



City of Lake Geneva, 626 Geneva St, Lake Geneva, WI 53147- 262.248.3673- www.cityoflakegeneva.com

CITY OF LAKE GENEVA PUBLIC WORKS COMMITTEE
MONDAY, JANUARY 24, 2022 4:00 P.M.
LAKE GENEVA CITY HALL; COUNCIL CHAMBERS (LOWER LEVEL)

Members: Chairperson Cindy Flower, Mary Jo Fesenmaier, Rich Hedlund, Tim Dunn, and John Halverson

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AGENDA

1. Meeting called to order by Chairperson Flower
2. Roll Call
3. Comments from the public as allowed by Wis. Stats. §19.84(2), limited to items on this agenda. Comments will be limited to 5 minutes
4. Approval of the December 28, 2021 Public Works Committee meeting minutes as prepared and distributed
5. Director of Public Works Report
 - a. Update regarding Snow Event Reports/Plowing
 - b. Update regarding DPW Administrative Assistant Hiring process
 - c. Update regarding Ordinance in relation to Snow Removal on Pedestrian Paths
 - d. Update regarding Cemetery Record Keeping
 - e. Update regarding installation of Delineator Tubes in Spring 2022
 - f. Update regarding the 2021 Street Improvement Project in relation to striping and installation of bollards
 - g. Update regarding Brush Collection Ordinance Revision
6. Parking Manager Report
 - a. Electric Car Charging Stations
 - b. Year Round Parking Program
7. Discussion/Recommendation regarding Change Order #3 filed by Wolf Paving Co, Inc for a completion date extension for the 2021 Street Improvement Project- **DPW Director Earle & Kapur Engineering**
8. Discussion/Recommendation regarding Pay Request #3 filed by Wolf Paving Co, Inc for the 2021 Street Improvement project in an amount not to exceed \$175,751.50- **DPW Director Earle & Kapur Engineering**
9. Discussion/Recommendation regarding the bid award for the 2022 Crack Filling & Sealing Project- **DPW Director Earle**
10. Discussion/Recommendation regarding 2022 Street Improvement Project- **Ald. Flower**
11. Discussion/Recommendation regarding implementation of additional funds to the for Sidewalk Repair within the 2022 Street Improvement Project- **Ald. Flower**
12. Discussion/Recommendation regarding Library Park sidewalk upgrades – **DPW Director Earle**

13. Discussion/Recommendation regarding WI DOT Highway 50 Project; including specialized signal equipment and turn lanes- **DPW Director Earle**
14. Discussion/Recommendation regarding possible placement of a traffic signal at Center Street and Interchange North- **Ald. Flower**
15. Discussion regarding signal plans for Bloomfield Rd and Edwards Blvd- **DPW Director Earle & Kapur Engineering**
16. Discussion regarding possible roadside/right-of-way/park planting for reduced mowing- **Ald. Flower**
17. Future Agenda Items
 - a. GAP/Island Boundary Properties
 - b. Townline Rd/Edwards Blvd Intersection Signs/Signal
 - c. YMCA Contract- Veterans Park Rentals
18. Adjourn

<i>This is a meeting of the Public Works Committee. No official Council action will be taken; however, a quorum of the Council may be present.</i>

CITY OF LAKE GENEVA PUBLIC WORKS COMMITTEE MINUTES
TUESDAY, DECEMBER 28, 2021 4:00 P.M.
LAKE GENEVA CITY HALL; COUNCIL CHAMBERS (LOWER LEVEL)

Members: Chairperson Cindy Flower, Mary Jo Fesenmaier, Rich Hedlund, Tim Dunn, and John Halverson

Chairperson Flower called the meeting to order at 4:00 p.m.

Roll Call

Present: Flower, Fesenmaier, Dunn, and Halverson

Absent: Hedlund

Comments from the public as allowed by Wis. Stats. §19.84(2), limited to items on this agenda. Comments will be limited to 5 minutes

None

Approval of the November 22, 2021 Public Works Committee meeting minutes as prepared and distributed
Motion by Fesenmaier to approve, second by Dunn. No discussion. Motion carried 4-0.

Director of Public Works Report

Snow Event Reports

Public Works Director Earle was not present at the meeting, but the reports were in the packet for review. Committee discussion included review of the snow events to date. Flower would like to see some graphs to accompany the present data, for the snow events moving forward. Fesenmaier stated that she would like updates on the 1815 Conant Street issue, the 2021 Street Improvement striping, the Townline Road signage, and the tubular delineators on Edwards Blvd near Highway 50. No action taken.

Parking Manager Report

Electric Car Charging Stations

Parking Manager Elder addressed the committee regarding the Parking Enforcement reports. He noted that the Parking Enforcement operation is done for the season, so there isn't a revenue report to give. He added that he has been given some revenue projections for electric car charging stations, all of which is located in the packet materials. He stated that the station's projected to generate \$25,000 after four years, if they are used at least forty hours a week. He wouldn't use this as a bona fide revenue stream, but maybe as a modern convenience. Elder noted that he believes that the City could set the rate to charge. Elder added that there is currently pending legislation that could disallow municipalities from having charging stations. Committee discussion included the desire to continue to research this idea and bring back any more information gathered. Flower would like to explore parking passes for those who not only live in Walworth County, but maybe by proximity to the City. No action taken.

Discussion/Recommendation regarding Disc Golf Bridge for replacement

Flower explained there has been some back and forth on which bridge should be replaced; the Public Works Committee had recommended bridge #5, while the Park Board had recommended bridge #3. Flower explained that there is still the issue of identifying where the utilities are located near bridge #5. She added there needs to be discussion regarding the costs to replace both bridges. This could be paid for by using the remaining capital funds instead of replacing the chillers for the City Hall air conditioning. Flower stated that she would like to have more information regarding the costs for the replacement of the two bridges, the need for the new chiller, and the potential need for a new roof at 1070 Carey Street. She added that if only one could be replaced she would like to see bridge #5 replaced as it would connect the disc golf course in a more user friendly way. Committee discussion stated that there needs to be a bridge to be determined, assuming that there is not funding for both. The committee would like to see both bridges be replaced in 2022 or 2023, but that is only one could be replaced it would be preferred that bridge #5 be selected.

Motion by Flower to direct City staff to explore replacing both bridges #3 and #5 if possible, but to supply information for the replacement of both bridges, second by Halverson. Motion carried 3-1, with Fesenmaier voting no.

Discussion/Recommendation regarding ordinances and communication materials regarding DPW services

Flower reviewed the materials within the packet regarding the brush and yard waste pickup program. Flower noted that there are discrepancies between the tax bill flyer and the ordinances; there is not currently anything in the ordinances that state that a brush pickup cannot take longer than five minutes. Fesenmaier stated that she would like the ordinance be reviewed and possibly amended to match the current City/Contractor practices. Fesenmaier stated that the current practice is working and that the ordinances should reflect that. Flower stated that she would like to see the ordinances followed versus the current practice.

Motion by Flower to direct staff to review all pertinent ordinances included to verify that it is followed by current practices, second by Fesenmaier. Motion carried 4-0.

Discussion/Recommendation regarding City Engineering Services RFP

Flower explained that printed materials were distributed to the committee members. She added that it was approved at the November 22, 2021 Public Works meeting and questioned how this would move forward. City Clerk Kropf explained that it may still be in the draft phase, but that she would circle back with the City Administrator for a status update. Flower would like to see an Ad Hoc Committee created to review the contracts; this committee would include the Public Works Director, Building & Zoning Administrator, Utilities Director and several committee/commission members. Fesenmaier stated that the City Administrator should put the RFQ together and maybe then create a group that would review.

Motion by Fesenmaier to reaffirm that the City Administrator will draft a RFQ with the recommendations from Alderperson Flowers memo and that it be reviewed at the January 18, 2022 Finance, Licensing and Regulation Committee meeting and then refer to Council, second by Halverson. Motion carried 4-0.

Discussion/Recommendation regarding 2022 Street Improvement Project

John Jenkins from MSA Engineering, addressed the committee regarding the 2022 Street Improvement project. He outlined that there were several sidewalks and ramps identified as being in disrepair that have been added to the 2022 program. He added that some streets are still being reviewed in coordination with any potential utility work. He added that the list of streets will be dependent on what the contractor prices come in at. He added that the work to be done on Wrigley Drive would be done sometime after Labor Day. Fesenmaier stated that she received a complaint regarding Campell Street between Wrigley Drive and South LakeShore Drive. Jenkins noted that it didn't show up on the WISLR for repair, but that it could be looked at. Flower stated that it would be helpful to have a map included for future discussions. Flower also added that the pedestrian traffic/sidewalk café on Wrigley Drive needs to be addressed. She added that she would like to see some communication made to the downtown business owners, to alert them of possible disruptions. Jenkins added that he can certainly provide some communications to residents, but that until the street list is finalized it would be hard to provide that at this time. Flower stated that she would like to see the sidewalks included in the street assessments. Committee discussion included sending this street list to the FLR committee for recommendation. Flower stated that two alleys are supposed to be addressed each year and that the list currently doesn't have any. Jenkins stated that he wasn't given any alleys to include. Flower asked that two alleys be identified and included in the street improvement plan.

Motion by Flower to forward the current list of streets, to include two alleys, including the sidewalk assessments for the street list including the additional \$20,000 for sidewalk repairs approved during the budget, and communication to residents to Finance, Licensing, and Regulation Committee, second by Fesenmaier. Motion carried 4-0.

Future Agenda Items

- Disc Golf Bridge Replacement
- 2022 Street Improvement Project
- Update on 2021 Street Improvement Project
- Update on Townline Road Signage
- Update on Bloomfield Road Signal
- Update on Native Plantings
- Update on tubular delineators

Adjourn

Motion by Fesenmaier to adjourn, second by Halverson. Motion carried 4-0. The meeting adjourned at 5:27 p.m.

EVENT SUMMARY

SNOW & ICE CONTROL											
2021-2022 SNOW EVENT SUMMARY											
	DATE	DATE	SALT BRINE	SAND/SALT	SALT	SAND/SALT	FULL-PLOW	SPECIAL	REGULAR	TOTAL	TOTAL
	START	END	GALLONS	TONS	TONS	RUN	RUN	COSTS	COSTS	COST	TO DATE
1	12/7/2021	12/7/2021			6.00	x		\$ 426.78	\$ 1,435.00	\$ 1,861.78	
2	12/14/2021	12/14/2021			1.00	x		\$ 71.13	\$ 315.00	\$ 386.13	\$ 2,247.91
3	12/26/2021	12/27/2021			1.25	x	x	\$ 713.91	\$ 875.00	\$ 1,588.91	\$ 3,836.82
4	12/28/2021	12/28/2021	1300.00		28.50		x	\$ 4,863.71	\$ 10,305.00	\$ 15,168.71	\$ 19,005.53
5	12/31/2021	12/31/2021			12.00	x		\$ 1,628.56	\$ 1,065.00	\$ 2,693.56	\$ 21,699.09
6	1/1/2022	1/2/2022			33.00	x	x	\$ 11,959.79	\$ 13,796.25	\$ 25,756.04	\$ 47,455.13
7	1/5/2022	1/5/2022			14.25		x	\$ 1,013.60	\$ 6,005.00	\$ 7,018.60	\$ 54,473.73
8	1/8/2022	1/8/2022			3.75	x		\$ 766.74	\$ 630.00	\$ 1,396.74	\$ 55,870.47
9	1/12/2022	1/12/2022	600.00		6.25	x		\$ 582.56	\$ 1,845.00	\$ 2,427.56	\$ 58,298.03
10	1/14/2022	1/15/2022	1800.00			x		\$ 414.00	\$ 735.00	\$ 1,149.00	\$ 59,447.03
11											
12											
13											
14											
15											
16											
17											
18											
19											
		TOTAL	3700.00		106.00						
		TOTAL COST TO DATE						\$ 22,440.78	\$ 37,006.25	\$ 59,447.03	
		AVERAGE COST PER EVENT						\$ 2,244.08	\$ 3,700.63	\$ 5,944.70	
cc:	Public Works Director										
	Street Superintendent										
	Administrator										

CITY OF LAKE GENEVA
2021-2022 ICE & SNOW CONTROL

TYPE OF SNOW STORM (CHECK ONE)

X	SAND/SALT RUN (DURATION__HOURS)
	FULL-PLOW RUN (DURATION__HOURS)

SNOW STORM DATES:

START	1/14/22	3:30pm
END	1/15/22	2:45pm

APPROX. ACCUMULATION (INCHES) Snow	0.25	Freezing Rain/Rain	
		(SNOW)	(SNOW)

