

United City of Yorkville

651 Prairie Pointe Drive Yorkville, Illinois 60560 Telephone: 630-553-4350

www.yorkville.il.us

AGENDA CITY COUNCIL MEETING Tuesday, January 28, 2025 7:00 p.m.

City Hall Council Chambers 651 Prairie Pointe Drive, Yorkville, IL

Call to Order:

Pledge of Allegiance:

Roll Call by Clerk: WARD I WARD II WARD III WARD IV

Ken Koch Arden Joe Plocher Chris Funkhouser Seaver Tarulis
Dan Transier Craig Soling Matt Marek Rusty Corneils

Establishment of Quorum:

Amendments to Agenda:

Presentations:

- 1. Introduction of New Community Development Employee David Hansen, Senior Planner
- 2. Introduction of Public Works Employee John Sleezer, Assistant Director of Public Works

Public Hearings:

Citizen Comments on Agenda Items:

Consent Agenda:

- 1. Bill Payments for Approval
 - \$ 3,099,206.07 (vendors)
 - \$ 435,615.01 (payroll period ending 01/17/25)
 - \$ 3,534,821.08 (total)
- 2. PW 2025-02 Water Reports for August 2024 December 2024
- 3. PW 2025-05 Resolution Approving a Change Order Relating to the 2024 Local Road Program *authorize the Mayor and City Clerk to execute*
- 4. PW 2025-06 Resolution Approving the Release of a Performance Guarantee Bond Related to Grande Reserve Unit 20 *authorize the Mayor and City Clerk to execute*
- 5. PW 2025-08 Ordinance Amending the Traffic Schedule and Index (Matlock Drive and Berrywood Lane) *authorize the Mayor and City Clerk to execute*

Mayor's Report:

- 1. CC 2025-05 Fireworks Display Contract
 - a. Resolution Authorizing a Contract with Mad Bomber Fireworks Productions for the Purchase of Fireworks for a City-Sponsored Fireworks Display
 - b. Ordinance Authorizing the Fourth Amendment to the Annual Budget of the United City of Yorkville, for the Fiscal Year Commencing on May 1, 2024 and Ending on April 30, 2025
- 2. CC 2025-06 Appointment to Planning and Zoning Commission Chad Green
- 3. CC 2025-07 Resolution Approving a Sales Tax Revenue Sharing Agreement (Costco Wholesale Corporation

Public Works Committee Report:

- 1. PW 2025-07 Resolution Authorizing the Purchase of 500 Replacement Water Meters in an Amount Not to Exceed \$130,000
- 2. PW 2025-09 Resolution Approving an Engineering Agreement with Engineering Enterprises, Inc. (Route 47 Utility Relocation Carpenter St. to Waterpark Way)
- 3. PW 2025-10 Resolution Approving an Engineering Agreement with Engineering Enterprises, Inc. (Whispering Meadows Storm Sewer Design Engineering Agreement)

Economic Development Committee Report:

Public Safety Committee Report:

Administration Committee Report:

Park Board:

Planning and Zoning Commission:

- 1. PZC 2024-30 & EDC 2025-07 Kendall County Petition 24-30 1.5 Mile Review (South of 9949 and 10021 Ament Road)
- 2. PZC 2024-33 & EDC 2025-10 Costco
 - a. Ordinance Approving an Amendment to a Planned Unit Development for Yorkville Crossing (Costco Wholesale Corporation)
 - b. Ordinance Approving a Special Use Permit Allowing the Operation of a Gasoline Service Station on Certain Territory Located at the Southeast Corner of East Countryside Parkway and McHugh Road, Yorkville, Illinois (Costco Wholesale Corporation)
 - c. Ordinance Approving the Final Plat of Subdivisions for Costco Wholesale

City Council Report:

City Clerk's Report:

Community and Liaison Report:

Staff Report:

Mayor's Report (cont'd):

- 4. CC 2025-08 Public Works and Parks Department Facility Update
- 5. CC 2025-09 Lake Michigan Water Project Update

Additional Business:

Citizen Comments:

Executive Session:

1. For litigation, when an action against, affecting, or on behalf of the particular public body has been filed and is pending before a court or administrative tribunal, or when the public body finds that an action is probable or imminent, in which case the basis for the finding shall be recorded and entered into the minutes of the closed meeting.

Adjournment:

COMMITTEES, MEMBERS AND RESPONSIBILITIES

ADMINISTRATION: February 19, 2025 - 6:00 p.m. - East Conference Room #337

CommitteeDepartmentsLiaisonsChairman:Alderman MarekFinanceLibrary

Vice-Chairman: Alderman Plocher Administration

Committee: Alderman Koch Committee: Alderman Corneils

ECONOMIC DEVELOPMENT: February 4, 2025 – 6:00 p.m. – East Conference Room #337

<u>Committee</u> <u>Departments</u> <u>Liaisons</u>

Chairman: Alderman Plocher Community Development Planning & Zoning Commission Vice-Chairman: Alderman Funkhouser Building Safety & Zoning Kendall Co. Plan Commission

Committee: Alderman Transier
Committee: Alderman Tarulis

PUBLIC SAFETY: March 6, 2025 – 6:00 p.m. – East Conference Room #337

<u>Committee</u> <u>Departments</u> <u>Liaisons</u>

Chairman: Alderman Transier Police School District

Vice-Chairman: Alderman Tarulis Committee: Alderman Soling Committee: Alderman Funkhouser

COMMITTEES, MEMBERS AND RESPONSIBILITIES cont'd:

PUBLIC WORKS: February 18, 2025 – 6:00 p.m. – East Conference Room #337

CommitteeDepartmentsLiaisonsChairman:Alderman KochPublic WorksPark BoardVice-Chairman:Alderman SolingEngineeringYBSD

Committee: Alderman Marek Parks and Recreation

Committee: Alderman Corneils

UNITED CITY OF YORKVILLE WORKSHEET CITY COUNCIL Tuesday, January 28, 2025

Tuesday, January 28, 2025
7:00 PM
CITY COUNCIL CHAMBERS

AME	NDMENTS TO AGENDA:
	SENTATIONS:
1.	Introduction of New Community Development Employee – David Hansen, Senior Planner
2.	Introduction of Public Works Employee – John Sleezer, Assistant Director of Public Works

		ubject to
4.		elease of a Performance Guarantee Bond Related to
	Grande Reserve Unit 20	
		ubject to
	☐ Removed	
	□ Notes	
5.	PW 2025-08 Ordinance Amending the Tr	affic Schedule and Index (Matlock Drive and Berrywood
5.	_	`
5.	☐ Approved: Y N □ S	ubject to
5.	☐ Approved: Y N □ S	affic Schedule and Index (Matlock Drive and Berrywood

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	Approved: Y N Subject to						
	Removed						
	□ Notes						
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	□ Notes
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	□ Notes
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	Approved: Y N Subject to
	□ Removed

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 □ Removed		(Costco Wholesale Corporation)
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Parkway and McHugh Road, Yorkville, Illinois (Costco Wholesale Corporation) Approved: Y N		
 □ Removed c. Ordinance Approving the Final Plat of Subdivisions for Costco Wholesale □ Approved: Y N □ Subject to 		
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c. Ordinance Approving the Final Plat of Subdivisions for <i>Costco Wholesale</i> Approved: Y N Subject to		
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Removed		
		☐ Removed
□ Notes		

MAY	OR'S REPO	ORT (CON	Г'D):						
4.	CC 2025-08 Public Works and Parks Department Facility Update								
	☐ Approv	ed: Y	N	□ Subject to					
	☐ Notes _								
5.	CC 2025-09	9 Lake Micl	higan Water I	Project Update					
	☐ Remove	ed							
	☐ Notes _								
ADDI	TIONAL B	USINESS:	3 -			======================================			

CITIZEN COMMENTS:	 	 	



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works	
Parks and Recreation	

Agenda	Item	Number
11501144	100111	1 (dilloci

Consent Agenda #1

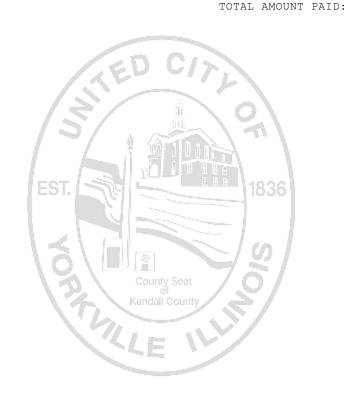
Tracking Number

Agenda Item Summary Memo

Title: Bills for Paym	nent	
Meeting and Date:	City Council – January 28, 2025	
Synopsis:		
Council Action Prev	iously Taken:	
	•	
Date of Action:	Action Taken:	
Item Number:		
Type of Vote Requir	red: Majority	
Council Action Requ	uested: Approval	
Submitted by:	Amy Simmons	Finance
	Name	Department
	Agenda Item No	tes:

DATE: 01/07/25 TIME: 10:53:36 ID: AP225000.WOW

CHECK #	VENDOR # INVOICE #		OICE IT	EM # 	DESCRIPTION	CHECK DATE	ACCOUNT #	ITEM AMT	
131254	KCR	KENDALL COUNTY	RECORDER'	S		01/02/25			
	4017769	01/	02/25 0)1	RELEASE UTILITY LIEN		51-510-54-00-5448 INVOICE TOTAL:	57.00 57.00 *	
							CHECK TOTAL:		57.00
							TOTAL AMOUNT PAID:		57.00



01-110 01-120 01-210 01-220 01-410 01-640 11-111	ADMIN FINANCE POLICE COMMUNITY DEVELOPMENT STREETS OPERATIONS ADMINISTRATIVE SERVICES FOX HILL SSA	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION CAPITAL WATER OPERATIONS SEWER OPERATIONS PARKS DEPARTMENT RECREATION DEPARTMENT LIBRARY OPERATIONS	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT
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DATE: 01/15/25 TIME: 08:12:14

CHECK #

UNITED CITY OF YORKVILLE PRG ID: AP215000.WOW

CHECK DATE: 01/15/25

CHECK REGISTER

VENDOR # INVOICE INVOICE ITEM NUMBER

DATE # DESCRIPTION ACCOUNT # ITEM AMT

541918 COMEDNBD COMED

011425-EASEMENT 01/14/25 01 ONE TIME FEE FOR EASEMENT 51-510-60-00-6024 24,835.47

02 SR6532041 ** COMMENT ** INVOICE TOTAL: 24,835.47 *

> CHECK TOTAL: 24,835.47

> TOTAL AMOUNT PAID: 24,835.47



01-110 01-120 01-210 01-220 01-410 01-640 11-111	ADMIN FINANCE POLICE COMMUNITY DEVELOPMENT STREETS OPERATIONS ADMINISTRATIVE SERVICES FOX HILL SSA	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION CAPITAL WATER OPERATIONS SEWER OPERATIONS PARKS DEPARTMENT RECREATION DEPARTMENT LIBRARY OPERATIONS	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT
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DATE: 01/13/25

TIME: 07:44:32

ID: AP211001.W0W

INVOICES DUE ON/BEFORE 01/17/2025

CHECK # INVOICE ITEM VENDOR # INVOICE # DATE # DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT D003928 EVANST TIM EVANS 161.00 2025 IPRA PER DIEM 01/08/25 01 2025 IPRA 2025 CONFERENCE 79-795-54-00-5415 02 MEAL PER DIEMS ** COMMENT ** INVOICE TOTAL: 161.00 * DIRECT DEPOSIT TOTAL: 161.00 D003929 GALAUNEJ JAKE GALAUNER 2025 IPRA PER DIEM 01/08/25 01 2025 IPRA 2025 CONFERENCE 79-795-54-00-5415 02 MEAL PER DIEMS ** COMMENT ** INVOICE TOTAL: 322.00 * DIRECT DEPOSIT TOTAL: 322.00 541915 GREGORYK KATELYN GREGORY 2025 IPRA PER DIEM 01/08/25 01 2025 IPRA 2025 CONFERENCE 79-795-54-00-5415 230.00 02 MEAL PER DIEMS ** COMMENT ** INVOICE TOTAL: 230.00 * CHECK TOTAL: 230.00 D003930 PRUITTC CAYLA PRUITT 79-795-54-00-5415 230.00 2025 IPRA PER DIEM 02 MEAL PER DIEMS ** COMMENT ** INVOICE TOTAL: 230.00 * DIRECT DEPOSIT TOTAL: 230.00 D003931 REDMONST STEVE REDMON 2025 IPRA PER DIEM 01/08/25 01 2025 IPRA 2025 CONFERENCE 79-795-54-00-5415 322.00 02 MEAL PER DIEMS ** COMMENT ** 322.00 * INVOICE TOTAL: DIRECT DEPOSIT TOTAL: 322.00 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 COUNTRYSIDE TIF 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX DEVELOPER ESCROW 79-795 RECREATION DEPARTMENT 01-640 ADMINISTRATIVE SERVICES 25-212 GENERAL GOVERNMENT CAPITAL 95-000 **ESCROW DEPOSIT** 82-820 LIBRARY OPERATIONS 11-111 FOX HILL SSA 25-215 PUBLIC WORKS CAPITAL

TIME: 07:44:32 ID: AP211001.W0W

DATE: 01/13/25

CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT
D003932	ROSBOROS	SHAY REMUS						
	2025 IPRA	PER DIEM	01/08/25		2025 IPRA 2025 CONFERENCE MEAL PER DIEMS	79-795-54-00-54 ** COMMENT **		322.00
				02	MEAL PER DIEMS		OICE TOTAL:	322.00 *
						DIRECT DEPOSIT	TOTAL:	322.00
541916	SENDRAS	SAMANTHA S	ENDRA					
	2025 IPRA	PER DIEM	01/08/25		2025 IPRA 2025 CONFERENCE MEAL PER DIEMS	79-795-54-00-54 ** COMMENT **		230.00
				02	MEAL PER DIEMS	// /	JOICE TOTAL:	230.00 *
					EST.	CHECK TOTAL:		230.00
					TOTAL C	HECKS PAID:		460.00
					TOTAL D	IRECT DEPOSITS PA	ID:	1,357.00
					TOTAL AI County Seat Kendali Count			1,817.00

01-110 01-120 01-210 01-220 01-410 01-640 11-111	ADMIN FINANCE POLICE COMMUNITY DEVELOPMENT STREETS OPERATIONS ADMINISTRATIVE SERVICES FOX HILL SSA	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION CAPITAL WATER OPERATIONS SEWER OPERATIONS PARKS DEPARTMENT RECREATION DEPARTMENT LIBRARY OPERATIONS	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT
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TIME: 09:36:22 ID: AP225000.WOW

DATE: 01/16/25

CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	CHECK DESCRIPTION DATE	ACCOUNT #	ITEM AMT	
900157	FNBO	FIRST	NATIONAL BANK	AHAMC	01/25/25			
	012525-A.	SIMMONS	12/31/24	0.1	GO TO-DEC 2024 PHONE SERVICE	01-110-54-00-5440	161.33	
	012323 11.	DIFFICIND	12/51/24		GO TO-DEC 2024 PHONE SERVICE		172.08	
					GO TO-DEC 2024 PHONE SERVICE		118.31	
					GO TO-DEC 2024 PHONE SERVICE		172.08	
					GO TO-DEC 2024 PHONE SERVICE		860.40	
					NICOR-11/1-12/3 651 PRIAIRIE	01-110-54-00-5480	162.02	
					POINTE DR	** COMMENT **	102.02	
					ADS-BEECHER FIRE ALARM	24-216-60-00-6020	3,926.50	
					VERIZON-NOV 2024 IN CAR UNITS	01-210-54-00-5440	756.21	
					COMCAST-11/20-12/19 651 PP	01-110-54-00-5440	82.02	
					INTERNET	** COMMENT **	02.02	
					COMCAST-11/20-12/19 651 PP	01-220-54-00-5440	87.48	
					INTERNET	** COMMENT **	07.40	
					COMCAST-11/20-12/19 651 PP	01-120-54-00-5440	60.15	
					INTERNET	** COMMENT **	00.13	
					COMCAST-11/20-12/19 651 PP	79-790-54-00-5440	87.48	
					INTERNET	** COMMENT **	07.40	
					COMCAST-11/20-12/19 651 PP	01-210-54-00-5440	437.42	
					INTERNET	** COMMENT **	437.42	
					COMCAST-11/20-12/19 651 PP	79-795-54-00-5440	87.49	
					INTERNET	** COMMENT **	07.49	
				21	INTERNET	INVOICE TOTAL:	7,170.97 *	
						INVOICE TOTAL:	7,170.97 ^	
	012525 D	DEIIDENC	12/31/24	0.1	MENARDS#112724-FLANGE, PLUGS	01-410-56-00-5620	13.08	
	012323-6.	DEHKENS	12/31/24		MENARDS#112724-FLANGE, FLOGS	01-410-56-00-5620	127.99	
					MENARDS#121024-INSOLATION	01-410-56-00-5620	9.99	
					MENARDS#121024-CASIERS MENARDS#121624-KNEE PADS	01-410-56-00-5620	9.99	
					MENARDS#121024-KNEE FADS MENARDS#122724-CLEANER	01-410-56-00-5620	19.96	
					MENARDS#122724-CLEANER MENARDS#120524-THERMOSTAT	01-410-56-00-5620	32.93	
				0 0	MENARDS#120524-INERMOSTA1	INVOICE TOTAL:	213.94 *	
						INVOICE TOTAL.	213.34	
	012525-В.	BI.VSTONE	12/31/24	0.1	AMAZON-PENS, CALCULATOR, POST	01-110-56-00-5610	133.79	
	012323 D.	DHIDIONE	12/51/24		IT NOTES, GLUE, BATTERIES	** COMMENT **	133.73	
					AMAZON-POSTAGE METER TAPES,	01-110-56-00-5610	43.74	
					KLEENEX	** COMMENT **	13.71	
					AMAZON-1099-R TAX FORMS	01-120-56-00-5610	36.96	
					AMAZON-COPY PAPER	01-110-56-00-5610	172.40	
				0 0	AMAZON COLL LALEN	INVOICE TOTAL:	386.89 *	
						INVOICE TOTAL.	300.03	
	012525-B.	CREADEILE	12/31/24	0.1	ICC-RESIDENTIAL ELECTRICAL	01-220-54-00-5412	309.00	
	012020 D.	O1/11/11/11/11	. 12/01/21		INSPECTOR STUDY GUIDE AND EXAM		303.00	
				02	INCIDCION CIODI COIDE IND ENAM	INVOICE TOTAL:	309.00 *	
						111,40101 1011111.	303.00	
	012525-В.	OLSON	12/31/24	0.1	VIBRANT.ORG-MEMORIAL DONATION	01-110-56-00-5610	105.79	
	012020 D.	0.2001	12/01/21		IN LIEU OF FLOWERS	** COMMENT **	100.75	
				02		0011111111		

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900157	FNBO	FIRST NAT	IONAL BANK (AHAMO	01/25/2	25	
	012525-B	.OLSON	12/31/24	03	ZOOM-12/23-01/22 USER FEES	01-110-54-00-5462 INVOICE TOTAL:	189.95 295.74 *
	012525-B	.WEBER	12/31/24	02	NAPA#380055-CHAIN CABLE AUTO ZONE-CHAIN LUBE ACE-THREADLOCKERS	01-410-56-00-5620 01-410-56-00-5620 01-410-56-00-5620	38.93 38.94 38.42
				0.3	ACE-IHREADLOCKERS	INVOICE TOTAL:	116.29 *
	012525-В	.WOLF	12/31/24	02	MENARDS#112624-PADLOCKS MENARDS#121324-PAINT, LINERS FLATSOS#34024-VALVE STEM	79-790-56-00-5620 79-790-56-00-5646 79-790-54-00-5495	29.98 113.91 25.00
				03	I ENISOU STORT VILLA SIEN	INVOICE TOTAL:	168.89 *
	012525-D	.BROWN	12/31/24	02	AMAZON-PRINTER INK ILAWWA-SMALL SYSTEMS WEBINAR		67.25 70.00
				0 4	FLATSOS#34152-4 NEW TIRES AMAZON-REPLACEMENT BATTERY MENARDS3121724-REFLECTIVE TA	51-510-56-00-5620	1,257.12 65.44 53.95
				0 6 0 7	GRAINGER-LABEL TAPE CARTRIDGE AMAZON-REGULATOR	52-520-56-00-5610 51-510-56-00-5638	25.37 155.00
				09 10	MENARDS#120524-BATTERIES, SOZ MENARDS#122724-CLEANERS MENARDS#121124-COUPLER,	51-510-56-00-5638 51-510-56-00-5638	20.33 27.85 58.27
				11	NIPPLES, PLUGS, AIR CHUCK my So	** COMMENT ** INVOICE TOTAL:	1,800.58 *
	012525-D	.HENNE	12/31/24		ACE-SCREWS MENARDS120624-SNOW FENCE	01-410-56-00-5620 01-410-56-00-5620	1.76 31.87
				03	MENARDS120024-SNOW FENCE MENARDS#121024-THERMOSTAT NAPA#379967-WIPER BLADE	24-216-56-00-5656 01-410-56-00-5628	29.98 24.98
				05 06	NAPA#380045-BATTERY TERMINAL NAPA#380051-RELAY	01-410-56-00-5628 01-410-56-00-5628	9.80 10.96
				08	NAPA#380039-WINDSHIELD WASHEI NOZZLE	** COMMENT **	18.45
				10	NAPA#380115-GROTE RURAL KING-BUNG TANKS MENARDS#121024-CABLES, POLE		18.85 59.98 110.53
				12 13	BREAKERS, CONNECTORS, BLANK COVER, WIRE	** COMMENT ** ** COMMENT **	
				14	DUTEK-HOSES	01-410-56-00-5628 INVOICE TOTAL:	76.50 393.66 *
	012525-D	.SMITH	12/31/24		ADVANTAGE DRIVER TRAINING-CDI	79-790-54-00-5412 ** COMMENT **	3,500.00
				03	NAPA#379407-FUEL TANK VALVE	79-790-56-00-5640	22.11

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900157	FNBO	FIRST	NATIONAL BANK	OMAHA		01/25/25			
	012525-D.	SMITH	12/31/24	05	160 DRIVING ACAI TRAINING FOR LAN LOMBARDO		79-790-54-00-5412 ** COMMENT ** ** COMMENT **	12,450.00	
				07	MENARDS#120524-I	ORIVE BELT, PVC DOOR STOP	25-225-60-00-6020	141.01	
					MENARDS#121624-E			5.77	
					MENARDS#121824-V		79-790-56-00-5640	13.65	
					MENARDS#120624-E		79-790-56-00-5640	38.75	
					MENARDS#121324-E		79-790-56-00-5620	18.65	
					MENARDS#121024-7		79-790-56-00-5640	108.85	
					MENARDS#121024-H		79-790-56-00-5640	2.56	
					MENARDS#121224 - I	La La La La B	79-790-56-00-5620	-6.22	
					CREDIT	NOTANE KETTEE	** COMMENT **	0.22	
				10	CREDIT	3/	INVOICE TOTAL:	16,295.13 *	
	012525-D.	YODER	12/31/24		MENARDS#121024-S BOLTS	SPRAY PAINT,	01-410-56-00-5620 ** COMMENT **	21.90	
				-	EST		INVOICE TOTAL:	21.90 *	
	012525-E.I	DHUSE	12/31/24	01	AMAZON-PRINTER T	ONER	52-520-56-00-5610	219.94	
			, - ,		AMAZON-BINDER DI	The state of the s	52-520-56-00-5610	11.28	
					AMAZON-PRINTER T		52-520-56-00-5610	109.99	
				0 4	N.SAFETY-UTILITY	GLOVES	01-410-56-00-5600	187.19	
					N.SAFETY-UTILITY		51-510-56-00-5600	187.19	
					N.SAFETY-UTILITY		52-520-56-00-5600	187.20	
						Kendali County	INVOICE TOTAL:	902.79 *	
	012525-E.I	HERNAND	EZ 12/30/24	0.1	MENARDS#120224-0	CABLE TIES	01-410-56-00-5620	29.99	
	012020 2.		12,00,21		MENARDS#120424-E		01-410-56-00-5620	12.05	
					MENARDS#121624-E		01-410-56-00-5620	9.99	
					ACE-PROPANE REF		01-410-56-00-5620	19.99	
					MENARDS#121724-E		01-410-56-00-5620	156.05	
					UTILITY BLADES,		** COMMENT **		
					ILSOS-CDL LICENS		01-410-54-00-5462	61.35	
				0 ,	TEGOS OBE ETGEN.		INVOICE TOTAL:	289.42 *	
1	012525-E.	WILLRET	12/30/24		PARAGON-MALWAREE		01-640-54-00-5450	158.97	
				02	SUBSCRIPTION-1 I	DEVICE	** COMMENT **		
				0 4	PARAGON-DELL CON DOCKING STATION	AND MONITORS	01-640-54-00-5450 ** COMMENT **	1,939.96	
						MONITORS		566.52	
				07	NIU-ILLINOIS FIN REGISTRATION		01-110-54-00-5412 ** COMMENT **	109.00	
i				08	AMAZON-POWER STE	RIP	01-640-54-00-5450	50.98	
					PARAGON-ADOBE AC		01-640-54-00-5450	198.99	
							INVOICE TOTAL:	3,024.42 *	

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900157	FNBO	FIRST NAT	TIONAL BANK (AHAMC	0	1/25/25		
	012525-G	JOHNSON	12/31/24	0.1	MENARDS#121224-DUCT TAP	E,PEN 51-510-56-00-5620	11.96	
	012323 G.	.0011110011	12/31/24		MENARDS#121224 DOC1 TAT	· ·	6.20	
				02		INVOICE TOTAL:	18.16 *	
	012525-G	.KLEEFISCH	12/30/24	01	MENARDS#112624-SCREWS	79-790-56-00-5640	11.34	
					MENARDS#121024-OUTDOOR : SCREWDRIVERS, OUTLETS	LIGHT, 79-790-56-00-5640 ** COMMENT **	122.13	
				0 4	MENARDS#120324-CONTRACTOR BAGS, LOCKNUTS, BUSHING	OR 79-790-56-00-5640	27.70	
				07 08	MENARDS#120524-COUPLER, STRAPS, POLE BREAKERS, OUTLETS, TOGGLE SWITCHE CONDUIT		156.31	
				10	MENARDS#121124-CAULK GUI BUSHING, NIPPLES, LOCKN	N, 79-790-56-00-5640	20.64	
					MENARDS#121224-BALLASTS		167.94	
						INVOICE TOTAL:	506.06 *	
	012525-G	.NELSON	12/31/24		OSWEGO PRINTING-4,000 BUILDING INSPECTION FOR	01-220-56-00-5620 MS ** COMMENT **	437.50	
					AMAZON-HOLIDAY DECOR	01-220-56-00-5620	81.84	
				05	AMAZON-HEATER	01-220-56-00-5620	33.98	
				06	AMAZON-HOLIDAY DECOR	01-220-56-00-5620	41.98	
					12	County Seat INVOICE TOTAL:	595.30 *	
	012525-G	.STEFFENS	12/31/24		MENARDS#121624-BRAKELEE		157.96	
					, GREASE	** COMMENT **	0.0	
				0.3	MENARDS#121824-ANTIFREE		92.88	
						INVOICE TOTAL:	250.84 *	
	012525-J	.ANDERSON	12/31/24	01	NAPA#379098-EXTENSIONS	79-790-56-00-5640	24.98	
				02	MENARDS#122724-UTILITY		24.98	
						INVOICE TOTAL:	49.96 *	
	012525-J	.BAUER	12/31/24		SETCOM-WIRELESS HEADSET		2,022.25	
					SETCOM-WIRELESS HEADSET		2,022.25	
				03	SETCOM-WIRELESS HEADSET		2,022.25	
						INVOICE TOTAL:	6,066.75 *	
	012525-J	.BEHLAND	12/31/24	01	INTOWNE STORAGE-MONTHLY	UNIT 01-220-54-00-5485	308.00	
				02	SHAW-PERMIT CLERK POSTI	NG 01-220-54-00-5426	536.60	
				03	SHAW-PW ASST. DIRECTOR	POSTING 01-410-54-00-5462	251.66	
				04	SHAW-PW ASST. DIRECTOR	POSTING 51-510-54-00-5462	251.67	
				05	SHAW-PW ASST. DIRECTOR	POSTING 52-520-54-00-5462	251.67	
					TRIBUNE-HRTLND MDWS PH		247.72	

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900157	FNBO FIRST N	ATIONAL BANK C	MAHA	01/25/	25	
	012525-J.BEHLAND	12/31/24	08 09	TRIBUNE-DMYF LLLP PH NOTICE TRIBUNE-DMYF LLLP PH NOTICE TRIBUNE-ANNUAL TREASURER RPR IML-MEMBERSHIP DUES	90-234-00-00-0011	1,576.75 744.91 1,428.00 1,750.00
			10	THE MEMBERSHIT DOES	INVOICE TOTAL:	7,346.98 *
	012525-J.GALAUNER	12/31/24		BSN#928363174-BASKETBALL COACHES SHIRTS	79-795-56-00-5606 ** COMMENT **	1,140.00
					INVOICE TOTAL:	1,140.00 *
	012525-J.JENSEN	12/31/24		IACP-LIFE ACTIVE MEMBERSHIP DUES	01-210-54-00-5460 ** COMMENT **	220.00
				(3)	INVOICE TOTAL:	220.00 *
	012525-J.NAVARRO	12/31/24		AMAZON-FILTERS AMAZON-ROLL ADHESIVE	24-216-56-00-5656 24-216-56-00-5656	18.63 14.34
				AMAZON-CEILING FIXTURE AMAZON-PAPER TOWELS	24-216-56-00-5656 24-216-56-00-5656	149.99 75.40
				FERGUSION-PAPER TOWELS FOX VALLEY FIRE-FAID TESTING	24-216-56-00-5656 24-216-54-00-5446	218.15 900.00
			0.8	AT CITY HALL AMAZON-TRASH BAGS	** COMMENT ** 24-216-56-00-5656	127.84
			10	AMAZON-CABINET CLIPS TEE JAY SERVICE-CITY HALL by So		14.98 450.00
				MAIN ENTERENCE DOOR REPAIR GLOBAL-STEEL OUTDOOR ASHTRAY		243.44
				\\LE	INVOICE TOTAL:	2,212.77 *
	012525-J.WEISS	12/31/24		AMAZON-SENSORY WALL PANEL AMAZON-DISPOSABLE COFFEE CUP	82-820-56-00-5610 82-000-24-00-2480	99.99 19.02
			02	AMMINION DIGITORNELL COLLECTION COL	INVOICE TOTAL:	119.01 *
	012525-K.BALOG	12/31/24		ACCURINT-NOV 2024 SEARCHES COMCAST-11/15-12/14 INTERNET		200.00
			03	AMAZON-KEY TAGS, CABINET, DE CALENDAR		157.22
			0 1	CHEMPHIC	INVOICE TOTAL:	1,187.22 *
	012525-K.BARKSDALE	12/31/24		ADOBE-MONTHLY CREATIVE CLOUD FEE	01-220-54-00-5462 ** COMMENT **	59.99
			03	AACE-MEMBERSHIP DUE RENEWAL	01-220-54-00-5460 INVOICE TOTAL:	100.00 159.99 *
	012525-K.GREGORY	12/31/24		RED CROSS-BLOODBORNE PATHOGE:	NS 79-795-54-00-5412 ** COMMENT **	31.50
			7.2		INVOICE TOTAL:	31.50 *

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900157	FNBO	FIRST NA	TIONAL BANK (AHAMC		01/25/25			
	012525-K	THRIC	12/31/24	0.1	SCHOLASTIC-HOLID	IV BOOKS	79-795-56-00-5606	55.21	
	012323 R	• IIIXI G	12/31/24		DOLLAR TREE-SENS		79-795-56-00-5606	6.25	
					AMAZON-ITEMS FOR		79-795-56-00-5606	116.73	
					GIFT BAGS	0111110	** COMMENT **	110.70	
					DOLLAR TREE-MASO	N JARS, SNOW	79-795-56-00-5606	2.50	
					DOLLAR TREE-SNOW	·	79-795-56-00-5606	100.00	
				07	DOLLAR TREE-HOLI	DAY ART ITEMS	79-795-56-00-5606	7.50	
				08	AMAZON-CONSTRUCT	ION PAPER	79-795-56-00-5606	37.86	
				09	TARGET-HOLIDAY W	RAPPING	79-795-56-00-5606	28.24	
				10	SUPPLIES		** COMMENT **		
				11	WALMART-CLASSROO	M SUPPLIES	79-795-56-00-5606	9.44	
				12	WALMART-REINDEER	FOOD SUPPLIES	79-795-56-00-5606	16.16	
				13	TARGET-COOKIES	11,	79-795-56-00-5606	90.96	
					/-	5/ 1	INVOICE TOTAL:	470.85 *	
	012525-K	JONES.	12/31/24	0.1	ARNESON#256591-0	CT 2024 GAS	01-410-56-00-5695	133.66	
	012020 1	.001120	12,01,21		ARNESON#256591-0	F 7 3.05 (00 10 SH	51-510-56-00-5695	133.66	
					ARNESON#256591-0	4 THE R. P. LEWIS CO., LANSING, MICH.	52-520-56-00-5695	133.67	
					ARNESON#262477-0		01-410-56-00-5695	223.09	
					ARNESON#262477-0		51-510-56-00-5695	223.09	
				06	ARNESON#262477-0	CT 2024 DIESEL	52-520-56-00-5695	223.08	
				07	ARNESON#262478-0	CT 2024 GAS	01-410-56-00-5695	340.32	
				0.8	ARNESON#262478-0	CT 2024 GAS	51-510-56-00-5695	340.32	
				09	ARNESON#262478-0	CT 2024 GAS	52-520-56-00-5695	340.33	
				10	AQUAFIX#15718-VI	TASTIM GREASE	52-520-56-00-5613	1,118.36	
				11	METRO INDUSTRY#0	67602-BRUELL	52-520-54-00-5444	1,575.00	
				12	PUMP FIELD SERVI	CE	** COMMENT **		
					WATER	/ TE IN	51-510-56-00-5640	2,226.02	
					PRODUCTS#0325939		** COMMENT **		
					BUSHING, CAST IR		** COMMENT **		
					WATER PRODUCTS#0	326096-BAND	51-510-56-00-5640	189.25	
					REPAIR CLAMPS	206005	** COMMENT **	400 75	
					WATER PRODUCTS#0	326005-BAND	51-510-56-00-5640	429.75	
					REPAIR CLAMPS	017 0004 070	** COMMENT **	167 13	
					ARNESON#261671-N		01-410-56-00-5695	167.13	
					ARNESON#261671-N ARNESON#261671-N		51-510-56-00-5695 52-520-56-00-5695	167.13	
					ARNESON#2616/1-N ARNESON#262541-N		01-410-56-00-5695	167.14 176.56	
					ARNESON#262541-N		51-510-56-00-5695	176.56	
					ARNESON#262541-N ARNESON#262541-N		52-520-56-00-5695	176.56	
					ARNESON#262541-N ARNESON#261672-N		01-410-56-00-5695	514.97	
l					ARNESON#261672-N ARNESON#261672-N		51-510-56-00-5695	514.96	
					ARNESON#261672-N			514.97	
					ARNESON#262540-N			528.46	
					ARNESON#262540-N		51-510-56-00-5695	528.46	
				5 0			11 010 00 00 0000	020.10	

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900157	FNBO	FIRST NAT	IONAL BANK C	MAHA		01/25/25		
	012525-K.	TONES	12/31/24	21	ARNESON#262540-NOV 2	024 DIEGET	52-520-56-00-5695	528.47
	012J2J-K.	JONES	12/31/24		AMPERAGE#2149755-UNI			
					WATER PRODUCTS#03262		51-510-56-00-5640	27.00
					REPAIR CLAMPS		** COMMENT **	27.00
					WATER PRODUCTS#03262		51-510-56-00-5640	161.25
					REPAIR CLAMPS	JO DAND	** COMMENT **	101.23
					ARNESON#262842-NOV 2	024 GAS	01-410-56-00-5695	112.41
				3.8	ARNESON#262842-NOV 2	024 GAS	51-510-56-00-5695	112.42
					ARNESON#262842-NOV 2		52-520-56-00-5695	112.42
					ARNESON#262843-NOV 2		01-410-56-00-5695	561.09
					ARNESON#262843-NOV 2		51-510-56-00-5695	561.09
					ARNESON#262843-NOV 2		52-520-56-00-5695	561.09
					AURORA#237323-OCT 20		51-510-54-00-5429	84.00
					TESTING		** COMMENT **	01.00
					WELDSTAR-CYLINDER RE		01-410-54-00-5485	79.36
				46	ARNESON#262911-NOV 2	024 DIESEL	01-410-56-00-5695	164.26
				47	ARNESON#262911-NOV 2	024 DIESEL	51-510-56-00-5695	164.26
					ARNESON#262911-NOV 2		52-520-56-00-5695	164.27
					METRO INDUSTRY#06801		52-520-54-00-5444	360.00
					STATION MONTHLY METR		** COMMENT **	000.00
					DATA SERVICE		** COMMENT **	
					METRO		52-520-54-00-5444	780.00
				53	INDUSTRY#068195-COUN		** COMMENT **	
					ALARM REPAIR	County Seat	** COMMENT **	
					AMPERAGE#2156103-UNI		51-510-56-00-5638	427.03
					AMPERAGE#2156113-LAM	Mendali County	23-230-56-00-5642	369.00
				57	AMPERAGE#2157297-CIR	CUIT	51-510-56-00-5638	45.05
				58	AMPERAGE#2153519-BUL	L HORN,	23-230-56-00-5642	1,981.38
				59	BRACKETS, PHOT CELLS	, FIXTURE	** COMMENT **	·
				60	AMPERAGE#2158443-TPI	CORP	51-510-56-00-5638	98.27
				61	TRUGREEN-OCT 2024 GR	OUNDS	51-510-54-00-5445	1,086.00
				62	CARE		** COMMENT **	
				63	TRUGREEN-OCT 2024 GR	OUNDS	52-520-54-00-5495	280.00
				64	CARE		** COMMENT **	
				65	TRUGREEN-OCT 2024 GR	OUNDS	24-216-54-00-5446	592.00
				66	CARE		** COMMENT **	
				67	LINDCO#240984-RUBBER	CUTTING	01-410-56-00-5628	511.61
				68	EDGE		** COMMENT **	
				69	WIRE		52-520-54-00-5444	138.00
				70	WIZ#363998-01/01/25-	03/31/25	** COMMENT **	
				71	ALARM MONITORING FOR	LIFT	** COMMENT **	
				72	STATIONS		** COMMENT **	
							INVOICE TOTAL:	24,201.99 *
	012525-M.	BARBANENTE	12/31/24	01	FIVE BELOW-HOLIDAY T	REE DECOR	79-795-56-00-5606	36.00

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CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	DESCRIPTION	CHECK DATE	ACCOUNT #	ITEM AMT
900157	FNBO E	FIRST NAT	IONAL BANK (AHAMC		01/25/25		
	012525-M.BAF	RBANENTE	12/31/24	02	TARGET-STORAGE BINS		79-795-56-00-5606 INVOICE TOTAL:	11.95 47.95 *
	012525-M.CAF	RYLE	12/31/24		CONSTANT CONTACT-PROP SERVICES	BABTION	01-210-54-00-5462 ** COMMENT **	122.40
					GJOVIKS#449031-REPLAC	E TIRE	01-210-54-00-5495	289.85
					GJOVIKS#449072-OIL CH		01-210-54-00-5495	587.85
					BRAKE REPAIR	,	** COMMENT **	
					GJOVIKS#449093-OIL CH	HANGE	01-210-54-00-5495	58.43
				07	GJOVIKS#449107-OIL CE	HANGE	01-210-54-00-5495	59.09
				0.8	GJOVIKS#448728-REPLAC	E TIRES	01-210-54-00-5495	560.65
				09	GJOVIKS#449386-REPLAC	CE BRAKES	01-210-54-00-5495	693.24
				10	GJOVIKS#449567-OIL CH	HANGE	01-210-54-00-5495	59.99
				11	GJOVIKS#446135-REPLAC	CE BATTERY	01-210-54-00-5495	282.35
				12	JEWEL-NAPKINS, PLATES,	ICE	01-210-56-00-5650	23.72
				13	MENARDS#121024-EXTREM	ME STRIPS	01-210-56-00-5620	3.28
				14	ILLINOIS LAW-2025 ILE	CAS	01-210-54-00-5412	400.00
				15	CONFERENCE REGISTRAT	ON	** COMMENT **	
					E31.		INVOICE TOTAL:	3,140.85 *
	012525-M.CIS	SIJA	12/31/24		AMAZON-BANKERS BOXES, BINDER CLIPS		01-110-56-00-5610 ** COMMENT **	89.79
				03	KEND PRINT-NAME PLATE		01-110-56-00-5610	21.90
				0 4	KEND PRINT-NAME PLATE	S-CASTALD	01-110-56-00-5610	21.90
				05	KEND PRINT-NAME PLATE	S-HANSEN	01-110-56-00-5610	21.90
					12		INVOICE TOTAL:	155.49 *
	012525-M.CUF	RTIS	12/31/24	01	AMAZON-PAINTING CANVA	s/E	82-000-24-00-2480	19.13
			, - ,				INVOICE TOTAL:	19.13 *
	012525-M.MC0	TDECODV	12/31/24	0.1	WELSTAR-NITROGEN		51-510-56-00-5638	34.02
	012323 M.MCC	REGORI	12/31/24		MENARDS#121124-TOOL	ROY TARPS	51-510-56-00-5630	127.26
					SIUE-VIRTUAL ERTC CLA	•	51-510-54-00-5412	300.00
					MENARDS#120324-TORCH		51-510-56-00-5630	74.99
					MENARDS#121224-DRIVE		51-510-56-00-5620	26.95
					MENARDS#121824-TREAD	•	51-510-56-00-5620	10.99
					MENARDS#122024-HOOK		51-510-56-00-5620	8.33
				•			INVOICE TOTAL:	582.54 *
	012525-M.NEI	LSON	12/31/24	01	MENARDS#121724-USB DE	RIVES	01-210-56-00-5620	12.13
					AMAZON-FLASH DRIVES		01-210-56-00-5620	49.04
							INVOICE TOTAL:	61.17 *
	012525-M.SEN	1G	12/31/24		MENARDS#121024-PICK TPAINT MARKERS, PUTTY	•	01-410-56-00-5620 ** COMMENT **	101.42

CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	CHECK DATE	ACCOUNT #	ITEM AMT
900157	FNBO FIR	ST NATIONAL BANK C	MAHA	01/25/25			
	012525-M.SENG	12/31/24	04	THREADLOCKERS, WRENG MENARDS#120224-WOOD JX TRUCK CENTER-BULE	BUNDLE	** COMMENT ** 01-410-56-00-5620 01-410-56-00-5628 INVOICE TOTAL:	21.58 403.58 526.58 *
	012525-M.WARD	12/31/24	01	YORK POST-POSTAGE		82-820-54-00-5452 INVOICE TOTAL:	13.77 13.77 *
	012525-P.LANDA	12/31/24	02 03	MENARDS#120424-SOCKE EXTENSION, CLAMPS MENARDS#121324-CLEAN		79-790-56-00-5640 ** COMMENT ** 79-790-56-00-5620	37.86 37.95
				RIVERVIEW-ALIGNMENT		79-790-54-00-5495 INVOICE TOTAL:	99.95 175.76 *
	012525-P.LEGEN	DRE 12/31/24	02 03	CARROLL-WOOD BUNDLE MENARDS#121924-SCRAI MENARDS#120724-3 IN FLASHLIGHT	PER, TAPE	51-510-56-00-5665 51-510-56-00-5620 51-510-56-00-5620 ** COMMENT **	224.00 18.73 44.98
	012525-P.MCMAH	ON 12/31/24		GALLS-SERVICE BOOTS		INVOICE TOTAL: 01-210-56-00-5600	287.71 * 161.49
	012323 1.HOFMI	ON 12/31/24	02 03 04	STEVENS-EMBROIDERY PETTIBORNE-IDS WASH HOUSE-PATCHES A OHERRON-SERVICE UNIF	APPLIED _{ty Seat}	01-210-56-00-5600 01-210-54-00-5430 01-210-56-00-5600 01-210-56-00-5600	20.00 57.00 118.56 649.35
			07	AMAZON-PATROL BAG AMAZON-GEAR BELTS, H HOLDERS	FLASHLIGHT	01-210-56-00-5620 01-210-56-00-5600 ** COMMENT ** INVOICE TOTAL:	60.00 338.67 1,405.07 *
	012525-P.RATOS	12/31/24	02	AMAZON-PHONE CHARGER AMAZON-HOT CHOCOLATE AREA 47 TOWING-ROADS	E PODS	01-220-56-00-5620 01-220-56-00-5620 01-220-54-00-5490 INVOICE TOTAL:	21.99 20.99 100.00 142.98 *
	012525-P.SCODR	0 12/31/24		ILAWWA-VIRTUAL WATER DISTRIBUTION TRAININ		51-510-54-00-5412 ** COMMENT **	343.00
			03 04 05 06	MENARDS#121224-GLOVE MENARDS#121024-PLIEF MENARDS#120324-FAUCE MENARDS#121124-FAUCE HOME DEPO-METAL CUTO	ES R, BLADES ET COVER ET COVER	51-510-56-00-5600	13.96 18.46 2.78 2.78 9.87 390.85 *
	012525-R.BEDFO	RD 12/31/24	01	FARM&FLEET-UTILITY (CLEVIS	01-410-56-00-5620	12.58

CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	DESCRIPTION CHECK		ITEM AMT	
900157	FNBO	FIRST NATI	ONAL BANK	OMAHA	01/25/	· /25		
	012525-R.BE	EDFORD	12/31/24		MENARDS#121024-TRIM RESTORE		32.83	
					KIT, DETAILER, TOWELS			
					MENARDS#121324-CLEVIS LINK,		141.53	
					SALT ERASER	** COMMENT **		
					MENARDS#121724-CLEANERS		16.92	
					MENARDS#121724-CAMS, COUPLEF		59.94	
					RURAL KING-NIPPLES	01-410-56-00-5620	8.97	
					RURAL KING-HOSE	01-410-56-00-5620	78.24	
				10	MENARDS#122624-ANTIFREEZE	01-410-56-00-5620	42.48	
					MENARDS#121924-SHOVEL, HAMMER		249.87	
					PRY BAR	** COMMENT **		
				13	MENARDS#122624-BAR OIL	01-410-56-00-5620	19.98	
						INVOICE TOTAL:	663.34 *	
						* \ 2\\	0.5	
	012525-R.CC	NARD	12/31/24		MENARDS#112624-BLEACH, BAGS	51-510-56-00-5620	25.91	
					MENARDS#120324-TORCH KIT	51-510-56-00-5630	54.99	
					MENARDS#121124-PLUGS	51-510-56-00-5638	2.99	
					DUTEK#1025350-HOSES	51-510-56-00-5628	89.50	
					MENARDS#121624-ANCHORS, SUME		210.53	
					PUMP	** COMMENT **		
					MENARDS#121924-PVC PIPE, UNIC	/	17.56	
				0 8	MENARDS#122624-SHOP TOWELS	51-510-56-00-5620	11.98	
					(0)	INVOICE TOTAL:	413.46 *	
	012525-R.FF	REDRICKSON	12/31/24	0.1	COMCAST-11/13-12/12 610 TOWE		119.85	
	012323 11.11	(LDI(ICI(BON	12/31/21		INTERNET	** COMMENT **	119.03	
					COMCAST-11/15-12/14 102 E VA		221.48	
					EMMON INTERNERT, CABLE	** COMMENT **	221.40	
					GFOA-GFOA LMS WEBINAR	01-120-54-00-5412	75.00	
					GFOA-OVERVIEW OF RECEIVABLES		85.00	
					FUNCTION IN TREASURY OFFICE	** COMMENT **	03.00	
					WEBINAR	** COMMENT **		
					GFOA-ANNUAL RENEWAL FEES	01-120-54-00-5460	170.00	
					NEWTEK-12/11-1/11 WEB HOSTIN		17.90	
					COMCAST-11/29-12/28 185 WOLF		269.47	
					INTERNET, CABLE AND VOICE	** COMMENT **	200.47	
					COMCAST-11/30-12/29 610 TOWE		31.58	
					INTERNET	** COMMENT **	51.50	
					COMCAST-11/30-12/29 610 TOWE		126.32	
					INTERNET	** COMMENT **	120.02	
					COMCAST-11/30-12/29 610 TOWE		78.95	
					INTERNET	** COMMENT **	10.90	
				10	T14 T T1/1/45 T	INVOICE TOTAL:	1,195.55 *	
						111.0102 101112.	_,	
	012525-R.HC	DOUS	12/31/24	01	MENARDS#121124-DUCT TAPE,	79-790-56-00-5640	165.83	

CHECK #	VENDOR # INVOICE #	‡ 	INVOICE DATE			CHECK DATE ACC	OUNT #	ITEM AMT	
900157	FNBO	FIRST NAT	'IONAL BANK (MAHA	01	./25/25			
	012525-R.	HODOHE	12/31/24	0.2	COURTER	*	* COMMENT **		
	012323-R.	. норооз	12/31/24	02	COUPLER		OICE TOTAL:	165.83 *	
	012525-R.	.HORNER	12/31/24		FLATSOS#34033-2 TIRES		790-54-00-5495	500.00	
				02	AMAZON-COMPASS, FOLDERS,			59.55	
					CHECKER	*	* COMMENT **		
				0 4	MENARDS#122324-GAS CAN,			80.93	
						INV	OICE TOTAL:	640.48 *	
	012525-R.	MIKOLASEK	12/31/24	01	3D LESSONS-DISPUTED CHRO	G CR 01-	000-24-00-2440	-5.99	
				02	3D LESSONS-DISPUTED CHRO	G CR 01-	000-24-00-2440	-6.99	
					3D LESSONS-DISPUTED CHRO		000-24-00-2440	-7.99	
				0 4	3D LESSONS-DISPUTED CHRO		000-24-00-2440	6.99	
					15/	63	OICE TOTAL:	-13.98 *	
	012525-P	WOOLSEV	12/31/24	0.1	AMAZON-DOOR KNOB BAGS	01-	120-54-00-5462	13.56	
	012323 R.	WOODSEI	12/31/24		AMAZON-DOOR KNOB BAGS	51-	510-54-00-5462	20.34	
					AMAZON-DOOR KNOB BAGS		520-54-00-5462	5.99	
					EST.	the same of the sa	OICE TOTAL:	39.89 *	
	012525-S.	AUGUSTINE	12/31/24		AMAZON-MONITORS & STANDS		820-56-00-5635	310.74	
					AMAZON-CHAIR MATS		820-56-00-5610	439.96	
					TRIBUNE-SUBSCRIPTION BAI	0.0	820-54-00-5460	13.15	
					TARGET-POWER STRIPS AMAZON-HDMI ADAPTERS		820-56-00-5635 820-56-00-5635	44.97 12.99	
					AMAZON-HOMI ADAFIERS AMAZON-TOILET BOWL CLEAN	STRUCTURE COULTRY AND ADDRESS OF THE PROPERTY	820-56-00-5621	151.83	
					AMAZON-TOTLET BOWL CLEAT	4 / /	820-56-00-5610	24.99	
					MACIANOS-STAFF MEAL	_ 9 9	820-56-00-5676	113.62	
				0.9	QUILL-TISSUE, PAPER TOWN		820-56-00-5621	557.66	
				10	OUILL-CHARCOAL, MATS	82-	820-56-00-5620	396.60	
				11	QUILL-CHARCOAL, MATS AMAZON-LABELS	82-	000-24-00-2480	56.81	
				12	QUILL-WALL MOUNT SANI NA	AP 82-	820-56-00-5621	69.08	
				13	QUILL-CHARCOAL	82-	820-56-00-5620	487.20	
					LIBRARIES FIRST-MUSEUM		820-54-00-5460	110.00	
					ADVANTURE PASS		* COMMENT **		
					MOBILE CITIZEN-HOTSPOT F			960.00	
					MOBILE CITIZEN-HOTSPOT			70.00	
					REACTIVATION		* COMMENT **	45.40	
				19	SALESFORCE-NO SMOKING PO			45.42 3,865.02 *	
						INV	OICE TOTAL:	3,003.02 ^	
	012525-S.	.IWANSKI	12/31/24	01	AMAZON-KNITTING KIT		000-24-00-2480	0.75	
				02	YORK POST-POSTAGE	82-	820-54-00-5452	9.51	
					AMAZON-THERMAL PAPER		820-56-00-5621	62.77	
l				0 4	AMAZON-BATTERIES, PENCILS	82-	820-56-00-5610	45.75	

CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #		CHECK DATE ACCOUNT #	ITEM AMT
900157	FNBO	FIRST NA	TIONAL BANK (OMAHA	0:	1/25/25	
	012525_0	IWANSKI	12/21/24	0.5	AMAZON-DAILY PLANNERS	82-820-56-00-5610	21.49
	012323 5.	IMANDILI	12/31/24		YORK POST-POSTAGE	82-820-54-00-5452	13.91
					YORK POST-POSTAGE	82-820-54-00-5452	9.51
				0 7	10111 1001 10011101	INVOICE TOTAL:	163.69 *
	012525-S.	MENDEZ	12/31/24	01	AMAZON-BADGE HOLDERS	01-220-56-00-5620	13.47
					AMAZON-PHONE CASE, DESK		40.63
					,	INVOICE TOTAL:	54.10 *
	012525-S.	REDMON	12/31/24		AT&T-12/24-01/23 INTERNITOWN SQUARE PARK SIGN		146.58
				03	FUN EXPRESS-SANTA BREAK! SUPPLIES		64.73
				0.5	ARC-BLOOD BORNE PATHOGE TRAINING	N 79-795-54-00-5412 ** COMMENT **	35.00
					RUNCO-KITCHEN SUPPLIES		39.17
				0.8	RUNCO-LABELS, PAPER	79-795-56-00-5610	174.62
				09	AMAZON-CRICUT TRANSFER '	TAPE 79-795-56-00-5606	23.98
				10	RUNCO-CARDSTOCK	79-795-56-00-5610	60.39
				11	RUNCO-TP, PAPER TOWELS	79-795-56-00-5640	114.46
					IPRA-2025 SOARING TO NEW	W 79-795-54-00-5412	330.00
				13	HEIGHTS CONFERENCE	** COMMENT **	
				14	REGISTRATION-GREGORY	** COMMENT **	
					IPRA-2025 SOARING TO NEW		330.00
					HEIGHTS CONFERENCE	endal County ** COMMENT **	
					REGISTRATION-SENDRA	** COMMENT **	
					LOMBARDI#50072400-SNOWG		245.00
					WORKSHOP	** COMMENT **	0.7.00
					SMITHEREEN-NOV 2024 PES'		97.00
					CONTROL AT PARKS GARAGE		120 60
						DIESEL 79-790-56-00-5695	128.60 135.02
					ARNESON#262476-OCT 2024 ARNESON#262913-NOV 2024		367.09
					ARNESON#262913-NOV 2024 ARNESON#262112-DEC 2024		380.75
					ARNESON#202112-DEC 2024 ARNESON#262912-NOV 2024		507.37
					ARNESON#262912-NOV 2024 ARNESON#261670-NOV 2024		573.02
					ARNESON#201070-NOV 2024 ARNESON#262475-OCT 2024		965.45
					ARNESON#262841-NOV 2024		382.02
					CUSTOM NEON-EXPERIENCE		1,274.70
					YORKVILLE NEON SIGN		_,
				~ -		INVOICE TOTAL:	6,374.95 *
	012525-S.	REMUS	12/31/24	01	DUNKIN-HOT CHOCOLATE	79-795-56-00-5606	49.98
			,,1		JEWEL-COOKIES	79-795-56-00-5606	34.94
					BSA TROOP 34-FIR TREES		

CHECK #	VENDOR # INVOICE #		INVOICE DATE		CHEC DESCRIPTION DATE		ITEM AMT	
900157	FNBO	FIRST	NATIONAL BANK	OMAHA	01/25	5/25		
	012525-S.	DEMIIC	12/31/24	0.4	DUNKIN-COFFEE	79-795-56-00-5606	23.99	
	012323-5.	KEMUS	12/31/24		DUNKIN-COFFEE	79-795-56-00-5606	23.99	
					ROSATIS-PIZZA	79-795-56-00-5606	64.48	
				0 0	NOSATIS TIZZA	INVOICE TOTAL:	1,330.81 *	
	012525-S.	SENDRA	12/31/24	0.1	DUNKIN-HOT CHOCOLATE	79-795-56-00-5606	49.98	
			//		TARGET-JUICE, WATER	79-795-56-00-5606	54.64	
					WALMART-PRESCHOOL HOLIDAY	79-795-56-00-5606	190.20	
					PARTY SUPPLIES	** COMMENT **		
				0.5	AMAZON-HOLIDAY PARTY SUPPLI	TES 79-795-56-00-5606	54.44	
				06	AMAZON-HOLIDAY PARTY SUPPLI	ES 79-795-56-00-5606	58.22	
					MENARDS#121224-TREE STANDS	79-795-56-00-5606	18.16	
				0.8	AMAZON-BALLOON ARCHES	79-795-56-00-5606	20.98	
				09	TARGET-COOKIES	79-795-56-00-5606	21.87	
					DOLLAR TREE-TABLECOVERS	79-795-56-00-5606	5.00	
					1 4 4	INVOICE TOTAL:	473.49 *	
	012525-s.	SLEEZER	12/31/24	01	MENARDS#120324-RETURNED LIG	GHTS 25-225-60-00-6010	-311.38	
				02	MENARDS#122324-HOLIDAY DECO	OR 25-225-60-00-6010	574.72	
				03	MENARDS#122324-GARLAND	25-225-60-00-6010	384.86	
				0 4	HOME DEPO-BATTERY, TOOL SET	79-790-56-00-5630	1,016.00	
				05	STEVENS-STAFF SHIRTS-LOWRY	79-790-56-00-5620	29.90	
				06	STEVENS-STAFF SHIRTS-CLEVER	79-790-56-00-5620	29.90	
				07	STEVENS-STAFF SHIRTS-LOMBAR	RDO 79-790-56-00-5620	84.75	
				0.8	STEVENS-STAFF SHIRTS-SCOTT	79-790-56-00-5620	64.75	
				09	STEVENS-STAFF SHIRTS-WOLF	79-790-56-00-5620	64.75	
				10	STEVENS-STAFF SHIRTS-ANDERS	SON 79-790-56-00-5620	64.75	
				11	STEVENS-STAFF SHIRTS-KLEEFI	SCH 79-790-56-00-5620	64.75	
				12	STEVENS-STAFF SHIRTS-LANDA	79-790-56-00-5620	64.75	
				13	STEVENS-STAFF SHIRTS-HODOUS	79-790-56-00-5620	64.75	
					STEVENS-STAFF SHIRTS-HOULE		64.75	
					STEVENS-STAFF SHIRTS-SMITH		64.75	
					STEVENS-STAFF SHIRTS-HORNER		64.75	
				17	STEVENS-STAFF SHIRTS-SLEEZE		64.75	
						INVOICE TOTAL:	2,456.25 *	
	012525-T.	HOULE	12/31/24		MENARDS#112624-ROPE LIGGHT, TIE DOWNS, MASONARY SCREWS		35.13	
				03	MENARDS#112624-ROPE LIGHT	25-225-60-00-6010	12.99	
					MENARDS#112624-EXTERIOR TIM		19.98	
				05	NAPA#379130-EXTENSIONS	79-790-56-00-5630	49.96	
				06	NAPA#379145-EXTENSIONS	79-790-56-00-5630	24.98	
				07	MENARDS#121724-POLE PUNER	79-790-56-00-5630	33.96	
				08	BLADES	** COMMENT **		
				09	MENARDS#112724-ELECTRICAL T	PAPE 79-790-56-00-5620	36.74	

CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION DATE		ITEM AMT
900157	FNBO FIRST NAT	IONAL BANK	OMAHA	01/25	/25	
	012525-T.HOULE	12/31/24	10	GREASE	** COMMENT ** INVOICE TOTAL:	213.74 *
	012525-T.LOWRY	12/31/24	02	MENARDS#120224-CLEANERS MENARDS#120224-RETURNED SNOWFLAKE CREDIT	79-790-56-00-5640 79-790-56-00-5640 ** COMMENT ** INVOICE TOTAL:	
	012525-T.MILSCHEWSKI	12/31/24	02 03 04 05 06 07 08 09 10 11 12 13 14 15 16	ILLCO-BELT MENARDS#112724-RETURNED PLUC MENARDS#120324-P TRAP, GLOVE MENARDS#112624-DISHWASHER SUPPLY LINE HOME DEPO-COUNTER CLEANER HOME DEPO-SOCKET SET, HEATE! MENARDS#121624-GARBAGE BAGS HOME DEPO-TOILET SEAT MENARDS#121624-SCREWS, WASGERS, TOILET SEAT, CASTE! BOARDS MENARDS#112724-BOLTS ACE-BOLTS, WASHERS MENARDS#120424-PAINT, SALT MENARDS#120524-REACH TOOL ILLCO-BELTS ILLCO-BELTS HOME DEPO-LIGHT BULBS	ES 24-216-56-00-5656 24-216-56-00-5656 ** COMMENT ** 24-216-56-00-5656 R 24-216-56-00-5656 82-820-54-00-5495 82-820-54-00-5495 ** COMMENT ** ** COMMENT ** 82-820-54-00-5495 24-216-56-00-5656 24-216-56-00-5656 24-216-56-00-5656	-12.78 16.98 18.49 19.96 116.88 25.48 25.99 64.51 4.49 13.61 99.41 7.98 76.88
	012525-T.SCOTT	12/31/24	02 03 04 05 06 07 08	MENARDS#120924-SILT FENCE MENARDS#122624-JACK MENARDS#121224-WASHERS, BATTERIES NAPA#379677-BATTERY DEPOSIT NAPA#379671-BRAKE CYLINDER NAPA#379675-BRAKE FLUID NAPA#379570-STARTER MENARDS#121724-STUDS MENARDS#120624-SCREWS	79-790-56-00-5640 79-790-56-00-5630 79-790-56-00-5640 ** COMMENT ** 79-790-56-00-5640 79-790-56-00-5640 79-790-56-00-5640 79-790-56-00-5640 25-225-60-00-6020 INVOICE TOTAL: CHECK TOTAL:	36.39 24.09 -22.00 157.41 8.49 145.78 34.50 44.75 529.37 *

UNITED CITY OF YORKVILLE PRE-CHECK RUN EDIT

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#	INVOICE #	DATE	#	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT	
541919	AACVB AURORA A	AREA CONVENTIO	ON					
	12/24-ALL	01/08/25	01	DEC 2024 ALL SEASON HOTEL TAX	01-640-54-00-5481 INVOI	CE TOTAL:	54.72 54.72 *	
					CHECK TOTAL:		54.	72
541920	ADVAAUTO ADVANCEI	O AUTOMATION 8	& CON	TROLS				
	24-4837	12/30/24		REPLACED PLC BATTERY AT RT47 & RT71	51-510-54-00-5445 ** COMMENT **		240.00	
			02	RITI		CE TOTAL:	240.00 *	
					CHECK TOTAL:		240.	00
541921	AEPENERG AEP ENER	RGY		/5/ 1	/ %/			
	3025129010-010225	01/02/25	01	12/03-12/27 2224 TREMONT	51-510-54-00-5480 INVOI	CE TOTAL:	8,680.79 8,680.79 *	
	3025129021-010225	01/02/25	01	11/04-12/04 610 TOWER WELL	51-510-54-00-5480 INVOI	CE TOTAL:	8,517.78 8,517.78 *	
	3025129054-122324	12/23/24	01	11/15-12/16 2702 MILL RD	51-510-54-00-5480 INVOI	CE TOTAL:	9,404.29 9,404.29 *	
	3025129065-010225	01/02/25	01	11/25-12/27 2921 BRISTOL RDG	51-510-54-00-5480 INVOI	CE TOTAL:	6,288.28 6,288.28 *	
				Kendall County	CHECK TOTAL:		32,891.	14
541922	ALTORFER ALTORFE	R INDUSTRIES,	INC	19/1-11				
	PO630014778	12/19/24	01 02	REPAIRED WIRING AT GRANDE RESERVE PLANT	51-510-54-00-5445 ** COMMENT **		1,503.00	
			02	NBOBINE I BINI		CE TOTAL:	1,503.00 *	
					CHECK TOTAL:		1,503.	00
	01-110 ADMIN							
	01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPM 01-410 STREETS OPERATIONS	1 2 1ENT 2 2	.2-112 .5-155 .3-230 .4-216 .5-205	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL	25-225 PARK & RECREAT 51-510 WATER OPERATI 52-520 SEWER OPERATION 79-790 PARKS DEPARTO	ONS DNS ENT	84-840 LIBRARY CAF 87-870 COUNTRYSII 88-880 DOWNTOW 89-890 DOWNTOW 90-XXX DEVELOPER	DE TIF 'N TIF 'N II TIF
	01-640 ADMINISTRATIVE SERVIC 11-111 FOX HILL SSA		25-212 25-215	GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	79-795 RECREATION DEF 82-820 LIBRARY OPERAT		95-000 ESCROW DE	

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CHECK #	VENDOR # INVOICE #	INVOICE ITE DATE #		ACCOUNT # PROJECT CODE	ITEM AMT
541923	AMENGLLI ERIC SUS	SZYNSKI			
	2025 HTD-DEPOSIT	01/02/25 01	2025 HTD BAND DEPOSIT	79-000-14-00-1400 INVOICE TOTAL:	2,375.00 2,375.00 *
				CHECK TOTAL:	2,375.00
D003933	ANTPLACE ANTHONY	PLACE YORKVILLE	LP		
	FEB 2025	02	CITY OF YORKVILLE HOUSING ASSISTANCE PROGRAM RENT REIMBURSEMENT FOR FEB 2025	01-640-54-00-5427 ** COMMENT ** ** COMMENT **	946.00
			REINDOROEMENT FOR TED 2020	INVOICE TOTAL:	946.00 *
541924	ATOMIC ATOMIC M	MUSIC GROUP LLC	3	DIRECT DEPOSIT TOTAL:	946.00
			2025 HTD BAND DEPOSIT	79-000-14-00-1400 INVOICE TOTAL:	2,000.00 2,000.00 *
541925	ATT AT&T		EST.	CHECK TOTAL:	2,000.00
		12/25/24 01	12/25-01/24 RIVERFRONT PARK	79-795-54-00-5440 INVOICE TOTAL:	231.27 231.27 *
541926	BCBS BLUE CRO	SS BLUE SHIELD	County Seat of Kendall Count	/ < /	231.27
	F015083-FEB 2025	0 2 0 3	DEARBORN/BCBS EAP-FEB 2025 DEARBORN/BCBS EAP-FEB 2025 DEARBORN/BCBS EAP-FEB 2025 DEARBORN/BCBS EAP-FEB 2025	01-110-52-00-5222 01-120-52-00-5222 01-210-52-00-5222 01-220-52-00-5222	5.64 5.64 50.76 11.63
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPM 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICE 11-111 FOX HILL SSA	25-205	MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL	25-225 PARK & RECREATION CAPITAL 51-510 WATER OPERATIONS 52-520 SEWER OPERATIONS 79-790 PARKS DEPARTMENT 79-795 RECREATION DEPARTMENT 82-820 LIBRARY OPERATIONS	84-840 LIBRARY CAPITAL 87-870 COUNTRYSIDE TIF 88-880 DOWNTOWN TIF 89-890 DOWNTOWN II TIF 90-XXX DEVELOPER ESCROW 95-000 ESCROW DEPOSIT

UNITED CITY OF YORKVILLE PRE-CHECK RUN EDIT

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CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	DESCRIPTION	ACCOUN	IT #	PROJECT CODE	ITEM	AMT		
541926	BCBS	BLUE CROSS E	BLUE SHIE	ELD								
	F015083-FEB	2025	01/08/25	06 07 08 09	DEARBORN/BCBS EAP-FEB 2025	24-216 51-510 52-520 79-790		E TOTAL:	1 1 1	3.28 2.82 0.45 4.82 6.22 1.28 7.05 9.59 *		
D003934	BEAVERST	VERNNE L. HE	ENNE			1						
	PYMT#2	C)1/01/25	02	1203 BADGER ST PYMT #2 1203 BADGER ST PYMT #2 1203 BADGER ST PYMT #2	52-520 01-410	0-54-00-5485 0-54-00-5485 0-54-00-5485 INVOIC:	E TOTAL:	83 83	3.34 3.33 3.33 0.00 *		
541927	BENNETTG	BENNETT, GAF	RY L.		EST.		1030					
	122924	1	12/29/24		JAN-APR 2025 BRUSH DUMPING MAY-JUN 2025 BRUSH DUMPING County Seat	01-000	0-54-00-5443 0-14-00-1400 INVOIC	E TOTAL:	20	0.00 0.00 0.00 *		
541928	BUILDERS	BUILDERS PAV	/ING LLC		Kendali County		-					
	2407504	C	01/07/25	01/07/25			ENGINEERS PAYMENT ESTIMATE 4 FOR 2024 ROAD PROGRAM		0-60-00-6028 COMMENT ** INVOIC	E TOTAL:	234,30	9.98 9.98 *
						CHECK	TOTAL:			234,309.98		
	01-410 STREETS O	RATIVE SERVICES		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTME RECREATION DEPARTMENT OPERATION	NS NS NT RTMENT	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT		

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CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT	
541929	CAMBRIA CAMBRIA S	ALES COMPAN	IY INC					
	44014	12/30/24	01	PAPER TOWEL, TOILET TISSUE		E TOTAL:	196.38 196.38 *	
					CHECK TOTAL:		196.3	38
541930	CHLORINA CHLORINAT	ING LTD, IN	IC					
	824326	09/24/24	01	CHLORINATION CHARGE	51-510-54-00-5462 INVOIC	E TOTAL:	675.00 675.00 *	
541931	COMED COMMONWEA	LTH EDISON		TITED	CHECK TOTAL:		675.0	00
341331	0228182000-1024	12/30/24	01	09/27-10/28 102 VAN EMMON LOT	/ 1/ 11/1/ // 11 11	E TOTAL:	23.16 23.16 *	
	0228182000-11242	01/07/25	01	10/28-11/25 120 VAN EMMON LOT	01-110-54-00-5480 INVOIC	E TOTAL:	22.44 22.44 *	
	1135300100-1224	12/30/24	01	11/25-12/27 456 KENNEDY RD	52-520-54-00-5480 INVOIC	E TOTAL:	153.01 153.01 *	
	1870344000-1224	12/31/24	01	11/27-12/31 105 COUNTRYSIDE PK	- 1 1/1 I	E TOTAL:	38.48 38.48 *	
	1951034000-1224	01/03/25	01	12/02-01/02 RT34 & BEECHER RD Kendal County	23-230-54-00-5482 INVOIC	E TOTAL:	128.09 128.09 *	
	3131491222-1224	12/31/24	01	11/26-12/30 101 BRUELL ST	51-510-54-00-5480 INVOIC	E TOTAL:	742.79 742.79 *	
	3387801111-1224	12/27/24	01	11/23-12/26 872 PRAIRIE	23-230-54-00-5482 INVOIC	E TOTAL:	215.98 215.98 *	
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPME 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICES 11-111 FOX HILL SSA	NT G	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 PARK & RECREATION 51-510 WATER OPERATION 52-520 SEWER OPERATION 79-790 PARKS DEPARTME 79-795 RECREATION DEPARTME 82-820 LIBRARY OPERATION	NS NS NT ARTMENT	84-840 LIBRARY CAP 87-870 COUNTRYSID 88-880 DOWNTOWN 89-890 DOWNTOWN 90-XXX DEVELOPER I 95-000 ESCROW DER	DE TIF N TIF N II TIF ESCROW

UNITED CITY OF YORKVILLE PRE-CHECK RUN EDIT

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ADMINISTRATIVE SERVICES

25-212

25-215

GENERAL GOVERNMENT CAPITAL

PUBLIC WORKS CAPITAL

01-640

11-111 FOX HILL SSA

INVOICES DUE ON/BEFORE 01/28/2025

INVOICE CHECK # VENDOR # ITEM INVOICE # DATE DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT 541931 COMED COMMONWEALTH EDISON 3741450787-1224 12/27/24 01 12/11-12/27 1201 BADGER UNIT B 51-510-54-00-5480 28.77 INVOICE TOTAL: 28.77 * 3852534000-1224 12/26/24 01 11/23-12/26 RT126 & SCHLHS RD 23-230-54-00-5482 151.78 INVOICE TOTAL: 151.78 * 3897838000-1224 51-510-54-00-5480 71.02 INVOICE TOTAL: 71.02 * 6242447000-1224 23-230-54-00-5482 23.37 23.37 * INVOICE TOTAL: 01-110-54-00-5480 8273737000-1224 12/31/24 01 11/25-12/31 104 E VAN EMMON 366.29 366.29 * INVOICE TOTAL: 100 12/31/24 01 11/26-12/30 7 COUNTRYSIDE PKWY 23-230-54-00-5482 8507242000-1224 246.20 246.20 * INVOICE TOTAL: 12/30/24 01 11/25-12/27 276 WINDHAM LIFT 9810925111-1224 52-520-54-00-5480 156.78 INVOICE TOTAL: 156.78 * CHECK TOTAL: 2,368.16 541932 CONTELEC CONSTELLATION TELECOM 01-110-54-00-5440 241.08 3419 02 JAN 2025 PUBLIC WORKS LINES 51-510-54-00-5440 421.89 03 JAN 2025 SEWER DEPT. LINES 52-520-54-00-5440 241.08 04 JAN 2025 RECREATION. LINES 79-795-54-00-5440 241.08 05 JAN 2025 TRAFFIC SIGNAL 01-410-54-00-5435 60.27 06 MAINTENANCE ** COMMENT ** INVOICE TOTAL: 1,205.40 * CHECK TOTAL: 1,205.40 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 **COUNTRYSIDE TIF** 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX **DEVELOPER ESCROW**

79-795

RECREATION DEPARTMENT

82-820 LIBRARY OPERATIONS

ESCROW DEPOSIT

95-000

DATE: 01/19/25 TIME: 10:36:31 ID: AP211001.W0W

CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT
541933	COREMAIN CORE & M	AIN LP					
	V901109	12/11/24	01	64 100CF METERS	51-510-56-	00-5664 INVOICE TOTAL:	9,664.00 9,664.00 *
					CHECK TOTA	L:	9,664.00
541934	CREST CRESTVIE	W BUILDERS					
	20220129-628 WHITE O	01/10/25	01	REFUND SECURITY GUARANTEE	01-000-24-	INVOICE TOTAL:	600.00 600.00 *
541935	DRHCAMBR DR HORTO	N-MIDWEST		ZII'	CHECK TOTA	L:	600.00
	20200971-2588 ANNA M	01/09/25		REMAINING SECURITY GUARANTEE REFUND	01-000-24- ** COMME		2,500.00
			02	KEFUND	COMME	INVOICE TOTAL:	2,500.00 *
	2022-0742-3340 SEELE	01/14/25		SECURITY GUARANTEE REFUND BALANCE	01-000-24- ** COMME		2,500.00
			02	BALANCE	^ COMME	INVOICE TOTAL:	2,500.00 *
					CHECK TOTA	L:	5,000.00
541936	DUTEK THOMAS &	JULIE FLETO	CHER	10/1	73		
	1025381	12/13/24	01	COUPLERS, NIPPLES County Seat Kendali Count		00-5628 INVOICE TOTAL:	232.50 232.50 *
	1025423	12/19/24	01	HOSES	01-410-56-	00-5628 INVOICE TOTAL:	72.50 72.50 *
					CHECK TOTA	L:	305.00
541937	EEI ENGINEER	ING ENTERPR	ISES,	INC.			
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPMI 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICE 11-111 FOX HILL SSA		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	51-510 WAT 52-520 SEW 79-790 PARK 79-795 RECF	& RECREATION CAPITAL ER OPERATIONS ER OPERATIONS (S DEPARTMENT EEATION DEPARTMENT ARY OPERATIONS	84-840 LIBRARY CAPITAL 87-870 COUNTRYSIDE TIF 88-880 DOWNTOWN TIF 89-890 DOWNTOWN II TIF 90-XXX DEVELOPER ESCROW 95-000 ESCROW DEPOSIT

DATE: 01/19/25

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INVOICES DUE ON/BEFORE 01/28/2025

CHECK # VENDOR # INVOICE ITEM INVOICE # DATE DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT 541937 ENGINEERING ENTERPRISES, INC. 82204 12/20/24 01 TRAFFIC CONTROL SIGNAGE AND 01-640-54-00-5465 3,255.00 02 MARKINGS ** COMMENT ** INVOICE TOTAL: 3,255.00 * 82205 12/20/24 01 UTILITY PERMIT REVIEWS 01-640-54-00-5465 1,050.00 INVOICE TOTAL: 1,050.00 * 82206 12/20/24 01 PRESTWICK 01-640-54-00-5465 329.00 329.00 * INVOICE TOTAL: 82207 01-640-54-00-5465 12/20/24 01 GRANDE RESERVE-UNIT 8 438.00 INVOICE TOTAL: 438.00 * 82208 12/20/24 01 GRANDE RESERVE-UNIT 3 01-640-54-00-5465 1,690.00 INVOICE TOTAL: 1,690.00 * 1 777 82209 90-147-00-00-0111 12/20/24 01 GRANDE RESERVE-UNITS 26 & 27 2,313.00 INVOICE TOTAL: 2,313.00 * 82210 12/20/24 01 GRANDE RESERVE-UNIT 7 01-640-54-00-5465 2,550.00 INVOICE TOTAL: 2,550.00 * 82211 12/20/24 01 GRANDE RESERVE-UNITS 15 & 22 01-640-54-00-5465 1,170.00 INVOICE TOTAL: 1,170.00 * 01 KENDALL MARKETPLACE-LOT 52 90-154-00-00-0111 82212 12/20/24 697.50 02 PHASE 2 AND 3 RESUB County Scale ** COMMENT ** 697.50 * INVOICE TOTAL: Kendall County 12/20/24 01 GRANDE RESERVE-UNIT 20 01-640-54-00-5465 82213 648.00 648.00 * INVOICE TOTAL: 82214 12/20/24 01 GRANDE RESERVE-UNIT 9 01-640-54-00-5465 2,207.00 INVOICE TOTAL: 2,207.00 * 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 **COUNTRYSIDE TIF** 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX **DEVELOPER ESCROW** 79-795 RECREATION DEPARTMENT **ADMINISTRATIVE SERVICES** 01-640 25-212 GENERAL GOVERNMENT CAPITAL 95-000 **ESCROW DEPOSIT** 82-820 LIBRARY OPERATIONS 11-111 FOX HILL SSA 25-215 PUBLIC WORKS CAPITAL

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INVOICES DUE ON/BEFORE 01/28/2025

CHECK # VENDOR # INVOICE ITEM INVOICE # DATE DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT 541937 ENGINEERING ENTERPRISES, INC. 82215 12/20/24 01 BRIGHT FARMS 90-173-00-00-0111 936.50 INVOICE TOTAL: 936.50 * 82216 12/20/24 01 KENDALLWOOD ESTATES-RALLY 90-174-00-00-0111 3,172.50 INVOICE TOTAL: 3,172.50 * 82217 12/20/24 51-510-60-00-6015 01 NORTH CENTRAL EWST REHAB 522.00 INVOICE TOTAL: 522.00 * 90-179-00-00-0111 6,648.00 82218 12/20/24 01 BRISTOL BAY UNIT 13 INVOICE TOTAL: 6,648.00 * 82219 12/20/24 01 KENNEDY RD AND FREEDOM PLACE 23-230-60-00-6087 602.50 02 INTERSECTION IMPROVEMENTS ** COMMENT ** INVOICE TOTAL: 602.50 * 82220 12/20/24 90-188-00-00-0111 01 CALEDONIA UNIT 3 2,246.00 INVOICE TOTAL: 2,246.00 * 82221 12/20/24 01 GENERAL LAKE MICHIGAN/DWC 01-640-54-00-5465 1,375.50 ** COMMENT ** 02 COORDINATION INVOICE TOTAL: 1,375.50 * 82222 01 BRISTOL BAY UNIT 10 90-186-00-00-0111 12/20/24 47.00 47.00 * INVOICE TOTAL: 01 BRISTOL BAY UNIT 12 County Scat 90-186-00-00-0111 82223 12/20/24 47.00 47.00 * INVOICE TOTAL: 82224 12/20/24 01 GRANDE RESERVE-UNIT 01-640-54-00-5465 868.00 868.00 * INVOICE TOTAL: 82225 12/20/24 01 GRANDE RESERVE-UNIT 6 01-640-54-00-5465 188.00 INVOICE TOTAL: 188.00 * 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 **COUNTRYSIDE TIF** 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX **DEVELOPER ESCROW** 79-795 RECREATION DEPARTMENT **ADMINISTRATIVE SERVICES** 01-640 25-212 GENERAL GOVERNMENT CAPITAL 95-000 **ESCROW DEPOSIT** 82-820 LIBRARY OPERATIONS 11-111 FOX HILL SSA 25-215 PUBLIC WORKS CAPITAL

INVOICES DUE ON/BEFORE 01/28/2025

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01-220 COMMUNITY DEVELOPMENT

01-640 ADMINISTRATIVE SERVICES

01-410 STREETS OPERATIONS

11-111 FOX HILL SSA

24-216

25-215

BUILDING & GROUNDS

25-212 GENERAL GOVERNMENT CAPITAL

PUBLIC WORKS CAPITAL

25-205 POLICE CAPITAL

DATE: 01/19/25

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HECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	1 DESCRIPTION	ACCOUN	T # PROJECT CODE	ITEM AMT
541937	EEI	ENGINEERING ENTERPR	ISES,	INC.			
	82226	12/20/24	02	LAKE MICHIGAN CONNECTION-CORROSION CONTROL STUDY	** C	-60-00-6011 OMMENT ** OMMENT **	542.25
						INVOICE TOTAL:	542.25 *
					CHECK	TOTAL:	33,542.75
541938	EEI	ENGINEERING ENTERPR	ISES,	INC.			
	82227	12/20/24	01	PUBLIC WORKS SITE-BOOMBAH BLVD	24-216	-60-00-6042 INVOICE TOTAL:	15,790.74 15,790.74 *
				2	CHECK	TOTAL:	15,790.74
541939	EEI	ENGINEERING ENTERPR	ISES,	INC.	1 =	n \	
	82228	12/20/24		WATER AUDIT AND NON-REVENUE WATER REDUCTION		-54-00-5465 OMMENT **	58.50
				EST.	E 8 8 -	INVOICE TOTAL:	58.50 *
	82229	12/20/24	01	BOWMAN SUBDIVISION	90-194	-00-00-0111 INVOICE TOTAL:	2,260.00 2,260.00 *
	82230	12/20/24	01	NORTHPOINTE SUBDIVISION		-00-00-0111	3,767.00
				\ O \ (INVOICE TOTAL:	3,767.00 *
	82231	12/20/24	01	WELL #10 & RAW WATER MAIN Scal	51-510	-60-00-6029 INVOICE TOTAL:	12,433.97 12,433.97 *
	82232	12/20/24	01	GREEN DOOR KELAKA	90-191	-00-00-0111	3,250.00
				\\\LE\\	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	INVOICE TOTAL:	3,250.00 *
	82233	12/20/24	01	2024 WATER MAIN REPLACEMENT-A	51-510	-60-00-6025 INVOICE TOTAL:	9,497.50 9,497.50 *
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE		15-155	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL	25-225 51-510	PARK & RECREATION CAPITAL WATER OPERATIONS	84-840 LIBRARY CAPITAI 87-870 COUNTRYSIDE TI 88-880 DOWNTOWN TIF

DOWNTOWN II TIF

ESCROW DEPOSIT

DEVELOPER ESCROW

89-890

90-XXX

95-000

52-520 SEWER OPERATIONS

PARKS DEPARTMENT

LIBRARY OPERATIONS

RECREATION DEPARTMENT

79-790

79-795

82-820

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INVOICES DUE ON/BEFORE 01/28/2025

CHECK # VENDOR # INVOICE ITEM INVOICE # DATE DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT 541939 ENGINEERING ENTERPRISES, INC. 82234 12/20/24 01 2024 WATER MAIN REPLACEMENT-B 51-510-60-00-6025 976.00 INVOICE TOTAL: 976.00 * 82235 12/20/24 01 ELDAMAIN WATER MAIN LOOP-LP 51-510-60-00-6024 77,091.49 INVOICE TOTAL: 77,091.49 * 12/20/24 52-520-60-00-6024 82236 20,688.06 01 SOUTHERN SANITARY SEWER ** COMMENT ** 02 CONNECTION-LP 20,688.06 * INVOICE TOTAL: 82237 12/20/24 01 CENTER ST WATER MAIN EXTENSION 51-510-60-00-6025 9,756.25 9,756.25 * INVOICE TOTAL: 82238 01 GRANDE RESERVE-UNITS 10 & 11 90-223-00-00-0111 12/20/24 28,585.75 777 INVOICE TOTAL: 28,585.75 * 82239 12/20/24 01 FY 2026 BUDGET 01-640-54-00-5465 4,630.50 INVOICE TOTAL: 4,630.50 * 82240 90-208-00-00-0111 298.50 12/20/24 01 QUIK TRIP GAS STATION INVOICE TOTAL: 298.50 * 82241 12/20/24 01 2024 ROAD PROGRAM 23-230-60-00-6025 915.00 INVOICE TOTAL: 915.00 * 12/20/24 01 KENDALL MARKETPLACE-LOT 52 90-154-00-00-0111 82242 14,422.00 ** COMMENT ** 02 PHASE 4 INVOICE TOTAL: 14,422.00 * 82243 12/20/24 01 LAKE MICHIGAN-WIFIA LOAN 51-510-60-00-6011 11,332.63 ** COMMENT ** 02 APPLICATION INVOICE TOTAL: 11,332.63 * 82244 12/20/24 01 RT47 WATER MAIN 51-510-60-00-6035 31,310.00 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 **COUNTRYSIDE TIF** 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX **DEVELOPER ESCROW** 79-795 RECREATION DEPARTMENT **ADMINISTRATIVE SERVICES** 01-640 25-212 GENERAL GOVERNMENT CAPITAL 95-000 **ESCROW DEPOSIT** 82-820 LIBRARY OPERATIONS 11-111 FOX HILL SSA 25-215 PUBLIC WORKS CAPITAL

DATE: 01/19/25 TIME: 10:36:31 ID: AP211001.WOW

CHECK #	VENDO		INVOICE DATE	ITEM #		ACCOUNT #	PROJECT CODE	ITEM AMT	
541939	EEI	ENGINEERIN	G ENTERPR	ISES,	INC.				
	8224	4	12/20/24		RELOCATION-WATER PARKWAY TO BERTRAM DR	** COMMENT ** ** COMMENT **	E TOTAL:	31 310 00	*
	8224	5	12/20/24	01	CITY OF YORKVILLE-GENERAL	01-640-54-00-5465		4,107.00 4,107.00	
	8224	6	12/20/24	01	MUNICIPAL ENGINEERING SERVICES	01-640-54-00-5465		1,900.00	
	8224	7	12/20/24		CORNEILS RD SOLAR/BEECHER RD SOLAR	90-216-00-00-0111 ** COMMENT **		906.00	
	8224	8	12/20/24	01	GRANDE RESERVE-UNIT 21	INVOIC 90-222-00-00-0111	E TOTAL:	906.00	*
	8224	۵	12/20/24	0.1	2024 LOCAL RD PROGRAM	INVOIC	E TOTAL:	210.00	*
					EST.	INVOIC	E TOTAL:	44,978.00	*
	8225		12/20/24		GRANDE RESERVE - UNITS 18 & 25	INVOIC	E TOTAL:	1,173.00 1,173.00	*
	8225	1	12/20/24	01	PAVEMENT MANAGEMENT UPDATE	23-230-54-00-5465 INVOIC	E TOTAL:	4,925.00 4,925.00	*
	8225	2	12/20/24	01	LM-NORTH RECEIVING STATION Seat Kandal County	/ . No. / /	E TOTAL:	26,427.50 26,427.50	*
	8225	3	12/20/24	01	LM-SOUTH RECEIVING STATION	51-510-60-00-6011 INVOIC	E TOTAL:	15,094.00 15,094.00	*
	8225	4	12/20/24		LM-SOUTH RECEIVING STATION STANDPIPE	51-510-60-00-6011 ** COMMENT **	E TOTAL:	5,194.60 5,194.60	*
						CHECK TOTAL:		336,1	
	01-120 01-210 01-220 01-410 01-640	ADMIN FINANCE POLICE COMMUNITY DEVELOPMENT STREETS OPERATIONS ADMINISTRATIVE SERVICES FOX HILL SSA		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 PARK & RECREATION 51-510 WATER OPERATION 52-520 SEWER OPERATION 79-790 PARKS DEPARTME 79-795 RECREATION DEPARTME 82-820 LIBRARY OPERATION	NS NS :NT ARTMENT	87-870 COUNT 88-880 DOWN 89-890 DOWN 90-XXX DEVELO	Y CAPITAL TRYSIDE TIF TOWN TIF TOWN II TIF DPER ESCROW W DEPOSIT

TIME: 10:36:31 ID: AP211001.W0W

DATE: 01/19/25

CHECK #	VENDOR # INVOICE #	INVOICE DATE	: ITEM #	DESCRIPTION	ACCOUNT # PROJECT	CODE ITEM AMT	
541940	EEI	ENGINEERING ENTERE	PRISES,	INC.			
	82255	12/20/2		LM-NORTHWEST ELEVATED WATER STORAGE TANK	51-510-60-00-6011 ** COMMENT **	57,090.25	
					INVOICE TOTAL:	57,090.25	*
					CHECK TOTAL:	57,0	90.25
541941	EEI	ENGINEERING ENTER	PRISES,	INC.			
	82256	12/20/2		LM-RT126 WATER MAIN IMPROVEMENTS	51-510-60-00-6011 ** COMMENT **	5,355.50	
				130	INVOICE TOTAL:	5,355.50	*
	82257	12/20/2	24 01 02	LM-BLUESTEM WATER MAIN IMPROVEMENTS	51-510-60-00-6011 ** COMMENT **	9,625.00	
				/3/	INVOICE TOTAL:	9,625.00	*
	82258	12/20/2	24 01	CYRUS ONE	90-227-00-00-0111	246.00	
					INVOICE TOTAL:	246.00	*
	82259	12/20/2	24 01	2025 WATER MAIN REPLACEMENT	51-510-60-00-6025	67,080.47	
					INVOICE TOTAL:	67,080.47	*
	82260	12/20/2	24 01	LM-LAND ACQUISITION SERVICES	51-510-60-00-6011	2,790.00	
				14 6	INVOICE TOTAL:	-	*
	82261	12/20/2	24 01	FAXON RD RECONSTRUCTION	23-230-60-00-6046	5,491.42	
		,_,		County Seat	INVOICE TOTAL:		*
	82262	12/20/2	94 01	BEECHER RD RECONSTRUCTION	23-230-60-00-6046	5,542.08	
	02202	12/20/2	.1 01	BBBCHER RD RECONSTRUCTION	INVOICE TOTAL:	-	*
	82263	12/20/2		KENNEDY RD ROADWAY	23-230-60-00-6040	12,918.00	
			02	IMPROVEMENTS	** COMMENT ** INVOICE TOTAL:	12,918.00	*
	01-410 STREETS	NITY DEVELOPMENT OPERATIONS STRATIVE SERVICES	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 PARK & RECREATION CAPITAL 51-510 WATER OPERATIONS 52-520 SEWER OPERATIONS 79-790 PARKS DEPARTMENT 79-795 RECREATION DEPARTMENT 82-820 LIBRARY OPERATIONS	87-870 COUNT 88-880 DOWN 89-890 DOWN 90-XXX DEVELO	Y CAPITAL TRYSIDE TIF TOWN TIF TOWN II TIF DPER ESCROW W DEPOSIT

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CHECK # VENDOR # INVOICE ITEM INVOICE # DATE DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT 541941 ENGINEERING ENTERPRISES, INC. 82264 12/20/24 01 2820 BEECHER SOLAR 90-231-00-00-0111 1,035.50 INVOICE TOTAL: 1,035.50 * 82265 12/20/24 01 WWS NEEDS ASSESSMENT 01-640-54-00-5465 855.25 02 CALCULATIONS UPDATE ** COMMENT ** 855.25 * INVOICE TOTAL: 12/20/24 01 KENDALL COUNTY BLDG-FOX ST 01-640-54-00-5465 82266 453.00 453.00 * INVOICE TOTAL: 82267 01-640-54-00-5465 210.00 12/20/24 01 QUIET ZONE STUDY-DOWNTOWN 210.00 * INVOICE TOTAL: 82268 90-242-00-00-0111 984.00 12/20/24 01 PIONEER DEVELOPMENT 984.00 * INVOICE TOTAL: 777 82269 90-232-00-00-0111 12/20/24 01 HEARTLAND MEADOWS WEST 2,629.00 INVOICE TOTAL: 2,629.00 * 82270 12/20/24 01 DMYF, LLLP 90-234-00-00-0111 1,887.00 INVOICE TOTAL: 1,887.00 * 01 2025 ROAD PROGRAM-MFT 82271 12/20/24 23-230-60-00-6025 15,274.50 INVOICE TOTAL: 15,274.50 * 90-239-00-00-0111 82272 12/20/24 01 COSTCO 3,196.00 INVOICE TOTAL: 3,196.00 * Kendall County 82273 12/20/24 01 1106 S BRIDGE ST 90-237-00-00-0111 637.50 INVOICE TOTAL: 637.50 * 82274 12/20/24 01 2024-2025 BRIDGE INSPECTION 01-640-54-00-5465 14,500.00 INVOICE TOTAL: 14,500.00 * 82298 11/26/24 01 2025 LOCAL ROAD PROGRAM 23-230-60-00-6028 46,793.50 46,793.50 * INVOICE TOTAL: CHECK TOTAL: 197,503.72 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 **COUNTRYSIDE TIF** 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX **DEVELOPER ESCROW** 79-795 RECREATION DEPARTMENT **ADMINISTRATIVE SERVICES** 01-640 25-212 GENERAL GOVERNMENT CAPITAL 95-000 **ESCROW DEPOSIT** 82-820 LIBRARY OPERATIONS 11-111 FOX HILL SSA 25-215 PUBLIC WORKS CAPITAL

DATE: 01/19/25 TIME: 10:36:31 ID: AP211001.WOW

CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT :	PROJECT CODE	ITEM AMT
541942	FIRSTNET AT&T MOB	ILITY					
	287313454005X0103202	12/25/24	02 03	11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES	01-220-54 51-510-54 01-110-54 01-210-54	1-00-5440 1-00-5440	42.20 42.20 42.20 838.04
				11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES	79-795-54		42.20 1,006.84 *
					CHECK TO	'AL:	1,006.84
541943	FIRSTNET AT&T MOB	ILITY		LED C	7.		
	287313454207X0103202	12/25/24	02 03 04 05	11/26-12/25 MOBILE DEVICES 4 REPLACEMENT PHONES 11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES 11/26-12/25 MOBILE DEVICES	01-220-54 01-220-56 79-790-54 79-795-54 51-510-54	5-00-5620 -00-5440 -00-5440 -00-5440 -00-5440 INVOICE TOTAL:	340.92 3.96 36.24 156.88 235.32 72.48 845.80 *
541944	FLEEPRID FLEETPRI	DE		EST.	CHECK TO		845.80
	121938482	12/06/24	01	WORK LAMP		5-00-5628 INVOICE TOTAL:	46.39 46.39 *
541945	FOXVALLE FOX VALL	EY TROPHY &	AWARD	of Kendall Coun		7	10,03
	T197	01/08/25	01	BASKETBALL MEDALS	79-795-50	5-00-5606 INVOICE TOTAL:	800.00 800.00 *
					CHECK TO	AL:	800.00
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPM 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICE 11-111 FOX HILL SSA		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	51-510 W. 52-520 SE 79-790 PA 79-795 RE	RK & RECREATION CAPITAL ATER OPERATIONS WER OPERATIONS RKS DEPARTMENT CREATION DEPARTMENT RARY OPERATIONS	84-840 LIBRARY CAPITAL 87-870 COUNTRYSIDE TIF 88-880 DOWNTOWN TIF 89-890 DOWNTOWN II TIF 90-XXX DEVELOPER ESCROW 95-000 ESCROW DEPOSIT

TIME: 10:36:31 ID: AP211001.W0W

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CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	ACCOUN	VT #	PROJECT CODE	ITEN	I AMT
541946	G&LCOUNT G & L CO	UNTERTOPS,	INC						
	10389	01/09/25		BALANCE OWED FOR COM/DEV		5-56-00-5656		25	0.00
			02	COUNTERTOP	** (COMMENT ** INVOI	CE TOTAL:	25	0.00 *
					CHECK	TOTAL:			250.00
541947	GARDKOCH GARDINER	KOCH & WEI	SBERG						
	22411	01/10/25	01	KIMBALL HILL I MATTERS	01-640)-54-00-5461 INVOI	CE TOTAL:		0.00
					CHECK	TOTAL:			360.00
541948	GLATFELT GLATFELT	ER UNDERWRI	TING S	RVS.	/6	21			
	218649131	01/09/25		ADDITION OF MACK DUMP TRUCK TO INSURANCE	11.11.	0-52-00-5231 COMMENT **		1,55	9.00
			02		1 H E	INVOI	CE TOTAL:	1,55	9.00 *
				EST.		TOTAL:			1,559.00
541949	HARRIS HARRIS CO	OMPUTER SYS	TEMS						
	MSIXT0000589	12/31/24	01 02 03	MYGOVHUB FEES-DEC 2024 MYGOVHUB FEES-DEC 2024 County Seat	51-510	0-54-00-5462 0-54-00-5462 0-54-00-5462 INVOI		15 4	5.06 7.60 6.35 9.01 *
541950	HARTROB ROBBIE HA	ΔRT		Kendali County	CHECK	TOTAL:			309.01
341930	011425-TUITION		0.1	AURORAS MASTER CLASS ADV	01-210)-54-00-5410		1 20	6.00
	011423-101110N	01/14/25		CLINICAL SOCIAL WORK TIUTION		COMMENT **		1,20	0.00
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPME 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICE 11-111 FOX HILL SSA		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREAT WATER OPERATION SEWER OPERATION PARKS DEPARTM RECREATION DEF LIBRARY OPERAT	ONS DNS ENT PARTMENT	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT

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541950	HARTROB ROBBIE H	IART							
	011425-TUITION	01/14/25	03	REIMBURSEMENT	** C	OMMENT ** INVOICE	TOTAL:	1,20	5.00 *
	011425-TUITION 2	01/14/24		AURORA MASTER'S CLASS SWK POLICY TUITION REIMBURSEMENT		-54-00-5410 OMMENT **		1,200	
	011425-TUITION 3	01/14/25	01	AURORA MASTER'S CLASS FIELD	01-210	INVOICE -54-00-5410		1,200	5.00 * 5.00
				INSTRUCT TUITION REIMBURSEMENT		OMMENT ** INVOICE	TOTAL:	1,20	5.00 *
					CHECK	TOTAL:			3,618.00
541951	ILPHLEBO ILLINOIS	PHLEBOTOMY	SERVI	CES	15	a 1			
	2168	12/27/24	01	PHLEBOTOMY SERVICES	01-210	-54-00-5462 INVOICE	TOTAL:).00).00 *
				EST.	CHECK	TOTAL:			550.00
541952	IMPERINV IMPERIAI	INVESTMENTS							
	NOV 2024-REBATE	01/09/25	01	NOV 2024 BUSINESS DIST REBATE	01-000	-24-00-2488 INVOICE	TOTAL:	•	5.61 5.61 *
				County Seat	CHECK	TOTAL:			2,356.61
541953	JDEERE JOHN DEE	CRE FINANCIAL		Kendall County					
	11983513	09/17/24	01	INSTALLED TEMPERATURE SWITCH	01-410	-54-00-5490 INVOICE	TOTAL:	1,155 1,155	5.62 5.62 *
	12010410	10/17/24	01	REPLACED FUEL CHECK VALVE	01-410	-54-00-5490 INVOICE).49).49 *
					CHECK '	TOTAL:			2,026.11
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPM 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVIC	ES 2	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTMEN RECREATION DEPAR LIBRARY OPERATION	S S T RTMENT	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT

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CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT # PR	ROJECT CODE ITEM AMT
541954	JIMSTRCK J	M'S TRUCK INSPECT	CION LL	3		
	207297	01/03/25	01	TRUCK INSPECTION	01-410-54-00-5490 INVOICE T	43.00 FOTAL: 43.00 *
					CHECK TOTAL:	43.00
541955	KENDCROS KI	ENDALL CROSSING, I	LC			
	BD REBATE 11/2	01/08/25	01	NOV 2024 BUSINESS DIST REBATE	INVOICE T	5,881.91 FOTAL: 5,881.91 *
541956	KLUBER KI	LUBER, INC			CHECK TOTAL:	5,881.91
	9355	12/31/24	02	WORKED COMPLETED ON YORKVILLE PUBLIC WORKS AND PARK	** COMMENT **	194,489.95
			03	MAINTENANCE BUILDING	** COMMENT ** INVOICE T	TOTAL: 194,489.95 *
				EST.	CHECK TOTAL:	194,489.95
541957	LAUTAMEN LA	AUTERBACH & AMEN,	LLP		_	
	95659	09/28/24	01 02 03	PROFESSIONAL SERVICES RENDERED IN CONNECTION WITH GASB 96	01-120-54-00-5414 ** COMMENT ** ** COMMENT **	1,500.00
			0.5	County Seal of Kendall Coun	INVOICE T	TOTAL: 1,500.00 * 1,500.00
541958	LINDCO L	NDCO EQUIPMENT SA	LES IN	1/4/	CHECK TOTAL.	1,300.00
341930	230883C-SWL	11/20/24		WESTERN STAR CHASSIS	25-215-60-00-6070 INVOICE T	130,450.00 FOTAL: 130,450.00 *
					INVOICE	130,430.00
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE		12-112 15-155	SUNFLOWER SSA MOTOR FUEL TAX (MFT)	25-225 PARK & RECREATION C 51-510 WATER OPERATIONS	87-870 COUNTRYSIDE TIF
	01-220 COMMUNITY I 01-410 STREETS OPER. 01-640 ADMINISTRATI 11-111 FOX HILL SSA	ATIONS	23-230 24-216 25-205 25-212 25-215	CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	52-520 SEWER OPERATIONS 79-790 PARKS DEPARTMENT 79-795 RECREATION DEPARTM 82-820 LIBRARY OPERATIONS	OF OOD FECTION DEDOCIT

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541958	LINDCO	LINDCO EQU	IPMENT SAI	LES IN	c					
	2403361-SWI	1	12/23/24	01	MACK TRUCK FINAL BUILD OUT			E TOTAL:	154,41 154,41	
						CHECK	TOTAL:			284,860.56
541959	LITE	LITE CONST	RUCTION							
	APP 17		01/10/25	02	FINAL PAYMENT FOR YORKVILLE CITY HALL AND POLICE FACILITY	** C	OMMENT **		198,90	2.56
				03	RENOVATIONS		OMMENT ** INVOIC	E TOTAL:	198,90	2.56 *
					/2	CHECK	TOTAL:			198,902.56
541960	LRS	LRS, LLC			/5/	1/2	n			
	PS624314		09/19/24		08/23-09/19 PORTOLET UPKEEP-2775 GRANDE TR		-56-00-5620 OMMENT **		18	4.00
				02	OTREET 2773 GRANDE IN			E TOTAL:	18	4.00 *
	PS629251		10/17/24		10/18 PORTOLET UPKEEP- 427 BRISTOL BAY	79-795	-56-00-5620 OMMENT **			9.85
				02				E TOTAL:		9.85 *
	PS634941		11/14/24		11/15 PORTOLET UPKEEP-301 N BRIDGE		-56-00-5620 MENT **			7.49
					County Seat	18		E TOTAL:		7.49 *
	PS634942		11/14/24	01 02	11/15 PORTOLET UPKEEP-131 E		-56-00-5620 OMMENT **		45	2.00
					V/E I		INVOIC	E TOTAL:	45	2.00 *
	PS634944		11/14/24		11/15 PORTOLET UPKEEP- 374 E VAN EMMON		-56-00-5620 OMMENT **			3.28
						_		E TOTAL:		3.28 *
	01-410 STREETS O	ITY DEVELOPMEN [.] PERATIONS		12-112 15-155 23-230 24-216 25-205	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL	25-225 51-510 52-520 79-790	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTMENT	NS NS NT	84-840 87-870 88-880 89-890 90-XXX	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW
	01-640 ADMINIST 11-111 FOX HILL S	RATIVE SERVICES SA		25-212 25-215	GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	79-795 82-820	RECREATION DEPA LIBRARY OPERATION		95-000	ESCROW DEPOSIT

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ID: AP211001.W0W

INVOICES DUE ON/BEFORE 01/28/2025

INVOICE ITEM CHECK # VENDOR # INVOICE # DATE # DESCRIPTION ACCOUNT # PROJECT CODE ITEM AMT 541960 LRS, LLC PS634945 11/14/24 01 11/15 PORTOLET UPKEEP-1711 79-795-56-00-5620 3.28 02 JOHN ST ** COMMENT ** 3.28 * INVOICE TOTAL: PS634946 11/14/24 01 11/15 PORTOLET UPKEEP-1474 79-795-56-00-5620 3.28 02 SYCAMORE ** COMMENT ** 3.28 * INVOICE TOTAL: 11/14/24 01 11/15 PORTOLET UPKEEP-901 79-795-56-00-5620 10.78 PS634947 ** COMMENT ** 02 GAME FARM RD 10.78 * INVOICE TOTAL: 11/14/24 01 10/20-11/14 PORTOLET UPKEEP-PS634948 79-795-56-00-5620 98.57 02 2775 GRANDE TR ** COMMENT ** 98.57 * INVOICE TOTAL: 11/14/24 01 11/15 PORTOLET UPKEEP-3651 79-795-56-00-5620 6.57 PS634950 02 KENNEDY ** COMMENT ** INVOICE TOTAL: 6.57 * 79-795-56-00-5620 PS634951 11/14/24 01 11/15 PORTOLET UPKEEP-872 3.28 02 PRAIRIE CROSSING ** COMMENT ** INVOICE TOTAL: 3.28 * 79-795-56-00-5620 PS634953 11/14/24 01 11/15 PORTOLET UPKEEP-600 6.57 4.1 ** COMMENT ** 02 HAYDEN DR INVOICE TOTAL: 6.57 * 11/14/24 01 11/15-11/19 PORTOLET 79-795-56-00-5620 118.23 PS634954 02 UPKEEP-BRISTOL BAY ** COMMENT ** 118.23 * INVOICE TOTAL: 79-795-56-00-5620 PS634956 11/14/24 01 11/15 PORTOLET 3.28 ** COMMENT ** 02 UPKEEP-COUNTRYSIDE INVOICE TOTAL: 3.28 * 01-110 ADMIN 12-112 SUNFLOWER SSA 84-840 LIBRARY CAPITAL 25-225 PARK & RECREATION CAPITAL 01-120 FINANCE 15-155 MOTOR FUEL TAX (MFT) 87-870 **COUNTRYSIDE TIF** 51-510 WATER OPERATIONS 01-210 POLICE 23-230 CITY WIDE CAPITAL 88-880 DOWNTOWN TIF 52-520 SEWER OPERATIONS 01-220 COMMUNITY DEVELOPMENT 24-216 BUILDING & GROUNDS 89-890 **DOWNTOWN II TIF** 79-790 PARKS DEPARTMENT 01-410 STREETS OPERATIONS 25-205 POLICE CAPITAL 90-XXX **DEVELOPER ESCROW** 79-795 RECREATION DEPARTMENT ADMINISTRATIVE SERVICES 01-640 25-212 GENERAL GOVERNMENT CAPITAL 95-000 ESCROW DEPOSIT 82-820 LIBRARY OPERATIONS 11-111 FOX HILL SSA 25-215 PUBLIC WORKS CAPITAL

INVOICES DUE ON/BEFORE 01/28/2025

DATE: 01/19/25

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CHECK #	VEND INVOI	OOR #			INVOICE DATE	ITEM #	DESCRIPTION	ACCOUN	T #	PROJECT CODE	ITEM	AMT	
541960	LRS		LRS, I	LLC									
	PS63	4957			11/14/24		11/15-12/12 PORTOLET UPKEEP-RICE CONSTRUCTION SITE				9	2.00	
						02	OFFILE CONSTRUCTION SITE			E TOTAL:	9	2.00	*
	PS63	9131			12/12/24		12/13-01/09 PORTOLET UPKEEP-131 E HYDRAULIC		-56-00-5620		30	2.00	
									INVOIC	E TOTAL:	30	2.00	*
	PS63	9136			12/12/24	01	11/15 PORTOLET UPKEEP-ROTARY	79-795	-56-00-5620 INVOIC	E TOTAL:		3.28 3.28	*
	PS64	2664			01/09/25		1/10-2/06 PORTOLET UPKEEP-RIVERFRONT PARK		-56-00-5620 COMMENT **		30	2.00	
						02	15/11	/ 0		E TOTAL:	30	2.00	*
								CHECK	TOTAL:			1,6	09.74
541961	MECH	IANIC	MECHAN	NICS I	LAB LLC			9 H E					
	5876				10/21/24	01	REPLACE AIR DRYER	01-410	-54-00-5490 INVOIC	E TOTAL:		8.03	*
	5996	;			12/18/24		BALANCE DUE ON EXHAUST MANIFOLD REPAIR		-54-00-5490 COMMENT **		31	1.56	
							10/1	-/		E TOTAL:	31	1.56	*
	6032				01/03/25	01	ABS MODULATOR REPAIR County Scat Kendal County	01-410		E TOTAL:		0.00	*
541962	MENI	NC	MENARI	OS INC	Ç.		TALE I	CHECK	TOTAL:			7:	19.59
	1031	24-STRE	EBATE		01/01/25	01	AUG-OCT 2024 SALES TAX REBATE	01-640			111,72 111,72		
								CHECK	TOTAL:			111,7	22.44
	01-110 01-120 01-210 01-220 01-410 01-640 11-111	STREETS C	IITY DEVELO DPERATIONS RATIVE SER SSA	5		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTME RECREATION DEPA LIBRARY OPERATION	NS NS NT RTMENT	84-840 87-870 88-880 89-890 90-XXX 95-000	COUNT DOWN DOWN DEVELO	Y CAPITAL RYSIDE TIF TOWN TIF TOWN II TIF DPER ESCROW W DEPOSIT

DATE: 01/19/25 TIME: 10:36:31 ID: AP211001.WOW

CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT
541963	MESIMPSO	M.E. SIMPSO	N CO, INC	:				
	42730		07/25/24	01	LEAK DETECTION AT 407 MAIN ST		5640 NVOICE TOTAL:	645.00 645.00 *
						CHECK TOTAL:		645.00
541964	MORTON	MORTON SALT	, INC					
	5403249549		12/27/24	01	100	. "	5618 NVOICE TOTAL:	34,907.28 34,907.28 *
541965	MOTOROLA	MOTOROLA SO	LUTIONS			CHECK TOTAL:		34,907.28
	8230480048		08/30/24		ANNUAL SERVICE CONTRACT	01-210-54-00-5		1,550.00
				02	RENEWAL	** COMMENT ?	VOICE TOTAL:	1,550.00 *
					EST.	CHECK TOTAL:		1,550.00
541966	MROWCO	MATHEWSON R	IGHT OF W	AY CO,				
	24-0387-03		12/31/24	02	LAKE MICHIGAN WATER SYSTEM IMPROVEMENT PROJECT NEGOTIATION SERVICES	51-510-60-00-6 ** COMMENT **	**	6,000.00
					County Seat	76/11	NVOICE TOTAL:	6,000.00 *
					Kendall County	CHECK TOTAL:		6,000.00
541967	MUNCOLLE	MUNICIPAL C	OLLECTION	SERV	ICES	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
	028580		11/30/24	01	COMMISSION ON COLLECTIONS	01-210-54-00-5 II	5467 NVOICE TOTAL:	35.00 35.00 *
	028828		12/31/24	01	COMMISSION ON COLLECTIONS	01-210-54-00-5	5467 NVOICE TOTAL:	6.22 6.22 *
						CHECK TOTAL:		41.22
	01-410 STREETS	NITY DEVELOPMENT OPERATIONS TRATIVE SERVICES		12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	51-510 WATER OP 52-520 SEWER OP 79-790 PARKS DEP 79-795 RECREATIO	ERATIONS	84-840 LIBRARY CAPITAL 87-870 COUNTRYSIDE TIF 88-880 DOWNTOWN TIF 89-890 DOWNTOWN II TIF 90-XXX DEVELOPER ESCROW 95-000 ESCROW DEPOSIT

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CHECK #	VENDOR # INVOICE #	INVOICE ITE DATE #	M DESCRIPTION	ACCOUNT # PROJECT CODE	ITEM AMT
541968	MUNIWELL MUNICIPAL	WELL & PUMP			
	23092	12/31/24 01		51-510-60-00-6029 ** COMMENT **	528,445.80
				INVOICE TOTAL:	528,445.80 *
				CHECK TOTAL:	528,445.80
541969	NARVICK NARVICK BE	ROS. LUMBER CO,	INC		
	95092	12/16/24 01	CONCRETE	51-510-56-00-5640 INVOICE TOTAL:	538.00 538.00 *
				CHECK TOTAL:	538.00
541970	NICOR NICOR GAS		/3/ 8	101	
	00-41-22-8748 4-1224	01/02/25 01	12/02-01/02 1107 PRAIRIE	01-110-54-00-5480 INVOICE TOTAL:	66.79 66.79 *
	15-64-61-3532 5-1224	01/02/25 01	12/02-01/02 1991 CANNONBALL	01-110-54-00-5480 INVOICE TOTAL:	55.93 55.93 *
	16-00-27-3553 4-1224	01/10/25 01	12/10-01/10 1301 CAROLYN CT	01-110-54-00-5480 INVOICE TOTAL:	53.64 53.64 *
	20-52-56-2042 1-1224	12/30/24 01	11/27-12/30 420 FAIRHAVEN	01-110-54-00-5480 INVOICE TOTAL:	148.52 148.52 *
	23-45-91-4862 5-1224	01/03/25 01	County Seat 12/03-01/03 101 BRUELL County	01-110-54-00-5480 INVOICE TOTAL:	149.31 149.31 *
	31-61-67-2493 1-1224	01/09/25 01	12/09-01/09 276 WINDHAM	01-110-54-00-5480 INVOICE TOTAL:	52.46 52.46 *
	37-35-53-1941 1-1224	01/07/25 01	12/06-01/07 185 WOLF ST	01-110-54-00-5480 INVOICE TOTAL:	415.01 415.01 *
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPMEN 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICES 11-111 FOX HILL SSA	12-112 15-155 23-230 T 24-216 25-205 25-212 25-215	MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL	25-225 PARK & RECREATION CAPITAL 51-510 WATER OPERATIONS 52-520 SEWER OPERATIONS 79-790 PARKS DEPARTMENT 79-795 RECREATION DEPARTMENT 82-820 LIBRARY OPERATIONS	84-840 LIBRARY CAPITAL 87-870 COUNTRYSIDE TIF 88-880 DOWNTOWN TIF 89-890 DOWNTOWN II TIF 90-XXX DEVELOPER ESCROW 95-000 ESCROW DEPOSIT

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CHECK #	VENDOR # INVOICE #	INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT	
541970	NICOR NICOR	GAS						
	40-52-64-8356 1-12	224 01/06/25	01	12/04-01/04 02 E VAN EMMON	01-110-54-00-548) ICE TOTAL:	449.75 449.75	*
	46-69-47-6727 1-12	224 01/07/25	01	12/06-01/07 1975 N BRIDGE	01-110-54-00-5480 INVO	O ICE TOTAL:	148.83 148.83	
	61-60-41-1000 9-12	224 01/03/25	01	12/03-01/03 610 TOWER	01-110-54-00-548 INVO	O ICE TOTAL:	852.99 852.99 *	*
	66-70-44-6942 9-12	224 01/07/25	01	12/06-01/07 1908 RAINTREE RD	01-110-54-00-548 INVO	O ICE TOTAL:	155.74 155.74	*
	80-56-05-1157 0-12	224 01/07/25	01	12/06-01/07 2512 ROSEMONT	01-110-54-00-548 INVO	O ICE TOTAL:	67.70 67.70	*
	83-80-00-1000 7-12	224 01/03/25	01	12/03-01/03 610 TOWER UNIT B	01-110-54-00-548 INVO	O ICE TOTAL:	306.44 306.44	*
	86-91-67-3104 4-12	224 01/07/25	01	12/13-01/07 1203 BADGER ST	01-110-54-00-548 INVO		125.68 125.68	*
	91-85-68-4012 8-12	224 01/06/25	01	12/02-01/02 902 GAME FARM RD		O ICE TOTAL:	2,502.76 2,502.76	*
				19/1	CHECK TOTAL:		5 , 551	1.55
541971	NUTOYS NUTOYS	S LEISURE PROD	UCTS	County Seat	/.9/			
	120524	12/05/24	01	10 SWING SEATS Kendal Count	79-790-56-00-564	O ICE TOTAL:	1,898.00 1,898.00	*
				/	CHECK TOTAL:		1,898	8.00
541972	OLEARYC CYNTH:	IA O'LEARY						

01-110 01-120 01-210 01-220 01-410 01-640 11-111	ADMIN FINANCE POLICE COMMUNITY DEVELOPMENT STREETS OPERATIONS ADMINISTRATIVE SERVICES FOX HILL SSA	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION CAPITAL WATER OPERATIONS SEWER OPERATIONS PARKS DEPARTMENT RECREATION DEPARTMENT LIBRARY OPERATIONS	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT
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DATE: 01/19/25 TIME: 10:36:31 ID: AP211001.WOW

'EM AMT	ODE ITEM	PROJECT CODE	NT #	ACCOUN'	CRIPTION		ITEM #	INVOICE DATE	I 	DOR # ICE #		CHECK #
								EARY	CYNTHIA O'LE	ARYC	OLE	541972
420.00	42	2	5-54-00-5462 COMMENT **		ETBALL LEAGUE ASSIGNING	BASKET FEE		12/15/24	BASKETBALL 1	FALL	REC	
420.00 *	42	ICE TOTAL:	INVOICE									
420.00			TOTAL:	CHECK								
						CATING	ABRIC;	LDING & FA	O'MALLEY WEI	LLEY	OMA	541973
225.00 225.00 *		5 ICE TOTAL:	0-54-00-5495 INVOICE	79-790	FY ALUM RAMP	MODIFY	01	12/19/24	1	72	214	
225.00			TOTAL:	CHECK								
			21	/ 0				IS LLC	PLAY ILLINOI	YIL	PLA	541974
265.80 265.80 *		0 ICE TOTAL:	0-56-00-5640 INVOICE	79-790	GROUND REPLACEMENT PARTS	PLAYG	01	11/25/24	1	1	211	
052.40 052.40 *			0-56-00-5640 INVOICE		CONNECTORS, BRASS SPACERS	ROPE (01	12/20/24	1	470	824	
1,318.20			TOTAL:	CHECK								
			in l	5/1	14/19/2	C	LLC	NT SOURCE,	LAMBERT PRIN	NTSRC	PRI	541975
127.50 127.50 *		6 ICE TOTAL:	5-56-00-5606 INVOICE	79-795	CY SHOWCASE TABLE COVER	AGENCY	01	01/07/25	C	5	443	
127.50			TOTAL:	CHECK	Kendall County							
					1911				RYAN HOMES	01975	R00	541976
500.00	2,50	5	0-24-00-2415	01-000	RITY GUARANTEE REFUND	SECURI	01	01/06/25	-4432 TAMPA 0	21413-	202	
-50.00 450.00 *		5 ICE TOTAL:	0-24-00-2415 INVOICE	01-000	BISCAYNE OVRPYMT	362 BI	02					
2,450.00			TOTAL:	CHECK								
											04.446	
O COUNTRYSIDE TIF O DOWNTOWN TIF O DOWNTOWN II TIF X DEVELOPER ESCROW	84-840 87-870 88-880 89-890 90-XXX 95-000	TIONS TIONS MENT EPARTMENT	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTMEN RECREATION DEPA	25-225 51-510 52-520 79-790 79-795	LOWER SSA DR FUEL TAX (MFT) VIDE CAPITAL ING & GROUNDS E CAPITAL RAL GOVERNMENT CAPITAL	MOTOR CITY WII BUILDIN POLICE (2-112 5-155 3-230 4-216 5-205 5-212	1 2 2 2	CE E MUNITY DEVELOPMENT TS OPERATIONS NISTRATIVE SERVICES	STREET ADMIN	01-110 01-120 01-210 01-220 01-410 01-640	
0 X	89-890 90-XXX	TIONS MENT EPARTMENT	SEWER OPERATION PARKS DEPARTMEN	52-520 79-790	ING & GROUNDS E CAPITAL	BUILDIN POLICE (GENERA	4-216 5-205	2· 2 2	MUNITY DEVELOPMENT TS OPERATIONS NISTRATIVE SERVICES	COMM STREET	01-220 01-410	

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541977	R0002208 HARI DEVE	LOPMENT YOR	RKVILL	E LLC					
	103124-STREBATE	01/01/25	01	AUG-OCT 2024 SALES TAX REBATE	01-640		E TOTAL:		9.68 9.68 *
					CHECK	TOTAL:			979.68
541978	R0002288 LENNAR								
	20230249-851 WINDETT	01/10/25	01	SECURITY GUARANTEE REFUND			E TOTAL:		0.00
				/ KED	CHECK	TOTAL:			5,000.00
541979	STANDARD STANDARD	& ASSOCIATE	ES, IN	c.	\ o				
	SA000059997	12/18/24	01	LAW ENFORCEMENT APPLICATION	01-210	0-54-00-5411 INVOIC	E TOTAL:		5.00 *
					CHECK	TOTAL:			45.00
541980	TRAFFIC TRAFFIC C	ONTROL CORI	PORATI	ON EST.	ii ii ii	1836			
	155868	12/30/24	01	REPLACED INVERTERS	01-410	0-54-00-5435 INVOIC	E TOTAL:		5.00 5.00 *
				19/1	CHECK	TOTAL:			5,855.00
541981	TRICO TRICO MEC	HANICAL ,	INC	County Seat	/5)/			
	15212	12/31/24	01	HVAC MAINTENANCE INSPECTION AT 610 TOWER		5-54-00-5446 COMMENT **		30	0.00
			02	AI 610 TOWER			E TOTAL:	30	0.00 *
	15216	12/31/24	01			5-54-00-5446		30	0.00
			02	EMMON	** (COMMENT ** INVOIC	E TOTAL:	30	0.00 *
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPMEN 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICES 11-111 FOX HILL SSA	ΙΤ	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTMENTED RECREATION DEPARTMENT OPERATION DEPARTMENT OPERATION OPERATION DEPARTMENT OPERATMENT	NS NS NT IRTMENT	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT

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541981	TRICO TRICO	MECHANICAL ,	INC			
	24-1284	12/31/24		HVAC REPAIR AT 901 GAME FARM RD-BEECHER CENTER	24-216-54-00-5446 ** COMMENT **	750.00
					INVOICE TOTAL:	750.00 *
	24-1289	12/31/24		HVAC REPAIR AT 901 GAME FARM RD-BEECHER CENTER	24-216-54-00-5446 ** COMMENT **	985.83
					INVOICE TOTAL:	985.83 *
541982	TROTSKY TROTSK	Y INVESTIGATIV	/E	TED CI	CHECK TOTAL:	2,335.83
	YORKVILLE PD 24-04	11/27/24		POLYGRAPH EXAM FOR 3	01-210-54-00-5410	585.00
			02	APPLICANTS	** COMMENT ** INVOICE TOTAL:	585.00 *
					CHECK TOTAL:	585.00
541983	UMBBANK UMB BA	NK		EST.	1836	
	103124-STREBATE	12/01/24	01	AUG-OCT 2024 SALES TAX REBATE	01-640-54-00-5492 INVOICE TOTAL:	146,740.69 146,740.69 *
541984	VITOSH CHRIST	INE M. VITOSH		10/1	CHECK TOTAL:	146,740.69
	2263	11/18/24	01	11/04 & 11/18 ADMIN HEARINGS	01-210-54-00-5467 INVOICE TOTAL:	350.00 350.00 *
	2276	12/31/24	01	12/11/24 PLANNING & ZONING	01-220-54-00-5462 INVOICE TOTAL:	240.00 240.00 *
	2277	12/16/24	01	DEC 2024 ADMIN HEARINGS	01-210-54-00-5467 INVOICE TOTAL:	350.00 350.00 *
					CHECK TOTAL:	940.00
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELO 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SER' 11-111 FOX HILL SSA	PMENT	12-112 15-155 23-230 24-216 25-205 25-212	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL	25-225 PARK & RECREATION CAPITAL 51-510 WATER OPERATIONS 52-520 SEWER OPERATIONS 79-790 PARKS DEPARTMENT 79-795 RECREATION DEPARTMENT 82-820 LIBRARY OPERATIONS	84-840 LIBRARY CAPITAL 87-870 COUNTRYSIDE TIF 88-880 DOWNTOWN TIF 89-890 DOWNTOWN II TIF 90-XXX DEVELOPER ESCROW 95-000 ESCROW DEPOSIT

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CHECK #	VENDOR # INVOICE #	INVOICE IT DATE	TEM #	DESCRIPTION	ACCOU	NT #	PROJECT CODE	ITEM A	MT
541985	VSHOREWO VILLAGE	OF SHOREWOOD							
	0073180	C	02	ILEAS MOBILE FIELD FORCE REGION 3C 2025 ANNUAL TEAM DUES RENEWAL	** (0-54-00-5460 COMMENT **		300.	00
							CE TOTAL:	300.	00 *
					CHECK	TOTAL:			300.00
541986	WAUBONSE WAUBONSE	E COMMUNITY COI	LLEG	E					
	113868	(02 03	OSHA 10 TRAINING OSHA 10 TRAINING OSHA 10 TRAINING OSHA 10 TRAINING	51-51(01-41(79-79(0-54-00-5412 0-54-00-5412 0-54-00-5412 0-54-00-5412 INVOI		177. 472. 531. 590. 1,770.	0 0 0 0 0 0
541987	WERDERW WALLY WE	RDERICH							
	121124-AUGUST	12/11/24	01	AUG 2024 ADMIN HEARINGS	01-210	0-54-00-5467 INVOI	CE TOTAL:	150. 150.	00
	121124-DEC 2024	12/15/24	01	DEC 2024 ADMIN HEARINGS	01-210	0-54-00-5467 INVOI	CE TOTAL:	150. 150.	00
	121124-JULY	12/11/24 (01	JUL 2024 ADMIN HEARINGS	01-210	0-54-00-5467 INVOI	CE TOTAL:	150. 150.	00
	121124-JUNE	12/11/24	01	JUN 2024 ADMIN HEARINGS	01-210	0-54-00-5467 INVOI	CE TOTAL:	150. 150.	00
	121124-MAY	12/11/24 0	01	MAY 2024 ADMIN HEARINGS	01-210	0-54-00-5467 INVOI	CE TOTAL:	150. 150.	00
	121124-NOVEMBER	12/11/24 0	01	NOV 2024 ADMIN HEARINGS	01-210	0-54-00-5467 INVOI	CE TOTAL:	150. 150.	00
	01-110 ADMIN 01-120 FINANCE 01-210 POLICE 01-220 COMMUNITY DEVELOPM 01-410 STREETS OPERATIONS 01-640 ADMINISTRATIVE SERVICE 11-111 FOX HILL SSA	25-2	.55 .30 .16 .05	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATI WATER OPERATI SEWER OPERATION PARKS DEPARTM RECREATION DEF LIBRARY OPERAT	ONS DNS JENT PARTMENT	87-870 C 88-880 D 89-890 D 90-XXX D	BRARY CAPITAL OUNTRYSIDE TIF OWNTOWN TIF OWNTOWN II TIF EVELOPER ESCROW SCROW DEPOSIT

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CHECK #	VENDOR INVOICE		INVOICE DATE	ITEM #	DESCRIPTION	ACCOUN'	Т #	PROJECT CODE	ITEM	AMT
541987	WERDER	W WALLY WER	DERICH							
	121124	-OCTOBER	12/11/24	01	OCT 2024 ADMIN HEARINGS	01-210	-54-00-5467 INVOIC	E TOTAL:		0.00 0.00 *
	121124	-SEPTEMBER	12/11/24	01	SEPT 2024 ADMIN HEARINGS	01-210	-54-00-5467 INVOIC	E TOTAL:		0.00 0.00 *
						CHECK	TOTAL:			1,200.00
541988	YBSD	YORKVILLE	BRISTOL		CD CI					
	2025.0	01	01/02/25	01	JAN 2025 LANDFILL EXPENSES	51-510	-54-00-5445 INVOIC	E TOTAL:	22,19 22,19	7.86 7.86 *
	24-DEC		01/07/25	01	DEC 2024 SANITARY FEES	95-000	-24-00-2450 INVOIC	E TOTAL:	446,31 446,31	0.90 0.90 *
						CHECK	TOTAL:			468,508.76
541989	YORKBI	GB YORKVILLE	BIG BAND		EST.	1 H E	836			
	2025 Н	TD-DEPOSIT	01/15/25	01	2025 HTD BAND DEPOSIT		-14-00-1400	E TOTAL:		0.00 0.00 *
541990	YOUNGM	MARLYS J.	YOUNG		County Seat	CHECK	TOTAL:			300.00
	010225	PS	01/07/25	01	01/02/25 PS MEETING MINUTES	01-110	-54-00-5462 INVOIC	E TOTAL:		5.00 5.00 *
	112624	-JRB	12/31/24	02	11/26/24 JRB MEETING MINUTES 11/26/24 JRB MEETING MINUTES 11/26/24 JRB MEETING MINUTES	88-880	-54-00-5462 -54-00-5462 -54-00-5462 INVOIC	E TOTAL:	2 2	8.34 8.33 8.33 5.00 *
	01-120 FIN 01-210 PO 01-220 CO 01-410 STI 01-640 AD	MIN JANCE LICE MMUNITY DEVELOPMEN REETS OPERATIONS MINISTRATIVE SERVICES X HILL SSA	ΙΤ	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION WATER OPERATION SEWER OPERATION PARKS DEPARTMEN RECREATION DEPA LIBRARY OPERATION	NS NS NT RTMENT	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT

DATE: 01/19/25 TIME: 10:36:31 ID: AP211001.WOW

CHECK #	VENDOR # INVOICE #		INVOICE DATE	ITEM #	DESCRIPTION	ACCOUNT #	PROJECT CODE	ITEM AMT
541990	YOUNGM	MARLYS J.	YOUNG					
	121224-PC		12/29/24	02	12/12/24 PC MEETING MINUTES 12/12/24 PC MEETING MINUTES 12/12/24 PC MEETING MINUTES	90-238-00-00-00 90-239-00-00-00	11	28.34 28.33 28.33 85.00 *
	121724-PW		01/03/25	01	12/17/24 PW MEETING MINUTES	01-110-54-00-54 INV	62 OICE TOTAL:	85.00 85.00 *
					SHITED C	CHECK TOTAL:		340.00
						TOTAL CHECKS PA	ID:	2,966,949.37
					EST.	TOTAL DEPOSITS	PAID:	3,446.00
					County Seat Kendall Count		ID:	2,970,395.37

01-110 01-120 01-210 01-220 01-410 01-640 11-111	ADMIN FINANCE POLICE COMMUNITY DEVELOPMENT STREETS OPERATIONS ADMINISTRATIVE SERVICES FOX HILL SSA	12-112 15-155 23-230 24-216 25-205 25-212 25-215	SUNFLOWER SSA MOTOR FUEL TAX (MFT) CITY WIDE CAPITAL BUILDING & GROUNDS POLICE CAPITAL GENERAL GOVERNMENT CAPITAL PUBLIC WORKS CAPITAL	25-225 51-510 52-520 79-790 79-795 82-820	PARK & RECREATION CAPITAL WATER OPERATIONS SEWER OPERATIONS PARKS DEPARTMENT RECREATION DEPARTMENT LIBRARY OPERATIONS	84-840 87-870 88-880 89-890 90-XXX 95-000	LIBRARY CAPITAL COUNTRYSIDE TIF DOWNTOWN TIF DOWNTOWN II TIF DEVELOPER ESCROW ESCROW DEPOSIT
--	--	--	--	--	---	--	--



UNITED CITY OF YORKVILLE PAYROLL SUMMARY January 17, 2025

	REGULAR	OVERTIME	TOTAL	IMRF	FICA	TOTALS
MAYOR & LIQ. COM.	\$ 1,457.34	\$ -	\$ 1,457.34	\$ -	\$ 111.49 \$	1,568.83
ALDERMAN	4,940.00	-	4,940.00	-	377.92	5,317.92
ADMINISTRATION	19,683.51	-	19,683.51	1,306.98	1,447.39	22,437.88
FINANCE	16,040.76	-	16,040.76	1,065.10	1,194.57	18,300.43
POLICE	155,333.70	9,996.08	165,329.78	461.65	12,311.34	178,102.77
COMMUNITY DEV.	29,554.06	-	29,554.06	1,906.61	2,182.30	33,642.97
STREETS	28,341.83	1,133.53	29,475.36	1,957.17	2,180.47	33,613.00
BUILDING & GROUNDS	6,356.06	-	6,356.06	422.04	473.41	7,251.51
WATER	22,852.14	711.66	23,563.80	1,522.51	1,809.29	26,895.60
SEWER	16,141.93	-	16,141.93	1,071.82	1,186.84	18,400.59
PARKS	36,205.99	-	36,205.99	2,342.97	2,691.41	41,240.37
RECREATION	26,259.79	-	26,259.79	1,485.99	1,952.40	29,698.18
LIBRARY	17,117.58	-	17,117.58	770.10	1,257.28	19,144.96
TOTALS	\$ 380,284.69	\$ 11,841.27	\$ 392,125.96	\$ 14,312.94	\$ 29,176.11 \$	435,615.01

TOTAL PAYROLL

\$ 435,615.01



UNITED CITY OF YORKVILLE

BILL LIST SUMMARY

Tuesday, January 28, 2025

ACCOUNTS PAYABLE	DATE	
Clerk's Check #131254 Kendall County Recorder (Page 1)	01/02/2025	\$ 57.00
Manual City Check Register (Page 2)	01/15/2025	24,835.47
Manual City Check Register (Pages 3 - 4)	01/17/2025	1,817.00
City MasterCard Bill Register (Pages 5 - 18)	01/25/2025	102,101.23
City Check Register (Pages 19 - 47)	01/28/2025	2,970,395.37
SUB-TO	TAL:	\$3,099,206.07
<u>PAYROLL</u>		
Bi - Weekly (Page 48)	01/17/2025	\$ 435,615.01
SUB-TO	TAL:	\$ 435,615.01
TOTAL DISBURSEME	NTS:	\$ 3,534,821.08



Reviewed By:	Age
Legal Finance	Co
Engineer City Administrator Community Development	Tı
Purchasing Police Public Works	
D 1 1D (

Agenda Item Number	
Consent Agenda #2	_
Tracking Number	•
PW 2025-02	

	Parks and Recreation		
Agenda Item Summary Memo			
Title: Water Re	eports for August 2024 to December	2024	
Meeting and D	ate: City Council – January 28, 20	25	
Synopsis: IEP	A water reports for Aug, Sept, Oct, N	Nov, and Dec of 2024. Reports need to be	
Acc	cepted by City Council.		
Council Action	Previously Taken:		
Date of Action:	PW - 1/21/25 Action Taken:	Moved forward to CC consent agenda.	
Item Number:	PW 2025-02		
Type of Vote R	equired: Majority		
Council Action	Requested: Approval		
Submitted by:	Eric Dhuse	Public Works	
	Name	Department	
Agenda Item Notes:			



United City of Yorkville WATER DEPARTMENT REPORT

<u>August</u> 2024 MONTH / YEAR

NO	WELL DEPTH	PUMP DEPTH	WATER ABOVE PUMP	THIS MONTH'S PUMPAGE	
	(FEET)	(FEET)	(FEET)	(GALLONS)	
4	1394	795	386	20,082,000	
7	1527	1125	522	17,651,100	
8	1384	840	291	17,299,000	
9	1368	861	349	14,558,000	
	TOTAL PUMPED 69,590,100				
CURRENT MONTH'S PUMPAGE IS1,587,000GALLONS MORE THAN LAST MONTH					

9	1300	001	349	
<u> </u>			TOTAL PUMPED	69,590,100
CURREI	NT MONTH'S PUMP	AGE IS 1,	587,000 GALLONS	MORE THAN LAST MONTH
		4	1 <u>,775,900</u> GALLC	ONS LESS THAN LAST YEAR
DAILY A	AVERAGE PUMPED:		<u> 44,842</u> GALLONS	
	MAXIMUM PUMPED AVERAGE PER CAPI		2,878,000 GALLONS 91.42 GALLONS	(Population 23,000)
WATER	R TREATMENT:			
CHLORINE: 1591 LBS. FED FLUORIDE: 0 LBS. FED POLYPHOSPHATE: 1704 LBS. FE WATER QUALITY: BACTERIOLOGICAL SAMPLES ANALYZED		0 LBS. FED 704 LBS. FED LES ANALYZED BY ILL TORY	MEASURED CO CALCULATED CO INOIS ENVIRONMENTAL UNSATISFACTO	
	UMBER OF METER!	· · · · · · · · · · · · · · · · · · ·	NUMBER OF LEAR BATTERIES REPLACED	KS OR BREAKS REPAIRED:
RESIDE —— COMM	NTIAL: <u>37</u>	COMMERCI	IAL: <u>2</u> I	NDUSTRIAL/GOVERNMENTAL: 0



United City of Yorkville WATER DEPARTMENT REPORT

<u>September</u>
2024
MONTH / YEAR

	_			
NO	WELL DEPTH	PUMP DEPTH	WATER ABOVE PUMP	THIS MONTH'S PUMPAGE
NU	(FEET)	(FEET)	(FEET)	(GALLONS)
4	1394	795	386	20,110,000
7	1527	1125	522	18,386,000
8	1384	840	291	20,009,000
9	1368	861	349	15,536,000
			TOTAL PUMPER	74.044.000
			TOTAL PUMPED	74,041,000
CURRE	:NT MONTH'S PUMP	AGE IS 4.	450,900 GALLONS N	MORE THAN LAST MONTH
0011112				MORE THAN LAST YEAR
DAILY	AVERAGE PUMPED:	2,24	68,033GALLONS	
DAILY	MAXIMUM PUMPED	:3	, <u>154,000</u> GALLONS	
DAILY	AVERAGE PER CAPI	TA USE:10	00.41 GALLONS (P	opulation 23,000)
WATE	R TREATMENT:			
CHLOR	TINE: 19	70 LBS. FED	CALCULATED CON	CENTRATION: 3.41 MG/L
FLUOR			MEASURED CONCE	•
	PHOSPHATE: 1832 LBS. FED CALCULATED CONCENTRATION: 1.11		, ,	
WATER QUALITY:				
	_	es analyzed by Illi	NOIS ENVIRONMENTAL PR	OTECTION AGENCY:
	30 SATISFACT	ORY	UNSATISFACTORY ((EXPLAIN)
FLOUR	IDE: <u>3</u> SAMP	LE(S) TAKEN	CONCENTI	RATION: <u>0.69</u> MG/L
MAIN	MAINTENANCE:			
NUMBER OF METERS REPLACED: <u>8</u> NUMBER OF LEAKS OR BREAKS REPAIRED:				
NEW 4	MXU'S: <u>25</u> BATTERIES REPLACED: NEW CUSTOMERS:			
	ENTIAL: 42	COMMERCIA	AI: 1 INDI	JSTRIAL/GOVERNMENTAL: 0
		COI II ILICEIP	<u>1</u> INDC	<u> </u>



United City of Yorkville WATER DEPARTMENT REPORT

October 2024 MONTH / YEAR

WELLS	<u> </u>			
NO	WELL DEDTIL	DUMP DEPTH	WATER AROVE BUMB	THIS MONTH'S DUMPAGE
NO	WELL DEPTH (FEET)	PUMP DEPTH (FEET)	WATER ABOVE PUMP (FEET)	THIS MONTH'S PUMPAGE (GALLONS)
4	1394	795	386	15,269,000
7	1527	1125	513	18,971,000
8	1384	840	291	16,345,000
9	1368	861	351	13,761,000
			TOTAL PUMPED	64,346,000
CURRE	ENT MONTH'S PUMP		695,000 GALLONS 595,500 GALLONS	LESS THAN LAST MONTH MORE THAN LAST YEAR
DAILY	AVERAGE PUMPED:	2,14	14,867GALLONS	
DAILY	Maximum Pumped	: <u> </u>	<u>,914,000</u> GALLONS	
DAILY	AVERAGE PER CAPI	TA USE: <u>8</u>	7.52 GALLONS (Po	oulation 23,000)
WATE	R TREATMENT:			
CHLOR	INE: <u>15</u>	30_LBS. FED	CALCULATED CON	CENTRATION: 3.04 MG/
FLUOR	IDE:	0_LBS. FED	MEASURED CONCE	ENTRATION:0.69MG/
		CENTRATION: <u>1.09</u> MG/		
WATE	R QUALITY:			
BACTE	RIOLOGICAL SAMPL 30 SATISFACT		NOIS ENVIRONMENTAL PR UNSATISFACTORY (
FLOUR	IDE: 3 SAMP	LE(S) TAKEN	CONCENTI	RATION: <u>0.64</u> MG/L
MAIN	TENANCE:			
	NUMBER OF ME	TERS REPLACED: 5	NUMBER OF LEAKS OR B	REAKS REPAIRED:
NEW (CUSTOMERS:	MXU'S: <u>25</u>	BATTERIES REPLACED: _	
RESIDENTIAL:24 COMMERCIAL: INDUSTRIAL/GOVERNMENTAL:0				
RESIDE	ENTIAL: <u>24 </u>	COMMERCIA	AL: INDU	JSTRIAL/GOVERNMENTAL: <u>0</u>



United City of Yorkville WATER DEPARTMENT REPORT

<u>November</u> 2024 MONTH / YEAR

NO	WELL DEPTH	PUMP DEPTH	WATER ABOVE PUMP (FEET)	THIS MONTH'S PUMPAGE
4	(FEET) 1394	(FEET) 795	395	(GALLONS) 10,868,000
7	1527	1125	513	17,626,500
8	1384	840	314	14,427,000
9	1368	861	356	9,979,000
	1300	001		3,373,000
			TOTAL PUMPED	52,900,500
	ENT MONTH'S PUMP. AVERAGE PUMPED:	1,	1,445,500 GALLONS 753,500 GALLONS 63,350 GALLONS	LESS THAN LAST MONTH LESS THAN LAST YEAR
DAILY	MAXIMUM PUMPED	2	,027,000 GALLONS	
DAILY	AVERAGE PER CAPI	TA USE:72	2.32 GALLONS (Po	pulation 23,000)
WATE	R TREATMENT:			
FLUORIDE: 0 LBS. FED MEASURED CONCENTRATION: 0.62			ENTRATION: 0.62 MG/L	
WATE	R QUALITY:			
BACTE	RIOLOGICAL SAMPL <u>30</u> SATISFACT		NOIS ENVIRONMENTAL PR UNSATISFACTORY (
FLOURIDE: 3 SAMPLE(S) TAKEN CONCENTRATION: 0.62 MG/L				
MAIN	TENANCE:			
N	UMBER OF METERS	REPLACED: 10	NUMBER OF LEAKS O	R BREAKS REPAIRED:1
NEW (CUSTOMERS:	MXU'S: <u>6</u>	BATTERIES REPLACED: _	
RESIDE	ENTIAL: <u>10</u>	COMMERCIA	AL: INDU	JSTRIAL/GOVERNMENTAL: 0



United City of Yorkville WATER DEPARTMENT REPORT

<u>December</u> 2024 MONTH / YEAR

NO	WELL DEPTH (FEET)	PUMP DEPTH (FEET)	WATER ABOVE PUMP (FEET)	THIS MONTH'S PUMPAGE (GALLONS)	
4	1394	795	416	13,794,000	
7	1527	1125	494	16,109,000	
8	1384	840	303	13,871,000	
9	1368	861	349	11,437,000	
			TOTAL PUMPED	52,900,500	
CURRE	nt month's pump		311,100 GALLONS 527,400 GALLONS	MORE THAN LAST MONTH LESS THAN LAST YEAR	
DAILY	AVERAGE PUMPED:	1,76	63,350GALLONS		
DAILY	Maximum Pumped	: <u> </u>	,027,000 GALLONS		
DAILY	AVERAGE PER CAPI	TA USE:7	2.32 GALLONS (Po	pulation 23,000)	
WATE	R TREATMENT:				
CHLOR	CHLORINE: 1310 LBS. FED CALCULATED CONCENTRATION: 3.02 M			ICENTRATION: 3.02 MG/L	
FLUOR	IDE:	0LBS. FED	MEASURED CONCE	ENTRATION: <u>0.72</u> MG/L	
POLYP	HOSPHATE: 12	E: 1270 LBS. FED CALCULATED CONCENTRATION: 1.02		CENTRATION: <u>1.02</u> MG/L	
WATE	R QUALITY:				
BACTERIOLOGICAL SAMPLES ANALYZED BY ILLINOIS ENVIRONMENTAL PROTECTION AGENCY: UNSATISFACTORY (EXPLAIN)					
FLOURIDE:3 SAMPLE(S) TAKEN CONCENTRATION:0.72_ MG/L					
MAINTENANCE:					
NUMBER OF METERS REPLACED: NUMBER OF LEAKS OR BREAKS REPAIRED:1					
NEW (CUSTOMERS:	MXU'S: <u>0</u>	BATTERIES REPLACED: _		
RESIDENTIAL:11 COMMERCIAL: INDUSTRIAL/GOVERNMENTAL:0			JSTRIAL/GOVERNMENTAL: 0		



Reviewed By:			
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works Parks and Recreation			

Agenda Item Number
Consent Agenda #3
Tracking Number
PW 2025-05

Agenda Item Summary Memo

Agenda Item Summary Wemo				
Title: 2024 Local Road Program – Change Order No. 2 (Balancing)				
Meeting and Date:	Meeting and Date: City Council – January 28, 2025			
Synopsis: Recomm	endation to Approve Reque	est for Approval of Change of Plans		
Council Action Pre	viously Taken:			
Date of Action: PW		xen: Moved forward to CC consent agenda.		
Item Number: PW	2025-05			
Type of Vote Requi	ired: Majority			
Council Action Requested: Approval of Request for Change of Plans				
Submitted by:	Brad Sanderson	Engineering		
	Name	Department		
	Agenda I	tem Notes:		



Memorandum

To: Bart Olson, City Administrator

From: Brad Sanderson, EEI

CC: Eric Dhuse, Director of Public Works Erin Willrett, Assistant City Administrator

Rob Fredrickson, Finance Director

Jori Behland, City Clerk

Date: January 3, 2025

Subject: 2024 Local Road Program

The purpose of this memo is to present Change Order No. 2 and Final for the above referenced project.

A Change Order, as defined by in the General Conditions of the Contract Documents, is a written order to the Contractor authorizing an addition, deletion or revision in the work within the general scope of the Contract Documents or authorizing an adjustment in the Contract Price or Contract Time.

Background:

The City awarded the work for the 2024 Local Road Program to Builders Paving, LLC in the amount of \$3,162,000. After the project was awarded the City received funds for the completion of improvements on Faxon Road from High Ridge Lane to Twinleaf Trail. The City approved Change Order No. 1 with Builders Paving, LLC in the amount of \$596,828.00, which increased the contract value to \$3,758,836.00.

Question Presented:

Should the City approve Change Order No. 2 and Final which would <u>decrease</u> the contract value by \$30,571.28?

Discussion:

The change order would decrease the contract value to \$3,728,264.72. The final construction value for the additional work on Faxon Road was \$556,685.88.

We are recommending approval of the change order.

Action Required:

Consideration of approval of Change Order No. 2 and Final.

Resolution No. 2025-

A RESOLUTION OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS APPROVING A CHANGE ORDER RELATING TO THE 2024 LOCAL ROAD PROGRAM

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, the City had approved a contract in the amount of \$3,162,000 with Builders Paving, LLC ("Builders Paving"), for a project commonly known as the 2024 Local Road Program; and

WHEREAS, the City had previously approved a Change Order increasing the value of this Project by \$596,828, to \$3,758,836; and

WHEREAS, the price of the Project has since <u>decreased</u> in the amount of \$30,571.28 (the "Change Order") after completion of the Project and final balancing of the Project cost; and

WHEREAS, all change orders increasing or decreasing the cost of a public contract by at least \$25,000 must meet the required findings that circumstances necessitating the change were not reasonably foreseeable at the time the contract was signed; or the change is germane to the original contract as signed; or the Change Order is in the best interest of the City as required by Section 33E-9 of the Illinois Criminal Code (720 ILCS 5/33E-9); and

WHEREAS, it has been recommended to the Mayor and City Council (the "Corporate Authorities") that a Change Order decreasing the total contract price to the amount of \$3,728,264.72 is necessary, as set forth in the proposal from Builders Paving.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois:

Section 1. The foregoing recitals are hereby incorporated in this Resolution as the

findings of the Corporate Authorities.

Section 2. The Corporate Authorities hereby find and declare that Change Order No.

2 to the 2024 Local Road Program contract with Builders Paving, LLC, which results in a total

decrease of \$30,571.28, is required and that such decrease is germane to the original contract as

signed.

Section 3. The Change Order is hereby approved, and the City Administrator is

authorized to execute the Change Order as hereinabove identified.

Section 4. That this resolution shall be in full force and effect from and after its passage

and approval according to law.

[Remainder of Page Intentionally Blank; Roll Call Vote to Follow]

Resolution No. 2025-____

day of	, A.D. 2025.
	CITY CLERK
KEN KOCH	DAN TRANSIER
ARDEN JOE PLOCHER	CRAIG SOLING
CHRIS FUNKHOUSER	MATT MAREK
SEAVER TARULIS	RUSTY CORNEILS
APPROVED by me, a this day of	Mayor of the United City of Yorkville, Kendall County, Illinois, A.D. 2025.
	MAYOR
Attest:	
CITY CLERK	



Request for Approval of Change of Plans

Local Public Agency		County		Route	Section	Number
United City of Yorkville		Kendall		Various Local Roads	N/A	
Request Number		Contractor				
2	≍ Final	Builder's	Paving, LLC			
Address			City		State	Zip Code
4401 Roosevelt Road			Hillside		IL	60162
Date						
1/2/2025						
I recommend that this Deduction	be mad	de from	the above con	tract.		

The estimated quantities are shown below and the contractor agrees to furnish the materials and do the work at the unit prices.

_							
	Item Description	Unit of Measure	Quantity	Unit Price	Addition (A) or Deduction (D)	Total Addition	Total Deduction
-	Partial Depth Patching (Special)	Sq Yd	485	\$30.0000	D	\$0.0000	\$14,550.0000
-	Hot-Mix Asphalt Surface Removal - Butt Joint	Sq Yd	156.5	\$30.0000	A	\$4,695.0000	\$0.0000
-	Hot-Mix Asphalt Surface Removal, Variable Depth, Type 1	Sq Yd	1881	\$2.1000	A	\$3,950.1000	\$0.0000
-	Hot-Mix Asphalt Surface Removal, Variable Depth, Type 2	Sq Yd	1326	\$2.8500	A	\$3,779.1000	\$0.0000
-	Hot-Mix Asphalt Surface Removal, 3"	Sq Yd	3899	\$3.2000	A	\$12,476.8000	\$0.0000
-	Bituminous Materials (Tack Coat)	Pound	4950	\$0.0100	Α	\$49.5000	\$0.0000
-	Hot-Mix Asphalt Binder Course, IL-9.5, N50	Ton	176	\$80.0000	A	\$14,080.0000	\$0.0000
-	Hot-Mix Asphalt Surface Course, IL-9.5, Mix "D", N50	Ton	655	\$80.0000	A	\$52,400.0000	\$0.0000
-	Combination Concrete Curb and Gutter Removal and Replacement	Foot	1687	\$36.0000	D	\$0.0000	\$60,732.0000
-	Sidewalk Removal	Sq Ft	2674	\$1.0000	D	\$0.0000	\$2,674.0000
-	Portland Cement Concrete Sidewalk, 5 Inch	Sq Ft	2031	\$10.2500	D	\$0.0000	\$20,817.7500
-	Detectable Warnings	Sq Ft	161	\$32.0000	Α	\$5,152.0000	\$0.0000
-	Inlets to be Adjusted	Each	31	\$538.0000	Α	\$16,678.0000	\$0.0000
-	Inlets to be Reconstructed	Each	2	\$611.0000	D	\$0.0000	\$1,222.0000
-	Manholes to be Reconstructed	Each	1	\$1,345.0000	D	\$0.0000	\$1,345.0000
-	Sanitary Manholes to be Adjusted	Each	1	\$1,975.0000	Α	\$1,975.0000	\$0.0000
-	Domestic Water Service Boxes to be Adjusted	Each	1	\$357.0000	D	\$0.0000	\$357.0000
-	Type 1 Frame, Open Lid	Each	3	\$794.0000	Α	\$2,382.0000	\$0.0000
-	Type 1 Frame, Closed Lid	Each	1	\$817.0000	D	\$0.0000	\$817.0000
-	Type 3 Frame and Grate	Each	5	\$974.0000	D	\$0.0000	\$4,870.0000
-	Type 6 Frame and Grate	Each	5	\$1,113.0000	D	\$0.0000	\$5,565.0000
-	Thermoplastic Pavement Markings - Letters & Symbols	Sq Ft	3.8	\$5.0000	A	\$19.0000	\$0.0000

Item Description	Unit of Measure	Quantity	Unit Price	Addition (A) or Deduction (D)	Total Addition	Total Deduction
Thermoplastic Pavement Markings - Line 4"	Foot	470	\$0.8500	А	\$399.5000	\$0.0000
Thermoplastic Pavement Markings - Line 6"	Foot	2251	\$1.2500	A	\$2,813.7500	\$0.0000
Thermoplastic Pavement Markings - Line 12"	Foot	749	\$2.5000	A	\$1,872.5000	\$0.0000
Thermoplastic Pavement Markings - Line 24"	Foot	341	\$5.0000	A	\$1,705.0000	\$0.0000
Short Term Pavement Marking	Foot	456	\$1.0000	D	\$0.0000	\$456.0000
Short Term Pavement Marking Removal	Sq Ft	152	\$5.0000	D	\$0.0000	\$760.0000
Portland Cement Concrete Driveway Removal and Replacement	Sq Ft	17	\$125.0000	D	\$0.0000	\$2,125.0000
Brick Paver Driveway Removal and Reset	Sq Ft	222	\$17.0000	D	\$0.0000	\$3,774.0000
Bike Path Removal	Sq Ft	102	\$1.0000	D	\$0.0000	\$102.0000
Hot-Mix Asphalt Bike Path Removal and Replacement	Sq Yd	17.4	\$35.0000	D	\$0.0000	\$609.0000
Sodding, Special	Sq Yd	117.5	\$17.0000	D	\$0.0000	\$1,997.5000
Supplemental Watering	Unit	100	\$1.0000	D	\$0.0000	\$100.0000
Routing and Sealing Cracks	Foot	24598	\$0.6400		\$15,742.7200	\$0.0000
Preparation of Base	Sq Yd	8500	\$1.5000	D	\$0.0000	\$12,750.0000
Hot-Mix Asphalt Surface Removal, 4.5"	Sq Yd	560	\$5.0000	D	\$0.0000	\$2,800.0000
Hot-Mix Asphalt Binder Course, IL-19.0, N50	Ton	460	\$78.0000	D	\$0.0000	\$35,880.0000
Hot-Mix Asphalt Driveway Removal and Replacement	Sq Yd	0.2	\$40.0000	D	\$0.0000	\$8.0000
AUP #1 - Additional Striping Mobilization	L Sum	1	\$1,500.0000	A	\$1,500.0000	\$0.0000
AUP #2 - Concrete Median Removal	Sq Ft	345	\$6.0000	A	\$2,070.0000	\$0.0000
	•			Total Changes	\$143,739.97	\$174,311.25

Add Row

Total Net Change	(\$30,571.28)
Amount of Original Contract	\$3,758,836.00
Amount of Previous Change Orders	
Amount of adjusted/final contract	\$3,728,264.72

Total net	deduction	to date	(\$30,571.28) which is	-0.81% of the contract price.

State fully the nature and reason for the change
As completed per field measurements. See attached for explanation.

	rease or decrease in the cost of the contract is \$10,000.00 or more, or the time of completion is increased or decreased ore, one of the following statements must be checked:
☐ The Lo	cal Public Agency has determined that the circumstances which necessitate this change were not reasonably foreseeable me the contract was signed.
X The Lo	cal Public Agency has determined that the change is germane to the original contract as signed.
	cal Public Agency has determined that this change is in the best interest of the Local Public Agency and is zed by law.
Prepared By	Title of Preparer
Christopher C	
	i reject manager
Submitted/Appro	ved
	Local Public Agency Signature & Date
BY:	
Title:	
F B I B'. (
For a Road Dist	rict project County Engineer signature required.
	County Engineer/Superintendent of HighwaysSignature & Date
	Approved:
	Illinois Department of Transportation
	Regional Engineer Signature & Date
IDOT Department	Use Only
•	on Received Date Additional Location?
WMFT Entry By	Entry Date



Reviewed By:	
Legal	
Finance	
Engineer	
City Administrator	
Community Development	
Purchasing	
Police	
Public Works	
Parks and Recreation	1 1 1

Agenda Item Number
Consent Agenda #4
Tracking Number
PW 2025-06

Agenda Item Summary Memo

Λ	genua reem bum	mary wiemo		
ve Unit 20 – P	erformance Guara	antee Release		
City Council	– January 28, 202	25		
f Guarantee				
iously Taken	:			
- 1/21/25	Action Taken:	Moved forward to CC consent agenda.		
2025-06				
r ed: Majority				
uested: Consi	deration of Appro	val		
Brad Sar	nderson	Engineering		
Nar	ne	Department		
Agenda Item Notes:				
	City Council Guarantee Fiously Taken 1/21/25 2025-06 Fed: Majority uested: Consi	riously Taken: - 1/21/25		



Memorandum

To: Bart Olson, City Administrator

From: Brad Sanderson, EEI

CC: Eric Dhuse, Director of Public Works

Krysti Barksdale-Noble, Community Dev. Dir.

Jori Behland, City Clerk

Date: December 18, 2024 Subject: Grande Reserve Unit 20

The developer has completed the remaining punch list items from the one-year warranty period. We are now recommending a full release of their remaining performance guarantee bond. The value of the guarantee to be released is \$141,750.90.

The public improvements were accepted on January 17, 2024.

Please let us know if you have any questions.

Resolution No. 2025-

A RESOLUTION OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS APPROVING THE RELEASE OF A PERFORMANCE GUARANTEE BOND RELATED TO GRANDE RESERVE UNIT 20

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, Grande Reserve (Chicago) ASLI VI, L.L.P., an Illinois limited liability limited partnership ("Developer") submitted a Performance Guarantee Bond in the amount of \$141,750.90 to the City, related to the development of Grande Reserve Unit 20 (the "Project"); and

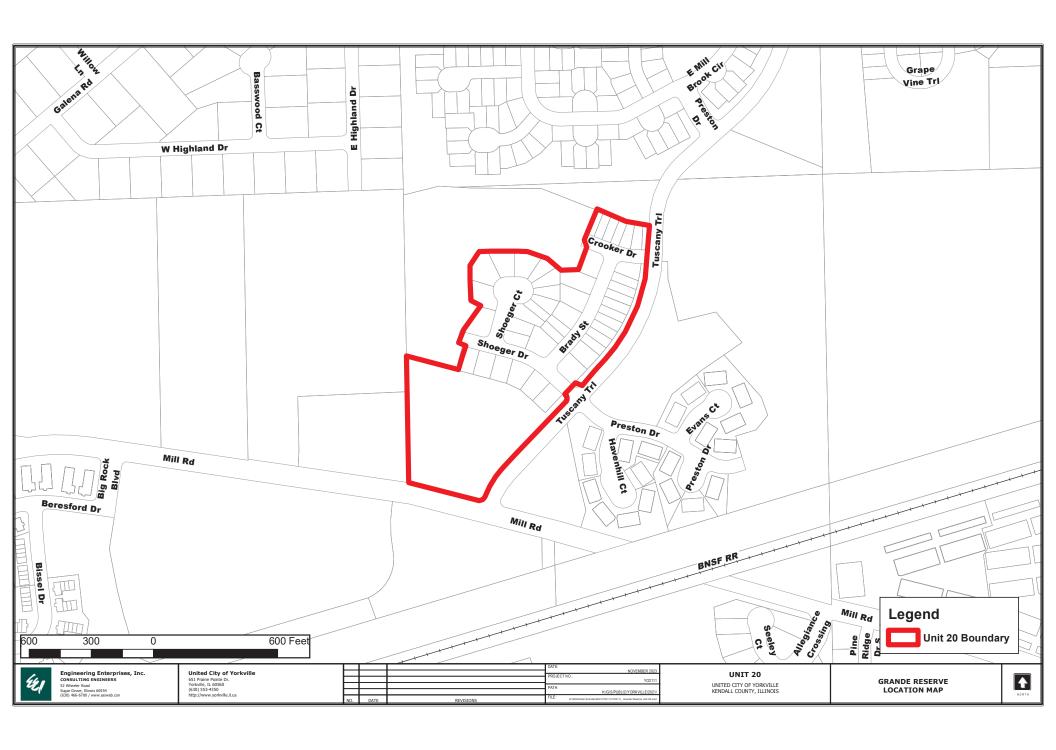
WHEREAS, the Developer has completed the Project and all punch-list items from the Project's one year warranty period; and

WHEREAS, City staff and engineering consultants recommend the release of the Performance Guarantee Bond to the Developer.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois:

- Section 1: That the foregoing recitals are hereby incorporated in this Resolution as the findings of the Corporate Authorities.
- Section 2: That the full Performance Guarantee Bond in the amount of \$141,750.90 be released to Grande Reserve (Chicago) ASLI VI, L.L.L.P., as recommended by the City's engineering consultants, Engineering Enterprises, Inc.
- Section 4: That this resolution shall be in full force and effect from and after its passage and approval according to law.

day of	, A.D. 2025.
	CITY CLERK
KEN KOCH	DAN TRANSIER
ARDEN JOE PLOCHER	CRAIG SOLING
CHRIS FUNKHOUSER	MATT MAREK
SEAVER TARULIS	RUSTY CORNEILS
APPROVED by me, a this day of	Mayor of the United City of Yorkville, Kendall County, Illinois, A.D. 2025.
	MAYOR
Attest:	
CITY CLERK	





Reviewed By:	
Legal Finance Engineer City Administrator Community Development	
Purchasing	
Police	

Agenda Item Number
Consent Agenda #5
Tracking Number
PW 2025-08

Agenda Item Summary Memo

Public Works Parks and Recreation

Title: Grande R	Leserve Traffic Contr	ol Signage Ana	lysis				
Meeting and Da	nte: City Council –	January 28, 20	25				
Synopsis: Revi	Synopsis: Review of Recommendations						
Council Action	Previously Taken:						
Date of Action:	PW – 1/21/25	Action Taken:	Moved forward to CC consent agenda.				
Item Number:	PW 2025-08						
Type of Vote R	equired: Majority						
Council Action	Requested: Consider	ration of Recor	mmendations				
Submitted by:			Engineering				
	Name		Department				
		Agenda Item	Notes:				



Memorandum

To: Bart Olson, City Administrator

From: Brad Sanderson, EEI

CC: Eric Dhuse, Director of Public Works

Krysti Barksdale-Noble, Community Dev. Dir.

Jori Behland, City Clerk

James Jensen, Chief of Police

Date: December 27, 2024

Subject: Grande Reserve Intersection Analyses

As requested, we investigated the possible installation of yield and stop signs at various intersections in Grande Reserve:

In Units 23, 26, and 27, the following intersections were studied:

- 1. East Millbrook Circle and Blackhawk Boulevard
- 2. East Millbrook Circle and Silver Springs Court
- 3. East Millbrook Circle and Ketchum Court
- 4. East Millbrook Circle and Sheridan Court
- 5. East Millbrook Circle and Gains Court
- 6. East Millbrook Circle and Owen Court
- 7. Millbrook Circle and Preston Drive
- 8. West Millbrook Circle and Nickerson Court
- 9. West Millbrook Circle and Hatch Court
- 10. West Millbrook Circle and Sutherland Court
- 11. West Millbrook Circle and Potter Court
- 12. West Millbrook Circle and Kellogg Court
- 13. West Millbrook Circle and Ellory Court
- 14. West Millbrook Circle and Gould Court
- 15. West Millbrook Circle and Curtis Court
- 16. West Millbrook Circle and Waterman Lane
- 17. West Millbrook Circle and Big Grove Lane
- 18. West Millbrook Circle and Royal Court

In Units 9 and 10, the following intersection was studied:

19. Matlock Drive and Berrywood Lane

Our findings were as follows:

- o All intersections are currently uncontrolled and without pavement markings on all approaches.
- o There appear to be no sight distance constraints or left-turn conflicts at any intersection.
- The United City of Yorkville Police Department reported a single accident in Grande Reserve in the previous thirty-six months. The accident, which was a single vehicle accident, did not occur at any of the intersections.
- The observed bi-directional vehicle, bicycle, and pedestrian volume entering was less than 100 vehicles per hour for all intersections.

- The speed limit for the neighborhood was posted at 30 mph. Observed traffic closely followed posted limits.
- o All streets examined were designated as local roads.
- School buses were observed to stop at several of the intersections; however, no safety or flow issues were identified.
- O At this time, none of the intersections in Units 23, 26, and 27 appear to be a good candidate for a yield, stop, or multi-way stop.
- o In anticipation of future development and traffic demands, we recommend the installation of a stop sign at the northeast corner of Matlock Drive and Berrywood Lane for westbound traffic.

The following pages of this memorandum describe the methodology outlined in the MUTCD for traffic control devices. Additionally, the data that was collected for all intersections is attached.

Ordinance No. 2025-

ORDINANCE OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS AMENDING THE TRAFFIC SCHEDULE AND INDEX

WHEREAS, the United City of Yorkville, Kendall County, Illinois, has designated certain intersections within the City as stop intersections and has identified the corner for placement of stop signs at such intersections; and,

WHEREAS, after extensive investigation and study of traffic patterns, it has been determined that additional intersections should be designated as stop intersections; and,

WHEREAS, the additional stop intersections, as hereinafter set forth, have been determined to be in conformance with the current Manual on Uniform Traffic Control Devices.

NOW THEREFORE BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, that the traffic schedule and index regarding stop-sign control is hereby amended by revising the following:

Section I. The Traffic Schedule and Index regarding Stop-Sign Control is hereby amended by adding the following as a One-Way Stop Intersection:

1) Northeast Corner of Matlock Drive and Berrywood Lane

Section II. This Ordinance shall be in full force and effect from and after its passage and approval as provided by law.

Passed by the C	ity Council of the United City of Yorkville, Kendall County, Illinois this
day of	, A.D. 2025.
	CITY CLERK

KEN KOCH	DAN TRANSIER
ARDEN JOE PLOCHER	CRAIG SOLING
CHRIS FUNKHOUSER	MATT MAREK
SEAVER TARULIS	RUSTY CORNEILS
APPROVED by me, as Magthis day of	yor of the United City of Yorkville, Kendall County, Illinois, A.D. 2025.
	MAYOR
Attest:	
	_

CITY CLERK

MUTCD Intersection Control Guidelines

The governing entity on traffic control signage and right-of-way intersection control is the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD). The 11th Edition of the Manual, updated in December 2023, provides the following guidance when considering intersection control at unsignalized intersections:

Guidance:

The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users.

Guidance:

- A. When selecting a form of intersection control, the following factors should be considered: a. Motor vehicle, bicycle, and pedestrian traffic volumes on all approaches; where the term units/day or units/hour is indicated, it should be the total of motor vehicle, bicycle, and pedestrian volume;
- B. Driver yielding behavior with regard to all modes of conflicting traffic, including bicyclists and pedestrians;
- C. Number and angle of approaches;
- D. Approach speeds;
- E. Sight distance available on each approach;
- F. Reported crash experience; and
- G. The presence of a grade crossing near the intersection.

Standard:

YIELD or STOP signs shall not be used for speed control.

Section 2B.10 of the MUTCD details the following for the installation of yield control at an intersection:

Guidance:

At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs.

Yield control should be considered when engineering judgment indicates that all of the following conditions exist:

- A. Intersection sight distance is adequate on the approaches to be controlled by YIELD signs.
- B. All approaches to the intersection are a single lane and there are no separate turn lanes.
- *C. One of the following crash-related criteria applies:*
- D. For changing from no intersection control to yield control, there have been two or more reported crashes in the previous 12 months that are susceptible to correction by the installation of a YIELD sign.
- E. For changing from minor road stop control to yield control, there have been two or fewer reported crashes in the previous 12 months.
- F. The combined motor vehicle, bicycle, and pedestrian volume entering the intersection averages less than 1,800 units per day or 140 units in the peak hour.
- *G.* The angle of intersection is between 90 and 75 degrees.

H. The functional classification of the intersecting streets is either the intersection of two local streets or the intersection of a local street with a collector street.

Option:

YIELD signs may be installed at an intersection when any of the following conditions apply:

- A. At the second intersection of a divided highway crossing or median break functioning as two separate intersections (see Figure 2B-19). In this case, a YIELD sign may be installed at the entrance to the second intersection.
- B. For a channelized turn lane that is separated from the adjacent travel lanes by an island, even if the adjacent lanes at the intersection are controlled by a highway traffic control signal or by a STOP sign.
- C. At an intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.
- D. Facing the entering roadway for a merge-type movement if engineering judgment indicates that control is needed because acceleration geometry and/or sight distance is not adequate for merging traffic operation.
- E. On low-volume rural roads if engineering judgment indicates that a YIELD sign would provide adequate control.
- F. On an approach to an intersection where the only permissible movement is a right-turn movement with an intersection geometry similar to a channelized right-turn lane or an approach to a roundabout.

Section 2B.11 of the MUTCD details the following for the installation of minor road stop control at an intersection:

Guidance:

Stop control on the minor-road approach or approaches to an intersection should be considered when engineering judgment indicates that one or more of the following conditions exist:

- A. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway.
- B. Crash records indicate that:
 - 1. For a four-leg intersection, there are three or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.
 - 2. For a three-leg intersection, there are three or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.
- C. The intersection is of a lower functional classification road with a higher functional classification road.
- D. Conditions that previously supported the installation of all-way stop control no longer exist.

On low-volume rural roads, a STOP sign should be considered at an intersection where engineering judgment indicates that Item C in Paragraph 1 of this Section is applicable or where the intersection has inadequate sight distance for the operating vehicle speeds.

Section 2B.12 of the MUTCD details the following for the installation of an All-Way Stop Control intersection:

Support:

The provisions in the following sections describe warrants for the recommended engineering study to determine all-way stop control. Warrants are not a substitute for engineering judgment. The fact that a warrant for a particular traffic control device is met is not conclusive justification to install or not install all-way stop control. Because each intersection will have unique characteristics that affect its operational performance or safety, it is the engineering study for a given intersection that is ultimately the basis for a decision to install or not install all-way stop control.

All-way stop controls at intersections with substantially differing approach volumes can reduce the effectiveness of these devices for all roadway users.

Guidance:

The decision to establish all-way stop control at an unsignalized intersection should be based on an engineering study. The engineering study for all-way stop control should include an analysis of factors related to the existing operation and safety at the intersection, the potential to improve these conditions, and the applicable factors contained in the following all-way stop control warrants:

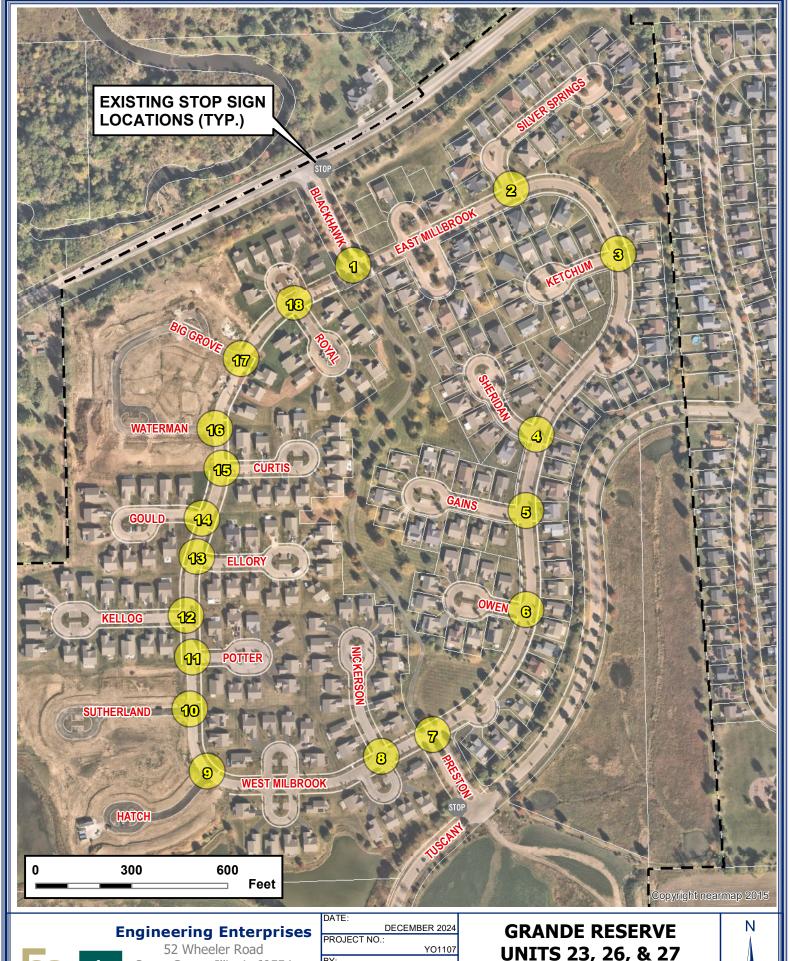
- A. All-Way Stop Control Warrant A: Crash Experience (see Section 2B.13)
- B. All-Way Stop Control Warrant B: Sight Distance (see Section 2B.14)
- C. All-Way Stop Control Warrant C: Transition to Signal Control or Transition to Yield Control at a Circular Intersection (see Section 2B.15)
- D. All-Way Stop Control Warrant D: 8-Hour Volume (Vehicles, Pedestrians, Bicycles) (see Section 2B.16)
- E. All-Way Stop Control Warrant E: Other Factors (see Section 2B.17)

Option:

The decision to install all-way stop control on site roadways open to public travel may be based on engineering judgment.

Standard:

The satisfaction of an all-way stop control warrant or warrants shall not in itself require the installation of all-way stop control at an unsignalized intersection.





52 Wheeler Road Sugar Grove, Illinois 60554 (630) 466-6700 www.eeiweb.com DATE:

DECEMBER 2024
PROJECT NO.:

YO1107
BY:

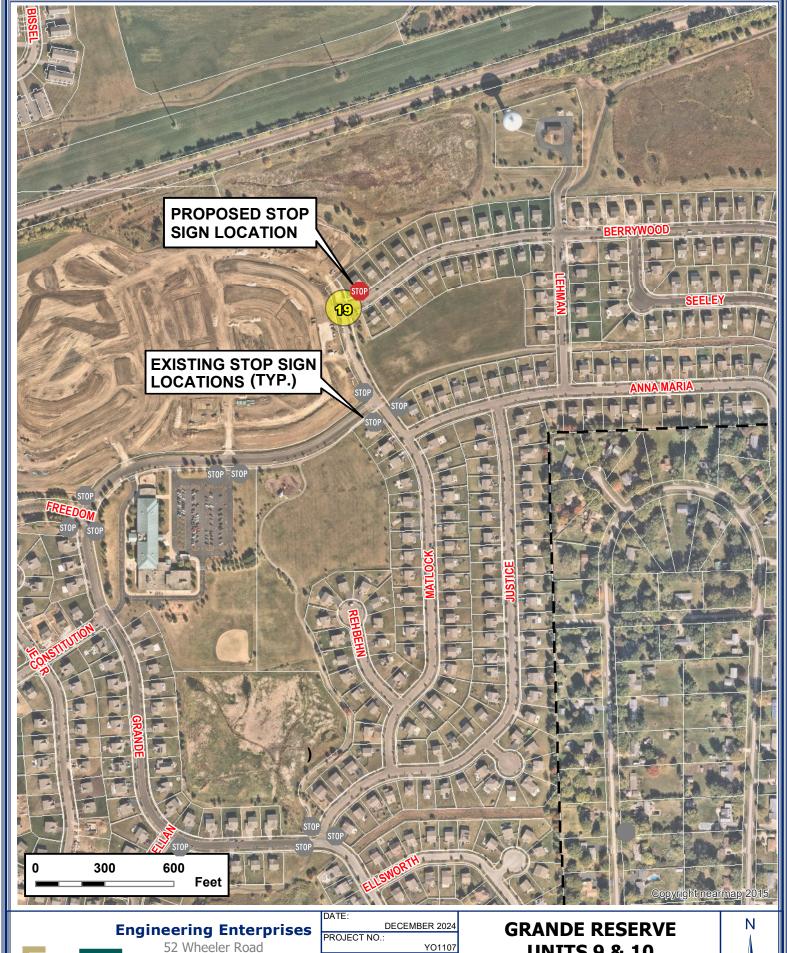
KKP
PATH:

HIGISIPUS LICIYORKVILLE120111
FILE:

YO1107-Millbrook Circle.mxd

UNITS 23, 26, & 27
INTERSECTION
ANALYSES







52 Wheeler Road Sugar Grove, Illinois 60554 (630) 466-6700 www.eeiweb.com DECEMBER 2024
PROJECT NO.:
YO1107
BY:
KKP
PATH:
HAGISIPUBLICIYORKVILLE120111
FILE:
YO1107-Matlock Drive.mxd

GRANDE RESERVE
UNITS 9 & 10
INTERSECTION
ANALYSES

UNITED CITY OF YORKVILLE TWO-WAY YIELD PRELIMINARY ENGINEERING EVALUATION*

Location: Millbrook Cir & Blackhawk Blvd, Silver Springs Court, Ketchum Court, Sheridan Court, Gains Court, Owen Court, Preston Drive, Nickerson Court, Hatch Court, Sutherland Court, Potter Court, Kellogg Court, Ellory Court, Gould Court, Curtis Court, Waterman Lane, Big Grove Lane, and Royal Court

Guidance: The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users.

Standard: YIELD or STOP signs shall not be used for speed control.

	Criteria Met	<u>Criteria**</u>			
Yes	Additional Study Required	No			
		I. Yield control s	nould be considered when engineering judgment indicates that all of the following conditions exist:		
		A. Intersection	n sight distance is adequate on the approaches to be controlled by YIELD signs.		
		B. All approa	ches to the intersection are a single lane and there are no separate turn lanes.		
		C. One of the	following crash-related criteria applies:		
			ing from no intersection control to yield control, there have been two or more reported crashes in the previous 12 at are susceptible to correction by the installation of a YIELD sign.		
		2. For chang	ing from minor road stop control to yield control, there have been two or fewer reported crashes in the previous 12		
		The comb	ined motor vehicle, bicycle, and pedestrian volume entering the intersection averages less than s per day or 140 units in the peak hour.		
		E. The angle	of intersection is between 90 and 75 degrees.		
			onal classification of the intersecting streets is either the intersection of two local streets or the intersection of a local a collector street.		
		II. YIELD signs m	ay be installed at an intersection when any of the following conditions apply:		
			ond intersection of a divided highway crossing or median break functioning as two separate intersections. In this case, ign may be installed at the entrance to the second intersection.		
			nnelized turn lane that is separated from the adjacent travel lanes by an island, even if the adjacent lanes at the n are controlled by a highway traffic control signal or by a STOP sign.		
			section where a special problem exists and where engineering judgment indicates the problem to be susceptible to by the use of the YIELD sign.		
			entering roadway for a merge-type movement if engineering judgment indicates that control is needed because on geometry and/or sight distance is not adequate for merging traffic operation.		
		E. On low-vo	lume rural roads if engineering judgment indicates that a YIELD sign would provide adequate control.		
			oroach to an intersection where the only permissible movement is a right-turn movement with an intersection geometry a channelized right-turn lane or an approach to a roundabout.		
Based on	a preliminary rev	of the criteria for a yield sign	the following action is recommended:		
		Criteria are clearly m	et recommending installation of a yield sign.		
		Criteria are not clear	ly met at this time - no further action recommended.		
	Criteria may or may not be met - additional engineering study required.				
Ву	: Gabriel Braboy	Y.E.	Date: _12/17/2024		
Senior Project Engineer I					
	Title				
Ву	:		Date:		
		Title	-		

Updated 10/11/2024

UNITED CITY OF YORKVILLE TWO-WAY STOP PRELIMINARY ENGINEERING EVALUATION*

Location: Millbrook Cir & Blackhawk Blvd, Silver Springs Court, Ketchum Court, Sheridan Court, Gains Court, Owen Court, Preston Drive, Nickerson Court, Hatch Court, Sutherland Court, Potter Court, Kellogg Court, Ellory Court, Gould Court, Curtis Court, Waterman Lane, Big Grove Lane, and Royal Court

Guidance: The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users.

Standard: YIELD or STOP signs shall not be used for speed control.

	Criteria Met		<u>Criteria**</u>
Yes	Additional Study Required	No	
			 Stop control on the minor-road approach or approaches to an intersection should be considered when judgment indicates that one or more of the following conditions exist:
			A. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway.
			B. Crash records indicate that:
			For a four-leg intersection, there are three or more reported crashes in a 12-month period or six or more reported 1. crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.
			For a three-leg intersection, there are three or more reported crashes in a 12-month period or five or more reported 2. crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control.
			C. The intersection is of a lower functional classification road with a higher functional classification road.
			D. Conditions that previously supported the installation of all-way stop control no longer exist.
Based on	a preliminary re	eview of t	he criteria for a 2-way stop sign the following action is recommended:
			Criteria are clearly met recommending installation of a stop sign.
			Criteria are not clearly met at this time - no further action recommended.
			Criteria may or may not be met - additional engineering study required.
Ву:	Gabriel Braboy	/, P.E.	Date: _12/17/2024
	Senior Project	Engineer Title	
Ву:			Date:
		Title	

Updated 10/11/2024

UNITED CITY OF YORKVILLE MULTI-WAY STOP PRELIMINARY ENGINEERING EVALUATION*

Location: Millbrook Cir & Blackhawk Blvd, Silver Springs Court, Ketchum Court, Sheridan Court, Gains Court, Owen Court, Preston Drive, Nickerson Court, Hatch Court, Sutherland Court, Potter Court, Kellogg Court, Ellory Court, Gould Court, Curtis Court, Waterman Lane, Big Grove Lane, and Royal Court

Guidance: The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and

efficiency for all road users.