ITEM NO.	DESCRIPTION	QUANTITY AMOUNT	UNIT	UNIT RATE	SPECIAL COSTS	REGULAR COSTS
	TOTAL NO. OF MEN INVOLVED:	1				
1	LABOR					
	A. TOTAL REGULAR MANHOURS WORKED =	7.00	HOURS	\$ 35.00		\$ 245.00
	B. TOTAL OVERTIME MANHOURS WORKED =		HOURS	\$ 50.00	\$ -	
	(OVERTIME = 1 1/2)					
	C. TOTAL DOUBLE TIME MANHOURS WORKED=		HOURS	\$ 70.00	\$ -	
	(SUNDAYS & HOLIDAYS)					
	D. TOTAL REGULAR NON-UNION MANHOURS WORKED =		HOURS	\$ 40.00		\$ -
	E. TOTAL OVERTIME NON-UNION MANHOURS WORKED =		HOURS	\$ 40.00	\$ -	
	TOTAL MANHOURS	7.00				
2	EQUIPMENT:					
	E. 5-CY DUMP TRUCK WITH PLOW	1.00	EACH	\$ 70.00		\$ 490.00
	AVERAGE PER VEHICLE	7.00	HOURS			
	TOTAL	7.00	HOURS			
	F. 1-TON DUMP TRUCK WITH PLOW		EACH	\$ 60.00		#DIV/0!
	AVERAGE PER VEHICLE	#DIV/0!	HOURS			
	TOTAL		HOURS			
	G. FRONT END LOADER		HOURS	\$ 75.00		\$ -
	H. BOBCAT		HOURS	\$ 45.00		\$ -
	I. FULL-SIZE PICK-UP TRUCK		HOURS	\$ 40.00		\$ -
	J. SNOWBLOWER-FRONT END LOADER MOUNTED		HOURS	\$ 80.00		\$ -
	TOTAL VEHICLE HOURS	7.00				
3	MATERIALS:					
	K. SALT/SAND MIXTURE		TONS	\$ 20.43	\$ -	
	SALT		TONS	\$ 71.13	\$ -	
	SALT BRINE	1800.00	GALLONS	\$ 0.23	\$ 414.00	
4	PROFESSIONAL SERVICES:					
	L. 15 OR 20 C.Y. DUMP TRUCK W/ DRIVER		HOURS	\$ 100.00	\$ -	
	SUB-TOTAL SNOW FIGHTING COSTS SPECIAL EXPENSES AND OVERTIME				\$ 414.00	
	SUB-TOTAL SNOW FIGHTING COSTS DURING THE REGULAR WORK DAY					#DIV/0!
	TOTAL SNOWFIGHTING COST PER EVENT		#DIV/0!			

NOTE: COSTS NOT INCLUDED ARE AFTER-PLOWING EQUIPMENT PARTS/MAINTENANCE, STREET SWEEPING, AND INCIDENTALS.

cc: Public Works Director
Street Superintendent
City Administrator

TEMP.	DEGREES F
HIGH	27
LOW	22
GROUND	22
WIND	NE15-20

Account Number	Account Title	2021-21 Prior year Actual	2021-21 Prior year Budget	Variance Current year	% of Budget
CEMETERY OPERATIONS					
CEMETERY OPERATIONS					
CEMETERY OPERATIONS					
48-00-00-41110	PROPERTY TAX LEVY	150,000.00	150,000.00	.00	100.00
48-00-00-46100	MISC REVENUE	3,205.00	3,250.00	45.00	98.62
48-00-00-46540	SALE OF GRAVES/NICHES	19,500.00	12,000.00	7,500.00-	162.50
48-00-00-46550	FOUNDATIONS/STAKE-OUTS	450.00	700.00	250.00	64.29
48-00-00-46560	BURIAL INTERNMENTS	31,475.00	26,000.00	5,475.00-	121.06
48-00-00-48110	INVESTMENT INCOME	125.28	600.00	474.72	20.88
48-00-00-49100	APPL OF PRIOR YEARS APPROP	.00	6,000.00	6,000.00	.00
48-00-00-49200	TRANSFER FROM GENERAL FUND	.00	.00	.00	.00
48-00-00-49400	TRANSFER FROM PERPETUAL CARE	14,015.34	13,000.00	1,015.34-	107.81
Total CEMETERY OPERATIONS:		218,770.62	211,550.00	7,220.62-	103.41
CEMETERY OPERATIONS					
48-00-00-51200	CEM WAGES	92,827.51	91,800.00	1,027.51-	101.12
48-00-00-51250	CEM OVERTIME	2,476.77	3,500.00	1,023.23	70.76
48-00-00-51260	CEM SEASONAL LABOR	13,192.46	12,300.00	892.46-	107.26
48-00-00-51270	CEM ADMIN ASSISTANT	.00	.00	.00	.00
48-00-00-51340	CEM LIFE INSURANCE EXP	290.54	275.00	15.54-	105.65
48-00-00-51345	CEM HEALTH INSURANCE	24,433.54	39,415.00	14,981.46	61.99
48-00-00-51350	CEM DENTAL INSURANCE	1,283.45	840.00	443.45-	152.79
48-00-00-51355	CEM VISION INSURANCE	74.01	66.00	8.01-	112.14
48-00-00-51360	CEM RETIREMENT EXPENSE	6,524.35	6,435.00	89.35-	101.39
48-00-00-51370	CEM DISABILITY EXP	320.54	340.00	19.46	94.28
48-00-00-51380	CEM UNIFORM ALLOWANCE	1,200.00	1,200.00	.00	100.00
48-00-00-51520	CEM FICA EXPENSE	8,187.62	8,235.00	47.38	99.42
48-00-00-52160	CEM PROFESSIONAL SERVICES	.00	.00	.00	.00
48-00-00-52210	CEM TELEPHONE EXP	1,251.05	1,350.00	98.95	92.67
48-00-00-52220	CEM ELECTRICITY EXP	1,941.81	2,000.00	58.19	97.09
48-00-00-52240	CEM GAS HEAT EXP	732.99	1,200.00	467.01	61.08
48-00-00-52260	CEM WATER/SEWER EXP	2,825.58	3,000.00	174.42	94.19
48-00-00-52400	CEM BUILDING REPAIRS	305.98	2,000.00	1,694.02	15.30
48-00-00-52500	CEM EQUIP MAINT/REPAIRS	3,196.26	3,000.00	196.26-	106.54
48-00-00-53100	CEM OFFICE SUPPLIES	.00	100.00	100.00	.00
48-00-00-53120	CEM POSTAGE EXP	.00	40.00	40.00	.00
48-00-00-53130	CEM WORKERS COMP INS	2,348.82	3,200.00	851.18	73.40
48-00-00-53140	CEM LIABILITY/PROPERTY INS	1,763.79	2,340.00	576.21	75.38
48-00-00-53400	CEM OPERATING SUPPLIES	918.07	1,000.00	81.93	91.81
48-00-00-53410	CEM FUEL EXPENSE	4,825.49	5,000.00	174.51	96.51
48-00-00-53500	CEM BLDG MAINT SUPPLIES	199.23	500.00	300.77	39.85
48-00-00-53510	CEM VEHICLE MAINT/REPAIR	4,384.61	3,000.00	1,384.61-	146.15
48-00-00-53600	CEM MAINT SERVICE EXP	629.95	1,700.00	1,070.05	37.06
48-00-00-53620	CEM GROUNDS/LANDSCAPING	620.34	800.00	179.66	77.54
48-00-00-53990	CEM MISC EXP	98.43	350.00	251.57	28.12
48-00-00-54200	CEM GRAVES/FOUNDATIONS	15,857.97	16,400.00	542.03	96.69
48-00-00-54300	CEM COLUMBARIUM EXPENSES	.00	164.00	164.00	.00
48-00-00-58100	CEM EQUIPMENT OUTLAY	.00	.00	.00	.00
Total CEMETERY OPERATIONS:		192,711.16	211,550.00	18,838.84	91.09
Total CEMETERY OPERATIONS:		411,481.78	423,100.00	11,618.22	97.25
CEMETERY OPERATIONS Revenue Total:		218,770.62	211,550.00	7,220.62-	103.41

Account Number	Account Title	2021-21 Prior year Actual	2021-21 Prior year Budget	Variance Current year	% of Budget
	CEMETERY OPERATIONS Expenditure Total:	192,711.16	211,550.00	18,838.84	91.09
	Net Total CEMETERY OPERATIONS:	26,059.46	.00	26,059.46-	.00
	Net Grand Totals:	26,059.46	.00	26,059.46-	.00

MEMORANDUM TO THE CITY OF LAKE GENEVA

To: Tom Earle
From: Naomi Rauch
CC: Neil Waswo, Greg Governatori, Mike Timmers
Date: January 10, 2022
Re: Contract Change Order Request #3 – Contract Extension
2021 Lake Geneva Streets Program

Attached please find a copy of Contract Change Order #3 and Justification for the **2021 Lake Geneva Street Program** construction project.

Work includes: Contract Extension

- New Substantial Completion Date: May 27th, 2022.
- New Final Completion Date: June 26th, 2022.

Due to poor weather during the Fall as well as the work in Change Order #2, the Substantial and Final Completion date have been extended. See attached Change Order #3 documents for more detail.

Let me know if you have any questions or comments!

Thank you!

CONTRACT CHANGE ORDER

Change Order: #3

Date: December 27, 2021

Name of Project: 2021 Lake Geneva Street Program

OWNER: City of Lake Geneva

CONTRACTOR: Wolf Paving

ENGINEER: Kapur & Associates, Inc.

The following changes are hereby made to the Contract Documents: **See attached documentation.**

Justification: **(See attached)**

Change to CONTRACT PRICE- \$ 0

Original CONTRACT PRICE - \$ 648,631.82

Current CONTRACT PRICE adjusted by previous CHANGE ORDER - \$ 663,967.32

The CONTRACT PRICE due to this CHANGE ORDER will be
increased (~~decreased~~) by - \$ 0

The new CONTRACT PRICE including this CHANGE ORDER will be - \$ 0

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased) (~~decreased~~) by 223 calendar days.

The date for completion of work will be May 27, 2022 Substantial (Date).
June 26, 2022 Final (Date)

The CONTRACTOR and OWNER hereby agree that the compensation to the CONTRACTOR effected hereby constitutes full settlement of the claims of the CONTRACTOR under this contract arising out of or incident to the changes effected hereby.

This document will become a supplement to the contract and all provisions will apply hereto.

Recommended by the ENGINEER: _____ Date _____

Name: Emma Connell

Title: Staff Engineer

Accepted by the CONTRACTOR: _____ Date _____

Name: Jay Trepanier

Title: General Contractor

Approved by the OWNER: _____ Date _____

Name: Tom Earle

Title: Director of Public Works

2021 Lake Geneva Street Program

Justification of Price for Contract Change Order #3

I. Item Description:

Item #1.01 Contract Extension

- I. Description: The original final completion date was November 15th, 2021. At the City of Lake Geneva's direction, the contract with Wolf Paving will be extended as follows:
- New Substantial Completion Date: May 27th, 2022.
 - New Final Completion Date: June 26th, 2022.
- II. Basis of Contract Change: The City of Lake Geneva understands that the contractor was unable to make the substantial and final completion dates due to poor weather conditions during the Fall of 2021. Additionally, the City asked Wolf Paving to complete Change Order #2, which included re-striping of southbound lanes at the intersection of Edwards and Hwy 50. To compensate these delays and include time for Change Order #2, the new Substantial Completion date will be May 27th, 2022 and the Final Completion date will be to June 26th, 2022. The below list are items the City of Lake Geneva will expect to be completed by each date.

Substantial Completion by May 27th, 2022

1. All traffic lanes open
2. All pavement markings and erosion control complete
 - i. Removal of two (2) ONLY pavement markings at the intersection of Edwards and Hwy 50 in the far west lane.
 - ii. 18-Inch epoxy stop bar at Snake Rd.
 - iii. Grading work and restoration at the section of sidewalk near 200 N Edwards Blvd. (Aldi)
3. All bid items and change order items complete, other than punch-list and cleanup work

Final Completion by June 26th, 2022

1. To be completed per Standard General Conditions, section 15.06.
2. Punch-list and cleanup work completed
3. Final payment completed

MEMORANDUM TO THE CITY OF LAKE GENEVA

To: Tom Earle
From: Mike Timmers
CC: Neil Waswo, Naomi Rauch
Date: December 29th, 2021
Re: Pay Request for 2021 Lake Geneva Street Program

A review of the Request for **Payment No. 3** from **Wolf Paving Co., Inc.** for the **2021 Lake Geneva Street Program** construction contract has been completed.

Please note, Wolf Invoice #3 and #3A are included on this payment application. There were some changes made (both positive and negative quantity adjustments) to Invoice #3 and Wolf's accounting software was unable to change this invoice (because it was closed out for that month) so Invoice #3A reflects those changes. Some of the quantities were decreased (because the Engineer's measurements were less than Wolf's measurements) and some were increased (because Wolf did not yet bill some quantities at the time of Invoice #3 and by the time Invoice #3A was created more work had been completed). If you have any questions regarding these quantities, please feel free to reach out to us.

Tom, could you please review this pay request and forward it to City Hall, if you approve.

Payment in the amount of **\$175,751.50** for this payment request has been recommended for approval by the Construction Manager on site. Please note, retainage of \$8,000 is being held until Spring, at which time final inspection will be completed, to assure proper restoration and completion of this project is satisfied.

The Contractor's documents are enclosed for the City's approval. Payment amounts are broken up as follows:

	<u>New Invoice Amount</u>	<u>Previously Invoiced</u>	<u>Total</u>
Invoiced	\$167,535.70	\$524,911.91	\$692,447.61
Retainage (5%, until 50% complete)	<u>\$ 8,215.80</u>	<u>(\$ 16,215.80)</u>	<u>(\$ 8,000.00)</u>
Total Approved for Payment	\$175,751.50	\$508,696.11	\$684,447.61

Contract Base Bid, based on plan quantities: \$648,631.82

Please feel free to contact me if you have any questions.

Please send Payment to:

Wolf Paving Co., Inc.
Attn: Jay Trepanier
612 N. Sawyer Road
Oconomowoc, WI 53066

201.0210	Grubbing	SY	1020	\$ 2.00	\$ 2,040.00				0.00	\$ -
204.0120	Removing Asphaltic Surface Milling (Partial Depth 2")	SY	2000	\$ 2.18	\$ 4,360.00			2,016.00	2,016.00	\$ 4,394.88
204.0150	Removing Curb & Gutter	LF	10	\$ 9.80	\$ 98.00			10.00	10.00	\$ 98.00
205.0100	Excavation Common	CY	75	\$ 29.60	\$ 2,220.00			100.00	100.00	\$ 2,960.00
305.0115	Base Aggregate Dense 3/4-Inch	TON	35	\$ 45.70	\$ 1,599.50				0.00	\$ -
305.0120	Base Aggregate Dense 1 1/4-Inch	TON	90	\$ 27.15	\$ 2,443.50			78.04	78.04	\$ 2,118.79
311.0110	Breaker Run-Undistributed	TON	290	\$ 29.85	\$ 8,656.50				0.00	\$ -
416.1010	Concrete Surface Drains	CY	2	\$ 1,200.00	\$ 2,400.00			1.00	1.00	\$ 1,200.00
460.5224	HMA Pavement Type 4 LT 58-28 S (460.6223), Item also includes asphaltic materi	TON	240	\$ 73.54	\$ 17,649.60			331.65	331.65	\$ 24,389.54
465.0315	Asphaltic Flumes	SY	6	\$ 310.00	\$ 1,860.00			5.55	5.55	\$ 1,720.50
522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1	\$ 920.00	\$ 920.00			1.00	1.00	\$ 920.00
522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1	\$ 975.00	\$ 975.00			1.00	1.00	\$ 975.00
601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	560	\$ 23.30	\$ 13,048.00			560.00	560.00	\$ 13,048.00
606.0200	Medium Riprap	CY	2	\$ 120.00	\$ 240.00			5.70	5.70	\$ 684.00
608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	505	\$ 65.90	\$ 33,279.50			501.50	501.50	\$ 33,048.85
608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	70	\$ 72.20	\$ 5,054.00			70.80	70.80	\$ 5,111.76
611.0600	Inlet Covers Type A: R-3067-L	EACH	3	\$ 545.00	\$ 1,635.00			3.00	3.00	\$ 1,635.00
611.0624	Inlet Covers Type H: R-3067-L	EACH	3	\$ 545.00	\$ 1,635.00			3.00	3.00	\$ 1,635.00
611.1230	Catch Basins 2x3-FT	EACH	3	\$ 1,695.00	\$ 5,085.00			3.00	3.00	\$ 5,085.00
611.3003	Inlets 3-FT Diameter	EACH	3	\$ 1,425.00	\$ 4,275.00			3.00	3.00	\$ 4,275.00
611.8110	Adjusting Manhole Covers - Sanitary	EACH	1	\$ 735.00	\$ 735.00				0.00	\$ -
628.1504	Silt Fence	LF	100	\$ 3.00	\$ 300.00	136.00			136.00	\$ 408.00
628.2004	Erosion Mat Class I Type B	SY	1020	\$ 1.20	\$ 1,224.00			991.00	991.00	\$ 1,189.20
628.7015	Inlet Protection Type C	EACH	6	\$ 60.00	\$ 360.00			6.00	6.00	\$ 360.00
645.0120	Geotextile Type HR	SY	5	\$ 8.00	\$ 40.00				0.00	\$ -
645.0220	Geogrid Type SR	SY	400	\$ 5.00	\$ 2,000.00				0.00	\$ -
690.0150	Sawing Asphalt	LF	800	\$ 1.25	\$ 1,000.00			616.00	616.00	\$ 770.00
SPV.0180.01	Restore Disturbed Areas - Includes Topsoil (625.0100), Fertilizer Type A (629.020)	SY	1020	\$ 4.15	\$ 4,233.00			991.00	991.00	\$ 4,112.65

ADDITIONAL BID SUBTOTAL \$123,445.60

Subtotal, Additional Bid - Paid to Date

\$113,311.57

Subtotal \$ per Estimate - Base Bid \$ 408.00 \$ 3,172.40 \$ 109,731.17

ADDITIONAL BID - SNAKE ROAD

Item No.	Item Description	Unit	Bid Qty.	Bid Unit \$	Bid Total \$	Quantity per Estimate			Qty to Date	\$ Paid to Date
						#1	#2	#3		
646.9000	Marking Removal Line 4-Inch	LF	785	\$ 3.00	\$ 2,355.00			90.00	90.00	\$ 270.00
646.9200	Marking Removal Line Wide	LF	46	\$ 11.00	\$ 506.00			46.00	46.00	\$ 506.00
646.9300	Marking Removal Special Marking	EACH	16	\$ 300.00	\$ 4,800.00			16.00	16.00	\$ 4,800.00
646.1020.01	Marking Line Epoxy 4-Inch (White)	LF	785	\$ 0.50	\$ 392.50			590.00	590.00	\$ 295.00
646.5020.02	Marking Arrow Epoxy (Left)	EACH	4	\$ 300.00	\$ 1,200.00			4.00	4.00	\$ 1,200.00
646.5020.04	Marking Arrow Epoxy (Straight)	EACH	2	\$ 275.00	\$ 550.00			2.00	2.00	\$ 550.00
646.5020.05	Marking Arrow Epoxy (Straight and Right)	EACH	2	\$ 400.00	\$ 800.00			2.00	2.00	\$ 800.00
646.5120	Marking Word Epoxy "ONLY"	EACH	8	\$ 350.00	\$ 2,800.00			6.00	6.00	\$ 2,100.00
646.6120	Marking Stop Line Epoxy 18-Inch	LF	46	\$ 17.00	\$ 782.00			46.00	46.00	\$ 782.00
SPV.0105.01	Traffic Control	LS	1	\$ 1,150.00	\$ 1,150.00			1.00	1.00	\$ 1,150.00

ADDITIONAL BID SUBTOTAL \$15,335.50

Subtotal, Additional Bid - Paid to Date

\$12,453.00

Subtotal \$ per Estimate - Base Bid \$ - \$ - \$ 12,453.00

Subtotal \$ Paid per Estimate \$ 158,908.45 \$ 366,003.46 \$ 167,535.70

Retainage Held per Estimate \$ (7,945.42) \$ (8,270.38) \$ 8,215.80

Total Paid per Estimate \$ 150,963.03 \$ 357,733.08 \$ 175,751.50

TOTAL BASE BID + ALL ADD'L BIDS + CCO #2: \$663,967.32

TOTAL - Paid to Date

\$ 692,447.61

Less Retainage Held

\$ (8,000.00)

TOTAL BASE BID + ALL ADD'L BIDS - Paid to Date, Less Retainage

\$ 684,447.61

APPLICATION AND CERTIFICATE FOR PAYMENT

Invoice #: 40912

To Owner: City of Lake Geneva
626 Geneva StreetProject: 21.20023. Lake Geneva, CO-2021 Lake
Geneva Street Program

Application No.: 3

Distribution to :
☐ Owner
☐ Architect
☐ Contractor
☐

Lake Geneva, WI 53147

Period To: 11/30/2021

From Contractor: Wolf Paving Co., Inc.
612 N. Sawyer Road
Oconomowoc, WI 53066

Via Architect:

Project Nos:

Contract For: City of Lake Geneva 2021 Street Program

Contract Date:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.
Continuation Sheet is attached.

1. Original Contract Sum	\$648,631.82
2. Net Change By Change Order	\$15,335.50
3. Contract Sum To Date	\$663,967.32
4. Total Completed and Stored To Date	\$694,976.92
5. Retention:	
a. 4.89% of Completed Work	\$33,982.08
b. 0.00% of Stored Material	\$0.00
Total Retention	\$33,982.08
6. Total Earned Less Retention	\$660,994.84
7. Less Previous Certificates For Payments	\$497,882.56
8. Current Payment Due	\$163,112.28
9. Balance To Finish, Plus Retention	\$2,972.48

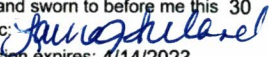
The undersigned Contractor certifies that to the best of the Contractor's knowledge, information, and belief, the work covered by this Application for Payment has been completed in accordance with the Contract Documents. That all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Wolf Paving Co., Inc.

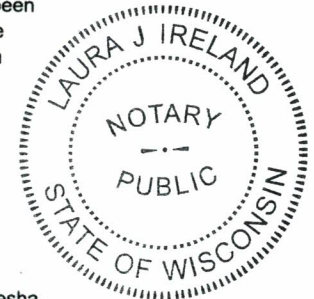
By:  Jacob Mrugacz, President Date: 11/30/2021

State of: Wisconsin

Subscribed and sworn to before me this 30

Notary Public: 

My Commission expires: 4/14/2023

County of: Waukesha
day of November, 2021

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information, and belief, the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$163,112.28

(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By: Mike Timmers Date: 12/29/2021

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment, and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CHANGE ORDER SUMMARY	Additions	Deductions
Total changes approved in previous months by Owner	\$0.00	\$0.00
Total Approved this Month	\$15,335.50	\$0.00
TOTALS	\$15,335.50	\$0.00
Net Changes By Change Order	\$15,335.50	

CONTINUATION SHEET

Application and Certification for Payment, containing Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retention for line items may apply.

Application No. : 3

Application Date : 12/06/21

To:

Architect's Project No.:

Invoice # : 40912

Contract : 21.20023. Lake Geneva, CO-2021 Lake Geneva Street Program

A Item No.	B Description of Work	C Scheduled Value	D Work Completed		F Materials Presently Stored (Not in D or E)	G Total Completed and Stored To Date (D+E+F)	H % (G / C)	I Balance To Finish (C-G)	Retention
			From Previous Application (D+E)	This Period In Place					
1	Clearing	2,088.00	0.00	0.00	0.00	0.00	0.00%	2,088.00	
2	Clearing (Tree Removal Two Each)	780.00	0.00	0.00	0.00	0.00	0.00%	780.00	
3	Grubbing	232.00	0.00	0.00	0.00	0.00	0.00%	232.00	
4	Grubbing (Tree Removal Two Each)	78.00	0.00	0.00	0.00	0.00	0.00%	78.00	
5	Removing Pavement (asphalt)	1,938.00	0.00	1,938.00	0.00	1,938.00	100.00%	0.00	
6	Removing Asphaltic Surface Milling (Partial Depth 2") Edward	37,382.16	37,884.76	0.00	0.00	37,884.76	101.34%	-502.60	
7	Removing Asphaltic Surface Milling (Partial Depth 3")	4,150.00	0.00	4,332.60	0.00	4,332.60	104.40%	-182.60	
8	Removing Curb & Gutter (includes saw cuts into lane)	12,000.00	12,000.00	0.00	0.00	12,000.00	100.00%	0.00	
9	Remove Concrete Sidewalk	2,232.00	1,782.00	0.00	0.00	1,782.00	79.84%	450.00	
10	Excavation Common	16,250.00	16,250.00	1,250.00	0.00	17,500.00	107.69%	-1,250.00	
11	Excavation Common - EBS -Undistributed (Alley)	5,250.00	0.00	7,077.30	0.00	7,077.30	134.81%	-1,827.30	
12	Base Aggregate Dense 1 1/4-Inch	15,120.00	13,816.20	0.00	0.00	13,816.20	91.38%	1,303.80	
13	Breaker Run Undistributed (Alley)	3,325.00	0.00	0.00	0.00	0.00	0.00%	3,325.00	
14	Concrete Driveway 8-Inch	6,885.00	6,885.00	0.00	0.00	6,885.00	100.00%	0.00	
15	HMA Pavement Type 4 LT 58-28 S (460.6223), Item Also Include	38,184.00	43,514.22	0.00	0.00	43,514.22	113.96%	-5,330.22	
16	HMA Pavement Type 4 LT 58-28 S (460.6223), Item Also Include	14,519.89	0.00	16,394.89	0.00	16,394.89	112.91%	-1,875.00	
17	HMA Pavement Type 4 MT 58-28 S (460.6223), Item Also Include	155,673.00	193,676.49	0.00	0.00	193,676.49	124.41%	-38,003.49	
18	Concrete Curb & Gutter 30-Inch Type D	32,000.00	32,000.00	0.00	0.00	32,000.00	100.00%	0.00	
19	Concrete Sidewalk 4-Inch	68,876.25	68,876.25	0.00	0.00	68,876.25	100.00%	0.00	
20	Curb Ramp Detectable Warning Field Yellow	6,900.00	8,511.00	0.00	0.00	8,511.00	123.35%	-1,611.00	
21	Adjusting Manhole Covers (Undistributed)	11,760.00	0.00	3,675.00	0.00	3,675.00	31.25%	8,085.00	
22	Inlet Protection Type D	4,116.00	5,880.00	0.00	0.00	5,880.00	142.86%	-1,764.00	
23	Marking Line Epoxy 4-Inch (White)	2,194.56	1,814.88	459.36	0.00	2,274.24	103.63%	-79.68	
24	Marking Line Epoxy 4-Inch (Yellow)	16,215.36	5,809.92	752.64	0.00	6,562.56	40.47%	9,652.80	
25	Marking Line Epoxy 8-Inch (White)	960.75	1,044.15	0.00	0.00	1,044.15	108.68%	-83.40	
26	Marking Line Epoxy 8-Inch Diagonal (Yellow) (for striped med	10,250.00	9,214.75	0.00	0.00	9,214.75	89.90%	1,035.25	

CONTINUATION SHEET

Page 3 of 4

Application and Certification for Payment, containing

Contractor's signed certification is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retention for line items may apply.