Guidance: The decision to establish all-way stop control at an unsignalized intersection should be based on an engineering study.

Standard: YIELD or STOP signs shall not be used for speed control.

Standard: The satisfaction of an all-way stop control warrant or warrants shall not in itself require the installation of all-way stop control at an unsignalized intersection.

	g		· ·· ·
	Criteria Met		Criteria**
Yes	Additional Study Required	No	
			A. Crash Experience:
			For a four-leg intersection, there are five or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.
			For a three-leg intersection, there are four or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.
			B. Sight Distance:
			An engineering study indicates that sight distance on the minor-road approaches controlled by a STOP sign is not adequate for a vehicle to turn onto or cross the major (uncontrolled) road. At such a location, the road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.
			C. Transition to Signal Control or Transition to Yield Control at a Circular Intersection: At locations where all-way stop control is an interim measure that can be installed to control traffic while arrangement are being made for the installation of a traffic control signal at the intersection or for the installation of yield control at a circular intersection.
			D. 8-Hour Volume:
			(Any Major-Street Speed) The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the major-street
			approaches is at least 300 units per hour for each of any 8 hours of a typical day; and The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the minor-street
			approaches is at least 200 units per hour for each of any of the same 8 hours. (85th Percentile Major-Street Speed > 40 mph)
			The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the major-street approaches is at least 210 units per hour for each of any 8 hours of a typical day; and
			The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the minor-street approaches is at least 140 units per hour for each of any of the same 8 hours.
			E. Other Factors:
			 The need to control left-turn conflicts. An intersection of two residential neighborhood collector (through) streets of similar design and operating
			 characteristics where all-way stop control would improve traffic operational characteristics of the intersection. Where pedestrian and/or bicyclist movements support the installation of all-way stop control.
Danad an	a proliminant re	wiew of	
baseu on	a preliminary re	eview or	he criteria for a multi-way stop sign the following action is recommended:
			Criteria are clearly met recommending installation of a multi-way stop.
			Criteria are not clearly met at this time - no further action recommended.
			Criteria may or may not be met - additional engineering study required.
Ву:	Gabriel Braboy	, P.E.	Date: <u>12/17/2024</u>
	Senior Project	Enginee	1
		Title	
Ву:			Date:
		T:41.	

^{*} Based upon Professional Engineer's Review

Updated 10/11/2024

UNITED CITY OF YORKVILLE TWO-WAY YIELD PRELIMINARY ENGINEERING EVALUATION*

Location: Matlock Dr & Berrywood Ln

Guidance: The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users.

Standard: YIELD or STOP signs shall not be used for speed control.

	Criteria Met			Criteria**
Yes	Additional Study Required	No		
			I. Y	field control should be considered when engineering judgment indicates that all of the following conditions exist:
			A.	Intersection sight distance is adequate on the approaches to be controlled by YIELD signs.
			B.	All approaches to the intersection are a single lane and there are no separate turn lanes.
			C.	One of the following crash-related criteria applies:
				1. For changing from no intersection control to yield control, there have been two or more reported crashes in the previous 12 months that are susceptible to correction by the installation of a YIELD sign.
			:	For changing from minor road stop control to yield control, there have been two or fewer reported crashes in the previous 12 months.
			D.	The combined motor vehicle, bicycle, and pedestrian volume entering the intersection averages less than 1,800 units per day or 140 units in the peak hour.
			E.	The angle of intersection is between 90 and 75 degrees.
			F.	The functional classification of the intersecting streets is either the intersection of two local streets or the intersection of a local street with a collector street.
			II.	YIELD signs may be installed at an intersection when any of the following conditions apply:
			A.	At the second intersection of a divided highway crossing or median break functioning as two separate intersections. In this case, a YIELD sign may be installed at the entrance to the second intersection.
			В.	For a channelized turn lane that is separated from the adjacent travel lanes by an island, even if the adjacent lanes at the intersection are controlled by a highway traffic control signal or by a STOP sign.
			C.	At an intersection where a special problem exists and where engineering judgment indicates the problem to be susceptible to correction by the use of the YIELD sign.
			D.	Facing the entering roadway for a merge-type movement if engineering judgment indicates that control is needed because acceleration geometry and/or sight distance is not adequate for merging traffic operation.
			E.	On low-volume rural roads if engineering judgment indicates that a YIELD sign would provide adequate control.
			F.	On an approach to an intersection where the only permissible movement is a right-turn movement with an intersection geometry similar to a channelized right-turn lane or an approach to a roundabout.
Based on a	a preliminary revi	ew of the	criteria	for a two-way stop sign the following action is recommended:
			Crite	ria are clearly met recommending installation of a yield sign.
			Crite	ria are not clearly met at this time - no further action recommended.
			Crite	ria may or may not be met - additional engineering study required.
Ву:	Gabriel Braboy	/, Ρ.Ε.		Date: <u>12/17/2024</u>
	Senior Project	Enginee	r I	
		Titl		
Ву:				Date:
		Title	e	

UNITED CITY OF YORKVILLE TWO-WAY STOP

PRELIMINARY ENGINEERING EVALUATION*

Guidance: The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users. Standard: YIELD or STOP signs shall not be used for speed control. Criteria Met Criteria** **Additional** Study Yes Required No Stop control on the minor-road approach or approaches to an intersection should be considered when engineering 1 judgment indicates that one or more of the following conditions exist: A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway. В. Crash records indicate that: For a four-leg intersection, there are three or more reported crashes in a 12-month period or six or more reported 1. crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control. For a three-leg intersection, there are three or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period. The crashes should be susceptible to correction by installation of minor-road stop control. C. The intersection is of a lower functional classification road with a higher functional classification road. D. Conditions that previously supported the installation of all-way stop control no longer exist. Based on a preliminary review of the criteria for a yield sign the following action is recommended: Criteria are clearly met recommending installation of a stop sign. Criteria are not clearly met at this time - no further action recommended. Criteria not met at this time; but, is anticipated to be in the future. Stop sign installation recommended. By: Gabriel Braboy, P.E. Date: 12/17/2024 Senior Project Engineer I Date: Title

Location: Matlock Dr & Berrywood Ln

UNITED CITY OF YORKVILLE MULTI-WAY STOP PRELIMINARY ENGINEERING EVALUATION*

Location: Matlock Dr & Berrywood Ln

Guidance: The type of traffic control used at an unsignalized intersection should be the least restrictive that provides appropriate levels of safety and efficiency for all road users.

Guidance: The decision to establish all-way stop control at an unsignalized intersection should be based on an engineering study.

Standard: YIELD or STOP signs shall not be used for speed control.

Standard: The satisfaction of an all-way stop control warrant or warrants shall not in itself require the installation of all-way stop control at an unsignalized intersection.

Yes	Criteria Met Additional Study Required	No	<u>Criteria**</u>
			A. Crash Experience:
			For a four-leg intersection, there are five or more reported crashes in a 12-month period or six or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.
			For a three-leg intersection, there are four or more reported crashes in a 12-month period or five or more reported crashes in a 36-month period that were of a type susceptible to correction by the installation of all-way stop control.
			B. Sight Distance:
			An engineering study indicates that sight distance on the minor-road approaches controlled by a STOP sign is not adequate for a vehicle to turn onto or cross the major (uncontrolled) road. At such a location, the road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop.
			C. Transition to Signal Control or Transition to Yield Control at a Circular Intersection:
			At locations where all-way stop control is an interim measure that can be installed to control traffic while arrangements are being made for the installation of a traffic control signal at the intersection or for the installation of yield control at a circular intersection.
			D. 8-Hour Volume: (Any Major-Street Speed)
			The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the major-street approaches is at least 300 units per hour for each of any 8 hours of a typical day; and
			The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the minor-street approaches
			is at least 200 units per hour for each of any of the same 8 hours. (85th Percentile Major-Street Speed > 40 mph)
			The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the major-street approaches is at least 210 units per hour for each of any 8 hours of a typical day; and
			The combined motor vehicle, bicycle, and pedestrian volume entering the intersection from the minor-street approaches is at least 140 units per hour for each of any of the same 8 hours.
		_	E. Other Factors:
			 The need to control left-turn conflicts. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics
			2. where all-way stop control would improve traffic operational characteristics of the intersection. 3. Where pedestrian and/or bicyclist movements support the installation of all-way stop control.
Based on	a preliminary re	view of t	the criteria for a multi-way stop sign the following action is recommended:
24004 0	a pa. y		
			Criteria are clearly met recommending installation of a multi-way stop.
			Criteria are not clearly met at this time - no further action recommended.
			Criteria may or may not be met - additional engineering study required.
Ву:	Gabriel Braboy	, P.E.	Date: 12/17/2024
	Senior Project	Engineer	
		Title	
Ву:			Date:
		Title	

^{*} Based upon Professional Engineer's Review

Updated 10/11/2024

INTERSECTION #1 MILLBROOK CIR & BLACKHAWK BLVD

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT NUMBER 101107 PROJECT GRANDE RESERVE FANALYSIS DATE 10/17 BY GAB SUBJECT INTERSECTION MILLBROOK + RLACKHAWK OF PAGE 16 E MILBROOK 7:23 AM - 8:23 AM 10/17 ON CONDUCTED: STUDY 4 BUS OBSERVED 15





WEST MILLBROOK CIRCLE – EASTBOUND APPROACH





WEST MILLBROOK CIRCLE – EASTBOUND APPROACH

LOOKING EAST

Engineering Enterprises, Inc.







EAST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING WEST



EAST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING NORTH









BLACKHAWK BOULEVARD – SOUTHBOUND APPROACH

LOOKING WEST



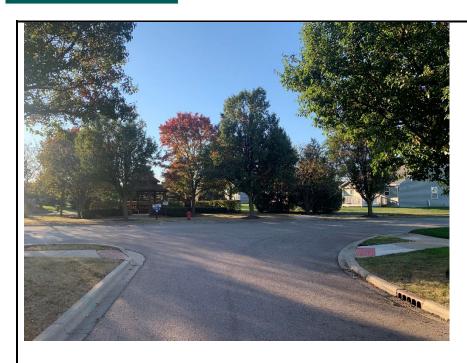
BLACKHAWK BOULEVARD – SOUTHBOUND APPROACH

LOOKING EAST



Engineering Enterprises, Inc.

INTERSECTION



BLACKHAWK BOULEVARD – SOUTHBOUND APPROACH

LOOKING SOUTH

INTERSECTION #2 MILLBROOK CIR & SILVER SPRINGS CT

	Engineering Enterprises, Inc. 52 Wheeler Road · Sugar Grove, Illinois 60554 PROJECT GRANDE RESERVE PROJECT NUMBER. SUBJECT INTERSECTION ANALYSIS BY GAB EMILBROOK + SILVER SPRINGS CT PAGE 1	TEL: (630) 466-6700 FAX: (630) 466-6701
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EAST MILLBROOK CIRCLE – EASTBOUND APPROACH LOOKING EAST



EAST MILLBROOK CIRCLE – EASTBOUND APPROACH
LOOKING NORTH









EAST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING WEST



EAST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING NORTH









SILVER SPRINGS COURT – SOUTHBOUND APPROACH

LOOKING SOUTH



SILVER SPRINGS COURT – SOUTHBOUND APPROACH

LOOKING EAST

Engineering Enterprises, Inc.







SILVER SPRINGS COURT – SOUTHBOUND APPROACH

LOOKING WEST

INTERSECTION #3 MILLBROOK CIR & KETCHUM CT

Engineering Enterprises, Jnç. 1 TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT NUMBER 401107 PROJECT GRANDE RESERVE SUBJECT INTERSECTION ANALYSIS DATE OCT 21,2024 GAB KETCHUM CT PAGE E MILLBROOK CIR 17 UNITS/HR 408 UNITS/DAY KETCHUM

7:24 AM _ 8:24 AM

24

STUDY

CONDUCTED





EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING WEST





EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST



EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH





KETCHUM COURT – EASTBOUND APPROACH

LOOKING NORTH



KETCHUM COURT – EASTBOUND APPROACH

LOOKING EAST

Engineering Enterprises, Inc.







KETCHUM COURT – EASTBOUND APPROACH

INTERSECTION #4 MILLBROOK CIR & SHERIDAN CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT OKANDE RESERVE PROJECT NUMBER 901107
SUBJECT INTERSECTION ANALYSIS BY GAB DATE 10/18 DATE 10/18/24 SHERIDAN EMILLBROOK CIR. PAGE OF 24UNITS/4R 3080 / 576UNITS/2019 4 1 2000 5TUDY CONDUCTED 10/18/24 7:24 AM - 8:24 AM OPEUS 33





EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING WEST









EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST



EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH









SHERIDAN COURT – EASTBOUND APPROACH

LOOKING NORTH



SHERIDAN COURT – EASTBOUND APPROACH

Engineering Enterprises, Inc.







SHERIDAN COURT – EASTBOUND APPROACH

LOOKING EAST

INTERSECTION #5 MILLBROOK CIR & GAINS CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT GRANDE RESERVE CAB DATE 10/18 SUBJECT INTERSECTION ANALYSIS BY MILBROOK + GAINS PAGE_ OF 25 UNITS/HR 30 1 STUDY CONDUCTED 39





EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH LOOKING NORTH



EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING WEST









EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST



EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH









GAINS COURT – EASTBOUND APPROACH

LOOKING NORTH



GAINS COURT – EASTBOUND APPROACH

Engineering Enterprises, Inc.







GAINS COURT – EASTBOUND APPROACH

LOOKING EAST

INTERSECTION #6 MILLBROOK CIR & OWEN CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT GRANDE RESERVE 401107 _____ PROJECT NUMBER __ SUBJECT INTERSECTION ANALYSIS BY GAB DATE 10/18 MILLBROOK OWEN PAGE_ OF OWEN CT 20 UNITS HIL 480 UNITS DAY STUDY CONDUCTED 7:24AM - 8:24AM G.A.B assol 45





EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



EAST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING WEST









EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH LOOKING WEST



EAST MILLBROOK CIRCLE – SOUTHBOUND APPROACH LOOKING SOUTH









OWEN COURT – EASTBOUND APPROACH

LOOKING NORTH



OWEN COURT – EASTBOUND APPROACH

LOOKING EAST

Engineering Enterprises, Inc.







OWEN COURT – EASTBOUND APPROACH

INTERSECTION #7 MILLBROOK CIR & PRESTON DR

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT GRANDE RESERVE JO1107 DATE 10/17/24 PROJECT NUMBER_ BY GAB SUBJECT INTERSECTION ANALYSIS PRESTON DIZ 3 MILLBROOK CIR PAGE 47 UNITS/NAY
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PRESTON DRIVE – NORTHBOUND APPROACH

LOOKING WEST



PRESTON DRIVE – NORTHBOUND APPROACH

LOOKING EAST





WEST MILLBROOK CIRCLE – EASTBOUND APPROACH LOOKING EAST



EAST MILLBROOK CIRCLE – WESTBOUND APPROACH
LOOKING WEST

Engineering Enterprises, Inc.







EAST MILLBROOK CIRCLE – WESTBOUND APPROACH

INTERSECTION #8 MILLBROOK CIR & NICKERSON CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT GRANDE RESERVE" 401107 DATE 10/17/24 NICKERSON CT + WMILLBROOK PAGE 16 UNITS/HR th MILLBROOK CITE 384 UN 175 /DAY 3PED STUDY CONDUCTED 10/17/24 O BUSES OBSERVED 56





WEST MILLBROOK CIRCLE – EASTBOUND APPROACH LOOKING EAST



WEST MILLBROOK CIRCLE – EASTBOUND APPROACH LOOKING SOUTH





WEST MILLBROOK CIRCLE – EASTBOUND APPROACH LOOKING NORTH

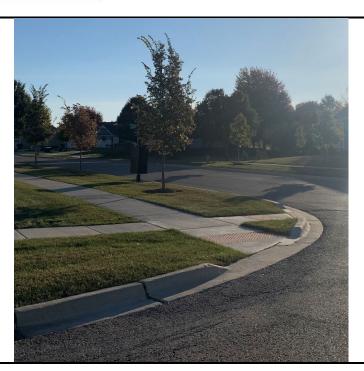


NICKERSON COURT – SOUTHBOUND APPROACH LOOKING WEST









NICKERSON COURT – SOUTHBOUND APPROACH

LOOKING EAST



NICKERSON COURT – SOUTHBOUND APPROACH









WEST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING WEST



WEST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING NORTH

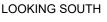
Engineering Enterprises, Inc.

INTERSECTION





WEST MILLBROOK CIRCLE – WESTBOUND APPROACH





WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH





WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

INTERSECTION #9 MILLBROOK CIR & HATCH CT

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WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH LOOKING SOUTH

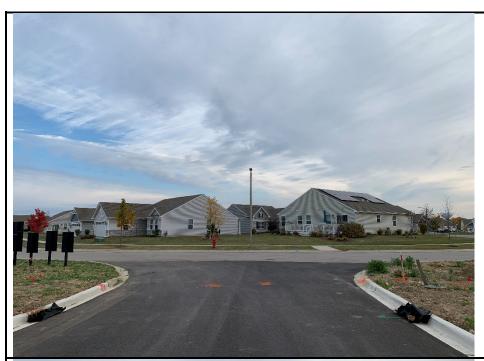


WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH









HATCH COURT – EASTBOUND APPROACH

LOOKING EAST



HATCH COURT – EASTBOUND APPROACH





HATCH COURT – EASTBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH

Engineering Enterprises, Inc.





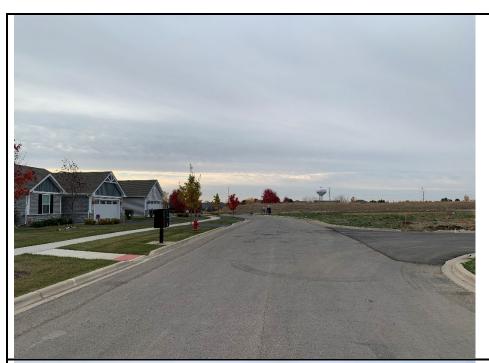


WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

INTERSECTION #10 MILLBROOK CIR & SUTHERLAND CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT GRANDE RESERVE PROJECT NUMBER 40/107
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WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING SOUTH



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH









SUTHERLAND COURT – EASTBOUND APPROACH

LOOKING NORTH



SUTHERLAND COURT – EASTBOUND APPROACH









SUTHERLAND COURT – EASTBOUND APPROACH

LOOKING EAST



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

Engineering Enterprises, Inc.







WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH

INTERSECTION #11 MILLBROOK CIR & POTTER CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 PROJECT NUMBER _ 401107 PROJECT GRANDE RESERVE GAB DATE 10/23/24 SUBJECT INTERSECTION ANALYSIS BY ____ MILLBROOK + POTTER CT PAGE 28 UNITS/AR POTTER CT 672 UNITS DAY LINDEVELOPED STUDY CONDUCTED 10/23 7.19AM - 8.10AM B GAB 2 BUSES OBSERVED

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WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH





WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH LOOKING EAST



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH





POTTER COURT – WESTBOUND APPROACH

LOOKING NORTH



POTTER COURT – WESTBOUND APPROACH

Engineering Enterprises, Inc.







POTTER COURT – WESTBOUND APPROACH

INTERSECTION #12 MILLBROOK CIR & KELLOGG CT

Engineering Enterprises, Inc. TEL: (630) 466-6700 52 Wheeler Road • Sugar Grove, Illinois 60554 FAX: (630) 466-6701 401107 PROJECT GRANDE RESERVE PROJECT NUMBER DATE 10/23/24 SUBJECT INTERSECTION ANALYSIS GAB MILLBROOK + KELLOGG PAGE MILLBROOK BUS STOP 28 34 UNITS/HR KELLOGG CT 816 UNITS/DAY STUDY CONDUCTED 10/23/24 BY GAB FROM 7:18 AM 8:18 AM To

BUSES OBSERVED









WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH





WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH









KELLOGG COURT – EASTBOUND APPROACH

LOOKING NORTH



KELLOGG COURT – EASTBOUND APPROACH

INTERSECTION #13 MILLBROOK CIR & ELLORY CT





WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH









WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH LOOKING EAST



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH





ELLORY COURT – WESTBOUND APPROACH

LOOKING NORTH



ELLORY COURT – WESTBOUND APPROACH

INTERSECTION #14 MILLBROOK CIR & GOULD CT

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WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH









WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH





GOULD COURT – EASTBOUND APPROACH

LOOKING NORTH



GOULD COURT – EASTBOUND APPROACH

INTERSECTION #15 MILLBROOK CIR & CURTIS CT

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WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH





WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING EAST



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING EAST









WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING SOUTH



CURTIS COURT – WESTBOUND APPROACH

LOOKING NORTH

Engineering Enterprises, Inc.







CURTIS COURT – WESTBOUND APPROACH

LOOKING SOUTH

INTERSECTION #16 MILLBROOK CIR & WATERMAN LN

	44.	52 Wheeler Road	g Enterprises, li Sugar Grove, Illinois 6 RANDE RES	0554	PROJECT NUMBER	TEL: (630) 466-6700 FAX: (630) 466-6701
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WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING SOUTH



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST





WATERMAN LANE – EASTBOUND APPROACH

LOOKING NORTH



WATERMAN LANE – EASTBOUND APPROACH

LOOKING SOUTH





WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING WEST



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH

INTERSECTION #17 MILLBROOK CIR & BIG GROVE LN

4	4.	52 Wheeler Road	g Enterprises, li · Sugar Grove, Illinois 6 RANDE RES	0554	PROJECT NUMBER	TEL: (630) 466-6700 FAX: (630) 466-6701
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WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING SOUTH



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST





BIG GROVE LANE- EASTBOUND APPROACH

LOOKING NORTH



BIG GROVE LANE – EASTBOUND APPROACH

LOOKING SOUTH





WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING WEST



WEST MILLBROOK CIRCLE – NORTHBOUND APPROACH

LOOKING NORTH

INTERSECTION #18 MILLBROOK CIR & ROYAL CT

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WEST MILLBROOK CIRCLE – EASTBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – EASTBOUND APPROACH

LOOKING EAST





WEST MILLBROOK CIRCLE – EASTBOUND APPROACH

LOOKING SOUTH



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING WEST





WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING SOUTH



WEST MILLBROOK CIRCLE – SOUTHBOUND APPROACH

LOOKING EAST









WEST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING NORTH



WEST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING WEST









WEST MILLBROOK CIRCLE – WESTBOUND APPROACH

LOOKING SOUTH



ROYAL COURT – NORTHBOUND APPROACH

LOOKING NORTH









ROYAL COURT – NORTHBOUND APPROACH

LOOKING WEST



ROYAL COURT – NORTHBOUND APPROACH

LOOKING EAST

INTERSECTION #19 MATLOCK DR & BERRYWOOD LN

	Engineering Enterprises, Inc. 52 Wheeler Road • Sugar Grove, Illinois 60554	TEL: (630) 466-6700 FAX: (630) 466-6701
	PROJECT GRANDE RESERVE PROJECT NUMBER SUBJECT INTERSECTION ANALYSIS BY GAB MATLOCK DR & BERRYWOOD PAGE 1	
	A COLON	10]
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MATLOCK DRIVE – NORTHBOUND APPROACH LOOKING NORTH



MATLOCK DRIVE – NORTHBOUND APPROACH LOOKING EAST





MATLOCK DRIVE – SOUTHBOUND APPROACH LOOKING SOUTH



MATLOCK DRIVE – SOUTHBOUND APPROACH LOOKING EAST





BERRYWOOD LANE – WESTBOUND APPROACH

LOOKING WEST



BERRYWOOD LANE – WESTBOUND APPROACH

LOOKING SOUTH

Engineering Enterprises, Inc.







BERRYWOOD LANE – WESTBOUND APPROACH

LOOKING NORTH



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works Parks and Recreation	

Agenda Item Number
Mayor's Report #1
Tracking Number
CC 2025-05

Agenda Item Summary Memo

Title: Fireworks Con	ntract with Mad Bomber Firew	orks Production and Budget Amendment	
Meeting and Date:	City Council – January 28, 20	25	
Synopsis: Please see	e the attached memo.		
Council Action Prev	viously Taken:		
Date of Action:	Action Taken:		
Item Number:			
Type of Vote Requir	red: Supermajority (6 out of 9)		
Council Action Requested: Approval			
Submitted by:	Tim Evans Name	Parks & Recreation	
	Name	Department	
	Agenda Item	Notes:	



Memorandum

To: Yorkville City Council

From: Tim Evans, Director of Parks and Recreation

Rob Fredrickson, Finance Director

CC: Bart Olson, City Administrator

Date: January 15, 2025

Subject: July 4th Fireworks Display Contract Approval

Summary

Review and approval of the City's 2025 July 4^{th} Fireworks Display Contract and corresponding budget amendment.

Background

Approximately thirteen (13) years ago, staff members of the City's Parks & Recreation Department began volunteering with the Yorkville Area 4th of July Celebration committee in organizing the annual Yorkville Area 4th of July event and fireworks show. The City graciously offered to continue, with police assistance, loaning equipment (such as barricades, cones, utility vehicles, port-a-lets etc.) as well as creating a "City 4th of July" account to collect revenues and pay expenses.

Since City staff started volunteering with the Yorkville Area 4th of July Celebration, the City has periodically held additional fireworks shows, such as St. Patrick's, Holiday Celebration and a Summer Kick Off, for residents to enjoy, especially during the pandemic.

As part of the currently scheduled 2025 City fireworks shows, staff will need to sign a 4th of July fireworks contract which will exceed \$25,000. To receive the best purchase prices in 2021, Parks & Recreation staff released a fireworks Request for Proposal (RFP). One fireworks manufacturer submitted a proposal, Mad Bomber Fireworks Productions, which the City, Fire Department and the 4th of July Committee have contracted with for many years. It is important to note the outstanding relationship the City and Bristol Kendall Fire Department have with Mad Bomber Fireworks.

Since securing another fireworks company may be difficult as the City only had one company submit a contract proposal four years ago and with the original contract expiring in 2024, staff is bringing the 2025 July 4th fireworks contract to the Council for approval. In order to formally extend the contract for another year, we must amend the current year (FY 25) budget, as any contractual commitment of the City to expend funds must be followed by a subsequent appropriation per State Statute. Since the firework shows will not take place until next fiscal year, staff would roll the current year amended amount of \$53,000 into FY 26, as part of the annual budget process. To keep the amendment as simple as possible, only the program supplies line item in the Recreation Department cost center of the (79) Parks & Recreation Fund has been adjusted. The actual financing mechanism(s) (i.e., program revenues, General Fund transfer, etc.) will be determined as part of the FY 26 budget process. On paper, this amendment will

reduce fund balance by \$53,000 (by increasing Recreation program supplies from \$280,000 to \$333,000); however, in actuality this amendment will have no budgetary impact, since the actual expenditures will not be incurred until FY 26.

Recommendation

Staff seeks City Council approval of the attached resolution and budget amendment in order to execute the Mad Bomber Fireworks Productions contract proposal in the amount of \$53,000 for the two City fireworks shows in 2025.

Resolution No. 2025-

A RESOLUTION OF THE UNITED CITY OF YORKVILLE, ILLINOIS, AUTHORIZING A CONTRACT WITH MAD BOMBER FIREWORKS PRODUCTIONS FOR THE PURCHASE OF FIREWORKS FOR A CITY-SPONSORED FIREWORKS DISPLAY

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, the City's Municipal Code provides that the City may approve contracts for supplies, materials and equipment that have not been competitively bid by a two-thirds affirmative vote of the City Council; and

WHEREAS, the City plans to host a fireworks show for the enjoyment of residents during calendar year 2025 on July 4, 2025; and

WHEREAS, the City released a Fireworks RFP in 2021, to which only one business responded, Mad Bomber Fireworks Productions ("Mad Bomber"); and

WHEREAS, the City has contracted with Mad Bomber for the supply of fireworks and related set up and production for fireworks shows that the City has hosted for at least four years, and the City and Bristol Kendall Fire Protection District maintain an outstanding relationship with Mad Bomber; and

WHEREAS, the City, therefore, desires to enter into a new contract with Mad Bomber for a fireworks show the City will be hosting during the 2025 calendar year; and

WHEREAS, the Mayor and City Council have determined that it is in the best interests of the health, safety and welfare of the City and its residents to authorize and approve a contract between the City and Mad Bomber for the purchase of a fireworks display and related set up and production of said display.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois:

Section 1. The foregoing recitals are hereby incorporated in this Resolution as the findings of the Corporate Authorities.

Section 2. In consideration of the foregoing recitals, the Corporate Authorities hereby waive the competitive bidding requirement, pursuant to the City's Municipal Code, and authorize

and direct the City Administrator to proceed with the execution of an agreement with Mad Bomber Fireworks Productions, in an amount not to exceed \$53,000, for the production of a fireworks show to be hosted by the City.

Section 3. This Resolution shall be in full force and effect upon its passage and approval as provided by law.

Passed by the City Cou	ncil of the United City of Yorkville, Kendall County, Illinois this
day of	, A.D. 2025.
	CITY CLERK
KEN KOCH	DAN TRANSIER
ARDEN JOE PLOCHER	CRAIG SOLING
CHRIS FUNKHOUSER	MATT MAREK
SEAVER TARULIS	RUSTY CORNEILS
APPROVED by me. a	Mayor of the United City of Yorkville, Kendall County, Illinois
this day of	
	MAYOR
Attest:	
CITY CLERK	

MAD BOMBER

FIREWORKS PRODUCTIONS

3999 E. HUPP ROAD BLDG. R-3-1 LAPORTE, IN 46350 11N485 HUNTER TRAIL * ELGIN, IL 60124 * (847) 464-1442 **Fax** (847) 464-1388

THIS SPECIALLY PREPARED PROPOSAL IS FOR THE

UNITED CITY OF YORKVILLE, IL

ANNUAL INDEPENDENCE DAY CELEBRATION

COUNTRYSIDE PARKWAY YORKVILLE, ILLINOIS

FRIDAY JULY 4th. 2025

Only the finest selection of assorted types of display fireworks have been submitted in this proposal, with an EMPHASIS on Multiple Break, and Special Effect Display Barrages. Plus a complete line on oriental & imported pattern products from China, Japan, and Taiwan. Also included are the latest brilliant Colored Effects from the leading manufactures in the United States.

TOTAL PRICE \$53,000.00

INCLUDES THE FOLLOWING:

25 - Minutes of Intense Presentation

Ten Million Dollars Liability Insurance.

Same Crew of Experienced, Licensed Pyrotechnic Operators to Deliver, Set-up, and Execute the entire Display Production.

Clean-up of the firing area immediately following the display.

Crew of operators covered under Workman's Compensation.

D.O.T. Certified drivers with Five Million Dollars road liability.

Rain Dated during 2025 Year

Choreographed Display Production.

MAD BOMBER FIREWORKS PRODUCTIONS AGREEMENT

This contract entered into this 16th day of January, 2025 by and between Mad Bomber Fireworks Productions of Kingsbury, Indiana hereinafter to as Seller, and UNITED CITY OF YORKVILLE 651 Prairie Ponte Drive, Yorkville, IL Hereinafter referred to as Buyer, of UNITED CITY OF YORKVILLE, ILLINOIS 60560.

Witness: Seller agrees to provide and Buyer agrees to purchase certain Fireworks Displays in accordance with the Program. Buyer will pay Seller a sum of \$53,000.00 for said Displays. Upon acceptance of this agreement Buyer will not pay Seller a sum of (waived) as an Earnest Money Deposit with the Balance due and payable within 30 days after the display date agreed upon. A late charge of 1½% per month will be assessed on accounts not paid within thirty days of display date. Buyer agrees to pay any and all collection costs, including reasonable attorney's fees and court cost incurred by Seller in the collection or attempted collection of any amount due under this agreement and invoice.

Both Seller and Buyer mutually agree to the following terms, conditions, and stipulations:

- Seller will present said Fireworks Display on the evening of the FOURTH day of JULY, 2025, it being understood
 that should there be inclement weather the day of the display the Seller has sole discretion to cancel display. An
 alternate display date will be given within six months of the original date agreeable to both the Seller and Buyer.
- 2. For inclement weather or any other reason there will be a 15% Fee of the Agreement price when alternate date is scheduled within six months of original display date. If Buyer chooses not to reschedule an alternate date within six months of original date, there will be a 50% Fee of Agreement price for cancellation of Display.
- 3. Buyer will provide a sufficient area for the Display, including a minimum spectator set back of 350' feet at all points from the discharge area. Buyer will provide protection of the display by roping-off or other suitable means. Buyer will provide adequate police protection to prevent spectators from entering display area. Buyer agrees to search the fallout area at first light following a night display.
- 4. Seller reserves the right to terminate the Display in the event that persons enter the secured Danger Zone and Security is unable to secure the Danger Zone.
- 5. Seller agrees to provide Qualified Technicians to take charge of and present said Display.
- 6. Seller agrees to provide Liability Insurance in the amount of \$10,000,000.00 for the benefit of both the Buyer and Seller All individual entities listed on the Certificate of Insurance will be deemed and additional insured per this contract.
- 7. Mad Bomber Firework Productions retains the right to substitute product of equal or greater value in the event of shortage. or unavailability of any particular item on the proposal.

	F
8. Seller and Buyer agree to include Attachments, Display price does not include local fire protection	, if any See Attachments: /Manual Fired Display
Both Seller and Buyer hereto do mutually and severatives to be binding upon the parties, themselves MIAND, INC. MAD BOMBER FIREWORKS	rerally guarantee terms, conditions, and payments of this contract, these s, their heirs, executors, administrators, successors and assigns. BUYER By
Sr. Vice President	(is duly authorized agent, who represents that he/she has full authority to bind the Buyer)
Date01/16/25	Date;

Ordinance No. 2025-

AN ORDINANCE AUTHORIZING THE FOURTH AMENDMENT TO THE ANNUAL BUDGET OF THE UNITED CITY OF YORKVILLE, FOR THE FISCAL YEAR COMMENCING ON MAY 1, 2024 AND ENDING ON APRIL 30, 2025

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non-home rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

WHEREAS, pursuant to 65 ILCS 5/8-2-9.4, the City adopted Ordinance No. 2024-10 on March 26, 2024 adopting an annual budget for the fiscal year commencing on May 1, 2024 and ending on April 30, 2025; and,

WHEREAS, pursuant to 65 ILCS 5/8-2-9.6, by a vote of two-thirds of the members of the corporate authorities then holding office, the annual budget of the United City of Yorkville may be revised by deleting, adding to, changing or creating sub-classes within object classes and object classes themselves. No revision of the budget shall be made increasing the budget in the event funds are not available to effectuate the purpose of the revision; and,

WHEREAS, funds are available to effectuate the purpose of this revision.

NOW THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

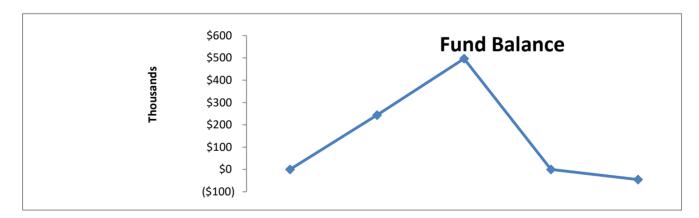
Section 1. That the amounts shown in Schedule A, attached hereto and made a part hereof by reference, increasing and/or decreasing certain object classes and decreasing certain fund balances in the Parks and Recreation fund with respect to the United City of Yorkville's 2024-2025 Budget are hereby approved.

Section 2. This ordinance shall be in full force and effect from and after its passage and approval according to law.

Passed by the City Cou	ncil of the United City of York	cville, Kendall County, Illinois this
day of	, A.D. 2025.	
	_	
	C	CITY CLERK
KEN KOCH	DAN TR	RANSIER
ARDEN JOE PLOCHER	CRAIG S	SOLING
CHRIS FUNKHOUSER	MATT N	MAREK
SEAVER TARULIS	RUSTY	CORNEILS
APPROVED by me a	s Mayor of the United City of Y	Yorkville, Kendall County, Illinois
this day of		Torkvine, Rendan County, Inmois
	N	MAYOR
Attest:		
CITY CLERK		

PARKS & RECREATION FUND (79)

		FY 2022 Actual		FY 2023 Actual	FY 2024 Actual		FY 2025 Adopted Budget		FY 2025 Amended Budget
Revenue									
Charges for Service	\$	549,231	\$	695,128	\$ 781,652	\$	740,825	\$	740,825
Investment Earnings	•	91	•	2,311	11,508	•	1,250	, i	1,250
Reimbursements		3,991		21,125	6,451		-,		-,
Miscellaneous		239,222		270,844	304,076		265,844		265,844
Other Financing Sources		1,515,511		2,232,541	2,440,844		2,357,728		2,357,728
Total Revenue	\$	2,308,046	\$	3,221,949	\$ 3,544,531	\$	3,365,647	\$	3,365,647
Expenditures									
Salaries	\$	1,122,835	\$	1,335,391	\$ 1,507,914	\$	1,764,244	\$	1,764,244
Benefits		421,101		446,283	465,646		637,618		637,618
Contractual Services		284,725		517,297	600,405		721,051		721,051
Supplies		552,385		679,172	717,839		731,490		784,490
Total Expenditures	\$	2,381,046	\$	2,978,143	\$ 3,291,804	\$	3,854,403	\$	3,907,403
Surplus (Deficit)	\$	(73,000)	\$	243,806	\$ 252,727	\$	(488,756)	\$	(541,756)
Ending Fund Balance	\$	-	\$	243,804	\$ 496,532	\$	-	\$	(45,224)
	·	0.0%		8.2%	15.1%		0.0%		-1.2%



United City of Yorkville Parks and Recreation Fund

79

PARKS AND REC	REATION	FUND REVENUE								FY 2025		FY 2025
Account	Descri	ntion		FY 2022		FY 2023		FY 2024		Adopted		Amended Budget
Account Charges for Services	Descri	puon		Actual		Actual		Actual		Budget		Duugei
79-000-44-00-4402	SPECI	AL EVENTS	\$	73,124	\$	76,493	\$	75,873	\$	85,000	s	85,000
79-000-44-00-4403		D DEVELOPMENT	Ψ	126,268	Ψ	137,156	Ψ	146,193	Ψ.	145,000		145,000
79-000-44-00-4404		ETICS AND FITNESS		323,635		427,043		484,320		445,000		445,000
79-000-44-00-4441		ESSION REVENUE		26,204		39,436		60,266		50,000		50,000
79-000-44-00-4482		ARY CHARGEBACK		20,201		15,000		15,000		15,825		15,825
79-000-44-00-4482	Total:	Charges for Services	\$	549,231	\$	695,128	\$	781,652	\$,	\$	740,825
		g	*	,	-	0, 0, 0	-		-	,	•	,
Investment Earnings 79-000-45-00-4500	INIVES	STMENT EARNINGS	\$	91	¢	2,311	•	11,508	\$	1,250	 \$	1,250
/9-000-43-00-4300						ŕ		,			, ·	Ź
	Total:	Investment Earnings	\$	91	\$	2,311	\$	11,508	\$	1,250	\$	1,250
Reimbursements												
79-000-46-00-4690	REIMI	B - MISCELLANEOUS	\$	3,991	\$	21,125	\$	6,451	\$	-	\$	-
	Total:	Reimbursements	\$	3,991	\$	21,125	\$	6,451	\$	-	\$	-
Miscellaneous												
79-000-48-00-4820	RENT.	AL INCOME	\$	64,149	\$	73,650	\$	70,128	\$	73,844	\$	73,844
79-000-48-00-4825	PARK	RENTALS		9,968		10,909		19,258		15,000		15,000
79-000-48-00-4843	HOME	ETOWN DAYS		145,676		165,729		167,648		150,000		150,000
79-000-48-00-4846	SPON	SORSHIPS & DONATIONS		7,800		6,800		18,877		15,000		15,000
79-000-48-00-4850	MISCI	ELLANEOUS INCOME		11,629		13,756		28,165		12,000		12,000
	Total:	Miscellaneous	\$	239,222	\$	270,844	\$	304,076	\$	265,844	\$	265,844
Other Financing Sou	rces											
79-000-49-00-4901	TRAN	SFER FROM GENERAL	\$	1,515,511	\$	2,232,541	\$	2,440,844	\$	2,357,728	\$	2,357,728
	Total:	Other Financing Sources	\$	1,515,511	\$	2,232,541	\$	2,440,844	\$	2,357,728	\$	2,357,728
	Total:	PARKS & REC REVENUE	<u>\$</u>	2,308,046	\$	3,221,949	\$	3,544,531	\$	3,365,647	<u>\$</u>	3,365,647

United City of Yorkville Parks and Recreation Fund

795

RECREATION DE	PARTMENT EXPENDITURES					FY 2025		FY 2025
			FY 2022	FY 2023	FY 2024	Adopted	1	Amended
Account	Description		Actual	Actual	Actual	Budget		Budget
Salaries								
79-795-50-00-5010	SALARIES & WAGES	\$	369,077	\$ 464,286	\$ 503,726	\$ 597,912	\$	597,912
79-795-50-00-5015	PART-TIME SALARIES		4,078	16,584	18,769	25,000		25,000
79-795-50-00-5045	CONCESSION WAGES		8,820	12,701	15,822	17,000		17,000
79-795-50-00-5046	PRE-SCHOOL WAGES		42,373	51,931	86,890	53,000		53,000
79-795-50-00-5052	INSTRUCTORS WAGES		12,468	28,880	46,281	50,000		50,000
	Total: Salaries	\$	436,816	\$ 574,382	\$ 671,488	\$ 742,912	\$	742,912
Benefits								
79-795-52-00-5212	RETIREMENT PLAN CONTRIBUTION	\$	39,317	\$ 39,905	\$ 34,492	\$ 39,014	\$	39,014
79-795-52-00-5214	FICA CONTRIBUTION		32,801	42,846	50,859	55,165		55,165
79-795-52-00-5216	GROUP HEALTH INSURANCE		69,510	82,352	86,444	143,278		143,278
79-795-52-00-5222	GROUP LIFE INSURANCE		607	862	862	1,039		1,039
79-795-52-00-5223	DENTAL INSURANCE		5,084	6,666	7,406	10,290		10,290
79-795-52-00-5224	VISION INSURANCE		797	1,006	1,061	1,338		1,338
	Total: Benefits	\$	148,116	\$ 173,637	\$ 181,124	\$ 250,124	\$	250,124
Contractual Services								
79-795-54-00-5412	TRAINING & CONFERENCES	\$	1,952	\$ 2,969	\$ 3,028	\$ 6,000	\$	6,000
79-795-54-00-5415	TRAVEL & LODGING		4	1,813	1,922	3,000		3,000
79-795-54-00-5424	COMPUTER REPLACEMENT CHARGEBAC	K	2,473	7,474	6,289	1,862		1,862
79-795-54-00-5426	PUBLISHING & ADVERTISING		11,356	12,621	8,270	55,000		55,000
79-795-54-00-5440	TELECOMMUNICATIONS		14,482	15,203	17,327	16,000		16,000
79-795-54-00-5447	SCHOLARSHIPS		-	-	-	2,000		2,000
79-795-54-00-5452	POSTAGE & SHIPPING		1,114	2,406	1,738	3,000		3,000
79-795-54-00-5460	DUES & SUBSCRIPTIONS		2,247	3,169	4,236	4,000		4,000
79-795-54-00-5462	PROFESSIONAL SERVICES		87,708	122,304	151,565	150,000		150,000
79-795-54-00-5480	UTILITIES		7,333	8,420	14,896	10,070		10,070
79-795-54-00-5485	RENTAL & LEASE PURCHASE		1,339	1,412	4,329	6,000		6,000
79-795-54-00-5488	OFFICE CLEANING		7,419	16,548	22,291	19,515		19,515
79-795-54-00-5495	OUTSIDE REPAIR & MAINTENANCE		976	43,292	988	10,000		10,000
	Total: Contractual Services	\$	138,403	\$ 237,631	\$ 236,879	\$ 286,447	\$	286,447

United City of Yorkville Parks and Recreation Fund

795

RECREATION DE	PARTMENT EXPENDITURES							FY 2025		FY 2025
Account	Description		FY 2022 Actual		FY 2023 Actual	FY 2024 Actual		Adopted Budget		Amended Budget
Supplies										
79-795-56-00-5600	WEARING APPAREL	\$	-	\$	-	\$ 3,750	\$	4,000	\$	4,000
79-795-56-00-5602	HOMETOWN DAYS SUPPLIES		127,875		156,063	151,535		150,000		150,000
79-795-56-00-5606	PROGRAM SUPPLIES		189,296		249,385	293,646		280,000		333,000
79-795-56-00-5607	CONCESSION SUPPLIES		13,014		20,133	26,451		23,000		23,000
79-795-56-00-5610	OFFICE SUPPLIES		2,395		3,229	2,649		3,000		3,000
79-795-56-00-5620	OPERATING SUPPLIES		23,430		30,604	28,244		35,000		35,000
79-795-56-00-5640	REPAIR & MAINTENANCE		1,363		1,699	496		2,000		2,000
	Total: Supplies	\$	357,373	\$	461,113	\$ 506,771	\$	497,000	\$	550,000
	Total: RECREATION EXPENDITURES	<u>\$</u>	1,080,708	<u>\$</u>	1,446,763	\$ 1,596,262	<u>\$</u>	1,776,483	<u>\$</u>	1,829,483



Reviewed By:	

Legal	
Finance	
Engineer	
City Administrator	Ш
Community Development	
Purchasing	
Police	
Public Works	
Parks and Recreation	

Agenda	Item	Number
Agenua	ItCIII	Nullioci

Mayor's Report #2

Tracking Number

CC 2025-06

Agenda Item Summary Memo

Title: Planning and Zo	oning Commission Appointmen	nt – Chad Green
Meeting and Date:	City Council – January 28, 202	5
Synopsis:		
Council Action Previo	ously Taken:	
Date of Action:	Action Taken:	
Item Number:		
Type of Vote Require	d: Majority	
Council Action Reque	ested: Approval	
Submitted by:	Mayor John Purcell	
	Name	Department
	Agenda Item N	lotes:



United City of Yorkville

800 Game Farm Road Yorkville, Illinois 60560 Telephone: 630-553-4350 www.yorkville.il.us

United City of Yorkville Board & Commission Application

To be considered for a board or commission, please complete this application and return to the attention of Jori Behland, City Clerk at the address listed above or by email to jbehland@yorkville.il.us.

Name	e_ CHAD 1	TREEN	ngalan kadan kadan ka	
Addr	ess_			
Phon	e: Home		Work	Cell
Emai	1			Subdivision Kylnar Ribbe
Pleas	e indicate the	Board/Commission(s	s) that you woul	d like to participate on:
	Fire and Library F Park Boa			Planning and Zoning Commission Police Pension Fund Board
The f	ollowing ques	tions help in selectio	n of board/com	mission members.
1.	residents of • I've Row • Former D • T Commen	the United City of Y OUR FAMILY BUSING IRECTURE OF THE YORK THY SIT ON B.TH	orkville. ESS 12 Yearous ONLE ALLER CHIM CHILED TO CHAE	BOTHED & THE BUTED FOR SELAH HOME UN BACKERE DEGREES FROM VIL - MANAGEMEN
2.				ion for the United City of Yorkville?
	-			MILY HAS RUN BUSINESSES IN YURKUILLE
				A PART OF GORDELET GROOTS.
Than	k you for you	r interest in being a	part of the deve	lopment of the United City of Yorkville!
undert	akings. It is the		form with all aspec	minatory practices in its hiring, and its contractual tts of Federal Civil Rights legislation including the ation.
****	******	*******	******	**********
				the City's policy to perform a cursory background fthe boards or commissions.
	Clu	the state of the s		1-8-25
Signa	ture of Applicar	t		Date
For offi	ce use only: Date	Received	Initials	



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police	

Agenda Item Number
Mayor's Report #3
Tracking Number
CC 2025-07

Agenda Item Summary Memo

Public Works Parks and Recreation

Title: Costco Whole	esale Corporation – Sales Tax	x Revenue Sharing Agreement
Meeting and Date:	City Council – January 28,	2025
Synopsis:		
Council Action Prev	viously Taken:	
Date of Action:	Action Take	en:
Item Number:		
Type of Vote Requi	red: Majority	
Council Action Req	uested: Approval	
Submitted by:	Bart Olson Name	Administration Department
	Agenda Ita	•
The packet material v	was not compete at the time	of packet creation. It will be distributed via a
supplemental packet	prior to or at the City Counc	il meeting.

Resolution No. 2025-

A RESOLUTION OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS APPROVING A SALES TAX REVENUE SHARING AGREEMENT

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a duly organized and validly existing non-home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, Costco Wholesale Corporation, a Washington corporation ("Costco") is purchasing approximately thirty-four (34) acres for a proposed development of a members-only retail store and gasoline service station (the "Project") at the southeast corner of East Countryside Parkway and McHugh Road (the "Subject Property"), and has submitted, for approval, a Final Plat of Subdivision and a special use permit pursuant to the Yorkville Unified Development Ordinance (the "UDO") in order to proceed to construct the Project, and

WHEREAS, the City seeks to encourage the development of the Subject Property and the construction and operation of the Project and, in order to make the Project economically feasible, the City is prepared to rebate to Costco a portion of the sales tax revenue to be generated by the Project and received by the City as authorized by the Illinois Municipal Code Sections 8-11-20 (65 ILCS 5/8-11-20) and 8-1-2.5 (65 ILCS 5/8-1-2.5); and

WHEREAS, as required by Section 8-11-20, the City has made certain findings with regard to the Subject Property, the Project and Costco (collectively, the "Findings"), all as hereinafter set forth; and

WHEREAS, in light of the Findings by the City and reviewing the benefits the Project shall bring to the City and all of the affected taxing districts with an increase of the tax base, creation of new job opportunities and improvement to the welfare of the residents of the community, the City is prepared to affirm its Findings and approve the Sales Tax Revenue Sharing Agreement, a copy of which is attached hereto, all as hereinafter set forth.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. The above recitals are incorporated herein and made a part of this Ordinance.

Section 2. The Mayor and City Council hereby make the following Findings:

- (a) that the Subject Property is vacant and has remained vacant for many years prior to the date hereof;
- (b) that the Project shall create job opportunities within the City;
- (c) that the Project will serve to further development of adjacent areas;
- (d) that without the Sales Tax Revenue Sharing Agreement, the Project would not be possible;
- (e) that Costco meets high standards of creditworthiness and financial strength as demonstrated by an "A" rating of its corporate debentures;
- (f) that the Project will strengthen the City's commercial sector;
- (g) that the Project will enhance the City's tax base; and
- (h) that the Sales Tax Sharing Agreement is in the best interest of the City.
- **Section 3.** The Sales Tax Revenue Sharing Agreement by and between the United City of Yorkville, Kendall County, Illinois and Costco Wholesale Corporation in the form attached hereto and made a part hereof, is hereby approved and the Mayor and City Clerk are hereby authorized to execute.
- **Section 4.** The Mayor, City Administrator and the Finance Director are hereby authorized to implement the terms of the Sales Tax Sharing Agreement as may be required.
- **Section 5.** That this Resolution shall be in full force and effect from and after its passage and approval as provided by law.

Passed by the City Cou	ncil of the United Cit	y of Yorkville, Kendall Co	unty, Illinois this
day of	, A.D. 2025.		
		CITY CLERK	
KEN KOCH		DAN TRANSIER	
ARDEN JOE PLOCHER _		CRAIG SOLING	
CHRIS FUNKHOUSER _		MATT MAREK	
SEAVER TARULIS		RUSTY CORNEILS	

	APPROVED by	me, as Mayor of the U	Jnited City of Yorkville, Kendal	l County, Illinois
this	day of	, A.D. 2	2025.	
			MAYOR	
Attest:				

CITY CLERK



	_
Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works	

Agenda Item Number

Public Works Committee #1

Tracking Number

PW 2025-07

Agenda Item Summary Memo

Parks and Recreation

Title: Water Meter	Purchase	
Meeting and Date:	City Council – January 28, 202	5
Synopsis: Public W	ork is proposing to purchase and	install 500 additional water meters and
readers to	assist in offsetting future costs.	
Council Action Pre	viously Taken:	
Date of Action: PW		Moved forward to City Council agenda.
Item Number: PW	2025-07	
Type of Vote Requi	red: Supermajority (6 out of 9)	
Council Action Req	uested: Approval	
Submitted by:	Eric Dhuse	Public Works
	Name	Department
	Agenda Item N	otes:



Memorandum

To: Public Works Committee

From: Eric Dhuse, Director of Public Works

CC: Bart Olson, City Administrator

Date: January 15, 2025

Subject: Bulk Water Meter Purchase

Summary

PW is proposing to purchase 500 additional water meters to install throughout the year to assist in lowering the cost of future meter replacement programs.

Background

The City Council approved the purchase of 1243 replacement water meters and readers on 11/26/24. Because of the high number of meters and readers, we purchased at once, the vendor was able to give us a better price than normal. To save money where we can, I asked them if they would be willing to sell us 500 meters at the same price, to which they said yes, if we purchase them within a very short time frame because prices go up at the first of the year. The savings on 500 meters and readers is \$30,000 compared to what we normally pay if we buy them in lesser amounts.

Our thought is to use the proposed 500 meters to replace older meters in town to reduce the total number of meters that still need to be replaced in the next phases of the meter replacement program. In addition to the \$30,000 in savings, we would save the future cost of labor to install them if they were part of the next phase of the meter change out program. The labor savings would be approximately \$86,500 on 500 meters. We did not have an opportunity to plan for this or put this in as a budget request, this is an idea that we had after we saw the prices for the meters and readers as they were quoted in the meter replacement program in November of 2024. This also will not wait until next fiscal year, they are holding the price for a month for us, after that the prices will go up.

The cost of the meters and readers is \$130,000. While this expense would exceed the budget allocated for the Meters & Parts line item, Finance Director Fredrickson is confident that the additional cost can be absorbed within the overall Water Fund Expense Budget, eliminating the need for a budget amendment.

Recommendation

I recommend that we purchase the meters and readers as proposed from Core and Main at a price not to exceed \$130,000. These meters need to be replaced and will be replaced within the meter replacement program at a higher cost. If we can find a way to replace them in this coming year, we will save money and have an additional 500 meters reading more accurately to capture all the water revenue accurately and precisely.

Resolution No. 2025-____

A RESOLUTION OF THE UNITED CITY OF YORKVILLE, ILLINOIS, AUTHORIZING THE PURCHASE OF 500 REPLACEMENT WATER METERS IN AN AMOUNT NOT TO EXCEED \$130,000

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, the City's Municipal Code provides that the City may approve contracts for supplies and equipment that have not been competitively bid by a two-thirds affirmative vote of the City Council; and

WHEREAS, the City is currently working toward sourcing water from Lake Michigan instead of local aquifers and a requirement for gaining access to Lake Michigan water is reducing the City's non-revenue water loss to less than 10%; and

WHEREAS, replacing old water meters with newer, more sensitive water meters will contribute to reducing the City's non-revenue water loss, and the City therefore desires to replace approximately 500 old meters; and

WHEREAS, the City's meter supplier, Core and Main, has provided a quote to supply and install new Sensus meter systems for 500 meters that need to be replaced, for a total price of \$130,000.00, said Quote attached hereto as "Exhibit A"; and

WHEREAS, Core and Main is the only Sensus meter supplier in the area, the City has had a positive experience with Sensus meters, almost all the meters currently in the City's system are Sensus meters and dozens of comparable municipalities in the Chicago suburbs and throughout the Fox Valley area use this Sensus meter system; and

WHEREAS, along with reducing the City's non-revenue water loss, the new meters would increase the efficiency of the Public Works department as the new meters are faster and easier to read than the City's existing meters; and

WHEREAS, the Mayor and City Council have determined that it is in the best interests of the health and safety of the City and its residents to waive the competitive bidding requirement and to authorize and approve the purchase of the new meters from Core and Main in accordance with the provisions of the Quote.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois:

Section 1. The foregoing recitals are hereby incorporated in this Resolution as the findings of the Corporate Authorities.

Section 2. The Corporate Authorities hereby waive the competitive bidding requirements of the City's Municipal Code pursuant to the foregoing recitals, and the City Administrator is authorized and directed to proceed with the purchase of 500 replacement water meters, as described in the Quote, from Core and Main of Belvidere, Illinois.

Section 3. This Resolution shall be in full force and effect upon its passage and approval as provided by law.

		y of Yorkville, Kendall C	ounty, Illinois this
day of	, A.D. 2025.		
		CITY CLERK	
KEN KOCH		DAN TRANSIER	
ARDEN JOE PLOCHER		CRAIG SOLING	
CHRIS FUNKHOUSER		MATT MAREK	
SEAVER TARULIS		RUSTY CORNEILS	
APPROVED by me, a this day of	-	City of Yorkville, Kenda	all County, Illinois
		MAYOR	
Attest:			
CITY CLERK			



Bid Proposal for Yorkville-Eric-Meters

CITY OF YORKVILLE

Job Location: Yorkville, IL Bid Date: 12/20/2024

Core & Main Bid #: 3927284

12/20/2024 - 2:23 PM

Core & Main

6829 Irene Rd

Belvidere, IL 61008

Phone: 8155443458

Fax: 8155443474

Seq#	Qty	Description	Units	Price	Ext Price
10	500	3/4S IPERL .1CF 3-TERM SCREW 7.5"LL 7WHL I2X3FBXX	EA	130.00	65,000.00
20	500	510M S/POINT M2 WIRED SP HR & LD 5396353751202MI	EA	130.00	65,000.00
				Sub Total	130,000.00
				Tax	0.00
				Total	130,000.00

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS ARE RELEASED BY CUSTOMER FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP RESERVES THE RIGHT TO INCREASE PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS, TARIFFS, TRANSPORTATION, FUEL AND RAW MATERIAL COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD TIMES. ANY MATERIAL DELIVERIES DELAYED BEYOND MANUFACTURER LEAD TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONTINGENT UPON BUYER'S ACCEPTANCE OF SELLER'S TERMS AND CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME, WHICH CAN BE FOUND AT: https://coreandmain.com/TandC/



Reviewed By:	 Agenda Item Number
Legal Finance	Public Works Committee #2
Engineer City Administrator Community Development	Tracking Number
Purchasing Police	PW 2024-98
Public Works Parks and Recreation	

	Agenda Item Su	mmary Memo
Title: Meter Cha	nge Out Proposal	_
Meeting and Dat	e: City Council – November 2	6, 2024
Synopsis: Propos	sed change out of certain meters	to assist us in getting under 10%
Non-1	revenue water loss.	
Council Action P	reviously Taken:	
Date of Action: P	W - 11/19/24 Action Take	n: Moved forward to City Council agenda.
Item Number: P	W 2024-98	
Type of Vote Rec	quired: Supermajority (6 out of	9)
Council Action R	Requested: Approval	
Submitted by:	Eric Dhuse	Public Works
_	Name	Department
	Agenda Ite	m Notes:



Memorandum

To: Public Works Committee

From: Eric Dhuse, Director of Public Works

CC: Bart Olson, City Administrator

Date: November 4, 2024

Subject: Water Meter Changeout Proposal

Summary

A proposal from our current water meter supplier to replace 1243 water meters with new meters and meter reading units that would allow us to use a fixed based meter reading system. The proposed cost for this service is \$735,092.25. We currently have \$800,000 budgeted for this project in the approved FY25 budget.

Background

Reducing our non-revenue water loss to less than 10% is a requirement of our Lake Michigan allocation and is a high priority for the City to come into compliance before we switch to lake water. Besides being a requirement, getting into compliance a year before we start to get water from Lake Michigan will potentially save us millions in the future. If we are under the 10% non-revenue water loss, we will not have to annually submit and implement a non-revenue water loss remediation plan. The plan would have to include upgrades to our system to bring us into compliance. As we know, replacing infrastructure is very expensive and any money we can save will help keep water rates as low as possible. At this time, we are replacing all water main that is not ductile iron, performing leak detection on our entire system each year, and replacing certain water meters that may no longer be accurate in an effort to come into compliance by October 2026.

The attached proposal is from Core and Main, our areas Sensus meter distributor, that breaks down the size and number of meters we are looking to replace along with the cost of the smart points, accessories, base station, analytics, integration, and hosting, along with labor. We have used Sensus meters longer than I have been with the city. When I started in 1995, we were updating meters that had been in use since the 60's and 70's and replacing them with Sensus meters. At that time, we had many different meters in place and read them all manually. Our next upgrade was installing touch pads on new and replacement meters which allowed us to walk up to the touch pad with a handheld unit and touch the pad to store a read. After that, we started installing MXU boxes along with our current iperl meter which allowed us to implement a drive by reading system on new installs and any replacement meters. Finally, we have started installing the latest meter readers which are called flexnets. All current meters with flexnet readers will be able to communicate with the new base station. Currently, we have 3614 flexnet meters in the system. With the upgrade, we will have roughly 54% of our meters on the radio read system with approximately 4000 left on the drive by system. The drive by meters and readers will be our next replacement group which can be broken down into several years if necessary to fit within our budget.

Changing out these certain water meters will not only improve our accuracy to assist in getting us under our 10% threshold, but it will also greatly improve our efficiency and allow us to serve the residents better by giving them almost real time usage reports, history of usage and being able to alert them if there is unusually high usage. Our efficiency will be improved in many ways. Below is a list of 3 items I believe will greatly improve our efficiency.

- 1. Eliminating our walking route. This route has manual meters that take an employee a week to complete. While that may not sound like much, that adds up to 6 weeks per year if everything goes smooth. 6 weeks is about 11.5% of an employee's work year. Removing that much time will improve the efficiency of the department.
- 2. We will be able to get final reads immediately instead of sending someone to the site to get a reading. At this time, we must send someone to get a reading for every new home and every existing home that is bought/sold. Year to date, we have had 672 final reads for new construction and move in/out. If we figure 30 minutes per read from the time the call comes in at city hall to the time we return the read to city hall we will save 336 hours of time by having the reads be instant. That is 16% of an employee's work year.
- 3. We will be getting rid of a hodge-podge system of reads and narrowing it down to the flexnet radio reads and the drive by radio reads. Currently, we have 151 touch pads and 573 manual meters that make up our walking route. In addition, we have 389 ITRON reads which were a trial meter that we used in Autumn Creek/Prairie Meadows/Grande Reserve areas that were supposed to be the "next great advance in meter technology". Those readers are now obsolete and no longer technically supported. We are currently using a program on our radio read computer to read each ITRON endpoint and manually add each read to a spreadsheet. You can imagine the time we will save if we can change these out for fixed base radio reads that are instant. Making sure every meter is loaded into the proper place, getting the reads, and downloading the reads all take time.

All these efficiency improvements are on the conservative side. I counted on everything going smoothly every time we use it. As we know, with old technology, that is not the case. I did not count for any delays or glitches in our system, nor did I count the re-reads that we have to do each time we read the whole town. There will always be meters that don't read, have an error, or have a very odd read that doesn't make sense. We then must go out and get the reads again either with the radio read system, or manually.

This program is basically a turnkey operation for the City. Our involvement would be limited to the initial announcement to let everyone that is in the program know that there will be a meter change out and that Core and Main have been hired to complete the work. From There, Core and Main will contact the residents, set up appointment, swap out the meter, program the meter, and enter it in the database. The support team would then assist in integrating the new meters into our system for billing. This may take some support from MSI as well, but Sensus has worked with us and many other municipalities, I am confident this will be a smooth process. During this process, our responsibilities will be to answer any questions that resident's may have regarding the program, assisting in integrating the new meters into our billing system, and assisting with with residents that do not want to make appointments with the contractor. In these cases, we may have to accompany the contractor, or in extreme cases, we may have to cut off water service

until such time as we can get in to change the meter. I say extreme, but it is so incredibly rare that I can only think on one time this has happened in my tenure with the City. We realize that this is a last resort, and we do everything possible not to use this tool. We expect this entire process to take 3-5 months. Core and Main is confident that 3 months will be adequate, but they build in extra time just in case.

I have attached a reference list of other local municipalities that have the Sensus FlexNet AMI (Advanced Metering Infrastructure) system that are in use. We are also happy with the Sensus meters, the support we get from them, and staying with Sensus meters will be the most cost-effective solution to upgrading our system to a full AMI system since almost all meters that are currently in our system are Sensus meters.

Once the initial change out is completed, staff will work on putting together a comprehensive plan to switch the rest of our meters over to the new fixed base system. With the remaining meter count being over 4,000 we have not yet determined if a multi-year program would be better than doing it all at once. We will have to look at all aspects before bringing anything forward for consideration.

Recommendation

Staff recommends approving the proposal from Core and Main of Belvidere, IL in the amount of \$735,092.25. This will need to be a super majority approval since this is a sole source bid.

Resolution No. 2024-

A RESOLUTION OF THE UNITED CITY OF YORKVILLE, ILLINOIS, AUTHORIZING THE PURCHASE OF 1243 REPLACEMENT WATER METERS IN AN AMOUNT NOT TO EXCEED \$735,093

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, the City's Municipal Code provides that the City may approve contracts for supplies and equipment that have not been competitively bid by a two-thirds affirmative vote of the City Council; and

WHEREAS, the City is currently working toward sourcing water from Lake Michigan instead of local aquifers and a requirement for gaining access to Lake Michigan water is reducing the City's non-revenue water loss to less than 10%; and

WHEREAS, replacing old water meters with newer, more sensitive water meters will contribute to reducing the City's non-revenue water loss, and the City therefore desires to replace approximately 1243 old meters; and

WHEREAS, the City's meter supplier, Core and Main, has provided a quote to supply and install new Sensus meter systems for 1243 meters that need to be replaced, for a total price of \$735,092.25, said Quote attached hereto as "Exhibit A"; and

WHEREAS, Core and Main is the only Sensus meter supplier in the area, the City has had a positive experience with Sensus meters, almost all the meters currently in the City's system are Sensus meters and dozens of comparable municipalities in the Chicago suburbs and throughout the Fox Valley area use this Sensus meter system; and

WHEREAS, along with reducing the City's non-revenue water loss, the new meters would increase the efficiency of the Public Works department as the new meters are faster and easier to read than the City's existing meters; and

WHEREAS, the City has allocated \$800,000 in the Fiscal Year End 2025 budget for this project; and

WHEREAS, the Mayor and City Council have determined that it is in the best interests of the health and safety of the City and its residents to waive the competitive bidding requirement and to authorize and approve the purchase of the new meters from Core and Main in accordance with the provisions of the Quote.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois:

Section 1. The foregoing recitals are hereby incorporated in this Resolution as the findings of the Corporate Authorities.

Section 2. The Corporate Authorities hereby waive the competitive bidding requirements of the City's Municipal Code pursuant to the foregoing recitals, and the City Administrator is authorized and directed to proceed with the purchase of 1243 replacement water meters, as described in the Quote, from Core and Main of Belvidere, Illinois.

Section 3. This Resolution shall be in full force and effect upon its passage and approval as provided by law.

Passed by the City Coun	cil of the United City of York	kville, Kendall County, Illinois this
day of	, A.D. 2024.	
	-	CITY CLERK
KEN KOCH _	DAN TR	RANSIER
ARDEN JOE PLOCHER _	CRAIG	SOLING
CHRIS FUNKHOUSER _	MATT N	MAREK
SEAVER TARULIS	RUSTY	CORNEILS
APPROVED by me, as	Mayor of the United City of	Yorkville, Kendall County, Illinois
this day of		,
	N	MAYOR
Attest:		
CITY CLERK		



6829 Irene Road, Belvidere IL., 61008

Date: October 31, 2024 Village:

Yorkville Jon Bauer Attn:

Subject: Yorkville 2025 Phase 1 Quotation for Sensus Meters/FlexNet System

Product	<u>Quantity</u>	<u>Unit Price</u>		Extension
New Water Meters				
5/8" Sensus iPERL Water Meter 3/4"S Sensus iPERL Water Meter	0 1061	\$130.00 ea \$130.00 ea		\$0.00 \$137,930.00
3/4" Sensus iPERL Water Meter (9"LL)	0	\$152.00 ea		\$0.00
1" Sensus iPERL Water Meter	182	\$205.00 ea		\$37,310.00
3/4"S Sensus Ally Water Meter (7 1/2"LL)	0	\$425.00 ea		\$0.00
1" Sensus Ally Water Meter (7 1/2"LL)	0	\$505.00 ea		\$0.00
Section Total:	1243			\$175,240.00
New 1 1/2" - 3" OMNI C2 Water Meters				
1 1/2" Sensus OMNI C2 Water Meter with Integral Strainer, AMR Output Pulse Output and Test Outlet	6	\$1,250.00	ea	\$7,500.00
2" Sensus OMNI C2 Water Meter with Integral Strainer, AMR Output	4	\$1,440.00		¢4 440 00
Pulse Output and Test Outlet 3" Sensus OMNI C2 Water Meter with Integral Strainer, AMR Output	1	\$1,440.00	ea	\$1,440.00
Pulse Output and Test Outlet	1	\$1,825.00	ea	\$1,825.00
Section Total:	8			\$10,765.00
Labor				
Installation of 5/8" Meter	0 1061	\$170.00 ea		\$0.00
Installation of 3/4" Meter Installation of 1" Meter	182	\$170.00 ea \$170.00 ea		\$180,370.00 \$30,940.00
Installation of 1-1/2" Meter	6	\$395.00 ea		\$2,370.00
Installation of 2" Meter	1	\$405.00 ea		\$405.00
Installation of 3" Meter Installation of New Wire	1 0	\$900.00 ea \$90.00 ea		\$900.00 \$0.00
Installation of Ground Strap 5/8"-1"	0	\$55.00 ea		\$0.00
Correct Hard Plumbing	0	\$265.00 ea		\$0.00
Smartpoint only (outside sets)	0	\$125.00 ea		\$0.00
Installation of 3/4" Ball Valve (includes valve) Installation of 1" Ball valve (includes valve)	0 0	\$250.00 ea \$285.00 ea		\$0.00 \$0.00
,	Ü	ф203.00 ea		·
Section Total:				\$214,985.00
Smartpoints 510M Single Port Touchcoupled Smartpoints	1251	\$130.00 ea		\$162,630.00
		ψ.00.00 00		
Section Total:	1251			\$162,630.00
Meter Accessories 22 Guage 3-Conductor Meter Wire (500' Spool)	3	\$60.00 ea		\$180.00
5/8"-1" Ground Clamps	2486	\$4.25 ea		\$10,565.50
Seal Wire (1000' Spool)	2	\$110.00 ea		\$220.00
#4 Solid Copper Ground Wire (200' Spool)	5	\$325.00 ea		\$1,625.00
TouchPad 3/4" Meter Gaskets	0 2122	\$8.00 ea		\$0.00
Plastic Meter Seal	1243	\$0.00 ea \$0.25 ea		\$0.00 \$310.75
A23-NL 5/8"X3/4" to 3/4" Adaptor	0	\$20.00 ea		\$0.00
Section Total:				\$12,901.25
Infrastructure				
M420B2 Tower Gateway Basestation includes installation.	2	\$55,000.00 ea		\$110,000.00
Section Total:				\$110,000.00

Sensus Analytics SaaS Integration and Hosting Fees			
Sensus Analytics SA/RNI Set up Fee	1	\$12,975.00 one time	\$12,975.00
Sensus Analytics Billing Integration Fee	1	\$8,095.00 one time	\$8,095.00
Annual Sensus Analytics SA/RNI Hosting Fee 5K Services Year '25	1	\$22,216.00 annual	\$22,216.00
Annual Sensus Analytics SA/RNI Hosting Fee 6.5K Services Year '26	0	\$26,645.00 annual	\$0.00
Annual Sensus Analytics SA/RNI Hosting Fee 9K Services Year '27	0	\$32,595.00 annual	\$0.00
Annual Sensus Analytics SA/RNI Hosting Fee 9K Services Year '28	0	\$33,573.00 annual	\$0.00
Annual Sensus Analytics SA/RNI Hosting Fee 9K Services Year '29	0	\$34,580.00 annual	\$0.00
Section Total:			\$43,286.00
Section Total: Extended Warranties, Training, Management Fee			\$43,286.00
	1	\$3,700.00 annual	\$43,286.00 \$3,700.00
Extended Warranties, Training, Management Fee	1 0	\$3,700.00 annual \$2,200.00 annual	· ,
Extended Warranties, Training, Management Fee Annual Walk by/Drive by Support	1 0 1	, , , , , , , , , , , , , , , , , , , ,	\$3,700.00

\$735,092.25 Subtotal:

\$16.050.00

Section Total:

- NOTE:

 * Propagation study determined (2) Basestation required inside smartpoint installation.

 * Basestation Pricing Includes installation and startup.

 * Basestation Pricing subject to change pending job site survey.

 * Pricing and installation does not include communication link between Basestation to (RNI).

 * Utility responsible to provide electric at Basestation.

 * Pricing does not include software interface to billing system.

 * Final project pricing shall be determined by actual meter quantities supplied and installed.

- * Final project pricing shall be determined by actual meter quantities supplied and installed.
 * Final Pricing subject to volatile market conditions.

- * Pricing does not include Payment/Performance Bond.
 * Installation pricing are for 'Labor Only" to replace meter with same lay length meter.
 * Additional plumbing/pit set pricing determined case by case basis.
- * Labor assumes no responsibility on ground wire sizing

Prices are good until May 1, 2025. Delivery can be made from stock to within twelve (12) weeks from receipt of your purchase order. Our terms of payment are net thirty (30) days.

Sincerely,

Steve Cooper

Steve Cooper Territory Manager





LOCAL REFERENCES:

Belvidere, Illinois Brent Anderson (815) 544-6622 (asstpublicwksdir@ci.belvidere.il.us) (4000) Sensus Water Meters with FlexNet AMI Network System Completed – (2011)

Morton Grove, Illinois Marty Durkin (847) 815-1688 (mdurkin@mortongroveil.org) (8000) Sensus water Meters with FlexNet AMI System Completed - 8000 total meters - (2011)

Wheeling, Illinois Jeff Wolfgram (847) 279-6420 (jwolfgram@wheelingil.gov) (8000) Sensus water Meters with FlexNet AMI System Completed - (2013)

Bensenville, Illinois Joe Caracci (630) 350-3431 (jcaracci@bensenville.il.us) (5700) Sensus water Meters with FlexNet AMI System Completed - (2013)

Homewood, Illinois John Schaefer (708) 206-2901 (jschaefer@homesweethomewood.com) (7000) Sensus water Meters with FlexNet AMI System Completed - (2013)

Des Plaines, Illinois Tim Watkins-(847) 391-5468 (twatkins@desplaines.org) (16800) Sensus Water Meters with FlexNet AMI System Completed- (2021)

Orland Park, Illinois Ken Dado-(708) 403-6350 (KDado@orlandpark.org) (24000) Sensus Water Meters with FlexNet AMI System Currently Installing- (2015)

Calumet City, Illinois Gerry Surufka-(708) 417-2233 (gsurufka@calumetcity.org) (10000) Sensus Water Meters with FlexNet AMI System Completed- (2017)





Glenview, Illinois Joe Kenney-(847) 724-1700 (16000) Sensus Water Meters with FlexNet AMI System Completed- (2015)

Palatine, Illinois Matt Barry-(847) 705-5200 (mbarry@palatine.il.us) (19000) Sensus Water Meters with FlexNet AMI System Completed- (2015)

Aurora, Illinois Eric Schoeny-(630) 256-3486(<u>eschoeny@aurora-il.org</u>) (42000) Sensus Water Meters with FlexNet AMI System Completed- (2018)

Tinley Park, Illinois John Urbanski-(708) 444-5500(jurbanski@tinleypark.org) (22000) Sensus Water Meters with FlexNet AMI System Completed- (2018)

Oak Brook, Illinois Tim O'Malley-(847) 827-4490 (tommaley@oak-brook.org) (5400) Sensus Water Meters with FlexNet AMI System Completed- (2019)

Dixon, Illinois Matt Heckman-(815) 288-7474 (matt.heckman@discoverdixon.org) (5400) Sensus Water Meters with FlexNet AMI System Completed- (2018)

Chicago Ridge, Illinois Stan Barwock-(708) 577-8920 (Sbarwock@chicagoridge.org) (2200) Sensus Water Meters with FlexNet AMI System Completed- (2018)

Broadview, Illinois Matt Ames-(708) 681-3602 (mames@broadview-il.org) (3800) Sensus Water Meters with FlexNet AMI System Completed- (2018)





New Lenox, Illinois Mark Brow-(815) 215-4500 (mbrow@newlenox.net) (10000) Sensus Water Meters with FlexNet AMI System Currently Installing- (2018)

Elk Grove Village, Illinois Keith Conley-(847) 734-8049 (kconley@elkgrove.org) (12500) Sensus Water Meters with FlexNet AMI System Completed- (2019)

Lagrange Park, Illinois Rick Radde-(708) 243-9550 (rradde@lagrangepark.org) (4300) Sensus Water Meters with FlexNet AMI System Completed- (2018)

Algonqin, Illinois Jason Schutz-(847) 658-2700 (jasonschutz@algonquin.org) (11000) Sensus Water Meters with FlexNet AMI System Completed- (2020)

Glencoe, Illinois Don Kirk-(847) 461-1154 (dkirk@villageofglencoe.org) (3300) Sensus Water Meters with FlexNet AMI System Completed- (2021)

Naperville, Illinois Darrell Blenniss- (630) 305-5994 (<u>BlennissD@naperville.il.us</u>) (42,500) Sensus Smartpoints with FlexNet AMI System Completed- (2021)

Northfield, Illinois Bill Wipperfurth-(847) 456-2590 (bwipperfurth@northfieldil.org) (3000) Sensus Water Meters with FlexNet AMI System Completed- (2022)

Itasca, Illinois Mike Subers – 630 228-5663 (<u>msubers@itasca.com</u>) (2,700) Sensus Smartpoints with FlexNet AMI System Completed – (2024)





Bloomingdale, Illinois Ken Lindhorn – 630-671-5833 (<u>lindhornk@vil.bloomingdale.il.us</u>) (7000) Sensus Smartpoints with FlexNet AMI System Completed – (2024)

Addison, Illinois Shawn Campbell – 331-254-0427 (<u>scampbell@addison-il.org</u>) (12,000) Sensus Smartpoints with FlexNet AMI System Completed – (2023)

Additional references upon request



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works Parks and Recreation	

Agenda Item Number

Public Works Committee #2

Tracking Number

PW 2025-09

Agenda Item Summary Memo

Title: Route 47	Utility Relocation – Ca	arpenter St. to Waterpark Way
Meeting and Da	ate: City Council – Ja	nuary 28, 2025
Synopsis: Pleas	se see the attached men	10.
Council Action	Previously Taken:	
Date of Action:	PW - 1/21/25 A	ction Taken: Moved forward to City Council agenda.
Item Number:	PW 2025-09	
Type of Vote R	equired: Majority	
Council Action	Requested: Approval	
Submitted by:	Eric Dhuse Name	Public Works Department
		agenda Item Notes:
	A	agenua Item 110tts.



Memorandum

To: Public Works Committee

From: Eric Dhuse, Director of Public Works

CC: Bart Olson, City Administrator

Date: January 15, 2025

Subject: Route 47 Utility Relocation – Carpenter St. to Waterpark Way

Summary

Proposed Engineering agreement from EEI for the design of the Rt. 47 Utility Relocation from Carpenter St. to Waterpark Way.

Background

Staff has been working with IDOT District III for some time on the widening of Rt. 47 from Carpenter St. to Waterpark Way. We are now at the stage where we know what utilities must be moved, and where they need to be moved to. EEI is proposing an engineering agreement for the relocation of approximately 4800 linear feet of water main improvements, 40 linear feet of sanitary force main, and 1725 linear feet of sanitary sewer improvements. Most of this work will be focused from Cannonball Trail to Wrigley Way and near Waterpark Way.

For a fixed fee of \$107,484 EEI is proposing to coordinate, field survey, design, permit, bid, and execute contracts. Any direct expenses will be billed at the actual value and are estimated at \$25,400. At this time, IDOT has not committed in writing to pay for this work, however, they have verbally said they think they will pay for it, but to date we have not received that in writing. However, we do have \$180,000 budgeted in the City Wide Capital section of the approved FY 25 budget to be able to front fund the contract and seek reimbursement from IDOT.

At this time, we do not have a schedule of when any of this work will take place, but we know it will be sooner rather than later and we would like to have the planning and design completed as soon as possible to be able to work with IDOT to ensure there are no conflicts.

Recommendation

Staff recommends the approval of this Professional Service Agreement.

Resolution No. 2025-

RESOLUTION OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS APPROVING AN ENGINEERING AGREEMENT WITH ENGINEERING ENTERPRISES, INC.

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a non-home rule municipality duly organized and validly existing in accordance with the Constitution of the State of Illinois and the laws of this State; and

WHEREAS, the City's Public Works Department plans to conduct certain improvements from Carpenter Street to Waterpark Way, being water main improvements, sanitary force main improvements, and sanitary sewer improvements (the "Project"); and

WHEREAS, completion of the Project will require engineering services conducted by an outside engineering firm; and

WHEREAS, Engineering Enterprises, Inc., of Sugar Grove, Illinois ("EEI"), has prepared an agreement between EEI and the City for engineering services related to the Project (the "Agreement"), said Agreement being attached hereto as *Exhibit A*; and

WHEREAS, EEI has provided engineering services for various projects completed by the City, and the City administration has found that EEI is a qualified and experienced engineering firm; and

WHEREAS, the City administration recommends approval of the Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council (the "Corporate Authorities") of the United City of Yorkville, Kendall County, Illinois, as follows:

- **Section 1.** The foregoing recitals are hereby incorporated in this Resolution as the findings of the Corporate Authorities.
 - **Section 2.** The Mayor and City Clerk are hereby authorized to execute an *Agreement*

attached hereto as Exhibit A	1.		
Section 3. This	Resolution shall be in full fo	orce and effect from and after it	s passage
and approval according to l	aw.		
Passed by the City C	ouncil of the United City of	Yorkville, Kendall County, Illi	nois this
day of	, A.D. 2025.		
		CITY CLERK	
KEN KOCH	DAN	N TRANSIER	
ARDEN JOE PLOCHER	CRA	AIG SOLING	
CHRIS FUNKHOUSER	MA	TT MAREK	
SEAVER TARULIS	RUS	STY CORNEILS	
A PAR CAVER 1		AV. 1 '11 V. 1 11 G	*11'
APPROVED by me this day of	-	y of Yorkville, Kendall County	, Illinois
uns uuy 01			
		MAYOR	
		WATOK	
Attest:			
City Clerk			

for Professional Service - Route 47 Utility Relocation - Carpenter St. to Waterpark Way,

Agreement for Professional Services Route 47 Utility Relocation – Carpenter St. to Waterpark Way

THIS AGREEMENT, by and between the *United City of Yorkville*, hereinafter referred to as the "City" or "OWNER" and Engineering Enterprises, Inc. hereinafter referred to as the "Contractor" or "ENGINEER" agrees as follows:

A. Services:

The Engineer shall furnish the necessary personnel, materials, equipment and expertise to make the necessary investigations, analysis and calculations along with exhibits, cost estimates and narrative, to complete all necessary engineering services to the City as indicated on the included Attachment A. Design engineering will be provided for approximately 4,800 linear feet of water main improvements, 40 linear feet of sanitary force main improvements, and 1,725 linear feet of sanitary sewer improvements (See Attachment E for project limits). Engineering will be in accordance with all City, Standard Specifications for Water and Sewer Construction in Illinois, Illinois Department of Transportation, and Illinois Environmental Protection Agency requirements.

B. Term:

Services will be provided beginning on the date of execution of this agreement and continuing, until terminated by either party upon 7 days written notice to the non-terminating party or upon completion of the Services. Upon termination the Contractor shall be compensated for all work performed for the City prior to termination.

C. Compensation and maximum amounts due to Contractor:

ENGINEER shall receive as compensation for all work and services to be performed herein, an amount based on the Estimate of Level of Effort and Associated Cost included in Attachment C. Design Engineering will be paid for as a Fixed Fee (FF) in the amount of \$107,484. Direct expenses will be billed at the actually value spent and are estimated at \$25,400. The hourly rates for this project are shown in the attached 2024 Standard Schedule of Charges (Attachment F). All payments will be made according to the Illinois State Prompt Payment Act and not less than once every thirty days.

D. Changes in Rates of Compensation:

In the event that this contract is designated in Section B hereof as an Ongoing Contract, Contractor, on or before February 1st of any given year, shall provide written notice of any change in the rates specified in Section C hereof (or on any attachments hereto) and said changes shall only be effective on and after May 1st of that same year.

E. Ownership of Records and Documents:

Contractor agrees that all books and records and other recorded information developed specifically in connection with this agreement shall remain the property of the City. Contractor



agrees to keep such information confidential and not to disclose or disseminate the information to third parties without the consent of the City. This confidentiality shall not apply to material or information, which would otherwise be subject to public disclosure through the freedom of information act or if already previously disclosed by a third party. Upon termination of this agreement, Contractor agrees to return all such materials to the City. The City agrees not to modify any original documents produced by Contractor without contractors consent. Modifications of any signed duplicate original document not authorized by ENGINEER will be at OWNER's sole risk and without legal liability to the ENGINEER. Use of any incomplete, unsigned document will, likewise, be at the OWNER's sole risk and without legal liability to the ENGINEER.

F. Governing Law:

This contract shall be governed and construed in accordance with the laws of the State of Illinois. Venue shall be in Kendall County, Illinois.

G. Independent Contractor:

Contractor shall have sole control over the manner and means of providing the work and services performed under this agreement. The City's relationship to the Contractor under this agreement shall be that of an independent contractor. Contractor will not be considered an employee to the City for any purpose.

H. Certifications:

Employment Status: The Contractor certifies that if any of its personnel are an employee of the State of Illinois, they have permission from their employer to perform the service.

Anti-Bribery: The Contractor certifies it is not barred under 30 Illinois Compiled Statutes 500/50-5(a) - (d) from contracting as a result of a conviction for or admission of bribery or attempted bribery of an officer or employee of the State of Illinois or any other state.

Loan Default: If the Contractor is an individual, the Contractor certifies that he/she is not in default for a period of six months or more in an amount of \$600 or more on the repayment of any educational loan guaranteed by the Illinois State Scholarship Commission made by an Illinois institution of higher education or any other loan made from public funds for the purpose of financing higher education (5 ILCS 385/3).

Felony Certification: The Contractor certifies that it is not barred pursuant to 30 Illinois Compiled Statutes 500/50-10 from conducting business with the State of Illinois or any agency as a result of being convicted of a felony.

Barred from Contracting: The Contractor certifies that it has not been barred from contracting as a result of a conviction for bid-rigging or bid rotating under 720 Illinois Compiled Statutes 5/33E or similar law of another state.

Drug Free Workplace: The Contractor certifies that it is in compliance with the Drug Free Workplace Act (30 Illinois Compiled Statutes 580) as of the effective date of this contract.



The Drug Free Workplace Act requires, in part, that Contractors, with 25 or more employees certify and agree to take steps to ensure a drug free workplace by informing employees of the dangers of drug abuse, of the availability of any treatment or assistance program, of prohibited activities and of sanctions that will be imposed for violations; and that individuals with contracts certify that they will not engage in the manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of the contract.

Non-Discrimination, Certification, and Equal Employment Opportunity: The Contractor agrees to comply with applicable provisions of the Illinois Human Rights Act (775 Illinois Compiled Statutes 5), the U.S. Civil Rights Act, the Americans with Disabilities Act, Section 504 of the U.S. Rehabilitation Act and the rules applicable to each. The equal opportunity clause of Section 750.10 of the Illinois Department of Human Rights Rules is specifically incorporated herein. The Contractor shall comply with Executive Order 11246, entitled Equal Employment Opportunity, as amended by Executive Order 11375, and as supplemented by U.S. Department of Labor regulations (41 C.F.R. Chapter 60). The Contractor agrees to incorporate this clause into all subcontracts under this Contract.

International Boycott: The Contractor certifies that neither it nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act (30 ILCS 582).

Record Retention and Audits: If 30 Illinois Compiled Statutes 500/20-65 requires the Contractor (and any subcontractors) to maintain, for a period of 3 years after the later of the date of completion of this Contract or the date of final payment under the Contract, all books and records relating to the performance of the Contract and necessary to support amounts charged to the City under the Contract. The Contract and all books and records related to the Contract shall be available for review and audit by the City and the Illinois Auditor General. If this Contract is funded from contract/grant funds provided by the U.S. Government, the Contract, books, and records shall be available for review and audit by the Comptroller General of the U.S. and/or the Inspector General of the federal sponsoring agency. The Contractor agrees to cooperate fully with any audit and to provide full access to all relevant materials.

United States Resident Certification: (This certification must be included in all contracts involving personal services by non-resident aliens and foreign entities in accordance with requirements imposed by the Internal Revenue Services for withholding and reporting federal income taxes.) The Contractor certifies that he/she is a: _x_ United States Citizen Resident Alien Non-Resident Alien The Internal Revenue Service requires that taxes be withheld on payments made to non-resident aliens for the performance of personal services at the rate of 30%.
Tax Payer Certification: Under penalties of perjury, the Contractor certifies that its Federal Tax Payer Identification Number or Social Security Number is (provided separately) and is doing business as a (check one): Individual Real Estate Agent Sole Proprietorship Government Entity Partnership Tax Exempt Organization (IRC 501(a) only) _x Corporation Not for Profit Corporation Trust or Estate Medical and Health Care Services Provider Corp.



I. Indemnification:

Contractor shall indemnify and hold harmless the City and City's agents, servants, and employees against all loss, damage, and expense which it may sustain or for which it will become liable on account of injury to or death of persons, or on account of damage to or destruction of property resulting from the performance of work under this agreement by Contractor or its Subcontractors, or due to or arising in any manner from the wrongful act or negligence of Contractor or its Subcontractors of any employee of any of them. In the event that either party shall bring any suit, cause of action or counterclaim against the other party, the non-prevailing party shall pay to the prevailing party the cost and expenses incurred to answer and/or defend such action, including reasonable attorney fees and court costs. In no event shall either party indemnify any other party for the consequences of that party's negligence, including failure to follow the ENGINEER's recommendations.

J. Insurance:

The contractor agrees that it has either attached a copy of all required insurance certificates or that said insurance is not required due to the nature and extent of the types of services rendered hereunder. (Not applicable as having been previously supplied)

K. Additional Terms or Modification:

The terms of this agreement shall be further modified as provided in the attached Exhibits. Except for those terms included on the Exhibits, no additional terms are included as a part of this agreement. All prior understandings and agreements between the parties are merged into this agreement, and this agreement may not be modified orally or in any manner other than by an agreement in writing signed by both parties. In the event that any provisions of this agreement shall be held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties. The list of Attachments are as follows:

Attachment A: Standard Terms and Conditions

Attachment B: Scope of Services

Attachment C: Estimated Level of Effort and Associated Cost

Attachment D: Anticipated Project Schedule

Attachment E: Project Location Map

Attachment F: 2024 Standard Schedule of Charges

L. Notices:

All notices required to be given under the terms of this agreement shall be given mail, addressed to the parties as follows:



Angie Smith

Executive Assistant

Jori Behland

City Clerk

For the *United City of Yorkville*: For the Contractor: City Administrator and City Clerk Engineering Enterprises, Inc. United City of Yorkville 52 Wheeler Road 651 Prairie Pointe Drive Sugar Grove Illinois 60554 Yorkville, IL 60560 Either of the parties may designate in writing from time to time substitute addresses or persons in connection with required notices. Agreed to this ____day of ______, 2025. United City of Yorkville Engineering Enterprises, Inc.: Brad Sanderson, PE John Purcell Chief Operating Officer / President Mayor



STANDARD TERMS AND CONDITIONS

Agreement: These Standard Terms and Conditions, together with the Professional Services Agreement, constitute the entire integrated agreement between the OWNER and Engineering Enterprises, Inc. (EEI) (hereinafter "Agreement"), and take precedence over any other provisions between the Parties. These terms may be amended, but only if both parties consent in writing. However, to the extent that the Scope of Work differs from the Standard Terms and Conditions, the Scope of Work document controls.

Standard of Care: In providing services under this Agreement, the ENGINEER will endeavor to perform in a matter consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under same circumstances in the same locality. ENGINEER makes no other warranties, express or implied, written or oral under this Agreement or otherwise, in connection with ENGINEER'S service.

Construction Engineering and Inspection: The ENGINEER shall not supervise, direct, control, or have authority over any contractor work, nor have authority over or be responsible for the means, methods, techniques sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety of the site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work.

The ENGINEER neither guarantees the performance of any contractor nor assumes responsibility for contractor's failure to furnish and perform the work in accordance with the contract documents.

The ENGINEER is not responsible for the acts or omissions of any contractor, subcontractor, or supplies, or any of their agents or employees or any other person at the site or otherwise furnishing or performing any work.

Shop drawing and submittal review by the ENGINEER shall apply to only the items in the submissions and only for the purpose of assessing if upon installation or incorporation in the project work they are generally consistent with the construction documents. OWNER agrees that the contractor is solely responsible for the submissions and for compliance with the construction documents. OWNER further agrees that the ENGINEER'S review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend or safety programs or precautions. The ENGINEER'S consideration of a component does not constitute acceptance of the assembled items.

The ENGINEER'S site observation during construction shall be at the times agreed upon in the Project Scope. Through standard, reasonable means the ENGINEER will become generally familiar with observable completed work. If the ENGINEER observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and OWNER for them to address.

Opinion of Probable Construction Costs: ENGINEER'S opinion of probable construction costs represents ENGINEER'S best and reasonable judgment as a professional engineer. OWNER acknowledges that ENGINEER has no control over construction costs of contractor's methods of determining pricing, or over competitive bidding by contractors, or of market conditions or changes thereto. ENGINEER cannot and does not guarantee that proposals, bids or actual construction costs will not vary from ENGINEER'S opinion of probable construction costs.

Copies of Documents & Electronic Compatibility: Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of the project.

Changed Conditions: If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the ENGINEER are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks, or other material terms of this Agreement, the ENGINEER may call for renegotiation of appropriate portions of this Agreement. The ENGINEER shall notify the OWNER of the changed conditions necessitating renegotiation, and the ENGINEER and the OWNER shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement, in accordance with the termination provision hereof.

Hazardous Conditions: OWNER represents to ENGINEER that to the best of its knowledge no Hazardous Conditions (environmental or otherwise) exist on the project site. If a Hazardous Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Condition. In the event ENGINEER or any other party encounters a Hazardous Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Condition; and (ii) warrants that the project site is in full compliance with applicable Laws and Regulations. ENGINEER agrees to cooperate with the OWNER, as necessary, to remediate a Hazardous Condition, but same may result in additional costs to the OWNER.



Consequential Damages: Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the OWNER nor the ENGINEER, their respective officers, directors, partners, employees, contractors, or subcontractors shall be liable to the other or shall make any claim for any incidental, indirect, or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation, or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract, and breach of strict or implied warranty. Both the OWNER and the ENGINEER shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

Termination: This Agreement may be terminated for convenience, without cause, upon fourteen (14) days written notice of either party. In the event of termination, the ENGINEER shall prepare a final invoice and be due compensation as set forth in the Professional Services Agreement for all costs incurred through the date of termination.

Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days' written notice for the following reasons:

- (a) Substantial failure by the other party to comply with or perform in accordance with the terms of the Agreement and through no fault of the terminating party;
- (b) Assignment of the Agreement or transfer of the project without the prior written consent of the other party;
- (c) Suspension of the project or the ENGINEER'S services by the OWNER for a period of greater than ninety (90) calendar days, consecutive or in the aggregate.
- (d) Material changes in the conditions under which this Agreement was entered into, the scope of services or the nature of the project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

Payment of Invoices: Invoices are due and payable within 30 days of receipt unless otherwise agreed to in writing.

Third Party Beneficiaries: Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the OWNER or the ENGINEER. The ENGINEER'S services under this Agreement are being performed solely and exclusively for the OWNER'S benefit, and no other party or entity shall have any claim against the ENGINEER because of this Agreement or the performance or nonperformance of services hereunder. The OWNER and ENGINEER agree to require a similar provision in all contracts with contractors, subcontractors, vendors and other entities involved in this Project to carry out the intent of this provision.

Force Majeure: Each Party shall be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by force majeure (defined below) and the nonperforming party promptly provides notice of such prevention to the other party. Such excuse shall be continued so long as the condition constituting force majeure continues. The party affected by such force majeure also shall notify the other party of the anticipated duration of such force majeure, any actions being taken to avoid or minimize its effect after such occurrence, and shall take reasonable efforts to remove the condition constituting such force majeure. For purposes of this Agreement, "force majeure" shall include conditions beyond the control of the parties, including an act of God, acts of terrorism, voluntary or involuntary compliance with any regulation, law or order of any government, war, acts of war (whether war be declared or not), labor strike or lock-out, civil commotion, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe. The payment of invoices due and owing hereunder shall in no event be delayed by the payer because of a force majeure affecting the payer.

Additional Terms or Modification: All prior understandings and agreements between the parties are merged into this Agreement, and this Agreement may not be modified orally or in any manner other than by an Agreement in writing signed by both parties. In the event that any provisions of this Agreement shall be held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties.

Assignment: Neither party to this Agreement shall transfer or assign any rights or duties under or interest in this Agreement without the prior written consent of the other party. Subcontracting normally contemplated by the ENGINEER shall not be considered an assignment for purposes of this Agreement.

Waiver: A party's waiver of, or the failure or delay in enforcing any provision of this Agreement shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

Attorney's Fees: In the event of any action or proceeding brought by either party against the other under this Agreement, the prevailing party shall be entitled to recover from the other all costs and expenses including without limitation the reasonable fees of its attorneys in such action or proceeding, including costs of appeal, if any, in such amount as the Court may adjudge reasonable.

Fiduciary Duty: Nothing in this Agreement is intended to create, nor shall it be construed to create, a fiduciary duty owed to either party to the other party. EEI makes no warranty, express or implied, as to its professional services rendered.

Headings: The headings used in this Agreement are inserted only as a matter of convenience only, and in no way define, limit, enlarge, modify, explain or define the text thereof nor affect the construction or interpretation of this Agreement.



Route 47 Utility Relocation – Carpenter St. to Waterpark Way United City of Yorkville, IL Professional Services Agreement - Design Engineering

Attachment B - Scope of Services

DESIGN ENGINEERING

2.1 Project Management and Administration

- Budget Tracking
- Management of Personnel and the Engineering Contract
- Coordination with the City and Other Regulatory Agencies (IEPA)

2.2 Project Meetings

- Project Kick-Off Meeting Between the City and EEI
- Two (2) Design Progress Meetings Between the City and, EEI prior to Bidding
- One (1) Design Meeting Between the City, IDOT, and EEI prior to Bidding.

2.3 Topographic Survey

- Field Survey
- Drafting to Create Base File

2.4 Utility Coordination

- Design JULIE
- Plan Submission and Coordinate with Private Utilities

2.5 Final Plans, Specifications and Estimates

- Preparation of 60%, 90%, and 100% Engineering Plans
- Preparation of 90% and 100% Project Manual and Engineer's Opinion of Probable Construction Cost.
 Project Manual Shall Include Bidding and Contract Documents, General Conditions, and Special Provisions.

2.6 Permits

- Prepare IEPA Documentation for CCDD Management of Soils
- Prepare IEPA Construction Permit Application and Acquire Permit

2.7 Bidding and Contracting

- Prepare Bidders List and Ad for Bid
- Submit Ad for Bid to the Local Paper and Post Bidding Documents on QuestCDN
- Address Bid Questions and Prepare Addenda
- Attend Bid Opening
- Prepare Bid Tab, Bid Summary, and Recommendation of Award
- Execute Contract Documents

DIRECT EXPENSES

The following scope of services will be provided by EEI's sub-consultants:

Geotechnical and CCDD (Rubino Engineering, Inc.)

- Ten (10) Soil Borings
- Prepare Geotechnical Report and CCDD Analysis
- Prepare LPC 662/663 Permit

The above scope for "Route 47 Utility Relocation – Carpenter St. to Waterpark Way" summarizes the work items that will be completed for this contract. Additional work items, including additional meetings beyond the meetings defined in the above scope, shall be considered outside the scope of the base contract and will be billed in accordance with the Standard Schedule of Charges.



ATTACHMENT C: ESTIMATE OF LEVEL OF EFFORT AND ASSOCIATED COST PROFESSIONAL ENGINEERING SERVICES	
CLIENT	
United City of Yorkville	
PROJECT TITLE	PREPARED BY
Route 47 Utility Relocation - Carpenter St. to Waterpark Way	KDW

TASK		ROLE	PIC	PM	SPE 2	PE	SPM	SPT 2	PT	SPT 2	SPT 1	ADMIN			
NO.	TASK DESCRIPTION													HOURS	COST
NO.		RATE	\$246	\$210	\$200	\$168	\$234	\$175	\$140	\$175	\$164	\$72			
PROJE	CT ADMINISTRATION														
2.1	Project Management and Administration		2	32	-	-	-	-	-	-	-	-		34	\$ 7,212
2.2	Project Meetings		6	9	-	-	-	-	-	-	-	-		15	\$ 3,366
2.3	Topographic Survey		-	-	-	-	30	24	24	-	-	-		78	\$ 14,580
2.4	Utility Coordination		-	2	12	-	-	-	-	-	•	-		14	\$ 2,820
2.5	Final Plans, Specifications, and Estimates		6	48	100	44	-	-	-	30	116	-		344	\$ 63,222
2.6	Permits		-	4	30					-	•	-		34	\$ 6,840
2.7	Bidding and Contracting		2	12	12	18		-	-	-	•	14		58	\$ 9,444
	Insert Task	Subtotal:	16	107	154	62	30	24	24	30	116	14	-	577	\$ 107,484
	PROJECT	TOTAL:	16	107	154	62	30	24	24	30	116	14	-	577	107,484

DIRECT EXPENSES	
Mileage =	\$ -
Printing =	\$ 400
Legal Surveying =	\$ 10,000
Environmental Assessment =	\$ 15,000
DIRECT EXPENSES =	\$ 25,400

LABOR SUMMARY	
EEI Labor Expenses =	\$ 107,484
TOTAL LABOR EXPENSES	\$ 107.484

TOTAL COSTS \$ 132,884



ATTACHMENT D: ESTIMATED SCHEDULE

Final Plans, Specifications, and Estimates

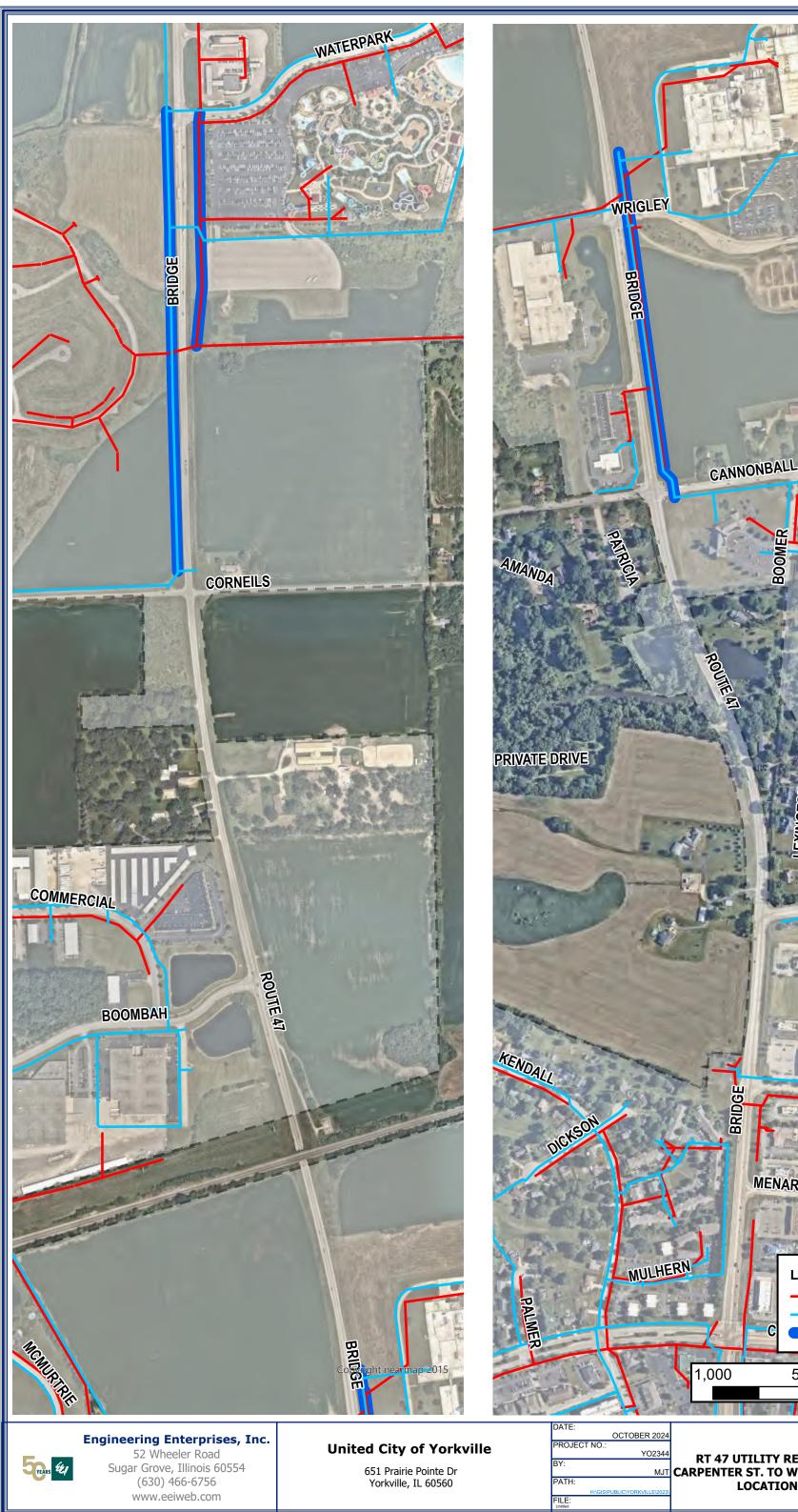
2.5

Permits

Bidding and Contracting

CLIE	NT					PROJE	CT NU	MBER					
	United City of Yorkville					YO234	4						
PRO	ECT TITLE					DATE		PREP#	ARED B	Y			
	Route 47 Utility Relocation - Carpenter St. to Waterpark Way					1/14/25	5	KDW					
TASK													
NO.	TASK DESCRIPTION	2025											
NO.		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
	CT ADMINISTRATION												
2.1	Project Management and Administration												
2.2	Project Meetings												
2.3	Topographic Survey												
2.4	Utility Coordination												





RT 47 UTILITY RELOCATION -CARPENTER ST. TO WATERPARK WAY LOCATION MAP

MENARD

Legend

500

Sanitary Sewer Main Water Main Lines

Utility Relocation



0 Feet

FAIRHAVEN

SWANSON

KENNEDY



Engineering Enterprises, Inc.

STANDARD SCHEDULE OF CHARGES ~ JANUARY 1, 2024

EMPLOYEE DESIGNATION	CLASSIFICATION	HOURLY RATE
Senior Principal	E-4	\$246.00
Principal	E-3	\$241.00
Senior Project Manager	E-2	\$234.00
Project Manager	E-1	\$210.00
Senior Project Engineer/Surveyor II	P-6	\$200.00
Senior Project Engineer/Surveyor I	P-5	\$186.00
Project Engineer/Surveyor	P-4	\$168.00
Senior Engineer/Surveyor	P-3	\$155.00
Engineer/Surveyor	P-2	\$140.00
Associate Engineer/Surveyor	P-1	\$127.00
Senior Project Technician II	T-6	\$175.00
Senior Project Technician I	T-5	\$164.00
Project Technician	T-4	\$153.00
Senior Technician	T-3	\$140.00
Technician	T-2	\$127.00
Associate Technician	T-1	\$111.00
GIS Technician II	G-2	\$125.00
GIS Technician I	G-1	\$114.00
Engineering/Land Surveying Intern	I-1	\$ 82.00
Executive Administrative Assistant	A-4	\$ 77.00
Administrative Assistant	A-3	\$ 72.00

VEHICLES. REPROGRAPHICS, DIRECT COSTS, DRONE AND EXPERT TESTIMONY

Vehicle for Construction Observation \$ 20.00

In-House Scanning and Reproduction \$0.25/Sq. Ft. (Black & White)

\$1.00/Sq. Ft. (Color)

Reimbursable Expenses (Direct Costs)

Cost

Services by Others (Direct Costs)

Cost + 10%

Unmanned Aircraft System / Unmanned Aerial Vehicle / Drone \$ 225.00 Expert Testimony \$ 275.00



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works Parks and Recreation	

Agenda Item Number

Public Work Committee #3

Tracking Number

PW 2025-10

Agenda Item Summary Memo

Title: Whispering Me	adows Storm S	ewer						
Meeting and Date:	City Council – J	January 28, 2025						
Synopsis: Please see	the attached me	emo.						
Council Action Previ	ously Taken:							
Date of Action: PW –	1/21/25	Action Taken: Moved forward to City Council agenda.						
Item Number: PW 20	025-10							
Type of Vote Require	ed: Majority							
Council Action Requ	ested: Approva	1						
Submitted by:	Eric Dhu	se Public Works						
	Name	Department						
Agenda Item Notes:								



Memorandum

To: Public Works Committee

From: Eric Dhuse, Director of Public Works

CC: Bart Olson, City Administrator

Date: January 15, 2025

Subject: Whispering Meadows Storm Sewer

Summary

Proposed Engineering agreement from EEI for the design of Whispering Meadows Storm Sewer Outfall.

Background

This is one of the work items that was contemplated as part of the TRG settlement and will be funded from those proceeds. This work was contemplated since the stormwater basins at the north end of Whispering meadows do not have an outfall to the Rob Roy Drainage Ditch, it was never finished when the developer went under during the great recession. Currently, there is just a hole in the middle of the field with a piece of pipe in it. Without an outfall, the basins cannot function properly. For example, water can become too high in heavy rains which can lead to a multitude of problems such as flooding and then stagnation when the water can't go anywhere. With the development of the balance of the lots imminent, it is an opportune time to finish this project. Currently, staff estimates the cost of construction for this project to be \$250,000. This contract does not contemplate construction, just a piece of information for you. EEI is proposing an engineering PSA to coordinate, design, permit, and bid the project as part of this agreement. The cost for these services is fixed fee of \$26,936. Once the engineering is completed and bids received, staff will bring forward recommendations for construction and for a construction engineering agreement. The actual construction of the project is not slated until later this year, well into FY 26.

Recommendation

Staff recommends the approval of this Professional Service Agreement.

Resolution No. 2025-

RESOLUTION OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS APPROVING AN ENGINEERING AGREEMENT WITH ENGINEERING ENTERPRISES, INC.

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a non-home rule municipality duly organized and validly existing in accordance with the Constitution of the State of Illinois and the laws of this State; and

WHEREAS, the City's Public Works Department plans to conduct certain improvements to the storm sewer in the Whispering Meadows subdivision (the "Project"); and

WHEREAS, completion of the Project will require engineering services conducted by an outside engineering firm; and

WHEREAS, Engineering Enterprises, Inc., of Sugar Grove, Illinois ("EEI"), has prepared an agreement between EEI and the City for engineering services related to the Project (the "Agreement"), said Agreement being attached hereto as *Exhibit A*; and

WHEREAS, EEI has provided engineering services for various projects completed by the City, and the City administration has found that EEI is a qualified and experienced engineering firm; and

WHEREAS, the City administration recommends approval of the Agreement.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council (the "Corporate Authorities") of the United City of Yorkville, Kendall County, Illinois, as follows:

- **Section 1.** The foregoing recitals are hereby incorporated in this Resolution as the findings of the Corporate Authorities.
- **Section 2.** The Mayor and City Clerk are hereby authorized to execute an *Agreement* for *Professional Service Whispering Meadows Storm Sewer*, attached hereto as *Exhibit A*.

Section 3. This	Resolution shall be in full force an	nd effect from and after its passage
and approval according to l	aw.	
Passed by the City C	ouncil of the United City of Yorky	ville, Kendall County, Illinois this
day of	, A.D. 2025.	
	CI	TY CLERK
KEN KOCH	DAN TRA	ANSIER
ARDEN JOE PLOCHER	CRAIG SO	OLING
CHRIS FUNKHOUSER	MATT M.	AREK
SEAVER TARULIS	RUSTY C	CORNEILS
APPROVED by me this day of	, as Mayor of the United City of Young	orkville, Kendall County, Illinois
	MA	AYOR
Attest:		
City Clerk		

Agreement for Professional Services Whispering Meadows Storm Sewer

THIS AGREEMENT, by and between the United City of Yorkville, hereinafter referred to as the "City" or "OWNER" and Engineering Enterprises, Inc. hereinafter referred to as the "Contractor" or "ENGINEER" agrees as follows:

A. Services:

The Engineer shall furnish the necessary personnel, materials, equipment and expertise to make the necessary investigations, analysis and calculations along with exhibits, cost estimates and narrative, to complete all necessary engineering services to the City as indicated on the included Attachment B. Services to be provided include design engineering services for the Whispering Meadows Storm Sewer as indicated on Attachment C, with the schedule indicated on Attachment D, and in the location shown on Attachment F. All Engineering will be in accordance with all City, Yorkville Stormwater Management Ordinance, and Illinois Department of Natural Resources requirements.

B. Term:

Services will be provided beginning on the date of execution of this agreement and continuing, until terminated by either party upon 7 days written notice to the non-terminating party or upon completion of the Services. Upon termination the Contractor shall be compensated for all work performed for the City prior to termination.

C. Compensation and maximum amounts due to Contractor:

Contractor shall receive as compensation for all work and services to be performed herein an amount based on the Estimate of Level of Effort and Associated Cost included in Attachment C. Design Engineering will be paid for as a Fixed Fee (FF) in the amount of \$21,336.00. Direct Expenses are estimated at \$5,600.00. The total contract amount is \$26,936.00. The hourly rates for this project are shown in the 2024 Standard Schedule of Charges included in Attachment E. All payments will be made accordingly to the Illinois State Prompt Payment Act and not less than once every thirty days.

D. Changes in Rates of Compensation:

In the event that this contract is designated in Section B hereof as an Ongoing Contract, Contractor, on or before February 1st of any given year, shall provide written notice of any change in the rates specified in Section C hereof (or on any attachments hereto) and said changes shall only be effective on and after May 1st of that same year.



E. Ownership of Records and Documents:

Contractor agrees that all books and records and other recorded information developed specifically in connection with this agreement shall remain the property of the City. Contractor agrees to keep such information confidential and not to disclose or disseminate the information to third parties without the consent of the City. This confidentiality shall not apply to material or information, which would otherwise be subject to public disclosure through the freedom of information act or if already previously disclosed by a third party. Upon termination of this agreement, Contractor agrees to return all such materials to the City. The City agrees not to modify any original documents produced by Contractor without contractors consent. Modifications of any signed duplicate original document not authorized by ENGINEER will be at OWNER's sole risk and without legal liability to the ENGINEER. Use of any incomplete, unsigned document will, likewise, be at the OWNER's sole risk and without legal liability to the ENGINEER.

F. Governing Law:

This contract shall be governed and construed in accordance with the laws of the State of Illinois. Venue shall be in Kendall County, Illinois.

G. Independent Contractor:

Contractor shall have sole control over the manner and means of providing the work and services performed under this agreement. The City's relationship to the Contractor under this agreement shall be that of an independent contractor. Contractor will not be considered an employee to the City for any purpose.

H. Certifications:

Employment Status: The Contractor certifies that if any of its personnel are an employee of the State of Illinois, they have permission from their employer to perform the service.

Anti-Bribery: The Contractor certifies it is not barred under 30 Illinois Compiled Statutes 500/50-5(a) - (d) from contracting as a result of a conviction for or admission of bribery or attempted bribery of an officer or employee of the State of Illinois or any other state.

Loan Default: If the Contractor is an individual, the Contractor certifies that he/she is not in default for a period of six months or more in an amount of \$600 or more on the repayment of any educational loan guaranteed by the Illinois State Scholarship Commission made by an Illinois institution of higher education or any other loan made from public funds for the purpose of financing higher education (5 ILCS 385/3).



Felony Certification: The Contractor certifies that it is not barred pursuant to 30 Illinois Compiled Statutes 500/50-10 from conducting business with the State of Illinois or any agency as a result of being convicted of a felony.

Barred from Contracting: The Contractor certifies that it has not been barred from contracting as a result of a conviction for bid-rigging or bid rotating under 720 Illinois Compiled Statutes 5/33E or similar law of another state.

Drug Free Workplace: The Contractor certifies that it is in compliance with the Drug Free Workplace Act (30 Illinois Compiled Statutes 580) as of the effective date of this contract. The Drug Free Workplace Act requires, in part, that Contractors, with 25 or more employees certify and agree to take steps to ensure a drug free workplace by informing employees of the dangers of drug abuse, of the availability of any treatment or assistance program, of prohibited activities and of sanctions that will be imposed for violations; and that individuals with contracts certify that they will not engage in the manufacture, distribution, dispensation, possession, or use of a controlled substance in the performance of the contract.

Non-Discrimination, Certification, and Equal Employment Opportunity: The Contractor agrees to comply with applicable provisions of the Illinois Human Rights Act (775 Illinois Compiled Statutes 5), the U.S. Civil Rights Act, the Americans with Disabilities Act, Section 504 of the U.S. Rehabilitation Act and the rules applicable to each. The equal opportunity clause of Section 750.10 of the Illinois Department of Human Rights Rules is specifically incorporated herein. The Contractor shall comply with Executive Order 11246, entitled Equal Employment Opportunity, as amended by Executive Order 11375, and as supplemented by U.S. Department of Labor regulations (41 C.F.R. Chapter 60). The Contractor agrees to incorporate this clause into all subcontracts under this Contract.

International Boycott: The Contractor certifies that neither it nor any substantially owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act (30 ILCS 582).

Record Retention and Audits: If 30 Illinois Compiled Statutes 500/20-65 requires the Contractor (and any subcontractors) to maintain, for a period of 3 years after the later of the date of completion of this Contract or the date of final payment under the Contract, all books and records relating to the performance of the Contract and necessary to support amounts charged to the City under the Contract. The Contract and all books and records related to the Contract shall be available for review and audit by the City and the Illinois Auditor General. If this Contract is funded from contract/grant funds provided by the U.S. Government, the Contract, books, and records shall be available for review and audit by the Comptroller General of the U.S. and/or the Inspector General of the federal



sponsoring agency. The Contractor agrees to cooperate fully with any audit and to provide full access to all relevant materials.

United States Resident Certification: (This certification must be included in all contracts involving personal services by non-resident aliens and foreign entities in accordance with requirements imposed by the Internal Revenue Services for withholding and reporting federal income taxes.) The Contractor certifies that he/she is a: x United States Citizen ___ Resident Alien ___ Non-Resident Alien The Internal Revenue Service requires that taxes be withheld on payments made to non resident aliens for the performance of personal services at the rate of 30%.

Tax Payer Certification: Under penalties of perjury, the Contractor certifies that its Federal Tax Payer Identification Number or Social Security Number is (provided separately) and is doing business as a (check one): ___ Individual ___ Real Estate Agent ___ Sole Proprietorship ___ Government Entity ___ Partnership ___ Tax Exempt Organization (IRC 501(a) only) x Corporation ___ Not for Profit

Corporation Trust or Estate Medical and Health Care Services Provider

I. Indemnification:

Corp.

Contractor shall indemnify and hold harmless the City and City's agents, servants, and employees against all loss, damage, and expense which it may sustain or for which it will become liable on account of injury to or death of persons, or on account of damage to or destruction of property resulting from the performance of work under this agreement by Contractor or its Subcontractors, or due to or arising in any manner from the wrongful act or negligence of Contractor or its Subcontractors of any employee of any of them. In the event that the either party shall bring any suit, cause of action or counterclaim against the other party, the non-prevailing party shall pay to the prevailing party the cost and expenses incurred to answer and/or defend such action, including reasonable attorney fees and court costs. In no event shall the either party indemnify any other party for the consequences of that party's negligence, including failure to follow the ENGINEER's recommendations.

J. Insurance:

The contractor agrees that it has either attached a copy of all required insurance certificates or that said insurance is not required due to the nature and extent of the types of services rendered hereunder. (Not applicable as having been previously supplied)

K. Additional Terms or Modification:

The terms of this agreement shall be further modified as provided on the attached Exhibits. Except for those terms included on the Exhibits, no additional terms are



included as a part of this agreement. All prior understandings and agreements between the parties are merged into this agreement, and this agreement may not be modified orally or in any manner other than by an agreement in writing signed by both parties. In the event that any provisions of this agreement shall be held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties. The list of Attachments are as follows:

Attachment A: Standard Terms and Conditions

Attachment B: Scope of Services

Attachment C: Estimated Level of Effort and Associated Cost

Attachment D: Anticipated Project Schedule

Attachment E: 2024 Standard Schedule of Charges

Attachment F: Location Map

L. Notices:

All notices required to be given under the terms of this agreement shall be given mail, addressed to the parties as follows:

For the City: For the Contractor:

City Administrator and City Clerk United City of Yorkville 651 Prairie Pointe Drive Yorkville, IL 60560

Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, Illinois 60554

Either of the parties may designate in writing from time to time substitute addresses or persons in connection with required notices.

Agreed to thisday of, 202	5.
United City of Yorkville	Engineering Enterprises, Inc.:
John Purcell Mayor	Brad Sanderson, P.E. Chief Operating Officer/President
 Jori Behland City Clerk	Timothy Paulson, P.E. Senior Project Manager



STANDARD TERMS AND CONDITIONS

Agreement: These Standard Terms and Conditions, together with the Professional Services Agreement, constitute the entire integrated agreement between the OWNER and Engineering Enterprises, Inc. (EEI) (hereinafter "Agreement"), and take precedence over any other provisions between the Parties. These terms may be amended, but only if both parties consent in writing. However, to the extent that the Scope of Work differs from the Standard Terms and Conditions, the Scope of Work document controls.

Standard of Care: In providing services under this Agreement, the ENGINEER will endeavor to perform in a matter consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under same circumstances in the same locality. ENGINEER makes no other warranties, express or implied, written or oral under this Agreement or otherwise, in connection with ENGINEER'S service.

Construction Engineering and Inspection: The ENGINEER shall not supervise, direct, control, or have authority over any contractor work, nor have authority over or be responsible for the means, methods, techniques sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety of the site, nor for any failure of a contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work.

The ENGINEER neither guarantees the performance of any contractor nor assumes responsibility for contractor's failure to furnish and perform the work in accordance with the contract documents.

The ENGINEER is not responsible for the acts or omissions of any contractor, subcontractor, or supplies, or any of their agents or employees or any other person at the site or otherwise furnishing or performing any work.

Shop drawing and submittal review by the ENGINEER shall apply to only the items in the submissions and only for the purpose of assessing if upon installation or incorporation in the project work they are generally consistent with the construction documents. OWNER agrees that the contractor is solely responsible for the submissions and for compliance with the construction documents. OWNER further agrees that the ENGINEER'S review and action in relation to these submissions shall not constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend or safety programs or precautions. The ENGINEER'S consideration of a component does not constitute acceptance of the assembled items.

The ENGINEER'S site observation during construction shall be at the times agreed upon in the Project Scope. Through standard, reasonable means the ENGINEER will become generally familiar with observable completed work. If the ENGINEER observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and OWNER for them to address.

Opinion of Probable Construction Costs: ENGINEER'S opinion of probable construction costs represents ENGINEER'S best and reasonable judgment as a professional engineer. OWNER acknowledges that ENGINEER has no control over construction costs of contractor's methods of determining pricing, or over competitive bidding by contractors, or of market conditions or changes thereto. ENGINEER cannot and does not guarantee that proposals, bids or actual construction costs will not vary from ENGINEER'S opinion of probable construction costs.

Copies of Documents & Electronic Compatibility: Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of the project.

Changed Conditions: If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the ENGINEER are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks, or other material terms of this Agreement, the ENGINEER may call for renegotiation of appropriate portions of this Agreement. The ENGINEER shall notify the OWNER of the changed conditions necessitating renegotiation, and the ENGINEER and the OWNER shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement, in accordance with the termination provision hereof.

Hazardous Conditions: OWNER represents to ENGINEER that to the best of its knowledge no Hazardous Conditions (environmental or otherwise) exist on the project site. If a Hazardous Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Condition. In the event ENGINEER or any other party encounters a Hazardous Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Condition; and (ii) warrants that the project site is in full compliance with applicable Laws and Regulations. ENGINEER agrees to cooperate with the OWNER, as necessary, to remediate a Hazardous Condition, but same may result in additional costs to the OWNER.



Consequential Damages: Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, neither the OWNER nor the ENGINEER, their respective officers, directors, partners, employees, contractors, or subcontractors shall be liable to the other or shall make any claim for any incidental, indirect, or consequential damages arising out of or connected in any way to the Project or to this Agreement. This mutual waiver of consequential damages shall include, but is not limited to, loss of use, loss of profit, loss of business, loss of income, loss of reputation, or any other consequential damages that either party may have incurred from any cause of action including negligence, strict liability, breach of contract, and breach of strict or implied warranty. Both the OWNER and the ENGINEER shall require similar waivers of consequential damages protecting all the entities or persons named herein in all contracts and subcontracts with others involved in this project.

Termination: This Agreement may be terminated for convenience, without cause, upon fourteen (14) days written notice of either party. In the event of termination, the ENGINEER shall prepare a final invoice and be due compensation as set forth in the Professional Services Agreement for all costs incurred through the date of termination.

Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days' written notice for the following reasons:

- (a) Substantial failure by the other party to comply with or perform in accordance with the terms of the Agreement and through no fault of the terminating party;
- (b) Assignment of the Agreement or transfer of the project without the prior written consent of the other party;
- (c) Suspension of the project or the ENGINEER'S services by the OWNER for a period of greater than ninety (90) calendar days, consecutive or in the aggregate.
- (d) Material changes in the conditions under which this Agreement was entered into, the scope of services or the nature of the project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.

Payment of Invoices: Invoices are due and payable within 30 days of receipt unless otherwise agreed to in writing.

Third Party Beneficiaries: Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the OWNER or the ENGINEER. The ENGINEER'S services under this Agreement are being performed solely and exclusively for the OWNER'S benefit, and no other party or entity shall have any claim against the ENGINEER because of this Agreement or the performance or nonperformance of services hereunder. The OWNER and ENGINEER agree to require a similar provision in all contracts with contractors, subcontractors, vendors and other entities involved in this Project to carry out the intent of this provision.

Force Majeure: Each Party shall be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by force majeure (defined below) and the nonperforming party promptly provides notice of such prevention to the other party. Such excuse shall be continued so long as the condition constituting force majeure continues. The party affected by such force majeure also shall notify the other party of the anticipated duration of such force majeure, any actions being taken to avoid or minimize its effect after such occurrence, and shall take reasonable efforts to remove the condition constituting such force majeure. For purposes of this Agreement, "force majeure" shall include conditions beyond the control of the parties, including an act of God, acts of terrorism, voluntary or involuntary compliance with any regulation, law or order of any government, war, acts of war (whether war be declared or not), labor strike or lock-out, civil commotion, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe. The payment of invoices due and owing hereunder shall in no event be delayed by the payer because of a force majeure affecting the payer.

Additional Terms or Modification: All prior understandings and agreements between the parties are merged into this Agreement, and this Agreement may not be modified orally or in any manner other than by an Agreement in writing signed by both parties. In the event that any provisions of this Agreement shall be held to be invalid or unenforceable, the remaining provisions shall be valid and binding on the parties.

Assignment: Neither party to this Agreement shall transfer or assign any rights or duties under or interest in this Agreement without the prior written consent of the other party. Subcontracting normally contemplated by the ENGINEER shall not be considered an assignment for purposes of this Agreement.

Waiver: A party's waiver of, or the failure or delay in enforcing any provision of this Agreement shall not constitute a waiver of the provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

Attorney's Fees: In the event of any action or proceeding brought by either party against the other under this Agreement, the prevailing party shall be entitled to recover from the other all costs and expenses including without limitation the reasonable fees of its attorneys in such action or proceeding, including costs of appeal, if any, in such amount as the Court may adjudge reasonable.

Fiduciary Duty: Nothing in this Agreement is intended to create, nor shall it be construed to create, a fiduciary duty owed to either party to the other party. EEI makes no warranty, express or implied, as to its professional services rendered.

Headings: The headings used in this Agreement are inserted only as a matter of convenience only, and in no way define, limit, enlarge, modify, explain or define the text thereof nor affect the construction or interpretation of this Agreement.



Whispering Meadows Storm Sewer United City of Yorkville, IL Professional Services Agreement - Design Engineering

Attachment B - Scope of Services

DESIGN ENGINEERING

1.0 Project Management and Administration

- Budget Tracking
- Management of Personnel and the Engineering Contract
- Coordination with the City and Other Regulatory Agencies

1.1 Project Meetings

- Project Kick-Off Meeting Between the City and EEI
- One (1) Design Progress Meeting Between the City and, EEI prior to Bidding

1.2 Topographic Survey

- Field Survey
- Drafting to Create Base File
- Boundary Survey for Easements

1.3 Utility Coordination

- Design JULIE
- Plan Submission and Coordinate with Private Utilities

1.4 Final Plans, Specifications and Estimates

- Confirm Storm Sewer Design and Sizing
- Preparation of Engineering Plans and Specifications
- Preparation of Project Manual and Engineer's Opinion of Probable Construction Cost. Project Manual Shall Include Bidding and Contract Documents, General Conditions, and Special Provisions.
- Preparation of Plat of Easement documents

1.5 Permitting

- Prepare Stormwater Permit Documentation
- Statewide Floodplain Permit Documentation
- Coordination for wetland permitting for outfall
- Coordination with Rob Roy Drainage District

1.6 Bidding and Contracting

- Prepare Bidders List and Ad for Bid
- Submit Ad for Bid to the Local Paper and Post Bidding Documents on QuestCDN
- Address Bid Questions and Prepare Addenda
- Attend Bid Opening
- Prepare Bid Tab, Bid Summary, and Recommendation of Award
- Execute Contract Documents



DIRECT EXPENSES

The following scope of services will be provided by EEI's subconsultants:

Hey & Associates

• Wetland Delineation and Permitting

Geotechnical and CCDD (Rubino Engineering, Inc.)

- Two (2) Soil Borings
- Prepare Geotechnical Report and CCDD Analysis
- Prepare LPC 662/663 Permit

EXCLUSIONS

The above scope of services for the Whispering Meadows Storm Sewer includes the following exclusions:

- Environmental Surveys
- Exploratory Digging
- Construction Engineering Services

The above scope for "Whispering Meadows Storm Sewer" summarizes the work items that will be completed for this contract. Additional work items, including additional meetings beyond the meetings defined in the above scope shall be considered outside the scope of the base contract and will be billed in accordance with the Standard Schedule of Charges.



ATTACHMENT C: ESTIMATE OF LEVEL OF EFFORT AND ASSOCIATED COST PROFESSIONAL ENGINEERING SERVICES

CLIENT	PROJECT NUMBER	
UNITED CITY OF YORKVILLE	YO2462-P	
PROJECT TITLE	DATE	PREPARED BY
WHISPERING MEADOWS STORM SEWER	12/19/24	PGW2/TNP

TASK NO.	TASK DESCRIPTION	ROLE PERSON RATE	PIC BPS \$246	SPM TNP/MGS \$234	SPE 2 PGW2 \$200	PE \$168	SPT 2 JMB \$175	ST CAD \$140	ADMIN \$72	HOURS COS		COST
DESIGN	N ENGINEERING											
1.0	Project Management and Administration		1	2						3	\$	714
1.1	Project Meetings		1	1	1					3	\$	680
1.2	Topographic Survey			3			12			15	\$	2,802
1.3	Utility Coordination			1	8					9	\$	1,834
1.4	Final Plans, Specifications, and Estimates			13	24			16		53	\$	10,082
1.5	Permitting			2	8					10	\$	2,068
1.6	Bidding and Contracting			2	12				4	18	\$	3,156
	lı	nsert Task Subtotal:	2	24	53	-	12	16	4	111	\$	21,336
		PROJECT TOTAL:	2	24	53	-	12	16	4	111		21,336

EEI STAFF

PIC Principal in Charge
SPM Senior Project Manager
SPE 2 Senior Project Engineer II

PE Project Engineer

SPT 2 Senior Project Technician II

ST Senior Technician ADMIN Administrative Assistant

DIRECT EXPENSES	
Printing/Scanning =	\$ 100
Wetlands =	\$ 3,000
Soils =	\$ 2,500
DIRECT EXPENSES =	\$ 5,600

LABOR SUMMARY	
EEI Labor Expenses =	\$ 21,336
TOTAL LABOR EXPENSES	\$ 21.336

TOTAL COSTS \$ 26,936



ATTACHMENT D: ESTIMATED SCHEDULE CLIENT PROJECT NUMBER UNITED CITY OF YORKVILLE YO2462 PROJECT TITLE DATE PREPARED BY PGW2/TNP WHISPERING MEADOWS STORM SEWER 12/19/24 **TASK** TASK DESCRIPTION 2025 NO. FEB | MAR | APRIL | MAY | JUNE | JULY | AUG | SEPT | OCT | NOV | DEC DESIGN ENGINEERING Project Management and Administration Project Meetings Topographic Survey 1.2 **Utility Coordination** Final Plans, Specifications and Estimates 1.4 Permitting



Bidding and Contracting



Engineering Enterprises, Inc.

STANDARD SCHEDULE OF CHARGES ~ JANUARY 1, 2024



EMPLOYEE DESIGNATION	CLASSIFICATION	HOURLY RATE
Senior Principal	E-4	\$246.00
Principal	E-3	\$241.00
Senior Project Manager	E-2	\$234.00
Project Manager	E-1	\$210.00
Senior Project Engineer/Surveyor II	P-6	\$200.00
Senior Project Engineer/Surveyor I	P-5	\$186.00
Project Engineer/Surveyor	P-4	\$168.00
Senior Engineer/Surveyor	P-3	\$155.00
Engineer/Surveyor	P-2	\$140.00
Associate Engineer/Surveyor	P-1	\$127.00
Senior Project Technician II	T-6	\$175.00
Senior Project Technician I	T-5	\$164.00
Project Technician	T-4	\$153.00
Senior Technician	T-3	\$140.00
Technician	T-2	\$127.00
Associate Technician	T-1	\$111.00
GIS Technician II	G-2	\$125.00
GIS Technician I	G-1	\$114.00
Engineering/Land Surveying Intern	I-1	\$ 82.00
Executive Administrative Assistant	A-4	\$ 77.00
Administrative Assistant	A-3	\$ 72.00

VEHICLES. REPROGRAPHICS, DIRECT COSTS, DRONE AND EXPERT TESTIMONY

Vehicle for Construction Observation \$ 20.00

In-House Scanning and Reproduction \$0.25/Sq. Ft. (Black & White)

\$1.00/Sq. Ft. (Color)

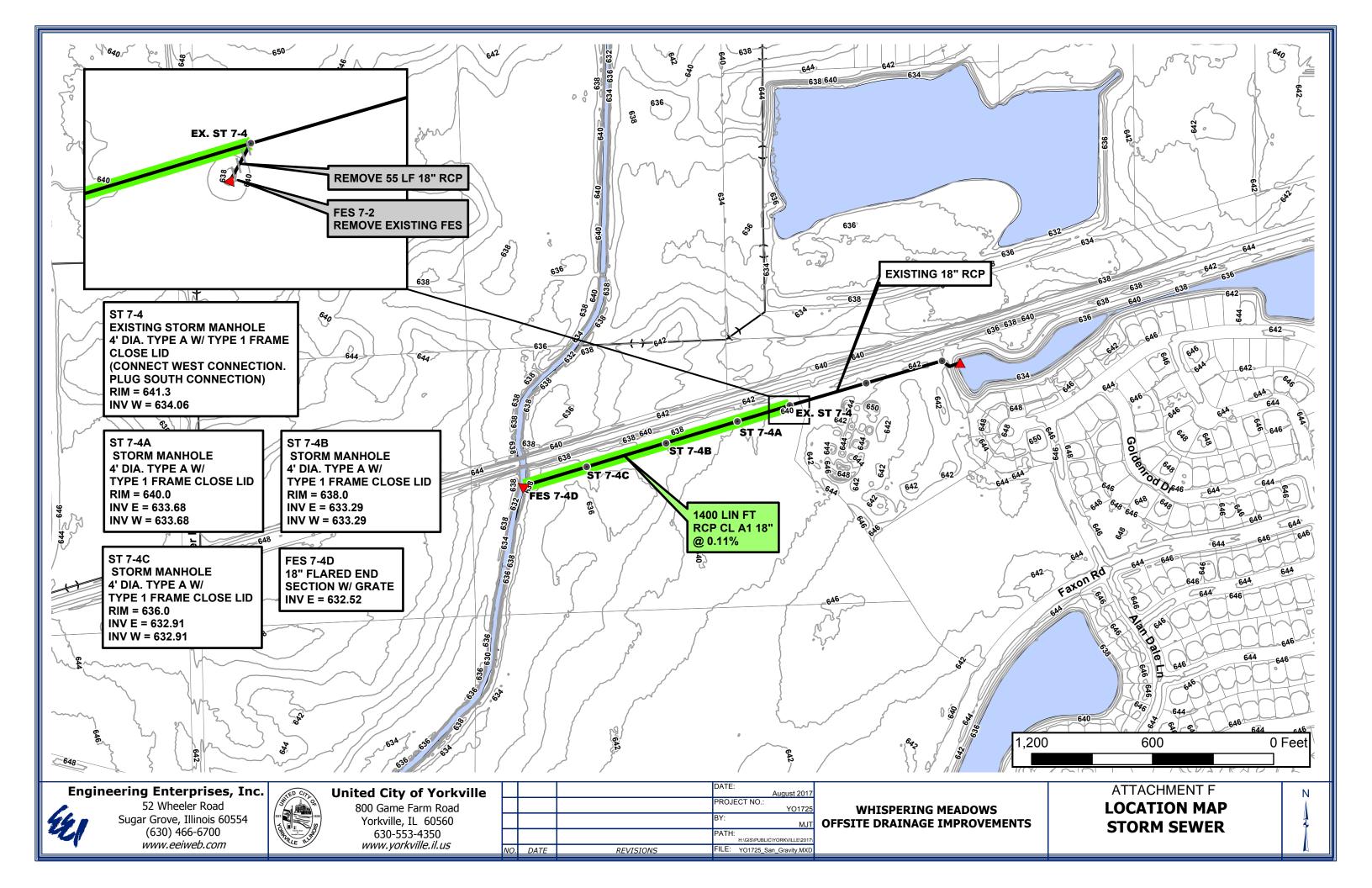
Reimbursable Expenses (Direct Costs)

Cost

Services by Others (Direct Costs)

Cost + 10%

Unmanned Aircraft System / Unmanned Aerial Vehicle / Drone \$ 225.00 Expert Testimony \$ 275.00





Reviewed By:	
Legal	
Finance	
Engineer	
City Administrator	
Community Development	
Purchasing	
Police	
Public Works	
Parks and Recreation	

Agenda Item Number

Planning and Zoning Commission #1

Tracking Number

PZC 2024-30 & EDC 2025-07

Agenda Item Summary Memo

Title: Kendall C	County Petition 24-30 – 1.5-Mile	Review (South of 9949 and 10021 Ament Rd)
Meeting and Da	city Council – January 28, 2	2025
Synopsis: Pleas	se see the attached memo.	
Council Action	Previously Taken:	
Date of Action:	PZC – 1/8/25 Action Take	n: Moved forward to City Council agenda.
Item Number:	PZC 2024-30 & EDC 2025-07	
Type of Vote Ro	equired: Majority	
Council Action	Requested: Approval	
Submitted by:	Sara Mendez	Community Development
_	Name	Department
	Agenda Ite	m Notes:
Nicholas S. Bell	one on Behalf of Ament Road Sol	lar 1, LLC (Tenant) and Janet M. Dhuse on
Behalf of the Jar	net Dhuse Declaration of Family T	Trust Dated March 1, 2013 (Owner)



Memorandum

To: City Council

From: Sara Mendez, Planner I

Krysti Barksdale-Noble, Community Development Director

CC: Bart Olson, City Administrator

Date: January 13, 2025

Subject: PZC 2024-30 – Nicholas S. Bellone on Behalf of Ament Road Solar 1,

LLC (Tenant) and Janet M. Dhuse on Behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner)

1.5 Mile Review

SUMMARY:

Staff has reviewed a request from Kendall County Planning and Zoning Department along with the subsequent documents attached. This property is located within one and a half miles of the planning boundary for Yorkville, allowing the City the opportunity to review and provide comments to Kendall

County. The petitioner, Nicholas S. Bellone on behalf of Ament Road Solar 1. LLC (Tenant) and Janet M. Dhuse on behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner) are seeking a special use permit for a commercial solar energy facility and a variance to Section 36-282(17)(a) of the Kendall County Zoning Ordinance allow to commercial solar energy facility on land within 1.5 miles of municipality without an annexation agreement.

The real property is located immediately south of Ament Road and approximately 0.33 miles west of Route 47 in unincorporated Kendall County.



PROPOSED MOTION

In consideration of the proposed mile and one-half review of Kendall County Petition 24-30 by Ament Road Solar 1, LLC, seeking a special use permit for a commercial solar energy system and variance to allow a commercial solar energy system on land within 1.5 miles of a municipality without an annexation agreement consisting of (2) parcels totaling ~93.4 acres, the Planning and Zoning Commission recommends to the City Council to not object to the request.

Action:

Linnane – aye; Vineyard – aye; Crouch – aye; Forristall – aye.

6 ayes; 0 nays

ATTACHMENTS

1. Application with Attachments



Memorandum

To: Planning and Zoning Commission

From: Sara Mendez, Planner I

Krysti Barksdale-Noble, Community Development Director

CC: Bart Olson, City Administrator

Date: January 2, 2024

Subject: PZC 2024-30 – Nicholas S. Bellone on Behalf of Ament Road Solar 1,

LLC (Tenant) and Janet M. Dhuse on Behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner)

1.5 Mile Review

SUMMARY:

Staff has reviewed a request from Kendall County Planning and Zoning Department along with the subsequent documents attached. This property is located within one and a half miles of the planning

boundary for Yorkville, allowing the City the opportunity to review and provide comments to Kendall County. The petitioner, Nicholas S. Bellone on behalf of Ament Road Solar 1, LLC (Tenant) and Janet M. Dhuse on behalf of the Janet Dhuse Declaration of Family Trust Dated March 1, 2013 (Owner) are seeking a special use permit for a commercial solar energy facility and a variance to Section 36-282(17)(a) of the Kendall County Zoning Ordinance to allow a commercial solar energy facility on land within 1.5 miles of municipality without an annexation agreement.



The real property is located immediately south of Ament

Road and approximately 0.33 miles west of Route 47 in unincorporated Kendall County.

PROPERTY BACKGROUND:

The property is located south of 9949 and 10021 Ament Road in unincorporated Kendall County and comprised of two (2) parcels totaling ~93.4 acres. The parcel located closest to the left (PIN #05-17-400005) consists of ~35.4 acres. The parcel closest to Route 47 (PIN #05-16-300-006) is larger in area at ~58 acres. Currently owned by Janet Dhuse Family Trust, the site is undeveloped and utilized for agricultural purposes. While the parcel is not immediately adjacent to incorporated Yorkville, it is approximately 0.82 miles (~4,000 feet) south of the Towns at Windett Reserve subdivision.

In August 2024, New Leaf Energy, dba Ament Road Solar 1, LLC, formally requested confirmation from the City Council on whether Yorkville wished to enter a pre-annexation agreement for the proposed solar energy facility on parcels #05-17-400-005 and #05-16-300-006. Although the site is unincorporated and not contiguous to the City of Yorkville, it falls within Yorkville's 1.5-mile planning jurisdiction. As such, New Leaf Energy sought guidance on the City's interest in pursuing a pre-annexation agreement.

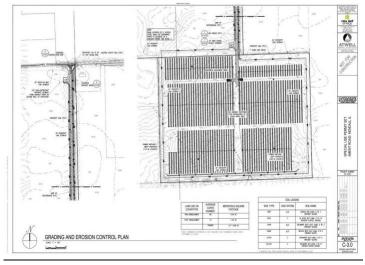
At the August 27, 2024, City Council meeting, the Council formally confirmed that Yorkville <u>would not</u> pursue a pre-annexation agreement for the proposed solar energy facility. Per Section 36-282(17)(a) of the Kendall County Zoning Ordinance: "All commercial solar energy facilities and test solar energy systems located within one and one-half ($1\frac{1}{2}$) miles of a municipality shall either annex to the municipality or obtain an annexation agreement with the municipality requiring the municipality's regulations to flow through the property."

Given Yorkville's decision not to enter a pre-annexation agreement, the applicant, Ament Road Solar 1, LLC, has filed for a variance to Section 36-282(17)(a) with Kendall County. This variance would allow the proposed solar energy facility to proceed without annexation or an annexation agreement.

PROPOSED DEVELOPMENT:

The property is currently zoned A-1 Agricultural District. Per Kendall County's Zoning Ordinance, all development proposed in the district must obtain site plan approval from the County Board. According to the application and site plans provided, the applicant is proposing a 5 MW AC community solar farm on two parcels (PIN #05-17-400-005 and #05-16-300-006) in Kendall County. The project encompasses an approximate 39.34-acre portion of the total 95.3 acres. Per Section 36-282 of Kendall County's Zoning Ordinance, construction and operation of Commercial Solar Energy Facilities are permitted in the Agricultural District by Special Use Permit.

The proposed setback of 1,442 feet from the Ament Road is consistent with the City of Yorkville's required setback of 1,000 feet from the nearest roadway network and Kendall County's required 50 feet from the nearest edge of public road rights-of-way.



YORKVILLE COMPREHENSIVE PLAN:

Yorkville's 2016 Comprehensive Plan designation for this property is Agricultural Zone (AZ). The agricultural zone future land use designation is primarily intended for lands expected to remain for agricultural uses, both general farming and restricted forms such as pastures, gardening, kennel, riding stables, nurseries, and greenhouses. The proposed commercial solar energy facility, along with the A-1 zoning in Kendall County is consistent with Yorkville's Comprehensive Plan.

STAFF COMMENTS

Staff is seeking input from the Planning and Zoning Commission as the one-and-a-half-mile review allows for the City to make comments and requests to the petitioner and County prior to their public meetings. This review will also be brought to City Council at the January 14, 2025 meeting. This item was delivered to the City on October 25, 2024.

ATTACHMENTS

1. Application with Attachments



DEPARTMENT OF PLANNING, BUILDING & ZONING

111 West Fox Street • Room 203 Yorkville, IL • 60560

(630) 553-4141

Fax (630) 553-4179

Petition 24-27

Steve W. Jeffers on Behalf of Revolution Investments, LLC Plat of Vacation of a Drainage and Utility Easement in Whitetail Ridge Subdivision

INTRODUCTION

A ten foot (10') drainage and utility easement presently exists between Lots 110 and 111 in Whitetail Ridge Subdivision. The Petitioner own the subject lots and would like to construct a home in the center of the combined lots.

SITE INFORMATION

PETITIONER Steve W. Jeffers on Behalf of Revolution Investments, LLC

ADDRESS 5682 and 5834 Championship Court, Yorkville (Lots 110 and 111 of Whitetail Ridge)

LOCATION Approximately 0.10 Miles Northwest of the Intersection of Clubhouse Drive and Championship Court on the South Side of Championship Court



TOWNSHIP Na-Au-Say Township

PARCEL #s 06-07-374-004 and 06-07-374-005

LOT SIZE 1.5 +/- Acres

EXISTING LAND Residential/Vacant

USE

ZONING RPD-2

LRMP

Current Land Use	Vacant One-Family Residential
Future Land Use	Rural Residential (Max 0.65 Du/Acre)
Roads	Championship Court is a Township Road classified as a Local Road
Trails	None
Floodplain/ Wetlands	None

REQUESTED ACTION

Vacate a Ten Foot (10') Drainage and Utility Easement Between Lots 110 and 111

APPLICABLE REGULATIONS

Section 7.06 (Subdivision Control Ordinance)

SURROUNDING LAND USE

Location	Adjacent Land Use	Adjacent Zoning	Land Resource Management Plan	Zoning within ½ Mile
North	Single-Family Residential	RPD-2	Rural Residential (Max 0.65 DU/Acre)	N/A
South	Open Space (Golf Course)	RPD-2 SU	Open Space (Golf Course)	N/A
East	Open Space (Golf Course)	RPD-2 SU	Open Space (Golf Course)	N/A
West	Single-Family Residential	RPD-2	Rural Residential	N/A

The RPD-2 special use is for a golf course.

ACTION SUMMARY

NA-AU-SAY TOWNSHIP

Na-Au-Say Township was emailed information on August 23, 2024.

UNITED CITY OF YORKVILLE

The United City of Yorkville was emailed information on August 23, 2024.

BRISTOL-KENDALL FIRE PROTECTION DISTRICT

The Bristol-Kendall Fire Protection District was emailed information on August 23, 2024.

GENERAL

The application materials are included as Attachment 1. The plat of vacation is included as Attachment 2. The topographic information is included as Attachment 3.

On August 22, 2024, Greg Chismark sent an email stating that he had no objections to the vacation from a drainage perspective. This email is included as Attachment 4.

On August 22, 2024, a representative from the Whitetail Ridge Homeowners' Association submitted an email stating the HOA had no objections to the requested easement vacation. This email is included as Attachment 5.

As of the date of this memo, the Petitioner was still obtaining approvals from the utilities.

RECOMMENDATION

Staff recommends approval of the requested easement vacation provided that Lots 110 and 111 remain under the same ownership.

ATTACHMENTS

- 1. Application Materials
- 2. Plat of Vacation
- 3. Topographic Information
- 4. August 22, 2024, Email from WBK Engineering
- 5. August 22, 2024, Email from Homeowners' Association



DEPARTMENT OF PLANNING, BUILDING & ZONING

111 West Fox Street • Yorkville, IL • 60560 Fax (630) 553-4179 (630) 553-4141

APPLICATION

PROJECT NAME	Revolution Investments, LLC	FILE #:	

CURRENT LANDOWNER/NAME Revolution Investments, LL			
SITE INFORMATION	SITE ADDRESS OR LOCAT	ION	ASSESSOR'S ID NUMBER (PIN)
ACRES .0695 acres	Lots 110 and 111 Champ 60560	pionship Court, Yorkville, IL	06-07-374-004 06-07-374-005
EXISTING LAND USE	CURRENT ZONING	LAND CLASSIFICATION	ON ON LRMP
acant residential lots	PUD	PUD	
REQUESTED ACTION (Check A	ll That Apply):		
SPECIAL USE	MAP AMENDMENT	(Rezone to)V	ARIANCE
ADMINISTRATIVE VARIAN	CE A-1 CONDITIONAL U	ISE for: SI	TE PLAN REVIEW
TEXT AMENDMENT PRELIMINARY PLAT	RPD (Concept; FINAL PLAT	_ Preliminary; Final) AD _X_ OTH	MINISTRATIVE APPEAL ER PLAT (Vacation, Dedication, etc.)
	AL USEMajor;Minor)		
PRIMARY CONTACT Attorney Daniel J. Kramer	PRIMARY CONTACT N	VIAILING ADDRESS	PRIMARY CONTACT EMAIL
PRIMARY CONTACT PHONE #	PRIMARY CONTACT I	FAX# PRIM	MARY CONTACT OTHER #(Cell, etc.)
² ENGINEER CONTACT	ENGINEER MAILING A	ADDRESS	ENGINEER EMAIL
Eric at Todd Surveying			
ENGINEER PHONE #	ENGINEER FAX #		ENGINEER OTHER # (Cell, etc.)
	SIGNING THIS FORM TH	AT THE PROPERTY IN QU	ESTION MAY BE VISITED BY
I UNDERSTAND THAT BY	D/ COMMISSION MEMBER	S IMRUUGHUUI INE FEI	
COUNTY STAFF & BOAR THE PRIMARY CONTACT THE COUNTY.	D/ COMMISSION MEMBER LISTED ABOVE WILL BE S	SUBJECT TO ALL CORRES	PONDANCE ISSUED BY
COUNTY STAFF & BOAR THE PRIMARY CONTACT THE COUNTY. I CERTIFY THAT THE INF BEST OF MY KNOWLEDG ABOVE SIGNATURES. TO ALL DEBTS OWED TO KI	D/ COMMISSION MEMBER LISTED ABOVE WILL BE S ORMATION AND EXHIBITS SE AND THAT I AM TO FILE HE APPLICANT ATTESTS ENDALL COUNTY AS OF T	SUBJECT TO ALL CORRES SUBMITTED ARE TRUE A THIS APPLICATION AND A THAT THEY ARE FREE OF	ND CORRECT TO THE ACT ON BEHALF OF THE DEBT OR CURRENT ON ATION.
COUNTY STAFF & BOAR THE PRIMARY CONTACT THE COUNTY. I CERTIFY THAT THE INF BEST OF MY KNOWLEDG ABOVE SIGNATURES. TO	D/ COMMISSION MEMBER LISTED ABOVE WILL BE S ORMATION AND EXHIBITS SE AND THAT I AM TO FILE HE APPLICANT ATTESTS ENDALL COUNTY AS OF T	SUBJECT TO ALL CORRES S SUBMITTED ARE TRUE A THIS APPLICATION AND A THAT THEY ARE FREE OF	ND CORRECT TO THE ACT ON BEHALF OF THE DEBT OR CURRENT ON

¹Primary Contact will receive all correspondence from County ²Engineering Contact will receive all correspondence from the County's Engineering Consultants

KENDALL COUNTY DISCLOSURE OF BENEFICIARIES FORM

1	Applicant Revolution Inves	tments, LLC			
	Address				
	City		State IL	Zip 60541	
2.	Nature of Benefit Sought Lar	ndowner			
3.	Nature of Applicant: (Please of Natural Person (a) Corporation (b) Land Trust/Trustee (d) Trust/Trustee (d) Partnership (e) Joint Venture (f)	;)	Company	A	
4.	If applicant is an entity other tapplicant: A Limited Liability Compan	nan described in Se	ction 3, briefly state	e the nature and characterist	ics of the
5.	If your answer to Section 3 you person or entity who is a 5% strust, a joint venture in the case profits and losses or right to convented to the convented to the second section of the second section of the second section of the second section of the section of	narcholder in case o e of a joint venture.	of a corporation, a h	eneficiary in the case of a tr	riet or land
	Stephen Jeffers			50%	
	Angela Jeffers			50%	
6.	Name, address, and capacity of Dnaiel J. Kramer, Attorney for		disclosure on beha	If fi the applicant:	
making read the	this disclosure on behalf of the a above and foregoing Disclosure ostance and fact.	pplicant, that I am o	being first duly sw	orn under oath that I am the nake the disclosure, that I ha ts contained therein are true	27/0
Subscrib	ped and sworn to before me this	21st day of 1	ugust	, A.D. 202Y	
(seal)					
	"OFFICIAL COLLEEN THAN NOTARY PUBLIC, STATE COMMISSION NO.	NSON OF ILLINOIS	-	Notary Public	



Business Entity Search

Entity Information

Entity

REVOLUTION INVESTMENTS LLC

Name

Principal

8942 WILCOX CT

Address

NEWARK,IL 605419119

File

11613802

Status

ACTIVE on 02-07-2024

Number

Entity Type

LLC

Type of

Jurisdiction

LLC

Domestic

Org.

Date/Admission03-23-2022

Date

Duration

PERPETUAL

Annual

Report

Agent

02-07-2024

Annual Report

2024

IL

Year

Filing Date

ANGIE JEFFERS

Information

Agent

Change

Date

03-23-2022

Services and More Information

Attachment 1, Page 4

Choose a tab below to view services available to this business and more information about this business.



Showing 1 to 2 of 2 entries

Previous 1 Next



ALTA COMMITMENT FOR TITLE INSURANCE issued by Fidelity National Title Insurance Company

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Fidelity National Title Insurance Company (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part |—Requirements have not been met within 6 months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Law Offices of Daniel J. Kramer

By | Authorized Signatory

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.





Transaction Identification Data, for which the Company assumes no liability as set forth in Commitment Condition 5.e.:

ORIGINATING OFFICE: FOR SETTLEMENT INQUIRIES, CONTACT: Wheatland Title Company Wheatland Title Company 105 W. Veterans Parkway 105 W. Veteran's Parkway Yorkville, IL 60560 Yorkville, IL 60560 Main Phone: (630) 892-2323 Main Phone: 630-892-2323 x 9989 Email: closings@wheatlandtitle.com Email: closings@wheatlandtitle.com

Name & Address of Title Insurance Agent:

Law Offices of Daniel J. Kramer

Issuing Office File Number: WTC-HC-2024KL-11233

Property Address: 5834 & 5862 Championship Court, Yorkville, IL 60560

SCHEDULE A

- 1. Commitment Date: April 25, 2024
- 2. Policy to be issued:
 - 2021 ALTA® Owner's Policy

Proposed Insured: Revolution Investments, LLC Proposed Amount of Insurance: \$110,000.00 The estate or interest to be insured: FEE SIMPLE

2021 ALTA® Lender's Policy b.

Proposed Insured:

Proposed Amount of Insurance:

The estate or interest to be insured: FEE SIMPLE

3. The estate or interest in the Land at the Commitment Date is:

FEE SIMPLE

The Title is, at the Commitment Date, vested in:

Whitetail Developments, LLC

The Land is described as follows: 5.

See Exhibit A Attached

Fidelity National Title Insurance Company

f Daniel I Vromer

Authorized Signatory

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I— Requirements; and Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic

Registered Agent: Law Offices of Daniel J. Kramer

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Attachment 1, Page 7



5/1/2024 12:01PM Commitment for Title Insurance [2021 v. 01.00 (07-01-2021)]

Exhibit A

LOTS 110 AND 111 OF WHITETAIL RIDGE SUBDIVISION OF PART OF SECTION 12, TOWNSHIP 36 NORTH, RANGE 7, PART OF SECTION 7, TOWNSHIP 36 NORTH, RANGE 8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION IN KENDALL AND NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS.

END OF SCHEDULE A

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.





SCHEDULE B, PART I—Requirements

All of the following Requirements must be met:

- The Proposed Insured must notify the Company in writing of the name of any party not referred to in this
 Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may
 then make additional Requirements or Exceptions.
- Pay the agreed amount for the estate or interest to be insured.
- 3. Pay the premiums, fees, and charges for the Policy to the Company.
- Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
- Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the company is not able to close or insure any transaction involving Land that is associated with these activities.
- 6. The "Good Funds" section of the Title Insurance Act (215 ILCS 155/26) is effective January 1, 2010. This Act places limitations upon our ability to accept certain types of deposits into escrow. Please contact your local Title office regarding the application of this new law to your transaction.
- 7. Effective June 1, 2009, pursuant to Public Act 95-988, satisfactory evidence of identification must be presented for the notarization of any and all documents notarized by an Illinois notary public. Satisfactory identification documents are documents that are valid at the time of the notarial act; are issued by a state or federal government agency; bear the photographic image of the individual's face; and bear the individual's signature.
- 8. The Proposed Policy Amount(s) must be increased to the full value of the estate or interest being insured, and any additional premium must be paid at that time. An Owner's Policy should reflect the purchase price or full value of the Land. A Loan Policy should reflect the loan amount or value of the property as collateral. Proposed Policy Amount(s) will be revised and premiums charged consistent therewith when the final amounts are approved.
- 9. We should be furnished a properly executed ALTA statement and, unless the land insured is a condominium unit, a survey if available. Matters disclosed by the above documentation will be shown specifically.
- Satisfy requirements for final utilities and any transfer stamps pursuant to the requirements set forth by municipality for which the subject property lies.
- 11. The company should be provided a statement from the borrower(s) relative to any mortgage shown on Schedule B disclosing whether the borrower(s) have entered into any forbearance or loan modification agreement with the lender relative to delayed or past postponed payments or other restructuring of the debt secured by the mortgage.
- 12. Any recorded lien shown in Schedule B-2 will appear as an exception in the policy unless a sufficient release of said lien is recorded in the county where the subject premises is located.

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Registered Agent: Law Offices of Daniel J. Kramer



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5/1/2024 12:01PM Commitment for Title Insurance [2021 v. 01.00 (07-01-2021)]

- 13. We should be furnished (A) a certification from the Illinois Secretary of State that Whitetail Developments, LLC has properly filed its articles of organization; (B) a copy of the articles of organization together with any amendments thereto; (C) a copy of the operating agreement together with any amendments thereto; (D) a list of incumbent managers or a roster of current members if managers have not been appointed; and (E) a certification that no event of dissolution has occurred.
 - In the event of a sale of all or substantially all of the assets of said limited liability company, we should be furnished a copy of the resolution adopted by the members of said limited liability company authorizing the sale and the execution and delivery of the anticipated deed. This commitment is subject to such additional requirements and/or exceptions as may be deemed necessary upon our review of these exhibits.
- 14. Upon any conveyance or mortgage of the land, a statement from the Secretary of the Board of Managers that there are no unpaid assessment liens arising by reason of the nonpayment of assessments should be furnished.

END OF SCHEDULE B, Part I

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SCHEDULE B, PART II—Exceptions

Some historical land records contain Discriminatory Covenants that are illegal and unenforceable by law. This Commitment and the Policy treat any Discriminatory Covenant in a document referenced in Schedule B as if each Discriminatory Covenant is redacted, repudiated, removed, and not republished or recirculated. Only the remaining provisions of the document will be excepted from coverage.

The Policy will not insure against loss or damage resulting from the terms and conditions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

- 1. Rights or claims of parties in possession not shown by the Public Records.
- 2. The effect on the Title of an encumbrance, violation, variation, adverse circumstance, boundary line overlap, or encroachment (including an encroachment of an improvement across the boundary lines of the Land), but only if the encumbrance, violation, variation, adverse circumstance, boundary line overlap, or encroachment would have been disclosed by an accurate and complete land title survey of the Land.
- 3. Easements, or claims of easements, not shown by the Public Records.
- Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
- 5. Taxes or special assessments which are not shown as existing liens by the Public Records.
- Loss or damage by reason of there being recorded in the Public Records, any deeds, mortgages, lis pendens, liens or other title encumbrances subsequent to the Commitment date and prior to the effective date of the final Policy.

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SCHEDULE B, PART II, CONTINUED

Taxes and assessments for the year 2023 and all subsequent years are a lien but not yet due and payable.

8 Tax Year: 2022

Tax ID #: 06-07-374-005

Taxes Assessed in the Name of: Whitetail Development LLC

18 Stonehill Rd Oswego, IL 60543 Total Annual Tax: \$1.26

First Installment Amount: \$0.63 First Installment Status: Paid Second Installment Amount: \$0.63 Second Installment Status: Paid

Note: Property is subject to a Special Assessment.

Tax Year: 2022

Tax ID #: 06-07-374-004

Taxes Assessed in the Name of: Whitetail Development LLC

18 Stonehill Rd Oswego, IL 60543 Total Annual Tax: \$1.26 First Installment Amount: \$0.63

First Installment Status: Paid Second Installment Amount: \$0.63 Second Installment Status: Paid

Note: Property is subject to a Special Assessment.

- 9. Intentionally Left Blank
- 10. Building setback line of 30 feet from the northwesterly lot line, 10 feet from the northeasterly and southwesterly lot line, and 50 feet from the southeasterly lot line as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985.
- 11. Easement for public utilities and drainage over and across the northwesterly 15 feet, northeasterly and southwesterly 5 feet, and southeasterly 10 feet of subject property as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985.
- 12. Easement for golf course over and across the southeasterly 40 feet of subject property as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985.

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- 13. Building Lines and Easements as shown on the Plat of Subdivision recorded June 9, 2005 as Document No. 200500015985; Document No. 200500015985.
- Covenants, conditions, restrictions and easements contained in Declaration of Protective Covenants for Whitetail Ridge Homeowners Association, recorded on June 9, 2005 as Document No. 200500015992; Document No. 200500015992.

Note: See document copy for particulars.

 Amendment to Declaration of Protective Covenants for Whitetail Ridge Subdivision Homeowners' Association recorded September 16, 2020 as Document Number 202000017966

Note: See document copy for particulars.

- Terms and conditions contained in By-Laws for Whitetail Ridge Subdivision Homeowners' Association recorded July 1, 2011 as Document No. 201100010720 in the Kendall County Recorder's Office.
- 17. Terms and conditions contained in Consent to Creation of Special Service Tax Area dated March 16, 2005 and recorded June 9, 2005 as Document No. 200500015986 made by Whitetail Development, LLC recorded in the Kendall County Recorder's Office.
- 18. Terms and conditions contained in an Ordinance establishing a back-up Special Tax Service Area Number 2005-32 for Whitetail Ridge Subdivision recorded June 9, 2005 as Document No. 200500015987 recorded in the Kendall County Recorder's Office.
- Terms and conditions contained in an Ordinance Establishing a back-up Special Tax Service Area Number 2005-33 recorded June 9, 2005 as Document No. 200500015988 made by the County of Kendall, recorded in the Kendall County Recorder's Office.
- 20. Terms and conditions contained in an Ordinance Establishing Back Up Special Tax Service Area 2005-30 recorded June 9, 2005 in Document No. 200500015990 made by County of Kendall, recorded in the Kendall County Recorder's Office.
- 21. Terms and conditions contained in an Ordinance enabling creation of Special Service Area 2005-31 recorded June 9, 2005 in Document No. 200500015991 made by County of Kendall, recorded in the Kendall County Recorder's Office.
- 22. Terms and conditions contained in a Grant of Conservation Easement dated May 16, 2005 and recorded June 9, 2005 as Document No. 200500015993 made by Whitetail Development, LLC to Whitetail Ridge Homeowners Association LLC recorded in the Kendall County Recorder's Office.

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- 23. Terms, conditions and provisions contained in Grant of Conservation Easement dated May 16, 2005 and recorded June 9, 2005 in Document No. 200500015994 made by Whitetail Development, LLC to Whitetail Ridge Golf Club, LLC recorded in the Kendall County Recorder's Office.
- 24. Rights of the public, the State of Illinois, the County, the Township and the Municipality in and to that part of the land, if any, taken or used for road purposes.
- 25. Rights of way for drainage ditches, tiles, feeders and laterals, if any.

END OF SCHEDULE B, Part II

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COMMITMENT CONDITIONS

DEFINITIONS

- a. "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.
- "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.
- c. "Land": The land described in Item 5 of Schedule A and improvements located on that land that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- d. "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.
- e. "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- f. "Proposed Amount of Insurance": Each dollar amount specified in Schedule A as the Proposed Amount of Insurance of each Policy to be issued pursuant to this Commitment.
- g. "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- h. "Public Records": The recording or filing system established under State statutes in effect at the Commitment Date under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.
- i. "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.
- i. "Title": The estate or interest in the Land identified in Item 3 of Schedule A.
- 2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.
- 3. The Company's liability and obligation is limited by and this Commitment is not valid without:
 - a. the Notice;
 - b. the Commitment to Issue Policy;
 - the Commitment Conditions;
 - d. Schedule A:
 - e. Schedule B, Part I-Requirements; and
 - f. Schedule B. Part II-Exceptions; and
 - a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company is not liable for any other amendment to this Commitment.

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LIMITATIONS OF LIABILITY

- a. The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - comply with the Schedule B, Part I—Requirements;
 - ii. eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or
 - acquire the Title or create the Mortgage covered by this Commitment.
- b. The Company is not liable under Commitment Condition 5.a. if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- c. The Company is only liable under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- d. The Company's liability does not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Condition 5.a. or the Proposed Amount of Insurance.
- The Company is not liable for the content of the Transaction Identification Data, if any.
- f. The Company is not obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- g. The Company's liability is further limited by the terms and provisions of the Policy to be issued to the Proposed Insured.
- LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT; CHOICE OF LAW AND CHOICE OF FORUM
 - Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
 - b. Any claim must be based in contract under the State law of the State where the Land is located and is restricted to the terms and provisions of this Commitment. Any litigation or other proceeding brought by the Proposed Insured against the Company must be filed only in a State or federal court having jurisdiction.
 - c. This Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
 - d. The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
 - Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
 - f. When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.
- IF THIS COMMITMENT IS ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for closing, settlement, escrow, or any other purpose.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

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9. CLAIMS PROCEDURES

This Commitment incorporates by reference all Conditions for making a claim in the Policy to be issued to the Proposed Insured. Commitment Condition 9 does not modify the limitations of liability in Commitment Conditions 5 and 6.

CLASS ACTION

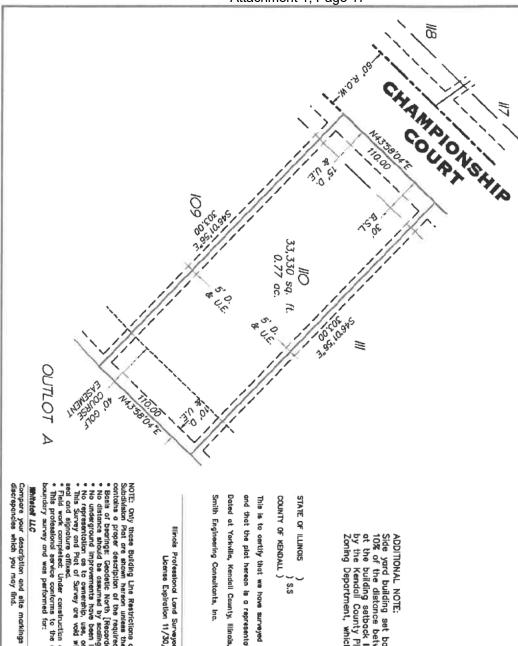
ALL CLAIMS AND DISPUTES ARISING OUT OF OR RELATING TO THIS COMMITMENT, INCLUDING ANY SERVICE OR OTHER MATTER IN CONNECTION WITH ISSUING THIS COMMITMENT, ANY BREACH OF A COMMITMENT PROVISION, OR ANY OTHER CLAIM OR DISPUTE ARISING OUT OF OR RELATING TO THE TRANSACTION GIVING RISE TO THIS COMMITMENT, MUST BE BROUGHT IN AN INDIVIDUAL CAPACITY. NO PARTY MAY SERVE AS PLAINTIFF, CLASS MEMBER, OR PARTICIPANT IN ANY CLASS OR REPRESENTATIVE PROCEEDING. ANY POLICY ISSUED PURSUANT TO THIS COMMITMENT WILL CONTAIN A CLASS ACTION CONDITION.

11. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Amount of Insurance is \$2,000,000 or less may be arbitrated at the election of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

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PLATEY

ACCORDING TO THE PLAT THEREOF RECORDED JUNE 8, 2005 AS DOCUMENT NUMBER 20050015985, BEING A SUBDINISON OF PART OF SECTION 12-36-7, PART OF SECTION 7-36-8, AND PART OF THE FORMER MAIST. HEE-SHAW RESERVATION, IN KENDALL & NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS

ADDITIONAL NOTE:
Side yard building set back lines are 10° or 10% of the distance between side lot lines at the building setback line, as determined by the Kendall County Planning, Building and Zoning Department, whichever is greater.

COUNTY OF KENDALL) STATE OF ILLINOIS

and that the plat hereon is a representation of the said survey. This is to certify that we have surveyed the premises above described,

Dated at Yorkville, Kendall County, Illinois, July 14, A.D. 2005.

flinois Professional Land Surveyor No. 3359 License Expiration 11/30/06

NOTE: Only those Building Line Restrictions or Easements shown on a Recorded Subdivision Plat are shown herson unless the description ordered to be surveyed contains a proper description of the required building lines or easements.

Basis of bearings: Geodetic North [Recorded Whitetail Ridge Plat of Subdivision]
No distance should be assumed by scaling.

No underground improvements have been located unless shown and neted. No representation as to awnership, use, or passession should be hereon implied. This Survey and Plot of Survey are void shitput original embossed or red colored.

sed and signoture offixed.

* Field work completed Under construction at time of survey.

* This professional service conforms to the current Illinois minimum standards for a boundary survey and was performed for:

with this plot and AT ONCE report any

DE = PARKE CHANAGE EASMENT
LE = LANGSUM CEAND CHASTRU

ME = HANGSUM CEAND CHASTRU

SE = SHEEL UTELTY EASSMENT

LES = SHEEL UTELTY EASSMENT

R.S.L. = BRALDING SETBACK LIME WESCLAR EASTERN
WESCLAR EASTERN
WASCLAR EASTERN
WATENWASE AND CONSTRUCTION
THEN!

NOTE: 9/8" STEEL REBAR TO BE SET AT ALL LOT COMMETS VALESS OTHERWISE NOTED PER RECORDED PLAT OF SUBENHISON.

LOT 110 OF WHITETAIL RIDGE SUBDIVISION, KENDALL COUNTY, ILLINOIS

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← BACK

revolution investment	s			Results: 8
Document No Docume	eni Recorded Date	Party1	Party2	Legals
P202400006 PTAX	6/18/2024 1	WHITETAIL	REVOLUTIO	Sub: WHITET
2024000068 WARRA	NTY 6/18/2024 1	WHITETAIL	REVOLUTIO	Sub: WHITET
20240006856 6/18/2024 12:37:41 PM WARRANTY DEED Purchase more information and the image for this document	Parties Party WHITETAIL DEVELOPMENT LIG Party 2: REVOLUTION INVESTMENTS LLG	Legals WHITETAIL RIDGE L. 11 WHITETAIL RIDGE L: 11		onal
P202400002PTAX	3/7/2024 12:	.WIENCKOW	REVOLUTIO	Sub: WHITET

2024000024... WARRANTY ... 3/7/2024 12:...WIENCKOW... REVOLUTIO... Sub: WHITET... 2023000015... WARRANTY ... 2/14/2023 8:...CAK INVEST... REVOLUTIO... Sub: 181 WO... 2022000085... ASSIGNMEN... 5/16/2022 1... REVOLUTIO... BUSEY BANK Sub: 181 WO... 2022000085... MORTGAGE 5/16/2022 1... REVOLUTIO... BUSEY BANK 2022000085... WARRANTY ... 5/16/2022 1... CAK INVEST... REVOLUTIO...

Contact FAQ

PLAT OF EASEMENT RELEASE PART OF LOTS 110 AND 111 WHITETAIL RIDGE KENDALL & NA-AU-SAY TOWNSHIPS KENDALL COUNTY ILLINOIS



Scale: 1" = 30"

PIN: 06-07-374-004 06-07-374-005

PROPERTY LOCATION:

5834 & 5862 CHAMPIONSHIP COURT YORKVILLE, ILLINOIS 60560

SURVEYOR'S NOTE:

* 10% OF LOT WIDTH

Cronted of the Court of the Cou

OWNER'S CERTIFICATE

COMMONWEALTH EDISON COMPANY
THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,
THIS, A.D. 20
BY:
BY:
TITLE:
AT&T
THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,
THIS, A.D. 20
BY:
SIGNATURE
PRINT NAME
TITLE:
COMCAST
THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,
THIS, A.D. 20
BY:
SIGNATURE BY:
PRINT NAME
TITLE:
NICOR
THE RELEASE OF THE EASEMENTS SHOWN HEREON ARE APPROVED AND ACCEPTED,
THIS, A.D. 20
BY:
SIGNATURE BY:
PRINT NAME
TITI F.

**SURVEYOR'S NOTE:
SIDEYARD SETBACK LINES ARE 10' OR 10% OF
WIDTH PER DETAIL ON WHITETAIL RIDGE
SUBDIVISION PLAT.

LEGAL DESCRIPTION OF EASEMENT TO BE RELEASED:

THE SOUTHWESTERLY 5.0 FEET OF LOT 111 (EXCEPT THE SOUTHEASTERLY 10.0 FEET AND THE NORTHWESTERLY 15.0 FEET THEREOF) AND THE NORTHEASTERLY 5.0 FEET OF LOT 110 (EXCEPT THE SOUTHEASTERLY 10.0 FEET AND THE NORTHWESTERLY 15.0 FEET THEREOF) ALL IN WHITETAIL RIDGE SUBDIVISION, BEING A SUBDIVISION OF PART OF SECTION 12, TOWNSHIP 36 NORTH, RANGE 7, PART OF SECTION 7, TOWNSHIP 36, RANGE 8, AND PART OF THE FORMER WAISH—KEE—SHAW RESERVATION, IN KENDALL AND NA—AU—SAY TOWNSHIPS, ACCORDING TO THE PLAT THEREOF RECORDED JUNE 9, 2005 AS

DOCUMENT NO. 200500015985, IN KENDALL COUNTY, ILLINOIS.

) SS

SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS)

COUNTY OF KENDALL)

WE, CORNERSTONE SURVEYING, P.C., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYOR CORPORATION NO. 184.006522, DO HEREBY STATE THAT WE HAVE PREPARED THIS PLAT OF EASEMENT RELEASE FOR THE PROPERTY DESCRIBED HEREON.

DATED AT YORKVILLE, ILLINOIS ON JULY 31, 2024.

ERIC POKORNY P.L.S. NO.

STATE OF ILLINOIS)
COUNTY OF KENDALL)
THIS IS TO CERTIFY THAT WE, AND ARE THE OWNERS OF THE PROPERTY DESCRIBED HEREON, AND DO WILLINGLY ACCEPT AND APPROVE THE EASEMENT RELEASE DESCRIBED HEREON.
DATED AT, ILLINOIS
THIS, A.D. 20
(OWNER'S NAME)
(OWNER'S NAME)
NOTARY'S CERTIFICATE
STATE OF ILLINOIS)
) SS COUNTY OF KENDALL)
I,, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID, TO HEREBY CERTIFY THAT AND, WHO ARE PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING OWNER'S CERTIFICATE, APPEARED BEFORE ME THIS DAY, IN PERSON, AND ACKNOWLEDGED THE EXECUTION OF THE ANNEXED PLAT AND ACCOMPANYING INSTRUMENTS FOR USES AND PURPOSES THEREIN SET FORTH AS THEIR FREE AND VOLUNTARY ACT.
GIVEN UNDER MY HAND AND NOTARIAL SEAL,
THIS, A.D. 20
NOTARY PUBLIC

STATE OF ILLINOIS)

COUNTY OF KENDALL)

APPROVED BY THE COUNTY BOARD OF KENDALL COUNTY, ILLINOIS,

ON THIS ______ DAY OF ______, A.D. 20____.

CHAIRMAN OF COUNTY BOARD

COUNTY CLERK

COUNTY RECORDER'S CERTIFICATE

STATE OF ILLINOIS)

COUNTY OF KENDALL)

THIS INSTRUMENT NO. _____ WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF KENDALL COUNTY, ILLINOIS, AFORESAID,

ON THIS _____ DAY OF ______,

A.D. 20____, AT ______ O'CLOCK ___,M.

KENDALL COUNTY RECORDER

Legend

○=Found 3/4" Dia. Iron Pipe

●=Found 1/2" Dia. Iron Rod

○=Found 5/8" Dia. Iron Rod

(XX.XX')= Record Distance

XX.XX'= Measured Distance

N= North E= East
S= South W= West

R= Radius A= Arc Length

XXX = Fence

= Concrete/Asphalt

Michel C. Ensalaco, P.L.S. Exp. 11/30/2024
Eric C. Pokorny, P.L.S. Exp. 11/30/2024

TODD SURVEYING

Professional Land Surveying Services
"Cornerstone Surveying PC"

759 John Street, Suite D

Yorkville, IL 60560
Phone: 630-892-1309

MY COMMISSION EXPIRES _____.

Client: Revolution Builders

Book #: sheets Drawn By: JG. JJH | Plat #: 7249

Reference:
Field Work Completed: 7/19/2024

Rev. Date Rev. Description

Project Number:

2024-0533 Release

Survey is only valid if original seal is shown in red.

Topographic Exhibit

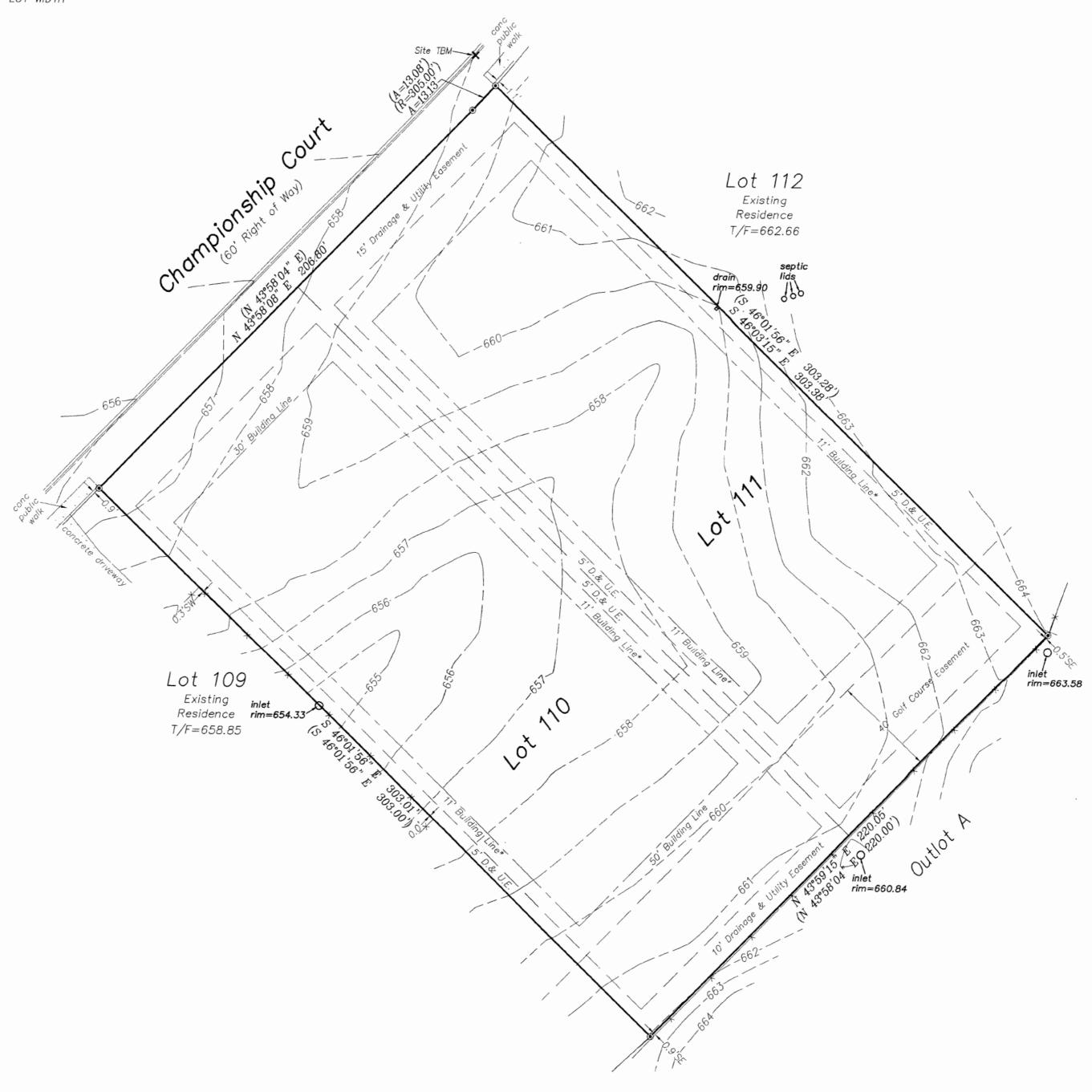
LOTS 110 AND 111 OF WHITETAIL RIDGE SUBDIVISION, A SUBDIVISION OF PART OF SECTION 12, TOWNSHIP 36, RANGE 7, PART OF SECTION 7, TOWNSHIP 36, RANGE 8, AND PART OF THE FORMER WAISH-KEE-SHAW RESERVATION, IN KENDALL AND NA-AU-SAY TOWNSHIPS, KENDALL COUNTY, ILLINOIS.