Application No. : 3

Application Date : 12/06/21

To:

Architect's Project No.:

Invoice # : 40912

Contract : 21.20023. Lake Geneva, CO-2021 Lake Geneva Street Program

A Item No.	B Description of Work	C Scheduled Value	D Work Completed		F Materials Presently Stored (Not in D or E)	G Total Completed and Stored To Date (D+E+F)	H % (G / C)	I Balance To Finish (C-G)	Retention
			From Previous Application (D+E)	This Period In Place					
27	Epoxy Arrow (left)	2,520.00	2,800.00	0.00	0.00	2,800.00	111.11%	-280.00	
28	Epoxy Arrow (right)	2,800.00	2,800.00	0.00	0.00	2,800.00	100.00%	0.00	
29	Marking Word Epoxy "ONLY"	5,525.00	5,525.00	0.00	0.00	5,525.00	100.00%	0.00	
30	Marking Stop Line Epoxy 18-inch	308.75	292.50	0.00	0.00	292.50	94.74%	16.25	
31	Clearing	8,032.50	6,230.50	0.00	0.00	6,230.50	77.57%	1,802.00	
32	Adjusting Valve Boxes	155.00	0.00	0.00	0.00	0.00	0.00%	155.00	
33	Removing Asphaltic Surface Milling (Partial Depth 2")	4,360.00	0.00	4,394.88	0.00	4,394.88	100.80%	-34.88	
34	Removing Curb & Gutter	98.00	0.00	98.00	0.00	98.00	100.00%	0.00	
35	Excavation Common	2,220.00	0.00	2,960.00	0.00	2,960.00	133.33%	-740.00	
36	Base Aggregate Dense 3/4-Inch	1,599.50	0.00	0.00	0.00	0.00	0.00%	1,599.50	
37	Base Aggregate Dense 1 1/4-Inch	2,443.50	0.00	2,118.79	0.00	2,118.79	86.71%	324.71	
38	Breaker Run-Undistributed	8,656.50	0.00	0.00	0.00	0.00	0.00%	8,656.50	
39	Concrete Surface Drains	2,400.00	0.00	2,400.00	0.00	2,400.00	100.00%	0.00	
40	HMA Pavement Type 4LT 58- 28 S, Item also includes tack coat	17,649.60	0.00	24,389.54	0.00	24,389.54	138.19%	-6,739.94	
41	Asphaltic Flumes	1,860.00	0.00	1,720.50	0.00	1,720.50	92.50%	139.50	
42	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	920.00	0.00	920.00	0.00	920.00	100.00%	0.00	
43	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	975.00	0.00	975.00	0.00	975.00	100.00%	0.00	
44	Concrete Curb & Gutter 30-Inch Type D	13,048.00	0.00	13,048.00	0.00	13,048.00	100.00%	0.00	
45	Medium Riprap	240.00	0.00	0.00	0.00	0.00	0.00%	240.00	
46	Storm Sewer Pipe Reinforce Concrete Class III 12-Inch	33,279.50	0.00	33,048.85	0.00	33,048.85	99.31%	230.65	
47	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	5,054.00	0.00	5,111.76	0.00	5,111.76	101.14%	-57.76	
48	Inlet Covers Type A: R-3067-L	1,635.00	0.00	1,635.00	0.00	1,635.00	100.00%	0.00	
49	Inlet Covers Type H: R-3067-L	1,635.00	0.00	1,635.00	0.00	1,635.00	100.00%	0.00	
50	Catch Basins 2x3-FT	5,085.00	0.00	5,085.00	0.00	5,085.00	100.00%	0.00	
51	Inlets 3-FT Diameter	4,275.00	0.00	4,275.00	0.00	4,275.00	100.00%	0.00	
52	Adjusting Manhole Covers - Sanitary	735.00	0.00	0.00	0.00	0.00	0.00%	735.00	
53	Silt Fence	300.00	408.00	450.00	0.00	858.00	286.00%	-558.00	
54	Erosion Mat Class I Type B	1,224.00	0.00	0.00	0.00	0.00	0.00%	1,224.00	
55	Inlet Protection Type C	360.00	0.00	0.00	0.00	0.00	0.00%	360.00	

CONTINUATION SHEET

Application and Certification for Payment, containing Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retention for line items may apply.

Application No. : 3
Application Date : 12/06/21
To:
Architect's Project No.:

Invoice # : 40912 Contract : 21.20023. Lake Geneva, CO-2021 Lake Geneva Street Program

A Item No.	B Description of Work	C Scheduled Value	D Work Completed		F Materials Presently Stored (Not in D or E)	G Total Completed and Stored To Date (D+E+F)	H % (G / C)	I Balance To Finish (C-G)	Retention
			From Previous Application (D+E)	This Period In Place					
56	Geotextile Type HR	40.00	0.00	0.00	0.00	0.00	0.00%	40.00	
57	Geogrid Type SR	2,000.00	0.00	0.00	0.00	0.00	0.00%	2,000.00	
58	Sawing Asphalt	1,000.00	0.00	1,000.00	0.00	1,000.00	100.00%	0.00	
59	Restore Disturbed Areas - Includes Topsoil (625.0100), Ferti	4,233.00	0.00	4,112.65	0.00	4,112.65	97.16%	120.35	
99	Asphalt	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	
32.1	Traffic Control	9,200.00	0.00	9,200.00	0.00	9,200.00	100.00%	0.00	
32.2	Restore Distributed Areas-Includes topsoil, fertilizer	27,285.00	43,898.89	1,096.75	0.00	44,995.64	164.91%	-17,710.64	
32.3	Clearing	4,080.00	3,172.40	0.00	0.00	3,172.40	77.75%	907.60	
32.4	Grubbing	2,040.00	0.00	0.00	0.00	0.00	0.00%	2,040.00	
CO 2.1	Marking Removal Line 4 Inch	2,355.00	0.00	2,355.00	0.00	2,355.00	100.00%	0.00	
CO 2.2	Marking Removal Line Wide	506.00	0.00	506.00	0.00	506.00	100.00%	0.00	
CO 2.3	Marking Removal Special Marking	4,800.00	0.00	4,800.00	0.00	4,800.00	100.00%	0.00	
CO 2.4	Marking Line Epoxy 4 Inch White	392.50	0.00	392.50	0.00	392.50	100.00%	0.00	
CO 2.5	Epoxy Arrow Left	1,200.00	0.00	1,200.00	0.00	1,200.00	100.00%	0.00	
CO 2.6	Epoxy Arrow Straight	550.00	0.00	550.00	0.00	550.00	100.00%	0.00	
CO 2.7	Marking Arrow Straight And Right	800.00	0.00	800.00	0.00	800.00	100.00%	0.00	
CO 2.8	Marking Word Epoxy Only	2,800.00	0.00	2,800.00	0.00	2,800.00	100.00%	0.00	
CO 2.9	Marking Stop Line Epoxy 18 Inch	782.00	0.00	782.00	0.00	782.00	100.00%	0.00	
CO 2.10	Traffic Control	1,150.00	0.00	1,150.00	0.00	1,150.00	100.00%	0.00	
Grand Totals		663,967.32	524,086.91	170,890.01	0.00	694,976.92	104.67%	-31,009.60	33,982.08



Progress Billing Invoice

From: Wolf Paving Co., Inc.
612 N. Sawyer Road
Oconomowoc, WI 53066
262.965.2121

Invoice #: 40972

Date: 12/28/21

Application #: 3A

To: City of Lake Geneva
626 Geneva Street
Lake Geneva, WI 53147

Invoice Due Date: 01/27/22

Payment Terms: Net 30 days

Contract: 21.20023. Lake Geneva, CO-2021 Lake Geneva Street Program

qty

Cont Item	Description	Contract Amount	Contract Quantity	Quantity This Period	Quantity JTD	UIM	Unit Price	Amount This Period	Amount To-Date	% Compl
1	Clearing	2,088.00	116.00	0.00	0.00	SY	18.00000	0.00	0.00	0.00%
2	Clearing (Tree Removal Two Each)	780.00	39.00	0.00	0.00	ID	20.00000	0.00	0.00	0.00%
3	Grubbing	232.00	116.00	0.00	0.00	SY	2.00000	0.00	0.00	0.00%
4	Grubbing (Tree Removal Two Each)	78.00	39.00	0.00	0.00	ID	2.00000	0.00	0.00	0.00%
5	Removing Pavement (asphalt)	1,938.00	102.00	0.00	102.00	SY	19.00000	0.00	1,938.00	100.00%
6	Removing Asphaltic Surface Milling (Partial Depth 2") Edward	37,382.16	21,484.00	0.00	21,772.85	SY	1.74000	0.00	37,884.76	101.34%
7	Removing Asphaltic Surface Milling (Partial Depth 3")	4,150.00	1,000.00	0.00	1,044.00	SY	4.15000	0.00	4,332.60	104.40%
8	Removing Curb & Gutter (includes saw cuts into lane)	12,000.00	1,000.00	0.00	1,000.00	LF	12.00000	0.00	12,000.00	100.00%
9	Remove Concrete Sidewalk	2,232.00	62.00	0.00	49.50	SY	36.00000	0.00	1,782.00	79.84%
10	Excavation Common	16,250.00	650.00	0.00	700.00	CY	25.00000	0.00	17,500.00	107.69%
11	Excavation Common - EBS -Undistributed (Alley)	5,250.00	175.00	0.00	235.91	CY	30.00000	0.00	7,077.30	134.81%
12	Base Aggregate Dense 1 1/4-Inch	15,120.00	756.00	0.00	690.81	TON	20.00000	0.00	13,816.20	91.38%
13	Breaker Run Undistributed (Alley)	3,325.00	133.00	0.00	0.00	TON	25.00000	0.00	0.00	0.00%
14	Concrete Driveway 8-Inch	6,885.00	102.00	0.00	102.00	SY	67.50000	0.00	6,885.00	100.00%
15	HMA Pavement Type 4 LT 58-28 S (460.6223), Item Also Include	38,184.00	516.00	0.00	588.03	TON	74.00000	0.00	43,514.22	113.96%
16	HMA Pavement Type 4 LT 58-28 S (460.6223), Item Also Include	14,519.89	173.00	0.00	195.34	TON	83.93000	0.00	16,394.89	112.91%
17	HMA Pavement Type 4 MT 58-28 S (460.6223), Item Also Include	155,673.00	2,471.00	0.00	3,074.23	TON	63.00000	0.00	193,676.49	124.41%
18	Concrete Curb & Gutter 30-Inch Type D	32,000.00	1,000.00	0.00	1,000.00	LF	32.00000	0.00	32,000.00	100.00%
19	Concrete Sidewalk 4-Inch	68,876.25	18,367.00	0.00	18,367.00	SF	3.75000	0.00	68,876.25	100.00%
20	Curb Ramp Detectable Warning Field Yellow	6,900.00	230.00	0.00	283.70	SF	30.00000	0.00	8,511.00	123.35%
21	Adjusting Manhole Covers (Undistributed)	11,760.00	16.00	0.00	5.00	EA	735.00000	0.00	3,675.00	31.25%
22	Inlet Protection Type D	4,116.00	42.00	0.00	60.00	EA	98.00000	0.00	5,880.00	142.86%
23	Marking Line Epoxy 4-Inch (White)	2,194.56	4,572.00	0.00	4,738.00	LF	0.48000	0.00	2,274.24	103.63%
24	Marking Line Epoxy 4-Inch (Yellow)	16,215.36	33,782.00	0.00	13,672.00	LF	0.48000	0.00	6,562.56	40.47%
25	Marking Line Epoxy 8-Inch (White)	960.75	1,281.00	0.00	1,392.20	LF	0.75000	0.00	1,044.15	108.68%
26	Marking Line Epoxy 8-Inch Diagonal (Yellow) (for striped med	10,250.00	1,000.00	0.00	899.00	LF	10.25000	0.00	9,214.75	89.90%