COMMONLY KNOWN AS: 5862 & 5834 CHAMPIONSHIP COURT, YORKVILLE, ILLINOIS.

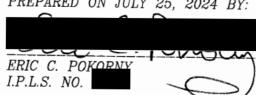
PROPERTY CONTAINS: 1.53 ACRES / 66,667.6 SQUARE FEET, MORE OR LESS

SURVEYOR'S NOTE:

* 10% OF LOT WIDTH



PREPARED ON JULY 25, 2024 BY:





Scale: 1" = 30'●=Found 5/8" Dia. Iron Rod (XX.XX')= Record Distance XX.XX'= Measured Distance N= North E= East S= South W= West R= Radius A= Arc Length -X - X - X = Fence= Concrete/Asphalt D.&U.E.= Drainage & Utility Easement Michel C. Ensalaco, P.L.S. Exp. 11/30/2024 Eric C. Pokorny, P.L.S. Exp. 11/30/2024

Professional Land Surveying Services "Cornerstone Surveying PC"
759 John Street, Suite D
Yorkville, IL 60560
Phone: 630-892-1309

Survey is only valid if original seal is shown in red.

Revolution Builders Book #: sheets Drawn By. JG. JJH Plat #: 7249 Field Work Completed: 7/19/2024 Rev. Date Rev. Description

Project Number:

2024-0533

Attachment 4

Matt Asselmeier

From:

Greg Chismark < gchismark@bodwegroup.com>

Sent:

Thursday, August 22, 2024 7:06 AM

To:

Matt Asselmeier

Subject:

[External]RE: Kendall County Petition 24-27

CAUTION - This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Matt.

I have no concerns. I checked the original subdivision plans and see no utilities. Drainage patterns should remain unaffected. Let me know if you want something more than this e-mail.

Greg

Greg Chismark, PE

Mobile 847-344-5619 | Office 630-338-8527 | gchismark@bodwegroup.com

From: Matt Asselmeier < masselmeier@kendallcountyil.gov>

Sent: Wednesday, August 21, 2024 1:08 PM

To: Greg Chismark < gchismark@bodwegroup.com>

Subject: Kendall County Petition 24-27

Greg:

The County received a request to vacated the public utility and drainage easement between lots 110 and 111 in Whitetail Ridge.

The topo is attached.

Do you have any concerns regarding this vacation from a stormwater perspective?

Thanks,

Matthew H. Asselmeier, AICP, CFM Director Kendall County Planning, Building & Zoning 111 West Fox Street Yorkville, IL 60560-1498

PH: 630-553-4139 Fax: 630-553-4179

Matt Asselmeier

From:

Debbie Mika <

Sent:

Thursday, August 22, 2024 7:53 AM

To:

Matt Asselmeier

Subject:

[External]Re: 5862 Championship Court

CAUTION - This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Matt,

The HOA has no issues.

Thanks.

Debbie Mika

From: Matt Asselmeier < masselmeier@kendallcountyil.gov>

Sent: Wednesday, August 21, 2024 1:09:48 PM

To: Debbie Mika <tdmika@live.com> Subject: 5862 Championship Court

Debbie:

The County received a request from Steve Jeffers on Behalf of Revolution Investment, LLC to vacate a public utility and drainage easement between Lots 110 and 111 in Whitetail Ridge in order to be able to construct a house in the middle of the combined lots.

Does the HOA have any objections to this vacation?

Thanks,

Matthew H. Asselmeier, AICP, CFM Director Kendall County Planning, Building & Zoning 111 West Fox Street Yorkville, IL 60560-1498

PH: 630-553-4139 Fax: 630-553-4179



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works Parks and Recreation	

Agenda Item Number

Planning and Zoning Commission #2

Tracking Number

PZC 2024-33 & EDC 2025-10

Agenda Item Summary Memo

Title: Costco W	holesale Corp. (PUD Am	ndment, Special Use & Fin	al Plat)
Meeting and Da	te: City Council – Janua	ry 28, 2025	_
Synopsis: Propo	osed Planned Unit Develo	ment (PUD) Amendment, S	special Use and Final
Plat	for a wholesale retail ware	nouse, fuel station, and com	mercial outlots.
Council Action	Previously Taken:		
Date of Action:	PZC – 1/8/25 Actio	Taken: Moved forward to	City Council agenda.
Item Number:	PZC 2024-33 & EDC 202	-10	
Type of Vote Re	quired: Majority		
Council Action	Requested: Vote		
			_
Submitted by: _	Krysti J. Barksdale-Nob		ity Development
	Name	De	epartment
	Ager	da Item Notes:	
See attached me	morandum.		
_			



Memorandum

To: Planning & Zoning Commission

From: Krysti J. Barksdale-Noble, Community Development Director

CC: Bart Olson, City Administrator

Sara Mendez, Planner I

Date: January 17, 2025

Subject: PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plat)

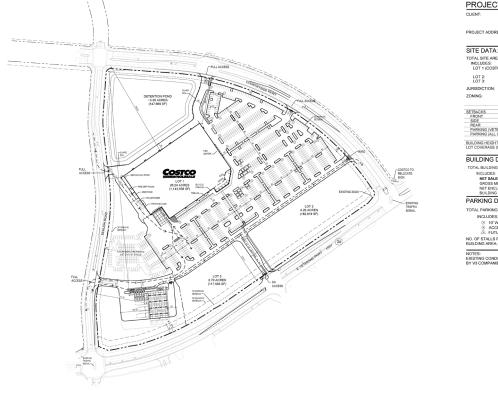
Proposed Wholesale Retail Warehouse, Fuel Station and Outlots

REQUEST SUMMARY:

Stephen Cross, an authorized representative of Costco, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner, are requesting approval to develop a members-only retail store spanning approximately 160,000 square feet, establish and operate a standalone fueling facility, and obtain final plat approval to subdivide the existing two parcels, totaling nearly 34 acres, into three new parcels. The Costco development, including the fueling facility, will occupy approximately 33.14 acres (Lot 1), with an additional 7 acres designated for two perimeter lots (Lot 2 and Lot 3) along Veteran's Parkway and about 3.4 acres reserved for stormwater management at the northwest corner of the property.

UPDATE:

At the January 7, 2025, Economic Development Committee meeting, the petitioner presented an updated site plan and elevation rendering. The updated site plan now aligns with the revised Traffic Impact Study's recommendation to modify the Veterans Parkway / Costco / Tuma intersection from full access to 3/4 access. The site plan, prepared by MG2 and dated January 3, 2025, also updates parking details, showing a total of 956 stalls (855 initially and 101 future) compared to the 980 stalls (856 initially and 124 future) noted in prior staff memos. These updates were reviewed at both the EDC and PZC meetings.





DD11-08

COSTCO WHOLESALE

YORKVILLE, ILLINOIS

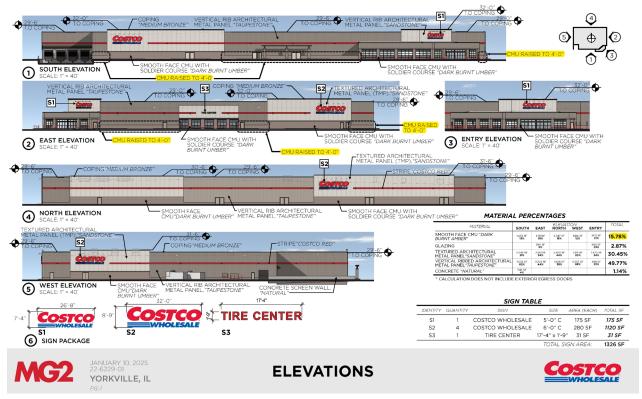
SITE PLAN

RY 03, 2025

Below are the updated building elevation renderings, highlighting a minor color change in the CMU block material. The previous "Buff" color has been updated to "Dark Burnt Umber," which is a deeper tone. Costco has recently adopted this as the new standard color for all new buildings, and the petitioner wanted to ensure the renderings accurately reflect this update.



Additionally, the petitioner has increased the proposed amount of masonry materials (CMU) on the building elevations from the originally proposed $\sim 14.61\%$ (1,424 sq. ft.) overall and 32% on the front façade (south elevation and entry) to approximately 15.78% (2,538 sq. ft.) overall and 34% on the front façade as illustrated on the plans and tables below:



ORIGINAL

MATERIAL PERCENTAGES

MATERIAL	SOUTH	EAST	NORTH	WEST	ENTRY	TOTAL
SMOOTH FACE CMU "BUFF"	1405 SF 994	13515#	2.547 SF 18%	1288 SF 12%	905 SF 20%	14.61%
GLAZING		390 SF 5%			995 SF 23%	2.89%
TEXTURED ARCHITECTURAL METAL PANEL"SANDSTONE"	2,549.5F 29%	2.8675F 34%	5,850 SF 44%	19015F 20%	1,470 SF 34%	30.60%
VERTICAL RIBBED ARCHITECTURAL METAL PANEL" TAUPE"	2765.5F 49%	1.925 SF 4PK	5308 SF 56N	6.557 SF 68%	939 SF 22%	50.76%
CONCRETE "NATURAL"	546 SF 475					1.14%

^{*} CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

REVISED

MATERIAL PERCENTAGES

MATERIAL	2355000	2000	ELEVAT	ION	C222.5(3)	TOTAL
PIATERIAL	SOUTH	EAST	NORTH	WEST	ENTRY	
SMOOTH FACE CMU "DARK BURNT AMBER"	1633 SF 10%	1516SF 10%	2.347 SF 18%	1388 SF 12%	905 SF 29%	15.78%
GLAZING		390 SF			995 SF 23%	2.87%
TEXTURED ARCHITECTURAL METAL PANEL"SANDSTONE"	2,549 SF 29%	2.6679F 34%	5.850 SF 44%	1,981 SF 20%	1,470 SF 34%	30.45%
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"TAUPESTONE"	7,633 SF 62%	3,703 SF 44%	5,308 SF 36%	6,557 SF 68%	939 SF 22%	49.77%
CONCRETE "NATURAL"	546 SF 4%					1.14%

^{*} CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

Planning & Zoning Commission Action:

The Planning and Zoning Commission reviewed the requests for PUD Amendment, Special Use, and Final Plat of Subdivision approval at a meeting held on January 8, 2025 and made the following actions on the motions below:

1. Planned Unit Development (PUD) Amendment

In consideration of testimony presented during a Public Hearing on January 8, 2025, the Planning and Zoning Commission recommends approval to the City Council of a request for an amendment to the Yorkville Crossing Planned Unit Development Agreement to facilitate the development of an approximately 160,000-square-foot members-only retail store, a fuel facility, and two (2) commercial outlots with an underlying zoning designation of B-3 General Business District for an approximately 34 acre parcel located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway, subject to the conditions enumerated in a staff memorandum dated January 2, 2025 and review comments prepared by the City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan and Aerial Site Plan prepared by MG2 dated January 3, 2025 and Traffic Study prepared by V3 Companies updated December 30, 2024.

Action:

Crouch – aye; Vinyard – aye; Forristall – aye; Linnane – aye: 4 ayes; 0 no.

2. Special Use

In consideration of testimony presented during a Public Hearing on January 8, 2025 and approval of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council of a request for Special Use authorization for a fuel facility as part of the Costco Wholesale Warehouse development to be located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway within the Yorkville Crossing PUD subject to engineering review comments provided by the City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan and Aerial

Site Plan prepared by MG2 dated January 3, 2025 and Traffic Study prepared by V3 Companies updated December 30, 2024.

Action:

Crouch – aye; Vinyard – aye; Forristall – aye; Linnane – aye: 4 ayes; 0 no.

3. Final Plat of Subdivision

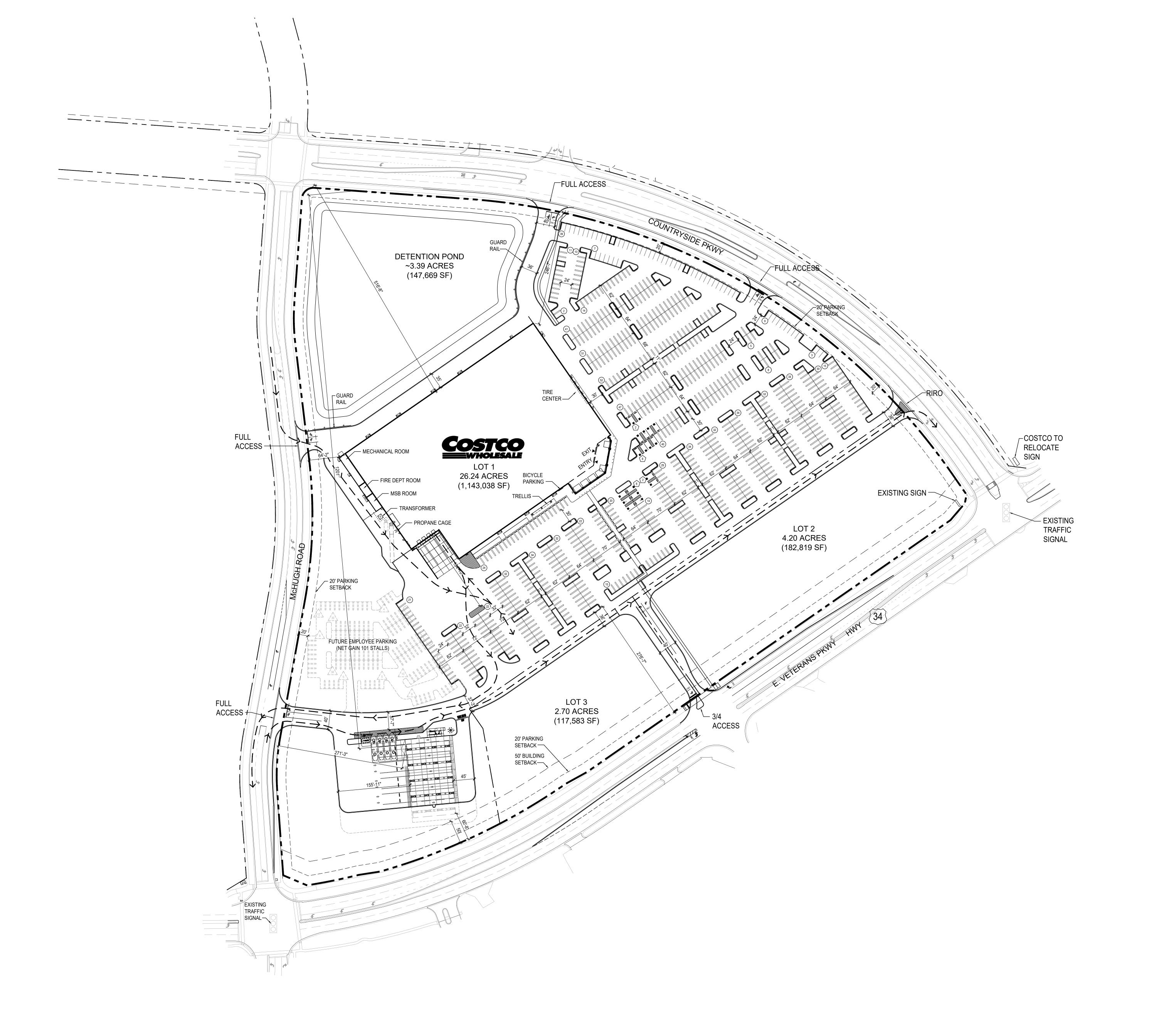
The Planning and Zoning Commission recommends approval to the City Council of the Final Plat of Subdivision of Costco Wholesale, dated last revised 12/18/24 and prepared by V3 Companies, Ltd. subject to review comments prepared by City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to said Final Plat of Subdivision.

Action:

Crouch – aye; Vinyard – aye; Forristall – aye; Linnane – aye: 4 ayes; 0 no.

Attachments:

- 1. Updated Site Plan & Aerial Site Plan dated January 3, 2025 and prepared by MG2
- 2. Updated Building Elevations & Renderings dated January 10, 2025 and prepared by MG2
- 3. Draft Ordinance Approving Costco PUD Amendment
- 4. Draft Ordinance Granting Special Use
- 5. Draft Ordinance Approving Final Plat
- 6. PZC Memo
- 7. Applications for Special Use, PUD Amendment, and Final Plat
- 8. Costco Site Plan Narrative, dated November 15, 2024 and prepared by Costco Wholesale Corporation
- 9. Written responses to review comments prepared by Cross Engineering & Associates dated December 30, 2024.
- 10. Costco ALTA Survey, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
- 11. Costco Site Plan, dated December 20, 2024 and prepared by MG2
- 12. Costco Aerial Site Plan, dated December 20, 2024 and prepared by MG2
- 13. Final Plat of Subdivision of Costco Wholesale, dated last revised 12/18/24 and prepared by V3 Companies, Ltd.
- 14. Preliminary Civil/Engineering Plans for Costco Wholesale, dated 11-13-24 and prepared by MG2
- 15. Costco Landscape Plan, dated last revised 11-15-24 and prepared by Kimley Horn
- 16. Costco Warehouse Floor Plan, dated November 15, 2024 and prepared by MG2
- 17. Costco Architectural Elevations, dated November 15, 2024 and prepared by MG2
- 18. Costco Renderings, dated November 15, 2024 and prepared by MG2
- 19. Costco Fuel Facility Plan, dated November 15, 2024 and prepared by MG2
- 20. Costco Lighting Plan, dated July 2024 and prepared by T.E., Inc.
- 21. Costco Traffic Impact Study, dated November 13, 2024 and Updated December 30, 2024 as prepared by V3 Companies, Ltd.
- 22. Costco Preliminary Stormwater Management Report, dated November 13, 2024 and prepared by V3 Companies, Ltd.
- 23. Plan Council Packet dated 12-12-24
- 24. EEI Review Letter dated December 5, 2024
- 25. Public Hearing Notice



COSTCO WHOLESALE

YORKVILLE, ILLINOIS

PROJECT DATA

PROJECT ADDRESS:

CLIENT:

COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027

SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY

YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA: INCLUDES:

33.14 ACRES (1,443,461 SF)

LOT 1 (COSTCO): 26.24 ACRES (1,143,038 SF) **INCLUDES 3.39 AC DETENTION POND** 4.20 ACRES (182,819 SF) LOT 2:

LOT 3: 2.70 ACRES (117,583 SF)

JURISDICTION: UNITED CITY OF YORKVILLE

ZONING: B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
SIDE	20'	64'-2" / 246'-7"	271'-3"
REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"
LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA:	161,562 S
INCLUDES:	
NET SALES FLOOR	153,820 S
GROSS MECHANICAL / FIRE / MSB	2,266 S
NET ENCLOSED CANOPY	3,560 S
BUILDING ENVELOPE	1,916 S

PARKING DATA:

TOTAL PARKING:

956 STALLS

INCLUDES:

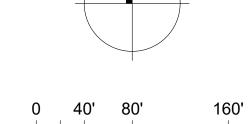
10' WIDE STALLS 837 STALLS 18 STALLS # ACCESSIBLE STALLS 101 STALLS

FUTURE STALLS (NET GAIN) NO. OF STALLS PER 1,000 SQ. FT. OF NET

BUILDING AREA: 6.22 STALLS

EXISTING CONDITIONS BASED ON SURVEY

BY V3 COMPANIES





YORKVILLE, IL



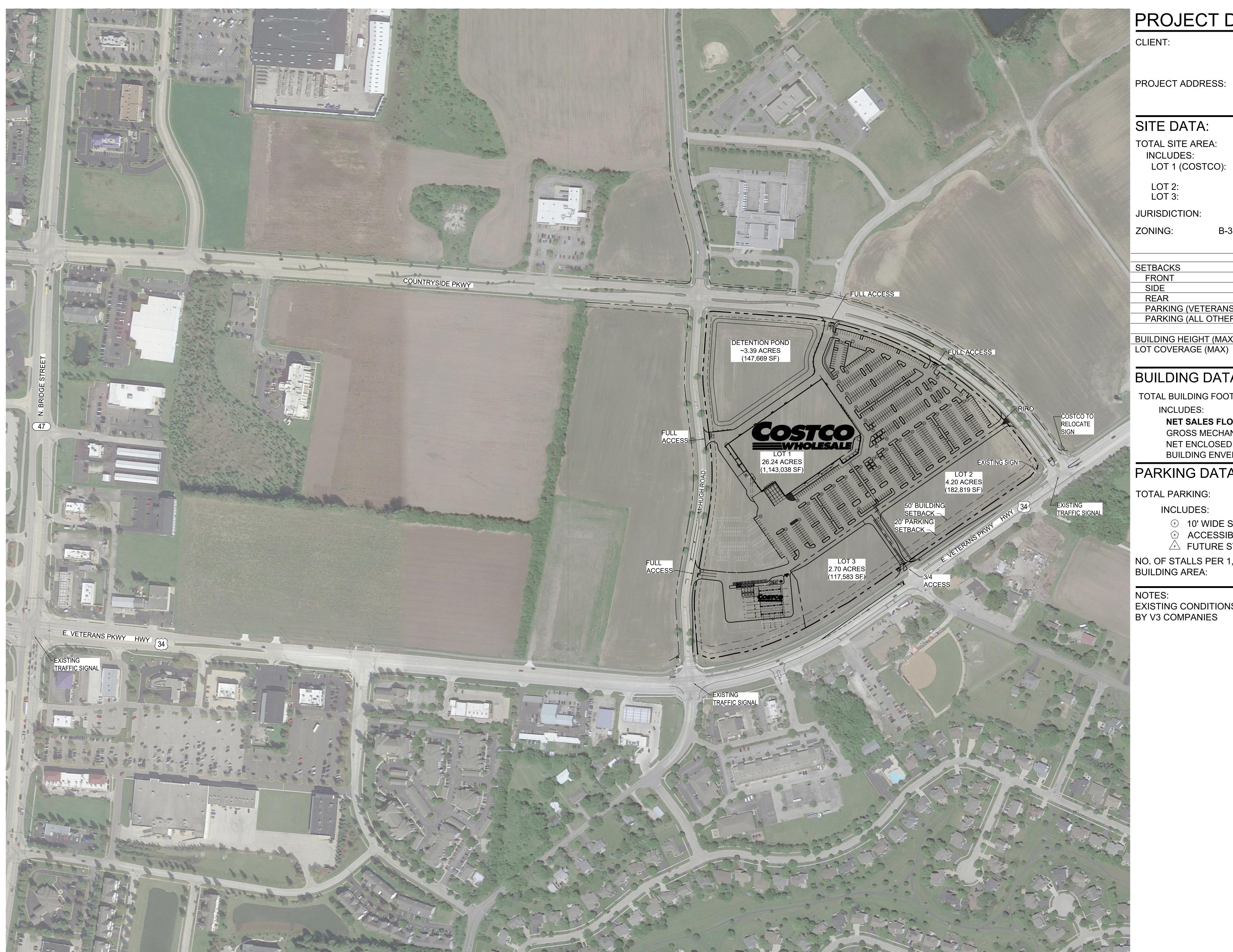
22-6229-01 JANUARY 03, 2025

SITE PLAN

DD11-08

SITE PLAN

JANUARY 03, 2025



PROJECT DATA

CLIENT:

COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027

PROJECT ADDRESS:

SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY

YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA: **INCLUDES**:

33.14 ACRES (1,443,461 SF)

LOT 1 (COSTCO):

26.24 ACRES (1,143,038 SF) **INCLUDES 3.39 AC DETENTION POND** 4.20 ACRES (182,819 SF) 2.70 ACRES (117,583 SF)

JURISDICTION:

UNITED CITY OF YORKVILLE

ZONING:

B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL		
		WAREHOUSE	FUEL	
SETBACKS				
FRONT	50'	507'-9"	60'-8"	
SIDE	20'	64'-2" / 246'-7"	271'-3"	
REAR	30'	510'-8"	1,201'	
PARKING (VETERANS)	20'	276'-7"	N/A	
PARKING (ALL OTHER)	20'	20'	N/A	
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"	

80% 65.4% (LOT 1 ONLY)

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA:	161,562 S	
INCLUDES:		
NET SALES FLOOR	153,820 S	
GROSS MECHANICAL / FIRE / MSB	2,266 S	
NET ENCLOSED CANOPY	3,560 S	
BUILDING ENVELOPE	1,916 S	

PARKING DATA:

TOTAL PARKING:

956 STALLS

101 STALLS

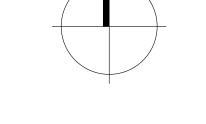
INCLUDES:

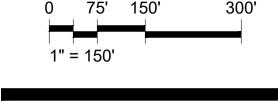
10' WIDE STALLS 837 STALLS 18 STALLS # ACCESSIBLE STALLS

FUTURE STALLS (NET GAIN)

NO. OF STALLS PER 1,000 SQ. FT. OF NET 6.22 STALLS

EXISTING CONDITIONS BASED ON SURVEY







YORKVILLE, IL



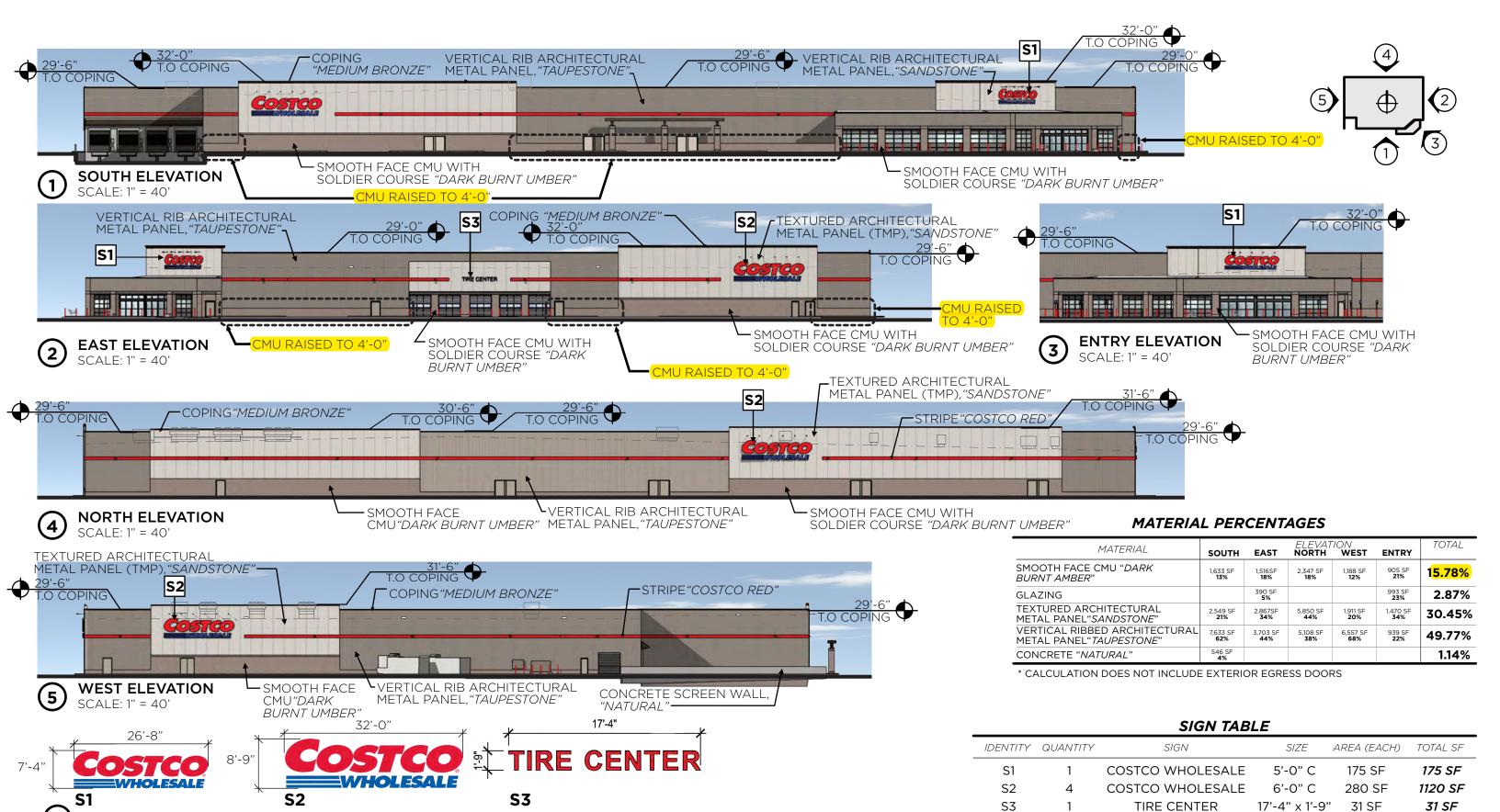
22-6229-01 JANUARY, 03, 2025

AERIAL SITE PLAN

DD12-08

AERIAL SITE PLAN

COSTCO WHOLESALE





SIGN PACKAGE

JANUARY 10, 2025 22-6229-01 YORKVILLE, IL

ELEVATIONS



1326 SF

TOTAL SIGN AREA.



VERTICAL METAL PANEL CMU

PROFILE: "MEGA RIB" COLOR: "TAUPESTONE"

PROFILE: SMOOTHFACE COLOR: "DARK BURNT UMBER **INSULATED METAL PANEL**

PROFILE: "GRANITESTONE" **COLOR:** "SANDSTONE"

METAL TRIM

PROFILE: COPING/CORNICE **COLOR:** "MEDIUM BRONZE"

SIGNAGE & ACCENT BAND

MANUFACTURER: METAL SALES COLOR: "SAFETY RED" AND "LAPIS LAZULI"



JANUARY 10, 2025 22-6229-01 YORKVILLE, IL PG: 2

MATERIAL BOARD























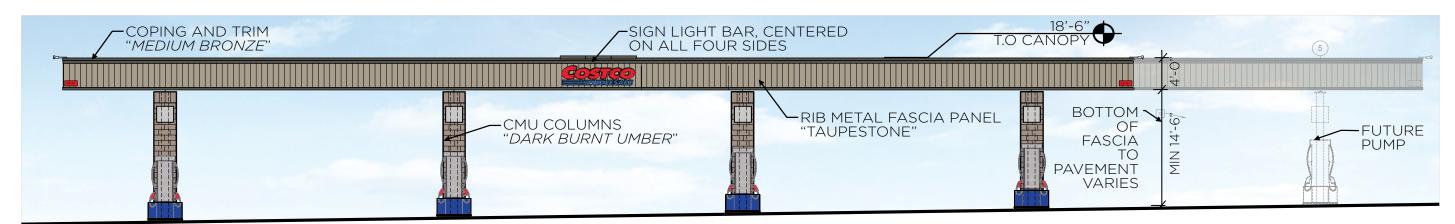






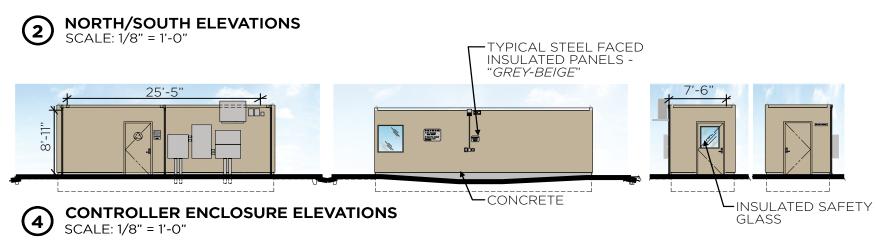




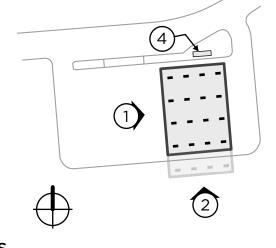


EAST/WEST ELEVATIONS SCALE: 1/8" = 1'-0"









WARMING HUT ELEVATIONS SCALE: 1/8" = 1'-0"



SIGN AREA TABULATION (CANOPY SIGNS)

QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF
4	COSTCO WHOLESALE	2'-5 1/4" "C"	21 SF	84 SF

TOTAL SIGNAGE AREA: 84 SF







JANUARY 10, 2025 22-6229-01

YORKVILLE, IL

Ordinance No. 2025-

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS APPROVING AN AMENDMENT TO A PLANNED UNIT DEVELOPMENT FOR YORKVILLE CROSSING (COSTCO WHOLESALE CORPORATION)

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a duly organized and validly existing non-home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, the Mayor and City Council approved by Ordinance Number 2000-34 dated July 13, 2000, AN ORDINANCE AUTHORIZING THE EXECUTION OF A PLANNED UNIT DEVELOPMENT AND ANNEXATION AGREEMENT OF DONALD J. HAMMAN AND CAROL S. HAMMAN, establishing the Yorkville Crossings Planned Unit Development ("PUD") which was recorded in the office of the Kendall County Recorder as document 200000012564 on September 15, 2000; and

WHEREAS, the Mayor and City Council approved by Ordinance Number 2008-21 dated March 11, 2008, AN ORDINANCE AUTHORIZING THE EXECUTION OF A MODIFICAION TO THE PLANNED UNIT DEVELOPMENT AND ANNEXATION AGREEMENT OF DONALD J. HAMMAN AND CAROL S. HAMMON, ORDINANCE 2000-34, approving certain modifications to the PUD which was recorded in the office of the Kendall County Recorder as document 200800012052 on May 13, 2008; and

WHEREAS, Costco Wholesale Corporation (the "*Petitioner*") desires to develop an approximately 34-acre site that is located within the PUD, at the southeast corner of East Countryside Parkway and McHugh Road (the "*Parcel*") with a members-only retail store (the "*Warehouse*") and a fueling facility (collectively, the "*Project*"); and

WHEREAS, the Petitioner has filed an application to amend the Planned Unit Development for Yorkville Crossing (the "Amended PUD"), seeking to include the Petitioner's site development plans, along with requesting certain deviations from the City's Unified Development Ordinances (the "UDO"); and

WHEREAS, a legal notice of publication regarding a public hearing before the Planning and Zoning Commission (the "*PZC*") on the proposed Amended PUD was duly published in a newspaper of general circulation in the City, not more than thirty (30) nor less than fifteen (15) days prior to the public hearing; and

WHEREAS, the PZC convened and held a public hearing on January 8, 2025, for the consideration of the Amended PUD; and

WHEREAS, the PZC reviewed the standards set forth in Sections 10-8-5D and 10-8-8E of the UDO; and

WHEREAS, upon conclusion of said public hearing, the PZC made findings of fact and a recommendation to the Mayor and City Council (the "Corporate Authorities") to approve the Amended PUD; and

WHEREAS, the Corporate Authorities have reviewed the findings and recommendation of the PZC and therefore agree to amend the Planned Unit Development for Yorkville Crossing to accommodate the Petitioner's request, said Amended PUD being substantially in the form attached hereto.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

- **Section 1.** The above recitals are incorporated herein and made a part of this Ordinance.
- **Section 2.** The Amended PUD is hereby approved substantially in the form attached hereto as "*Exhibit A*", subject to certain conditions set forth in Section 4 of this Ordinance.
- **Section 4.** The Parcel shall be constructed, operated, and maintained as a members-only wholesale retail store known as "Costco" pursuant to the Amended PUD and in accordance with the following conditions:
 - a. Yorkville UDO Modification Standard #2, "Sustainable Design" shall apply specifically to the Warehouse proposed for the Parcel. The sustainable design elements shall include:
 - 1. The building structure's steel system and architectural metal panes shall be comprised of 80% recycled content, with the associated batt insulation comprised of greater than 50% recycled content.
 - 2. The roof shall maintain reflectance, emittance and SRI rates that lessen heat gain, and the premanufactured building system shall provide erection efficiency to reduce impacts to the carbon footprint.
 - 3. Landscaping shall be designed to create a high impact with seasonal interest, and shall incorporate many native and drought tolerant species, which shall minimize irrigation and maintenance needs.
 - 4. All site and building lighting systems shall utilize LED technology.
 - 5. A water management system shall be implemented to lower wastewater and sewer use.
 - 6. Any refrigeration systems shall use carbon dioxide as a refrigerant, as opposed to hydrofluorocarbons, as carbon dioxide is widely considered a more environmentally conscious refrigerant.
 - b. The Subject Parcel is currently zoned B-3 General Business District. A "general retail store, greater than one (1) acre" accurately describes the Costco member-only retail

store Petitioner wishes to develop and is permitted in a B-3 General Business District. A "gasoline service station" is a special use in the B-3 General Business District. The Petitioner shall apply for a Special Use permit for the gasoline service station special use. Petitioner contemplates a "tire center" on the Parcel, which is not an identified use in the City's UDO. City staff has identified this use as similar to "automobile repair" or "automobile service", both permitted uses in B-3 General Business District.

- c. The Subject Parcel shall be allowed the following deviations to the Yorkville Unified Development Ordinance (UDO):
 - 1. Per Section 10-5-1 of the UDO, the maximum required parking for the Subject Parcel is 386 spaces, The Petitioner is permitted to install 855 parking spaces initially to serve the Project, with an additional 101 future parking spaces planned, for an overall 956 parking spaces to be permitted on the Parcel as depicted in the "Costco Wholesale Site Plan" prepared by MG2 dated January 3, 2025, attached hereto as "Exhibit B".
 - 2. Per Section 10-5-1K-1 of the UDO, the infrastructure for a minimum of 8 electric vehicle charging stations is required for the Project based upon the maximum required parking. The Petitioner shall not be required to install infrastructure for vehicle charging stations on the Parcel.
 - 3. Per Table 10-5-7-E of the UDO, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. The Petitioner is permitted to install light fixtures with a maximum height of 36 feet, six (6) inches.
 - 4. Per Sections 10-5-3 C and 10-5-3-E of the UDO, building foundation plantings and parking area interior landscaping shall be provided. The Petitioner is not required to install building foundation plantings and is permitted relief from the placement of parking lot medians for every third bay of parking in front or to the side of the Costco building and the requirement for a parking island for every 10 parking spaces, as depicted in the "Costco Wholesale Overall Landscape Plan" prepared by Kimley Horn dated November 15, 2024, attached hereto as "Exhibit C".
 - 5. Per Section 10-5-8-C-3.b of the UDO, Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty percent (50%) of the total building, broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty percent (50%) of the façade and loading bays shall not be located in the front of a building or in the area abutting a public right-of-way. Petitioner may install loading bays on the front of the proposed Warehouse and may incorporate masonry/cementitious materials into approximately 15% of the

total building and 34% of the front elevation of the Warehouse, as depicted in the "Costco Wholesale Building Elevations and Material Board" prepared by MG2 dated January 10, 2025, attached hereto as "Exhibit D".

- d. The Parcel shall have a minimum of five (5) access points: three (3) along East Countryside Parkway, including two (2) full-access points and one (1) right-in, right-out access point, as well as two (2) full-access points along McHugh Road. A sixth access point, proposed as a three-quarter (3/4) access along East Veterans Parkway, is subject to approval by the Illinois Department of Transportation ("IDOT") and compliance with the Traffic Study prepared by V3 Companies, updated on December 30, 2024, and attached as "Exhibit E.".
- e. Existing center medians along East Countryside Parkway shall be adjusted to accommodate necessary off-site road enhancements and left-turn lanes shall be created at the intersections of East Countryside Parkway and McHugh Road.
- f. New right-turn lanes shall be installed at the fueling facility entrance on McHugh Road and at Veteran's Parkway.
- g. Petitioner will provide a cross-access agreement with any future out lot developers.
- h. Petitioner shall provide at least one (1) pedestrian connection to the public way off East Veterans Parkway at the intersection with Tuma Road.
- i. Section 10-5-3 of the UDO establishes landscape standards for new developments.
 - 1. Due to the site's unique location being surrounded by public roadways, special attention will be required during landscape installation to ensure clear visibility at driveway and right-of-way intersections. In accordance with Section 10-5-6 of the Unified Development Ordinance, this may necessitate minor adjustments to the approved Landscape Plan, such as relocating or removing certain plant materials. Plants, trees, or any vegetation placed in the medians shall be the responsibility of the City to maintain.
- j. Section 10-5-4 of the UDO requires all mechanical units that are visible from any public right of way be screened from public view, and the area to be screened shall be no more than 20% visible through the screening material. Evergreen hedges or non-transparent walls are permitted screening materials per the UDO. Petitioner may screen two proposed ground-mounted compactors located on the west elevation adjacent to McHugh road with landscaping material, such as evergreen trees, ornamental trees and shrubbery located to the west of the compactors in landscape bed edge.
- k. The Petitioner may install six (6) wall mounted signs on the exterior elevations of the Warehouse, as depicted in the "Costco Wholesale Elevations" prepared by MG2 dated January 10, 2025, attached hereto as "Exhibit D".

1. All plans are subject to review comments prepared by the City Engineer, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan prepared by MG2 dated January 3, 2025 and a Traffic Study prepared by V3 Companies updated December 30, 2024, attached hereto as "Exhibit F".

Section 5. This Ordinance shall be in full force and effect after its passage, publication and approval as provided by law.

Passed by the City Cou	uncil of the United Ca	ity of Yorkville, Kendall Co	ounty, Illinois this
day of	, A.D. 2025.		
		CITY CLERK	
KEN KOCH		DAN TRANSIER	
ARDEN JOE PLOCHER		CRAIG SOLING	
CHRIS FUNKHOUSER		MATT MAREK	
SEAVER TARULIS		RUSTY CORNEILS	
APPROVED by me, a	s Mayor of the Unite	ed City of Yorkville, Kenda	ll County, Illinois
this day of	, A.D. 2025		
		MAYOR	
Attest:			
CITY CLERK			

EXHIBIT A

STATE OF ILLINOIS) REHN
05-1
0500
COUNTY OF KENDALL) RHSP

200800012052
Filed for Record in
KENDALL COUNTY: ILLINDIS
REHNETTA S MICKELSON
05-13-2008 At 10:06 am.
ORDINANCE P9.00
RMSF Surcharse 10.00

ORDINANCE NO. <u>a 008 a</u>

AN ORDINANCE AUTHORIZING THE EXECUTION OF A MODIFICATION TO THE PLANNED UNIT DEVELOPMENT AND ANNEXATION AGREEMENT OF DONALD J. HAMMAN AND CAROL S. HAMMAN, ORDINANCE 2000-34

WHEREAS, it is in the best interest of the UNITED CITY OF YORKVILLE (the CITY), Kendall County, Illinois, and the property owner, that modifications and clarifications to that certain Planned Unit Development and Annexation Agreement of Donald J. Hamman and Carol S. Hamman and the CITY dated July 13, 2000 (the "Annexation Agreement") pertaining to the development of the real estate described in the Annexation Agreement be entered into by the UNITED CITY OF YORKVILLE; and

WHEREAS, said Modifications to Planned Unit Development and Annexation Agreement has been memorialized in that certain document entitled "Modifications to Annexation Agreement with Yorkville Crossings LLC and the United City of Yorkville Concerning Yorkville Crossings" (the "Modification") which Modification has been considered by the City Council; and

WHEREAS, the legal owners of record of the real property which is the subject of said Modification (the "Subject Property") and the CITY are ready, willing and able to enter into said Modification and to perform the obligations as required under the Modification and the Annexation Agreement; and

WHEREAS, the statutory procedures provided in 65 ILCS 5/11-15.1-1, as amended, for the approval and execution of the amendments to annexation agreements have been fully complied with in relation to the Modification; and

WHEREAS, the Subject Property is annexed to and within the corporate boundaries of the United City of Yorkville.

NOW THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS AS FOLLOWS:

Section 1: That the Mayor and City Clerk are herewith authorized and directed to execute, on behalf of the CITY, the Modification to Annexation Agreement with Yorkville Crossings LLC, a copy of which is attached hereto and made a part hereof.

Section 2: That this Ordinance shall be in full force and effect from and after its passage and approval and publication as provided by law.

Passed by	the City	Council of the	United City of Yorkville,	Kendall (County,	Illinois	this
	_day of	MARCH	, A.D. 2008.				

CITY CLERK

ROBYN SUTCLIFF	JOSEPH BESCO
ARDEN JOE PLOCHER	WALLY WERDERICH
GARY GOLINSKI	MARTY MUNNS
ROSE SPEARS	JASON LESLIE
Approved by me, as Mayor of the Illinois, this// day of <i>MARCH</i>	United City of Yorkville, Kendall County,, A.D. 2008.

MAYOR

MODIFICATION TO ANNEXATION AGREEMENT WITH YORKVILLE CROSSINGS LLC AND THE UNITED CITY OF YORKVILLE Concerning YORKVILLE CROSSINGS

WHEREAS, on July 13, 2000, Donald J. Hamman and Carol S. Hamman, referred to in the Annexation Agreement as the OWNERS/DEVELOPERS and the CITY entered a Planned Unit Development and Annexation Agreement pursuant to Ordinance No 2000-34 which was recorded with the Kendall County Recorder on September 15, 2000 as document 200000012564, (the Annexation Agreement) for the property described in the Annexation Agreement as Exhibit "A" to that agreement (the Annexed Property) which property was thereby annexed to the CITY; and

WHEREAS, pursuant to the Annexation Agreement, the real property described in the Annexation Agreement (the "Original Subject Property") was annexed to the CITY; and

WHEREAS, since the date of the Annexation Agreement, the Owners/Developers have conveyed the following three portions of the of the Original Subject Property, specifically: (1) the 4.24 acre Kalant parcel at the northwest corner of McHugh and Countryside Parkway and legally described on Exhibit "A-1" attached hereto and made a part hereof, and (2) the 6.21 acre United States Postal Service parcel at the northeast corner of McHugh and Countryside Parkway and legally described on Exhibit "A-2" attached hereto and made a part hereof, and (3) the 11.66 acre Prairie Pointe Subdivision parcel north and east of the United States Postal Service Parcel and northerly of Crimson Lane and legally described on Exhibit "A-3" attached hereto and made a part hereof, which parcels are not subject to this modification; and

WHEREAS, there is pending in another proceeding involving part of the Annexed Property, the Yorkville Crossings Unit One project (herein referred to as the Wal-Mart Parcel), the rezoning for which, and the final plat and plan for which includes the dedication of and improvements for Crimson Lane to connect Countryside Parkway with Autumn Creek Subdivision, which proceeding is not subject to this modification. The legal description for the Wal-Mart Parcel is on Exhibit "A-4" which is attached hereto and made a part hereof; and

WHEREAS, there is a portion of the Original Subject Property subject to a sale agreement with Wal-Mart, which portion is legally described on Exhibit "A-4" hereto; and

WHEREAS, the three parcels previously conveyed (the Kalant, USPS, and the Prairie Pointe parcels) and the Wal-Mart Parcel will hereinafter be collectively referred to as the "Excluded Parcels"; and

WHEREAS, except as specifically provided herein, the Excluded Parcels are not subject to this Modification; and

WHEREAS, the Donald Hamman and Carol Hamman have conveyed the Annexed Property except for the Excluded Parcels including any or all rights, duties and obligations under the Annexation Agreement to Yorkville Crossings LLC, an Illinois Limited Liability Company, which will hereinafter be referred to as OWNER/DEVELOPER; and

WHEREAS, that part of the Original Subject Property that remains after excluding the Excluded Parcels, which parcel is legally described on Exhibit "A-5" to this Modification, shall be referred to herein as the "Subject Property"; and

WHEREAS, development of the Subject Property has progressed and all parties to this Modification are desirous of setting forth certain clarifications and modifications to the terms and conditions upon which the Subject Property was annexed to the CITY; and further to provide clarifications and modifications as to how the Subject Property will be developed within the CITY in an orderly manner (all, the "Proposed Modifications"); and

WHEREAS, the Proposed Modifications have been considered by the City and the OWNER/DEVELOPER; and

WHEREAS, at the request of the OWNER/DEVELOPER and the CITY, the Plan Commission has considered and heretofore approved the Proposed Modification, including the land use and zoning changes contained in the Proposed Modifications; and

WHEREAS, the OWNER/DEVELOPER and their representatives have discussed the Proposed for the development of the Subject Property and have had public meeting with the City Council; and prior to the execution hereof, notice was duly published and a public hearing was held to consider this Modification to the Annexation Agreement, as required by the statutes of the State of Illinois in such case made and provided; and,

WHEREAS, except as specifically modified herein, the Annexation Agreement aforesaid shall remain in full force and effect,

NOW THEREFORE, for and in consideration of the mutual promises and covenants herein contained, the parties agree, under the terms and authority provided in 65 ILCS 5/11-15 1-1 through 65 ILCS 5/11-15 1-5, as amended, as follows:

1. REZONING OF PORTIONS OF THE SUBJECT PROPERTY:

A The CITY has separately considered and approved certain modifications to the Wal-Mart Parcel, including a final plat of subdivision, referred to herein as

"Yorkville Crossings Unit One", which final plat includes the dedication and certain improvements to Crimson Lane. None of the City approvals for the Wal-Mart Parcel shall be modified or affected by this Amendment.

- B. None of the Excluded Parcels shall be affected by or subject to the provisions of this Modification
- C. The Annexation Agreement is hereby amended to zone the Subject Property as Planned Unit Development (hereinafter PUD) and the zoning of the portion of that property described on Exhibit "C", shall allow all of the uses permitted in the B-3 Service Business District. That property shall include all of the property southerly of Crimson Lane and easterly of the Wal-Mart Parcel, thereby extending the allowable uses of the B-3 Service Business District from its present delineation approximately 900 feet northerly of US Route 34 to the southerly boundary of Crimson Lane.

Said zoning shall allow the size, density, areas, coverage, and maximum building heights as set forth on Exhibit "D" of the Annexation Agreement, B-3, Service Business District, and said real property shall be used as developed in accordance with 65 ILCS 5/11-15-1 through 65 ILCS 5/11-15.1-5, and in accordance with all City Ordinances, provided that the uses of the Commercial Component of the Subject Property shall be consistent with the uses as stated in Exhibit "D-1".

D. The portion of the PUD that includes the Residential Component and the Office Component, is north of Crimson Lane and easterly of the Prairie Pointe Subdivision parcel, includes the Detention Facility consisting of the Pond, two sedimentation forebays on the west and east of the Pond, and two Open Space/Drainage Corridors, (the Detention Pond) and is depicted on Exhibit "K".

The Annexation Agreement is hereby amended to zone the Subject Property as Planned Unit Development (hereinafter PUD) depicted on Exhibit "K" and identified as the Office Component being that portion of the Residential Component northerly of Crimson Drive and southerly of the Detention Pond, which is currently zoned R-2 Single Family Residential District and described on Exhibit "O", shall allow all of the uses permitted in the O-Office District as stated in Exhibit "D-1".

Said zoning shall allow the uses, size, density, areas, coverage, and maximum building heights as set forth on Exhibit "O-1" of the Annexation Agreement, O-Office District, except for those O Office uses deleted on the O Office portion of Exhibit "D-1" hereto and said real property shall be used as developed in accordance with 65 ILCS 5/11-15-1 through 65 ILCS 5/11-15.1-5, and in accordance with all CITY ordinances.

2. The CITY acknowledges that OWNER/DEVELOPER having annexed the Original Subject Property pursuant to the Annexation Agreement and having developed the real property described therein, and the CITY and OWNER/DEVELOPER further acknowledge that the parties have completed, or will each undertake the following duties, covenants, and obligations as applicable:

A.

i. OWNER/DEVELOPER has satisfied the Annexation Agreement requirement to dedicate certain property for the purpose of extending Countryside Parkway and McHugh Road to the south to their intersections with US Route 34, all as depicted on the Plat of Dedication of Right-of-Way attached hereto as Exhibit "G" all as contemplated by the Annexation Agreement (the dedicated ROW). The Plat of Dedication of attached hereto as Exhibit "G" was recorded with the Kendall County Recorder of Deeds on July 19, 2000 as Document Number #20009644 (F-F 7-89) (the Plat of Dedication).

OWNER/DEVELOPER has dedicated to the CITY the easement required by Section 2 A iv of the Annexation Agreement to serve the real property to the East (Autumn Creek Subdivision) with sanitary sewer, and Crimson Lane of Yorkville Crossing Unit One has been designed to incorporate this municipal utility easement south and adjacent to this right of way.

The OWNER/DEVELOPER agrees to provide the easement to the CITY necessary for the water main along the north side of Crimson Lane.

The OWNER/DEVELOPER agrees to provide an easement to the CITY in the final Plat of Subdivision for the Residential and /or the Office component shown on the Conceptual PUD Plan to access the Detention Pond for any proper governmental purpose relating to emergencies or relating to the SSA. Until acceptance of the Final Plat of Subdivision for either the Residential and/or the Office Component of the Conceptual PUD Plan, the CITY's easement for this purpose shall extend to any undeveloped area encompassed by the Office/Residential components of the Conceptual PUD Plan reasonably necessary for said access (Exhibits O and F), The final easement for this purpose will be memorialized on the Final Plat of Subdivision for the first of either the Residential and/or the Office Component of the Exhibit "K" Conceptual PUD Plan in an area reasonably suitable for this purpose, which First Final Plat of Subdivision will also include the final designation of the Detention Pond parcel, including the areas indicated as forebays and the lake on Exhibit "K"

Conceptual PUD Plan.

- B Menard, Inc. (Menard) and OWNER/DEVELOPER have cooperated and all authority has been granted by OWNER/DEVELOPER to Menard to:
 - i. Enter upon the Dedicated Right-of-Way to construct at Menard's expense, the subject roadways and to obtain temporary construction easements in addition to the roadways if any temporary construction easements were necessary to complete all work contemplated to be performed by Menard, pursuant to the Annexation Agreement
 - Authorize and permit the extension of all CITY, Yorkville-Bristol Sanitary District, and public utilities including, but not limited to telephone, electric and gas through said area.
 - iii. Consent to the rebate of sales tax revenue to Menard under its
 Development and Annexation Agreement with the CITY, as to sales tax
 revenues generated on all the areas zoned B-3 Service Business District
 within the Original Subject Property and in the Subject Property, in order
 for Menard to recover the costs advanced by Menard for the construction
 of Countryside Parkway and McHugh Street.
 - iv. OWNER/DEVELOPER provided easements to the CITY for CITY Roadways on the Original Subject Property and Subject Property to drain into the Detention Pond,
 - v. Sections 2.B.vi, ix, x and xi of the Annexation Agreement are unaffected by this Modification.
- **2. B.viii** of the Annexation Agreement is hereby amended by replacing said section with the following provisions:

The CITY agrees that in consideration of sums advanced by OWNER/DEVELOPER for engineering, bonding and construction (the Costs) of:

- (a) Costs of Roadway Constructions, including
- (a.i) the main collector road, commonly known as Crimson Lane, between the commercial and residential sections of the development from Countryside Parkway to the northeasterly boundary of the property to its connection with Autumn Creek Subdivision, and part of the final plat of subdivision of Yorkville Crossings Unit One; and
- (a ii) the construction and/or reconstruction of the intersections at US Route 34 (a/k/a

Veterans Parkway) per the State of Illinois Department of Transportation (IDOT) requirements (including traffic signalization and all of the other IDOT approved roadway modifications to US Route 34, the improvements and intersections for modification of Countryside Parkway, and

(a.iii) any or all changes needed in Countryside Parkway including the modifications to intersections, the construction of median breaks and turn lanes,

the foregoing to be hereinafter collectively referred to as "Roadway Constructions" and

- (b) Costs of the public utilities within the non-residential portions of the Subdivision, including: watermain, sanitary sewer and public storm sewer, any Best Management Practices (BMPs) that facilitate the functionality of the public storm sewers for the Subject Property and all rights of way and the IDOT Improvements, the foregoing to be hereinafter collectively referred to as "Public Utilities" and
- (c) the CITY will reimburse OWNER/DEVELOPER, with a fixed interest rate of 4.2%, one-half (1/2) of the CITY's share of the Illinois Retailers Occupation Tax ("Sales Tax") receipts as received by the CITY from any and all commercial or business located on the Original Subject Property, for any and all of the Costs both before and after this Modification for the Roadway Constructions and the Public Utilities, provided that Menard, Inc. shall be first reimbursed from said fund, if not previously reimbursed from the reimbursement on the Menard property, for reimbursements provided for in Paragraph 2.E of the Development and Annexation Agreement to the United City of Yorkville Route 47 and Kennedy Road (Menard, inc.) dated July 13, 2000 and recorded on November 21, 2001 with the Kendall County Recorder as document 200100022565. It is understood by the parties that the amount owed to Menards, Inc. at the date of this agreement is estimated to be \$10,346,434.42.

The 50% sales tax rebate will commence on the sooner of 1) the date Menard, Inc. is reimbursed for all expenses committed to by the Annexation Agreement and the Menard, Inc. Development and Annexation Agreement as approved by the CITY July 13, 2000 or 2) the expiration of the Menard, Inc. Annexation Agreement, and will continue until the sooner of 1) all funds advanced by or on behalf of OWNER/DEVELOPER for the improvements listed herein are repaid, or 2) until a date 15 years following the date of commencement of the rebate. It is understood by the parties that the amount owed to Menards, inc. at the date of this agreement is estimated to be \$10,346,434 42.

OWNER/DEVELOPER may enter an agreement with Wal-Mart to share the obligation to advance funds for the above referenced public improvements and to allocate the Sales Tax Reimbursement between OWNER/DEVELOPER and Wal-Mart.

C. Section 2.C. relating to permission to OWNER/DEVELOPER to locate a temporary

Concrete Batch Plant, is deleted from the Annexation Agreement by this Modification.

D. The CITY is concerned that in order to prevent sedimentation of the primary infiltration component of the overall stormwater Detention Pond (without an outlet sewer to the Fox River), the overall stormwater Detention Pond design will require that OWNER/DEVELOPER construct sedimentation basin forebays as a necessary component of the overall facility design. The overall stormwater Detention Pond design, including the emergency relief mechanism in a separate plan, i.e. for backflow through the large diameter conduit connecting the pond with the existing overflow location for the subject property at a low point across US Route 34, as prepared by Atwell-Hicks Dated December 11, 2007, entitled Crimson Lane Stormwater Management Facility, Atwell-Hicks project No 06000418.33 as modified by its substituted Tab 7 of January 18. 2008, its Report of January 21, 2008 to the City of Yorkville entitled "Re: Yorkville Crossing P.U.D Infiltration Basin and Stormwater Management Review (Crimson Lane Stormwater Management Facility) United City of Yorkville, Kendall County, Illinois, and as modified by Atwell-Hicks report of February 26, 2008 concerning off-site flows, and the Items 1 through 4 of the Staff Conclusions in the Crimson Lane Stormwater Basin Review of February 26, 2008 by Laura Haake, and Atwell-Hicks March 7, 2008 revisions and response thereto, is approved for this purpose, and the CITY acknowledges that this overall stormwater Detention Pond has sufficient capacity for all of the existing or proposed development of the Original Subject Property being approximately 257.68 acres, including the Subject Property, the Residential and Office Components of the PUD northerly of Crimson Lane, the CITY right-of-ways that are currently draining into the Detention Pond with, in addition, capacity sufficient for the additions to the IDOT ROW contemplated by this Modification.

OWNER/DEVELOPER agrees to construct at its expense the forebay system as illustrated schematically on the attached design (Exhibit "I"). These sedimentation forebays and the two Emergency Outfall Pipes are in lieu of an outfall sewer to the Fox River.

OWNER/DEVELOPER agrees to commence construction of the Improvements described by Exhibit "I" (Crimson Lane Stormwater Management Facility plans with a latest revision date of February 7, 2008) immediately upon the transfer of title to Wal-Mart for the Wal-Mart Parcel. The OWNER/DEVELOPER agrees to provide bonding in compliance with the city Subdivision Control Ordinance. The city agrees to consider reductions in bonding upon OWNER/DEVELOPER'S requests based on work substantially completed at the time of said requests.

OWNER/DEVELOPER will indemnify and hold the CITY harmless from any and all liability that results from the construction, maintenance or operation of the Detention Pond.

E. In the event that the CITY determines that the Detention Pond has capacity in excess of all of the existing or proposed development of the Subject Property and the CITY right-of-ways that are currently draining into the Detention Pond, the CITY may enter an Intergovernmental Agreement with IDOT to permit IDOT to use the Detention Pond for stormwater detention and/or retention for US Route 34 (Veterans Parkway). Any such Intergovernmental Agreement shall provide that IDOT will, at its expense, construct and maintain such BMPs as are necessary to protect the water quality of the Detention Pond, and it will construct any storm sewers in US Route 34 as are necessary to convey Stormwater to the Detention Pond. In the event that the CITY receives payment from IDOT pursuant to any such Intergovernmental Agreement, such payments shall be paid to OWNER/DEVELOPER and credited against the Costs for Roadway Construction and Public Utilities to be reimbursed by the CITY pursuant to Section 2. B. viii above

3, 4,7 and 8.

Sections 3, 4, 7 and 8 of the Annexation Agreement are not affected by this Modification, except that Paragraphs 3.F.iii to 3.F.vi are deleted, and OWNER/DEVELOPER shall instead contribute cash calculated in conformity with existing Ordinances dealing with land cash donations for schools. As its land cash donation for parks, the OWNER/DEVELOPER's agrees to donate \$707,000 to the CITY within 30 days of closing on the Wal-Mart Parcel for use on Capital Improvement Costs for the Park and Recreation Department.

5. BINDING EFFECT AND TERM:

- A. The Annexation Agreement and this Modification thererto shall be binding upon and inure to the benefit of the parties hereto, and their successors and owners of record of the land which is the subject of the Annexation Agreement and/or this Modification, all assignees, lessees, and any successor municipal authorities of said CITY; for any development having commenced within a period of twenty years from the date of execution of the Annexation Agreement by the CITY.
- B. CITY and OWNER/DEVELOPER agree that OWNER/DEVELOPER and CITY have completed all conduct and cooperation with Menard for all joint obligations contemplated by the Annexation Agreement affecting the Original Subject Property and therefore no Joint Development Agreement among OWNER/DEVELOPER, the CITY and Menard is required.

6. NOTICES:

Any notices required hereunder shall be in writing and shall be served upon any other party in writing and shall be faxed and delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid, and addressed as follows: If to the CITY: Mayor and City Clerk

United City of Yorkville 800 Game Farm Road Yorkville, IL 60560 (630) 553-4350 Fax: (630) 553-7575

With a copy to: Kathleen Field Orr

Attorney for the City of Yorkville

800 Game Farm Road Yorkville, IL 60560 (630) 553-4350 Fax: (630) 553-7575

If to OWNER/DEVELOPER Yorkville Crossings LLC

c/o Donald J. Hamman, Manager

13351 B Faxon Road Plano, IL 60545 (630) 554-9101 Fax: (630) 554-9181

With a copy to: John P. Duggan

Duggan Law Offices 181 S. Lincolnway North Aurora, IL 60542

(630) 264-7893 Fax: (630) 264-1310

If to Walmart Wal-Mart Stores, Inc.

Attention Realty Management, State of Illinois

Re: Yorkville, IL #4462 2001 S E 10TH Street

Bentonville, AR 72716-0050

With a copy to Wal-Mart Stores, Inc.

Attention: Adele Lucas Re: Yorkville, IL #4462 2001 S E 10TH Street

Bentonville, AR 72716-0050

And with a copy to

Katie Cunningham

Drinker Biddle & Reath LLP 191 N. Wacker Drive Chicago, Illinois 60606 (312) 569-1219 FAX (312) 569-3219

or to such other addresses as any party from time to time designate in a written notice to the other parties

- 9. OWNER/DEVELOPER has organized and incorporated the Yorkville Crossing Property Owners Association, Inc., (the "Association") a property owners association created to own, maintain and assess expenses for maintenance of the common areas located on the Residential or Office Components of the Subject Property. Currently, the only common area is part of the Detention Pond. It is contemplated that when the Detention Pond is completed, the entirety of the Detention Pond and any portion of the Detention System, including the Detention Pond, Storm Water collection or discharge sewers not on private property except for those owned and maintained by the CITY, the sedimentation forebays, and all other open space associated with the Residential or Office Components will be conveyed to the Association. The Association's Declaration of Covenants Conditions and Restrictions (the "Declaration") provide that assessments will be levied against all property that becomes subject to the Declaration to maintain the Common Areas. Property becomes subject to the Declaration by executing a Detention System Easement with the Association that entitles the property to use the Detention Pond for its detention/retention needs. The OWNER/DEVELOPER consent to the creation of a backup or dormant Special Service Area on the Subject Property and the Wal-Mart Parcel referred to in this Modification Agreement, to maintain the Common Areas in the event that the Association fails to do so. The City agrees to consider alternative legal instruments, in lieu of the dormant Special Service Area of the Wal-Mart Parcel and approve such alternative method as the City deems appropriate.
- The OWNER/DEVELOPER and the CITY shall require that, as a prerequisite to use of the Detention Pond, stormwater best management practices (BMPs), such as catch basin filters, separators, bio-swales and similar engineering practices to protect the water quality of storm water before it passes into the sedimentation forebays prior to the pond shall be required of all property subject to the Modification to the Annexation Agreement to be developed as a requirement to utilize the Detention Pond. All storm water shall pass through filtration devices and/or bioswales prior to reaching the Detention Pond to remove the suspended particles along with treatment for chemical removal such as hydrocarbons. A long term maintenance plan for the entire Stormwater basin parcel shall be created and adopted by the Association and its performance shall be within the contemplated scope of the special service area.

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IN WITNESS WHEREOF, the undersigned have	e hereunto set their hands and seals this
day of MAY , 2008.	
CITY: THE UNITED CITY OF YORKVILLE	OWNER/DEVELOPER:
By: Valerie Burk Mayor	Yorkville Crossing LLC, an Illinois Limited Liability Company
Attest: Open and Dodued City Clerk	By Donald J. Hamman, its Manager
STATE OF ILLINOIS) COUNTY OF KENDALL)	
the uses and purposes therein set forth; and the s she, as custodian of the corporate seal of the CI	of Yorkville and Jackie Milschewski, City e the same persons whose names are subscribed hey signed and delivered the foregoing and as the free and voluntary act of said CITY, for said City Clerk then and there acknowledged that
GIVEN under my hand and Notarial Seal this / Ywa Pickering Notary Public	$\frac{5f}{}$ day of $\frac{MAY}{}$, 2008
	OFFICIAL SEAL LISA PICKERING NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES:12/13/08

STATE OF ILLINOIS)	
)	SS
COUNTY OF KENDALL)	

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY, that Donald J. Hamman, who is personally known to me to be the same persons whose names are subscribed to the foregoing instrument acknowledged that he is the sole Manager of Yorkville Crossings LLC and that he signed and delivered the foregoing instrument as its own free and voluntary act of said company, for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 6 day of A Roll, 2008.

Notary Public

OFFICIAL CEAL
JOHN P DUCCAN
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:02/12/03

EXHIBIT LIST

Exhibit "A"	Legal Description of the Original Subject Property
Exhibit "A-1"	Legal Description of the Kalant parcel
Exhibit "A-2"	Legal Description of the USPS parcel
Exhibit "A-3"	Legal Description of the Prairie Pointe Subdivision parcel
Exhibit "A-4"	Legal Description of the Wal-Mart Parcel
Exhibit "A-5"	Legal Description of the Subject Property, that is the Original Subject Property except the Excluded Parcels, the Kalant Parcel, the USPS Parcel, the Prairie Pointe Subdivision parcel and the Wal-Mart Parcel.
Exhibit "A-6"	Depiction of Subject Property and Excluded Parcels
Exhibit "B"	Plat of Annexation, no change from Annexation Agreement
Exhibit "C"	Legal Description of B-3 Service Business District zoned area subject to this Modification Agreement
Exhibit "D"	B-3 Service Business District of the Zoning Ordinance
Exhibit "D-1"	current B-3 Service District uses applicable to the B-3 and O Office components of the Subject Property
Exhibit "E"	Legal Description of PUD B.R-2 One Family Resident District zoned area subject to this Modification Agreement
Exhibit "F"	Article B.R-2 One Family Resident District of the Zoning Ordinance
Exhibit "G"	Right-of-Way Plat of Dedication, no change from Annexation Agreement
Exhibit "H"	Legal Description of the Menard, Inc. Parcel; no change from the Annexation Agreement
Exhibit "I"	Stormwater Detention Pond – Engineering Plan Set
Exhibit "J"	Identification Sign Drawing, no change from Annexation Agreement
Exhibit "K"	Subject Property Conceptual PUD Plan

Legal Description of O-Office District zoned area subject to this Modification Agreement Exhibit "O"

Exhibit "O-1" O Office District Zoning Ordinance

Exhibit "A"

LEGAL DESCRIPTION

That part of the Southeast Quarter of Section 21, part of the Southwest Quart of Section 22, part of the Northwest Quarter of Section 27 and part of the Northeast Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Commencing at an existing iron pipe stake said to be over the original location of a stone in the center line of the Original Bristol and Oswego Road previously described as being 23.05 chains West and thence 35°30' West, 11.02 chains from the Southeast corner of said Section 22; thence Northerly along a line forming an angle of 93°23'07" with the center line of U.S. Route No. 34, measured from the Northeast to the Northwest, this line hereinafter referred to as line "A", 30.05 feet to the Northerly right-of-way line of said Route 34; thence Northwesterly along line "A" aforesaid 798 60 feet; thence Southwesterly, parallel with said center line, 332.0 feet for a point of beginning; thence Northeasterly along the last described course, 332.0 feet to said line "A" thence Northwesterly along said line "A", 1,225.95 feet to a point measured along said line "A", 2,054.60 feet Northwesterly of said center line; thence Southwesterly along a line forming an angle of 87°07'00" with the last described course, measured clockwise therefrom, 825.40 feet; thence Northwesterly along a line which forms an angle of 269°46'00" with the last described course, measured clockwise therefrom, 508.20 feet; thence Southwesterly along a line forming an angle of 91°07'35" with the last described course, measured clockwise therefrom, 3,369.33 feet; thence Northwesterly along a line forming an angle of 130°01'22" with the last described course, measured counter-clockwise therefrom, 56.76 feet; thence Southerly along a line forming an angle of 90°21'26" with the last described course, measured clockwise therefrom, 1,362.93 to the Northwest corner of a tract conveyed to Vijay K. and Promila Marawaha by a Warranty Deed recorded June 17, 1994 as Document 9406488; thence Easterly along the North line of said tract at right angles to the last described course, 349.64 feet; thence Southerly along the East line of said tract 731.78 feet to the Northerly right-of-way of said Route 34; thence Easterly along said Northerly right-of-way line, 162.55 feet; thence Easterly along said Northerly right-of-way line being along a tangential curve to the left having a radius of 1,402.39 feet, an arc distance of 976.52 feet; thence Northeasterly along said Northerly right-of-way line being tangent to the last described curve at the last described point, 4,268.99 feet to a line drawn parallel with line "A" Southeasterly from the point of beginning; thence Northwesterly along said parallel line, 798.60 feet to the point of beginning; together with that part of U.S. Route 34 lying Southerly of and adjacent to the property hereon described, in Bristol Township, Kendall County, Illinois and containing a total of 257.68 Acres of land, more or less.



TICOR TITLE INSURANCE COMPANY

ORDER NUMBER: 2000 000096267 KA

STREET ADDRESS: NW CORNER OF COUNTRISIDE PKWY & MCHUGH
CITY: YORKVILLE COUNTY: KENDALL COUNTY

TAX NUMBER: 02-28-226-002-0000 PIN: 02-21-400-009 and 02-28-226-007

LEGAL DESCRIPTION:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 3 IN MENARDS COMMERCIAL COMMONS, ACCORDING TO THE PLAT THEREOF RECORDED MAY 13, 2002 AS DOCUMENT NO. 02-11411, SAID POINT ALSO BEING ON THE NORTHERLY RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY, ACCORDING TO THE PLAT OF DEDICATION OF SAID COUNTRYSIDE PARKWAY AND MCHUGH ROAD, RECORDED JULY 19, 2000 AS DOCUMENT 0009655; THENCE ALONG THE BOUNDARY OF SAID LOT 3 THE FOLLOWING THREE COURSES; NORTH 10 DEGREES 10 MINUTES 19 SECONDS EAST A DISTANCE OF 428.32 FEET; THENCE SOUTH 80 DEGREES 14 MINUTES 48 SECONDS EAST A DISTANCE OF 57.05 FEET; THENCE NORTH 49 DEGREES 50 MINUTES 06 SECONDS EAST A DISTANCE OF 280.19 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF SAID MCHUGH ROAD; THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE THE FOLLOWING SIX COURSES; SOUTH 03 DEGREES 16 MINUTES 50 SECONDS EAST A DISTANCE OF 62.86 FEET; THENCE 110.80 FEET ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 540.00 FEET, THE CHORD OF WHICH BEARS SOUTH 09 DEGREES 09 MINUTES 38 SECONDS EAST A CHORD DISTANCE OF 110.61 FEET; THENCE SOUTH 15 DEGREES 02 MINUTES 19 SECONDS EAST A DISTANCE OF 231.13 FEET; THENCE 153.39 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, THE CHORD OF WHICH BEARS SOUTH 05 DEGREES 29 MINUTES 09 SECONDS EAST A CHORD DISTANCE OF 152.68 FEET; THENCE SOUTH 04 DEGREES 04 MINUTES 00 SECONDS WEST A DISTANCE OF 51.84 FEET; THENCE 39.27 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, THE CHORD OF WHICH BEARS SOUTH 49 DEGREES 04 MINUTES 00 SECONDS WEST A CHORD DISTANCE OF 35.36 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF SAID COUNTRYSIDE PARKWAY; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE NORTH 85 DEGREES 56 MINUTES 00 SECONDS WEST A DISTANCE OF 412.41 FEET TO THE POINT OF BEGINNING, IN THE UNITED CITY OF YORKVILLE, BRISTOL TOWNSHIP, KENDALL COUNTY, ILLINOIS.

EXA TO WALLANT DOED HAMMANS TO USPS



TICOR TITLE INSURANCE COMPANY

ORDER NUMBER: 2000 000095603 KA

STREET ADDRESS: CORNER OF MCHUGH AND COUNTRYSIDE

CITY: YORKVILLE COUNTY: KENDALL COUNTY
TAX NUMBER: ***02 15 300 013 0600**
PIN 02-28-226-005

LEGAL DESCRIPTION:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF LOT 3 IN MENARDS COMMERCIAL COMMONS, ACCORDING TO THE PLAT THEREOF RECORDED MAY 13, 2002 AS DOCUMENT 02-11411, SAID POINT ALSO BEING THE NORTHERLY RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY, ACCORDING TO THE PLAT OF DEDICATION OF SAID COUNTRYSIDE PARKWAY AND MCHUGH ROAD, RECORDED JULY 19, 2000 AS DOCUMENT 0009655; THENCE ALONG THE BOUNDARY OF SAID LOT 3 THE FOLLOWING THREE COURSES; NORTH 10 DEGREES 10 MINUTES 19 SECONDS EAST A DISTANCE OF 428.32 FEET; THENCE SOUTH 80 DEGREES 14 MINUTES 48 SECONDS EAST A DISTANCE OF 57.05 FEET; THENCE NORTH 49 DEGREES 50 MINUTES 06 SECONDS EAST A DISTANCE OF 380.30 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF SAID MCHUGH ROAD; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE SOUTH 03 DEGREES 16 MINUTES 56 SECONDS EAST A DISTANCE OF 95.39 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST A DISTANCE OF 536.47 FEET; THENCE SOUTH 04 DEGREES 04 MINUTES 00 SECONDS WEST A DISTANCE OF 591.61 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE COURSES; 42.80 FEET ALONG A NON-TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 1500 00 FEET, THE CHORD OF WHICH BEARS NORTH 85 DEGREES 06 MINUTES 57 SECONDS WEST A CHORD DISTANCE OF 42.79 FEET; THENCE NORTH 85 DEGREES 56 MINUTES 00 SECONDS WEST A DISTANCE OF 338.21 FEET; THENCE 39.27 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, THE CHORD OF WHICH BEARS NORTH 40 DEGREES 56 MINUTES 00 SECONDS WEST A CHORD DISTANCE OF 35 36 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF SAID MCHUGH ROAD; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE THE FOLLOWING FIVE COURSES; NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST A DISTANCE OF 51.84 FEET; THENCE 180.06 FEET ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 540.00 FEET. THE CHORD OF WHICH BEARS NORTH 05 DEGREES 29 MINUTES 09 SECONDS WEST A CHORD DISTANCE OF 179.23 FEET; THENCE NORTH 15 DEGREES 02 MINUTES 19 SECONDS WEST A DISTANCE OF 231.13 FEET; THENCE 94.38 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, THE CHORD OF WHICH BEARS NORTH 09 DEGREES 09 MINUTES 38 SECONDS WEST A CHORD DISTANCE OF 94.22 FEET; THENCE NORTH 03 DEGREES 16 MINUTES 56 SECONDS WEST A DISTANCE OF 27.53 FEET TO THE POINT OF BEGINNING. IN THE UNITED CITY OF YORKVILLE, BRISTOL TOWNSHIP, KENDALL COUNTY, ILLINOIS.

Page 1 of 1

PINs: 02-21-482-001 02-21-482-002 02-21-482-003

02-28-226-010

Prairie Pointe Subdivision, Yorkville, Kendall County, Illinois

Legal Description prior to subdivision:

That part of the Southeast Quarter of Section 21, and that part of the Northeast Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian, described as follows: Commencing at the Southeast corner of Lot 3 in Menards Commercial Commons, according to the plat thereof recorded May 13, 2002 as Document No 02-11411, said point also being on the northerly Right-of-Way line of Countryside Parkway, according to the plat of dedication of said Countryside Parkway and McHugh Road, recorded July 19, 2000 as Document No. 0009655; thence along the boundary of said Lot 3 the following three (3) courses; North 10 degrees 10 minutes 19 seconds East, a distance of 428.32 feet; thence South 80 degrees 14 minutes 48 seconds East, a distance of 57.05 feet; thence North 49 degrees 50 minutes 06 seconds East, a distance of 380.30 feet to a point on the easterly Right-of-Way line of said McHugh Road, said point also being the most southerly corner of Lot 167 of Prairie Meadows Subdivision, for the Point of Beginning; thence continuing North 49 degrees 50 minutes 06 seconds East, along the southeasterly line of said Lot 167, 331 38 feet to a bend in said southeasterly line; thence North 49 degrees 50 minutes 23 seconds East, along said southeasterly line, 422.19 feet; thence South 38 degrees 18 minutes 57 seconds east, 725.52 feet to the westerly line of an existing Drainage Easement; thence South 21 degrees 49 minutes 59 seconds East, along the westerly line of said existing Drainage Easement, 202.47 feet to the northwesterly line of the proposed Crimson Lane; thence South 55 degrees 13 minutes 02 seconds West, along said northwesterly line, 189.48 feet to a point of curvature in said line; thence southwesterly along a curve to the left with a radius of 440 00 feet and a chord bearing of South 32 degrees 09 minutes 20 seconds West, an arc length of 354.20 feet; thence South 09 degrees 05 minutes 39 seconds West, along the westerly line of said proposed Crimson Lane, 41.31 feet; thence South 52 degrees 19 minutes 11 seconds West, along said westerly line, 35.25 feet to a point on the northerly right of way line of Countryside Parkway; thence westerly along said northerly right of way line, being along a curve to the left with a radius of 1393.64 feet and a chord bearing of North 82 degrees 44 minutes 37 seconds West, an arc length of 78.84 feet to the southeast corner of the United Stated Postal Service lands; thence North 04 degrees 04 minutes 00 seconds East, along the easterly line of said United Stated Postal Service lands, 591 61 feet to the northeast corner thereof; thence North 85 degrees 56 minutes 00 seconds West, along the northerly line of said United Stated Postal Service lands, 536.47 feet to the northwest corner thereof, said northwest corner being on the easterly right of way line of said McHugh Road; thence North 03 degrees 16 minutes 56 seconds West, along the easterly right of way line of said McHugh Road, 95.39 feet to the point of beginning, in the United City of Yorkville, Kendall County, Illinois

PART OF SECTIONS 21, 22, 27 AND 28, ALL IN TOWNSHIP 37 NORTH, RANGE 7 EAST, OF THE THIRD PRINCIPAL MERIDIAN, KENDALL COUNTY, ILLINOIS, BEING BOUNDED AS FOLLOWS:

COMMENCING AT THE SOUTHWESTERN CORNER OF LOT 211 IN AUTUMN CREEK P.U.D. UNIT 1 SUBDIVISION, BEING A SUBDIVISION OF PART OF SECTION 15 AND PART OF SECTION 22, ALL IN TOWNSHIP 37 NORTH. RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN. ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 3, 2006, AS DOCUMENT 200600000144 IN THE OFFICE OF THE RECORDER, KENDALL COUNTY. ILLINOIS: THENCE NORTH 38 DEGREES 09 MINUTES 10 SECONDS WEST (ASSUMED BEARINGS) ALONG THE SOUTHWESTERN LINE OF LOTS 211. 212 AND 213, A DISTANCE OF 333.67 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, SAID POINT LYING SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST 7.00 FEET FROM THE INTERSECTION OF THE SOUTHWESTERN LINE OF SAID LOT 213 AND THE SOUTHEASTERN RIGHT-OF-WAY LINE OF CRIMSON LANE AS DEDICATED ON SAID AUTUMN CREEK PLAT, SAID POINT ALSO LYING ON A NON-TANGENT CURVE BEING CONCAVE TO THE NORTHWEST, SAID POINT LYING SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST 440.00 FEET FROM THE RADIUS POINT OF SAID CURVE; THENCE SOUTHWESTERLY AND WESTERLY ALONG SAID CURVE TO THE RIGHT 234.72 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHEAST, SAID POINT LYING SOUTH 07 DEGREES 35 MINUTES 15 SECONDS EAST 440.00 FEET FROM THE RADIUS POINT OF THE FIRST CURVE, SAID POINT ALSO LYING NORTH 07 DEGREES 35 MINUTES 15 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF THE REVERSE CURVE, THE CHORD OF THE FIRST CURVE BEING SOUTH 67 DEGREES 07 MINUTES 48 SECONDS WEST 231.95 FEET; THENCE WESTERLY AND SOUTHWESTERLY ALONG SAID REVERSE CURVE TO THE LEFT 170.78 FEET TO ITS POINT OF TANGENCY, SAID POINT LYING NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF SAID CURVE, THE CHORD OF SAID REVERSE CURVE BEING SOUTH 68 DEGREES 49 MINUTES 21 SECONDS WEST 169.18 FEET; THENCE SOUTH 55 DEGREES 13 MINUTES 56 SECONDS WEST 1937.37 FEET; THENCE SOUTH 34 DEGREES 46 MINUTES 19 SECONDS EAST PERPENDICULAR TO THE EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34, A DISTANCE OF 1210.98 FEET TO A POINT LYING 69.89 FEET NORTHWESTERLY OF (MEASURED PERPENDICULAR TO) THE EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34, SAID RIGHT-OF-WAY LINE RECORDED IN A WARRANTY DEED ON APRIL 1, 2002, AS DOCUMENT 200200007755 IN THE OFFICE OF THE RECORDER, KENDALL COUNTY, ILLINOIS: THENCE SOUTH 60 DEGREES 44 MINUTES 34 SECONDS EAST 44.37 FEET TO A

POINT LYING 30.00 FEET NORTHWESTERLY OF (MEASURED PERPENDICULAR TO) THE AFORESAID EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34: THENCE SOUTH 34 DEGREES 46 MINUTES 19 SECONDS EAST PERPENDICULAR TO THE AFORESAID NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34 A DISTANCE OF 30.00 FEET TO THE AFORESAID EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34 (THE FOLLOWING TWO (2) COURSES ARE ALONG THE NORTHWESTERN AND NORTHERN LINE OF SAID U.S. ROUTE 34); 1) THENCE SOUTH 55 DEGREES 13 MINUTES 41 SECONDS WEST 1011.59 FEET: 2) THENCE NORTH 82 DEGREES 23 MINUTES 54 SECONDS WEST 77.16 FEET TO A CORNER OF SAID EXISTING NORTHERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34, SAID POINT ALSO LYING ON THE NORTHEASTERN RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY AS DEDICATED ON JULY 19, 2000, AS DOCUMENT 0009655 IN THE OFFICE OF THE RECORDER, KENDALL COUNTY, ILLINOIS (THE FOLLOWING TWO (2) COURSES ARE ALONG THE NORTHEASTERN AND NORTHERN LINE OF SAID COUNTRYSIDE PARKWAY); 1) THENCE NORTH 34 DEGREES 46 MINUTES 19 SECONDS WEST 54.37 FEET TO THE POINT OF CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHWEST, SAID POINT LYING NORTH 55 DEGREES 13 MINUTES 41 SECONDS EAST 1500.00 FEET FROM THE RADIUS POINT OF SAID CURVE: 2) THENCE NORTHWESTERLY AND WESTERLY ALONG SAID CURVE TO THE LEFT 1087.82 FEET TO THE SOUTHEASTERN CORNER OF CRIMSON LANE AS DEDICATED ON A PLAT PREPARED BY SMITH ENGINEERING CONSULTANTS AND LAST REVISED ON JULY 11, 2007, SAID POINT LYING NORTH 13 DEGREES 40 MINUTES 35 SECONDS EAST 1500.00 FEET FROM THE RADIUS POINT OF SAID CURVE, THE CHORD OF SAID CURVE BEING NORTH 55 DEGREES 32 MINUTES 52 SECONDS WEST 1064.14 FEET (THE FOLLOWING FIVE (5) COURSES ARE ALONG THE DEDICATION OF SAID CRIMSON LANE; 1) THENCE NORTH 33 DEGREES 31 MINUTES 12 SECONDS WEST 37.32 FEET; 2) THENCE NORTH 09 DEGREES 06 MINUTES 33 SECONDS EAST 44.20 FEET TO THE POINT OF CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHEAST, SAID POINT OF CURVATURE LYING NORTH 80 DEGREES 53 MINUTES 27 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF SAID CURVE; 3) THENCE NORTHERLY AND NORTHEASTERLY ALONG SAID CURVE TO THE RIGHT 289 80 FEET TO ITS POINT OF TANGENCY, SAID POINT OF TANGENCY LYING NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF SAID CURVE, THE CHORD OF SAID CURVE BEING NORTH 32 DEGREES 10 MINUTES 15 SECONDS EAST 282.04 FEET; 4) THENCE NORTH 55 DEGREES 13 MINUTES 56 SECONDS EAST 189 48 FEET; 5) THENCE NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 80,00 FEET; THENCE NORTH 55 DEGREES 13 MINUTES 56 SECONDS EAST 2883.55 FEET TO THE POINT OF CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHEAST. SAID POINT OF CURVATURE LYING NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 440.00 FEET FROM THE RADIUS POINT OF SAID CURVE;

THENCE NORTHEASTERLY AND EASTERLY ALONG SAID CURVE TO THE RIGHT 208.73 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE BEING CONCAVE TO THE NORTHWEST, SAID POINT OF REVERSE CURVATURE LYING NORTH 07 DEGREES 35 MINUTES 15 SECONDS WEST 440.00 FEET FROM THE FIRST CURVE, SAID POINT ALSO LYING SOUTH 07 DEGREES 35 MINUTES 15 SECONDS EAST 360.00 FEET FROM THE RADIUS POINT OF SAID REVERSE CURVE. THE CHORD OF THE FIRST CURVE BEING NORTH 68 DEGREES 49 MINUTES 21 SECONDS EAST 206.78 FEET; THENCE EASTERLY AND NORTHEASTERLY ALONG SAID REVERSE CURVE TO THE LEFT 192.05 FEET TO THE WESTERN LINE OF LOT 227 IN THE AFORESAID AUTUMN CREEK SUBDIVISION, SAID POINT LYING SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST 360.00 FEET FROM THE RADIUS POINT OF SAID REVERSE CURVE, THE CHORD OF THE REVERSE CURVE BEING NORTH 67 DEGREES 07 MINUTES 48 SECONDS EAST 189 78 FEET: THENCE SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST ALONG THE SOUTHWESTERN LINE OF SAID LOT 227 AND ALONG THE SOUTHWESTERN LINE OF SAID DEDICATED CRIMSON LANE AND ALONG THE SOUTHWESTERN LINE OF SAID LOT 213, A DISTANCE OF 80.00 FEET TO THE **POINT OF BEGINNING**, CONTAINING 40.848 ACRES, MORE OR LESS.

Exhibit "A"

LEGAL DESCRIPTION

That part of the Southeast Quarter of Section 21, part of the Southwest Quart of Section 22, part of the Northwest Quarter of Section 27 and part of the Northeast Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Commencing at an existing iron pipe stake said to be over the original location of a stone in the center line of the Original Bristol and Oswego Road previously described as being 23.05 chains West and thence 35°30' West, 11.02 chains from the Southeast corner of said Section 22; thence Northerly along a line forming an angle of 93°23'07" with the center line of U.S. Route No. 34, measured from the Northeast to the Northwest, this line hereinafter referred to as line "A", 30.05 feet to the Northerly right-of-way line of said Route 34; thence Northwesterly along line "A" aforesaid 798.60 feet; thence Southwesterly, parallel with said center line, 332.0 feet for a point of beginning; thence Northeasterly along the last described course, 332.0 feet to said line "A" thence Northwesterly along said line "A", 1,225.95 feet to a point measured along said line "A", 2,054.60 feet Northwesterly of said center line; thence Southwesterly along a line forming an angle of 87°07'00" with the last described course, measured clockwise therefrom, 825.40 feet; thence Northwesterly along a line which forms an angle of 269°46'00" with the last described course, measured clockwise therefrom, 508.20 feet; thence Southwesterly along a line forming an angle of 91°07'35" with the last described course, measured clockwise therefrom, 3,369.33 feet; thence Northwesterly along a line forming an angle of 130°01'22" with the last described course, measured counter-clockwise therefrom, 56.76 feet; thence Southerly along a line forming an angle of 90°21'26" with the last described course, measured clockwise therefrom, 1,362.93 to the Northwest corner of a tract conveyed to Vijay K. and Promila Marawaha by a Warranty Deed recorded June 17, 1994 as Document 9406488; thence Easterly along the North line of said tract at right angles to the last described course, 349.64 feet; thence Southerly along the East line of said tract 731.78 feet to the Northerly right-of-way of said Route 34; thence Easterly along said Northerly right-of-way line, 162.55 feet; thence Easterly along said Northerly right-of-way line being along a tangential curve to the left having a radius of 1,402.39 feet, an arc distance of 976.52 feet; thence Northeasterly along said Northerly right-of-way line being tangent to the last described curve at the last described point, 4,268.99 feet to a line drawn parallel with line "A" Southeasterly from the point of beginning; thence Northwesterly along said parallel line, 798.60 feet to the point of beginning; together with that part of U.S. Route 34 lying Southerly of and adjacent to the property hereon described, in Bristol Township, Kendall County, Illinois and containing a total of 257.68 Acres of land, more or less.

Page 2 of 7

Except the Kalant parcel, Exhibit A-2



TICOR TITLE INSURANCE COMPANY

ORDER NUMBER: 2000 000096267 KA

STREET ADDRESS: NW CORNER OF COUNTRISIDE PKWY & MCHUGH
CITY: YORKVILLE COUNTY: KENDALL COUNTY

TAX NUMBER: 02-28-226-002-0000 PIN: 02-21-400-009 and 02-28-226-007

LEGAL DESCRIPTION:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 3 IN MENARDS COMMERCIAL COMMONS, ACCORDING TO THE PLAT THEREOF RECORDED MAY 13, 2002 AS DOCUMENT NO. 02-11411, SAID POINT ALSO BEING ON THE NORTHERLY RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY, ACCORDING TO THE PLAT OF DEDICATION OF SAID COUNTRYSIDE PARKWAY AND MCHUGH ROAD, RECORDED JULY 19, 2000 AS DOCUMENT 0009655; THENCE ALONG THE BOUNDARY OF SAID LOT 3 THE FOLLOWING THREE COURSES; NORTH 10 DEGREES 10 MINUTES 19 SECONDS EAST A DISTANCE OF 428.32 FEET; THENCE SOUTH 80 DEGREES 14 MINUTES 48 SECONDS EAST A DISTANCE OF 57.05 FEET; THENCE NORTH 49 DEGREES 50 MINUTES 06 SECONDS EAST A DISTANCE OF 280.19 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF SAID MCHUGH ROAD; THENCE ALONG SAID WESTERLY RIGHT-OF-WAY LINE THE FOLLOWING SIX COURSES; SOUTH 03 DEGREES 16 MINUTES 50 SECONDS EAST A DISTANCE OF 62.86 FEET; THENCE 110.80 FEET ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 540.00 FEET, THE CHORD OF WHICH BEARS SOUTH 09 DEGREES 09 MINUTES 38 SECONDS EAST A CHORD DISTANCE OF 110.61 FEET; THENCE SOUTH 15 DEGREES 02 MINUTES 19 SECONDS EAST A DISTANCE OF 231.13 FEET; THENCE 153.39 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, THE CHORD OF WHICH BEARS SOUTH 05 DEGREES 29 MINUTES 09 SECONDS EAST A CHORD DISTANCE OF 152.68 FEET; THENCE SOUTH 04 DEGREES 04 MINUTES 00 SECONDS WEST A DISTANCE OF 51.84 FEET; THENCE 39.27 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, THE CHORD OF WHICH BEARS SOUTH 49 DEGREES 04 MINUTES 00 SECONDS WEST A CHORD DISTANCE OF 35,36 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF SAID COUNTRYSIDE PARKWAY; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE NORTH 85 DEGREES 56 MINUTES 00 SECONDS WEST A DISTANCE OF 412.41 FEET TO THE POINT OF BEGINNING, IN THE UNITED CITY OF YORKVILLE, BRISTOL TOWNSHIP, KENDALL COUNTY, ILLINOIS.

Page 3 of 7

EXA TO WALLANTI DOED HAMMANS TO USPS



and Except the USPS Parcel, Exhibit A-2

TICOR TITLE INSURANCE COMPANY

ORDER NUMBER: 2000 000095603 KA

STREET ADDRESS: CORNER OF MCHUGH AND COUNTRYSIDE

CITY: YORKVILLE COUNTY: KENDALL COUNTY
PIN: 02-28-226-005

TAX NUMBER: -02 15 300 013 0000

LEGAL DESCRIPTION:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 21, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF LOT 3 IN MENARDS COMMERCIAL COMMONS, ACCORDING TO THE PLAT THEREOF RECORDED MAY 13, 2002 AS DOCUMENT 02-11411, SAID POINT ALSO BEING THE NORTHERLY RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY, ACCORDING TO THE PLAT OF DEDICATION OF SAID COUNTRYSIDE PARKWAY AND MCHUGH ROAD, RECORDED JULY 19, 2000 AS DOCUMENT 0009655; THENCE ALONG THE BOUNDARY OF SAID LOT 3 THE FOLLOWING THREE COURSES; NORTH 10 DEGREES 10 MINUTES 19 SECONDS EAST A DISTANCE OF 428.32 FEET; THENCE SOUTH 80 DEGREES 14 MINUTES 48 SECONDS EAST A DISTANCE OF 57.05 FEET; THENCE NORTH 49 DEGREES 50 MINUTES 06 SECONDS EAST A DISTANCE OF 380.30 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF SAID MCHUGH ROAD; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE SOUTH 03 DEGREES 16 MINUTES 56 SECONDS EAST A DISTANCE OF 95.39 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST A DISTANCE OF 536.47 FEET; THENCE SOUTH 04 DEGREES 04 MINUTES 00 SECONDS WEST A DISTANCE OF 591.61 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE THE FOLLOWING THREE COURSES; 42.80 FEET ALONG A NON-TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 1500.00 FEET, THE CHORD OF WHICH BEARS NORTH 85 DEGREES 06 MINUTES 57 SECONDS WEST A CHORD DISTANCE OF 42.79 FEET; THENCE NORTH 85 DEGREES 56 MINUTES 00 SECONDS WEST A DISTANCE OF 338.21 FEET; THENCE 39.27 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, THE CHORD OF WHICH BEARS NORTH 40 DEGREES 56 MINUTES 00 SECONDS WEST A CHORD DISTANCE OF 35.36 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF SAID MCHUGH ROAD; THENCE ALONG SAID EASTERLY RIGHT-OF-WAY LINE THE FOLLOWING FIVE COURSES; NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST A DISTANCE OF 51.84 FEET; THENCE 180.06 FEET ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 540.00 FEET, THE CHORD OF WHICH BEARS NORTH 05 DEGREES 29 MINUTES 09 SECONDS WEST A CHORD DISTANCE OF 179.23 FEET; THENCE NORTH 15 DEGREES 02 MINUTES 19 SECONDS WEST A DISTANCE OF 231.13 FEET; THENCE 94.38 FEET ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 460.00 FEET, THE CHORD OF WHICH BEARS NORTH 09 DEGREES 09 MINUTES 38 SECONDS WEST A CHORD DISTANCE OF 94.22 FEET; THENCE NORTH 03 DEGREES 16 MINUTES 56 SECONDS WEST A DISTANCE OF 27.53 FEET TO THE POINT OF BEGINNING, IN THE UNITED CITY OF YORKVILLE, BRISTOL TOWNSHIP, KENDALL COUNTY, ILLINOIS.

and except the Prairie Point Subdivision, Exhibit A-3

PINs: 02-21-482-001

Prairie Pointe Subdivision, Yorkville, Kendall County, Illinois

02-21-482-002

02-21-482-003

02-28-226-010

Legal Description prior to subdivision:

That part of the Southeast Quarter of Section 21, and that part of the Northeast Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian, described as follows: Commencing at the Southeast corner of Lot 3 in Menards Commercial Commons, according to the plat thereof recorded May 13, 2002 as Document No. 02-11411, said point also being on the northerly Right-of-Way line of Countryside Parkway, according to the plat of dedication of said Countryside Parkway and McHugh Road, recorded July 19, 2000 as Document No. 0009655; thence along the boundary of said Lot 3 the following three (3) courses; North 10 degrees 10 minutes 19 seconds East, a distance of 428.32 feet; thence South 80 degrees 14 minutes 48 seconds East, a distance of 57.05 feet; thence North 49 degrees 50 minutes 06 seconds East, a distance of 380.30 feet to a point on the easterly Right-of-Way line of said McHugh Road, said point also being the most southerly corner of Lot 167 of Prairie Meadows Subdivision, for the Point of Beginning; thence continuing North 49 degrees 50 minutes 06 seconds East, along the southeasterly line of said Lot 167, 331.38 feet to a bend in said southeasterly line; thence North 49 degrees 50 minutes 23 seconds East, along said southeasterly line, 422.19 feet; thence South 38 degrees 18 minutes 57 seconds east, 725.52 feet to the westerly line of an existing Drainage Easement; thence South 21 degrees 49 minutes 59 seconds East, along the westerly line of said existing Drainage Easement, 202.47 feet to the northwesterly line of the proposed Crimson Lane; thence South 55 degrees 13 minutes 02 seconds West, along said northwesterly line, 189.48 feet to a point of curvature in said line; thence southwesterly along a curve to the left with a radius of 440.00 feet and a chord bearing of South 32 degrees 09 minutes 20 seconds West, an arc length of 354.20 feet; thence South 09 degrees 05 minutes 39 seconds West, along the westerly line of said proposed Crimson Lane, 41.31 feet; thence South 52 degrees 19 minutes 11 seconds West, along said westerly line, 35.25 feet to a point on the northerly right of way line of Countryside Parkway; thence westerly along said northerly right of way line, being along a curve to the left with a radius of 1393.64 feet and a chord bearing of North 82 degrees 44 minutes 37 seconds West, an arc length of 78.84 feet to the southeast corner of the United Stated Postal Service lands; thence North 04 degrees 04 minutes 00 seconds East, along the easterly line of said United Stated Postal Service lands, 591.61 feet to the northeast corner thereof; thence North 85 degrees 56 minutes 00 seconds West, along the northerly line of said United Stated Postal Service lands, 536.47 feet to the northwest corner thereof, said northwest corner being on the easterly right of way line of said McHugh Road; thence North 03 degrees 16 minutes 56 seconds West, along the easterly right of way line of said McHugh Road, 95.39 feet to the point of beginning, in the United City of Yorkville, Kendall County, Illinois.

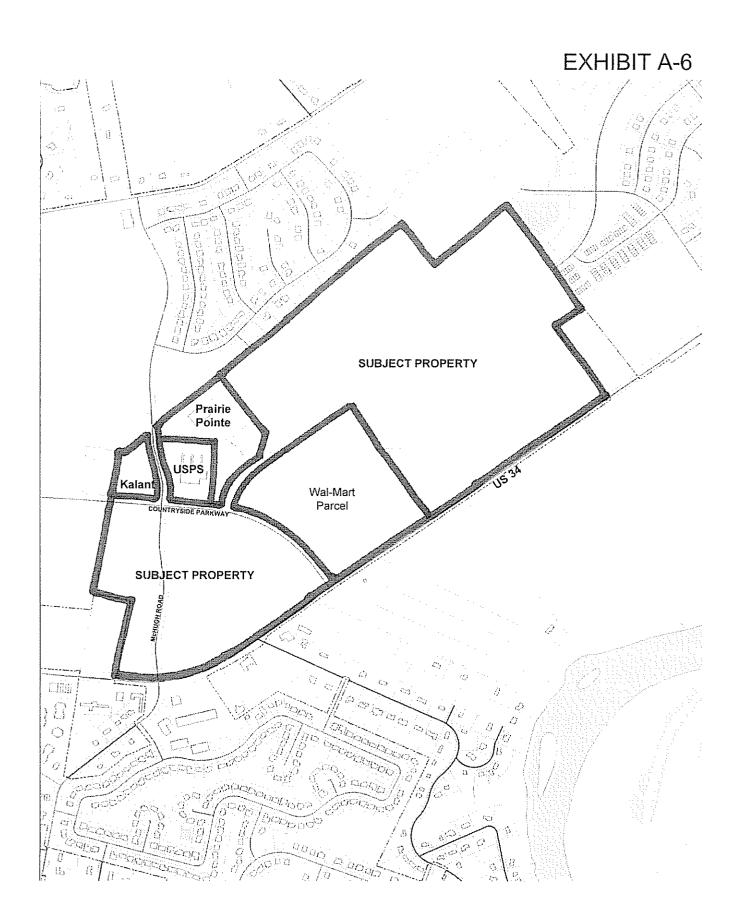
and except the Wal-Mart Parcel, Exhibit A-4

PART OF SECTIONS 21, 22, 27 AND 28, ALL IN TOWNSHIP 37 NORTH, RANGE 7 EAST, OF THE THIRD PRINCIPAL MERIDIAN, KENDALL COUNTY, ILLINOIS, BEING BOUNDED AS FOLLOWS:

COMMENCING AT THE SOUTHWESTERN CORNER OF LOT 211 IN AUTUMN CREEK P.U.D. UNIT 1 SUBDIVISION, BEING A SUBDIVISION OF PART OF SECTION 15 AND PART OF SECTION 22, ALL IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED JANUARY 3, 2006, AS DOCUMENT 200600000144 IN THE OFFICE OF THE RECORDER, KENDALL COUNTY, ILLINOIS; THENCE NORTH 38 DEGREES 09 MINUTES 10 SECONDS WEST (ASSUMED BEARINGS) ALONG THE SOUTHWESTERN LINE OF LOTS 211. 212 AND 213, A DISTANCE OF 333.67 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, SAID POINT LYING SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST 7.00 FEET FROM THE INTERSECTION OF THE SOUTHWESTERN LINE OF SAID LOT 213 AND THE SOUTHEASTERN RIGHT-OF-WAY LINE OF CRIMSON LANE AS DEDICATED ON SAID AUTUMN CREEK PLAT, SAID POINT ALSO LYING ON A NON-TANGENT CURVE BEING CONCAVE TO THE NORTHWEST. SAID POINT LYING SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST 440.00 FEET FROM THE RADIUS POINT OF SAID CURVE; THENCE SOUTHWESTERLY AND WESTERLY ALONG SAID CURVE TO THE RIGHT 234.72 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHEAST, SAID POINT LYING SOUTH 07 DEGREES 35 MINUTES 15 SECONDS EAST 440.00 FEET FROM THE RADIUS POINT OF THE FIRST CURVE, SAID POINT ALSO LYING NORTH 07 DEGREES 35 MINUTES 15 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF THE REVERSE CURVE, THE CHORD OF THE FIRST CURVE BEING SOUTH 67 DEGREES 07 MINUTES 48 SECONDS WEST 231.95 FEET; THENCE WESTERLY AND SOUTHWESTERLY ALONG SAID REVERSE CURVE TO THE LEFT 170.78 FEET TO ITS POINT OF TANGENCY, SAID POINT LYING NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF SAID CURVE, THE CHORD OF SAID REVERSE CURVE BEING SOUTH 68 DEGREES 49 MINUTES 21 SECONDS WEST 169 18 FEET; THENCE SOUTH 55 DEGREES 13 MINUTES 56 SECONDS WEST 1937.37 FEET; THENCE SOUTH 34 DEGREES 46 MINUTES 19 SECONDS EAST PERPENDICULAR TO THE EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34, A DISTANCE OF 1210.98 FEET TO A POINT LYING 69.89 FEET NORTHWESTERLY OF (MEASURED PERPENDICULAR TO) THE EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34, SAID RIGHT-OF-WAY LINE RECORDED IN A WARRANTY DEED ON APRIL 1, 2002, AS DOCUMENT 200200007755 IN THE OFFICE OF THE RECORDER, KENDALL COUNTY, ILLINOIS: THENCE SOUTH 60 DEGREES 44 MINUTES 34 SECONDS EAST 44.37 FEET TO A

POINT LYING 30.00 FEET NORTHWESTERLY OF (MEASURED PERPENDICULAR TO) THE AFORESAID EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34; THENCE SOUTH 34 DEGREES 46 MINUTES 19 SECONDS EAST PERPENDICULAR TO THE AFORESAID NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34 A DISTANCE OF 30.00 FEET TO THE AFORESAID EXISTING NORTHWESTERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34 (THE FOLLOWING TWO (2) COURSES ARE ALONG THE NORTHWESTERN AND NORTHERN LINE OF SAID U.S. ROUTE 34): 1) THENCE SOUTH 55 DEGREES 13 MINUTES 41 SECONDS WEST 1011.59 FEET; 2) THENCE NORTH 82 DEGREES 23 MINUTES 54 SECONDS WEST 77.16 FEET TO A CORNER OF SAID EXISTING NORTHERN RIGHT-OF-WAY LINE OF U.S. ROUTE 34, SAID POINT ALSO LYING ON THE NORTHEASTERN RIGHT-OF-WAY LINE OF COUNTRYSIDE PARKWAY AS DEDICATED ON JULY 19, 2000, AS DOCUMENT 0009655 IN THE OFFICE OF THE RECORDER, KENDALL COUNTY, ILLINOIS (THE FOLLOWING TWO (2)) COURSES ARE ALONG THE NORTHEASTERN AND NORTHERN LINE OF SAID COUNTRYSIDE PARKWAY), 1) THENCE NORTH 34 DEGREES 46 MINUTES 19 SECONDS WEST 54.37 FEET TO THE POINT OF CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHWEST, SAID POINT LYING NORTH 55 DEGREES 13 MINUTES 41 SECONDS EAST 1500.00 FEET FROM THE RADIUS POINT OF SAID CURVE; 2) THENCE NORTHWESTERLY AND WESTERLY ALONG SAID CURVE TO THE LEFT 1087.82 FEET TO THE SOUTHEASTERN CORNER OF CRIMSON LANE AS DEDICATED ON A PLAT PREPARED BY SMITH ENGINEERING CONSULTANTS AND LAST REVISED ON JULY 11, 2007, SAID POINT LYING NORTH 13 DEGREES 40 MINUTES 35 SECONDS EAST 1500.00 FEET FROM THE RADIUS POINT OF SAID CURVE, THE CHORD OF SAID CURVE BEING NORTH 55 DEGREES 32 MINUTES 52 SECONDS WEST 1064.14 FEET (THE FOLLOWING FIVE (5) COURSES ARE ALONG THE DEDICATION OF SAID CRIMSON LANE; 1) THENCE NORTH 33 DEGREES 31 MINUTES 12 SECONDS WEST 37.32 FEET; 2) THENCE NORTH 09 DEGREES 06 MINUTES 33 SECONDS EAST 44.20 FEET TO THE POINT OF CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHEAST, SAID POINT OF CURVATURE LYING NORTH 80 DEGREES 53 MINUTES 27 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF SAID CURVE; 3) THENCE NORTHERLY AND NORTHEASTERLY ALONG SAID CURVE TO THE RIGHT 289 80 FEET TO ITS POINT OF TANGENCY. SAID POINT OF TANGENCY LYING NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 360.00 FEET FROM THE RADIUS POINT OF SAID CURVE, THE CHORD OF SAID CURVE BEING NORTH 32 DEGREES 10 MINUTES 15 SECONDS EAST 282.04 FEET; 4) THENCE NORTH 55 DEGREES 13 MINUTES 56 SECONDS EAST 189.48 FEET; 5) THENCE NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 80.00 FEET; THENCE NORTH 55 DEGREES 13 MINUTES 56 SECONDS EAST 2883.55 FEET TO THE POINT OF CURVATURE OF A CURVE BEING CONCAVE TO THE SOUTHEAST. SAID POINT OF CURVATURE LYING NORTH 34 DEGREES 46 MINUTES 04 SECONDS WEST 440.00 FEET FROM THE RADIUS POINT OF SAID CURVE;

THENCE NORTHEASTERLY AND EASTERLY ALONG SAID CURVE TO THE RIGHT 208.73 FEET TO A POINT OF REVERSE CURVATURE OF A CURVE BEING CONCAVE TO THE NORTHWEST, SAID POINT OF REVERSE CURVATURE LYING NORTH 07 DEGREES 35 MINUTES 15 SECONDS WEST 440.00 FEET FROM THE FIRST CURVE, SAID POINT ALSO LYING SOUTH 07 DEGREES 35 MINUTES 15 SECONDS EAST 360.00 FEET FROM THE RADIUS POINT OF SAID REVERSE CURVE, THE CHORD OF THE FIRST CURVE BEING NORTH 68 DEGREES 49 MINUTES 21 SECONDS EAST 206.78 FEET; THENCE EASTERLY AND NORTHEASTERLY ALONG SAID REVERSE CURVE TO THE LEFT 192.05 FEET TO THE WESTERN LINE OF LOT 227 IN THE AFORESAID AUTUMN CREEK SUBDIVISION, SAID POINT LYING SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST 360.00 FEET FROM THE RADIUS POINT OF SAID REVERSE CURVE. THE CHORD OF THE REVERSE CURVE BEING NORTH 67 DEGREES 07 MINUTES 48 SECONDS EAST 189.78 FEET: THENCE SOUTH 38 DEGREES 09 MINUTES 10 SECONDS EAST ALONG THE SOUTHWESTERN LINE OF SAID LOT 227 AND ALONG THE SOUTHWESTERN LINE OF SAID DEDICATED CRIMSON LANE AND ALONG THE SOUTHWESTERN LINE OF SAID LOT 213, A DISTANCE OF 80 00 FEET TO THE POINT OF BEGINNING, CONTAINING 40.848 ACRES, MORE OR LESS.





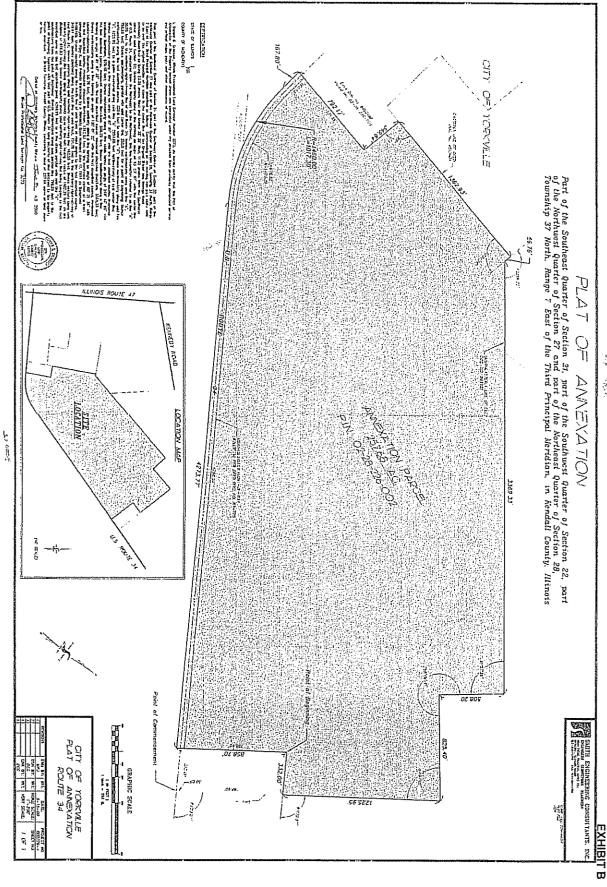


Exhibit C Legal Description of B-3 Service Business District zoned area subject to this Modification Agreement

THAT PART OF SECTIONS 21, 22, 27 AND 28 IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN LYING NORTHWESTERLY OF AND ADJACENT TO THE NORTHWESTERLY RIGHT OF WAY LINE OF U.S. ROUTE 34, SOUTHEASTERLY OF AND ADJACENT TO THE SOUTHEASTERLY RIGHT OF WAY LINE OF CRIMSON LANE, NORTHEASTERLY OF AND ADJACENT TO THE NORTHEASTERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY AND SOUTHWESTERLY OF AND ADJACENT TO THE SOUTHWESTERLY LINE OF AUTUMN CREEK P.U.D. UNIT 1, (EXCEPT THE EASTERLY 330.0 FEET OF THE SOUTHERLY 740' THEREOF) IN THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND CONTAINING 98.1 ACRES OF LAND MORE OR LESS.

Also:

That part of the Northeast Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Beginning at the Northeast corner of Lot 4 of Menards Commercial Commons, recorded as Document 02-11411; thence South 85 degrees 56 minutes 00 seconds East, along the South right of way line of Countryside Parkway, 424.17 feet; thence Southeasterly along said South right of way line, being along a curve concave to the Southwest, with a radius of 25.00 feet and a chord bearing of South 40 degrees 56 minutes 00 seconds East, an arc length of 39.27 feet to a point on the Westerly right of way line of McHugh Road; thence South 04 degrees 04 minutes 00 seconds West, along said Westerly right of way line, 226.43 feet; thence southerly along said Westerly right of way line, being along a curve concave to the East, with a radius of 540,00 feet and a chord bearing of South 01 degrees 24 minutes 19 seconds East, an arc length of 103.15 feet; thence South 06 degrees 52 minutes 38 seconds East, along said Westerly right of way line, 250.39 feet, thence southerly along said Westerly right of way line, being along a curve concave to the West, with a radius of 960.00 feet and a chord bearing of South 01 degrees 38 minutes 51 seconds West, an arc length of 285.66 feet; thence South 10 degrees 10 minutes 20 seconds West, along said Westerly right of way line, 300.40 feet; thence Southerly along said Westerly right of way line, being along a curve, concave to the East, with a radius of 540.00 feet and a chord bearing of South 03 degrees 01 minutes 21 seconds West, an arc length of 134.77 feet; thence South 04 degrees 07 minutes 38 seconds East, along said Westerly right of way line, 184.24 feet to the Northerly right of way line of U.S. Route 34, per document numbers 2002-00008973 and 2002-00007755; thence South 58 degrees 43 minutes 04 seconds West, along said Northerly right of way line, 96.06 feet; thence Westerly along said Northerly right of way line, being along a curve concave to the North, with a radius of 1390.00 feet and a chord bearing of North 86 degrees 56 minutes 15 seconds West, an arc length of 97.51 feet; thence North 84 degrees 55 minutes 40 seconds West, along said Northerly right of way line. 154.24 feet to a point on the East line of a tract of land conveyed to Vijay K. and Promila Marawaha by a Warranty Deed recorded June 17, 1994 as Document 9406488; thence North 10 degrees 10 minutes 20 seconds East along the Easterly line of said Document 9406488, 701.56 feet to the Northeast corner thereof, thence North 79 degrees 49 minutes 41 seconds West, along the Northerly line of said Document 9406488, 349.64 feet to a point on the Easterly line of Lot 4 of said Menards Commercial Commons, recorded as Document 02-11411; thence North 10 degrees 10 minutes 19 seconds East, along said Easterly line, 823.98 feet to the point of beginning, in the Township of Bristol, Kendall County, Illinois and containing 14 61 acres of land more or less.

Also:

Triangular Parcel legal description:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28 TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13 SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976 51 FEET; THENCE WESTERLY ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00' AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES 09 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1.41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MC HUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460,00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET: THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300 40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309 47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250 39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460 00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25 00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39 27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338 21 FEET; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND A CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54 08 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS, AND CONTAINING 34 13 ACRES MORE OR LESS.

Legal Description of property southerly of Countryside Parkway, westerly of McHugh and northerly of Route 34:

That part of the Northeast Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Beginning at the Northeast corner of Lot 4 of Menards Commercial Commons, recorded as Document 02-11411; thence South 85 degrees 56 minutes 00 seconds East, along the South right of way line of Countryside Parkway, 424 17 feet; thence Southeasterly along said South right of way line, being along a curve concave to the Southwest, with a radius of 25.00 feet and a chord bearing of South 40 degrees 56 minutes 00 seconds East, an arc length of 39 27 feet to a point on the Westerly right of way line of McHugh Road; thence South 04 degrees 04 minutes 00 seconds West, along said Westerly right of way line, 226 43 feet; thence southerly along said Westerly right of way line, being along a curve concave to the East, with a radius of 540 00 feet and a chord bearing of South 01 degrees 24 minutes 19 seconds East, an arc length of 103.15 feet; thence South 06 degrees 52 minutes 38 seconds East, along said Westerly right of way line, 250 39 feet; thence southerly along said Westerly right of way line, being along a curve concave to the West, with a radius of 960 00 feet and a chord bearing of South 01 degrees 38 minutes 51 seconds West, an arc length of 285 66 feet; thence South 10 degrees 10 minutes 20 seconds West, along said Westerly right of way line, 300 40 feet; thence Southerly along said Westerly right of way line, being along a curve, concave to the East, with a radius of 540 00 feet and a chord bearing of South 03 degrees 01 minutes 21 seconds West, an arc length of 134.77 feet; thence South 04 degrees 07 minutes 38 seconds East, along said Westerly right of way line, 184 24 feet to the Northerly right of way line of U.S. Route 34, per document numbers 2002-00008973 and 2002-00007755; thence South 58 degrees 43 minutes 04 seconds West, along said Northerly right of way line, 96 06 feet; thence Westerly along said Northerly right of way line, being along a curve concave to the North, with a radius of 1390 00 feet and a chord bearing of North 86 degrees 56 minutes 15 seconds West, an arc length of 97.51 feet; thence North 84 degrees 55 minutes 40 seconds West, along said Northerly right of way line, 154.24 feet to a point on the East line of a tract of land conveyed to Vijay K. and Promila Marawaha by a Warranty Deed recorded June 17, 1994 as Document 9406488; thence North 10 degrees 10 minutes 20 seconds East along the Easterly line of said Document 9406488, 701 56 feet to the Northeast corner thereof; thence North 79 degrees 49 minutes 41 seconds West, along the Northerly line of said Document 9406488, 349.64 feet to a point on the Easterly line of Lot 4 of said Menards Commercial Commons, recorded as Document 02-11411; thence North 10 degrees 10 minutes 19 seconds East, along said Easterly line, 823 98 feet to the point of beginning, in the Township of Bristol, Kendall County, Illinois and containing 14 61 acres of land more or less

ARTICLE D. B-3 SERVICE BUSINESS DISTRICT

10-7D-1: PERMITTED USES:

All uses permitted in the B-2 district.
Agricultural implement sales and service.
Appliance - service only.
Automotive sales and service.
Boat-sales.
Building material sales.
Business machine repair.
Car wash without mechanical repair on the premises.
Catering service.
Drive-in restaurant.
Electrical equipment sales.
Feed and grain sales.
Frozen food locker.
Furniture repair and refinishing.
Golf driving range.
Greenhouse.
Kennel.
Miniature golf.
Motorcycle sales and service.
Nursery.
Orchard.

Plumbing supplies and fixture sales.

Park - commercial recreation.

Pump sales.
Recreational vehicle sales and service.
Skating-rin k.
Sports-arena
Taxicab-garage .
Tennis court - indoor.
Trailer rental.
Truck rental.
Truck-sales and service.
Upholstery shop.
Veterinary clinic. (Ord. 1973-56A, 3-28-1974; amd. Ord. 1986-1, 1-9-1986; Ord. 1988-7, 4-14-1988; Ord. 1995-19, 8-10-1995; Ord. 1998-21, 6-25-1998; Ord. 2005-58, 7-12-2005)
10-7D-2: SPECIAL USES:
All special uses permitted in the B-2 district.
Amusement park.
Boat launching ramp.
Boat rental and storage.
Daycare centers.
Stadium. (Ord. 1973-56A, 3-28-1974; amd. Ord. 1995-19, 8-10-1995; Ord. 1995-20, 8-10-1995)
10-7D-3: LOT AREA:

10-7D-4: YARD AREAS:

No building shall be erected or enlarged unless the following yards are provided and maintained in connection with such building, structure or enlargement:

A. Front Yard: A front yard of not less than fifty feet (50'). (Ord. 1973-56A, 3-28-1974)

No lot shall have an area less than ten thousand (10,000) square feet. (Ord. 1986-1, 1-9-1986)

B. Side Yards:

- 1. A minimum side yard shall be required between buildings within the B-3 district of twenty feet (20') between a building constructed thereon and the side lot line, except in any existing B-3 zoning district within the corporate boundaries where no minimum side yard shall be required between buildings, except where a side yard adjoins a street, wherein a minimum yard of not less than thirty feet (30') shall be required.
- 2. The zoning board of appeals may, upon application, grant a variance to any petitioner seeking to vary the side yard requirements in a B-3 district if the variance is sought for a parcel of real estate that is sought to be developed as a planned unit development because of the unique nature of the parcel or development sought thereon. (Ord. 1986-1, 1-9-1986; amd. 1994 Code)
- C. Rear Yard: A rear yard of not less than twenty feet (20'). (Ord. 1973-56A, 3-28-1974)
- D. Transitional Yards: Where a side or rear lot line coincides with a residential district zone, a yard of not less thirty feet (30') shall be required. A transitional yard shall be maintained only when the adjoining residential district is zoned R-1 or R-2 one-family residential. (Ord. 1973-56A, 3-28-1974; amd. Ord. 1987-1, 2-12-1987)

E. Parking Lot Setback Requirements:

- 1. Arterial Roadways: When a parking lot located in the B-3 zoning district is located next to an arterial roadway, as defined in the city's comprehensive plan, a twenty foot (20') setback from the property line is required.
- 2. Nonarterial Roadways: When a parking lot located in the B-3 zoning district is located next to a nonarterial roadway, as defined in the city's comprehensive plan, a ten foot (10') setback from the property line is required. (Ord. 1998-32, 11-5-1998)

10-7D-5: LOT COVERAGE:

No more than fifty percent (50%) of the area of the zoning lot may be occupied by buildings and structures, including accessory buildings. (Ord. 1973-56A, 3-28-1974)

10-7D-6: MAXIMUM BUILDING HEIGHT:

- A.No building or structure shall be erected or altered to exceed a maximum height of six (6) stories or eighty feet (80'), whichever is lower.
- B.No building or structure shall be erected or altered to exceed a maximum height of three (3) stories or thirty five feet (35') within the "downtown area" as described by exhibit A, attached to the ordinance codified herein. (Ord. 2006-67, 8-8-2006)

10-7D-7: OFF STREET PARKING AND LOADING:

All in accordance with regulations set forth in chapter 11 of this title. (Ord. 1973-56A, 3-28-1974)

EXHIBIT "D-1" Permitted Uses

This exhibit lists all permitted uses as they exist in the current Zoning Ordinance. Uses excluded and not permitted by this Agreement are crossed out as follows: (not permitted use)

OFFICE DISTRICT (0)

Advertising agency.

Bank.

Barber shop.

Beauty shop.

Bookkeeping service.

Club private indoor.

Coffee shop.

College, university or junior college.

Commercial school, trade school - offering training in classroom study.

Credit union.

Detective agency.

Employment office.

Engineering office.

Government office.

Income tax service.

Insurance office.

Library.

Manufacturing agent's office.

Medical clinic.

Park.

Professional offices.

Public accountant.

Real estate office.

Savings and loan association.

Stenographic service.

Stock broker.

Telegraph office.

Ticket office.

Title company.

Travel agency.

Utility office. (Ord. 1973-56A, 3-28-74)

Special Uses

Solid waste disposal site (Ord. 1973-56A, 3-28-1974; amd. Ord. 1995-20, 8-10-1995)

LIMITED BUSINESS DISTRICT (B-1)

All uses permitted in the O district.

Antique sales.

Apartments, single family, located in business buildings.

Bakery - retail.

Barbershop.

Beauty shop.

Bookstore.

Cafeteria (diner).

Camera shop.

Church or other place of worship.

Cigar, cigarette and tobacco store.

Clothes - pressing and repair.

Club-private indoor.

Club private outdoor.

Community center

Dressmaker - seamstress.

Drugstore.

Florist sales.

Fruit and vegetable market - retail.

Gift shop.

Grocery store - supermarket.

Gymnasium.

Health food store.

Hobby shop.

Hospital (general).

Hospital or treatment center.

Household furnishing shop.

Ice cream shop.

Jewelry - retail.

Laundry, cleaning and dyeing - retail.

Library.

Magazine and newsstand.

Meat market.

Medical clinic.

Mortuary - funeral home.

Park.

Photography studio.

Playground.

Post office.

Professional building.

Recreation center.

Restaurant.

Shoe and hat repair.

Substation.

Swimming pool - indoor.

Tennis club - private or daily fee.

Trailer. (Ord. 1973–56A, 3-28-1974; amd. 1994-Code; Ord. 1994-1A, 2-10-1994; Ord.

2003 41, 7 22 2003)

GENERAL BUSINESS DISTRICT (B-2)

All uses permitted in the O and B-1 Districts.

Appliances - sales.

Army/Navy surplus sales.

Art gallery - art studio sales.

Art supply store.

Auditorium.

Automatic food service.

Automobile accessory store.

Automobile rental.

Bicycle shop.

Billiard parlor.

Blueprint and photostat shop.

Bowling alley.

Carry-out food service.

Catalog sales office.

Clothing store - all types.

Dance hall.

Department store.

Discount store

Drygoods store - retail.

Floor covering sales.

Furniture sales - new/used.

Hardware store.

Health club or gymnasium.

Hotel.

Interior decorating studio.

Junior department store

Leather goods.

Locksmith

Motel.

Music, instrument and record store.

Newspaper publishing.

Office equipment and supply sales.

Paint/wallpaper store.

Pawnshop.

Personal loan agency.

Pet store.

Picture frame store.

Radio and television studios.

Reducing salon, masseur and steam bath.

Sporting goods

Stationery.

Taxidermist.

Theater.

Toy store.

Typewriter - sales and repair.

Variety store.

Watch and clock sales and repair.

Weaving and mending - custom. (Ord. 1973-56A, 3-28-1974; amd. 1994 Code)

SERVICE BUSINESS DISTRICT (B-3)

All uses permitted in the B-2 district.

Agricultural implement sales and service.

Appliance - service only.

Automotive sales and service

Boat sales.

Building material sales.

Business machine repair.

Car wash without mechanical repair on the premises.

Catering service.

Drive-in restaurant.

Electrical equipment sales.

Feed and grain sales.

Frozen food locker.

Furniture repair and refinishing.

Golf driving range.

Greenhouse

Kennel.

Miniature golf.

Motorcycle sales and service.

Nursery.

Orchard.

Park - commercial recreation.

Plumbing supplies and fixture sales.

Pump sales.

Recreational vehicle sales and service.

Skating rink.

Sports arena.

Taxicab garage.

Tennis court - indoor.

Trailer rental.

Truck rental.

Truck-sales and service.

Upholstery shop.

Veterinary clinic. (Ord. 1973-56A, 3-28-1974; amd. Ord. 1986-1, 1-9-1986; Ord. 1988-7, 4-14-1988; Ord. 1995-19, 8-10-1995; Ord. 1998-21, 6-25-1998; Ord. 2005-58, 7-12-2005)

Exhibit E Legal Description of PUD B.R-2 One Family District component of the Subject Property

THAT PART OF SECTIONS 21 AND 22, IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING NORTHEASTERLY OF AND ADJACENT TO PRAIRIE POINTE SUBDIVISION, SOUTHEASTERLY OF AND ADJACENT TO THE SOUTHEASTERLY LINE (AND ITS NORTHEASTERLY EXTENSION) OF PRAIRIE MEADOWS SUBDIVISION, NORTHWESTERLY OF AND ADJACENT TO THE NORTHWESTERLY RIGHT OF WAY LINE OF CRIMSON LANE, AND SOUTHWESTERLY OF THE SOUTHWESTERLY LINE (AND ITS NORTHWESTERLY EXTENSION) OF AUTUMN CREEK SUBDIVISION, (EXCEPT THAT DESCRIBED AS FOLLOWS: THAT PART OF SAID SECTIONS 21 AND 22 LYING NORTHEASTERLY OF AND ADJACENT TO PRAIRIE POINTE SUBDIVISION, NORTHWESTERLY OF AND ADJACENT TO THE NORTHWESTERLY RIGHT OF WAY LINE OF CRIMSON LANE, SOUTHEASTERLY OF AND ADJACENT TO A LINE THAT IS 235.0' NORTHWESTERLY OF AND PARALLEL WITH THE NORTHWESTERLY RIGHT OF WAY LINE OF SAID CRIMSON LANE, AND SOUTHWESTERLY OF A LINE THAT IS 445.0 FEET SOUTHWESTERLY OF AND PARALLEL WITH THE SOUTHEASTERLY EXTENSION OF THE NORTHEASTERLY LINE OF PRAIRIE MEADOWS SUBDIVISION, AND EXCEPT THAT PART OF SAID SECTION 22 DESIGNATED AS A SCHOOL PARCEL) IN THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND CONTAINING 42.0 ACRES OF LAND MORE OR LESS.

ARTICLE C. R-2 ONE-FAMILY RESIDENCE DISTRICT

10-6C-1: USES PERMITTED:

The following uses are permitted:

Any permitted use in the Estate District or the R-1 One-Family Residence District. (Ord. 2000-1, 1-27-2000)

10-6C-2: SPECIAL USES:

The following uses may be allowed by special use permit in accordance with the provisions of Section <u>10-14-6</u> of this Title:

Any use permitted as a special use in the Estate District or the R-1 One-Family Residence District, except that planned developments may be considered where the zoning lot proposed for development has a gross area of not less than ten (10) acres.

Bed and breakfast inns. (Ord. 1973-56A, 3-28-1974; amd. Ord. 1994-36, 10-13-1994; Ord. 2000-1, 1-27-2000)

10-6C-3: LOT AREA AND ALLOWABLE DENSITY:

A. Lots with private wells and/or private sewage treatment facilities:

- 1. One acre with a width at the building line not less than one hundred twenty five feet (125'). Density shall not exceed one dwelling unit per each acre. (Ord. 1973-56A, 3-28-1974; amd. 1994 Code; Ord. 2000-1, 1-27-2000)
- 2. This subsection shall apply within the one and one-half (1 1/2) mile planning limits of the City, only upon application and obtaining a special use from the City Plan Commission and approved by the City Council. The standards for approval of a special use permit shall be only upon:
 - a. A showing by the petitioner that an undue hardship exists to establish a connection to the City water and/or sewer mains.
 - b. That no sewer or water lines exist within two hundred fifty feet (250') of the proposed development of petitioner.
 - c. That due to unique size, terrain or character of the petitioner's development, it is necessary to allow individual private wells and private sewage treatment facilities so as to facilitate the orderly growth of a particular development.
 - d. That the City is unable to provide capacity in its water or sewer mains; or the petitioner is unable to secure sufficient capacity of the Yorkville-Bristol Sanitary District Plant for disposal of sewage. (Ord. 1988-2, 1-28-1988, amd. Ord. 2000-1, 1-27-2000)
- B. Lots served by both public sewerage and water facilities shall have an area of not less than

- twelve thousand (12,000) square feet and a width at the building line of not less than eighty feet (80'). Density shall not exceed three and three-tenths (3.3) dwelling units per each acre.
- C. All nonresidential principal uses of buildings as permitted in this Article shall be located on a tract of land having an area of not less than two (2) acres, except Municipal projects and developments.
- D. Lot size for special uses shall not be less than two (2) acres. (Ord. 1973-56A, 3-28-1974; amd. 1994 Code; Ord. 2000-1, 1-27-2000)

10-6C-4: YARD AREAS:

No building shall be erected or enlarged unless the following yards are provided and maintained in connection with such building, structure or enlargement:

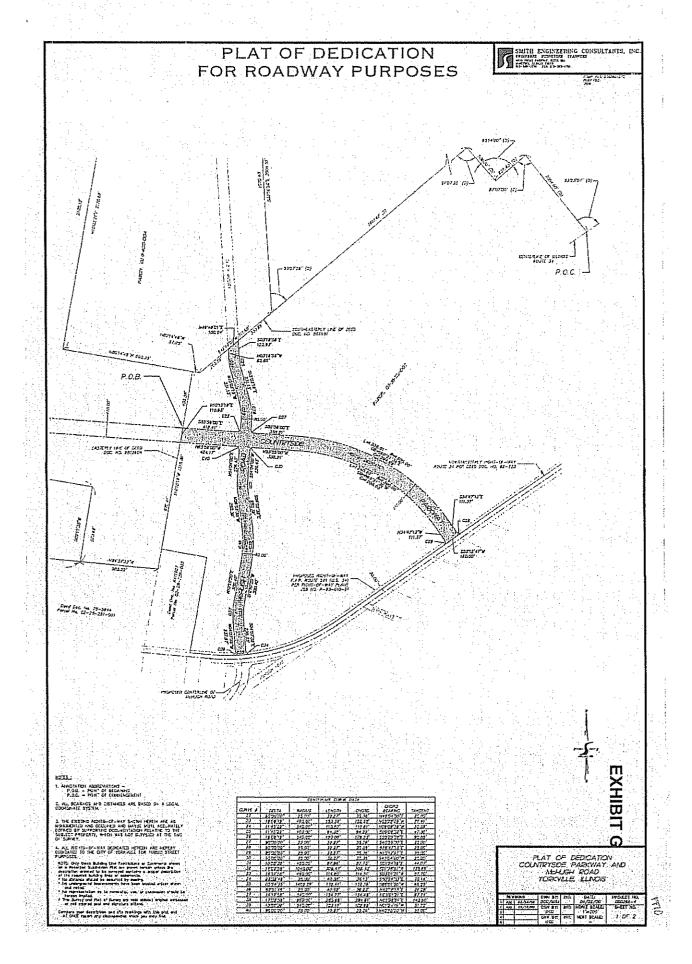
- A. Front Yard: A front yard of not less than thirty feet (30').
- B Side Yards: A side yard on each side of the zoning lot of not less than ten feet (10'), or ten percent (10%), whichever is greater, except where a side yard adjoins a street, the minimum width shall be increased to thirty feet (30').
- C. Rear Yard: A rear yard of not less than forty feet (40'). (Ord. 1973-56A, 3-28-1974; amd. Ord. 2000-1, 1-27-2000)

10-6C-5: LOT COVERAGE:

Not more than thirty percent (30%) of the area of a zoning lot may be covered by buildings or structures including accessory buildings. (Ord. 2000-1, 1-27-2000)

10-6C-6: MAXIMUM BUILDING HEIGHT:

Same regulations shall apply as permitted or required in the R-1 One-Family Residence District. (Ord. 1973-56A, 3-28-1974; amd. Ord. 2000-1, 1-27-2000)



PLAT OF DEDICATION FOR ROADWAY PURPOSES



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LEGAL DESCRIPTION

"Holdiman Parcel"

That part of the East half of Section 20, part of the West half of Section 21 and part of the North half of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Beginning at the intersection of the present center line of Illinois State Route 47 with the center line extended Westerly of Kennedy Road; thence Easterly along said extended center line and said center line of Kennedy Road 878.41 feet; thence Southerly along a line which forms an angle of 72 degrees 32 minutes 08 seconds with the last described course, measured counterclockwise therefrom, 2,863.64 feet; thence Easterly along a line which forms an angle of 91 degrees 56 minutes 56 seconds with the last described course, measured clockwise therefrom, 997.26 feet; thence Southerly along a line which forms an angle of 90 degrees 21 minutes 54 seconds with the last described course, measured counterclockwise therefrom, 573.68 feet, thence Westerly along a line which forms an angle of 93 degrees 53 minutes 56 seconds with the last described course, measured counterclockwise therefrom, 1,042.49 feet to the Southeast corner of a tract of land conveyed to the Old Second National Bank of Aurora, as Trustee under the provisions of a Trust Agreement dated May 29, 1979, and known as Trust No. 3072, by a Warranty Deed in Trust recorded June 7, 1979, as Document 79-3006; thence Northerly along the East line of said tract 458.96 feet to the Northeast corner thereof; thence Westerly along the North line of said tract 584.10 feet to said Route 47 center line; thence Northerly along said Route 47 center line 1,773.96 feet to the Northeast corner of Countryside Center, Unit No. 4, Yorkville, Kendall County, Illinois; thence Northwesterly along the North line of said Unit No. 4, 1,369.78 feet to an angle point therein; thence Westerly along the North line, the North line of Countryside Center, Unit No. 2, Yorkville, Kendall County, Illinois, and said North line extended, 1,390.06 to the Easterly line of a tract of land conveyed to Robert J. Mahoney by Quit Claim Deed recorded June 15, 1971, as Document 71-2019; thence Northeasterly along said Easterly line 41.95 feet to an angle pint therein; thence Northeasterly along said Easterly line 505.39 feet to the southerly line of a tract of land conveyed to Harold B. Spackman by a Warranty Deed recorded July 25, 1953, as Document 105980; thence Easterly along said Southerly line 1,222.09 feet to a Southeast corner of said Spackman tract; thence Northerly along an Easterly line of said Spackman tract 419.50 feet to a Southeast corner of said Spackman track; thence Easterly along a Southerly line of said Spackman tract 687.50 feet to said Route 47 center line; thence Southerly along said center line to the point of beginning, excepting therefrom that part of the Southwest Quarter of said Section 21 described as follows: Beginning at the intersection of the present center line of Illinois State Route No. 47 with the center line extended Westerly of Kennedy Road; thence Southerly along said Route 47 center line 275.0 feet; thence Westerly at right angles to said center line 685.0 feet; thence Northerly parallel with said center line 770.66 feet; thence Easterly at right angles to the last described course 645.51 feet to said Route 47 center line; thence Southerly along said center line, being along a curve to the right having a radius of 1,998.90 feet, 397.98 feet; thence Southerly along said center line 100.31 feet to the point of beginning, in Bristol Township, Kendall County, Illinois; and further excepting that part of the Northwest Quarter of Section 28, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Beginning at the Northwest comer of Hatcher Commercial Development, Yorkville, Kendall County, Illinois, being a point in the center line of Illinois State Route No. 47; thence North 06 degrees 11 minutes 23 seconds East along said center line 543.66 feet; thence Easterly at right angles to said center line, 631.96 feet; thence Southerly along a line which forms an angle of 88 degrees 26 minutes 36 seconds with the last described course, measured counterclockwise therefrom, 557.68 feet to the North line of said Hatcher Commercial Development extended Easterly; thence Westerly along said extended North line and said North line, 597.47 fect to the point of beginning in the United City of the Village of Yorkville, Kendall County, Illinois and containing 7.765 acres.

"Conover Parcel"

Commencing at the Northeast corner of Countryside Center Subdivision, Unit No. One, thence 06°11'23" East a distance of 2241.20 feet to the intersection of the centerlines of Illinois Route 47 and Kennedy Road, thence North 82°16'57" East along the centerline of Kennedy Road a distance of 869.30 feet to the Point of Beginning, thence South 09°44'49" West a distance of 2863.64 feet, thence South 78°18'15" East a distance of 997.26 feet, thence South 11°19'51" West a distance of 573.68 feet, thence South 82°34'05" East a distance of 588.06 feet, thence North 12°17'10" East a distance of 1515.36 feet, thence North 78°04'16" West a distance of 990.35 feet, thence North 12°08'16" East a distance of 2128.69 feet to the centerline of Kennedy Road, thence continuing North 12°08'16" East to the North right-of-way line of Kennedy Road, thence South 82°16'57" West along the North right-of-way line of Kennedy Road to a point on a line extended North 09°44'49" East from the Point of Beginning, thence South 09°44'49" West to the Point of Beginning, containing 75.708 acres.

"Kirk Parcel"

That part of the Southeast Quarter of Section 21, Township 37 North, Range 7 East of the Third Principal Meridian described as follows: Commencing at an existing iron pipe stake said to be over the original location of a stone in the center of original Bristol and Oswego Road previously described as being 23.05 chains West and North 35°30' West 11.02 chains from the Southeast corner of said Section 22; thence Northwesterly along a line forming an angle of 93°23'07" with the center line of U.S. Route No. 34, measured from Northeast to Northwest, 2054.60 feet; thence Southwesterly along a line forming an angle of 87°07'00" with the last described course, measured clockwise therefrom, 825.40 feet; thence Northwesterly along a line forming an angle of 269°46'00" with the last described course, measured clockwise therefrom, 508.20 feet; thence Southwesterly along a line, which line is hereinafter referred to as "Line A" and forms an angle of 91 07'35" with the last described course, measured clockwise therefrom, 2657.62 feet; thence North along a line forming an angle of 53°07'29" with the last described course measured counterclockwise therefrom, 2004.69 feet to a point in the center line of Kennedy Road for the point of beginning; thence South along the last described course 2004.69 feet to said Line A; thence Southwesterly along the extension of said Line A; 711.71 feet; thence Northwesterly along a line forming an angle of 130°01'22" with the last described course, measured counterclockwise therefrom, 1047.11 feet; thence Northeasterly along a line forming an angle of 89°47'39" with the last described course, measured counterclockwise therefrom, 2128.69 feet to a point in the center line of Kennedy Road which is a Northeast corner of a tract of land conveyed to John G. Conover by a Warranty Deed dated October 27, 1972 and recorded November 2, 1972 as Document No. 72-5301; thence Easterly along said center line, 1106.04 feet to the point of beginning in Bristol Township, Kendall County, Illinois.

Together with that part of Kennedy Road lying Northerly of and adjacent to the subject Property described as follows:

Beginning at the Northwest corner of the subject property, being the Northeast corner of a tract of land per Warrantee deed 72-5301 recorded November 2, 1972; thence North 10 degrees 02 minutes 21 seconds East 26.57 feet to the North Line of said Kennedy road; thence along said North line North 80 degrees 16 minutes 09 seconds East, 1099.88 feet; thence South 03 degrees 16 minutes 56 seconds East, 25.16 feet to the Northeast corner of the subject property, being a point on the centerline of said Kennedy Road; thence along said centerline South 80 degrees 16 minutes 09 seconds East, 1106.04 feet to the point of beginning.

All in Kendall County and containing a total of 69.19 acres of land more or less.

CRIMSON LANE STORMWATER MANAGEMENT FACILITY

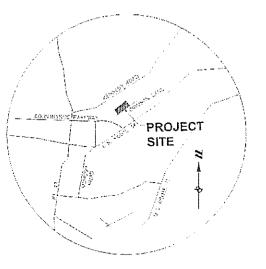
COUNTRYSIDE PARKWAY AND CRIMSON LANE
YORKVILLE, ILLINOIS 60560
KENDALL COUNTY
FINAL ENGINEERING PLANS

ENGINEER

ATWELL-HICKS
1245 EAST DIEHL ROAD, SUITE 100
NAPERVILLE, ILLINOIS 60563
TELEPHONE: (630) 577-0800
FAX: (630) 577-0900

OWNER

HAMMAN PROPERTIES
133518 FAXON ROAD
PLANO, ILLINOIS 60654
TELEPHONE: (630) 554-9109
FAX: (630) 554-9181



SITE LOCATION MAP

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SHEET INDEX

SP-01 COVER SHEET
SP-02 GENERAL NOTES, STANDARDS, AND DETAILS
SP-03 GRADIN-0 PLAN
SP-04 NATIVE PLAINING PLAN
SP-05 NATIVE PLAINING PLAN NOTES
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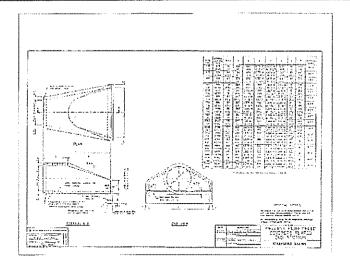
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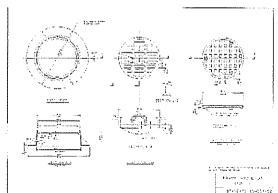
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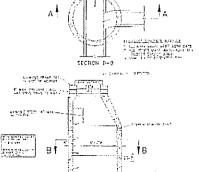
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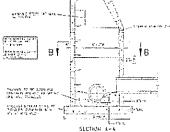
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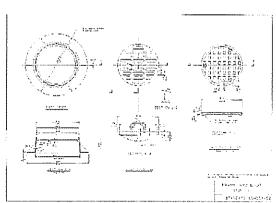






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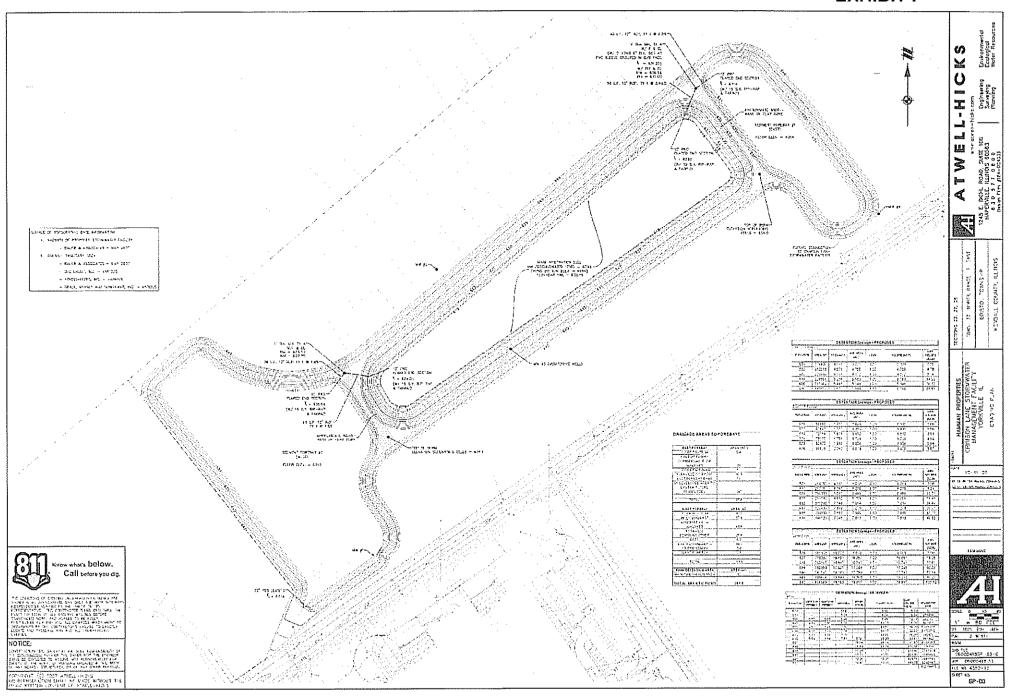


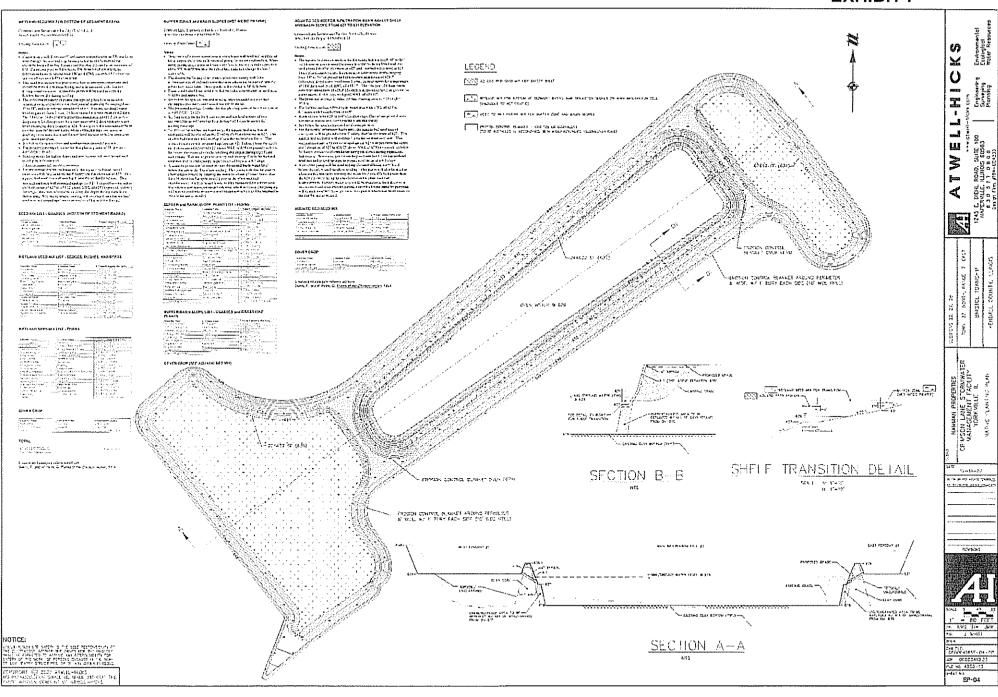
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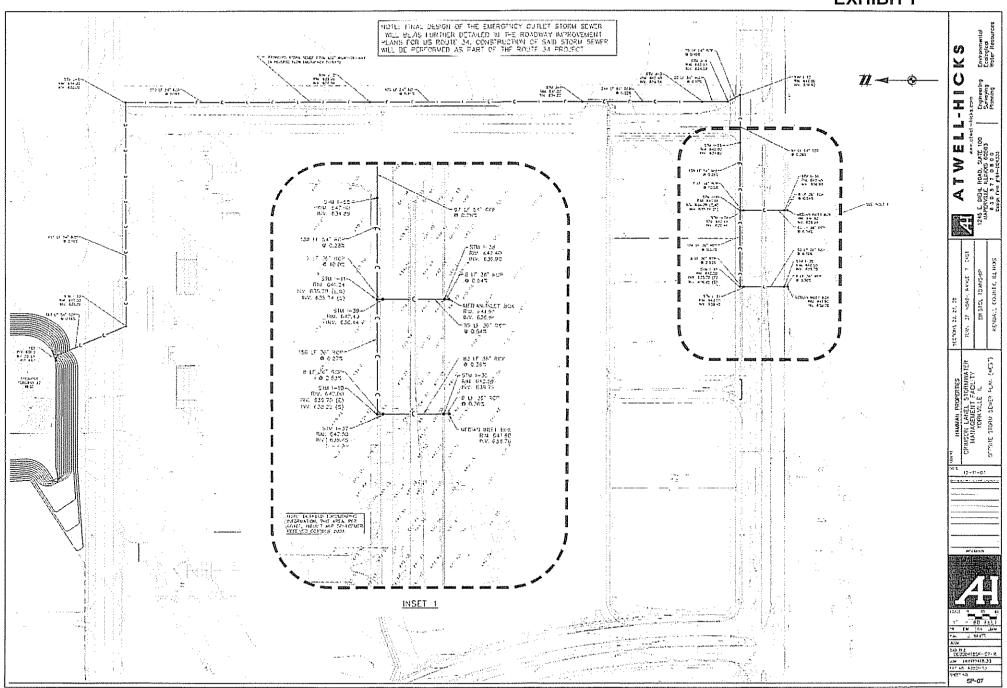
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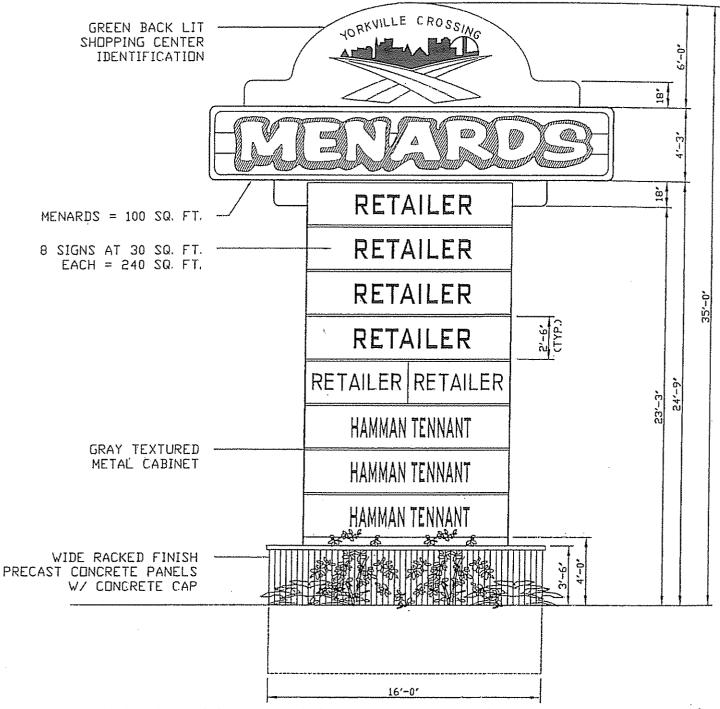
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EXHIBIT J



PROPOSED SHOPPING CENTER IDENTIFICATION SIGN LOCATED AT COUNTRYSIDE PARKWAY & HWY. 34

TOTAL SIGNAGE SQUARE FOOTAGE = 340-SQ, FT. SCALE: 3/16' = 1'-0'

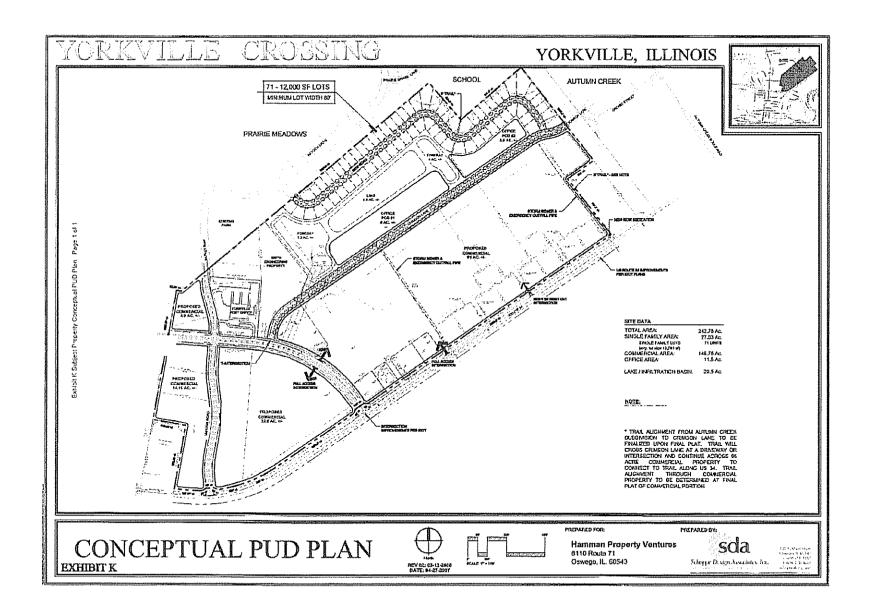


Exhibit O Legal Description of O-Office District zoned area subject to this Modification Agreement

THAT PART OF SECTIONS 21 AND 22, IN TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING NORTHEASTERLY OF AND ADJACENT TO PRAIRIE POINTE SUBDIVISION, NORTHWESTERLY OF AND ADJACENT TO THE NORTHWESTERLY RIGHT OF WAY LINE OF CRIMSON LANE, SOUTHEASTERLY OF AND ADJACENT TO A LINE THAT IS 235.0' NORTHWESTERLY OF AND PARALLEL WITH THE NORTHWESTERLY RIGHT OF WAY LINE OF SAID CRIMSON LANE, AND SOUTHWESTERLY OF A LINE THAT IS 445.0 FEET SOUTHWESTERLY OF AND PARALLEL WITH THE SOUTHEASTERLY EXTENSION OF THE NORTHEASTERLY LINE OF PRAIRIE MEADOWS SUBDIVISION, IN THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND CONTAINING 18.5 ACRES OF LAND MORE OR LESS

ARTICLE A. O OFFICE DISTRICT

10-7A-1: USES PERMITTED:

Advertising agency.
Bank.
Barber shop.
Beauty shop.
Bookkeeping service.
Club - private indoor.
Coffee shop.
College, university or junior college.
Commercial school, trade school - offering training in classroom study.
Credit union.
Detective agency.
Employment office.
Engineering office,
Government office.
Income tax service.
Insurance office.
Library.
Manufacturing agent's office.
Medical clinic.
Park.
Professional offices.
Public accountant.

Real estate office.

(Savings	and	loan	association
(Stenogr	aphic	c serv	vice.

Stock broker.

Telegraph office.

Ticket-office.

Title company.

Travel agency.

Utility office. (Ord. 1973-56A, 3-28-74)

10-7A-2: SPECIAL USES:

Daycare centers.

Planned developments.

Solid waste disposal site. (Ord. 1973-56A, 3-28-1974; amd. Ord. 1995-20, 8-10-1995)

10-7A-3: LOT AREA:

No lot shall have an area less than twenty thousand (20,000) square feet. (Ord. 1973-56A, 3-28-1974)

10-7A-4: YARD AREAS:

No building shall be erected or enlarged unless the following yards are provided and maintained in connection with such building, structure or enlargement:

A.Front Yard: A front yard of not less than thirty feet (30').

B.Side Yards: A side yard on each side of the zoning lot of not less than ten feet (10), except where a side yard adjoins a street, the minimum width shall be increased to twenty feet (20).

C.Rear Yard: A rear yard of not less than twenty feet (20'). (Ord. 1973-56A, 3-28-1974)

10-7A-5: LOT COVERAGE:

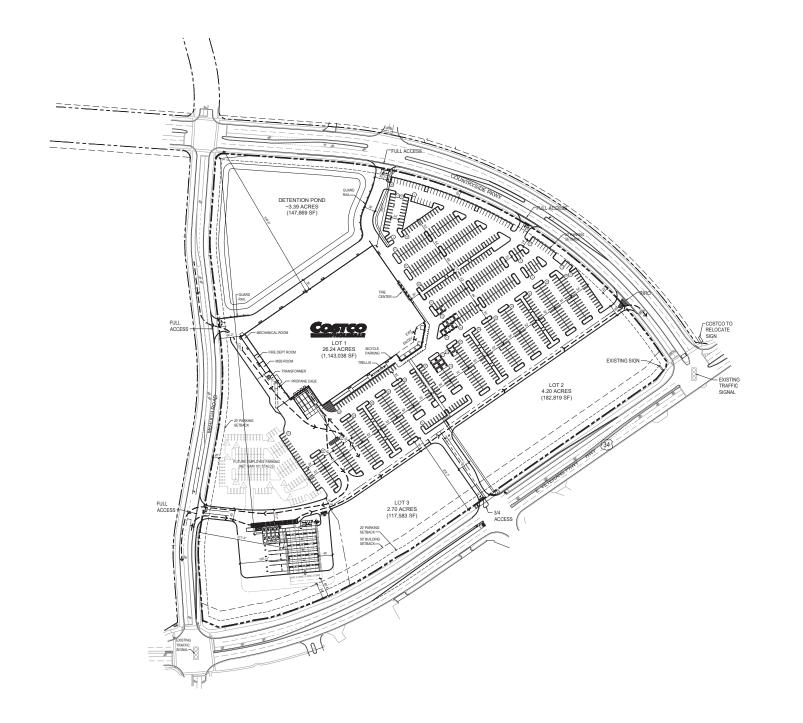
Not more than fifty percent (50%) of the area of the zoning lot may be occupied by buildings and structures, including accessory buildings. (Ord. 1973-56A, 3-28-1974)

10-7A-6: MAXIMUM BUILDING HEIGHT:

- A.No building or structure shall be erected or altered to exceed a maximum height of six (6) stories or eighty feet (80'), whichever is lower.
- B.No building or structure shall be erected or altered to exceed a maximum height of three (3) stories or thirty five feet (35') within the "downtown area" as described by exhibit A, attached to the ordinance codified herein. (Ord. 2006-67, 8-8-2006)

10-7A-7: OFF STREET PARKING AND LOADING:

All in accordance with regulations set forth in <u>chapter 11</u> of this title. (Ord. 1973-56A, 3-28-1974)



PROJECT DATA

CLIENT: COSTCO WHOLESALE

999 LAKE DRIVE ISSAQUAH, WA 98027

PROJECT ADDRESS: SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY

YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA: 33.14 ACRES (1,443,461 SF)

INCLUDES: LOT 1 (COSTCO):

26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND LOT 2: LOT 3: 4.20 ACRES (182,819 SF)

2.70 ACRES (117,583 SF) JURISDICTION: UNITED CITY OF YORKVILLE

ZONING: B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
SIDE	20'	64'-2" / 246'-7"	271'-3"
REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"
LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA: 161.562 SF INCLUDES: NET SALES FLOOR 153,820 SF GROSS MECHANICAL / FIRE / MSB

2.266 SF NET ENCLOSED CANOPY 3,560 SF BUILDING ENVELOPE 1,916 SF

PARKING DATA:

TOTAL PARKING: 956 STALLS INCLUDES:

837 STALLS 18 STALLS

101 STALLS NO. OF STALLS PER 1,000 SQ. FT. OF NET

BUILDING AREA: 6.22 STALLS

NOTES:

EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES









22-6229-01 JANUARY 03, 2025

SITE PLAN

DD11-08

COSTCO WHOLESALE



PROJECT DATA

COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027

SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL PROJECT ADDRESS:

SITE DATA:

TOTAL SITE AREA: 33.14 ACRES (1,443,461 SF) INCLUDES:

LOT 1 (COSTCO): 26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND 4.20 ACRES (182,819 SF) 2.70 ACRES (117,583 SF) LOT 2: LOT 3:

JURISDICTION: UNITED CITY OF YORKVILLE

ZONING: B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
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BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA:

161.562 SF

INCLUDES: NET SALES FLOOR 153,820 SF GROSS MECHANICAL / FIRE / MSB 2.266 SF NET ENCLOSED CANOPY 3,560 SF BUILDING ENVELOPE 1,916 SF

PARKING DATA:

TOTAL PARKING: 956 STALLS

INCLUDES: ⊙ 10' WIDE STALLS
 ⊙ ACCESSIBLE STALLS
 △ FUTURE STALLS (NET GAIN)

837 STALLS 18 STALLS 101 STALLS

NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA:

6.22 STALLS

NOTES: EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES





YORKVILLE, IL



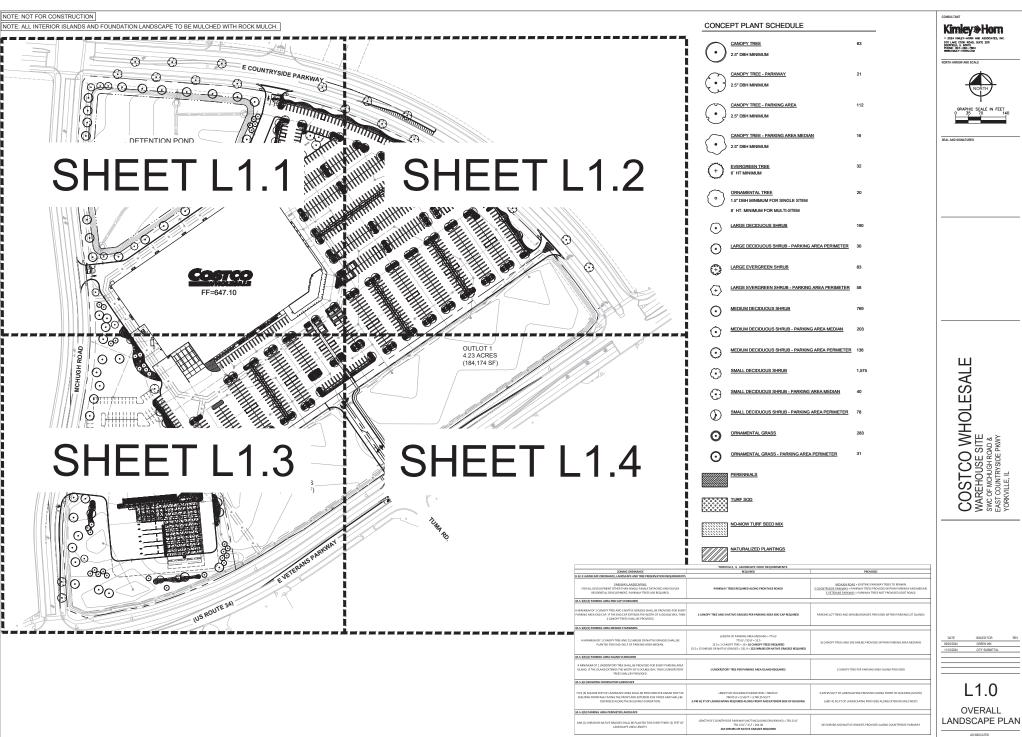
22-6229-01 JANUARY, 03, 2025

AERIAL SITE PLAN

AERIAL SITE PLAN

COSTCO WHOLESALE

EXHIBIT C

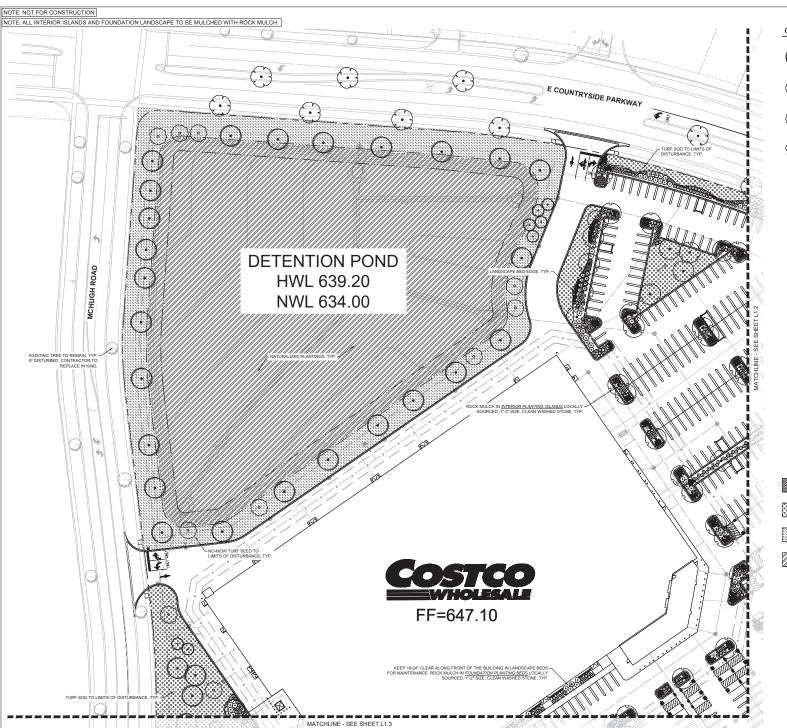


Kimley≫Horn © 2024 KIMLEY-HOPN AND ASSOCIA 570 LAKE COCK ROAD, SUITE 200 DEERFIELD, N. 60015 PHONE: 847-200-7804 WINNIMAEY-HOPN.COM



COSTCO WHOLESALE WAREHOUSE SITE SWOOD OF MOUGH ROAD & SWOOD OF MOUGH ROAD & SWOOD OF WAY YORKVILLE.

L1.0 **OVERALL**



CONCEPT PLANT SCHEDULE

CANOPY TRE 2.5" DBH MIN

CANOPY TREE - PARKWAY

CANOPY TREE - PARKING AREA

CANOPY TREE - PARKING AREA MEDIAL

2.5" DBH MINIMUM

+ EVERGREEN TREE
6' HT MINIMUM

ORNAMENTAL TREE

1.5" DBH MINIMUM FOR SINGLE STE

LARGE DECIDUOUS SHRUB

LARGE DECIDUOUS SHRUB - PARKING AREA PERIMETE

LARGE EVERGREEN SHRUB

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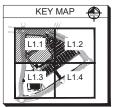
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NATURALIZED PLANTINGS



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COSTCO WHOLESALE WAREHOUSE SITE SW CP MCHUCH ROAD & EAST COUNTRYSIDE PWWY YORKVILLE, IL

Kimley > Horn

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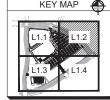
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LANDSCAPE PLAN

AS INDICATED



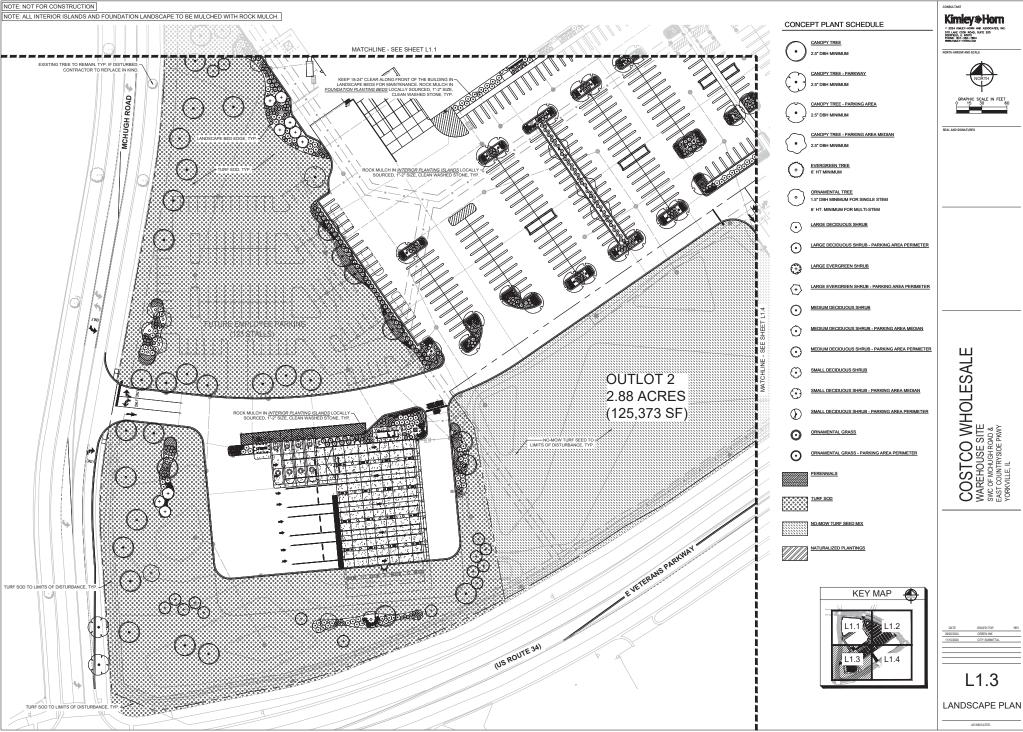
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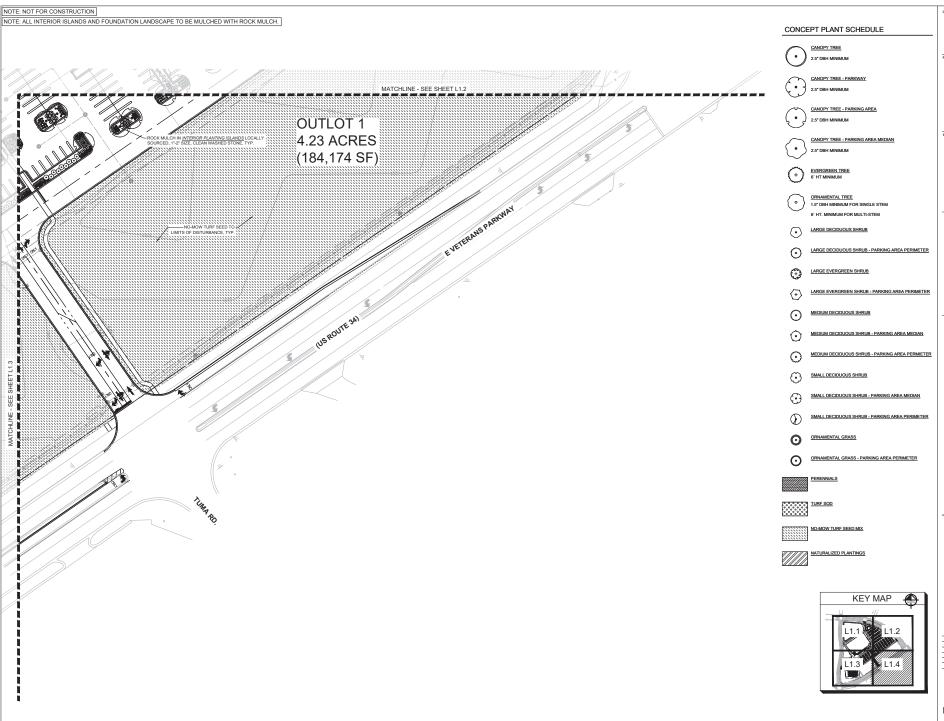
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L1.2

LANDSCAPE PLAN







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EAST COUNTRYSIDE PRWY
YORKWILE, IL



L1.4

LANDSCAPE PLAN

AS INDICATED

PLANT SCHEDULE

TREES
ACER MIYABEI 'MORTON' / STATE STREET™ MIYABE MAPLE

ACER X FREEMANII 'AUTUMN BLAZE' / AUTUMN BLAZE MAPLE

CELTIS OCCIDENTALIS / COMMON HACKBERRY

GINKGO BILOBA 'AUTUMN GOLD' / AUTUMN GOLD MAIDENHAIR TREE

GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' / SKYLINE HONEY LOCUST

GYMNOCLADUS DIOICUS 'ESPRESSO' / KENTUCKY COFFEETREE

QUERCUS RICOLOR / SWAMP WHITE OAK

TAXODIUM DISTICHUM 'SHAWNEE BRAVE' / SHAWNEE BRAVE BALD CYPRESS

TILIA AMERICANA 'BOULEVARD' / BOULEVARD AMERICAN LINDEN

ULMUS AMERICANA 'PRINCETON' / PRINCETON AMERICAN ELM

ULMUS X 'MORTON' / ACCOLADE™ ELM

ZELKOVA SERRATA 'GREEN VASE' / GREEN VASE JAPANESE ZELKOVA

EVERGREEN TREES ABIES CONCOLOR / WHITE FIR

PICEA ABIES / NORWAY SPRUCE

PICEA OMORIKA / SERBIAN SPRUCE

PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' / VANDERWOLF'S PYRAMID LIMBER PINE

PSEUDOTSUGA MENZIESII / DOUGLAS FIR

ORNAMENTAL TREES
AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE APPLE SERVICEBERRY

MALLIS X 'PRAIRIFIRF' / PRAIRIFIRF CRARAPPI F

SYRINGA RETICULATA 'IVORY SILK' / IVORY SILK JAPANESE TREE LILAC

SHRUBS
ARONIA MELANOCARPA 'MORTON' / IROQUOIS BEAUTY™ BLACK CHOKEBERRY ARONIA MELANOCARPA 'UCONNAM165' / LOW SCAPE MOUND CHOKEBERRY

CEANOTHUS AMERICANUS / NEW JERSEY TEA

CORNUS ALBA 'BAILHALO' / IVORY HALO® TATARIAN DOGWOOD

CORNUS SANGUINEA 'CATO' / ARCTIC SUN® BLOODTWIG DOGWOOD

DIERVILLA X 'G2X88544' / KODIAK® ORANGE DIERVILLA

FORSYTHIA X INTERMEDIA 'NIMBUS' / SHOW OFF® SUGAR BABY® DWARF FORSYTHIA

HYDRANGEA PANICULATA 'JANE' / LITTLE LIME® PANICLE HYDRANGEA PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' / LITTLE DEVIL™ DWARF NINEBARK

PHYSOCARPUS OPULIFOLIUS 'SEWARD' / SUMMER WINE® NINEBARK

POTENTILLA FRUTICOSA 'JACKMANII' / JACKMAN'S BUSH CINQUEFOIL

SPIRAEA BETULIFOLIA 'TOR GOLD' / GLOW GIRL® BIRCHLEAF SPIREA

SPIRAEA JAPONICA 'NEON FLASH' / NEON FLASH JAPANESE SPIREA

SPIRAFA JAPONICA WAI RUMA' / MAGIC CARPET JAPANESE SPIREA VIBURNUM DENTATUM 'BLUE MUFFIN' / BLUE MUFFIN ARROWWOOD VIBURNUM

WEIGELA FLORIDA 'ALEXANDRA' / WINE & ROSES® WEIGELA

WEIGELA FLORIDA 'BRAMWELL' / FINE WINE® WEIGELA

WEIGELA ELORIDA VERWEIG! / MY MONET® WEIGELA

<u>EVERGREEN SHRUBS</u> JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER

TAXUS X MEDIA 'TAUNTONII' / TAUNTON'S ANGLO-JAPANESE YEW

<u>ORNAMENTAL GRASSES</u>
CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS PANICUM VIRGATUM 'CHEYENNE SKY' / CHEYENNE SKY PRAIRIE WINDS® SWITCH GRASS

PANICUM VIRGATUM 'HEAVY METAL' / HEAVY METAL SWITCH GRASS PENNISETUM ALOPECUROIDES 'BURGUNDY BUNNY' / BURGUNDY BUNNY DWARF FOUNTAIN GRASS

PENNISETUM ALOPECUROIDES 'HAMELN' / HAMELN FOUNTAIN GRASS

PENNISETUM ALOPECUROIDES 'PIGLET' / PIGLET DWARF FOUNTAIN GRASS

SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PERENNIALS
ALLIUM X "SUMMER BEAUTY" / SUMMER BEAUTY ORNAMENTAL ONION AMSONIA TABERNAEMONTANA 'BLUE ICE' / BLUE ICE EASTERN BLUESTAR

ECHINACEA X 'BUTTERFLY KISSES' / BUTTERFLY KISSES CONEFLOWER

HEMEROCALLIS X 'ROSY RETURNS' / ROSY RETURNS DAYLILY

RUDBECKIA FULGIDA 'LITTLE GOLDSTAR' / LITTLE GOLDSTAR BLACK-EYED SUSAN

SEDUM X 'AUTUMN JOY' / AUTUMN JOY SEDUM

NATURALIZED POND PLANTINGS, POND DESIGN AND EXACT SEED MIXES TO BE DETERMINED AT A LATER DATE:



Pizzo Native Plant Nursery, LLC • 10729 Pine Road • Leland, IL 60531 • Phone : 815-981-8000 • www.pizzonursery.com

Econ	nomy Prairie Seed Mix (D	Ory-Mesic Soils)																	
MIX STAT	TISTICS																		
Average !	Mix Height (ft)	3	Design	ad as th	a mact		ical	u to oct	a la lie la		000	0010	ally freet	ional an	dala mdal	lo maintaini	og the bish	est aesthetic	malma
Median F	Vix Height (ft)	3																	
Species H	seights (# of Occurrences in Mix)	2" (11) 3" (8), 4" (8), 5" (3	This m	ix includ	es prair	rie speci	es that	quickly	estab	ilish	for a	a mo	ore imme	diate na	turalized	setting in s	unny areas	that remain	mesic
	of Native Species in Mix	2 (22) (0), 4 (0), 5 (to dou	for the r	nort of	the gree	uina co	acon O	unrEl	EQ	ef th	ic m	ly is come	norad of	wildflow	one that an	ovido an an	ay of bloom	from
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	lean W Value	1	startin	g with th	ne vello	w bloon	ns of an	inual Pa	rtridg	te P	a ar	nd b	iennial Bl	ack-Eve:	Susan.	An addition	al colorful :	matrix of per-	ennial
	Wetland Category																	2.9' by seed	
				appear	s in the	succee	aing 3 to	o 5 yea	rs. In	IS IS	a m	ealu	m-snort r	leight p	airie wit	n an averag	e neight of	2.9 by seed	count
	of Native Seed	15.																	
	r Square Foot	90.	2																
Percent c	of Mix (by Seed Count) Requiring Stratification	MREFI			_														
Grasses.	Sedees, & Rushes	- No.		10				V											
		COMMON NAME	C-VALUE	W-VALUE		HEI	GHT	BLOOM	T 8	3100	M TIM	E	SEEDS/OZ	OZ/ACRE		%0	FMIX		
CODE	SCIENTIFIC NAME	COMMON NAME	C-VALUE	W-VALUE	W:TNESS	Min-Max	Typical	COLOR	AM	1	1 A	5 0	SEEDS/OZ	OS/ACKE	LB/ACRE	by Weight	Veight by Seed Coun	GERMINATION	TOP SOW
BOUCUR	Boutelous curtipenduls	Side-pats Grama	8	- 5	UPL	1.5-2.5	2	N/A		т			6,000	32.00	2.00		4.86%	N/A	
CXBREV	Carex brevior	Plains Oval Sedge	4	0	FAC	1-3"	2	N/A					29,000	2.00	0.12	0.83%	1,47%	CM-60	
SORNUT	Sorphastrum nutans	Indian Grass	5	3	:ACU	3-7	6	N/A		П			12,000	16.00	1.00	6.65%	4.86%	N/A	
ELYCAN	Elymus conodensis	Canada Wild Rye	4	3	:ACU	3-5'	5	N/A		П			5,200	48.00			6.32%	N/A	
	Panicum virgatum	Switch Grass	5	0	FAC	3-6'	4	N/A					14,000	32.00			11.34%	N/A	
SCHSCO	Schizachyrium scoparium	Little Bluesten	5	3	FACU	2-31	3	N/A			-	-	15,000			13.29%	12.15%	N/A	
		**************************************								_			Grass/Sed	ge Subtotals	10.121	67.29%	40.99%		
Wildflow	ners .									7									
CODE	SCIPNTIFIC NAME	COMMON NAME	C-VALUE	W-VALUE		HEI	GHT	BLOOM		3100	M TIM	E	SEEDS/OZ		LR/ACRE	%0	FMIX	GERMINATION	TOP SO
CODE	SCIENTIFIC NAME	COMMON NAME	C-VALUE	W-VALUE	W:TNESS	Min-Max	Typical	COLOR	A M	1	A	5 0	SEEDS/OZ	OZ/ACRE	LB/ACHE	by Weight	by Seed Coun	GERMINATION	TOP SO
ASCSYR	Asclepias syriaca	Common Miliweed	0	3	:ACU	2.6'	3	Pink		ш			4,000	4.00	0.25	1.66%	0.40%	CM-30	
CHAFAS	Chomoecrista fascicifata	Partridge Pea	5	3	:ACU	6"-2"	2	Yellow		П			2,700	16.00	1.00	6.65%	1.09%	CM-10, H,	
CORLAN	Coreopsis lanceolata	Sand Coreopris	5	3	:ACU	1.5-3'	2	Yellow		П			20,000	4.00		1.66%	2.02%	CM-30	
DESCAA	Desmodium canaderse	Showy Tick Trefoil	4	3	:ACU	3-6'	4	Purple		П			5,500	2.54	0.16	1.04%	0.35%	J.	
ECHPUR	Echinoceo purpureo	Purple Conefower	3	5	UPL	2-5'	4	Purple		П			6,600	12.00	0.75		2.00%	N/A	
	McKapala holianthalaca	Early Sunflawer	- 5	- 5	'ACU	3.5"	- 5	VcHow		=		-	6,300	0.01			1.2011	GM 30	
MONFIS	Monarda fistulosa	Wild Bergamot	4	3	:ACU	2.5-4'	4	Purple		ш			70,000				3.54%	N/A	
PENDIG	Penstemon digitalis	Foxglove Beardtongue	4	0	FAC	2-31	3	White					130,000		0.11		5.76%	CM-30, G	
RUDHIR	Rudbeckia hirta	Black-eyed Susan	1	3	:ACU	2-31	2	Yellow	$\perp T$				92,000	16.00			37.25%	CM-30	
SILINT	Silphium integrifolium	Rosin Weed	5	5	UPL	2-6"	5	Yellow					1,200	3.00			0.09%	CM-60	
	Symphyotrichum novoe-angliae	New England Aster	4	-3	IACW	3-5'	4	Purple	\perp	LT			66,000	1.00			1.67%	CM-60	
TRAOHI	Tradescantia ohiensis	Ohio Spiderwort	2	3	ACU	2-4"	3	Blue					8,000		0.09		0.30%	CM-120 or M, C	

NO-MOW TURF SEED MIX

BOTANICAL NAI	ME COMMON NAME	ACRE	TOTAL
GRASSES, SEDGES	& RUSHES		
Lolium perenne	Perennial Rye	25.0	13%
Agrostis gigantea	Red Top	15.0	8%
Festuca rubra	Creeping Red Fescue	80.0	40%
Festuca arundinacea	Tall Fescue	20.0	10%
Festuca ovina	Sheep's Fescue	20.0	10%
Poa pratensis	Kentucky Bluegrass	40.0	20%
	SEED MIX TOTAL LBS PER ACRE:	200	

LIBS/ 1% OF

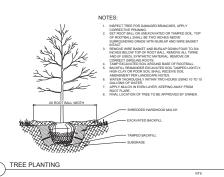
COSTCO WHOLESALE WAREHOUSE SITE SWOOF MCHIGH ROAD & EAST COUNTRYSIDE PKWY

Kimley≫Horn

SEAL AND SIGNATURES

L2.0

LANDSCAPE NOTES AND DETAILS



THIS DETAIL IS FOR THEE STANING ORLY, REF, TYPICAL TREE PRANTING DETAIL FOR ADDITIONAL PLANTING INFORMATION. THE STANING IS ORLY REQUIRED WHEN TREES ARE UNSTABLE, TIPPED OVER, AND/OR REQUISTED BY MURICIPALITY OR OWNER, UNLESS OTHERWISE MOTED. PREVAILING WIND SECTION

NOTES: THEE FURL DISSIPATION OF TAMPED SOIL TOP BALL ON UNEXCAVATED OR TAMPED SOIL TOP BALL SHALL BE TWO INCHES ABOVE NDING GRADE WITH BURLAP AND WIRE BASKET AND (IF USED), SYNTHETIC MATERIAL REMOVE OR CORRECT GIRDLING ROOTS. TAMP EXCAVATED SOIL AROUND BASE OF ROOTS/ BACKELL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OF POOR SOIL SHALL RECEIVE SOIL TAMPED LIGHTLY. HIGH CLAY OF POOR SOIL SHALL RECEIVE SOIL TAMPED LIGHTLY. AMENDMENT FER LANDSCAPE NOTES. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER. APPLY MULCH IN EVEN LAYER, KEEPING AND A CONTROL OF THE TO BE APPROVED BY OWNER CONTROL OF THE TOP - SHREDDED HARDWOOD MULCH - EXCAVATED BACKFILL

- ADJACENT SURFACE

- 1 X 4" STEEL EDGER TOP FLUSH WITH GRADE - 12" STEEL EDGER SPIKE

6 OZ. NON-WOVEN GEOTEXTILE FABRIC

3" = 1"-0"

WRAP AT ADJACENT SURFACE

(3, EVERGREEN TREE PLANTING

MINIMUM 6" BEYOND ROOT BALL

NOTES:

- THOSE SHRUBS.