Progress Billing Invoice

From: Wolf Paving Co., Inc.
612 N. Sawyer Road
Oconomowoc, WI 53066
262.965.2121

Invoice #: 40972

Date: 12/28/21

Application #: 3A

To: City of Lake Geneva
626 Geneva Street
Lake Geneva, WI 53147

Invoice Due Date: 01/27/22

Payment Terms: Net 30 days

Contract: 21.20023. Lake Geneva, CO-2021 Lake Geneva Street Program

qty

Cont Item	Description	Contract Amount	Contract Quantity	Quantity This Period	Quantity JTD	UIM	Unit Price	Amount This Period	Amount To-Date	% Compl
27	Epoxy Arrow (left)	2,520.00	9.00	0.00	10.00	EA	280.00000	0.00	2,800.00	111.11%
28	Epoxy Arrow (right)	2,800.00	10.00	0.00	10.00	EA	280.00000	0.00	2,800.00	100.00%
29	Marking Word Epoxy "ONLY"	5,525.00	17.00	0.00	17.00	EA	325.00000	0.00	5,525.00	100.00%
30	Marking Stop Line Epoxy 18-inch	308.75	19.00	0.00	18.00	LF	16.25000	0.00	292.50	94.74%
31	Clearing	8,032.50	945.00	0.00	733.00	SY	8.50000	0.00	6,230.50	77.57%
32	Adjusting Valve Boxes	155.00	1.00	0.00	0.00	EA	155.00000	0.00	0.00	0.00%
33	Removing Asphaltic Surface Milling (Partial Depth 2")	4,360.00	2,000.00	0.00	2,016.00	SY	2.18000	0.00	4,394.88	100.80%
34	Removing Curb & Gutter	98.00	10.00	0.00	10.00	LF	9.80000	0.00	98.00	100.00%
35	Excavation Common	2,220.00	75.00	0.00	100.00	CY	29.60000	0.00	2,960.00	133.33%
36	Base Aggregate Dense 3/4-Inch	1,599.50	35.00	0.00	0.00	TON	45.70000	0.00	0.00	0.00%
37	Base Aggregate Dense 1 1/4-Inch	2,443.50	90.00	0.00	78.04	TON	27.15000	0.00	2,118.79	86.71%
38	Breaker Run-Undistributed	8,656.50	290.00	0.00	0.00	TON	29.85000	0.00	0.00	0.00%
39	Concrete Surface Drains	2,400.00	2.00	-1.00	1.00	CY	1,200.00000	-1,200.00	1,200.00	50.00%
40	HMA Pavement Type 4LT 58- 28 S, Item also includes tack coat	17,649.60	240.00	0.00	331.65	TON	73.54000	0.00	24,389.54	138.19%
41	Asphaltic Flumes	1,860.00	6.00	0.00	5.55	SY	310.00000	0.00	1,720.50	92.50%
42	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	920.00	1.00	0.00	1.00	EA	920.00000	0.00	920.00	100.00%
43	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	975.00	1.00	0.00	1.00	EA	975.00000	0.00	975.00	100.00%
44	Concrete Curb & Gutter 30-Inch Type D	13,048.00	560.00	0.00	560.00	LF	23.30000	0.00	13,048.00	100.00%
45	Medium Riprap	240.00	2.00	5.70	5.70	CY	120.00000	684.00	684.00	285.00%
46	Storm Sewer Pipe Reinforce Concrete Class III 12-Inch	33,279.50	505.00	0.00	501.50	LF	65.90000	0.00	33,048.85	99.31%
47	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	5,054.00	70.00	0.00	70.80	LF	72.20000	0.00	5,111.76	101.14%
48	Inlet Covers Type A: R-3067-L	1,635.00	3.00	0.00	3.00	EA	545.00000	0.00	1,635.00	100.00%
49	Inlet Covers Type H: R-3067-L	1,635.00	3.00	0.00	3.00	EA	545.00000	0.00	1,635.00	100.00%
50	Catch Basins 2x3-FT	5,085.00	3.00	0.00	3.00	EA	1,695.00000	0.00	5,085.00	100.00%
51	Inlets 3-FT Diameter	4,275.00	3.00	0.00	3.00	EA	1,425.00000	0.00	4,275.00	100.00%
52	Adjusting Manhole Covers - Sanitary	735.00	1.00	0.00	0.00	EA	735.00000	0.00	0.00	0.00%
53	Silt Fence	300.00	100.00	-150.00	136.00	LF	3.00000	-450.00	408.00	136.00%



Progress Billing Invoice

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qty

Cont Item	Description	Contract Amount	Contract Quantity	Quantity This Period	Quantity JTD	UIM	Unit Price	Amount This Period	Amount To-Date	% Compl
54	Erosion Mat Class I Type B	1,224.00	1,020.00	991.00	991.00	SY	1.20000	1,189.19	1,189.19	97.16%
55	Inlet Protection Type C	360.00	6.00	6.00	6.00	EA	60.00000	360.00	360.00	100.00%
56	Geotextile Type HR	40.00	5.00	0.00	0.00	SY	8.00000	0.00	0.00	0.00%
57	Geogrid Type SR	2,000.00	400.00	0.00	0.00	SY	5.00000	0.00	0.00	0.00%
58	Sawing Asphalt	1,000.00	800.00	-184.00	616.00	LF	1.25000	-230.00	770.00	77.00%
59	Restore Disturbed Areas - Includes Topsoil (625.0100), Ferti	4,233.00	1,020.00	0.00	991.00	SY	4.15000	0.00	4,112.65	97.16%
99	Asphalt	0.00	3,402.00	0.00	0.00	TON	0.00000	0.00	0.00	0.00%
32.1	Traffic Control	9,200.00	1.00	0.00	1.00	LS.	9,200.00000	0.00	9,200.00	100.00%
32.2	Restore Distributed Areas-Includes topsoil, fertilizer	27,285.00	5,100.00	0.00	8,410.40	SY	5.35000	0.00	44,995.64	164.91%
32.3	Clearing	4,080.00	1,020.00	0.00	793.10	SY	4.00000	0.00	3,172.40	77.75%
32.4	Grubbing	2,040.00	1,020.00	0.00	0.00	SY	2.00000	0.00	0.00	0.00%
CO 2.1	Marking Removal Line 4 Inch	2,355.00	785.00	-695.00	90.00	LF	3.00000	-2,085.00	270.00	11.46%
CO 2.2	Marking Removal Line Wide	506.00	46.00	0.00	46.00	LF	11.00000	0.00	506.00	100.00%
CO 2.3	Marking Removal Special Marking	4,800.00	16.00	0.00	16.00	EA	300.00000	0.00	4,800.00	100.00%
CO 2.4	Marking Line Epoxy 4 Inch White	392.50	785.00	-195.00	590.00	LF	0.50000	-97.50	295.00	75.16%
CO 2.5	Epoxy Arrow Left	1,200.00	4.00	0.00	4.00	EA	300.00000	0.00	1,200.00	100.00%
CO 2.6	Epoxy Arrow Straight	550.00	2.00	0.00	2.00	EA	275.00000	0.00	550.00	100.00%
CO 2.7	Marking Arrow Straight And Right	800.00	2.00	0.00	2.00	EA	400.00000	0.00	800.00	100.00%
CO 2.8	Marking Word Epoxy Only	2,800.00	8.00	-2.00	6.00	EA	350.00000	-700.00	2,100.00	75.00%
CO 2.9	Marking Stop Line Epoxy 18 Inch	782.00	46.00	0.00	46.00	LF	17.00000	0.00	782.00	100.00%
CO 2.10	Traffic Control	1,150.00	0.00	0.00	1.00	LS	0.00000	0.00	1,150.00	100.00%

Total Billed To Date:	692,447.61
Less Retainage:	8,000.00
Less Previous Applications:	671,808.39
Total Due This Invoice:	12,639.22

2022 Joint Crack Cleaning Sealing Bid Tabulation
January 4, 2022 at 10:00 a.m.

<u>Streets/Lots:</u>	<u>American Pavement Solutions</u>	<u>Russell Standard</u>	<u>Thunder Road</u>	<u>Fahrner Asphalt</u>
Fire Dept Lot	X		X	X
LaSalle	X		X	X
LaSalle Ct	X		X	X
Linda Ln	X		X	X
Lookout	X		X	X
Maxwell St	X		X	X
Miller Ct	X	X	X	X
E & W Miller Ct	X	X	X	X
Minihan Rd	X	X	X	X
South St	X	X	X	X
1070 Carey St	X	X	X	X
Ceylon Ct	X	X	X	X
Carey St	X		X	X
High St	X			
Add on for Utility	\$2,625.00	\$4,600.00	\$3,200.00	\$3,135.00
Balance	\$10,240.00	\$0.00	\$0.00	\$20,000.00

CONTRACT DOCUMENT



PROJECT: 2022 JOINT & CRACK CLEANING & SEALING

**OWNER: CITY OF LAKE GENEVA DPW
1065 CAREY STREET
LAKE GENEVA, WISCONSIN 53147 (262)248-6644**

**Contacts; Tom Earle, DPW
tearle@cityoflakegeneva.com**

**Neil Waswo, Superintendent.
nwaswo@cityoflakegeneva.com**

**Bid Opening: 04 Jan., 2022 10:00am.
City Hall, 626 Geneva Street
Lake Geneva, WI. 2nd floor meeting room**

**CITY OF LAKE GENEVA
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2022 JOINT & CRACK CLEANING & SEALING**

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BID BOND	N/A
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AGREEMENT

PERFORMANCE BOND	N/A
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PAYMENT BOND	N/A
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NOTICE OF AWARD

PREVAILING WAGE RATE DETERMINATION	N/A
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INSURANCE QUESTIONNAIRE & REFERENCES

OFFICIAL NOTICE TO BIDDERS

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2021 Joint & Crack Cleaning & Sealing
Notice To Bidders

**CITY OF LAKE GENEVA
NOTICE TO BIDDERS
2022 JOINT & CRACK CLEANING & SEALING**

Sealed proposals will be accepted by the City of Lake Geneva in the City Clerk's office at 626 Geneva Street, Lake Geneva, Wisconsin until 10am Tuesday, 04 Jan., 2022 for Joint & Crack Cleaning & Sealing, as specified in these bid documents.

Proposals must be sealed and submitted on the proposal forms and returned clearly marked 'City of Lake Geneva 2022 Joint and Crack Filling' with name of proposer, date and time of opening. No undated, unsigned, late, incomplete, emailed or faxed proposals will be considered. The City is not responsible for late or misdirected mail or cartage therefore hand delivery is advised.

Bidders must submit pre-qualification packet prior to the opening of bids by contacting the City Clerk's office or visiting the City website. Bid will not be awarded until Pre-Qual is approved.

All bids shall be F.O.B. destination, prepaid and allowed to the Clerk's Office with no charges for packing or cartage.

The City reserves the right to reject any or all proposals and to accept any proposal deemed most advantageous to the City of Lake Geneva.

Bidding documents are available by emailing the Director of Public Works, Mr Tom Earle at tearle@cityoflakegeneva.com or by appointment at the DPW offices, 1065 Carey St. Lake Geneva. (262)248-6644..

The City of Lake Geneva is exempt from Federal Excise Tax and State Sales Tax; therefore, proposals should be made exclusive of these taxes. A Tax Exemption Certificate and/or Tax Exemption Registry number will be furnished to the successful proposer.

Insurance Requirements are: \$1,000,000 General Liability, Worker's Compensation - Statutory Limits, \$5,000,000 Employer's Liability. See pre-qualification form on website or Clerks Office.

Successful bidder shall properly hold the City of Lake Geneva harmless from all damages occurring in any way by bidders acts or negligence, or that of his employees, agents or workers. Completed Insurance questionnaire must be submitted with your proposal.

Contractor to include any clarifications to the specification in his proposal.

Proposed price shall be all-inclusive for Joint & Crack Cleaning & Sealing with no part being 'to be done by others'.