 REMOVE BURLAP FROM TOP HALF THE LENGTH OF ROOTBALL. TWINE AND (IF USED) SYNTHETIC MATERIAL SHALL BE REMOVED FROM PLANTING BED. FOR CONTAINER GROWN SHRUBS. REMOVE CONTAINER AND LOOSEN ROOTS
- USELT) OTTO TO THE CONTAINER (ROWN SHRUBS, NEXT OF THE CONTAINER (ROWN SHRUBS, NEXT OF THE CONTAINER (ROWN) OF THE CONTAINER (LWITH AMENDED SOIL PER LANDSCAPE NOTES. WATER CONTAINER LWITH AMENDED SOIL PER LANDSCAPE NOTES.



3" = 1"-0"

PERENNIAL PLANTING

PLAN TREE STAKING

NOTES:

(2

STONE MULCH

LANDSCAPE NOTES SPECIFICATIONS SHALL SUPERCEDE LANDSCAPE NOTES.

BED HEIGHT IS TO BE 2" ABOVE FINISH GRADE AND WELL DRAINED. REMOVE CONTAINER, SCORE SOIL MASS TO REDIRECT AND PREVENT CIRCLING

ROOTS. CORRECT GIRDLING ROOTS.

2. PLANT MATERIAL SHALL BE LAID OUT BY FOLLOWING THE BED EDGE, WORKING TOWARDS THE CENTER OF THE BED USING TRIANGULAR (STAGGERED) SPACING

SPACING TO BE AS SPECIFIED IN THE PLANT LIST, PERENNIALS SHALL BE PLACED WITH THEIR CENTER 24" FROM EDGE OF BED.

O.C. SPACING, SEE PLANS FOR DETAILS

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST TO REPAR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS THE CONTRACTOR SHALL BEFORE THE COST TO REPAR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADJACENT PROPERTY THAT IS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAR OF ANY OF THEM TREATMENT OF THE TREATMENT OF THE

GUARANTE TREES, SHUUS AND GROUND COVER FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM NEGLECT BY OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA. OR INCIDENTS WHICH ARE SERVIOL DURGOZE CONTRACTORS CONTROL.

**

PLAN VIEW

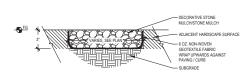
CONTRACTOR THE MAY INCEDITATIVE MAY INCE

Kimley ** Horn ORTH ARROW AND SCALE

ш ESAL COSTCO WHOLE WAREHOUSE SITE SAT COUNTRYSIDE PKWY YORKVILLE, IL.

12.1 LANDSCAPE NOTES

AND DETAILS

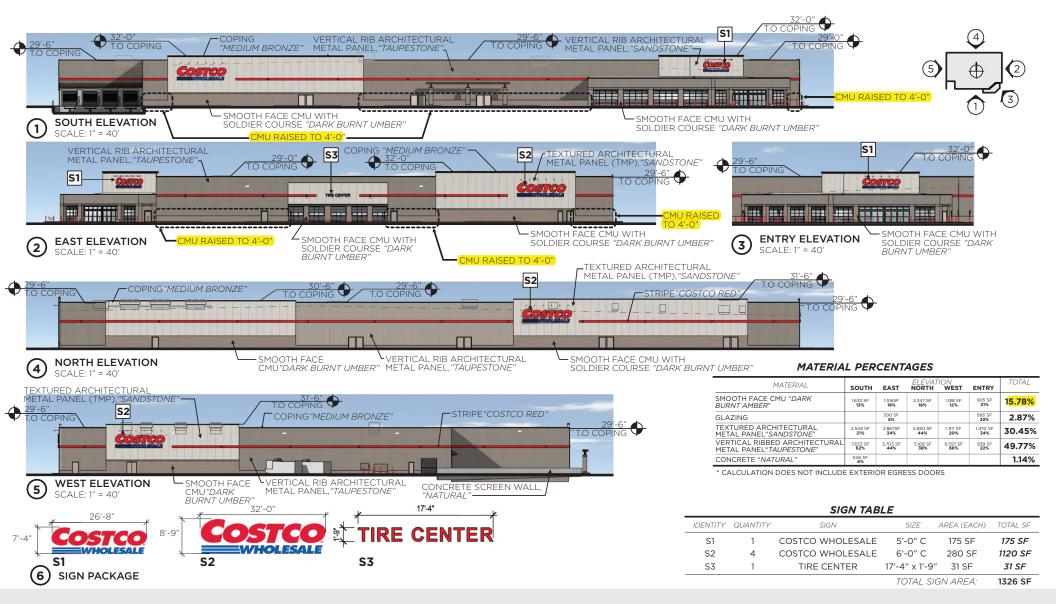


STONE MULCH ADJACENT TO HARDSCAPE

YORKVILLE II PARKWAY TREE NOTES:

NO TREE SHALL BE FLANTID CLOSES THAN THEIRY FEET (OY) OF THE RIGHT-OF-MAY INTERSECTION. F. ASTEPO FY WELD GOA'S BLOCKFOOT AND HIS THE SHORE MAY PROJECTIVE THE INTERSECTION. SHALL BE FLANTED CLOSES THAN 50 LINEAL FEET IN FRONT OF A SIGN. THE SHALL BE FLANTED CLOSES THAN 50 LINEAL FEET IN FRONT OF A SIGN. THE SHALL BE FLANTED CLOSES THAN 50 LINEAL FEET OF FROM LINEAL POLES. STREET SIGNS, FIRE HYDRAYTS AND ANY OTHER SUCH TEMS THAT MAY, IN THE OPPHION OF THE CITY PLANNER OR PUBLIC WORKS DIRECTOR, REQUIRE SIGNAR INTERVAL.

EXHIBIT D





JANUARY 10, 2025 22-6229-01 YORKVILLE, IL

ELEVATIONS







VERTICAL METAL PANEL CMU

PROFILE: "MEGA RIB" COLOR: "TAUPESTONE"



PROFILE: SMOOTHFACE COLOR: "DARK BURNT UMBER



INSULATED METAL PANEL

PROFILE: "GRANITESTONE" COLOR: "SANDSTONE"



METAL TRIM

PROFILE: COPING/CORNICE **COLOR:** "MEDIUM BRONZE"



SIGNAGE & ACCENT BAND

MANUFACTURER: METAL SALES COLOR: "SAFETY RED" AND "LAPIS LAZULI"



JANUARY 10, 2025 22-6229-01 YORKVILLE, IL PG: 2

MATERIAL BOARD







JANUARY 10, 2025 22-6229-01 **YORKVILLE, IL** *PG: 3*









JANUARY 10, 2025 22-6229-01 **YORKVILLE, IL** *PG: 4*





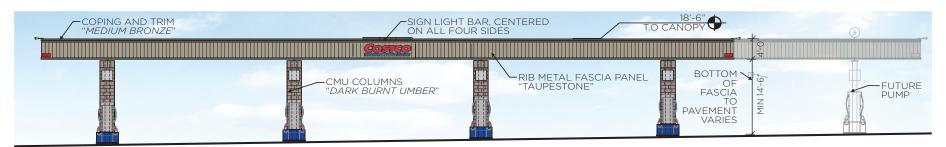




JANUARY 10, 2025 22-6229-01 **YORKVILLE, IL**

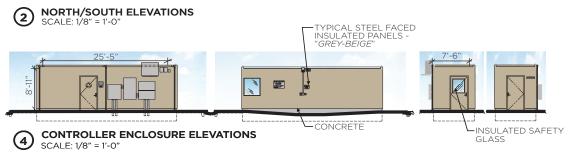
SOUTHEAST PERSPECTIVE



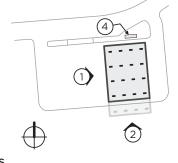


EAST/WEST ELEVATIONS
SCALE: 1/8" = 1'-0"









WARMING HUT ELEVATIONS SCALE: 1/8" = 1'-0"



SIGN AREA TABULATION (CANOPY SIGNS)

QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF
4	COSTCO WHOLESALE	2'-5 1/4" "C"	21 SF	84 SF
		TOTAL S	IGNAGE AREA:	84 SF





JANUARY 10, 2025 22-6229-01 **YORKVILLE, IL** *PG:* 6

FUEL ELEVATIONS



EXHIBIT E

TRAFFIC IMPACT STUDY

REPORT FOR:

Costco Wholesale, Yorkville



<u>US 34/VETERANS PARKWAY & COUNTRYSIDE PARKWAY YORKVILLE, ILLINOIS</u>

PREPARED BY:



V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517

V3 Project No. 240757

November 13, 2024 Updated December 30, 2024



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I. INTRODUCTION

V3 Companies has been retained by Costco Wholesale Corporation to conduct a traffic impact study for a proposed Costco Warehouse located at the northeast corner of US 34/Veterans Parkway and McHugh Road in the City of Yorkville, Illinois. The site is bounded by Countryside Parkway to the north, US 34/Veterans Parkway to the southeast, and McHugh Road to the west. A location map is included as Figure 1.

The proposed development consists of a Costco Wholesale building with approximately 161,064 square feet and a members-only gas station with 32 fueling positions when the store opens. The site plan illustrates the future expansion of the gas station to provide an additional eight fueling positions. The proposed access plan includes a right-in/right-out/left-in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a second full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway. The site plan proposes 859 parking stalls. Figure 2 illustrates the proposed site plan with driveway locations.

The purpose of this study is to evaluate the potential traffic impacts of the proposed Costco Wholesale warehouse and the members-only gas station. Traffic estimates are projected to 2031, which is five years beyond the potential build out in 2026, based on traffic projections from CMAP.

The study area includes the following intersections as well as the proposed driveways to the site.

- Countryside Parkway and McHugh Road (unsignalized)
- Countryside Parkway and Crimson Lane/Costco Driveway 1 (unsignalized)
- Countryside Parkway and Costco Driveway 2 (unsignalized)
- Countryside Parkway and Costco Driveway 3 (unsignalized)
- US Route 34/Veterans Parkway and Countryside Parkway (signalized)
- US Route 34/Veterans Parkway and Tuma Road/Costco Driveway 4 (unsignalized)
- US Route 34/Veterans Parkway and McHugh Road (signalized)
- McHugh Road and Costco Driveway 5 (unsignalized)
- McHugh Road and Costco Driveway 6 (unsignalized)

This report includes a description of existing conditions, data collection and capacity analysis, evaluation of data, traffic signal warrant analysis and turn lane warrant analysis, and conclusions.

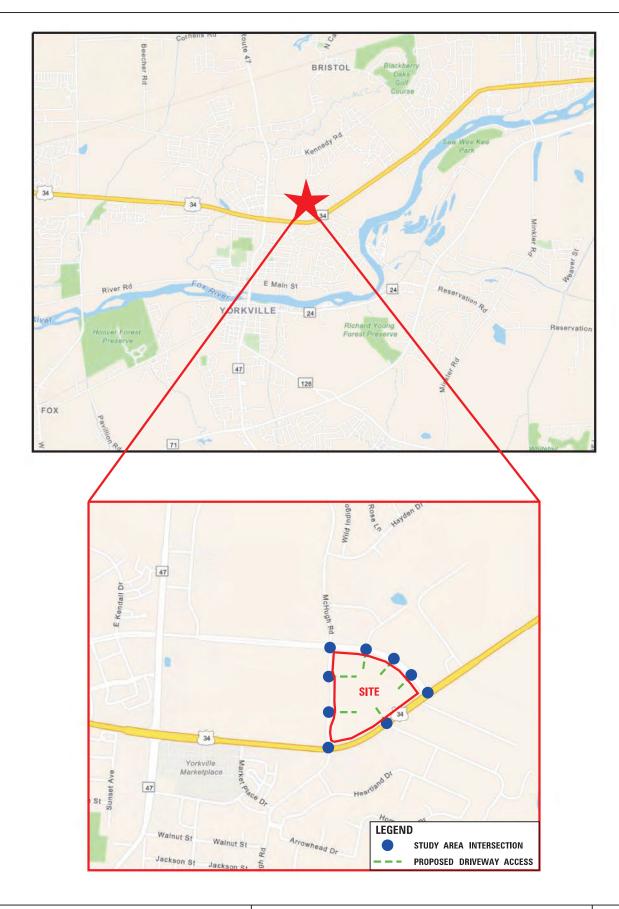


FIGURE 1 SITE LOCATION MAP



YORKVILLE ILLINOIS

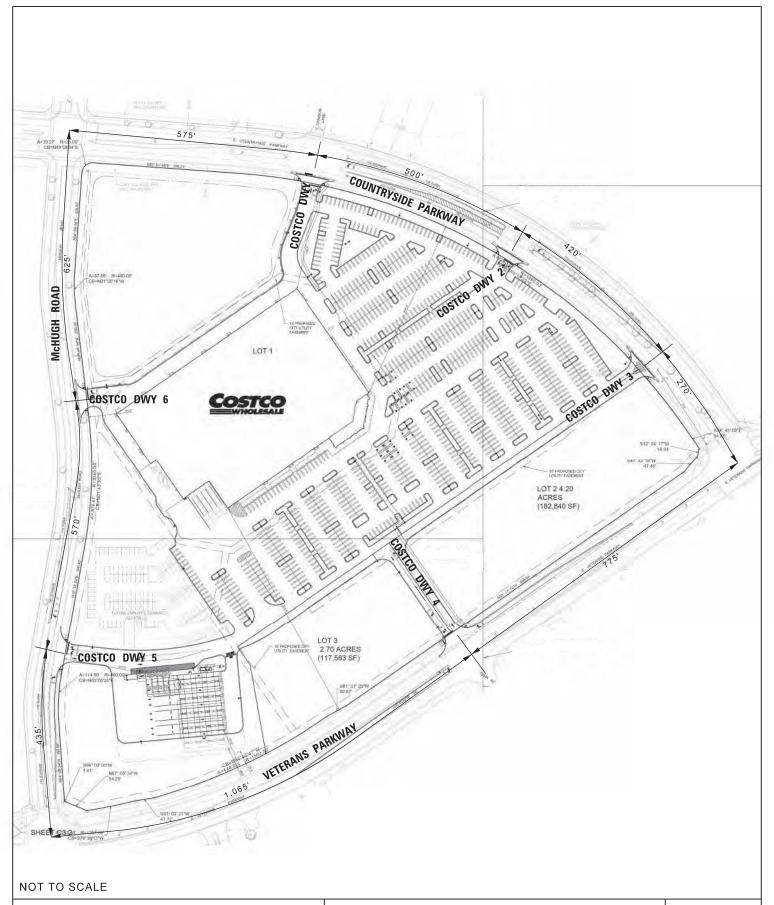


FIGURE 2 CONCEPTUAL SITE PLAN



YORKVILLE ILLINOIS



II. PROJECT CONDITIONS

Land Uses

The land uses near the project site primarily consist of residential and retail uses as well as undeveloped land. The surrounding land uses are illustrated in Figure 3.

Roadway System

The characteristics of the roadways in the vicinity of the site are presented below. The existing lane configurations in the study area are illustrated in Figure 4.

Roadway Descriptions

US 34/Veterans Parkway is an east/west roadway classified as a Strategic Regional Arterial (SRA) with a posted speed limit of 45 mph adjacent to the proposed development. US 34 provides two travel lanes in each direction that widens to include a striped median that facilitates auxiliary turn lanes at intersections. US 34 is under jurisdiction of the Illinois Department of Transportation. The average daily traffic (ADT) volume on US 34 to the east of McHugh Road was 16,200 vehicles per day in 2023, while the west side was 14,00 vehicles per day based on the IDOT database.

Countryside Parkway is an east/west roadway classified as a minor collector with a posted speed of 40 mph that curves to intersect US 34. Countryside Parkway consists of a five-lane boulevard section that includes turn lanes at intersections. There are raised concrete and landscaped medians along the Countryside Parkway corridor. Countryside Parkway is under municipal jurisdiction. The average daily traffic (ADT) volume on Countryside Parkway to the east of McHugh Road was 1,600 vehicles per day in 2019, while the west side was 3,600 vehicles per day based on the IDOT database.

McHugh Road is a north/south roadway classified as a major collector with one travel lane in each direction and a striped median as a two-way left turn lane that facilitates auxiliary turn lanes at major intersections. McHugh Road is under municipal jurisdiction and has a posted speed limit of 35 mph. McHugh Road has a 2019 ADT of 2,000 vehicles per day north of US 34 while the south side was 2,950 vehicles per day based on the IDOT database.

Tuma Road is an east/west roadway classified as a local road with one travel lane in each direction. Tuma Road provides access to the existing residential development south of US 34. The posted speed limit is 30 mph and is under township jurisdiction with a 2019 ADT of 1,100 vehicles per day based on the IDOT database.

Crimson Lane is a north/south roadway classified as a local road with one travel lane in each direction and a striped median as a two-way left turn lane that facilitates auxiliary turn lanes at major intersections.



Crimson Lane provides access to the existing Children of America Yorkville, the Police Station, and City Hall facilities north of Countryside Parkway. Crimson Lane is under municipal jurisdiction.

Intersection Descriptions

US 34/Veterans Parkway and Countryside Parkway is a coordinated signalized three-leg intersection. The northeast-bound approach of US 34 consists of one left turn lane and two through lanes while the southwest-bound approach consists of two through lanes and one right turn lane. The southbound approach on Countryside Parkway consists of one left turn lane and one right turn lane. All approaches operate with a protected/permitted left turn movement. The traffic signal was observed during the peak hours and found that the cycle length for the weekday am is 110 seconds, the weekday pm is 120 seconds and Saturday midday is 100 seconds.

US 34/Veterans Parkway and McHugh Road is a coordinated signalized intersection. The northbound approach of McHugh Road consists of one left turn lane, one through lane, and one right turn lane while the southbound approach consists of one left turn lane and one shared through/right turn lane. The eastbound and westbound approaches of US 34 consist of one left turn lane, one through lane, and one shared through/right turn lane. All approaches operate with a protected/permitted left turn movement. The traffic signal was observed during the peak hours and found that the cycle length for the weekday am is 110 seconds, the weekday pm is 120 seconds and Saturday midday is 100 seconds.

McHugh Road and Countryside Parkway is an unsignalized all-way stop-controlled intersection. The northbound and southbound approaches of McHugh Road consist of one left turn lane and one shared through/right turn lane. The eastbound and westbound approaches of Countryside Parkway consists of one left turn lane and one shared through/right turn lane.

US 34/Veterans Parkway and Tuma Road is a minor leg stop-controlled t-intersection with the northbound approach of Tuma Road signed as the stop approach. The northeast-bound approach of US 34 consists of one through lane and one shared through/right turn lane while the southwest-bound approach consists of one left turn lane and two through lanes. The northbound approach of Tuma Road consists of one shared left turn/right turn lane.

Countryside Parkway and Crimson Lane is a minor leg stop-controlled t-intersection with the southbound approach of Crimson Lane signed as the stop approach. The eastbound approach of Countryside Parkway consists of one left turn lane and two through lanes while the westbound approach of Countryside Parkway consists of one through lane and one shared through/right turn lane. The southbound approach of Crimson Lane consists of one left turn lane and right turn lane.

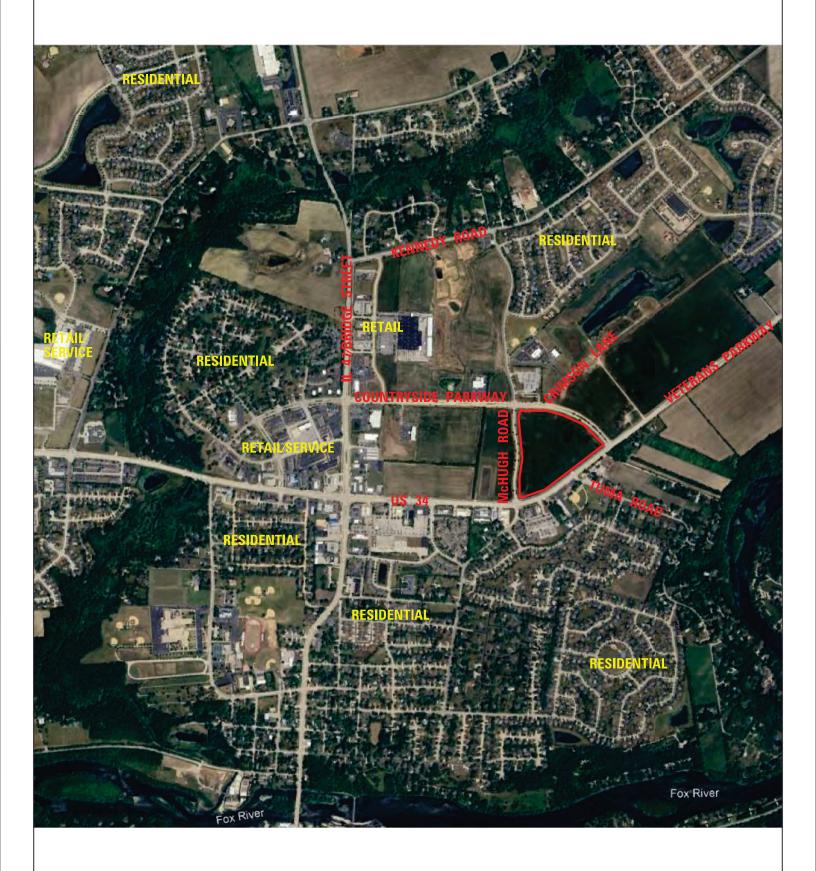


FIGURE 3 LAND USE MAP



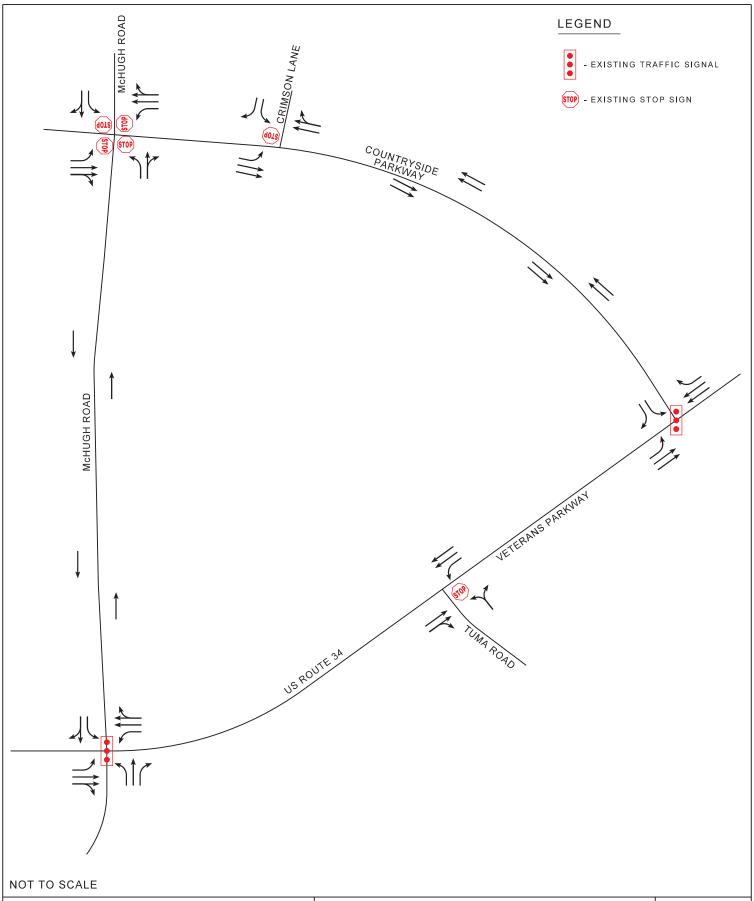


FIGURE 4
EXISTING LANE CONFIGURATION



YORKVILLE ILLING



Traffic Volumes

To assist in the evaluation of the traffic impact on the roadway system resulting from the proposed development, existing vehicular volumes were collected at the study area intersections.

Existing traffic counts were collected on Saturday, September 14, 2024, Tuesday, September 17, 2024, and Wednesday, September 18, 2024. The weekday am peak hour traffic counts were collected from 7:00 am to 9:00 am, the weekday pm peak hour traffic counts were collected from 4:00 pm to 6:00 pm, and the Saturday midday counts were collected from 11:00 am to 3:00 pm. The time periods of the traffic counts were selected to coincide with the typical peak hours of the arterial roadways like US 34/Veterans Parkway, as well as the typical peak hours for a retail development.

It should be noted that due to complications with the traffic data collection equipment, the study area intersections were counted on two consecutive weekdays. The intersections of Countryside Parkway and McHugh Road, US 34 and Countryside Parkway, and US 34 and Tuma Road were collected on Tuesday, September 17, 2024, and the intersections of US 34 and McHugh Road and Countryside Parkway and Crimson Lane were collected on Wednesday, September 18, 2024. The weekday peak hour traffic volumes were balanced with the approach and departure volumes along McHugh Road between US 34 and Countryside Parkway and along Countryside Parkway between Crimson Lane and US 34 adjusted by taking the higher approach traffic volume and distributing it based on the existing turning distribution.

The weekday am peak hour occurs between 7:00 am - 8:00 am, the weekday pm peak hour occurs between 4:30 pm - 5:30 pm, and the Saturday midday peak hour occurs 12:45 pm - 1:45 pm, respectively. The existing peak hour volumes at the study area intersections are illustrated in Figure 5. A summary of the traffic volumes collected in fifteen-minute increments is provided in Appendix A.

Proposed Development

Land Use Development

It is our understating that there are no known development plans within the immediate study area that are likely to alter traffic patterns in the near future. It should be noted that the properties on the west side of McHugh Road and the east side of Countryside Parkway will likely be developed in the future. At this time, there are no specific development plans for those sites.

Roadway Development

It is our understanding that there are no other known planned roadway developments that will impact traffic patterns in the study area.



The proposed access plan includes a right-in/right-out/left-in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway north of the US 34 intersection.

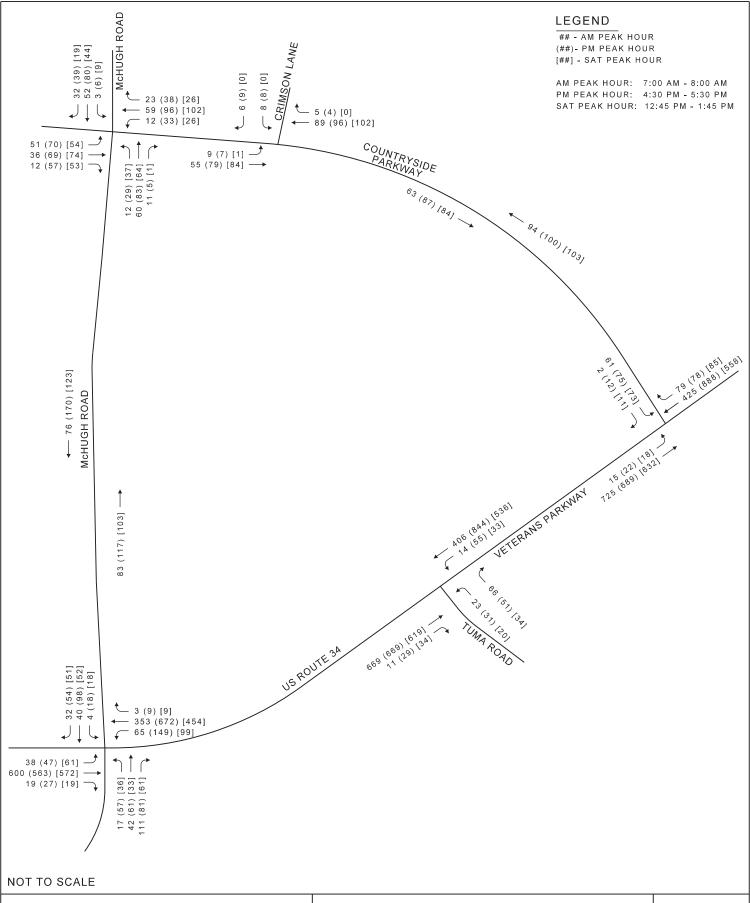


FIGURE 5
EXISTING TRAFFIC VOLUMES



YORKVILLE ILLINOIS



III. TRAFFIC FORECASTS

Project Traffic Volumes

Trip Generation

The proposed site plan consists of an approximately 161,064 square foot Costco Wholesale building and a members-only gas station with 40 pumps. Project traffic is estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The following land use category is used to determine project traffic:

Discount Club (ITE Land Use Code 857) – A discount club is a discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items such as food, clothing, tires, and appliances; many items are sold in large quantities or bulk. Some sites may include on-site fueling pumps.

Gasoline/Service Station (ITE Land Use Code 944) – This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have ancillary facilities for servicing and repairing motor vehicles and may have a car wash.

The *Trip Generation Manual, 11th Edition* assigns trip generation estimates based on a regression equation for each peak period and an independent variable. In this case, the gross building area is applicable for the discount club and vehicle fueling positions for the gas station. The weekday am and weekday pm peak hour trip generation equations are selected for weekday, peak hour of adjacent street traffic for one hour from 7 am to 9 am and 4 pm to 6 pm. The Saturday midday peak hour equations are selected for the Saturday peak hour of generator for both uses.

Trip generation is estimated based on the operational areas, which are summarized in Table 1. The Costco store will not be open during the weekday am peak hour as warehouse stores typically open after the morning commuter peak hour. A nominal number of trips are assumed for the weekday am peak hour to account for deliveries and employee trips to the store. The gas station is expected to be open to members only during the weekday am peak hour.

It is unlikely that the ITE *Trip Generation Handbook* methodology for internal capture is applicable since both the discount club and gas station are members only. The discount club operator stated that for locations in the Midwest, typically 65 to 75 percent of all gas station trips also include a trip into the discount club. In order to maintain a conservative analysis, it is assumed that 65 percent of gas station trips are internally captured, resulting in an overall internal capture of 22 percent during the weekday pm peak hour and 15 percent during the Saturday midday peak hour. Weekday daily and Saturday volumes



were calculated using a ten percent reduction for internal capture and a pass by reduction similar to the peak hour for the gas station and discount club.

As documented in the ITE *Trip Generation Handbook*, some land uses do not typically generate all new traffic on the roadway system. The total traffic generation is a combination of pass-by trips, or traffic drawn from the existing traffic flow on the adjacent streets, and primary trips, which represent new traffic drawn to the roadway network. In order to assess the pass-by trips, the data published in the ITE *Trip Generation Handbook* was utilized to estimate the pass-by percentages for the applicable land uses. It should be noted that pass-by trip reductions do not reduce the total number of trips into and out of the site, but decrease the number of new trips on the roadway network. A 34 percent pass-by rate was used for the discount club land use during the weekday pm peak hour and a 25 percent pass-by rate during the Saturday midday peak hour. Similarly, a 63 percent pass-by rate was applied for the gas station during the weekday am peak hour, while a 57 percent and 49 percent was used for the weekday pm and Saturday midday peak hours, respectively.

The new and pass-by trips will be assigned to the site driveways and local roadway network based on a trip distribution of these trips. The assignment of traffic to the driveways will likely follow a similar distribution to the existing condition, with adjustments made to account for modifications to the internal roadway network and the gas station location.

Table 1: Costco Trip Generation

	Table 1. Costed Trip deficiation												
IIIC	LUC LAND USE SIZE		Weekday	W	eekday A	MA	Weekday PM			Saturday	Saturday MD		
LUC	LAND OSE	3126	Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total
857	Discount Club	161,064 SF	6,836	5	5	10	337	338	675	8,657	503	523	1,026
657	Interr	nal Capture Reduction:	-686	0	0	0	-90	-91	-181	-719	-81	-85	-166
		-2,276	0	0	0	-84	-84	-168	-2,381	-108	-108	-216	
944	Gasoline/Service Station	40 Fueling Position	6,880	206	205	411	278	278	556	5,736	255	256	511
944	Intern	-686	0	0	0	-91	-90	-181	-719	-85	-81	-166	
		-2,602	-129	-129	-258	-107	-107	-214	-2,107	-85	-85	-170	
Total Trip Generation:			13,716	211	210	421	615	616	1,231	14,393	758	779	1,537
Less Internal Capture:			-1,371	0	0	0	-181	-181	-362	-1,438	-166	-166	-332
Internal Capture Rate:			10%	0%			29%			10%	22%		
Total External Trips			12,345	211	210	421	434	435	869	12,955	592	613	1,205
Less Pass-by:			-4,878	-129	-129	-258	-191	-191	-382	-4,488	-193	-193	-386
Total New Traffic Generated on Network:				82	81	163	243	244	487	8,467	399	420	819

Overall, 163, 487, and 819 total new trips are estimated during the weekday am, weekday pm, and Saturday midday peak hours, respectively. An additional 258, 382, and 386 pass-by trips are anticipated during the weekday am, weekday pm, and Saturday midday peak hour, respectively.

It should be noted that the gasoline/service station land use includes ancillary uses on the site, including convenience and car wash. The Costco gas stations do not have any ancillary uses. Therefore, the 163 new



trips generated by the 40 fueling positions may be overestimated as it is unlikely that over 80 vehicles will make a home-to-gas station only trip during the weekday am peak hour.

Pages from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* are included in Appendix I for reference.

Trip Distribution and Assignment

The direction from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems.

The distribution of discount club and gasoline/service station is based on the location of schools, employment centers, and commercial/retail areas. Traffic is primarily assigned to US 34 and Countryside Parkway due to the high-volume arterial nature of these streets. Much lower volumes are assigned to McHugh Road. The overall trip distribution is summarized in Table 2.

Table 2: Trip Distribution

Cordon Location	Distribution
Veterans Parkway/US 34 - East of Countryside Parkway	45%
Veterans Parkway/US 34 - West of McHugh Road	25%
Countryside Parkway - West of McHugh Road	20%
McHugh Road - North of Countryside Parkway	5%
McHugh Road - South of Veterans Parkway/US 34	5%

The assignment of traffic to the driveways follows a similar distribution to the existing condition, with adjustments made to account for modifications to the internal roadway network and the location of the gas station. The proposed access plan includes a full access driveway on US 34 that aligns with Tuma Road, two full access driveways and one right in/right out driveway on Countryside Parkway, and two full access driveways on McHugh Road. Therefore, approximately 40 percent of the total Costco trips are assigned to the driveway on US 34, 35 percent of the Costco trips are assigned to the Countryside driveways, and 25 percent to the driveways along McHugh Road. The distribution and assignment of proposed primary trips is illustrated in Figure 6.

It is assumed that most pass-by and diverted trips will be along US 34, Countryside Parkway, and McHugh Road. The directional split favors the westbound vehicles utilize the driveways to access the site via right



turns to and from US 34. The distribution and assignment of proposed pass by trips is illustrated in Figure 7.

The proposed primary trips are added to the proposed pass by trips to obtain the total proposed trips, which are illustrated in Figure 8.

Background Traffic Volumes

Background traffic volumes are estimated for the year 2031 which is five years beyond the anticipated build out in 2026. These volumes account for future non-project related growth in the area. The AADT for the study area roadways were obtained from the IDOT database. A summary of the CMAP growth rates is provided in Table 3. CMAP correspondence is provided in Appendix B.

Table 3: CMAP Growth Rates

Church	AAD	г	Total Growth	Compounded	Total Growth	Total Growth from 2024 to 2050	
Street	Existing AADT (Year)	2050 Proj.	from Count Year to 2050	Yearly Rate	from 2024 to 2031		
US Route 34 east of McHugh Road	16,200 (2023)	21,000	29.6%	1.0%	7.0%	28.4%	
US Route 34 west of McHugh Road	14,000 (2023)	18,100	29.3%	1.0%	6.9%	28.1%	
Countryside Parkway between US 34 and McHugh Road	1,600 (2019)	2,000	25.0%	0.7%	5.2%	20.6%	
Countryside Parkway west of McHugh Road	3,600 (2019)	4,500	25.0%	0.7%	5.2%	20.6%	
McHugh Road south of US 34	2,950 (2019)	3,700	25.4%	0.7%	5.2%	20.9%	
McHugh Road north of US 34	2,000 (2019)	2,500	25.0%	0.7%	5.2%	20.6%	
Tuma Road south of US 34	1,100 (2019)	1,380	25.5%	0.7%	5.3%	20.9%	

Overall, the CMAP projections indicate that there will be overall growth in traffic along the study area roadways around the proposed development. For the purposes of this study, a uniform total growth factor of 7.0 percent is applied to all movements throughout the study area to accommodate non-project related growth.

The 2031 background traffic volumes are illustrated in Figure 9.

Future Traffic Volumes

The total project trips are added to the background volume to obtain the future with project traffic volumes for the study area intersections. Future with project traffic volumes are depicted in Figure 10.

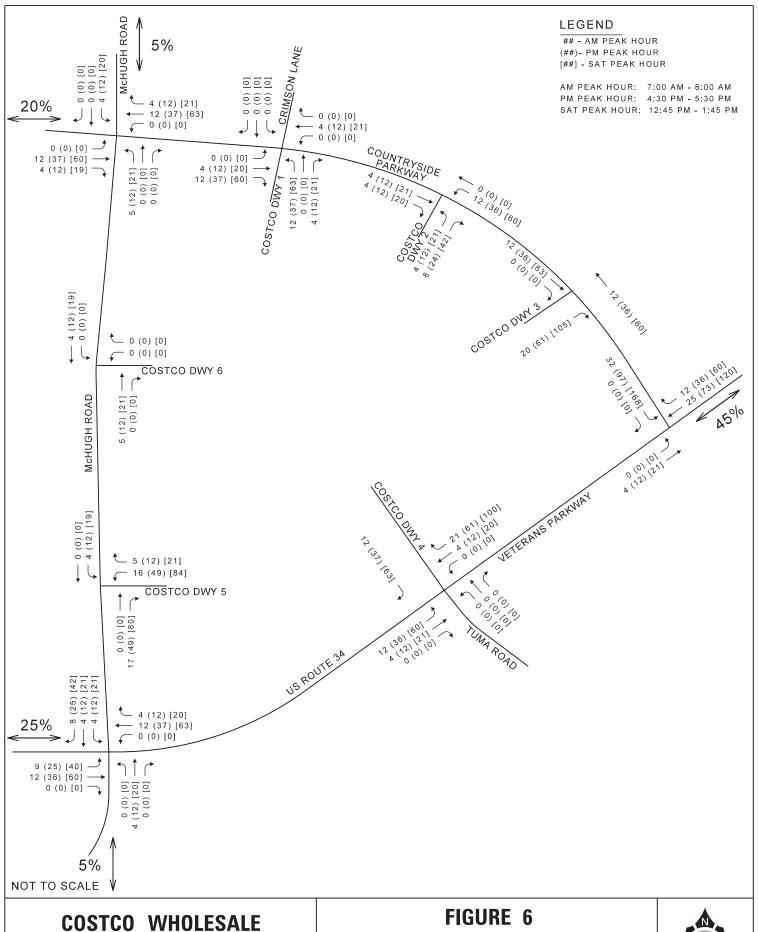


FIGURE 6
NEW PROJECT
TRAFFIC VOLUMES



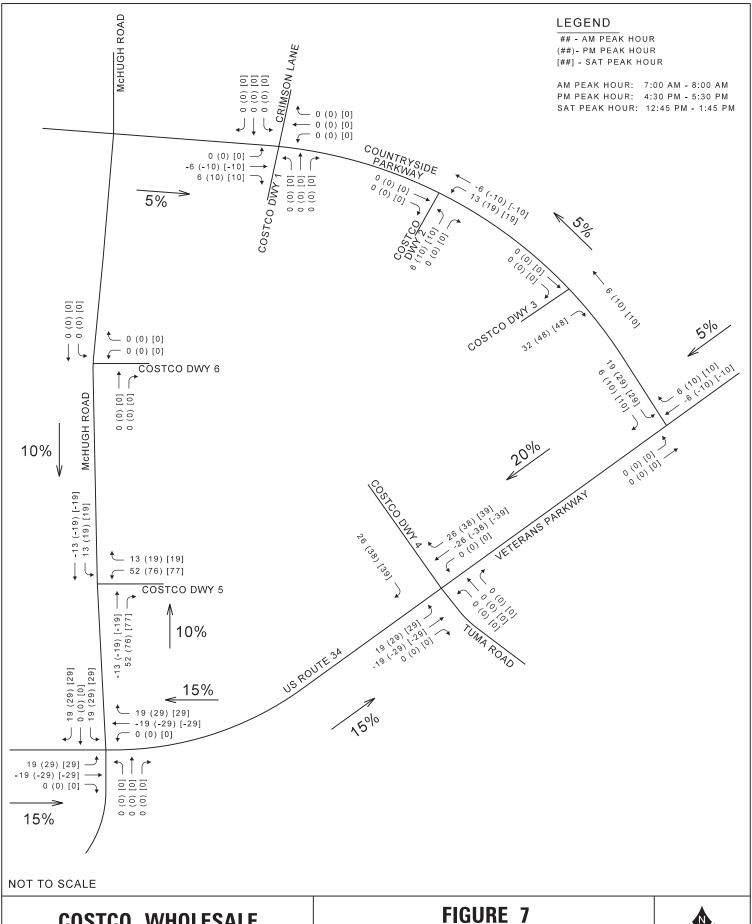
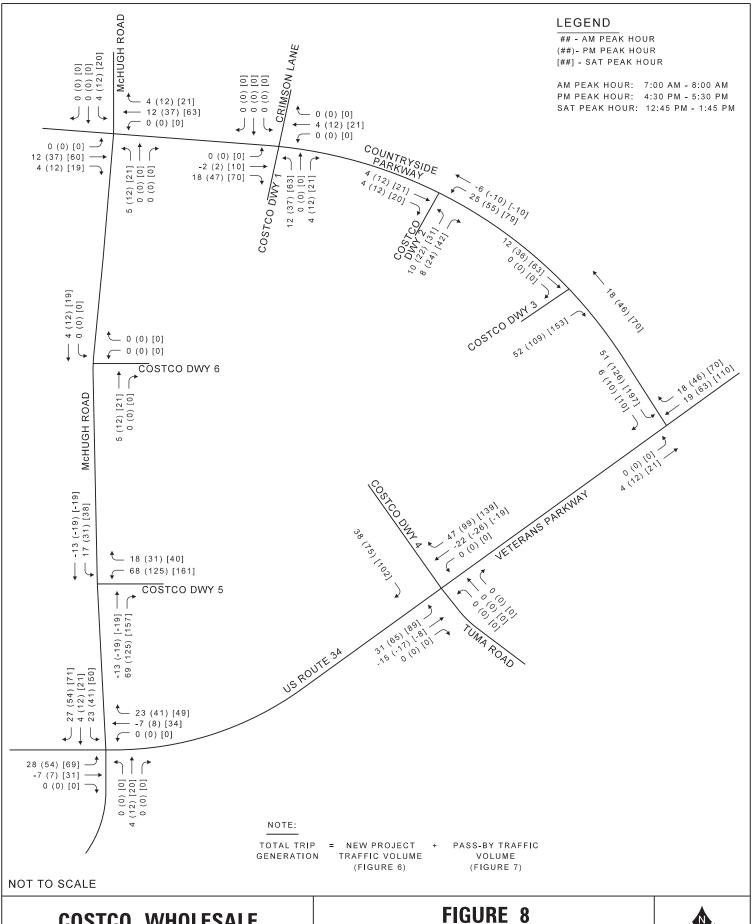


FIGURE 7
PASS BY
TRAFFIC VOLUMES





TOTAL
TRAFFIC VOLUMES



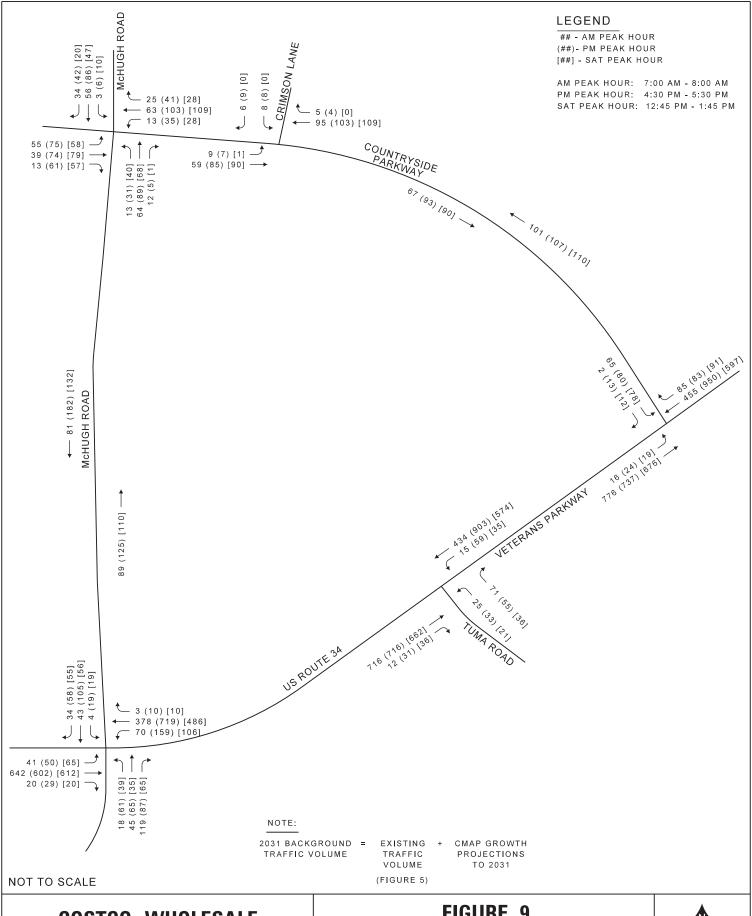
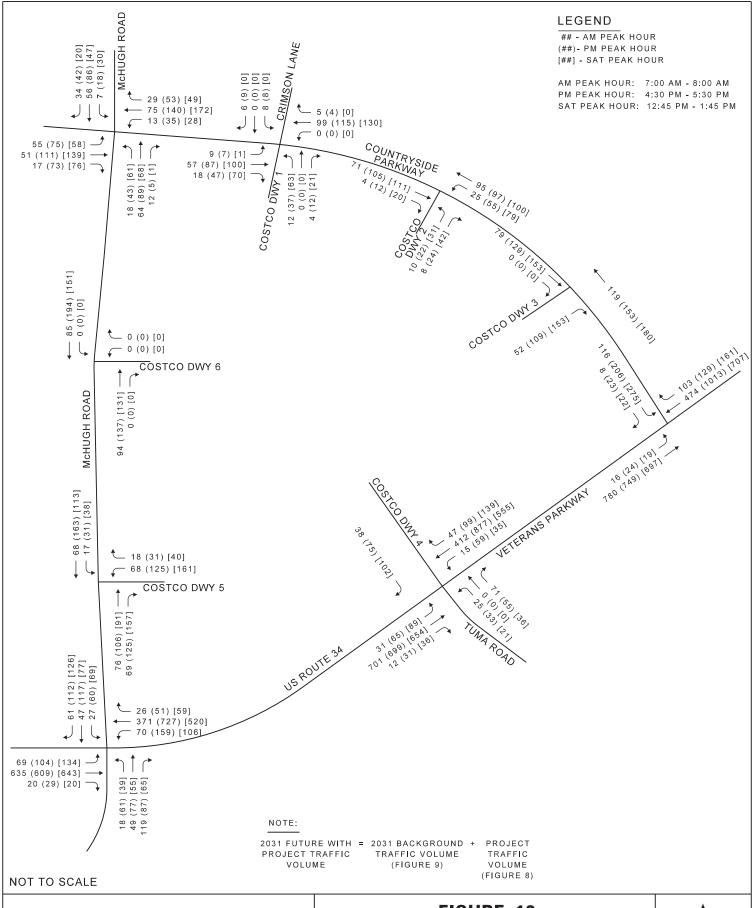


FIGURE 9 2031 BACKGROUND TRAFFIC VOLUMES

W V E



COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 10 2031 FUTURE WITH PROJECT TRAFFIC VOLUMES

ECT ILLINOIS



IV. TRAFFIC ANALYSIS

Auxiliary Lane Analysis

This study evaluated whether additional auxiliary lanes are warranted at the study area intersections. The warrant analysis follows the methodology detailed in IDOT's *Bureau of Design and Environmental Manual* (BDE). Warrants are determined based on factors such as through volume, opposing volume, and percentage of turning vehicles. Different warrants are used for left and right turn lanes, and factors such as design speed. Worksheets displaying all right and left turn lane warrants are included in Appendix C.

Overall, it is found that the westbound right turn movement at Costco Driveway 4 on US 34 and the northbound right turn movement at Costco Driveway 5 on McHugh Road meet the right turn lane warrant based on the BDE chart comparing right turn and approach volumes and should therefore be considered. This warrant is intended to identify areas with high right turn volumes that can unduly impair the through movements. In this case, the through volumes along US 34 are relatively high. Based on the results of the auxiliary warrants, it is recommended that right turn lanes are provided on the westbound approach of US 34 at Costco Driveway 4 and the northbound approach of McHugh Road at Costco Driveway 5.

Left turn lanes are not currently provided at Costco Driveways 1, 2, and 4. It is found that the westbound approach of Countryside Parkway at Costco Driveway 1 and Driveway 2 and the eastbound approach of US 34 at Costco Driveway 4 meet the warrant of uniformity of intersection design for auxiliary left turn lanes. Currently, the striped median along McHugh Road provides a two-way left turn lane which will accommodate the southbound left turns at Driveways 5 and 6. Based on the results of the auxiliary lane warrants, it is recommended that left turn lanes are provided on the westbound approach of Countryside Parkway at Costco Driveway 1 and Costco Driveway 2 and on the eastbound approach of US 34 at the Costco Driveway 4.

Traffic Signal Warrant Analysis

Based on the projected traffic volumes at the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road, a traffic signal warrant analysis has been conducted at each intersection. The investigation for the need for a traffic control signal is based on the methodology established in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD establishes nine individual warrants. The installation of a traffic signal should be further investigated at locations that meet one or more warrants. However, warrant 1, the eight-hour vehicular volume warrant, is typically the only vehicular volume/delay warrant that is considered for intersections on designated SRA routes.

Warrant 1 is met if a total of eight hours in the day exceeds the thresholds established in the MUTCD. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. However, additional guidance from IDOT states that in cases involving future volumes, the eight-hour vehicular volume hour can be estimated as 55 percent of the peak hour volumes.



The IDOT methodology also requires a reduction of the minor approach right turn volume based on factors such as lane configuration and conflicting volumes. Additionally, the minor street threshold volumes are typically increased for intersections located on SRA's to reflect more rigid warranting requirements. The policy for new traffic signals along an SRA route are described in Section 10.4.2 of the *Strategic Regional Arterial Design Concept Report*, February 1994.

Based on the projected weekday pm peak hour traffic volumes and utilizing the IDOT guidance to estimate the eighth hour volumes, the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road do not meet the eight-hour warrants. Therefore, for the purposes of this study, the intersections of US 34 and Costco Driveway 4/Tuma Road was analyzed as a two-way stop-controlled intersection and the intersection of Countryside Parkway and McHugh Road was analyzed as the existing all-way stop-controlled configuration. The supporting Signal Warrant Review Sheet and Right Turn Factorization Sheet are included in Appendix E.

Capacity Analysis

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's *Highway Capacity Manual (HCM), 7th Edition*. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the intersection as a whole. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 4.



Table 4: Level of Service Definitions for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)				
А	<u><</u> 10	≤ 10.0				
В	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0				
С	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0				
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0				
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0				
F	> 80.0	> 50.0				

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*, National Research Council, 2016.

Typically, various state and local governments adopt standards varying between LOS C and LOS E, depending on the area's size and roadway characteristics.

The study area includes the existing signalized intersections of US 34/Veterans Parkway and Countryside Parkway and US 34/Veterans Parkway and McHugh Road, the existing unsignalized intersections of McHugh Road and Countryside Parkway, Crimson Lane and Countryside Parkway, and US 34/Veterans Parkway and Tuma Road, and the proposed connections on US 34/Veterans Parkway, McHugh Road, and Countryside Parkway. Capacity analysis was performed with Synchro 11.1. Models were created for the weekday am, weekday pm, and Saturday midday peak hours for the existing, 2031 background, and 2031 future with project scenarios.

The capacity analysis results at the signalized intersections are summarized in Table 5 and at the unsignalized intersections in Table 6. The traffic signal timing plans were obtained from videos captured during the traffic counts and utilized for this analysis. Supporting capacity analysis worksheets are provided in Appendices E, F, and G, respectively.



Table 5: Capacity Analysis of Signalized Intersections

			Eastb	ound	Westbound		Northbound		Southbound		Intersection	
Intersection	Peak Hour	Scenario	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
		Existing (2024)	2.5	Α	4.5	Α	-	-	46.9	D	5.4	Α
	Weekday AM	Background (2031)	2.5	Α	4.6	Α	-	-	47.4	D	5.5	Α
	7	Future with Project (2031)	2.7	Α	4.5	Α	-	-	53.5	D	7.6	Α
Veterans		Existing (2024)	1.4	Α	6.0	Α	-	-	50.3	D	6.4	Α
Parkway (US	Weekday	Background (2031)	1.5	Α	6.3	Α	-	-	50.8	D	6.5	Α
34) &	PM	Future with Project (2031)	2.4	Α	6.2	Α	-	-	114.7	F	16.4	В
Countryside Parkway		FwP (2031) w/ Mitigation	9.1	Α	17.3	В	-	-	33.8	С	16.1	В
raikway	Saturday MD	Existing (2024)	1.4	Α	5.4	Α	-	-	39.3	D	5.6	Α
		Background (2031)	1.4	Α	5.4	Α	-	-	39.6	D	5.6	Α
		Future with Project (2031)	2.2	Α	5.4	Α	-	-	136.1	F	24.8	С
		FwP (2031) w/ Mitigation	12.8	В	16.1	В	-	-	25.0	С	16.2	В
		Existing (2024)	14.2	В	10.6	В	15.9	В	28.0	С	14.1	В
	Weekday AM	Background (2031)	14.5	В	11.3	В	15.7	В	29.0	С	14.5	В
	7.11	Future with Project (2031)	14.2	В	11.4	В	18.2	В	27.9	С	15.1	В
Veterans		Existing (2024)	17.9	В	15.2	В	23.5	С	41.3	D	19.4	В
Parkway (US 34) & McHugh	Weekday PM	Background (2031)	18.4	В	15.5	В	23.4	С	42.6	D	19.9	В
Road		Future with Project (2031)	17.9	В	17.0	В	26.6	С	45.2	D	22.0	С
		Existing (2024)	20.2	С	17.3	В	15.2	В	20.3	С	18.7	В
	Saturday MD	Background (2031)	20.7	С	18.1	В	15.3	В	20.9	С	19.3	В
	IVID	Future with Project (2031)	20.5	С	21.0	С	18.9	В	23.1	С	20.9	С



Table 6: Capacity Analysis of Unsignalized Intersections

	Weekday AM Weekday PM					Saturday MD												
Intersection / Approach		ting (24)	Backg	round 31)	Futur Project			ting (24)	Backg (20	round	Futui Project			ting 24)	Backg (20	round	Futur Project	
Арргоасп	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
McHugh Road 8	k Country	/side Par	kway															
NB Left	9.0	Α	9.1	Α	9.4	Α	9.7	Α	9.8	Α	10.5	В	9.3	Α	9.5	Α	10.6	В
NB Thru/right	9.2	Α	9.4	Α	9.7	Α	9.9	Α	10.2	В	10.8	В	9.1	Α	9.3	Α	10.1	В
EB Left	9.7	Α	9.8	Α	10.1	В	10.1	В	10.4	В	10.8	В	9.3	Α	9.5	Α	10.1	В
EB Thru	8.6	Α	8.7	Α	9.0	Α	9.1	Α	9.3	Α	10.1	В	8.7	Α	8.8	Α	10.0	Α
EB Thru/right	8.3	Α	8.5	Α	8.7	Α	8.9	Α	9.1	Α	10.0	Α	8.4	Α	8.5	Α	9.8	Α
WB Left	9.0	Α	9.1	Α	9.3	Α	9.6	Α	9.8	Α	10.1	В	9.0	Α	9.2	Α	9.7	Α
WB Thru	8.8	Α	9.0	Α	9.3	Α	9.5	Α	9.7	Α	10.5	В	9.0	Α	9.1	Α	10.4	В
WB Thru/right	8.6	Α	8.8	Α	9.1	Α	9.0	Α	9.3	Α	10.0	Α	8.6	Α	8.7	Α	9.9	Α
SB Left	10.0	Α	10.1	В	10.4	В	9.3	Α	9.4	Α	10.1	В	9.1	Α	9.2	Α	10.2	В
SB Thru/right	9.2	Α	9.5	Α	9.8	Α	10.1	В	10.5	В	11.2	В	8.9	Α	9.1	Α	9.9	Α
Countryside Par	kway &	Crimson	Lane/Co	stco Driv	eway 1										•			
NB Left/thru	-	-	-	-	10.2	В	-	-	-	-	10.4	В	-	-	-	-	10.7	В
NB Right	-	-	-	-	8.6	Α	-	-	-	-	8.8	Α	-	-	-	-	8.9	Α
EB Left	7.8	Α	7.9	Α	7.9	Α	7.5	Α	7.5	Α	7.5	Α	7.4	Α	7.5	Α	7.5	Α
WB Left	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α
SB Left	10.0	В	10.1	В	10.4	В	9.6	Α	9.7	А	10.1	В	0.0	Α	0.0	Α	0.0	Α
SB Right	8.7	Α	8.8	Α	8.8	Α	8.6	Α	8.7	Α	8.7	Α	0.0	Α	0.0	Α	0.0	Α
Countryside Par	kway &	Costco D	riveway 2	2				<u>'</u>							•			
NB Left	-	-	-	-	9.6	Α	-	-	-	-	10.8	В	-	-	-	-	11.6	В
NB Right	-	-	-	-	8.6	Α	-	-	-	-	8.7	Α	-	-	-	-	8.9	Α
WB Left	-	-	-	-	7.4	Α	-	-	-	-	7.6	Α	-	-	-	-	7.7	Α
Countryside Par	kway &	Costco D	riveway	3 (RIRO)				<u>'</u>							•			
EB Right	-	-	-	-	8.7	Α	-	-	-	-	9.2	Α	-	-	-	-	9.5	А
Veterans Parkw	ay (US 3	1) & Tum	a Road/	Costco D	riveway 4	ļ.												
NE Left	-	-	-	-	7.9	Α	-	-	-	-	8.9	Α	-	-	-	-	8.5	А
NW Appr.	15.4	С	16.8	С	18.4	С	24.1	С	29.4	D	56.3	F	16.6	С	18.0	С	27.2	D
SE Right	-	-	-	-	9.0	Α	-	-	-	-	10.6	В	-	-	-	-	9.8	Α
SW Left	9.4	Α	9.6	Α	9.6	Α	9.4	Α	9.7	Α	9.7	Α	9.1	Α	9.3	Α	9.3	Α
McHugh Road & Costco Driveway 5																		
WB Left	-	-	-	-	10.1	В	-	-	-	-	11.9	В	-	-	-	-	12.0	В
WB Right	-	-	-	-	8.8	Α	-	-	-	-	9.0	Α	-	-	-	-	8.9	Α
SB Left	-	-	-	-	7.6	Α	-	-	-	-	7.8	Α	-	-	-	-	7.9	Α
McHugh Road 8	k Costco	Driveway	y 6															
WB Left	-	-	-	-	0.0	А	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α
WB Right	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α
SB Left	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α

Existing Scenario

Based on the analysis results at the signalized intersections, the major approaches operate with LOS D or lower at the study area intersections. At the signalized intersection of US 34/Veterans Parkway and Countryside Parkway, the overall intersection operates at LOS A for all three time periods, while the signalized intersection of US 34/Veterans Parkway and McHugh Road operates at LOS B for all three time periods.

All movements at the unsignalized intersections operate adequately with LOS C or better.



Background Scenario

For the 2031 background scenario, delays tend to increase slightly at the signalized intersections. The addition of background traffic results in similar delay times for each approach and the overall intersection. It is worth noting that slight delay improvements are observed on some minor street approaches. This is due to the increased side street volumes placing more calls on the intersection approach which extends the effective green times for the side street and results in a decreased average delay for that approach.

All movements at the unsignalized intersections continue to operate adequately. The northwest approach of Tuma Road is projected to operate at LOS D during the weekday pm peak hour.

Future with Project Scenario

Delays again tend to slightly increase with the addition of project related traffic for the weekday am, weekday pm, and Saturday midday peak hours. Based on the projected analysis, the southbound approach at Countryside Parkway and US 34/Veterans Parkway operates at LOS F during the weekday pm and Saturday midday peak hours and the overall intersection delay drops from LOS A to LOS B for the weekday pm and from LOS A to LOS C for the Saturday midday peak hour. At the signalized intersection of US 34/Veterans Parkway and McHugh Road, all approaches operate at LOS D or better for all three time periods. The overall intersection delay drops from LOS B to LOS C for both the weekday pm and Saturday midday peak hours.

All movements at the unsignalized intersections continue to operate adequately, with all levels of service remaining at LOS D or better with the exception of the northwest approach of Tuma Road which is projected to operate at LOS F during the weekday pm peak hour. Higher delays are typical at stop-controlled approaches on minor streets and driveways at intersections with arterial roadways during peak periods. Additionally, it should be noted that the volume-to-capacity ratio of the minor approaches are less than one, indicating available capacity. While left-turn movements from driveways onto arterials may experience delays during peak hours, they are expected to operate adequately at all other hours of the day.

Potential Mitigation Scenario

As described, the southbound approach at the intersection of Countryside Parkway and US 34/Veterans Parkway is projected to operate at LOS F during the weekday pm and Saturday midday peak hour using the existing traffic signal timing plan. One option to reduce the southbound approach delay would be to retime the existing signal timing plan by shifting 22 seconds of green time from the US 34/Veterans Parkway eastbound/westbound through movement to the southbound approach during the weekday pm and 23 seconds of green time during the Saturday midday peak hours. As illustrated in Table 5, retiming the traffic signal would result in the southbound approach operating at LOS C with minimal impact on the eastbound and westbound approaches, with the US 34 approaches both operating at LOS B during both



peak hours. The signal retiming would have to be approved by IDOT. The capacity worksheets for this mitigation can be found in Appendix H.

Queue Length Analysis

A queue length analysis was conducted at each of the study area intersections. A summary of this analysis is provided in Table 7. This data is comprised of the 95th percentile queue output from the Synchro analysis.

For the existing, background, and future with project scenarios, all left and right turning queue lengths do not exceed the provided storage lengths with the exception of the southbound left turn at the signalized US 34 and Countryside Parkway intersection. This southbound movement exceeds the existing storage during the weekday pm peak hour and Saturday midday peak hours with a queue of 341 feet and 381 feet, respectively. It should be noted that this is a trap lane and the queues do not spill back into the main travel lanes, however, it is anticipated that this queue will back up to the proposed Costco Driveway 4 (right in/right out). Based on the proposed mitigation scenario, the southbound queues will decrease to 208 feet during the weekday pm peak hour and 211 feet during the Saturday midday peak hour.

No queuing issues are anticipated at any of the unsignalized intersections.

It should be noted that based on the location of the proposed Costco Driveway 5 at McHugh Road, north of the US 34/Veterans Parkway intersection with McHugh Road, the southbound left turn storage and taper will be reduced to accommodate this Costco Driveway. Proposed storage and taper lengths are included in Table 7. As illustrated in Table 7, the reduction of the existing storage and taper will likely not impact the 95th percentile queue length for any of the three time periods.

It is concluded that no queue storage mitigation is required at any of the intersections and site driveways.



Table 7: 95th Percentile Queue Lengths

		Table 7: 95 th P	ercer	itile Q			ths				
			Eastb	ound	Westl	ound	North	bound	Southbound		
Intersection	Peak Hour	Scenario	Left	Right	Left	Right	Left	Right	Left	Right	
		Existing (2024)	10	-	3	-	3	-	0	-	
	Weekday AM	Background (2031)	13	-	3	-	3	-	0	-	
	Alvi	Future with Project (2031)	13	-	3	-	3	-	3	-	
McHugh Dood		Existing (2024)	13	-	5	-	5	-	0	-	
McHugh Road & Countryside	Weekday	Background (2031)	13	-	5	-	5	-	0	-	
Parkway	PM	Future with Project (2031)	15	-	5	-	8	-	3	-	
(All-Way Stop		Existing (2024)	8	-	3	-	5	-	3	-	
Controlled)	Saturday MD	Background (2031)	10	-	5	-	5	-	3	-	
	IVID	Future with Project (2031)	10	-	5	-	10	-	5	-	
		Storage Length (ft)	150	-	150	-	160	-	120	-	
		Taper Length (ft)	160	-	145	-	175	-	115	-	
		Existing (2024)	0	-	-	-	-	-	3	0	
	Weekday AM	Background (2031)	0	-	-	-	-	-	3	0	
Countryside	Alvi	Future with Project (2031)	0	-	0	-	3	0	3	0	
Parkway &		Existing (2024)	0	-	-	-	-	-	0	0	
Crimson Lane	Weekday	Background (2031)	0	-	-	-	-	-	0	0	
/ Costco	PM	Future with Project (2031)	0	-	0	-	5	0	0	0	
Driveway 1 (Two-Way		Existing (2024)	0	-	-	-	-	-	0	0	
Stop	Saturday MD	Background (2031)	0	-	-	-	-	-	0	0	
Controlled)	IVID	Future with Project (2031)	0	-	0	-	8	3	0	0	
		Storage Length (ft)	150	-	140*	-	30*	30*	100	100	
		Taper Length (ft)	145	-	130*	-	-	-	100	-	
		Existing (2024)	-	-	-	-	-	-	-	-	
	Weekday	Background (2031)	-	-	-	-	-	-	-	-	
	AM	Future with Project (2031)	-	-	3	-	0	0	-	-	
Countryside		Existing (2024)	-	-	-	-	-	-	-	-	
Parkway & Costco	Weekday PM	Background (2031)	-	-	-	-	-	-	-	-	
Driveway 2	PIVI	Future with Project (2031)	-	-	3	-	3	3	-	-	
(Two-Way		Existing (2024)	-	-	-	-	-	-	-	-	
Stop Controlled\	Saturday MD	Background (2031)	-	-	-	-	-	-	-	-	
Controlled)	IVID	Future with Project (2031)	-	-	5	-	5	3	-	-	
		Storage Length (ft)	-	-	185*	-	30*	30*	-	-	
		Taper Length (ft)	-	-	200*	-	-	-	-	-	
		Existing (2024)	-	-	-	-	-	-	-	-	
	Weekday AM	Background (2031)	-	-	-	-	-	-	-	-	
	Aivi	Future with Project (2031)	-	5	-	-	-	-	-	-	
Countryside Parkway &		Existing (2024)	-	-	-	-	-	-	-	-	
Costco	Weekday PM	Background (2031)	-	-	-	-	-	-	-	-	
Driveway 3	1	Future with Project (2031)	-	10	-	-	-	-	-	-	
(Two-Way	6.11.	Existing (2024)	-	-	-	-	-	-	-	-	
Stop Controlled)	Saturday MD	Background (2031)	-	-	-	-	-	-	-	-	
controlled	5	Future with Project (2031)	-	15	-	-	-	-	-	-	
		Storage Length (ft)	-	90*	-	-	-	-	-	-	
		Taper Length (ft)	-	-	-	-	-	-	-	-	
	\A/c = 1: 1:	Existing (2024)	3	-	-	5	-	-	84	8	
	Weekday AM	Background (2031)	3	-	-	5	-	-	89	8	
		Future with Project (2031)	4	-	-	5	-	-	144	15	
		Existing (2024)	4	-	-	5	-	-	110	20	
Veterans	Weekday	Background (2031)	4	-	-	5	-	-	114	21	
Parkway/US	PM	Future with Project (2031)	6	-	-	6	-	-	341	26	
34 & Countryside		FwP (2031) w/ Mitigation	13	-	-	6	-	-	208	21	
Parkway		Existing (2024)	2	-	-	5	-	-	90	16	
(Signalized)				-	-	6	-	-	94	18	
(Signalized)	Saturday	Background (2031)									
(Signalized)	Saturday MD	Future with Project (2031)	3	-	-	7	-	-	381	23	
(Signalized)			3 11	-	-	7 8	-	-	381 211	23 16	
(Signalized)		Future with Project (2031)		-	-		-	-			



Table 7: 95th Percentile Queue Lengths (cont.)

Note	1		Table 7: 95" Perce					<u> </u>	<u>. </u>		
Vector V				Eastb	ound	Westl	ound	North	bound	Southbound	
Weekday	Intersection	Peak Hour	Scenario	Left	Right	Left	Right	Left	Right	Left	Right
Veterans Parkway/US 34 & Turn Storage Length (ft) 120 170 180 190			Existing (2024)	-	-	3	-	2	.0	-	-
Veterans Parkinawy/US Saturday Crow-way Crow-			Background (2031)	-	-	3	-	25		-	-
Weekday Phi	Veterans	AIVI	Future with Project (2031)	3	-	3	0	2	.8	-	3
Road/Costco Driveway 4 (Two-Way 5 top Controlled) PM	Parkway/US		Existing (2024)	-	-	5	-	3	5	-	-
Future with Project (2031) 5 - 5 0 80 - 10			Background (2031)	-	-	8	-	4	5	-	-
Two-Way Saturday Existing (2024)	'		Future with Project (2031)	5	-	5	0	8	0	-	10
Mode		6.11.	Existing (2024)	-	-	3	-	1	.5	-	-
Future with Project (2031) 8 - 3 0 28 - 10			Background (2031)	-	-	3	-	1	.8	-	-
Veterans	Controlled))	IVID	Future with Project (2031)	8	-	3	0	2	.8	-	10
Veterans			Storage Length (ft)	215*	-	275	215*	-	-	-	110*
Veterans			Taper Length (ft)	220*	-	170	220*	-	-	-	-
Veterans			Existing (2024)	21	-	31	-	29	43	11	-
Veterans			Background (2031)	22	-	33	-	30	44	11	-
Veterans PM PM Future with Project (2031) 30 - 77 - 72 36 30 - 77 - 72 38 71 - 77 - 72 36 30 - 77 - 72 38 71 - 77 - 72 36 30 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 72 38 71 - 77 - 77 77 77 77 77		AIVI	Future with Project (2031)	33	-	33	-	30	46	40	-
Parkway/US 34 & McHugh Road Saturday MD Future with Project (2031) 54 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 77 - 72 36 30 - 77 - 77 - 77 - 72 36 30 - 77 - 77 - 77 - 77 - 77 - 77 38 77 - 77 - 77 - 77 - 77 38 77 - 77	Veterans		Existing (2024)	28	-	73	-	68	35	29	-
Saturday Saturday Saturday Saturday Saturday Saturday Store St			Background (2031)	30	-	77	-	72	36	30	-
Saturday		1101	Future with Project (2031)	54	-	77	-	72	38	71	-
Mothugh Road & Costco Driveway 5 (Two-Way Stop Controlled) Mothugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Cost Road Road & Costco Driveway 6 (Two-Way Stop Cost Road Road Road Road Road Road Road Road			Existing (2024)	36	-	57	-	37	23	23	-
Future with Project (2031) 69 - 60 - 40 26 61 -	(Signalized)		Background (2031)	38	-	68	-	40	25	24	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Criveway 6 (Two-Way Stop Criveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Cost Costco Driveway 6 (Two-Way Stop Cost Costco Driveway 6 (Two-Way Stop Cost Cost Cost Cost Cost Cost Cost Cost		IVID	Future with Project (2031)	69	-	60	-	40	26	61	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Costco Driveway 6 (Two			Storage Length (ft)	170	-	180	-	105	105	245/145*	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) Weekday AM Existing (2024)			Taper Length (ft)	180	-	180	-	110	110	150/175*	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Costco Drivewa			Existing (2024)	-	-	-	-	-	-	-	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) Existing (2024) Controlled Controlled Existing (2024) Controlled Controlled Existing (2024) Controlled Controlled Existing (2024) Controlled Controlled Controlled Existing (2024) Controlled Cont			Background (2031)	-	-	-	-	-	-	-	-
& Costco Driveway 5 (Two-Way Stop Controlled) Weekday PM Background (2031)		AIVI	Future with Project (2031)	-	-	8	3	-	0	0	-
PM Background (2031)	McHugh Road		Existing (2024)	-	-	-	-	-	-	-	-
Future with Project (2031) - - 20 3 - 0 3 - - - 20 3 - - - - - - - -			Background (2031)	-	-	-	-	-	-	-	-
Stop Controlled Saturday MD Storage Length (ft)		1101	Future with Project (2031)	-	-	20	3	-	0	3	-
Controlled Saturday Background (2031)			Existing (2024)	-	-	-	-	-	-	-	-
Future with Project (2031) - - 25 3 - 0 3 -			Background (2031)	-	-	-	-	-	-	-	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Controlled Stude May MD Storage Length (ft)		IVID	Future with Project (2031)	-	-	25	3	-	0	3	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Meekday MD Existing (2024) Background (2031) 0 0 0 0 0 Existing (2024)			Storage Length (ft)	-	-	75*	75*	-	145*	145*	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Weekday AM			Taper Length (ft)	-	-	-	-	-	145*	175*	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Montrolled Montrol			Existing (2024)	-	-	-	-	-	-	-	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Saturday MD Future with Project (2031) 0 0 0 0			Background (2031)	-	-	-	-	-	-	-	-
& Costco Driveway 6 (Two-Way Stop Controlled) Weekday PM (Two-Way Stop Controlled) Background (2031)		Alvi	Future with Project (2031)	-	-	0	0	-	-	0	-
PM Background (2031)	McHugh Road		Existing (2024)	-	-	-	-	-	-	-	-
Future with Project (2031) - - 0 0 - - 0 0 -			Background (2031)	-	-	-	-	-	-	-	-
Saturday Saturday MD Saturday Satu	,	FIVI	Future with Project (2031)	-	-	0	0	-	-	0	-
Controlled) Saturday MD Background (2031)			Existing (2024)	-	-	-	-	-	-	-	-
Future with Project (2031)			Background (2031)	-	-	-	-	-	-	-	-
		IVID	Future with Project (2031)	-	-	0	0	-	-	0	-
Taper Length (ft)			Storage Length (ft)	-	-	25*	25*	-	-	-	-
			Taper Length (ft)	-	-	-	-	-	-	-	-

Notes:

- 1. All values in feet
- 2. * Proposed Storage and taper lengths.

Site Circulation

In the proposed site plan, Costco Driveway 3, Costco Driveway 4, and Costco Driveway 5 will serve as the access point to the main internal road through the site. Costco Driveway 3 will be connected to Countryside Parkway providing access from the east side of the site while Costco Driveway 5 will connect



to McHugh Road facilitating access from the west. This connection will also provide convenient access to the proposed gas station and access points to the Costco parking fields. For the purpose of the discussion below, the internal roadway is described as an east-west street. Overall, it is expected that the internal roadway configuration, with the limited access points and stop controlled intersections, will operate effectively.

Internal Intersection Summary

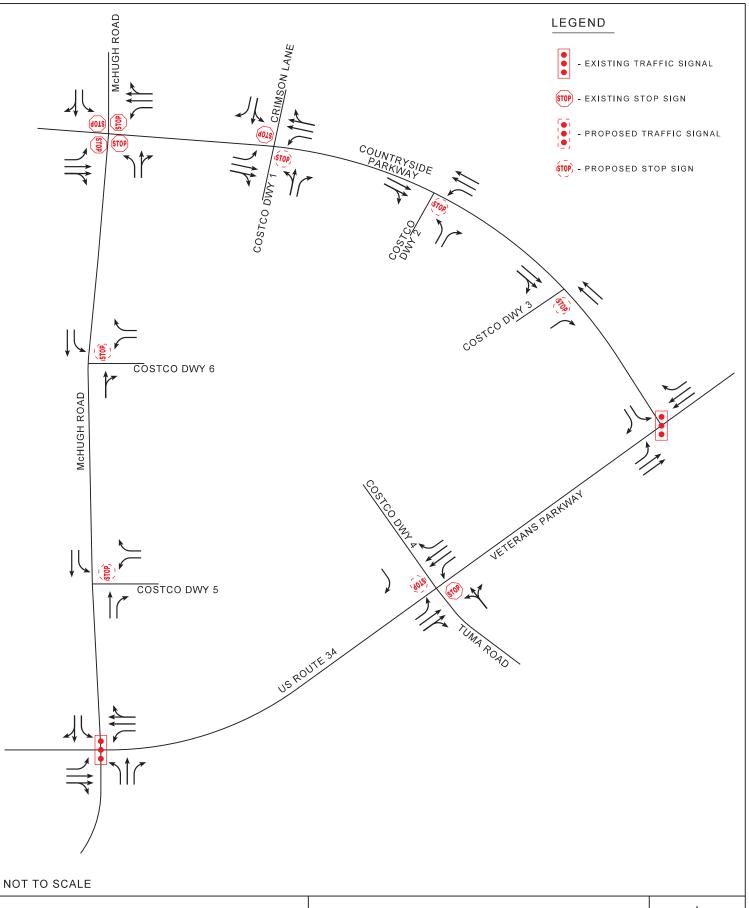
- Intersection 1 Located approximately 390 feet east of McHugh Road
 - o Three leg intersection
 - Stop controlled on the northbound approach exit from the gas station
- Intersection 2 Costco Driveway 4 Located approximately 460 feet east of Intersection 1
 - Three leg intersection
 - Stop Controlled on the eastbound and westbound approaches
 - o Free flow traffic for inbound traffic from US 34/Veterans Parkway

Each driveway connected to the roadway network is anticipated to contain two existing lanes and one departing lane with the exception of the right in/right out driveway.

The entrance for the gas station is located on Costco Driveway 5. The opening day gas station configuration consists of eight individual drive aisles with four fueling positions each. Conservatively, each drive aisle has space for approximately for six vehicles to queue waiting to pull up to the pump. Therefore, a minimum of 80 vehicles can be accommodated within the gas station area. The future expansion of the gas station by eight fueling positions includes additional queuing area.

Proposed Lane Configuration

Based on the auxiliary lane, capacity, and queue length analysis, it is recommended that no geometric changes are needed at any of the study area intersections. The proposed lane configuration is illustrated in Figure 11.



COSTCO WHOLESALE CORPORATION YORKVILLE, IL

FIGURE 11 PROPOSED LANE CONFIGURATION





V. CONCLUSIONS

The purpose of this study is to evaluate the potential traffic impacts of the proposed Costco Warehouse located along the north side of US Route 34 at the northwest corner of Route 34 and Countryside Parkway in the City of Yorkville, Illinois. The proposed development consists of approximately 161,064 square foot Costco Wholesale building and a members-only gas station with 40 gas pumps.

The proposed access plan includes a right in/right out/left in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway. The site plan proposes 859 parking stalls.

Traffic estimates are projected to 2031, which is five years beyond the anticipated build out in 2026, utilizing growth rates from CMAP that projected traffic volumes to 2050. The study area includes the existing signalized intersections of US 34/Veterans Parkway and Countryside Parkway and US 34/Veterans Parkway and McHugh Road, the existing unsignalized intersections of McHugh Road and Countryside Parkway, Crimson Lane and Countryside Parkway, and US 34/Veterans Parkway and Tuma Road, and the proposed connections on US 34/Veterans Parkway, McHugh Road, and Countryside Parkway.

This study evaluated whether additional auxiliary lanes are warranted at the study area intersections, the westbound approach of US 34/Veterans Parkway at Costco Driveway 4 and the northbound approach of McHugh Road at Costco Driveway 5 meet the warrant based on the chart comparing right turn and approach volumes and were therefore considered. Similarly, the westbound approach of Countryside Parkway at Costco Driveway 1 and Costco Driveway 2 and on the eastbound approach of US 34/Veterans Parkway at the Costco Driveway 4 meet the warrant based on uniformity of intersection design and were therefore considered. Therefore, it is recommended that right turn and left turn lanes are considered at these driveways.

As part of this study would be the installation of a traffic signal following the methodology established in the MUTCD and IDOT SRA criteria. Warrant 1, the eight-hour vehicular volume warrant, is typically the only vehicular volume/delay warrant that is considered for intersections on designated SRA routes. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. However, additional guidance from IDOT states that in cases involving future volumes, the eight-hour vehicular volume hour can be estimated as 55 percent of the peak hour volumes.

Based on the projected weekday pm peak hour traffic volumes and utilizing the IDOT guidance to estimate the eighth hour volumes, the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road do not meet the eight-hour warrants. Therefore, for the purposes of this study, the intersection of US 34 and Costco Driveway 4/Tuma Road was analyzed as a two-way stop-controlled intersection and the intersection of Countryside Parkway and McHugh Road was analyzed as the existing all-way stop-controlled configuration.



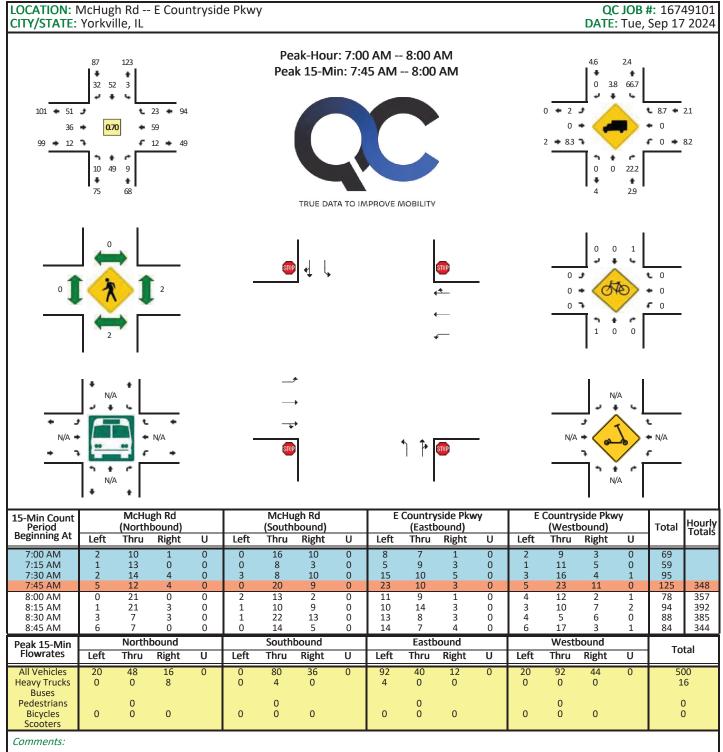
Results of the capacity analysis for the existing scenario indicate that all approaches are experiencing low delays at the signalized and unsignalized intersections. Delays increased in the background scenario and all movements operate adequately. In the future with project scenario, both signalized intersections continue to operate at adequate LOS, however the southbound approach at Countryside Parkway and US 34/Veterans Parkway operates at LOS F during the weekday pm and Saturday midday peak hours. One potential mitigation option to reduce the southbound approach delay would be to retime the existing signal timing plan by shifting 22 seconds of green time from the US 34/Veterans Parkway eastbound/ westbound through movement to the southbound approach during the weekday pm and 23 seconds of green time during the Saturday midday peak hours. As illustrated in Table 5, retiming the traffic signal would result in the southbound approach operating at LOS C with minimal impact on the eastbound and westbound approaches, with the US 34 approaches both operating at LOS B during both peak hours. The signal retiming would have to be approved by IDOT.

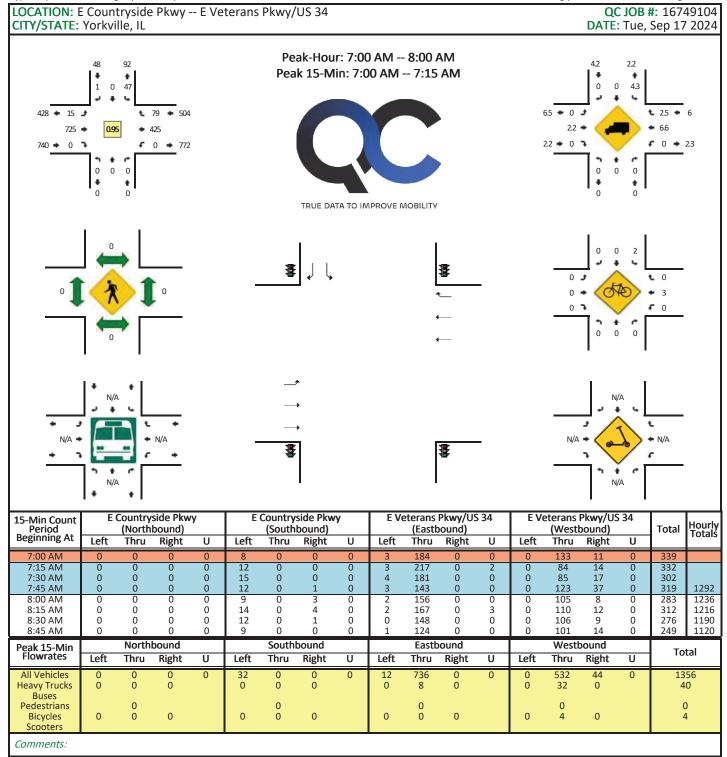
The results of the capacity analysis for the unsignalized intersections during the existing as well as the background scenario are projected to operate with low delays. In the future with project scenario, all movements at the unsignalized intersections continue to operate adequately, with all levels of service remaining at LOS D or better with the exception of the northwest approach of Tuma Road which is projected to operate at LOS F during the weekday pm peak hour. Higher delays are typical at stop-controlled approaches on minor streets and driveways at intersections with arterial roadways during peak periods. Additionally, it should be noted that the volume-to-capacity ratio of the minor approaches are less than one, indicating available capacity. While left turn movements from driveways onto arterials may experience delays during peak hours, they are expected to operate adequately at all other hours of the day.

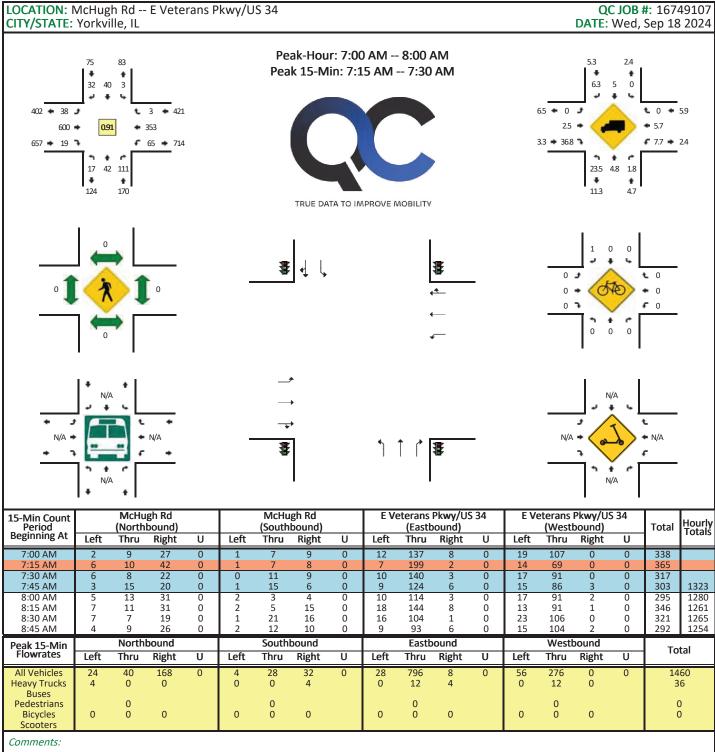
Additionally, a 95th percentile queue analysis was conducted at each of the study area driveways. No major queues were observed at the turning movements with the exception of the southbound left turn at the Countryside Parkway and US 34/Veterans Parkway intersection. This southbound movement exceeds the existing storage during the weekday pm peak hour and Saturday midday peak hours with a queue of 341 feet and 381 feet, respectively. It should be noted that this is a trap lane and the queues do not spill back into the main travel lanes, however, it is anticipated that this queue will back up to the proposed Costco Driveway 4 (right in/right out). Based on the proposed mitigation scenario, the southbound queues will decrease to 208 feet during the weekday pm peak hour and 211 feet during the Saturday midday peak hour. Therefore, it is concluded that no queue storage mitigation is required at any of the intersections and site driveways.

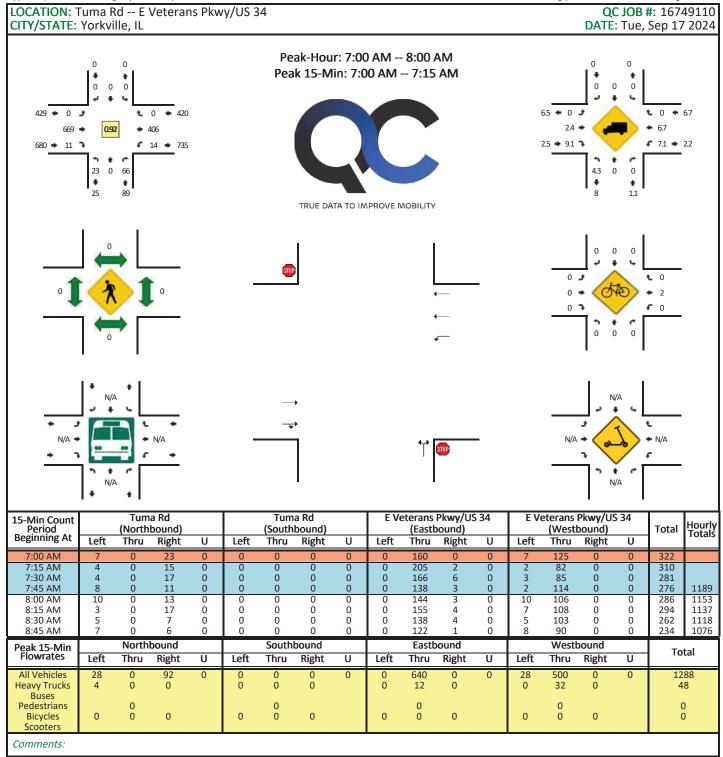
Site circulation will be aided by a limited access internal roadway which is configured with traditional stop-controlled intersections and no direct access to parking aisles. The gas station is configured such that 80 vehicles can be held within the gas station area.

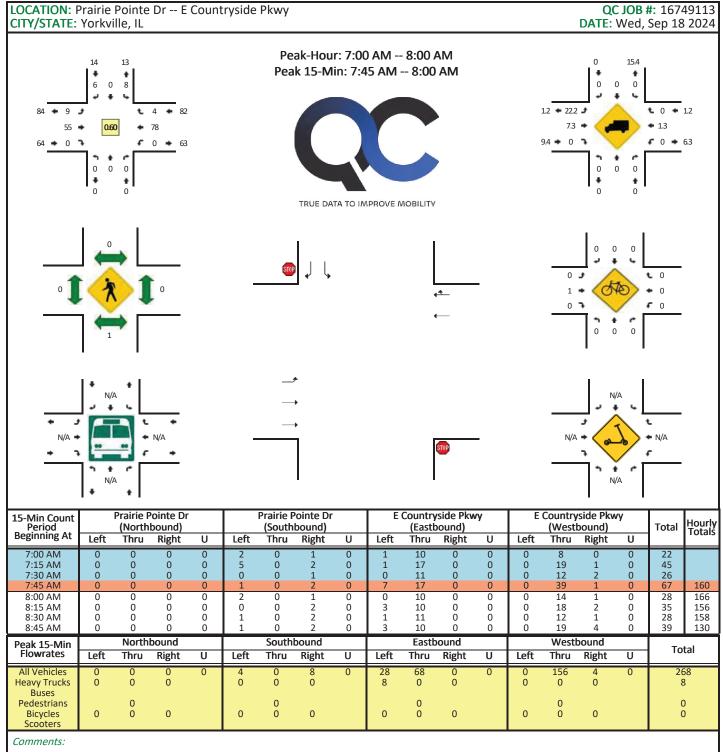
APPENDIX A EXISTING TRAFFIC COUNTS

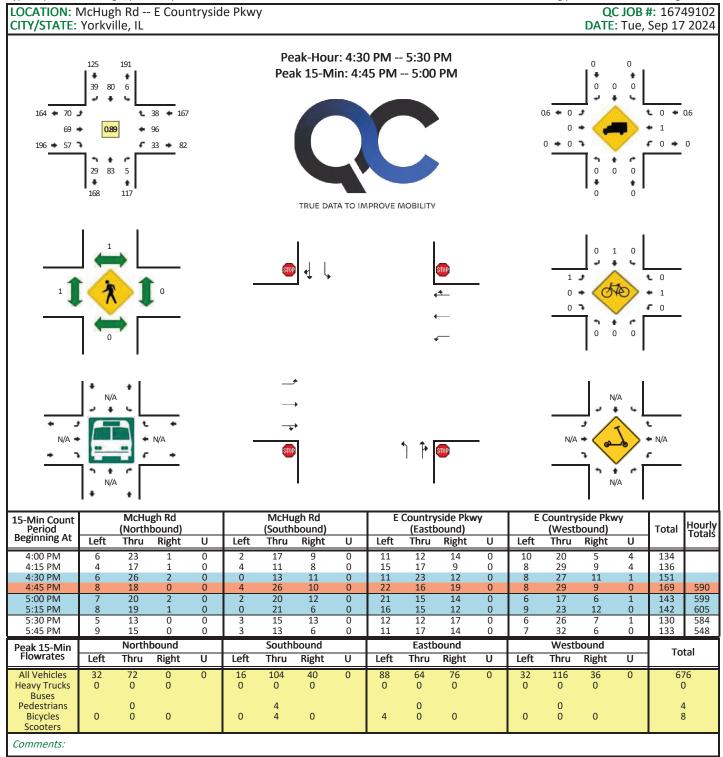


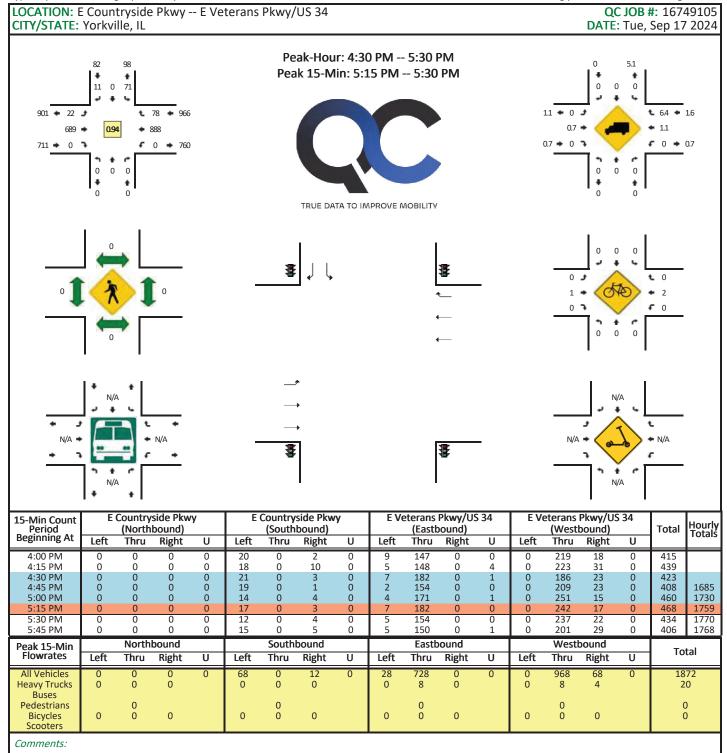


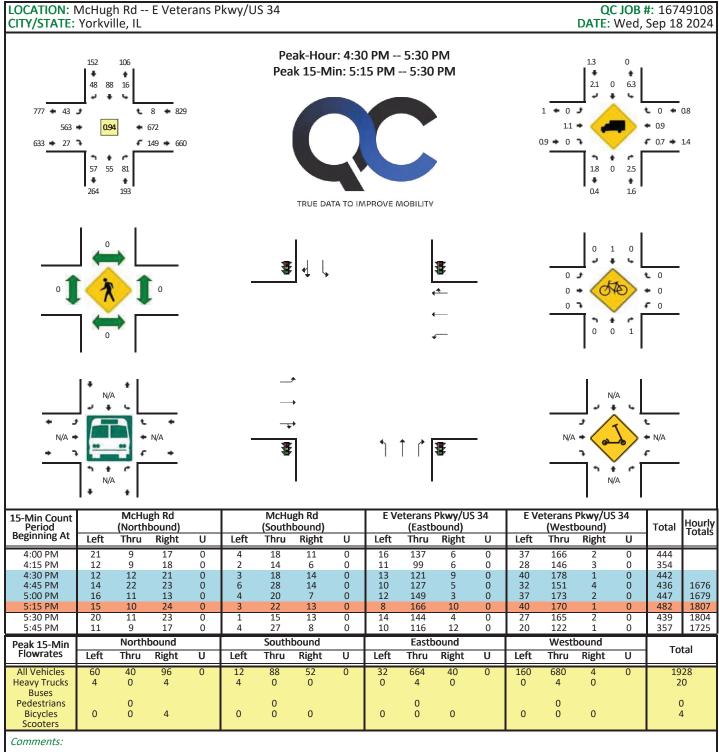


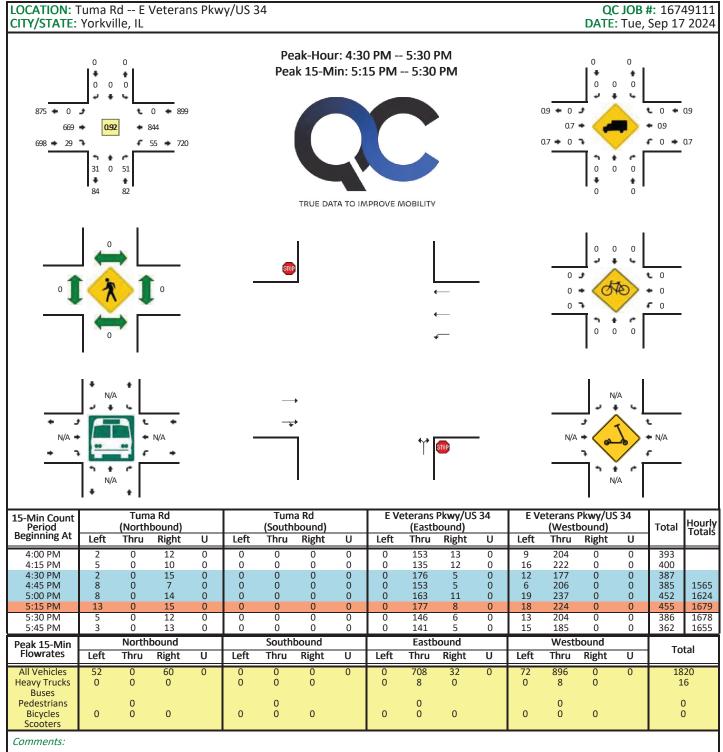


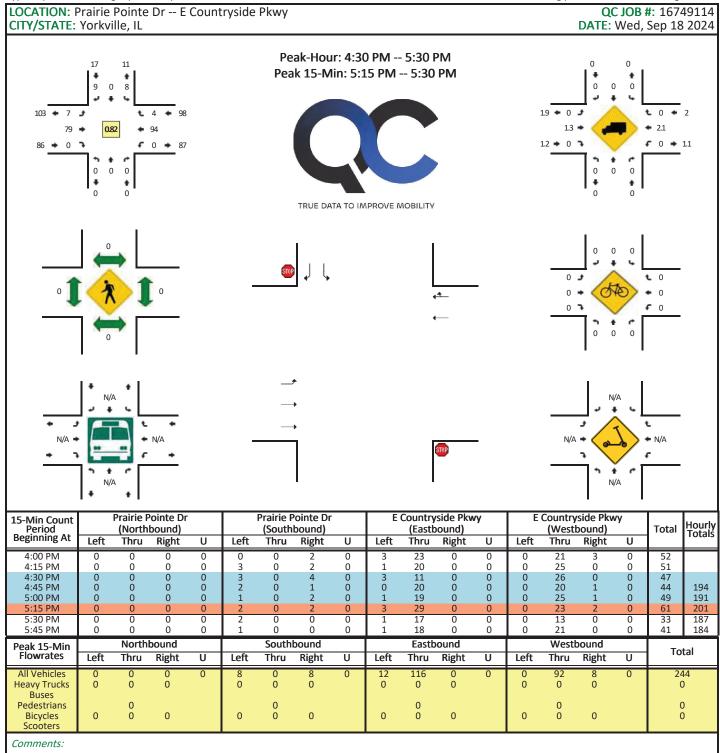








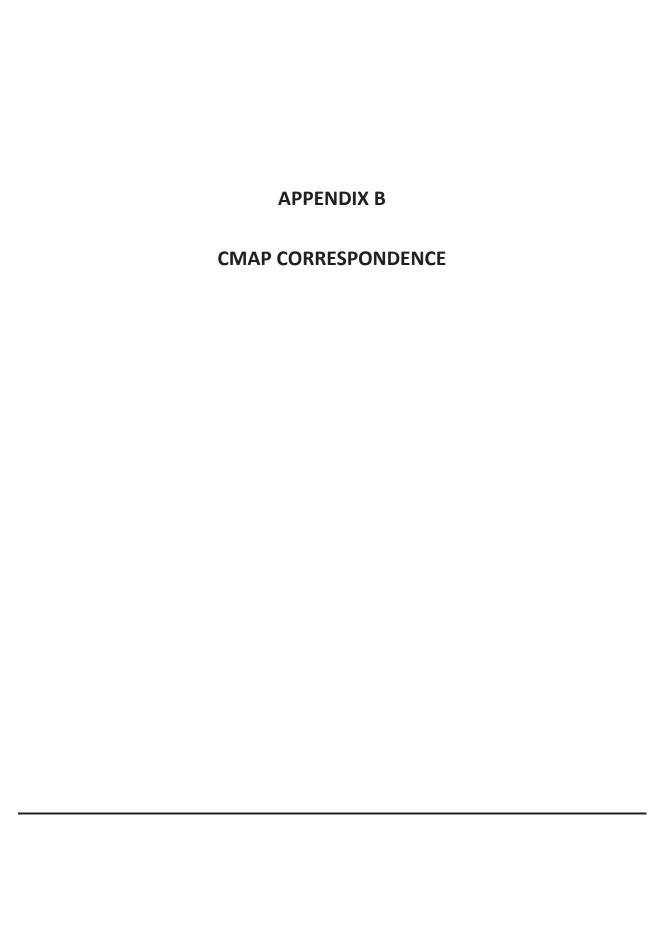


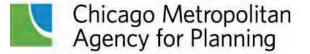


Report generated on 10/11/2024 7:31 AM

LOCATION: E Countryside Pkwy -- E Veterans Pkwy/US 34 QC JOB #: 16749106 CITY/STATE: Yorkville, IL **DATE:** Sat, Sep 14 2024 Peak-Hour: 12:45 PM -- 1:45 PM 1.2 3.9 Peak 15-Min: 1:30 PM -- 1:45 PM 1.4 0.7 🗢 0 🧈 **4.7 4.2** 572 💠 632 🖈 0.95 0.8 • 0.7 **•** 0 **→** 703 650 → 0 → 0.8 • 0 • ŧ + + ŧ + TRUE DATA TO IMPROVE MOBILITY 0 3 **t** 0 **+** 1 0 7 **•** 0 ŧ N/A Ł ♣ N/A ⇟ f N/A N/A E Countryside Pkwy E Countryside Pkwy E Veterans Pkwy/US 34 E Veterans Pkwy/US 34 15-Min Count Hourly Totals (Southbound) Total Period Beginning At (Northbound) (Eastbound) (Westbound) Left Thru Right U Left Thru Right U Left Thru Right U Left Thru Right U 11:00 AM 11:15 AM 11:30 AM 11:45 AM Ō Ō Ō Ō Ō Ō 12:00 PM 12:15 PM 12:30 PM 12:45 PM 1:00 PM 1:15 PM 1:30 PM 1:45 PM 0 2:00 PM 2:15 PM 2:30 PM 2:45 PM Northbound Southbound Eastbound Westbound Peak 15-Min Total Flowrates Left Thru Right U Left Thru Right U Left Thru Right U Left Thru Right U All Vehicles **Heavy Trucks** Buses **Pedestrians Bicycles** Scooters Comments:

Report generated on 10/11/2024 7:31 AM





433 West Van Buren Street, Suite 450 Chicago, IL 60607 cmap.illinois.gov | 312-454-0400

October 24, 2024

Peter Reinhofer, P.E. Chicago Traffic Services Leader/Senior Planner Manager V3 Companies 7325 Janes Avenue Woodridge, IL 60517

Subject: US34 and Countryside Parkway

IDOT

Dear Mr. Reinhofer:

In response to a request made on your behalf and dated October 18, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
US Route 34 east of McHugh Road	16,200	21,000
US Route 34 west of McHugh Road	14,000	18,100
Countryside Parkway between US 34 and McHugh Road	1,600	2,000
Countryside Parkway west of McHugh Road	3,600	4,500
McHugh Road south of US 34	2,950	3,700
McHugh Road north of US 34	2,000	2,500
Tuma Road south of US 34	1,100	1,380

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2024 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

Jose Rodriguez, PTP, AICP

Senior Planner, Research & Analysis

Cc: Rios (IDOT)

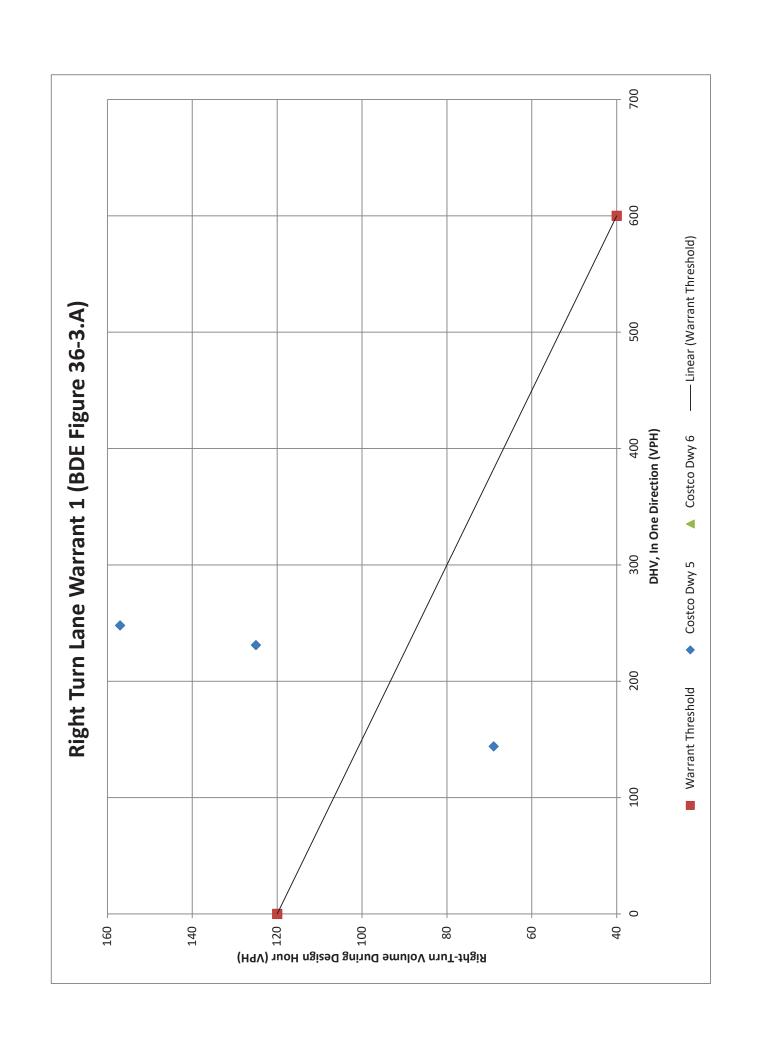
S:\AdminGroups\ResearchAnalysis\2024 TrafficForecasts\Yorkville\ke-06-24\ke-06-24.docx

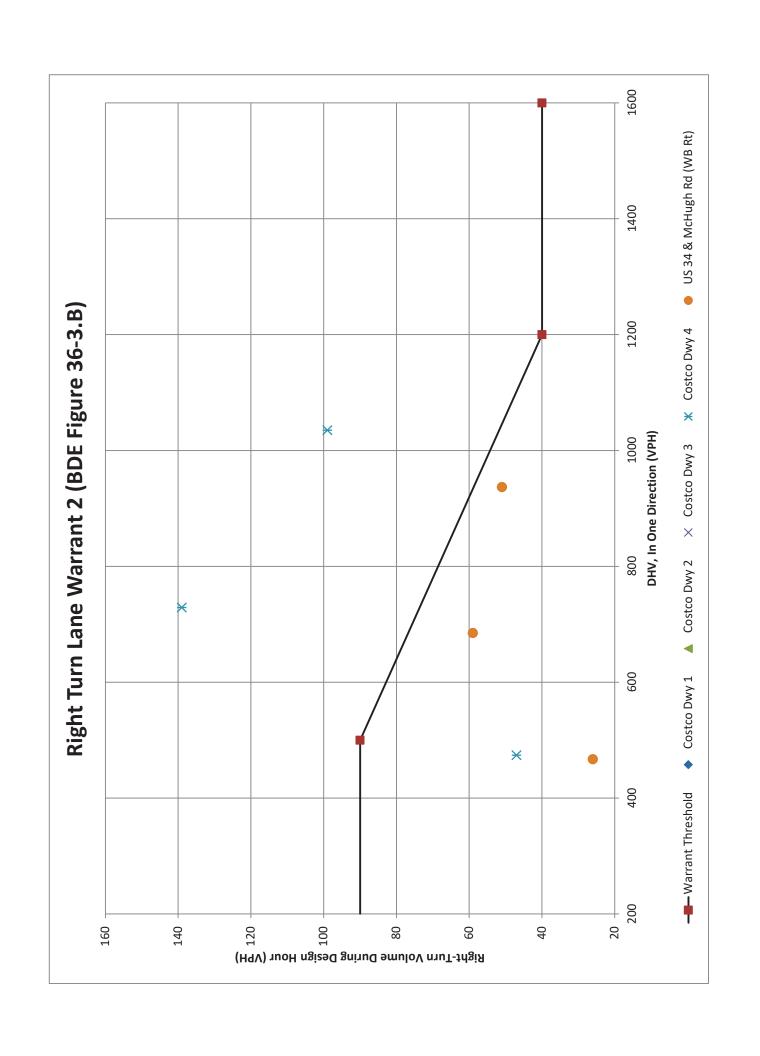
APPENDIX C AUXILIARY LANE ANALYSIS

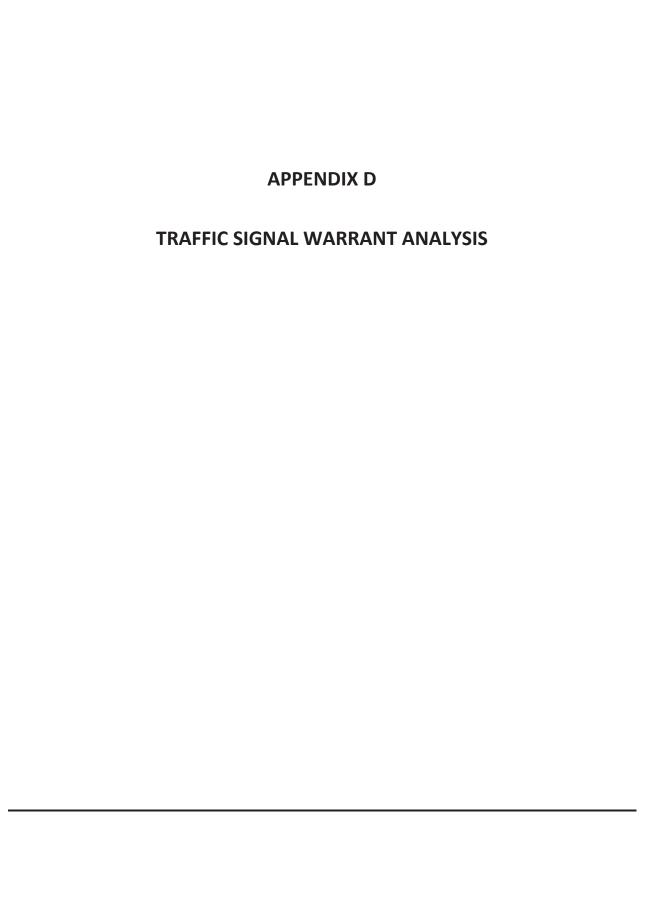


Criteria	Right-Turn Lane Warrants	Costco Dwy 1	Costco Dwy 2	Costco Dwy 3	Costco Dwy 4	Costco Dwy 5	Costco Dwy 6	Comments
1	Unsignalized intersection on a two lane highway that satisfies the criteria in BDE Figures	N/A	N/A	N/A	N/A	Yes	No	Costco Dwy 1 thru 4 are not a two-lane Highway. Costco Dwy 5 meets criteria to consider a right turn lane.
2	Unsignalized intersection on a four lane highway that satisfies the criteria in BDE Figures	No	No	No	Yes	N/A	N/A	Costco Dwy 4 meets the criteria to consider a right turn lane.
3	On expressways where the side street ADT is over 250	No	No	No	No	No	No	Not on an expressway.
	Any intersection where a capacity analysis determines a right-turn lane is necessary to meet the LOS criteria	No	No	No	No	No	No	All movements operate at acceptable LOS.
	At any intersection where the right- turning volume is greater than 150 vph and where there is greater than 300 vplph on the mainline	No	No	No	No	No	No	Right-turn lane volumes are less than 150 vph.
6	Uniformity of intersection design along the highway if other intersections have right-turn lanes	No	No	No	No	No	No	No unsignalized intersections in the area have right turn lanes
7	Any intersection where the mainline is curved to the left and the mainline curve requires superelevation	No	No	No	No	No	No	Roads are not on superelevated curves
	At railroad crossings where the railroad is located close to the intersection and a right turn lane would be desirable to efficiently move through traffic on the parallel roadway	No	No	No	No	No	No	Not near a railroad.
	Any intersection where the crash experience, traffic operations, sight distance restrictions, or engineering judgement indicates a significant conflict related to right-turning vehicles.	No	No	No	No	No	No	No additional indicators mandating right- turn lanes.

Criteria	Left-Turn Lane Warrants	Costco Dwy 1 Costco Dwy 2 Costco Dwy 3 Costco Dwy 4 Costco Dwy 5 Costco Dwy		Costco Dwy 6	Comments			
1	Unsignalized intersection on a two lane highway that satisfies the criteria in BDE Figures	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	Not a two-lane Highway.
1	Signalized intersetion where the left- turning volume is equal to or greater than 75 vph	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	Not Signalized intersections
3	Any intersection where a capacity analysis determines a left-turn lane is necessary to meet the LOS criteria	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	All movements operate at acceptable LOS
4	Uniformity of intersection design along the highway if other intersections have left-turn lanes	Yes	Yes	N/A - RIRO Only	Yes	N/A - Already Provided	N/A - Already Provided	Intersections to the west of Costco Dwy 1 and 2 and east and west of Costco Dwy 4 provide left turn lanes.
5	Any intersection where the crash experience, traffic operations, sight distance restrictions, or engineering judgement indicates a significant conflict related to left-turning vehicles.	No	No	N/A - RIRO Only	No	N/A - Already Provided		No additional indicators mandating left- turn lanes.







Date	12/26/2024

Location Information

Intersection	Countryside Parkway & McHugh Road
City	Yorkville
County	Kendall
District	3

Street Information

Major Street (EB/WB)	Countryside Parkway
Minor Street (NB/SB)	McHugh Road

Review Information

Counts Used	Quality Counts - 2031 FwP Volumes
Count Dates	9/17/2024
Date Reviewed	12/26/2024
Reviewed By	MFM

Warrant Information

Speed Limit of Major Street	40
Number of Lanes on Major	2
Number of Lanes on Minor	1
Isolated Community?	No
SRA Route Number	No

Countryside Parkway & McHugh Road State Of Illinois Date: 12/26/2024 City: Yorkville

Department of Transportation Bureau of Traffic

Kendall District: Major Countryside Parkway

McHugh Road

County:

Minor

SUMMARY OF TRAFFIC SURVEY

Route:	TRAFFIC FROM NORTH McHugh Road N. of: Countryside Parkway Going				TRAFFIC FROM SOUTH McHugh Road S. of: Countryside Parkway Going			TOTAL B. of: McHugh Road W. Going			TRAFFIC FROM WEST Countryside Parkway W. of: McHugh Road Going				TOTAL EAST	GRAND			
START TIME	EAST L	SOUTH	WEST	TOTAL	WEST	NORTH	EAST	TOTAL	AND SOUTH	SOUTH	WEST	NORTH	TOTAL	NORTH	EAST	SOUTH	TOTAL	AND WEST	TOTAL
AM	7	56	34	97	18	64	12	94	191	13	75	29	117	55	51	17	123	240	431
РМ	18	86	42	146	43	89	5	137	283	35	140	53	228	73	111	75	259	487	770
SAT	30	47	20	97	61	68	1	130	227	28	172	49	249	58	139	76	273	522	749
55th % AM	4	31	19	54	10	36	7	53	107	7	41	16	64	30	28	9	67	131	238
55th % PM	10	47	23	80	24	50	3	77	157	19	77	29	125	40	61	41	142	267	424
55th % Sat	17	26	11	54	34	38	1	73	127	15	95	27	137	32	76	42	150	287	414

REVIEW INFORMATION

COUNTS USED: Quality Counts - 2031 FwP Volumes

COUNT DATE(S): 9/17/2024 DATA REVIEWED: 12/26/2024 REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Countryside Parkway & McHugh Road
MUNCIPALITY: Yorkville

COUNTY: Kendall

			MINOR S T NAME		jh Road	CRITICAL MAINLINE	BASE RIGHT	MAINLINE	ADJUSTED		ADJUSTED
DIR	PEAK HOUR	CONFIG. # CRIT. MAINLINE LANE #			2	APPROACH VOLUME PER	TURN	CONGESTION	RIGHT TURN REDUCTION %	ADJUSTED RIGHT TURNS	MINOR STREET
		LEFT	LEFT THROUGH		RIGHT APP. TOTAL		REDUCTION %	FACTOR %	REDUCTION %		VOLUME
SB	AM	7	56	34	97	38	40%	0%	40%	20	83
SB	PM	18	86	42	146	70	40%	0%	40%	25	129
SB	SAT	30	47	20	97	86	40%	0%	40%	12	89
			2.1				100/		100/		
SB	55th AM	4	31	19	54	21	40%	0%	40%	11	46
SB	55th PM	10	47	23	80	39	40%	0%	40%	14	71
SB	55th Sat	17	26	11	54	48	40%	0%	40%	7	49

MAINLINE CONG	ESTION FACTORS
VOLUMES	FACTOR %
0-399	0%
400-499	5%
500-599	10%
600-699	15%
700-799	20%
800-899	25%
900-999	30%
1000-1099	35%
1100-1199	40%
1200-1299	45%
1300-1399	50%
1400-1499	55%

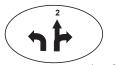
REVIEW INFORMATION
COUNTS USED: Quality Counts - 2031 FwP Volumes
COUNT DATE(S): 9/17/2024
DATE REVIEWED 12/26/2024

REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS











Any configuration with an exclusive right turn lane (usually

up	to	600	ft.	long)	
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PH	LEFT	THROUGH	RIGHT	TOTAL (A)	0.7A	0.35A	3T	T/3	(T+L)	(T+R)	3R	3L	T/2	T/4	L=T=R (+/-)
AM	7	56	34	97	68	34	168	19	63	90	102	21	28	14	NO
PM	18	86	42	146	102	51	258	29	104	128	126	54	43	22	NO
SAT	30	47	20	97	68	34	141	16	77	67	60	90	24	12	NO
														_	
55th AM	4	31	19	54	38	19	93	10	35	50	57	12	16	8	NO
55th PM	10	47	23	80	56	28	141	16	57	70	69	30	24	12	NO
\square															
55th Sat	17	26	11	54	38	19	78	9	43	37	33	51	13	7	NO

		BASE REDUCTION									
PH	CONFIG 1	CONFIG 2	CONFIG 3	CONFIG 4	CONFIG 5						
AM	40%	40%	75%	30%	50%						
PM	20%	40%	75%	30%	30%						
SAT	20%	40%	75%	30%	30%						
55th AM	40%	40%	75%	30%	50%						
55th PM	20%	40%	75%	30%	30%						
55th Sat	20%	40%	75%	30%	30%						

SIGNAL WARRANT REVIEW SHEET

District #3

SRA: No YES NO

INTERSECTION: Countryside Parkway & McHugh Road

MUNCIPALITY: Yorkville

COUNTY: Kendall

 Speed Limit of Major Route
 40
 Isolated Community with Population< 10, Number of Lanes of Major Approach</th>
 No

 Number of Lanes of Major Approach
 2
 Number of Lanes of Minor Approach
 1

	MAJOR	ADJ. MINOR	Check any hours which meet the following Warrants						
	STREET	STREET		WARRANT 1					
	VOLUME	VOLUME	Α	В	WARRANT 1 A/B: 8 hrs of				
HOUR	(both	(higher volume				oth			
BEGIN	approaches)	approaches)	100%	100%	80% of A	80% of B			
AM	240	83							
PM	487	129			X				
0.4.7	F00	00	ļ						
SAT	522	89							
		1							
55th % AM	131	46							
55th % PM	267	71							
55th % SAT	287	49							
			 						
			<u> </u>		<u> </u>				

	Met:	No	No	No	No
Volume Requirements:	MAJOR:	600	900	480	630
	MINOR:	150	100	120	80

REVIEW INFORMATION

COUNTS USED: Quality Counts - 2031 FwP Volumes

COUNT DATE(S): 9/17/2024 DATE REVIEWED: 12/26/2024 REVIEWED BY: MFM

Comments

WARRANT 1 Warrant 1 is met if any of the following	YES ng Con	NO ditions are m	N/A et:
CONDITION A Minmum Vehicular Volume	YES	NO	N/A
CONDITION B Interruption of Continuous Traffic	YES	NO	N/A
CONDITION A/B Combination of Warranrts	YES	NO	N/A
WARRANT 2 Four Hour Volume	YES	NO (N/A
WARRANT 3 Peak Hour Volume	YES	NO (N/A
WARRANT 4 Pedestrian Volume	YES	NO (N/A
WARRANT 5 School Crossing	YES	NO (N/A
WARRANT 6 Coordinated Signal System	YES	NO (N/A
WARRANT 7 Accidents Experience	YES	NO (N/A
WARRANT 8 Roadway Network	YES	NO (N/A
WARRANT 9 Intersection Near a Grade Crossing	YES	NO (N/A

Date	12/26/2024

Location Information

Intersection	US Route 34 & Tuma Road/Costco Dwy 4
City	Yorkville
County	Kendall
District	3

Street Information

Major Street (EB/WB)	US 34
Minor Street (NB/SB)	Tuma Road/Costco Dwy 4

Review Information

Counts Used	Quality Counts extrapolated to 2031
Count Dates	9/17/2024
Date Reviewed	12/26/2024
Reviewed By	MFM

Warrant Information

Speed Limit of Major Street	45
Number of Lanes on Major	2
Number of Lanes on Minor	1
Isolated Community?	No
SRA Route Number	513

US Route 34 & Tuma Road/Costco Dwy 4 State Of Illinois Date: 12/26/2024 City: Yorkville Department of Transportation

Department of Transportation
Bureau of Traffic

District: 3
Major US 34

County:

SUMMARY OF TRAFFIC SURVEY

Minor Tuma Road/Costco Dwy 4

Kendall

	TRAFFIC F	ROM NORT	ГН		TRAFFIC F	ROM SOUT	TH .			TRAFFIC F	ROM EAST	-		TRAFFIC F	ROM WEST				
Route:	Tuma Roa	d/Costco D	wy 4		Tuma Road/Costco Dwy 4								US 34						
	N. of:	US 34			S. of:	US 34			TOTAL	IL. OI. Tullia Roda Octob Billy 4		W. of:	Tuma Roa	d/Costco D	wy 4	TOTAL			
		Going				Going			NORTH AND		Going				Going			EAST AND	GRAND TOTAL
	EAST	SOUTH	WEST	TOTAL	WEST	NORTH	EAST	TOTAL	SOUTH	SOUTH	WEST	NORTH	TOTAL	NORTH	EAST	SOUTH	TOTAL	WEST	IOTAL
START TIME	-	•	+		<u> </u>		I '												
AM	0	0	38	38	25	0	71	96	134	15	412	47	474	31	701	12	744	1,218	1,352
PM	0	0	75	75	33	0	55	88	163	59	877	99	1,035	65	699	31	795	1,830	1,993
SAT	0	0	102	102	21	0	36	57	159	35	555	139	729	89	654	36	779	1,508	1,667
55th % AM	0	0	21	21	14	0	40	54	75	8	227	26	261	17	386	7	410	671	746
55th % PM	0	0	41	41	18	0	31	49	90	32	482	54	568	36	384	17	437	1,005	1,095
55th % Sat	0	0	56	56	12	0	20	32	88	19	305	76	400	49	360	20	429	829	917

REVIEW INFORMATION

COUNTS USED: Quality Counts extrapolated to 2031

COUNT DATE(S): 9/17/2024
DATA REVIEWED: 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: US Route 34 & Tuma Road/Costco Dwy 4
MUNCIPALITY: Yorkville COUNTY: Kendall

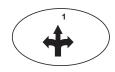
	PEAK		MINOR: T NAME FIG. #		Costco Dwy 4	CRITICAL MAINLINE	BASE RIGHT	MAINLINE	ADJUSTED	ADJUSTED	ADJUSTED MINOR STREET	
DIR	HOUR		LINE LANE#		2	APPROACH	TURN	CONGESTION FACTOR %	RIGHT TURN REDUCTION %	RIGHT TURNS		
		LEFT	THROUGH	RIGHT	APP. TOTAL	VOLUME PER LANE	REDUCTION %	FACTOR %	REDUCTION %		VOLUME	
NB	AM	25	0	71	96	351	60%	0%	60%	28	53	
NB	PM	33	0	55	88	350	40%	0%	40%	33	66	
NB	SAT	21	0	36	57	327	40%	0%	40%	22	43	
NB	55th AM	14	0	40	54	193	60%	0%	60%	16	29	
NB	55th PM	18	0	31	49	192	40%	0%	40%	19	36	
NB	55th Sat	12	0	20	32	180	40%	0%	40%	12	24	

MAINLINE CONG	ESTION FACTORS					
VOLUMES	FACTOR %					
0-399	0%					
400-499	5%					
500-599	10%					
600-699	15%					
700-799	20%					
800-899	25%					
900-999	30%					
1000-1099	35%					
1100-1199	40%					
1200-1299	45%					
1300-1399	50%					
1400-1499	55%					

REVIEW INFORMATION
COUNTS USED: Quality Counts extrapolated to 2031
COUNT DATE(S): 9/17/2024
DATE REVIEWEC 12/26/2024 REVIEWED BY: MFM

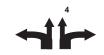
RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS











Any configuration with an exclusive right turn lane (usually

up	to o	UU II	. 1	ong)	
_	_	~=	_	_	_

PH	LEFT	THROUGH	RIGHT	TOTAL (A)	0.7A	0.35A	3T	T/3	(T+L)	(T+R)	3R	3L	T/2	T/4	L=T=R (+/-)
AM	25	0	71	96	67	34	0	0	25	71	213	75	0	0	NO
PM	33	0	55	88	62	31	0	0	33	55	165	99	0	0	NO
SAT	21	0	36	57	40	20	0	0	21	36	108	63	0	0	NO
55th AM	14	0	40	54	38	19	0	0	14	40	120	42	0	0	NO
55th PM	18	0	31	49	34	17	0	0	18	31	93	54	0	0	NO
55th Sat	12	0	20	32	22	11	0	0	12	20	60	36	0	0	NO

		B/	ASE REDUCTION	ON	
PH	CONFIG 1	CONFIG 2	CONFIG 3	CONFIG 4	CONFIG 5
AM	60%	60%	75%	65%	75%
PM	40%	60%	75%	65%	75%
SAT	40%	60%	75%	65%	75%
55th AM	60%	60%	75%	65%	75%
55th PM	40%	60%	75%	65%	75%
55th Sat	40%	60%	75%	65%	75%

SIGNAL WARRANT REVIEW SHEET

District #1

YES NO

COUNTY: Kendall

INTERSECTION: US Route 34 & Tuma Road/Costco Dwy 4

MUNCIPALITY: Yorkville

Speed Limit of Major Route Number of Lanes of Major Approach

Isolated Community with Population< 10, No Number of Lanes of Minor Approach

	MAJOR	ADJ. MINOR	Check any h		neet the follow	ing Warrants
	STREET	STREET		WAR	RANT 1	
	VOLUME	VOLUME	Α	В		A/B: 8 hrs of
HOUR	(both	(higher volume	4000/	4000/		oth
BEGIN	approaches)	approaches)	100%	100%	80% of A	80% of B
AM	1,218	53				
PM	1,830	66				
SAT	1,508	43				
55th % AM	671	29				
55th % PM	1.005	36				
	-,,					
55th % SAT	829	24				
	- 3 <u>-</u> 20				1	
					1	

	Met:	No	No	No	No
Volume Requirements:	MAJOR:	600	900	480	630
	MINOR:	150	125	120	80

REVIEW INFORMATION

COUNTS USED: Quality Counts extrapolated to 2031 COUNT DATE(S): 9/17/2024

DATE REVIEWED: 12/26/2024 REVIEWED BY: MFM

Comments

WARRANT 1	YES	NO N/A	_
Warrant 1 is met if any of the followi	ng Con	ditions are met:	
CONDITION A Minmum Vehicular Volume	YES	NO N/A	
CONDITION B Interruption of Continuous Traffic	YES	NO N/A	
CONDITION A/B Combination of Warranrts	YES	NO N/A	
WARRANT 2 Four Hour Volume	YES	NO N/A)
WARRANT 3 Peak Hour Volume	YES	NO N/A)
WARRANT 4 Pedestrian Volume	YES	NO N/A)
WARRANT 5 School Crossing	YES	NO N/A)
WARRANT 6 Coordinated Signal System	YES	NO N/A)
WARRANT 7 Accidents Experience	YES	NO N/A)
WARRANT 8 Roadway Network	YES	NO N/A)
WARRANT 9 Intersection Near a Grade Crossing	YES	NO N/A)

APPENDIX E

CAPACITY ANALYSIS WORKSHEETS 2024 EXISTING

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	61	2	15	725	425	79
Future Volume (vph)	61	2	15	725	425	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1500	1300	250
Storage Lanes	0	1	100			1
•	25	1	160			1
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00 0.850
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			4-00
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
FIt Permitted	0.950		0.472			
Satd. Flow (perm)	1736	1615	897	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2				83
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0.93	0.93	2%	7%	3%
Adj. Flow (vph)	64	2	16	763	447	83
	04		10	703	447	03
Shared Lane Traffic (%)	C4		10	700	447	00
Lane Group Flow (vph)	64	2	16	763	447	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
			•			
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel				J. L.	J LA	
Detector 2 Extend (s)				0.0	0.0	
` ,	Prot	Perm	nmint	NA	NA	nmaov
Turn Type		Fellil	pm+pt			pm+ov
Protected Phases	6		7	4	8	6

	4	لر	*	1	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase	<u> </u>					<u> </u>
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
. ,						
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.29	0.01	0.02	0.28	0.18	0.06
Control Delay	47.5	29.5	1.5	2.5	5.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	29.5	1.5	2.5	5.3	0.3
LOS	D	С	Α	A	А	А
Approach Delay	46.9			2.5	4.5	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Green (s)	MaxR	MaxR				
			Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	42	0	1	34	37	0
Queue Length 95th (ft)	84	8	m3	37	76	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	220	207	783	2702	2460	1484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.01	0.02	0.28	0.18	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.29

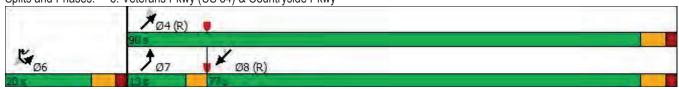
Intersection Signal Delay: 5.4 Intersection LOS: A

Intersection Capacity Utilization 34.2% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	۶	-	7	1	+	•	1	1	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		*	^		*	1	7	*	1>	
Traffic Volume (vph)	38	600	19	65	353	3	17	42	111	4	40	32
Future Volume (vph)	38	600	19	65	353	3	17	42	111	4	40	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3452	0	1671	3404	0	1456	1810	1583	1805	1683	0
FIt Permitted	0.521			0.328			0.655			0.727		
Satd. Flow (perm)	990	3452	0	577	3404	0	1004	1810	1583	1381	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			1				122		30	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%
Adj. Flow (vph)	42	659	21	71	388	3	19	46	122	4	44	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	680	0	71	391	0	19	46	122	4	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		Cl+Ex	CI+Ex		CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	۶	-	7	1	•	*	1	†	1	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.3	60.4		72.0	64.8		29.2	25.0	38.1	27.4	22.5	
Actuated g/C Ratio	0.63	0.55		0.65	0.59		0.27	0.23	0.35	0.25	0.20	
v/c Ratio	0.06	0.36		0.16	0.19		0.06	0.11	0.19	0.01	0.22	
Control Delay	6.6	14.6		7.4	11.2		30.6	36.5	5.8	29.8	27.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.6	14.6		7.4	11.2		30.6	36.5	5.8	29.8	27.9	
LOS	Α	В		Α	В		С	D	Α	С	C	
Approach Delay		14.2			10.6			15.9			28.0	
Approach LOS		В			В			В			С	
90th %ile Green (s)	7.4	58.9		8.6	60.1		8.4	17.2	8.6	6.3	15.1	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	6.7	59.8		7.7	60.8		7.3	27.0	7.7	0.0	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	Ped	
50th %ile Green (s)	6.3	60.4		7.1	61.2		0.0	27.0	7.1	0.0	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	0.0	61.0		6.5	71.0		0.0	27.0	6.5	0.0	27.0	
30th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.9		5.6	71.0		0.0	27.0	5.6	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	9	134		16	67		10	25	0	2	27	
Queue Length 95th (ft)	21	180		31	90		29	63	43	11	78	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	776	1897		539	2006		312	412	740	406	367	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.36		0.13	0.19		0.06	0.11	0.16	0.01	0.22	
Intersection Summary												

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

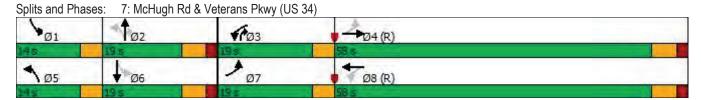
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 14.1 Intersection LOS: B

Intersection Capacity Utilization 42.3% ICU Level of Service A

Analysis Period (min) 15



Intersection Delay, s/veh 9	•
	9
Intersection LOS A	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	*		-	↑ 1→		1	1		-	1	
Traffic Vol, veh/h	51	36	12	12	59	23	12	60	11	3	52	32
Future Vol, veh/h	51	36	12	12	59	23	12	60	11	3	52	32
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	73	51	17	17	84	33	17	86	16	4	74	46
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.1			8.7			9.2			9.2		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	85%	0%	100%	50%	0%	100%	46%	0%	62%	
Vol Right, %	0%	15%	0%	0%	50%	0%	0%	54%	0%	38%	
Sign Control	Stop										
Traffic Vol by Lane	12	71	51	24	24	12	39	43	3	84	
LT Vol	12	0	51	0	0	12	0	0	3	0	
Through Vol	0	60	0	24	12	0	39	20	0	52	
RT Vol	0	11	0	0	12	0	0	23	0	32	
Lane Flow Rate	17	101	73	34	34	17	56	61	4	120	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.029	0.152	0.122	0.052	0.05	0.029	0.086	0.09	0.009	0.177	
Departure Headway (Hd)	6.018	5.409	6.031	5.493	5.278	6.027	5.523	5.297	7.15	5.312	
Convergence, Y/N	Yes										
Cap	592	658	591	647	673	591	645	672	499	671	
Service Time	3.788	3.18	3.805	3.268	3.052	3.798	3.295	3.069	4.918	3.08	
HCM Lane V/C Ratio	0.029	0.153	0.124	0.053	0.051	0.029	0.087	0.091	0.008	0.179	
HCM Control Delay	9	9.2	9.7	8.6	8.3	9	8.8	8.6	10	9.2	
HCM Lane LOS	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	
HCM 95th-tile Q	0.1	0.5	0.4	0.2	0.2	0.1	0.3	0.3	0	0.6	

Intersection							
Int Delay, s/veh	1.2						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	*	^	† 1>		7	7	
Traffic Vol, veh/h	9	55	89	5	8	6	
Future Vol, veh/h	9	55	89	5	8	6	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage		0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	60	60	60	60	60	60	
Heavy Vehicles, %	22	7	1	0	0	0	
Mvmt Flow	15	92	148	8	13	10	
Major/Minor	Major1	N	Major2	Λ	/linor2		
Conflicting Flow All	156	0	-	0	228	78	
Stage 1	-	-	-	-	152	-	
Stage 2	-	-	-	-	76	-	
Critical Hdwy	4.54	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.42	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1287	-	-	-	745	973	
Stage 1	-	-	-	-	866	-	
Stage 2	-	-	-	-	944	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1287	-	-	-	736	973	
Mov Cap-2 Maneuver	-	-	-	-	736	-	
Stage 1	-	-	-	-	856	-	
Stage 2	-	-	-	-	944	-	
Approach	EB		WB		SB		
HCM Control Delay, s	1.1		0		9.4		
HCM LOS					А		
Minor Lane/Major Mvn	nt	EBL	EBT	WBT	WPD	SBLn1 S	RI n2
	π	1287	LDI	VVDI	WDR	736	
Capacity (veh/h) HCM Lane V/C Ratio		0.012	-		-	0.018	973
HCM Control Delay (s)		7.8	-	-		10	8.7
HCM Lane LOS		7.0 A	-	-	-	В	Α
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0
HOW JOHN JOHN Q VEN	1					0.1	U

Intersection						
Int Delay, s/veh	1.3					
		AUAZ	NIET	NED	0)4#	OVACE
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	Y		1		7	^
Traffic Vol, veh/h	23	66	669	11	14	406
Future Vol, veh/h	23	66	669	11	14	406
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	9	7	7
Mvmt Flow	25	72	727	12	15	441
	/linor1		/lajor1		Major2	
Conflicting Flow All	984	370	0	0	739	0
Stage 1	733	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	242	627	-	-	831	-
Stage 1	431	-	-	-	-	-
Stage 2	762	_	-	_	-	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	238	627	_	_	831	_
Mov Cap-1 Maneuver	238	-	<u>-</u>	_	-	_
Stage 1	431		_		_	
•	748		-	-		-
Stage 2	740	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	15.4		0		0.3	
HCM LOS	С				0.0	
1.5W E00						
Minor Lane/Major Mvm	t	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-	441	831	-
HCM Lane V/C Ratio		-	-	0.219	0.018	-
HCM Control Delay (s)		-	-	15.4	9.4	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	0.8	0.1	-

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	7	7	*	^	^	7
Traffic Volume (vph)	75	12	22	689	888	78
Future Volume (vph)	75	12	22	689	888	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			250
•	25	- 1	160			1
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950	1015	0.950	0==4	0.57.4	4504
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
Flt Permitted	0.950		0.269			
Satd. Flow (perm)	1805	1615	511	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13				83
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	80	13	23	733	945	83
Shared Lane Traffic (%)	00	10	20	700	340	00
Lane Group Flow (vph)	80	13	23	733	945	83
						No
Enter Blocked Intersection	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel	OITEX	OITEX	OITEX	OITEX	OITEX	OITEX
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)				0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	M	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase				<u> </u>		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
- , ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0	J.5 Lead	0.0		0.0
Lead/Lag Ontimize?					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	2.0	Yes	2.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	0.38	0.07	0.05	0.26	0.36	0.06
Control Delay	54.8	22.2	1.2	1.4	6.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	22.2	1.2	1.4	6.5	0.3
LOS	D	С	Α	Α	Α	Α
Approach Delay	50.3			1.4	6.0	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	94.0	84.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	94.0	84.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	58	0	1	20	137	0
Queue Length 95th (ft)	110	20	4	34	172	5
Internal Link Dist (ft)	1162	20	7	691	759	3
Turn Bay Length (ft)	200		180	031	139	250
Base Capacity (vph)	210	199	513	2799	2630	1412
Starvation Cap Reducts	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0.07	0 04	0	0 26	0
Reduced v/c Ratio	0.38	0.07	0.04	0.26	0.36	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 6.4

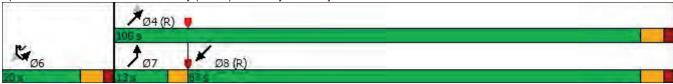
Intersection LOS: A

Intersection Capacity Utilization 38.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy

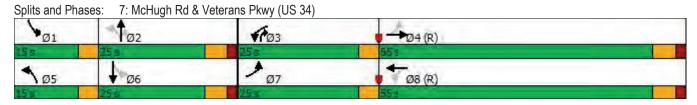


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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		1	*		7	↑	7	7	1>	
Traffic Volume (vph)	47	563	27	149	672	9	57	61	81	18	98	54
Future Volume (vph)	47	563	27	149	672	9	57	61	81	18	98	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998				0.850		0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3568	0	1770	1900	1568	1703	1787	0
FIt Permitted	0.343			0.338			0.500			0.715		
Satd. Flow (perm)	652	3551	0	636	3568	0	931	1900	1568	1282	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				86		20	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	50	599	29	159	715	10	61	65	86	19	104	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	628	0	159	725	0	61	65	86	19	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	7	1	-	•	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.9	60.7		76.2	65.6		36.3	29.6	45.4	31.8	23.9	
Actuated g/C Ratio	0.58	0.51		0.64	0.55		0.30	0.25	0.38	0.26	0.20	
v/c Ratio	0.11	0.35		0.32	0.37		0.18	0.14	0.13	0.05	0.43	
Control Delay	9.0	18.6		10.6	16.2		31.6	38.7	6.2	30.1	42.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	9.0	18.6		10.6	16.2		31.6	38.7	6.2	30.1	42.6	
LOS	Α	В		В	В		С	D	Α	С	D	
Approach Delay		17.9			15.2			23.5			41.3	
Approach LOS		В			В			С			D	
90th %ile Green (s)	8.0	58.0		12.5	62.5		11.3	22.5	12.5	8.0	19.2	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.2	59.7		10.8	63.3		9.6	23.5	10.8	7.0	20.9	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	6.7	60.8		9.7	63.8		8.4	34.0	9.7	0.0	22.1	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.2	61.8		8.7	64.3		7.3	34.0	8.7	0.0	23.2	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	63.3		7.2	74.0		0.0	34.0	7.2	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	13	146		46	159		34	37	0	10	98	
Queue Length 95th (ft)	28	199		73	191		68	84	35	29	174	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180	1=00		180	10-0		110	100	110	245	2=1	
Base Capacity (vph)	622	1799		611	1950		363	468	791	419	371	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.08	0.35		0.26	0.37		0.17	0.14	0.11	0.05	0.43	
Intersection Summary												

Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase	EBTL and 8:WBTL, Start of Green
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 54.0	6 ICU Level of Service A
Analysis Period (min) 15	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		*	* 1>		7	Þ		7	T _P	
Traffic Vol, veh/h	70	69	57	33	96	38	29	83	5	6	80	39
Future Vol, veh/h	70	69	57	33	96	38	29	83	5	6	80	39
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	79	78	64	37	108	43	33	93	6	7	90	44
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.4			9.3			9.9			10.1		
HCM LOS	Α			Α			Α			В		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	94%	0%	100%	29%	0%	100%	46%	0%	67%	
Vol Right, %	0%	6%	0%	0%	71%	0%	0%	54%	0%	33%	
Sign Control	Stop										
Traffic Vol by Lane	29	88	70	46	80	33	64	70	6	119	
LT Vol	29	0	70	0	0	33	0	0	6	0	
Through Vol	0	83	0	46	23	0	64	32	0	80	
RT Vol	0	5	0	0	57	0	0	38	0	39	
Lane Flow Rate	33	99	79	52	90	37	72	79	7	134	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.059	0.164	0.139	0.084	0.133	0.066	0.118	0.121	0.012	0.214	
Departure Headway (Hd)	6.514	5.973	6.349	5.844	5.341	6.417	5.93	5.529	6.503	5.773	
Convergence, Y/N	Yes										
Cap	551	601	566	614	672	559	605	649	551	623	
Service Time	4.241	3.701	4.073	3.569	3.065	4.143	3.656	3.255	4.231	3.501	
HCM Lane V/C Ratio	0.06	0.165	0.14	0.085	0.134	0.066	0.119	0.122	0.013	0.215	
HCM Control Delay	9.7	9.9	10.1	9.1	8.9	9.6	9.5	9	9.3	10.1	
HCM Lane LOS	Α	Α	В	Α	Α	А	А	А	Α	В	
HCM 95th-tile Q	0.2	0.6	0.5	0.3	0.5	0.2	0.4	0.4	0	8.0	

Intersection							
Int Delay, s/veh	1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	T	11	↑ ↑	וטאי	SDL 1	7	
Traffic Vol, veh/h	7	79	96	4	8	9	
Future Vol, veh/h	7	79	96	4	8	9	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage	e,# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	82	82	82	82	82	82	
Heavy Vehicles, %	0	1	2	0	0	0	
Mvmt Flow	9	96	117	5	10	11	
Major/Minor	Major1	N	Major2	N	/linor2		
Conflicting Flow All	122	0	-	0	186	61	
Stage 1	-	-	-	-	120	-	
Stage 2	-	-	-	-	66	-	
Critical Hdwy	4.1	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.2	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1478	-	-	-	791	998	
Stage 1	-	-	-	-	898	-	
Stage 2	-	-	-	-	955	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1478	-	-	-	786	998	
Mov Cap-2 Maneuver	-	-	-	-	786	-	
Stage 1	-	-	-	-	893	-	
Stage 2	-	-	-	-	955	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.6		0		9.1		
HCM LOS					Α		
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WRD (SBLn1 S	PIn2
	π	1478	LDI	VVDI	WDR	786	
Capacity (veh/h) HCM Lane V/C Ratio		0.006	-	-	-	0.012	998
HCM Control Delay (s)		7.5	-	-		9.6	8.6
HCM Lane LOS		7.5 A	-	-	-	9.0 A	Α
HCM 95th %tile Q(veh))	0	-	_	_	0	0
HOW JOHN JOHN Q VEIL	1	U				U	- 0

Intersection						
Int Delay, s/veh	1.5					
	NWL	NWR	NET	NER	CIVII	SWT
Movement		NVVK		NEK	SWL	
Lane Configurations	21	E1	↑ ↑	11	5	^
Traffic Vol, veh/h	31	51	669	11	55	844
Future Vol, veh/h	31	51	669	11	55	844
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	34	55	727	12	60	917
Major/Minor N	/linor1	N	/lajor1	N	Major2	
Conflicting Flow All	1312	370	0	0	739	0
Stage 1	733	-	-	_	-	-
Stage 2	579	_	_	_	_	_
Critical Hdwy	6.8	6.9	_		4.1	_
Critical Hdwy Stg 1	5.8	0.9	_	_	4.1	
Critical Hdwy Stg 2	5.8		-			
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	153	633	-		876	
	442	-	-	-	- 070	-
Stage 1	529		-			
Stage 2 Platoon blocked, %	529	-	-	-	-	-
	112	622	-	-	076	-
Mov Cap-1 Maneuver	143	633	-	-	876	-
Mov Cap-2 Maneuver	143	-	-	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	24.1		0		0.6	
HCM LOS	C C				0.0	
1.0 200						
						015
Minor Lane/Major Mvm	t	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-		876	-
HCM Lane V/C Ratio		-	-	0.323		-
HCM Control Delay (s)		-	-		9.4	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	1.4	0.2	-
,						

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	73	11	18	632	558	85
Future Volume (vph)	73	11	18	632	558	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			1
•	25	l I	160			1
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
FIt Permitted	0.950		0.406			
Satd. Flow (perm)	1787	1615	771	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12				89
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0.33	0.33	1%	1%	5%
Adj. Flow (vph)	77	12	19	665	587	89
Shared Lane Traffic (%)	11	14	13	000	307	09
Lane Group Flow (vph)	77	12	19	665	587	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
						CI+Ex
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+EX
Detector 1 Channel		0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6	. 0.111	7	4	8	6
T TOLECTED T HOSES	<u> </u>		'	-	0	0

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase				<u> </u>		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	U.U	J.5 Lead	0.0		0.0
Lead/Lag					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	2.0	Yes	2.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	0.31	0.05	0.03	0.25	0.23	0.06
Control Delay	42.4	19.4	0.9	1.4	6.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	19.4	0.9	1.4	6.1	0.4
LOS	D	В	Α	Α	Α	Α
Approach Delay	39.3			1.4	5.4	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	45	0	1	15	51	0
Queue Length 95th (ft)	90	16	m2	25	101	5
Internal Link Dist (ft)	1162	10	1112	691	759	J
Turn Bay Length (ft)	200		180	031	109	250
Base Capacity (vph)	250	236	688	2644	2508	1448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0.05	0 03	0 25	0 22	0.06
Reduced v/c Ratio	0.31	0.05	0.03	0.25	0.23	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31

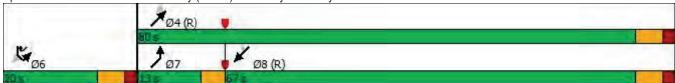
Intersection Signal Delay: 5.6 Intersection LOS: A

Intersection Capacity Utilization 31.6% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	×	-	7	1	+	•	1	†	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		*	14		7	1	7	7	1>	
Traffic Volume (vph)	61	572	19	99	454	9	36	33	61	18	52	51
Future Volume (vph)	61	572	19	99	454	9	36	33	61	18	52	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180	1000	0	180	1000	0	110	1000	110	245	1000	0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170		U	180		Ū	105		•	150		U
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.995	0.00	1.00	0.997	0.00	1.00	1.00	0.850	1.00	0.926	1.00
FIt Protected	0.950	0.000		0.950	0.001		0.950		0.000	0.950	0.020	
Satd. Flow (prot)	1770	3592	0	1805	3564	0	1805	1900	1568	1805	1759	0
Flt Permitted	0.461	0002	0	0.328	0004	0	0.646	1300	1000	0.735	1700	U
Satd. Flow (perm)	859	3592	0	623	3564	0	1227	1900	1568	1396	1759	0
Right Turn on Red	000	3332	Yes	020	3304	Yes	1221	1300	Yes	1000	1755	Yes
Satd. Flow (RTOR)		4	163		2	163			71		44	163
Link Speed (mph)		45			45			30	7 1		35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0.90	0.90	0.90	1%	0.90	0.90	0.90	3%	0.90	0.90	0.90
Adj. Flow (vph)	64	596	20	103	473	9	38	34	64	19	54	53
Shared Lane Traffic (%)	04	590	20	103	473	9	30	34	04	19	54	55
Lane Group Flow (vph)	64	616	0	103	482	0	38	34	64	19	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Leit	12	rtigiit	Leit	12	rtigrit	Leit	12	rtigrit	Leit	12	Right
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9
Number of Detectors	1	2	3	1	2	3	1	2	1	1	2	3
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	Cl+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	OI. LX	OI. LX		OI · LX	OI. LX		OI LX	OILLX	OI. LX	OI · LX	OI. LX	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel		51. LX			01 · LX			JI. LX			31. LX	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	7	1	•	*	1	Ť	1	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	52.0	42.4		54.6	45.2		35.5	29.8	43.9	33.8	27.3	
Actuated g/C Ratio	0.52	0.42		0.55	0.45		0.36	0.30	0.44	0.34	0.27	
v/c Ratio	0.13	0.40		0.24	0.30		0.08	0.06	0.09	0.04	0.21	
Control Delay	10.6	21.2		12.4	18.4		21.2	28.3	4.6	20.8	20.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.6	21.2		12.4	18.4		21.2	28.3	4.6	20.8	20.3	
LOS	В	С		В	В		С	С	Α	С	С	
Approach Delay		20.2			17.3			15.2			20.3	
Approach LOS		С			В			В			С	
90th %ile Green (s)	8.8	40.2		10.3	41.7		8.6	23.1	10.3	7.4	21.9	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.8	41.5		9.0	42.7		7.5	23.9	9.0	6.6	23.0	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	7.1	42.4		8.1	43.4		6.8	34.0	8.1	0.0	23.7	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.4	43.3		7.2	44.1		0.0	34.0	7.2	0.0	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	44.4		6.1	54.0		0.0	34.0	6.1	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	17	139		28	97		16	14	0	8	32	
Queue Length 95th (ft)	36	193		57	132		37	43	23	23	79	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	635	1524		547	1611		514	566	853	554	512	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.40		0.19	0.30		0.07	0.06	0.08	0.03	0.21	
Intersection Summary												

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

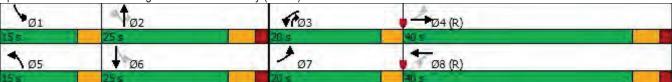
Maximum v/c Ratio: 0.40

Intersection Signal Delay: 18.7 Intersection LOS: B

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



1

Number of Lanes

2

0

1

0

1

0

Intersection												
Intersection Delay, s/veh	8.9											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	1		*	* 1>		*	13		7	f >	
Traffic Vol, veh/h	54	74	53	26	102	26	37	64	1	9	44	19
Future Vol, veh/h	54	74	53	26	102	26	37	64	1	9	44	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mymt Flow	59	80	58	28	111	28	40	70	1	10	48	21

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	8.8	8.8	9.2	8.9
HCM LOS	Α	Α	А	А

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	98%	0%	100%	32%	0%	100%	57%	0%	70%	
Vol Right, %	0%	2%	0%	0%	68%	0%	0%	43%	0%	30%	
Sign Control	Stop										
Traffic Vol by Lane	37	65	54	49	78	26	68	60	9	63	
LT Vol	37	0	54	0	0	26	0	0	9	0	
Through Vol	0	64	0	49	25	0	68	34	0	44	
RT Vol	0	1	0	0	53	0	0	26	0	19	
Lane Flow Rate	40	71	59	54	84	28	74	65	10	68	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.068	0.111	0.097	0.081	0.116	0.047	0.113	0.095	0.017	0.104	
Departure Headway (Hd)	6.116	5.639	5.928	5.425	4.945	5.98	5.494	5.241	6.197	5.485	
Convergence, Y/N	Yes										
Cap	582	631	601	656	719	595	648	679	574	648	
Service Time	3.892	3.415	3.696	3.193	2.712	3.749	3.263	3.009	3.978	3.266	
HCM Lane V/C Ratio	0.069	0.113	0.098	0.082	0.117	0.047	0.114	0.096	0.017	0.105	
HCM Control Delay	9.3	9.1	9.3	8.7	8.4	9	9	8.6	9.1	8.9	
HCM Lane LOS	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	
HCM 95th-tile Q	0.2	0.4	0.3	0.3	0.4	0.1	0.4	0.3	0.1	0.3	

Intersection							
Int Delay, s/veh	0						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	*	^	† 1>		7	7	
Traffic Vol, veh/h	1	84	102	0	0	0	
Future Vol, veh/h	1	84	102	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage	e,# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	85	85	85	85	85	85	
Heavy Vehicles, %	0	0	3	0	0	0	
Mvmt Flow	1	99	120	0	0	0	
Major/Minor	Major1	N	Major2	Λ	/linor2		
Conflicting Flow All	120	0		0	172	60	
Stage 1	-	-	-	-	120	-	
Stage 2	-	-	-	-	52	-	
Critical Hdwy	4.1	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.2	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1480	-	-	-	807	999	
Stage 1	-	-	-	-	898	-	
Stage 2	-	-	-	-	970	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1480	-	-	-	806	999	
Mov Cap-2 Maneuver	-	-	-	-	806	-	
Stage 1	-	-	-	-	897	-	
Stage 2	-	-	-	-	970	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.1		0		0		
HCM LOS					Α		
	_	_	_		_		
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WRR	SBLn1 SBL	n2
Capacity (veh/h)	ii C	1480	LDI	WDT	יוטוי	JULITI JUL	.112
HCM Lane V/C Ratio		0.001	-	-	-	-	-
HCM Control Delay (s)	\	7.4	-	-	-	0	0
HCM Lane LOS		7.4 A	-	-	_	A	A
HCM 95th %tile Q(veh)	0	_	_	_	-	-
TIOW JOHN JUNE WIVELL	7	U					

Intersection						
Int Delay, s/veh	0.9					
		AUAZ	NIET	NED	0)4#	OVACT
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	**		1		7	^
Traffic Vol, veh/h	20	34	619	34	33	536
Future Vol, veh/h	20	34	619	34	33	536
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	0	1	0	0	1
Mvmt Flow	22	37	666	37	35	576
	Minor1		/lajor1		Major2	
Conflicting Flow All	1043	352	0	0	703	0
Stage 1	685	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.9	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	220	650	-	-	904	-
Stage 1	454	-	-	-	-	-
Stage 2	669	_	_	_	_	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	211	650	_	_	904	_
Mov Cap-1 Maneuver	211	-	<u>-</u>	_	-	_
Stage 1	454				-	
	643			-		-
Stage 2	043	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	16.6		0		0.5	
HCM LOS	С					
Minor Lane/Major Mvm	ıt	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-	367	904	-
HCM Lane V/C Ratio		-	-	0.158		-
HCM Control Delay (s)		-	-	16.6	9.1	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	0.6	0.1	-
,						

APPENDIX F

CAPACITY ANALYSIS WORKSHEETS 2031 BACKGROUND

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	65	2	16	776	455	85
Future Volume (vph)	65	2	16	776	455	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1500	1300	250
Storage Lanes	0	1	100			1
		l I				l I
Taper Length (ft)	25	1.00	160	0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
FIt Permitted	0.950		0.458			
Satd. Flow (perm)	1736	1615	870	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2				89
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0.93	0.93	2%	7%	3%
Adj. Flow (vph)	68	2	17	817	479	89
	00		17	017	4/9	09
Shared Lane Traffic (%)	00	0	47	047	470	00
Lane Group Flow (vph)	68	2	17	817	479	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
	0	0	0	0	0	0
Detector 1 Position(ft)						
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases		i Cilli		4	8	•
Frolected Phases	6		7	4	ď	6

	W	1	*	*	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4	.,_,		8
Detector Phase	6	6	7	4	8	6
Switch Phase	0	0		-	0	0
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	70.0%	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
. ,	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)			3.5	6.0	6.0	6.0
Total Lost Time (s)	6.0	6.0		0.0		0.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?	0.0	2.0	Yes	2.0	Yes	0.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	10
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.31	0.01	0.02	0.30	0.19	0.06
Control Delay	47.9	29.5	1.6	2.6	5.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	29.5	1.6	2.6	5.4	0.3
LOS	D	С	Α	Α	Α	Α
Approach Delay	47.4			2.5	4.6	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	44	0	1	36	41	0
Queue Length 95th (ft)	89	8	m3	40	81	5
Internal Link Dist (ft)	1162	3	1110	691	759	3
Turn Bay Length (ft)	200		180	001	100	250
Base Capacity (vph)	220	207	764	2702	2460	1485
Starvation Cap Reductn	0	0	0	0	2400	0
Spillback Cap Reductin	0	0	0	0	0	0
	0	0	0	0	0	0
Storage Cap Reductn Reduced v/c Ratio						
Reduced V/C Ratio	0.31	0.01	0.02	0.30	0.19	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31

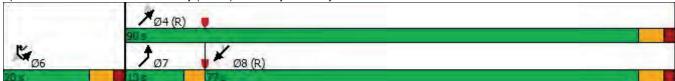
Intersection Signal Delay: 5.5 Intersection LOS: A

Intersection Capacity Utilization 35.6% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



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Trimorragin ra ev r	veteraris i kwy (00 04)							Timing Flam Wookday Flam Foak						
	*	-	7	1	+	*	1	Ť	1	1	↓	1		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations	*	* 13		7	* 1>		*	1	7	*	7>			
Traffic Volume (vph)	41	642	20	70	378	3	18	45	119	4	43	34		
Future Volume (vph)	41	642	20	70	378	3	18	45	119	4	43	34		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	180		0	180		0	110		110	245		0		
Storage Lanes	1		0	1		0	1		1	1		0		
Taper Length (ft)	170			180			105			150				
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00		
Frt		0.995			0.999				0.850		0.934			
Flt Protected	0.950			0.950			0.950			0.950				
Satd. Flow (prot)	1805	3453	0	1671	3404	0	1456	1810	1583	1805	1683	0		
FIt Permitted	0.507	0.00		0.312			0.649			0.725				
Satd. Flow (perm)	963	3453	0	549	3404	0	994	1810	1583	1377	1683	0		
Right Turn on Red		0.00	Yes			Yes			Yes			Yes		
Satd. Flow (RTOR)		4	100		1	100			131		29	. 00		
Link Speed (mph)		45			45			30	101		35			
Link Distance (ft)		892			1073			856			727			
Travel Time (s)		13.5			16.3			19.5			14.2			
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91		
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%		
Adj. Flow (vph)	45	705	22	77	415	3	20	49	131	4	47	37		
Shared Lane Traffic (%)	70	700	22	11	410	J	20	73	101	7	71	31		
Lane Group Flow (vph)	45	727	0	77	418	0	20	49	131	4	84	0		
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No		
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right		
Median Width(ft)	LOIL	12	rtigiit	LOIL	12	rtigrit	LOIL	12	rtigitt	LOIL	12	rtigrit		
Link Offset(ft)		0			0			0			0			
Crosswalk Width(ft)		16			16			16			16			
Two way Left Turn Lane		10			10			10			Yes			
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9		
Number of Detectors	1	2	3	1	2	3	1	2	1	1	2	3		
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru			
Leading Detector (ft)	20	100		20	100		20	100	20	20	100			
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0			
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0			
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6			
Detector 1 Type	CI+Ex	Cl+Ex		Cl+Ex	Cl+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex			
Detector 1 Channel	OIILX	OIILX		OITEX	OIILX		OIILX	OITEX	OIILX	OITEX	OITEX			
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0			
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94			
Detector 2 Size(ft)		6			6			6			6			
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex			
Detector 2 Channel		OITEX			OITEX			OITEX			OITEX			
		0.0			0.0			0.0			0.0			
Detector 2 Extend (s)	nmınt	NA		nmint	NA		nmint		nmiov	nmint	NA			
Turn Type Protected Phases	pm+pt			pm+pt			pm+pt	NA 2	pm+ov 3	pm+pt				
Frolected Phases	7	4		3	8		5		3	1	6			

	*	-	7	1	•	•	1	1	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.2	60.3		71.4	62.9		29.2	25.0	38.3	27.4	22.4	
Actuated g/C Ratio	0.63	0.55		0.65	0.57		0.27	0.23	0.35	0.25	0.20	
v/c Ratio	0.07	0.38		0.18	0.21		0.07	0.12	0.21	0.01	0.23	
Control Delay	6.6	15.0		7.6	12.0		30.7	36.6	5.6	29.8	28.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.6	15.0		7.6	12.0		30.7	36.6	5.6	29.8	28.9	
LOS	Α	В		Α	В		С	D	Α	С	С	
Approach Delay		14.5			11.3			15.7		_	29.0	
Approach LOS		В			В			В			С	
90th %ile Green (s)	7.5	58.7		8.8	60.0		8.5	17.2	8.8	6.3	15.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	6.8	59.7		7.8	60.7		7.3	27.0	7.8	0.0	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	Ped	
50th %ile Green (s)	6.4	60.3		7.2	61.1		0.0	27.0	7.2	0.0	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.0	60.9		6.6	61.5		0.0	27.0	6.6	0.0	27.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.8		5.7	71.0		0.0	27.0	5.7	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	10	146		17	72		10	27	0	2	30	
Queue Length 95th (ft)	22	195		33	94		30	66	44	11	83	
Internal Link Dist (ft)		812			993		00	776	77		647	
Turn Bay Length (ft)	180	012		180	330		110	.10	110	245	341	
Base Capacity (vph)	762	1893		524	1945		310	412	745	405	366	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductin	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.06	0.38		0.15	0.21		0.06	0.12	0.18	0.01	0.23	
Intersection Summary												

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

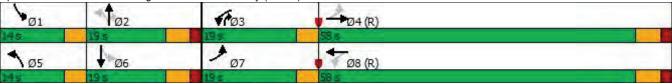
Maximum v/c Ratio: 0.38

Intersection Signal Delay: 14.5 Intersection LOS: B

Intersection Capacity Utilization 43.5% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Mvmt Flow

Number of Lanes

Intersection												
Intersection Delay, s/veh	9.2											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	* 1>		-	* 13		1	1		1	1	
Traffic Vol, veh/h	55	39	13	13	63	25	13	64	12	3	56	34
Future Vol, veh/h	55	39	13	13	63	25	13	64	12	3	56	34
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.2	8.9	9.4	9.5
HCM LOS	Α	A	А	Α

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	84%	0%	100%	50%	0%	100%	46%	0%	62%	
Vol Right, %	0%	16%	0%	0%	50%	0%	0%	54%	0%	38%	
Sign Control	Stop										
Traffic Vol by Lane	13	76	55	26	26	13	42	46	3	90	
LT Vol	13	0	55	0	0	13	0	0	3	0	
Through Vol	0	64	0	26	13	0	42	21	0	56	
RT Vol	0	12	0	0	13	0	0	25	0	34	
Lane Flow Rate	19	109	79	37	37	19	60	66	4	129	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.031	0.166	0.133	0.057	0.055	0.032	0.093	0.098	0.009	0.193	
Departure Headway (Hd)	6.101	5.49	6.111	5.573	5.357	6.108	5.604	5.375	7.232	5.396	
Convergence, Y/N	Yes										
Cap	583	648	582	637	662	581	634	660	492	660	
Service Time	3.881	3.271	3.897	3.358	3.143	3.894	3.39	3.161	5.011	3.174	
HCM Lane V/C Ratio	0.033	0.168	0.136	0.058	0.056	0.033	0.095	0.1	0.008	0.195	
HCM Control Delay	9.1	9.4	9.8	8.7	8.5	9.1	9	8.8	10.1	9.5	
HCM Lane LOS	Α	Α	Α	Α	Α	А	А	Α	В	А	
HCM 95th-tile Q	0.1	0.6	0.5	0.2	0.2	0.1	0.3	0.3	0	0.7	

Intersection							
Int Delay, s/veh	1.1						
	EBL	EDT	\\/DT	WBR	CDI	SBR	
Movement Lane Configurations		EBT	WBT	WBK	SBL		
Traffic Vol, veh/h	9	^	↑1 → 95	5	8	7	
Future Vol, veh/h	9	59	95	5	8	6	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-	None	
Storage Length	150	-	_	-	100	0	
Veh in Median Storage		0	0	-	0	-	
Grade, %	-	0	0	_	0	-	
Peak Hour Factor	60	60	60	60	60	60	
Heavy Vehicles, %	22	7	1	0	0	0	
Mvmt Flow	15	98	158	8	13	10	
Major/Minor	Major1	N	Major2	N	/linor2		
Conflicting Flow All	166	0	viaj012 -	0	241	83	
Stage 1	100	-	-	-	162	- 03	
Stage 1	-	_	-	-	79	-	
Critical Hdwy	4.54		-		6.8	6.9	
Critical Hdwy Stg 1	07	_	_	_	5.8	-	
Critical Hdwy Stg 2	-	_	-	_	5.8	_	
Follow-up Hdwy	2.42	-	_	_	3.5	3.3	
Pot Cap-1 Maneuver	1275	-	-	-	732	966	
Stage 1	-	-	-	-	856	-	
Stage 2	-	-	-	-	941	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1275	-	-	-	723	966	
Mov Cap-2 Maneuver	-	-	-	-	723	-	
Stage 1	-	-	-	-	846	-	
Stage 2	-	-	-	-	941	-	
Approach	EB		WB		SB		
HCM Control Delay, s	1		0		9.5		
HCM LOS	1		- 0		Α.		
					, ,		
NA: - 1 (NA - 1 - NA		ED!	FDT	MOT	MES	ODL 4.0	DI O
Minor Lane/Major Mvm	nt	EBL	EBT	WBT		SBLn1 S	
Capacity (veh/h)		1275	-	-	-	723	966
HCM Cartest Dalay (2)		0.012	-	-		0.018	0.01
HCM Control Delay (s)		7.9	-	-	-		8.8
HCM Cath % tile O(vah)	\	A	-	-	-	B	A
HCM 95th %tile Q(veh))	0	-	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.4					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	W	TANALL	1	NEIX	3VVL	1
Traffic Vol, veh/h	25	71	716	12	15	434
Future Vol, veh/h	25	71	716	12	15	434
Conflicting Peds, #/hr	0	0	0	0	0	434
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None	riee -	None	riee -	None
	0	None -	-	None -	275	None -
Storage Length						
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	9	7	7
Mvmt Flow	27	77	778	13	16	472
Major/Minor N	1inor1	N	Major1		Major2	
Conflicting Flow All	1053	396	0	0	791	0
Stage 1	785	-	_	-	-	-
Stage 2	268	_	_	_	_	_
Critical Hdwy	6.88	6.94	_	_	4.24	_
Critical Hdwy Stg 1	5.88	0.34	_	_		
Critical Hdwy Stg 2	5.88	_		-		-
Follow-up Hdwy	3.54	3.32	-	_	2.27	-
Pot Cap-1 Maneuver	218	603			793	-
	405					
Stage 1		-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %	044	000	-	-	700	-
Mov Cap-1 Maneuver	214	603	-	-	793	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	16.8		0		0.3	
HCM LOS	C		U		0.0	
TIOWI LOO	J					
Minor Lane/Major Mvmt		NET	NERN	IWLn1	SWL	SWT
			_	409	793	-
Capacity (veh/h)						
Capacity (veh/h) HCM Lane V/C Ratio		-	-	0.255		-
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	-	16.8	9.6	-
Capacity (veh/h) HCM Lane V/C Ratio			- - -			

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	80	13	24	737	950	83
Future Volume (vph)	80	13	24	737	950	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			l I
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.850	1.00	0.95	0.93	0.850
Flt Protected	0.950	0.000	0.950			0.000
		1615		2574	2574	1504
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
FIt Permitted	0.950	4045	0.248	0574	0.57.4	4504
Satd. Flow (perm)	1805	1615	471	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				88
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	85	14	26	784	1011	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	14	26	784	1011	88
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32	rugiic	2010	12	12	rugiic
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	10			10	10	
	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor				1.00	1.00	
Turning Speed (mph)	15	9	15	0		9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	3.0	3.0	0.0	94	94	3.0
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel				OITEX	OITEX	
				0.0	0.0	
Detector 2 Extend (s)	Б ′	D.		0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	W	1	*	*	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase			,		3	<u> </u>
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
()	2.0	2.0	0.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)					6.0	6.0
Total Lost Time (s)	6.0	6.0	3.5	6.0		0.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?	2.0		Yes	0.0	Yes	2.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	0.40	0.07	0.06	0.28	0.38	0.06
Control Delay	55.5	22.1	1.3	1.5	6.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	22.1	1.3	1.5	6.8	0.3
LOS	E	C	Α	Α	A	A
Approach Delay	50.8			1.5	6.3	- 1
Approach LOS	D			Α	A	
90th %ile Green (s)	14.0	14.0	6.3	94.0	84.2	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	6.0	94.0	84.5	14.0
70th %ile Green (s) 70th %ile Term Code						
	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	62	0	1	22	151	0
Queue Length 95th (ft)	114	21	4	37	188	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	210	200	484	2799	2629	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.07	0.05	0.28	0.38	0.06
Neduced We Natio	0.40	0.07	0.03	0.20	0.50	0.00
Intersection Summary						

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

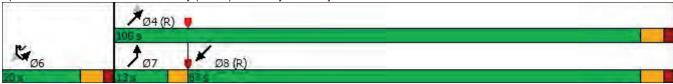
Maximum v/c Ratio: 0.40

Intersection Signal Delay: 6.5 Intersection LOS: A

Intersection Capacity Utilization 40.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	J	577452			4	4	4	†	<i>></i>	-		1
	M.	0.75.0	*	*		2.5	7	848	1		*	343
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	† 1>	00	150	1	40	7	†	7	1	₽	=0
Traffic Volume (vph)	50	602	29	159	719	10	61	65	87	19	105	58
Future Volume (vph)	50	602	29	159	719	10	61	65	87	19	105	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998				0.850		0.947	
FIt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3568	0	1770	1900	1568	1703	1787	0
FIt Permitted	0.318			0.316			0.474			0.712		
Satd. Flow (perm)	604	3551	0	594	3568	0	883	1900	1568	1276	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				93		20	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	53	640	31	169	765	11	65	69	93	20	112	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	671	0	169	776	0	65	69	93	20	174	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	-	1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		Cl+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	OI LX	OI - EX		OI LX	OI - EX		OI LX	OI LX	OI - EX	OI LX	OI LX	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel		OITEX			OITEX			OITEX			OITEX	
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	nm i nf			nmint	NA		nmint		nmiov	nmint		
Turn Type	pm+pt	NA 4		pm+pt			pm+pt	NA	pm+ov	pm+pt	NA 6	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	*	1	+	•	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.7	60.4		76.3	65.5		36.3	29.6	45.6	31.7	23.7	
Actuated g/C Ratio	0.58	0.50		0.64	0.55		0.30	0.25	0.38	0.26	0.20	
v/c Ratio	0.13	0.37		0.35	0.40		0.20	0.15	0.14	0.06	0.47	
Control Delay	9.1	19.1		11.1	16.5		31.9	38.8	6.0	30.2	44.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	9.1	19.1		11.1	16.5		31.9	38.8	6.0	30.2	44.1	
LOS	Α	В		В	В		С	D	Α	С	D	
Approach Delay		18.4			15.5			23.4			42.6	
Approach LOS		В			В			С			D	
90th %ile Green (s)	8.1	57.6		12.9	62.4		11.5	22.5	12.9	8.0	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Max	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.3	59.4		11.1	63.2		9.8	23.4	11.1	7.1	20.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	6.8	60.5		10.0	63.7		8.6	34.0	10.0	0.0	21.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.2	61.6		8.9	64.3		7.5	34.0	8.9	0.0	23.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	63.1		7.4	74.0		0.0	34.0	7.4	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	14	160		49	171		36	40	0	11	108	
Queue Length 95th (ft)	30	216		77	204		72	89	36	30	188	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	600	1791		592	1948		353	468	794	416	369	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.09	0.37		0.29	0.40		0.18	0.15	0.12	0.05	0.47	
Intersection Summary												

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

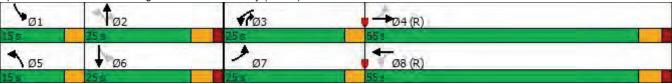
Maximum v/c Ratio: 0.47

Intersection Signal Delay: 19.9 Intersection LOS: B

Intersection Capacity Utilization 56.3% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Heavy Vehicles, %

Mvmt Flow

Intersection												
Intersection Delay, s/veh	9.9											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		1	* 1>		1	ĵ»		7	1	
Traffic Vol, veh/h	75	74	61	35	103	41	31	89	5	6	86	42
Future Vol, veh/h	75	74	61	35	103	41	31	89	5	6	86	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89

Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.6			9.6			10.1			10.5		
HCM LOS	Α			Α			R			В		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	95%	0%	100%	29%	0%	100%	46%	0%	67%	
Vol Right, %	0%	5%	0%	0%	71%	0%	0%	54%	0%	33%	
Sign Control	Stop										
Traffic Vol by Lane	31	94	75	49	86	35	69	75	6	128	
LT Vol	31	0	75	0	0	35	0	0	6	0	
Through Vol	0	89	0	49	25	0	69	34	0	86	
RT Vol	0	5	0	0	61	0	0	41	0	42	
Lane Flow Rate	35	106	84	55	96	39	77	85	7	144	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.064	0.179	0.151	0.092	0.146	0.071	0.13	0.133	0.012	0.236	
Departure Headway (Hd)	6.642	6.103	6.466	5.961	5.458	6.538	6.05	5.648	6.629	5.898	
Convergence, Y/N	Yes										
Cap	540	588	555	601	657	548	593	635	540	610	
Service Time	4.377	3.839	4.198	3.693	3.189	4.273	3.785	3.382	4.362	3.631	
HCM Lane V/C Ratio	0.065	0.18	0.151	0.092	0.146	0.071	0.13	0.134	0.013	0.236	
HCM Control Delay	9.8	10.2	10.4	9.3	9.1	9.8	9.7	9.3	9.4	10.5	
HCM Lane LOS	А	В	В	Α	А	А	А	А	Α	В	
HCM 95th-tile Q	0.2	0.6	0.5	0.3	0.5	0.2	0.4	0.5	0	0.9	

Intersection							
Int Delay, s/veh	1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	EDL	^	₩	WDIX	SDL	JDK	
Traffic Vol, veh/h	7	85	103	4	8	9	
Future Vol, veh/h	7	85	103	4	8	9	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage	,# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	82	82	82	82	82	82	
Heavy Vehicles, %	0	1	2	0	0	0	
Mvmt Flow	9	104	126	5	10	11	
Major/Minor N	/lajor1	N	Major2	N	/linor2		
Conflicting Flow All	131	0	-	0	199	66	
Stage 1	-	-	_	-	129	-	
Stage 2	_	_	_	_	70	_	
Critical Hdwy	4.1	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.2	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1467	-	-	-	777	991	
Stage 1	-	-	-	-	889	-	
Stage 2	-	-	-	-	950	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1467	-	-	-	772	991	
Mov Cap-2 Maneuver	-	-	-	-	772	-	
Stage 1	-	-	-	-	884	-	
Stage 2	-	-	-	-	950	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.6		0		9.2		
HCM LOS					A		
Minor Lane/Major Mvm	+	EBL	EBT	WBT	WPD	SBLn1 S	RI n2
		1467	LDI	VVDI	WDR	772	
Capacity (veh/h) HCM Lane V/C Ratio		0.006			-	0.013	991
HCM Control Delay (s)		7.5	-	-	_	9.7	8.7
HCM Lane LOS		7.5 A	-	-	-	9.7 A	Α
HCM 95th %tile Q(veh)		0	-	<u>-</u>	_	0	0
HOW Jour Joure Q(Veri)		U			_	U	U

Intersection						
Int Delay, s/veh	1.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	INVVL	INVVIX		NEIX	SVVL	↑ ↑
Traffic Vol, veh/h	33	55	↑1 ≽	31	5 9	TT 903
Future Vol, veh/h	33	55	716	31	59	903
Conflicting Peds, #/hr	0	0	0	0	0	903
			Free	Free	Free	Free
Sign Control RT Channelized	Stop -	Stop	riee -	None	riee -	None
	0	None -	-	None -	275	None -
Storage Length Veh in Median Storage			0	-	2/5	0
Grade, %	, # U 0	-	0			0
	92	92	92	- 02	92	92
Peak Hour Factor				92		
Heavy Vehicles, %	0	0	770	0	0	1
Mvmt Flow	36	60	778	34	64	982
Major/Minor N	Minor1	Λ	/lajor1	1	Major2	
Conflicting Flow All	1414	406	0	0	812	0
Stage 1	795	-	-	-	-	-
Stage 2	619	_	_	_	_	_
Critical Hdwy	6.8	6.9	_	_	4.1	_
Critical Hdwy Stg 1	5.8	-	_	_	-	_
Critical Hdwy Stg 2	5.8	_		_	_	
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	131	600	_	_	823	
Stage 1	410	000		-	020	
Stage 2	505		_	_	_	
	505	-	-	-	-	
Platoon blocked, %	101	600	-	-	000	-
Mov Cap-1 Maneuver	121	600	-	-	823	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	410	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	29.4		0		0.6	
HCM LOS	23.4 D		- 0		0.0	
TIOW LOO	U					
Minor Lane/Major Mvm	t	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-		823	-
HCM Lane V/C Ratio		-	-	0.397	0.078	-
HCM Control Delay (s)		-	-	29.4	9.7	-
HCM Lane LOS		-	-	D	Α	-
HCM 95th %tile Q(veh)		-	-	1.8	0.3	-

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	78	12	19	676	597	91
Future Volume (vph)	78	12	19	676	597	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1500	1300	250
Storage Lanes	0	1	100			1
•	25	l I	160			l I
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
FIt Permitted	0.950		0.387			
Satd. Flow (perm)	1787	1615	735	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13				96
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	82	13	20	712	628	96
Shared Lane Traffic (%)	02	10	20	1 12	020	30
Lane Group Flow (vph)	82	13	20	712	628	96
Enter Blocked Intersection	No	No	No	No	No	No
			Left	Left		
Lane Alignment	Left	Right	Leit		Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	CITEX	CITEX	OITEX	CITEX	OITEX	CITEX
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6
	<u> </u>		'		0	0

	W	1	*	*	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase			,	7	0	0
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
• , ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0		0.0		0.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?		0.0	Yes	2.0	Yes	0.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	0.33	0.05	0.03	0.27	0.25	0.07
Control Delay	42.9	18.8	1.1	1.4	6.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	18.8	1.1	1.4	6.2	0.4
LOS	D	В	Α	Α	Α	Α
Approach Delay	39.6			1.4	5.4	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
			0.0	74.0	74.0	14.0
10th %ile Green (s)	14.0	14.0 May D				
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	48	0	1	16	55	0
Queue Length 95th (ft)	94	18	m2	26	109	6
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	250	237	663	2644	2508	1448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.05	0.03	0.27	0.25	0.07
Intersection Summary						

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.33

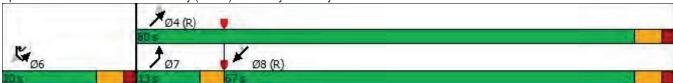
Intersection Signal Delay: 5.6 Intersection LOS: A

Intersection Capacity Utilization 33.0% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



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See Configurations		۶	→	*	1	4	*	1	1	~	1	Ţ	4
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	7	* 13		7	*1 >		7	^	7	7	1	
Future Volume (vph)				20	106		10						55
Ideal Flow (ryphip)		65	612	20	106	486	10	39	35	65	19	56	55
Storage Length (ft) 180	() ,		1900										
Storage Lanes													
Taper Length (ff)				0									0
Lane Util. Factor		170			180			105			150		
Firth			0.95	0.95		0.95	0.95		1.00	1.00		1.00	1.00
Filt Protected 0.950 0.9	Frt												
Satd. Flow (prot) 1770 3592 0 1805 3564 0 1805 1900 1568 1805 1759 0	Flt Protected	0.950			0.950			0.950			0.950		
Fit Permitted			3592	0		3564	0		1900	1568		1759	0
Satd, Flow (perm) Ref Sept Flow (perm) Right Turn on Red Flow (RTOR) A Sept Sept													
New Note			3592	0		3564	0		1900	1568		1759	0
Satd. Flow (RTOR)													
Link Speed (mph) 45 45 45 30 35 Link Distance (ft) 892 1073 856 727 Travel Time (s) 13.5 16.3 19.5 14.2 Peak Hour Factor 0.96			4			2						44	
Link Distance (ft)									30				
Travel Time (s)	,												
Peak Hour Factor 0.96													
Heavy Vehicles (%)		0.96		0.96	0.96		0.96	0.96		0.96	0.96		0.96
Adj. Flow (vph)													
Shared Lane Traffic (%) Lane Group Flow (vph) 68 659 0 110 516 0 41 36 68 20 115 0 No No No No No No No	, ,												
Lane Group Flow (vph)													
Enter Blocked Intersection		68	659	0	110	516	0	41	36	68	20	115	0
Left Left Right Median Width(fft) 12	,												
Median Width(ft) 12 16 10 10 100 100 100 100 100 100 100 100 100 100 100 100 100 100													
Link Offset(ft)													J
Crosswalk Width(ff) 16 16 16 16 16 Two way Left Turn Lane Yes Headway Factor 1.00													
Two way Left Turn Lane													
Headway Factor													
Turning Speed (mph) 15 9 15 9 15 9 15 9 Number of Detectors 1 2 1 2 1 2 1 1 2 Detector Template Left Thru Left Thru Left Thru Right Left Thru Leading Detector (ft) 20 100 20 100 20 100 20 20 100 Trailing Detector (ft) 0 <td></td> <td>1.00</td> <td></td> <td>1.00</td>		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Number of Detectors 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 10 0 0 0													
Detector Template			2			2			2			2	
Leading Detector (ft) 20 100 20 100 20 20 100 Trailing Detector (ft) 0		Left			Left			Left		Riaht	Left		
Trailing Detector (ft) 0													
Detector 1 Position(ft) 0	. ,												
Detector 1 Size(ft) 20 6 20 6 20 20 6 Detector 1 Type CI+Ex Detector 1 Detector 2 Detector 2 Position(ft) 94 94 94 94 94 94 94 Percentage of the control of t		0	0		0	0		0	0	0	0	0	
Detector 1 Type CI+Ex					20			20		20	20		
Detector 1 Channel Detector 1 Extend (s) 0.0 <			Cl+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex		CI+Ex	
Detector 1 Extend (s) 0.0													
Detector 1 Queue (s) 0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s) 0.0 Turn Type pm+pt NA pm+pt NA pm+pt NA pm+pt NA pm+pt NA pm+pt NA													
Detector 2 Position(ft) 94 94 94 94 Detector 2 Size(ft) 6 6 6 6 Detector 2 Type CI+Ex CI+Ex CI+Ex Detector 2 Channel Detector 2 Extend (s) 0.0 0.0 0.0 Turn Type pm+pt NA pm+pt NA pm+pt NA	. ,												
Detector 2 Size(ft) 6 6 6 6 Detector 2 Type CI+Ex CI+Ex CI+Ex Detector 2 Channel Detector 2 Extend (s) 0.0 0.0 0.0 Turn Type pm+pt NA pm+pt NA pm+pt NA													
Detector 2 Type Cl+Ex Cl+Ex Cl+Ex Cl+Ex Detector 2 Channel Detector 2 Extend (s) 0.0 0.0 0.0 0.0 Turn Type pm+pt NA pm+pt NA pm+pt NA pm+pt NA													
Detector 2 Channel 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Turn Type pm+pt NA pm+pt NA pm+pt NA pm+pt NA pm+pt NA pm+pt NA													
Detector 2 Extend (s) 0.0 0.0 0.0 0.0 Turn Type pm+pt NA pm+pt NA pm+pt NA pm+pt NA													
Turn Type pm+pt NA pm+pt NA pm+ov pm+pt NA			0.0			0.0			0.0			0.0	
, , , , , , , , , , , , , , , , , , , ,		pm+pt			pm+pt			pm+pt		pm+ov	pm+pt		
	Protected Phases	7	4		3	8		5	2	3		6	

	٠	-	7	1	-	*	1	†	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%	2	20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	51.9	42.2		54.7	45.1		35.6	29.8	44.1	33.8	27.2	
Actuated g/C Ratio	0.52	0.42		0.55	0.45		0.36	0.30	0.44	0.34	0.27	
v/c Ratio	0.14	0.43		0.26	0.32		0.09	0.06	0.09	0.04	0.23	
Control Delay	10.7	21.8		13.7	19.0		21.3	28.3	4.9	20.8	21.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.7	21.8		13.7	19.0		21.3	28.3	4.9	20.8	21.0	
LOS	В	С		В	В		С	С	Α	С	С	
Approach Delay		20.7			18.1			15.3			20.9	
Approach LOS		С			В			В			С	
90th %ile Green (s)	8.9	39.9		10.6	41.6		8.8	23.1	10.6	7.4	21.7	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.9	41.3		9.2	42.6		7.7	23.8	9.2	6.7	22.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	7.2	42.2		8.3	43.3		6.9	34.0	8.3	0.0	23.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.5	43.1		7.4	44.0		0.0	34.0	7.4	0.0	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	44.3		6.2	54.0		0.0	34.0	6.2	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	18	152		31	104		17	15	0	8	36	
Queue Length 95th (ft)	38	209		68	146		40	44	25	24	86	
Internal Link Dist (ft)	400	812		400	993		440	776	4.40	0.45	647	
Turn Bay Length (ft)	180	4540		180	4000		110	F00	110	245	F44	
Base Capacity (vph)	618	1516		527	1608		511	566	853	554	511	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	0.43		0.21	0.32		0.08	0.06	0.08	0.04	0.23	
Intersection Summary												

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

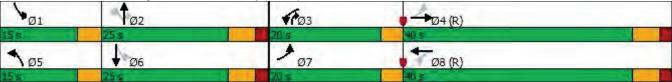
Intersection Signal Delay: 19.3

Intersection Capacity Utilization 45.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection			
Intersection Delay, s/veh Intersection LOS	9.1		
Intersection LOS	Α		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	* 1>		1	1		7	T ₃		*	T.	
Traffic Vol, veh/h	58	79	57	28	109	28	40	68	1	10	47	20
Future Vol, veh/h	58	79	57	28	109	28	40	68	1	10	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	63	86	62	30	118	30	43	74	1	11	51	22
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	8.9			9			9.4			9.1		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	99%	0%	100%	32%	0%	100%	56%	0%	70%	
Vol Right, %	0%	1%	0%	0%	68%	0%	0%	44%	0%	30%	
Sign Control	Stop										
Traffic Vol by Lane	40	69	58	53	83	28	73	64	10	67	
LT Vol	40	0	58	0	0	28	0	0	10	0	
Through Vol	0	68	0	53	26	0	73	36	0	47	
RT Vol	0	1	0	0	57	0	0	28	0	20	
Lane Flow Rate	43	75	63	57	91	30	79	70	11	73	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.075	0.119	0.105	0.087	0.126	0.051	0.122	0.103	0.019	0.113	
Departure Headway (Hd)	6.199	5.723	6.001	5.497	5.016	6.054	5.568	5.312	6.286	5.576	
Convergence, Y/N	Yes										
Cap	573	621	593	647	708	587	638	669	565	636	
Service Time	3.984	3.508	3.778	3.274	2.792	3.834	3.348	3.093	4.075	3.366	
HCM Lane V/C Ratio	0.075	0.121	0.106	0.088	0.129	0.051	0.124	0.105	0.019	0.115	
HCM Control Delay	9.5	9.3	9.5	8.8	8.5	9.2	9.1	8.7	9.2	9.1	
HCM Lane LOS	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	
HCM 95th-tile Q	0.2	0.4	0.4	0.3	0.4	0.2	0.4	0.3	0.1	0.4	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LDL.	1	↑	WDI\	SBL	JDIN 7
Traffic Vol, veh/h	1	TT 90	109	0	0	0
Future Vol, veh/h	1	90	109	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	1	106	128	0	0	0
Major/Minor N	1ajor1	N	Major2	N	/linor2	
Conflicting Flow All	128	0	-	0	183	64
Stage 1	120	-		-	128	-
Stage 2	_	-	-	_	55	-
Critical Hdwy	4.1	_	-	_	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1470	-	-	-	795	994
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1470	-	-	-	794	994
Mov Cap-2 Maneuver	-	-	-	-	794	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	967	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.1		0		0	
HCM LOS	• • •		•		A	
Minor Long/Major Muset		EBL	EDT	WDT	WDD	CDI n4 CDI
Minor Lane/Major Mvmt			EBT	WBT	WDK :	SBLn1 SBL
Capacity (veh/h) HCM Lane V/C Ratio		1470	-	-	-	-
HCM Control Delay (s)		0.001 7.5	-	-	-	0
HCM Lane LOS		7.5 A	-	-	-	A
HCM 95th %tile Q(veh)		0	-	-	-	A -
HOW JOHN /OUR Q(VEH)		U	-	-	-	

Intersection						
Int Delay, s/veh	1					
Movement	NWL	NIMD	NET	NED	CIVII	SWT
		NWR	NET	NER	SWL	
Lane Configurations	74	00	1	00	7	^
Traffic Vol, veh/h	21	36	662	36	35	574
Future Vol, veh/h	21	36	662	36	35	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	0	1	0	0	1
Mymt Flow	23	39	712	39	38	617
WWW.	20	00	112	00	00	017
Major/Minor	Minor1	N	Major1	1	Major2	
Conflicting Flow All	1117	376	0	0	751	0
Stage 1	732	-	_	-	-	-
Stage 2	385	_	-	_	_	_
Critical Hdwy	6.9	6.9	_	_	4.1	_
Critical Hdwy Stg 1	5.9	-	_	_	-	_
Critical Hdwy Stg 2	5.9		_		_	
				-		
Follow-up Hdwy	3.55	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	197	627	-	-	868	-
Stage 1	429	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	627	-	-	868	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	619	-	-	-	-	-
g 	3.0					
Approach	NW		NE		SW	
HCM Control Delay, s	18		0		0.5	
HCM LOS	С					
Mineral and Maria	-4	NIET	MED	11 11 1	OM	OVACE
Minor Lane/Major Mvn	nt	NET	NEKN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-	337	868	-
HCM Lane V/C Ratio		-	-	0.182		-
HCM Control Delay (s))	-	-	18	9.3	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-
	,					

APPENDIX G

CAPACITY ANALYSIS WORKSHEETS 2031 FUTURE WITH PROJECT

	4)	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	116	8	16	780	474	103
Future Volume (vph)	116	8	16	780	474	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	1900	180	1300	1300	250
		1				200
Storage Lanes	0	I	1			l l
Taper Length (ft)	25	4.00	160	0.05	0.05	4.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
FIt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
Flt Permitted	0.950		0.449			
Satd. Flow (perm)	1736	1615	853	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		8				108
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0%	0%	2%	7%	3%
Adj. Flow (vph)	122	8	17	821	499	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	8	17	821	499	108
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				10	- 10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
•	1.00	9	1.00	1.00	1.00	9
Turning Speed (mph)			15	0	0	9
Number of Detectors	1	1	•	2	2	•
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	0.0	0.0	0.0	94	94	0.0
. ,						
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases						

	4)	7	1	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase			,			
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
- ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0	Lead	0.0		0.0
Lead/Lag Ontimize?					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	3.0	Yes 3.0	2.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.0	44.0	00.5	0	0	400.0
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.55	0.04	0.02	0.30	0.20	0.07
Control Delay	55.5	23.5	1.8	2.7	5.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	23.5	1.8	2.7	5.4	0.3
LOS	Е	С	Α	Α	Α	Α
Approach Delay	53.5			2.7	4.5	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	82	0	1	44	43	0
Queue Length 95th (ft)	144	15	m4	49	85	5
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180		, , , ,	250
Base Capacity (vph)	220	212	752	2702	2460	1486
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.04	0.02	0.30	0.20	0.07
	0.00	0.04	0.02	0.00	0.20	0.07
Intersection Summary						

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

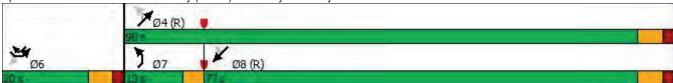
Intersection Signal Delay: 7.6 Intersection LOS: A

Intersection Capacity Utilization 38.0% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



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	٨	-	7	-	+	•	4	1	-	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	1		*	↑ 1→		*	†	7	*	1>	02.1
Traffic Volume (vph)	69	635	20	70	371	26	18	49	119	27	47	61
Future Volume (vph)	69	635	20	70	371	26	18	49	119	27	47	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180	1000	0	180	1000	0	110	1000	110	195	1000	0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170		· ·	180		· ·	105		•	120		U
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.995	0.50	1.00	0.990	0.50	1.00	1.00	0.850	1.00	0.916	1.00
Flt Protected	0.950	0.000		0.950	0.000		0.950		0.000	0.950	0.010	
Satd. Flow (prot)	1805	3453	0	1671	3384	0	1456	1810	1583	1805	1649	0
Flt Permitted	0.497	0400	<u> </u>	0.320	0004		0.681	1010	1000	0.677	10-13	
Satd. Flow (perm)	944	3453	0	563	3384	0	1043	1810	1583	1286	1649	0
Right Turn on Red	777	0400	Yes	303	3304	Yes	1043	1010	Yes	1200	1043	Yes
Satd. Flow (RTOR)		4	163		9	163			131		48	163
Link Speed (mph)		45			45			30	101		35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0.91	3%	37%	8%	6%	0.91	24%	5%	2%	0.91	5%	6%
Adj. Flow (vph)	76	698	22	77	408	29	24 /0	54	131	30	52	67
Shared Lane Traffic (%)	70	090	22	11	400	29	20	34	131	30	52	07
Lane Group Flow (vph)	76	720	0	77	437	0	20	54	131	30	119	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left		Left	Left	Right	Left	Left	
Median Width(ft)	Leit	12	Rigiit	Leit	12	Right	Leit	12	Rigiti	Leit	12	Right
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
()		10			10			10			Yes	
Two way Left Turn Lane Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	9	1.00	1.00	9	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph) Number of Detectors	13	2	9	10	2	9	10	2	1	10	2	9
Detector Template	Left			Left	Thru		Left	Thru		Left	Thru	
		Thru			100				Right			
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	20			20			20		20	20		
Detector 1 Size(ft)		6		CI+Ex	6 CI+Ex			6 CI+Ex	CI+Ex	Cl+Ex	6 CI+Ex	
Detector 1 Type Detector 1 Channel	CI+Ex	Cl+Ex		CI+EX	UI+EX		CI+Ex	UI+EX	UI+EX	UI+EX	UI+EX	
	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			Cl+Ex			CI+Ex	
Detector 2 Channel		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	*	1	•	•	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%	1	7.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.9	60.3		70.8	62.3		27.3	20.3	33.5	28.2	22.4	
Actuated g/C Ratio	0.64	0.55		0.64	0.57		0.25	0.18	0.30	0.26	0.20	
v/c Ratio	0.12	0.38		0.18	0.23		0.07	0.16	0.23	0.08	0.32	
Control Delay	6.8	15.0		7.4	12.2		30.8	42.3	6.5	30.8	27.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.8	15.0		7.4	12.2		30.8	42.3	6.5	30.8	27.1	
LOS	Α	В		Α	В		С	D	Α	С	С	
Approach Delay		14.2			11.4			18.3			27.9	
Approach LOS		В			В			В			С	
90th %ile Green (s)	8.5	58.7		8.8	59.0		8.5	14.8	8.8	8.7	15.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	7.6	59.7		7.8	59.9		7.3	15.9	7.8	7.6	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
50th %ile Green (s)	7.1	60.3		7.2	60.4		0.0	16.7	7.2	6.8	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	Ped	Gap	Gap	MaxR	
30th %ile Green (s)	6.5	60.9		6.6	61.0		0.0	27.0	6.6	0.0	27.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.8		5.7	71.0		0.0	27.0	5.7	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	17	144		17	74		10	34	0	16	40	
Queue Length 95th (ft)	33	193		33	97		30	73	46	40	105	
Internal Link Dist (ft)		812		400	993			776		40-	369	
Turn Bay Length (ft)	180	1000		180	1010		110		110	195	2=1	
Base Capacity (vph)	752	1893		532	1919		315	333	682	390	374	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.38		0.14	0.23		0.06	0.16	0.19	0.08	0.32	
Intersection Summary												

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 15.1 Intersection LOS: B

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	9.5											
Intersection LOS	Α											
	EDI	EDT	EDD	MIDI	MOT	MOD	NDI	NDT	NDD	ODI	ODT	000

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 1>		*	1		7	P		1	1	
Traffic Vol, veh/h	55	51	17	13	75	29	18	64	12	7	56	34
Future Vol, veh/h	55	51	17	13	75	29	18	64	12	7	56	34
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	79	73	24	19	107	41	26	91	17	10	80	49
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.4			9.2			9.6			9.8		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	84%	0%	100%	50%	0%	100%	46%	0%	62%	
Vol Right, %	0%	16%	0%	0%	50%	0%	0%	54%	0%	38%	
Sign Control	Stop										
Traffic Vol by Lane	18	76	55	34	34	13	50	54	7	90	
LT Vol	18	0	55	0	0	13	0	0	7	0	
Through Vol	0	64	0	34	17	0	50	25	0	56	
RT Vol	0	12	0	0	17	0	0	29	0	34	
Lane Flow Rate	26	109	79	49	49	19	71	77	10	129	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.045	0.173	0.138	0.078	0.075	0.033	0.115	0.12	0.021	0.202	
Departure Headway (Hd)	6.345	5.734	6.318	5.779	5.563	6.316	5.812	5.587	7.477	5.66	
Convergence, Y/N	Yes										
Cap	566	626	569	621	645	568	619	643	480	638	
Service Time	4.068	3.457	4.041	3.502	3.286	4.038	3.533	3.308	5.197	3.36	
HCM Lane V/C Ratio	0.046	0.174	0.139	0.079	0.076	0.033	0.115	0.12	0.021	0.202	
HCM Control Delay	9.4	9.7	10.1	9	8.7	9.3	9.3	9.1	10.4	9.8	
HCM Lane LOS	Α	Α	В	Α	Α	Α	Α	Α	В	Α	
HCM 95th-tile Q	0.1	0.6	0.5	0.3	0.2	0.1	0.4	0.4	0.1	8.0	

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^		*	1			4	7	-		7
Traffic Vol, veh/h	9	57	18	0	99	5	12	0	4	8	0	6
Future Vol, veh/h	9	57	18	0	99	5	12	0	4	8	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	92	92	60	60	92	92	92	60	92	60
Heavy Vehicles, %	22	7	2	2	1	0	2	2	2	0	2	0
Mvmt Flow	15	95	20	0	165	8	13	0	4	13	0	10
Major/Minor M	lajor1		I	Major2		ľ	Minor1		N	Minor2		
Conflicting Flow All	173	0	0	115	0	0	218	308	58	247	-	87
Stage 1	-	-	-	-	-	-	135	135	-	169	-	-
Stage 2	-	-	-	-	-	-	83	173	-	78	-	-
Critical Hdwy	4.54	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.42	-	-	2.22	-	-	3.52	4.02	3.32	3.5	_	3.3
Pot Cap-1 Maneuver	1267	-	-	1472	-	-	719	605	996	692	0	961
Stage 1	-	-	-	-	-	-	854	784	-	822	0	-
Stage 2	_	-	-	-	-	-	916	755	-	928	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1472	-	-	705	598	996	683	-	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	705	598	-	683	_	-
Stage 1	_	-	-	-	-	-	844	775	-	812	-	-
Stage 2	_	-	_	-	_	-	906	755	-	913	-	-
g-> -												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0			9.8			9.7		
HCM LOS							A			Α		
							- 1					
Minor Lane/Major Mvmt		NBLn11	VBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1 S	SBLn2	
Capacity (veh/h)		705	996	1267	-	-	1472	-		683	961	
HCM Lane V/C Ratio		0.019		0.012	-	-	-	-	-	0.02	0.01	
HCM Control Delay (s)		10.2	8.6	7.9	_	-	0	_	-	10.4	8.8	
HCM Lane LOS		В	A	A	_	_	A	-	_	В	A	
HCM 95th %tile Q(veh)		0.1	0	0	_	_	0	_	-	0.1	0	
		0.7								J. 1		

Intersection						
Int Delay, s/veh	1.6					
		EDD	WDI	WDT	NDI	NDD
	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	^	4	7	^	10	7
Traffic Vol, veh/h	71	4	25	95	10	8
Future Vol, veh/h	71	4	25	95	10	8
Conflicting Peds, #/hr	0	0	_ 0	_ 0	0	0
9	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage, #	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	4	27	103	11	9
NA - i / NA i	-!4		M-:0		A: A	
	ajor1		Major2		/linor1	
Conflicting Flow All	0	0	81	0	185	41
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	106	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1515	-	787	1021
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	907	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	_	1515	-	773	1021
Mov Cap-2 Maneuver	-	_	-	_	773	
Stage 1	_	_	_	_	935	_
Stage 2	_				891	_
Glage Z		_	_		031	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.5		9.2	
HCM LOS					Α	
N. 1 /N. 1 N. 1		UDL 41	VIDI O	EDT	EDD	MDI
Minor Lane/Major Mvmt	ſ	NBLn11		EBT	EBR	WBL
Capacity (veh/h)			1021	-		1515
HCM Lane V/C Ratio		0.014		-	-	0.018
HCM Control Delay (s)		9.7	8.6	-	-	7.4
HCM Lane LOS		Α	Α	-	-	Α
HCM 95th %tile Q(veh)		0	0	-	-	0.1

Intersection						
Int Delay, s/veh	1.8					
		EDD	CET	CED	N I VA /I	NI\A/T
	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		7	1			^
Traffic Vol, veh/h	0	52	79	0	0	119
Future Vol, veh/h	0	52	79	0	0	119
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	86	0	0	129
Major/Minor Ma	nor1	N.	Anier1	N.	/loior?	
	nor1		Major1		Major2	
Conflicting Flow All	-	43	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	1018	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	1018	-	-	-	-
Mov Cap-2 Maneuver	_	-	-	-	-	-
Stage 1	-	_	-	_	-	_
Stage 2	_	_	_	_	_	_
Olago Z	_					
Approach	EB		SE		NW	
HCM Control Delay, s	8.7		0		0	
HCM LOS	Α					
					055	
Mineral and Maina Maria		NIVA/T F	TD1 4	OFT		
Minor Lane/Major Mvmt		NWT E		SET	SER	
Capacity (veh/h)		-	1018	SET -	SER -	
Capacity (veh/h) HCM Lane V/C Ratio		-	1018 0.056	SET - -	SER -	
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	1018 0.056 8.7	-	-	
Capacity (veh/h) HCM Lane V/C Ratio		-	1018 0.056	-	- -	

Intersection													
Int Delay, s/veh	1.8												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations			7		4		*	1		*	**	7	
Traffic Vol, veh/h	0	0	38	25	0	71	31	701	12	15	412	47	
Future Vol, veh/h	0	0	38	25	0	71	31	701	12	15	412	47	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	Stop	-	-	None	-	-		-	-	None	
Storage Length	_	_	0	_	_	-	215	_	-	275	_	215	
Veh in Median Storage,	# -	0	_	_	0	_		0	-		0		
Grade, %	_	0	_	_	0	_	_	0	_	_	0	_	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	4	2	2	2	2	92	7	7	2	
	0		41	27		77	34	762	13	16	448	51	
Mvmt Flow	U	0	41	21	0	11	34	702	13	16	448	51	
Major/Minor M	linor2		1	Minor1		ı	Major1		ı	Major2			
Conflicting Flow All	-		224	1093	1368	388	499	0	0	775	0	0	
Stage 1	_		-	837	837	-	433	-	-	-	-	-	
Stage 2	_	_	_	256	531	_	_	_	_	_	_	_	
Critical Hdwy		-	6.94	7.58	6.54	6.94	4.14	_		4.24			
		-		6.58					-				
Critical Hdwy Stg 1	-	_	-		5.54	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	6.58	5.54	-	- 0.00	-	-	-	-	-	
ollow-up Hdwy	-	-	3.32	3.54	4.02	3.32	2.22	-	-	2.27	-	-	
Pot Cap-1 Maneuver	0	0	*938	*192	159	611	1277	-	-	805	-	-	
Stage 1	0	0	-	*323	380	-	-	-	-	-	-	-	
Stage 2	0	0	-	*880	669	-	-	-	-	-	-	-	
Platoon blocked, %			1	1	1		1	-	-		-	-	
Mov Cap-1 Maneuver	-	-	*938	*177	151	611	1277	-	-	805	-	-	
Mov Cap-2 Maneuver	-	-	-	*177	151	-	-	-	-	-	-	-	
Stage 1	-	-	-	*314	370	-	-	-	-	-	-	-	
Stage 2	-	-	-	*825	655	-	-	-	-	-	-	-	
Approach	SE			NW			NE			SW			
HCM Control Delay, s	9			18.4			0.3			0.3			
HCM LOS	A			C			0.0			0.0			
TOW EOO				0									
Minor Lane/Major Mvmt		NEL	NET	NERN	IWLn1	SELn1	SWL	SWT	SWR				
Capacity (veh/h)		1277	_	_	373	938	805	_	_				
HCM Lane V/C Ratio		0.026	_	_		0.044	0.02	_	_				
HCM Control Delay (s)		7.9	_	_	18.4	9	9.6	_	_				
HCM Lane LOS		7.9 A			C	A	9.0 A		-				
		0.1	-	-	1.1	0.1	0.1	-	-				
HCM 95th %tile Q(veh)		0.1	-	-	1.1	U. I	U. I	-	-				
Notes													
: Volume exceeds capa	acity	\$: De	lay exc	eeds 30	00s	+: Com	outation	Not De	efined	*: All	major v	olume ir	n platoon

Intersection							
Int Delay, s/veh	3.1						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	J
Lane Configurations	VVDL	WER	IND I	INDIK	SBL	<u>>DI</u>	
Traffic Vol, veh/h	1	1 8	T 75	6 9	1 7	T 68	ļ
Future Vol, veh/h	68	18	75 75	69	17	68	
	00	0	75	09	0	00	
Conflicting Peds, #/hr							
Sign Control RT Channelized	Stop -	Stop	Free	Free	Free	Free	
			-		150	None	
Storage Length	0	0	-	145	150	-	
Veh in Median Storage		-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	74	20	82	75	18	74	
Major/Minor N	Minor1	N	/lajor1	1	Major2		
Conflicting Flow All	192	82	0	0	157	0	
Stage 1	82	-	_	-	-	-	
Stage 2	110	_	_	_	-	_	
Critical Hdwy	6.42	6.22	_	_	4.12	_	
Critical Hdwy Stg 1	5.42	-	_	_	- 1.12	_	
Critical Hdwy Stg 2	5.42	_	_	_	_	_	
	3.518	3 318	_	_	2.218	_	
Pot Cap-1 Maneuver	797	978	_	_	1423	_	
Stage 1	941	-	_	_	-	_	
Stage 2	915	_	_	_	_	_	
Platoon blocked, %	310		_	_		_	
Mov Cap-1 Maneuver	787	978			1423		
Mov Cap-2 Maneuver	779	9/0	_	-	1423	_	
Stage 1	941	-	-	-		-	
<u> </u>		-	-	-	-	-	
Stage 2	903	-	-	-	-	-	
Approach	WB		NB		SB		
HCM Control Delay, s	9.8		0		1.5		
HCM LOS	Α						
Minor Lane/Major Mum	+	NBT	NIPDV	VBLn1V	VRI p2	SBL	
Minor Lane/Major Mvm	l	INDI					
Capacity (veh/h)		-	-		978	1423	
HCM Carter Dalay (2)		-		0.095		0.013	
HCM Control Delay (s)		-	-		8.8	7.6	
HCM C5th 0(tile O(tieh)		-	-	В	Α	A	
HCM 95th %tile Q(veh)		-	-	0.3	0.1	0	

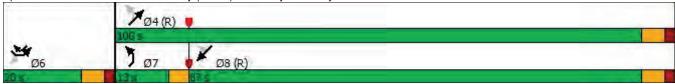
Intersection							
Int Delay, s/veh	0						
Movement	WBL	WBR	NBT	NBR	SBL	SBT	Į
				NBK			
Lane Configurations	7	7	1	٥	7	↑	
Traffic Vol, veh/h	0	0	94	0	0	85 85	
Future Vol, veh/h	0	0	94	0	0		
Conflicting Peds, #/hr	O Cton	O Ctop	0	0	0	0	
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-		- E0	None	
Storage Length	0	0	-	-	50	-	
Veh in Median Storage		-	0	-	-	0	
Grade, %	0	-	0	-	-	0	
Peak Hour Factor	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	
Mvmt Flow	0	0	102	0	0	92	
Major/Minor	Minor1	N	Major1		Major2		
Conflicting Flow All	194	102	0	0	102	0	
Stage 1	102	-	-	-	-	-	
Stage 2	92	_	_	_	_	_	
Critical Hdwy	6.42	6.22	_	-	4.12	_	
Critical Hdwy Stg 1	5.42	-	_	_	-	_	
Critical Hdwy Stg 2	5.42	_	_	_	_	_	
Follow-up Hdwy	3.518		_	_		_	
Pot Cap-1 Maneuver	795	953	_	_	1490		
Stage 1	922	-	_	_	1430	_	
Stage 2	932	_	_	_	_	_	
Platoon blocked, %	332	_	_	_	-	_	
Mov Cap-1 Maneuver	795	953		_	1490		
•	786	900	_	-		-	
Mov Cap-2 Maneuver	922		-	-	-	-	
Stage 1		-	-	-	-	-	
Stage 2	932	-	-	-	-	-	
Approach	WB		NB		SB		
HCM Control Delay, s	0		0		0		
HCM LOS	Α						
NAI	-4	NET	MDDV	VDI 41	VDI C	ODI	
Minor Lane/Major Mvn	nt	NBT	NRKA	VBLn1V		SBL	
		-	-	-	-	1490	
Capacity (veh/h)				-	-	-	
Capacity (veh/h) HCM Lane V/C Ratio		-	-		_	^	
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s))	-	-	0	0	0	
Capacity (veh/h) HCM Lane V/C Ratio		- - -			0 A	0 A 0	

	4)	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	206	23	24	749	1013	129
Future Volume (vph)	206	23	24	749	1013	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			1
•	25	l I	160			l I
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
FIt Permitted	0.950		0.228			
Satd. Flow (perm)	1805	1615	433	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				137
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0.54	0.54	0.54	1%	1%	6%
Adj. Flow (vph)	219	24	26	797	1078	137
Shared Lane Traffic (%)	213	24	20	131	1070	101
Lane Group Flow (vph)	219	24	26	797	1078	137
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
						CI+Ex
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+EX
Detector 1 Channel		0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6	. 0.111	7	4	8	6
- Totected Filases	<u> </u>		'	-	0	0

	4)	7	1	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase	<u> </u>					<u> </u>
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
• ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0	J.5 Lead	0.0		0.0
Lead/Lag					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	3.0	Yes 3.0	2.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.0	44.0	00.5	0	0	440.7
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	1.04	0.11	0.06	0.28	0.41	0.10
Control Delay	125.2	18.7	2.0	2.4	7.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.2	18.7	2.0	2.4	7.0	0.3
LOS	F	В	Α	Α	Α	Α
Approach Delay	114.7			2.4	6.2	
Approach LOS	F			Α	Α	
90th %ile Green (s)	14.0	14.0	6.3	94.0	84.2	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	6.0	94.0	84.5	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	~183	0	2	36	165	0
Queue Length 95th (ft)	#341	26	6	54	206	6
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180		, , , ,	250
Base Capacity (vph)	210	209	456	2799	2629	1416
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.11	0.06	0.28	0.41	0.10
	1.04	0.11	0.00	0.20	U. 4 I	0.10
Intersection Summary						

Area Type: Other Cycle Length: 120 Actuated Cycle Length: 120 Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green Natural Cycle: 60 Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.04 Intersection Signal Delay: 16.4 Intersection LOS: B Intersection Capacity Utilization 49.4% ICU Level of Service A Analysis Period (min) 15 ~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	۶	→	7	1	4	•	1	1	1	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 1>		7	* 1>		7	↑	7	*	T _P	
Traffic Volume (vph)	104	609	29	159	727	51	61	77	87	60	117	112
Future Volume (vph)	104	609	29	159	727	51	61	77	87	60	117	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			120		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.990				0.850		0.927	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3541	0	1770	1900	1568	1703	1744	0
Flt Permitted	0.278			0.325			0.376			0.704		
Satd. Flow (perm)	528	3551	0	611	3541	0	700	1900	1568	1262	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			7				93		34	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	111	648	31	169	773	54	65	82	93	64	124	119
Shared Lane Traffic (%)								<u> </u>				
Lane Group Flow (vph)	111	679	0	169	827	0	65	82	93	64	243	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15	,,,,,,	9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	0	O		0	O		O	O	O	O	O	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			Cl+Ex			CI+Ex	
Detector 2 Channel		JI-LX			JI. LA			01. LX			01. LX	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
1.100000 1.110000	'			<u> </u>			<u> </u>		J	'	U	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	71.3	60.4		74.7	62.2		33.7	23.7	39.7	33.7	23.7	
Actuated g/C Ratio	0.59	0.50		0.62	0.52		0.28	0.20	0.33	0.28	0.20	
v/c Ratio	0.28	0.38		0.35	0.45		0.24	0.22	0.16	0.17	0.65	
Control Delay	10.4	19.2		10.9	18.3		32.7	44.5	6.6	31.6	48.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.4	19.2		10.9	18.3		32.7	44.5	6.6	31.6	48.8	
LOS	В	В		В	В		С	D	Α	С	D	
Approach Delay		17.9			17.0			26.6			45.2	
Approach LOS		В			В			С			D	
90th %ile Green (s)	10.4	57.6		12.9	60.1		11.5	19.0	12.9	11.5	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Max	MaxR	Gap	Max	MaxR	
70th %ile Green (s)	9.1	59.4		11.1	61.4		9.8	20.6	11.1	9.9	20.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	8.3	60.5		10.0	62.2		8.6	21.8	10.0	8.7	21.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
30th %ile Green (s)	7.5	61.6		8.9	63.0		7.5	23.0	8.9	7.5	23.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
10th %ile Green (s)	6.4	63.1		7.4	64.1		0.0	34.0	7.4	0.0	34.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	31	162		49	182		36	55	0	36	154	
Queue Length 95th (ft)	54	219		77	220		72	106	38	71	#288	
Internal Link Dist (ft)	400	812		400	993		440	776	4.40	405	369	
Turn Bay Length (ft)	180	4704		180	4007		110	075	110	195	074	
Base Capacity (vph)	565	1791		600	1837		308	375	721	413	371	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0 45		0	0	0 13	0 15	0	
Reduced v/c Ratio	0.20	0.38		0.28	0.45		0.21	0.22	0.13	0.15	0.65	
Intersection Summary												

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 61.3% ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	10.5											
Intersection LOS	В											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	1		-	↑ 1>		1	1		-	1	
Traffic Vol, veh/h	75	111	73	35	140	53	43	89	5	18	86	42
Future Vol, veh/h	75	111	73	35	140	53	43	89	5	18	86	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	84	125	82	39	157	60	48	100	6	20	97	47
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	10.3	10.2	10.7	11.1
HCM LOS	В	В	В	В

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	95%	0%	100%	34%	0%	100%	47%	0%	67%	
Vol Right, %	0%	5%	0%	0%	66%	0%	0%	53%	0%	33%	
Sign Control	Stop										
Traffic Vol by Lane	43	94	75	74	110	35	93	100	18	128	
LT Vol	43	0	75	0	0	35	0	0	18	0	
Through Vol	0	89	0	74	37	0	93	47	0	86	
RT Vol	0	5	0	0	73	0	0	53	0	42	
Lane Flow Rate	48	106	84	83	124	39	105	112	20	144	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.094	0.19	0.158	0.144	0.198	0.075	0.185	0.185	0.039	0.251	
Departure Headway (Hd)	7.03	6.491	6.751	6.245	5.774	6.823	6.334	5.939	7.016	6.284	
Convergence, Y/N	Yes										
Cap	509	551	530	573	619	524	565	602	509	570	
Service Time	4.789	4.25	4.504	3.998	3.527	4.574	4.085	3.691	4.772	4.041	
HCM Lane V/C Ratio	0.094	0.192	0.158	0.145	0.2	0.074	0.186	0.186	0.039	0.253	
HCM Control Delay	10.5	10.8	10.8	10.1	10	10.1	10.5	10	10.1	11.2	
HCM Lane LOS	В	В	В	В	Α	В	В	Α	В	В	
HCM 95th-tile Q	0.3	0.7	0.6	0.5	0.7	0.2	0.7	0.7	0.1	1	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	**		ኘ	† 1>			4	7	7		7
Traffic Vol, veh/h	7	87	47	0	115	4	37	0	12	8	0	9
Future Vol, veh/h	7	87	47	0	115	4	37	0	12	8	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	92	92	82	82	92	92	92	82	92	82
Heavy Vehicles, %	0	1	2	2	2	0	2	2	2	0	2	0
Mvmt Flow	9	106	51	0	140	5	40	0	13	10	0	11
Major/Minor N	/lajor1			Major2		<u> </u>	Minor1		<u> </u>	Minor2		
Conflicting Flow All	145	0	0	157	0	0	220	295	79	214	-	73
Stage 1	-	-	-	-	-	-	150	150	-	143	-	-
Stage 2	-	-	-	-	-	-	70	145	-	71	-	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1450	-	-	1420	-	-	717	615	965	729	0	981
Stage 1	-	-	-	-	-	-	837	772	-	851	0	-
Stage 2	-	-	-	-	-	-	932	776	-	936	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1420	-	-	706	611	965	716	-	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	611	-	716	-	-
Stage 1	-	-	-	-	-	-	832	767	-	846	-	-
Stage 2	-	-	-	-	-	-	922	776	-	918	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0			10			9.4		
HCM LOS							В			Α		
Minor Lane/Major Mvmt	t N	NBLn1 I	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1	SBLn2	
Capacity (veh/h)		706	965	1450	-	-	1420	-	-		981	
HCM Lane V/C Ratio			0.014		_	_	-	_	_	0.014		
HCM Control Delay (s)		10.4	8.8	7.5	-	-	0	-	-		8.7	
HCM Lane LOS		В	А	Α	-	-	A	-	-	В	Α	
HCM 95th %tile Q(veh)		0.2	0	0	-	-	0	-	-	0	0	

Intersection						
Int Delay, s/veh	2.7					
		EDD	WDI	WDT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	10 5	40	7	^	7	74
Traffic Vol, veh/h	105	12	55	97	22	24
Future Vol, veh/h	105	12	55	97	22	24
Conflicting Peds, #/hr	0	0	0	_ 0	0	0
3	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	13	60	105	24	26
Major/Minor	-14	_	Mais = 0		Alia a ma	
	ajor1		Major2		/linor1	
Conflicting Flow All	0	0	127	0	294	64
Stage 1	-	-	-	-	121	-
Stage 2	-	-	-	-	173	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1457	-	673	987
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	_	1457	-	645	987
Mov Cap-2 Maneuver	-	_		_	645	-
Stage 1	_	_	_	_	891	_
Stage 2	_		_		806	_
Glaye Z	_	_	_		000	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.7		9.7	
HCM LOS					Α	
NAII/NA ' NA '		UDL 4	UDL C	CDT	EDD	MDI
Minor Lane/Major Mvmt	ſ	VBLn11		EBT	EBR	WBL
Capacity (veh/h)		645	987	-		1457
HCM Lane V/C Ratio			0.026	-	-	0.041
HCM Control Delay (s)		10.8	8.7	-	-	7.6
HCM Lane LOS		В	Α	-	-	Α
HCM 95th %tile Q(veh)		0.1	0.1	-	-	0.1

Intersection						
Int Delay, s/veh	2.6					
		EDD	OFT	OFF	N IVA/I	NINA/ T
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		7	1			^
Traffic Vol, veh/h	0	109	129	0	0	153
Future Vol, veh/h	0	109	129	0	0	153
Conflicting Peds, #/hr	0	0	_ 0	0	0	_ 0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-		-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, a		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	118	140	0	0	166
Major/Minor Mi	inor1	N	laior1	N	/aior?	
			/lajor1		/lajor2	
Conflicting Flow All	-	70	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	978	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	978	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
					A 11 4 7	
Approach	EB		SE		NW	
HCM Control Delay, s	9.2		0		0	
HCM LOS	Α					
Minor Lane/Major Mvmt		NWT E	-RI n1	SET	SER	
				OLI	OLIN	
Capacity (veh/h) HCM Lane V/C Ratio		-	978 0.121		-	
				-	-	
HCM Control Delay (s)		-	9.2	-	-	
HCM Lane LOS		-	Α	-	-	
HCM 95th %tile Q(veh)		-	0.4	-	-	

Intersection													
Int Delay, s/veh	3.5												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations			7		4		7	1		7	^	7	
Traffic Vol, veh/h	0	0	75	33	0	55	65	699	31	59	877	99	
Future Vol, veh/h	0	0	75	33	0	55	65	699	31	59	877	99	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	Stop	-	-	None	-	-		-	-	None	
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215	
Veh in Median Storage, #	‡ -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	0	2	0	2	1	0	0	1	2	
Mvmt Flow	0	0	82	36	0	60	71	760	34	64	953	108	
Major/Minor Mii	nor2		ľ	Minor1		ı	Major1		N	Major2			
Conflicting Flow All	-	-	477	1524	2108	397	1061	0	0	794	0	0	
Stage 1	-	_	-	919	919	-	-	-	-	-	-	-	
Stage 2	_	_	_	605	1189	_	_	_	_	_	_	_	
Critical Hdwy	_	_	6.94	7.5	6.54	6.9	4.14	_	_	4.1	_	_	
Critical Hdwy Stg 1	_	_	-	6.5	5.54	-	- 1.17	<u>-</u>	_	-	_	_	
Critical Hdwy Stg 2	_	_	_	6.5	5.54	_	_	_	_	_	_	_	
Follow-up Hdwy	_	_	3.32	3.5	4.02	3.3	2.22	_	_	2.2	_	_	
Pot Cap-1 Maneuver	0	0	*721	*91	52	608	1004	_	_	836	_	_	
Stage 1	0	0	121	*296	348	-	-	_	_	-	_	_	
Stage 2	0	0		*683	452	_					_		
Platoon blocked, %	U	U	1	1	1		1	_	_		_	_	
Mov Cap-1 Maneuver	_	_	*721	*72	44	608	1004	_	_	836	_	_	
Mov Cap-1 Maneuver	_	_	121	*72	44	-	-	_	_	-	_		
Stage 1	_			*275	323	_					_		
Stage 2		_		*560	417		_		_	-	_		
Slaye Z	-	-	-	500	41/	_	-	-	-	-	-	-	
Approach	SE			NW			NE			SW			
	10.6			56.3			0.7			0.6			
HCM LOS	В			50.5 F			0.1			0.0			
TOW LOO	D			'									
Minor Lane/Major Mvmt		NEL	NET	NERN	WLn1	SFI n1	SWL	SWT	SWR				
Capacity (veh/h)		1004	1121	- 11-111	160	721	836	J 1 1 1	-				
HCM Lane V/C Ratio		0.07		_		0.113		-	_				
HCM Control Delay (s)		8.9	-		56.3	10.6	9.7	-	-				
HCM Lane LOS		0.9 A		-	50.5 F		9.7 A		-				
HCM 95th %tile Q(veh)		0.2	-	-	3.2	0.4	0.2	-					
`		U.Z			3.2	0.4	U.Z		-				
Notes ~: Volume exceeds capac													
		A -		eeds 30		+: Comp			C 1	4 A II			n platoon

Intersection 3.4
Movement WBL WBR NBT NBR SBL SBT Lane Configurations 1
Lane Configurations 7 4 7 4 Traffic Vol, veh/h 125 31 106 125 31 163 Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Lane Configurations 7 4 7 4 Traffic Vol, veh/h 125 31 106 125 31 163 Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Traffic Vol, veh/h 125 31 106 125 31 163 Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free Free
Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Sign Control Stop Stop Free Free Free Free
<u> </u>
RT Channelized - None - None - None
111 0110111011200 110110 110110
Storage Length 0 0 - 145 150 -
Veh in Median Storage, # 0 - 0 0
Grade, % 0 - 0 - 0
Peak Hour Factor 92 92 92 92 92 92
Heavy Vehicles, % 2 2 2 2 2 2
Mvmt Flow 136 34 115 136 34 177
Major/Minor Minor1 Major1 Major2
Conflicting Flow All 360 115 0 0 251 0
•
Stage 2 245
Critical Hdwy 6.42 6.22 4.12 -
Critical Hdwy Stg 1 5.42
Critical Hdwy Stg 2 5.42
Follow-up Hdwy 3.518 3.318 2.218 -
Pot Cap-1 Maneuver 639 937 1314 -
Stage 1 910
Stage 2 796
Platoon blocked, %
Mov Cap-1 Maneuver 622 937 1314 -
Mov Cap-1 Maneuver 659
<u> </u>
Stage 1 910
Stage 2 775
Approach WB NB SB
HCM Control Delay, s 11.3 0 1.2
HCM LOS B
I IOWI LOS D
Minor Lane/Major Mymt NBT NBRWBLn1WBLn2 SBI
Minor Lane/Major Mvmt NBT NBRWBLn1WBLn2 SBL Capacity (veh/h) - 659 937 1314
Capacity (veh/h) 659 937 1314
Capacity (veh/h) 659 937 1314 HCM Lane V/C Ratio - 0.206 0.036 0.026
Capacity (veh/h) - - 659 937 1314 HCM Lane V/C Ratio - - 0.206 0.036 0.026 HCM Control Delay (s) - 11.9 9 7.8
Capacity (veh/h) 659 937 1314 HCM Lane V/C Ratio - 0.206 0.036 0.026

Traffic Vol, veh/h
Movement
Traffic Vol, veh/h
Traffic Vol, veh/h 0 0 137 0 0 194 Future Vol, veh/h 0 0 137 0 0 194 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Pa 2
Future Vol, veh/h 0 0 137 0 0 194 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Page 92 92 92
Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Rone None - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
Sign Control Stop Stop Free Rone Storage Length 0 2
RT Channelized - None - None - None Storage Length 0 0 - 50 - Veh in Median Storage, # 0 - 0 0 - 0 Grade, % 0 - 0 0 0 0 0 Peak Hour Factor 92
Storage Length 0 0 - - 50 - Veh in Median Storage, # 0 - 0 - 0 - 0 Grade, % 0 - 0 - - 0 Peak Hour Factor 92 92 92 92 92 92 Heavy Vehicles, % 2
Veh in Median Storage, # 0 - 0 - - 0 Grade, % 0 - 0 - - 0 Peak Hour Factor 92 92 92 92 92 92 Heavy Vehicles, % 2 1 4 9 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0
Grade, % 0 - 0 - - 0 Peak Hour Factor 92
Peak Hour Factor 92 143 92 93 94
Meavy Vehicles, % 2 2 2 2 2 2 2 2 Mvmt Flow 0 0 149 0 0 0 211
Mvmt Flow 0 0 149 0 0 211 Major/Minor Minor1 Major1 Major2 Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 - - - - - - Stage 2 211 -
Major/Minor Minor1 Major1 Major2 Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Stage 1 149 -
Stage 2 211 - - - - Critical Hdwy 6.42 6.22 - 4.12 - Critical Hdwy Stg 1 5.42 - - - - Critical Hdwy Stg 2 5.42 - - - - Follow-up Hdwy 3.518 3.318 - - 2.218 - Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - - Stage 2 824 - - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Critical Hdwy 6.42 6.22 - 4.12 - Critical Hdwy Stg 1 5.42 - - - - Critical Hdwy Stg 2 5.42 - - - - Follow-up Hdwy 3.518 3.318 - - 2.218 - Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - - Stage 2 824 - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - Stage 1 879 - - - - - Stage 2 824 - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Critical Hdwy Stg 1 5.42 - - - - Critical Hdwy Stg 2 5.42 - - - - Follow-up Hdwy 3.518 3.318 - - 2.218 - Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - Stage 1 879 - - - - - Stage 2 824 - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Critical Hdwy Stg 2 5.42 -
Follow-up Hdwy 3.518 3.318 2.218 - Pot Cap-1 Maneuver 639 898 - 1432 - Stage 1 879 Stage 2 824 Platoon blocked, % Mov Cap-1 Maneuver 639 898 - 1432 - Mov Cap-2 Maneuver 679 Stage 1 879 Stage 2 824 Approach WB NB SB HCM Control Delay, s 0 0 0
Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - Stage 2 824 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - Stage 1 879 - - - - - Stage 2 824 - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Stage 1 879 -
Stage 2 824 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - </td
Stage 2 824 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - - Stage 1 879 - - - - - - Stage 2 824 - - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Platoon blocked, % - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 -
Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 -
Mov Cap-2 Maneuver 679 -
Stage 1 879 -
Stage 2 824 - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Approach WB NB SB HCM Control Delay, s 0 0 0
HCM Control Delay, s 0 0 0
HCM Control Delay, s 0 0 0
,
HCM LOS A
Minor Lane/Major Mvmt NBT NBRWBLn1WBLn2 SBL
·
Capacity (veh/h) 1432
HCM Lane V/C Ratio
HCM Control Delay (s) 0 0 0
HCM Lane LOS A A A
HCM 95th %tile Q(veh) 0

	4	1	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	**	7
Traffic Volume (vph)	275	22	19	697	707	161
Future Volume (vph)	275	22	19	697	707	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
	0	1	100			250
Storage Lanes		l l	· ·			I
Taper Length (ft)	25	4.00	160	0.05	0.05	4.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
FIt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.336			
Satd. Flow (perm)	1787	1615	638	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				169
Link Speed (mph)	40			45	45	.00
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	289	23	20	734	744	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	289	23	20	734	744	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	9	1.00	1.00	1.00	9
Number of Detectors	15	1	10	2	2	1
		•	•			•
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	0.0	0.0	0.0	94	94	0.0
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel				0.0		
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	4	1	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase				<u>'</u>		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag	0.0	0.0	Lead	0.0		0.0
•					Lag Yes	
Lead-Lag Optimize?	2.0	2.0	Yes 3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0 May	3.0				
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.0	44.0	70 5	0	70.0	00.0
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	1.16	0.09	0.04	0.28	0.30	0.12
Control Delay	145.6	16.0	1.6	2.2	6.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	145.6	16.0	1.6	2.2	6.5	0.4
LOS	F	В	Α	Α	Α	Α
Approach Delay	136.1			2.2	5.4	
Approach LOS	F			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	~219	0	1	29	68	0
Queue Length 95th (ft)	#381	23	m3	39	133	7
Internal Link Dist (ft)	208	20	1110	691	759	,
Turn Bay Length (ft)	200		180	001	100	250
Base Capacity (vph)	250	245	598	2644	2508	1453
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.09	0.03	0.28	0.30	0.12
	1.10	0.09	0.03	0.20	0.50	0.12
Intersection Summary						

Area Type: Other Cycle Length: 100 Actuated Cycle Length: 100 Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green Natural Cycle: 55 Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.16 Intersection Signal Delay: 24.8 Intersection LOS: C Intersection Capacity Utilization 44.8% ICU Level of Service A Analysis Period (min) 15 ~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal. Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy Ø4 (R)

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		7	* 1>		*	↑	7	*	T _P	
Traffic Volume (vph)	134	643	20	106	520	59	39	55	65	69	77	126
Future Volume (vph)	134	643	20	106	520	59	39	55	65	69	77	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170		· ·	180		· ·	105		•	120		J
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.995	0.00	1.00	0.985	0.00	1.00	1.00	0.850	1.00	0.907	1.00
Flt Protected	0.950	0.000		0.950	0.000		0.950		0.000	0.950	0.001	
Satd. Flow (prot)	1770	3592	0	1805	3524	0	1805	1900	1568	1805	1723	0
FIt Permitted	0.342	0002		0.311	0021		0.592	1000	1000	0.659	1720	
Satd. Flow (perm)	637	3592	0	591	3524	0	1125	1900	1568	1252	1723	0
Right Turn on Red	001	0002	Yes	001	00Z-T	Yes	1120	1500	Yes	1202	1720	Yes
Satd. Flow (RTOR)		3	103		13	103			71		73	103
Link Speed (mph)		45			45			30	7 1		35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
	2%		0.90	0.90	1%	0.90	0.90		3%	0.90	0.90	
Heavy Vehicles (%)	140	0%	21			61		0%	5% 68	72		0%
Adj. Flow (vph)	140	670	21	110	542	01	41	57	00	12	80	131
Shared Lane Traffic (%)	440	004	^	440	000	0	4.4		C0	70	044	0
Lane Group Flow (vph)	140	691	0	110	603	0	41	57	68	72	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	4.00	4.00	4.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	Yes	4.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	53.9	42.2		52.1	41.2		32.6	24.2	38.5	35.3	27.2	
Actuated g/C Ratio	0.54	0.42		0.52	0.41		0.33	0.24	0.38	0.35	0.27	
v/c Ratio	0.31	0.46		0.27	0.41		0.10	0.12	0.11	0.15	0.40	
Control Delay	12.3	22.1		12.3	22.6		21.5	33.1	5.4	22.0	23.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	12.3	22.1		12.3	22.6		21.5	33.1	5.4	22.0	23.4	
LOS	В	С		В	С		С	С	Α	С	С	
Approach Delay		20.5			21.0			18.9			23.1	
Approach LOS		С			С			В			С	
90th %ile Green (s)	12.0	39.9		10.6	38.5		8.8	19.8	10.6	10.7	21.7	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	10.3	41.3		9.2	40.2		7.7	21.4	9.2	9.1	22.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	9.2	42.2		8.3	41.3		6.9	22.4	8.3	8.1	23.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
30th %ile Green (s)	8.1	43.1		7.4	42.4		0.0	23.4	7.4	7.1	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Gap	MaxR	
10th %ile Green (s)	6.7	44.3		6.2	43.8		0.0	34.0	6.2	0.0	34.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	40	161		31	122		17	29	0	30	73	
Queue Length 95th (ft)	69	221		60	181		40	65	26	61	148	
Internal Link Dist (ft)		812			993			776			369	
Turn Bay Length (ft)	180			180			110		110	195		
Base Capacity (vph)	546	1516		534	1460		479	459	770	518	522	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.26	0.46		0.21	0.41		0.09	0.12	0.09	0.14	0.40	
Intersection Summary												

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 20.9

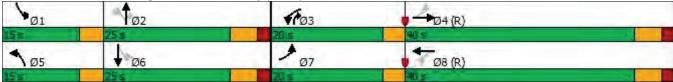
Intersection LOS: C

Intersection Capacity Utilization 56.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	10											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lana Configurations	*	A.T.		*	A.T.		*	Φ.		*	Φ.	

Lane Configurations	7	* 1>		1	* 1>	·	7	P		7	T ₂	
Traffic Vol, veh/h	58	139	76	28	172	49	61	68	1	30	47	20
Future Vol, veh/h	58	139	76	28	172	49	61	68	1	30	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	63	151	83	30	187	53	66	74	1	33	51	22
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.9			10.1			10.3			10		
HCM LOS	Α			В			В			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	99%	0%	100%	38%	0%	100%	54%	0%	70%	
Vol Right, %	0%	1%	0%	0%	62%	0%	0%	46%	0%	30%	
Sign Control	Stop										
Traffic Vol by Lane	61	69	58	93	122	28	115	106	30	67	
LT Vol	61	0	58	0	0	28	0	0	30	0	
Through Vol	0	68	0	93	46	0	115	57	0	47	
RT Vol	0	1	0	0	76	0	0	49	0	20	
Lane Flow Rate	66	75	63	101	133	30	125	116	33	73	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.127	0.133	0.114	0.168	0.206	0.056	0.21	0.186	0.063	0.127	
Departure Headway (Hd)	6.885	6.408	6.524	6.019	5.58	6.568	6.08	5.806	6.988	6.278	
Convergence, Y/N	Yes										
Cap	520	559	550	596	644	546	591	618	513	571	
Service Time	4.626	4.149	4.26	3.755	3.316	4.304	3.816	3.542	4.731	4.02	
HCM Lane V/C Ratio	0.127	0.134	0.115	0.169	0.207	0.055	0.212	0.188	0.064	0.128	
HCM Control Delay	10.6	10.1	10.1	10	9.8	9.7	10.4	9.9	10.2	9.9	
HCM Lane LOS	В	В	В	Α	А	А	В	Α	В	Α	
HCM 95th-tile Q	0.4	0.5	0.4	0.6	0.8	0.2	0.8	0.7	0.2	0.4	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^		7	44			4	7	7		7
Traffic Vol, veh/h	1	100	70	0	130	0	63	0	21	0	0	0
Future Vol, veh/h	1	100	70	0	130	0	63	0	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	92	92	85	85	92	92	92	85	92	85
Heavy Vehicles, %	0	0	2	2	3	0	2	2	2	0	2	0
Mvmt Flow	1	118	76	0	153	0	68	0	23	0	0	0
Major/Minor N	/lajor1			Major2		N	/linor1		N	Minor2		
Conflicting Flow All	153	0	0	194	0	0	235	311	97	214	_	77
Stage 1	-	-	-	-	-	-	158	158	-	153	-	-
Stage 2	-	-	-	-	-	-	77	153	-	61	-	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1440	-	-	1377	-	-	700	602	940	729	0	975
Stage 1	-	-	-	-	-	-	828	766	-	840	0	-
Stage 2	-	-	-	-	-	-	923	770	-	949	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1440	-	-	1377	-	-	699	601	940	711	-	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	601	-	711	-	-
Stage 1	-	-	-	-	-	-	827	765	-	839	-	-
Stage 2	-	-	-	-	-	-	923	770	-	925	-	-
, i												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			10.3			0		
HCM LOS							В			Α		
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1 S	SBL _{n2}	
Capacity (veh/h)		699	940	1440	-	-	1377	-	-	-	-	
HCM Lane V/C Ratio					-	-	-	-	-	-	-	
HCM Control Delay (s)		10.7	8.9	7.5	-	-	0	-	-	0	0	
HCM Lane LOS		В	Α	A	-	-	A	-	-	A	A	
HCM 95th %tile Q(veh)		0.3	0.1	0	-	-	0	-	-	-	-	

Intersection						
Int Delay, s/veh	3.5					
	EBT	EBR	\\/DI	WDT	NDL	NBR
		EBK	WBL	WBT	NBL	
Lane Configurations	^	20	70	^	1	10
Traffic Vol, veh/h	111	20	79	100	31	42
Future Vol, veh/h	111	20	79	100	31	42
Conflicting Peds, #/hr	0	_ 0	0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage, #		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	22	86	109	34	46
Major/Minor Ma	nior1	N	Major?	ı	/linor1	
	ajor1		Major2			70
Conflicting Flow All	0	0	143	0	359	72
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	227	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1437	-	613	975
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1437	-	576	975
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	_	-	-	-	880	-
Stage 2	-	-	-	_	742	_
01030 =						
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.4		10	
HCM LOS					В	
Minor Lane/Major Mvmt	N	NBLn11	VIRI n2	EBT	EBR	WBL
Capacity (veh/h)		576	975 0.047	-		1437
HCM Control Dolay (a)				-	-	0.06
HCM Control Delay (s)		11.6	8.9	-	-	7.7
HCM Lane LOS		В	A	-	-	A
HCM 95th %tile Q(veh)		0.2	0.1	-	-	0.2

Intersection						
Int Delay, s/veh	3					
		EDD	CET	CED	NI/A/I	NI\A/T
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		7	1			11
Traffic Vol, veh/h	0	153	153	0	0	180
Future Vol, veh/h	0	153	153	0	0	180
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	166	166	0	0	196
NA - : /NA: NA	!4		1-11	, and a	4-10	
	inor1		/lajor1		//ajor2	
Conflicting Flow All	-	83	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	960	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	960	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	_	-	_
Stage 1	_	_	-	_	_	_
Stage 2	_	_	_	_	_	_
Olago Z	_	_				
Approach	EB		SE		NW	
HCM Control Delay, s	9.5		0		0	
HCM LOS	Α					
NA' - 1 /NA - 1 - NA 1		AUA/T F	-DL 4	OFT	٥٥٥	
Minor Lane/Major Mvmt		NWT E		SET	SER	
Capacity (veh/h)		-		-	-	
HCM Lane V/C Ratio		-	0.173	-	-	
HCM Control Delay (s)		-	9.5	-	-	
HCM Lane LOS		-	Α	-	-	
HCM 95th %tile Q(veh)		-	0.6	-	-	
, ,						

Intersection													
Int Delay, s/veh	2.2												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations			7		4		*	1		7	**	7	
Traffic Vol, veh/h	0	0	102	21	0	36	89	654	36	35	555	139	
Future Vol, veh/h	0	0	102	21	0	36	89	654	36	35	555	139	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	93	92	93	92	93	93	93	93	92	
Heavy Vehicles, %	2	2	2	5	2	0	2	1	0	0	1	2	
Mvmt Flow	0	0	111	23	0	39	97	703	39	38	597	151	
Major/Minor N	/linor2		N	Minor1			Major1		N	/aior?			
					4744					Major2			
Conflicting Flow All	-	-	299	1292 917	1741	371	748	0	0	742	0	0	
Stage 1	-	-	-		917	-	-	-	-	-	-	-	
Stage 2	-	-	-	375	824	-	-	-	-	- 4 4	-	-	
Critical Hdwy	-	-	6.94	7.6	6.54	6.9	4.14	-	-	4.1	-	-	
Critical Hdwy Stg 1	-	-	-	6.6	5.54	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	- 2.20	6.6	5.54	-	- 0.00	-	-	-	-	-	
Follow-up Hdwy	-	-	3.32	3.55	4.02	3.3	2.22	-	-	2.2	-	-	
Pot Cap-1 Maneuver	0	0	*863	*135	91	632	1117	-	-	874	-	-	
Stage 1	0	0	-	*287	349	-	-	-	-	-	-	-	
Stage 2	0	0	-	*807	546	-	-	-	-	-	-	-	
Platoon blocked, %			*000	*100	1	620	1	-	-	074	-	-	
Mov Cap-1 Maneuver	-	-	*863	*106	80	632	1117	-	-	874	-	-	
Mov Cap-2 Maneuver	-	-	-	*106	80	-	-	-	-	-	-	-	
Stage 1	-	-	-	*262 *673	319 523	-	-	-	-	-	-	-	
Stage 2	-	-	-	0/3	523	-	-	-	-	-	-	-	
Approach	SE			NW			NE			SW			
HCM Control Delay, s	9.8			27.2			1			0.4			
HCM LOS	Α			D									
Minor Lane/Major Mvmt	ŀ	NEL	NET	NERN	IWLn1	SFLn1	SWL	SWT	SWR				
Capacity (veh/h)		1117	-	142141	223	863	874	-	-				
HCM Lane V/C Ratio		0.087	-	_		0.128		-	_				
HCM Control Delay (s)		8.5	-		27.2	9.8	9.3	-					
HCM Lane LOS		Α	_	_	D	9.0 A	9.5 A	_	_				
HCM 95th %tile Q(veh)		0.3		_	1.1	0.4	0.1						
` ′		0.0			1.1	0.4	0.1						
Votes													
: Volume exceeds cap	acity	\$: De	lay exc	eeds 30	00s	+: Com	putation	Not De	efined	*: All	major v	olume ii	n platoon

Intersection						
Int Delay, s/veh	4.3					
		WDD	NDT	NDD	CDI	CDT
Movement Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	161	10	01	157	30	112
Traffic Vol, veh/h	161	40 40	91	157	38 38	113 113
Future Vol, veh/h Conflicting Peds, #/hr	161	40	91	157	38	0
				Free	Free	Free
Sign Control RT Channelized	Stop -	Stop	Free	None		None
	0		-	145	150	
Storage Length		0	0	145	150	0
Veh in Median Storage						
Grade, %	0	- 00	0	- 00	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	175	43	99	171	41	123
Major/Minor	Minor1	N	Major1	- 1	Major2	
Conflicting Flow All	304	99	0	0	270	0
Stage 1	99	-	-	-		-
Stage 2	205	_	-	_	-	_
Critical Hdwy	6.42	6.22	_	_	4.12	_
Critical Hdwy Stg 1	5.42	-	_	_	-	_
Critical Hdwy Stg 2	5.42	_	_	_	_	_
Follow-up Hdwy	3.518	3.318	_	_	2.218	_
Pot Cap-1 Maneuver	688	957	-	-	1293	-
Stage 1	925	-	_	_	-	_
Stage 2	829	-	_	_	-	-
Platoon blocked, %	320		_	_		_
Mov Cap-1 Maneuver	666	957	_	_	1293	_
Mov Cap-1 Maneuver	689	-	_	_	1200	_
Stage 1	925				-	
Stage 2	802	_		_		_
Stage 2	002	_	_	_	_	_
Approach	WB		NB		SB	
HCM Control Delay, s	11.4		0		2	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NRRV	VBLn1V	VRI n2	SBL
Capacity (veh/h)		INDI	-	689	957	1293
HCM Lane V/C Ratio		_		0.254		
HCM Control Delay (s)				12	8.9	7.9
HCM Lane LOS		-		B	Α	7.9 A
HCM 95th %tile Q(veh)			1	0.1	0.1
TION JOHN JOHN WING WING	1			-	0.1	0.1

latana atta						
Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	-	7	P		1	↑
Traffic Vol, veh/h	0	0	131	0	0	151
Future Vol, veh/h	0	0	131	0	0	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	50	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	0	142	0	0	164
WIVIIICI IOW	U	0	172	U	U	104
Major/Minor	Minor1	N	Major1	N	Major2	
Conflicting Flow All	306	142	0	0	142	0
Stage 1	142	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	686	906	-	_	1441	-
Stage 1	885	-	_	_		_
Stage 2	865	_	_	_	_	_
Platoon blocked, %	000		_	_		_
Mov Cap-1 Maneuver	686	906	_		1441	
	712	900	-	-	1441	
Mov Cap-2 Maneuver			-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS	A					
	, ,					
			NET		VDI 6	05:
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1V	VBLn2	SBL
Capacity (veh/h)		-	-	-	-	1441
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s)		-	-	0	0	0
HCM Lane LOS		-	-	Α	Α	Α
HCM 95th %tile Q(veh)	-	-	-	-	0

APPENDIX H

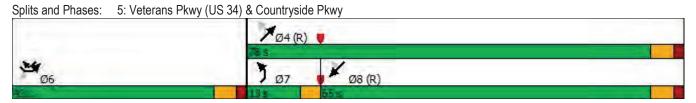
CAPACITY ANALYSIS WORKSHEETS 2031 FUTURE WITH PROJECT WITH PROPOSED MITIGATION

	4	1	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	206	23	24	749	1013	129
Future Volume (vph)	206	23	24	749	1013	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1000	1000	250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.850	1.00	0.90	0.33	0.850
FIt Protected	0.950	0.000	0.950			0.000
		1615		2574	2574	1504
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
FIt Permitted	0.950	4045	0.176	0574	0574	4504
Satd. Flow (perm)	1805	1615	334	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				137
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	219	24	26	797	1078	137
Shared Lane Traffic (%)						
Lane Group Flow (vph)	219	24	26	797	1078	137
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32	rtigrit	LGIL	12	12	rtigrit
Link Offset(ft)	0			0	0	
	16				16	
Crosswalk Width(ft)	10			16	10	
Two way Left Turn Lane	4.00	4.00	4.00	4.00	4.00	4.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	94	94	0.0
Detector 2 Position(ft)						
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

11/12/2024 V3 Companies

	4	7	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	42.0	42.0	13.0	78.0	65.0	42.0
Total Split (%)	35.0%	35.0%	10.8%	65.0%	54.2%	35.0%
Maximum Green (s)	36.0	36.0	9.5	72.0	59.0	36.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
. ,	0.0		0.0		0.0	0.0
Lost Time Adjust (s)		0.0		0.0		
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	36.0	36.0	74.5	72.0	66.0	110.4
Actuated g/C Ratio	0.30	0.30	0.62	0.60	0.55	0.92
v/c Ratio	0.40	0.05	0.09	0.37	0.55	0.10
Control Delay	36.2	11.2	7.5	9.1	19.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	11.2	7.5	9.1	19.5	0.0
LOS	30.2 D	11.2 B	7.5 A	9.1 A	19.5 B	0.5 A
	33.8	D	A	9.1	17.3	A
Approach LOS						
Approach LOS	C	20.0	7.4	A 70.0	B	20.0
90th %ile Green (s)	36.0	36.0	7.1	72.0	61.4	36.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	36.0	36.0	6.5	72.0	62.0	36.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	36.0	36.0	6.1	72.0	62.4	36.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	36.0	36.0	0.0	72.0	72.0	36.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	36.0	36.0	0.0	72.0	72.0	36.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	135	0	5	92	291	0
Queue Length 95th (ft)	208	21	13	118	364	6
Internal Link Dist (ft)	208	۷۱	13	691	759	U
()	200		180	091	109	250
Turn Bay Length (ft)		E04		2444	1064	
Base Capacity (vph)	541	501	323	2144	1964	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.05	0.08	0.37	0.55	0.10
Intersection Summary						

Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT,	Start of Green	
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.55		
Intersection Signal Delay: 16.1	Intersection LOS: B	
Intersection Capacity Utilization 49.4%	ICU Level of Service A	
Analysis Period (min) 15		



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	4	1	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	275	22	19	697	707	161
Future Volume (vph)	275	22	19	697	707	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1000	1000	250
Storage Lanes	0	1	1			1
Taper Length (ft)	25	'	160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.850	1.00	0.90	0.93	0.850
Flt Protected	0.950	0.050	0.950			0.000
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950	1015	0.271	3374	3374	1556
		1015		2574	2574	4520
Satd. Flow (perm)	1787	1615	515	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				169
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	289	23	20	734	744	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	289	23	20	734	744	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32	3		12	12	.3
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	- 10			-10	10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
•	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15	2	0	
Number of Detectors		1 Diabt	•	2 Than	2 Thu:	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel				OI · LX	OI · LX	
Detector 2 Extend (s)				0.0	0.0	
	Drot	Dorm	nmint			nmunu
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

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	4	7	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases	022	6	4	.,_,		8
Detector Phase	6	6	7	4	8	6
Switch Phase			,	7		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	43.0	43.0	13.0	57.0	44.0	43.0
Total Split (%)	43.0%	43.0%	13.0%	57.0%	44.0%	43.0%
				51.0%		
Maximum Green (s)	37.0	37.0	9.5		38.0	37.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effet Green (s)	37.0	37.0	53.5	51.0	47.0	93.6
Actuated g/C Ratio	0.37	0.37	0.54	0.51	0.47	0.94
v/c Ratio	0.44	0.04	0.06	0.40	0.44	0.12
Control Delay	26.3	8.3	9.7	12.8	19.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	8.3	9.7	12.8	19.7	0.4
LOS	С	Α	Α	В	В	Α
Approach Delay	25.0			12.8	16.1	
Approach LOS	С			В	В	
90th %ile Green (s)	37.0	37.0	6.9	51.0	40.6	37.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	37.0	37.0	6.3	51.0	41.2	37.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
30th %ile Term Code						
	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	137	0	4	89	147	0
Queue Length 95th (ft)	211	16	m11	144	238	8
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	661	612	398	1822	1678	1450
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.04	0.05	0.40	0.44	0.12
	0.44	0.04	0.03	0.40	0.44	0.12
Intersection Summary						

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

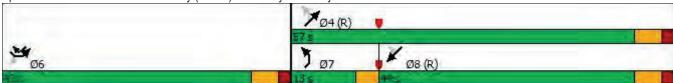
Intersection Signal Delay: 16.2 Intersection LOS: B

Intersection Capacity Utilization 44.8% ICU Level of Service A

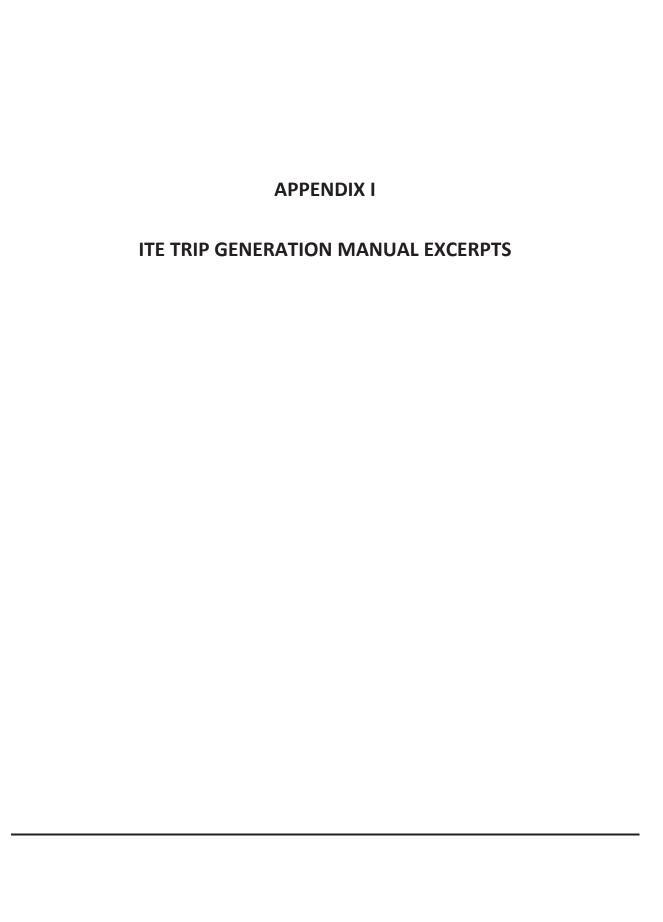
Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



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Land Use: 857 **Discount Club**

Description

A discount club is a discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items such as food, beverages, household items, clothing, tires, and appliances. Many items are sold in large quantities or bulk. Some sites may include on-site fueling pumps.

Additional Data

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alabama, Alberta (CAN), California, Connecticut, Delaware, Florida, Maryland, Massachusetts, Minnesota, Ohio, Oregon, Pennsylvania, and Washington.

To assist in the future analysis of this land use, it is important to collect and include information on the presence of vehicle fueling stations in trip generation data submissions.

Source Numbers

212, 245, 333, 344, 345, 346, 424, 438, 445, 580, 584, 700, 715, 719, 975, 1047



Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

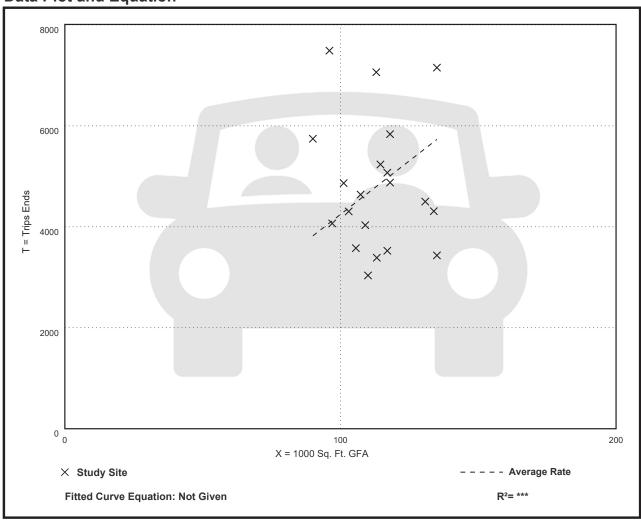
Setting/Location: General Urban/Suburban

Number of Studies: 20 Avg. 1000 Sq. Ft. GFA: 113

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
42.46	25.44 - 78.02	13.04





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

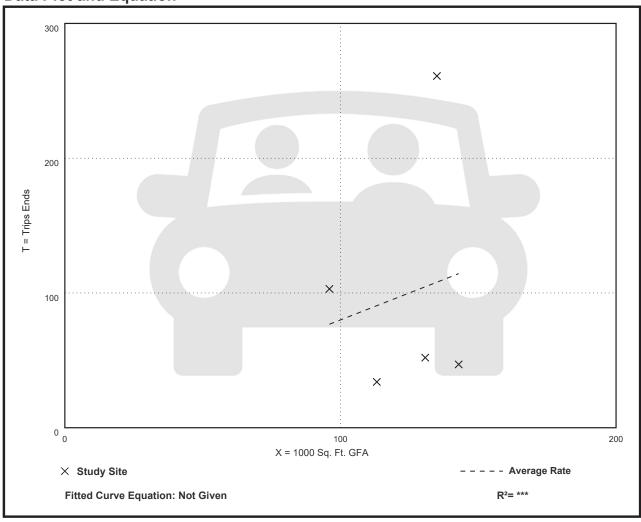
Setting/Location: General Urban/Suburban

Number of Studies: 5 Avg. 1000 Sq. Ft. GFA: 124

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.80	0.30 - 1.93	0.73





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

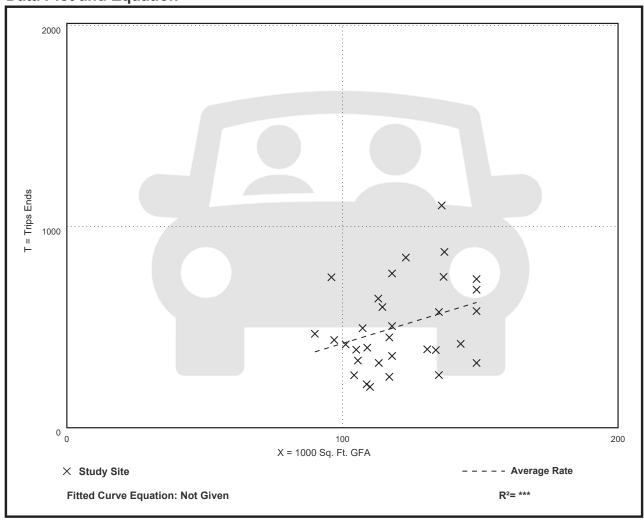
Setting/Location: General Urban/Suburban

Number of Studies: 32 Avg. 1000 Sq. Ft. GFA: 121

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.19	1.85 - 8.13	1.70





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday

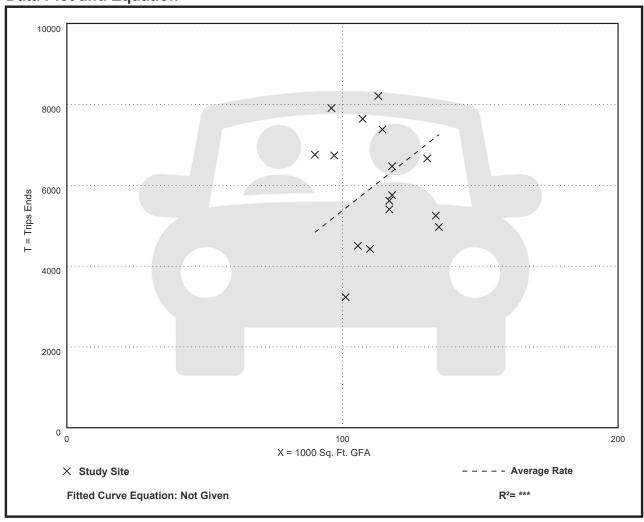
Setting/Location: General Urban/Suburban

Number of Studies: 16 Avg. 1000 Sq. Ft. GFA: 113

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
53.75	31.97 - 82.43	15.25





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Saturday, Peak Hour of Generator

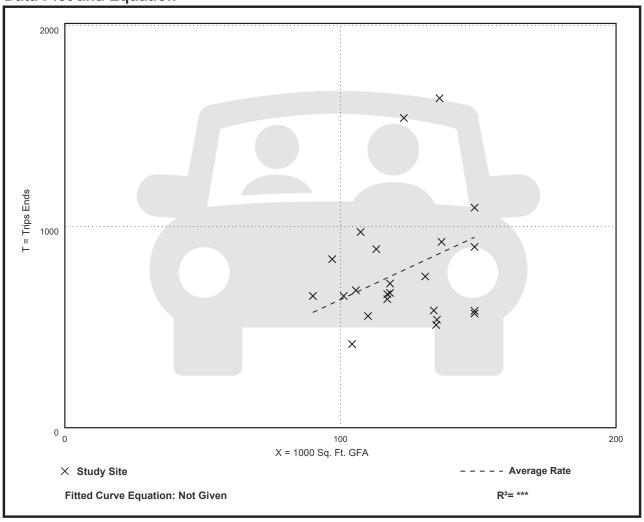
Setting/Location: General Urban/Suburban

Number of Studies: 23 Avg. 1000 Sq. Ft. GFA: 123

Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
6.37	3.79 - 12.52	2.43





Land Use: 944 **Gasoline/Service Station**

Description

This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have facilities for servicing and repairing motor vehicles. The gasoline/service station may also have a car wash. Convenience store/gas station (Land Use 945) and truck stop (Land Use 950) are related uses.

Additional Data

The independent variable—vehicle fueling positions—is defined as the maximum number of vehicles that can be fueled simultaneously. The sites in this land use include both self-pump and attendant-pumped fueling positions and both pre-pay and post-pay operations.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/tripand-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Kentucky, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario (CAN), Oregon, South Dakota, Texas, and Washington.

Specialized Land Use Data

A 2006 study provided data on four private fuel facilities in Florida (source 721). These facilities provide self-fuel service for any motorist with a pre-established membership account. The site is not open to the general public. The trip generation characteristics of these sites differ from sites included in this land use; therefore, trip generation information for these sites is excluded from the data plots. The four sites have an average of nine vehicle fueling positions, with an average of 12 vehicle trips during the weekday, AM peak hour of adjacent traffic and 7 vehicle trips during the weekday, PM peak hour of adjacent street traffic.

Source Numbers

221, 274, 278, 288, 340, 350, 351, 355, 359, 366, 440, 583, 617, 618, 631, 721, 867, 882, 883, 888, 954, 977



Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions On a: Weekday

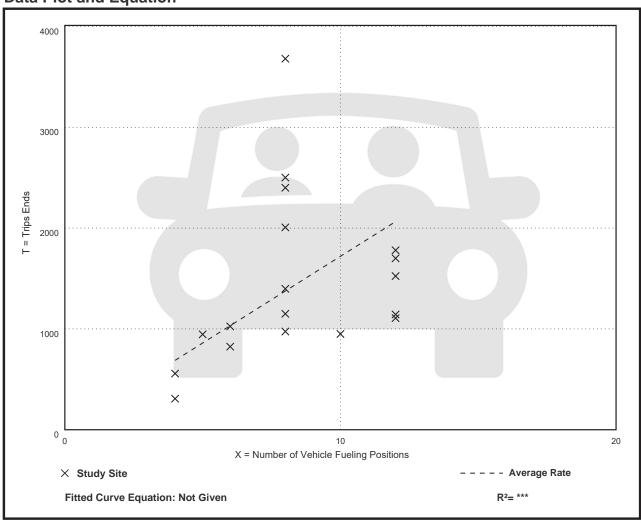
Setting/Location: General Urban/Suburban

Number of Studies: 18 Avg. Num. of Vehicle Fueling Positions: 8

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
172.01	77.00 - 460.00	96.45





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

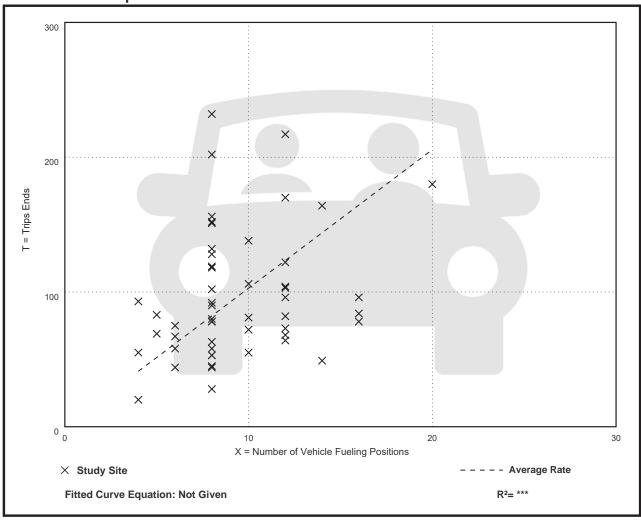
Number of Studies: 53

Avg. Num. of Vehicle Fueling Positions: 9

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
10.28	3.50 - 29.00	5.36





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

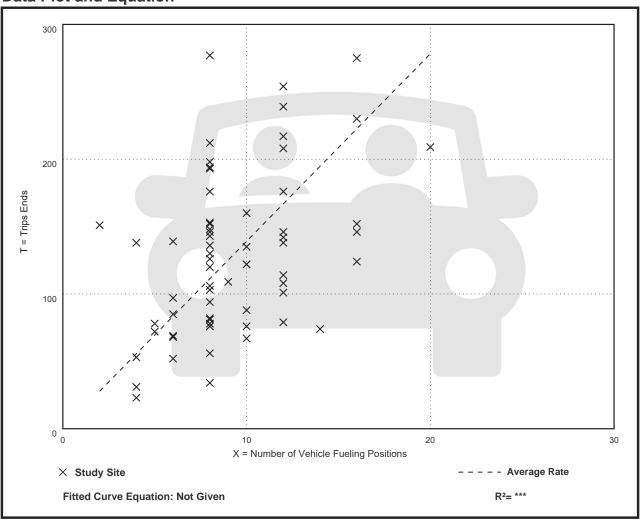
Number of Studies: 65

Avg. Num. of Vehicle Fueling Positions: 9

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
13.91	4.25 - 75.50	6.93





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions On a: Saturday

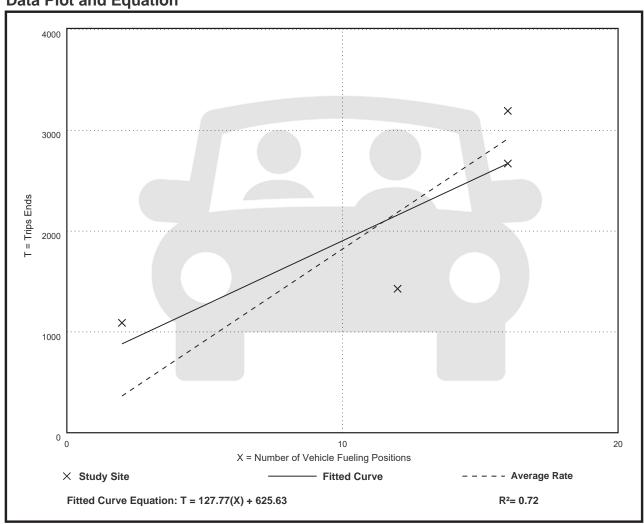
Setting/Location: General Urban/Suburban

Number of Studies: 4 Avg. Num. of Vehicle Fueling Positions: 12

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
182.17	119.00 - 545.00	96.27





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Saturday, Peak Hour of Generator

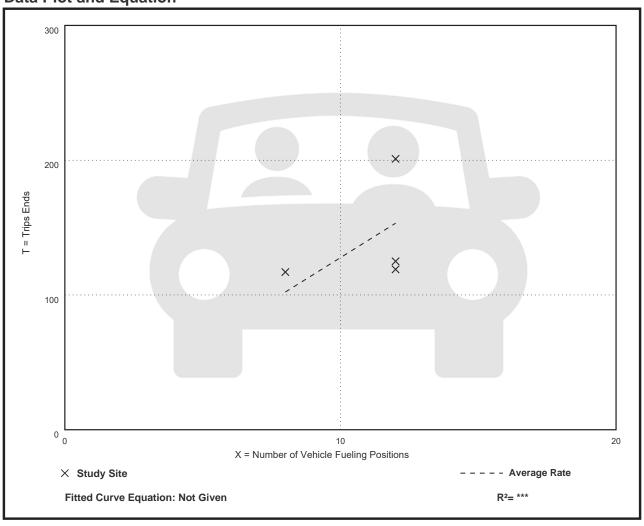
Setting/Location: General Urban/Suburban

Number of Studies: 4
Avg. Num. of Vehicle Fueling Positions: 11

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
12.77	9.92 - 16.75	3.40





Engineering Enterprises, Inc.





December 5, 2024

Ms. Krysti Barksdale-Noble Community Development Director United City of Yorkville 651 Prairie Pointe Yorkville, IL 60560

Re: Costco

Preliminary Engineering – 1st Submittal United City of Yorkville

Dear Krysti:

We have reviewed the following items for the above-referenced project:

- Preliminary Engineering Plans (5 sheets) dated November 13, 2024, and prepared by V3 Companies
- Final Plat of Subdivision (2 sheets) dated October 29, 2024, and prepared by V3 Companies.
- Photometric Plan dated July 22, 2024, and prepared by T.E. Inc.
- Preliminary Stormwater Management Report dated November 13, 2024, and prepared by V3 Companies
- Traffic Impact Study dated November 13, 2024, and prepared by V3 Companies
- Preliminary Landscape Plan dated November 15, 2024, and prepared by Kimley-Horn
- Other Supporting Documentation

Our review of these plans and reports are to generally determine their compliance with local ordinances and whether the improvements will conform to existing local systems and equipment. This review and our comments do not relieve the designer from his duties to conform to all required codes, regulations, and acceptable standards of engineering practice. Engineering Enterprises, Inc.'s review is not intended as an in-depth quality assurance review, we cannot and do not assume responsibility for design errors or omissions in the plans. As such, we offer the following comments:

General

- 1. The following permits may be required during final engineering and should be provided to the City when obtained. The City and EEI should be copied on all correspondence with the agencies.
 - IEPA NPDES General Construction Permit is required. The Notice of Intent must be filed with IEPA 30 days prior to start of construction.
 - IEPA Water and Sanitary Sewer Permits
 - Yorkville Bristol Sanitary District (YBSD) approval is needed for the connection of the proposed sanitary lines to the existing sanitary sewer.
 - IDOT for the connection to U.S. Route 34
 - United City of Yorkville Stormwater Management Permit
- 2. The following will need to be submitted with final engineering:
 - a. An engineer's estimate needs to be provided and must include all public improvements within the ROW including all public utilities and connections, all soil erosion and sediment control items, and all permitted stormwater items. This cost estimate will be used to determine the construction guarantee amount. In addition, a cost estimate needs to be provided for all site improvements which will be used to calculate the building permit fees.
 - b. Truck turning exhibits for delivery and emergency vehicles
- Additional forms and information can be found at https://www.yorkville.il.us/333/Engineering-Department.
- 4. The comments in the attached review letter from the City's landscaping consultant must be addressed and a revised landscaping plan submitted with final engineering.

Preliminary Engineering Plans

We have completed a cursory review of the preliminary engineering plans and stormwater management report. A detailed review will be completed with the submittal of final engineering. The following comments should be considered when developing final engineering.

C_{0.0} - Cover Sheet

- 5. The plans should be signed and sealed by a Professional Engineer prior to final approval.
- 6. The JULIE logo or contact information should be included on the cover sheet.
- 7. Include contact information for the City and YBSD on the cover sheet.

C2.0 - Layout Plan

8. The City should confirm that the number of parking spaces is adequate.

C3.0 - Preliminary Grading Plan

- Additional grading should be shown in the fueling area.
- Include 1-ft contours in the non-paved area to the west (where the future employee parking will be).

C4.0 - Preliminary Utility Plan

- 11. All utility conflicts will need to be shown.
- 12. Water valves should be included on the water main.
- 13. Provide details of the water main connections.
- 14. The storm structures should be labeled with unique identifiers and the type of structure, frame, and lids/grates.

Photometric Plan

- 15. The photometric plan should include a summary table that includes average, average to minimum, and maximum to minimum light intensity data to confirm that the lighting plan meets the requirements of the Ordinance.
- 16. Light intensity shall be zero-foot candles at all property lines.
- 17. Light fixtures should be fully cut off and conform to the dark sky concept.

Preliminary Stormwater Management Report

- 18. A City of Yorkville Stormwater Permit Application should be submitted with Final Engineering.
- 19. The stormwater management report should be signed and sealed by a Professional Engineer prior to final approval.
- 20. Confirm that the detention basin design accounts for the future development of the fueling station and employee parking lot that is indicated on the plans.
- 21. The report includes a requirement to control the outlet to 0.08 cfs/acre for a 25-year storm. It has been determined that this will not be required for this project.
- 22. A full report with calculations, modeling, and exhibits as indicated in the permit application should be included with final engineering.
- 23. A certified wetland determination will need to be included with final engineering.

- 24. Confirm that the existing storm sewer that goes to the existing detention basin is installed.
- 25. Calculations for the drawdown time of the detention basin will be required due to the 5.8' bounce.

Traffic Study

The following roadway-related improvements are anticipated to accommodate the new development based on the submitted traffic study:

- A new full-access driveway on US 34 that aligns with Tuma Road.
 - a. Eastbound dedicated left turn lane into Costco.
 - b. Westbound dedicated right turn lane into Costco.
- Two new full-access driveways on McHugh Road.
 - c. Restriping the existing two-way left turn lane into a dedicated left turn lane into the proposed Costco gas station.
 - d. Widening McHugh Road near US 34 for a dedicated right-turn lane into the proposed Costco gas station.
- A new full-access driveway on Countryside Parkway that aligns with Crimson Lane.
 - e. Restriping the unused, existing left turn lane in the paved, westbound Countryside Parkway median area.
- A new full-access driveway on Countryside Parkway.
 - f. Removal of the existing landscaped and curbed median area.
 - g. Adding dedicated left turn lane into the proposed Costco parking lot.
- A new Right-In Right-Out driveway on Countryside Parkway.
- 26. The traffic impact study should be submitted to IDOT for review. The City should be copied on all correspondence with IDOT.
- 27. IDOT should comment on the proposed mitigations at US 34 and Countryside. Note that the capacity analysis indicated an inadequate level of service without the proposed mitigations. Storage lengths were also exceeded in this area.
- 28. The storage length for the southbound Countryside Parkway at US 34 should meet the proposed mitigation queue length and avoid blocking the exit of Driveway 3.
- 29. The existing traffic volumes displayed in Figure 5 along McHugh Road do not balance with the volumes entering the intersections of US 34 / McHugh Road and McHugh Road / Countryside Parkway.
- 30. The existing traffic volumes displayed in Figure 5 along Countryside Parkway do not balance with those entering the intersections of US 34 / Countryside Parkway and Countryside Parkway / Crimson Lane.
- 31. The pages from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, should be included in the Appendix.

- 32. The size utilized in Table 1 for trip generation of the Gasoline/Service Station does not account for the future expansion of the gas station.
- 33. A traffic signal warrant analysis at the intersection of US 34/Veterans Parkway and Costco Driveway 4/Tuma Road found the installation of a traffic signal to be unwarranted. It is noted that an inadequate Level of Service at US 34 / Tuma Road / Driveway 4 is expected. A proposed mitigation plan should be provided.

The safety of the eastbound left turn into Driveway 4 is of concern.

- 34. A traffic signal warrant analysis should be performed for McHugh Road and Countryside Parkway with the anticipated project traffic volumes.
- 35. The taper length for the left turn at Driveway 2 should meet minimum IDOT Bureau of Local Roads and Streets (BLRS) design requirements.
- 36. The shifting of driveway 5 further north should be considered. Ideally, the taper length for the southbound left turn at US 34 is extended as it should meet minimum IDOT BLRS design requirements.

This would also allow the shifting of the dedicated right-turn lane for driveway 5 away from the intersection at US 34.

Final Plat of Subdivision

- 37. The legal description is the surveyor's certificate must describe the measured boundary.
- 38. The chord length should be added to all curve dimensions.
- 39. All easements must be dimensioned.
- 40. The water main easement should be changed to a C.U.E.
- 41. The S.S.E. should be changed to C.U.E.
- 42. Cross-access easements are needed over all lots.
- 43. The Public Utility Easement Provisions and the stand-alone Nicor Gas provisions should be removed.
- 44. The stormwater management easement and City Utility Easement C.U.E. provisions should be added.
- 45. The building setback line on the west line of Lot 1 needs to be labeled.
- 46. The area table must match the areas on the plat.
- 47. All fire hydrants, valves and emergency shut off must be inside the C.U.E.

- 48. The concrete monument symbols do not match the location labels on the plat.
- 49. Note 2 on the IDOT access notes contradicts the site plan.

The plans should be resubmitted for further review. If you have any questions or require additional information, please contact our office.

Respectfully Submitted,

ENGINEERING ENTERPRISES, INC.

Bradley P. Sanderson, P.E.

Chief Operating Officer / President

BPS/tnp/pgw2

Mr. Bart Olson, City Administrator (via email) pc:

Ms. Erin Willrett, Assistant City Administrator (via email)

Mr. Eric Dhuse, Director of Public Works (via email)

Mr. Pete Ratos, Building Department (via email)

Ms. Gina Nelson, Admin Assistant (via email)

Ms. Sara Mendez, City Planner (via email)

Building Department (via email) <u>Bzpermits@yorkville.il.us</u>

Ms. Jori Behland, City Clerk (via email)

Mr. Stephen Cross, Costco (via email)

Mr. Dan Free, V3 (via email)

TNP. PGW2, EEI (via e-mail)

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

8755 W. HIGGINS ROAD, SUITE 835 CHICAGO, ILLINOIS 60631 PHONE (773) 693-9200 FAX (773) 693-9200

December 5, 2024

Pamela Whitfield, PE, CFM Senior Project Engineer II Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, IL 60554

Project No.: 21-0275 AO

Re: Landscape Plan Review

Costco

Dear Pamela:

We have completed our first landscape plan review of the proposed Costco development located southwest of McHugh Road and East Countryside Parkway in Yorkville.

Landscape Plan - NOT RECOMMENDED FOR APPROVAL

Because it is preliminary and lacks sufficient detail, and based upon comments below, this landscape plan is not recommended for approval at this time. A response letter from the petitioner which addresses all review comments should be provided with their next submittal.

REVIEW COMMENTS

Comments must be addressed before landscape plan approval can be recommended. If there are any changes to the proposed project, additional comments may be provided. Please note that the requirements of each section are in addition to the requirements of all other sections of the ordinance (i.e., trees and other plant materials cannot be "double counted" to meet multiple requirements).

Building Foundation Landscape Zone

A Building Foundation Landscape Zone, consisting of 5 square feet of landscape area per linear foot of building frontage, is required along front and side yards. No foundation landscaping is shown on the east and west sides of the building. Requirements are not met.

Parking Area Perimeter Landscape Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted. The City may require Parking Lot Perimeter Landscape along the southern edge of the main parking lot if Outlots 1 and 2 are to remain vacant.

Pamela Whitfield Costco December 5, 2024 page 2

Parking Area Interior Landscape Zone

Parking area medians are required every third bay of parking in front or side of building. Parking area islands spaced not more than 10 continuous spaces apart are also required. Requirements are not met.

Transition Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted.

Species Diversity Requirements

Compliance with species diversity requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Minimum Plant Size Requirements

Compliance with minimum plant size requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Tree Preservation and Removal

A review of Google Earth and Google Streetview imagery suggests there are a few parkway trees on the subject property, which are shown to be preserved. Requirements appear to be met and will be confirmed later after more detailed plans have been submitted

Street Trees

A minimum of 1 canopy tree is required per every 40 linear feet of parkway. Requirements are not met.

Wetlands

A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

SUMMARY

This review was based upon the following documents, pursuant to relevant landscape requirements of the City's Unified Development Ordinance and Wetland Regulations.

Landscape Plans, 7 sheets, prepared by Kimley-Horn, most recently dated 11/15/2024

Let us know if there are any questions or comments.

Sincerely,

Tim Pollowy, RLA (IL & WI) Senior Landscape Architect

Ordinance No. 2025-

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, APPROVING A SPECIAL USE PERMIT ALLOWING THE OPERATION OF A GASOLINE SERVICE STATION ON CERTAIN TERRITORY LOCATED AT THE SOUTHEAST CORNER OF EAST COUNTRYSIDE PARKWAY AND MCHUGH ROAD, YORKVILLE, ILLINOIS (COSTCO WHOLESALE CORPORATION)

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a duly organized and validly existing non-home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, under section 11-13-1.1 of the Illinois Municipal Code (65 ILCS 5/1-1-1 *et seq.*) the Mayor and the City Council of the City (collectively, the "*Corporate Authorities*") may provide for the classification of special uses in its zoning ordinance; and

WHEREAS, pursuant to the United City of Yorkville Unified Development Ordinance (the "UDO"), any person owning or having an interest in property may file an application to use such land for one or more of the special uses provided for in the zoning district in which the land is situated; and

WHEREAS, Costco Wholesale Corporation ("the Petitioner"), is purchasing approximately 34 acres for the proposed development of a members-only retail store and gasoline service station, located at the southeast corner of East Countryside Parkway and McHugh Road ("Subject Property") legally described in Section 2 of this Ordinance; and

WHEREAS, under the authority of the UDO, the Subject Property is located in a designated B-3 General Business District and gasoline service stations are allowed with a special use permit; and

WHEREAS, the Corporate Authorities have received a request from the Petitioner for a special use permit for the Subject Property to allow the operation of a gasoline service station; and

WHEREAS, a legal notice of publication regarding a public hearing before the Planning and Zoning Commission on the proposed special use permit was duly published in a newspaper of general circulation in the City, not more than thirty (30) nor less than fifteen (15) days prior to the public hearing; and

WHEREAS, notice to property owners within 500 feet of the Subject Property identified for the special use permit was sent by certified mail; and

WHEREAS, the Planning and Zoning Commission convened and held a public hearing on January 8, 2025, for the consideration of the special use application; and

WHEREAS, the Planning and Zoning Commission reviewed the standards set forth in Section 10-8-5D of the UDO; and

WHEREAS, upon conclusion of said public hearing, the Planning and Zoning Commission made findings of fact and recommendation to the Corporate Authorities to grant the special use for the Subject Property for a gasoline service station; and

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. The above recitals are incorporated herein and made a part of this Ordinance.

Section 2. That the Corporate Authorities hereby approve the special use for the Subject Property, legally described as:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13

SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976.51 FEET; THENCE WESTERLY ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00' AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES 09 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1.41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET: THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309.47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250.39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25.00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338.21 FEET; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54.08 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS.

EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER VESTING TITLE ENTERED IN CASE NO. 15-ED-10, CIRCUIT COURT OF KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS DOCUMENT NO. 201500016982.

with Property Index Numbers 02-27-101-003 and 02-28-227-002, for use as a gasoline service station.

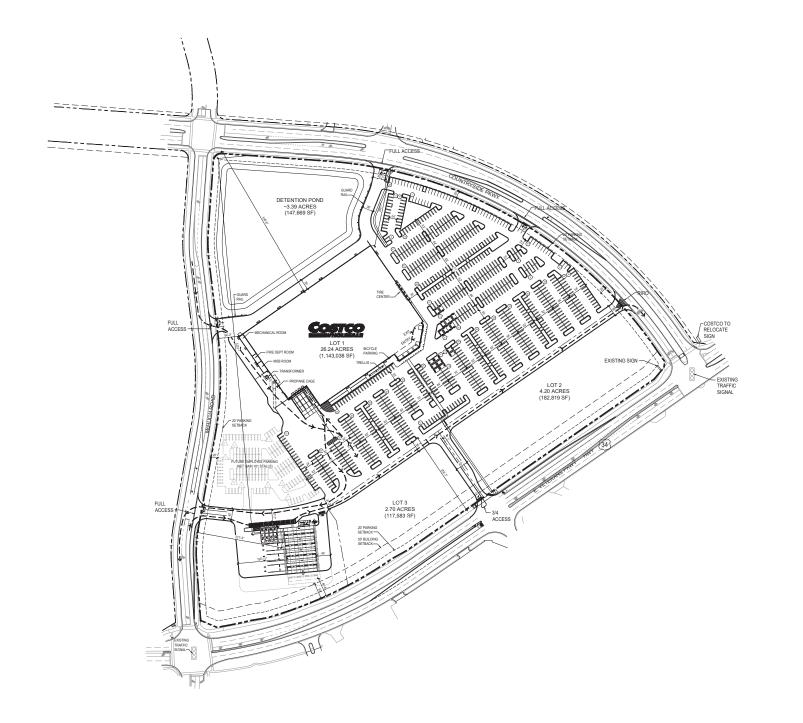
Section 3. That the special use granted herein shall be constructed, operated, and maintained in accordance with the following plans, diagrams and conditions:

- a. Costco Wholesale Site Plan, prepared by MG2 and dated January 3, 2025.
- b. Costco Wholesale Overall Landscape Plan, prepared by Kimley Horn and dated November 15, 2025.
- c. Costco Wholesale Fuel Facility Plan, prepared by MG2 and dated November 15, 2024.
- d. Costco Wholesale Fuel Elevations, prepared by MG2 and dated January 10, 2025.

Section 4. That this Ordinance shall be in full force and effect upon its passage, approval and publication as provided by law.

Passed by the City C	Council of the United C	ity of Yorkville, Kendall C	County, Illinois this
day of	, A.D. 2025.		
		CITY CLERK	
KEN KOCH		DAN TRANSIER	
ARDEN JOE PLOCHER		CRAIG SOLING	
CHRIS FUNKHOUSER		MATT MAREK	
SEAVER TARULIS		RUSTY CORNEILS	
APPROVED by me	e as Mayor of the Unit	ed City of Yorkville, Kend	all County Illinois
this day of	•	•	an County, Inmois
uns uay or	, 11.D. 2020	·•	
		MANOR	
		MAYOR	

Attest:		
CITY CLERK		



PROJECT DATA

CLIENT: COSTCO WHOLESALE

999 LAKE DRIVE ISSAQUAH, WA 98027

PROJECT ADDRESS: SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY

YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA: 33.14 ACRES (1,443,461 SF)

INCLUDES: LOT 1 (COSTCO):

26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND LOT 2: LOT 3: 4.20 ACRES (182,819 SF) 2.70 ACRES (117,583 SF)

JURISDICTION: UNITED CITY OF YORKVILLE

ZONING: B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
SIDE	20'	64'-2" / 246'-7"	271'-3"
REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
BUILDING HEIGHT (MAX)	80'	32'-0"	18'-6"
LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA: 161.562 SF INCLUDES: NET SALES FLOOR 153,820 SF GROSS MECHANICAL / FIRE / MSB

2.266 SF NET ENCLOSED CANOPY 3,560 SF BUILDING ENVELOPE 1,916 SF

PARKING DATA:

TOTAL PARKING: 956 STALLS INCLUDES:

837 STALLS 18 STALLS 101 STALLS

NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA:

6.22 STALLS

NOTES:

EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES









22-6229-01 JANUARY 03, 2025

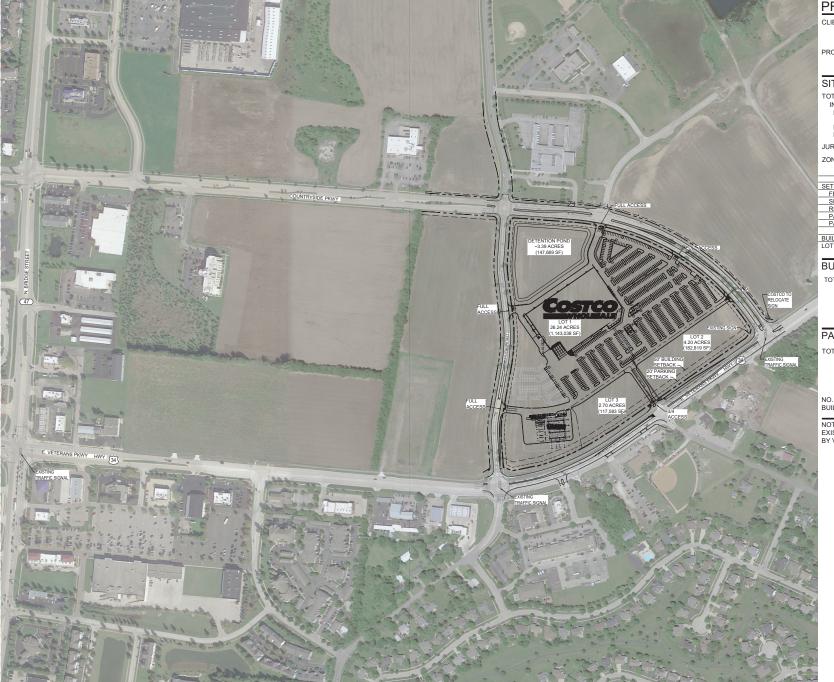
SITE PLAN

DD11-08

COSTCO WHOLESALE

YORKVILLE, ILLINOIS JANUARY 03, 2025

SITE PLAN



PROJECT DATA

CLIENT:

COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027

PROJECT ADDRESS:

SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL

SITE DATA:

TOTAL SITE AREA: 33.14 ACRES (1,443,461 SF) INCLUDES:

LOT 1 (COSTCO): 26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND 4.20 ACRES (182,819 SF) 2.70 ACRES (117,583 SF) LOT 2: LOT 3:

JURISDICTION: UNITED CITY OF YORKVILLE

ZONING: B-3 GENERAL BUSINESS DISTRICT, PUD

	REQ	ACTUAL	
		WAREHOUSE	FUEL
SETBACKS			
FRONT	50'	507'-9"	60'-8"
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REAR	30'	510'-8"	1,201'
PARKING (VETERANS)	20'	276'-7"	N/A
PARKING (ALL OTHER)	20'	20'	N/A
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LOT COVERAGE (MAX)	80%	65.4% (LOT 1 ONLY)	

BUILDING DATA:

TOTAL BUILDING FOOTPRINT AREA: INCLUDES:

NET SALES FLOOR 153,820 SF GROSS MECHANICAL / FIRE / MSB

2.266 SF NET ENCLOSED CANOPY 3,560 SF BUILDING ENVELOPE 1,916 SF

PARKING DATA:

TOTAL PARKING: 956 STALLS INCLUDES:

⊙ 10' WIDE STALLS
 ⊙ ACCESSIBLE STALLS
 △ FUTURE STALLS (NET GAIN)

NO. OF STALLS PER 1,000 SQ. FT. OF NET

BUILDING AREA:

101 STALLS 6.22 STALLS

837 STALLS 18 STALLS

161.562 SF

NOTES: EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES









22-6229-01 JANUARY, 03, 2025

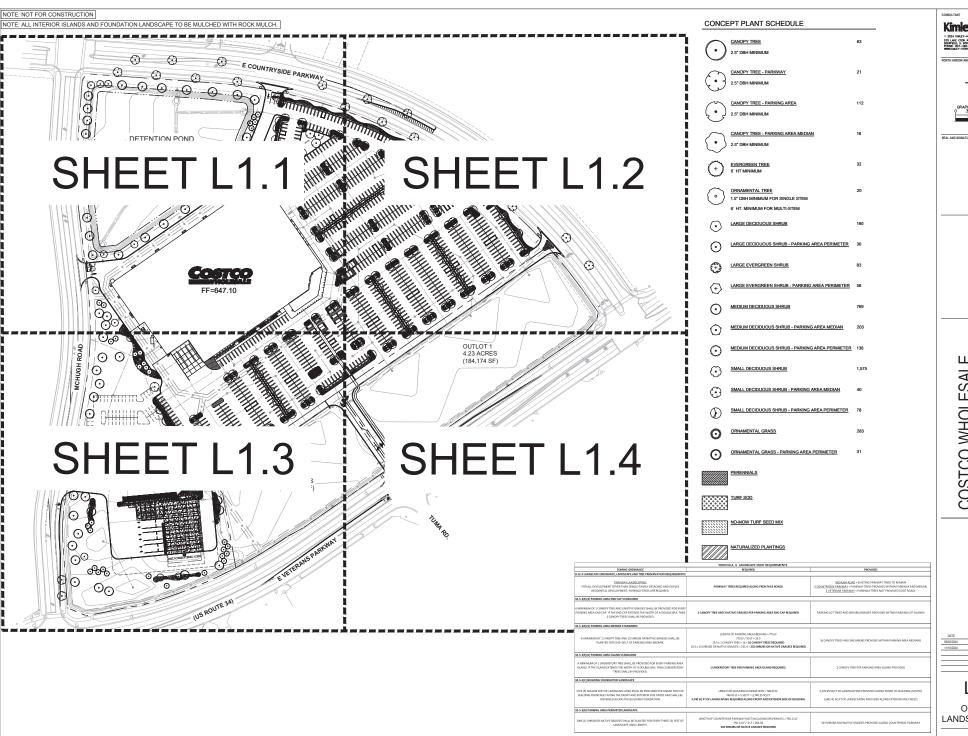
AERIAL SITE PLAN

DD12-08

JANUARY 03, 2025

AERIAL SITE PLAN

COSTCO WHOLESALE



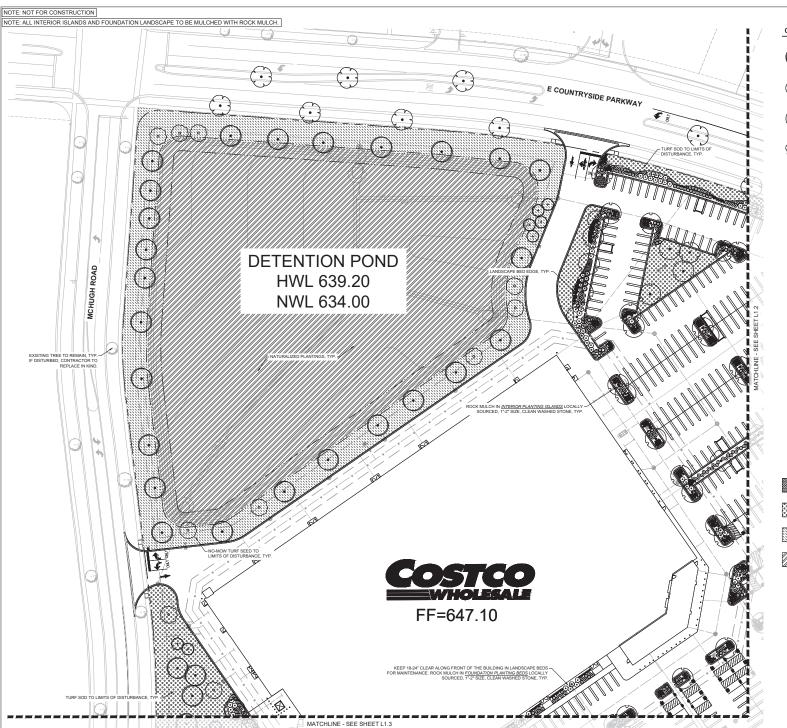
Kimley≫Horn © 2024 KIMLEY-HOPN AND ASSOCIA 570 LAKE COCK ROAD, SUITE 200 DEERFIELD, N. 60015 PHONE: 847-200-7804 WINNIMAEY-HOPN.COM



COSTCO WHOLESALE WAREHOUSE SITE SWOOD OF MOUGH ROAD & SWOOD OF MOUGH ROAD & SWOOD OF WAY YORKVILLE.

L1.0

OVERALL LANDSCAPE PLAN



CONCEPT PLANT SCHEDULE

2.5" DBH MINII

CANOPY TREE - PARKW

CANOPY TREE - PARKING AREA

CANOPY TREE - PARKING AREA MEDIAN 2.5" DBH MINIMUM

+ EVERGREEN TREE
6' HT MINIMUM

ORNAMENTAL TREE

1.5" DBH MINIMUM FOR SINGLE STI

LARGE DECIDUOUS SHRUB

LARGE DECIDUOUS SHRUB - PARKING AREA PERIMETE

LARGE EVERGREEN SHRUB

LARGE EVERGREEN SHRUB - PARKING AREA PERIMETER

MEDIUM DECIDUOUS SHRU

MEDIUM DECIDUOUS SHRUB - PARKING AREA MEDIAN

MEDIUM DECIDUOUS SHRUB - PARKING AREA PERMIET

SMALL DECIDUOUS SHR

SMALL DECIDUOUS SHRUB - PARKING AREA MEDIAN

SMALL DECIDUOUS SHRUB - PARKING AREA PERIMETER

ORNAMENTAL GRA

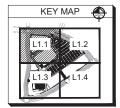
ORNAMENTAL GRASS - PARKING AREA PERIMETER

PEREN

TURF SO

NO-MOW TURF SEED MIX

NATURALIZED PLANTINGS



Kimley» Hom

2 2024 MART-HON NA ASSOCIATES, NC.
3950 LIME CONS.
SERVICIAL 1, 00053
WWW.CALEY-HONG.COM

ORTH ARROW AND SCALE



TAL AND GIGHTING

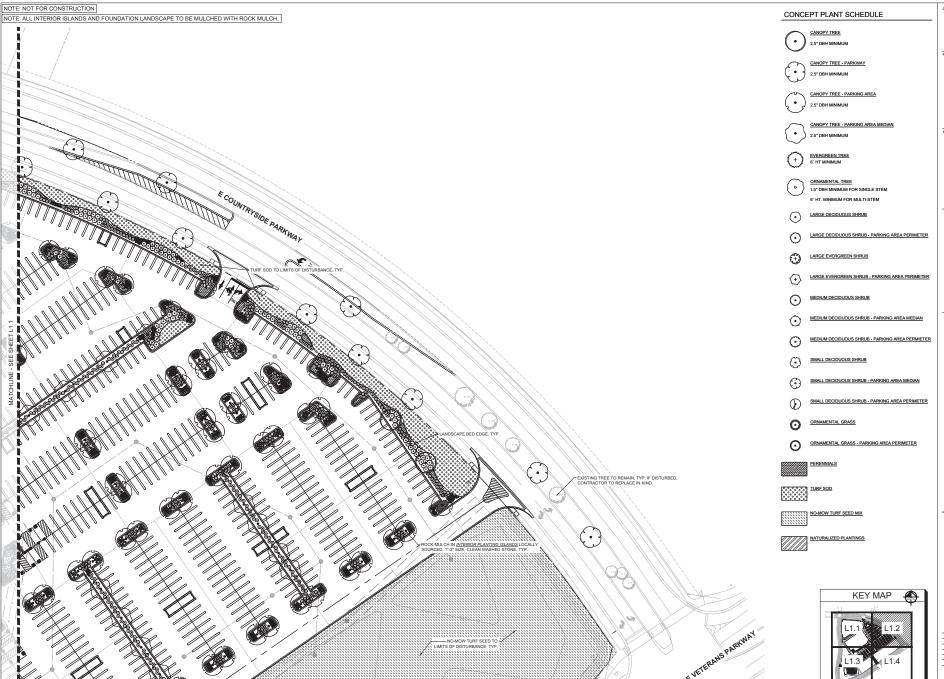
COSTCO WHOLESALE WAREHOUSE SITE SW CP MCHUCH ROAD & EAST COUNTRYSIDE PWWY YORKVILLE, IL

ATE ISSUED FOR REV 20224 GREEN INK 20224 CITY SUBMITTAL

L1.1

LANDSCAPE PLAN

AS INDICATED



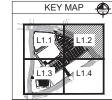
MATCHLINE - SEE SHEET L1.4

Kimley> Horn

2024 PIMEY HOW AND ASSOCIATES, INC.
870 LIME COCK 800A, BUTE 200
PERSPERD, It. 60075
PPODE: 0477-200-7204
WWW.MILLY-HOW COM

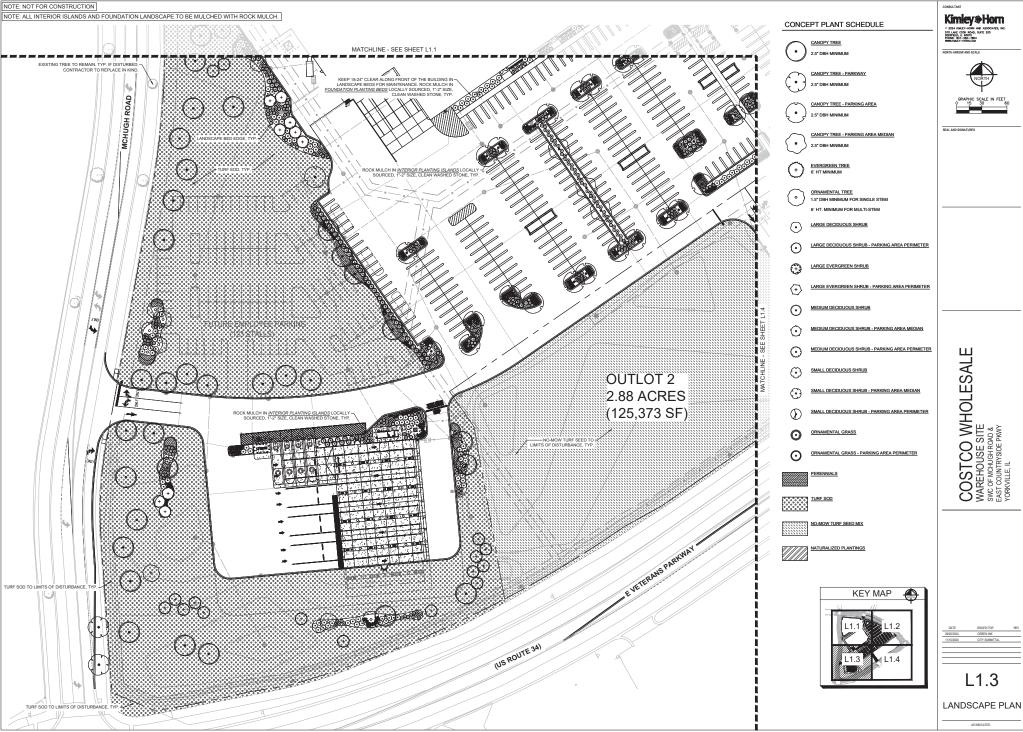


COSTCO WHOLESALE WAREHOUSE SITE SW CP MCHUCH ROAD & EAST COUNTRYSIDE PWWY YORKVILLE, IL

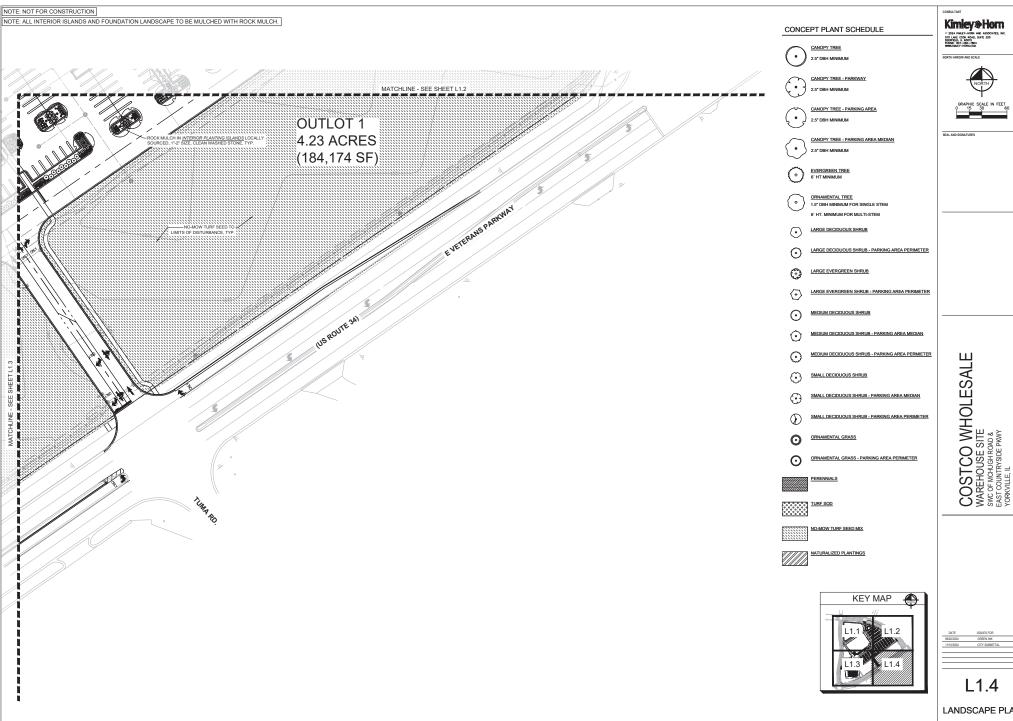


L1.2

LANDSCAPE PLAN







Kimley Horn

2024 KMLY-HORN AND ASSOCIATES, INC.
570 LARC COOK ROAD, SWITE 200
PERSPEAR, I. 6005
PROME: B47-200-7704
WWKMLEY-HORN COM





L1.4

LANDSCAPE PLAN

PLANT SCHEDULE

TREES
ACER MIYABEI 'MORTON' / STATE STREET™ MIYABE MAPLE

ACER X FREEMANII 'AUTUMN BLAZE' / AUTUMN BLAZE MAPLE

CELTIS OCCIDENTALIS / COMMON HACKBERRY

GINKGO BILOBA 'AUTUMN GOLD' / AUTUMN GOLD MAIDENHAIR TREE

GLEDITSIA TRIACANTHOS INFRMIS 'SKYLINE' / SKYLINE HONEY LOCUST

GYMNOCLADUS DIOICUS 'ESPRESSO' / KENTUCKY COFFEETREE

OSTRYA VIRGINIANA / AMERICAN HOPHORNBEAM

QUERCUS RICOLOR / SWAMP WHITE OAK

TAXODIUM DISTICHUM 'SHAWNEE BRAVE' / SHAWNEE BRAVE BALD CYPRESS

TILIA AMERICANA 'BOULEVARD' / BOULEVARD AMERICAN LINDEN

ULMUS AMERICANA 'PRINCETON' / PRINCETON AMERICAN ELM

ULMUS X 'MORTON' / ACCOLADE™ ELM ZELKOVA SERRATA 'GREEN VASE' / GREEN VASE JAPANESE ZELKOVA

EVERGREEN TREES
ABIES CONCOLOR / WHITE FIR

PICEA ABIES / NORWAY SPRUCE

PICEA OMORIKA / SERBIAN SPRUCE

PINUS FLEXILIS 'VANDERWOLF'S PYRAMID' / VANDERWOLF'S PYRAMID LIMBER PINE

PSEUDOTSUGA MENZIESII / DOUGLAS FIR

ORNAMENTAL TREES
AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE APPLE SERVICEBERRY

MALLIS X 'PRAIRIFIRF' / PRAIRIFIRF CRARAPPI F

SYRINGA RETICULATA 'IVORY SILK' / IVORY SILK JAPANESE TREE LILAC

SHRUBS ARONIA MELANOCARPA "MORTON" / IROQUOIS BEAUTY™ BLACK CHOKEBERRY ARONIA MELANOCARPA 'UCONNAM165' / LOW SCAPE MOUND CHOKEBERRY

CEANOTHUS AMERICANUS / NEW JERSEY TEA

CORNUS ALBA 'BAILHALO' / IVORY HALO® TATARIAN DOGWOOD

CORNUS SANGUINEA 'CATO' / ARCTIC SUN® BLOODTWIG DOGWOOD

DIERVILLA X 'G2X88544' / KODIAK® ORANGE DIERVILLA FORSYTHIA X INTERMEDIA 'NIMBUS' / SHOW OFF® SUGAR BABY® DWARF FORSYTHIA

HYDRANGEA PANICULATA 'JANE' / LITTLE LIME® PANICLE HYDRANGEA

PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' / LITTLE DEVIL™ DWARF NINEBARK

PHYSOCARPUS OPULIFOLIUS 'SEWARD' / SUMMER WINE® NINEBARK POTENTILLA FRUTICOSA 'JACKMANII' / JACKMAN'S BUSH CINQUEFOIL

SPIRAEA BETULIFOLIA 'TOR GOLD' / GLOW GIRL® BIRCHLEAF SPIREA

SPIRAEA JAPONICA 'NEON FLASH' / NEON FLASH JAPANESE SPIREA

SPIRAFA JAPONICA WAI RUMA' / MAGIC CARPET JAPANESE SPIREA

VIBURNUM DENTATUM 'BLUE MUFFIN' / BLUE MUFFIN ARROWWOOD VIBURNUM

WEIGELA FLORIDA 'ALEXANDRA' / WINE & ROSES® WEIGELA WEIGELA FLORIDA 'BRAMWELL' / FINE WINE® WEIGELA

WEIGELA ELORIDA VERWEIG! / MY MONET® WEIGELA

<u>EVERGREEN SHRUBS</u> JUNIPERUS CHINENSIS 'SEA GREEN' / SEA GREEN JUNIPER

TAXUS X MEDIA 'TAUNTONII' / TAUNTON'S ANGLO-JAPANESE YEW

<u>ORNAMENTAL GRASSES</u>
CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS

PANICUM VIRGATUM 'CHEYENNE SKY' / CHEYENNE SKY PRAIRIE WINDS® SWITCH GRASS

PANICUM VIRGATUM 'HEAVY METAL' / HEAVY METAL SWITCH GRASS PENNISETUM ALOPECUROIDES 'BURGUNDY BUNNY' / BURGUNDY BUNNY DWARF FOUNTAIN GRASS

PENNISETUM ALOPECUROIDES 'HAMELN' / HAMELN FOUNTAIN GRASS

PENNISETUM ALOPECUROIDES 'PIGLET' / PIGLET DWARF FOUNTAIN GRASS

SPOROBOLUS HETEROLEPIS / PRAIRIE DROPSEED

PERENNIALS
ALLIUM X "SUMMER BEAUTY" / SUMMER BEAUTY ORNAMENTAL ONION AMSONIA TABERNAEMONTANA 'BLUE ICE' / BLUE ICE EASTERN BLUESTAR

ECHINACEA X 'BUTTERFLY KISSES' / BUTTERFLY KISSES CONEFLOWER

HEMEROCALLIS X 'ROSY RETURNS' / ROSY RETURNS DAYLILY

RUDBECKIA FULGIDA 'LITTLE GOLDSTAR' / LITTLE GOLDSTAR BLACK-EYED SUSAN

SEDUM X 'AUTUMN JOY' / AUTUMN JOY SEDUM

NATURALIZED POND PLANTINGS, POND DESIGN AND EXACT SEED MIXES TO BE DETERMINED AT A LATER DATE:



Pizzo Native Plant Nursery, LLC • 10729 Pine Road • Leland, IL 60531 • Phone : 815-981-8000 • www.pizzonursery.com

MIX STA	ISTICS																	
Average	dix Height (ft)	3.1	Design	ad as th	o most		icala	u to octo	hlich e		alaai	cally from	tional an	dele mbil		ing the high	est aesthetic	unlun
Median I	Six Height (ft)	3.1																
Species H	eights (# of Occurrences in Mix)	2" (111 3" (8), 4" (8), 5" (3	This m	ix includ	esprair	rie speci	es that	quickly e	stabli	sh fa	ram	ore imme	diate na	turalized	setting in s	sunny areas	that remain i	mesic
	of Native Species in Mix	21	20 to dry for the most of the growing season. Over 55% of this mix is composed of wildflowers that provide an array of blooms from															
Hothe N	,	10.1	April H	rough (ctoher	W/han	inetalle	d and m	nana	1 000	racti	u this miv	typically	bagine f	lowering in	ite second	growing seas	on
Native M	ean C Value																	
Native M	ean W Value																matrix of pere	
National Wetland Category FACUH species appears in the succeeding 3 to 5 years. This is a medium-short height prairie with an average height of 2,9' by seed co						count.												
Lbs/Acre of Native Seed 15.0																		
Seeds pe	Square Foot	90.	7															
Percent of	f Mix (by Seed Count) Requiring Stratification	MREF!	1															
		MREF!			-													
	f Mix (by Seed Count)Requiring Stratification Sedges, & Rushes	MREFI				2						20			,			
		COMMON NAME	C-VALUE	W-VALUE	WITNESS	HEI		BLOOM		DOM 1		SEEDS/02	OZ/ACRE	LR/ACRE		F MIX	GERMINATION	TOP SON
Grasses,	Scientific NAME	COMMON NAME	C-VALUE	W-VALUE		Min-Max		COLOR	BLO A M			0	OZ/ACRE	LB/ACRE	by Weight	by Seed Coun	GERMINATION	TOP SOV
CODE	SCIBITIFIC NAME Boutelous curtipendus	COMMON NAME Side-oats Grama	C-VALUE 8	5	UPL	Min-Max 1.5-2.5		COLOR N/A				6,000	32.00	2.00	by Weight 13.299	by Seed Count 4.86%	N/A	TOP SOV
Grasses, CODE BOUCUR CXBREV	Redges, & Rushes SCIENTIFIC NAME Boutefous curtipendus Carex betwier	COMMON NAME Side-oats Grama Plains Oval Sidge	C-VALUE 8 4	W-VALUE 5 0	UPL	Min-Max 1.5-2.5' 1-3'		N/A N/A				6,000	32.00	2.00	by Weight 13.299 0.839	4.86% 1.47%	N/A CM-60	TOP SOV
CODE SOUCUR EXBREV SORNUT	SCIENTIFIC NAME SCIENTIFIC NAME Boutefous curtipendids Carey between	COMMON NAME Side-cats Grama Plains Oval Sedge Indian Grass	C-VALUE 8 4 5	5 0 3	UPL FAC FACU	Min-Max 1.5-2.5' 1-3' 3-7'		N/A N/A N/A				6,000 29,000 12,000	32.00 2.00 16.00	2.00 0.13 1.00	by Weight 13.299 0.839 6.659	by Seed Coun 4.86% 1.47% 4.86%	N/A CM-60 N/A	TOP SO
Grasses, CODE BOUCUR COBREV SORNUT ELYCAN	SCIENTIFIC NAME Boutelous curtipendula Carex brevior Sosphostrum naturos Elymus condensis	COMMON NAME Side-costs Grama Plains Oval Srdge Indian Grass Canada Wild tye	8 4 5	5 0 3 3	FAC FACU	Min-Max 1.5-2.5' 1-3' 3-7' 3-5'		N/A N/A N/A N/A				6,000 29,000 12,000 5,200	32.00 2.00 16.00 48.00	2.00 0.13 1.00 3.00	0.839 0.659 19.949	by Seed Coun 4.869 1.479 4.869 6.329	N/A CM-60 N/A N/A	TOP SO
Grasses, CODE BOUCUR COBREV SORNUT ELYCAN PANVIR	ledges, & Rushes SCIENTRIC NAME Boutefous curtipendiés Cares bervier Sosphestram nature Elymus conadensis Planicum virgarum	COMMON NAME Side-costs Grama Plains Oval Stdge Indian Grass Canada Wild tye Switch Grass	8 4 5 4 5	5 0 3	UPL FAC ACU ACU FAC	Min-Max 1.5-2.5' 1-3' 3-7' 3-5' 3-6'		N/A N/A N/A N/A N/A N/A				6,000 29,000 12,000 5,200 14,000	32.00 2.00 16.00 48.00 32.00	2.00 0.13 1.00 3.00 2.00	by Weight 13.299 0.839 6.659 19.949	by Seed Coun 4.86% 1.47% 4.86% 6.32% 11.34%	N/A CM-60 N/A N/A N/A	TOP SO
CODE BOUCUR BORNUT BORNUT ELYCAN PANVIR	SCIENTIFIC NAME Boutelous curtipendula Carex brevior Sosphostrum naturos Elymus condensis	COMMON NAME Side-costs Grama Plains Oval Srdge Indian Grass Canada Wild tye	C-VALUE 8 4 5 4 5 5	5 0 3 3	FAC FACU	Min-Max 1.5-2.5' 1-3' 3-7' 3-5'		N/A N/A N/A N/A				6,000 29,000 12,000 5,200 14,000	32.00 2.00 16.00 48.00 32.00 32.00	2.00 0.13 1.00 3.00 2.00 2.00	by Weight 13.299 0.839 6.659 19.949 13.299	by Seed Count 4.86% 4.86	N/A CM-60 N/A N/A	TOP SO
Grasses, CODE BOUCUR COBREV SORNUT ELYCAN PANVIR	ledges, & Rushes SCIENTRIC NAME Boutefous curtipendiés Cares bervier Sosphestram nature Elymus conadensis Planicum virgarum	COMMON NAME Side-costs Grama Plains Oval Stdge Indian Grass Canada Wild tye Switch Grass	C-VALUE 8 4 5 4 5 5	5 0 3 3	UPL FAC ACU ACU FAC	Min-Max 1.5-2.5' 1-3' 3-7' 3-5' 3-6'		N/A N/A N/A N/A N/A N/A				6,000 29,000 12,000 5,200 14,000	32.00 2.00 16.00 48.00 32.00	2.00 0.13 1.00 3.00 2.00 2.00	by Weight 13.299 0.839 6.659 19.949	by Seed Count 4.86% 4.86	N/A CM-60 N/A N/A N/A	TOP SO
Grasses, CODE BOUCUR CXBREV SORNUT ELYCAN PANVIR SCHSCO	Jackees, & Roubes SCIBYTRIC NAME Boutefow cursipendide Corne bevoir Sophistrian nutrates Sophistrian nutrates Planiciam virgatum Schirarchyvium scoperium	COMMON NAME Side-costs Grama Plains Oval Stdge Indian Grass Canada Wild tye Switch Grass	C-VALUE 8 4 5 4 5 5	5 0 3 3	UPL FAC ACU ACU FAC	Min-Max 1.5-2.5' 1-3' 3-7' 3-5' 3-6'		N/A N/A N/A N/A N/A N/A				6,000 29,000 12,000 5,200 14,000	32.00 2.00 16.00 48.00 32.00 32.00	2.00 0.13 1.00 3.00 2.00 2.00	by Weight 13.299 0.839 6.659 19.949 13.299	by Seed Count 4.86% 4.86	N/A CM-60 N/A N/A N/A	TOP SO
Grasses, CODE BOUCUR CXBREV SORNUT ELYCAN PANVIR	Jackees, & Roubes SCIBYTRIC NAME Boutefow cursipendide Corne bevoir Sophistrian nutrates Sophistrian nutrates Planiciam virgatum Schirarchyvium scoperium	COMMON NAME Side-costs Grama Plains Oval Stdge Indian Grass Canada Wild tye Switch Grass	8 4 5 4 5 5	5 0 3 3	UPL FAC ACU ACU FAC ACU	Min-Max 1.5-2.5' 1-3' 3-7' 3-5' 3-6' 2-3'		N/A N/A N/A N/A N/A N/A	A M	OOM 1	A S	6,000 29,000 12,000 5,200 14,000 15,000 Grass/Sed	32.00 2.00 16.00 48.00 32.00 32.00	2.00 0.13 1.00 3.00 2.00 2.00 10.125	by Weight 13.299 0.839 6.659 19.949 13.299 67.299	by Seed Count 4.86% 4.86	N/A CM-60 N/A N/A N/A	

ASCSYR		Common Miliweed	0	3	:ACU	2-6'	3	Pink		=	-			4,000	4.00	0.25	1.66%	0.40%	CM-30	
		Partridge Pea	5	3	:ACU	6*-2"	2	Yellow			-			2,700	16.00	1.00		1.09%	CM-10, H, I	
CORLAN		Sand Coreopsis	5	3	:ACU	1.5-3'	2	Yellow				Т	П	20,000	4.00	0.25	1.66%	2.02%	CM-30	
DESCAA	Desmodium canaderse	Showy Tick Trefoil	4	3	:ACU	3-6'	4	Purple			-			5,500	2.50	0.16	1.04%	0.35%	1,1	
ECHPUR		Purple Conefower	3	5	UPL	2.5'	4	Purple				т		6,600	12.00	0.75	4.98%	2.00%	N/A	
HELHEL		Early Sunflawer	- 5	,	SAGU	3.5"	- 5	VcHow	_	_	-	-		6,300	0.01	0.50	9.92%	1.201	CM 30	
MONFIS	Monarda fistulosa	Wild Bergamot	4	3	:ACU	2.5-4'	4	Purple			-			70,000	2.01	0.13	0.83%	3,54%	N/A	
PENDIG	Penstemon digitalis	Faxglove Beardtongue	4	0	FAC	2-31	3	White		_		Т		130,000		0.11	0.73%	5.76%	CM-30, G	
RUDHIR	Rudbeckia hirta	Black-eyed Susan	1	3	:ACU	2-31	2	Yellow			-			92,000	16.00	1.00	6.65%	37.25%	CM-30	
SILINT	Silphium integrifolium	Rosin Weed	5	5	UPL	2-6'	5	Yellow			-			1,200		0.19	1.25%	0.09%	CM-60	
SYMNOV	Symphyotrichum novoe-angliae	New EnglandAster	4	-3	IACW	3-5"	4	Purple		П	п			66,000		0.06	0.42%	1.67%	CM-60	
TRAOHI	Tradescantia ohiensis	Ohio Spiderwort	2	3	ACU	2-4"	3	Blue			ш	т		8,000		0.09	0.62%	0.30%	CM-120 or M, G	
VERSTR	Verbena stricta	Hoary Vervain	4	- 5	UPL	1-3"	2	Blue			7	т		28,000	3.01	0.19	1.25%	2.13%	CM-60	
ZIZAUR	Zinia aurea	Golden Alexanders	7	0	FAC	1-2.5"	2	Yellow		ш	т	т		11,000	4.01	0.25	1.66%	1.11%	CM-60 or M, G	
														Wildflowe		4.922	32.71%	59.01%		
														Mix T	DTALS	15.047	100.00%	100.00%		

NO-MOW TURF SEED MIX

ME	COMMON NAME	ACRE	TOTAL							
GRASSES, SEDGES, & RUSHES										
	Perennial Rye	25.0	13%							
grostis gigantea Red Top										
	Creeping Red Fescue	80.0	40%							
	Tall Fescue	20.0	10%							
	Sheep's Fescue	20.0	10%							
	Kentucky Bluegrass	40.0	20%							
SEED	MIX TOTAL LBS PER ACRE:	200								
		S, & RUSHES Perennial Rye Red Top Creeping Red Fescue Tall Fescue Sheep's Fescue	ACRE S, & RUSHES Perennial Rye 25.0 Red Top 15.0 Creeping Red Fescue 80.0 Tall Fescue 20.0 Sheep's Fescue 20.0 Kentucky Bluegrass 40.0							

LIBS/ 1% OF

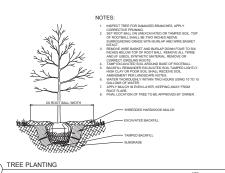
COSTCO WHOLESALE WAREHOUSE SITE SWOOF MCHIGH ROAD & EAST COUNTRYSIDE PRWY

Kimley≫Horn

SEAL AND SIGNATURES

L2.0 LANDSCAPE NOTES

> AND DETAILS AS INDICATED



THIS DETAIL IS FOR THEE STANING ORLY, REF, TYPICAL TREE PRANTING DETAIL FOR ADDITIONAL PLANTING INFORMATION. THE STANING IS ORLY REQUIRED WHEN TREES ARE UNSTABLE, TIPPED OVER, AND/OR REQUISTED BY MURICIPALITY OR OWNER, UNLESS OTHERWISE MOTED. PREVAILING WIND SECTION PLAN TREE STAKING (2

BED HEIGHT IS TO BE 2" ABOVE FINISH GRADE AND WELL DRAINED. REMOVE CONTAINER, SCORE SOIL MASS TO REDIRECT AND PREVENT CIRCLING

ROOTS. CORRECT GIRDLING ROOTS.

2. PLANT MATERIAL SHALL BE LAID OUT BY FOLLOWING THE BED EDGE, WORKING TOWARDS THE CENTER OF THE BED USING TRIANGULAR (STAGGERED) SPACING.

SPACING TO BE AS SPECIFIED IN THE PLANT LIST, PERENNIALS SHALL BE PLACED WITH THEIR CENTER 24" FROM EDGE OF BED.

O.C. SPACING, SEE PLANS FOR DETAILS

NOTES: THEE FUR DISSISSION OF TAMPED SOIL TOP BALL ON UNEXCAVATED OR TAMPED SOIL TOP BALL SHALL BE TWO INCHES ABOVE NDING GRADE WITH BURLAP AND WIRE BASKET AND (IF USED), SYNTHETIC MATERIAL REMOVE OR CORRECT GIRDLING ROOTS. TAMP EXCAVATED SOIL AROUND BASE OF ROOTS/ BACKELL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OF POOR SOIL SHALL RECEIVE SOIL TAMPED LIGHTLY. HIGH CLAY OF POOR SOIL SHALL RECEIVE SOIL TAMPED LIGHTLY. AMENDMENT FER LANDSCAPE NOTES. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER. APPLY MULCH IN EVEN LAYER, KEEPING AND A CONTRACT OF THE TO BE APPROVED BY OWNER CONTRACT OF THE TO BE APPROVED BY OWNER OF T - SHREDDED HARDWOOD MULCH - EXCAVATED BACKFILL EVERGREEN TREE PLANTING

MINIMUM 6" BEYOND ROOT BALL

SHRUB PLANTING

3" = 1"-0"

PERENNIAL PLANTING

NOTES:

STONE MULCH

(3,

LANDSCAPE NOTES SPECIFICATIONS SHALL SUPERCEDE LANDSCAPE NOTES.

THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST TO REPAR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS THE CONTRACTOR SHALL BEFORE THE COST TO REPAR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONTRICTOR. SHALL BE RESPONSIBLE FOR THE REPAR OF ANY OF THEM TRENDED ON THE PLANT MATERIAL IS SUBJECT TO FIELD AND SITE CONTRICTOR. SHALL BE RESPONSIBLE FOR THE REPAR OF ANY OF THEM TRENDES ON EXCANATIONS THAT SETTLE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAR OF ANY OF THEM TRENDES ON EXCANATIONS THAT SETTLE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAR OF ANY OF THEM TRENDES ON EXCANATIONS THAT SETTLE.

RESPONSIBLE FOR THE REPAR OF ANY OF THEM TRENDES ON THE TRENDE

GURBANTE TREES, SHRUES AND GROUND COVER FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE AGAINST DEFECTS INCLUDING DEATH AND UNSATISPACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM NEGLECT BY OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA.
OR INCIDENTS WHICH ARE SERVIOUS LONGACE CONTRACTORS CONTROL.

**

PLAN VIEW

CONTRACTOR THE DESTRICT HE RES, SHIELDS AND GROUND COVER FOR A PREDIO OF ON EXCEPTING A AGRED OF CONTRACTORS CONTROL.

GRECORITY WHICH ARE BEYOND LANDSCAPE CONTRACTORS CONTROL.

GRECORITY WHICH ARE BEYOND CONTROL OF THE BALLED A BURLAP TREE IF THIS IS NOT THE CASE, SOIL SHALL BE REMOVED DOWN TO THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED, THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT COLLARROOT FLAIR. WHEN THE BALLED A BURLAP TREE IS PLANTED. THE ROOT FLAIR. WHEN THE B



- THOSE SHRUBS.

 REMOVE BURLAP FROM TOP HALF THE LENGTH OF ROOTBALL. TWINE AND (IF USED) SYNTHETIC MATERIAL SHALL BE REMOVED FROM PLANTING BED. FOR CONTAINER GROWN SHRUBS. REMOVE CONTAINER AND LOOSEN ROOTS
- USELT) OTTO TO THE CONTAINER (ROWN SHRUBS, NEXT OF THE CONTAINER (ROWN SHRUBS, NEXT OF THE CONTAINER (ROWN) CONTROL (ROWN) CON

6 OZ NON-WOVEN GEOTEXTILE FABRI WRAP UPWARDS AGAINST PAVING / CURB - SUBGRADE

STONE MULCH ADJACENT TO HARDSCAPE

YORKVILLE II PARKWAY TREE NOTES:

- NO TREE SHALL BE FLANTID CLOSES THAN THEIRY FEET (OY) OF THE RIGHT-OF-MAY INTERSECTION. F. ASTOP OF THE DOOR IS LOCKED AT AN INTERSECTION, NO TITEE WHICH APPROACHING THE INTERSECTION, SHALL BE FLANTED CLOSES THAN 50 LINEAL FEET IN FRONT OF A SIGN. THE SHALL THAN AND MAY SHARL OF THEM THE FLORY FROM LINEAL PREST SHALL, SHALL BE FLANTED CLOSES THAN 50 LINEAL FEET OF FROM LINEAP POLES. STREET SHANS, FIRE HYDRAYTS AND ANY OTHER SUCH THEM STATE THAT THAY, IN THE OPPHION OF THE CITY PLANNER OR PUBLIC WORKS DIRECTOR, REQUIRE SIMILAR INTERVAL.

- ADJACENT SURFACE - 1 X 4" STEEL EDGER TOP FLUSH WITH GRADE - 12" STEEL EDGER SPIKE 6 OZ. NON-WOVEN GEOTEXTILE FABRIC WRAP AT ADJACENT SURFACE



3" = 1"-0"

COSTCO WHOLE WAREHOUSE SITE SAT COUNTRYSIDE PKWY YORKVILLE, IL.

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ESAL

Kimley ** Horn

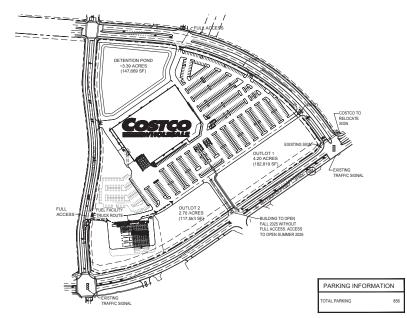
ORTH ARROW AND SCALE

SEAL AND SIGNATURE

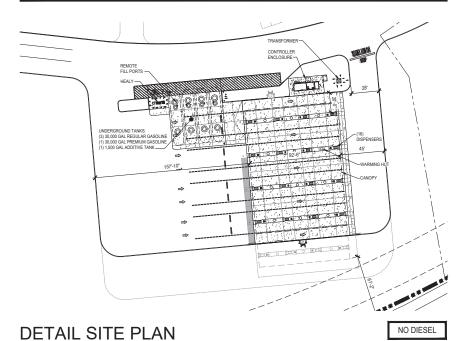
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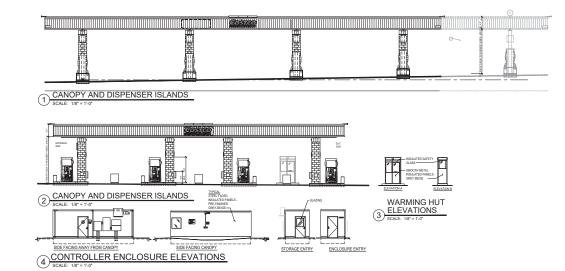
LANDSCAPE NOTES AND DETAILS

AS INDICATED

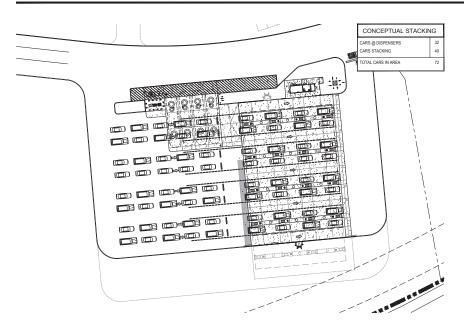


CONCEPT FUEL TRUCK ROUTE





CONCEPT ELEVATIONS



STACKING PLAN

FUEL FACILITY PLAN





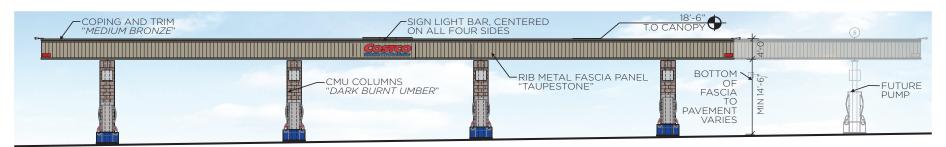


22-6229-01 NOVEMBER 15, 2024 FUEL FACILITY

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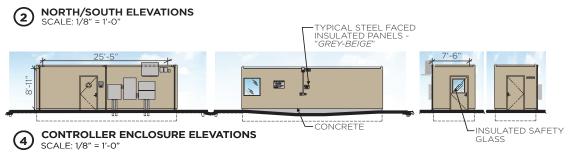
COSTCO WHOLESALE

NOVEMBER 15, 2024

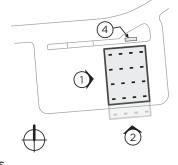


EAST/WEST ELEVATIONS
SCALE: 1/8" = 1'-0"









WARMING HUT ELEVATIONS SCALE: 1/8" = 1'-0"



SIGN AREA TABULATION (CANOPY SIGNS)

	COSTCO WHOLESALE	- ,	IGNAGE AREA:	84 SF
	COSTCO WHOLESALE	2'-5 1/4" "C"	21 SF	84 SF
QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF



JANUARY 10, 2025 22-6229-01 **YORKVILLE, IL** *PG:* 6

FUEL ELEVATIONS



	Ordinance No. 2025-
COUNTY OF KENDALL)
STATE OF ILLINOIS)) ss.

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, APPROVING THE FINAL PLAT OF SUBDIVISIONS FOR COSTCO WHOLESALE

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, Costco Wholesale Company (the "Petitioner") has filed an application and petition for approval of the Final Plat of Subdivision of Costco Wholesale, generally located at the southeast corner of East Countryside Parkway and McHugh Road, for members-only retail store and a fueling facility on approximately 34 acres, along with two perimeter lots on an additional seven (7) acres and a stormwater management basin on approximately 3.4 acres; and

WHEREAS, the Planning and Zoning Commission convened and held a meeting on January 8, 2025, to consider the Final Plat of Subdivision of Costco Wholesale; and

WHEREAS, the Planning and Zoning Commission reviewed the standards set forth in Chapter 7 of Title 10 Subdivision Standards and Chapter 8 Section 8 of Title 10 Subdivision Procedures of the Yorkville Unified Development Ordinance and made a recommendation to the Mayor and City Council (the "Corporate Authorities") for approval of the Final Plat of Subdivision of Costco Wholesale subject to the review comments provided by the City Engineer, Engineering Enterprises, Inc. dated December 5, 2024; and

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

- **Section 1**. The above recitals are incorporated herein and made a part of this Ordinance.
- **Section 2**. That the Corporate Authorities hereby approve the Final Plat of Subdivision of Costco Wholesale, for the property legally described and attached hereto and made a part hereof by reference as "*Exhibit A*".
- **Section 3**. That the Corporate Authorities hereby approve the Final Plat of Subdivision of Costco Wholesale as prepared by V3 Companies, Ltd., date last revised November 13, 2024, attached hereto and made a part hereof as "*Exhibit B*", and authorize the Mayor, City Clerk, City Administrator and City Engineer to execute said Plat, subject to the review comments provided in letters from Engineering Enterprises, Inc., dated December 5, 2024, attached hereto and made a part hereof as "*Exhibit C*".

Section 4. That the City Clerk is hereby authorized pursuant to Section 10-8-6-C-7.e of the Yorkville Unified Development Ordinance to file a copy of this ordinance and the Final Plat of Subdivision of Costco Wholesale with the Kendall County Recorder of Deeds.

Section 5. That this Ordinance shall be in full force and effect from and after its passage, approval, and publication in the manner provided by law.

Passed by the City Counc	il of the United City o	f Yorkville, Kendall Co	ounty, Illinois this
day of	, A.D. 2025.		
		CITY CLERK	
KEN KOCH	DA	AN TRANSIER	
ARDEN JOE PLOCHER	CR	AIG SOLING	
CHRIS FUNKHOUSER	MA	ATT MAREK	
SEAVER TARULIS	RU	JSTY CORNEILS	
APPROVED by me, as M	Mayor of the United Ci	ty of Yorkville, Kenda	ll County, Illinois
this day of	, A.D. 2025.		
		MAYOR	
Attest:			

CITY CLERK

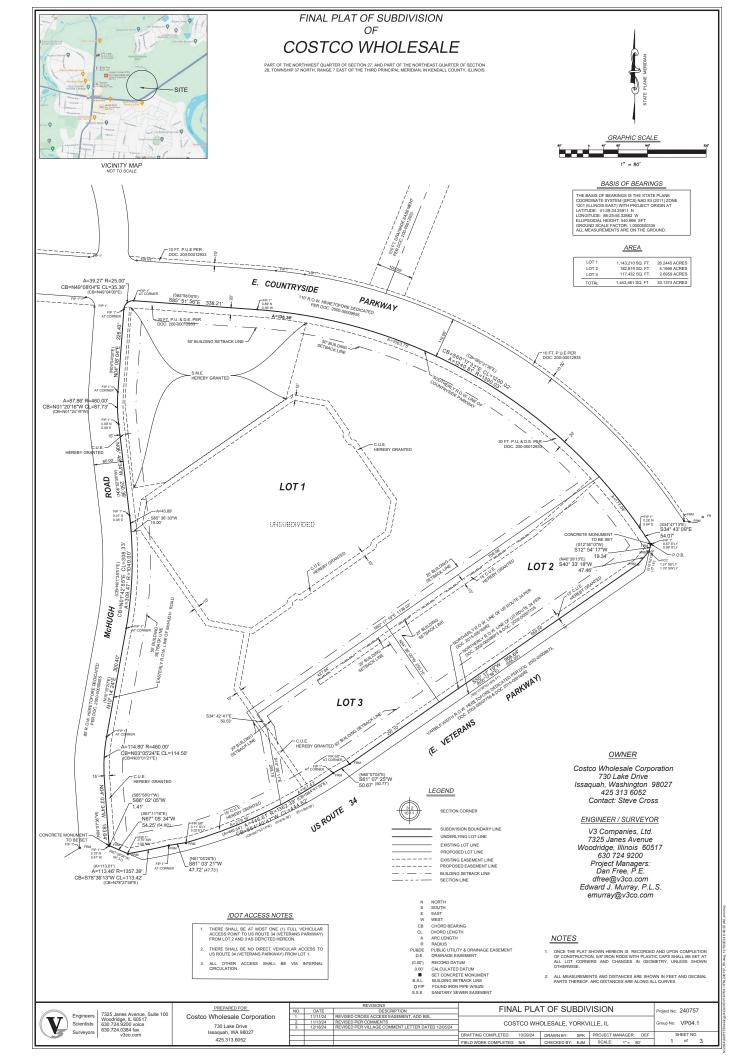
EXHIBIT A

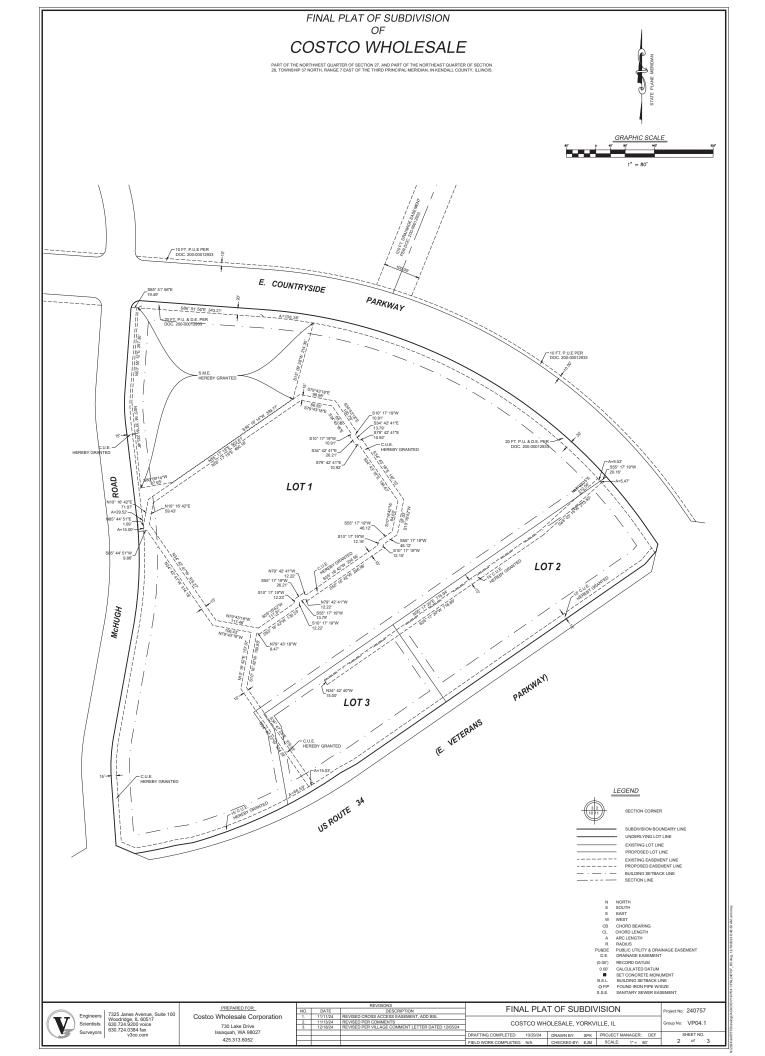
The legal description is as follows:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13 SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976.51 FEET; THENCE WESTERLY ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00' AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES 09 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1.41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET; THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309.47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250.39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25.00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338.21 FEET; THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54.08 FEET FROM THE POINT OF BEGINNING; THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS.

EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER

VESTING TITLE ENTERED IN CASE NO. 15-ED-10, CIRCUIT COURT OF KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS DOCUMENT NO. 201500016982.





FINAL PLAT OF SUBDIVISION OF

COSTCO WHOLESALE

PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

CITY ADMINISTRATOR'S CERTIFICATE

OWNERSHIP CERTIFIC	ATE				
STATE OF)				
COUNTY OF) SS				
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SECRETARY		Printed N	lame		
NOTARY CERTIFICATE					
STATE OF)) SS				
COUNTY OF) 55				
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SURFACE WATER STAT	EMENT				
STATE OF ILLINOIS) SS COUNTY OF DUPAGE)					
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STATE REGISTRATION NUME	BER				
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STATE OF ILLINOIS) SS COUNTY OF KENDALL)					
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ILLINOIS, THISDAY	/ OF		20_	-	
			_		
COUNTY CLERK					
RECORDER'S CERTIFIC	ATE				
STATE OF ILLINOIS))SS				
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KENDALL COUN	ITY RECORE	DER			
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	VED AND ACCEPTED BY THE CITY ADMINISTRATOR OF THE UNITED CITY
. 514141	LLE, ILLINOIS, THISDAY OF, 20
	CITY ADMINISTRATOR
CITY F	PLANNING AND ZONING COMMISSION CERTIFICATE
	OF ILLINOIS)
) SS Y OF KENDALL
	VED AND ACCEPTED BY THE PLANNING AND ZONING COMMISSION OF THE UNIT YORKVILLE, ILLINOIS, THISDAY OF, 20
	CHAIRMAN
CITY C	COUNCIL CERTIFICATE
STATE	OF ILLINOIS)
) SS Y OF KENDALL
	VED AND ACCEPTED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY LLE, ILLINOIS, THISDAY OF, 20
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	MAYOR
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CITY C	MAYOR CLERK'S CERTIFICATE
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CITY UTILITY EASEMENTS PROVISIONS

KENDALL COUNTY RIGHT TO FARM STATEMENT

THE UNITED CITY OF YORKVILLE, ITS SUCCESSORS, LICENSEES AND ASSIGNS, ARE REPRETY GIVEN EASEMENT RIGHTS TO ALE PLATTED BASEMENTS GESCHATED CITY OF THE PROPERTY OF THE WATER SANITARY SEWER OR STORM MAY BE GRADED AS SINULES TO RECEIVE LOCAL SURFACE DRAWAGE. NO PERMANENT OF THE PROPERTY OF

STORMWATER MANAGEMENT EASEMENT PROVISIONS

THE OWNER OF THE PROPERTY SHALL REMAIN RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWAITER MANAGEMENT AREA AND APPURTENANCES. THE UNITED CITY OF YORKVILLE WILL PERFORM ONLY EMERGENCY PROCEDURES AS DEEMED NECESSARY BY THE CITY ENGINEER OF THE UNITED CITY OF YORKVILLE.

SURVEYORS AUTHORIZATION CERTIFICATE

EDWARD J. MURRAY ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037 MY LICENSE EXPIRES ON NOVEMBER 30, 2026. emurray@x26c.com



SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS) SS

THIS IS TO CERTIFY THAT LEDWARD J. MURRAY. ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 4037 HAVE SURVEYED AND SUBVINED THE FELO LOWING DESCREED POOPERTY:

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BEING THE SAME AS:

RECORDED OCTOBER 28, 2015 AS DOCUMENT NO. 20150016982.

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I FURTHER CERTIFY THAT THIS LAND IS WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY WHICH HAS AUTHORIZED A COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE, AS NOW OR HEREAFTER AMENDED.

I FURTHER CERTIFY THAT THE ANNEXED PLAT IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. PERMANENT MONUMENTS WILL BE SET AT ALL LOT CORNERS, EXCEPT WHERE CONCRETE MONUMENTS ARE WORCHTE.

I FURTHER CERTIFY THAT THE ABOVE DESCRIBED AREA IS IN AREAS DETERMIN OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN (ZONE X) AS DEFINED BY THE BURREGROLY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP OF KENDALI ILLINOIS & INCORPORATED AREAS (COMMUNITY PANEL NO. 1709300045H, EFFE 18/2014).

DATED	THIS	 DAY	OF	, A.D., 20	

EDWARD J. MURRAY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037
MY LICENSE SEPPRES ON NOVEMBER 30, 2026.
V3 COMPANIES J. TD. PROFESSIONAL DESIGN FIRM NO. 184000902
THIS DESIGN FIRM MUMBER E SPIRES APPLE 30, 2025.



DATE

PREPARED FOR: Costco Wholesale Corporation

730 Lake Drive Issaquah, WA 98027 425.313.6052

			REVISIONS	FINAL PLAT OF SUBDIVISION							
	NO.	. DATE DESCRIPTION		FINA	L PLA	1 OF 501	BUIV	ISION			
1	1.	11/11/24	REVISED CROSS ACCESS EASEMENT, ADD BSL								
	2.			COSTCO WHOLESALE, YORKVILLE, IL							
	3.	12/18/24	REVISED PER VILLAGE COMMENT LETTER DATED 12/05/24	COOTGO WHOLEGALL, I				OTTOTALE, IE			
	\vdash			DRAFTING COMPLETED:	10/29/24	DRAWN BY:	SPK	PROJECT MAN			
	-			FIELD WORK COMPLETED:	N/A	CHECKED BY:	EJM	SCALE:			



Project No: 240757

Group No: VP04.1

EXHIBIT C

Engineering Enterprises, Inc.





December 5, 2024

Ms. Krysti Barksdale-Noble Community Development Director United City of Yorkville 651 Prairie Pointe Yorkville, IL 60560

Re: Costco

Preliminary Engineering – 1st Submittal United City of Yorkville

Dear Krysti:

We have reviewed the following items for the above-referenced project:

- Preliminary Engineering Plans (5 sheets) dated November 13, 2024, and prepared by V3 Companies
- Final Plat of Subdivision (2 sheets) dated October 29, 2024, and prepared by V3 Companies.
- Photometric Plan dated July 22, 2024, and prepared by T.E. Inc.
- Preliminary Stormwater Management Report dated November 13, 2024, and prepared by V3 Companies
- Traffic Impact Study dated November 13, 2024, and prepared by V3 Companies
- Preliminary Landscape Plan dated November 15, 2024, and prepared by Kimley-Horn
- Other Supporting Documentation

Our review of these plans and reports are to generally determine their compliance with local ordinances and whether the improvements will conform to existing local systems and equipment. This review and our comments do not relieve the designer from his duties to conform to all required codes, regulations, and acceptable standards of engineering practice. Engineering Enterprises, Inc.'s review is not intended as an in-depth quality assurance review, we cannot and do not assume responsibility for design errors or omissions in the plans. As such, we offer the following comments:

General

- The following permits may be required during final engineering and should be provided to the City when obtained. The City and EEI should be copied on all correspondence with the agencies.
 - IEPA NPDES General Construction Permit is required. The Notice of Intent must be filed with IEPA 30 days prior to start of construction.
 - IEPA Water and Sanitary Sewer Permits
 - Yorkville Bristol Sanitary District (YBSD) approval is needed for the connection of the proposed sanitary lines to the existing sanitary sewer.
 - IDOT for the connection to U.S. Route 34
 - United City of Yorkville Stormwater Management Permit
- 2. The following will need to be submitted with final engineering:
 - a. An engineer's estimate needs to be provided and must include all public improvements within the ROW including all public utilities and connections, all soil erosion and sediment control items, and all permitted stormwater items. This cost estimate will be used to determine the construction guarantee amount. In addition, a cost estimate needs to be provided for all site improvements which will be used to calculate the building permit fees.
 - b. Truck turning exhibits for delivery and emergency vehicles
- Additional forms and information can be found at https://www.yorkville.il.us/333/Engineering-Department.
- 4. The comments in the attached review letter from the City's landscaping consultant must be addressed and a revised landscaping plan submitted with final engineering.

Preliminary Engineering Plans

We have completed a cursory review of the preliminary engineering plans and stormwater management report. A detailed review will be completed with the submittal of final engineering. The following comments should be considered when developing final engineering.

C_{0.0} - Cover Sheet

- 5. The plans should be signed and sealed by a Professional Engineer prior to final approval.
- 6. The JULIE logo or contact information should be included on the cover sheet.
- 7. Include contact information for the City and YBSD on the cover sheet.

C2.0 - Layout Plan

8. The City should confirm that the number of parking spaces is adequate.

C3.0 - Preliminary Grading Plan

- Additional grading should be shown in the fueling area.
- Include 1-ft contours in the non-paved area to the west (where the future employee parking will be).

C4.0 - Preliminary Utility Plan

- 11. All utility conflicts will need to be shown.
- 12. Water valves should be included on the water main.
- 13. Provide details of the water main connections.
- 14. The storm structures should be labeled with unique identifiers and the type of structure, frame, and lids/grates.

Photometric Plan

- 15. The photometric plan should include a summary table that includes average, average to minimum, and maximum to minimum light intensity data to confirm that the lighting plan meets the requirements of the Ordinance.
- 16. Light intensity shall be zero-foot candles at all property lines.
- 17. Light fixtures should be fully cut off and conform to the dark sky concept.

Preliminary Stormwater Management Report

- 18. A City of Yorkville Stormwater Permit Application should be submitted with Final Engineering.
- 19. The stormwater management report should be signed and sealed by a Professional Engineer prior to final approval.
- 20. Confirm that the detention basin design accounts for the future development of the fueling station and employee parking lot that is indicated on the plans.
- 21. The report includes a requirement to control the outlet to 0.08 cfs/acre for a 25-year storm. It has been determined that this will not be required for this project.
- 22. A full report with calculations, modeling, and exhibits as indicated in the permit application should be included with final engineering.
- 23. A certified wetland determination will need to be included with final engineering.

- 24. Confirm that the existing storm sewer that goes to the existing detention basin is installed.
- 25. Calculations for the drawdown time of the detention basin will be required due to the 5.8' bounce.

Traffic Study

The following roadway-related improvements are anticipated to accommodate the new development based on the submitted traffic study:

- A new full-access driveway on US 34 that aligns with Tuma Road.
 - a. Eastbound dedicated left turn lane into Costco.
 - b. Westbound dedicated right turn lane into Costco.
- Two new full-access driveways on McHugh Road.
 - c. Restriping the existing two-way left turn lane into a dedicated left turn lane into the proposed Costco gas station.
 - d. Widening McHugh Road near US 34 for a dedicated right-turn lane into the proposed Costco gas station.
- A new full-access driveway on Countryside Parkway that aligns with Crimson Lane.
 - e. Restriping the unused, existing left turn lane in the paved, westbound Countryside Parkway median area.
- A new full-access driveway on Countryside Parkway.
 - f. Removal of the existing landscaped and curbed median area.
 - g. Adding dedicated left turn lane into the proposed Costco parking lot.
- A new Right-In Right-Out driveway on Countryside Parkway.
- 26. The traffic impact study should be submitted to IDOT for review. The City should be copied on all correspondence with IDOT.
- 27. IDOT should comment on the proposed mitigations at US 34 and Countryside. Note that the capacity analysis indicated an inadequate level of service without the proposed mitigations. Storage lengths were also exceeded in this area.
- 28. The storage length for the southbound Countryside Parkway at US 34 should meet the proposed mitigation queue length and avoid blocking the exit of Driveway 3.
- 29. The existing traffic volumes displayed in Figure 5 along McHugh Road do not balance with the volumes entering the intersections of US 34 / McHugh Road and McHugh Road / Countryside Parkway.
- 30. The existing traffic volumes displayed in Figure 5 along Countryside Parkway do not balance with those entering the intersections of US 34 / Countryside Parkway and Countryside Parkway / Crimson Lane.
- 31. The pages from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, should be included in the Appendix.

- 32. The size utilized in Table 1 for trip generation of the Gasoline/Service Station does not account for the future expansion of the gas station.
- 33. A traffic signal warrant analysis at the intersection of US 34/Veterans Parkway and Costco Driveway 4/Tuma Road found the installation of a traffic signal to be unwarranted. It is noted that an inadequate Level of Service at US 34 / Tuma Road / Driveway 4 is expected. A proposed mitigation plan should be provided.

The safety of the eastbound left turn into Driveway 4 is of concern.

- 34. A traffic signal warrant analysis should be performed for McHugh Road and Countryside Parkway with the anticipated project traffic volumes.
- 35. The taper length for the left turn at Driveway 2 should meet minimum IDOT Bureau of Local Roads and Streets (BLRS) design requirements.
- 36. The shifting of driveway 5 further north should be considered. Ideally, the taper length for the southbound left turn at US 34 is extended as it should meet minimum IDOT BLRS design requirements.

This would also allow the shifting of the dedicated right-turn lane for driveway 5 away from the intersection at US 34.

Final Plat of Subdivision

- 37. The legal description is the surveyor's certificate must describe the measured boundary.
- 38. The chord length should be added to all curve dimensions.
- 39. All easements must be dimensioned.
- 40. The water main easement should be changed to a C.U.E.
- 41. The S.S.E. should be changed to C.U.E.
- 42. Cross-access easements are needed over all lots.
- 43. The Public Utility Easement Provisions and the stand-alone Nicor Gas provisions should be removed.
- 44. The stormwater management easement and City Utility Easement C.U.E. provisions should be added.
- 45. The building setback line on the west line of Lot 1 needs to be labeled.
- 46. The area table must match the areas on the plat.
- 47. All fire hydrants, valves and emergency shut off must be inside the C.U.E.

- 48. The concrete monument symbols do not match the location labels on the plat.
- 49. Note 2 on the IDOT access notes contradicts the site plan.

The plans should be resubmitted for further review. If you have any questions or require additional information, please contact our office.

Respectfully Submitted,

ENGINEERING ENTERPRISES, INC.

Bradley P. Sanderson, P.E.

Chief Operating Officer / President

BPS/tnp/pgw2

Mr. Bart Olson, City Administrator (via email) pc:

Ms. Erin Willrett, Assistant City Administrator (via email)

Mr. Eric Dhuse, Director of Public Works (via email)

Mr. Pete Ratos, Building Department (via email)

Ms. Gina Nelson, Admin Assistant (via email)

Ms. Sara Mendez, City Planner (via email)

Building Department (via email) <u>Bzpermits@yorkville.il.us</u>

Ms. Jori Behland, City Clerk (via email)

Mr. Stephen Cross, Costco (via email)

Mr. Dan Free, V3 (via email)

TNP. PGW2, EEI (via e-mail)

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

8755 W. HIGGINS ROAD, SUITE 835 CHICAGO, ILLINOIS 60631 PHONE (773) 693-9200 FAX (773) 693-9200

December 5, 2024

Pamela Whitfield, PE, CFM Senior Project Engineer II Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, IL 60554

Project No.: 21-0275 AO

Re: Landscape Plan Review

Costco

Dear Pamela:

We have completed our first landscape plan review of the proposed Costco development located southwest of McHugh Road and East Countryside Parkway in Yorkville.

Landscape Plan - NOT RECOMMENDED FOR APPROVAL

Because it is preliminary and lacks sufficient detail, and based upon comments below, this landscape plan is not recommended for approval at this time. A response letter from the petitioner which addresses all review comments should be provided with their next submittal.

REVIEW COMMENTS

Comments must be addressed before landscape plan approval can be recommended. If there are any changes to the proposed project, additional comments may be provided. Please note that the requirements of each section are in addition to the requirements of all other sections of the ordinance (i.e., trees and other plant materials cannot be "double counted" to meet multiple requirements).

Building Foundation Landscape Zone

A Building Foundation Landscape Zone, consisting of 5 square feet of landscape area per linear foot of building frontage, is required along front and side yards. No foundation landscaping is shown on the east and west sides of the building. Requirements are not met.

Parking Area Perimeter Landscape Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted. The City may require Parking Lot Perimeter Landscape along the southern edge of the main parking lot if Outlots 1 and 2 are to remain vacant.