City of Lake Geneva

Ms. Lana Kropf
City Clerk
10 Nov., 2021

MINIMUM BID SPECIFICATION

(blank)

2022 Joint & Crack Cleaning & Sealing Specifications

CITY OF LAKE GENEVA MINIMUM BID SPECIFICATION JOINT & CRACK CLEANING & SEALING

DESCRIPTION: This work consists of sawing or routing and cleaning cracks and joints in asphalt surfaces and then sealing these prepared cracks and joints with an approved sealing material. It also includes removal and replacement of loose sealant from earlier work/contracts. The work excludes the long joint between the asphalt pavement and concrete gutter.

MATERIALS: The joint sealer shall be a material meeting requirements of ASTM D 3405. An elastic type, hot-pour sealer will be required. Or approved alternate. Material will be reheated only once and in small quantities. Prolonged heating up to six (6) hours will be permissible. Backer rod used in conjunction with this sealer shall be made of cellulose, cotton, or plastic foam. The backer rod must withstand, without damage, the high temperatures inherent to these sealers. The backer rod shall be of a size that compression is required for installation in the crack so it maintains its position during the filling operation.

All sealant materials and separating and blocking medium shall be certified or tested and approved by the engineer before being incorporated into the work. The Contractor shall furnish a complete written statement of the origin, composition and manufacture of any or all material that are to be used in the work. Where installation procedures or any part thereof are required to be in accordance with recommendations of the manufactures of sealing compounds, the Contractor shall submit catalogue data and copies of recommendations prior to installation of the materials.

EQUIPMENT

- A. Routing or sawing equipment shall be mechanical and power driven, capable of cutting the joints and cracks to the required dimensions. The router must have in-line wheels and cutting head capable of following random cracks and have depth control to insure consistent and accurate routing depths. Excessive spalling of the asphalt surface will not be permitted. Crack routing equipment will be permitted on asphalt pavement, but will not be permitted on Portland Cement Concrete Pavement.
- B. Two (2) air compressors will be required during asphalt crackfilling operations. They must be of sufficient size to maintain a minimum air pressure of 120 psi. and provide moisture and oil free compressed air. One compressor shall be used on asphalt pavement with an air wand to blow out the crack and clean off the road. The second shall be used with the heat lance. Note that one compressor is not of sufficient size to run both air wand and heat lance at the same time. Any request for an exception to this requirement shall be made at the time of bid including any credit.
- C. Water cleaning equipment shall be used on Portland Cement Concrete Pavement and be capable of delivering water with a pressure of 2,000 psi. from a nozzle to the crack or joint being cleaned, to remove existing joint sealer, debris, and loose material from the crack or joint.
- D. Sand blast equipment shall be capable of removing the existing sealant, saw slurry, silt or other foreign material from the vertical face of the crack or joint to the specified depth, leaving a clean, dry, newly exposed surface.
- E. Equipment used for heating and placing the hot-pour sealant material shall be of the oil-jacketed, double-boiler type heating kettle or other thermostatically controlled equipment of a type approved by the Engineer, equipped with both agitation and re-circulation systems, capable of heating the material to 410 degrees F. and pumping the material into the prepared cracks or joints with a wand applicator.

CONSTRUCTION

- A. Class I Cracks: On asphalt streets, cracks which have an average opening of 3/4" or less shall be routed or sawed to provide a minimum sealant reservoir of 3/4" width by a nominal 3/4" depth.

Pg 5/23

- B. Class II Crack: Joints and cracks which do not require routing or sawing shall be considered Class II cracks. Construction joints on exposed concrete curb pans shall be considered Class II cracks and shall

not require backer rod or sawing. Asphalt cracks which have an average opening greater than 3/4" will not require routing or sawing, but they shall be thoroughly cleaned of all foreign material to a depth necessary to accommodate the sealer material and the backer rod to be used. Backer rod shall be placed in the crack to a depth that provides at least 3/4" clearance above the backer rod for the sealer. The backer rod shall be dry when placed.

- C. Asphalt cement concrete, Portland Cement Concrete, and foreign material resulting from crack preparation shall be cleared from the roadway by brooming, compressed air, mechanical sweeping, or other methods satisfactory to the Street Department Superintendent.
- D. Cracks shall be clean and dried prior to sealing.

The entire crack reservoir shall be filled with sealant to a level even with the roadway surface. A narrow "U" shaped squeegee may be used to aid in placement of the sealant. Sealant on the roadway surface in excess of one inch on each side of the crack edge will not be acceptable.

LIMITATIONS: Crack cleaning and sealing shall be done only when the ambient air and pavement surface temperatures are above 40 degrees F. When near this minimum, additional blow torch blasting or drying time, or both, may be necessary to assure a satisfactory bond to the crack surface.

Lanes may be opened to traffic only after the sealer has set sufficiently so it will not pick up under traffic. Powder or biodegradable paper may be applied to the sealer, but only after the sealer surface has set so as to avoid penetration of the powder or paper into the sealer.

Cracks shall be sealed within three (3) working days after routing or sawing preparation.

METHOD OF MEASUREMENT AND AWARD: This work will be measured lump sum based upon the number of streets checked off by the contractor from the list. In the event more than one contractor can perform on all streets, award shall be determined by the number of Type I and Type II lineal feet remaining to be performed for the City.

BASIS OF PAYMENT: This work will be paid lump sum in the amount of **\$35,000.00 (thirty five thousand dollars).**

GUARANTEE OF WORK: Contractor shall guarantee that the cracks sealed shall remain sealed through the following three (3) winters. Contractor shall return to the project site each of the following three (3) summers and repair sealed cracks, which have lost their sealant bond at no additional cost. Failed sealed cracks will be identified by the Director of Public Works.

SUPPLEMENTAL SPECIFICATIONS

1. When being filled, all asphalt-cleaned cracks shall be dried by a high capacity blowtorch.
2. In all cases, cleaning shall include removal of vegetation from cracks.
3. All materials equipment, labor and traffic control shall be provided by the Contractor and included in the unit price bid.
4. At locations where crack sealant settles into the crack opening more than 1/4" below adjacent pavement, additional filling will be necessary.
5. A sample of sealant material to be used shall be submitted to the Engineering Division. Each batch of sealing compound delivered to the job site shall be accompanied by the manufacturer's certification stating that the sealant meets the requirement of the specifications.

Notice shall be given to the Street Department no less than 24 hours in advance to any crackfilling operation. The point of contact will be Mr. Neil Waswo, Superintendent of Public Works, phone (262) 248-6644. Office hours are 6:30 A.M. to 2:00 P.M., Monday through Thursday. Pg 6/23

6. Status reports identifying linear footage totals broken down by class types and location shall be provided in writing or email to the DPW Superintendent or Director of Public Works on a daily basis.

7. The locations of streets to be crackfilled are listed in priority order and attached in the back of the contract.
8. Work hour restrictions on all City streets from 6:00 A.M. to 10:00 P.M. **Work in the downtown area shall not take place after 12:00 noon on Fridays. .**
9. **No work shall be allowed in the downtown area between Memorial Day and Labor Day.**
10. The Contractor may store materials and equipment at his own risk as follows: at Street Garage, 1065 Carey Street, with admittance restricted to weekdays from **6am A.M. to 2:00 P.M. Monday through Thursday.**
11. The City requires that the asphalt pavement crackfilling is completed prior to any Portland Cement Pavement.
12. Pavement joint and crackfilling shall be started **as soon as possible after notice to proceed, and complete as much of the work as practical prior to the Wednesday before Memorial Day. All work shall be completed no later than 25 May, 2022 or as otherwise indicated on his bid.** Completion date may be a factor in bid award. Extensions will be given at the discretion of the City for weather related delays.
13. Qualifications of Contractor - The Contractor shall have been routing, cleaning and filling cracks per specifications for a minimum of 10 (ten) verifiable years.
14. Prequalification - All bidders must submit a list of five (5) previously completed crackfilling projects. Each project must have been in place for a minimum of three (3) winters.
15. On any street with a traffic signal pavement loop, the buried loops shall not be sawed or routed. It shall be cleaned with air pressure only and filled with crackfiller.
16. The Contractor shall provide "Crackfilling Notice Door Hangers" and shall be responsible for placing their name and phone number on them, and placing them on residence's doors one to three days prior to crackfilling work where applicable.
17. The Contractor shall maintain and utilize a mechanical street sweeper (minimum size: 16,000 GUW) at the work site to clean up debris and respond to dirt and dust complaints. Street sweeping debris may be disposed of in the Street Department yard, 1065 Carey Street, during normal working hours.
18. The Contractor shall be responsible for crackfilling all designated roadways. Temporary no parking signs may be placed at the approval of the DPW Superintendent. The Contractor shall be responsible for posting and removing the "No Parking" signs when necessary to crackfill streets.
19. Special consideration must be placed on any work on Main St as it is a State Connecting Highway. Any lane closures must be coordinated through the State DOT and City as it is also an oversize vehicle route. The State DOT provides an online form to apply for lane closures. It is the responsibility of the Contractor to coordinate the lane closure permit.
20. Work on South St must allow for the operation of school busses.
21. Any work on the Fire Dept lot must be coordinated with the On Duty Officer to not hinder any emergency response. A 24hr prior notice is required to the On Duty Officer.

BID PROPOSAL FORM

(blank)

2021 Joint & Crack Cleaning & Sealing
Proposal

**CITY OF LAKE GENEVA
PROPOSAL
2022 JOINT & CRACK CLEANING & SEALING**

Bid opening date: 04 Jan., 2022. 10:00am. Lake Geneva City Hall

City of Lake Geneva
City Clerk, City Hall
626 Geneva Street
Lake Geneva, WI 53147
(262) 248-3673

City Clerk:

We recognize the City of Lake Geneva will expend the lump sum amount of **\$35,000.00** to clean and seal joints and cracks, in accordance with City of Lake Geneva specifications. We have reviewed the following list and attached map, taking all necessary field measurements, and have placed an X in front of the streets that we will perform a combination of Class I and Class II joint and crack cleaning and sealing as follows:

JOINT & CRACK CLEANING & SEALING-CLASS I & CLASS II

<u>Street Name</u>	<u>From</u>	<u>To</u>
X Fire Dept Lot	Newer asphalt area in rear, seams.	
X LaSalle	Carey	Edgewood
X LaSalle Ct	Entire route	
X Linda Ln	Entire Route	
X Lookout	Linda	Miller
X Maxwell St.	Dodge	Pleasant
X Miller Ct.	Entire Route	
X E. & W Miller Ct	Entire Route	
X Minihan Rd.	Entire Route	
X South St.	Wells	Bonnie Brae
X 1070 Carey	New Asphalt	
X Ceylon Ct.	Entire Route*	*check limits
X Carey St	LaSalle north to termini.	

MANDATORY ADD, separate from above.

Water Dept asphalt lot as described on attached map.

Price; \$ 3,135.00

Contact Utility Director with questions. Mr. Josh Gajewski. (262)248-2311

It is the intent that the checked list follows in priority order, but the size of some of the listed streets may necessitate skipping a street near the bottom of the list in favor of a lesser cost street.

If all streets are checked to be done for the budgeted amount, indicate the balance if any, of City funding remaining to be allocated to additional City street crack filling. \$ 20,000 —

Work started within 15 days of award.

City of Lake Geneva will pay within (30) days of completion of job.

Completion date if different than **25 May, 2022** _____

Guarantee/warranty (be specific): SEE ATTACHMENT # 1

Product literature included? ☒ Yes ☐ No

Comments: _____

We recognize the City will award this contract to the vendor whos proposal is deemed most advantageous to the City.

Respectfully Submitted,

Firm: Fahrney Asphalt Sealers, LLC

Signature: Jim Rozumalski, Vice President

Address: 316 Racmisch Road

Wauwatosa, WI 53597

Phone: 108-849-0466 Fax: 108-849-0470

Payment Terms:

_____ % _____ days

Net 30 days

Date: 12/4/2022

A 5% Bid Bond shall be required. Amount of Bond; \$ (five percent) 5% of total amount bid
Included; Yes ☒ No ☐

AGREEMENT

PROPOSAL / CONTRACTJob. No. **1202123432**Date: **December 27, 2021**

PLOVER, WI 54467
2800 Mecca Drive
Ph.: 715.341.2868
Fax: 715.341.1054

WAUNAKEE, WI 53597
316 Raemisch Road
Ph.: 608.849.6466
Fax: 608.849.6470

KAUKAUNA, WI 54130
860 Eastline Road
Ph.: 920.759.1008
Fax: 920.759.1019

EAU CLAIRE, WI 54703
6615 U.S. Hwy 12 W
Ph.: 715.874.6070
Fax: 715.874.6717



Pavement Maintenance Contractors

EEO/AA Employer

CORPORATE OFFICE: 1.800.332.3360

FREDERIC, WI 54837
3468 115th Street
Ph.: 715.653.2535
Fax: 715.653.2553

SAGINAW, MI 48601
2224 Veterans Memorial Pkwy
Ph.: 989.752.9200
Fax: 989.752.9205

DUBUQUE, IA 52002
7680 Commerce Park
Section C
Ph.: 563.556.6231
Fax: 563.588.1240

OAKDALE, MN 55128
7500 Hudson Blvd., Ste. 305
Ph.: 651.340.6212
Fax: 651.340.6221

Contact Name: **Tom Earle**

Contract Price

T.B.D.