Pamela Whitfield Costco December 5, 2024 page 2

Parking Area Interior Landscape Zone

Parking area medians are required every third bay of parking in front or side of building. Parking area islands spaced not more than 10 continuous spaces apart are also required. Requirements are not met.

Transition Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted.

Species Diversity Requirements

Compliance with species diversity requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Minimum Plant Size Requirements

Compliance with minimum plant size requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Tree Preservation and Removal

A review of Google Earth and Google Streetview imagery suggests there are a few parkway trees on the subject property, which are shown to be preserved. Requirements appear to be met and will be confirmed later after more detailed plans have been submitted

Street Trees

A minimum of 1 canopy tree is required per every 40 linear feet of parkway. Requirements are not met.

Wetlands

A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

SUMMARY

This review was based upon the following documents, pursuant to relevant landscape requirements of the City's Unified Development Ordinance and Wetland Regulations.

Landscape Plans, 7 sheets, prepared by Kimley-Horn, most recently dated 11/15/2024

Let us know if there are any questions or comments.

Sincerely,

Tim Pollowy, RLA (IL & WI) Senior Landscape Architect



Memorandum

To: Planning & Zoning Commission

From: Krysti J. Barksdale-Noble, Community Development Director

CC: Bart Olson, City Administrator

Sara Mendez, Planner I

Date: January 2, 2025

Subject: PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plat)

Proposed Wholesale Retail Warehouse, Fuel Station and Outlots

REQUEST SUMMARY:

Stephen Cross, an authorized representative of Costco, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner, are requesting approval to develop a members-only retail store spanning approximately 160,000 square feet, establish and operate a standalone fueling facility, and obtain final plat approval to subdivide the existing two parcels, totaling nearly 34 acres, into three new parcels. The Costco development, including the fueling facility, will occupy approximately 33.14 acres (Lot 1), with an additional 7 acres designated for two perimeter lots (Lot 2 and Lot 3) along Veteran's Parkway and about 3.4 acres reserved for stormwater management at the northwest corner of the property.

As part of the request to amend the existing "Yorkville Crossing" Planned Unit Development (PUD) agreement and Special Use authorization for the fueling station, Costco is seeking allowances for additional parking (980 stalls vs. a code-maximum of 387), exceptions to electric vehicle charging requirements, pole-mounted lighting height exceeding the 35-foot limit (proposed at 36'-6"), certain landscape regulation deviations, and a reduced masonry material percentage on building facades.



COSTCO WHOLESALE WAREHOUSE

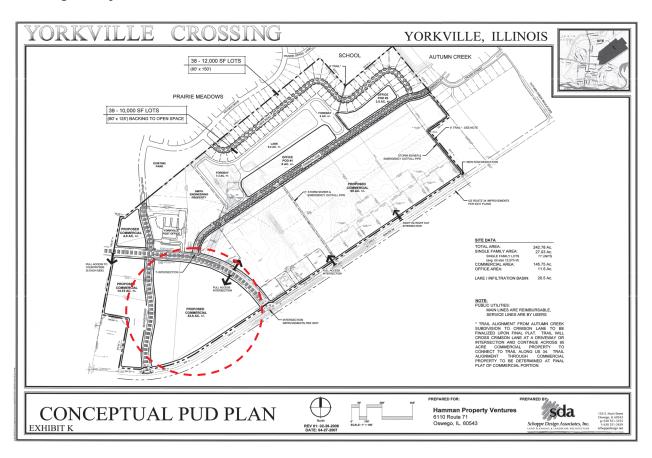
United City of Yorkville, Illinois Date: November 18, 2024

File Location: I:\ARCGIS TEMPLATES\COSTCO WHOLESALE WAREHOUSE



PROPERTY BACKGROUND/ZONING:

The subject property consists of two (2) parcels (#02-28-227-002 and #0 02-27-101-003) which was annexed into Yorkville through Ordinance 2000-34 as part of the Yorkville Crossing development. The Yorkville Crossing Planned Unit Development (PUD) identified the property as having an underlying **B-3 General Business District** zoning which allowed for specific land uses listed in Exhibit "D-1" of the PUD Agreement. Notably, this includes "Grocery Store-Supermarkets" as an allowable use. The following Concept PUD Plan was included as an exhibit to Ordinance 2008-21:



Further, per Table 10-3-12 (B) of the Yorkville Unified Development Ordinance (UDO), a "general retail store, greater than one (1) acre" is a <u>permitted</u> land use and a "gasoline service station" is a <u>special use</u> in the B-3 General Business District. Therefore, the petitioner is requesting the existing Yorkville Crossing Planned Unit Development be amended, or modified, to include Costco's site development plans, requested Special Use permit and all deviations required to construct the proposed project, per plans submitted. The following are the current immediate surrounding zoning and land uses to the subject property:

	Zoning	Land Use				
North	E. Countryside Parkway B-3 PUD (Yorkville Crossing)	Transportation Land Use United States Post Office (USPS) & Vacant Land				
South	US 34 (Veterans Parkway) B-3 General Business District B-3 (Kendall County)	Transportation Land Use Heartland Business Center American Legion & Various Business Land Uses				
East	E. Countryside Center B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land				
West	McHugh Road B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land				

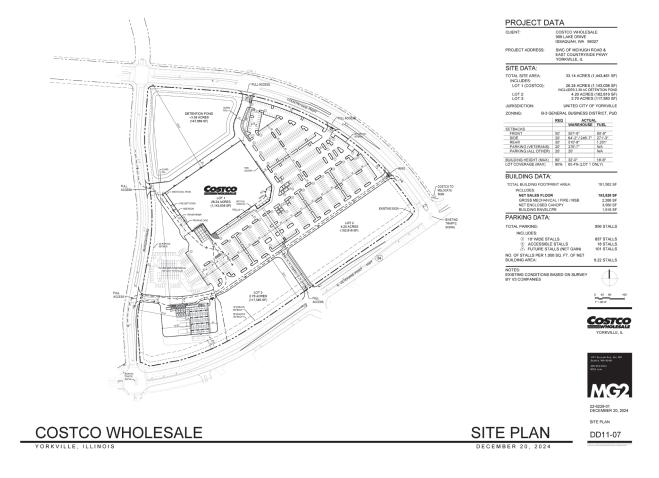
AMENDMENTS TO APPROVED PUD:

As noted earlier, the approved land use of a "grocery store/supermarket" within the Yorkville Crossing PUD's B-3 General Business District is consistent with the proposed Costco Warehouse development. However, Section 10-8-8G of the City's Unified Development Ordinance (UDO) defines the criteria for distinguishing between major and minor amendments to planned unit developments. This request is classified as a <u>major amendment</u> to the approved Yorkville Crossing PUD due to the proposed special use for a fueling station, several requested deviations from UDO development standards, and the inclusion of a site plan.

PROPOSED SITE PLAN:

The Costco site plan places the warehouse at the center of the property, oriented toward Veteran's Parkway, with parking arranged along the southern and eastern sides to prioritize customer accessibility. Future employee parking lot expansion is also proposed to the west of the retail warehouse building. Substantial setbacks and landscaped buffer zones with a mix of trees and shrubs separate the site physically and visibly from nearby properties, while a stormwater management area on the northern edge offers both environmental functionality and aesthetic value.

The internal building design includes a Tire Center, a conveniently located loading dock, and energy-efficient LED lighting for safe navigation across parking and pedestrian areas. Two (2) additional parcels along Veteran's Parkway are earmarked for future commercial development, aligning with the site's zoning requirements and ensuring harmony with Costco's operational goals.



ANCILLARY USES:

While the Unified Development Ordinance does not specifically identify a "tire center" use, where car lifts will be available for tire rotations and tire replacements, the Zoning Administrator can determine if the use is substantially similar to a use listed in the tables. If it is, the use shall be treated in the same

manner as the substantially similar use. Staff identifies the use as similar to "automobile repair" or "automobile service" which are permitted uses in the B-3 General Business District.

REQUESTED PUD DEVIATIONS:

Planned Unit Developments (PUDs) may modify base district standards if the requested changes are explicitly identified and demonstrate compatibility with surrounding development, necessity for proper site development, and alignment with at least one modification standard in Section 10-8-8D of the UDO. Although not required during the amendment process, the petitioner has identified the "Sustainable Design" standard as the modification standard for the Costco development, ensuring the proposed project incorporates methods in site design, architecture, building materials, and landscaping that reduce energy consumption and improve stormwater management.

The petitioner outlines several sustainable design features, including 80% recycled content in the building's steel system and metal panels, insulation with over 50% recycled content, and a roof designed to minimize heat gain. Landscaping uses native, drought-tolerant species to reduce irrigation and maintenance needs, while LED lighting is implemented throughout the site. A water management system enhances efficiency by reducing wastewater and sewer use. Furthermore, the refrigeration system utilizes carbon dioxide (CO2), a sustainable alternative to hydrofluorocarbons (HFCs), due to its low Global Warming Potential, non-toxic, and non-flammable properties.

Below is a summary of the design components of the development plans and the identified <u>five (5)</u> <u>proposed deviations</u> from the Unified Development Ordinance (UDO) as part of the PUD Amendment and Special Use requests:

1. **B-3 Bulk Regulations** - Per the Table 10-3-9(A) Bulk and Dimensional Standards, the following compares current B-3 General Business District standards with the proposed Planned Unit Development (PUD) requested modifications:

BULK REGULATIONS	REQUIRED MINIMUM STANDARDS B-3 DISTRICT	PROPOSED MINIMUM STANDARDS COSTCO	PROPOSED MINIMUM STANDARDS FUEL FACILITY		
FRONT YARD (Veterans Pkwy)	50 ft.	507 ft.	60'-8''		
CORNER SIDE YARD (East/West)	30 ft.	246'-7"/64 ft.	271'-3"		
REAR YARD (SEC Countryside Pkwy/McHugh)	20 ft.	64 ft.	1,201'		
PARKING SETBACK (Veterans Pkwy)	20 ft.	275 ft.	N/A		
PARKING SETBACK (Countryside Pkwy/McHugh)	20 ft.	20 ft.	N/A		
MAXIMUM LOT COVERAGE	80%	65.4%	N/A (included with Costco)		
MAXIMUM BUILDING HEIGHT	80 ft.	32 ft.	18'-6''		

The proposed PUD for the Costco Warehouse and proposed fueling station meets the minimum building setback requirements and other regulations related to maximum lot coverage and building height for the B-3 district.

- 2. **Parking Requirements** According to the Parking Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), there are 856 total parking spaces to be provided on the property to accommodate the proposed ~160,000 sq. ft. retail warehouse building and fueling facility uses. <u>Future parking expansion area will include another 124 stalls for an overall total 980 parking spaces.</u> The petitioner is also proposing to exceed the minimum standard parking stall and aisle dimensions by providing 90-degree parking stalls with a 10' width and a minimum of 18.5' stall depth with a 2' overhang. Aisle widths for the 2-way drives are 32' wide.
 - a. Per the Unified Development Ordinance, the minimum parking requirement for a retail store more than 8,000 sq. ft. of the net building square feet is 2 spaces/1,000 sq. ft. Gasoline Service Stations require a minimum of 1 space/gas pump and 1space/300 sq. ft. for any accessory retail space. However, to minimize excessive areas of pavement, no off-street parking area for nonresidential uses shall exceed the required minimum number of parking spaces by more than twenty (20) percent, except as approved by the Zoning Administrator. In approving additional spaces, the Zoning Administrator shall determine that the parking is needed based on documented evidence of actual use and demand provided by the applicant. Therefore, the total required maximum parking for the subject property is 386 spaces, including a minimum of 8 ADA accessible spaces.

Deviation #1: The petitioner is requesting a variance from the UDO's required maximum parking due to parking being "critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property."

Staff is supportive of the deviation from a maximum of 2 parking spaces per 1,000 net sq. ft. of building area to approximately 6.22 parking spaces per 1,000 of building area, as noted in the response comments provided by Cross Engineering & Assoc. dated December 30, 2024.

3. *Electric Vehicle (EV) Requirements* - Per Section 10-5-1K-1 of the Unified Development Ordinance, infrastructure for a minimum of 8 electric vehicle charging station is required to be installed for the proposed 980 parking spaces (1 EV charging station per 50 required parking spaces).

Deviation #2: The petitioner is requesting full relief from the UDO's minimum required EV charging station requirement due to "current Costco data reveals that an exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future."

Staff is supportive of the deviation of the full relief for the installation of infrastructure to accommodate the required minimum 8 electric vehicle charging stations since the petitioner will reevaluate the need for EV charging in the near future.

4. *Off-Street Loading* - Per Section 10-5-1-Q of the Unified Development Ordinance, the number of off-street shall be determined on a case-by-case basis, and in the instance of special uses, loading berths adequate number and size to serve such use, as determined by the Zoning Administrators, shall be provided.

- a. The petitioner proposes to have four (4) recessed off-street loading spaces for the retail warehouse located at the southwest corner of the building. While not a deviation, staff is supportive of this request.
- 5. Vehicular Access It is noted that the site has six (6) points of access. Three (3) off of E. Countryside Parkway two (2) full access and one (1) right-in/right-out; one (1) full off of E. Veterans Parkway, which will be coordinated with IDOT; and two (2) full access points off of McHugh Road. These access points lead to internal private roadways which loop around the retail warehouse building, provides direct access to the fueling facility, and will connect to the future outlot uses.
 - a. In line with Section 10-5-1-F of the Unified Development Ordinance, which encourages cross-access between adjacent properties, the development is required to promote shared parking and ease vehicular flow between commercial and residential areas. The commercial lots meet shared parking requirements, and as such, the developer proposes to ensure vehicular cross-access between the Costco parcel and the future outlot parcels via a real estate agreement. This aims to reduce street access points and facilitate movement between different uses, supporting connectivity and operational efficiency within the site.
- 6. **Pedestrian Circulation** Per Section 10-5-1-N Pedestrian Circulation Standards of the Unified Development Ordinance required off-street parking areas to on-site pedestrian circulation systems and connection to existing and future planned trails.
 - a. The petitioner has provided a single pedestrian connection to the public way off of E. Veterans Parkway at the intersection with Tuma Road. A secondary pedestrian connection to the public way at the northernmost full access drive on Countryside Parkway at the intersection with Crimson Lane is also proposed.
- 7. *Traffic Study/Roadway Improvements* A Costco Traffic Impact Study, dated November 13, 2024 was prepared by V3 Companies, Ltd. Per the study, off-site road enhancements will involve adjusting the existing center medians along Countryside Parkway and adding lane striping to create left-turn lanes at the intersections of Countryside Parkway and McHugh Road. Additionally, new right-turn lanes will be installed at the gas station entrance on McHugh Road and at Veteran's Parkway.
 - a. The City Engineer has reviewed the traffic study and has requested the study be submitted to IDOT for review and comments on certain traffic mitigations proposed as part of the development. Staff recommends further traffic signal warrant analyses should be performed at the intersection of US 34/Veterans Parkway, Costco Driveway #4/Tuma Road, and McHugh Road/Countryside Parkway.
- 8. **Lighting** A photometric plan has been provided along with pole details of the proposed light standards to be installed within the parking lot area. Maximum illumination at the property line shall not exceed zero (0) foot-candle and no glare shall spill onto adjacent properties or rights of way.

Deviation #3: Per Table 10-5-7(E) of the Unified Development Ordinance, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. The petitioner seeks a deviation to this regulation to install a light fixture with a maximum height of 36'-6" to provide ample uniform light coverage of the parking lot area. **Staff supports this deviation**.

9. *Mechanical Screening* - Per Section 10-5-4 Screening of the Unified Development Ordinance, ground/wall-mounted and roof mounted mechanical units that are visible from any public right-of-way or adjacent residential property shall be screened from public view.

Materials used for screening shall be designed and established so that the area or element being screened is no more than twenty (20) percent visible through the screen.

a. It is noted that there are two (2) proposed ground-mounted compactors located on the west elevation adjacent to McHugh Road. It appears the petitioner has proposed to screen ground mounted mechanical equipment with landscaping material such as evergreen trees, ornamental trees and shrubbery located to the west in landscape bed edge.

Since the units may not be visible from the public way due to the location, setback and landscaping provided on the site, staff is supportive of the screening.

10. *Landscaping* - Section 10-5-3 of the Unified Development Ordinance establishes landscape standards for new developments. The petitioner has submitted a Costco Landscape Plan, prepared by Kimley Horn, and dated last revised 11-15-24. The landscape plan emphasizes a diverse mix of plantings to enhance aesthetic appeal and environmental integration. It includes over 1,000 canopy and ornamental trees complemented by shrubs, ornamental grasses, and perennials. Turf sod and no-mow seed mix cover large areas, while naturalized plantings and decorative rock mulch are used for ecological and visual interest.

Deviation #4 - The petitioner is requesting relief from Sections 10-5-3-C Building Foundation Landscape Zone and Section 10-5-3-E Parking Area Interior Landscaping Zone. Considering the necessity for a clear path of ingress and egress for shoppers and the adjacent loading facility, along with the landscaping already provided in the nearby end-of-aisle parking island, staff supports the deviation from the building foundation planting requirements. Additionally, staff supports the interior landscaping requirements for the parking area, including the placement of parking lot medians every third bay of parking in front or to the side of the building and a parking island for every 10 parking spaces, due to the increased demand for vehicular parking on-site.

- 11. *Appearance Standards* Per Section 10-5-8-C-3.b Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty (50) percent of the total building, as broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty (50) percent of the facade. Any other facade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades. Additional standards include:
 - a. Loading bays for commercial and office uses shall not be located in the front of a building or in the area abutting a public right-of-way, and all commercial, office.
 - b. Institutional buildings shall consist of solid and durable facade materials and be compatible with the character and scale of the surrounding area.

The petitioner has submitted exterior building elevations depicting the retail warehouse with materials such materials as insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. Below is the proposed building material breakdown and architectural renderings:

MATERIAL PERCENTAGES

MATERIAL	SOUTH	EAST	ELEVAT NORTH	7ON WEST	ENTRY	TOTAL
SMOOTH FACE CMU "BUFF"	1,403 SF 11%	1,151SF 14%	2,347 SF 18%	1J88 SF 12%	905 SF 29%	14.61%
GLAZING		390 SF 5%			993 SF 23%	2.89%
TEXTURED ARCHITECTURAL METAL PANEL"SANDSTONE"	2,549 SF 21%	2,867SF 34%	5,850 SF 44%	1911 SF 20%	1,470 SF 34%	30.60%
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"TAUPE"	7,765 SF 63%	3,925 SF 47%	5,108 SF 38%	6,557 SF 68%	939 SF 22%	50.76%
CONCRETE "NATURAL"	546 SF 4%					1.14%

^{*} CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS



- c. Staff has calculated that the masonry/cementitious materials make up approximately 15-16% of the total building and 30-35% of the front elevation (South and Entry). We understand that Costco must maintain its corporate brand and image, and staff is fully supportive of this deviation from the 50% appearance code standard. The proposed textured and ribbed architectural paneling provides a solid and durable façade, which meets the intent of the UDO's requirements.
- d. In Section 10-5-8C.1 of the UDO it states "Creativity and ingenuity in applying the standards and guidelines listed in this Code are encouraged. <u>Likewise</u>, ingenuity and <u>creativity</u>, while considering deviations to the standards and guidelines of this Code, are encouraged."

<u>Deviation #5</u> - The petitioner is requesting relief from the minimum masonry requirements and the placement of loading bays at the front of the building and adjacent to a public right-of-way. The design incorporates vertical architectural articulation through the use of color, texture, and a strategic distribution of sustainable materials proportionate to the building's scale. Furthermore, the inclusion of a free-standing steel trellis on the south elevation helps to soften and define the building's mass as viewed from US 34/Veterans Parkway. With these enhancements and the recessed docking area, <u>staff supports the requested deviation</u>.

12. **Signage** - Per Section 10-6-6 of the Unified Development Ordinance, single tenant buildings shall be permitted a total of two (2) primary wall signs or one (1) primary wall sign per one hundred (100) linear feet of building frontage. One (1) additional wall sign shall be allowed per additional hundred (100) feet of building frontage. Only one (1) primary wall sign shall be displayed on any single building façade.

a. The petitioner is proposing six (6) wall mounted signs as illustrated on the exterior elevations, as illustrated below:

	SIGN TABLE							
IDENTITY	QUANTITY	SIGN	SIZE	AREA (EACH)	TOTAL SF			
S1	1	COSTCO WHOLESALE	5'-0" C	175 SF	175 SF			
S2	4	COSTCO WHOLESALE	6'-0" C	280 SF	1120 SF			
S3	1	TIRE CENTER	17'-4" x 1'-9"	31 SF	31 SF			
			TOTAL SIGN AREA:		1326 SF			



Per staff's calculations, the petitioner is permitted a maximum of five (5) primary signs and eight (8) secondary signs totaling 13 wall signs, as depicted in the table below:

Elevation	Façade Length	Permitted # of Signs	Proposed # of Signs	Permitted Max. Sign Area	Proposed Sign Area
South	~358'-7"	3	1	~717.4 sq. ft.	280 sq. ft.
East	~326'-4"	3	2	~652.8 sq. ft.	311 sq. ft.
Entry	70'-3 ¾''	1	1	~140.7 sq. ft.	175 sq. ft.
North	~493'-6"	3	1	~987.2 sq. ft.	280 sq. ft.
West	~220'-0"	3	1	~440 sq. ft.	280 sq. ft.
TOT	ΓAL	13	6	~2938.1 sq. ft.	1326 sq. ft.

All proposed wall signs conform to UDO regulations. It is noted a monument sign is not proposed for the development. However, the existing pylon ground-mounted "Menards/Yorkville Crossing" sign located at the southeast corner of the property will be relocated, east of Countryside Parkway on parcel #02-27-101-004 owned by Yorkville Crossings, LLC.

PROPOSED SPECIAL USE:

As previously mentioned, the proposed fuel facility (gasoline service station) situated at the northeast corner of US 34 and McHugh Road is identified as a special use in the B-3 General Business District requiring additional discretion in the approval process due to operational characteristics that are different from, but complements, the primary retail land use.

The Costco fuel facility proposes 16 gas dispensers, accommodating 2 cars per dispenser. A total of eight (8) lanes are proposed for car queuing allowing five (5) cars per lane stacking. This results in a total of 72 cars maximum in this area of the site. No accessory retail convenience store is proposed for the fuel facility area.

During the Plan Council staff-level review, staff expressed some concerns regarding the southernmost full access off of McHugh Road leading to the fueling facility which may cause a backup onto the public roadway should there be more than the five (5) vehicles stacking per fuel lane or 40 vehicle max stacking for all pumps. The petitioner subsequently provided further details regarding the operation of the fuel station.

According to Costco, the proposed fuel facility design is based on extensive data collection and observations from facilities nationwide, ensuring efficiency by tailoring the number of pumps, queue lanes, and traffic flow to each location. The Yorkville facility, among the largest in the Midwest, includes

16 pumps (32 dispensers), a 155-foot drive lane accommodating 40 vehicles, and a total capacity for 72 vehicles in the designated area. This design aims to minimize wait times, vehicle queuing, and public road backups. If future demand warrants, the facility can expand southward to add four more pumps (40 dispensers total) and extend queuing lanes westward to further enhance traffic flow and reduce potential congestion.

Based upon this further information, staff is confident the petitioner can adequately address any on-site vehicle stacking issues, should they arise, avoiding backups into the adjacent public ways. Therefore, staff is supportive of the special use request for a fuel facility.

PROPOSED FINAL PLAT:

A Final Plat of Subdivision of Costco Wholesale dated last revised 12/18/24 and prepared by V3 Companies, Ltd. has been submitted by the petitioner. The plat includes detailed boundary descriptions, lot sizes, and dimensions for the proposed three (3) lots: Lot 1 (26.24 acres), Lot 2 (4.20 acres), and Lot 3 (2.70 acres). It highlights easements for utilities, drainage, and stormwater management, as well as building setback lines. The plat also identifies public utility access and stormwater provisions and references prior dedications for rights-of-way along major roads like US Route 34 and McHugh Road. Staff recommends approval of the Final Plat of Subdivision subject to review comments provided by the EEI, City Engineer, in a letter dated December 5, 2024.

COMPREHENSIVE PLAN:

The 2016 Comprehensive Plan Update designates this property as "Mid Density Residential (MDR)" which is defined typically for higher density residential developments near commercial areas and transportation corridors including townhomes and multi-family development.

Although the proposed commercial land use does not align with the comprehensive plan's current future land use designation, staff supports the use because it is consistent with the "Destination Commercial (DC)" designation assigned to nearby properties to the west. Additionally, the property's existing B-3 zoning classification aligns with both the Destination Commercial land use and the original PUD. If the proposed





development is approved, staff will initiate an amendment to the Comprehensive Plan.

STANDARDS FOR SPECIAL USE:

The Planning and Zoning Commission may recommend approval of a Special Use upon considering the following standards (Section 10-8-5 of the Yorkville Unified Development Ordinance):

- i. The establishment, maintenance or operation of the Special Use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort, or general welfare.
- ii. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within or near the neighborhood in which it is to be located.

- iii. The establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.
- iv. Adequate utilities, access roads, drainage or other necessary facilities have been or shall be provided.
- v. Adequate measures shall be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets.
- vi. The proposed Special Use is not contrary to the objectives of the City's adopted Comprehensive Plan.

The petitioner has provided responses to these standards which will be incorporated into the record during the public hearing.

STAFF COMMENTS:

A staff-level technical review of the proposed plans was conducted by the Plan Council on December 12, 2024. This included written review comments on the plans prepared by EEI, the City Engineer, dated December 5, 2024, which are attached for your reference. In response, the petitioner has submitted revised plans and written responses addressing the comments in the review letter to proceed with the public hearing. Approval of the Planned Unit Development Amendment, Special Use, and Final Plat is contingent upon comments prepared by EEI dated December 5, 2024 and any subsequent reviews related to the plans submitted on December 30, 2024. **Staff is supportive of the application and requests**.

PROPOSED MOTIONS:

1. Planned Unit Development (PUD) Amendment

In consideration of testimony presented during a Public Hearing on January 8, 2025, the Planning and Zoning Commission recommends approval to the City Council of a request for an amendment to the Yorkville Crossing Planned Unit Development Agreement to facilitate the development of an approximately 160,000-square-foot members-only retail store, a fuel facility, and two (2) commercial outlots with an underlying zoning designation of B-3 General Business District for an approximately 34 acre parcel located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway, subject to the conditions enumerated in a staff memorandum dated January 2, 2025 and review comments prepared by the City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan and Aerial Site Plan prepared by MG2 dated December 20, 2024 and Traffic Study prepared by V3 Companies updated December 30, 2024, and further subject to {insert any additional conditions of the Planning and Zoning Commission}...

2. Special Use

In consideration of testimony presented during a Public Hearing on January 8, 2025 and approval of the findings of fact, the Planning and Zoning Commission recommends approval to the City Council of a request for Special Use authorization for a fuel facility as part of the Costco Wholesale Warehouse development to be located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway within the Yorkville Crossing PUD subject to engineering review comments provided by the City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to the Site Plan and Aerial Site Plan prepared by MG2 dated December 20, 2024 and Traffic Study prepared by V3 Companies updated December 30, 2024, and further subject to {insert any additional conditions of the Planning and Zoning Commission}...

3. Final Plat of Subdivision

The Planning and Zoning Commission recommends approval to the City Council of the Final Plat of Subdivision of Costco Wholesale, dated last revised 12/18/24 and prepared by V3

Companies, Ltd. subject to review comments prepared by City's engineering consultant, EEI, Inc., in a letter dated December 5, 2024 and any subsequent reviews related to said Final Plat of Subdivision, and further subject to {insert any additional conditions of the Planning and Zoning Commission}...

Attachments:

- 1. Applications for Special Use, PUD Amendment, and Final Plat
- 2. Costco Site Plan Narrative, dated November 15, 2024 and prepared by Costco Wholesale Corporation
- 3. Written responses to review comments prepared by Cross Engineering & Associates dated December 30, 2024.
- 4. Costco ALTA Survey, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
- 5. Costco Site Plan, dated December 20, 2024 and prepared by MG2
- 6. Costco Aerial Site Plan, dated December 20, 2024 and prepared by MG2
- 7. Final Plat of Subdivision of Costco Wholesale, dated last revised 12/18/24 and prepared by V3 Companies, Ltd.
- 8. Preliminary Civil/Engineering Plans for Costco Wholesale, dated 11-13-24 and prepared by MG2
- 9. Costco Landscape Plan, dated last revised 11-15-24 and prepared by Kimley Horn
- 10. Costco Warehouse Floor Plan, dated November 15, 2024 and prepared by MG2
- 11. Costco Architectural Elevations, dated November 15, 2024 and prepared by MG2
- 12. Costco Renderings, dated November 15, 2024 and prepared by MG2
- 13. Costco Fuel Facility Plan, dated November 15, 2024 and prepared by MG2
- 14. Costco Lighting Plan, dated July 2024 and prepared by T.E., Inc.
- 15. Costco Traffic Impact Study, dated November 13, 2024 and Updated December 30, 2024 as prepared by V3 Companies, Ltd.
- 16. Costco Preliminary Stormwater Management Report, dated November 13, 2024 and prepared by V3 Companies, Ltd.
- 17. Plan Council Packet dated 12-12-24
- 18. EEI Review Letter dated December 5, 2024
- 19. Public Hearing Notice



INVOICE & WORKSHEET PETITION APPLICATION					
CONCEPT PLAN REVIEW	☐ Engineering Plan Review deposit \$500.00	Total: \$ 0			
AMENDMENT	□ Annexation \$500.00 □ Plan \$500.00 □ Plat \$500.00 ☒ P.U.D. \$500.00	Total: \$ 500.00			
ANNEXATION	≥ \$250.00 + \$10 per acre for each acre over 5 acres				
5 = # of Acres	x \$10 = + \$250 = \$ Amount for Extra Acres Total Amount	Total: \$ 0			
REZONING	\$200.00 + \$10 per acre for each acre over 5 acres				
5=	rezoning to a PUD, charge PUD Development Fee - not Rezoning Fee	Total: \$			
SPECIAL USE					
	$x $10 = \frac{291.30}{\text{Amount for Extra Acres}} + $250 = $ 541.30$	Total: \$ 541.30			
ZONING VARIANCE	\square \$85.00 + \$500.00 outside consultants deposit	Total: \$			
PRELIMINARY PLAN FEE	× \$500.00	Total: \$ 500.00			
PUD FEE	☐ \$500.00	Total: \$			
FINAL PLAT FEE	≥ \$500.00	Total: \$ 500			
ENGINEERING PLAN REVIEW DEPOSIT	□ Less than 1 acre \$5,000.00 □ Over 1 acre, less than 10 acres \$10,000.00 ☒ Over 10 acres, less than 40 acres \$15,000.00 □ Over 40 acres, less than 100 acres \$20,000.00 □ Over 100 acres \$25,000.00	Total: \$ 15,000			
OUTSIDE CONSULTANTS DEPOSIT Legal,	land planner, zoning coordinator, environmental services				
	For Annexation, Subdivision, Rezoning, and Special Use: ☐ Less than 2 acres \$1,000.00 ☐ Over 2 acres, less than 10 acres \$2,500.00 ☑ Over 10 acres \$5,000.00	Total: \$ 5,000			
	TOTAL AMOUNT DUE:	22,041.30			



DATE: 11-8-2024	PZC NUMBER:	DEVELOPMENT NAME:				
PETITIONER INFORMATION						
NAME: Stephen Cross-Auth	norized Costco Representative	COMPANY: Costco Wholesale Corporation				
MAILING ADDRESS: c/o Cross	Engineering Associates, Inc. 1955	Raymond Drive				
CITY, STATE, ZIP: Northbrook,	TELEPHONE: OBUSINESS OHOME 847-498-0800					
EMAIL: c_stephencross@costco.com FAX:						
PROPERTY INFORMATION						
NAME OF HOLDER OF LEGAL TITLE	Joda Land Holding, LLC					
IF LEGALTITLE IS HELD BY A LAND	TRUST, LIST THE NAMES OF ALL HOLDERS O	F ANY BENEFICIAL INTEREST THEREIN:				
PROPERTY STREET ADDRESS: N//	A					
DESCRIPTION OF PROPERTY'S PHY Northwest cor	SICAL LOCATION: mer of Veteran's Parkway & Ea	st Countryside Parkway				
CURRENT ZONING CLASSIFICATION	l: B-3 General Business PUD	COMPREHENSIVE PLAN FUTURE LAND USE DESIGNATION: Mid-Density Res.				
REQUESTED SPECIAL USE: Gasoline Service Station						
ZONING AND LAND USE OF SUR	ROUNDING PROPERTIES					
NORTH: B-3 General Busine	ess, PUD; Institutional/ Commerci	al/ Office				
EAST: B-3 General Busine	ess and O Office, PUD; Vacant Lan	d & Suburban Neighborhood				
SOUTH: B-3 General Busine	ess District; Commercial & Kendal	County, B3, Highway Business				
WEST: B-3 General Busine	ess and O Office PUD; Vacant Land	d & Commercial				
KENDALL COUNTY PARCEL IDEN	ITIFICATION NUMBER(S)					
02-27-101-003	02-28-227-002					



ATTORNEY INFORMATION	
NAME: Joon Kim	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: 999 Lake Drive	
CITY, STATE, ZIP: Issaquah, WA 98027	TELEPHONE: 425-416-5456
EMAIL: joonkim@costco.com	FAX:
ENGINEER INFORMATION	
NAME: Dan Free	COMPANY: V3 Companies
MAILING ADDRESS: 7325 Janes Avenue	
CITY, STATE, ZIP: Woodridge, Illinois 60517	TELEPHONE: 630-724-9200
EMAIL: dfree@v3co.com	FAX:
LAND PLANNER/SURVEYOR INFORMATION	
NAME: Risa Yuki-Principal	COMPANY: MG2 Architects
MAILING ADDRESS: 1101 Second Ave. Ste 100	
CITY, STATE, ZIP: Seattle, WA 98101	TELEPHONE: 206-962-6630
EMAIL: risa.yuki@mg2.com	FAX:
ATTACHMENTS	

Petitioner must attach a legal description of the property to this application and title it as "Exhibit A".

Petitioner must list the names and addresses of any adjoining or contiguous landowners within five hundred (500) feet of the property that are entitled notice of application under any applicable City Ordinance or State Statute. Attach a separate list to this application and title it as "Exhibit B".



SPECIAL USE STANDARDS

PLEASE STATE HOW THE ESTABLISHMENT, MAINTENANCE OR OPERATION OF THE SPECIAL USE WILL NOT BE UNREASONABLY DETRIMENTAL TO OR ENDANGER THE PUBLIC HEALTH, SAFETY, MORALS, COMFORT OR GENERAL WELFARE:

The proposed fuel facility will not endanger the public health, safety, morals, comfort or general welfare of any portion of the community. The fuel facility has been designed to provide a safe environment for the residents of the City of Yorkville and surrounding communities, as well as Costco's members and employees. The fuel facility will meet applicable Federal, State and local codes for fire access, pedestrian and vehicular accessibility; fuel truck movements and gas operations. Costco will maintain the fuel facilities appearance, provide State required maintenance, which includes equipment and tank testing and monitoring inspections. The fuel facility, canopy, paving, lighting, and fuel dispensers will be designed to State and all applicable zoning and development regulations.

PLEASE STATE HOW THE SPECIAL USE WILL NOT BE INJURIOUS TO THE USE AND ENJOYMENT OF OTHER PROPERTY IN THE IMMEDIATE VICINITY FOR THE PURPOSE ALREADY PERMITTED, NOR SUBSTANTIALLY DIMINISH AND IMPAIR PROPERTY VALUES WITHIN OR NEAR THE NEIGHBORHOOD IN WHICH IT IS LOCATED:

The proposed fuel facility will have no adverse impact(s) on the current use or enjoyment of nearby properties in the immediate area. The Property is zoned General Business District and the nearby zoning is predominately zoned commercial and as such, the requested special use is compatible with nearby current and future land uses. The fuel facility plan allows for generous setbacks, and landscaping along Veteran's Parkway and McHugh Road. The requested Special Use will not be injurious to other nearby property owners as the design, arrangement, land use intensity, scale and character is and will be compatible to nearby land uses and future developments.

There is no indication that the fuel facility will diminish or impair property values within the immediate commercial area or the community.

PLEASE STATE HOW THE ESTABLISHMENT OF THE SPECIAL USE WILL NOT IMPEDE THE NORMAL AND ORDERLY DEVELOPMENT AND IMPROVEMENT OF SURROUNDING PROPERTY FOR USES PERMITTED IN THE DISTRICT:

The fuel facility will not impede the orderly development and improvement of the surrounding property for uses permitted in the district as the proposed land use will encourage and promote orderly development in the area. Fuel facilities are typically located in the vicinity of a major transportation system and permitted as a special use in most commercial and business zoned districts. The proposed land use is compatible with existing land uses and is permitted as a special use in the B-3, General Business District.

The development of the Costco warehouse and fuel facility will serve as the catalyst promoting and encouraging future development in the immediate area.

PLEASE STATE HOW ADEQUATE UTILITIES, ACCESS ROADS, DRAINAGE OR OTHER NECESSARY FACILITIES HAVE BEEN OR ARE BEING PROVIDED:

The proposed fuel facility has been carefully planned to be accessible by multiple access points from McHugh Road, Veteran's Parkway and Countryside Parkway. Access directly to the fuel facility will be an efficient traffic movement with adequate queue to serve each fueling position. Drainage is designed to keep pavement areas safe and properly conveyed to an onsite storm water basin. Utilities such as water, sanitary sewer, electric and storm are available to effectively serve the fuel facility. The Property will be illuminated for safe vehicular and pedestrian travel.



SPECIAL USE STANDARDS

PLEASE STATE HOW ADEQUATE MEASURES HAVE BEEN OR WILL BE TAKEN TO PROVIDE INGRESS OR EGRESS SO DESIGNED AS TO MINIMIZE TRAFFIC CONGESTION IN THE **PUBLIC STREETS:**

The primarily entrance to the fuel facility is located north of the McHugh Road and Veteran's Parkway, which is a signalized intersection. The fuel facility is planned to accommodate anticipated traffic volumes and provide adequate queuing for vehicles within the Property. Traffic congestion on City roads will be minimized with the carefully designed site plan and location of the fuel facility within the Costco lot. The fuel facility ingress and egress has been designed to accommodate traffic movements from west to east allowing traffic to flow back to the Costco parking lot and interior perimeter roadway eliminating congestion at the McHugh Road intersection. Left turn lane modifications are planned for McHugh Road that will adequately serve the expected traffic volumes on this road. There will be no traffic impacts to Veteran's Road or Countryside Parkway.

PLEASE STATE HOW THE PROPOSED SPECIAL USE IS NOT CONTRARY TO THE OBJECTIVES OF THE CITY'S ADOPTED COMPREHENSIVE PLAN:

The proposed Costco fuel facility promotes the general purpose and intent of the Comprehensive Plan by providing an appropriate, aesthetically pleasing commercial land use along Veteran's Parkway's commercial corridor. The proposed land use is consistent with many goals and objectives of the Comprehensive Plan such as the development of a parcel of land previously zoned commercial many years ago. The requested Special Use in association with the proposed Costco warehouse will provide a new opportunity for residents to shop and fuel within the corporate limits of the City of Yorkville. The Comprehensive Plan promotes new commercial opportunities in areas that have been undeveloped for long periods of time with the hope that additional interest will be created by those developments. Costco's presence typically draws interest from other retailers and business adding to a communities commercial base.

AGREEMENT

I VERIFY THAT ALL THE INFORMATION IN THIS APPLICATION IS TRUE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONSULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT SCHEDULED COMMITTEE MEETING.

I UNDERSTAND ALL OF THE INFORMATION PRESENTED IN THIS DOCUMENT AND UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN FAULT AND I MUST THEREFORE FOLLOW THE REQUIREMENTS OUTLINED ABOVE.

Stephen J. Cross 11-8-2024 PETITIONER SIGNATURE DATE

DATE

arias

OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUE THE APPROPRIATE ENTITLEMENTS ON THE PROPERTY.

tammar

OWNER SIGNATURE

THIS APPLICATION MUST BE **NOTARIZED PLEASE NOTARIZE HERE:**

MARIAN F CROSS Notary Public, State of Illinois Commission No 831693 My Commission Expires January 21, 2028

(non 11-8-24



APPLICATION FOR FINAL PLAT/REPLAT

DATE: 11-8-2024	PZC NUMBER:	DEVELOPMENT NAME: Costo	o Yorkville, IL
PETITIONER INFORMATION			
NAME: Stephen Cross-A	Authorized Costco Representative	COMPANY: Costco Wholes	ale Corporation
MAILING ADDRESS: c/o Cross	s Engineering, Inc 1955 Raymond [Drive	
CITY, STATE, ZIP: Northbrook	k, IL 60062	TELEPHONE: ○ HOME ● BUSI	NESS 847-498-0800
EMAIL: c_stephencross@	Dcostco,com	FAX:	
PROPERTY INFORMATION			
NAME OF HOLDER OF LEGAL TITL	E: Joda Land Holding, LLC		
IF LEGAL TITLE IS RELU OT A LAN	ID TRUST, LIST THE NAMES OF ALL HOLDERS OF AN	IT DENEFICIAL INTEREST THEREIN.	
PROPERTY STREET ADDRESS: NA	'A		
	eteran's Parkway & East Countrysid		
TOTAL LOT ACREAGE: 34.13		TOTAL NUMBER OF LOTS TO BE C	REATED: 3
PROPOSED LOT AREAS AND D	IMENSIONS		
LOT NUMBER	LOT DIMENSIO	NS (W x L, IN FEET)	LOT AREA (IN SQUARE FEET)
Lot 1	Se	ee Plat	1,403,209
Lot 2	Se	See Plat 182,8	
Lot 3	Se	ee Plat	117,432
		~	



APPLICATION FOR FINAL PLAT/REPLAT

ATTORNEY INFORMATION	
NAME: Joon Kim	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: 999 Lake Drive	
CITY, STATE, ZIP: Issaquah, WA 98027	TELEPHONE: 425-416-5456
EMAIL: joonkim@costco.com	FAX:
ENGINEER INFORMATION	
NAME: Dan Free	COMPANY: V3 Companies
MAILING ADDRESS: 7325 Janes Avenue	
CITY, STATE, ZIP: Woodridge, IL 60517	TELEPHONE: 630-724-9200
EMAIL: dfree@v3co.com	FAX:
LAND PLANNER/SURVEYOR INFORMATION	
NAME: Risa Yuki-Principal	COMPANY: MG2 Architects
MAILING ADDRESS: 1101 Second Ave. Ste 100	
CITY, STATE, ZIP: Seattle, WA 98101	TELEPHONE: 206-962-6630
EMAIL: risa.yuki@mg2.com	FAX:
ATTACHMENTS	
Petitioner must attach a legal description of the property to this a	application and title it as "Exhibit A".
AGREEMENT	
I VERIFY THAT ALL THE INFORMATION IN THIS APPLICATION IS TRUET	TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS

OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONSULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT

I UNDERSTAND ALL OF THE INFORMATION PRESENTED IN THIS DOCUMENT AND UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN

Stephen Cross 11-8-2024

PETITIONER SIGNATURE

SCHEDULED COMMITTEE MEETING.

OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUE THE APPROPRIATE ENTITLEMENTS ON THE PROPERTY.

OWNER SIGNATURE

THIS APPLICATION MUST BE NOTARIZED **PLEASE NOTARIZE HERE:**

FAULT AND I MUST THEREFORE FOLLOW THE REQUIREMENTS OUTLINED ABOVE.

OFFICIAL SEAL MARIAN F CROSS

Notary Public, State of Illinois mission No. 831693



APPLICATION FOR AGREEMENT AMENDMENT

DATE: 11-8-2024 PZC NUMBER:		PZC NUMBER:	DEVELOPMENT NAME: Costco Yorkville, IL			
PETITIONER INF	ORMATION					
NAME:	Stephen Cross-Authorized Costco Represent (OMPANY: Costco Wholesale Corporation					
MAILING ADDRES	S: c/o Cross Eng	ineering, Inc. 1955 Raymo	nd Drive			
CITY, STATE, ZIP:	STATE, ZIP: Northbrook, IL 60062 TELEPHONE: ® BUSINESS ○ HOME					
EMAIL:	c_stephencro	ss@costco.com	FAX: 847-498-0800			
PROPERTY INFO	RMATION					
NAME OF HOLDER	ROF LEGAL TITLE: Jo	oda Land Holding, LLC				
IF LEGAL TITLE IS	HELD BY A LAND TRUS	T, LIST THE NAMES OF ALL HOLDERS O	F ANY BENEFICIAL INTEREST THEREIN:			
PROPERTY STREE	T ADDRESS: N/A					
	PROPERTY'S PHYSICAL					
Northwest co	orner of Veteran	's Parkway & East Country	side Parkway			
CURRENT ZONING	CLASSIFICATION: B-3	General Business District	PUD			
LIST ALL GOVERN	MENTAL ENTITIES OR A	GENCIES REQUIRED TO RECEIVE NOTIO	EE UNDER ILLINOIS LAW:			
ZONING AND LA	ND USE OF SURROUN	IDING PROPERTIES				
NORTH: B-3 Ge	eneral Business	PUD; Institutional/ Comme	rcial/ Office			
EAST: B-3 Ger	neral Business C	Office PUD; Vacant land 8	& Suburban Residential			
SOUTH: B-3 Ge	eneral Business;	Commercial & Kendall Co	unty, B3 Highway Business			
WEST: B-3 Ger	neral Business,	O Office PUD; Vacant land	& Commercial			
KENDALL COUN	TY PARCEL IDENTIFIC	ATION NUMBER(S)				
02-27	7-101-003	02-28-227-002				
				- 1		



APPLICATION FOR AGREEMENT AMENDMENT

PROPERTY INFORMATION

NAME OF AGREEMENT: An Ordinance Authorizing the Execution of a Modification to the Planned Unit Developr	nent and A	Annexa
--	------------	--------

DATE OF RECORDING: 05-13-2008

SUMMARIZE THE ITEMS TO BE AMENDED FROM THE EXISTING AGREEMENT:

The Amended Planned Unit Development Agreement will include the Costco Development Plan and all zoning and development standards approved by the City of Yorkville. The PUD Agreement will be coordinated between Costco Wholesale Corporation and the City of Yorkville's legal team.

ATTACHMENTS

Petitioner must attach a legal description of the property to this application and title it as "Exhibit A".

Petitioner must list the names and addresses of any adjoining or contiguous landowners within five hundred (500) feet of the property that are entitled notice of application under any applicable City Ordinance or State Statute. Attach a separate list to this application and title it as "Exhibit B", if applicable.

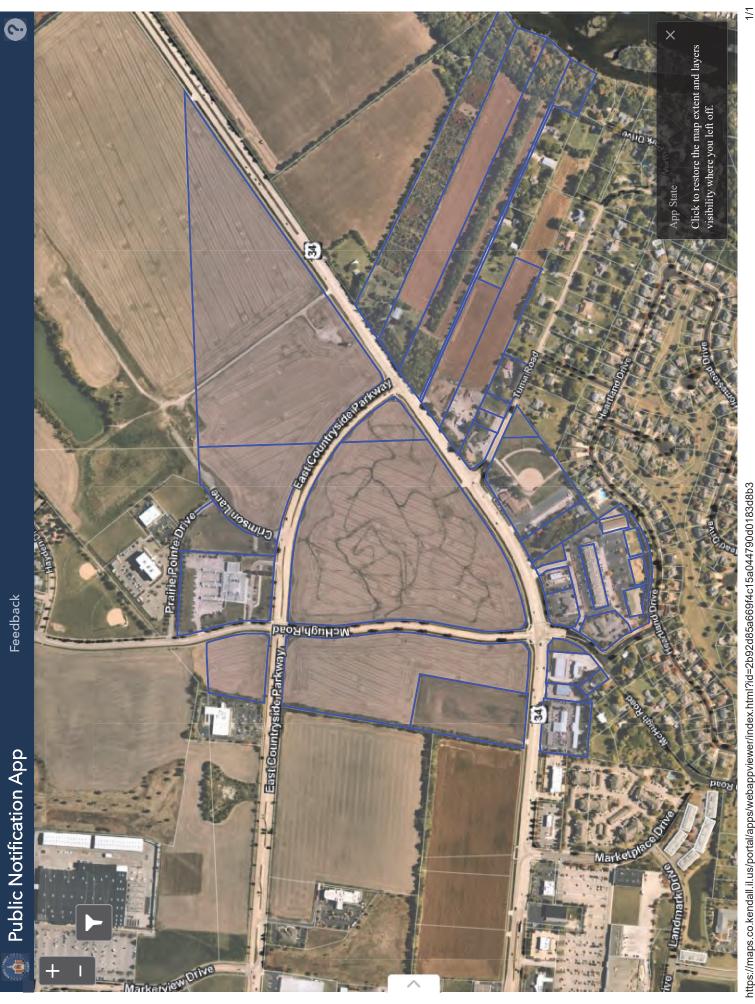
Petitioner must attach a true and correct copy of the existing agreement and title it as "Exhibit C".

Petitioner must attach amendments from the existing agreement and title it as "Exhibit D".



APPLICATION FOR AGREEMENT AMENDMENT

ATTORNEY INFORMATION	
NAME: Joon Kim	COMPANY: Costco Wholesale Corporation
MAILING ADDRESS: 999 Lake Drive	
CITY, STATE, ZIP: Issaquah, WA 98027	TELEPHONE: 425-416-5456
EMAIL: joonkim@costco.com	FAX:
ENGINEER INFORMATION	
NAME: Dan Free	COMPANY: V3 Companies
MAILING ADDRESS: 7325 Janes Avenue	
CITY, STATE, ZIP: Woodridge, Illinois 60517	TELEPHONE: 630-724-9200
EMAIL: dfree@v3co.com	FAX:
LAND PLANNER/SURVEYOR INFORMATION	
NAME: Risa Yuki -Principal	COMPANY: MG2 Architects
MAILING ADDRESS: 1101 Second Ave. Ste 100	
CITY, STATE, ZIP: Seattle, WA 9801	TELEPHONE: 206-962-6630
EMAIL: risa.yuki@mg2.com	FAX:
AGREEMENT	
OUTLINED AS WELL AS ANY INCURRED ADMINISTRATIVE AND PLANNING CONS SCHEDULED COMMITTEE MEETING.	EST OF MY KNOWLEDGE. I UNDERSTAND AND ACCEPT ALL REQUIREMENTS AND FEES AS ULTANT FEES WHICH MUST BE CURRENT BEFORE THIS PROJECT CAN PROCEED TO THE NEXT ID UNDERSTAND THAT IF AN APPLICATION BECOMES DORMANT IT IS THROUGH MY OWN E. 11-8-2024
PETITIONER SIGNATURE	DATE
OWNER HEREBY AUTHORIZES THE PETITIONER TO PURSUETHE APPROPRIATE	ENTITLEMENTS ON THE PROPERTY.
OWNER SIGNATURE	DATE
THIS APPLICATION MUST BE NOTARIZED PLEASE NOTARIZE HERE:	OFFICIAL SEAL MARIAN F CROSS Notary Public, State of Hirole Commission No. 831683 My Commission Expires January 21, 2028 Lan 11-8-24



PRAIRIE CREEK TRUST VETERANS WAY LLC AMERICAN LEGION POST 489 EDMUND J BRONGIEL 207 W KENDALL DR 9054 RTE 34 870 SIMONS RD YORKVILLE IL 60560 YORKVILLE IL 60560 OSWEGO IL 60543 PLINSKE AARON P PLINSKE WALTER J JAMES D CHESSRE TR VETERANS WAY LLC 300 N LAKE ST 207 W KENDALL DR 327 PLEASANT DR MONTGOMERY IL 60538 YORKVILLE IL 60560 SCHAUMBURG IL 60194 DAVID REVOC TRUST KELLOGG RICHARD NIEMIEC NANETTE ELLIOTT MICHALEC 5518 RESERVATION RD 1105 MCHUGH RD 3507 WALKER RD OSWEGO IL 60543 YORKVILLE IL 60560 YORKVILLE IL 60560 JODA LAND HOLDING LLC DHPJ PROPERTY GROUP LLC SHOCKER LAND COMPANY LLC 13665 TOWNHOUSE RD 1454 SYCAMORE RD 477 E BARBERRY CIR NEWARK IL 60541 YORKVILLE IL 60560 YORKVILLE IL 60560 JAMES D CHESSER TRUST OM VIDHAYE NAMAHA LLC CASEYS RETAIL COMPANY 300 N LAKE ST 7543 CHEROKEE LN PO BOX 54288 LIBERTY TOWNSHIP OH 45044 MONTGOMERY IL 60538 **LEXINGTON KY 40555** YORKVILLE CROSSINGS LLC **AMERICAN LEGION POST 489** ILLINOIS DEPARTMENT OF TRANSPORTATION 700 E NORRIS DR 13351 B FAXON RD 9054 RTE 34 **PLANO IL 60545** OTTAWA IL 61350 YORKVILLE IL 60560 JAMES D CHESSER TRUST DAVID E DEBBIE M COFFMAN UNITED STATES POST OFFICE 300 N LAKE ST 7315 W HILLSIDE 62 STRATFORD DR MONTGOMERY IL 60538 CYRSTAL LAKE IL 60012 BLOOMINGDALE IL 601177000 PRAIRIE CREEK TRUST BRAD R MERKEL YORKVILLE CROSSINGS LLC EDMUND J BRONGIEL 4383 TUMA RD 13351 B FAXON RD 870 SIMONS RD YORKVILLE IL 60560 **PLANO IL 60545** OSWEGO IL 60543 BAKA PROPERTIES LLC VETERANS WAY LLC JODA LAND HOLDING LLC 55 RIVERSIDE ST 207 W KENDALL DR 13665 TOWNHOUSE RD YORKVILLE IL 60560 YORKVILLE IL 60560 NEWARK IL 60541

YORKVILLE CROSSINGS LLC

13351 B FAXON RD

PLANO IL 60545

SVAB TRUST

HERBERT J ALICE E SVAB

906 CALLEVIEW DR

LA GRANGE IL 60525

r150 1/1 11/19/2024 12:37:31 PM

NAPERVILLE IL 60540

RICHARD MARKER

1626 MISTWOOD

CASTLE BANK

GATES CINDY S TRUST 9498 2190 EAST ST PRINCETON IL 61356

PAMELA S MARKER TRUST PAMELA S RICHARD D MARKER TTEES 1626 MISTWOOD DR NAPERVILLE IL 60540

GATES CINDY S TRUST 9498 2190 EAST ST PRINCETON IL 61356

COSTCO WHOLESALE CORPORATION

APPLICATION for a PUD AGREEMENT AMENDMENT SPECIAL USE PERMIT & FINAL PLAT APPROVALS

PROPOSED COSTCO WHOLESALE UNITED CITY OF YORKVILLE, ILLINOIS





TABLE OF CONTENTS

NARRATIVE

- 1.0 Property Owner and Project Team
- 2.0 Introduction and Property Description
- 3.0 Property History & Zoning
- 4.0 Entitlements
 - Planned Unit Development
 - Special Use Permit
 - Final Plat
- 5.0 Development Plan Proposal
 - Final Plat
 - Traffic / Roadway Improvements
 - Site Plan
 - Architecture
 - Fuel Facility
 - Utility and Stormwater Improvements
- 6.0 Planned Unit Development , Special Use Permit and Development Standards Deviations
- 7.0 Operations and Employees

PROPOSED COSTCO WHOLESALE

UNITED CITY OF YORKVILLE, ILLINOIS

1.0 Property Owner and Project Team

Property Owner: Mr. David Hamman and Mr. Joseph Hamman

Joda Land Holding, LLC

Newark, Illinois

Contract Purchaser: Costco Wholesale Corporation

730 Lake Drive Issaquah, WA 98027

Costco Real Estate

Development: Eric Orren, Vice President of Real Estate Development

Costco Wholesale Corporation

730 Lake Drive

Issaquah, WA 98027

Real Estate Consultant: Michael Stratis, Senior Vice President & Counsel

Intrepid Properties, Inc.

2311 W. 22nd Street, Suite 208

Oak Brook, IL 60523

Development Director: Stephen Cross, Authorized Costco Representative

President

Cross Engineering & Associates, Inc. 1955 Raymond Drive, Suite 119

Northbrook, IL 60062

Architect: Risa Yuki, Principal

MG2

1101 Second Avenue, Suite 100

Seattle, WA 98101

Engineer, Surveyor

& Traffic Consultant: Dan Free, P.E., Project Manager & Peter Reinhofer,

Senior Project Managers

V3 Companies 7325 Janes Avenue Woodridge, IL 60517

PROPOSED COSTCO WHOLESALE UNITED CITY OF YORKVILLE

2.0 Introduction and Subject Property

Costco Wholesale Corporation operates an international chain of membership retail buildings that carry quality, brand-name merchandise to members at lower prices than are typically found at conventional wholesale or retail sources. Costco's business model also provides assistance to local small to medium -size businesses by offering reduced costs in purchasing for resale and for everyday business use.

Costco retail presents one of the largest product category selections to be found under a single roof. Categories include groceries, candy, appliances, electronics, automotive supplies, tires, toys, hardware, sporting goods, jewelry, watches, cameras, books, housewares, apparel, health and beauty aids, furniture, office supplies, and office equipment. Costco is known for carrying top quality national and regional brands, with a 100% satisfaction guarantee, at prices consistently below traditional wholesale or retail outlets.

Members may also shop for private label Kirkland Signature[™] products, designed to be of equal or better quality than national brands, including juice, cookies, coffee, housewares, luggage, clothing, and detergent. Additionally, Costco operates self-service gasoline stations, and car washes at a number of its locations.

Costco Founded in 1983

Costco Wholesale Corporation (Costco) began operations in 1983 in Seattle. In October 1993, Costco merged with The Price Company, which pioneered the membership warehouse concept in 1976. In January 1997, after the spin-off of most of its non-warehouse assets to Price Enterprises, Inc., the Company changed its name to Costco Wholesale Corporation, which trades under the NASDAQ symbol "COST."

Costco continues to be an industry leader in terms of service, quality, value, and innovation. Costco has grown to become, in terms of sales, the second-largest Global retailer and the largest operator of membership clubs worldwide.

Costco has a significant retail presence in the greater Chicagoland area. Costco Yorkville would be the 20th store to open in the Chicagoland area. The closest Costco location to the proposed Yorkville trade area is Naperville, approximately thirteen miles to the northeast at 75th Street and Route 59th.

Costco has entered into an agreement with Joda Land Holding, LLC to purchase approximately 33 acres located at the northwest corner of Veteran's Parkway and

Countryside Parkway in the United City of Yorkville in order to develop a members only retail store and free-standing fueling facility (See Exhibit 1- ALTA Land Title Survey & Exhibit 2-Site Context Plan with Aerial Photo).

To construct the Costco retail and fueling facility as proposed in the Site Development Plans, certain zoning applications will be submitted, public hearings will be conducted, and approvals will be obtained to permit a commercial land use to operate on the Property. The Costco development and fueling facility will be developed on approximately 33.14 acres (Lot 1) with approximately 7 acres allocated for two perimeter lots (Lot 2 & Lot 3) along Veteran's Parkway and approximately 3.4 acres planned for stormwater management located at the northwest corner of the Property. (See Exhibit 3-Site Plan & Exhibit 4-Final Plat)

3.0 Property History & Zoning

The current property owners entered into a Planned Unit Development and Annexation Agreement ("Yorkville Crossing") with the United City of Yorkville in July of 2000. A modification to the Annexation and Planned Unit Development Agreement was recorded in May of 2008 amending the zoning of the Property from B-3 General Business District to B-3, PUD. The permitted uses for the Property included all uses in the B-1, B-2, B-3 and Office zoning Districts with non-permitted uses identified.

The current Planned Unit Development Agreement will be modified to include Costco's specific development plan for the Property and all requested deviations from the Development Code and Special Use permits necessary to construct our proposed retail development. The B-3 zoning district permits retail sales, automobile repair uses and gasoline service stations as a Special Use. The current zoning allows Costco to fully develop and operate their retail business on the Property. (See applications for PUD Agreement Amendment, Final Plat and Special Use)

4.0 Entitlements

Costco is submitting applications for an Amendment to the Planned Unit Development Agreement, Final Plat, and Special Use permit. The entitlement process will require public hearings before the Planning and Zoning Commission and City Council for final action and approvals.

The proposed Site Development Plans will require a Special Use Permit to operate the fueling facility. The site plan will conform to all Bulk and Dimensional Standards for each proposed lot. Certain relief from the Development Standards will be requested for Costco's proposed development plans. Please see section 6.0, Planned Unit Development, Special Use Permit and Development Standards Deviations for specific details.

5.0 Development Plan Proposal

Final Plat:

The Final Plat consists of a 3-lot subdivision. Lot 1, consisting of approximately 26 acres will be developed with Costco's retail building, stormwater, parking, and free-standing fueling facility. Lot 2 and Lot 3, consisting of approximately 7 acres will be platted for future retail development. The proposed lots comply with the minimum building envelop, size and minimum setback requirements as required in the Zoning Ordinance. Proposed water and sanitary utility easements are illustrated on the Final Plat. The proposed Costco building will be approximately 161,562 square feet and the overall site plan will provide for approximately 856 total parking stalls. The parking count will provide a ratio of 5.29 stalls per 1,000 square feet of building area, which provides sufficient parking based on Costco's anticipated member use. (See Exhibit 3- Site Plan & Exhibit 4-Final Plat of Subdivision)

Traffic/Roadway Improvements:

The Costco site is centrally located between 3 roadways that will all provide efficient ingress and egress for the Property. A full access at Veteran's Parkway and Tuma Road intersection will be provided and coordinated with IDOT. Access along E Countryside Parkway will be by two full access points and one right -in / right-out. Access along McHugh Road will be by two full access points. The fuel facilities primarily access will be off of McHugh Road to the west of the site. Off-site road improvements will require modifications to the existing center medians along Countryside Parkway and drive lane striping for left turn lanes at Countryside Parkway and McHugh Road. New right turn lanes will be constructed at the gas entrance at McHugh Road and at Veteran's Parkway. A detailed Traffic Impact Study has been submitted with our application. (See Exhibit 3-Site Plan & Exhibit 12-Traffic Impact Study)

Site Plan:

The Costco warehouse building is located generally in the center of the Property facing Veteran's Parkway. This location allows for an efficient parking program distributed around the south and east sides of the warehouse to maximize convenient parking spaces proximate to the customer entrance and exit located at the southeast corner of the building. The parking and internal drives are buffered from surrounding land uses by generous setbacks from property lines and planted buffer yards that include a rich mixture of evergreen, shade, shrubs, and ornamental trees. The interior of the parking lot is planted with islands throughout, offering shade and seasonal interest. 124 future

parking spaces have been planned for the southwest area of the Property. The stormwater management area is located at the north end of the property providing a visual buffer and separation between the building and McHugh Road and Countryside Parkway intersection. The stormwater management area will be planted with natives throughout the pond and side slopes. Parkway trees have been indicated along McHugh Road and Countryside Parkway providing a diverse canopy rich street parkway. (See Exhibit 6 for Preliminary Landscape Plans)

The Costco warehouse floor plan has been designed to offer a Member a true retail shopping experience by providing a variety of products, groceries and select services in convenient areas throughout the warehouse building. The Tire Center is located along the east building elevation inside the warehouse building. Five vehicle bays with car lifts will be available for tire rotations and tire replacements. Tires and batteries will also be sold at this warehouse location.

The loading dock is located at the southwest corner of the building, with easy ingress and egress onto McHugh Road. Trucks will exit using the same access drives. The delivery truck routes planned for this property are functional and will not have adverse impacts on member parking or existing traffic along any roadway transportation system. Apart from local vendors/suppliers and delivery services such as UPS or FedEx, all deliveries to the warehouse are controlled by Costco and most deliveries are completed during the morning or evening hours, prior to the store opening or after closing

The site lighting for the property will be provided with light poles distributed throughout the parking and drive areas. The proposed lighting plan utilizes a LED fixture mounted 36'-6" above pavement. This lighting height achieves an acceptable and safe lighting level for surface parking lots, pedestrian walkways, and drives.

The remaining property will be developed for two additional lots along Veteran's Parkway. Lot 2 will consist of a <u>+</u>4.2-acre parcel and Lot 3 will consist of a <u>+</u>2.7-acre parcel. It is intended that the lots will be marketed and sold for future commercial uses permitted in the B-3 zoning district. It is anticipated that the Lots will be subdivided into smaller lots, no less than 1 acre in size depending on the final need for a specific commercial use. Future retail development on both lots will be carefully considered by Costco to ensure compatibility with Costco's operations and the overall objective for the B-3 zoning district. (*See Exhibit 4- Final Plat*)

The existing Menard's pylon sign located at the southeast corner of the property will be relocated, east of Countryside Parkway. Costco will be submitting a sign permit for this work separate from the PUD and Special Use applications.

Architecture:

The proposed warehouse building design is a timeless solution utilizing a mixture of modern, traditional, and sustainable materials in a warm color palette of browns and beige. Vertical articulation is achieved through color, texture, and material distribution along the facades proportional to the scale of the building. Materials used include high quality, recycled, insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. The retail building entry is a focal point to the site and incorporates detailed pedestrian scaled smooth face CMU masonry at the columns and the use of glass. A free-standing steel trellis has been incorporated within the south elevation to soften and articulate the building mass visible from the south. Costco signage will be located on the north, south, east, west and entry building elevations in association with Costco's trademark red horizontal metal band. Extensive landscaping is planned throughout the site and will complement the building's architecture providing depth, softening and visual interest. (See Exhibit 8 & Exhibit 9, Warehouse Elevations, Signage, Architectural Renderings)

<u>Sustainable Design</u>: Awareness and responsibility to design, construct and operate Costco sites and buildings into an energy-efficient, sustainable, and environmentally responsible manner are embedded into the Costco program. This includes, but are not limited to:

- The building structure steel system and architectural metal panels are comprised of 80% recycled content with the associated batt insulation comprised of greater than 50% recycled content.
- The roof maintains reflectance, emittance and SRI rates that lessen heat gain, and the premanufactured building system provides erection efficiency reducing impacts to the carbon footprint.
- Landscaping has been designed to create a high impact with seasonal interest incorporating many native and drought tolerant species, which in turn minimizes irrigation and maintenance needs.
- All site and building lighting systems utilize LED Technology.
- Implementation of the water management system drives operational efficiency to lower wastewater and sewer use.

• The use of carbon dioxide (CO2) in the refrigeration systems, as opposed to HFCs (Hydrofluorocarbons), is widely considered a more environmentally conscious refrigerant due to its extremely low Global Warming Potential (GWP), as well as being non-toxic and non-flammable. Unlike many other refrigerants, CO2 is considered a "natural" refrigerant, readily available as a byproduct of industrial processes, making it a sustainable option.

Fuel Facility:

The fuel facility location within the Costco site has been planned southwest of the warehouse with direct access from McHugh Road. The facility is buffered from adjacent land uses by landscape setbacks to the south and west by generous setbacks and dense landscaping. The traffic flow will move through the facility in the easterly direction and exit directly onto a main east - west vehicular interior drive aisle that provides access to the main parking lot. It is anticipated that 60-65% of the members visiting the warehouse will also purchase gasoline during the same site visit. The fueling facility design is a simple contemporary structure taking cues from the retail building and incorporates similar materials, colors and textures creating a visual connection. The large canopy offers Members protection from the weather. The fuel facility will have 16 pumps or 32 fueling positions with a future expansion to the south adding 4 additional fueling pumps for a total of 20 pumps. The facility will have a controller enclosure, warming "hut" for Costco gas attendant, and 3 30,000-gallon regular fuel tanks and 1 30,000-gallon premium fuel tank. Diesel fuel will not be available at this location. Fuel trucks will access the property from McHugh Road and will exit on Countryside Parkway or Veteran's Parkway.

Utility and Stormwater Improvements:

The proposed development will connect to the existing water main located along the south and west sides of the Property. Water lines will be stubbed into the Property at the intersection of Veteran's Parkway and Countryside Parkway and along McHugh Road. Sanitary sewers will be connected to existing lines located along McHugh Road and Countryside Parkway. Sanitary sewer stubs will be provided to the outlots for future connections. Public water main will be looped around the building.

Stormwater drains across the site from south to north and discharges to the detention basin. The stormwater design includes a large stormwater pond at the northwest corner of the site to provide water quality treatment and rate control before discharging through the existing 36" culvert that runs north of Countryside Parkway. A network of storm sewer pipes within the development will convey stormwater from the Costco and future retail lots to the detention pond. The detention pond will be designed to retain a

small amount of water during storm events and will serve as an attractive amenity at the northwest corner of the Property. (*See Exhibit 5-Preliminary Engineering Plans*)

6.0 Planned Unit Development , Special Use Permit and Development Standards Deviations

The Property is currently subject to a Planned Unit Development Ordinance that was modified and recorded in 2008. The ordinance amended the zoning of the Property to B-3, PUD allowing all of the uses permitted in the B-3 General Business District. As part of Costco's development proposal, the Planned Unit Development Ordinance will be modified to include Costco's site development plans, requested Special Use permit and all deviations required to construct the proposed project as described below.

<u>Special Use Permit:</u> Costco is requesting a Special Use Permit to construct the proposed fuel facility on Lot 1. Gasoline Service Stations are permitted as a Special Use in the B-3 zoning district. Please refer to the Application for Special Use for additional information and responses to Special Use Standards.

Costco is requesting certain deviations from Chapter 5, Development Standards to construct the site development plans.

<u>Code:</u>: 10-5-1 Off-Street Parking and Loading; H. Off-Street Parking Requirements; 2. Maximum Requirements. No off-street parking for nonresidential uses shall exceed the required minimum number of parking spaces by more than 20% except as approved by the Zoning Administrator.

<u>Proposed Deviation:</u> Costco's total parking for the Property is 856 stalls. Future parking is 124 stalls for a total of 980 parking stalls. The maximum allowed pursuant to section 10-5-1 is 387 stalls. Parking is critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property.

<u>Code</u>: 10-5-1 Off-Street Parking and Loading; K. Electric Vehicle Charging Stations. Any parking area with 50 or more parking spaces, shall install the infrastructure required to accommodate a minimum of one 1 electric vehicle charging station per every 50 parking spaces.

<u>Deviation:</u> The site development plans do not contemplate EV Chargers or provide the infrastructure for future EV charging stations as current Costco data reveals that an

exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future.

<u>Code: 10-5-7-</u> Outdoor Lighting: E., Pole Mounted Outdoor Lighting, 2.; Maximum Pole Height for Business and Manufacturing Districts is 35 feet.

<u>Deviation:</u> The height of the light fixture throughout the Costco Property will be 36′-6″ from grade. The proposed lighting plan is carefully designed and integrated with the drive and parking lot layout to provide ample uniform coverage for Member security and safety while reducing unnecessary pole lights that would be required at a lower height. Costco's lamps are LEDs with a flat lens that directs light downward minimizing light pollution while creating a more sustainable lighting solution.

<u>Code</u>: 10-5-8-Appearance Standards; 3. Nonresidential; b. Building Design; (1) Commercial, Office and Institutional Uses; (b) Guidelines for Unbuilt Sites; (i) Masonry products or precast concrete shall be incorporated on at least 50% of the total building, as broken down as follows: The front façade shall incorporate masonry products or precast concrete on at least 50% of the façade. Any other façade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades.

<u>Deviation:</u> Costco's proposed building elevations will consist of a variety of sustainable materials as illustrated on the elevation drawings and at the percentages below:

MATERIAL PERCENTAGES

MATERIAL	1000	UR15.1	ELEVAT	ION	0.000	TOTAL	
MATERIAL	SOUTH	EAST	NORTH	WEST	ENTRY	1	
SMOOTH FACE CMU "BUFF"	1,403 SF 11%	1,151SF 14%	2,347 SF 18%	1,188 SF 12%	905 SF 21%	14.61%	
GLAZING		390 SF 5%			993 SF 23%	2.89%	
TEXTURED ARCHITECTURAL METAL PANEL"SANDSTONE"	2,549 SF 21%	2,867SF 34%	5,850 SF 44%	1,911 SF 20%	1,470 SF 34%	30.60%	
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"TAUPE"	7,765 SF 63%	3,925 SF 47%	5,108 SF 38%	6,557 SF 68%	939 SF 22%	50.76%	
CONCRETE "NATURAL"	546 SF 4%					1.14%	

^{*} CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

7.0 Operations and Employees

Operations:

The Costco product line consists of selective department store merchandise, such as wearing apparel, dry goods, appliances, furniture, hardware, and auto accessories; as well as a broad range of grocery store items, including fresh baked goods, meats, produce, and liquor sales. In addition to the floor merchandise, Costco also provides other specialty department and services such as bakery, photo center, tire center, pharmacy, optical and hearing aid departments.

The anticipated warehouse and fueling facility operation hours are as follows:

<u>Days</u>	<u>Warehouse</u>	<u>Fuel</u>
Monday-Friday	10:00 am - 8:30 pm	6:00 am - 9:30 pm
Saturday	9:30 am - 7:00 pm	6:00 am - 9:30 pm
Sunday	9:30 am - 7:00 pm	6:00 am - 9:30 pm

It is anticipated that Costco's opening will coincide with the roadway improvements at Countryside Parkway and McHugh Road. Improvements on Veteran's Parkway will be completed after the store opening and will be dependent on IDOT permit issuance. Costco is planning for an opening late fall of 2025.

Employees:

Costco takes pride in their employees and provides an excellent benefit package that includes, but not limited to medical, dental, vision, pharmacy, life insurance disability, long term care, employee stock purchase program, paid holidays, college student retention program, 401(k). Part-time employees working more than 23 hours per week are also eligible for core benefits (medical, dental and vacation benefits) after 6 months of employment. Currently, 91% of U.S. employees are eligible for the above benefits. On a local level, Costco recruits primarily within the community where it is located, and their objective is to hire promotable employees who have a desire to build a career. A typical warehouse employs upon opening approximately 150 to 200 employees with the ratio of part-time/full-time of 50% each. Costco pays among the highest hourly wages in the retail industry. Due to their philosophy that Costco's employees are just as important as their customers, they experience a low turnover rate with only 13% within the first year and only 7% turnover after one year.



December 30, 2024

Ms. Krysti Barksdale-Noble Community Development Director United City of Yorkville 651 Prairie Pointe1000 Civic Center Drive Yorkville, IL 60560

RE: PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plan)
NW Corner of Veterans Parkway and E. Countryside Parkway
Proposed Wholesale Retail Warehouse and Fuel Station

Dear Krysti,

We have received your November 21, 2024, Plan Council Departmental Review letter and are providing the following revised drawings and responses to your comments:

- 1. Revised Site Plan by MG2, dated 12-20-2024;
- 2. Revised Final Plat by V3, dated 12/18/2024;
- 3. Revised Traffic Report by V3, dated 12-30-2024

PUD Amendment / General Zoning Comments

<u>Comment 1.</u> **Planned Unit Development (PUD)** The subject property, originally annexed into Yorkville via. Ord. 2000-34, is part of the Yorkville Crossing development.

a. The petitioner is requesting the existing Yorkville Crossing Planned Unit Development be amended, or modified, to include Costco's site development plans, requested Special Use, permit and all deviations required to construct the proposed project, per plans submitted.

Response: Noted.

Comment 2. Planned Unit Development Amendment

i. The petitioner has listed four (4) proposed deviations from the base B-3 General Business District standards which will be detailed separately in this review memo under subsequent headings.

<u>Response:</u> Costco is requesting five (5) deviations from the B-3 General Business District standards to construct the proposed project:

- 1. Certain Landscape regulations in Section 10-5-3;
- 2. Certain Off-street parking and loading regulations for the maximum number of parking stalls in Section 10-5-1;

- 3. The minimum number of electric vehicle charging stations in Section 10-5-1:
- 4. Outdoor lighting standards for maximum pole height of light fixtures in Section 10-5-8;
- 5. Certain appearance standards related to the use of masonry products on building facades in Section 10-5-8.

<u>Comment 3.</u> **Zoning-** The subject property consists of two (2) parcels (#02-28-227-002 and #0 02-27-101-003). Subsequently rezoned as a Planned Unit Development via Ord. 2008-21, the permitted underlying zoning for the subject property is B-3 General Business District (formerly B-3 Service Business District") and allowed all uses in the B-1, B-2, B-3 and O-Office zoning Districts with some excluded uses as identified in the ordinance. The following are the current immediate surrounding zoning and land uses:

	Zoning	Land Use
North	E. Countryside Parkway B-3 PUD (Yorkville Crossing)	Transportation Land Use United States Post Office (USPS) & Vacant Land
South	US 34 (Veterans Parkway) B-3 General Business District B-3 (Kendall County)	Transportation Land Use Heartland Business Center American Legion & Various Business Land Uses
East	E. Countryside Center B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land
West	McHugh Road B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land

Response: Noted.

Comment 4. **Permitted Uses-** Per Table 10-3-12 (B) of the Yorkville Unified Development Ordinance (UDO), a "general retail store, greater than one (1) acre" is a <u>permitted</u> land use and a "gasoline service station" is a special use in the B-3 General Business District

- a. **Ancillary Uses** While the Unified Development Ordinance does not specifically identify a "tire center" use, where car lifts will be available for tire rotations and tire replacements, the Zoning Administrator can determine if the use is substantially similar to a use listed in the tables. If it is, the use shall be treated in the same manner as the substantially similar use. Staff identifies the use as similar to "automobile repair" or "automobile service" which are permitted uses in the B-3 General Business District.
- b. **Standards for Special Use** The petitioner has provided responses to the following standards for special use authorization, per Section 10-8-5 of the Yorkville Unified Development Ordinance, which will be entered into the record during the public hearing process:
 - i. The establishment, maintenance or operation of the Special Use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort, or general welfare.

- ii. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within or near the neighborhood in which it is to be located.
- iii. The establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.
- iv. Adequate utilities, access roads, drainage or other necessary facilities have been or shall be provided.
- v. Adequate measures shall be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets.
- vi. The proposed Special Use is not contrary to the objectives of the City's adopted Comprehensive Plan.
- c. Protest to Special Use Per Section 10-8-5-C of the Unified Development Ordinance, in the event of written protest against any proposed Special Use, signed and acknowledged by the owners of twenty (20) percent of the frontage adjacent thereto, or across an alley, or directly opposite therefrom, such Special Use shall not be granted except by the favorable vote of two-thirds (¾) of all members of the City Council. In such cases of written protest, a copy of the written protest shall be served by the protestor(s) on the applicant for the proposed Special Use and a copy upon applicant's Attorney, if any, by certified mail at the address of such applicant and attorney shown in the application for the proposed Special Use.

Response: Noted.

Site Plan Comments

<u>Comment 5.</u> **Building Setbacks** – Per the Table 10-3-9(A) Bulk and Dimensional Standards, the following compares current B-3 General Business District standards with the proposed Planned Unit Development (PUD) requested modifications:

BUILDING SETBACKS	REQUIRED MINIMUM SETBACKS B-3 DISTRICT	PROPOSED MINIMUM SETBACKS COSTCO	PROPOSED MINIMUM SETBACKS FUEL FACILITY
FRONT YARD (Veterans Pkwy)	50 ft.	507 ft.	60'-8"
CORNER SIDE YARD (East/West)	30 ft.	246'-7"/ 64 ft.	271-3"
REAR YARD (SEC Countryside Pkwy/McHugh)	20 ft.	64 ft.	1,201'
PARKING SETBACK* (Veterans Pkwy)	20 ft.	275 ft.	N/A

a. Above information provided from Site Data Table. Please provide a clearly dimensioned site plan clearly identifying the setbacks from the nearest building point to the adjacent property line.

<u>Response:</u> Please see revised Site Plan for all dimensional setbacks from the building and fueling facility to the property line.

b. Per Section 10-3-9 of the Unified Development Ordinance, parking lots in the B-3 district located adjacent to an arterial roadway, as defined in the city's comprehensive plan, must maintain a minimum setback of 20 feet from the property line and 10 feet from nonarterial roadways.

Response: Noted and Site Plan complies with required setbacks.

c. "Parking Lots" are defined as "an open, hard-surfaced area, designed, arranged and made available for the storage of private passenger automobiles only of occupants of the building or buildings for which the parking area is developed and is accessory."

Response: Noted.

Comment 6. **Maximum Building Height** - The B-3 General Business District has an 80 ft. maximum building height per Table 10-3-9(A) in the Unified Development Ordinance. The petitioner has provided overall building height for the proposed Costco Warehouse building in a Project Data table and Elevation plans.

a. Per the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), the stated maximum building height is 34 ft. However, the Elevations (Sheet DD13-05) illustrates the maximum height to the top of coping is 32 ft. Please verify which is the proposed maximum building height.

Response: The maximum building height is 32'-0".

Comment 7. **Maximum Lot Coverage** – Per Section 10-3-9(A) of the Unified Development Ordinance, the maximum lot coverage for the B-3 General Business District (inclusive of sidewalks, parking areas and all impervious surfaces) is 80% of the gross lot area. According to the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), lot coverage calculations are not provided.

a. Please provide calculations for the proposed total impervious coverage including building area, parking area, future parking area, and fuel station.

Response: Please see revised Site Plan for Lot 1 impervious coverage.

b. If area exceeds 80%, a requested deviation to the bulk regulations in Section 10-3-9. Bulk and Dimensional Standards of the Unified Development Ordinance.

Response: The total impervious coverage for Lot 1 is 65.4%.

Comment 8. Parking/ Loading - According to the Parking Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), there are 856 total parking spaces to be provided on the property to accommodate the proposed ~160,000 sq. ft. retail warehouse building and fueling facility uses. Future parking expansion area will include another 124 stalls for an overall total 980 parking spaces.

Response: Noted.

Parking Angle (degrees)	Figure Reference										
	А	В	С	D	E	F Overhang					
	Space Width	Space Depth	Aisle Width (2- Way)	Aisle Width (1- Way)	Depth of Interlocking Spaces						
0	9,	20'	24'	12'	n/a	n/a					
45	9'	18'	24'	12'	28.25	2'					
60	9'	18'	24'	18'	32'	2'					
90	9'	18'	24'	24'	36	2'					

c. Per Table 10-5-1(E)(1) Standard Parking Stall and Aisle Dimensional Requirements are as follows:

The petitioner is proposing 90-degree parking stalls with a 10' width and a minimum of 18.5' stall depth with a 2' overhang. Aisle widths for 2-way drives are 32' wide.

Response: Aisle widths for 2-way drives vary throughout the property. Parking drive aisles are 24' and 24'-6" when stalls are adjacent to landscape islands. The perimeter drive ais. le and certain interior aisles are 32' and 36' to accommodate truck movements.

d. Per Table 10-5-1(H)(5) Minimum Parking Requirements of the Yorkville Unified Development Ordinance, the minimum parking requirement for a retail store more than 8,000 sq. ft. of the net building square feet is 2 spaces/1,000 sq. ft. Gasoline Service Stations require a minimum of 1 space/gas pump and 1space/300 sq. ft. for any accessory retail space.

Response: Noted.

i. To minimize excessive areas of pavement, no off-street parking area for nonresidential or multi-family uses shall exceed the required minimum number of parking spaces by more than twenty (20) percent, except as approved by the Zoning Administrator. In approving additional spaces, the Zoning Administrator shall determine that the parking is needed based on documented evidence of actual use and demand provided by the applicant.

Response: Noted.

1. Per Section 10-5-1-H.4.b of the UDO, calculations for all area-based (square footage) parking standards must be computed on the basis of net floor area.

ii. Total required maximum parking for the subject property is 386 spaces, including a minimum of 8 ADA accessible spaces, as calculated below:

1. 153,820 net sq. ft./1,000 = 153.82 x 2 = 307.64 + 61.53 (20% of total) = 369.17 + 16 (gas dispensers) = 385.17 rounded to 386, per Section 10-5-1-H.4.a of the Unified Development Ordinance.

Response: Noted.

iii. The petitioner is requesting a variance from the UDO's required maximum parking due to parking being "critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property." (Deviation #1).

Staff is supportive of the deviation from a maximum of 2 parking spaces per 1,000 net sq. ft. of building area to approximately 5.04 parking spaces per 1,000 of building area as noted on Sheet C2.0 Layout Plan in Preliminary Engineering Plan Set (note page 6 of the Project Narrative under 5.0 Development Plan Proposal Final Plat, Sheet DD11-05 Site Plan, and Sheet DD12-05 Aerial Site Plan lists the parking count ratio as 5.29 stalls per 1,000 square feet of building area – possibly based on gross square footage?).

Response: The parking ratio is 6.22 stalls per 1,000 square feet of net building area.

iv. Additionally, per Section 10-5-1K-1 of the Unified Development Ordinance, infrastructure for a minimum of 8 electric vehicle charging stations is required to be installed (1 EV charging station per 50 required parking spaces).

Response: Noted.

v. The petitioner is also requesting full relief from the UDO's minimum required EV charging station requirement due to "current Costco data reveals that an exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future." (Deviation #2).

Staff is supportive of the deviation of the full relief for the installation of infrastructure to accommodate the required minimum 8 electric vehicle charging stations since the petitioner will reevaluate the need for EV charging in the near future.

Response: Noted.

e. Off-Street Loading – Per Section 10-5-1-Q of the Unified Development Ordinance, the number of off-street shall be determined on a case-by-case basis, and in the instance of special uses, loading berths adequate number and size to serve such use, as determined by the Zoning Administrators, shall be provided. The petitioner proposes to have four (4) recessed off-street loading spaces for the retail warehouse located at the southwest corner of the building.

Response: Noted.

<u>Comment 9.</u> **Fuel Facility** – Fuel facility proposes 16 gas dispensers, accommodating 2 cars per dispenser. A total of eight (8) lanes are proposed for car queuing allowing five (5) cars per

lane stacking. This results in a total of 72 cars maximum in this area of the site. No accessory retail convenience store is proposed for the fuel facility area.

Response: Noted.

a. Staff has some concerns regarding the southernmost full access off of McHugh Road leading to the fueling facility which may cause a backup onto the public roadway should there be more than the five (5) vehicles stacking per fuel lane or 40 vehicle max stacking for all pumps.

Response: Costco's fuel facilities are designed based on years of data collection, and observations made on existing facilities located throughout the Country. The number of pumps, queue lanes, and traffic movements are determined by Costco's gas operations team specific to each property and trade area. Reduced queues and wait times have been regularly observed at expanded existing fuel facilities constructed with a higher number of fuel pumps. There is a direct correlation between the number of fuel pumps and efficiency which can be applied to a new fuel facility design.

The fuel facility proposed consists of 16 pumps or 32 fuel dispensers, one of Costco's largest facilities in the Mid-west. The proposed 155' long drive lane will allow 40 vehicles in the queue storage area. For comparison, the number of pumps at the Plainfield fuel facility is 12 and the Naperville facilities are 12 and 15 pumps respectively with shorter queuing than what is being proposed at Costco Yorkville. In addition to 40 vehicles in queue, 32 vehicles will be accommodated at a fueling position for a total of 72 vehicles in the gas designated area. The 32 fueling positions will process the expected traffic volumes and peak demand efficiently and effectively decreasing wait times, vehicle queuing and reducing the possibility of a public road back-up.

In the future, if Costco determines that the average wait times during peak hours can be improved, the site plan for the fuel facility will allow the expansion of the facility south towards Veteran's Parkway to increase the number of pumps by 4 bringing the total to 20 pumps or 40 fuel dispensers as depicted in the proposed site plan. The queuing and drive lanes can also be expanded to the west allowing for more vehicle stacking thereby reducing the possibility of a back-up on McHugh Road.

Comment 10. Traffic / Roadways

- a. Direct Access It is noted that the site has six (6) points of access. Three (3) off of E. Countryside Parkway two (2) full access and one (1) right-in/right-out; one (1) full off of E. Veterans Parkway, which will be coordinated with IDOT; and two (2) full access points off of McHugh Road. These access points lead to internal private roadways which loop around the retail warehouse building, provide direct access to the fueling facility, and will connect to the future outlot uses.
 - i. It is noted on Sheet DD12-05 Aerial Site Plan, there are two (2) right in/right out access points on E. Countryside Road. Please revise discrepancy.

Response-Site Plan has been revised to correctly identify the full access intersection.

ii. It is also noted that off-site road enhancements will involve adjusting the existing center medians along Countryside Parkway and adding lane

striping to create left-turn lanes at the intersections of Countryside Parkway and McHugh Road. Additionally, new right-turn lanes will be installed at the gas station entrance on McHugh Road and at Veteran's Parkway.

- iii. Staff defers to City Engineer regarding site access and Traffic Impact Study.
- b. Cross Access Per Section 10-5-1-F of the Unified Development Ordinance, cross access between adjoining developments is required to minimize access points along streets, encourages shared parking, and allows for vehicular access between land uses. Will a cross access easement agreement be executed between the outlot developers and Costco?

Response: A cross access easement agreement will be executed with future outlot developers. This agreement will be part of the Construction, Operation and Reciprocal Easement Agreement (COREA) that will define matters relating to construction obligations, maintenance, stormwater, parking, cross access and utility easements.

- i. Note, according to Section 10-5-1-F-2-c, the Zoning Administrator may waive or modify the requirement for vehicular cross access on determining that such cross access is impractical or undesirable because it would require crossing a significant physical barrier or environmentally sensitive area, would create unsafe conditions, or there exists an inability to connect to adjacent property. City Council shall have the authority to waive or modify vehicular cross access requirements for all public review processes involving review by City Council.
- c. <u>Pedestrian Circulation</u> Per Section 10-5-1-N Pedestrian Circulation Standards of the Unified Development Ordinance required off-street parking areas to provide on- site pedestrian circulation systems and connection to existing and future planned trails. The petitioner has provided a single pedestrian connection to the public way off of E. Veterans Parkway at the intersection with Tuma Road.
 - Would the petitioner consider an additional pedestrian connection to the public way at the northernmost full access drive on Countryside Parkway at the intersection with Crimson Lane?

<u>Response:</u> Yes, please see revised Site Plan for a proposed pedestrian connection from the intersection of Countryside Parkway and Crimson Lane to the Costco parking lot.

- Comment 11. -Landscaping— Section 10-5-3 establishes landscape standards for new developments. The petitioner has submitted a Landscape Plan and per staff's review, the following sections of the Landscape Plan shall apply:
- i. <u>Section 10-5-3-C.</u> <u>Building Foundation Landscape Zone</u> All nonresidential, mixed-use, and multi-family development where a front yard setback is required, with the exception of food processing facilities regulated by the FDA, shall include landscape located at the building foundation as required by this section. Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide a softening effect at the base of buildings.
- ii. <u>Section 10-5-3-D. Parking Area Perimeter Landscape Zone</u> Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide screening between off-street parking areas and rights-of-way, and to provide for the integration of stormwater management with required

landscaping.

- iii. <u>Section 10-5-3-E. Parking Area Interior Landscape Zone</u> All off-street parking areas shall include landscape and trees located within the off-street parking area as required by this section. Trees and landscape required by this section shall be in addition to trees and landscape required under other sections of this title. It is the objective of this section to provide shade within parking areas, break up large expanses of parking area pavement, support stormwater management where appropriate, improve the appearance of parking lots as viewed from rights-of-way, and provide a safe pedestrian environment.
- iv. Section 10-5-3-F. Transition Zone Landscape Requirements Transition zone landscape shall be required along interior side and rear property lines of all nonresidential, mixed use, and multi-family development. It is not expected that the transition area will totally screen such uses but rather will minimize land use conflicts and enhance aesthetics. Staff defers all landscape review comments to the City Engineer's subconsultant. However, we want to highlight that, due to the site's unique location, being entirely surrounded by public roadways, special attention will be required during installation to ensure clear visibility at driveway and right-of- way intersections. In accordance with Section 10-5-6 of the Unified Development Ordinance, this may necessitate minor adjustments to the approved plan, such as relocating or removing certain plant materials.

Response: Noted. Please see comment/ response under Landscaping, page 18.

<u>Comment 12.</u> **Lighting** – A photometric plan has been provided along with pole details of the proposed

light standards to be installed within the parking lot area. Maximum illumination at the property line shall not exceed zero (0) foot-candle, and no glare shall spill onto adjacent properties or rights of way.

- a. Per Table 10-5-7(E) of the Unified Development Ordinance, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. The petitioner seeks a deviation to this regulation to install a light fixture with a maximum height of 36'-6" to provide ample uniform light coverage of the parking lot area (Deviation #3). Staff supports this deviation.
 - b. Staff defers to City Engineer regarding all other photometric plan review comments.

Response: Noted and see engineering responses on page 14.

Comment 13. Mechanical Screening – Per Section 10-5-4 Screening of the Unified Development Ordinance, ground/wall-mounted and roof mounted mechanical units that are visible from any public right-of-way or adjacent residential property shall be screened from public view. Materials used for screening shall be designed and established so that the area or element being screened is no more than twenty (20) percent visible through the screen.

Evergreen hedges or non-transparent walls such as stone masonry shall be allowed, as depicted below:

a. It is noted that there are two (2) proposed ground-mounted compactors located on the

west elevation adjacent to McHugh Road. It appears the petitioner has proposed to screen ground mounted mechanical equipment with landscaping material such as evergreen trees, ornamental trees and shrubbery located to the west in landscape bed edge.

i. Since the units may not be visible from the public way due to the location, setback and landscaping provided on the site, staff is supportive of the screening.

Response: Noted.

Comment 14. Appearance Standards – Per Section 10-5-8-C-3.b Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty (50) percent of the total building, as broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty (50) percent of the facade. Any other facade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades. Additional standards include:

- a. Loading bays for commercial and office uses shall not be located in the front of a building or in the area abutting a public right-of-way, and all commercial, office.
- b. Institutional buildings shall consist of solid and durable facade materials and be compatible with the character and scale of the surrounding area.

The petitioner has submitted exterior building elevations depicting the retail warehouse with materials such materials as insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. However, the petitioner is seeking relief from the minimum masonry requirements and location of loading bays in the front of the building and in an area abutting a public right-of-way (Deviation #4). Below is the proposed building material breakdown:

MATERIAL PERCENTAGES

MATERIAL		TOTAL					
MATERIAL	SOUTH	EAST	ELEVAT NORTH	WEST	ENTRY	101712	
SMOOTH FACE CMU "BUFF"	1,403 SF 11%	1,151SF 14%	2,347 SF 18%	1,188 SF 12%	905 SF 21%	14.61%	
GLAZING		390 SF 5%			993 SF 23%	2.89%	
TEXTURED ARCHITECTURAL METAL PANEL"SANDSTONE"	2,549 SF 21%	2,867SF 34%	5,850 SF 44%	1,911 SF 20%	1,470 SF 34%	30.60%	
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"TAUPE"	7,765 SF 63%	3,925 SF 47%	5,108 SF 38%	6,557 SF 68%	939 SF 22%	50.76%	
CONCRETE "NATURAL"	546 SF 4%					1.14%	

^{*} CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS

c. Staff has calculated that the masonry/cementitious materials make up approximately 15-16% of the total building and 30-35% of the front elevation (South and Entry). We understand that Costco must maintain its corporate brand and image, and staff is fully supportive of this deviation from the 50% appearance code standard. The proposed textured and ribbed architectural paneling provides a solid and durable facade, which meets the intent of the UDO's requirements.

- d. In Section 10-5-8C.1 of the UDO it states "Creativity and ingenuity in applying the standards and guidelines listed in this Code are encouraged. Likewise, ingenuity and creativity, while considering deviations to the standards and guidelines of this Code, are encouraged." Following this guidance, staff has previously used the credit for "major architectural features" outlined in Section 10-5-8C-2.7 (intended for residential uses) as a reference when approving deviations for unbuilt nonresidential sites that have or are seeking PUDs.
- e. Therefore, as vertical articulation is accomplished through the use of color, texture, and the strategic distribution of sustainable materials along the facades in proportion to the building's scale, along with the incorporation of a free- standing steel trellis on the south elevation to soften and define the building mass visible from the south, staff is supportive of the deviation.
- i. Note, while staff supports this request for relief—similar to the relief granted to the recently approved Cyrus One data center project—there is no guarantee the City Council will approve a deviation from the City's appearance standards.

Response: Noted.

<u>Comment 15.</u> **Signage** – The petitioner is proposing six (6) wall mounted signs as illustrated on the exterior elevations, as illustrated below:

		SIGN TABL	<u>E</u>		
IDENTITY	Quantity	SIGN	SIZE	AREA(EACH)	TOTAL SF
SI		COSTCO WHOLESALE	5'-0" C	175 SF	175 SF
S2	4	COSTCO WHOLESALE	6'-0" C	280 SF	1120SF
S3	1	TIRE CENTER	17'-4" × 1'-9"	31SF	31SF

- TOTAL SIGN AREA: 1326 SF
- a. Per Section 10-6-6 of the Unified Development Ordinance, single tenant buildings shall be permitted a total of two (2) primary wall signs or one (1) primary wall sign per one hundred (100) linear feet of building frontage. One (1) additional wall sign shall be allowed per additional hundred (100) feet of building frontage. Only one (1) primary wall sign shall be displayed on any single building façade.
- i. Additionally, a maximum of two (2) secondary wall signs may be authorized for buildings with lineal frontage in excess of seventy-five (75) feet by the Zoning Administrator provided such additional signage is:
 - (1) In keeping with the overall design and architecture of the building,
 - (2) A minimum of ten (10) feet from the primary wall sign and other secondary wall signs,
 - (3) A maximum of fifty (50) percent of the size of the primary wall sign,
 - (4) Accessory to the building's primary wall sign(s), and
 - (5) The total area of all primary and secondary wall signs does not exceed the maximum wall sign area as established in Section 10-6-6(A)(1).
- ii. Signs Attached to a Wall With a Public Entrance or Facing a Public Right-of-Way. The maximum sign area shall be two (2) square feet for every one (1) linear foot of the exterior wall to which it is affixed. The sign shall not exceed seventy-five (75) percent of the

width of the exterior wall to which it is attached.

- b. Since all building elevations (south, east, north, and west) have frontage along a public right-of-way, each façade is permitted one (1) primary wall sign.
- c. Additionally, each building façade (except the entry area) exceeds 100 liner feet, so an additional two (2) secondary wall signs are permitted per facade.
- d. Therefore, per staff's calculations, the petitioner is permitted a maximum of five (5) primary signs and eight (8) secondary signs totaling 13 wall signs, as depicted in the table below:

Elevation	Façade Length	Permitted # of Signs	Proposed # of Signs	Permitted Max. Sign Area	Proposed Sign Area
South	~358'-7"	3	1	~717.4 sq. ft.	280 sq. ft.
East	~326'-4"	3	2	~652.8 sq. ft.	311 sq. ft.
Entry	70'-3 ¾''	1	1	~140.7 sq. ft.	175 sq. ft.
North	~493'-6"	3	1	~987.2 sq. ft.	280 sq. ft.
West	~220'-0"	3	1	~440 sq. ft.	280 sq. ft.
TO	ΓAL	13	6	~2938.1 sq. ft.	1326 sq. ft.

d. All proposed wall signs conform to UDO regulations.

Response: Noted.

f. It is noted a monument sign is not proposed for the development. However, the existing pylon ground-mounted "Menards/Yorkville Crossing" sign located at the southeast corner of the property will be relocated, east of Countryside Parkway on parcel #02-27-101-004 owned by Yorkville Crossings, LLC.

<u>Comment 16</u>. **Comprehensive Plan** – The 2016 Comprehensive Plan Update designates this property as "Mid Density Residential (MDR)" which is defined typically for higher density residential developments near commercial areas and transportation corridors including townhomes and multi-family development.

a. Although the proposed commercial land use does not align with the comprehensive plan's current future land use designation, staff supports the use because it is consistent with the "Destination Commercial (DC)" designation assigned to nearby properties to the west. Additionally, the property's existing B-3 zoning classification aligns with both the Destination Commercial land use and the original PUD. If the proposed development is approved, an amendment to the Comprehensive Plan will be required.

<u>Response:</u> Noted. It is our understanding that staff will prepare the necessary documents to amend the Comprehensive Plan.

<u>Comment 17</u>. **Final Plat** – The title block on Sheet 2 of the Final Plat of Subdivision for "City Plan Commission Certificate" shall be revised to read "City Planning and Zoning Commission Certificate".

<u>Response:</u> The Certificate Title for Planning and Zoning Commission has been revised as requested.

Preliminary Engineering Comments and Responses

General

<u>Comment 1:</u> The following permits may be required during final engineering and should be provided to the City when obtained. The City and EEI should be copied on all correspondence with the agencies.

- IEPA NPDES General Construction Permit is required. The Notice of Intent must be filed with IEPA 30 days prior to start of construction.
- IEPA Water and Sanitary Sewer Permits
- Yorkville Bristol Sanitary District (YBSD) approval is needed for the connection of the proposed sanitary lines to the existing sanitary sewer.
- IDOT for the connection to U.S. Route 34
- United City of Yorkville Stormwater Management Permit

Response: Noted.

<u>Comment 2:</u> The following will need to be submitted with final engineering:

- a. An engineer's estimate needs to be provided and must include all public improvements within the ROW including all public utilities and connections, all soil erosion and sediment control items, and all permitted stormwater items. This cost estimate will be used to determine the construction guarantee amount. In addition, a cost estimate needs to be provided for all site improvements which will be used to calculate the building permit fees.
- b. Truck turning exhibits for delivery and emergency vehicles

Response: Noted. Information requested will be provided with Final Engineering.

Comment 3: Additional forms and information can be found at

https://www.yorkville.il.us/333/Engineering- Department.

Response: Noted.

<u>Comment 4:</u> The comments in the attached review letter from the City's landscaping consultant must be addressed and a revised landscaping plan submitted with final engineering.

Response: Noted. Please see page 19 for Landscaping responses.

Preliminary Engineering Plans

We have completed a cursory review of the preliminary engineering plans and stormwater management report. A detailed review will be completed with the submittal of final engineering. The following comments should be considered when developing final engineering.

C0.0 - Cover Sheet

<u>Comment 5:</u> The plans should be signed and sealed by a Professional Engineer prior to final approval.

Response: Noted.

Comment 6: The JULIE logo or contact information should be included on the cover sheet.

Response: Noted.

Comment 7: Include contact information for the City and YBSD on the cover sheet.

Response: Noted.

C2.0 - Layout Plan

Comment 8: The City should confirm that the number of parking spaces is adequate.

Response: Noted.

C3.0 - Preliminary Grading Plan

Comment 9: Additional grading should be shown in the fueling area.

Response: Noted. This information will be provided with final engineering.

Comment 10: Include 1-ft contours in the non-paved area to the west (where the future employee parking will be).

Response: Noted.

C4.0 - Preliminary Utility Plan

Comment 11: All utility conflicts will need to be shown.

Response: Noted. This information will be provided with Final Engineering.

Comment 12: Water valves should be included on the water main.

Response: Noted.

Comment 13: Provide details of the water main connections.

Response: Noted.

Comment 14: The storm structures should be labeled with unique identifiers and the type of structure, frame, and lids/grates.

Response: Noted.

Photometric Plan

<u>Comment 15:</u> The photometric plan should include a summary table that includes average, average to minimum, and maximum to minimum light intensity data to confirm that the lighting plan meets the requirements of the Ordinance.

Response: Noted. This information will be provided with Final Site Lighting Plans.

Comment 16: Light intensity shall be zero-foot candles at all property lines.

Response: Noted. This information will be provided with Final Site Lighting Plans.

Comment 17: Light fixtures should be fully cut off and conform to the dark sky concept.

Response: Noted. This information will be provided with Final Site Lighting Plans.

<u>Preliminary Stormwater Management Report</u>

<u>Comment 18:</u> A City of Yorkville Stormwater Permit Application should be submitted with Final Engineering.

Response: Noted.

<u>Comment 19:</u> The stormwater management report should be signed and sealed by a Professional Engineer prior to final approval.

Response: Noted.

<u>Comment 20:</u> Confirm that the detention basin design accounts for the future development of the fueling station and employee parking lot that is indicated on the plans.

<u>Response:</u> The detention basin and storm sewer are designed to accommodate the future development areas.

<u>Comment 21:</u> The report includes a requirement to control the outlet to 0.08 cfs/acre for a 25-year storm. It has been determined that this will not be required for this project.

Response: Noted. This will be removed from the calculations and design.

<u>Comment 22:</u> A full report with calculations, modeling, and exhibits as indicated in the permit application should be included with final engineering.

Response: Noted.

Comment 23: A certified wetland determination will need to be included with final engineering.

Response: Noted.

<u>Comment 24:</u> Confirm that the existing storm sewer that goes to the existing detention basin is installed.

<u>Response:</u> The ALTA / Topo survey includes the drainage easement, and the location of manholes that were located within the easement. This existing storm sewer also drains McHugh and Countryside Parkway.

Comment 25: Calculations for the drawdown time of the detention basin will be required due to the 5.8' bounce.

Response: Noted.

Traffic Study

<u>Comment 26:</u> The traffic impact study should be submitted to IDOT for review. The City should be copied on all correspondence with IDOT.

<u>Response:</u> Noted. The traffic study was submitted to IDOT on 11/19/2024. All correspondence with IDOT will be transmitted to the City.

<u>Comment 27:</u> IDOT should comment on the proposed mitigations at US 34 and Countryside. Note that the capacity analysis indicated an inadequate level of service without the proposed mitigations. Storage lengths were also exceeded in this area.

Response: Comments from IDOT will be provided to the City once received.

<u>Comment 28:</u> The storage length for the southbound Countryside Parkway at US 34 should meet the proposed mitigation queue length and avoid blocking the exit of Driveway 3.

Response: We agree. The proposed signal retiming at US 34 and Countryside Parkway results in the projected 95th percentile queue length not backing up to Driveway 3.

<u>Comment 29:</u> The existing traffic volumes displayed in Figure 5 along McHugh Road do not balance with the volumes entering the intersections of US 34 / McHugh Road and McHugh Road / Countryside Parkway.

Response: There is a difference in traffic volumes between intersections due to the traffic counts being conducted on different days. The existing traffic volumes have been balanced along McHugh Road between US 34 and Countryside Parkway using the higher volumes and increasing the arrival or departure volumes to balance.

<u>Comment 30:</u> The existing traffic volumes displayed in Figure 5 along Countryside Parkway do not balance with those entering the intersections of US 34 / Countryside Parkway and Countryside Parkway/ Crimson Lane.

Response: There is a difference in traffic volumes between intersections due to the traffic counts being conducted on different days. The existing traffic volumes have been balanced along Countryside Parkway between Crimson Lane and US 34 using the higher volumes and increasing the arrival or departure volumes to balance.

<u>Comment 31:</u> The pages from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, should be included in the Appendix.

Response: The pages from the ITE Trip Generation Manual have been included in the

Appendix.

<u>Comment 32:</u> The size utilized in Table 1 for trip generation of the Gasoline/Service Station does not account for the future expansion of the gas station.

<u>Response:</u> The trip generation has been updated to include the future expansion of the gas station.

Comment 33: A traffic signal warrant analysis at the intersection of US 34Neterans Parkway and Costco Driveway 4/Tuma Road found the installation of a traffic signal to be unwarranted. It is noted that an inadequate Level of Service at US 34 / Tuma Road / Driveway 4 is expected. A proposed mitigation plan should be provided. The safety of the eastbound left turn into Driveway 4 is of concern.

Response: We are proposing to modify the access at the US 34 and Tuma Road/Driveway 4 intersection to provide right in/right out/left in access. The left in movement is projected to operate at LOS A for all three peak hours with average delays of less than 10 seconds per vehicle. The projected eastbound left turns into the Costco development are slightly higher than the westbound left turns into Tuma Road during the weekday am and weekday pm peak hours. The Saturday eastbound left turn is higher but the opposing westbound through movement is also lower, resulting in the low delays. Additionally, the operations of the traffic signal at US 34 and Countryside Parkway creates gaps in westbound traffic for the eastbound left turns to occur.

<u>Comment 34:</u> A traffic signal warrant analysis should be performed for McHugh Road and Countryside Parkway with the anticipated project traffic volumes.

<u>Response:</u> A traffic signal warrant analysis was completed at the intersection of McHugh Road and Countryside Parkway and is included in the Appendix of the updated report.

<u>Comment 35:</u> The taper length for the left turn at Driveway 2 should meet minimum IDOT Bureau of Local Roads and Streets (BLRS) design requirements.

<u>Response:</u> The westbound left turn lane along Countryside Parkway at Driveway 2 was updated to meet the IDOT design requirements, providing 185 feet of storage length with a 200-foot taper.

Comment 36: The shifting of driveway 5 further north should be considered. Ideally, the taper length for the southbound left turn at US 34 is extended as it should meet minimum IDOT BLRS design requirements. This would also allow the shifting of the dedicated right-turn lane for driveway 5 away from the intersection at US 34.

Response: The southbound left turn lane at US 34 and McHugh Road has been redesigned to meet the IDOT design requirements for a roadway with a posted speed of 35 mph. Assuming a design speed of 40 mph, the left turn lane has been designed with 145 feet of storage length and a 175-foot taper. This updated design can be accommodated within the median along McHugh Road between US 34 and Driveway 5.

Final Plat of Subdivision

<u>Comment 37:</u> The legal description is the surveyor's certificate must describe the measured boundary.

Response: The legal description has been added to the surveyor's certificate.

Comment 38: The chord length should be added to all curve dimensions.

Response: The chord lengths have been added to the curve dimensions.

Comment 39: All easements must be dimensioned.

Response: An additional drawing has been added to identify the easement dimensions.

Comment 40: The water main easement should be changed to a C.U.E.

Response: The easement has been changed to a C.U.E.

Comment 41: The S.S.E. should be changed to C.U.E.

Response: The S.S.E. has been changed to a C.U.E.

Comment 42: Cross-access easements are needed over all lots.

<u>Response:</u> Cross-access easements will be part of the real estate agreement between Costo and lot purchaser drafted at the time of lot purchase.

<u>Comment 43:</u> The Public Utility Easement Provisions and the stand-alone Nicor Gas provisions should be removed.

Response: The P.U.E. and Nicor provisions have been removed.

<u>Comment 44:</u> The stormwater management easement and City Utility Easement C.U.E. provisions should be added.

Response: The S.M.E. and C.U.E. provisions have been added.

Comment 45: The building setback line on the west line of Lot 1 needs to be labeled.

Response: The building setback line has been added.

Comment 46: The area table must match the areas on the plat.

Response: The areas have been corrected.

Comment 47: All fire hydrants, valves and emergency shut off must be inside the C.U.E.

Response: The easements extents have been changed to include all watermain appurtenances.

Comment 48: The concrete monument symbols do not match the location labels on the plat.

Response: This has been revised on the Plat.

Comment 49: Note 2 on the IDOT access notes contradicts the site plan.

<u>Response:</u> Direct access from Route 34 is through Lots 2 and 3, not Lot 1. This is a typical note that IDOT requires.

Landscape Comments

Building Foundation Landscape Zone

<u>Comment 1</u>: A Building Foundation Landscape Zone, consisting of 5 square feet of landscape area per linear foot of building frontage, is required along front and side yards. No foundation landscaping is shown on the east and west sides of the building. Requirements are not met.

Response: A zoning deviation is requested for building foundation landscape.

Parking Area Perimeter Landscape Zone

<u>Comment 2:</u> Requirements appear to be met and will be confirmed later after more detailed plans have been submitted. The City may require Parking Lot Perimeter Landscape along the southern edge of the main parking lot if Outlots 1 and 2 are to remain vacant.

<u>Response</u>: Each outlot will be required to provide landscaping per code that meets the requirements for the individual site use. Costco will not be providing landscaping for these outlots. A no-mow planting mix will be provided for erosion control while lots are undeveloped.

Parking Area Interior Landscape Zone

<u>Comment 3:</u> Parking area medians are required every third bay of parking in front or side of building. Parking area islands spaced not more than 10 continuous spaces apart are also required. Requirements are not met.

Response: A deviation is requested for parking area interior landscape.

Transition Zone

<u>Comment 4:</u> Requirements appear to be met and will be confirmed later after more detailed plans have been submitted.

Response: Noted.

Species Diversity Requirements

<u>Comment 5:</u> Compliance with species diversity requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Response: Species diversity will be in compliance with Final Landscape Plans.

Minimum Plant Size Requirements

<u>Comment 6:</u> Compliance with minimum plant size requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Response: Minimum plant size requirements will be in compliance with Final Landscape Plans.

Tree Preservation and Removal

<u>Comment 7:</u> A review of Google Earth and Google Streetview imagery suggests there are a few parkway trees on the subject property, which are shown to be preserved. Requirements appear to be met and will be confirmed later after more detailed plans have been submitted

Response: Noted.

Street Trees

<u>Comment 8:</u> A minimum of 1 canopy tree is required per every 40 linear feet of parkway. Requirements are not met.

Response: Street trees will be adjusted on Final Landscape Plans for Countryside Parkway and McHugh Road to meet spacing and identify light pole locations.

Wetlands

<u>Comment 9:</u> A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

Response: Noted.

The following comments on the landscape plan were provided by Public Works, and also must be addressed.

General Question

<u>Comment 10:</u> You show new plantings in the median on Countryside Parkway, are you planning on maintaining the median?

<u>Response:</u> Costco will not be maintaining the Countryside Parkway median. Turf will be restored for any areas impacted by construction.

Sheet L1.1

<u>Comment 11</u>: Please locate the existing streetlights on McHugh Rd. and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights and street cuts.

<u>Response:</u> Final landscape plans will include existing streetlights and revised parkway tree spacing.

Comment 12: No parkway trees should be planted in medians that are less than 10' wide. We have had trees planted in these areas in the past and they do not survive.

Response: Trees shown in the median along Countryside Parkway are to be removed as the median is less than 10 feet with. Sheet L1.2

<u>Comment 13:</u> The city is planning on removing the existing pear trees and reshaping the median on East Countryside Parkway to allow better site lines and make it safer to mow. Perhaps we can work together to come up with a solution since you are cutting in a turn lane on East Countryside Parkway.

Response: Costco is open to working with Yorkville to come up with a feasible solution in the median. Note that Costco will not be maintaining the median.

<u>Comment 14</u>: Please locate the existing streetlights on Countryside Parkway and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights and street cuts.

<u>Response:</u> Final landscape plans will include existing streetlights and revised parkway tree spacing.

Yorkville Police Department Memorandum

<u>Signage</u>

<u>Comment 1:</u> Handicapped parking had been identified on the plan. Proper signage must meet MUTCD Standards for enforcement.

Response: Noted. Signage will comply to MUTCD Standards for Enforcement.

<u>Comment 2:</u> Areas that will be posted "No parking" must be posted via proper signage meeting MUTCD Standards for Enforcement (i.e. No Parking Fire Lane); No parking on Countryside Parkway; No Parking on McHugh Road.

<u>Response:</u> Noted. No parking signage will comply to MUTCD Standards for Enforcement at areas specified on the Final Engineering Plans.

<u>Comment 3:</u> The pedestrian walking / bike path runs along Rt. 34. This walking / bike path is extremely busy. While not required, we would recommend Bike Path or Pedestrian Crossing signs be posted.

Response: Noted.

Roadway

Comment 4: No parking should be allowed on Countryside Parkway or McHugh Road.

Response: Agreed. Final Engineering plans will indicate "No parking" signs.

Comment 5: No concerns at the intersection of Rt. 34 & Countryside Parkway or Rt. 34 & McHugh Road. Both of these intersections are controlled with traffic lights. I do have a concern with the intersection of Rt. 34 & Tuma Road. There does not appear to be any traffic control devices at this intersection other than a "Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be very problematic and dangerous. If this entrance / exit will remain, I recommend this being a "right in" and "right out" only.

<u>Response:</u> Noted. Intersection has been modified to allow a "Right In", Right Out" and "Left In" access. Please see Traffic Report for updated data for this intersection.

Landscape

<u>Comment 5:</u> I have not seen a landscaping plan for this project. If landscaping is going to be put in, they should use low growth or ground cover landscaping by the entrance / exit to limit site line issues.

Response: Noted. Please see landscaping plans for details.

Ingress / Egress

Comment 6: No concerns at the intersections of Rt. 34 & Countryside Parkway or Rt 34 & McHugh Road. Both of these intersections are controlled with traffic lights. I do have a concern with the intersection of Rt. 34 & Tuma Road. There does not appear to be any traffic control devices at this intersection other than a "Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be a very problematic and dangerous. If this entrance / exit will remain, I recommend this being a "right in" and "right out" only.

<u>Response:</u> Noted. Intersection has been modified to allow a "Right In", Right Out" and "Left In" access. Please see Traffic Report for updated data for this intersection.

<u>Comment 7:</u> Are vehicle entrance / exits safe? See Comments above, Only 1 entrance / exit would be classified as unsafe.

Response: Noted. See Response 6.

<u>Comment: 8.</u> Are warning signs for cross traffic requested? Signage for pedestrian walking/biking path should be added.

Response: Noted.

<u>Comment 9:</u> Please provide emergency contact information for after hours during construction. This will only be used if there is a law enforcement needed.

Response: Noted and General Contractor information will be provided.

<u>Miscellaneous</u>

Comment 10: Existing sidewalks already in place along Countryside Parkway, McHugh and

Rt._34.

Response: Noted.

<u>Comment 11:</u> Are sidewalk crosswalks needed? Bike path is already existing. Proper signage "Stop Signs" is needed for bike paths.

Response: Noted and Final Engineering will indicate Stop Signs as needed.

<u>Comment 12:</u> Will the police department have access to the building for emergencies? Police access during emergencies would be required.

Response: Noted and Agreed.

<u>Comment 13:</u> Will you provide Floor Plans/ Maps to the police department to be used for emergency purposes only? We would request a copy of the floor plans to be used for emergency purposes only.

Response: Noted and agreed.

We believe this submittal has addressed the comments provided by you and the Village consultants. If you have any questions or additional information is needed, please do not hesitate to contact me directly at 847/498-0800 or via email at <u>c_stephencross@costco.com</u> or my associate Larry Dziurdzik at <u>c_LarryDziurdzik@Costco.com</u>.

We look forward to presenting our Site Plan and Special Use applications at the Economic Development Committee on January 7th and the Planning and Zoning Commission on January 8th 2025.

Respectfully,

Stephen Cross

Authorized Costco Representative

CC: Eric Orren, Vice President of Real Estate Development, Costco Wholesale Reuben Warshawsky, Real Estate Attorney-MPS Law

Larry Dziurdzik, Authorized Costco Agent



1,443,461 SQ. FT. 33.1373 ACRES

PARKING STALLS

FLOOD HAZARD NOTE

UTILITY ATLAS NOTES:

J.U.L.I.E. DESIGN STAGE REQUEST DIG NUMBER A241923315 RECEIVED 07/10/24. CONTACTS PROVIDED BY JULI E. & LISTED BELOW WERE CONTACTED BY V3 VIA FAX, REQUESTING UTILITY ATLAS

GENERAL NOTES

- COMPARE THIS PLAT, LEGAL DESCRIPTION AND ALL SURVEY POINTS AND MONUMENTS BE CONSTRUCTION, AND IMMEDIATELY REPORT ANY DISCREPANCIES TO SURVEYOR.
- THE LOCATION OF THE PROPERTY LINES SHOWN ON THE FACE OF THIS PLAT ARE BASED UPON THE DESCRIPTION AND INFORMATION FURNISHED BY THE CLIENT, TOGETHER WITH THE TITLE COMMITMENT. THE PARCEL WHICH IS DEFINED MAY NOT REFLECT ACTUAL OWNERSHIP, BUT RPRIPTIS WHAT WAS SURVIVED. FOR OWNERSHIP, CONSULT YOUR TITLE COMPANY.
- INLETS AND OTHER UTILITY RIMS OR GRATES SHOWN HEREON ARE FROM FIELD OF SUCH, AND ONLY REPRESENT SUCH UTILITY IMPROVEMENTS WHICH ARE VISIBLE FROM ABOVIC GOODALD AT THE OFF THAT THE OFFICE AND THE OFFICE AND THAT THAT THE OFFICE AND THAT THE OFFICE AND THAT THAT THE OFFICE AND THAT THAT THAT THAT THE OFFICE AND THAT THAT THE OFFICE AND THAT THAT THAT THE OFFICE AND THAT THAT THE OFFICE AND THAT THE OFFICE AND THAT THAT THAT THE OFFICE AND THAT THE OFFICE AND THAT THAT THAT THAT THE OFFICE AND THAT THAT THE OFFICE AND THAT THAT THAT THE OFFICE AND THAT THE OFFICE AND THAT THAT THE OFFICE AND THE OFFICE
- THIS SURVEY MAY NOT REFLECT ALL UTILITIES OR IMPROVEMENTS IF SUCH ITEMS ARE HIDDEN BY LANDSCAPING OR ARE COVERED BY SUCH ITEMS AS DUMPSTERS, TRALERS, CARS, DIRT, PAVING OR SNOW, AT THE TIME OF THIS SURVEY, SNOW DID NOT COVER THE SITE. LAWN SPRINKLER SYSTEMS, IF ANY, ARE NOT SHOWN ON THIS SURVEY.
- OTHER THAN VISIBLE OBSERVATIONS NOTED HEREON, THIS SURVEY MAKES NO STATEM REGARDING THE ACTUAL PRESENCE OF ABSENCE OF ANY SERVICE.
- CALL JULILE. AT 1-803-802-0123 FOR FIELD LOCATION OF UNDERGROUND UTILITIES PRIOR TO ANY DIGGING OR CONSTRUCTION.
- PUBLIC AND/OR PRIVATE RECORDS HAVE NOT BEEN SEARCHED TO PROVIDE ADDITIONAL INFORMATION, OVERHEAD WIRES AND POLES (IF ANY EXIST) ARE SHOWN HEREON, HOWEVER THEIR FUNCTION AND DIMENSIONS HAVE NOT BEEN SHOWN.
- CALCIDA AND DIRECTOR HAVE NOT BEEN SYMMOTOR TOWNS CODES HAVE NOT BEEN STRENGTONE THAT WE FOUND IN LOCK BUILDING AND/OR ZONNS CODES HAVE NOT BEEN FRINCE STRENGTONS SHOWN ON THE RECORDED SUBDIVISION PLAT OR IN THE TITLE COMMITTED HAVE BEEN SHOWN. THE PROPERTY IS SELECT TO STREAKOR AS ESTREAMINED AND AND THE STRENGTON STRENGT HAVE AND THE STRENGT AND THE STREAMINED MALE A TITLE AND THE MAY SEE A MEED FOR AN INTERPRETATION OF A RESTRICTION, THE GOVERNMENT CANDED THAT A CERTIFICATION OF THE BASIS OF AN INTERPRETATION.
- THIS PROPERTY IS ZONED B-3 PUD PER CITY OF YORKVILLE ZONING MAP. SEE UNI YORKVILLE ZONING ORDINANCES FOR SPECIFICS.
- THERE IS NO OBSERVABLE EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

- I TIRD TO REPURS USECUTED IN THE PROJECT OF DUBLICATION. THE PELLOWANT OF THE REST ABBRICAN THE RESTAURCE COMPANY THE COMMITMENT, COMMITMENT DES-1220H CHWAI, DATED MAY 24, 20, WAS PROVIDED FOR SURVEYORS USE AT THE TIME ARTHOR OF THIS SURVEY. SEE "NOTES FROM SCHEDLE IS "9-9-WOMN HEERON."
 RITY ADDRESS WAS DESERVED IN THE COURSE OF FIELD WORK. NO PROPERTY ADDRESS TO NOT HE KENDALL COUNTY DIS WESTER (PUBLISHIPS, ADMINISHED LAND AND MAIL SUMPLY ADDRESS.)

A=87.86' R=460 CB=N01°20'16"W (CB=N01°24'19'W) "NO BUILDINGS EXIST ON SITE" LINSURDIVIDED

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY OF COSTCO WHOLESALE, YORKVILLE, IL NWC US 34/VETERANS & COUNTYSIDE - W#, CW23-0023

NWC US 34/VETERANS & COUNTYSIDE - W#, CW23-0023

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EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER VESTING TITLE EN-KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS DOCUMENT NO. 20150016982.

0 .0 .

S89" 55" 56"E 208.71"

ZONING INFORMATION

ZONINO DESIGNATION IS B.3 PLD AS TAKEN FROM THE CITY'S IMEBSITE https://www.yorkilla.tias/DocumentContent/Swnf 0599/2004-Zoning-Maip-244697biddi-AND NOT PROVIDED BY THE INSURER PURSUMANT TO THE ATRECUMERMENTS. FOR DETAILS SEE THE UNITED CITY OF YORKVILLE ZONINO GROBINANCE.

	Min. Let Size per DIL Bloc					Sethecks			
Min. Let	Shight Unit Attached Uses)	Maximum Density (For Mais- Unit Uses)	Min. Lot Width	Max. Lot Coverage			Min.	Max. East-ding Shight	Deciling Unit Max. Height
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	-	-	-	15%	25	of latend mex 20'			-
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SURVEYOR'S CERTIFICATE

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILL

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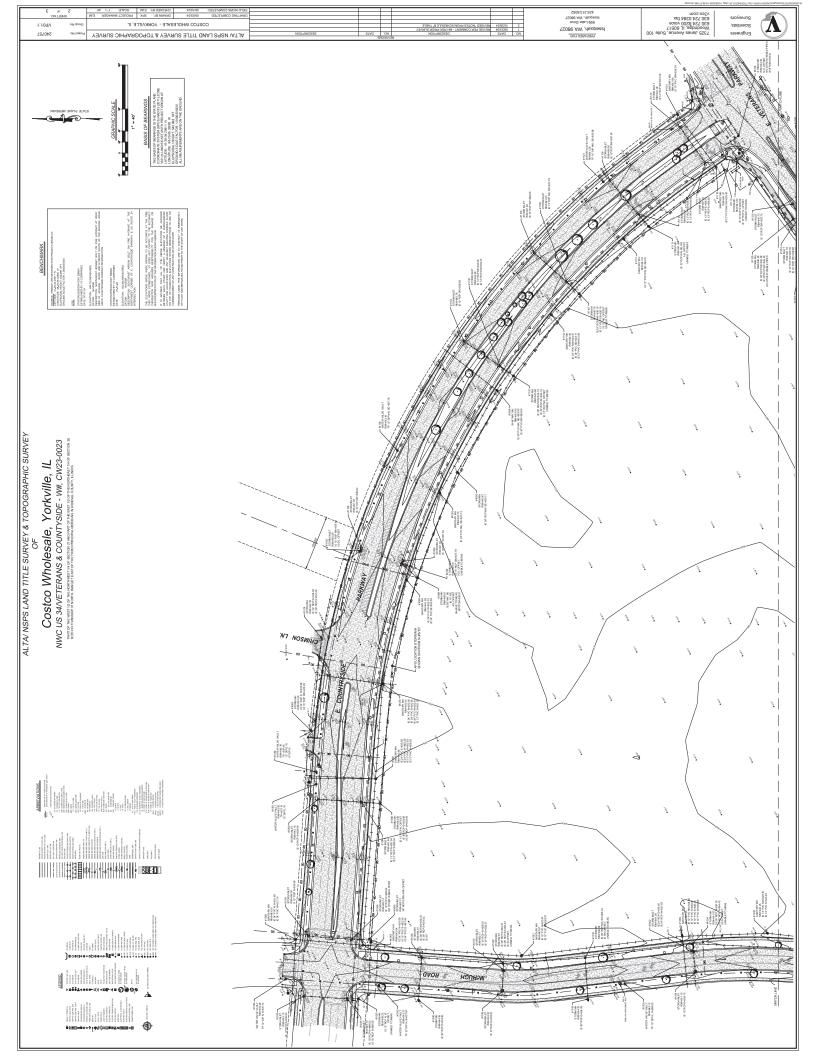


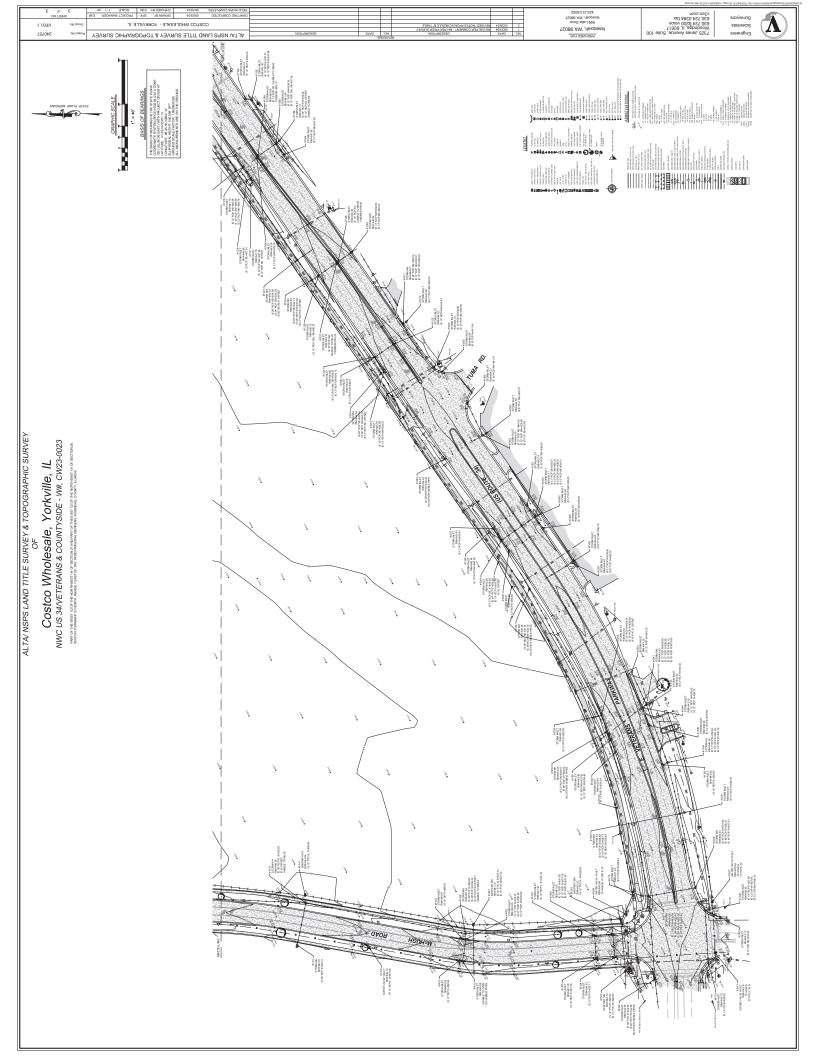
7325 Janes Avenue, Suite 100 Woodridge, IL 60517 630.724.9200 voice 630.724.0384 fax v3co.com

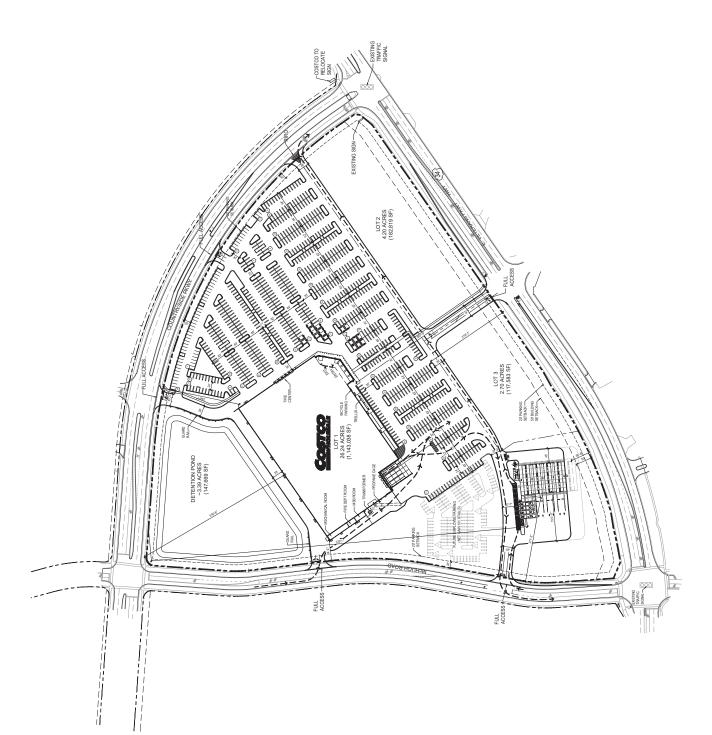
NOTES FROM SCHEDULE B PART II

NO. DATE DESCRIPTION
1 09/23/24 REVISE PER COMMENT: MIT PER PROR SURVE
2 10/28/24 REVISED "NOTES FROM SCHEDULE B" TABLE DATE

ALTA/ NSPS LAND TITLE SURVEY & TOPOGRAPHIC SURVEY







PROJECT DATA

SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027 PROJECT ADDRESS: SITE DATA:

33.14 ACRES (1,443,461 SF)

26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND 4.20 ACRES (182,819 SF) 2.70 ACRES (117,583 SF) TOTAL SITE AREA: INCLUDES: LOT 1 (COSTCO): LOT 2: LOT 3:

UNITED CITY OF YORKVILLE JURISDICTION:

B-3 GENERAL BUSINESS DISTRICT, PUD REQ ACTUAL WAREHOUSE FUEL ZONING:

BUILDING HEIGHT (MAX) 80' 32-0" 18-6" 18-6" 10T COVERAGE (MAX) 80% 65.4% (LOT 1 ONLY)

BUILDING DATA:

161,562 SF TOTAL BUILDING FOOTPRINT AREA: INCLUDES:

153,820 SF 2,266 SF 3,560 SF 1,916 SF NET SALES FLOOR GROSS MECHANICAL / FIRE / MSB NET ENCLOSED CANOPY

PARKING DATA:

TOTAL PARKING:

INCLUDES:

○ 10'WIDE STALLS
 ○ ACCESSIBLE STALLS
 △ FUTURE STALLS (NET GAIN)

837 STALLS 18 STALLS 101 STALLS

956 STALLS

NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA:

6.22 STALLS

NOTES: EXISTING CONDITIONS BASED ON SURVEY BY V3 COMPANIES

YORKVILLE, IL

SITE PLAN

DD11-07

SITE PLAN

DECEMBER 20, 2024

COSTCO WHOLESALE



COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027

33.14 ACRES (1,443,461 SF) SWC OF MCHUGH ROAD & EAST COUNTRYSIDE PKWY YORKVILLE, IL

26.24 ACRES (1,143,038 SF) INCLUDES 3.39 AC DETENTION POND 4.20 ACRES (182,819 SF) 2.70 ACRES (117,583 SF)

UNITED CITY OF YORKVILLE B-3 GENERAL BUSINESS DISTRICT, PUD REQ ACTUAL WAREHOUSE FUEL

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TOTAL BUILDING FOOTPRINT AREA:

161,562 SF

153,820 SF 2,266 SF 3,560 SF 1,916 SF INCLUDES:

NET SALES FLOOR

GROSS MECHANICAL / FIRE / MSB

NET ENCLOSED CANOPY

BUILDING ENVELOPE

956 STALLS

⊙ 10'WIDE STALLS
 ○ ACCESSIBLE STALLS
 △ FUTURE STALLS (NET GAIN)

837 STALLS 18 STALLS 101 STALLS

NO. OF STALLS PER 1,000 SQ. FT. OF NET BUILDING AREA:

6.22 STALLS

YORKVILLE, IL



22-6229-01 DECEMBER 20, 2024

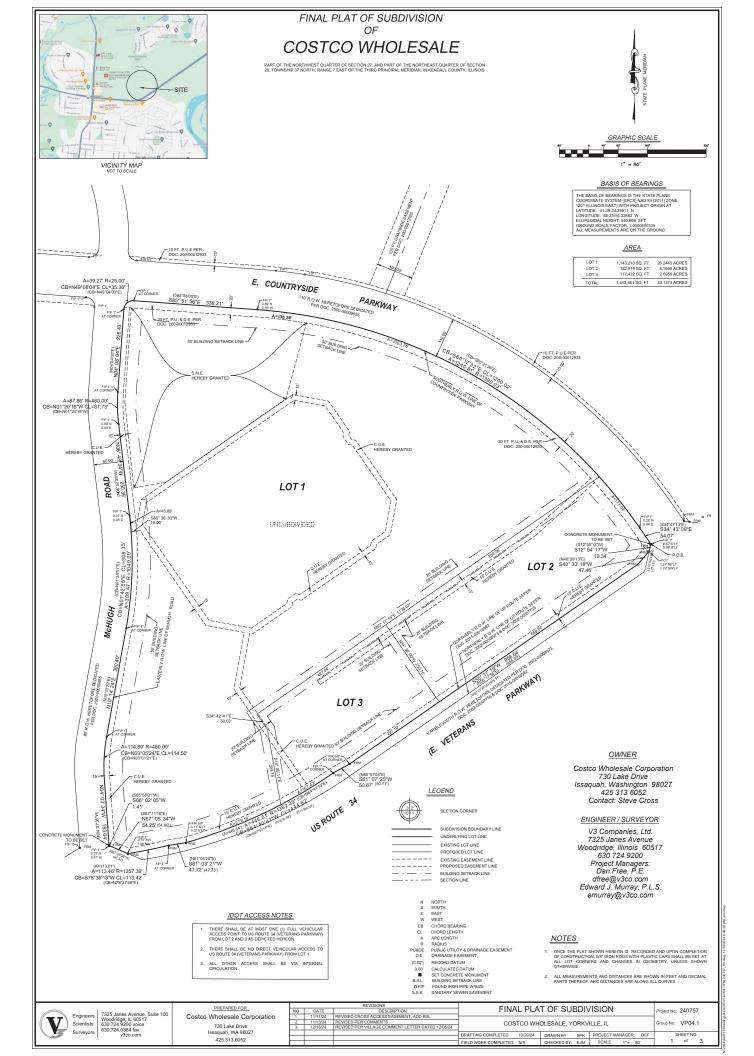
AERIAL SITE PLAN

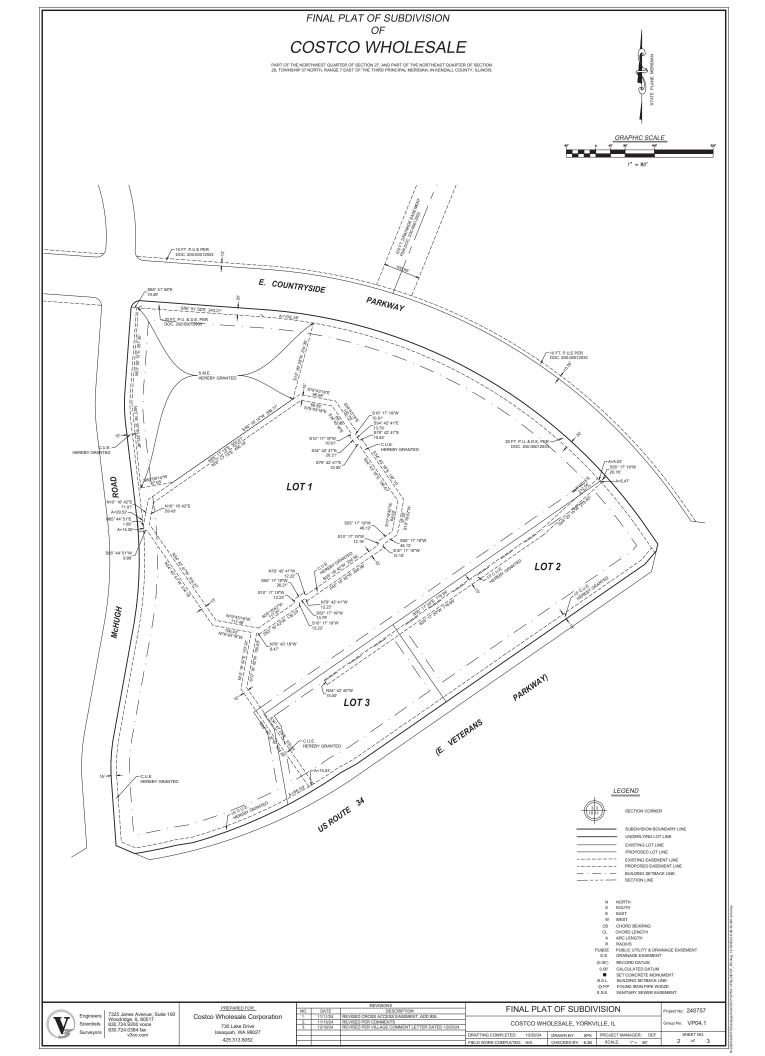
DD12-07

AERIAL SITE PLAN

COSTCO WHOLESALE

YORKVILLE, ILLINOIS





FINAL PLAT OF SUBDIVISION OF

COSTCO WHOLESALE

PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN KENDALL COUNTY, ILLINOIS.

CITY ADMINISTRATOR'S CERTIFICATE

OWNERSHIP CERTIFICATE
STATE OF)
COUNTY OF
THIS IS TO CERTIFY THAT THE FEE SIMPLE OWNER OF THE PROPERTY DESCRIBED IN THE FORECOMO SURVEYORS CERTIFICATE AND HAS CAUSED THE SAME TO BE SURVEYED, SURDIVIDED, AND PLATTED AS SHOWN HERGON FOR THE USES AND PURPOSES HEREBY ACKNOWLEDGE AND ADOPT THE SAME UNDER THE STYLE AND TITLE THEREON NOICELE AND THE SAME UNDER THE STYLE AND TITLE THEREON NOICELE AND TITLE
THE UNDERSONED HEEBEY DEDUCATES FOR PUBLIC USE THE LANDS SHOWN ON THE PLAT FOR THEROCOMPARES. STREETS, ALLEYS AND PUBLIC GERVICES, AND HERBEY PLAT FOR THE PUBLIC GERVICES, AND HERBEY THE PUBLIC GERVICES. AND HERBEY THE PUBLIC GREAT HER PUBLIC GREAT HER THE PUBLIC GREAT HERBEY HER PUBLIC GREAT HERBEY HER SUCCESSORS AND ASSIGNS, THE EASEMENT PROVISIONS WHICH ARE STATED HERDON.
THE UNDERSIGNED FURTHER CERTIFY THAT ALL OF THE LAND INCLUDED IN THIS PLAT LIES WITHIN THE BOUNDARIES OF YORKVILLE COMMUNITY UNIT SCHOOL DISTRICT 115.
DATED AT, THIS DAY OF, 20
CORPORATE NAME
COMPLETE ADDRESS
BY:
PRESIDENT Printed Name
SECRETARY Printed Name
NOTARY CERTIFICATE
STATE OF
STATE OF SS COUNTY OF SS
I,, A NOTARY PUBLIC IN AND FOR THE COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT AND PERSONALLY KNOWN TO ME TO BE THE
PRESIDENT AND SECRETARY OF AS SHOWN ABOVE, APPEARED BEFORE ME THIS DAY AND ACKNOWLEDGED THAT AS SUCH OFFICERS, THEY SIGNED AND DELIVERED THE SAID INSTRUMENT AND CAUSED THE CORPORATE SEAL TO BE AFFIXED THEREFOR AS THEIR FREE AND VOLUNTARY ACT AND AS THE FREE AND VOLUNTARY ACT OF SAID CORPORATION, FOR THE USES AND
PURPOSES THEREIN SET FORTH.
GIVEN UNDER MY HAND AND NOTARIAL SEAL THIS DAY OF 20
NOTARY PUBLIC
SURFACE WATER STATEMENT
STATE OF ILLINOIS)
SS COUNTY OF DUPAGE)
TO THE BEST OF DUE NOVINLEDGE AND BELIEF THE PRANNEG OF SUPFACE WATERS WILL NOT BE CONNECTED THE SOUTH THE THE THE THE THE THE THE THE THE T
THE CONSTRUCTION OF THE SUBDIVISION. DATED THIS DAY OF A.D., 20
IL. REGISTERED PROFESSIONAL ENG. OWNER OR ATTORNEY FOR OWNER
STATE REGISTRATION NUMBER
REGISTRATION EXPIRATION DATE
COUNTY CLERK'S CERTIFICATE
STATE OF ILLINOIS)
)SS COUNTY OF KENDALL)
I, COUNTY CLERK OF KENDAL COUNTY, LLNOS, DO HEREBY CERTIFY THAT THERE ARE NO DELINIORING GENERAL XASIS, NO UNPAID CURRENT TAXES, NO UNPAID FORFIETED TAXES, AND NO REDEBMABLE TAX SALES AGAINST ANY OF THE LAND INCLUDED IN THE PLAT HEREBN DRAWN, I FURTHER CERTIFY THAT I HAVE RESIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT HEREBN DRAWN, I FURTHER CERTIFY THAT I HAVE RESIVED ALL STATUTORY FEES IN CONNECTION WITH THE PLAT HEREBN DRAWN.
GIVEN UNDER MY HAND AND SEAL OF THE COUNTY CLERK AT YORKVILLE,
ILLINOIS, THISDAY OF20
COUNTY CLERK
RECORDER'S CERTIFICATE
STATE OF ILLINOIS)
)SS COUNTY OF KENDALL)
THIS INSTRUMENT NO. WAS FILED FOR RECORD IN THE RECORDERS OFFICE OF KENDALL COUNTY, ILLINOIS, ON THIS DAY OF, 20, AT O'CLOCK, M.
KENDALL COUNTY RECORDER
ILLINOIS DEPARTMENT OF TRANSPORTATION STATEMENT THIS PLAT HAS BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION
WITH RESPECT TO ROLDWAY ACCESS PURSUANT OF SECTION 2 OF "AN ACT TO REVISE THE LUM IN BEATRON TO PLATS" AS AMENDED. A PLAN THAT MEETS THE REQUIREMENTS CONTAINED IN THE DEPARTMENTS "POLICY" ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS".

) SS KENDALL)
APPROVED YORKVILLE,	AND ACCEPTED BY THE CITY ADMINISTRATOR OF THE UNITED CITY OF ILLINOIS, THISDAY OF, 20
	CITY ADMINISTRATOR
	CITY ADMINISTRATOR
CITY PLAI	NNING AND ZONING COMMISSION CERTIFICATE
STATE OF	ILLINOIS)
COUNTY OF	
APPROVED CITY OF YOR	AND ACCEPTED BY THE PLANNING AND ZONING COMMISSION OF THE UNITE RKVILLE, ILLINOIS, THISDAY OF, 20
	CHAIRMAN
CITY COU	INCIL CERTIFICATE
STATE OF	: ILLINOIS)
COUNTY OF) SS F KENDALL)
	AND ACCEPTED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY OF ILLINOIS, THISDAY OF, 20
	MAYOR
CITY CLEF	RK'S CERTIFICATE
STATE OF	RKS_CERTIFICATE ILLINOIS
STATE OF COUNTY OF APPROVED YORKVILLE,	: ILLINOIS)
STATE OF COUNTY OF APPROVED YORKVILLE,	: ILLINOIS) SS F KENDALL) AND ACCEPTED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY CILLINOIS, BY ORDINANCE No. AT A MEETING HELD TH
STATE OF COUNTY OF APPROVED YORKVILLE, DAY	ILLINOIS } F KENDALL SS F KENDALL
STATE OF COUNTY OF APPROVED YORKVILLE, DAY CITY ENG.	ILLINOIS } F KENDALL SS F KENDALL SS F KENDALL SS SS AT A MEETING HELD THE COF CITY CLERK UNEER'S CERTIFICATE ILLINOIS ILLINOIS ILLINOIS THE UNITED CITY COUNCIL OF THE UNITED CITY COUNCIL OF THE UNITED CITY CHECK THE UNITED CITY COUNCIL OF THE UNITED CITY COUNCIL OF THE UNITED CITY COUNCIL OF THE UNITED CITY CLERK UNEER'S CERTIFICATE ILLINOIS ILLINOIS THE UNITED CITY CLERK UNITED CITY CLERK ILLINOIS THE UNITED CITY CLERK THE UNITED CITY CLERK THE UNITED CITY CLERK THE UNITED CITY COUNCIL OF THE
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STATE OF COUNTY OI APPROVED YORKVILLE, DAY CITY ENG. STATE OF COUNTY OI I, YORKVILLE, INSTALLED	FILLINOIS } F KENDALL SS F KENDALL SS F KENDALL SS AND ACCEPTED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY C LILLINOIS, BY ORDINANCE No

KENDALL COUNTY RIGHT TO FARM STATEMENT

NOTICE. COURTY HAS A LONG, RICH TRADITION IN AGRICULTURE AND RESPECTS THE ROBERT AND THE FROM THE FORMER CONTINUES TO FLAY IN SHAPING THE ECONOMIC VARIABLY OF THE COUNTY. PROPERTY THAT SUPPORTS THIS INDUCATELY IS INDUCATED BY A ZONNIN INDICATOR. A-1 OR AG SPECIAL USE. ANYONE CONSTRUCTING A RESIDENCE OF FACILITY RESILT IN THE CONSTRUCTION OF THE PROPERTY OF THE PRO

CITY UTILITY EASEMENTS PROVISIONS

THE UNITED CITY OF YORKVILLE, ITS SUCCESSORS, LICENSEES AND ASSIGNS, ARE REPRETY GIVEN EASEMENT RIGHTS TO ALE PLATTED BASEMENTS DESIGNATED CITY OF THE PROPERTY OF THE WATER SANITARY SEVERE OR STORM MAY BE GRADED AS SINULES TO RECEIVE LOCAL SURFACE DRAWAGE. NO PERMANENT OF THE PROPERTY OF THE PROPERTY

STORMWATER MANAGEMENT EASEMENT PROVISIONS

THE OWNER OF THE PROPERTY SHALL REMAIN RESPONSIBLE FOR THE MAINTENANCE OF THE STORMWAITER MANAGEMENT AREA AND APPURTENANCES. THE UNITED CITY OF YORKVILLE WILL PERFORM ONLY EMERGENCY PROCEDURES AS DEEMED NECESSARY BY THE CITY ENGINEER OF THE UNITED CITY OF YORKVILLE.

SURVEYORS AUTHORIZATION CERTIFICATE

EDWARD J. MURRAY ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037 MY LICENSE EXPIRES ON NOVEMBER 30, 2026. emurray@x26c.com



SURVEYOR'S CERTIFICATE

STATE OF ILLINOIS) SS

BEING THE SAME AS:

RECORDED COTORER 22, 2015 AS DOCUMENT NO. 201500916982.

BIRNS THE SAME AS:

THAT FART OF THE NORTHINGST CLIMATER OF SECTION 37, MAD PART OF THE NORTHIGAT

MARKER OF SECTION 28, TOMBORY 27 NORTHINGST CLIMATER OF SECTION 37, TOMBORY

MARKER OF SECTION 28, TOMBORY 27 NORTHINGST CLIMATER OF SECTION 37, TOMBORY

MERIDAN, DESCRIBED AS TOLLOWS: BECONNING AT THE INTERSECTION OF THE SOUTHERLY

RIGHT OF WAY LIVE OF COLUMNYS SECONNING AT THE INTERSECTION OF THE SOUTHERLY

RIGHT OF WAY LIVE OF COLUMNYS SECONNING AT THE INTERSECTION OF U.S. ROUTE NO. 34 FER

SAD NORTHERLY RIGHT OF WAY OF U.S. ROUTE NO. 34, THE FOLLOWING 9 COURSES AND

DISTANCES: 1) THENCE SOUTH 12 DEGREES A MINITES IT SECONDS WEST, 19.34 FEET, 2)

THENCE SOUTH AND EGGREES 33 MINITES IS SECONDS WEST, 19.34 FEET, 2)

THENCE SOUTH AND EGGREES 35 MINITES IS SECONDS WEST, 19.34 FEET, 2)

THENCE SOUTH AND EGGREES 35 MINITES IS SECONDS WEST, 19.34 FEET, 2)

THENCE SOUTH AND EGGREES 35 MINITES IS SECONDS WEST, 19.34 FEET, 2)

THENCE SOUTH AND EGGREES 35 MINITES IS SECONDS WEST, 40 CHORD TO CHARLE AND OF SECONDS WEST, 19.34 FEET, 2)

THENCE SOUTH AND THE MARKER OF SECONDS WEST, 40 CHORD TO CHARLE AND OF SECONDS SECOND

I FURTHER CERTIFY THAT THIS LAND IS WITHIN THE CORPORATE LIMITS OF A MUNICIPALITY WHICH HAS AUTHORIZED A COMPREHENSIVE PLAN AND IS EXERCISING THE SPECIAL POWERS AUTHORIZED BY DIVISION 12 OF ARTICLE 11 OF THE ILLINOIS MUNICIPAL CODE, AS NOW OR HEREAFTER AMENDED.

I FURTHER CERTIFY THAT THE ANNEXED PLAT IS A CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION. ALL DISTANCES ARE SHOWN IN FEET AND DECIMALS THEREOF. PERMANENT MONUMENTS WILL BE SET AT ALL LOT CORNERS, EXCEPT WHERE CONCRETE MONUMENTS ARE WORCHTE.

FURTHER CERTIFY THAT THE ABOVE DESCRIBED AREA IS IN AREAS DETERMINATION OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN (ZONE X) AS DEFINED BY THE EMERGENCY MANAGEMENT ASPOTYS FLOOD ROSHANGE RATE MAP OF KENDAL ILLINOIS & INCORPORATED AREAS (COMMUNITY PANEL NO. 17093C0045H, EFFE 18(2014).

DATED THIS	DAY OF	, A.D., 20

EDWARD J. MURRAY
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-4037
MY LICENSE EXPIRES ON NOVEMBER 30, 2026.
V3 COMPANIES, LTD. PROFESSIONAL DESIGN FRIM NO. 184000902
THIS DESIGN FIRM NUMBER EXPIRES APRIL 30, 2025.





Engineers Scientists Surveyors | 7325 Janes Avenue, Suite 100 | Woodridge, IL 60517 | 630.724.9200 voice | 630.724.9384 fax | v3co.com | v3co.com

DATE

PREPARED FOR: Costco Wholesale Corr

730 Lake Drive Issaquah, WA 98027 425.313.6052

oration	

			REVISIONS	FINIA	I DI A	T OF OUR	חו	UCLON
	NO.	DATE	DESCRIPTION	FINA	AL PLA	T OF SUE	BUIV	ISION
n l	1.	11/11/24	REVISED CROSS ACCESS EASEMENT, ADD BSL					
	2.		REVISED PER COMMENTS	cos	TCO WHO	OLESALE, YO)RKV	ILE II
	3.	12/18/24	REVISED PER VILLAGE COMMENT LETTER DATED 12/05/24			occorrect, re		,
				DRAFTING COMPLETED:	10/29/24	DRAWN BY:	SPK	PROJECT MAI
	-			EIEI D WORK COMPLETED:	N/A	CHECKED BY:	E IM	SCALE:

HOLESALE, YORKVILLE, IL DRAWN BY: SPK PROJECT MANAGER: DEF

Project No: 240757 Group No: VP04.1

PRELIMINARY ENGINEERING PLANS

FOR

COSTACT YORKVILLE, IL

CW # 23-0023
NWC US34/VETERANS AND
COUNTRYSIDE PARKMAY
YORKVILLE, ILLINOIS 60560

COSTCO WHOLESALE CORPORATION 770.4ME ENVE 152.004H, WA 88027 17.455.315.800 WWW.COREGO.COM



NWC US34NETERANS AND COUNTRYSIDE PARKWAY YORKVILLE, ILLINOIS





PROJECT TEAM

OWNER

Costco Wholesale Corporation 730 Lake Drive Issaquan, Washington 98027 847 498 0800 Contacts: Steve Cross, Authorized Representative

ENGINEER

V3 Companies, Ltd.
V32 Janes Avenue
W7235 Janes Avenue
W7235 Janes Avenue
W7252 Janes Wenue
W725 Janes W725
Project Manager. Dan Free, P.E.
Project Engineer. Peter Wagenmaker, P.E.
CMI Designer, Jades Morrow
CMI Designer, Jades Morrow
My3co.com

MG2 1101 Second Avenue, Suite 100 Seattle, Washington 98101 206 962 6600 Contact: Risa Yuki

INDEX

PRELIMINARY ENGINEERING PLANS

- TITLE SHEET
 EXISTING CONDITIONS PLAN
 PRELMINARY LAYOUT AND PAVING PLAN
 PRELMINARY GRADING PLAN
 PRELMINARY UTILITY PLAN C0.0 C1.0 C2.0 C3.0 C4.0

BENCHMARKS

STATION DESIGNATION: SBM#1 ESTABLISHED BY: V3 COMPANIES DATE: 07-31-24

ELEMYON, 644-75 (MARSURED)
DATUM, WANDSS HENDED AND WANDSS HENDED TO SHEED FOR WHILEST ROAD.
HYDDANT SCHITT FOR EMPILIER ROAD AND E. COUNTRYSDE PARMY WITESECTION.

ELEWTON 643 89 MEASURED)
DOUBLING WATER SOUT ON FIRE HYDRAYT AT THE MORTHWEST CORNER OF COUNTRYSOE PARKWAYS US ROUTE SA ROUTE SA

THE BENATONS ABOVE WIRE KNOWN TO BE ACCURATE AT THE TIME THEY WERE ESTABLISHED OS DOES MANATEPPEREY TO THE ACCURACY THEM MASSIMES RESPONSIBILITY FOR THE MIS-LISE OR MANATEPPEREY TO THE WISHAM TOOR THE WISHAM WHEREON.

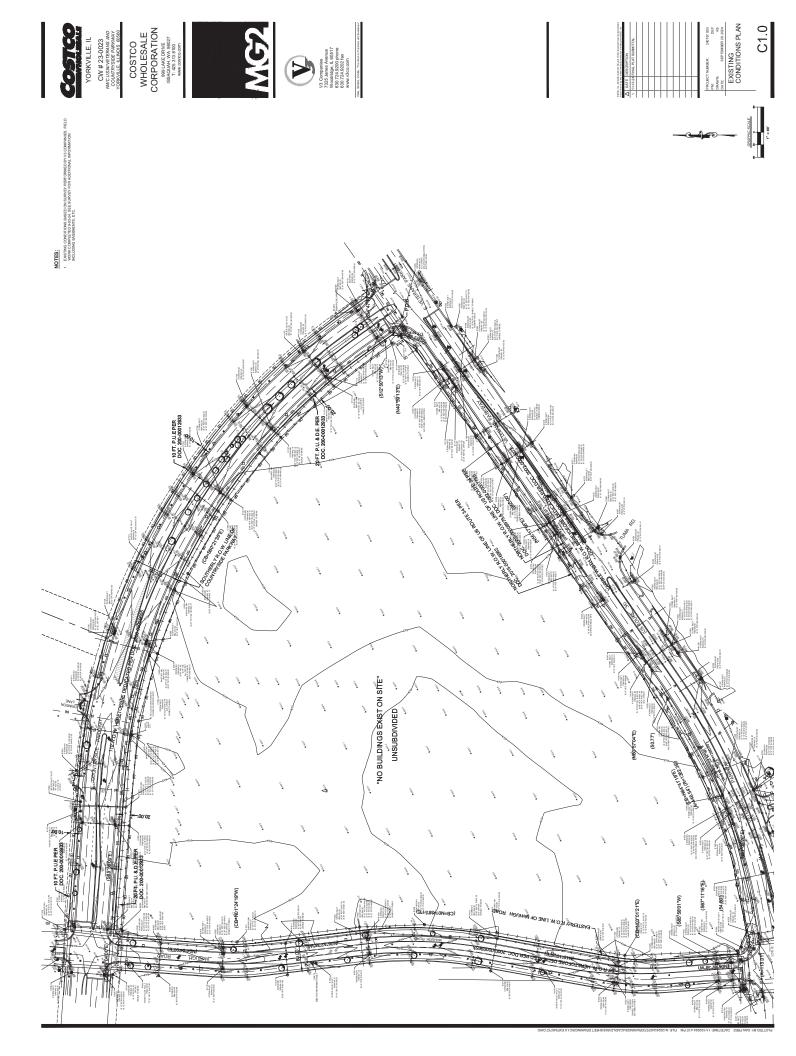
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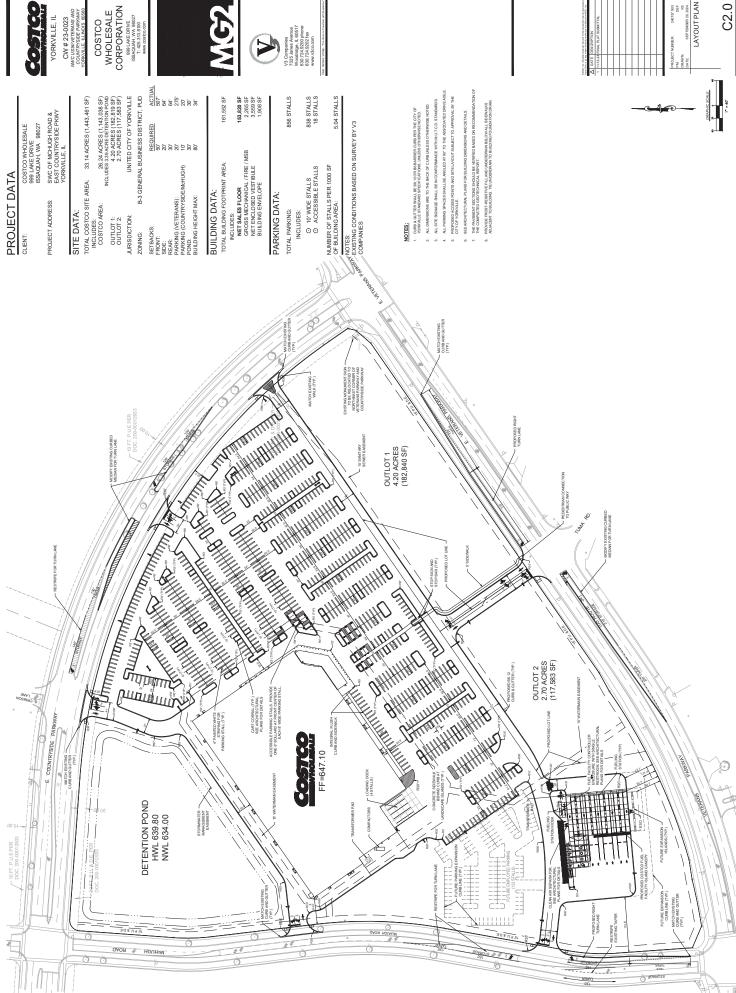
PERSONS USING THIS INFORMATION ARE TO CONTACT IS IMMEDIATELY WITH ANY PRIOR TO THE START OF ANY WORK.

PRELIMINARY ENGINEERING NOT FOR CONSTRUCTION





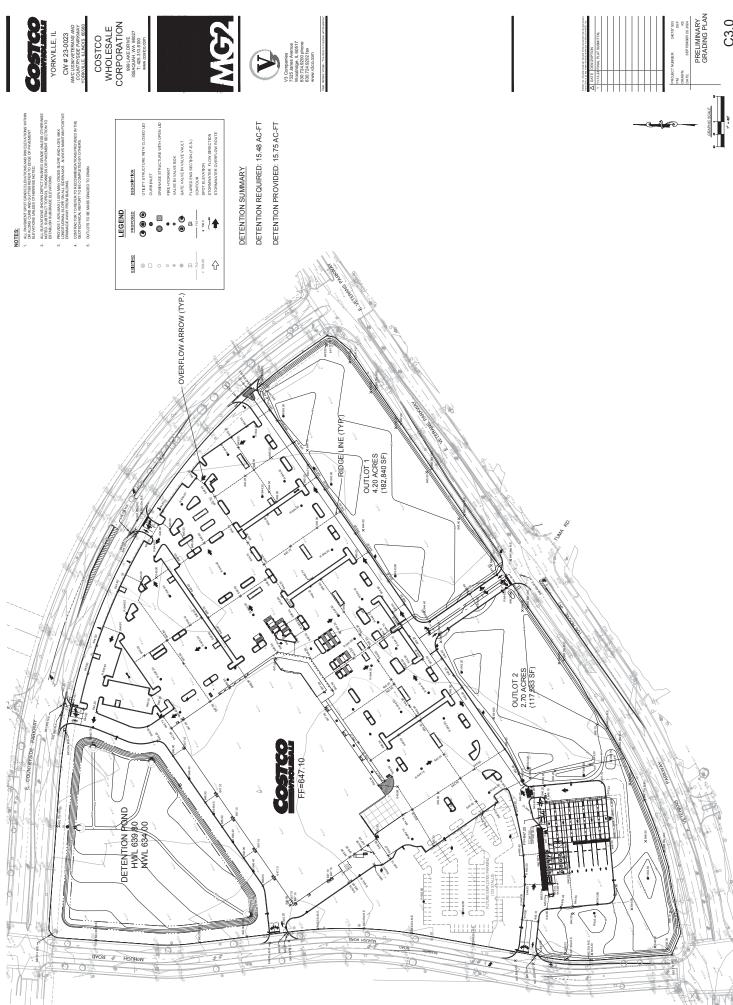






SEPTEMBER 20, 2024
LAYOUT PLAN

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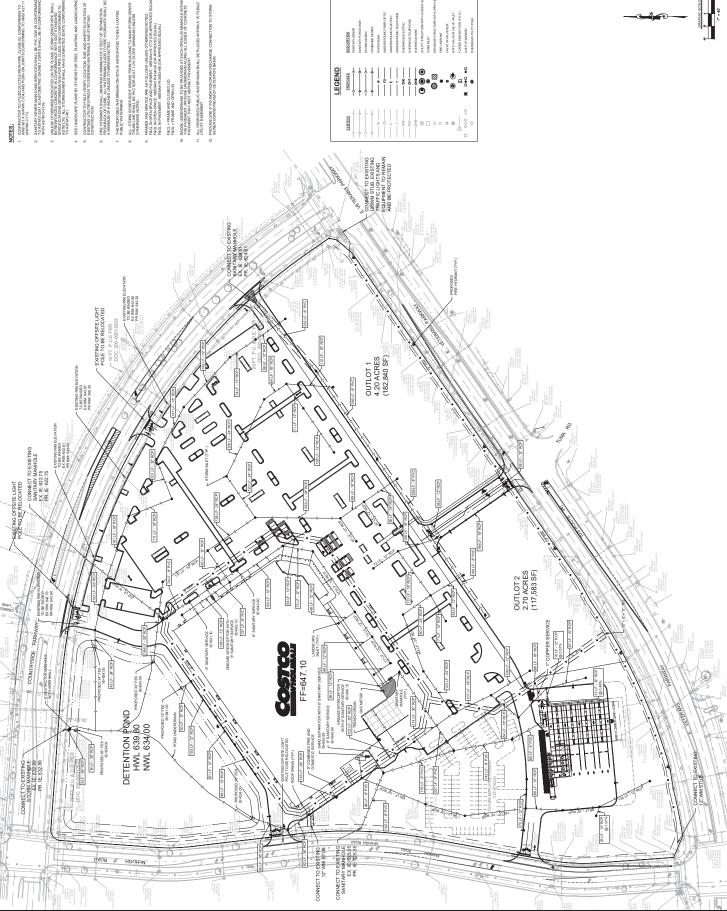








PRELIMINARY GRADING PLAN





CW # 23-0023

NWC US34/VETERANS AND
COUNTRYSIDE PARKWAY
YORKVILLE, ILLINOIS 80560

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WHOLESALE
CORPORATION
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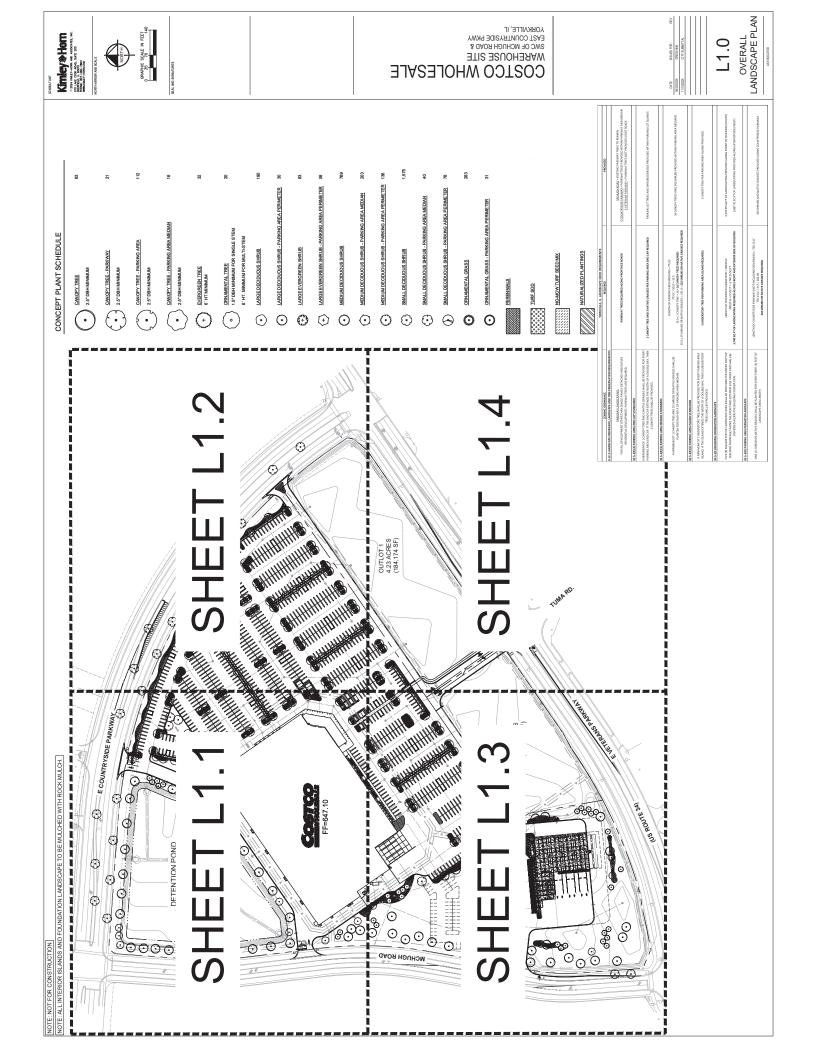
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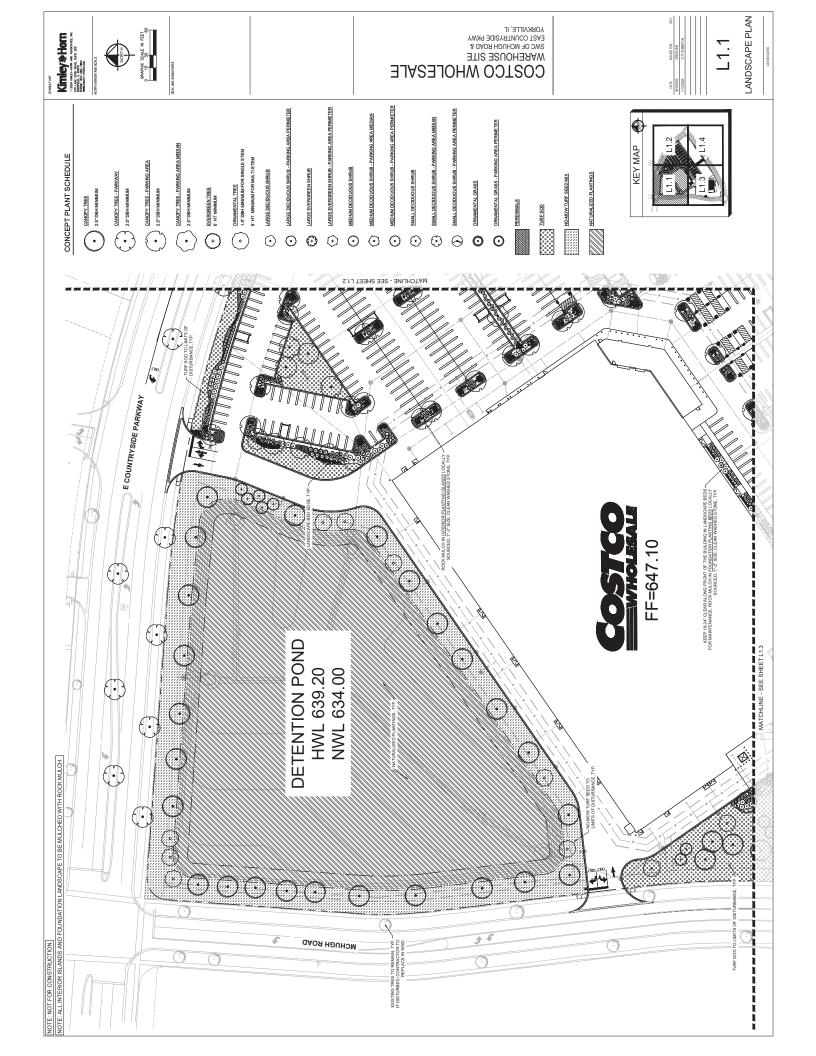


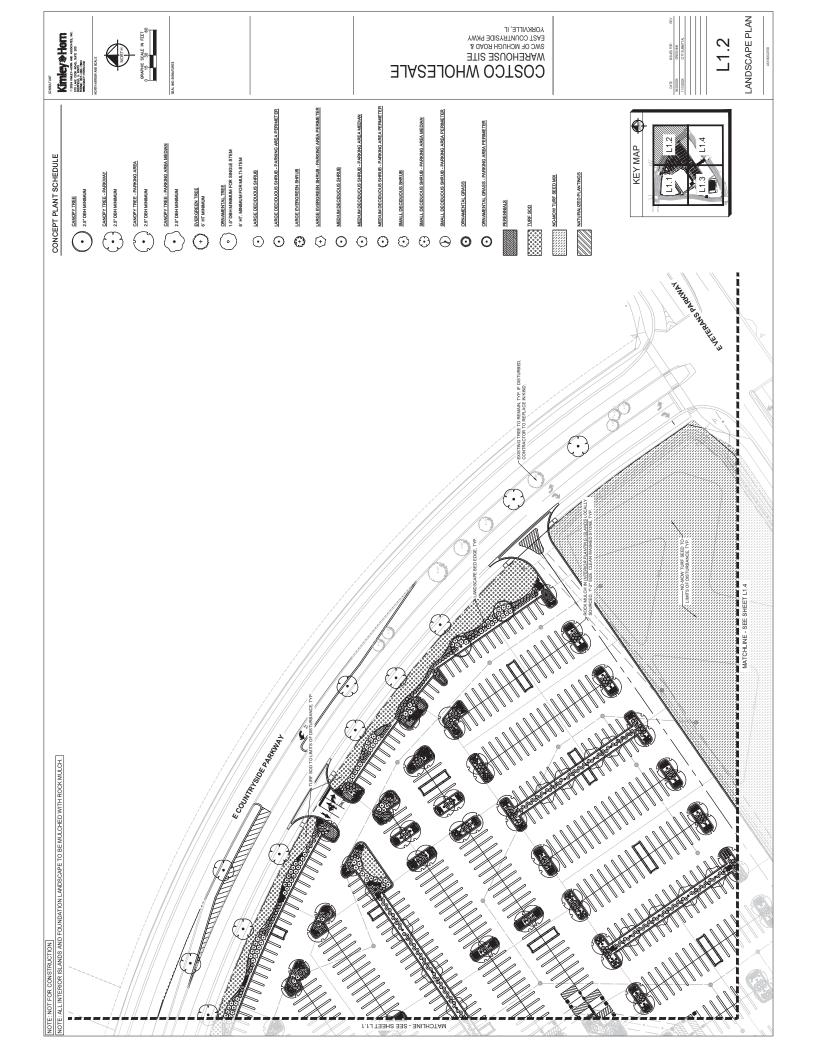


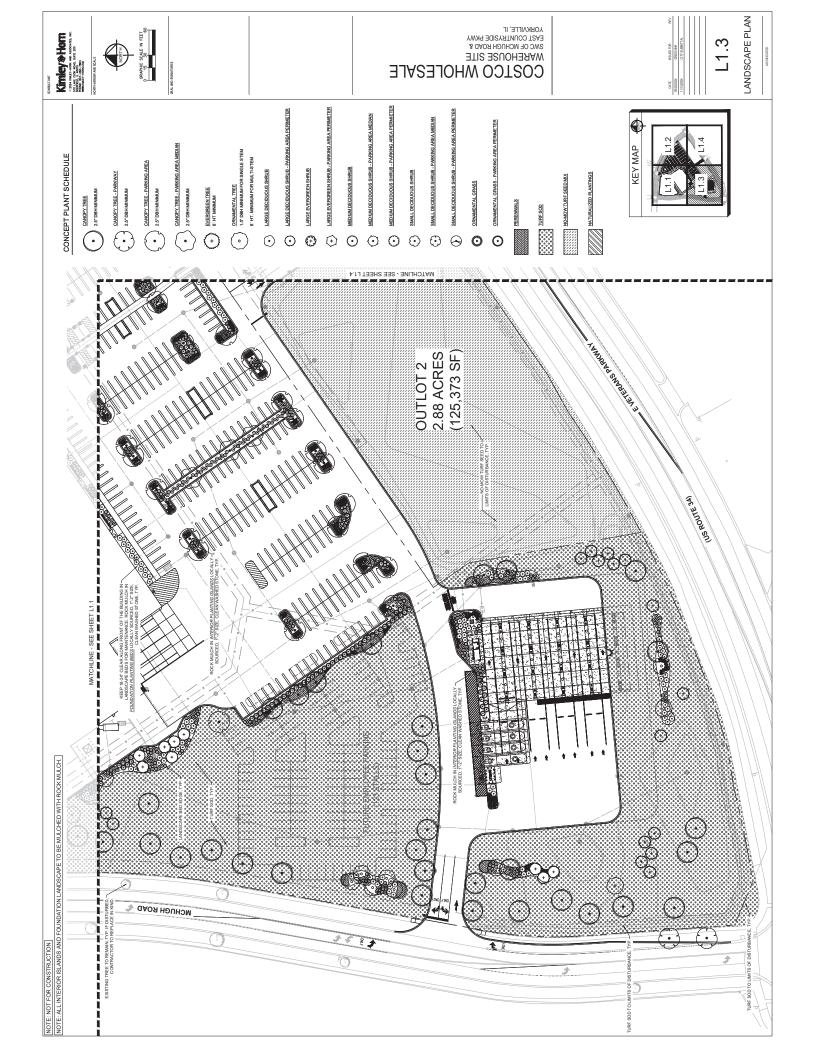
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UTILITY PLAN

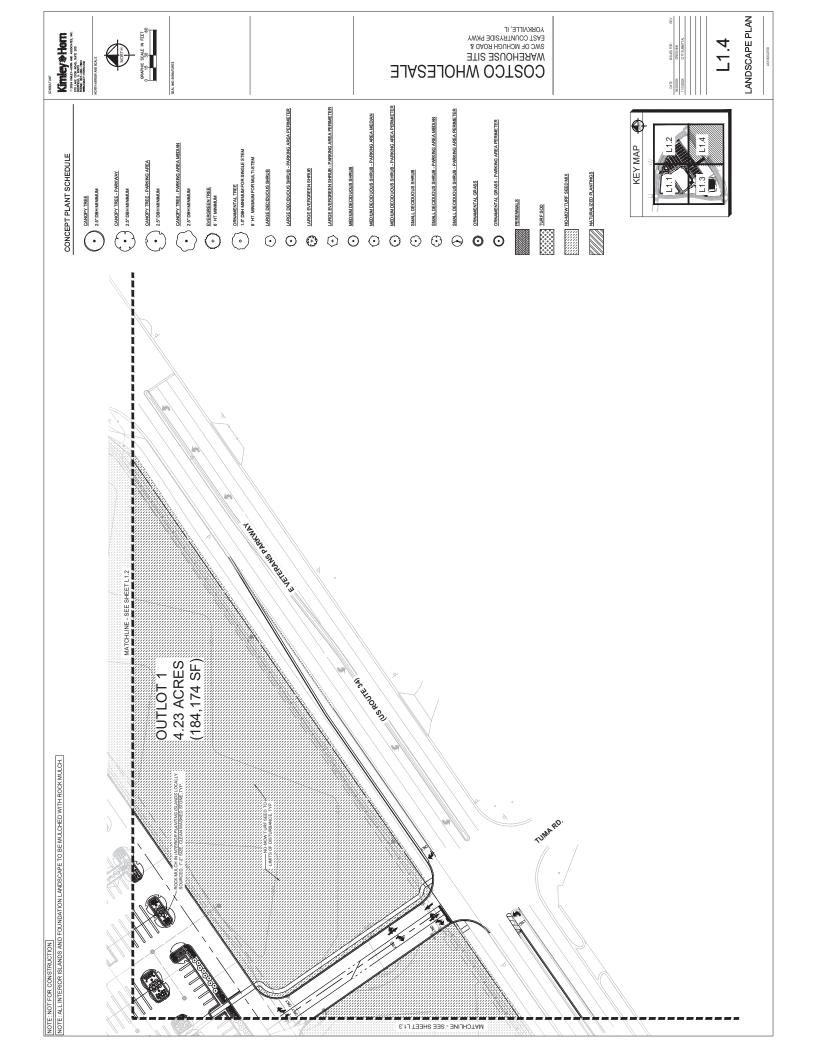
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NOTE: NOT FOR CONSTRUCTION | NOTE: ALL INTERIOR ISLANDS AND FOUNDATION LANDSCAPE TO BE MULCHED WITH ROCK MULCH.

PLANT SCHEDULE

ACER X FREEMANII 'AUTUMN BLAZE' / AUTUMN BLAZE MAPLE TREES ACERMIYABEI WORTON /STATE STREET''' MIYABE MAPLE CELTIS OCCIDENTALIS / COMMON HACKBERRY

GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' / SKYLINE HONEY LOCUST GINKGO BILOBA 'AUTUMN GOLD' / AUTUMN GOLD MAIDENHAIR TREE GYMNOCLADUS DIOICUS ESPRESSO'/KENTUCKY COFFEETREE

OSTRYA VIRGINIANA / AMERICAN HOPHORNBEAM

TAXODIUM DISTICHUM 'SHAWNEE BRAVE / SHAWNEE BRAVE BALD CYPRESS QUERCUS BICOLOR / SWAMP WHITE OAK

TILIA AMERICANA 'BOULEVARD' / BOULEVARD AMERICAN LINDEN ULMUS AMERICANA 'PRINCETON' / PRINCETON AMERICAN ELM ULMUS X'MORTON' / ACCOLADE "" ELM ULMUS X'FRONTIER' / FRONTIER ELM

EVERGREEN TREES ABIES CONCOLOR / WHITE FIR

ZELKOVA SERRATA 'GREEN VASE' / GREEN VASE JAPANESE ZELKOVA

PINUS FLEXILIS "VANDERWOLF'S PYRAMID" / PICEA OMORIKA/ SERBIAN SPRUCE

ORNAMENTAL TREES AMELANCHIER X GRANDIFLORA "AUTUMN BRILLIANCE" / AUTUMN BRILLIANCE APPLE SERVICEBERRY

PSEUDOTSUGA MENZIESII / DOUGLAS FIR

MALUS X 'PRAIRIFIRE' / PRAIRIFIRE CRABAPPLE

SYRINGA RETICULATA 'IVORY SILK' / IVORY SILK JAPANESE TREE LILAC

SHRUBS ARONIA MELANOCARPA "MORTON" / IROGUOIS BEAUTY "* BLACK CHOKEBERRY

ARONIA MELANOCARPA 'UCONNAM165' / LOW SCAPE MOUND CHOKEBERR' CORNUS ALBA 'BAILHALO' / IVORY HALO® TATARIAN DOGWOOD CEANOTHUS AMERICANUS / NEW JERSEY TEA

FORSYTHIA X INTERMEDIA NIMBUS' / SHOW OFF® SUGAR BABY® DWARF FORSYTHIA PHYSOCARPUS OPULIFOLIUS 'DONNA MAY' / LITTLE DEVIL'" DWARF NINEBARK HYDRANGEA PANICULATA 'JANE' / LITTLE LIME® PANICLE HYDRANGEA CORNUS SANGUINEA 'CATO' / ARCTIC SUN® BLOODTWIG DOGWOOD PHYSOCARPUS OPULIFOLIUS 'SEWARD' / SUMMER WINE® NINEBARK DIERVILLA X 'G2X88544" / KODIAK® ORANGE DIERVILLA DEUTZIA X 'NCDX1' / YUKI SNOWFLAKE® DEUTZIA

SPIRAEA BETULIFOLIA 'TOR GOLD' / GLOW GIRL® BIRCHLEAF SPIREA SPIRAEA JAPONICA 'NEON FLASH' / NEON FLASH JAPANESE SPIREA SPIRAEA JAPONICA "WALBUMA" / MAGIC CARPET JAPANESE SPIREA VIBURNUM DENTATUM 'BLUE MUFFIN' / BLUE MUFFIN ARROWWOOD WEIGELA FLORIDA 'ALEXANDRA' / WINE & ROSES® WEIGELA WEIGELA FLORIDA BRAMWELL' / FINE WINE® WEIGELA WEIGELA FLORIDA VERWEIG! / MY MONET® WEIGELA

POTENTILLA FRUTICOSA "JACKMANII" / JACKMAN'S BUSH CINQUEFOIL

EVERGREEN SHRUBS JUNIPERUS CHINENSIS 'SEA GREEN / SEA GREEN JUNIPER

TAXUS X MEDIA TAUNTONII / TAUNTON'S ANGLOJAPANESE YEW

PENNISETUM ALOPECUROIDES 'BURGUNDY BUNNY' / BURGUNDY BUNNY DWARF FOUNTAIN GRASS ORNAMENTAL GRASSES CALAMAGROSTIS X ACUTIFLORA KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS PANICUM VIRGATUM 'CHEYENNE SKY' / CHEYENNE SKY PRAIRIE WINDS® SWITCH GRASS PENNISETUM ALOPECUROIDES 'PIGLET / PIGLET DWARF FOUNTAIN GRASS PENNISETUM ALOPECUROIDES 'HAMIELN' / HAMIELN FOUNTAIN GRASS PANICUM VIRGATUM HEAVY METAL! HEAVY METAL SWITCH GRASS SPOROBOLUS HETEROLEPIS/PRAIRIE DROPSEED

RUDBECKIA FULGIDA 'LITTLE GOLDSTAR' / LITTLE GOLDSTAR BLACK-EYED SUSAN AMSONIA TABERNAEMONTANA 'BLUEICE' / BLUEICE EASTERN BLUESTAF ECHINACEA X 'BUT TERFLY KISSES' / BUTTERFLY KISSES CONEFLOWER PERENNIALS ALLIUM X'SUMMAER BEAUTY / SUMMAER BEAUTY ORNAMENTAL ONION HEMEROCALLIS X 'ROSY RETURNS' / ROSY RETURNS DAYLILY SEDUM X 'AUTUMN JOY / AUTUMN JOY SEDUM

Kimley»Horn

1 2014 MALE-HORN AND ADDOCATES, NO.
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SEAL AND SIGNATURES



NATURALIZED POND PLANTINGS, POND DESIGN AND EXACT SEED MIXES TO BE DETERMINED AT A LATER DATE:

Pizzo Native Plant Nursery, LLC • 10729 Pine Road • Leland, IL 60531 • Phone : 815-981-8000 • www.pizzonursery.com Economy Prairie Seed Mix (Dry-Mesic Soils)

Andion As	Average Mic Height (R)	3.0	Design	rd as the	most e	conomic	al way	o estab	lsh an ec	ologically	functiona	I prairie v	vhile ma	intaining	the highe	30 Designed as the most economical way to establish an ecologically functional prairie while maintaining the highest aesthetic value.	value.
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Bibre PG6		10.0	Anril #	rough C	rioher	When in	ctalled:	and mar	naged cor	rectiv th	is mix tynii	ally hoos	own flowe	ring in its	seconde	rowing ceaser	9
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MODEL	stocksi Wetsing Category	PACU+	species	appear	in the	ncceediii	1g 3 to	years.	INIS IS a L	medium-:	nort neigr	t pairie	with an	average	neignt of 2	species appears in the succeeding 3 to 5 years. This is a medium-short height plaine with an average height of 2.5° by seed count	ount.
S/Acre c	bs/Acre of Native Seed	15.0															
seds per	eds per Square Foot	90.7															
reent of	ercent of Mix (by Seed Count) Requiring Stratification	RREFI													Ì		
Patter. S.	Crasses, Seden, & Ruthes																
						HEIGHT	r	BLOOM	BLOOM TIME	L			-	% OF MIX	×		
3000	SCIBNTINC NAME	COMMON NAME	C-VALUE	W-VALUE W:TNESS	WETNESS	Min-Max Typical	-	-	AMJJAS	0	SEEDS/02 02/	OZ/ACRE LB/ACRE		by Weight by Seed Coun	Seed Coun:	GERMINATION	TOP 50W
OUGUR	Boutebus curtipendula	Side-outs Grama	80	5	UPL	1,5-25'	2	N/A			6,000		2,00	13,29%	4,36%	N/A	
VBREV	Carex brevior	Plains Oval Sedge	4	0	FAC	1.3.	2	N/A		H	29,000	2.00	0.13	0.83%	1,47%	CM-60	
TUNAC	Sorghastrum nataris	Indian Grass	s	3	:ACU	3.7.	9	N/A			12,000		1.00	9599	4.86%	N/A	
LYCAN	Elymus conodensis	Canada Wild tye	4	3	:ACU	3.5.	s	N/A			5,200		3.00	19.94%	6.32%	N/A	0
ANVIR	Panicam winostum	Switch Grass	s	0	FAC	3.6	4	N/A			14,000	32.00	2.00	13.29%	11.34%	N/A	
СНЅСО	Schizachynium scoponium	Uttle Bluesten	s	8	'ACU	2.3	en	N/A			15,000		2,00	13.29%	12.15%	N/A	
										Ö	Grass/Sedge Subtotals		10.125	67.29%	40.99%		
Mellowers																	
		-				HEIGHT		BLOOM	BLOOM TIME		1	1	-	% OF MIX	×	-	
COOR	SCIBNTING NAME	COMMON NAME	CVALUE	W-VALUE W:TNESS	W:TNESS	Min-Max Typical	-	COLOR	AMJJASO		FDS/OZ OZ/	OZ/ACRE LB/AG	Щ	by Weight by Seed Coun	Seed Count	GERMINATION TOP SOM	TOP SOW
SCSYR	Ascignias syriaca	Common Milweed	0	3	:NOV	5.6.	3	Pink			4,000		0.25	1,66%	0.40%	CM-30	
HAFAS	Champecrista fascicilata	Partridge Pea	s	3	:ACU	62.	2	relion			2,700	16.01	1,00	9599	1,09%	CM-10, H, I	
DRLAN	Coreopsis fanceolata	Sand Coreopsis	S	3	:AOU	15.3,	2	Yellow			20,000		0.25	1.66%	2,02%	CM-30	
SCAA	Desmodium canoderse	Showy Tick Tiefoil	4		:ACU	3.6'	4	Purple			5,500		0.16	1.04%	0.35%	1,1	
CHPUR	Echinoceo purpureo	Purple Conefower	e	S	UPL	2.5.	4	Purple			6,600		0.75	4.98%	2.00%	N/A	0
STATE	PhoRogosis Profesostholdes	Corty Surritories	v		NOV.	.54	s	Wellow.			6,369		9.59	9.9896	1.2651	664.30	
ONFIS	Monarda fistulosa	Wild Bergamot	9	3	:AQU	2.5-4"	4	Purple			000'04		0.13	0.83%	3.549(N/A	0
NDIG	Penstemon digitalis	Forgione Beardtongue	4	0	FAC	2-3.	3	White			130,000	1,75	0.11	0.73%	X92'S	CM-30, G	
IUDHIR	Rudbeckip hirta	Black-eyed Sysan	-	3	:ACU	2.3.	2	relion			92,000		1.00	96999	37.25%	CW-30	0
UMT	Silphiam integrifoliam	Rosin Weed	s	S	UPL	2.6.	s	relion			1,200		0.19	1.25%	X60'0	09-W2	0
YMMO/	Symphyotrichum nospe-angliae	New EnglandAster	4	÷	IACW	3-5.	4	Purple			000/99		90.0	0.42%	1.67%	09-W2	0
MOM	Tradescardia ohiemsis	Ohio Spiderwort	~	~	ACU	2-4	m	Bloe			8,000	1.50	60:0	0.62%	0.30%	CM-120 or M, G	0
TRSTR	Verbena stricta	Hoary Versals	4		160	1-3.	~	Bloe			28,000		0.19	1.25%	2.1356	09-W2	
1ZAUR	Zinia aurea	Golden Alexanders	7	0	FAC	1-2.5	2	relion			11,000	4.00	0.25	1.66%	3.11%	CM-60 or M, G	030
										5	Wildflower Subtotal:	L	4.922	32.71%	X10.62		
											Mix TOTALS		15.047	100.00%	100.00%		

NO-MOW TURF SEED MIX

BOTANICAL NAME	COMMON NAME	ACRE TOTAL	TOTAL
GRASSES, SEDGES, & RUSHES	USHES		
Lolium perenne	Perennial Rye	25.0	139
Agrostis gigantea	Red Top	15.0	86
Festuca rubra	Creeping Red Fescue	80.0	40%
Festuca arundinacea	Tall Fescue	20.0	10%
Festuca ovina	Sheep's Fescue	20.0	10%
Poa pratensis	Kentucky Bluegrass	40.0	20%
SEE	SEED MIX TOTAL LBS PER ACRE:	200	

SWC OF MCHUGH ROAD & YORKVILLE, IL

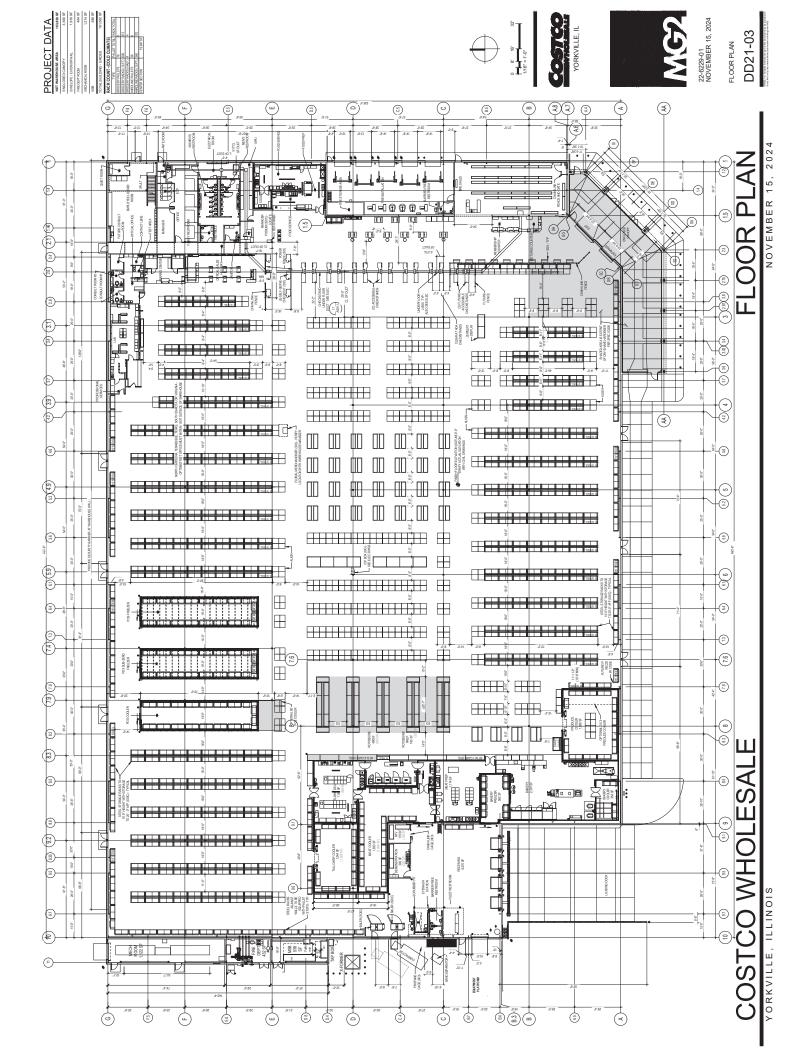
WAREHOUSE SITE

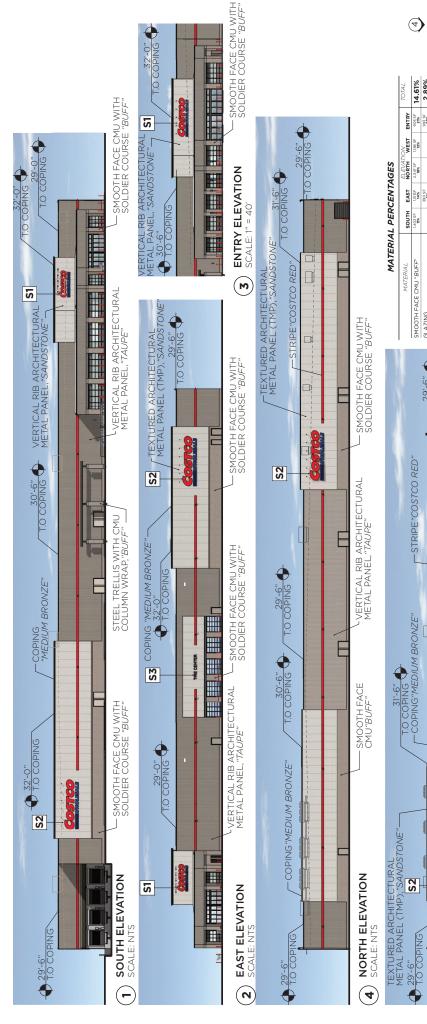
COSTCO WHOLESALE

LANDSCAPE NOTES AND DETAILS L2.0

LANDSCAPE NOTES AND DETAILS AOBKNIFTE' IF EAST COUNTRY/SIDE PRWY WAREHOUSE SITE Kimley»Horn

1 2014 MALE-HORN AND ADDOCATES, NO.
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2010 MALE COOK MALE, SAIT 200
2010 MALE COOK MA COSTCO WHOLESALE ED OTHERWISE ON THE PLANS. SPAUCED EDGE TO PROVIDE VSHAFED DEPTH AND WIDTH TO CREATE SEPARATTON BETWEEN MALCH AND GRASS. A SPAUCED BED EDGE SHALL SEPARATE MALCH REDS FROM TURF OR SEEDED AREAS.
PD EDGES. 1. THE AMEGICAE GAIL SETS STORMED FOR THE STATE CONTRICTOR SHALL SETS STORMED FOR THE CONTRICTOR SHALL SETS STATE CONTRICTOR SHALL WANNAL, AND GROUNDCOVER AREAS. TREES PLACED IN AREA COVERED BY TUPF SHALL RECEIVE A 4 FT WIDE MAXIMAN TREE RING WITH 3"DEPTH TITES TREES SHALL MEASURE CONTINUED TO THE LOCATED CLOSER THANK FROM INVESTIGATION THANK FROM THE LOCATED CLOSER THANK FR (3) EVERGREEN TREE PLANTING (6) STONE MULCH LANDSCAPE NOTES SPECIFICATIONS SHALL SUPERCEDE LANDSCAPE NOTES. (5) PERENNIAL PLANTING 2 TREE STAKING NOTE: NOT FOR CONSTRUCTION]
NOTE: ALL INTERIOR ISLANDS AND FOUNDATION LANDSCAPE TO BE MULCHED WITH ROCK MULCH. (7) STONE MULCH ADJACENT TO HARDSCAPE YORKVILLE, IL PARKWAY TREE NOTES: (4) SHRUB PLANTING (1) TREE PLANTING





MATERIAL PERCENTAGES

-STRIPE"COSTCO RED'

31-6" TO COPING COPING WED!UM BRONZE"

29'-6" T.O COPING

CONCRETE SCREEN WALL, "NATURAL"

VERTICAL RIB ARCHITECTURAL METAL PANEL, "TAUPE"

SMOOTH FACE CMU"BUFF"

WEST ELEVATION SCALE: NTS

S

IDENTITY QUANTIT

S1 S2 S3





YORKVILLE, IL

	TOTAL SF	175 SF	1120 SF	31 SF	1326 SF
	AREA (EACH) TOTAL SF	175 SF	280 SF	31 SF	IN AREA:
4.	SIZE	2,-0,, C	6'-0" C	17'-4" × 1'-9"	TOTAL SIGN AREA:
SIGN IABLE	SIGN	COSTCO WHOLESALE	COSTCO WHOLESALE	TIRE CENTER	
	_				







YORKVILLE, ILLINOIS

ELEVATIONS

DD13-05

ELEVATIONS

22-6229-01 NOVEMBER 15, 2024

NOVEMBER 15, 2024



DD14-05

RENDERINGS

(3) NORTHEASTT PERSPECTIVE







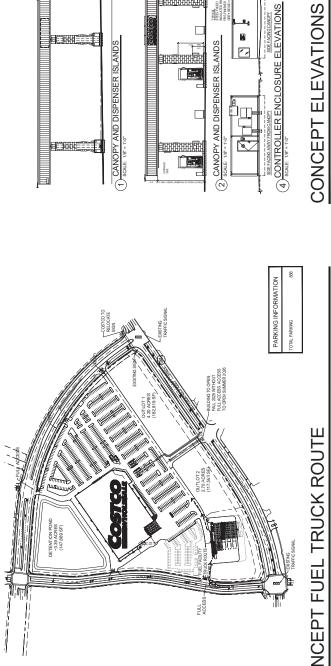


(1) ENTRY CANOPY PERSPECTIVE

COSTCO WHOLESALE

2 SOUTHWEST PERSPECTIVE

COSTCO WHOLESALE



RALATE SAFETY
GUAS
SMOOTH NETAL
FIRSLATED PARAS.
GREY BEIGE
BEVANDOLA
BEVANDOLA
BEVANDOLA
BEVANDOLA

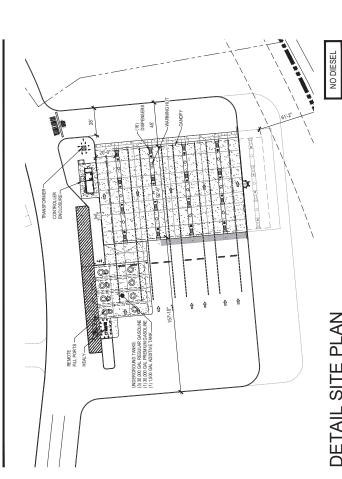
WARMING HUT

ELEVATIONS

Scale: 187= 1*0*

CONCEPTUAL STACKING

CONCEPT FUEL TRUCK ROUTE



DETAIL SITE PLAN

COSTCO WHOLESALE

YORKVILLE, ILLINOIS

STACKING PLAN

FUEL FACILITY PLAN

FUEL FACILITY PLAN

COSTOS MORVILLE, IL

NOVEMBER 15, 2024

DD41-02

TRAFFIC IMPACT STUDY

REPORT FOR:

Costco Wholesale, Yorkville



<u>US 34/VETERANS PARKWAY & COUNTRYSIDE PARKWAY YORKVILLE, ILLINOIS</u>

PREPARED BY:



V3 Companies 7325 Janes Avenue Woodridge, Illinois 60517

V3 Project No. 240757

November 13, 2024 Updated December 30, 2024



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I. INTRODUCTION

V3 Companies has been retained by Costco Wholesale Corporation to conduct a traffic impact study for a proposed Costco Warehouse located at the northeast corner of US 34/Veterans Parkway and McHugh Road in the City of Yorkville, Illinois. The site is bounded by Countryside Parkway to the north, US 34/Veterans Parkway to the southeast, and McHugh Road to the west. A location map is included as Figure 1.

The proposed development consists of a Costco Wholesale building with approximately 161,064 square feet and a members-only gas station with 32 fueling positions when the store opens. The site plan illustrates the future expansion of the gas station to provide an additional eight fueling positions. The proposed access plan includes a right-in/right-out/left-in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a second full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway. The site plan proposes 859 parking stalls. Figure 2 illustrates the proposed site plan with driveway locations.

The purpose of this study is to evaluate the potential traffic impacts of the proposed Costco Wholesale warehouse and the members-only gas station. Traffic estimates are projected to 2031, which is five years beyond the potential build out in 2026, based on traffic projections from CMAP.

The study area includes the following intersections as well as the proposed driveways to the site.

- Countryside Parkway and McHugh Road (unsignalized)
- Countryside Parkway and Crimson Lane/Costco Driveway 1 (unsignalized)
- Countryside Parkway and Costco Driveway 2 (unsignalized)
- Countryside Parkway and Costco Driveway 3 (unsignalized)
- US Route 34/Veterans Parkway and Countryside Parkway (signalized)
- US Route 34/Veterans Parkway and Tuma Road/Costco Driveway 4 (unsignalized)
- US Route 34/Veterans Parkway and McHugh Road (signalized)
- McHugh Road and Costco Driveway 5 (unsignalized)
- McHugh Road and Costco Driveway 6 (unsignalized)

This report includes a description of existing conditions, data collection and capacity analysis, evaluation of data, traffic signal warrant analysis and turn lane warrant analysis, and conclusions.

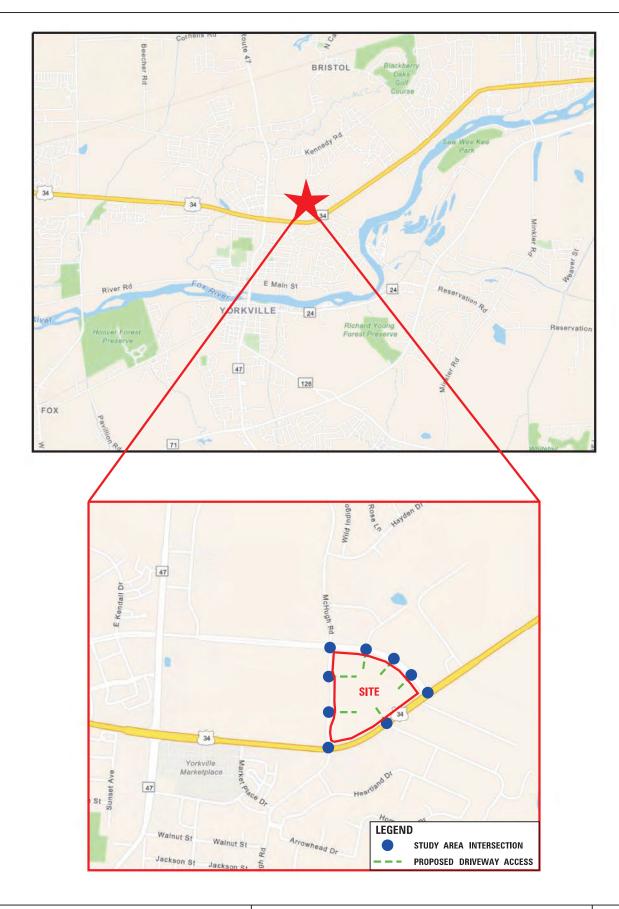


FIGURE 1 SITE LOCATION MAP



YORKVILLE ILLINOIS

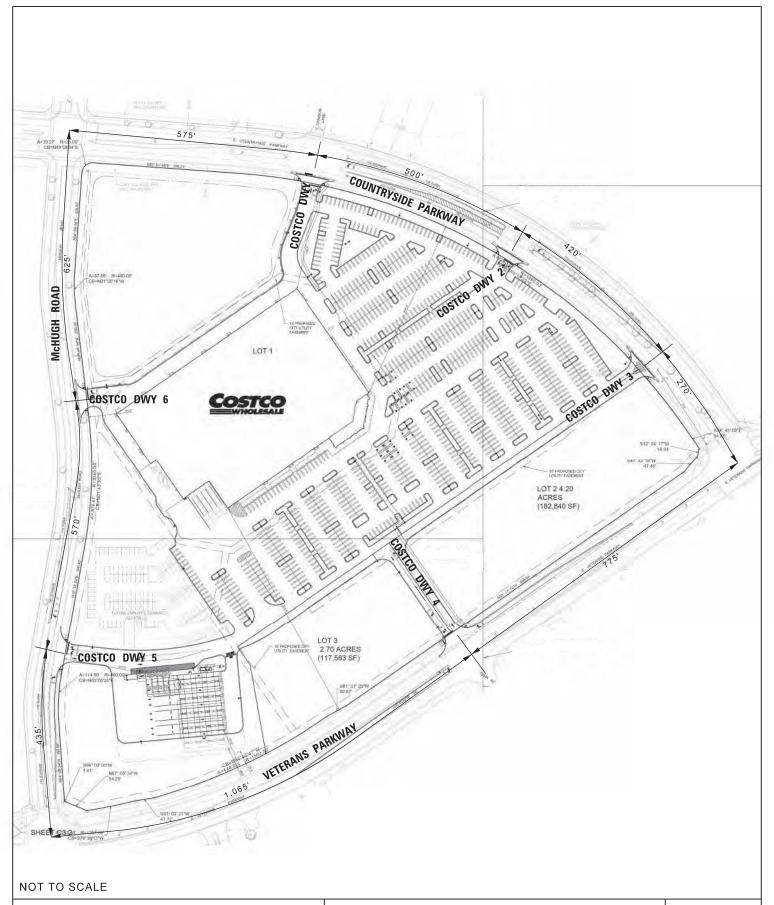


FIGURE 2 CONCEPTUAL SITE PLAN



YORKVILLE ILLINOIS



II. PROJECT CONDITIONS

Land Uses

The land uses near the project site primarily consist of residential and retail uses as well as undeveloped land. The surrounding land uses are illustrated in Figure 3.

Roadway System

The characteristics of the roadways in the vicinity of the site are presented below. The existing lane configurations in the study area are illustrated in Figure 4.

Roadway Descriptions

US 34/Veterans Parkway is an east/west roadway classified as a Strategic Regional Arterial (SRA) with a posted speed limit of 45 mph adjacent to the proposed development. US 34 provides two travel lanes in each direction that widens to include a striped median that facilitates auxiliary turn lanes at intersections. US 34 is under jurisdiction of the Illinois Department of Transportation. The average daily traffic (ADT) volume on US 34 to the east of McHugh Road was 16,200 vehicles per day in 2023, while the west side was 14,00 vehicles per day based on the IDOT database.

Countryside Parkway is an east/west roadway classified as a minor collector with a posted speed of 40 mph that curves to intersect US 34. Countryside Parkway consists of a five-lane boulevard section that includes turn lanes at intersections. There are raised concrete and landscaped medians along the Countryside Parkway corridor. Countryside Parkway is under municipal jurisdiction. The average daily traffic (ADT) volume on Countryside Parkway to the east of McHugh Road was 1,600 vehicles per day in 2019, while the west side was 3,600 vehicles per day based on the IDOT database.

McHugh Road is a north/south roadway classified as a major collector with one travel lane in each direction and a striped median as a two-way left turn lane that facilitates auxiliary turn lanes at major intersections. McHugh Road is under municipal jurisdiction and has a posted speed limit of 35 mph. McHugh Road has a 2019 ADT of 2,000 vehicles per day north of US 34 while the south side was 2,950 vehicles per day based on the IDOT database.

Tuma Road is an east/west roadway classified as a local road with one travel lane in each direction. Tuma Road provides access to the existing residential development south of US 34. The posted speed limit is 30 mph and is under township jurisdiction with a 2019 ADT of 1,100 vehicles per day based on the IDOT database.

Crimson Lane is a north/south roadway classified as a local road with one travel lane in each direction and a striped median as a two-way left turn lane that facilitates auxiliary turn lanes at major intersections.



Crimson Lane provides access to the existing Children of America Yorkville, the Police Station, and City Hall facilities north of Countryside Parkway. Crimson Lane is under municipal jurisdiction.

Intersection Descriptions

US 34/Veterans Parkway and Countryside Parkway is a coordinated signalized three-leg intersection. The northeast-bound approach of US 34 consists of one left turn lane and two through lanes while the southwest-bound approach consists of two through lanes and one right turn lane. The southbound approach on Countryside Parkway consists of one left turn lane and one right turn lane. All approaches operate with a protected/permitted left turn movement. The traffic signal was observed during the peak hours and found that the cycle length for the weekday am is 110 seconds, the weekday pm is 120 seconds and Saturday midday is 100 seconds.

US 34/Veterans Parkway and McHugh Road is a coordinated signalized intersection. The northbound approach of McHugh Road consists of one left turn lane, one through lane, and one right turn lane while the southbound approach consists of one left turn lane and one shared through/right turn lane. The eastbound and westbound approaches of US 34 consist of one left turn lane, one through lane, and one shared through/right turn lane. All approaches operate with a protected/permitted left turn movement. The traffic signal was observed during the peak hours and found that the cycle length for the weekday am is 110 seconds, the weekday pm is 120 seconds and Saturday midday is 100 seconds.

McHugh Road and Countryside Parkway is an unsignalized all-way stop-controlled intersection. The northbound and southbound approaches of McHugh Road consist of one left turn lane and one shared through/right turn lane. The eastbound and westbound approaches of Countryside Parkway consists of one left turn lane and one shared through/right turn lane.

US 34/Veterans Parkway and Tuma Road is a minor leg stop-controlled t-intersection with the northbound approach of Tuma Road signed as the stop approach. The northeast-bound approach of US 34 consists of one through lane and one shared through/right turn lane while the southwest-bound approach consists of one left turn lane and two through lanes. The northbound approach of Tuma Road consists of one shared left turn/right turn lane.

Countryside Parkway and Crimson Lane is a minor leg stop-controlled t-intersection with the southbound approach of Crimson Lane signed as the stop approach. The eastbound approach of Countryside Parkway consists of one left turn lane and two through lanes while the westbound approach of Countryside Parkway consists of one through lane and one shared through/right turn lane. The southbound approach of Crimson Lane consists of one left turn lane and right turn lane.

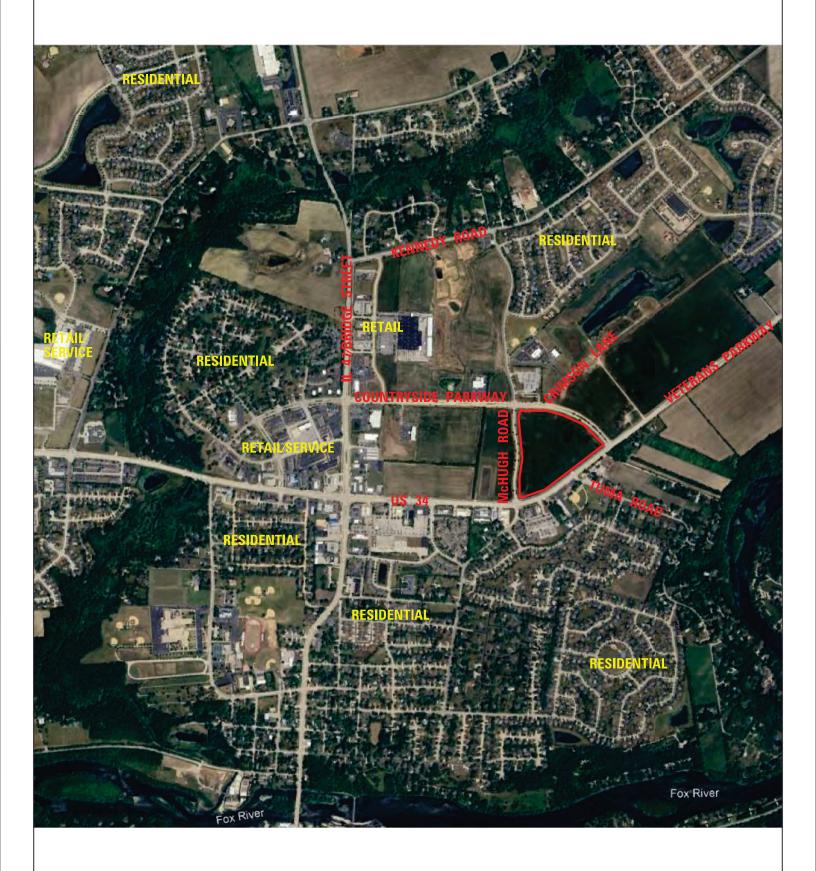


FIGURE 3 LAND USE MAP



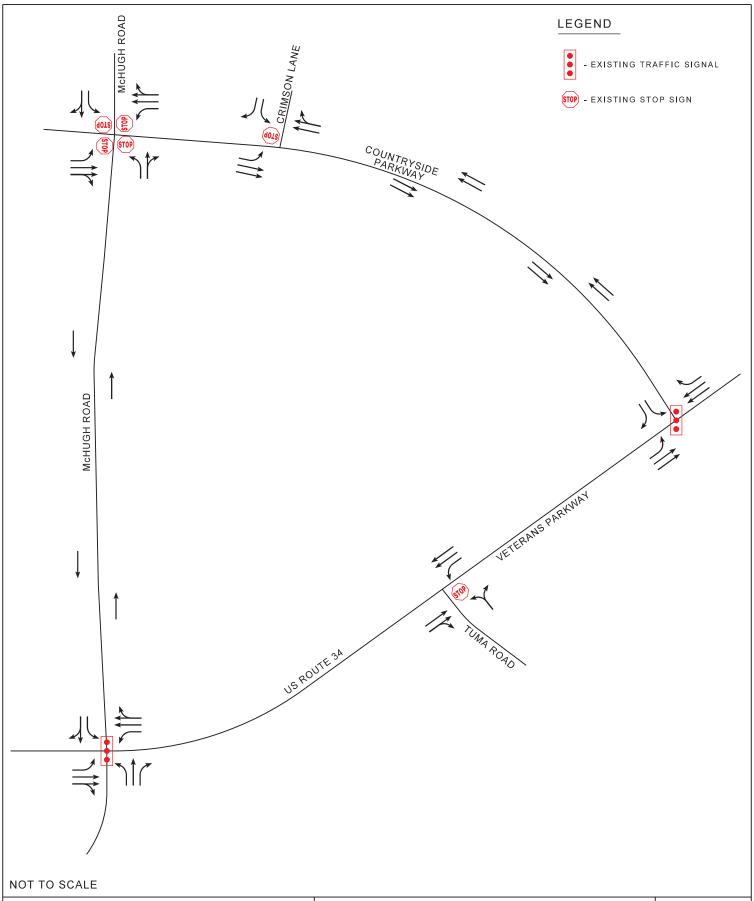


FIGURE 4
EXISTING LANE CONFIGURATION



YORKVILLE ILLING



Traffic Volumes

To assist in the evaluation of the traffic impact on the roadway system resulting from the proposed development, existing vehicular volumes were collected at the study area intersections.

Existing traffic counts were collected on Saturday, September 14, 2024, Tuesday, September 17, 2024, and Wednesday, September 18, 2024. The weekday am peak hour traffic counts were collected from 7:00 am to 9:00 am, the weekday pm peak hour traffic counts were collected from 4:00 pm to 6:00 pm, and the Saturday midday counts were collected from 11:00 am to 3:00 pm. The time periods of the traffic counts were selected to coincide with the typical peak hours of the arterial roadways like US 34/Veterans Parkway, as well as the typical peak hours for a retail development.

It should be noted that due to complications with the traffic data collection equipment, the study area intersections were counted on two consecutive weekdays. The intersections of Countryside Parkway and McHugh Road, US 34 and Countryside Parkway, and US 34 and Tuma Road were collected on Tuesday, September 17, 2024, and the intersections of US 34 and McHugh Road and Countryside Parkway and Crimson Lane were collected on Wednesday, September 18, 2024. The weekday peak hour traffic volumes were balanced with the approach and departure volumes along McHugh Road between US 34 and Countryside Parkway and along Countryside Parkway between Crimson Lane and US 34 adjusted by taking the higher approach traffic volume and distributing it based on the existing turning distribution.

The weekday am peak hour occurs between 7:00 am - 8:00 am, the weekday pm peak hour occurs between 4:30 pm - 5:30 pm, and the Saturday midday peak hour occurs 12:45 pm - 1:45 pm, respectively. The existing peak hour volumes at the study area intersections are illustrated in Figure 5. A summary of the traffic volumes collected in fifteen-minute increments is provided in Appendix A.

Proposed Development

Land Use Development

It is our understating that there are no known development plans within the immediate study area that are likely to alter traffic patterns in the near future. It should be noted that the properties on the west side of McHugh Road and the east side of Countryside Parkway will likely be developed in the future. At this time, there are no specific development plans for those sites.

Roadway Development

It is our understanding that there are no other known planned roadway developments that will impact traffic patterns in the study area.



The proposed access plan includes a right-in/right-out/left-in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway north of the US 34 intersection.

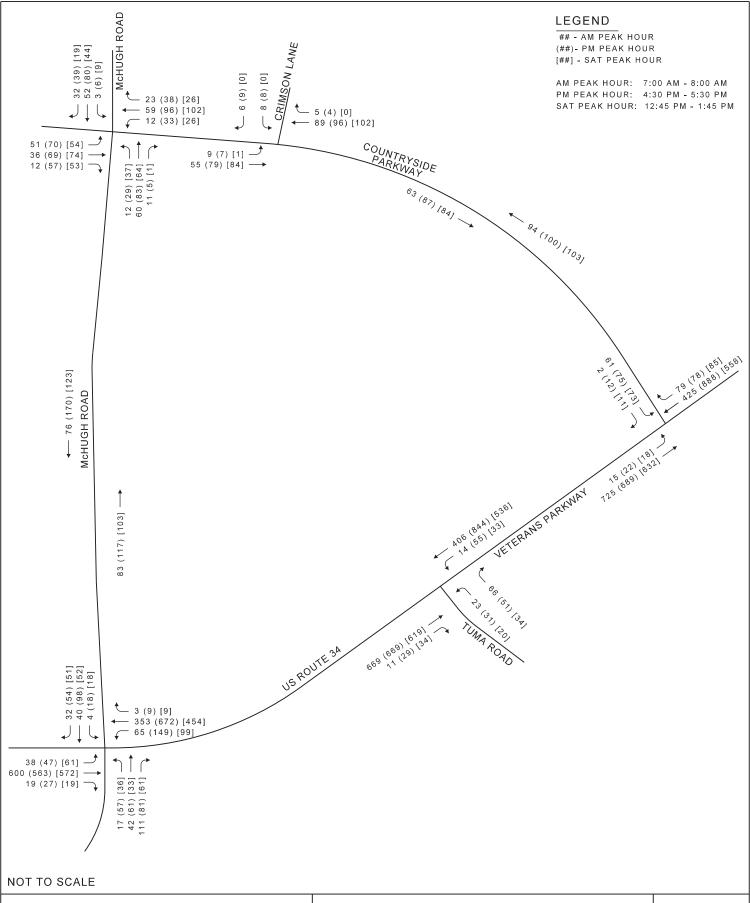


FIGURE 5
EXISTING TRAFFIC VOLUMES



YORKVILLE ILLINOIS



III. TRAFFIC FORECASTS

Project Traffic Volumes

Trip Generation

The proposed site plan consists of an approximately 161,064 square foot Costco Wholesale building and a members-only gas station with 40 pumps. Project traffic is estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The following land use category is used to determine project traffic:

Discount Club (ITE Land Use Code 857) – A discount club is a discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items such as food, clothing, tires, and appliances; many items are sold in large quantities or bulk. Some sites may include on-site fueling pumps.

Gasoline/Service Station (ITE Land Use Code 944) – This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have ancillary facilities for servicing and repairing motor vehicles and may have a car wash.

The *Trip Generation Manual, 11th Edition* assigns trip generation estimates based on a regression equation for each peak period and an independent variable. In this case, the gross building area is applicable for the discount club and vehicle fueling positions for the gas station. The weekday am and weekday pm peak hour trip generation equations are selected for weekday, peak hour of adjacent street traffic for one hour from 7 am to 9 am and 4 pm to 6 pm. The Saturday midday peak hour equations are selected for the Saturday peak hour of generator for both uses.

Trip generation is estimated based on the operational areas, which are summarized in Table 1. The Costco store will not be open during the weekday am peak hour as warehouse stores typically open after the morning commuter peak hour. A nominal number of trips are assumed for the weekday am peak hour to account for deliveries and employee trips to the store. The gas station is expected to be open to members only during the weekday am peak hour.

It is unlikely that the ITE *Trip Generation Handbook* methodology for internal capture is applicable since both the discount club and gas station are members only. The discount club operator stated that for locations in the Midwest, typically 65 to 75 percent of all gas station trips also include a trip into the discount club. In order to maintain a conservative analysis, it is assumed that 65 percent of gas station trips are internally captured, resulting in an overall internal capture of 22 percent during the weekday pm peak hour and 15 percent during the Saturday midday peak hour. Weekday daily and Saturday volumes



were calculated using a ten percent reduction for internal capture and a pass by reduction similar to the peak hour for the gas station and discount club.

As documented in the ITE *Trip Generation Handbook*, some land uses do not typically generate all new traffic on the roadway system. The total traffic generation is a combination of pass-by trips, or traffic drawn from the existing traffic flow on the adjacent streets, and primary trips, which represent new traffic drawn to the roadway network. In order to assess the pass-by trips, the data published in the ITE *Trip Generation Handbook* was utilized to estimate the pass-by percentages for the applicable land uses. It should be noted that pass-by trip reductions do not reduce the total number of trips into and out of the site, but decrease the number of new trips on the roadway network. A 34 percent pass-by rate was used for the discount club land use during the weekday pm peak hour and a 25 percent pass-by rate during the Saturday midday peak hour. Similarly, a 63 percent pass-by rate was applied for the gas station during the weekday am peak hour, while a 57 percent and 49 percent was used for the weekday pm and Saturday midday peak hours, respectively.

The new and pass-by trips will be assigned to the site driveways and local roadway network based on a trip distribution of these trips. The assignment of traffic to the driveways will likely follow a similar distribution to the existing condition, with adjustments made to account for modifications to the internal roadway network and the gas station location.

Table 1: Costco Trip Generation

	Table 1. costed Trip deficiation												
LUC	LAND USE	SIZE	Weekday	W	eekday A	MA	W	eekday F	PM	Saturday	Saturday MD		
LUC	LAND OSE	3126	Daily	In	Out	Total	In	Out	Total	Daily	In	Out	Total
857	Discount Club	161,064 SF	6,836	5	5	10	337	338	675	8,657	503	523	1,026
657	Interr	Internal Capture Reduction:			0	0	-90	-91	-181	-719	-81	-85	-166
		Pass-By Trips:	-2,276	0	0	0	-84	-84	-168	-2,381	-108	-108	-216
944	Gasoline/Service Station	40 Fueling Position	6,880	206	205	411	278	278	556	5,736	255	256	511
944	Intern	-686	0	0	0	-91	-90	-181	-719	-85	-81	-166	
		-2,602	-129	-129	-258	-107	-107	-214	-2,107	-85	-85	-170	
		Total Trip Generation:	13,716	211	210	421	615	616	1,231	14,393	758	779	1,537
		Less Internal Capture:	-1,371	0	0	0	-181	-181	-362	-1,438	-166	-166	-332
		Internal Capture Rate:	10%		0%			29%		10%		22%	
		12,345	211	210	421	434	435	869	12,955	592	613	1,205	
		-4,878	-129	-129	-258	-191	-191	-382	-4,488	-193	-193	-386	
	Total New Traffic Ge	nerated on Network:	7,467	82	81	163	243	244	487	8,467	399	420	819

Overall, 163, 487, and 819 total new trips are estimated during the weekday am, weekday pm, and Saturday midday peak hours, respectively. An additional 258, 382, and 386 pass-by trips are anticipated during the weekday am, weekday pm, and Saturday midday peak hour, respectively.

It should be noted that the gasoline/service station land use includes ancillary uses on the site, including convenience and car wash. The Costco gas stations do not have any ancillary uses. Therefore, the 163 new



trips generated by the 40 fueling positions may be overestimated as it is unlikely that over 80 vehicles will make a home-to-gas station only trip during the weekday am peak hour.

Pages from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* are included in Appendix I for reference.

Trip Distribution and Assignment

The direction from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems.

The distribution of discount club and gasoline/service station is based on the location of schools, employment centers, and commercial/retail areas. Traffic is primarily assigned to US 34 and Countryside Parkway due to the high-volume arterial nature of these streets. Much lower volumes are assigned to McHugh Road. The overall trip distribution is summarized in Table 2.

Table 2: Trip Distribution

Cordon Location	Distribution
Veterans Parkway/US 34 - East of Countryside Parkway	45%
Veterans Parkway/US 34 - West of McHugh Road	25%
Countryside Parkway - West of McHugh Road	20%
McHugh Road - North of Countryside Parkway	5%
McHugh Road - South of Veterans Parkway/US 34	5%

The assignment of traffic to the driveways follows a similar distribution to the existing condition, with adjustments made to account for modifications to the internal roadway network and the location of the gas station. The proposed access plan includes a full access driveway on US 34 that aligns with Tuma Road, two full access driveways and one right in/right out driveway on Countryside Parkway, and two full access driveways on McHugh Road. Therefore, approximately 40 percent of the total Costco trips are assigned to the driveway on US 34, 35 percent of the Costco trips are assigned to the Countryside driveways, and 25 percent to the driveways along McHugh Road. The distribution and assignment of proposed primary trips is illustrated in Figure 6.

It is assumed that most pass-by and diverted trips will be along US 34, Countryside Parkway, and McHugh Road. The directional split favors the westbound vehicles utilize the driveways to access the site via right



turns to and from US 34. The distribution and assignment of proposed pass by trips is illustrated in Figure 7.

The proposed primary trips are added to the proposed pass by trips to obtain the total proposed trips, which are illustrated in Figure 8.

Background Traffic Volumes

Background traffic volumes are estimated for the year 2031 which is five years beyond the anticipated build out in 2026. These volumes account for future non-project related growth in the area. The AADT for the study area roadways were obtained from the IDOT database. A summary of the CMAP growth rates is provided in Table 3. CMAP correspondence is provided in Appendix B.

Table 3: CMAP Growth Rates

Church	AAD	г	Total Growth	Compounded	Total Growth	Total Growth from 2024 to 2050	
Street	Existing AADT (Year)	2050 Proj.	from Count Year to 2050	Yearly Rate	from 2024 to 2031		
US Route 34 east of McHugh Road	16,200 (2023)	21,000	29.6%	1.0%	7.0%	28.4%	
US Route 34 west of McHugh Road	14,000 (2023)	18,100	29.3%	1.0%	6.9%	28.1%	
Countryside Parkway between US 34 and McHugh Road	1,600 (2019)	2,000	25.0%	0.7%	5.2%	20.6%	
Countryside Parkway west of McHugh Road	3,600 (2019)	4,500	25.0%	0.7%	5.2%	20.6%	
McHugh Road south of US 34	2,950 (2019)	3,700	25.4%	0.7%	5.2%	20.9%	
McHugh Road north of US 34	2,000 (2019)	2,500	25.0%	0.7%	5.2%	20.6%	
Tuma Road south of US 34	1,100 (2019)	1,380	25.5%	0.7%	5.3%	20.9%	

Overall, the CMAP projections indicate that there will be overall growth in traffic along the study area roadways around the proposed development. For the purposes of this study, a uniform total growth factor of 7.0 percent is applied to all movements throughout the study area to accommodate non-project related growth.

The 2031 background traffic volumes are illustrated in Figure 9.

Future Traffic Volumes

The total project trips are added to the background volume to obtain the future with project traffic volumes for the study area intersections. Future with project traffic volumes are depicted in Figure 10.

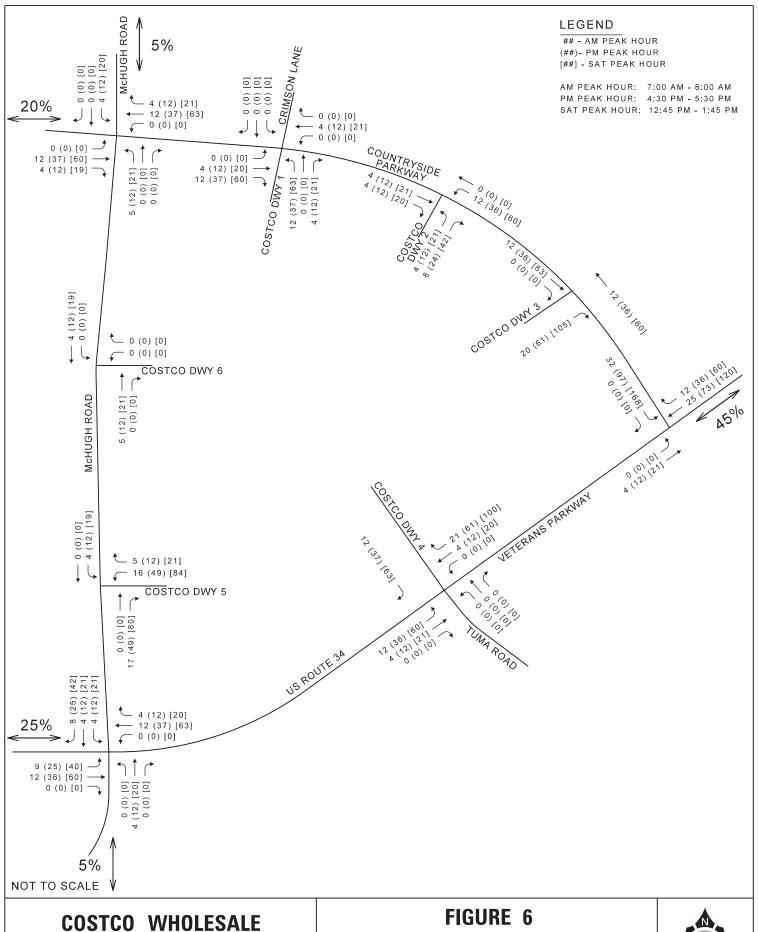


FIGURE 6
NEW PROJECT
TRAFFIC VOLUMES



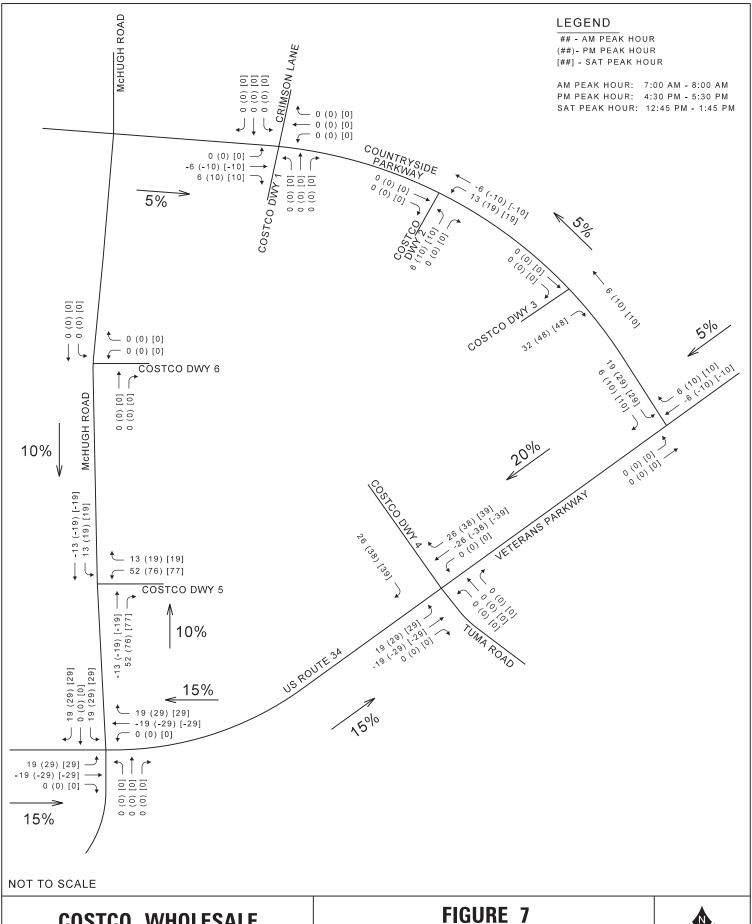
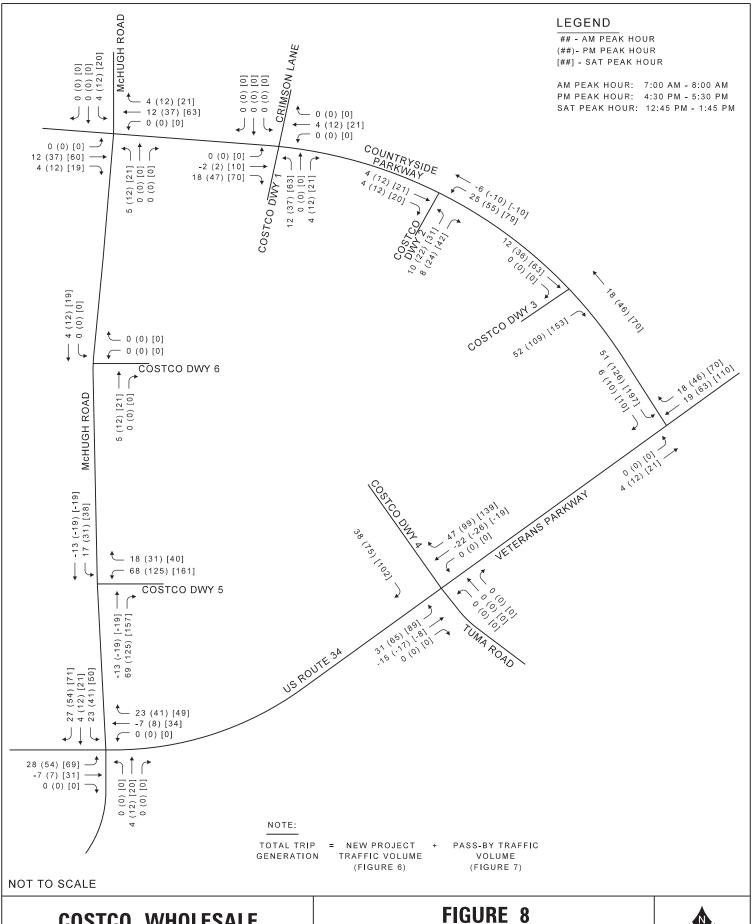


FIGURE 7
PASS BY
TRAFFIC VOLUMES





TOTAL
TRAFFIC VOLUMES



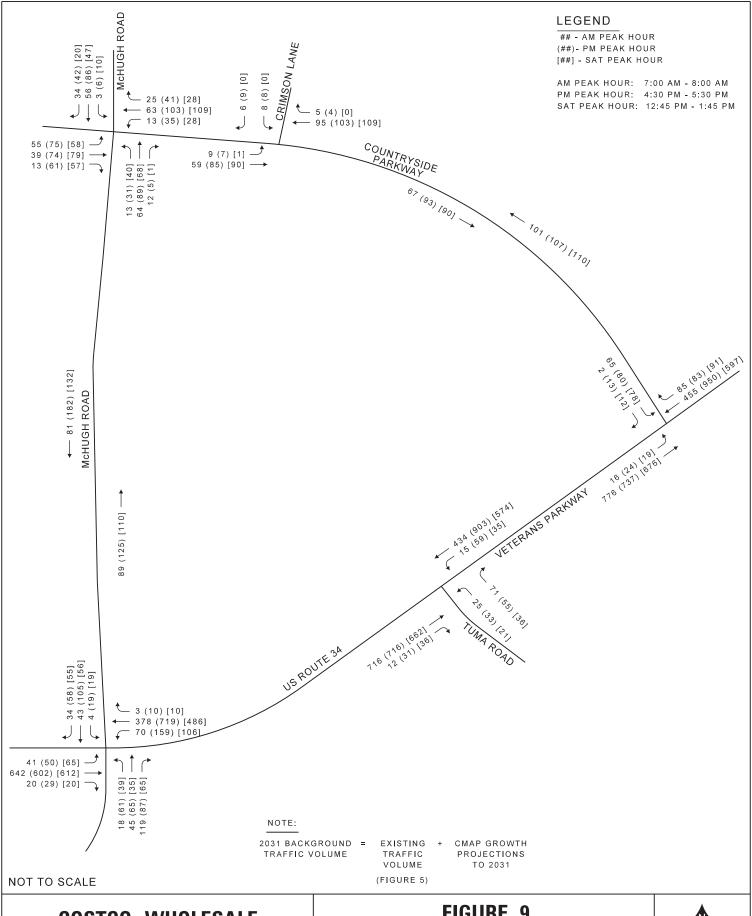


FIGURE 9 2031 BACKGROUND TRAFFIC VOLUMES

W V E

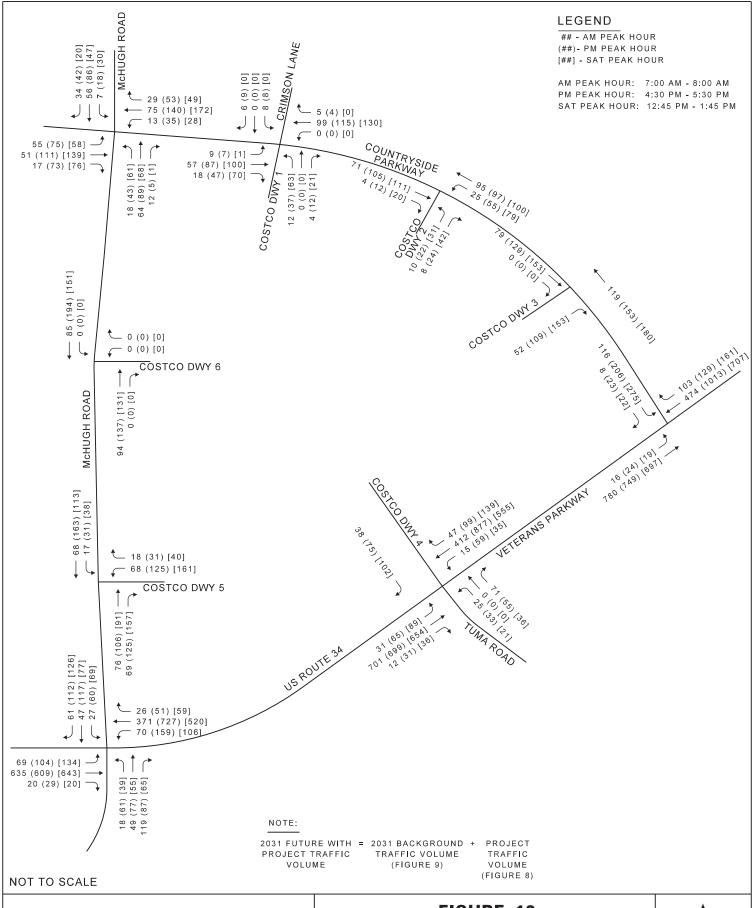


FIGURE 10 2031 FUTURE WITH PROJECT TRAFFIC VOLUMES

ECT ILLINOIS



IV. TRAFFIC ANALYSIS

Auxiliary Lane Analysis

This study evaluated whether additional auxiliary lanes are warranted at the study area intersections. The warrant analysis follows the methodology detailed in IDOT's *Bureau of Design and Environmental Manual* (BDE). Warrants are determined based on factors such as through volume, opposing volume, and percentage of turning vehicles. Different warrants are used for left and right turn lanes, and factors such as design speed. Worksheets displaying all right and left turn lane warrants are included in Appendix C.

Overall, it is found that the westbound right turn movement at Costco Driveway 4 on US 34 and the northbound right turn movement at Costco Driveway 5 on McHugh Road meet the right turn lane warrant based on the BDE chart comparing right turn and approach volumes and should therefore be considered. This warrant is intended to identify areas with high right turn volumes that can unduly impair the through movements. In this case, the through volumes along US 34 are relatively high. Based on the results of the auxiliary warrants, it is recommended that right turn lanes are provided on the westbound approach of US 34 at Costco Driveway 4 and the northbound approach of McHugh Road at Costco Driveway 5.

Left turn lanes are not currently provided at Costco Driveways 1, 2, and 4. It is found that the westbound approach of Countryside Parkway at Costco Driveway 1 and Driveway 2 and the eastbound approach of US 34 at Costco Driveway 4 meet the warrant of uniformity of intersection design for auxiliary left turn lanes. Currently, the striped median along McHugh Road provides a two-way left turn lane which will accommodate the southbound left turns at Driveways 5 and 6. Based on the results of the auxiliary lane warrants, it is recommended that left turn lanes are provided on the westbound approach of Countryside Parkway at Costco Driveway 1 and Costco Driveway 2 and on the eastbound approach of US 34 at the Costco Driveway 4.

Traffic Signal Warrant Analysis

Based on the projected traffic volumes at the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road, a traffic signal warrant analysis has been conducted at each intersection. The investigation for the need for a traffic control signal is based on the methodology established in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD establishes nine individual warrants. The installation of a traffic signal should be further investigated at locations that meet one or more warrants. However, warrant 1, the eight-hour vehicular volume warrant, is typically the only vehicular volume/delay warrant that is considered for intersections on designated SRA routes.

Warrant 1 is met if a total of eight hours in the day exceeds the thresholds established in the MUTCD. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. However, additional guidance from IDOT states that in cases involving future volumes, the eight-hour vehicular volume hour can be estimated as 55 percent of the peak hour volumes.



The IDOT methodology also requires a reduction of the minor approach right turn volume based on factors such as lane configuration and conflicting volumes. Additionally, the minor street threshold volumes are typically increased for intersections located on SRA's to reflect more rigid warranting requirements. The policy for new traffic signals along an SRA route are described in Section 10.4.2 of the *Strategic Regional Arterial Design Concept Report*, February 1994.

Based on the projected weekday pm peak hour traffic volumes and utilizing the IDOT guidance to estimate the eighth hour volumes, the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road do not meet the eight-hour warrants. Therefore, for the purposes of this study, the intersections of US 34 and Costco Driveway 4/Tuma Road was analyzed as a two-way stop-controlled intersection and the intersection of Countryside Parkway and McHugh Road was analyzed as the existing all-way stop-controlled configuration. The supporting Signal Warrant Review Sheet and Right Turn Factorization Sheet are included in Appendix E.

Capacity Analysis

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's *Highway Capacity Manual (HCM), 7th Edition*. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the intersection as a whole. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 4.



Table 4: Level of Service Definitions for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)						
А	<u><</u> 10	≤ 10.0						
В	> 10.0 and ≤ 20.0	> 10.0 and ≤ 15.0						
С	> 20.0 and ≤ 35.0	> 15.0 and ≤ 25.0						
D	> 35.0 and ≤ 55.0	> 25.0 and ≤ 35.0						
E	> 55.0 and ≤ 80.0	> 35.0 and ≤ 50.0						
F	> 80.0	> 50.0						

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*, National Research Council, 2016.

Typically, various state and local governments adopt standards varying between LOS C and LOS E, depending on the area's size and roadway characteristics.

The study area includes the existing signalized intersections of US 34/Veterans Parkway and Countryside Parkway and US 34/Veterans Parkway and McHugh Road, the existing unsignalized intersections of McHugh Road and Countryside Parkway, Crimson Lane and Countryside Parkway, and US 34/Veterans Parkway and Tuma Road, and the proposed connections on US 34/Veterans Parkway, McHugh Road, and Countryside Parkway. Capacity analysis was performed with Synchro 11.1. Models were created for the weekday am, weekday pm, and Saturday midday peak hours for the existing, 2031 background, and 2031 future with project scenarios.

The capacity analysis results at the signalized intersections are summarized in Table 5 and at the unsignalized intersections in Table 6. The traffic signal timing plans were obtained from videos captured during the traffic counts and utilized for this analysis. Supporting capacity analysis worksheets are provided in Appendices E, F, and G, respectively.



Table 5: Capacity Analysis of Signalized Intersections

	Table 5. Capacity Ariarysis of Signalized Intersections Eastbound Westbound Northbound Southbound Delay Los Delay						bound	Inters	ection			
Intersection	Peak Hour	Scenario	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
		Existing (2024)	2.5	Α	4.5	Α	-	-	46.9	D	5.4	Α
	Weekday AM	Background (2031)	2.5	Α	4.6	Α	-	-	47.4	D	5.5	Α
	7	Future with Project (2031)	2.7	Α	4.5	Α	-	-	53.5	D	7.6	Α
Veterans		Existing (2024)	1.4	Α	6.0	Α	-	-	50.3	D	6.4	Α
Parkway (US	Weekday	Background (2031)	1.5	Α	6.3	Α	-	-	50.8	D	6.5	Α
34) &	PM	Future with Project (2031)	2.4	Α	6.2	Α	-	-	114.7	F	16.4	В
Countryside Parkway		FwP (2031) w/ Mitigation	9.1	Α	17.3	В	-	-	33.8	С	16.1	В
raikway	Saturday MD	Existing (2024)	1.4	Α	5.4	Α	-	-	39.3	D	5.6	Α
		Background (2031)	1.4	Α	5.4	Α	-	-	39.6	D	5.6	Α
		Future with Project (2031)	2.2	Α	5.4	Α	-	-	136.1	F	24.8	С
		FwP (2031) w/ Mitigation	12.8	В	16.1	В	-	-	25.0	С	16.2	В
		Existing (2024)	14.2	В	10.6	В	15.9	В	28.0	С	14.1	В
	Weekday AM	Background (2031)	14.5	В	11.3	В	15.7	В	29.0	С	14.5	В
	7.0.41	Future with Project (2031)	14.2	В	11.4	В	18.2	В	27.9	С	15.1	В
Veterans		Existing (2024)	17.9	В	15.2	В	23.5	С	41.3	D	19.4	В
Parkway (US 34) & McHugh	Weekday PM	Background (2031)	18.4	В	15.5	В	23.4	С	42.6	D	19.9	В
Road		Future with Project (2031)	17.9	В	17.0	В	26.6	С	45.2	D	22.0	С
		Existing (2024)	20.2	С	17.3	В	15.2	В	20.3	С	18.7	В
	Saturday MD	Background (2031)	20.7	С	18.1	В	15.3	В	20.9	С	19.3	В
	IVID	Future with Project (2031)	20.5	С	21.0	С	18.9	В	23.1	С	20.9	С



Table 6: Capacity Analysis of Unsignalized Intersections

	Weekday AM					, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Weekday PM						Saturday MD					
Intersection / Approach	Existing (2024)		Background (2031)		Future w/ Project (2031)			ting (24)	Backg (20	round	Futui Project			ting 24)	Backg (20	round	Futur Project	
Арргоасп	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
McHugh Road 8	k Country	/side Par	kway															
NB Left	9.0	Α	9.1	Α	9.4	Α	9.7	Α	9.8	Α	10.5	В	9.3	Α	9.5	Α	10.6	В
NB Thru/right	9.2	Α	9.4	Α	9.7	Α	9.9	Α	10.2	В	10.8	В	9.1	Α	9.3	Α	10.1	В
EB Left	9.7	Α	9.8	Α	10.1	В	10.1	В	10.4	В	10.8	В	9.3	Α	9.5	Α	10.1	В
EB Thru	8.6	Α	8.7	Α	9.0	Α	9.1	Α	9.3	Α	10.1	В	8.7	Α	8.8	Α	10.0	Α
EB Thru/right	8.3	Α	8.5	Α	8.7	Α	8.9	Α	9.1	Α	10.0	Α	8.4	Α	8.5	Α	9.8	Α
WB Left	9.0	Α	9.1	Α	9.3	Α	9.6	Α	9.8	Α	10.1	В	9.0	Α	9.2	Α	9.7	Α
WB Thru	8.8	Α	9.0	Α	9.3	Α	9.5	Α	9.7	Α	10.5	В	9.0	Α	9.1	Α	10.4	В
WB Thru/right	8.6	Α	8.8	Α	9.1	Α	9.0	Α	9.3	Α	10.0	Α	8.6	Α	8.7	Α	9.9	Α
SB Left	10.0	Α	10.1	В	10.4	В	9.3	Α	9.4	Α	10.1	В	9.1	Α	9.2	Α	10.2	В
SB Thru/right	9.2	Α	9.5	Α	9.8	Α	10.1	В	10.5	В	11.2	В	8.9	Α	9.1	Α	9.9	Α
Countryside Par	kway &	Crimson	Lane/Co	stco Driv	eway 1										•			
NB Left/thru	-	-	-	-	10.2	В	-	-	-	-	10.4	В	-	-	-	-	10.7	В
NB Right	-	-	-	-	8.6	Α	-	-	-	-	8.8	Α	-	-	-	-	8.9	Α
EB Left	7.8	Α	7.9	Α	7.9	Α	7.5	Α	7.5	Α	7.5	Α	7.4	Α	7.5	Α	7.5	Α
WB Left	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α
SB Left	10.0	В	10.1	В	10.4	В	9.6	Α	9.7	Α	10.1	В	0.0	Α	0.0	Α	0.0	Α
SB Right	8.7	Α	8.8	Α	8.8	Α	8.6	Α	8.7	Α	8.7	Α	0.0	Α	0.0	Α	0.0	Α
Countryside Par	kway &	Costco D	riveway 2	2				<u>'</u>							•			
NB Left	-	-	-	-	9.6	Α	-	-	-	-	10.8	В	-	-	-	-	11.6	В
NB Right	-	-	-	-	8.6	Α	-	-	-	-	8.7	Α	-	-	-	-	8.9	Α
WB Left	-	-	-	-	7.4	Α	-	-	-	-	7.6	Α	-	-	-	-	7.7	Α
Countryside Par	kway &	Costco D	riveway	3 (RIRO)				<u>'</u>							•			
EB Right	-	-	-	-	8.7	Α	-	-	-	-	9.2	Α	-	-	-	-	9.5	А
Veterans Parkw	ay (US 3	1) & Tum	a Road/	Costco D	riveway 4	ļ.												
NE Left	-	-	-	-	7.9	А	-	-	-	-	8.9	Α	-	-	-	-	8.5	А
NW Appr.	15.4	С	16.8	С	18.4	С	24.1	С	29.4	D	56.3	F	16.6	С	18.0	С	27.2	D
SE Right	-	-	-	-	9.0	Α	-	-	-	-	10.6	В	-	-	-	-	9.8	Α
SW Left	9.4	Α	9.6	Α	9.6	Α	9.4	Α	9.7	Α	9.7	Α	9.1	Α	9.3	Α	9.3	Α
McHugh Road 8	k Costco	Driveway	y 5															
WB Left	-	-	-	-	10.1	В	-	-	-	-	11.9	В	-	-	-	-	12.0	В
WB Right	-	-	-	-	8.8	Α	-	-	-	-	9.0	Α	-	-	-	-	8.9	Α
SB Left	-	-	-	-	7.6	Α	-	-	-	-	7.8	Α	-	-	-	-	7.9	Α
McHugh Road 8	k Costco	Driveway	y 6															
WB Left	-	-	-	-	0.0	А	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α
WB Right	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α
SB Left	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α	-	-	-	-	0.0	Α

Existing Scenario

Based on the analysis results at the signalized intersections, the major approaches operate with LOS D or lower at the study area intersections. At the signalized intersection of US 34/Veterans Parkway and Countryside Parkway, the overall intersection operates at LOS A for all three time periods, while the signalized intersection of US 34/Veterans Parkway and McHugh Road operates at LOS B for all three time periods.

All movements at the unsignalized intersections operate adequately with LOS C or better.



Background Scenario

For the 2031 background scenario, delays tend to increase slightly at the signalized intersections. The addition of background traffic results in similar delay times for each approach and the overall intersection. It is worth noting that slight delay improvements are observed on some minor street approaches. This is due to the increased side street volumes placing more calls on the intersection approach which extends the effective green times for the side street and results in a decreased average delay for that approach.

All movements at the unsignalized intersections continue to operate adequately. The northwest approach of Tuma Road is projected to operate at LOS D during the weekday pm peak hour.

Future with Project Scenario

Delays again tend to slightly increase with the addition of project related traffic for the weekday am, weekday pm, and Saturday midday peak hours. Based on the projected analysis, the southbound approach at Countryside Parkway and US 34/Veterans Parkway operates at LOS F during the weekday pm and Saturday midday peak hours and the overall intersection delay drops from LOS A to LOS B for the weekday pm and from LOS A to LOS C for the Saturday midday peak hour. At the signalized intersection of US 34/Veterans Parkway and McHugh Road, all approaches operate at LOS D or better for all three time periods. The overall intersection delay drops from LOS B to LOS C for both the weekday pm and Saturday midday peak hours.

All movements at the unsignalized intersections continue to operate adequately, with all levels of service remaining at LOS D or better with the exception of the northwest approach of Tuma Road which is projected to operate at LOS F during the weekday pm peak hour. Higher delays are typical at stop-controlled approaches on minor streets and driveways at intersections with arterial roadways during peak periods. Additionally, it should be noted that the volume-to-capacity ratio of the minor approaches are less than one, indicating available capacity. While left-turn movements from driveways onto arterials may experience delays during peak hours, they are expected to operate adequately at all other hours of the day.

Potential Mitigation Scenario

As described, the southbound approach at the intersection of Countryside Parkway and US 34/Veterans Parkway is projected to operate at LOS F during the weekday pm and Saturday midday peak hour using the existing traffic signal timing plan. One option to reduce the southbound approach delay would be to retime the existing signal timing plan by shifting 22 seconds of green time from the US 34/Veterans Parkway eastbound/westbound through movement to the southbound approach during the weekday pm and 23 seconds of green time during the Saturday midday peak hours. As illustrated in Table 5, retiming the traffic signal would result in the southbound approach operating at LOS C with minimal impact on the eastbound and westbound approaches, with the US 34 approaches both operating at LOS B during both



peak hours. The signal retiming would have to be approved by IDOT. The capacity worksheets for this mitigation can be found in Appendix H.

Queue Length Analysis

A queue length analysis was conducted at each of the study area intersections. A summary of this analysis is provided in Table 7. This data is comprised of the 95th percentile queue output from the Synchro analysis.

For the existing, background, and future with project scenarios, all left and right turning queue lengths do not exceed the provided storage lengths with the exception of the southbound left turn at the signalized US 34 and Countryside Parkway intersection. This southbound movement exceeds the existing storage during the weekday pm peak hour and Saturday midday peak hours with a queue of 341 feet and 381 feet, respectively. It should be noted that this is a trap lane and the queues do not spill back into the main travel lanes, however, it is anticipated that this queue will back up to the proposed Costco Driveway 4 (right in/right out). Based on the proposed mitigation scenario, the southbound queues will decrease to 208 feet during the weekday pm peak hour and 211 feet during the Saturday midday peak hour.

No queuing issues are anticipated at any of the unsignalized intersections.

It should be noted that based on the location of the proposed Costco Driveway 5 at McHugh Road, north of the US 34/Veterans Parkway intersection with McHugh Road, the southbound left turn storage and taper will be reduced to accommodate this Costco Driveway. Proposed storage and taper lengths are included in Table 7. As illustrated in Table 7, the reduction of the existing storage and taper will likely not impact the 95th percentile queue length for any of the three time periods.

It is concluded that no queue storage mitigation is required at any of the intersections and site driveways.



Table 7: 95th Percentile Queue Lengths

		Table 7: 95 th P	ercer	itile Q			ths			
			Eastb	ound	Westl	ound	North	bound	South	bound
Intersection	Peak Hour	Scenario	Left	Right	Left	Right	Left	Right	Left	Right
		Existing (2024)	10	-	3	-	3	-	0	-
	Weekday AM	Background (2031)	13	-	3	-	3	-	0	-
	Alvi	Future with Project (2031)	13	-	3	-	3	-	3	-
McHugh Dood		Existing (2024)	13	-	5	-	5	-	0	-
McHugh Road & Countryside	Weekday	Background (2031)	13	-	5	-	5	-	0	-
Parkway	PM	Future with Project (2031)	15	-	5	-	8	-	3	-
(All-Way Stop		Existing (2024)	8	-	3	-	5	-	3	-
Controlled)	Saturday MD	Background (2031)	10	-	5	-	5	-	3	-
	IVID	Future with Project (2031)	10	-	5	-	10	-	5	-
		Storage Length (ft)	150	-	150	-	160	-	120	-
		Taper Length (ft)	160	-	145	-	175	-	115	-
		Existing (2024)	0	-	-	-	-	-	3	0
	Weekday AM	Background (2031)	0	-	-	-	-	-	3	0
Countryside	Alvi	Future with Project (2031)	0	-	0	-	3	0	3	0
Parkway &		Existing (2024)	0	-	-	-	-	-	0	0
Crimson Lane	Weekday	Background (2031)	0	-	-	-	-	-	0	0
/ Costco	PM	Future with Project (2031)	0	-	0	-	5	0	0	0
Driveway 1 (Two-Way		Existing (2024)	0	-	-	-	-	-	0	0
Stop	Saturday MD	Background (2031)	0	-	-	-	-	-	0	0
Controlled)	IVID	Future with Project (2031)	0	-	0	-	8	3	0	0
		Storage Length (ft)	150	-	140*	-	30*	30*	100	100
		Taper Length (ft)	145	-	130*	-	-	-	100	-
		Existing (2024)	-	-	-	-	-	-	-	-
	Weekday	Background (2031)	-	-	-	-	-	-	-	-
	AM	Future with Project (2031)	-	-	3	-	0	0	-	-
Countryside		Existing (2024)	-	-	-	-	-	-	-	-
Parkway & Costco	Weekday PM	Background (2031)	-	-	-	-	-	-	-	-
Driveway 2	PIVI	Future with Project (2031)	-	-	3	-	3	3	-	-
(Two-Way		Existing (2024)	-	-	-	-	-	-	-	-
Stop Controlled\	Saturday MD	Background (2031)	-	-	-	-	-	-	-	-
Controlled)	IVID	Future with Project (2031)	-	-	5	-	5	3	-	-
		Storage Length (ft)	-	-	185*	-	30*	30*	-	-
		Taper Length (ft)	-	-	200*	-	-	-	-	-
		Existing (2024)	-	-	-	-	-	-	-	-
	Weekday AM	Background (2031)	-	-	-	-	-	-	-	-
	Aivi	Future with Project (2031)	-	5	-	-	-	-	-	-
Countryside Parkway &		Existing (2024)	-	-	-	-	-	-	0 0 0 3 3 3 3 3 5 120 115 3 3 3 0 0 0 0 0 0 100 100 100 100 1 100 1	-
Costco	Weekday PM	Background (2031)	-	-	-	-	-	-	-	-
Driveway 3	1	Future with Project (2031)	-	10	-	-	-	-	-	-
(Two-Way	6.11.	Existing (2024)	-	-	-	-	-	- 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3		
Stop Controlled)	Saturday MD	Background (2031)	-	-	-	-	-	-	-	-
controlled	5	Future with Project (2031)	-	15	-	-	-	-	-	-
		Storage Length (ft)	-	90*	-	-	-	-	-	-
		Taper Length (ft)	-	-	-	-	-	-	-	-
	\A/c = 1: 1:	Existing (2024)	3	-	-	5	-	-	84	8
	Weekday AM	Background (2031)	3	-	-	5	-	-	89	8
		Future with Project (2031)	4	-	-	5	-	-	144	15
		Existing (2024)	4	-	-	5	-	-	110	20
Veterans	Weekday	Background (2031)	4	-	-	5	-	-	114	21
Parkway/US	PM	Future with Project (2031)	6	-	-	6	-	-	341	26
34 & Countryside		FwP (2031) w/ Mitigation	13	-	-	6	-	-	208	21
Parkway		Existing (2024)	2	-	-	5	-	-	90	16
,		Packground (2021)	2	-	-	6	-	-	94	18
	Saturday	Background (2031)								
(Signalized)	Saturday MD	Future with Project (2031)	3	-	-	7	-	-	381	23
(Signalized)			3 11	-	-	7 8	-	-		
(Signalized)		Future with Project (2031)		-	-		-		211	16



Table 7: 95th Percentile Queue Lengths (cont.)

Note			Table 7: 95 Perce		Quei						
Vector V				Eastb	ound	Westl	ound	North	bound	South	oound
Weekday And And Future with Project (2031) 3 3 0 28 3 3 3 3 3 3 3 3 3	Intersection	Peak Hour	Scenario	Left	Right	Left	Right	Left	Right	Left	Right
Veterans Parkway/US 34 & tuma Road Existing (2024)			Existing (2024)	-	-	3	-	2	0	-	-
Veterans Parkinsary Library Storage Length (ft) Storage Le			Background (2031)	-	-	3	-	2	:5	-	-
ParkwayUS Saturday Meekday Route with Project (2031) Saturday Sat	Veterans	Alvi	Future with Project (2031)	3	-	3	0	28		-	3
Road/Costco Driveway 4 (Two-Way 5 top Storage Length (ft)			Existing (2024)	-	-	5	-	3	35		-
Future with Project (2031) 5 . 5 0 80 . 10			Background (2031)	-	-	8	-	4	5	-	-
Two-Way South Saturday Saturday Saturday Saturday Controlled) Storage Length (ft) 215* 275 215* - - - 110*		PIVI	Future with Project (2031)	5	-	5	0	8	0	-	10
Stop Controlled Saturday Sa			Existing (2024)	-	-	3	-	1	.5	-	-
Future with Project (2031) 8 - 3 0 28 - 10			Background (2031)	-	-	3	-	1	.8	-	-
Veterans	Controlled))	MD	Future with Project (2031)	8	-	3	0	2	8	-	10
Veterans				215*	_	275	215*	_	_	_	110*
Veterans					_			_	_	_	
Veterans					_			20		11	_
Veterans											
Veterans		AM			_						
Veterans PM PM Future with Project (2031) 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 36 30 - 77 - 72 38 71 - 72 38 71 - 72 38 71 - 72 38 71 - 72 38 71 - 72 38 71 - 72 72 38 71 - 72 72 72 72 72 72 72	Parkway/US 34 & McHugh Road										
Statistics Sta					-						
Existing (2024) 36 - 57 - 37 23 23 - 38 - 38 - 68 - 40 25 24 - 38 - 38 - 68 - 40 25 24 - 38 - 38 - 68 - 40 25 24 - 38 - 38 - 68 - 40 25 24 - 38 - 38 - 68 - 40 25 24 - 38 - 38 - 68 - 40 26 61 - 38 - 68 - 40 26 61 - 38 - 68 - 40 26 61 - 38 - 68 - 40 26 61 - 58 - 68 - 40 25 24 - 58		PM			-		-				
Saturday MD Background (2031) 38 - 68 - 40 25 24 - 1			·		-						
Future with Project (2031) 69 - 60 - 40 26 61 -	(Signalized)	Saturday									
Storage Length (ft) 170 - 180 - 105 105 245/145* -		MD									
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Criveway 6 (Two-Way Stop Criveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Cost Park 1											
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Costco Driveway 6											
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) Existing (2024)								110		150/1/5*	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & MD McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Cost Costco Driveway 6 (Two-Way Stop Cost Cost Cost Cost Cost Cost Cost Cost		Weekday						-		-	-
McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 5 (Two-Way Stop Controlled) McHugh Road & MD McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) McHugh Road & Costco Driveway 6 (Two-Way Stop Cost Cost Cost Cost Cost Cost Cost Cost		AM	- ' '					-			-
& Costco Driveway 5 (Two-Way Stop Controlled) Background (2031)								-			-
Driveway 5 (Two-Way Stop Controlled) PM Sackground (2031) 20 3 - 0 3 -		Weekday				- 180 - 110 110 150/175* 					
Future with Project (2031)			-								
Controlled Saturday MD Eackground (2031)				-	-		3	-		3	-
MD Background (2031)		Saturday									-
Storage Length (ft) - - 75* 75* - 145* 145* -	Veterans		-								
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Controlled Stude May MD Storage Length (ft)				-	-			-	-		-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Meekday MD Existing (2024) Background (2031) 0 0 0 0 0 Existing (2024)				-	-	75*	75*	-			-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Weekday AM			Taper Length (ft)	-	-	-	-	-	145*	175*	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Montrolled Montrol		Weekday	Existing (2024)	-	-	-	-	-	-	-	-
McHugh Road & Costco Driveway 6 (Two-Way Stop Controlled) Weekday MD Existing (2024)			Background (2031)	-	-	-	-	-	-	-	-
& Costco Driveway 6 (Two-Way Stop Controlled) Weekday PM (Two-Way Stop Controlled) Background (2031)			Future with Project (2031)	-	-	0	0	-	-	0	-
PM Background (2031)	_	\4/== .=	Existing (2024)	-	-	-	-	-	-	-	-
Future with Project (2031) - - 0 0 - - 0 0 -			Background (2031)	-	-	-	-	-	-	-	-
Saturday Saturday MD Saturday Satu			Future with Project (2031)	-	-	0	0	-	-	0	-
Controlled) MD Background (2031) Future with Project (2031) Storage Length (ft) 25* 25*		Catamata	Existing (2024)	-	-	-	-	-	-	-	-
Future with Project (2031)	Controlled)		Background (2031)	-	-	-	-	-	-	-	-
		1410	Future with Project (2031)	-	-	0	0	-	-	0	-
Taper Length (ft)			Storage Length (ft)	-	-	25*	25*	-	-	-	-
			Taper Length (ft)	-	-	-	-	-	-	-	-

Notes:

- 1. All values in feet
- 2. * Proposed Storage and taper lengths.

Site Circulation

In the proposed site plan, Costco Driveway 3, Costco Driveway 4, and Costco Driveway 5 will serve as the access point to the main internal road through the site. Costco Driveway 3 will be connected to Countryside Parkway providing access from the east side of the site while Costco Driveway 5 will connect



to McHugh Road facilitating access from the west. This connection will also provide convenient access to the proposed gas station and access points to the Costco parking fields. For the purpose of the discussion below, the internal roadway is described as an east-west street. Overall, it is expected that the internal roadway configuration, with the limited access points and stop controlled intersections, will operate effectively.

Internal Intersection Summary

- Intersection 1 Located approximately 390 feet east of McHugh Road
 - o Three leg intersection
 - Stop controlled on the northbound approach exit from the gas station
- Intersection 2 Costco Driveway 4 Located approximately 460 feet east of Intersection 1
 - Three leg intersection
 - Stop Controlled on the eastbound and westbound approaches
 - o Free flow traffic for inbound traffic from US 34/Veterans Parkway

Each driveway connected to the roadway network is anticipated to contain two existing lanes and one departing lane with the exception of the right in/right out driveway.

The entrance for the gas station is located on Costco Driveway 5. The opening day gas station configuration consists of eight individual drive aisles with four fueling positions each. Conservatively, each drive aisle has space for approximately for six vehicles to queue waiting to pull up to the pump. Therefore, a minimum of 80 vehicles can be accommodated within the gas station area. The future expansion of the gas station by eight fueling positions includes additional queuing area.

Proposed Lane Configuration

Based on the auxiliary lane, capacity, and queue length analysis, it is recommended that no geometric changes are needed at any of the study area intersections. The proposed lane configuration is illustrated in Figure 11.

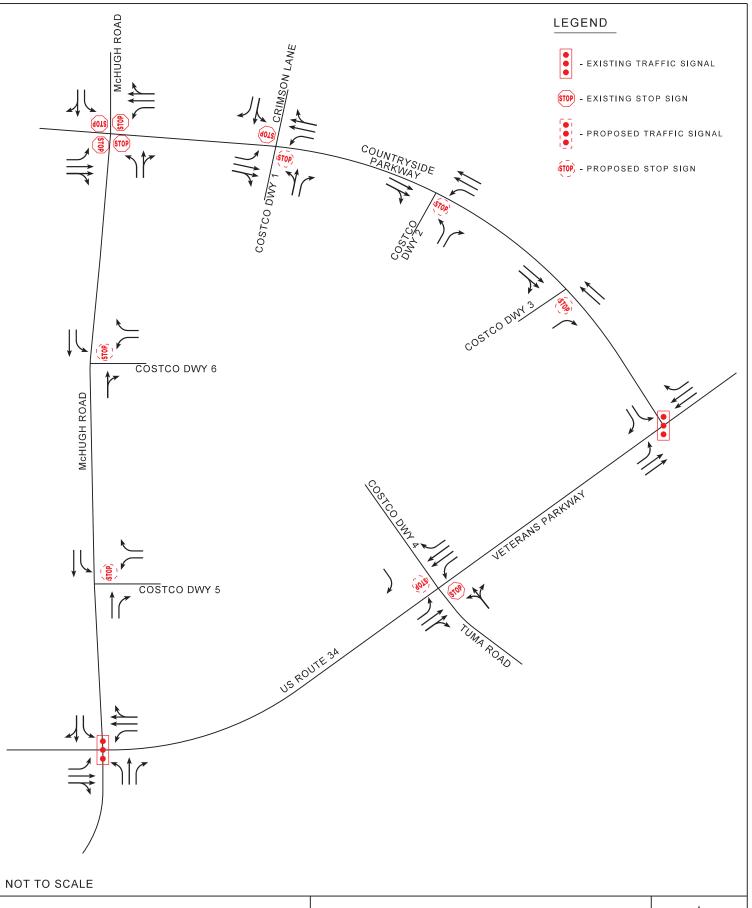


FIGURE 11 PROPOSED LANE CONFIGURATION





V. CONCLUSIONS

The purpose of this study is to evaluate the potential traffic impacts of the proposed Costco Warehouse located along the north side of US Route 34 at the northwest corner of Route 34 and Countryside Parkway in the City of Yorkville, Illinois. The proposed development consists of approximately 161,064 square foot Costco Wholesale building and a members-only gas station with 40 gas pumps.

The proposed access plan includes a right in/right out/left in access driveway on US 34 that aligns with Tuma Road, two full access driveways on McHugh Road, a full access driveway on Countryside Parkway that aligns with Crimson Lane, a full access driveway on Countryside Parkway, and a right in/right out driveway on Countryside Parkway. The site plan proposes 859 parking stalls.

Traffic estimates are projected to 2031, which is five years beyond the anticipated build out in 2026, utilizing growth rates from CMAP that projected traffic volumes to 2050. The study area includes the existing signalized intersections of US 34/Veterans Parkway and Countryside Parkway and US 34/Veterans Parkway and McHugh Road, the existing unsignalized intersections of McHugh Road and Countryside Parkway, Crimson Lane and Countryside Parkway, and US 34/Veterans Parkway and Tuma Road, and the proposed connections on US 34/Veterans Parkway, McHugh Road, and Countryside Parkway.

This study evaluated whether additional auxiliary lanes are warranted at the study area intersections, the westbound approach of US 34/Veterans Parkway at Costco Driveway 4 and the northbound approach of McHugh Road at Costco Driveway 5 meet the warrant based on the chart comparing right turn and approach volumes and were therefore considered. Similarly, the westbound approach of Countryside Parkway at Costco Driveway 1 and Costco Driveway 2 and on the eastbound approach of US 34/Veterans Parkway at the Costco Driveway 4 meet the warrant based on uniformity of intersection design and were therefore considered. Therefore, it is recommended that right turn and left turn lanes are considered at these driveways.

As part of this study would be the installation of a traffic signal following the methodology established in the MUTCD and IDOT SRA criteria. Warrant 1, the eight-hour vehicular volume warrant, is typically the only vehicular volume/delay warrant that is considered for intersections on designated SRA routes. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. However, additional guidance from IDOT states that in cases involving future volumes, the eight-hour vehicular volume hour can be estimated as 55 percent of the peak hour volumes.

Based on the projected weekday pm peak hour traffic volumes and utilizing the IDOT guidance to estimate the eighth hour volumes, the intersections of US 34 and Costco Driveway 4/Tuma Road and Countryside Parkway and McHugh Road do not meet the eight-hour warrants. Therefore, for the purposes of this study, the intersection of US 34 and Costco Driveway 4/Tuma Road was analyzed as a two-way stop-controlled intersection and the intersection of Countryside Parkway and McHugh Road was analyzed as the existing all-way stop-controlled configuration.



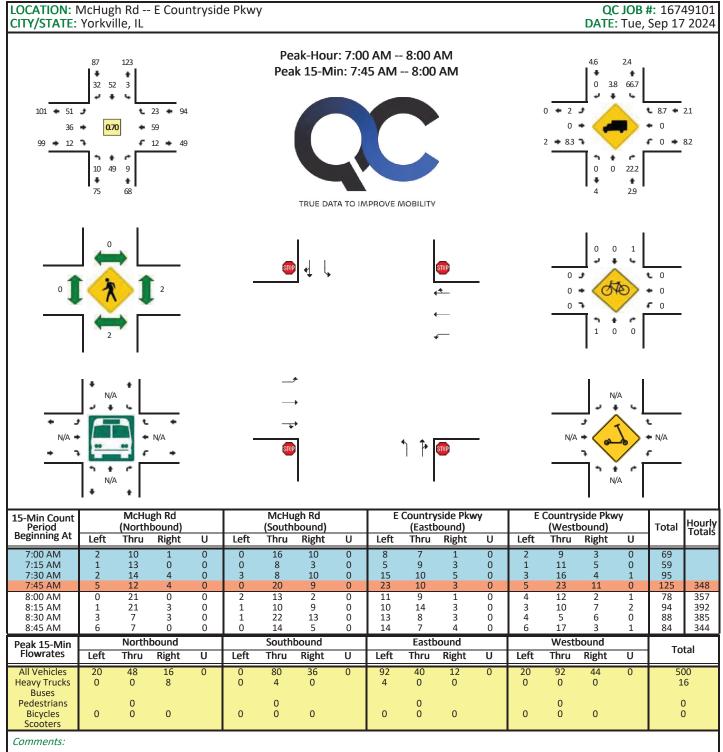
Results of the capacity analysis for the existing scenario indicate that all approaches are experiencing low delays at the signalized and unsignalized intersections. Delays increased in the background scenario and all movements operate adequately. In the future with project scenario, both signalized intersections continue to operate at adequate LOS, however the southbound approach at Countryside Parkway and US 34/Veterans Parkway operates at LOS F during the weekday pm and Saturday midday peak hours. One potential mitigation option to reduce the southbound approach delay would be to retime the existing signal timing plan by shifting 22 seconds of green time from the US 34/Veterans Parkway eastbound/ westbound through movement to the southbound approach during the weekday pm and 23 seconds of green time during the Saturday midday peak hours. As illustrated in Table 5, retiming the traffic signal would result in the southbound approach operating at LOS C with minimal impact on the eastbound and westbound approaches, with the US 34 approaches both operating at LOS B during both peak hours. The signal retiming would have to be approved by IDOT.

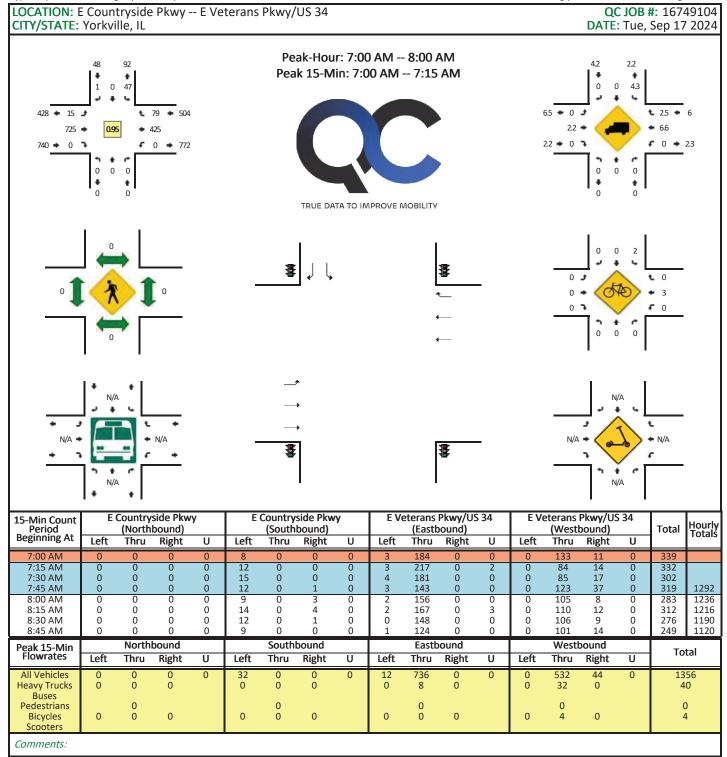
The results of the capacity analysis for the unsignalized intersections during the existing as well as the background scenario are projected to operate with low delays. In the future with project scenario, all movements at the unsignalized intersections continue to operate adequately, with all levels of service remaining at LOS D or better with the exception of the northwest approach of Tuma Road which is projected to operate at LOS F during the weekday pm peak hour. Higher delays are typical at stop-controlled approaches on minor streets and driveways at intersections with arterial roadways during peak periods. Additionally, it should be noted that the volume-to-capacity ratio of the minor approaches are less than one, indicating available capacity. While left turn movements from driveways onto arterials may experience delays during peak hours, they are expected to operate adequately at all other hours of the day.

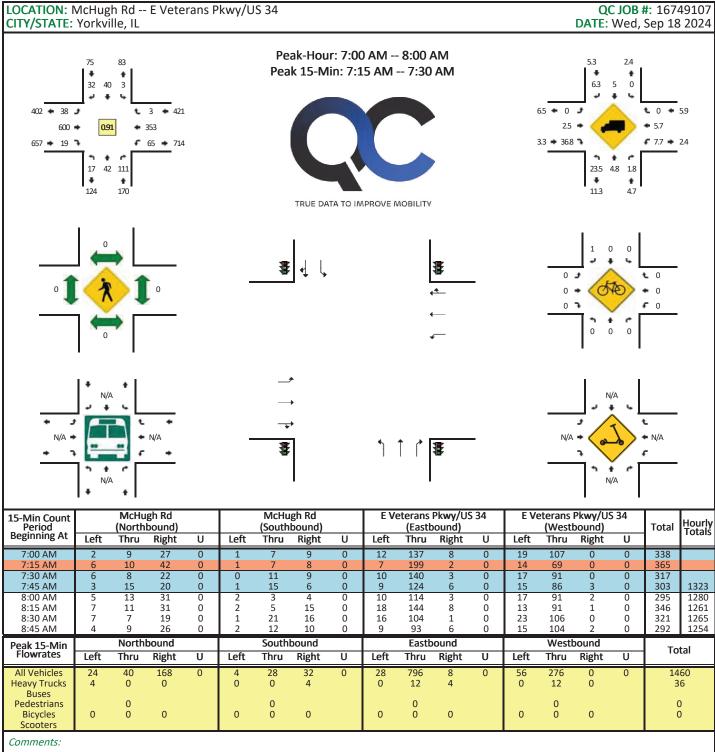
Additionally, a 95th percentile queue analysis was conducted at each of the study area driveways. No major queues were observed at the turning movements with the exception of the southbound left turn at the Countryside Parkway and US 34/Veterans Parkway intersection. This southbound movement exceeds the existing storage during the weekday pm peak hour and Saturday midday peak hours with a queue of 341 feet and 381 feet, respectively. It should be noted that this is a trap lane and the queues do not spill back into the main travel lanes, however, it is anticipated that this queue will back up to the proposed Costco Driveway 4 (right in/right out). Based on the proposed mitigation scenario, the southbound queues will decrease to 208 feet during the weekday pm peak hour and 211 feet during the Saturday midday peak hour. Therefore, it is concluded that no queue storage mitigation is required at any of the intersections and site driveways.

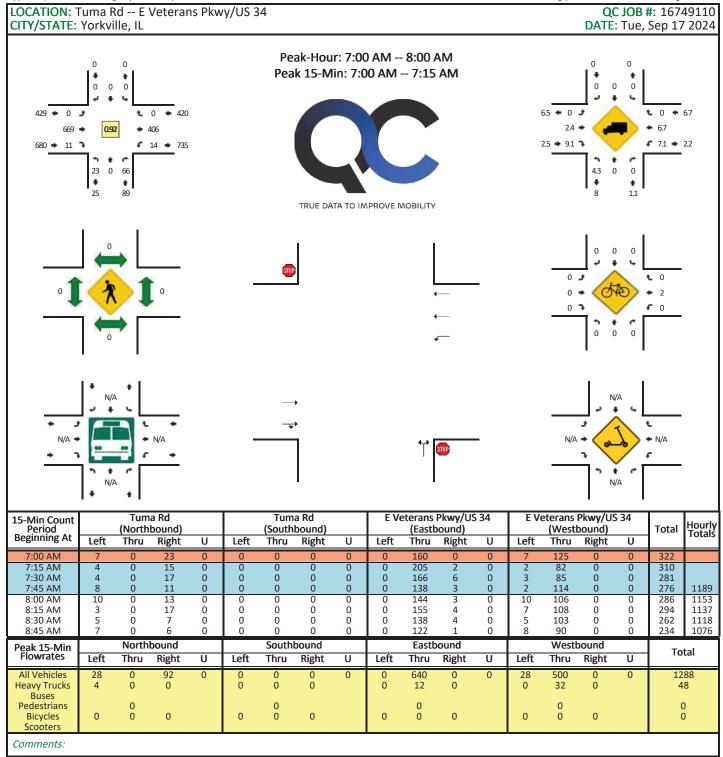
Site circulation will be aided by a limited access internal roadway which is configured with traditional stop-controlled intersections and no direct access to parking aisles. The gas station is configured such that 80 vehicles can be held within the gas station area.

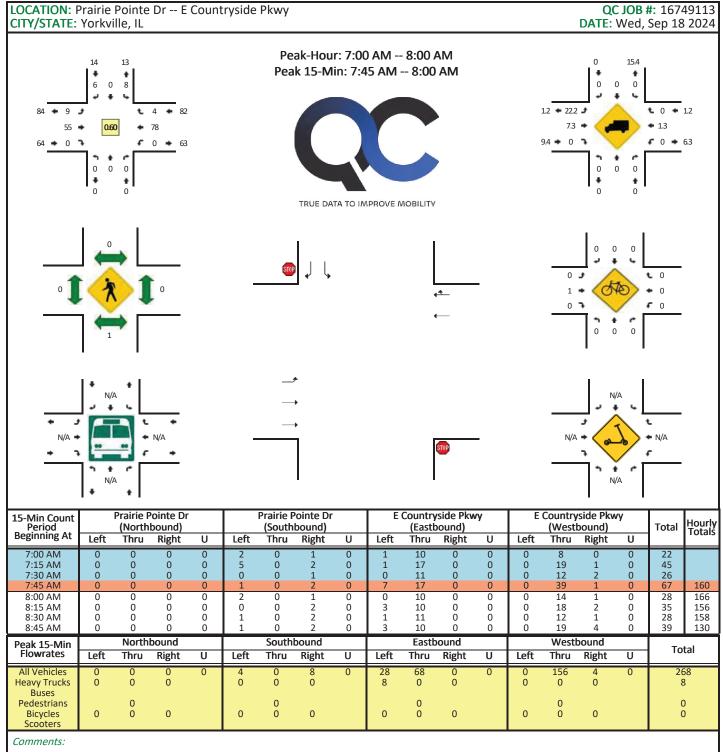
APPENDIX A EXISTING TRAFFIC COUNTS

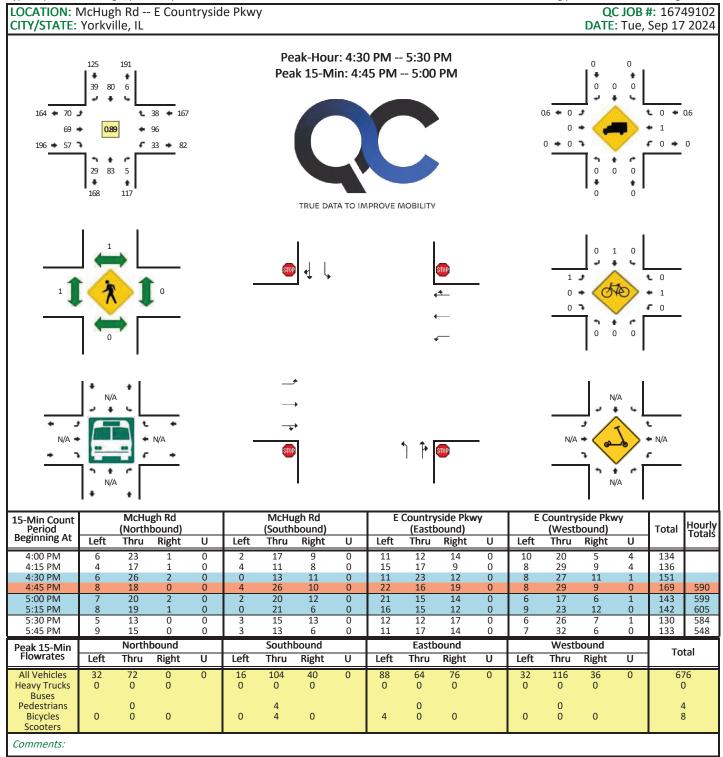


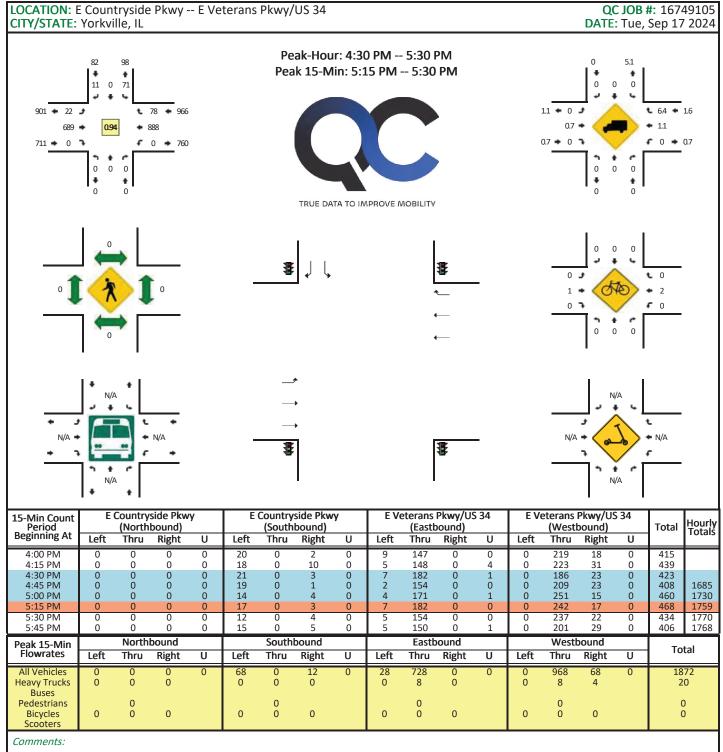


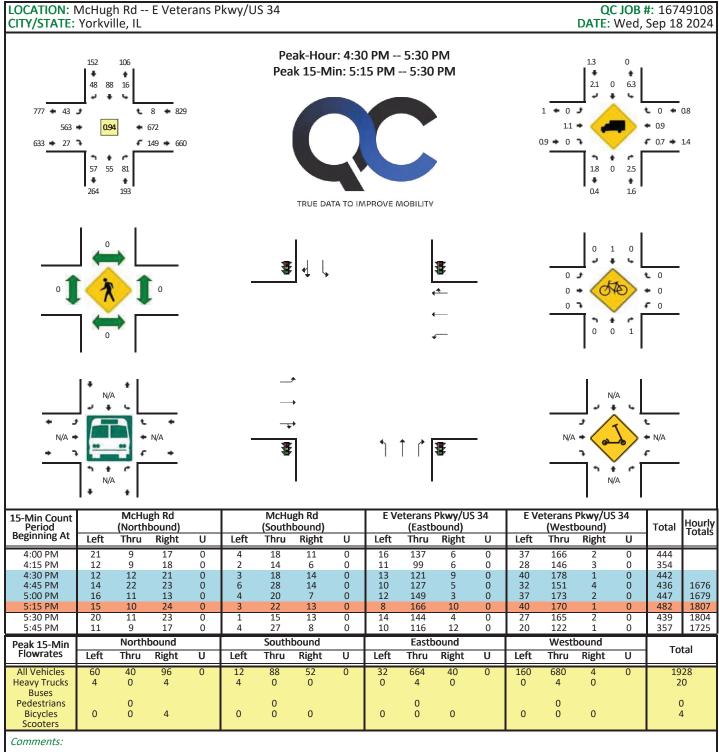


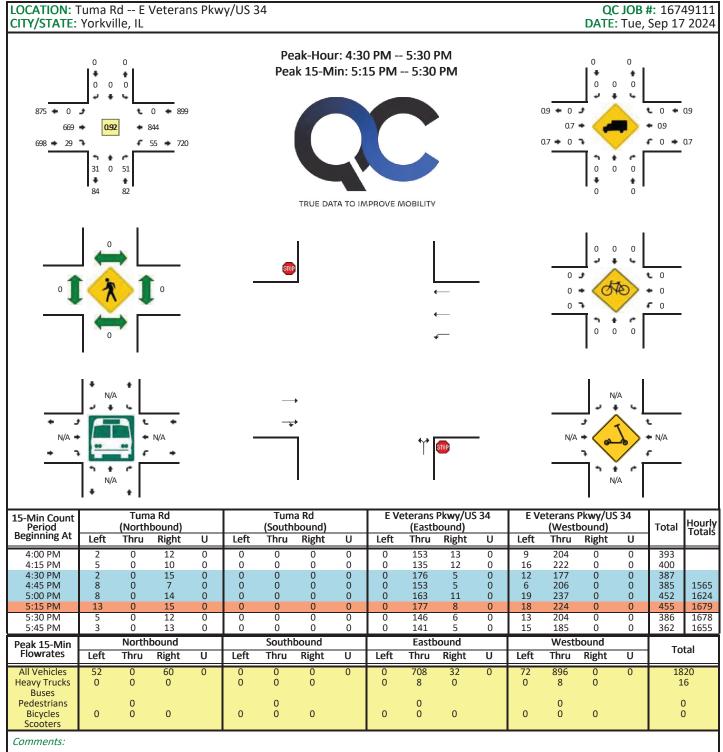


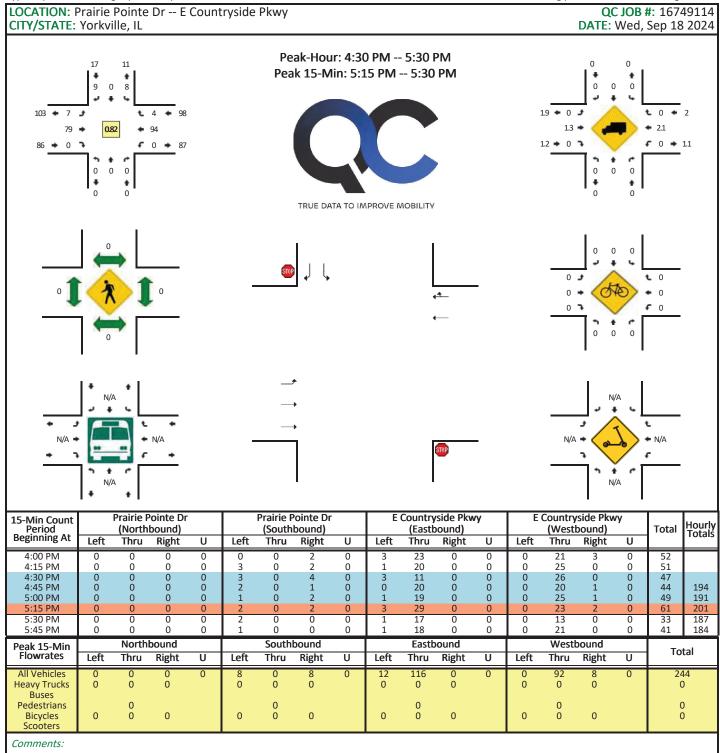








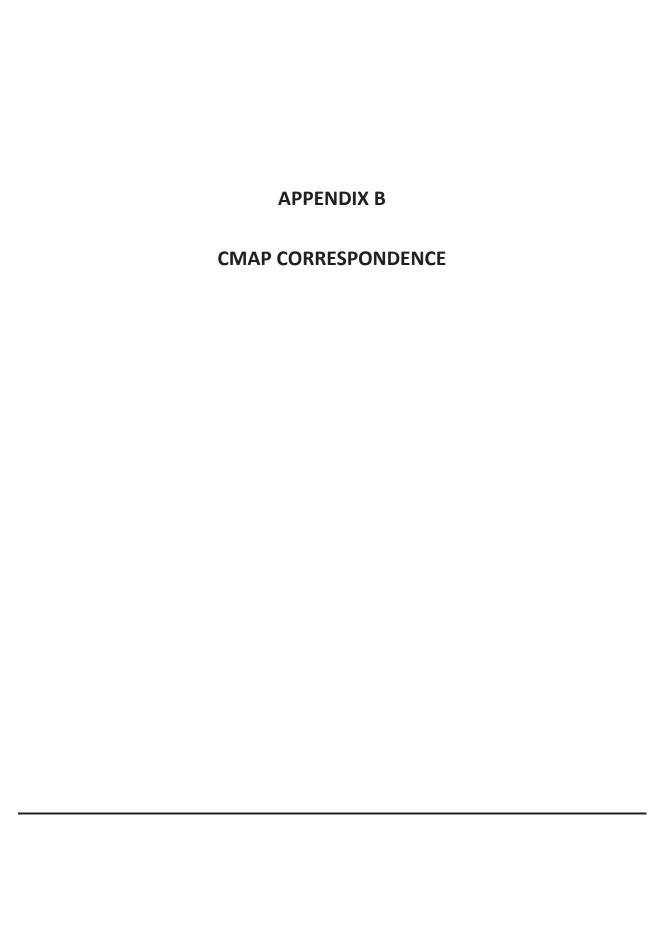


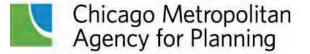


Report generated on 10/11/2024 7:31 AM

LOCATION: E Countryside Pkwy -- E Veterans Pkwy/US 34 QC JOB #: 16749106 CITY/STATE: Yorkville, IL **DATE:** Sat, Sep 14 2024 Peak-Hour: 12:45 PM -- 1:45 PM 1.2 3.9 Peak 15-Min: 1:30 PM -- 1:45 PM 1.4 0.7 🗢 0 🧈 **4.7 4.2** 572 💠 632 🌩 0.95 0.8 • 0.7 **•** 0 **→** 703 650 → 0 → 0.8 • 0 • ÷ + + ŧ + TRUE DATA TO IMPROVE MOBILITY 0 3 **t** 0 **+** 1 0 7 **•** 0 ŧ N/A Ł N/A ⇟ £ N/A N/A E Countryside Pkwy E Countryside Pkwy E Veterans Pkwy/US 34 E Veterans Pkwy/US 34 15-Min Count Hourly Totals (Southbound) Total Period Beginning At (Northbound) (Eastbound) (Westbound) Left Thru Right U Left Thru Right U Left Thru Right U Left Thru Right U 11:00 AM 11:15 AM 11:30 AM 11:45 AM Ō Ō Ō Ō Ō Ō 12:00 PM 12:15 PM 12:30 PM 12:45 PM 1:00 PM 1:15 PM 1:30 PM 1:45 PM 0 2:00 PM 2:15 PM 2:30 PM 2:45 PM Northbound Southbound Eastbound Westbound Peak 15-Min Total Flowrates Left Thru Right U Left Thru Right U Left Thru Right U Left Thru Right U All Vehicles **Heavy Trucks** Buses **Pedestrians Bicycles** Scooters Comments:

Report generated on 10/11/2024 7:31 AM





433 West Van Buren Street, Suite 450 Chicago, IL 60607 cmap.illinois.gov | 312-454-0400

October 24, 2024

Peter Reinhofer, P.E. Chicago Traffic Services Leader/Senior Planner Manager V3 Companies 7325 Janes Avenue Woodridge, IL 60517

Subject: US34 and Countryside Parkway

IDOT

Dear Mr. Reinhofer:

In response to a request made on your behalf and dated October 18, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
US Route 34 east of McHugh Road	16,200	21,000
US Route 34 west of McHugh Road	14,000	18,100
Countryside Parkway between US 34 and McHugh Road	1,600	2,000
Countryside Parkway west of McHugh Road	3,600	4,500
McHugh Road south of US 34	2,950	3,700
McHugh Road north of US 34	2,000	2,500
Tuma Road south of US 34	1,100	1,380

Traffic projections are developed using existing ADT data provided in the request letter and the results from the June 2024 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

Jose Rodriguez, PTP, AICP

Senior Planner, Research & Analysis

Cc: Rios (IDOT)

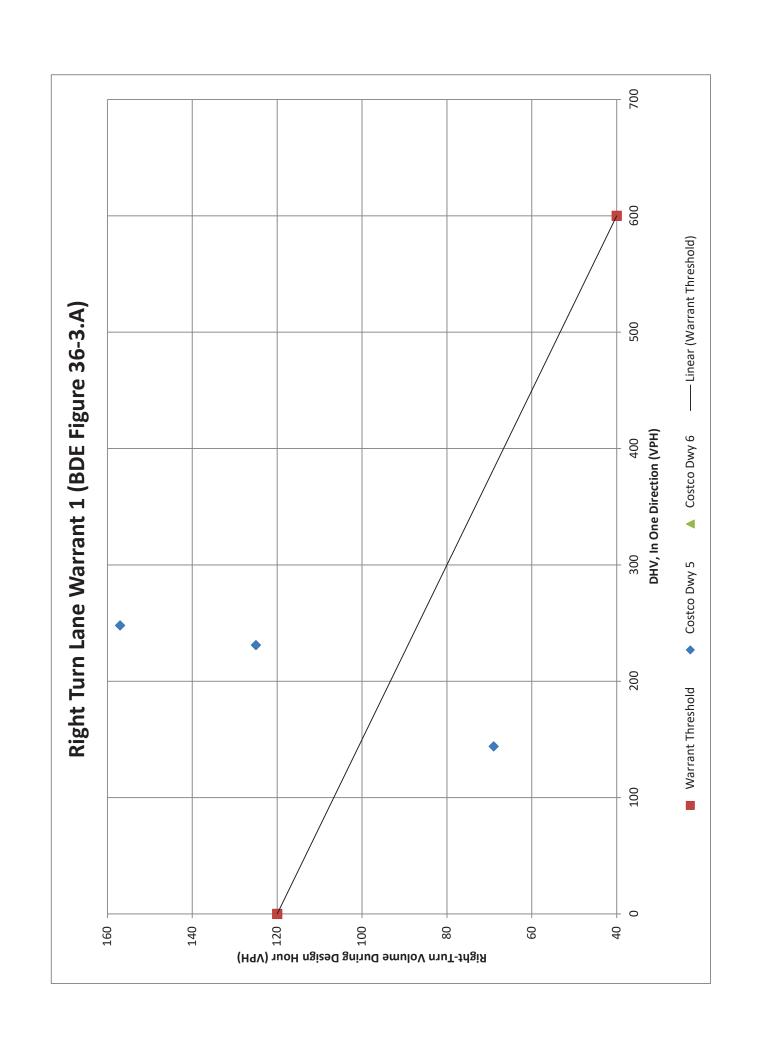
S:\AdminGroups\ResearchAnalysis\2024 TrafficForecasts\Yorkville\ke-06-24\ke-06-24.docx

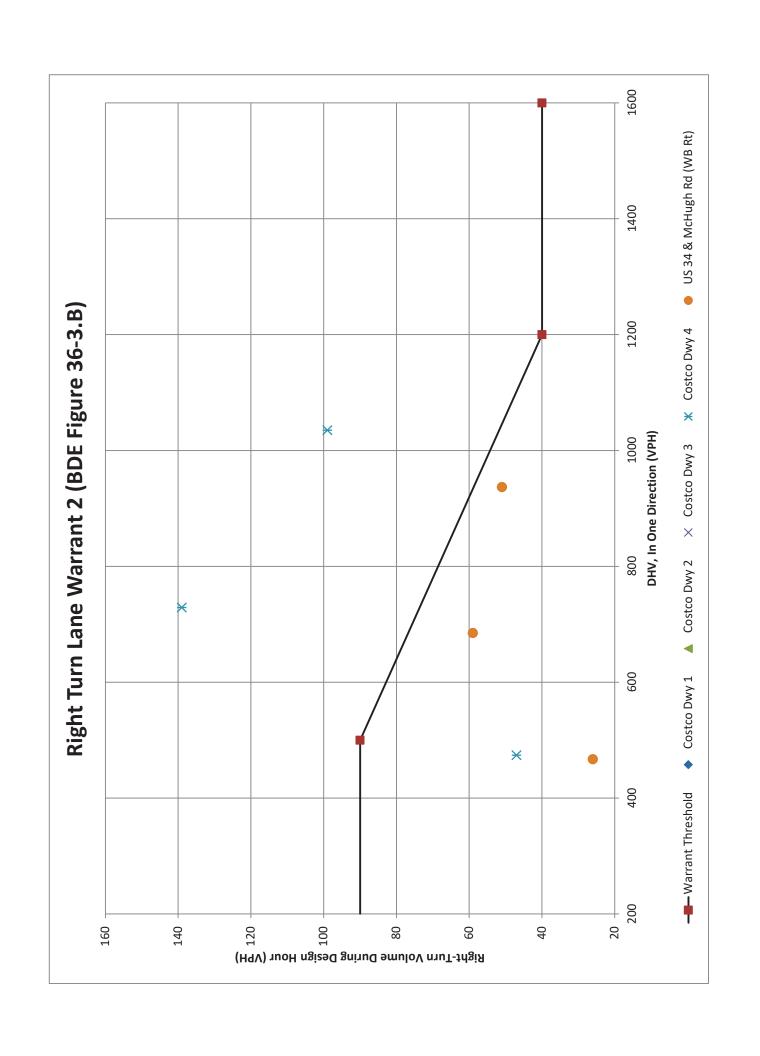
APPENDIX C AUXILIARY LANE ANALYSIS

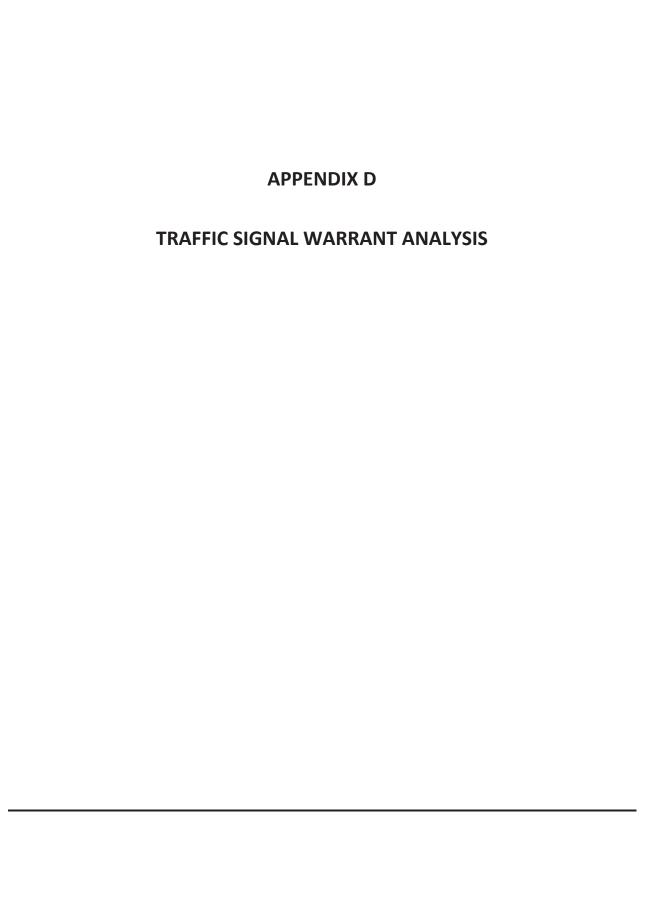


				Criteri	a Met?			
Criteria	Right-Turn Lane Warrants	Costco Dwy 1	Costco Dwy 2	Costco Dwy 3	Costco Dwy 4	Costco Dwy 5	Costco Dwy 6	Comments
1	Unsignalized intersection on a two lane highway that satisfies the criteria in BDE Figures	N/A	N/A	N/A	N/A	Yes	No	Costco Dwy 1 thru 4 are not a two-lane Highway. Costco Dwy 5 meets criteria to consider a right turn lane.
2	Unsignalized intersection on a four lane highway that satisfies the criteria in BDE Figures	No	No	No	Yes	N/A	N/A	Costco Dwy 4 meets the criteria to consider a right turn lane.
3	On expressways where the side street ADT is over 250	No	No	No	No	No	No	Not on an expressway.
	Any intersection where a capacity analysis determines a right-turn lane is necessary to meet the LOS criteria	No	No	No	No	No	No	All movements operate at acceptable LOS.
	At any intersection where the right- turning volume is greater than 150 vph and where there is greater than 300 vplph on the mainline	No	No	No	No	No	No	Right-turn lane volumes are less than 150 vph.
6	Uniformity of intersection design along the highway if other intersections have right-turn lanes	No	No	No	No	No	No	No unsignalized intersections in the area have right turn lanes
7	Any intersection where the mainline is curved to the left and the mainline curve requires superelevation	No	No	No	No	No	No	Roads are not on superelevated curves
	At railroad crossings where the railroad is located close to the intersection and a right turn lane would be desirable to efficiently move through traffic on the parallel roadway	No	No	No	No	No	No	Not near a railroad.
	Any intersection where the crash experience, traffic operations, sight distance restrictions, or engineering judgement indicates a significant conflict related to right-turning vehicles.	No	No	No	No	No	No	No additional indicators mandating right- turn lanes.

				Criteri	a Met?			
Criteria	Left-Turn Lane Warrants	Costco Dwy 1	Costco Dwy 2	Costco Dwy 3	Costco Dwy 4	Costco Dwy 5	Costco Dwy 6	Comments
1	Unsignalized intersection on a two lane highway that satisfies the criteria in BDE Figures	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	Not a two-lane Highway.
1	Signalized intersetion where the left- turning volume is equal to or greater than 75 vph	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	Not Signalized intersections
3	Any intersection where a capacity analysis determines a left-turn lane is necessary to meet the LOS criteria	N/A	N/A	N/A - RIRO Only	N/A	N/A - Already Provided	N/A - Already Provided	All movements operate at acceptable LOS
4	Uniformity of intersection design along the highway if other intersections have left-turn lanes	Yes	Yes	N/A - RIRO Only	Yes	N/A - Already Provided	N/A - Already Provided	Intersections to the west of Costco Dwy 1 and 2 and east and west of Costco Dwy 4 provide left turn lanes.
5	Any intersection where the crash experience, traffic operations, sight distance restrictions, or engineering judgement indicates a significant conflict related to left-turning vehicles.	No	No	N/A - RIRO Only	No	N/A - Already Provided		No additional indicators mandating left- turn lanes.







Date	12/26/2024

Location Information

Intersection	Countryside Parkway & McHugh Road
City	Yorkville
County	Kendall
District	3

Street Information

Major Street (EB/WB)	Countryside Parkway
Minor Street (NB/SB)	McHugh Road

Review Information

Counts Used	Quality Counts - 2031 FwP Volumes
Count Dates	9/17/2024
Date Reviewed	12/26/2024
Reviewed By	MFM

Warrant Information

Speed Limit of Major Street	40
Number of Lanes on Major	2
Number of Lanes on Minor	1
Isolated Community?	No
SRA Route Number	No

12/26/2024

Date:

Countryside Parkway & McHugh Road

Kendall 3 County: District:

Countryside Parkway McHugh Road Major Minor

State Of Illinois Department of Transportation Bureau of Traffic

SUMMARY OF TRAFFIC SURVEY

Route:	TRAFFIC FROM McHugh Road	TRAFFIC FROM NORTH McHugh Road	Ŧ		TRAFFIC FROM SOUTH McHugh Road	SOM SOUTI	_			TRAFFIC FROM EAST Countryside Parkway	ROM EAST e Parkway			TRAFFIC FROM WEST Countryside Parkway	ROM WEST e Parkway				
	N. of:	N. of: Countryside Parkway Going	le Parkway		S. of:	Countryside Parkway Going	Parkway			E. of:	McHugh Road Going	oad		W. of:	McHugh Road Going	oad		TOTAL	GRAND
START TIME	EAST	SOUTH	WEST	TOTAL	WEST	NORTH	EAST	TOTAL	SOUTH	нд С	WEST	NORTH	TOTAL	NORTH	EAST	Волтн	TOTAL	WEST	OIAL
AM	7	56	34	26	18	64	12	94	191	13	75	29	117	55	51	17	123	240	431
PM	18	98	42	146	43	68	2	137	283	35	140	53	228	73	111	75	259	487	770
SAT	30	47	20	26	19	89	-	130	227	28	172	49	249	58	139	92	273	522	749
55th % AM	4	31	19	54	10	36	7	53	107	7	41	16	64	30	28	O	29	131	238
55th % PM	10	47	23	80	24	20	е	77	157	19	77	29	125	40	61	14	142	267	424
55th % Sat	17	26	7	54	34	38	-	73	127	15	95	27	137	32	92	42	150	287	414

Quality Counts - 2031 FwP Volumes 9/17/2024 12/26/2024 MFM REVIEW INFORMATION
COUNTS USED:
COUNT DATE(S):
DATA REVIEWED:
REVIEWED BY:

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Countryside Parkway & McHugh Road MUNCIPALITY: Yorkville

١	H.	.			T						ſ
1 1	MINOR STREET	VOLUME	83	120	671	88	46		7.1	49	
	ADJUSTED RIGHT TURNS		20	30	67	12	1	;	14	7	
	RIGHT TURN	REDUCTION %	40%	408/	40.70	40%	40%		40%	40%	
ı	CONGESTION		%0	780	9/0	%0	%0		%0	%0	
	TURN		40%	408/	40%	40%	40%		40%	40%	
CRITICAL	APPROACH	VOLUME PER LANE	38	ÜŽ	2	86	21		38	48	
F McHugh Road	2 2	APP. TOTAL	97	116	041	97	54		80	54	
MINOR STREET IE MCHug		RIGHT	34	C/	74,	20	19		23	11	
* # E ;		THROUGH	56	90	000	47	31	!	47	26	
STREET	CONFIG CRIT. MAINLIN	LEFT	7	0,7	0	30	4		10	17	
	PEAK HOUR		AM	MO	Ā	SAT	55th AM		55th PM	55th Sat	
	DIR		SB	00	200	SB	SB		SB	SB	

MAINLINE CONGESTION FACTORS	FACTOR %	%0	2%	10%	15%	20%	25%	30%	35%	40%	45%	20%	22%
MAINLINE CONG	VOLUMES	0-399	400-499	200-299	669-009	700-799	800-899	666-006	1000-1099	1100-1199	1200-1299	1300-1399	1400-1499

REVIEW INFORMATION
COUNTS USED: Quality Counts - 2031 FwP Volumes
COUNT DATE(S): 91772024
DATE REVIEWED 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS









	1
4	17
	T
n	7

ight turn lane (usually
ip (c
Any configuration with an exclusive right turn lane (usu up to 600 ft. long)
Any configuration

up to 600 ft. long)	(1+1)	34 168 19 63 90	51 258 29 104 128	34 141 16 77 67		19 93 10 35 50	28 141 16 57 70	19 78 9 43 37
0.40		89	102	89	_	38	26	38
(A) IATOT TUDIO UDITO		6 34 97	146 42 146	.7 20 97		11 19 54	.7 23 80	11 54
UOIIOGNT Tas	ł	7 56	18 86	30 47		4 31	10 47	17 26
	E	AM	PM	SAT		55th AM	55th PM	55th Sat

		/B	BASE REDUCTION	N	
ЬН	CONFIG 1	CONFIG 2	CONFIG 3	CONFIG 4	CONFIG 5
AM	40%	40%	75%	30%	20%
PM	70%	40%	75%	30%	30%
SAT	20%	40%	75%	30%	30%
55th AM	40%	40%	75%	30%	20%
55th PM	%07	40%	75%	30%	30%
55th Sat	70%	40%	75%	30%	30%

SIGNAL WARRANT REVIEW SHEET

District #3

9

YES

SRA: No

COUNTY: Kendall

Parkway & McHugh F	Countryside F	INTERSECTION:	TION: Countryside Parkway & McHugh Road	
	Parkway & McHugh F	Countryside Parkway & McHugh F	Road	

Speed Limit of Major Route

Number of Lanes of Major Approach

Isolated Community with Population< 10, No Number of Lanes of Minor Approach

ng Warrants		A/B: 8 hrs of	both	80% of B									
Check any hours which meet the following Warrants	WARRANT 1	WARRANT 1 A/B:	pq	80% of A		×							
ours which m	WARR	В		100%									
Check any h		4		100%									
ADJ. MINOR	STREET	VOLUME	(higher volume	approaches)	83	129	89		46	71	49		
MAJOR	STREET	VOLUME	(both	approaches)	240	487	522		131	267	287		
			HOUR	BEGIN	AM	PM	SAT		55th % AM	55th % PM	55th % SAT		

N/A e met:	N/A	N/A	N/A	(N)	(N)	(N)	(N)	N/A	N A A	N/A
NO Iditions are	(S)	(NO)	(N)	ON	ON	ON	ON O	<u>Q</u>	ON ON	<u>Q</u>
YES owing Condi	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
WARRANT 1 Warrant 1 is met if any of the following Conditions are met:	• CONDITION A Minmum Vehicular Volume	CONDITION B Interruption of Continuous Traffic	• CONDITION A/B Combination of Warranrts	WARRANT 2 Four Hour Volume	WARRANT 3 Peak Hour Volume	WARRANT 4 Pedestrian Volume	WARRANT 5 School Crossing	WARRANT 6 Coordinated Signal System	WARRANT 7 Accidents Experience	WARRANT 8 Roadway Network

9 08 08

No 480

No 900

8000

MAJOR: MINOR:

Volume Requirements:

Quality Counts - 2031 FwP Volumes 9/17/2024 MFM

REVIEW INFORMATION
COUNTS USED: Quality
COUNT DATE(S): 9/17/2C
DATE REVIEWED: 12/26/3
REVIEWED BY: MFM

Comments

N/A/

9

YES

Intersection Near a Grade Crossing

WARRANT 9

Date	12/26/2024

Location Information

Intersection	US Route 34 & Tuma Road/Costco Dwy 4
City	Yorkville
County	Kendall
District	3

Street Information

Major Street (EB/WB)	US 34
Minor Street (NB/SB)	Tuma Road/Costco Dwy 4

Review Information

Counts Used	Quality Counts extrapolated to 2031
Count Dates	9/17/2024
Date Reviewed	12/26/2024
Reviewed By	MFM

Warrant Information

Speed Limit of Major Street	45
Number of Lanes on Major	2
Number of Lanes on Minor	1
Isolated Community?	No
SRA Route Number	513

US Route 34 & Tuma Road/Costco Dwy 4 State Of Illinois Date: 12/26/2024 City: Yorkville Department of Transportation

Department of Transportation
Bureau of Traffic

District: 3
Major US 34

County:

SUMMARY OF TRAFFIC SURVEY

Minor Tuma Road/Costco Dwy 4

Kendall

	TRAFFIC F	ROM NORT	ГН		TRAFFIC F	ROM SOUT	TH .			TRAFFIC F	ROM EAST	-		TRAFFIC F	ROM WEST	Г			
Route:	Tuma Roa	d/Costco D	wy 4		Tuma Roa	d/Costco D	wy 4			US 34				US 34					
	N. of:	US 34			S. of:	US 34			TOTAL	E. of:	Tuma Roa	d/Costco D	wy 4	W. of:	Tuma Roa	d/Costco D	wy 4	TOTAL	
		Going				Going			NORTH AND		Going				Going			EAST AND	GRAND TOTAL
	EAST	SOUTH	WEST	TOTAL	WEST	NORTH	EAST	TOTAL	SOUTH	SOUTH	WEST	NORTH	TOTAL	NORTH	EAST	SOUTH	TOTAL	WEST	IOTAL
START TIME	-	•	+		<u> </u>		I '												
AM	0	0	38	38	25	0	71	96	134	15	412	47	474	31	701	12	744	1,218	1,352
PM	0	0	75	75	33	0	55	88	163	59	877	99	1,035	65	699	31	795	1,830	1,993
SAT	0	0	102	102	21	0	36	57	159	35	555	139	729	89	654	36	779	1,508	1,667
55th % AM	0	0	21	21	14	0	40	54	75	8	227	26	261	17	386	7	410	671	746
55th % PM	0	0	41	41	18	0	31	49	90	32	482	54	568	36	384	17	437	1,005	1,095
55th % Sat	0	0	56	56	12	0	20	32	88	19	305	76	400	49	360	20	429	829	917

REVIEW INFORMATION

COUNTS USED: Quality Counts extrapolated to 2031

COUNT DATE(S): 9/17/2024
DATA REVIEWED: 12/26/2024
REVIEWED BY: MFM

RIGHT TURN FACTORIZATION SHEET

INTERSECTION: US Route 34 & Tuma Road/Costco Dwy 4
MUNCIPALITY: Yorkville COUNTY: Kendall

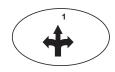
			MINOR: T NAME		Costco Dwy 4	CRITICAL MAINLINE	BASE RIGHT	MAINLINE	ADJUSTED		ADJUSTED
DIR	PEAK HOUR		FIG. # LINE LANE #		2	APPROACH VOLUME PER	TURN	CONGESTION FACTOR %	RIGHT TURN	ADJUSTED RIGHT TURNS	MINOR STREET VOLUME
		LEFT	THROUGH	RIGHT	APP. TOTAL	LANE	REDUCTION %	FACTOR %	REDUCTION %		VOLUME
NB	AM	25	0	71	96	351	60%	0%	60%	28	53
NB	PM	33	0	55	88	350	40%	0%	40%	33	66
NB	SAT	21	0	36	57	327	40%	0%	40%	22	43
NB	55th AM	14	0	40	54	193	60%	0%	60%	16	29
NB	55th PM	18	0	31	49	192	40%	0%	40%	19	36
NB	55th Sat	12	0	20	32	180	40%	0%	40%	12	24

MAINLINE CONG	STION FACTORS
VOLUMES	FACTOR %
0-399	0%
400-499	5%
500-599	10%
600-699	15%
700-799	20%
800-899	25%
900-999	30%
1000-1099	35%
1100-1199	40%
1200-1299	45%
1300-1399	50%
1400-1499	55%

REVIEW INFORMATION
COUNTS USED: Quality Counts extrapolated to 2031
COUNT DATE(S): 9/17/2024
DATE REVIEWEC 12/26/2024 REVIEWED BY: MFM

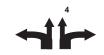
RIGHT TURN FACTORIZATION SHEET (CONT.)

LANE CONFIGURATIONS











Any configuration with an exclusive right turn lane (usually

up	to o	UU π.	iong)	
_	_	~ = :		7

PH	LEFT	THROUGH	RIGHT	TOTAL (A)	0.7A	0.35A	3T	T/3	(T+L)	(T+R)	3R	3L	T/2	T/4	L=T=R (+/-)
AM	25	0	71	96	67	34	0	0	25	71	213	75	0	0	NO
PM	33	0	55	88	62	31	0	0	33	55	165	99	0	0	NO
SAT	21	0	36	57	40	20	0	0	21	36	108	63	0	0	NO
55th AM	14	0	40	54	38	19	0	0	14	40	120	42	0	0	NO
55th PM	18	0	31	49	34	17	0	0	18	31	93	54	0	0	NO
55th Sat	12	0	20	32	22	11	0	0	12	20	60	36	0	0	NO
															1

		B/	ASE REDUCTION	ON	
PH	CONFIG 1	CONFIG 2	CONFIG 3	CONFIG 4	CONFIG 5
AM	60%	60%	75%	65%	75%
PM	40%	60%	75%	65%	75%
SAT	40%	60%	75%	65%	75%
55th AM	60%	60%	75%	65%	75%
55th PM	40%	60%	75%	65%	75%
55th Sat	40%	60%	75%	65%	75%

SIGNAL WARRANT REVIEW SHEET

District #1

YES NO

COUNTY: Kendall

INTERSECTION: US Route 34 & Tuma Road/Costco Dwy 4

MUNCIPALITY: Yorkville

Speed Limit of Major Route Number of Lanes of Major Approach

Isolated Community with Population< 10, No Number of Lanes of Minor Approach

	MAJOR	ADJ. MINOR	Check any h		neet the follow	ing Warrants
	STREET	STREET		WAR	RANT 1	
	VOLUME	VOLUME	Α	В		A/B: 8 hrs of
HOUR	(both	(higher volume	4000/	4000/		oth
BEGIN	approaches)	approaches)	100%	100%	80% of A	80% of B
AM	1,218	53				
PM	1,830	66				
SAT	1,508	43				
55th % AM	671	29				
55th % PM	1.005	36				
55th % SAT	829	24				
					1	
					1	

	Met:	No	No	No	No
Volume Requirements:	MAJOR:	600	900	480	630
	MINOR:	150	125	120	80

REVIEW INFORMATION

COUNTS USED: Quality Counts extrapolated to 2031 COUNT DATE(S): 9/17/2024

DATE REVIEWED: 12/26/2024 REVIEWED BY: MFM

Comments

WARRANT 1	YES	NO N/A	_
Warrant 1 is met if any of the followi	ng Con	ditions are met:	
CONDITION A Minmum Vehicular Volume	YES	NO N/A	
CONDITION B Interruption of Continuous Traffic	YES	NO N/A	
CONDITION A/B Combination of Warranrts	YES	NO N/A	
WARRANT 2 Four Hour Volume	YES	NO N/A)
WARRANT 3 Peak Hour Volume	YES	NO N/A)
WARRANT 4 Pedestrian Volume	YES	NO N/A)
WARRANT 5 School Crossing	YES	NO N/A)
WARRANT 6 Coordinated Signal System	YES	NO N/A)
WARRANT 7 Accidents Experience	YES	NO N/A)
WARRANT 8 Roadway Network	YES	NO N/A)
WARRANT 9 Intersection Near a Grade Crossing	YES	NO N/A)

APPENDIX E

CAPACITY ANALYSIS WORKSHEETS 2024 EXISTING

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	61	2	15	725	425	79
Future Volume (vph)	61	2	15	725	425	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
		1	100			250
Storage Lanes	0	l l				l I
Taper Length (ft)	25	4.00	160	0.05	0.05	4.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
FIt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
FIt Permitted	0.950		0.472			
Satd. Flow (perm)	1736	1615	897	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2				83
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
	4%	0.95	0.95	2%	7%	3%
Heavy Vehicles (%)	4% 64	2	16	763	447	
Adj. Flow (vph)	04		10	703	447	83
Shared Lane Traffic (%)	0.4		4.0	700	4.4-	
Lane Group Flow (vph)	64	2	16	763	447	83
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	CI+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel				J. L.	J LA	
Detector 2 Extend (s)				0.0	0.0	
` ,	Prot	Dorm	nm + nt	NA	NA	nm.+ov
Turn Type		Perm	pm+pt			pm+ov
Protected Phases	6		7	4	8	6

	4	لر	*	1	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase	<u> </u>					<u> </u>
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
. ,						
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.29	0.01	0.02	0.28	0.18	0.06
Control Delay	47.5	29.5	1.5	2.5	5.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	29.5	1.5	2.5	5.3	0.3
LOS	D	С	Α	A	А	А
Approach Delay	46.9			2.5	4.5	
Approach LOS	D			A	A	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Green (s)	MaxR	MaxR				
			Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	42	0	1	34	37	0
Queue Length 95th (ft)	84	8	m3	37	76	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	220	207	783	2702	2460	1484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.01	0.02	0.28	0.18	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.29

Intersection Signal Delay: 5.4

Intersection LOS: A

Intersection Capacity Utilization 34.2%

ICU Level of Service A

Analysis Period (min) 15 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	۶	-	7	1	+	•	1	1	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		*	^		7	1	7	*	1>	
Traffic Volume (vph)	38	600	19	65	353	3	17	42	111	4	40	32
Future Volume (vph)	38	600	19	65	353	3	17	42	111	4	40	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3452	0	1671	3404	0	1456	1810	1583	1805	1683	0
FIt Permitted	0.521			0.328			0.655			0.727		
Satd. Flow (perm)	990	3452	0	577	3404	0	1004	1810	1583	1381	1683	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			1				122		30	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%
Adj. Flow (vph)	42	659	21	71	388	3	19	46	122	4	44	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	680	0	71	391	0	19	46	122	4	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		Cl+Ex	CI+Ex		CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	۶	-	7	1	•	*	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.3	60.4		72.0	64.8		29.2	25.0	38.1	27.4	22.5	
Actuated g/C Ratio	0.63	0.55		0.65	0.59		0.27	0.23	0.35	0.25	0.20	
v/c Ratio	0.06	0.36		0.16	0.19		0.06	0.11	0.19	0.01	0.22	
Control Delay	6.6	14.6		7.4	11.2		30.6	36.5	5.8	29.8	27.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.6	14.6		7.4	11.2		30.6	36.5	5.8	29.8	27.9	
LOS	Α	В		Α	В		С	D	Α	С	C	
Approach Delay		14.2			10.6			15.9			28.0	
Approach LOS		В			В			В			С	
90th %ile Green (s)	7.4	58.9		8.6	60.1		8.4	17.2	8.6	6.3	15.1	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	6.7	59.8		7.7	60.8		7.3	27.0	7.7	0.0	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	Ped	
50th %ile Green (s)	6.3	60.4		7.1	61.2		0.0	27.0	7.1	0.0	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	0.0	61.0		6.5	71.0		0.0	27.0	6.5	0.0	27.0	
30th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.9		5.6	71.0		0.0	27.0	5.6	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	9	134		16	67		10	25	0	2	27	
Queue Length 95th (ft)	21	180		31	90		29	63	43	11	78	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	776	1897		539	2006		312	412	740	406	367	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.05	0.36		0.13	0.19		0.06	0.11	0.16	0.01	0.22	
Intersection Summary												

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

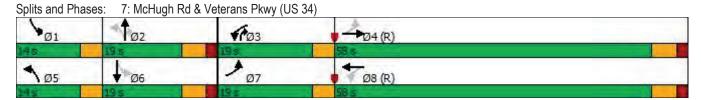
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 14.1 Intersection LOS: B

Intersection Capacity Utilization 42.3% ICU Level of Service A

Analysis Period (min) 15



Intersection				
Intersection Delay, s/veh	9			
Intersection LOS	Α			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 1>		*	↑ 1>		7	1		1	1	
Traffic Vol, veh/h	51	36	12	12	59	23	12	60	11	3	52	32
Future Vol, veh/h	51	36	12	12	59	23	12	60	11	3	52	32
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	73	51	17	17	84	33	17	86	16	4	74	46
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.1			8.7			9.2			9.2		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	85%	0%	100%	50%	0%	100%	46%	0%	62%	
Vol Right, %	0%	15%	0%	0%	50%	0%	0%	54%	0%	38%	
Sign Control	Stop										
Traffic Vol by Lane	12	71	51	24	24	12	39	43	3	84	
LT Vol	12	0	51	0	0	12	0	0	3	0	
Through Vol	0	60	0	24	12	0	39	20	0	52	
RT Vol	0	11	0	0	12	0	0	23	0	32	
Lane Flow Rate	17	101	73	34	34	17	56	61	4	120	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.029	0.152	0.122	0.052	0.05	0.029	0.086	0.09	0.009	0.177	
Departure Headway (Hd)	6.018	5.409	6.031	5.493	5.278	6.027	5.523	5.297	7.15	5.312	
Convergence, Y/N	Yes										
Cap	592	658	591	647	673	591	645	672	499	671	
Service Time	3.788	3.18	3.805	3.268	3.052	3.798	3.295	3.069	4.918	3.08	
HCM Lane V/C Ratio	0.029	0.153	0.124	0.053	0.051	0.029	0.087	0.091	0.008	0.179	
HCM Control Delay	9	9.2	9.7	8.6	8.3	9	8.8	8.6	10	9.2	
HCM Lane LOS	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	
HCM 95th-tile Q	0.1	0.5	0.4	0.2	0.2	0.1	0.3	0.3	0	0.6	

Intersection							
Int Delay, s/veh	1.2						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	*	^	† 1>		7	7	
Traffic Vol, veh/h	9	55	89	5	8	6	
Future Vol, veh/h	9	55	89	5	8	6	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage		0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	60	60	60	60	60	60	
Heavy Vehicles, %	22	7	1	0	0	0	
Mvmt Flow	15	92	148	8	13	10	
Major/Minor	Major1	N	Major2	Λ	/linor2		
Conflicting Flow All	156	0	-	0	228	78	
Stage 1	-	-	-	-	152	-	
Stage 2	-	-	-	-	76	-	
Critical Hdwy	4.54	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.42	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1287	-	-	-	745	973	
Stage 1	-	-	-	-	866	-	
Stage 2	-	-	-	-	944	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1287	-	-	-	736	973	
Mov Cap-2 Maneuver	-	-	-	-	736	-	
Stage 1	-	-	-	-	856	-	
Stage 2	-	-	-	-	944	-	
Approach	EB		WB		SB		
HCM Control Delay, s	1.1		0		9.4		
HCM LOS					А		
Minor Lane/Major Mvn	nt	EBL	EBT	WBT	WPD	SBLn1 S	RI n2
	π	1287	LDI	VVDI	WDR	736	
Capacity (veh/h) HCM Lane V/C Ratio		0.012	-		-	0.018	973
HCM Control Delay (s)		7.8	-	-		10	8.7
HCM Lane LOS		7.0 A	-	-	-	В	Α
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0
HOW JOHN JOHN Q VEN	1					0.1	U

Intersection						
Int Delay, s/veh	1.3					
		AUAZ	NIET	NED	0)4#	OVACE
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	Y		1		7	^
Traffic Vol, veh/h	23	66	669	11	14	406
Future Vol, veh/h	23	66	669	11	14	406
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	9	7	7
Mvmt Flow	25	72	727	12	15	441
	/linor1		/lajor1		Major2	
Conflicting Flow All	984	370	0	0	739	0
Stage 1	733	-	-	-	-	-
Stage 2	251	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	4.24	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	2.27	-
Pot Cap-1 Maneuver	242	627	-	-	831	-
Stage 1	431	-	-	-	-	-
Stage 2	762	_	-	_	-	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	238	627	_	_	831	_
Mov Cap-1 Maneuver	238	-	<u>-</u>	_	-	_
Stage 1	431		_		_	
•	748		-	-		-
Stage 2	740	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	15.4		0		0.3	
HCM LOS	С				0.0	
1.5W E00						
Minor Lane/Major Mvm	t	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-	441	831	-
HCM Lane V/C Ratio		-	-	0.219	0.018	-
HCM Control Delay (s)		-	-	15.4	9.4	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	0.8	0.1	-

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Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	7	7	*	^	^	7
Traffic Volume (vph)	75	12	22	689	888	78
Future Volume (vph)	75	12	22	689	888	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			250
•	25	- 1	160			1
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950	1015	0.950	0==4	0.57.4	4504
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
Flt Permitted	0.950		0.269			
Satd. Flow (perm)	1805	1615	511	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13				83
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	80	13	23	733	945	83
Shared Lane Traffic (%)	00	10	20	700	J-10	00
Lane Group Flow (vph)	80	13	23	733	945	83
						No
Enter Blocked Intersection	No	No	No	No	No	
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel	OITEX	OITEX	OITEX	OITEX	OITEX	OITEX
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)				0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	M	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase				<u> </u>		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
- , ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0	J.5 Lead	0.0		0.0
Lead/Lag Ontimize?					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	2.0	Yes	2.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	0.38	0.07	0.05	0.26	0.36	0.06
Control Delay	54.8	22.2	1.2	1.4	6.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	22.2	1.2	1.4	6.5	0.3
LOS	D	С	Α	Α	Α	Α
Approach Delay	50.3			1.4	6.0	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	94.0	84.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	94.0	84.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	58	0	1	20	137	0
Queue Length 95th (ft)	110	20	4	34	172	5
Internal Link Dist (ft)	1162	20	7	691	759	3
Turn Bay Length (ft)	200		180	031	139	250
Base Capacity (vph)	210	199	513	2799	2630	1412
Starvation Cap Reducts	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0.07	0 04	0	0 26	0
Reduced v/c Ratio	0.38	0.07	0.04	0.26	0.36	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 6.4

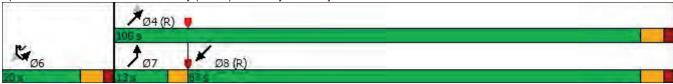
Intersection LOS: A

Intersection Capacity Utilization 38.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy

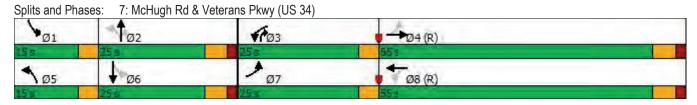


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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		7	*		1	↑	7	7	1>	
Traffic Volume (vph)	47	563	27	149	672	9	57	61	81	18	98	54
Future Volume (vph)	47	563	27	149	672	9	57	61	81	18	98	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998				0.850		0.947	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3568	0	1770	1900	1568	1703	1787	0
FIt Permitted	0.343			0.338			0.500			0.715		
Satd. Flow (perm)	652	3551	0	636	3568	0	931	1900	1568	1282	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				86		20	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	50	599	29	159	715	10	61	65	86	19	104	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	628	0	159	725	0	61	65	86	19	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	7	1	-	•	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.9	60.7		76.2	65.6		36.3	29.6	45.4	31.8	23.9	
Actuated g/C Ratio	0.58	0.51		0.64	0.55		0.30	0.25	0.38	0.26	0.20	
v/c Ratio	0.11	0.35		0.32	0.37		0.18	0.14	0.13	0.05	0.43	
Control Delay	9.0	18.6		10.6	16.2		31.6	38.7	6.2	30.1	42.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	9.0	18.6		10.6	16.2		31.6	38.7	6.2	30.1	42.6	
LOS	Α	В		В	В		С	D	Α	С	D	
Approach Delay		17.9			15.2			23.5			41.3	
Approach LOS		В			В			С			D	
90th %ile Green (s)	8.0	58.0		12.5	62.5		11.3	22.5	12.5	8.0	19.2	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.2	59.7		10.8	63.3		9.6	23.5	10.8	7.0	20.9	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	6.7	60.8		9.7	63.8		8.4	34.0	9.7	0.0	22.1	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.2	61.8		8.7	64.3		7.3	34.0	8.7	0.0	23.2	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	63.3		7.2	74.0		0.0	34.0	7.2	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	13	146		46	159		34	37	0	10	98	
Queue Length 95th (ft)	28	199		73	191		68	84	35	29	174	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180	1=00		180	10-0		110	100	110	245	2=1	
Base Capacity (vph)	622	1799		611	1950		363	468	791	419	371	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.08	0.35		0.26	0.37		0.17	0.14	0.11	0.05	0.43	
Intersection Summary												

Area Type: Other	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase	EBTL and 8:WBTL, Start of Green
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.43	
Intersection Signal Delay: 19.4	Intersection LOS: B
Intersection Capacity Utilization 54.0	6 ICU Level of Service A
Analysis Period (min) 15	

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		*	* 1>		7	Þ		7	T _P	
Traffic Vol, veh/h	70	69	57	33	96	38	29	83	5	6	80	39
Future Vol, veh/h	70	69	57	33	96	38	29	83	5	6	80	39
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	79	78	64	37	108	43	33	93	6	7	90	44
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.4			9.3			9.9			10.1		
HCM LOS	Α			Α			Α			В		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	94%	0%	100%	29%	0%	100%	46%	0%	67%	
Vol Right, %	0%	6%	0%	0%	71%	0%	0%	54%	0%	33%	
Sign Control	Stop										
Traffic Vol by Lane	29	88	70	46	80	33	64	70	6	119	
LT Vol	29	0	70	0	0	33	0	0	6	0	
Through Vol	0	83	0	46	23	0	64	32	0	80	
RT Vol	0	5	0	0	57	0	0	38	0	39	
Lane Flow Rate	33	99	79	52	90	37	72	79	7	134	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.059	0.164	0.139	0.084	0.133	0.066	0.118	0.121	0.012	0.214	
Departure Headway (Hd)	6.514	5.973	6.349	5.844	5.341	6.417	5.93	5.529	6.503	5.773	
Convergence, Y/N	Yes										
Cap	551	601	566	614	672	559	605	649	551	623	
Service Time	4.241	3.701	4.073	3.569	3.065	4.143	3.656	3.255	4.231	3.501	
HCM Lane V/C Ratio	0.06	0.165	0.14	0.085	0.134	0.066	0.119	0.122	0.013	0.215	
HCM Control Delay	9.7	9.9	10.1	9.1	8.9	9.6	9.5	9	9.3	10.1	
HCM Lane LOS	Α	Α	В	Α	Α	А	А	А	Α	В	
HCM 95th-tile Q	0.2	0.6	0.5	0.3	0.5	0.2	0.4	0.4	0	8.0	

Intersection							
Int Delay, s/veh	1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	T	11	↑ ↑	וטאי	SDL 1	7	
Traffic Vol, veh/h	7	79	96	4	8	9	
Future Vol, veh/h	7	79	96	4	8	9	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-		-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage	e,# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	82	82	82	82	82	82	
Heavy Vehicles, %	0	1	2	0	0	0	
Mvmt Flow	9	96	117	5	10	11	
Major/Minor	Major1	N	Major2	N	/linor2		
Conflicting Flow All	122	0	-	0	186	61	
Stage 1	-	-	-	-	120	-	
Stage 2	-	-	-	-	66	-	
Critical Hdwy	4.1	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.2	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1478	-	-	-	791	998	
Stage 1	-	-	-	-	898	-	
Stage 2	-	-	-	-	955	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1478	-	-	-	786	998	
Mov Cap-2 Maneuver	-	-	-	-	786	-	
Stage 1	-	-	-	-	893	-	
Stage 2	-	-	-	-	955	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.6		0		9.1		
HCM LOS					Α		
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WRD (SBLn1 S	PIn2
	π	1478	LDI	VVDI	WDR	786	
Capacity (veh/h) HCM Lane V/C Ratio		0.006	-	-	-	0.012	998
HCM Control Delay (s)		7.5	-	-		9.6	8.6
HCM Lane LOS		7.5 A	-	-	-	9.0 A	Α
HCM 95th %tile Q(veh))	0	-	_	_	0	0
HOW JOHN JOHN Q(VEI)	1	U				U	- 0

Intersection						
Int Delay, s/veh	1.5					
	NWL	NWR	NET	NER	CIVII	SWT
Movement		NVVK		NEK	SWL	
Lane Configurations	21	E1	↑ ↑	11	5	^
Traffic Vol, veh/h	31	51	669	11	55	844
Future Vol, veh/h	31	51	669	11	55	844
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	1	0	0	1
Mvmt Flow	34	55	727	12	60	917
Major/Minor N	/linor1	N	/lajor1	N	Major2	
Conflicting Flow All	1312	370	0	0	739	0
Stage 1	733	-	-	_	-	-
Stage 2	579	_	_	_	_	_
Critical Hdwy	6.8	6.9	_		4.1	_
Critical Hdwy Stg 1	5.8	0.9		_	4.1	
Critical Hdwy Stg 2	5.8		-			
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	153	633	-		876	
	442	-	-	-	- 070	-
Stage 1	529		-		-	
Stage 2 Platoon blocked, %	529	-	-	-	-	-
	112	622	-	-	076	-
Mov Cap-1 Maneuver	143	633	-	-	876	-
Mov Cap-2 Maneuver	143	-	-	-	-	-
Stage 1	442	-	-	-	-	-
Stage 2	493	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	24.1		0		0.6	
HCM LOS	C C				0.0	
1.0 200						
						015
Minor Lane/Major Mvm	t	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-		876	-
HCM Lane V/C Ratio		-	-	0.323		-
HCM Control Delay (s)		-	-		9.4	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	1.4	0.2	-
,						

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	73	11	18	632	558	85
Future Volume (vph)	73	11	18	632	558	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			1
•	25	l I	160			1
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
FIt Permitted	0.950		0.406			
Satd. Flow (perm)	1787	1615	771	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		12				89
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0.33	0.33	1%	1%	5%
Adj. Flow (vph)	77	12	19	665	587	89
Shared Lane Traffic (%)	11	14	13	000	307	09
Lane Group Flow (vph)	77	12	19	665	587	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
						CI+Ex
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+EX
Detector 1 Channel		0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6	. 0.111	7	4	8	6
T TOLECTED T HOSES	<u> </u>		'	4	0	0

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag	0.0	0.0	Lead	0.0	Lag	0.0
Lead-Lag Optimize?			Yes		Yes	
	2.0	2.0		3.0	3.0	3.0
Vehicle Extension (s)	3.0	3.0	3.0			
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.6	44.0	70 -	0	0	00.0
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	0.31	0.05	0.03	0.25	0.23	0.06
Control Delay	42.4	19.4	0.9	1.4	6.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	19.4	0.9	1.4	6.1	0.4
LOS	D	В	Α	Α	Α	Α
Approach Delay	39.3			1.4	5.4	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	45	0	1	15	51	0
Queue Length 95th (ft)	90	16	m2	25	101	5
Internal Link Dist (ft)	1162		1112	691	759	3
Turn Bay Length (ft)	200		180	331	100	250
Base Capacity (vph)	250	236	688	2644	2508	1448
Starvation Cap Reductn	0	0	000	0	0	0
Spillback Cap Reductin	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.05	0.03	0.25	0.23	0.06
Reduced V/C Ratio	0.51	0.05	0.03	0.23	0.23	0.00
Intersection Summary						

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31

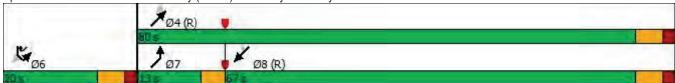
Intersection Signal Delay: 5.6 Intersection LOS: A

Intersection Capacity Utilization 31.6% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		*	1		7	1	7	*	1>	
Traffic Volume (vph)	61	572	19	99	454	9	36	33	61	18	52	51
Future Volume (vph)	61	572	19	99	454	9	36	33	61	18	52	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180	1000	0	180	1000	0	110	1000	110	245	1000	0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170		U	180		· ·	105		•	150		U
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.995	0.00	1.00	0.997	0.00	1.00	1.00	0.850	1.00	0.926	1.00
FIt Protected	0.950	0.000		0.950	0.007		0.950		0.000	0.950	0.020	
Satd. Flow (prot)	1770	3592	0	1805	3564	0	1805	1900	1568	1805	1759	0
Flt Permitted	0.461	0002	0	0.328	0004	0	0.646	1300	1000	0.735	1700	U
Satd. Flow (perm)	859	3592	0	623	3564	0	1227	1900	1568	1396	1759	0
Right Turn on Red	000	0002	Yes	020	0004	Yes	1221	1300	Yes	1000	1700	Yes
Satd. Flow (RTOR)		4	163		2	163			71		44	163
Link Speed (mph)		45			45			30	7 1		35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0.90	0.90	0.90	1%	0.90	0.90	0.90	3%	0.90	0.90	0.90
Adj. Flow (vph)	64	596	20	103	473	9	38	34	64	19	54	53
Shared Lane Traffic (%)	04	590	20	103	473	9	30	34	04	19	54	55
Lane Group Flow (vph)	64	616	0	103	482	0	38	34	64	19	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	Leit	12	rtigiit	Leit	12	rtigrit	LGIL	12	rtigrit	Leit	12	rtigrit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	1.00	9	15	1.00	9	15	1.00	9	15	1.00	9
Number of Detectors	13	2	<u> </u>	13	2	<u> </u>	13	2	1	1	2	3
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	Cl+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	OI LX	OI - EX		OI LX	OI LX		OI · LX	OI LX	OI LX	OI LX	OI - EX	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			CI+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel		, ·			,·						,·	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	*	1	•	*	1	Ť	1	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	52.0	42.4		54.6	45.2		35.5	29.8	43.9	33.8	27.3	
Actuated g/C Ratio	0.52	0.42		0.55	0.45		0.36	0.30	0.44	0.34	0.27	
v/c Ratio	0.13	0.40		0.24	0.30		0.08	0.06	0.09	0.04	0.21	
Control Delay	10.6	21.2		12.4	18.4		21.2	28.3	4.6	20.8	20.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.6	21.2		12.4	18.4		21.2	28.3	4.6	20.8	20.3	
LOS	В	С		В	В		С	С	Α	С	С	
Approach Delay		20.2			17.3			15.2			20.3	
Approach LOS		С			В			В			С	
90th %ile Green (s)	8.8	40.2		10.3	41.7		8.6	23.1	10.3	7.4	21.9	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.8	41.5		9.0	42.7		7.5	23.9	9.0	6.6	23.0	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	7.1	42.4		8.1	43.4		6.8	34.0	8.1	0.0	23.7	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.4	43.3		7.2	44.1		0.0	34.0	7.2	0.0	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	44.4		6.1	54.0		0.0	34.0	6.1	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	17	139		28	97		16	14	0	8	32	
Queue Length 95th (ft)	36	193		57	132		37	43	23	23	79	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	635	1524		547	1611		514	566	853	554	512	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.40		0.19	0.30		0.07	0.06	0.08	0.03	0.21	
Intersection Summary												

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

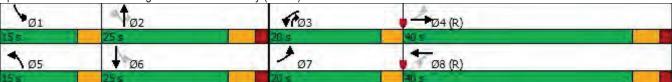
Maximum v/c Ratio: 0.40

Intersection Signal Delay: 18.7 Intersection LOS: B

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



1

Number of Lanes

2

0

1

0

1

0

Intersection												
Intersection Delay, s/veh	8.9											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	1		*	* 1>		*	13		7	ĵ.	
Traffic Vol, veh/h	54	74	53	26	102	26	37	64	1	9	44	19
Future Vol, veh/h	54	74	53	26	102	26	37	64	1	9	44	19
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mymt Flow	59	80	58	28	111	28	40	70	1	10	48	21

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	8.8	8.8	9.2	8.9
HCM LOS	Α	Α	А	А

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	98%	0%	100%	32%	0%	100%	57%	0%	70%	
Vol Right, %	0%	2%	0%	0%	68%	0%	0%	43%	0%	30%	
Sign Control	Stop										
Traffic Vol by Lane	37	65	54	49	78	26	68	60	9	63	
LT Vol	37	0	54	0	0	26	0	0	9	0	
Through Vol	0	64	0	49	25	0	68	34	0	44	
RT Vol	0	1	0	0	53	0	0	26	0	19	
Lane Flow Rate	40	71	59	54	84	28	74	65	10	68	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.068	0.111	0.097	0.081	0.116	0.047	0.113	0.095	0.017	0.104	
Departure Headway (Hd)	6.116	5.639	5.928	5.425	4.945	5.98	5.494	5.241	6.197	5.485	
Convergence, Y/N	Yes										
Cap	582	631	601	656	719	595	648	679	574	648	
Service Time	3.892	3.415	3.696	3.193	2.712	3.749	3.263	3.009	3.978	3.266	
HCM Lane V/C Ratio	0.069	0.113	0.098	0.082	0.117	0.047	0.114	0.096	0.017	0.105	
HCM Control Delay	9.3	9.1	9.3	8.7	8.4	9	9	8.6	9.1	8.9	
HCM Lane LOS	А	Α	Α	Α	Α	Α	Α	Α	Α	Α	
HCM 95th-tile Q	0.2	0.4	0.3	0.3	0.4	0.1	0.4	0.3	0.1	0.3	

Intersection							
Int Delay, s/veh	0						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	*	^	† 1>		7	7	
Traffic Vol, veh/h	1	84	102	0	0	0	
Future Vol, veh/h	1	84	102	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage	e,# -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	85	85	85	85	85	85	
Heavy Vehicles, %	0	0	3	0	0	0	
Mvmt Flow	1	99	120	0	0	0	
Major/Minor	Major1	N	Major2	Λ	/linor2		
Conflicting Flow All	120	0		0	172	60	
Stage 1	-	-	-	-	120	-	
Stage 2	-	-	-	-	52	-	
Critical Hdwy	4.1	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.2	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1480	-	-	-	807	999	
Stage 1	-	-	-	-	898	-	
Stage 2	-	-	-	-	970	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1480	-	-	-	806	999	
Mov Cap-2 Maneuver	-	-	-	-	806	-	
Stage 1	-	-	-	-	897	-	
Stage 2	-	-	-	-	970	-	
Approach	EB		WB		SB		
HCM Control Delay, s	0.1		0		0		
HCM LOS					Α		
	_	_	_	_	_		
Minor Lane/Major Mvm	nt	EBL	EBT	WBT	WRR	SBLn1 SBL	n2
Capacity (veh/h)	ii C	1480	LDI	WDT	יוטוי	JULITI JUL	.112
HCM Lane V/C Ratio		0.001	-	-	-	-	-
HCM Control Delay (s)	\	7.4	-	-	-	0	0
HCM Lane LOS		7.4 A	-	-	_	A	A
HCM 95th %tile Q(veh)	0	_	_	_	-	-
TIOW JOHN JUNE WIVELL	7	U					

Intersection						
Int Delay, s/veh	0.9					
		AUAZ	NIET	NED	0)4#	OVACT
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	**		1		7	^
Traffic Vol, veh/h	20	34	619	34	33	536
Future Vol, veh/h	20	34	619	34	33	536
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	0	1	0	0	1
Mvmt Flow	22	37	666	37	35	576
	Minor1		/lajor1		Major2	
Conflicting Flow All	1043	352	0	0	703	0
Stage 1	685	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.9	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	220	650	-	-	904	-
Stage 1	454	-	-	-	-	-
Stage 2	669	_	_	_	_	_
Platoon blocked, %			_	_		_
Mov Cap-1 Maneuver	211	650	_	_	904	_
Mov Cap-1 Maneuver	211	-	<u>-</u>	_	-	_
Stage 1	454				-	
	643			-		-
Stage 2	043	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	16.6		0		0.5	
HCM LOS	С					
Minor Lane/Major Mvm	ıt	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-	367	904	-
HCM Lane V/C Ratio		-	-	0.158		-
HCM Control Delay (s)		-	-	16.6	9.1	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)		-	-	0.6	0.1	-
,						

APPENDIX F

CAPACITY ANALYSIS WORKSHEETS 2031 BACKGROUND

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	65	2	16	776	455	85
Future Volume (vph)	65	2	16	776	455	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1500	1300	250
Storage Lanes	0	1	100			1
		l I				l I
Taper Length (ft)	25	1.00	160	0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
FIt Permitted	0.950		0.458			
Satd. Flow (perm)	1736	1615	870	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		2				89
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0.93	0.93	2%	7%	3%
Adj. Flow (vph)	68	2	17	817	479	89
	00		17	017	4/9	09
Shared Lane Traffic (%)	00	0	47	047	470	00
Lane Group Flow (vph)	68	2	17	817	479	89
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
	0	0	0	0	0	0
Detector 1 Position(ft)						
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases		i Cilli		4	8	•
Frolected Phases	6		7	4	ď	6

	W	1	*	*	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4	.,_,		8
Detector Phase	6	6	7	4	8	6
Switch Phase	0	0		-	0	0
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	70.0%	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
. ,	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)			3.5	6.0	6.0	6.0
Total Lost Time (s)	6.0	6.0		0.0		0.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?	0.0	2.0	Yes	2.0	Yes	0.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	10
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.31	0.01	0.02	0.30	0.19	0.06
Control Delay	47.9	29.5	1.6	2.6	5.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	29.5	1.6	2.6	5.4	0.3
LOS	D	С	Α	Α	Α	Α
Approach Delay	47.4			2.5	4.6	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	44	0	1	36	41	0
Queue Length 95th (ft)	89	8	m3	40	81	5
Internal Link Dist (ft)	1162	3	1110	691	759	3
Turn Bay Length (ft)	200		180	001	100	250
Base Capacity (vph)	220	207	764	2702	2460	1485
Starvation Cap Reductn	0	0	0	0	2400	0
Spillback Cap Reductin	0	0	0	0	0	0
	0	0	0	0	0	0
Storage Cap Reductn Reduced v/c Ratio						
Reduced V/C Ratio	0.31	0.01	0.02	0.30	0.19	0.06
Intersection Summary						

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.31

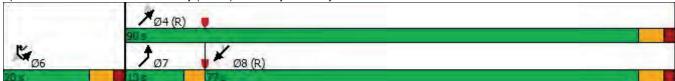
Intersection Signal Delay: 5.5 Intersection LOS: A

Intersection Capacity Utilization 35.6% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



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7. Worldgir Na a v	- 1010111		(000	.,							oonaay 7	
	*	-	7	1	+	*	1	Ť	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 13		7	* 1>		*	1	7	7	7>	
Traffic Volume (vph)	41	642	20	70	378	3	18	45	119	4	43	34
Future Volume (vph)	41	642	20	70	378	3	18	45	119	4	43	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.999				0.850		0.934	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3453	0	1671	3404	0	1456	1810	1583	1805	1683	0
FIt Permitted	0.507	0.00		0.312			0.649			0.725		
Satd. Flow (perm)	963	3453	0	549	3404	0	994	1810	1583	1377	1683	0
Right Turn on Red		0.00	Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4	100		1	100			131		29	. 00
Link Speed (mph)		45			45			30	101		35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	3%	37%	8%	6%	0%	24%	5%	2%	0%	5%	6%
Adj. Flow (vph)	45	705	22	77	415	3	20	49	131	4	47	37
Shared Lane Traffic (%)	70	700	22	11	410	J	20	73	101	7	71	31
Lane Group Flow (vph)	45	727	0	77	418	0	20	49	131	4	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	LOIL	12	rtigiit	LOIL	12	rtigiit	LOIL	12	rtigitt	LOIL	12	rtigrit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9	1.00	1.00	9
Number of Detectors	1	2	3	1	2	3	1	2	1	1	2	3
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	Cl+Ex		Cl+Ex	Cl+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	OIILX	OIILX		OITEX	OIILX		OIILX	OITEX	OIILX	OITEX	OITEX	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel		OITEX			OITEX			OITEX			OITEX	
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	nmınt	NA		nmint	NA		nmint		nmiov	nmint	NA	
Turn Type Protected Phases	pm+pt			pm+pt			pm+pt	NA 2	pm+ov 3	pm+pt		
Frolected Phases	7	4		3	8		5		3	1	6	

	×	-	7	1	+	*	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%		17.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.2	60.3		71.4	62.9		29.2	25.0	38.3	27.4	22.4	
Actuated g/C Ratio	0.63	0.55		0.65	0.57		0.27	0.23	0.35	0.25	0.20	
v/c Ratio	0.07	0.38		0.18	0.21		0.07	0.12	0.21	0.01	0.23	
Control Delay	6.6	15.0		7.6	12.0		30.7	36.6	5.6	29.8	28.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.6	15.0		7.6	12.0		30.7	36.6	5.6	29.8	28.9	
LOS	Α	В		Α	В		С	D	Α	С	С	
Approach Delay		14.5			11.3			15.7			29.0	
Approach LOS		В			В			В			С	
90th %ile Green (s)	7.5	58.7		8.8	60.0		8.5	17.2	8.8	6.3	15.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	6.8	59.7		7.8	60.7		7.3	27.0	7.8	0.0	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	Ped	
50th %ile Green (s)	6.4	60.3		7.2	61.1		0.0	27.0	7.2	0.0	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.0	60.9		6.6	61.5		0.0	27.0	6.6	0.0	27.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.8		5.7	71.0		0.0	27.0	5.7	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	10	146		17	72		10	27	0	2	30	
Queue Length 95th (ft)	22	195		33	94		30	66	44	11	83	
Internal Link Dist (ft)		812			993			776			647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	762	1893		524	1945		310	412	745	405	366	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.06	0.38		0.15	0.21		0.06	0.12	0.18	0.01	0.23	
Intersection Summary												

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

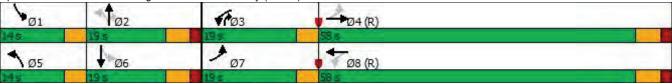
Maximum v/c Ratio: 0.38

Intersection Signal Delay: 14.5 Intersection LOS: B

Intersection Capacity Utilization 43.5% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	9.2											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	* 1>		1	1		7	T ₃		7	T _P	
Traffic Vol, veh/h	55	39	13	13	63	25	13	64	12	3	56	34
Future Vol, veh/h	55	39	13	13	63	25	13	64	12	3	56	34
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	79	56	19	19	90	36	19	91	17	4	80	49
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	9.2	8.9	9.4	9.5
HCM LOS	Α	A	Α	Α

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	84%	0%	100%	50%	0%	100%	46%	0%	62%	
Vol Right, %	0%	16%	0%	0%	50%	0%	0%	54%	0%	38%	
Sign Control	Stop										
Traffic Vol by Lane	13	76	55	26	26	13	42	46	3	90	
LT Vol	13	0	55	0	0	13	0	0	3	0	
Through Vol	0	64	0	26	13	0	42	21	0	56	
RT Vol	0	12	0	0	13	0	0	25	0	34	
Lane Flow Rate	19	109	79	37	37	19	60	66	4	129	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.031	0.166	0.133	0.057	0.055	0.032	0.093	0.098	0.009	0.193	
Departure Headway (Hd)	6.101	5.49	6.111	5.573	5.357	6.108	5.604	5.375	7.232	5.396	
Convergence, Y/N	Yes										
Cap	583	648	582	637	662	581	634	660	492	660	
Service Time	3.881	3.271	3.897	3.358	3.143	3.894	3.39	3.161	5.011	3.174	
HCM Lane V/C Ratio	0.033	0.168	0.136	0.058	0.056	0.033	0.095	0.1	0.008	0.195	
HCM Control Delay	9.1	9.4	9.8	8.7	8.5	9.1	9	8.8	10.1	9.5	
HCM Lane LOS	Α	Α	Α	Α	Α	Α	Α	Α	В	Α	
HCM 95th-tile Q	0.1	0.6	0.5	0.2	0.2	0.1	0.3	0.3	0	0.7	

Intersection							
Int Delay, s/veh	1.1						
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	EDL	1	↑	WDIX	SDL	JDK 7	
Traffic Vol, veh/h	9	TT 59	95	5	8	6	
Future Vol, veh/h	9	59	95	5	8	6	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-		-		-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage	, # -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	60	60	60	60	60	60	
Heavy Vehicles, %	22	7	1	0	0	0	
Mvmt Flow	15	98	158	8	13	10	
Major/Minor N	/lajor1	N	Major2	N	/linor2		
Conflicting Flow All	166	0	-	0	241	83	
Stage 1	-	-	-	-	162	-	
Stage 2	-	-	-	-	79	-	
Critical Hdwy	4.54	-	-	-	6.8	6.9	
Critical Hdwy Stg 1	-	-	-	-	5.8	-	
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.42	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1275	-	-	-	732	966	
Stage 1	-	-	-	-	856	-	
Stage 2	-	-	-	-	941	-	
Platoon blocked, %	10==	-	-	-		000	
Mov Cap-1 Maneuver	1275	-	-	-	723	966	
Mov Cap-2 Maneuver	-	-	-	-	723	-	
Stage 1	-	-	-	-	846	-	
Stage 2	-	-	-	-	941	-	
Approach	EB		WB		SB		
HCM Control Delay, s	1		0		9.5		
HCM LOS					Α		
Minor Lane/Major Mvm	t	EBL	EBT	WBT	WBR S	SBLn1 S	BLn2
Capacity (veh/h)		1275		-	-	723	966
HCM Lane V/C Ratio		0.012	-	-	_	0.018	0.01
HCM Control Delay (s)		7.9	-	-	-	10.1	8.8
HCM Lane LOS		A	-	-	-	В	Α
HCM 95th %tile Q(veh)		0	-	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.4					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	W	TANALL	1	NEIX	3VVL	1
Traffic Vol, veh/h	25	71	716	12	15	434
Future Vol, veh/h	25	71	716	12	15	434
Conflicting Peds, #/hr	0	0	0	0	0	434
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None	riee -	None	riee -	None
	0	None -	-	None -	275	None -
Storage Length						
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	2	2	9	7	7
Mvmt Flow	27	77	778	13	16	472
Major/Minor N	1inor1	N	Major1		Major2	
Conflicting Flow All	1053	396	0	0	791	0
Stage 1	785	-	_	-	-	-
Stage 2	268	_	_	_	_	_
Critical Hdwy	6.88	6.94	_	_	4.24	_
Critical Hdwy Stg 1	5.88	0.34	_	_		
Critical Hdwy Stg 2	5.88	_		-		-
Follow-up Hdwy	3.54	3.32	-	_	2.27	-
Pot Cap-1 Maneuver	218	603			793	-
	405					
Stage 1		-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %	044	000	-	-	700	-
Mov Cap-1 Maneuver	214	603	-	-	793	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	405	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	16.8		0		0.3	
HCM LOS	C		U		0.0	
TIOWI EOU	J					
Minor Lane/Major Mvmt		NET	NERN	IWLn1	SWL	SWT
			_	409	793	-
Capacity (veh/h)						
Capacity (veh/h) HCM Lane V/C Ratio		-	-	0.255		-
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	-	16.8	9.6	-
Capacity (veh/h) HCM Lane V/C Ratio			- - -			

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	80	13	24	737	950	83
Future Volume (vph)	80	13	24	737	950	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			l I
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.850	1.00	0.95	0.93	0.850
Flt Protected	0.950	0.000	0.950			0.000
		1615		2574	2574	1504
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
FIt Permitted	0.950	4045	0.248	0574	0.57.4	4504
Satd. Flow (perm)	1805	1615	471	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		14				88
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	85	14	26	784	1011	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	14	26	784	1011	88
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32	rugiic	2010	12	12	rugiic
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane	10			10	10	
	1.00	1.00	1.00	1.00	1.00	1.00
Headway Factor				1.00	1.00	
Turning Speed (mph)	15	9	15	0		9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	3.0	3.0	0.0	94	94	3.0
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel				OITEX	OITEX	
				0.0	0.0	
Detector 2 Extend (s)	Б ′	D.		0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	W	1	*	*	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase			,		<u> </u>	<u> </u>
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
()	2.0	2.0	0.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)					6.0	6.0
Total Lost Time (s)	6.0	6.0	3.5	6.0		0.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?	2.0		Yes	0.0	Yes	2.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	0.40	0.07	0.06	0.28	0.38	0.06
Control Delay	55.5	22.1	1.3	1.5	6.8	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	22.1	1.3	1.5	6.8	0.3
LOS	E	C	Α	Α	A	A
Approach Delay	50.8			1.5	6.3	- 1
Approach LOS	D			Α	A	
90th %ile Green (s)	14.0	14.0	6.3	94.0	84.2	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	6.0	94.0	84.5	14.0
70th %ile Green (s) 70th %ile Term Code						
	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	62	0	1	22	151	0
Queue Length 95th (ft)	114	21	4	37	188	5
Internal Link Dist (ft)	1162			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	210	200	484	2799	2629	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.07	0.05	0.28	0.38	0.06
Neduced We Natio	0.40	0.07	0.03	0.20	0.50	0.00
Intersection Summary						