PURCHASER: **CITY OF LAKE GENEVA**

TELEPHONE:

ADDRESS: **626 GENEVA ST
LAKE GENEVA, WI 53147**

DESCRIPTION OF PROPERTY:

**Cracksealing
626 GENEVA ST
LAKE GENEVA, WI 53147**

1. FAHRNER Asphalt Sealers, L.L.C. (CONTRACTOR) and PURCHASER agree that, CONTRACTOR shall furnish the labor and materials to complete certain construction in accordance with the following specifications:

Rout out cracks to a 3/4 x 3/4 ratio width versus depth. Blow out and clean cracks with compressed air and heat lance. Seal cracks with a rubberized asphalt crack sealant. This material exceeds Fed Spec ASTM D6690 Type II. Overband cracks using hand squeegee method.

Guarantee: (3) year guarantee that cracks will remain sealed.

This proposal may be withdrawn if not accepted and received by CONTRACTOR within _____ days of the date above and/or at any time before performance of the work hereunder upon CONTRACTOR'S determination that the PURCHASER is not creditworthy.

2. If proposal is accepted please sign, retain one copy and forward a copy to our office.

3. The undersigned ("PURCHASER") agrees to pay CONTRACTOR the total price of **T.B.D.** and/or the unit prices specified above for the labor and materials specified above which payment shall be due upon completion of each stage of work.

PURCHASER acknowledges that the specifications, conditions and price quotes specified above are satisfactory and hereby accepted.

Acceptance of this Proposal includes acceptance of all the terms and conditions on back.

CONTRACTOR:

Fahrner Asphalt Sealers, LLC: 608-280-1452
mike.jenquin@fahrnerasphalt.com

PURCHASER:

I have read and understand the terms and conditions on both sides of this contract.

Mike Jenquin

(PRINT OR TYPE NAME)

By:

(CONTRACTOR REPRESENTATIVE)

(PRINT OR TYPE NAME)

By:

(PURCHASER AUTHORIZED REPRESENTATIVE)

Date: **December 27, 2021**

Date of acceptance: _____

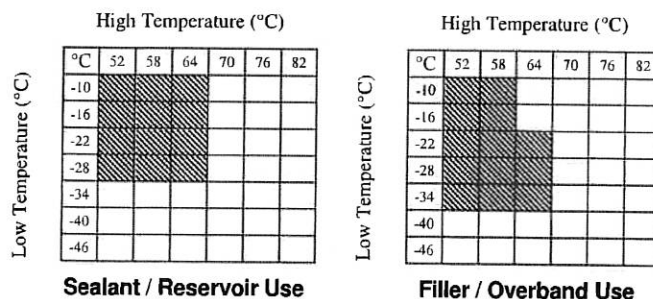
6165 W Detroit St. • Chandler AZ 85226
 +1 (602) 276-0406 • +1 (800) 528-8242 • FAX +1 (480) 961-0513
 www.crafco.com

READ BEFORE USING THIS PRODUCT

GENERAL Crafcro RoadSaver 201 sealant is a hot-applied, asphalt based product used to seal and fill cracks and joints in asphalt or Portland cement concrete pavements in moderate to cold climates. RoadSaver 201 is supplied in solid form which when melted and properly applied forms a highly adhesive and flexible compound that resists cracking in the winter and resists flow at summer temperatures. RoadSaver 201 is used in highway, street and airfield pavements and is applied to pavement cracks and joints using pressure feed melter applicators or pour pots. The unique formulation of RoadSaver 201 contains a minimum of 18% recycled rubber by weight of asphaltic components, which increases application temperature viscosity. RoadSaver 201 has been a quality Crafcro product for over 30 years. During this time RoadSaver 201 has become a preferred product by many users for sealing asphalt pavement cracks due to the increased viscosity and improved slump and flow resistance when applied. VOC = 0 g/l.

USAGE GUIDELINES RoadSaver 201 is applicable for Sealant / Reservoir Use and Filler / Overband Use in moderate to cold climates with low and high pavement temperatures identified in the charts. Pavement temperatures for the project location are determined at 98% reliability using FHWA LTPPBind V 3.1, and sealant or filler use is determined following Crafcro Product Selection Procedures.

 Applicable Pavement Temperatures



SPECIFICATION CONFORMANCE RoadSaver 201 meets all requirements of ASTM D6690 (AASHTO M324), Type II, "Joint and Crack Sealants, Hot-Applied, for Concrete and Asphalt Pavements", (formerly ASTM D3405 and AASHTO M301). RoadSaver 201 exceeds requirements of ASTM D6690 (AASHTO 324), Type I, (formerly ASTM D1190, AASHTO M173), and Federal Specification SS-S-164.

Test
 Cone Penetration
 Resilience
 Softening Point
 Bond, -20°F, 50% ext.
 Asphalt Compatibility
 Minimum Application Temperature
 Maximum Heating Temperature

ASTM D6690 (AASHTO M324)

Type II Limits
 90 max.
 60% min
 176°F (80°C) min.
 Pass 3 cycles
 Compatible
 380°F (193°C)
 400°F (204°C)

INSTALLATION The unit weight of Crafcro RoadSaver 201 is 9.7 lbs. per gallon (1.16 kg/L) at 60°F (15.5°C). Prior to use, the user must read and follow Installation Instructions for Hot-Applied RoadSaver, PolyFlex, Parking Lot and Asphalt Rubber Products to verify proper product selection, heating methods, pavement preparation procedures, application geometry, usage precautions and safety procedures. These instructions are provided with each pallet of product.

PACKAGING Product is supplied in either cardboard boxes, or in meltable, boxless PLEXI-melt packaging. Both package types are labeled in accordance with OSHA, GHS, and specification requirements; are sold by net weight; are interlock stacked on 48 x 40 in. (122 x 102 cm) 4-way pallets; can be stored outside; and are covered with a weather resistant pallet cover and 2 layers of UV protected stretch wrap.

- **BOX** packaging consists of cardboard boxes containing approximately 30 lb. (13.6 kg) of product with 75 boxes per pallet, weighing approximately 2250 lb. (1020 kg). Boxes contain a quick melting release film for easy removal and are taped closed, without any staples.
- **PLEXI-melt** packaging consists of 30 lb. (13.6 kg) blocks of product with 70 packages per pallet, weighing 2100 lb. (952 kg). To use, the pallet wrap is removed, and individual blocks are placed in the melter. There are no cardboard boxes or other cardboard components to open, empty, handle, or dispose of. PLEXI-melt packaging quickly melts into the product without affecting specification conformance.

WARRANTY CRAFCO, Inc. warrants that CRAFCO products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, Crafcro shall not be responsible for improperly applied or misused products. Remedies against Crafcro, Inc., as agreed to by Crafcro, are limited to replacing nonconforming product or refund (full or partial) of purchase price from Crafcro, Inc. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by Crafcro, Inc. whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow Crafcro recommendations for product installation.**

**AGREEMENT
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AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____ in the year 2021 by and between City of Lake Geneva (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK

- 1.1 CONTRACTOR shall assume all duties and responsibilities and complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The 2021 Joint & Crack Cleaning & Sealing -Various Locations in Lake Geneva, WI, in accordance with the plans and specifications and as required.

- 1.2 The Project for which the Work under the Contract Documents may be the whole or only a part of is generally described as follows:

2022 JOINT & CRACK CLEANING & SEALING CITY OF LAKE GENEVA WALWORTH COUNTY, WISCONSIN

ARTICLE 2. ENGINEER

- 2.1 The Project has been designed by the City of Lake Geneva and its Director of Public Works or his designee who is hereinafter called OWNER and OWNER'S representative, and assumes all duties and responsibilities and have the rights and authority assigned to OWNER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

CONTRACT TIMES

Contractor shall be ready and operational and ready for final payment in accordance with the Bid Specification no later than **May 25, 2022. It is the intent that the Contractor may start the work as soon as possible after award weather permits prior to winter.**

CONTRACTOR recognize that time is of the essence of the Work and shall not suffer financial loss if the Work is not completed within the time specified above, plus any extension thereof allowed in accordance with the Bid Specification. Contractor also recognize that delays, expense and difficulties may be encountered preceding the actual loss suffered by OWNER if the Contractor is not accordingly, instead of requiring any such proof, OWNER and Contractor shall be obligated damages for delay (but not as a penalty) of \$100.00, for each day that expires after the time specified in the Bid Specification.

Pre Qual sent to
Jeff 12/2/21
2021 is acceptable
Pre qual per city clerk
Via Email 12/2/21
AE

Paragraph 3.1 of Article 3 above for Substantial Completion until the Work is substantially complete.

- 3.3 Permitting CONTRACTOR or Surety to continue and finish the Work or any part of the Work after the times specified for completion, or after the date to which the times for completion may have been extended, shall in no way operate as a waiver on the part of OWNER of its rights under the Contract.

ARTICLE 4. CONTRACT PRICE

- 4.1 OWNER shall pay CONTRACTOR for the completion of the Work in accordance with the Contract Documents in current funds as shown in the Lump Sum Base Bid in the Bid Form in the amount of **Thirty-Five Thousand Dollars & No Cents (\$35,000.00) or actual lesser price.**

ARTICLE 5. PAYMENT PROCEDURES

- 5.1 CONTRACTOR shall submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by OWNER as provided in the General Conditions.

Progress Payments:

- 5.2 OWNER will make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by DPW Superintendent each month during construction as provided below. All progress payments will be on the basis of the progress of Work measured by the schedule of values established in the General Conditions (and in the case of Unit Price Work based on the number of units completed).

Retainage:

- 5.2.1 After each Application for Payment has been found acceptable by DPW, OWNER will pay 90% of the estimated value less any previous payments to CONTRACTOR until the Project is 50% complete. At 50% completion, further progress payments will be made in full to CONTRACTOR and no additional amounts will be retained unless OWNER determines that the character and progress of the Work is not proceeding satisfactorily. Amounts previously retained shall not be paid to CONTRACTOR. At 50% completion or any time thereafter when the character and progress of the Work is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10% of the value of the Work completed.
- 5.2.2 Upon Substantial Completion of the Work, the amount retained may be reduced. When the Work has been Substantially Completed except for Work which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of OWNER are valid reasons for non-completion, OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the work still to be completed or corrected.

- 5.3 Upon final completion and acceptance of the Work in accordance with the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by DPW as provided in said General Conditions.

ARTICLE 6. CONTRACTOR'S REPRESENTATIONS

- 6.1 CONTRACTOR has examined and carefully studied the Contract Documents (including the Addenda) and the other related data identified in the Bidding Documents including "technical data."
- 6.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance and furnishing of the Work.
- 6.3 CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
- 6.4 CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.
- 6.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.
- 6.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports, and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- 6.7 CONTRACTOR has given DPW written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR had discovered in the Contract Documents and the written resolution thereof by DPW is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicated and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 6.8 CONTRACTOR hereby covenants and agrees to pay all claims for labor performed and materials furnished, used or consumed in performing under this Agreement including, without limitations because of enumeration, fuel, lumber, building materials, machinery, vehicles, tractors, equipment, fixtures, apparatus, tools, appliances, supplies, electric energy, gasoline, motor oil, lubricating oil, greases, state imposed taxes, premiums for workers compensation insurance, and contributions for unemployment insurance.

- 6.9 CONTRACTOR agrees, to the extent practicable, to maintain a list of all subcontractors and suppliers performing labor or furnishing material under this Agreement.

ARTICLE 7. CONTRACT DOCUMENTS

The Contract Documents, which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 7.1 This Agreement.
- 7.2 Exhibits to this Agreement. (Copy of entire Bid Form, etc.)
- 7.3 Performance, Payment and other Bonds (Not Applicable).
- 7.4 Notice of Award.
- 7.5 Notice to Proceed. (Issued separately)
- 7.6 General Conditions.
- 7.7 Specifications. (Also Known as Minimum Bid Specifications).
- 7.8 Wage Rate Requirements (Not Applicable).
- 7.9 Other Appendix items consisting of the plans and pages listed.
- 7.10 Drawings (Crackfilling Map).
- 7.11 Local Forms.
- 7.12 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All written Amendments and other documents amending, modifying or supplementing the Contract Documents pursuant to the General Conditions.

The documents listed in Article 7 above are attached to this Agreement (except as expressly noted otherwise above.)

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be amended, modified or supplemented as provided in the General Conditions.

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ARTICLE 8. INSURANCE

- 8.1 The Contractor hereby agrees to assume and bear all risk of damage to, failure of the work under this contract, and all risks of any accident to any person or to the property of any person, from whatsoever cause

arising due to operations under this contract, until the work herein provided for shall have been fully completed and accepted by the City.