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

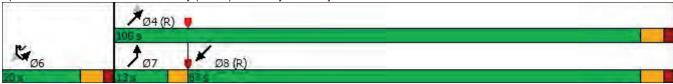
Maximum v/c Ratio: 0.40

Intersection Signal Delay: 6.5 Intersection LOS: A

Intersection Capacity Utilization 40.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	J	577452			4	4	4	†	<i>></i>	6		1
	M.	0.75.0	*	*		2.5	7	848	1		*	343
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	† 1>	00	150	1	40	7	†	7	1	₽	=0
Traffic Volume (vph)	50	602	29	159	719	10	61	65	87	19	105	58
Future Volume (vph)	50	602	29	159	719	10	61	65	87	19	105	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.998				0.850		0.947	
FIt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3568	0	1770	1900	1568	1703	1787	0
FIt Permitted	0.318			0.316			0.474			0.712		
Satd. Flow (perm)	604	3551	0	594	3568	0	883	1900	1568	1276	1787	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			1				93		20	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	53	640	31	169	765	11	65	69	93	20	112	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	671	0	169	776	0	65	69	93	20	174	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	-	1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	OI LX	OI - EX		OI LX	OI - EX		OI LX	OI LX	OI - EX	OI LX	OI LX	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94	0.0	0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			CI+Ex			Cl+Ex	
Detector 2 Channel		OITEX			OITEX			OITEX			OITEX	
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s)	nm i nf			nmint	NA		nmint		nmiov	nmint		
Turn Type	pm+pt	NA 4		pm+pt			pm+pt	NA	pm+ov	pm+pt	NA 6	
Protected Phases	7	4		3	8		5	2	3	1	6	

	۶	-	7	1	+	*	1	†	1	1	Į.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.7	60.4		76.3	65.5		36.3	29.6	45.6	31.7	23.7	
Actuated g/C Ratio	0.58	0.50		0.64	0.55		0.30	0.25	0.38	0.26	0.20	
v/c Ratio	0.13	0.37		0.35	0.40		0.20	0.15	0.14	0.06	0.47	
Control Delay	9.1	19.1		11.1	16.5		31.9	38.8	6.0	30.2	44.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	9.1	19.1		11.1	16.5		31.9	38.8	6.0	30.2	44.1	
LOS	A	В		В	В		C	D	A	C	D	
Approach Delay	,,	18.4			15.5			23.4	, ,		42.6	
Approach LOS		В			В			C			D	
90th %ile Green (s)	8.1	57.6		12.9	62.4		11.5	22.5	12.9	8.0	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Max	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.3	59.4		11.1	63.2		9.8	23.4	11.1	7.1	20.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	6.8	60.5		10.0	63.7		8.6	34.0	10.0	0.0	21.9	
50th %ile Term Code	Gap	Coord		Gap			Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.2	61.6		8.9	64.3		7.5	34.0	8.9	0.0	23.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	63.1		7.4	74.0		0.0	34.0	7.4	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	14	160		49	171		36	40	0 0	11	108	
Queue Length 95th (ft)	30	216		77	204		72	89	36	30	188	
Internal Link Dist (ft)	30	812		11	993		12	776	30	30	647	
` ,	180	012		180	333		110	770	110	245	047	
Turn Bay Length (ft)		1701			10/10			468	794	416	369	
Base Capacity (vph)	600	1791		592	1948		353					
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn Reduced v/c Ratio	0.09	0.37		0.29	0.40		0.18	0.15	0.12	0.05	0 0.47	
Intersection Summary												

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

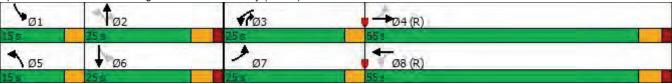
Maximum v/c Ratio: 0.47

Intersection Signal Delay: 19.9 Intersection LOS: B

Intersection Capacity Utilization 56.3% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Heavy Vehicles, %

Mvmt Flow

Intersection												
Intersection Delay, s/veh	9.9											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		1	* 1>		1	ĵ»		7	1	
Traffic Vol, veh/h	75	74	61	35	103	41	31	89	5	6	86	42
Future Vol, veh/h	75	74	61	35	103	41	31	89	5	6	86	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89

Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.6			9.6			10.1			10.5		
HCM LOS	Α			Α			R			В		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	95%	0%	100%	29%	0%	100%	46%	0%	67%	
Vol Right, %	0%	5%	0%	0%	71%	0%	0%	54%	0%	33%	
Sign Control	Stop										
Traffic Vol by Lane	31	94	75	49	86	35	69	75	6	128	
LT Vol	31	0	75	0	0	35	0	0	6	0	
Through Vol	0	89	0	49	25	0	69	34	0	86	
RT Vol	0	5	0	0	61	0	0	41	0	42	
Lane Flow Rate	35	106	84	55	96	39	77	85	7	144	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.064	0.179	0.151	0.092	0.146	0.071	0.13	0.133	0.012	0.236	
Departure Headway (Hd)	6.642	6.103	6.466	5.961	5.458	6.538	6.05	5.648	6.629	5.898	
Convergence, Y/N	Yes										
Cap	540	588	555	601	657	548	593	635	540	610	
Service Time	4.377	3.839	4.198	3.693	3.189	4.273	3.785	3.382	4.362	3.631	
HCM Lane V/C Ratio	0.065	0.18	0.151	0.092	0.146	0.071	0.13	0.134	0.013	0.236	
HCM Control Delay	9.8	10.2	10.4	9.3	9.1	9.8	9.7	9.3	9.4	10.5	
HCM Lane LOS	А	В	В	Α	А	А	А	А	Α	В	
HCM 95th-tile Q	0.2	0.6	0.5	0.3	0.5	0.2	0.4	0.5	0	0.9	

Intersection							
Int Delay, s/veh	1						
	EDI	FDT	MOT	MES	051	000	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations	7	^	1		7	7	
Traffic Vol, veh/h	7	85	103	4	8	9	
Future Vol, veh/h	7	85	103	4	8	9	
Conflicting Peds, #/hr	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Stop	Stop	
RT Channelized	-	None	-	None	-	None	
Storage Length	150	-	-	-	100	0	
Veh in Median Storage,	, # -	0	0	-	0	-	
Grade, %	-	0	0	-	0	-	
Peak Hour Factor	82	82	82	82	82	82	
Heavy Vehicles, %	0	1	2	0	0	0	
Mymt Flow	9	104	126	5	10	11	
IVIVIIIL I IOW	3	104	120	J	10	11	
Major/Minor N	//ajor1	N	Major2	N	Minor2		
Conflicting Flow All	131	0		0	199	66	
Stage 1	-	-	_	-	129	-	
Stage 2	_	_	_	_	70	_	
Critical Hdwy	4.1		_	_	6.8	6.9	
Critical Hdwy Stg 1	4.1	-	-	-	5.8	0.9	
		-					
Critical Hdwy Stg 2	-	-	-	-	5.8	-	
Follow-up Hdwy	2.2	-	-	-	3.5	3.3	
Pot Cap-1 Maneuver	1467	-	-	-	777	991	
Stage 1	-	-	-	-	889	-	
Stage 2	-	-	-	-	950	-	
Platoon blocked, %		-	-	-			
Mov Cap-1 Maneuver	1467	-	-	-	772	991	
Mov Cap-2 Maneuver	-	-	-	-	772	-	
Stage 1	-	-	-	-	884	-	
Stage 2	_	-	-	-	950	-	
<u>-</u>							
Approach	EB		WB		SB		
HCM Control Delay, s	0.6		0		9.2		
HCM LOS					Α		
				14/5-	14/5	OD! (=	DI A
Minor Lane/Major Mvm	t	EBL	EBT	WBT	WBR :	SBLn1 SI	
Capacity (veh/h)		1467	-	-	-	772	991
HCM Lane V/C Ratio		0.006	-	-	-	0.013	0.011
HCM Control Delay (s)		7.5	-	-	-	9.7	8.7
HCM Lane LOS		Α	-	-	-	Α	Α
HCM 95th %tile Q(veh)		0	-	-	-	0	0
J 222. 702 S.(7011)							

Intersection						
Int Delay, s/veh	1.8					
Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations	INVVL	INVVIX		NEIX	SVVL	↑ ↑
Traffic Vol, veh/h	33	55	↑1 ≽	31	5 9	TT 903
Future Vol, veh/h	33	55	716	31	59	903
Conflicting Peds, #/hr	0	0	0	0	0	903
			Free	Free	Free	Free
Sign Control RT Channelized	Stop -	Stop	riee -	None	riee -	None
	0	None -	-	None -	275	None -
Storage Length Veh in Median Storage			0	-	2/5	0
Grade, %	, # U 0	-	0			0
	92	92	92	- 02	92	92
Peak Hour Factor				92		
Heavy Vehicles, %	0	0	770	0	0	1
Mvmt Flow	36	60	778	34	64	982
Major/Minor N	Minor1	Λ	/lajor1	1	Major2	
Conflicting Flow All	1414	406	0	0	812	0
Stage 1	795	-	-	-	-	-
Stage 2	619	_	_	_	_	_
Critical Hdwy	6.8	6.9	_	_	4.1	_
Critical Hdwy Stg 1	5.8	-	_	_	-	_
Critical Hdwy Stg 2	5.8	_		_	_	
Follow-up Hdwy	3.5	3.3	_	_	2.2	_
Pot Cap-1 Maneuver	131	600	_	_	823	
Stage 1	410	000		-	020	
Stage 2	505		_	_	_	
	505	-	-	-	-	
Platoon blocked, %	101	600	-	-	000	-
Mov Cap-1 Maneuver	121	600	-	-	823	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	410	-	-	-	-	-
Stage 2	466	-	-	-	-	-
Approach	NW		NE		SW	
HCM Control Delay, s	29.4		0		0.6	
HCM LOS	23.4 D		- 0		0.0	
TIOW LOO	U					
Minor Lane/Major Mvm	t	NET	NERN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-		823	-
HCM Lane V/C Ratio		-	-	0.397	0.078	-
HCM Control Delay (s)		-	-	29.4	9.7	-
HCM Lane LOS		-	-	D	Α	-
HCM 95th %tile Q(veh)		-	-	1.8	0.3	-

	W	لر	*	×	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	78	12	19	676	597	91
Future Volume (vph)	78	12	19	676	597	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1500	1300	250
Storage Lanes	0	1	100			1
•	25	l I	160			l I
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
FIt Permitted	0.950		0.387			
Satd. Flow (perm)	1787	1615	735	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		13				96
Link Speed (mph)	40			45	45	
Link Distance (ft)	1242			771	839	
Travel Time (s)	21.2			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	82	13	20	712	628	96
Shared Lane Traffic (%)	02	10	20	1 12	020	30
Lane Group Flow (vph)	82	13	20	712	628	96
Enter Blocked Intersection	No	No	No	No	No	No
			Left	Left		
Lane Alignment	Left	Right	Leit		Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel	CITEX	CITEX	OITEX	CITEX	OITEX	CITEX
	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6
	<u> </u>		'		0	0

	W	1	*	*	K	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Permitted Phases	052	6	4	.,_,		8
Detector Phase	6	6	7	4	8	6
Switch Phase	0	0	'	-7	0	0
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
()	2.0	2.0	0.0	2.0	2.0	2.0
All-Red Time (s)						
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	0.33	0.05	0.03	0.27	0.25	0.07
Control Delay	42.9	18.8	1.1	1.4	6.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.9	18.8	1.1	1.4	6.2	0.4
LOS	42.9 D	10.0 B	Α	Α	Α.2	Α
	39.6	D	A	1.4	5.4	A
Approach Delay						
Approach LOS	D	440	0.0	A	Α	44.0
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	48	0	1	16	55	0
Queue Length 95th (ft)	94	18	m2	26	109	6
Internal Link Dist (ft)	1162	10	1112	691	759	U
· ,			180	091	759	250
Turn Bay Length (ft)	200	007		0044	0500	250
Base Capacity (vph)	250	237	663	2644	2508	1448
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.05	0.03	0.27	0.25	0.07
Intersection Summary						

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.33

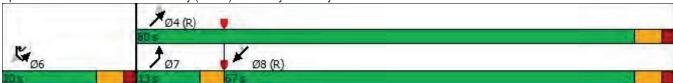
Intersection Signal Delay: 5.6 Intersection LOS: A

Intersection Capacity Utilization 33.0% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	٠	→	*	1	4	*	1	†	1	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		7	* 1>		7	†	7	*	T _P	
Traffic Volume (vph)	65	612	20	106	486	10	39	35	65	19	56	55
Future Volume (vph)	65	612	20	106	486	10	39	35	65	19	56	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	245		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			150		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.997				0.850		0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3592	0	1805	3564	0	1805	1900	1568	1805	1759	0
Flt Permitted	0.438			0.302			0.639			0.734		
Satd. Flow (perm)	816	3592	0	574	3564	0	1214	1900	1568	1395	1759	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2				71		44	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			727	
Travel Time (s)		13.5			16.3			19.5			14.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	0%	0%	0%	1%	0%	0%	0%	3%	0%	0%	0%
Adj. Flow (vph)	68	638	21	110	506	10	41	36	68	20	58	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	659	0	110	516	0	41	36	68	20	115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12	<u> </u>		12	<u> </u>		12	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	Cl+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	Cl+Ex	CI+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	٠	-	*	1	-	*	1	†	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	51.9	42.2		54.7	45.1		35.6	29.8	44.1	33.8	27.2	
Actuated g/C Ratio	0.52	0.42		0.55	0.45		0.36	0.30	0.44	0.34	0.27	
v/c Ratio	0.14	0.43		0.26	0.32		0.09	0.06	0.09	0.04	0.23	
Control Delay	10.7	21.8		13.7	19.0		21.3	28.3	4.9	20.8	21.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.7	21.8		13.7	19.0		21.3	28.3	4.9	20.8	21.0	
LOS	В	С		В	В		С	С	Α	С	С	
Approach Delay		20.7			18.1			15.3			20.9	
Approach LOS		С			В			В			С	
90th %ile Green (s)	8.9	39.9		10.6	41.6		8.8	23.1	10.6	7.4	21.7	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	7.9	41.3		9.2	42.6		7.7	23.8	9.2	6.7	22.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	7.2	42.2		8.3	43.3		6.9	34.0	8.3	0.0	23.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Skip	MaxR	
30th %ile Green (s)	6.5	43.1		7.4	44.0		0.0	34.0	7.4	0.0	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	44.3		6.2	54.0		0.0	34.0	6.2	0.0	34.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	18	152		31	104		17	15	0	8	36	
Queue Length 95th (ft)	38	209		68	146		40	44	25	24	86	
Internal Link Dist (ft)		812		4	993			776		- · -	647	
Turn Bay Length (ft)	180			180			110		110	245		
Base Capacity (vph)	618	1516		527	1608		511	566	853	554	511	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.11	0.43		0.21	0.32		0.08	0.06	0.08	0.04	0.23	
Intersection Summary												

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

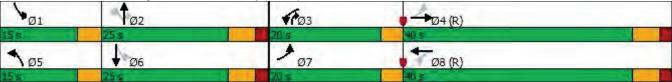
Intersection Signal Delay: 19.3

Intersection Capacity Utilization 45.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection			
Intersection Delay, s/veh Intersection LOS	9.1		
Intersection LOS	Α		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	* 13		1	1		7	T ₃		*	T.	
Traffic Vol, veh/h	58	79	57	28	109	28	40	68	1	10	47	20
Future Vol, veh/h	58	79	57	28	109	28	40	68	1	10	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	63	86	62	30	118	30	43	74	1	11	51	22
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	8.9			9			9.4			9.1		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	99%	0%	100%	32%	0%	100%	56%	0%	70%	
Vol Right, %	0%	1%	0%	0%	68%	0%	0%	44%	0%	30%	
Sign Control	Stop										
Traffic Vol by Lane	40	69	58	53	83	28	73	64	10	67	
LT Vol	40	0	58	0	0	28	0	0	10	0	
Through Vol	0	68	0	53	26	0	73	36	0	47	
RT Vol	0	1	0	0	57	0	0	28	0	20	
Lane Flow Rate	43	75	63	57	91	30	79	70	11	73	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.075	0.119	0.105	0.087	0.126	0.051	0.122	0.103	0.019	0.113	
Departure Headway (Hd)	6.199	5.723	6.001	5.497	5.016	6.054	5.568	5.312	6.286	5.576	
Convergence, Y/N	Yes										
Cap	573	621	593	647	708	587	638	669	565	636	
Service Time	3.984	3.508	3.778	3.274	2.792	3.834	3.348	3.093	4.075	3.366	
HCM Lane V/C Ratio	0.075	0.121	0.106	0.088	0.129	0.051	0.124	0.105	0.019	0.115	
HCM Control Delay	9.5	9.3	9.5	8.8	8.5	9.2	9.1	8.7	9.2	9.1	
HCM Lane LOS	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	
HCM 95th-tile Q	0.2	0.4	0.4	0.3	0.4	0.2	0.4	0.3	0.1	0.4	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	LDL.	11	↑	אטא	SBL	JDIN 7
Traffic Vol, veh/h	1	TT 90	109	0	0	0
Future Vol, veh/h	1	90	109	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	150	-	-	-	100	0
Veh in Median Storage,	# -	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	0	0	0
Mvmt Flow	1	106	128	0	0	0
Major/Minor N	1ajor1	N	Major2	N	/linor2	
Conflicting Flow All	128	0	-	0	183	64
Stage 1	-	-	_	-	128	-
Stage 2	_	_	-	_	55	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1470	-	-	-	795	994
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	967	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1470	-	-	-	794	994
Mov Cap-2 Maneuver	-	-	-	-	794	-
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	967	-
Approach	EB		WB		SB	
HCM Control Delay, s	0.1		0		0	
HCM LOS					A	
Minor Lang/Major Mumb		EBL	EDT	WPT	WPD	CDI n1 CDI
Minor Lane/Major Mvmt			EBT	WBT	WDK :	SBLn1 SBL
Capacity (veh/h)		1470	-	-	-	-
HCM Control Dolay (s)		0.001 7.5	-	-	-	0
HCM Control Delay (s) HCM Lane LOS		7.5 A	-	-		A
HCM 95th %tile Q(veh)		0	-	-	-	A -
HOW SOUT MILE Q(VEII)		U	-	-	-	-

Intersection						
Int Delay, s/veh	1					
Movement	NWL	NIMD	NET	NED	CIVII	SWT
		NWR	NET	NER	SWL	
Lane Configurations	74	00	1	00	7	^
Traffic Vol, veh/h	21	36	662	36	35	574
Future Vol, veh/h	21	36	662	36	35	574
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	275	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	5	0	1	0	0	1
Mymt Flow	23	39	712	39	38	617
WWW.	20	00	112	00	00	017
Major/Minor	Minor1	N	Major1	1	Major2	
Conflicting Flow All	1117	376	0	0	751	0
Stage 1	732	-	_	-	-	-
Stage 2	385	_	-	_	_	_
Critical Hdwy	6.9	6.9	_	_	4.1	_
Critical Hdwy Stg 1	5.9	-	_	_	-	_
Critical Hdwy Stg 2	5.9		_		_	
				-	2.2	
Follow-up Hdwy	3.55	3.3	-	-		-
Pot Cap-1 Maneuver	197	627	-	-	868	-
Stage 1	429	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	188	627	-	-	868	-
Mov Cap-2 Maneuver	188	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	619	-	-	-	-	-
g 	3.0					
Approach	NW		NE		SW	
HCM Control Delay, s	18		0		0.5	
HCM LOS	С					
Mineral and Maria	-4	NIET	MED	11 11 1	OM	OVACE
Minor Lane/Major Mvn	nt	NET	NEKN	IWLn1	SWL	SWT
Capacity (veh/h)		-	-	337	868	-
HCM Lane V/C Ratio		-	-	0.182		-
HCM Control Delay (s))	-	-	18	9.3	-
HCM Lane LOS		-	-	С	Α	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-
	,					

APPENDIX G

CAPACITY ANALYSIS WORKSHEETS 2031 FUTURE WITH PROJECT

	4)	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	116	8	16	780	474	103
Future Volume (vph)	116	8	16	780	474	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
	0	1	100			200
Storage Lanes		- 1				
Taper Length (ft)	25	4.00	160	0.05	0.05	4.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
FIt Protected	0.950		0.950			
Satd. Flow (prot)	1736	1615	1805	3539	3374	1568
Flt Permitted	0.950		0.449			
Satd. Flow (perm)	1736	1615	853	3539	3374	1568
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		8				108
Link Speed (mph)	40			45	45	.00
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	0%	0%	2%	7%	3%
Adj. Flow (vph)	122	8	17	821	499	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	8	17	821	499	108
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane				- 10	10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
•	1.00	9	1.00	1.00	1.00	9
Turning Speed (mph)			15	0	0	1
Number of Detectors	1	1	•	2	2	•
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	0.0	0.0	0.0	94	94	0.0
. ,				6	6	
Detector 2 Size(ft)						
Detector 2 Type				Cl+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	4)	7	1	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	90.0	77.0	20.0
Total Split (%)	18.2%	18.2%	11.8%	81.8%	70.0%	18.2%
Maximum Green (s)	14.0	14.0	9.5	84.0	71.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
- ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0	Lead	0.0		0.0
Lead/Lag Ontimize?					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	3.0	Yes 3.0	2.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.0	44.0	00.5	0	0	400.0
Act Effct Green (s)	14.0	14.0	86.5	84.0	80.2	103.8
Actuated g/C Ratio	0.13	0.13	0.79	0.76	0.73	0.94
v/c Ratio	0.55	0.04	0.02	0.30	0.20	0.07
Control Delay	55.5	23.5	1.8	2.7	5.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.5	23.5	1.8	2.7	5.4	0.3
LOS	Е	С	Α	Α	Α	Α
Approach Delay	53.5			2.7	4.5	
Approach LOS	D			Α	Α	
90th %ile Green (s)	14.0	14.0	6.1	84.0	74.4	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.8	84.0	74.7	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	84.0	84.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	82	0	1	44	43	0
Queue Length 95th (ft)	144	15	m4	49	85	5
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180		, , , ,	250
Base Capacity (vph)	220	212	752	2702	2460	1486
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.04	0.02	0.30	0.20	0.07
	0.00	0.04	0.02	0.00	0.20	0.07
Intersection Summary						

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

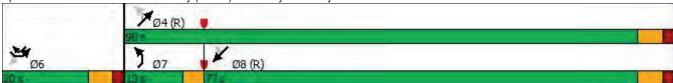
Intersection Signal Delay: 7.6 Intersection LOS: A

Intersection Capacity Utilization 38.0% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	٨	-	7	-	+	•	4	1	~	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	1		*	↑ 1→		*	†	7	*	ħ	02.1
Traffic Volume (vph)	69	635	20	70	371	26	18	49	119	27	47	61
Future Volume (vph)	69	635	20	70	371	26	18	49	119	27	47	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180	1000	0	180	1000	0	110	1000	110	195	1000	0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170		V	180		· ·	105		•	120		U
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.995	0.50	1.00	0.990	0.50	1.00	1.00	0.850	1.00	0.916	1.00
Flt Protected	0.950	0.000		0.950	0.000		0.950		0.000	0.950	0.510	
Satd. Flow (prot)	1805	3453	0	1671	3384	0	1456	1810	1583	1805	1649	0
Flt Permitted	0.497	0400		0.320	0004		0.681	1010	1000	0.677	10-13	
Satd. Flow (perm)	944	3453	0	563	3384	0	1043	1810	1583	1286	1649	0
Right Turn on Red	777	0400	Yes	303	3304	Yes	1043	1010	Yes	1200	1043	Yes
Satd. Flow (RTOR)		4	163		9	163			131		48	163
Link Speed (mph)		45			45			30	101		35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0.91	3%	37%	8%	6%	0.91	24%	5%	2%	0.91	5%	6%
. ,	76	698	22	77	408	29	24 %	54	131	30	52	67
Adj. Flow (vph) Shared Lane Traffic (%)	70	090	22	11	400	29	20	54	131	30	52	07
	76	720	0	77	437	٥	20	54	131	30	119	0
Lane Group Flow (vph) Enter Blocked Intersection	No		No	No	No	0 No	No	No	No	No	No	0 No
		No Left									Left	
Lane Alignment	Left	12	Right	Left	Left 12	Right	Left	Left 12	Right	Left	12	Right
Median Width(ft)												
Link Offset(ft)		0 16			0 16			16			0 16	
Crosswalk Width(ft)		10			10			10				
Two way Left Turn Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Yes	1.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	0	9	15	0	9	15	0	9	15 1	2	9
Number of Detectors	1	2		1	2		1	2	1			
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			Cl+Ex			CI+Ex	
Detector 2 Channel								2.5				
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	*	-	*	1	•	•	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	19.0	58.0		19.0	58.0		14.0	19.0	19.0	14.0	19.0	
Total Split (%)	17.3%	52.7%	1	7.3%	52.7%		12.7%	17.3%	17.3%	12.7%	17.3%	
Maximum Green (s)	15.5	52.0		15.5	52.0		10.5	13.0	15.5	10.5	13.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	69.9	60.3		70.8	62.3		27.3	20.3	33.5	28.2	22.4	
Actuated g/C Ratio	0.64	0.55		0.64	0.57		0.25	0.18	0.30	0.26	0.20	
v/c Ratio	0.12	0.38		0.18	0.23		0.07	0.16	0.23	0.08	0.32	
Control Delay	6.8	15.0		7.4	12.2		30.8	42.3	6.5	30.8	27.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	6.8	15.0		7.4	12.2		30.8	42.3	6.5	30.8	27.1	
LOS	Α	В		Α	В		С	D	Α	С	С	
Approach Delay		14.2			11.4			18.3			27.9	
Approach LOS		В			В			В			С	
90th %ile Green (s)	8.5	58.7		8.8	59.0		8.5	14.8	8.8	8.7	15.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
70th %ile Green (s)	7.6	59.7		7.8	59.9		7.3	15.9	7.8	7.6	16.2	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Ped	Gap	Gap	Ped	
50th %ile Green (s)	7.1	60.3		7.2	60.4		0.0	16.7	7.2	6.8	27.0	
50th %ile Term Code	Gap	Coord		Gap	Coord		Skip	Ped	Gap	Gap	MaxR	
30th %ile Green (s)	6.5	60.9		6.6	61.0		0.0	27.0	6.6	0.0	27.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
10th %ile Green (s)	0.0	61.8		5.7	71.0		0.0	27.0	5.7	0.0	27.0	
10th %ile Term Code	Skip	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	17	144		17	74		10	34	0	16	40	
Queue Length 95th (ft)	33	193		33	97		30	73	46	40	105	
Internal Link Dist (ft)		812		400	993			776		40-	369	
Turn Bay Length (ft)	180	1000		180	1010		110		110	195	2=1	
Base Capacity (vph)	752	1893		532	1919		315	333	682	390	374	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.10	0.38		0.14	0.23		0.06	0.16	0.19	0.08	0.32	
Intersection Summary												

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 15.1 Intersection LOS: B

Intersection Capacity Utilization 43.9% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	9.5											
Intersection LOS	Α											
	EDI	EDT	EDD	MIDI	MOT	MOD	NDI	NDT	NDD	ODI	ODT	000

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	* 1>		*	1		7	P		1	1	
Traffic Vol, veh/h	55	51	17	13	75	29	18	64	12	7	56	34
Future Vol, veh/h	55	51	17	13	75	29	18	64	12	7	56	34
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
Heavy Vehicles, %	2	0	8	0	0	9	0	0	22	67	4	0
Mvmt Flow	79	73	24	19	107	41	26	91	17	10	80	49
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.4			9.2			9.6			9.8		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	84%	0%	100%	50%	0%	100%	46%	0%	62%	
Vol Right, %	0%	16%	0%	0%	50%	0%	0%	54%	0%	38%	
Sign Control	Stop										
Traffic Vol by Lane	18	76	55	34	34	13	50	54	7	90	
LT Vol	18	0	55	0	0	13	0	0	7	0	
Through Vol	0	64	0	34	17	0	50	25	0	56	
RT Vol	0	12	0	0	17	0	0	29	0	34	
Lane Flow Rate	26	109	79	49	49	19	71	77	10	129	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.045	0.173	0.138	0.078	0.075	0.033	0.115	0.12	0.021	0.202	
Departure Headway (Hd)	6.345	5.734	6.318	5.779	5.563	6.316	5.812	5.587	7.477	5.66	
Convergence, Y/N	Yes										
Cap	566	626	569	621	645	568	619	643	480	638	
Service Time	4.068	3.457	4.041	3.502	3.286	4.038	3.533	3.308	5.197	3.36	
HCM Lane V/C Ratio	0.046	0.174	0.139	0.079	0.076	0.033	0.115	0.12	0.021	0.202	
HCM Control Delay	9.4	9.7	10.1	9	8.7	9.3	9.3	9.1	10.4	9.8	
HCM Lane LOS	Α	Α	В	Α	Α	Α	Α	Α	В	Α	
HCM 95th-tile Q	0.1	0.6	0.5	0.3	0.2	0.1	0.4	0.4	0.1	8.0	

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^		*	1			4	7	*		7
Traffic Vol, veh/h	9	57	18	0	99	5	12	0	4	8	0	6
Future Vol, veh/h	9	57	18	0	99	5	12	0	4	8	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	92	92	60	60	92	92	92	60	92	60
Heavy Vehicles, %	22	7	2	2	1	0	2	2	2	0	2	0
Mvmt Flow	15	95	20	0	165	8	13	0	4	13	0	10
Major/Minor M	lajor1		I	Major2		ľ	Minor1		N	Minor2		
Conflicting Flow All	173	0	0	115	0	0	218	308	58	247	-	87
Stage 1	-	-	-	-	-	-	135	135	-	169	-	-
Stage 2	-	-	-	-	-	-	83	173	-	78	-	-
Critical Hdwy	4.54	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.42	-	-	2.22	-	-	3.52	4.02	3.32	3.5	_	3.3
Pot Cap-1 Maneuver	1267	-	-	1472	-	-	719	605	996	692	0	961
Stage 1	-	-	-	-	-	-	854	784	-	822	0	-
Stage 2	_	-	-	-	-	-	916	755	-	928	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1267	-	-	1472	-	-	705	598	996	683	-	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	705	598	-	683	_	-
Stage 1	_	-	-	-	-	-	844	775	-	812	-	-
Stage 2	_	-	_	-	_	-	906	755	-	913	-	-
- 										•		
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0			9.8			9.7		
HCM LOS							А			Α		
Minor Lane/Major Mvmt		NBLn11	VBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1 S	SBLn2	
Capacity (veh/h)		705	996	1267	-	-	1472	-		683	961	
HCM Lane V/C Ratio		0.019		0.012	-	-	-	-	-	0.02	0.01	
HCM Control Delay (s)		10.2	8.6	7.9	_	-	0	_	-	10.4	8.8	
HCM Lane LOS		В	A	A	_	_	A	-	-	В	A	
HCM 95th %tile Q(veh)		0.1	0	0	_	_	0	_	-	0.1	0	
		0.7								3.1		

Intersection						
Int Delay, s/veh	1.6					
		EDD	WDI	WDT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	^	4	7	^	10	7
Traffic Vol, veh/h	71	4	25	95	10	8
Future Vol, veh/h	71	4	25	95	10	8
Conflicting Peds, #/hr	_ 0	0	_ 0	_ 0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	4	27	103	11	9
NA - i /NAi	1-14		M-:0		A: A	
	lajor1		Major2		/linor1	
Conflicting Flow All	0	0	81	0	185	41
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	106	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1515	-	787	1021
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	907	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1515	_	773	1021
Mov Cap-2 Maneuver	_	_	-	_	773	-
Stage 1	_	_	_	_	935	_
Stage 2	_		_	_	891	_
Olage Z					001	
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.5		9.2	
HCM LOS					Α	
N. 1 /N. 1 N. A. 1		UDL 41	VIDI O	EDT	EDD	MAIDI
Minor Lane/Major Mvmt	ſ	VBLn11		EBT	EBR	WBL
Capacity (veh/h)			1021	-		1515
HCM Lane V/C Ratio		0.014		-	-	0.018
HCM Control Delay (s)		9.7	8.6	-	-	7.4
HCM Lane LOS		Α	Α	-	-	Α
HCM 95th %tile Q(veh)		0	0	-	-	0.1

Intersection						
Int Delay, s/veh	1.8					
		EDD	CET	CED	NI\A/I	NIVA/T
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		7	1			^
Traffic Vol, veh/h	0	52	79	0	0	119
Future Vol, veh/h	0	52	79	0	0	119
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	86	0	0	129
NA - : /NA: NA			1-!1	, and a	4-10	
	inor1		Major1		Major2	
Conflicting Flow All	-	43	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	1018	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	_	1018	_	-	_	-
Mov Cap-2 Maneuver	_	-	_		_	_
Stage 1	_	_	_	_	_	_
Stage 2	_	_	_	_	_	_
Olago Z	_	_				_
Approach	EB		SE		NW	
HCM Control Delay, s	8.7		0		0	
	0.1					
HCM LOS						
HCM LOS	Α					
		NIVA/T F	- DI 4	OFT	OED	
Minor Lane/Major Mvmt		NWT E		SET	SER	
Minor Lane/Major Mvmt Capacity (veh/h)		-	1018	SET -	SER -	
Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio		-	1018 0.056	SET - -	SER -	
Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	1018 0.056 8.7	-	-	
Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio		-	1018 0.056	-	- -	

Intersection												
Int Delay, s/veh 1.8												
Movement SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations		7		4		7	1		7	^	7	
Traffic Vol, veh/h 0	0	38	25	0	71	31	701	12	15	412	47	
Future Vol, veh/h 0	0	38	25	0	71	31	701	12	15	412	47	
Conflicting Peds, #/hr 0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized -	-	Stop	-	-	None	-	_	None	-	-	None	
Storage Length -	_	0	_	_	-	215	_	-	275	-	215	
Veh in Median Storage, # -	0	-	_	0	_		0	_	-	0		
Grade, % -	0	_	_	0	_	_	0	_	_	0	_	
Peak Hour Factor 92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, % 2	2	2	4	2	2	2	2	9	7	7	2	
,		41	27		77	34	762	13	16	448	51	
Mvmt Flow 0	0	41	21	0	11	34	702	13	16	448	51	
Major/Minor Minor2			Minor1		ı	Major1		N	Major2			
Conflicting Flow All -		224	1093	1368	388	499	0	0	775	0	0	
Stage 1 -		-	837	837	-	433	-	-	-	-	-	
Stage 2 -	_	_	256	531	_	_	_	_	_	_	_	
Critical Hdwy -		6.94	7.58	6.54	6.94	4.14			4.24	_		
	-		6.58	5.54	0.94	4.14		-				
Critical Hdwy Stg 1 -	-	-					-	-	-	-	-	
Critical Hdwy Stg 2 -	-	-	6.58	5.54	-	-	-	-	-	-	-	
Follow-up Hdwy -	-	3.32	3.54	4.02	3.32	2.22	-	-	2.27	-	-	
Pot Cap-1 Maneuver 0	0	*938	*192	159	611	1277	-	-	805	-	-	
Stage 1 0	0	-	*323	380	-	-	-	-	-	-	-	
Stage 2 0	0	-	*880	669	-	-	-	-	-	-	-	
Platoon blocked, %		1	1	1		1	-	-		-	-	
Mov Cap-1 Maneuver -	-	*938	*177	151	611	1277	-	-	805	-	-	
Mov Cap-2 Maneuver -	-	-	*177	151	-	-	-	-	-	-	-	
Stage 1 -	-	-	*314	370	-	-	-	-	-	-	-	
Stage 2 -	-	-	*825	655	-	-	-	-	-	-	-	
	_	_	_	_	_	_	_	_	_	_	_	_
Approach SE			NW			NE			SW			
HCM Control Delay, s 9			18.4			0.3			0.3			
HCM LOS A			C			3.0			3.0			
10M 200 /1												
Minor Lane/Major Mvmt	NEL	NET	NERN	IWLn1	SELn1	SWL	SWT	SWR				
VIII OI Lano/Iviajoi Iviviii			_	373	938	805	-	_				
	1277	-				0.02	_	_				
Capacity (veh/h)	1277 0.026		-	0.28	0.044							
Capacity (veh/h) HCM Lane V/C Ratio	0.026	-	-	0.28	0.044		_	_				
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	0.026 7.9	-	-	18.4	9	9.6	-	-				
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS	0.026 7.9 A	- - -	-	18.4 C	9 A	9.6 A	-	-				
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh)	0.026 7.9	-	-	18.4	9	9.6						
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS	0.026 7.9 A 0.1	- - -	-	18.4 C 1.1	9 A	9.6 A 0.1	-	-				n platoon

Intersection						
Int Delay, s/veh	3.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	VVDL	VVDK	ND1	NDK	SDL	<u>361</u>
Traffic Vol, veh/h	68	18	T 75	69	17	6 8
Future Vol, veh/h	68	18	75	69	17	68
Conflicting Peds, #/hr	00	0	0	09	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	0	<u>-</u>	145	150	-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	_	0	_	_	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	74	20	82	75	18	74
IVIVIII(I IOW	17	20	02	10	10	17
	Minor1		//ajor1		Major2	
Conflicting Flow All	192	82	0	0	157	0
Stage 1	82	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	797	978	-	-	1423	-
Stage 1	941	-	-	-	-	-
Stage 2	915	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	787	978	-	-	1423	-
Mov Cap-2 Maneuver	779	-	-	-	-	-
Stage 1	941	-	-	-	-	-
Stage 2	903	-	-	-	-	-
Approach	WB		NB		SB	
	9.8		0		1.5	
HCM Control Delay, s HCM LOS			U		1.5	
HCWI LOS	Α					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1V	VBLn2	SBL
Capacity (veh/h)		-	-	779	978	1423
HCM Lane V/C Ratio		-	-	0.095	0.02	0.013
HCM Control Delay (s)		-	-	10.1	8.8	7.6
HCM Lane LOS		-	-	В	Α	Α
HCM 95th %tile Q(veh))	-	-	0.3	0.1	0

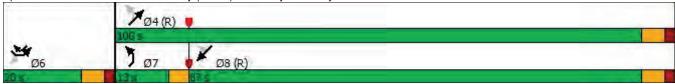
Intersection						
Int Delay, s/veh	0					
		W/PD	NDT	NDD	CDI	SBT
Movement Configurations	WBL	WBR	NBT	NBR	SBL	
Lane Configurations	7	7	1	٥	7	↑
Traffic Vol, veh/h	0	0	94	0	0	85 85
Future Vol, veh/h	0	0	94	0	0	00
Conflicting Peds, #/hr Sign Control		Stop	Free	Free	Free	Free
RT Channelized	Stop	None			riee -	None
Storage Length	0	0	-	None -	50	NOHE -
			0		50	
Veh in Median Storage Grade, %		-		-		0
	0	-	0	-	- 00	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	102	0	0	92
Major/Minor N	/linor1	N	Major1	I	Major2	
Conflicting Flow All	194	102	0	0	102	0
Stage 1	102	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	_	-	4.12	-
Critical Hdwy Stg 1	5.42	-	_	-	-	-
Critical Hdwy Stg 2	5.42	_	_	-	-	_
	3.518	3.318	_	-	2.218	-
Pot Cap-1 Maneuver	795	953	-	-	1490	_
Stage 1	922	-	-	-	-	-
Stage 2	932	_	-	-	-	_
Platoon blocked, %	002		_	_		_
Mov Cap-1 Maneuver	795	953	_	-	1490	_
Mov Cap-2 Maneuver	786	-	_	_	-	_
Stage 1	922	_	_	_	_	_
Stage 2	932	_	_	_	_	_
Staye 2	332		-	-	-	
Approach	WB		NB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS	Α					
Minor Lane/Major Mvm	t	NBT	NRRV	VBLn1V	VRI n2	SBL
	ι	INDI	INDIX	VDLIIIV -		1490
Capacity (veh/h) HCM Lane V/C Ratio		-	-		-	
			-	0	0	0
HCM Control Delay (s) HCM Lane LOS		-		A	A	A
HCM 95th %tile Q(veh)		-	-	A -	A -	0 0
		-	-	-	-	U

	4)	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	206	23	24	749	1013	129
Future Volume (vph)	206	23	24	749	1013	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			1
•	25	l I	160			l I
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
FIt Permitted	0.950		0.228			
Satd. Flow (perm)	1805	1615	433	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				137
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0.54	0.54	0.54	1%	1%	6%
Adj. Flow (vph)	219	24	26	797	1078	137
Shared Lane Traffic (%)	213	24	20	131	1070	101
Lane Group Flow (vph)	219	24	26	797	1078	137
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
						CI+Ex
Detector 1 Type	CI+Ex	Cl+Ex	Cl+Ex	CI+Ex	CI+Ex	CI+EX
Detector 1 Channel		0.0	0.0	0.0	0.0	0.0
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6	. 0.111	7	4	8	6
- Totected Filases	<u> </u>		'		0	0

	4)	7	1	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	100.0	87.0	20.0
Total Split (%)	16.7%	16.7%	10.8%	83.3%	72.5%	16.7%
Maximum Green (s)	14.0	14.0	9.5	94.0	81.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
• ,	6.0	6.0	3.5	6.0	6.0	6.0
Total Lost Time (s)	0.0	0.0	Lead	0.0		0.0
Lead/Lag					Lag	
Lead-Lag Optimize?	2.0	2.0	Yes	3.0	Yes 3.0	2.0
Vehicle Extension (s)	3.0	3.0	3.0			3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.0	44.0	00.5	0	0	440.7
Act Effct Green (s)	14.0	14.0	96.5	94.0	88.3	110.7
Actuated g/C Ratio	0.12	0.12	0.80	0.78	0.74	0.92
v/c Ratio	1.04	0.11	0.06	0.28	0.41	0.10
Control Delay	125.2	18.7	2.0	2.4	7.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	125.2	18.7	2.0	2.4	7.0	0.3
LOS	F	В	Α	Α	Α	Α
Approach Delay	114.7			2.4	6.2	
Approach LOS	F			Α	Α	
90th %ile Green (s)	14.0	14.0	6.3	94.0	84.2	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	6.0	94.0	84.5	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	5.8	94.0	84.7	14.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	94.0	94.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	~183	0	2	36	165	0
Queue Length 95th (ft)	#341	26	6	54	206	6
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180	301	700	250
Base Capacity (vph)	210	209	456	2799	2629	1416
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.11	0.06	0.28	0.41	0.10
Neudocu V/C Natio	1.04	0.11	0.00	0.20	0.41	0.10
Intersection Summary						

Area Type: Other Cycle Length: 120 Actuated Cycle Length: 120 Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green Natural Cycle: 60 Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.04 Intersection Signal Delay: 16.4 Intersection LOS: B Intersection Capacity Utilization 49.4% ICU Level of Service A Analysis Period (min) 15 ~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy



	۶	→	7	1	4	•	1	1	1	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 1>		7	* 1>		7	↑	7	*	T _P	
Traffic Volume (vph)	104	609	29	159	727	51	61	77	87	60	117	112
Future Volume (vph)	104	609	29	159	727	51	61	77	87	60	117	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180		0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170			180			105			120		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.990				0.850		0.927	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3551	0	1787	3541	0	1770	1900	1568	1703	1744	0
FIt Permitted	0.278			0.325			0.376			0.704		
Satd. Flow (perm)	528	3551	0	611	3541	0	700	1900	1568	1262	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			7				93		34	
Link Speed (mph)		45			45			30			35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	3%	6%	0%	2%
Adj. Flow (vph)	111	648	31	169	773	54	65	82	93	64	124	119
Shared Lane Traffic (%)								<u> </u>				
Lane Group Flow (vph)	111	679	0	169	827	0	65	82	93	64	243	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12	<u> </u>		12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane											Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	
Detector 1 Channel	· ·				· ·					· ·		
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

	۶	-	*	1	-	•	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	25.0	55.0		25.0	55.0		15.0	25.0	25.0	15.0	25.0	
Total Split (%)	20.8%	45.8%		20.8%	45.8%		12.5%	20.8%	20.8%	12.5%	20.8%	
Maximum Green (s)	21.5	49.0		21.5	49.0		11.5	19.0	21.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	71.3	60.4		74.7	62.2		33.7	23.7	39.7	33.7	23.7	
Actuated g/C Ratio	0.59	0.50		0.62	0.52		0.28	0.20	0.33	0.28	0.20	
v/c Ratio	0.28	0.38		0.35	0.45		0.24	0.22	0.16	0.17	0.65	
Control Delay	10.4	19.2		10.9	18.3		32.7	44.5	6.6	31.6	48.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	10.4	19.2		10.9	18.3		32.7	44.5	6.6	31.6	48.8	
LOS	В	В		В	В		С	D	Α	С	D	
Approach Delay		17.9			17.0			26.6			45.2	
Approach LOS		В			В			С			D	
90th %ile Green (s)	10.4	57.6		12.9	60.1		11.5	19.0	12.9	11.5	19.0	
90th %ile Term Code	Gap	Coord		Gap	Coord		Max	MaxR	Gap	Max	MaxR	
70th %ile Green (s)	9.1	59.4		11.1	61.4		9.8	20.6	11.1	9.9	20.7	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	8.3	60.5		10.0	62.2		8.6	21.8	10.0	8.7	21.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
30th %ile Green (s)	7.5	61.6		8.9	63.0		7.5	23.0	8.9	7.5	23.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
10th %ile Green (s)	6.4	63.1		7.4	64.1		0.0	34.0	7.4	0.0	34.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	31	162		49	182		36	55	0	36	154	
Queue Length 95th (ft)	54	219		77	220		72	106	38	71	#288	
Internal Link Dist (ft)		812			993			776			369	
Turn Bay Length (ft)	180			180	405=		110		110	195		
Base Capacity (vph)	565	1791		600	1837		308	375	721	413	371	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.20	0.38		0.28	0.45		0.21	0.22	0.13	0.15	0.65	
Intersection Summary												

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

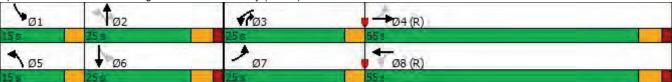
Intersection Signal Delay: 22.0 Intersection Capacity Utilization 61.3% ICU Level of Service B

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	10.5											
Intersection LOS	В											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		7	* 1>		7	1		7	1	
Traffic Vol, veh/h	75	111	73	35	140	53	43	89	5	18	86	42
Future Vol, veh/h	75	111	73	35	140	53	43	89	5	18	86	42
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	0	0	0	0	1	0	0	0	0	0	0	0
Mvmt Flow	84	125	82	39	157	60	48	100	6	20	97	47
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	3	3
HCM Control Delay	10.3	10.2	10.7	11.1
HCM LOS	В	В	В	В

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	95%	0%	100%	34%	0%	100%	47%	0%	67%	
Vol Right, %	0%	5%	0%	0%	66%	0%	0%	53%	0%	33%	
Sign Control	Stop										
Traffic Vol by Lane	43	94	75	74	110	35	93	100	18	128	
LT Vol	43	0	75	0	0	35	0	0	18	0	
Through Vol	0	89	0	74	37	0	93	47	0	86	
RT Vol	0	5	0	0	73	0	0	53	0	42	
Lane Flow Rate	48	106	84	83	124	39	105	112	20	144	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.094	0.19	0.158	0.144	0.198	0.075	0.185	0.185	0.039	0.251	
Departure Headway (Hd)	7.03	6.491	6.751	6.245	5.774	6.823	6.334	5.939	7.016	6.284	
Convergence, Y/N	Yes										
Cap	509	551	530	573	619	524	565	602	509	570	
Service Time	4.789	4.25	4.504	3.998	3.527	4.574	4.085	3.691	4.772	4.041	
HCM Lane V/C Ratio	0.094	0.192	0.158	0.145	0.2	0.074	0.186	0.186	0.039	0.253	
HCM Control Delay	10.5	10.8	10.8	10.1	10	10.1	10.5	10	10.1	11.2	
HCM Lane LOS	В	В	В	В	Α	В	В	Α	В	В	
HCM 95th-tile Q	0.3	0.7	0.6	0.5	0.7	0.2	0.7	0.7	0.1	1	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	**		ኘ	† 1>			4	7	7		7
Traffic Vol, veh/h	7	87	47	0	115	4	37	0	12	8	0	9
Future Vol, veh/h	7	87	47	0	115	4	37	0	12	8	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	92	92	82	82	92	92	92	82	92	82
Heavy Vehicles, %	0	1	2	2	2	0	2	2	2	0	2	0
Mvmt Flow	9	106	51	0	140	5	40	0	13	10	0	11
Major/Minor N	/lajor1			Major2		<u> </u>	Minor1		<u> </u>	Minor2		
Conflicting Flow All	145	0	0	157	0	0	220	295	79	214	-	73
Stage 1	-	-	-	-	-	-	150	150	-	143	-	-
Stage 2	-	-	-	-	-	-	70	145	-	71	-	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1450	-	-	1420	-	-	717	615	965	729	0	981
Stage 1	-	-	-	-	-	-	837	772	-	851	0	-
Stage 2	-	-	-	-	-	-	932	776	-	936	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1450	-	-	1420	-	-	706	611	965	716	-	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	706	611	-	716	-	-
Stage 1	-	-	-	-	-	-	832	767	-	846	-	-
Stage 2	-	-	-	-	-	-	922	776	-	918	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			0			10			9.4		
HCM LOS							В			Α		
Minor Lane/Major Mvmt	t N	NBLn1 I	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1	SBLn2	
Capacity (veh/h)		706	965	1450	-	-	1420	-	-		981	
HCM Lane V/C Ratio			0.014		_	_	-	_	_	0.014		
HCM Control Delay (s)		10.4	8.8	7.5	-	-	0	-	-		8.7	
HCM Lane LOS		В	А	Α	-	-	A	-	-	В	Α	
HCM 95th %tile Q(veh)		0.2	0	0	-	-	0	-	-	0	0	

Intersection						
Int Delay, s/veh	2.7					
		EDD	WDI	WDT	NDI	NDD
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	10 5	40	7	^	7	74
Traffic Vol, veh/h	105	12	55	97	22	24
Future Vol, veh/h	105	12	55	97	22	24
Conflicting Peds, #/hr	0	0	0	_ 0	0	0
3	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage,	# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	13	60	105	24	26
Major/Minor	-14	_	Mais = 0		Alia a ma	
	ajor1		Major2		/linor1	
Conflicting Flow All	0	0	127	0	294	64
Stage 1	-	-	-	-	121	-
Stage 2	-	-	-	-	173	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1457	-	673	987
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	840	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	_	1457	-	645	987
Mov Cap-2 Maneuver	-	_		_	645	-
Stage 1	_	_	_	_	891	_
Stage 2	_		_		806	_
Glaye Z	_	_	_		000	_
Approach	EB		WB		NB	
HCM Control Delay, s	0		2.7		9.7	
HCM LOS					Α	
NAII/NA ' NA '		UDL 4	UDL C	CDT	EDD	MDI
Minor Lane/Major Mvmt	ſ	VBLn11		EBT	EBR	WBL
Capacity (veh/h)		645	987	-		1457
HCM Lane V/C Ratio			0.026	-	-	0.041
HCM Control Delay (s)		10.8	8.7	-	-	7.6
HCM Lane LOS		В	Α	-	-	Α
HCM 95th %tile Q(veh)		0.1	0.1	-	-	0.1

Intersection						
Int Delay, s/veh	2.6					
		EDD	OFT	OFF	N IVA/I	NINA/ T
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		7	1			^
Traffic Vol, veh/h	0	109	129	0	0	153
Future Vol, veh/h	0	109	129	0	0	153
Conflicting Peds, #/hr	0	0	_ 0	0	0	_ 0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-		-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, a		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	118	140	0	0	166
Major/Minor Mi	inor1	N	laior1	N	/aior?	
			/lajor1		/lajor2	
Conflicting Flow All	-	70	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	978	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	978	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
			0=		A 11 4 7	
Approach	EB		SE		NW	
HCM Control Delay, s	9.2		0		0	
HCM LOS	Α					
Minor Lane/Major Mvmt		NWT E	-RI n1	SET	SER	
				OLI	OLIN	
Capacity (veh/h) HCM Lane V/C Ratio		-	978 0.121		-	
				-	-	
HCM Control Delay (s)		-	9.2	-	-	
HCM Lane LOS		-	Α	-	-	
HCM 95th %tile Q(veh)		-	0.4	-	-	

Intersection													
Int Delay, s/veh	3.5												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations			7		4		7	1		7	^	7	
Traffic Vol, veh/h	0	0	75	33	0	55	65	699	31	59	877	99	
Future Vol, veh/h	0	0	75	33	0	55	65	699	31	59	877	99	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	Stop	-	-	None	-	-		-	-	None	
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215	
Veh in Median Storage, #	‡ -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	0	2	0	2	1	0	0	1	2	
Mvmt Flow	0	0	82	36	0	60	71	760	34	64	953	108	
Major/Minor Mii	nor2		ľ	Minor1		ı	Major1		N	Major2			
Conflicting Flow All	-	-	477	1524	2108	397	1061	0	0	794	0	0	
Stage 1	-	_	-	919	919	-	-	-	-	-	-	-	
Stage 2	_	_	_	605	1189	_	_	_	_	_	_	_	
Critical Hdwy	_	_	6.94	7.5	6.54	6.9	4.14	_	_	4.1	_	_	
Critical Hdwy Stg 1	_	_	-	6.5	5.54	-	- 1.17	<u>-</u>	_	-	_	<u>-</u>	
Critical Hdwy Stg 2	_	_	_	6.5	5.54	_	_	_	_	_	_	_	
Follow-up Hdwy	_	_	3.32	3.5	4.02	3.3	2.22	_	_	2.2	_	_	
Pot Cap-1 Maneuver	0	0	*721	*91	52	608	1004	_	_	836	_	_	
Stage 1	0	0	121	*296	348	-	-	_	_	-	_	_	
Stage 2	0	0		*683	452	_					_		
Platoon blocked, %	U	U	1	1	1		1	_	_		_	_	
Mov Cap-1 Maneuver	_	_	*721	*72	44	608	1004	_	_	836	_	_	
Mov Cap-1 Maneuver	_	_	121	*72	44	-	-	_	_	-	_		
Stage 1	_			*275	323	_					_		
Stage 2		_		*560	417		_		_	-	_		
Slaye Z	-	-	-	500	41/	_	-	-	-	-	-	-	
Approach	SE			NW			NE			SW			
	10.6			56.3			0.7			0.6			
HCM LOS	В			50.5 F			0.1			0.0			
TOW LOO	D			'									
Minor Lane/Major Mvmt		NEL	NET	NERN	WLn1	SFI n1	SWL	SWT	SWR				
Capacity (veh/h)		1004	1121	- 11-111	160	721	836	J 1 1 1	-				
HCM Lane V/C Ratio		0.07		_		0.113		-	_				
HCM Control Delay (s)		8.9	-		56.3	10.6	9.7	-	-				
HCM Lane LOS		0.9 A		-	50.5 F		9.7 A		-				
HCM 95th %tile Q(veh)		0.2	-	-	3.2	0.4	0.2	-					
`		U.Z			3.2	0.4	U.Z		-				
Notes ~: Volume exceeds capac													
		A -		eeds 30		+: Comp			C 1	4 A II			n platoon

Intersection 3.4
Movement WBL WBR NBT NBR SBL SBT Lane Configurations 1
Lane Configurations 7 4 7 4 Traffic Vol, veh/h 125 31 106 125 31 163 Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Lane Configurations 7 4 7 4 Traffic Vol, veh/h 125 31 106 125 31 163 Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Traffic Vol, veh/h 125 31 106 125 31 163 Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free Free
Future Vol, veh/h 125 31 106 125 31 163 Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 Sign Control Stop Stop Free Free Free Free
Sign Control Stop Stop Free Free Free Free
<u> </u>
RT Channelized - None - None - None
111 0110111011200 110110 110110
Storage Length 0 0 - 145 150 -
Veh in Median Storage, # 0 - 0 0
Grade, % 0 - 0 - 0
Peak Hour Factor 92 92 92 92 92 92
Heavy Vehicles, % 2 2 2 2 2 2
Mvmt Flow 136 34 115 136 34 177
Major/Minor Minor1 Major1 Major2
Conflicting Flow All 360 115 0 0 251 0
•
Stage 2 245
Critical Hdwy 6.42 6.22 4.12 -
Critical Hdwy Stg 1 5.42
Critical Hdwy Stg 2 5.42
Follow-up Hdwy 3.518 3.318 2.218 -
Pot Cap-1 Maneuver 639 937 1314 -
Stage 1 910
Stage 2 796
Platoon blocked, %
Mov Cap-1 Maneuver 622 937 1314 -
Mov Cap-1 Maneuver 659
<u> </u>
Stage 1 910
Stage 2 775
Approach WB NB SB
HCM Control Delay, s 11.3 0 1.2
HCM LOS B
I IOWI LOS D
Minor Lane/Major Mymt NBT NBRWBLn1WBLn2 SBI
Minor Lane/Major Mvmt NBT NBRWBLn1WBLn2 SBL Capacity (veh/h) - 659 937 1314
Capacity (veh/h) 659 937 1314
Capacity (veh/h) 659 937 1314 HCM Lane V/C Ratio - 0.206 0.036 0.026
Capacity (veh/h) - - 659 937 1314 HCM Lane V/C Ratio - - 0.206 0.036 0.026 HCM Control Delay (s) - 11.9 9 7.8
Capacity (veh/h) 659 937 1314 HCM Lane V/C Ratio - 0.206 0.036 0.026

Traffic Vol, veh/h
Movement
Traffic Vol, veh/h
Traffic Vol, veh/h 0 0 137 0 0 194 Future Vol, veh/h 0 0 137 0 0 194 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Pa 2
Future Vol, veh/h 0 0 137 0 0 194 Conflicting Peds, #/hr 0 0 0 0 0 0 0 Sign Control Stop Stop Free Page 92 92 92
Conflicting Peds, #/hr 0 0 0 0 0 0 Sign Control Stop Stop Free Rone None - 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0
Sign Control Stop Stop Free Rone Storage Length 0 2 1 0 0 0 1 0 0 1 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 <
RT Channelized - None - None - None Storage Length 0 0 - 50 - Veh in Median Storage, # 0 - 0 0 - 0 Grade, % 0 - 0 0 0 0 0 Peak Hour Factor 92
Storage Length 0 0 - - 50 - Veh in Median Storage, # 0 - 0 - 0 - 0 Grade, % 0 - 0 - - 0 Peak Hour Factor 92 92 92 92 92 92 Heavy Vehicles, % 2
Veh in Median Storage, # 0 - 0 - - 0 Grade, % 0 - 0 - - 0 Peak Hour Factor 92 92 92 92 92 92 Heavy Vehicles, % 2 1 4 9 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0 149 0 0
Grade, % 0 - 0 - - 0 Peak Hour Factor 92
Peak Hour Factor 92 143 92 93 94
Meavy Vehicles, % 2 2 2 2 2 2 2 2 Mvmt Flow 0 0 149 0 0 0 211
Mvmt Flow 0 0 149 0 0 211 Major/Minor Minor1 Major1 Major2 Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 - - - - - - Stage 2 211 -
Major/Minor Minor1 Major1 Major2 Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Conflicting Flow All 360 149 0 0 149 0 Stage 1 149 -
Stage 1 149 -
Stage 2 211 - - - - Critical Hdwy 6.42 6.22 - 4.12 - Critical Hdwy Stg 1 5.42 - - - - Critical Hdwy Stg 2 5.42 - - - - Follow-up Hdwy 3.518 3.318 - - 2.218 - Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - - Stage 2 824 - - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Critical Hdwy 6.42 6.22 - 4.12 - Critical Hdwy Stg 1 5.42 - - - - Critical Hdwy Stg 2 5.42 - - - - Follow-up Hdwy 3.518 3.318 - - 2.218 - Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - - Stage 2 824 - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - Stage 1 879 - - - - - Stage 2 824 - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Critical Hdwy Stg 1 5.42 - - - - Critical Hdwy Stg 2 5.42 - - - - Follow-up Hdwy 3.518 3.318 - - 2.218 - Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - Stage 1 879 - - - - - Stage 2 824 - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Critical Hdwy Stg 2 5.42 -
Follow-up Hdwy 3.518 3.318 2.218 - Pot Cap-1 Maneuver 639 898 - 1432 - Stage 1 879 Stage 2 824 Platoon blocked, % Mov Cap-1 Maneuver 639 898 - 1432 - Mov Cap-2 Maneuver 679 Stage 1 879 Stage 2 824 Approach WB NB SB HCM Control Delay, s 0 0 0
Pot Cap-1 Maneuver 639 898 - - 1432 - Stage 1 879 - - - - Stage 2 824 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - Stage 1 879 - - - - - Stage 2 824 - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Stage 1 879 -
Stage 2 824 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - </td
Stage 2 824 - - - - Platoon blocked, % - - - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 - - - - - - Stage 1 879 - - - - - - Stage 2 824 - - - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Platoon blocked, % - - - Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 -
Mov Cap-1 Maneuver 639 898 - - 1432 - Mov Cap-2 Maneuver 679 -
Mov Cap-2 Maneuver 679 -
Stage 1 879 -
Stage 2 824 - - - - Approach WB NB SB HCM Control Delay, s 0 0 0
Approach WB NB SB HCM Control Delay, s 0 0 0
HCM Control Delay, s 0 0 0
HCM Control Delay, s 0 0 0
,
HCM LOS A
Minor Lane/Major Mvmt NBT NBRWBLn1WBLn2 SBL
·
Capacity (veh/h) 1432
HCM Lane V/C Ratio
HCM Control Delay (s) 0 0 0
HCM Lane LOS A A A
HCM 95th %tile Q(veh) 0

	4	1	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	**	7
Traffic Volume (vph)	275	22	19	697	707	161
Future Volume (vph)	275	22	19	697	707	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
	0	1	100			250
Storage Lanes			· ·			I
Taper Length (ft)	25	4.00	160	0.05	0.05	4.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.850				0.850
FIt Protected	0.950		0.950			
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.336			
Satd. Flow (perm)	1787	1615	638	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				169
Link Speed (mph)	40			45	45	.00
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	289	23	20	734	744	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	289	23	20	734	744	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	1.00	9	1.00	1.00	1.00	9
Number of Detectors	15	1	10	2	2	1
		•	•			•
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	0.0	0.0	0.0	94	94	0.0
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel				0.0		
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

	4	1	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase				<u>'</u>		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	20.0	20.0	13.0	80.0	67.0	20.0
Total Split (%)	20.0%	20.0%	13.0%	80.0%	67.0%	20.0%
Maximum Green (s)	14.0	14.0	9.5	74.0	61.0	14.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag	0.0	0.0	Lead	0.0		0.0
•					Lag Yes	
Lead-Lag Optimize?	2.0	2.0	Yes 3.0	3.0	3.0	3.0
Vehicle Extension (s)	3.0 May	3.0				
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)	44.0	44.0	70 5	0	70.0	00.0
Act Effct Green (s)	14.0	14.0	76.5	74.0	70.2	93.8
Actuated g/C Ratio	0.14	0.14	0.76	0.74	0.70	0.94
v/c Ratio	1.16	0.09	0.04	0.28	0.30	0.12
Control Delay	145.6	16.0	1.6	2.2	6.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	145.6	16.0	1.6	2.2	6.5	0.4
LOS	F	В	Α	Α	Α	Α
Approach Delay	136.1			2.2	5.4	
Approach LOS	F			Α	Α	
90th %ile Green (s)	14.0	14.0	6.2	74.0	64.3	14.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	14.0	14.0	5.9	74.0	64.6	14.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	14.0	14.0	0.0	74.0	74.0	14.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	~219	0	1	29	68	0
Queue Length 95th (ft)	#381	23	m3	39	133	7
Internal Link Dist (ft)	208	20	1110	691	759	,
Turn Bay Length (ft)	200		180	001	100	250
Base Capacity (vph)	250	245	598	2644	2508	1453
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.09	0.03	0.28	0.30	0.12
	1.10	0.09	0.03	0.20	0.50	0.12
Intersection Summary						

Area Type: Other Cycle Length: 100 Actuated Cycle Length: 100 Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green Natural Cycle: 55 Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.16 Intersection Signal Delay: 24.8 Intersection LOS: C Intersection Capacity Utilization 44.8% ICU Level of Service A Analysis Period (min) 15 ~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. m Volume for 95th percentile queue is metered by upstream signal. Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy Ø4 (R)

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	* 13		7	* 1>		*	↑	7	*	T _P	
Traffic Volume (vph)	134	643	20	106	520	59	39	55	65	69	77	126
Future Volume (vph)	134	643	20	106	520	59	39	55	65	69	77	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	180		0	180	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	110		110	195		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	170		· ·	180		· ·	105		•	120		J
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.995	0.00	1.00	0.985	0.00	1.00	1.00	0.850	1.00	0.907	1.00
Flt Protected	0.950	0.000		0.950	0.000		0.950		0.000	0.950	0.001	
Satd. Flow (prot)	1770	3592	0	1805	3524	0	1805	1900	1568	1805	1723	0
FIt Permitted	0.342	0002		0.311	0021		0.592	1000	1000	0.659	1720	
Satd. Flow (perm)	637	3592	0	591	3524	0	1125	1900	1568	1252	1723	0
Right Turn on Red	001	0002	Yes	001	00Z-T	Yes	1120	1500	Yes	1202	1720	Yes
Satd. Flow (RTOR)		3	103		13	103			71		73	103
Link Speed (mph)		45			45			30	7 1		35	
Link Distance (ft)		892			1073			856			449	
Travel Time (s)		13.5			16.3			19.5			8.7	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
	2%		0.90	0.90	1%	0.90	0.90		3%	0.90	0.90	
Heavy Vehicles (%)	140	0%	21			61		0%	5% 68	72		0%
Adj. Flow (vph)	140	670	21	110	542	01	41	57	00	12	80	131
Shared Lane Traffic (%)	440	004	_	440	000	0	4.4	F7	C0	70	044	0
Lane Group Flow (vph)	140	691	0	110	603	0	41	57	68	72	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane	4.00	4.00	4.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	Yes	4.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	7	4		3	8		5	2	3	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	9.5	24.0		9.5	24.0		9.5	24.0	9.5	10.5	24.0	
Total Split (s)	20.0	40.0		20.0	40.0		15.0	25.0	20.0	15.0	25.0	
Total Split (%)	20.0%	40.0%		20.0%	40.0%		15.0%	25.0%	20.0%	15.0%	25.0%	
Maximum Green (s)	16.5	34.0		16.5	34.0		11.5	19.0	16.5	11.5	19.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.5	4.0	3.5	3.5	4.0	
All-Red Time (s)	0.0	2.0		0.0	2.0		0.0	2.0	0.0	0.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	3.5	6.0		3.5	6.0		3.5	6.0	3.5	3.5	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max		None	Max	None	None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	53.9	42.2		52.1	41.2		32.6	24.2	38.5	35.3	27.2	
Actuated g/C Ratio	0.54	0.42		0.52	0.41		0.33	0.24	0.38	0.35	0.27	
v/c Ratio	0.31	0.46		0.27	0.41		0.10	0.12	0.11	0.15	0.40	
Control Delay	12.3	22.1		12.3	22.6		21.5	33.1	5.4	22.0	23.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	12.3	22.1		12.3	22.6		21.5	33.1	5.4	22.0	23.4	
LOS	В	С		В	С		С	С	Α	С	С	
Approach Delay		20.5			21.0			18.9			23.1	
Approach LOS		С			С			В			С	
90th %ile Green (s)	12.0	39.9		10.6	38.5		8.8	19.8	10.6	10.7	21.7	
90th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
70th %ile Green (s)	10.3	41.3		9.2	40.2		7.7	21.4	9.2	9.1	22.8	
70th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
50th %ile Green (s)	9.2	42.2		8.3	41.3		6.9	22.4	8.3	8.1	23.6	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	MaxR	Gap	Gap	MaxR	
30th %ile Green (s)	8.1	43.1		7.4	42.4		0.0	23.4	7.4	7.1	34.0	
30th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Gap	MaxR	
10th %ile Green (s)	6.7	44.3		6.2	43.8		0.0	34.0	6.2	0.0	34.0	
10th %ile Term Code	Gap	Coord		Gap	Coord		Skip	MaxR	Gap	Skip	MaxR	
Queue Length 50th (ft)	40	161		31	122		17	29	0	30	73	
Queue Length 95th (ft)	69	221		60	181		40	65	26	61	148	
Internal Link Dist (ft)		812			993			776			369	
Turn Bay Length (ft)	180			180			110		110	195		
Base Capacity (vph)	546	1516		534	1460		479	459	770	518	522	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.26	0.46		0.21	0.41		0.09	0.12	0.09	0.14	0.40	
Intersection Summary												

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 20.9

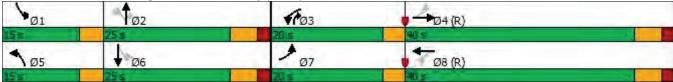
Intersection LOS: C

Intersection Capacity Utilization 56.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: McHugh Rd & Veterans Pkwy (US 34)



Intersection												
Intersection Delay, s/veh	10											
Intersection LOS	Α											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lana Configurations	*	A.T.		*	A.T.		*	Φ.		*	Φ.	

Lane Configurations	7	* 1>		1	* 1>	·	7	P		7	T _P	
Traffic Vol, veh/h	58	139	76	28	172	49	61	68	1	30	47	20
Future Vol, veh/h	58	139	76	28	172	49	61	68	1	30	47	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	1	4	0	2	0	0	0	0
Mvmt Flow	63	151	83	30	187	53	66	74	1	33	51	22
Number of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	3			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			3		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			3			3		
HCM Control Delay	9.9			10.1			10.3			10		
HCM LOS	Α			В			В			Α		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	0%	100%	0%	
Vol Thru, %	0%	99%	0%	100%	38%	0%	100%	54%	0%	70%	
Vol Right, %	0%	1%	0%	0%	62%	0%	0%	46%	0%	30%	
Sign Control	Stop										
Traffic Vol by Lane	61	69	58	93	122	28	115	106	30	67	
LT Vol	61	0	58	0	0	28	0	0	30	0	
Through Vol	0	68	0	93	46	0	115	57	0	47	
RT Vol	0	1	0	0	76	0	0	49	0	20	
Lane Flow Rate	66	75	63	101	133	30	125	116	33	73	
Geometry Grp	6	6	6	6	6	6	6	6	6	6	
Degree of Util (X)	0.127	0.133	0.114	0.168	0.206	0.056	0.21	0.186	0.063	0.127	
Departure Headway (Hd)	6.885	6.408	6.524	6.019	5.58	6.568	6.08	5.806	6.988	6.278	
Convergence, Y/N	Yes										
Cap	520	559	550	596	644	546	591	618	513	571	
Service Time	4.626	4.149	4.26	3.755	3.316	4.304	3.816	3.542	4.731	4.02	
HCM Lane V/C Ratio	0.127	0.134	0.115	0.169	0.207	0.055	0.212	0.188	0.064	0.128	
HCM Control Delay	10.6	10.1	10.1	10	9.8	9.7	10.4	9.9	10.2	9.9	
HCM Lane LOS	В	В	В	Α	А	А	В	Α	В	Α	
HCM 95th-tile Q	0.4	0.5	0.4	0.6	0.8	0.2	0.8	0.7	0.2	0.4	

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^		7	44			4	7	7		7
Traffic Vol, veh/h	1	100	70	0	130	0	63	0	21	0	0	0
Future Vol, veh/h	1	100	70	0	130	0	63	0	21	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-		-	-	None
Storage Length	150	-	-	140	-	-	-	-	0	100	-	0
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	92	92	85	85	92	92	92	85	92	85
Heavy Vehicles, %	0	0	2	2	3	0	2	2	2	0	2	0
Mvmt Flow	1	118	76	0	153	0	68	0	23	0	0	0
Major/Minor N	/lajor1			Major2		N	/linor1		N	Minor2		
Conflicting Flow All	153	0	0	194	0	0	235	311	97	214	_	77
Stage 1	-	-	-	-	-	-	158	158	-	153	-	-
Stage 2	-	-	-	-	-	-	77	153	-	61	-	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.54	6.54	6.94	7.5	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.5	-	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.52	4.02	3.32	3.5	-	3.3
Pot Cap-1 Maneuver	1440	-	-	1377	-	-	700	602	940	729	0	975
Stage 1	-	-	-	-	-	-	828	766	-	840	0	-
Stage 2	-	-	-	-	-	-	923	770	-	949	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1440	-	-	1377	-	-	699	601	940	711	-	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	699	601	-	711	-	-
Stage 1	-	-	-	-	-	-	827	765	-	839	-	-
Stage 2	-	-	-	-	-	-	923	770	-	925	-	-
, i												
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			10.3			0		
HCM LOS							В			Α		
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1 S	SBL _{n2}	
Capacity (veh/h)		699	940	1440	-	-	1377	-	-	-	-	
HCM Lane V/C Ratio					-	-	-	-	-	-	-	
HCM Control Delay (s)		10.7	8.9	7.5	-	-	0	-	-	0	0	
HCM Lane LOS		В	Α	A	-	-	A	-	-	A	A	
HCM 95th %tile Q(veh)		0.3	0.1	0	-	-	0	-	-	-	-	

Intersection						
Int Delay, s/veh	3.5					
	EBT	EBR	\\/DI	WDT	NDL	NBR
		EBK	WBL	WBT	NBL	
Lane Configurations	^	20	70	^	1	10
Traffic Vol, veh/h	111	20	79	100	31	42
Future Vol, veh/h	111	20	79	100	31	42
Conflicting Peds, #/hr	0	_ 0	0	_ 0	0	0
	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-		-	None
Storage Length	-	-	120	-	0	0
Veh in Median Storage, #		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	22	86	109	34	46
Major/Minor Ma	nior1	N	Major?	ı	/linor1	
	ajor1		Major2			70
Conflicting Flow All	0	0	143	0	359	72
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	227	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1437	-	613	975
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1437	-	576	975
Mov Cap-2 Maneuver	-	-	-	-	576	-
Stage 1	_	-	-	-	880	-
Stage 2	-	-	-	_	742	_
01030 =						
Approach	EB		WB		NB	
HCM Control Delay, s	0		3.4		10	
HCM LOS					В	
Minor Lane/Major Mvmt	N	NBLn11	VIRI n2	EBT	EBR	WBL
Capacity (veh/h)		576	975 0.047	-		1437
HCM Control Dolay (a)				-	-	0.06
HCM Control Delay (s)		11.6	8.9	-	-	7.7
HCM Lane LOS		В	A	-	-	A
HCM 95th %tile Q(veh)		0.2	0.1	-	-	0.2

Intersection						
Int Delay, s/veh	3					
		EDD	CET	CED	NI/A/I	NI\A/T
Movement	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations		7	1			^
Traffic Vol, veh/h	0	153	153	0	0	180
Future Vol, veh/h	0	153	153	0	0	180
Conflicting Peds, #/hr	0	0	0	0	0	0
	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage,		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	166	166	0	0	196
NA - : /NA: NA	!4		1-11	, and a	4-10	
	inor1		/lajor1		//ajor2	
Conflicting Flow All	-	83	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	960	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	960	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	_	-	_
Stage 1	_	_	-	_	-	_
Stage 2	_	_	_	_	_	_
Olago Z	_	_				
Approach	EB		SE		NW	
HCM Control Delay, s	9.5		0		0	
HCM LOS	Α					
NA' - 1 /NA - 1 - NA 1		AUA/T F	-DL 4	OFT	٥٥٥	
Minor Lane/Major Mvmt		NWT E		SET	SER	
Capacity (veh/h)		-		-	-	
HCM Lane V/C Ratio		-	0.173	-	-	
HCM Control Delay (s)		-	9.5	-	-	
HCM Lane LOS		-	Α	-	-	
HCM 95th %tile Q(veh)		-	0.6	-	-	
, ,						

Intersection													
Int Delay, s/veh	2.2												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR	
Lane Configurations			7		4		*	1		7	**	7	
Traffic Vol, veh/h	0	0	102	21	0	36	89	654	36	35	555	139	
Future Vol, veh/h	0	0	102	21	0	36	89	654	36	35	555	139	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	0	-	-	-	215	-	-	275	-	215	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	93	92	93	92	93	93	93	93	92	
Heavy Vehicles, %	2	2	2	5	2	0	2	1	0	0	1	2	
Mvmt Flow	0	0	111	23	0	39	97	703	39	38	597	151	
Major/Minor N	/linor2		N	Minor1			Major1		N	/aior?			
					4744					Major2			
Conflicting Flow All	-	-	299	1292 917	1741	371	748	0	0	742	0	0	
Stage 1	-	-	-		917	-	-	-	-	-	-	-	
Stage 2	-	-	-	375	824	-	-	-	-	-	-	-	
Critical Hdwy	-	-	6.94	7.6	6.54	6.9	4.14	-	-	4.1	-	-	
Critical Hdwy Stg 1	-	-	-	6.6	5.54	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	- 2.20	6.6	5.54	-	- 0.00	-	-	-	-	-	
Follow-up Hdwy	-	-	3.32	3.55	4.02	3.3	2.22	-	-	2.2	-	-	
Pot Cap-1 Maneuver	0	0	*863	*135	91	632	1117	-	-	874	-	-	
Stage 1	0	0	-	*287	349	-	-	-	-	-	-	-	
Stage 2	0	0	-	*807	546	-	-	-	-	-	-	-	
Platoon blocked, %			*000	*100	1	620	1	-	-	074	-	-	
Mov Cap-1 Maneuver	-	-	*863	*106	80	632	1117	-	-	874	-	-	
Mov Cap-2 Maneuver	-	-	-	*106	80	-	-	-	-	-	-	-	
Stage 1	-	-	-	*262 *673	319 523	-	-	-	-	-	-	-	
Stage 2	-	-	-	0/3	523	-	-	-	-	-	-	-	
Approach	SE			NW			NE			SW			
HCM Control Delay, s	9.8			27.2			1			0.4			
HCM LOS	Α			D									
Minor Lane/Major Mvmt	ŀ	NEL	NET	NERN	IWLn1	SFLn1	SWL	SWT	SWR				
Capacity (veh/h)		1117	-	142141	223	863	874	-	-				
HCM Lane V/C Ratio		0.087	-	_		0.128		-	_				
HCM Control Delay (s)		8.5	-		27.2	9.8	9.3	-					
HCM Lane LOS		Α	_	_	D	9.0 A	9.5 A	_	_				
HCM 95th %tile Q(veh)		0.3		_	1.1	0.4	0.1						
` ′		0.0			1.1	0.4	0.1						
Votes													
: Volume exceeds cap	acity	\$: De	lay exc	eeds 30	00s	+: Com	putation	Not De	efined	*: All	major v	olume ii	n platoon

Intersection						
Int Delay, s/veh	4.3					
		WDD	NDT	NDD	CDI	CDT
Movement Configurations	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	161	10	01	157	30	112
Traffic Vol, veh/h	161	40 40	91	157	38 38	113 113
Future Vol, veh/h Conflicting Peds, #/hr	161	40	91	157	38	0
				Free	Free	Free
Sign Control RT Channelized	Stop -	Stop	Free	None		None
	0		-	145	150	
Storage Length		0	0	145	150	0
Veh in Median Storage						
Grade, %	0	-	0	- 00	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	175	43	99	171	41	123
Major/Minor	Minor1	N	Major1	- 1	Major2	
Conflicting Flow All	304	99	0	0	270	0
Stage 1	99	-	-	_		-
Stage 2	205	_	-	_	-	_
Critical Hdwy	6.42	6.22	_	_	4.12	_
Critical Hdwy Stg 1	5.42	-	_	_	-	_
Critical Hdwy Stg 2	5.42	_	_	_	_	_
Follow-up Hdwy	3.518	3.318	_	_	2.218	_
Pot Cap-1 Maneuver	688	957	-	-	1293	-
Stage 1	925	-	_	_	-	_
Stage 2	829	-	_	_	-	-
Platoon blocked, %	320		_	_		_
Mov Cap-1 Maneuver	666	957	_	_	1293	_
Mov Cap-1 Maneuver	689	-	_	_	1200	_
Stage 1	925				-	
Stage 2	802	_		_		_
Stage 2	002	_	_	_	_	_
Approach	WB		NB		SB	
HCM Control Delay, s	11.4		0		2	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBT	NRRV	VBLn1V	VRI n2	SBL
Capacity (veh/h)		INDI	-	689	957	1293
HCM Lane V/C Ratio		_		0.254		
HCM Control Delay (s)				12	8.9	7.9
HCM Lane LOS		-		B	Α	7.9 A
HCM 95th %tile Q(veh)			1	0.1	0.1
TION JOHN JOHN WING WING	1			-	0.1	0.1

latana atta						
Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	-	7	P		1	↑
Traffic Vol, veh/h	0	0	131	0	0	151
Future Vol, veh/h	0	0	131	0	0	151
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	50	-
Veh in Median Storage	e, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	0	142	0	0	164
WIVIIICI IOW	U	0	172	U	U	104
Major/Minor	Minor1	N	Major1	N	Major2	
Conflicting Flow All	306	142	0	0	142	0
Stage 1	142	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	686	906	-	_	1441	-
Stage 1	885	-	_	_		_
Stage 2	865	_	_	_	_	_
Platoon blocked, %	000		_	_		_
Mov Cap-1 Maneuver	686	906	_	-	1441	
	712	900	-	-	1441	
Mov Cap-2 Maneuver			-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	0		0		0	
HCM LOS	A					
	, ,					
			NET		VDI 6	05:
Minor Lane/Major Mvn	nt	NBT	NBRV	VBLn1V	VBLn2	SBL
Capacity (veh/h)		-	-	-	-	1441
HCM Lane V/C Ratio		-	-	-	-	-
HCM Control Delay (s)		-	-	0	0	0
HCM Lane LOS		-	-	Α	Α	Α
HCM 95th %tile Q(veh)	-	-	-	-	0

APPENDIX H

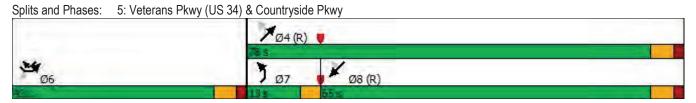
CAPACITY ANALYSIS WORKSHEETS 2031 FUTURE WITH PROJECT WITH PROPOSED MITIGATION

	4	1	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	206	23	24	749	1013	129
Future Volume (vph)	206	23	24	749	1013	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1000	1000	250
Storage Lanes	0	1	1			1
Taper Length (ft)	25		160			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.850	1.00	0.90	0.33	0.850
FIt Protected	0.950	0.000	0.950			0.000
		1615		2574	2574	1504
Satd. Flow (prot)	1805	1615	1805	3574	3574	1524
FIt Permitted	0.950	4045	0.176	0574	0574	4504
Satd. Flow (perm)	1805	1615	334	3574	3574	1524
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		24				137
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	1%	1%	6%
Adj. Flow (vph)	219	24	26	797	1078	137
Shared Lane Traffic (%)						
Lane Group Flow (vph)	219	24	26	797	1078	137
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	32	rtigrit	LUIL	12	12	rtigrit
Link Offset(ft)	0			0	0	
	16				16	
Crosswalk Width(ft)	10			16	10	
Two way Left Turn Lane	4.00	4.00	4.00	4.00	4.00	4.00
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	94	94	0.0
Detector 2 Position(ft)						
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6

11/12/2024 V3 Companies

	4	7	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4			8
Detector Phase	6	6	7	4	8	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	42.0	42.0	13.0	78.0	65.0	42.0
Total Split (%)	35.0%	35.0%	10.8%	65.0%	54.2%	35.0%
Maximum Green (s)	36.0	36.0	9.5	72.0	59.0	36.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
. ,	0.0		0.0		0.0	0.0
Lost Time Adjust (s)		0.0		0.0		
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effct Green (s)	36.0	36.0	74.5	72.0	66.0	110.4
Actuated g/C Ratio	0.30	0.30	0.62	0.60	0.55	0.92
v/c Ratio	0.40	0.05	0.09	0.37	0.55	0.10
Control Delay	36.2	11.2	7.5	9.1	19.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	11.2	7.5	9.1	19.5	0.0
LOS	30.2 D	11.2 B	7.5 A	9.1 A	19.5 B	0.5 A
	33.8	D	A	9.1	17.3	A
Approach LOS						
Approach LOS	C	20.0	7.4	A 70.0	B	20.0
90th %ile Green (s)	36.0	36.0	7.1	72.0	61.4	36.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	36.0	36.0	6.5	72.0	62.0	36.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	36.0	36.0	6.1	72.0	62.4	36.0
50th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
30th %ile Green (s)	36.0	36.0	0.0	72.0	72.0	36.0
30th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	36.0	36.0	0.0	72.0	72.0	36.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	135	0	5	92	291	0
Queue Length 95th (ft)	208	21	13	118	364	6
Internal Link Dist (ft)	208	۷۱	13	691	759	U
()	200		180	091	109	250
Turn Bay Length (ft)		E04		2444	1064	
Base Capacity (vph)	541	501	323	2144	1964	1412
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.05	0.08	0.37	0.55	0.10
Intersection Summary						

Area Type: Other		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 0 (0%), Referenced to phase 4:NETL and 8:S	SWT, Start of Green	
Natural Cycle: 60		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.55		
Intersection Signal Delay: 16.1	Intersection LOS: B	
Intersection Capacity Utilization 49.4%	ICU Level of Service A	
Analysis Period (min) 15		



	4	1	7	×	K	*
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations	*	7	*	^	^	7
Traffic Volume (vph)	275	22	19	697	707	161
Future Volume (vph)	275	22	19	697	707	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200	0	180	1300	1300	250
Storage Lanes	0	1	100			1
	25	l I	160			l I
Taper Length (ft)		1.00		0.05	0.05	1.00
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	0.050	0.850	0.050			0.850
Flt Protected	0.950	4045	0.950	0574	0574	4500
Satd. Flow (prot)	1787	1615	1805	3574	3574	1538
Flt Permitted	0.950		0.271			
Satd. Flow (perm)	1787	1615	515	3574	3574	1538
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		23				169
Link Speed (mph)	40			45	45	
Link Distance (ft)	288			771	839	
Travel Time (s)	4.9			11.7	12.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	0%	0%	1%	1%	5%
Adj. Flow (vph)	289	23	20	734	744	169
Shared Lane Traffic (%)		20				
Lane Group Flow (vph)	289	23	20	734	744	169
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left		Left	Left	Left	
	32	Right	Leit	12	12	Right
Median Width(ft)						
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	CI+Ex	Cl+Ex	CI+Ex	Cl+Ex	CI+Ex	CI+Ex
Detector 1 Channel	OITEX	OITLX	OITEX	OITEX	OITEX	OFFER
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				CI+Ex	CI+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	pm+ov
Protected Phases	6		7	4	8	6
			•	•		

11/12/2024 V3 Companies

	4	7	7	×	K	×
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Permitted Phases		6	4	.,_,		8
Detector Phase	6	6	7	4	8	6
Switch Phase			'	7		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	20.0	20.0	9.5	24.0	24.0	20.0
Total Split (s)	43.0	43.0	13.0	57.0	44.0	43.0
Total Split (%)	43.0%	43.0%	13.0%	57.0%	44.0%	43.0%
				51.0%		
Maximum Green (s)	37.0	37.0	9.5		38.0	37.0
Yellow Time (s)	4.0	4.0	3.5	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	0.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	3.5	6.0	6.0	6.0
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	None	C-Max	C-Max	Max
Walk Time (s)				7.0	7.0	
Flash Dont Walk (s)				11.0	11.0	
Pedestrian Calls (#/hr)				0	0	
Act Effet Green (s)	37.0	37.0	53.5	51.0	47.0	93.6
Actuated g/C Ratio	0.37	0.37	0.54	0.51	0.47	0.94
v/c Ratio	0.44	0.04	0.06	0.40	0.44	0.12
Control Delay	26.3	8.3	9.7	12.8	19.7	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	8.3	9.7	12.8	19.7	0.4
LOS	С	Α	Α	В	В	Α
Approach Delay	25.0			12.8	16.1	
Approach LOS	С			В	В	
90th %ile Green (s)	37.0	37.0	6.9	51.0	40.6	37.0
90th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
70th %ile Green (s)	37.0	37.0	6.3	51.0	41.2	37.0
70th %ile Term Code	MaxR	MaxR	Gap	Coord	Coord	MaxR
50th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
50th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
30th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
30th %ile Term Code						
	MaxR	MaxR	Skip	Coord	Coord	MaxR
10th %ile Green (s)	37.0	37.0	0.0	51.0	51.0	37.0
10th %ile Term Code	MaxR	MaxR	Skip	Coord	Coord	MaxR
Queue Length 50th (ft)	137	0	4	89	147	0
Queue Length 95th (ft)	211	16	m11	144	238	8
Internal Link Dist (ft)	208			691	759	
Turn Bay Length (ft)	200		180			250
Base Capacity (vph)	661	612	398	1822	1678	1450
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.04	0.05	0.40	0.44	0.12
	0.44	0.04	0.03	0.40	0.44	0.12
Intersection Summary						

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 4:NETL and 8:SWT, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

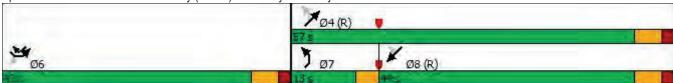
Intersection Signal Delay: 16.2 Intersection LOS: B

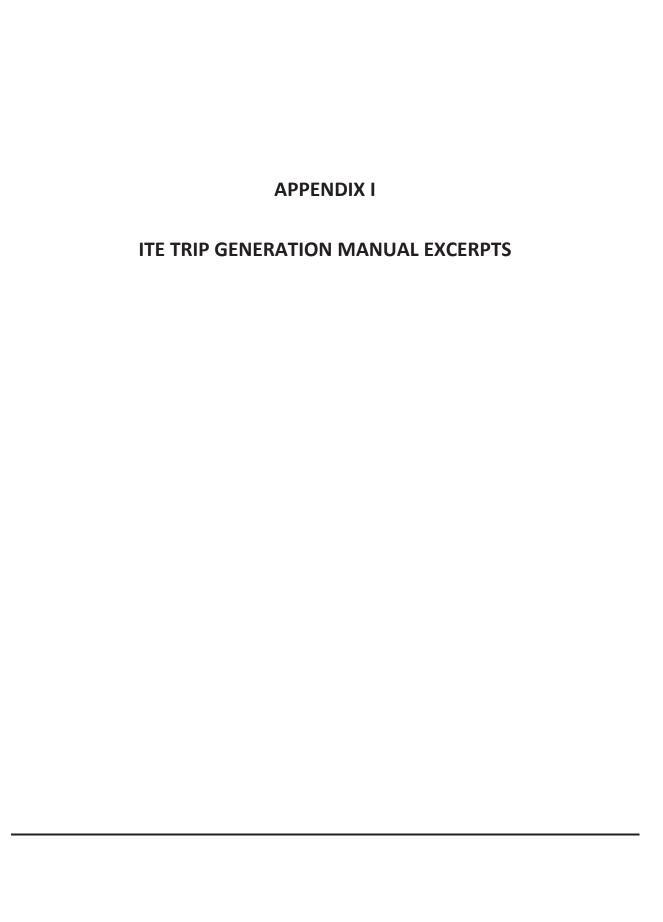
Intersection Capacity Utilization 44.8% ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Veterans Pkwy (US 34) & Countryside Pkwy





Land Use: 857 **Discount Club**

Description

A discount club is a discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items such as food, beverages, household items, clothing, tires, and appliances. Many items are sold in large quantities or bulk. Some sites may include on-site fueling pumps.

Additional Data

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alabama, Alberta (CAN), California, Connecticut, Delaware, Florida, Maryland, Massachusetts, Minnesota, Ohio, Oregon, Pennsylvania, and Washington.

To assist in the future analysis of this land use, it is important to collect and include information on the presence of vehicle fueling stations in trip generation data submissions.

Source Numbers

212, 245, 333, 344, 345, 346, 424, 438, 445, 580, 584, 700, 715, 719, 975, 1047



Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

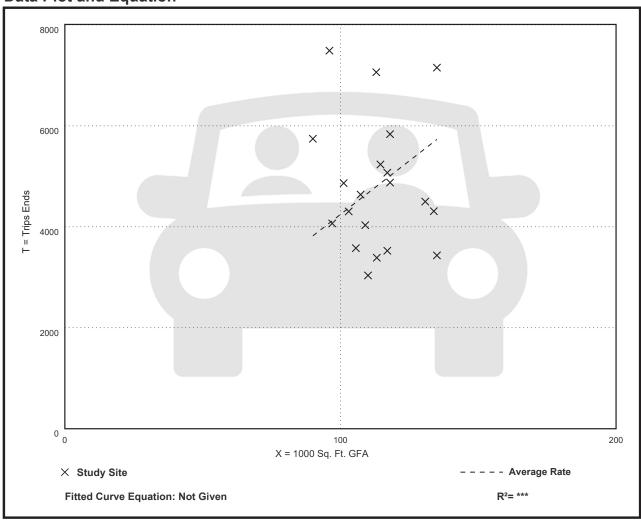
Setting/Location: General Urban/Suburban

Number of Studies: 20 Avg. 1000 Sq. Ft. GFA: 113

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
42.46	25.44 - 78.02	13.04





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

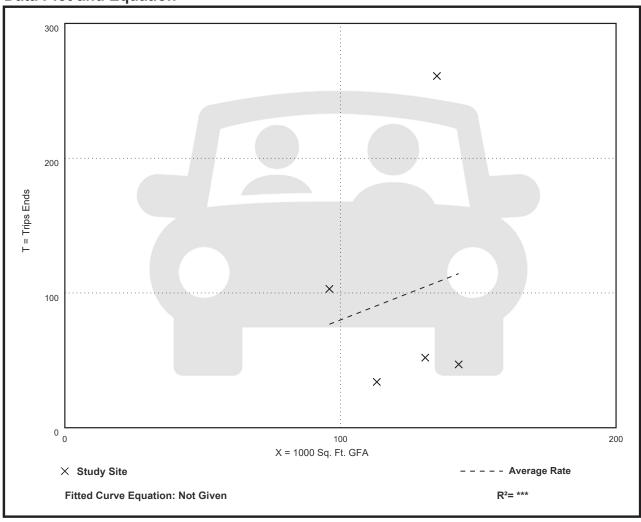
Setting/Location: General Urban/Suburban

Number of Studies: 5 Avg. 1000 Sq. Ft. GFA: 124

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.80	0.30 - 1.93	0.73





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

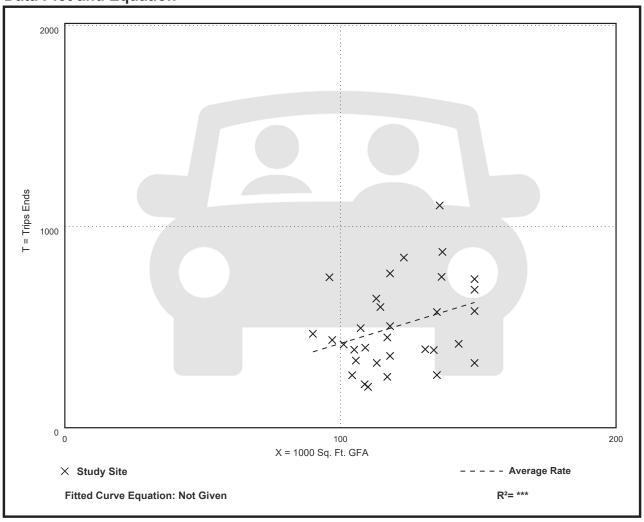
Setting/Location: General Urban/Suburban

Number of Studies: 32 Avg. 1000 Sq. Ft. GFA: 121

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.19	1.85 - 8.13	1.70





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday

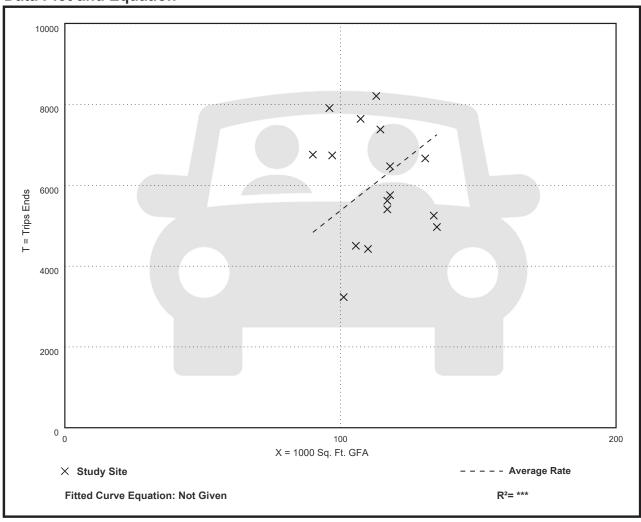
Setting/Location: General Urban/Suburban

Number of Studies: 16 Avg. 1000 Sq. Ft. GFA: 113

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
53.75	31.97 - 82.43	15.25





Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Saturday, Peak Hour of Generator

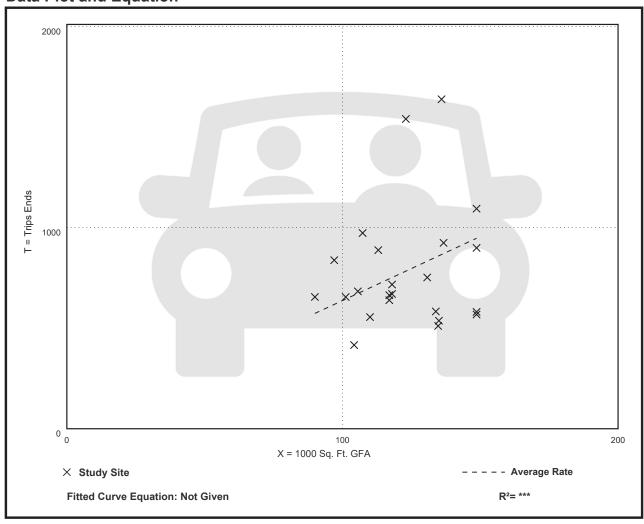
Setting/Location: General Urban/Suburban

Number of Studies: 23 Avg. 1000 Sq. Ft. GFA: 123

Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
6.37	3.79 - 12.52	2.43





Land Use: 944 **Gasoline/Service Station**

Description

This land use includes gasoline/service stations where the primary business is the fueling of motor vehicles. The sites included generally have a small building (less than 2,000 gross square feet) that houses a cashier and limited space for motor vehicle maintenance supplies and general convenience products. A gasoline/service station may also have facilities for servicing and repairing motor vehicles. The gasoline/service station may also have a car wash. Convenience store/gas station (Land Use 945) and truck stop (Land Use 950) are related uses.

Additional Data

The independent variable—vehicle fueling positions—is defined as the maximum number of vehicles that can be fueled simultaneously. The sites in this land use include both self-pump and attendant-pumped fueling positions and both pre-pay and post-pay operations.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/tripand-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Kentucky, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario (CAN), Oregon, South Dakota, Texas, and Washington.

Specialized Land Use Data

A 2006 study provided data on four private fuel facilities in Florida (source 721). These facilities provide self-fuel service for any motorist with a pre-established membership account. The site is not open to the general public. The trip generation characteristics of these sites differ from sites included in this land use; therefore, trip generation information for these sites is excluded from the data plots. The four sites have an average of nine vehicle fueling positions, with an average of 12 vehicle trips during the weekday, AM peak hour of adjacent traffic and 7 vehicle trips during the weekday, PM peak hour of adjacent street traffic.

Source Numbers

221, 274, 278, 288, 340, 350, 351, 355, 359, 366, 440, 583, 617, 618, 631, 721, 867, 882, 883, 888, 954, 977



Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions On a: Weekday

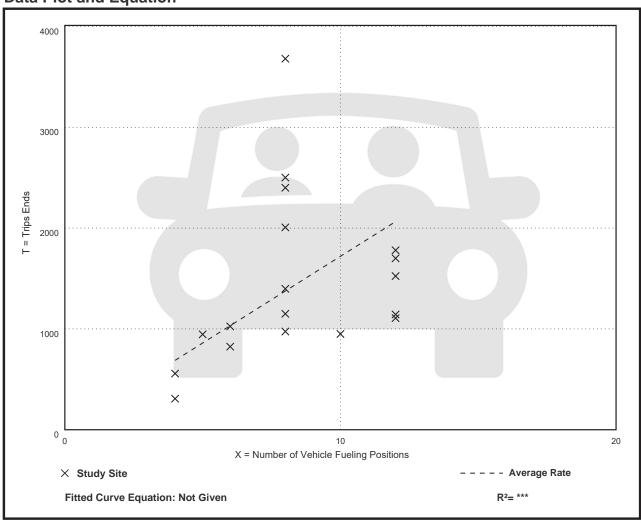
Setting/Location: General Urban/Suburban

Number of Studies: 18 Avg. Num. of Vehicle Fueling Positions: 8

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
172.01	77.00 - 460.00	96.45





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

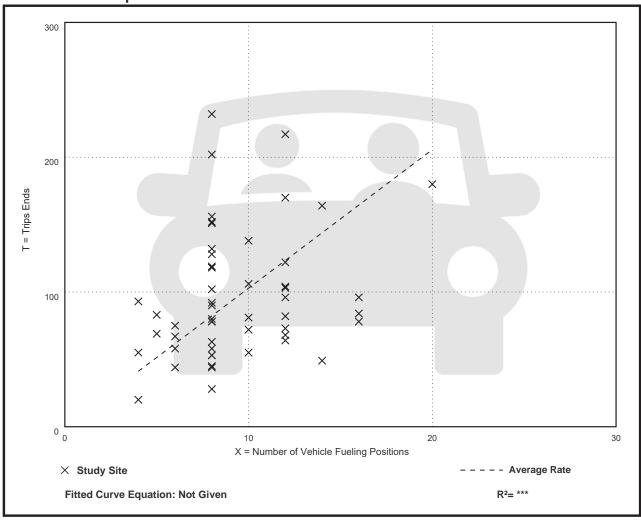
Number of Studies: 53

Avg. Num. of Vehicle Fueling Positions: 9

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
10.28	3.50 - 29.00	5.36





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

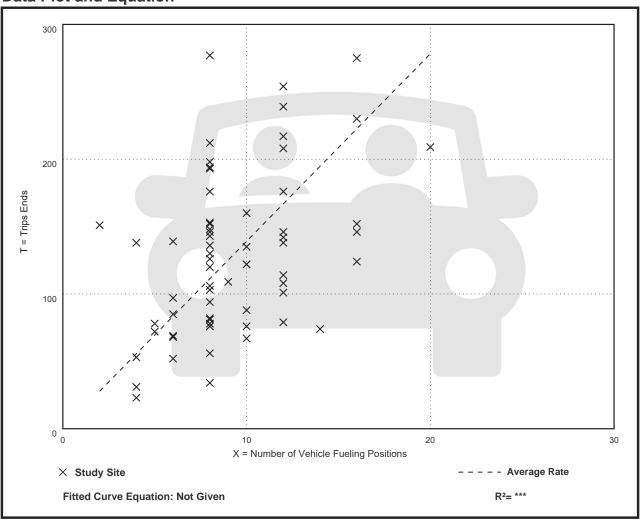
Number of Studies: 65

Avg. Num. of Vehicle Fueling Positions: 9

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
13.91	4.25 - 75.50	6.93





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions On a: Saturday

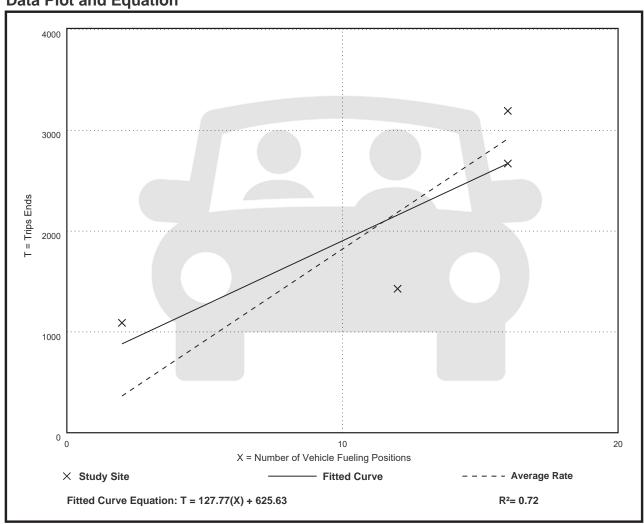
Setting/Location: General Urban/Suburban

Number of Studies: 4 Avg. Num. of Vehicle Fueling Positions: 12

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
182.17	119.00 - 545.00	96.27





Gasoline/Service Station (944)

Vehicle Trip Ends vs: Vehicle Fueling Positions

On a: Saturday, Peak Hour of Generator

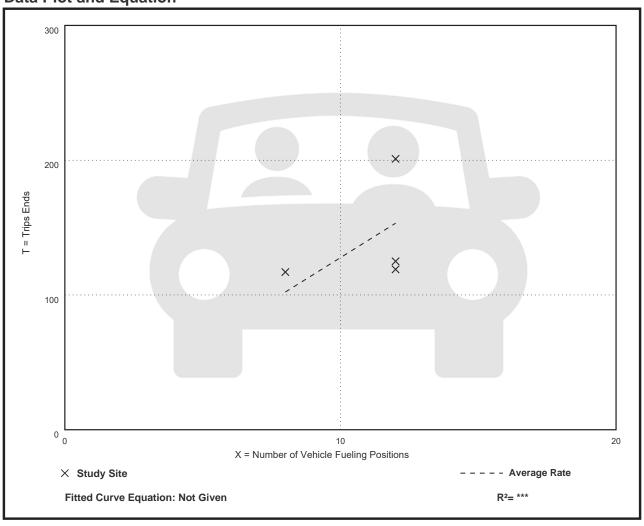
Setting/Location: General Urban/Suburban

Number of Studies: 4
Avg. Num. of Vehicle Fueling Positions: 11

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Vehicle Fueling Position

Average Rate	Range of Rates	Standard Deviation
12.77	9.92 - 16.75	3.40









PROJECT SITE:

COSTCO WHOLESALE
VETERANS PARKWAY (Rt. 34) AND COUNTRYSIDE PARKWAY
YORKVILLE, KENDALL COUNTY, ILLINOIS

PREPARED FOR:

Costco Wholesale Corporation 730 Lake Drive Issaquah, WA 98027 425.313.8100

PREPARED BY:

V3 COMPANIES, LTD. 7325 JANES AVENUE WOODRIDGE, ILLINOIS 60517 630.724.9200

NOVEMBER 13, 2024

COSTCO - YORKVILLE STORMWATER MANAGEMENT REPORT

YORKVILLE, KENDALL COUNTY, ILLINOIS

OVERVIEW

The proposed 33.14+ acre Costco Wholesale project is located in Sections 27 and 28, Township 37 North, Range 7 East in the City of Yorkville, Kendall County, Illinois. The property is located at the southeast corner of McHugh Road and Countryside Parkway (see enclosed project location map). The project includes the construction of the Costco Wholesale Warehouse and Fuel Facility with surface parking and underground utilities. The Costco warehouse and parking area would occupy 26.24+ acres of the site, with the rest to be developed in the future. Stormwater management is also proposed as part of the improvements.

The proposed development area is currently undeveloped farmland that is tributary to an existing offsite stormwater management basin located north of the site (see enclosed aerial map exhibit). The triangular site is bounded by Countryside Parkway to the north and northeast, Veterans Parkway (U.S. Route 34) to the south and southeast, and McHugh Road to the west. There are residential subdivisions further to the north and south of the development along with some commercial frontage across Veterans Parkway to the south.

The existing site is undeveloped and generally drains to one of two watersheds that divide the site (see enclosed USGS Topographic Map). Stormwater runoff on the west side of the site drains to Blackberry Creek to the north of the site while the east side drains to the Ferson Creek/Fox River watershed to the southeast. All stormwater runoff from the site is ultimately tributary to the Fox River and currently drains uncontrolled to nearby receiving waters which either are or flow into the Fox River.

According to the FEMA Flood Insurance Rate Maps (FIRM) (see enclosed FIRM exhibit), there is no 100-year mapped floodplain within the proposed Costco development. According to the USGS Hydrologic Atlas and the National Wetlands Inventory (NWI), there are no mapped wetlands present on the proposed development (see enclosed USGS Hydrologic Atlas and NWI Map). The soil survey of DuPage County shows that the site predominantly consists of two different soil types; Waupecan silt loam and Dresden silt loam, both classified as well drained soils (see enclosed Soil Survey Map).

DETENTION NARRATIVE

The site is to follow the Kendall County Stormwater Management Ordinance. The Ordinance requires that volume storage be provided to limit stormwater runoff from the developed site to 0.15 cfs per acre for the 100-year storm as well as 0.04 cfs per acre for the 2-year storm. Based on these requirements and the proposed impervious coverage, roughly 15.48 ac-ft of storage will be required for the 33.14+ acre site. The Yorkville Stormwater Management Plan also has a further requirement for outlet control to limit the 25-year storm event to 0.08 cfs per acre.

There is an existing offsite stormwater detention facility to the northeast that was designed and constructed to provide enough storage volume for the entire Yorkville Crossing

COSTCO - YORKVILLE STORMWATER MANAGEMENT REPORT

YORKVILLE, KENDALL COUNTY, ILLINOIS

development. However, due to costs of detention credits and onsite earthwork balancing considerations, Costco is planning to construct a new detention basin for the development within the site rather than connect to this offsite detention facility with new storm sewer.

A stormwater detention basin is proposed on the northwest corner of the site to store runoff on site and limit the release rate of stormwater leaving the site. The basin will be sized to provide volume storage to meet the requirements of the Kendall County Stormwater Management Plan and the City of Yorkville's standard specifications. Based on these requirements, 15.48 ac-ft of storage are required, and 15.75 ac-ft are provided in the basin. Required runoff volume was calculated based on the proposed site plan assuming 80% impervious coverage of the outlots when eventually developed, not including onsite roadways.

The proposed Costco grading plan will convey the 100-year overflow to the proposed stormwater basin via overland flow, as the site is graded to direct water north around the warehouse until it flows into the basin.

STORM SEWER

The proposed additions for this project are the 161,064 sf Costco warehouse along with surface parking, internal roadways, and associated utilities. The site will be graded to drain to stormwater inlets at low points which will send runoff into storm sewers, through which water will be directed into the onsite detention facility. The proposed Costco fuel facility and outlots will also be included in this storm sewer system and have their runoff conveyed to the northwest basin as well. The proposed storm sewer for the Costco development area will be sized to convey runoff from the 10-year rainfall event using the latest Bulletin 75 rainfall data.

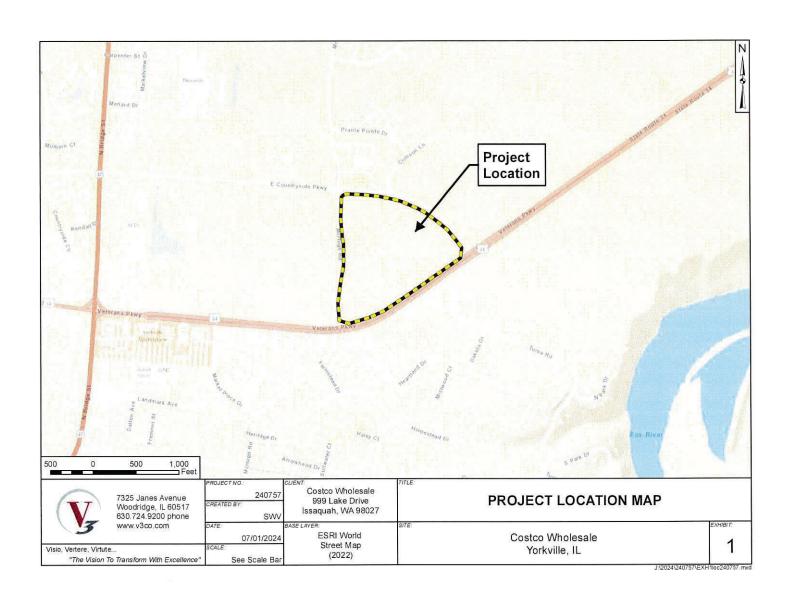
Four outfall connections to the detention basin are proposed to direct storm sewer flow from the Costco development into the proposed basin. This basin is designed to provide runoff volume storage to limit the release rate to City storm sewers during storm events. The basin is proposed to release through a restrictor manhole into storm sewer south of Countryside Parkway in the northwest corner of the site, north of the basin. Water leaving the pond will be restricted to a rate of 4.97 cfs for the 33.14-acre site, per Kendall County stormwater regulations.

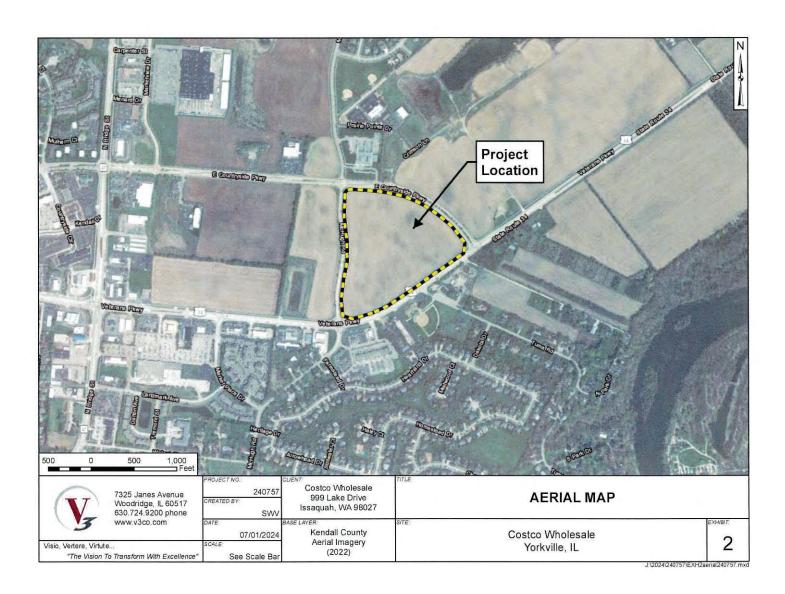
CONCLUSION

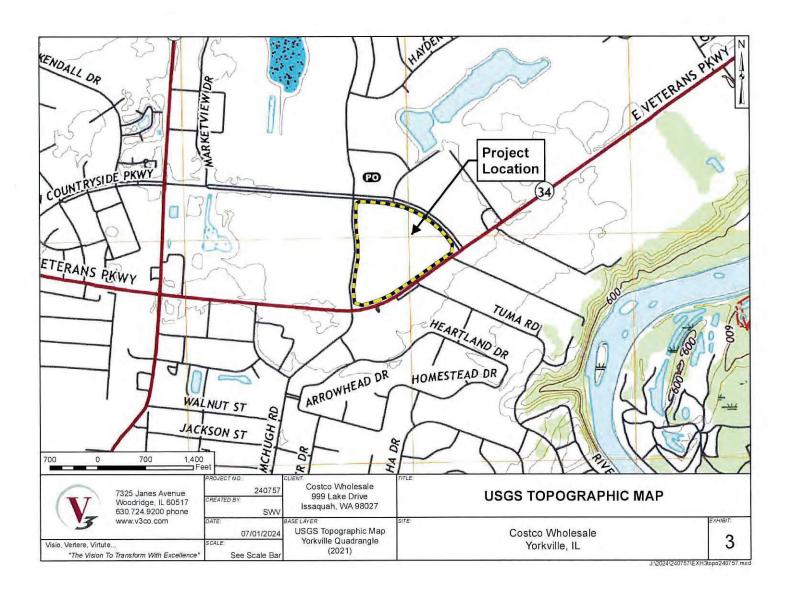
It is our opinion that the proposed stormwater management design conforms to the requirements of the Kendall County Stormwater Management Ordinance. The proposed stormwater management basin located in the northwest corner of the property will provide stormwater runoff storage for the proposed Costco warehouse, fuel facility, parking area, and outlots under the proposed condition.

APPENDIX 1 - Exhibits

- Project Location Map
 - Aerial Map
- USGS Topographic Atlas Map
- FEMA Flood Insurance Rate Map (FIRM)
 - Flood Zones of Kendall County Map
- National Wetland Inventory (NWI) Map
 - Soil Survey of Kendall County Map
 - Illinois Hydrologic Unit (HUC) Map



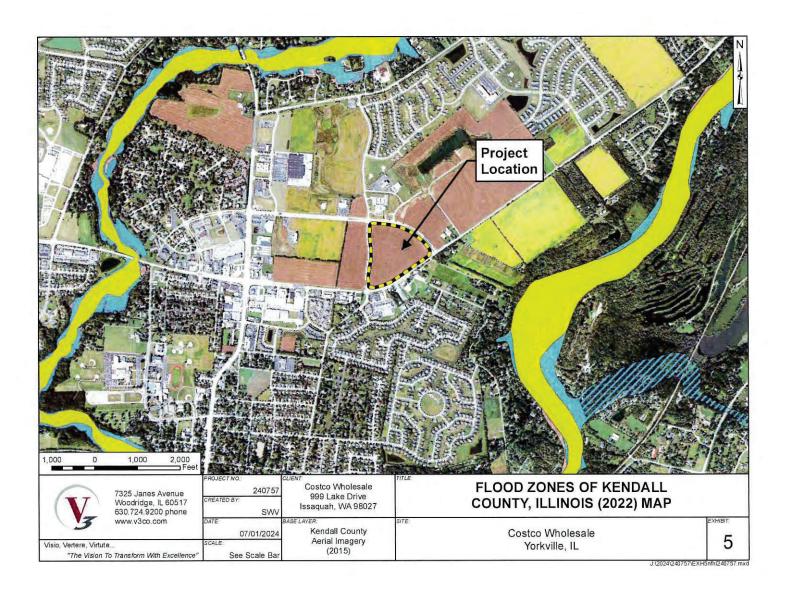


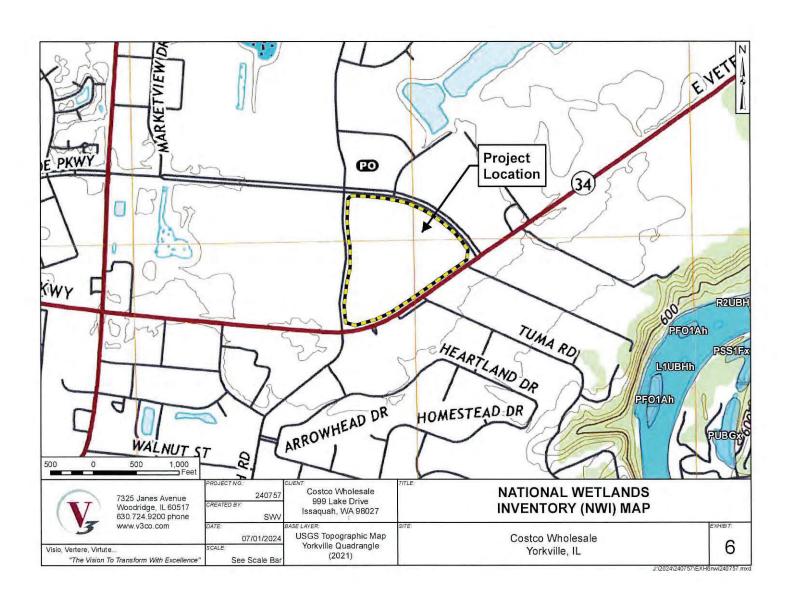


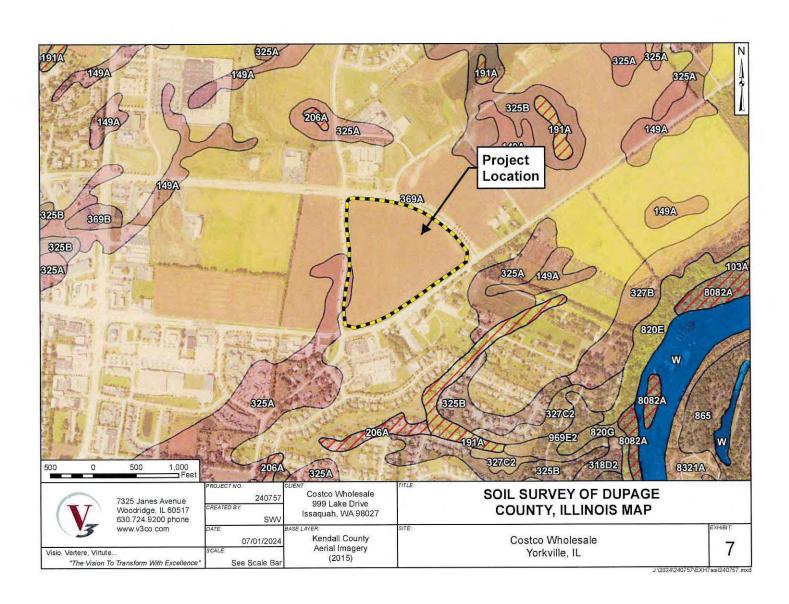


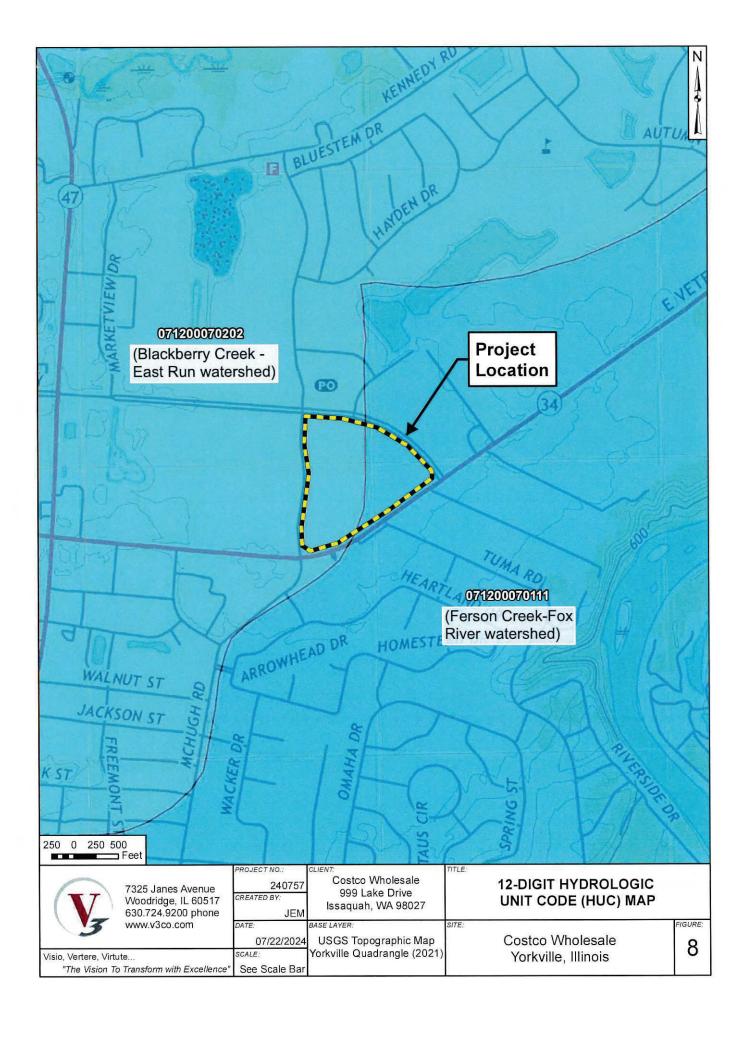


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Memorandum

To: Plan Council

From: Krysti Barksdale-Noble, Community Development Director

Date: November 21, 2024

Subject: PZC 2024-33 Costco (PUD Amendment, Special Use & Final Plat)

NW Corner of Veterans Parkway and E. Countryside Parkway Proposed Wholesale Retail Warehouse and Fuel Station

I have reviewed the applications for Planned Unit Development (PUD) Agreement Amendment to Ord. 2008-21 for Yorkville Crossing, Special Use for a fuel station, and Final Plat received November 15, 2024 as submitted by Stephen Cross, an authorized representative of Costco, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner. The submittal also included the following plans and documents:

- 1) Costco Site Plan Narrative, dated November 15, 2024 and prepared by Costco Wholesale Corporation
- 2) Costco ALTA Survey, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
- 3) Costco Site Context Plan, dated November 15, 2024 and prepared by MG2
- 4) Costco Site Plan, dated November 15, 2024 and prepared by MG2
- 5) Final Plat of Subdivision of Costco Wholesale, dated last revised 11-13-24 and prepared by V3 Companies, Ltd.
- 6) Preliminary Civil/Engineering Plans for Costco Wholesale, dated 11-13-24 and prepared by MG2
- 7) Costco Landscape Plan, dated last revised 11-15-24 and prepared by Kimley Horn
- 8) Costco Warehouse Floor Plan, dated November 15, 2024 and prepared by MG2
- 9) Costco Architectural Elevations, dated November 15, 2024 and prepared by MG2
- 10) Costco Renderings, dated November 15, 2024 and prepared by MG2
- 11) Costco Fuel Facility Plan, dated November 15, 2024 and prepared by MG2
- 12) Costco Lighting Plan, dated July 2024 and prepared by T.E., Inc.
- 13) Costco Traffic Impact Study, dated November 13, 2024 and prepared by V3 Companies, Ltd.
- 14) Costco Preliminary Stormwater Management Report, dated November 13, 2024 and prepared by V3 Companies, Ltd

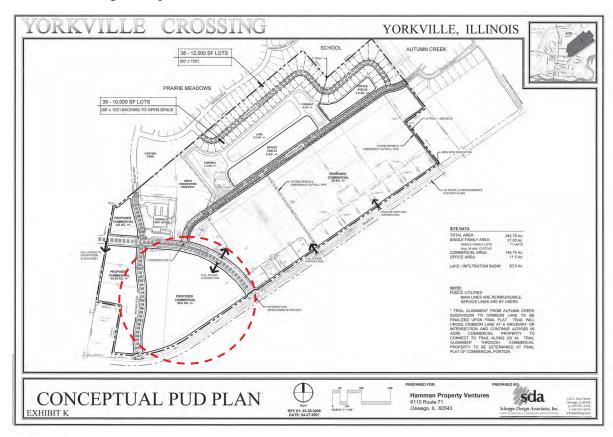
The petitioner is requesting approval to develop a members-only retail store spanning approximately 160,000 square feet, establish and operate a standalone fueling facility, and obtain final plat approval to subdivide the existing two parcels, totaling nearly 34 acres, into three new parcels. The Costco development, including the fueling facility, will occupy approximately 33.14 acres (Lot 1), with an additional 7 acres designated for two perimeter lots (Lot 2 and Lot 3) along Veteran's Parkway and about 3.4 acres reserved for stormwater management at the northwest corner of the property.

As part of the request to amend the existing "Yorkville Crossing" Planned Unit Development (PUD) agreement and Special Use authorization for the fueling station, Costco is seeking allowances for additional parking (980 stalls vs. a code-maximum of 387), exceptions to electric vehicle charging requirements, pole-mounted lighting height exceeding the 35-foot limit (proposed at 36'-6"), and a reduced masonry material percentage on building facades.

Based upon my review of the applications, documents and related plans, I have compiled the following comments:

PUD AMENDMENT/GENERAL ZONING COMMENTS:

1. **PLANNED UNIT DEVELOPMENT (PUD)** – The subject property, originally annexed into Yorkville via Ord. 2000-34, is part of the Yorkville Crossing development. The following Concept PUD Plan was included as an exhibit to Ord. 2008-21:



- a. The petitioner is requesting the existing Yorkville Crossing Planned Unit Development be amended, or modified, to include Costco's site development plans, requested Special Use permit and all deviations required to construct the proposed project, per plans submitted.
- 2. **PLANNED UNIT DEVELOPMENT AMENDMENT** Section 10-8-8G of City's Unified Development Ordinance (UDO) establishes criteria for major and minor planned unit development amendments. It is the finding of the Zoning Administrator that the request is deemed a <u>major amendment</u> to the approved Yorkville Crossing PUD based upon the requested deviations from the Unified Development Ordinance.
 - a. Section 10-8-8 of City's Unified Development Ordinance (UDO) also establishes standards for Planned Unit Development (PUDs). PUDs are allowed to modify standards of the base district as long as the requested modifications are specifically identified and demonstrates how each allowance is compatible with surrounding development, is necessary for proper development of the site, and is aligned with at least one (1) modification standard found in Section 10-8-8D of the UDO.
 - i. The petitioner has listed <u>four (4) proposed deviations</u> from the base B-3 General Business District standards which will be <u>detailed separately in this</u> review memo under subsequent headings.
 - b. While not required as part of the amendment process, PUDs should identify at least one (1) modification standard the proposed development will meet per Section 10-8-8D.

- i. Staff believes modification standard #2 "Sustainable Design" applies, as the proposed development will be designed with consideration given to various methods of site design, architecture and building materials, and landscaping design capable of reducing energy consumption and improving onsite stormwater management.
- ii. According to the petitioner, the sustainable design elements include, but are not limited to:
 - 1. The building structure steel system and architectural metal panels are comprised of 80% recycled content with the associated batt insulation comprised of greater than 50% recycled content.
 - 2. The roof maintains reflectance, emittance and SRI rates that lessen heat gain, and the premanufactured building system provides erection efficiency reducing impacts to the carbon footprint.
 - 3. Landscaping has been designed to create a high impact with seasonal interest incorporating many native and drought tolerant species, which in turn minimizes irrigation and maintenance needs.
 - 4. All site and building lighting systems utilize LED Technology.
 - 5. Implementation of the water management system drives operational efficiency to lower wastewater and sewer use.
 - 6. The use of carbon dioxide (CO2) in the refrigeration systems, as opposed to HFCs (Hydrofluorocarbons), is widely considered a more environmentally conscious refrigerant due to its extremely low Global Warming Potential (GWP), as well as being non-toxic and non-flammable. Unlike many other refrigerants, CO2 is considered a "natural" refrigerant, readily available as a byproduct of industrial processes, making it a sustainable option.
- 3. **ZONING** The subject property consists of two (2) parcels (#02-28-227-002 and #0 02-27-101-003). Subsequently rezoned as a Planned Unit Development via Ord. 2008-21, the permitted underlying zoning for the subject property is **B-3 General Business District** (formerly "B-3 Service Business District") and allowed all uses in the B-1, B-2, B-3, and O-Office zoning districts with some excluded uses as identified in the ordinance. The following are the current immediate surrounding zoning and land uses:

	Zoning	Land Use
North	E. Countryside Parkway B-3 PUD (Yorkville Crossing)	Transportation Land Use United States Post Office (USPS) & Vacant Land
South	US 34 (Veterans Parkway) B-3 General Business District B-3 (Kendall County)	Transportation Land Use Heartland Business Center American Legion & Various Business Land Uses
East	E. Countryside Center B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land
West	McHugh Road B-3/Office PUD (Yorkville Crossing)	Transportation Land Use Undeveloped Farm Land

4. **PERMITTED USES** – Per Table 10-3-12 (B) of the Yorkville Unified Development Ordinance (UDO), a "general retail store, greater than one (1) acre" is a <u>permitted</u> land use and a "gasoline service station" is a <u>special use</u> in the B-3 General Business District.

- a. **Ancillary Uses** While the Unified Development Ordinance does not specifically identify a "tire center" use, where car lifts will be available for tire rotations and tire replacements, the Zoning Administrator can determine if the use is substantially similar to a use listed in the tables. If it is, the use shall be treated in the same manner as the substantially similar use. Staff identifies the use as similar to "automobile repair" or "automobile service" which are permitted uses in the B-3 General Business District.
- b. **Standards for Special Use** The petitioner has provided responses to the following standards for special use authorization, per Section 10-8-5 of the Yorkville Unified Development Ordinance, which will be entered into the record during the public hearing process:
 - i. The establishment, maintenance or operation of the Special Use will not be unreasonably detrimental to or endanger the public health, safety, morals, comfort, or general welfare.
 - ii. The Special Use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purpose already permitted, nor substantially diminish and impair property values within or near the neighborhood in which it is to be located.
 - iii. The establishment of the Special Use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.
 - iv. Adequate utilities, access roads, drainage or other necessary facilities have been or shall be provided.
 - v. Adequate measures shall be taken to provide ingress or egress so designed as to minimize traffic congestion in the public streets.
 - vi. The proposed Special Use is not contrary to the objectives of the City's adopted Comprehensive Plan.
- c. **Protest to Special Use** Per Section 10-8-5-C of the Unified Development Ordinance, in the event of written protest against any proposed Special Use, signed and acknowledged by the owners of twenty (20) percent of the frontage adjacent thereto, or across an alley, or directly opposite therefrom, such Special Use shall not be granted except by the favorable vote of two-thirds (¾) of all members of the City Council. In such cases of written protest, a copy of the written protest shall be served by the protestor(s) on the applicant for the proposed Special Use and a copy upon applicant's Attorney, if any, by certified mail at the address of such applicant and attorney shown in the application for the proposed Special Use.

SITE PLAN COMMENTS:

The Costco site plan places the warehouse at the center of the property, oriented toward Veteran's Parkway, with parking arranged along the southern and eastern sides to prioritize customer accessibility. Future employee parking lot expansion is also proposed to the west of the retail warehouse building. Substantial setbacks and landscaped buffer zones with a mix of trees and shrubs separate the site physically and visibly from nearby properties, while a stormwater management area on the northern edge offers both environmental functionality and aesthetic value. The internal building design includes a Tire Center, a conveniently located loading dock, and energy-efficient LED lighting for safe navigation across parking and pedestrian areas. Two (2) additional parcels along Veteran's Parkway are earmarked for future commercial development, aligning with the site's zoning requirements and ensuring harmony with Costco's operational goals. The following is a summary review of the various Site Plan components:

5. **BUILDING SETBACKS** – Per the Table 10-3-9(A) Bulk and Dimensional Standards, the following compares current B-3 General Business District standards with the proposed Planned Unit Development (PUD) requested modifications:

BUILDING SETBACKS	REQUIRED MINIMUM SETBACKS B-3 DISTRICT	PROPOSED MINIMUM SETBACKS COSTCO	PROPOSED MINIMUM SETBACKS FUEL FACILITY
FRONT YARD (Veterans Pkwy)	50 ft.	507 ft.	<mark>???</mark>
CORNER SIDE YARD (East/West)	30 ft.	??/64 ft.	<mark>???</mark>
REAR YARD (SEC Countryside Pkwy/McHugh)	20 ft.	64 ft.	<mark>???</mark>
PARKING SETBACK* (Veterans Pkwy)	20 ft.	275 ft.	<mark>???</mark>
PARKING SETBACK* (Countryside Pkwy/McHugh)	20 ft.	20 ft.	<mark>???</mark>

- a. Above information provided from Site Data Table. Please provide a clearly dimensioned site plan clearly identifying the setbacks from the nearest building point to the adjacent property line.
- b. Per Section 10-3-9 of the Unified Development Ordinance, parking lots in the B-3 district located adjacent to an arterial roadway, as defined in the city's comprehensive plan, must maintain a minimum setback of 20 feet from the property line and 10 feet from nonarterial roadways.
- c. "Parking Lots" are defined as "an open, hard-surfaced area, designed, arranged and made available for the *storage* of private passenger automobiles only of occupants of the building or buildings for which the parking area is developed and is accessory."
- 6. **MAXIMUM BUILDING HEIGHT** The B-3 General Business District has an 80 ft. maximum building height per Table 10-3-9(A) in the Unified Development Ordinance. The petitioner has provided overall building height for the proposed Costco Warehouse building in a Project Data table and Elevation plans.
 - a. Per the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), the stated maximum building height is 34 ft. However, the Elevations (Sheet DD13-05) illustrates the maximum height to the top of coping is 32 ft. Please verify which is the proposed maximum building height.
- 7. MAXIMUM LOT COVERAGE Per Section 10-3-9(A) of the Unified Development Ordinance, the maximum lot coverage for the B-3 General Business District (inclusive of sidewalks, parking areas and all impervious surfaces) is 80% of the gross lot area. According to the Project Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), lot coverage calculations are *not* provided.
 - a. Please provide calculations for the proposed total impervious coverage including building area, parking area, future parking area, and fuel station.

- b. <u>If area exceeds 80%, a requested deviation to the bulk regulations in Section 10-3-9.</u> Bulk and Dimensional Standards of the Unified Development Ordinance.
- 8. **PARKING/LOADING** According to the Parking Data Table on the Layout Plan (Sheet C2.0), Site Plan (Sheet DD11-05), and Aerial Site Plan (Sheet DD12-05), there are <u>856 total parking spaces</u> to be provided on the property to accommodate the proposed ~160,000 sq. ft. retail warehouse building and fueling facility uses. <u>Future parking expansion area will include another 124 stalls for an overall total 980 parking spaces</u>.

			Figure R	teference		
Parking Angle (degrees)	Α	В	C	D	E	F
	Space Width	Space Depth	Aisle Width (2- Way)	Aisle Width (1- Way)	Depth of Interlocking Spaces	Overhang
0	9'	20'	24'	12'	n/a	n/a
45	9'	18'	24'	12'	28.25'	2'
60	9'	18'	24'	18'	32	2'
90	9'	18'	24'	24'	36'	2'

- c. Per Table 10-5-1(E)(1) Standard Parking Stall and Aisle Dimensional Requirements are as follows:
 - The petitioner is proposing 90-degree parking stalls with a 10' width and a minimum of 18.5' stall depth with a 2' overhang. Aisle widths for 2-way drives are 32' wide.
- d. Per Table 10-5-1(H)(5) <u>Minimum Parking Requirements</u> of the Yorkville Unified Development Ordinance, the minimum parking requirement for a retail store more than 8,000 sq. ft. of the <u>net building square feet</u> is 2 spaces/1,000 sq. ft. <u>Gasoline Service Stations require a minimum of 1 space/gas pump and 1space/300 sq. ft. for any accessory retail space.</u>
 - i. To minimize excessive areas of pavement, no off-street parking area for nonresidential or multi-family uses shall exceed the required minimum number of parking spaces by more than twenty (20) percent, except as approved by the Zoning Administrator. In approving additional spaces, the Zoning Administrator shall determine that the parking is needed based on documented evidence of actual use and demand provided by the applicant.
 - 1. Per Section 10-5-1-H.4.b of the UDO, calculations for all area-based (square footage) parking standards must be computed on the basis of net floor area.
 - ii. <u>Total required maximum parking for the subject property is 386 spaces, including a minimum of 8 ADA accessible spaces, as calculated below:</u>
 - 1. 153,820 net sq. ft./1,000 = 153.82 x 2 = 307.64 + 61.53 (20% of total) = 369.17 + 16 (gas dispensers) = 385.17 rounded to 386, per Section 10-5-1-H.4.a of the Unified Development Ordinance.
 - iii. The petitioner is requesting a variance from the UDO's required maximum parking due to parking being "critical to Costco's business plan and success for any warehouse located throughout the Country. The average parking for all new warehouses is between 850 to 900 stalls. Parking is based on the immediate need at store opening for our Members. Insufficient parking creates safety issues throughout the Property and will impede proper traffic flow in and around the Property." (Deviation #1).

Staff is supportive of the deviation from a maximum of 2 parking spaces per 1,000 net sq. ft. of building area to approximately 5.04 parking

- spaces per 1,000 of building area as noted on Sheet C2.0 Layout Plan in Preliminary Engineering Plan Set (note page 6 of the Project Narrative under 5.0 Development Plan Proposal Final Plat, Sheet DD11-05 Site Plan, and Sheet DD12-05 Aerial Site Plan lists the parking count ratio as 5.29 stalls per 1,000 square feet of building area possibly based on gross square footage?).
- iv. Additionally, per Section 10-5-1K-1 of the Unified Development Ordinance, infrastructure for a minimum of 8 electric vehicle charging station is required to be installed (1 EV charging station per 50 required parking spaces).
- v. The petitioner is also requesting full relief from the UDO's minimum required EV charging station requirement due to "current Costco data reveals that an exceedingly small percentage of projected Members in the trade area are owners of electric vehicles. Costco's operators determined that EV charging stations at this location would not be pursued or initially planned for as the demand does not currently exist. Costco will reevaluate this decision in the near future." (Deviation #2).

Staff is supportive of the deviation of the full relief for the installation of infrastructure to accommodate the required minimum 8 electric vehicle charging stations since the petitioner will reevaluate the need for EV charging in the near future.

- e. <u>Off-Street Loading</u> Per Section 10-5-1-Q of the Unified Development Ordinance, the number of off-street shall be determined on a case-by-case basis, and in the instance of special uses, loading berths adequate number and size to serve such use, as determined by the Zoning Administrators, shall be provided. <u>The petitioner proposes to have four (4) recessed off-street loading spaces for the retail warehouse located at the southwest corner of the building.</u>
- 9. <u>FUEL FACILITY</u> Fuel facility proposes 16 gas dispensers, accommodating 2 cars per dispenser. A total of eight (8) lanes are proposed for car queuing allowing five (5) cars per lane stacking. This results in a total of 72 cars maximum in this area of the site. No accessory retail convenience store is proposed for the fuel facility area.
 - a. Staff has some concerns regarding the southernmost full access off of McHugh Road leading to the fueling facility which may cause a backup onto the public roadway should there be more than the five (5) vehicles stacking per fuel lane or 40 vehicle max stacking for all pumps.

10. TRAFFIC/ROADWAYS

- a. <u>Direct Access</u> It is noted that the site has six (6) points of access. Three (3) off of E. Countryside Parkway two (2) full access and one (1) right-in/right-out; one (1) full off of E. Veterans Parkway, which will be coordinated with IDOT; and two (2) full access points off of McHugh Road. These access points lead to internal private roadways which loop around the retail warehouse building, provides direct access to the fueling facility, and will connect to the future outlot uses.
 - i. It is noted on Sheet DD12-05 Aerial Site Plan, there are two (2) right in/right out access points on E. Countryside Road. Please revise discrepancy.
 - ii. It is also noted that off-site road enhancements will involve adjusting the existing center medians along Countryside Parkway and adding lane striping to create left-turn lanes at the intersections of Countryside Parkway

and McHugh Road. Additionally, new right-turn lanes will be installed at the gas station entrance on McHugh Road and at Veteran's Parkway.

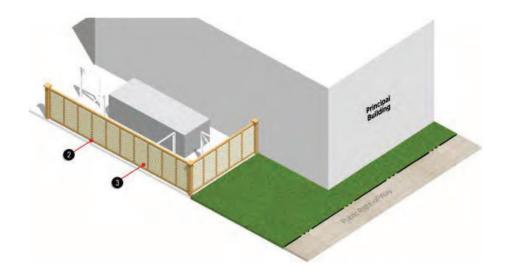
iii. Staff defers to City Engineer regarding site access and Traffic Impact Study.

- b. <u>Cross Access</u> Per Section 10-5-1-F of the Unified Development Ordinance, cross access between adjoining developments is required to minimize access points along streets, encourages shared parking, and allows for vehicular access between land uses. <u>Will a cross access easement agreement be executed between the outlot developers and Costco</u>?
 - i. Note, according to Section 10-5-1-F-2-c, the Zoning Administrator may waive or modify the requirement for vehicular cross access on determining that such cross access is impractical or undesirable because it would require crossing a significant physical barrier or environmentally sensitive area, would create unsafe conditions, or there exists an inability to connect to adjacent property. City Council shall have the authority to waive or modify vehicular cross access requirements for all public review processes involving review by City Council.
- c. <u>Pedestrian Circulation</u> Per Section 10-5-1-N Pedestrian Circulation Standards of the Unified Development Ordinance required off-street parking areas to provide onsite pedestrian circulation systems and connection to existing and future planned trails. <u>The petitioner has provided a single pedestrian connection to the public way off of E. Veterans Parkway at the intersection with Tuma Road.</u>
 - i. Would the petitioner consider an additional pedestrian connection to the public way at the northernmost full access drive on Countryside Parkway at the intersection with Crimson Lane?
- 11. **LANDSCAPING** Section 10-5-3 establishes landscape standards for new developments. The petitioner has submitted a Landscape Plan and per staff's review, the following sections of the Landscape Plan shall apply:
 - i. Section 10-5-3-C. Building Foundation Landscape Zone All nonresidential, mixed-use, and multi-family development where a front yard setback is required, with the exception of food processing facilities regulated by the FDA, shall include landscape located at the building foundation as required by this section. Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide a softening effect at the base of buildings.
 - ii. <u>Section 10-5-3-D. Parking Area Perimeter Landscape Zone</u> Landscape required by this section shall be in addition to landscape required under other sections of this title. It is the objective of this section to provide screening between off-street parking areas and rights-of-way, and to provide for the integration of stormwater management with required landscaping
 - iii. Section 10-5-3-E. Parking Area Interior Landscape Zone All off-street parking areas shall include landscape and trees located within the off-street parking area as required by this section. Trees and landscape required by this section shall be in addition to trees and landscape required under other sections of this title. It is the objective of this section to provide shade within parking areas, break up large expanses of parking area pavement, support stormwater management where appropriate, improve the appearance of

- parking lots as viewed from rights-of-way, and provide a safe pedestrian environment.
- iv. Section 10-5-3-F. Transition Zone Landscape Requirements Transition zone landscape shall be required along interior side and rear property lines of all nonresidential, mixed use, and multi-family development. It is not expected that the transition area will totally screen such uses but rather will minimize land use conflicts and enhance aesthetics.

Staff defers all landscape review comments to the City Engineer's subconsultant. However, we want to highlight that, due to the site's unique location, being entirely surrounded by public roadways, special attention will be required during installation to ensure clear visibility at driveway and right-of-way intersections. In accordance with Section 10-5-6 of the Unified Development Ordinance, this may necessitate minor adjustments to the approved plan, such as relocating or removing certain plant materials.

- 12. **LIGHTING** A photometric plan has been provided along with pole details of the proposed light standards to be installed within the parking lot area. Maximum illumination at the property line shall not exceed zero (0) foot-candle and no glare shall spill onto adjacent properties or rights of way.
 - a. Per Table 10-5-7(E) of the Unified Development Ordinance, the maximum height for outdoor light standards in the B-3 General Business District is 35 feet. The petitioner seeks a deviation to this regulation to install a light fixture with a maximum height of 36'-6" to provide ample uniform light coverage of the parking lot area (Deviation #3). Staff supports this deviation.
 - b. Staff defers to City Engineer regarding all other photometric plan review comments.
- 13. **MECHANICAL SCREENING** Per Section 10-5-4 Screening of the Unified Development Ordinance, ground/wall-mounted and roof mounted mechanical units that are <u>visible from</u> any public right-of-way or adjacent residential property shall be screened from public view. Materials used for screening shall be designed and established so that the area or element being screened is no more than twenty (20) percent visible through the screen. Evergreen hedges or non-transparent walls such as stone masonry shall be allowed, as depicted below:



- a. It is noted that there are two (2) proposed ground-mounted compactors located on the west elevation adjacent to McHugh Road. It appears the petitioner has proposed to screen ground mounted mechanical equipment with landscaping material such as evergreen trees, ornamental trees and shrubbery located to the west in landscape bed edge.
 - i. Since the units may not be visible from the public way due to the location, setback and landscaping provided on the site, staff is supportive of the screening.
- 14. **APPEARANCE STANDARDS** Per Section 10-5-8-C-3.b Commercial, Office and Institutional Uses, Masonry products or precast concrete shall be incorporated on at least fifty (50) percent of the total building, as broken down as follows: The front facade shall itself incorporate masonry products or precast concrete on at least fifty (50) percent of the facade. Any other facade that abuts a street shall incorporate masonry products. The use of masonry products or precast concrete is encouraged on the remaining facades. Additional standards include:
 - a. Loading bays for commercial and office uses shall not be located in the front of a building or in the area abutting a public right-of-way, and all commercial, office.
 - b. Institutional buildings shall consist of solid and durable facade materials and be compatible with the character and scale of the surrounding area.

The petitioner has submitted exterior building elevations depicting the retail warehouse with materials such materials as insulated textured metal architectural panels, smooth face CMU, glazing and ribbed architectural metal panels. However, the petitioner is seeking relief from the minimum masonry requirements and location of loading bays in the front of the building and in an area abutting a public right-of-way (Deviation #4). Below is the proposed building material breakdown:

MATERIAL PERCENTAGES

(0.000000183)	ELEVATION			TOTAL		
MATERIAL	SOUTH	EAST	NORTH	WEST	ENTRY	1,0,0
SMOOTH FACE CMU "BUFF"	tuna ge	THE SE	2.337 SE	1388.5F	905 GE 3116	14.61%
GLAZING.		JAU ST			21%	2.89%
TEXTURED ARCHITECTURAL METAL PANEL SANDSTONE	25/14 SE	2.007% 34%	5 850 SF 44%	30% 30%	1670 SE 34%	30.60%
VERTICAL RIBBED ARCHITECTURAL METAL PANEL"TAUPE"	7.768 SF 88%	1.975 SF 47%	5105 SF 38%	5.557.5F 60%	939 SF 22%	50.76%
CONCRETE "NATURAL"	546.9F					1.14%

- * CALCULATION DOES NOT INCLUDE EXTERIOR EGRESS DOORS
 - c. Staff has calculated that the masonry/cementitious materials make up approximately 15-16% of the total building and 30-35% of the front elevation (South and Entry). We understand that Costco must maintain its corporate brand and image, and staff is fully supportive of this deviation from the 50% appearance code standard. The proposed textured and ribbed architectural paneling provides a solid and durable façade, which meets the intent of the UDO's requirements.
 - d. In Section 10-5-8C.1 of the UDO it states "Creativity and ingenuity in applying the standards and guidelines listed in this Code are encouraged. <u>Likewise</u>, ingenuity and creativity, while considering deviations to the standards and guidelines of this Code, are encouraged." Following this guidance, staff has previously used the credit for "major architectural features" outlined in Section 10-5-8C-2.7 (intended for

- residential uses) as a reference when approving deviations for unbuilt nonresidential sites that have or are seeking PUDs.
- e. Therefore, as vertical articulation is accomplished through the use of color, texture, and the strategic distribution of sustainable materials along the facades in proportion to the building's scale, along with the incorporation of a free-standing steel trellis on the south elevation to soften and define the building mass visible from the south, staff is supportive of the deviation.
 - Note, while staff supports this request for relief—similar to the relief granted to the recently approved Cyrus One data center project—there is no guarantee the City Council will approve a deviation from the City's appearance standards.
- 15. **SIGNAGE** The petitioner is proposing six (6) wall mounted signs as illustrated on the exterior elevations, as illustrated below:

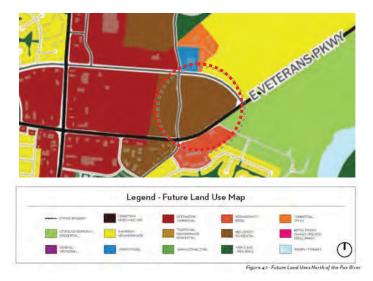


- a. Per Section 10-6-6 of the Unified Development Ordinance, single tenant buildings shall be permitted a total of two (2) primary wall signs or one (1) primary wall sign per one hundred (100) linear feet of building frontage. One (1) additional wall sign shall be allowed per additional hundred (100) feet of building frontage. Only one (1) primary wall sign shall be displayed on any single building façade.
 - i. Additionally, a maximum of two (2) secondary wall signs may be authorized for buildings with lineal frontage in excess of seventy-five (75) feet by the Zoning Administrator provided such additional signage is:
 - (1) In keeping with the overall design and architecture of the building,
 - (2) A minimum of ten (10) feet from the primary wall sign and other secondary wall signs,
 - (3) A maximum of fifty (50) percent of the size of the primary wall sign,
 - (4) Accessory to the building's primary wall sign(s), and
 - (5) The total area of all primary and secondary wall signs does not exceed the maximum wall sign area as established in Section 10-6-6(A)(1).
 - ii. Signs Attached to a Wall With a Public Entrance or Facing a Public Right-of-Way. The maximum sign area shall be two (2) square feet for every one (1) linear foot of the exterior wall to which it is affixed. The sign shall not to exceed seventy-five (75) percent of the width of the exterior wall to which it is attached.

- b. Since all building elevations (south, east, north, and west) have frontage along a public right-of-way, each façade is permitted one (1) primary wall sign.
- c. Additionally, each building façade (except the entry area) exceeds 100 liner feet, so an additional two (2) secondary wall signs are permitted per facade.
- d. Therefore, per staff's calculations, the petitioner is permitted a maximum of five (5) primary signs and eight (8) secondary signs totaling 13 wall signs, as depicted in the table below:

Elevation	Façade Length	Permitted # of Signs	Proposed # of Signs	Permitted Max. Sign Area	Proposed Sign Area
South	~358'-7"	3	1	~717.4 sq. ft.	280 sq. ft.
East	~326'-4"	3	2	~652.8 sq. ft.	311 sq. ft.
Entry	70'-3 3/4"	1	1	~140.7 sq. ft.	175 sq. ft.
North	~493'-6"	3	1	~987.2 sq. ft.	280 sq. ft.
West	~220'-0"	3	1	~440 sq. ft.	280 sq. ft.
TOTAL		13	6	~2938.1 sq. ft.	1326 sq. ft.

- e. All proposed wall signs conform to UDO regulations.
- f. It is noted a monument sign is not proposed for the development. However, the existing pylon ground-mounted "Menards/Yorkville Crossing" sign located at the southeast corner of the property will be relocated, east of Countryside Parkway on parcel #02-27-101-004 owned by Yorkville Crossings, LLC.
- 16. **COMPREHENSIVE PLAN** The 2016 Comprehensive Plan Update designates this property as "Mid Density Residential (MDR)" which is defined typically for higher density residential developments near commercial areas and transportation corridors including townhomes and multi-family development.
 - a. Although the proposed commercial land use does not align with the comprehensive plan's current future land use designation, **staff supports** the use because it is consistent with the "Destination Commercial (DC)" designation assigned to nearby properties to the west. Additionally, the property's existing B-3 zoning classification aligns with both the Destination Commercial land use and the original PUD. If the proposed development is approved, an amendment to the Comprehensive Plan will be required.



17. **FINAL PLAT** – The title block on Sheet 2 of the Final Plat of Subdivision for "City Plan Commission Certificate" shall be revised to read "<u>City Planning and Zoning Commission Certificate</u>".



Date:

From:

To:

Yorkville Police Department Memorandum 651 Prairie Pointe Drive

Krysti Barksdale-Noble (Community Development Director)

Yorkville, Illinois 60560 Telephone: 630-553-4340

Fax: 630-553-1141

James Jensen (Chief of Police)

December 2, 2024

Reference:	Plan Review	PZC 2024-33 Costco		
	Project Name:	Costco Wholesale Corp	poration	
	Applicant Name:	Costco Wholesale Corp	poration	
	Project Manager:			
	Project Number:	PZC 2024-33 Costco		
The commen	ts listed below are refe	renced to the above projec	t:	
<u>Signage</u>				
Handic	apped Signage Require	ed:	X Yes	No
(Comments: Handicap	ped parking has been ide	ntified on the p	lan. Proper signage
ı	must meet MUTCD St	andards for enforcement.		
	*	*Signage must meet MUTCD Stand **Fine amount must be listed on sig		
Speed	Limit Signage Required	d/Recommended	Yes	X No
•	School Zone Special S		Yes	
	Special Speed Zone Si		Yes	XNo
No Parl	king Signage Recomm	ended?	X Yes	No
(Comments: Areas tha	t will be posted "No Parki	ing" must be po	osted via proper
•	signage meeting MUT	CD Standards for enforce	ement (i.e. No P	arking Fire Lane)
No Par	king Locations:			
	No Parking on Cou	ıntryside Parkway		
•	No Parking on McI			
Dedica	ted Parking signage ne	eded?	Yes	X No
_	Located by Park			
	School			



Yorkville Police Department Memorandum 651 Prairie Pointe Drive Yorkville, Illinois 60560

Telephone: 630-553-4340 Fax: 630-553-1141

Common Parking Area			
Are there Street Name Conflicts? Comments:	Yes	X No	
Pedestrian/Bike Path Crossing Signage? Comments: The pedestrian walking/bike path rule path is extremely busy. While not required, we wanted the Pedestrian Crossing signs be posted.	_	 I. This walking/bil	ke
NO Construction Traffic Signage being requested? Location:	Yes	X No	
***We request that all signage is posted prior to the first occupancy permit ***All traffic control signage must conform to MUTCD Standards specific to	-	·	
<u>Roadway</u>			
Street Width: N/A			
Should parking be allowed on BOTH sides of road? Should parking be restricted to fire hydrant side? Comments: No Parking should be allowed on Co	Yes	No	
Center Roadway Medians: Limit Parking on Median? Signage Needed? Room for Emergency Veh. w/ one lane Obstructed?	Yes Yes	X No No No No	
Do you have intersection Concerns? Comments: No concerns at the intersections of Rt. 34 & McHugh Road. Both of these intersection lights. I do have a concern with the intersection does not appear to be any traffic control devices	ons are contro of Rt. 34 & Tu	ryside Parkway or lled with traffic ma Road. There	



Yorkville Police Department Memorandum 651 Prairie Pointe Drive Yorkville, Illinois 60560

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"Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each direction) and a turn lane this will be very problematic and dangerous. If this entrance/exit will remain, I recommend this being a "right in" and "right out" only.

<u>Landscape</u>					
Low Growth or Ground Cover Landscaping?	Yes	No			
Low Growth or Ground Cover Landscaping by windows?	Yes	No			
Low Growth or Ground Cover Landscaping by Entrances	Yes	No			
have not seen a landscaping plan for this project. If landsca		•			
should use low growth or ground cover landscaping by the	entrance/ex	tit to limit site line			
ssues.					
, <u>-</u>					
<u>Ingress / Egress</u>					
	X Yes	No			
Total Entrance/Exits for development?5					
Comments: No concerns at the intersections of Rt. 34 & Countryside Parkway or					
Rt. 34 & McHugh Road. Both of these intersection					
lights. I do have a concern with the intersection of	f Rt. 34 & Tun	na Road. There			
does not appear to be any traffic control devices at this intersection other than a					
"Stop Sign". With the speed of traffic on Rt. 34, four lanes of traffic (two in each					
direction) and a turn lane this will be very problem	atic and dang	gerous. If this			
entrance/exit will remain, I recommend this being a	ล "right in" aเ	nd "right out" only.			
	Yes				
Comments: See comments above. Only 1 entrance	e/exit would k	oe classified as			
unsafe.					
Are warning signs for cross traffic requested?	Y Voo	No			
	X Yes				
Comments: Signage for pedestrian walking/biking	pain snould	ne auded.			
Raised Median & Signage for Right in & Right Out?	Yes	X No			
Comments:	103				



Yorkville Police Department Memorandum 651 Prairie Pointe Drive

Yorkville, Illinois 60560 Telephone: 630-553-4340 Fax: 630-553-1141

Emergency Contact for after hours during construction

Comments: Please provide emergency contact information for after hours during construction. This will only be used if there is a law enforcement need.

	aw omoroomone nood.
Is this a gated or controlled access development? If yes, will police & Fire and Access?	Yes No Yes No
<u>Miscellaneous</u>	
Individual Mailboxes? Cluster Mailbox Kiosks? Will this cause traffic choke points?	YesX_No YesX_No YesX_No
Are sidewalks being planned for the development? Existing sidewalks already in place along Country 34.	
Are sidewalk crosswalks needed? Are there bike paths planned for this project? Comments: Bike path is already existing. Proper Signage needed for bike paths	YesX_NoYesNoX_YesNo
X Stop Signs Yield Signs Trespassing Other	
Are there HOA Controlled Roadway OR Parking Areas?	Yes X _ No
Ample Parking on Site?	Yes No
Are there other City Ordinance Concerns?	Yes X _ No
Noise Ordinance Parking Ordinances	Alarm Ordinance
Security Will security cameras be in use during construction?	Yes No
vviii seculity cameras de in USE OHIHO CONSHICHON/	169 170



Yorkville Police Department Memorandum 651 Prairie Pointe Drive

Yorkville, Illinois 60560 Telephone: 630-553-4340

Fax: 630-553-1141

Will security cameras be in use during normal	business hours?	Yes _	No	
Access to the building will be membership onl	y controlled. Will the	e police departme	ent have	
access to the building for emergencies?		Yes _	No	
Comments: Police access during em	ergencies would b	e required.		
What are the business Hours of Operation?	Monday – Friday	10:00a.m – 8:30p.m		
	Saturday	9:30a.m - 7:00p.m		
	Sunday	9:30a.m – 7:00	p.m	
	Fuel Station	6:00a.m – 9:30p.m		
Will the building be alarmed?		Yes	No	
Will you provide Floor Plans/Maps to the polic	e department to be u	used for emerger	ісу	
purposes only?		Yes _	No	
Comments: We would request a cop	y of the floor plans	to be used for e	emergency	
purposes only.				

I hope you find this information helpful, and we look forward to reviewing the revisions. If you should have any questions, comments, or concerns please do not hesitate to contact me.

Engineering Enterprises, Inc.





December 5, 2024

Ms. Krysti Barksdale-Noble Community Development Director United City of Yorkville 651 Prairie Pointe Yorkville, IL 60560

Re: Costco

Preliminary Engineering – 1st Submittal United City of Yorkville

Dear Krysti:

We have reviewed the following items for the above-referenced project:

- Preliminary Engineering Plans (5 sheets) dated November 13, 2024, and prepared by V3 Companies
- Final Plat of Subdivision (2 sheets) dated October 29, 2024, and prepared by V3 Companies.
- Photometric Plan dated July 22, 2024, and prepared by T.E. Inc.
- Preliminary Stormwater Management Report dated November 13, 2024, and prepared by V3 Companies
- Traffic Impact Study dated November 13, 2024, and prepared by V3 Companies
- Preliminary Landscape Plan dated November 15, 2024, and prepared by Kimley-Horn
- Other Supporting Documentation

Our review of these plans and reports are to generally determine their compliance with local ordinances and whether the improvements will conform to existing local systems and equipment. This review and our comments do not relieve the designer from his duties to conform to all required codes, regulations, and acceptable standards of engineering practice. Engineering Enterprises, Inc.'s review is not intended as an in-depth quality assurance review, we cannot and do not assume responsibility for design errors or omissions in the plans. As such, we offer the following comments:

General

- 1. The following permits may be required during final engineering and should be provided to the City when obtained. The City and EEI should be copied on all correspondence with the agencies.
 - IEPA NPDES General Construction Permit is required. The Notice of Intent must be filed with IEPA 30 days prior to start of construction.
 - IEPA Water and Sanitary Sewer Permits
 - Yorkville Bristol Sanitary District (YBSD) approval is needed for the connection of the proposed sanitary lines to the existing sanitary sewer.
 - IDOT for the connection to U.S. Route 34
 - United City of Yorkville Stormwater Management Permit
- 2. The following will need to be submitted with final engineering:
 - a. An engineer's estimate needs to be provided and must include all public improvements within the ROW including all public utilities and connections, all soil erosion and sediment control items, and all permitted stormwater items. This cost estimate will be used to determine the construction guarantee amount. In addition, a cost estimate needs to be provided for all site improvements which will be used to calculate the building permit fees.
 - b. Truck turning exhibits for delivery and emergency vehicles
- Additional forms and information can be found at https://www.yorkville.il.us/333/Engineering-Department.
- 4. The comments in the attached review letter from the City's landscaping consultant must be addressed and a revised landscaping plan submitted with final engineering.

Preliminary Engineering Plans

We have completed a cursory review of the preliminary engineering plans and stormwater management report. A detailed review will be completed with the submittal of final engineering. The following comments should be considered when developing final engineering.

C_{0.0} - Cover Sheet

- 5. The plans should be signed and sealed by a Professional Engineer prior to final approval.
- 6. The JULIE logo or contact information should be included on the cover sheet.
- 7. Include contact information for the City and YBSD on the cover sheet.

C2.0 - Layout Plan

8. The City should confirm that the number of parking spaces is adequate.

C3.0 - Preliminary Grading Plan

- Additional grading should be shown in the fueling area.
- Include 1-ft contours in the non-paved area to the west (where the future employee parking will be).

C4.0 - Preliminary Utility Plan

- 11. All utility conflicts will need to be shown.
- 12. Water valves should be included on the water main.
- 13. Provide details of the water main connections.
- 14. The storm structures should be labeled with unique identifiers and the type of structure, frame, and lids/grates.

Photometric Plan

- 15. The photometric plan should include a summary table that includes average, average to minimum, and maximum to minimum light intensity data to confirm that the lighting plan meets the requirements of the Ordinance.
- 16. Light intensity shall be zero-foot candles at all property lines.
- 17. Light fixtures should be fully cut off and conform to the dark sky concept.

Preliminary Stormwater Management Report

- 18. A City of Yorkville Stormwater Permit Application should be submitted with Final Engineering.
- 19. The stormwater management report should be signed and sealed by a Professional Engineer prior to final approval.
- 20. Confirm that the detention basin design accounts for the future development of the fueling station and employee parking lot that is indicated on the plans.
- 21. The report includes a requirement to control the outlet to 0.08 cfs/acre for a 25-year storm. It has been determined that this will not be required for this project.
- 22. A full report with calculations, modeling, and exhibits as indicated in the permit application should be included with final engineering.
- 23. A certified wetland determination will need to be included with final engineering.

- 24. Confirm that the existing storm sewer that goes to the existing detention basin is installed.
- 25. Calculations for the drawdown time of the detention basin will be required due to the 5.8' bounce.

Traffic Study

The following roadway-related improvements are anticipated to accommodate the new development based on the submitted traffic study:

- A new full-access driveway on US 34 that aligns with Tuma Road.
 - a. Eastbound dedicated left turn lane into Costco.
 - b. Westbound dedicated right turn lane into Costco.
- Two new full-access driveways on McHugh Road.
 - c. Restriping the existing two-way left turn lane into a dedicated left turn lane into the proposed Costco gas station.
 - d. Widening McHugh Road near US 34 for a dedicated right-turn lane into the proposed Costco gas station.
- A new full-access driveway on Countryside Parkway that aligns with Crimson Lane.
 - e. Restriping the unused, existing left turn lane in the paved, westbound Countryside Parkway median area.
- A new full-access driveway on Countryside Parkway.
 - f. Removal of the existing landscaped and curbed median area.
 - g. Adding dedicated left turn lane into the proposed Costco parking lot.
- A new Right-In Right-Out driveway on Countryside Parkway.
- 26. The traffic impact study should be submitted to IDOT for review. The City should be copied on all correspondence with IDOT.
- 27. IDOT should comment on the proposed mitigations at US 34 and Countryside. Note that the capacity analysis indicated an inadequate level of service without the proposed mitigations. Storage lengths were also exceeded in this area.
- 28. The storage length for the southbound Countryside Parkway at US 34 should meet the proposed mitigation queue length and avoid blocking the exit of Driveway 3.
- 29. The existing traffic volumes displayed in Figure 5 along McHugh Road do not balance with the volumes entering the intersections of US 34 / McHugh Road and McHugh Road / Countryside Parkway.
- 30. The existing traffic volumes displayed in Figure 5 along Countryside Parkway do not balance with those entering the intersections of US 34 / Countryside Parkway and Countryside Parkway / Crimson Lane.
- 31. The pages from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, should be included in the Appendix.

- 32. The size utilized in Table 1 for trip generation of the Gasoline/Service Station does not account for the future expansion of the gas station.
- 33. A traffic signal warrant analysis at the intersection of US 34/Veterans Parkway and Costco Driveway 4/Tuma Road found the installation of a traffic signal to be unwarranted. It is noted that an inadequate Level of Service at US 34 / Tuma Road / Driveway 4 is expected. A proposed mitigation plan should be provided.

The safety of the eastbound left turn into Driveway 4 is of concern.

- 34. A traffic signal warrant analysis should be performed for McHugh Road and Countryside Parkway with the anticipated project traffic volumes.
- 35. The taper length for the left turn at Driveway 2 should meet minimum IDOT Bureau of Local Roads and Streets (BLRS) design requirements.
- 36. The shifting of driveway 5 further north should be considered. Ideally, the taper length for the southbound left turn at US 34 is extended as it should meet minimum IDOT BLRS design requirements.

This would also allow the shifting of the dedicated right-turn lane for driveway 5 away from the intersection at US 34.

Final Plat of Subdivision

- 37. The legal description is the surveyor's certificate must describe the measured boundary.
- 38. The chord length should be added to all curve dimensions.
- 39. All easements must be dimensioned.
- 40. The water main easement should be changed to a C.U.E.
- 41. The S.S.E. should be changed to C.U.E.
- 42. Cross-access easements are needed over all lots.
- 43. The Public Utility Easement Provisions and the stand-alone Nicor Gas provisions should be removed.
- 44. The stormwater management easement and City Utility Easement C.U.E. provisions should be added.
- 45. The building setback line on the west line of Lot 1 needs to be labeled.
- 46. The area table must match the areas on the plat.
- 47. All fire hydrants, valves and emergency shut off must be inside the C.U.E.

- 48. The concrete monument symbols do not match the location labels on the plat.
- 49. Note 2 on the IDOT access notes contradicts the site plan.

The plans should be resubmitted for further review. If you have any questions or require additional information, please contact our office.

Respectfully Submitted,

ENGINEERING ENTERPRISES, INC.

Bradley P. Sanderson, P.E.

Chief Operating Officer / President

BPS/tnp/pgw2

Mr. Bart Olson, City Administrator (via email) pc:

Ms. Erin Willrett, Assistant City Administrator (via email)

Mr. Eric Dhuse, Director of Public Works (via email)

Mr. Pete Ratos, Building Department (via email)

Ms. Gina Nelson, Admin Assistant (via email)

Ms. Sara Mendez, City Planner (via email)

Building Department (via email) <u>Bzpermits@yorkville.il.us</u>

Ms. Jori Behland, City Clerk (via email)

Mr. Stephen Cross, Costco (via email)

Mr. Dan Free, V3 (via email)

TNP. PGW2, EEI (via e-mail)

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

8755 W. HIGGINS ROAD, SUITE 835 CHICAGO, ILLINOIS 60631 PHONE (773) 693-9200 FAX (773) 693-9200

December 5, 2024

Pamela Whitfield, PE, CFM Senior Project Engineer II Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, IL 60554

Project No.: 21-0275 AO

Re: Landscape Plan Review

Costco

Dear Pamela:

We have completed our first landscape plan review of the proposed Costco development located southwest of McHugh Road and East Countryside Parkway in Yorkville.

Landscape Plan - NOT RECOMMENDED FOR APPROVAL

Because it is preliminary and lacks sufficient detail, and based upon comments below, this landscape plan is not recommended for approval at this time. A response letter from the petitioner which addresses all review comments should be provided with their next submittal.

REVIEW COMMENTS

Comments must be addressed before landscape plan approval can be recommended. If there are any changes to the proposed project, additional comments may be provided. Please note that the requirements of each section are in addition to the requirements of all other sections of the ordinance (i.e., trees and other plant materials cannot be "double counted" to meet multiple requirements).

Building Foundation Landscape Zone

A Building Foundation Landscape Zone, consisting of 5 square feet of landscape area per linear foot of building frontage, is required along front and side yards. No foundation landscaping is shown on the east and west sides of the building. Requirements are not met.

Parking Area Perimeter Landscape Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted. The City may require Parking Lot Perimeter Landscape along the southern edge of the main parking lot if Outlots 1 and 2 are to remain vacant.

Pamela Whitfield Costco December 5, 2024 page 2

Parking Area Interior Landscape Zone

Parking area medians are required every third bay of parking in front or side of building. Parking area islands spaced not more than 10 continuous spaces apart are also required. Requirements are not met.

Transition Zone

Requirements appear to be met and will be confirmed later after more detailed plans have been submitted.

Species Diversity Requirements

Compliance with species diversity requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Minimum Plant Size Requirements

Compliance with minimum plant size requirements cannot be assessed at this time due to lack of information on the plan. Requirements are not met.

Tree Preservation and Removal

A review of Google Earth and Google Streetview imagery suggests there are a few parkway trees on the subject property, which are shown to be preserved. Requirements appear to be met and will be confirmed later after more detailed plans have been submitted

Street Trees

A minimum of 1 canopy tree is required per every 40 linear feet of parkway. Requirements are not met.

Wetlands

A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

SUMMARY

This review was based upon the following documents, pursuant to relevant landscape requirements of the City's Unified Development Ordinance and Wetland Regulations.

Landscape Plans, 7 sheets, prepared by Kimley-Horn, most recently dated 11/15/2024

Let us know if there are any questions or comments.

Sincerely,

Tim Pollowy, RLA (IL & WI) Senior Landscape Architect

Hey and Associates, Inc.

Engineering, Ecology and Landscape Architecture

8755 W. HIGGINS ROAD, SUITE 835 CHICAGO, ILLINOIS 60631 PHONE (773) 693-9200 FAX (773) 693-9200

December 10, 2024

Pamela Whitfield, PE, CFM Senior Project Engineer II Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, IL 60554

Project No.: 21-0275 AO

Re: Landscape Plan Review

Costco

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Pamela Whitfield Costco December 10, 2024 page 2

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Street Trees

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Wetlands

A review of Google Earth and Google Streetview imagery suggests there are no wetlands on the subject property.

The following comments on the landscape plan were provided by Public Works, and also must be addressed.

General Question

• You show new plantings in the median on Countryside Parkway, are you planning on maintaining the median?

Sheet L1.1

- Please locate the existing streetlights on McHugh Rd. and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights and street cuts.
- No parkway trees should be planted in medians that are less than 10' wide. We have had trees planted in these areas in the past and they do not survive.

Pamela Whitfield Costco December 10, 2024 page 3

Sheet L1.2

- The city is planning on removing the existing pear trees and reshaping the median on East
 Countryside Parkway to allow better site lines and make it safer to mow. Perhaps we can work
 together to come up with a solution since you are cutting in a turn lane on East Countryside
 Parkway.
- Please locate the existing streetlights on Countryside parkway and incorporate them into the landscape drawing. The proposed trees may interfere with the streetlights.

SUMMARY

This review was based upon the following documents, pursuant to relevant landscape requirements of the City's Unified Development Ordinance and Wetland Regulations.

• Landscape Plans, 7 sheets, prepared by Kimley-Horn, most recently dated 11/15/2024

Let us know if there are any questions or comments.

Sincerely,

Tim Pollowy, RLA (IL & WI) Senior Landscape Architect

Sin Pollony



Order ID: 7739822

Printed: 12/12/2024 4:48:15 PM

Page 2 of

* Agency Commission not included

GROSS PRICE *: \$923.67

PACKAGE NAME: IL Govt Legal Aurora Beacon

Product(s): SubTrib Aurora Beacon News, Publicnotices.com

AdSize(s): 2 Column

Run Date(s): Monday, December 16, 2024

Zone: Full Run
Color Spec. B/W

Preview

PUBLIC NOTICE NOTICE OF PUBLIC HEARING BEFORE UNITED CITY OF YORKVILLE PLANNING AND ZONING COMMISSION PZC 2024-33

NOTICE IS HEREBY GIVEN THAT Stephen Cross, an authorized representative of Costco, has submitted applications to the City of Yorkville, Kendall County, Illinois, on behalf of Costco Wholesale Corporation, the contract purchaser and petitioner, and Joda Land Holding, LLC, the property owner. The applications request an amendment to the Yorkville Crossing Planned Unit Development (PUD) Agreement to facilitate the development of an approximately 160,000-square- foot members-only retail store. Additionally, the petitioner seeks special use authorization to construct and operate a freestanding fueling facility, as well as final plat approval to resubdivide the existing two (2) parcels, totaling nearly 34 acres, into three (3) new parcels. The petitioner is also requesting deviations from the Unified Development Ordinance, including Section 10-5-3 regarding Landscape regulations; Section 10-5-1 regarding Off-Street Parking and Loading regulations for the maximum number of parking stalls and the minimum number of electric vehicle charging stations; Section 10-5-7 regarding Outdoor Lighting standards for the maximum pole height of light fixtures; and Section 10-5-8 regarding Appearance Standards related to the use of masonry products or precast concrete on building facades. The subject property is located at the northwest corner of Veterans Parkway (US 34) and Countryside Parkway.

The legal description is as follows:

THAT PART OF THE NORTHWEST QUARTER OF SECTION 27, AND PART OF THE NORTHEAST QUARTER OF SECTION 28, TOWNSHIP 37 NORTH, RANGE 7 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: BEGINNING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655, WITH THE NORTHERLY RIGHT OF WAY LINE OF U.S. ROUTE NO. 34 PER DOCUMENT NUMBERS 2002-00008973 AND 2002-00007755; THENCE SOUTH 12 DEGREES 50 MINUTES 13 SECONDS WEST, ALONG THE NORTHERLY RIGHT OF WAY LINE OF SAID U.S. ROUTE NO. 34, 77.16 FEET; THENCE SOUTH 55 DEGREES 12 MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 976.51 FEET; THENCE WESTERLY



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* Agency Commission not included

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PACKAGE NAME: IL Govt Legal Aurora Beacon

ALONG SAID NORTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.00'; AND A CHORD BEARING OF SOUTH 67 DEGREES 53 MINUTES 14 SECONDS WEST, AN ARC LENGTH OF 616.39 FEET; THENCE NORTH 67 DEGREES MINUTES 38 SECONDS WEST, ALONG SAID NORTHERLY RIGHT OF WAY LINE, 97.31 FEET; THENCE SOUTH 85 DEGREES 58 MINUTES 01 SECONDS WEST. ALONG SAID NORTHERLY RIGHT OF WAY LINE, 1,41 FEET TO THE EASTERLY RIGHT OF WAY LINE OF MCHUGH ROAD PER PLAT OF DEDICATION DOCUMENT NO. 2000-00009655; THENCE NORTH 04 DEGREES 07 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 183.64 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 03 DEGREES 01 MINUTES 21 SECONDS EAST, AN ARC LENGTH OF 114.80 FEET: THENCE NORTH 10 DEGREES 10 MINUTES 20 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 300.40 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE LEFT

WITH A RADIUS OF 1040.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 38 MINUTES 51 SECONDS EAST, AN ARC LENGTH OF 309.47 FEET; THENCE NORTH 06 DEGREES 52 MINUTES 38 SECONDS WEST, ALONG SAID EASTERLY RIGHT OF WAY LINE, 250.39 FEET; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 460.00 FEET AND A CHORD BEARING OF NORTH 01 DEGREES 24 MINUTES 19 SECONDS WEST, AN ARC LENGTH OF 87.86 FEET; THENCE NORTH 04 DEGREES 04 MINUTES 00 SECONDS EAST, ALONG SAID EASTERLY RIGHT OF WAY LINE. 226.43 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 25.00 FEET AND A CHORD BEARING OF NORTH 49 DEGREES 04 MINUTES 00 SECONDS EAST, AN ARC LENGTH OF 39.27 FEET TO A POINT ON SAID SOUTHERLY RIGHT OF WAY LINE OF COUNTRYSIDE PARKWAY; THENCE SOUTH 85 DEGREES 56 MINUTES 00 SECONDS EAST, ALONG SAID SOUTHERLY RIGHT OF WAY LINE, 338,21 FEET: THENCE SOUTHEASTERLY ALONG SAID SOUTHERLY RIGHT OF WAY LINE, BEING ALONG A CURVE TO THE RIGHT WITH A RADIUS OF 1390.03 FEET AND CHORD BEARING OF SOUTH 60 DEGREES 21 MINUTES 36 SECONDS EAST, AN ARC LENGTH OF 1240.81 FEET TO A POINT DRAWN NORTH 34 DEGREES 47 MINUTES 13 SECONDS WEST, 54.08 FEET FROM THE POINT OF BEGINNING;

THENCE SOUTH 34 DEGREES 47 MINUTES 13 SECONDS EAST ALONG SAID SOUTHERLY

RIGHT OF WAY LINE, 54.08 FEET TO THE POINT OF BEGINNING, ALL IN KENDALL COUNTY, ILLINOIS.

EXCEPTING THEREFROM: THAT PART TAKEN FOR ROAD PURPOSES BY ORDER VESTING TITLE ENTERED IN CASE NO. 15-ED-10, CIRCUIT COURT OF KENDALL COUNTY, ILLINOIS, RECORDED OCTOBER 28, 2015 AS



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DOCUMENT NO. 201500016982.

PINs: 02-28-227-002 and 02-27-101-003

A copy of the application is available for review during normal City business hours at the office of the Community Development Director.

NOTICE IS HEREWITH GIVEN THAT the Planning and Zoning Commission for the United City of Yorkville will conduct a Public Hearing on said applications on Wednesday, January 8, 2025 at 7 p.m. at the United City of Yorkville, City Hall, located at 651 Prairie Pointe Drive, Yorkville, Illinois 60560.

The public hearing may be continued from time to time to dates certain without further notice being published.

All interested parties are invited to attend the public hearing and will be given an opportunity to be heard. Any written comments should be addressed to the United City of Yorkville Community Development Department, City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois, and will be accepted up to the date of the public hearing. For more project information, please scan the QR code below.

By order of the Corporate Authorities of the United City of Yorkville, Kendall County, Illinois.

JORI BEHLAND

City Clerk



12/16/24 - 7739822



Reviewed By:	
Legal Finance Engineer City Administrator Community Development Purchasing Police Public Works	
Parks and Recreation	

Agenda Item Number
Mayor's Report #4
Tracking Number
CC 2025-08

Agenda Item Summary Memo

Title: Public Works	and Parks Department Fac	cility Update
Meeting and Date:	City Council – January 2	8, 2025
Synopsis:		
Council Action Prev	viously Taken:	
Date of Action:	Action Ta	ken:
Item Number:		
Type of Vote Requi	red: None	
Council Action Req	uested: Informational	
Submitted by:	Bart Olson Name	Administration Department
		Item Notes:
If new information is		ne meeting, then a discussion will be held.



	Reviewed By:
	Legal
	Finance
	Engineer
	City Administrator
	Community Development
	Purchasing
	Police
1	Public Works

Parks and Recreation

Agenda Item Number
Mayor's Report #5
Tracking Number
CC 2025-09

Agenda Item Summary Memo

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