8.2 The Contractor shall provide and pay for Public Liability, Property Damage and Workmen's Compensation Insurance with the following minimum limits of liability approved by the Utility Commission:

8.2.1 Workmen's Compensation and Employer's Liability.

Liability limits shall not be less than:

- (1) Workmen's Compensation Statutory
- (2) Employer's Liability \$100,000 Each Occurrence

8.2.2 Comprehensive Motor Vehicle Liability

Liability limits shall not be less than:

- (1) Bodily Injury \$ 500,000 Per Person
\$1,000,000 Each Occurrence
- (2) Property Damage \$ 250,000 Each Occurrence

8.2.3 Comprehensive General Liability

Liability limits shall be not less than:

- (1) Personal Injury \$1,000,000 Aggregate
- (2) Bodily Injury \$ 500,000 Each Occurrence
\$5,000,000 Aggregate
- (3) Property Damage \$ 250,000 Each Occurrence
- (4) Completed Operations and Products Liability coverage for life of the Contract and maintain coverage for one (1) year after final acceptance by the Utility Commission.

- (5) Named insured for this policy shall be: CITY OF LAKE GENEVA.

8.2.4 Owner's Protective Liability (Independent Contractors Insurance)

Liability limits shall not be less than:

- (1) Bodily Injury \$ 500,000 Each Occurrence
- (2) Property Damage \$ 250,000 Each Occurrence
\$ 250,000 Aggregate

8.2.5 Umbrella Excess Liability

- (1) The liability limits shall not be less than:

\$1,000,000 Each Occurrence

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8.3 The City shall be free and clear of any liabilities, including attorney's fees, and all other encumbrances resulting from all project-related claims.

ARTICLE 9. MISCELLANEOUS

- 9.1 All references to the General Conditions in any Contract Document shall be interpreted to include reference to any corresponding Supplementary Conditions, whether stated or unstated in such reference.
- 9.2 Terms used in this Agreement which are defined in the General Conditions will have the meanings indicated in the General Conditions.
- 9.3 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.4 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement. One counterpart each has been delivered to OWNER/ENGINEER and CONTRACTOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on _____, 2021, (which is the effective Date of the Agreement).

Attest:

(CONTRACTOR)

(Signature)

printed name

:

Address of Contractor/proposer

(If CONTRACTOR is a corporation, attach
evidence of authority to sign.)

Contractor phone *and email* _____

CONTRACTOR'S License No. _____ (If required by state or municipal law)

Attest: Ms Lana Kropf
City Clerk

Ms Charlene Klein
Mayor

(signature)

(signature)

Address for giving notices:
626 Geneva Street

Lake Geneva, WI 53147

In accordance with the requirements of Wis. Statute 62.15(12), I hereby certify that sufficient funds are available to pay the liability that will accrue hereunder.

City of Lake Geneva Comptroller, Ms Karen Hall

NOTICE OF AWARD

(blank)

CITY OF LAKE GENEVA

2022 Joint & Crack Cleaning & Sealing – Various Locations

NOTICE OF AWARD

Date _____

TO: _____

ADDRESS: _____

Contract: **City of Lake Geneva 2022 Joint & Crack Cleaning & Sealing**
(Insert Name of Contract as it appears in the Bidding Documents.)

Project: To do Joint & Crack Cleaning & Sealing at Various Locations, Lake Geneva, WI

You are notified that your Bid dated _____ for the above Contract has been considered. You have been awarded a Contract for

2022 Joint & Crack Cleaning & Sealing -Various Locations, in Lake Geneva, WI 53147

(Indicate total Work, alternates or sections or Work awarded.)

The Contract Price of your Contract is

Thirty-Five Thousand Dollars & No Cents
\$35,000.00

Or actual price of \$ _____

1. **Name:**
 Contact:
 Address:
 Phone:

2. **Name:**
 Contact:
 Address:
 Phone:

3. **Name:**
 Contact:
 Address:
 Phone:

4. **Name:**
 Contact:
 Address:
 Phone:

Fahrner Asphalt Sealers, LLC

Crackfill References

Owner	Chisago County Highway Department
Owner Project # / ID	
Project Description	Various Roads
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Chisago / Minnesota
Contact Name	Joe Triplett
Contact Address	31325 Oasis Rd, Center City, MN 55012
Phone / Fax	(651) 213-8708
Email Address	joe.triplett@chisagocounty.us
Contract Year(s)	2015 / 2016 / 2017 / 2018 / 2019 / 2020
Contract Amount(s)	\$44,936.73 / \$57,325.50 / \$86,760.00 / \$37,680.00 / \$89,281.00 / \$89,551.00

Owner	University of Wisconsin - Madison
Owner Project # / ID	Multiple
Project Description	Various University Lots
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dane / Wisconsin
Contact Name	Shaun Frey
Contact Address	21 N Park St, Ste 5301, Madison, WI 53715-1218
Phone / Fax	(608) 225-1135
Email Address	shaun.frey@wisc.edu
Contract Year(s)	2017 / 2018 / 2019 / 2020
Contract Amount(s)	\$50,605.60 / \$35,095.00 / \$34,765.00 / \$42,500.00

Owner	Town of Lisbon
Owner Project # / ID	
Project Description	[YEAR] Crackfilling
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Waukesha / Wisconsin
Contact Name	Joe Destefano Jr
Contact Address	N234 N8678 Woodside Rd, Lisbon, WI 53089
Phone / Fax	(262) 246-3416
Email Address	jdestefano@townoflisbonwi.com
Contract Year(s)	2017 / 2018 / 2019 / 2020
Contract Amount(s)	\$82,391.00 / \$62,614.00 / \$87,040.00 / \$76,360.00

Owner	Saginaw County Road Commission
Owner Project # / ID	
Project Description	Various Roadways
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Saginaw / Michigan
Contact Name	Dan Medina
Contact Address	3020 Sheridan Ave, Saginaw, MI 48601
Phone / Fax	(989) 752-6140
Email Address	medinad@scrc-mi.org
Contract Year(s)	2016 / 2017 / 2018 / 2019 / 2020
Contract Amount(s)	\$218,307.44 / \$227,868.26 / \$248,636.80 / \$177,837.25 / \$55,448.30

Owner	Washburn County Highway Department
Owner Project # / ID	
Project Description	Various County Roads
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Washburn / Wisconsin
Contact Name	Jon Johnson
Contact Address	1600 County Highway H, Spooner, WI 54801
Phone / Fax	(715) 635-4480
Email Address	
Contract Year(s)	2018 / 2019 / 2020
Contract Amount(s)	\$52,500.00 / \$118,264.74 / \$75,714.30

Fahrner Asphalt Sealers, LLC Crackfill References

Owner	City of Madison
Owner Project # / ID	7634 / 8095 / 8311 / 8558
Project Description	Majors
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dane / Wisconsin
Contact Name	Steve Sonntag
Contact Address	210 Martin Luther King Jr Blvd, Madison, WI 53703
Phone / Fax	(608) 266-1997
Email Address	ssonntag@cityofmadison.com
Contract Year(s)	2016 / 2018 / 2019 / 2020
Contract Amount(s)	\$305,719.00 / \$119,478.00 / \$378,676.00 / \$299,930.00

Owner	Dubuque County Road Department
Owner Project # / ID	Multiple
Project Description	Crackfill
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dubuque / Iowa
Contact Name	Chad Danielson
Contact Address	13047 City View Dr, Dubuque, IA 52002
Phone / Fax	(563) 513-1973
Email Address	
Contract Year(s)	2018 / 2019 / 2020
Contract Amount(s)	\$72,832.00 / \$12,328.50 / \$15,133.50

Owner	City of Madison
Owner Project # / ID	7633 / 8094 / 8310 / 8507
Project Description	Locals
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dane / Wisconsin
Contact Name	Steve Sonntag
Contact Address	210 Martin Luther King Jr Blvd, Madison, WI 53703
Phone / Fax	(608) 266-1997
Email Address	ssonntag@cityofmadison.com
Contract Year(s)	2016 / 2018 / 2019 / 2020
Contract Amount(s)	\$214,804.00 / \$72,520.50 / \$165,640.00 / \$250,213.00

Owner	Mecosta County Road Commission
Owner Project # / ID	
Project Description	County Roadways
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Mecosta / Michigan
Contact Name	Tim Nestle
Contact Address	120 N Dekrafft Ave, Big Rapids, MI 49307
Phone / Fax	(231) 796-2611
Email Address	tnestle@mecostaroads.org
Contract Year(s)	2019 / 2020
Contract Amount(s)	\$137,055.77 / \$102,377.92

Owner	City of Cumberland
Owner Project # / ID	
Project Description	[YEAR] Crackfill
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Barron / Wisconsin
Contact Name	Jerry Lindfors
Contact Address	950 1st Ave, Cumberland, WI 54829
Phone / Fax	(715) 419-0364
Email Address	
Contract Year(s)	2019 / 2020
Contract Amount(s)	\$17,743.00 / \$48,544.00

Fahrner Asphalt Sealers, LLC Crackfill References

Owner	Wexford County Road Commission
Owner Project # / ID	
Project Description	Various County Roads
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Wexford / Michigan
Contact Name	Karl Hanson
Contact Address	85 W M-115, Boon, MI 49618
Phone / Fax	(231) 775-9731
Email Address	engineer@wexfordcroc.org
Contract Year(s)	2019 / 2020
Contract Amount(s)	\$92,249.38 / \$74,984.00

Owner	Town of Washington
Owner Project # / ID	
Project Description	2019 Crackseal
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Eau Claire / Wisconsin
Contact Name	Janelle Henning
Contact Address	5750 Old Town Hall Rd, Eau Claire, WI 54701
Phone / Fax	(715) 834-3257
Email Address	
Contract Year(s)	2019 / 2020
Contract Amount(s)	\$63,621.60 / \$62,101.00

Owner	Town of Eagle Point
Owner Project # / ID	
Project Description	[YEAR] Crackfill
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Chippewa / Wisconsin
Contact Name	Dennis Ferstenou
Contact Address	14802 State Highway 124, Chippewa Falls, WI 54729
Phone / Fax	(715) 720-1226
Email Address	dferstenou@charter.net
Contract Year(s)	2018 / 2020
Contract Amount(s)	\$13,102.00 / \$49,902.00

Owner	City of Spooner
Owner Project # / ID	
Project Description	Various Streets
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Washburn / Wisconsin
Contact Name	David Olson
Contact Address	PO Box 548, Spooner, WI 54801
Phone / Fax	(715) 635-8769
Email Address	spooner.st.dept@cityofspooner.org
Contract Year(s)	2018 / 2020
Contract Amount(s)	\$22,022.02 / \$28,674.84

Owner	Village of Orfordville
Owner Project # / ID	
Project Description	Various Roadways
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Rock / Wisconsin
Contact Name	Karl Stuvengen
Contact Address	303 E Beloit St, Orfordville, WI 53576
Phone / Fax	(608) 295-5959
Email Address	
Contract Year(s)	2018 / 2020
Contract Amount(s)	\$67,395.00 / \$7,990.00

Fahrner Asphalt Sealers, LLC Crackfill References

Owner	City of Elkhorn
Owner Project # / ID	
Project Description	Pavement Maintenance
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Walworth / Wisconsin
Contact Name	Neal Kolb
Contact Address	9 S Broad St, Elkhorn, WI 53121
Phone / Fax	(262) 325-0274
Email Address	
Contract Year(s)	2016 / 2020
Contract Amount(s)	\$97,800.00 / \$98,331.00

Owner	Iowa Department of Transportation
Owner Project # / ID	04-C004-107
Project Description	HMA Joint & Crack Sealing
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Appanoose / Iowa
Contact Name	Nate Shilling
Contact Address	1200 Highway 2 W, Centerville, IA 52544
Phone / Fax	(642) 895-8853
Email Address	nshilling@appanoosecounty.net
Contract Year(s)	2020
Contract Amount(s)	\$297,481.16

Owner	Village of Whiting
Owner Project # / ID	
Project Description	Tommy's Turfpikie
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Portage / Wisconsin
Contact Name	Nick Schmeiser
Contact Address	3600 Water St, Stevens Point, WI 54481
Phone / Fax	(715) 340-7582
Email Address	nicschmeiser@villageofwhiting.com
Contract Year(s)	2020
Contract Amount(s)	\$59,524.00

Owner	Town of Arpin
Owner Project # / ID	
Project Description	Town Roads
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Wood / Wisconsin
Contact Name	Larry Schupe
Contact Address	7583 Arpin Sherry Rd, Vesper, WI 54489
Phone / Fax	(715) 459-4447
Email Address	
Contract Year(s)	2020
Contract Amount(s)	\$10,730.00

Owner	Village of Baldwin
Owner Project # / ID	
Project Description	Various Roads Within the Village
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	St. Croix / Wisconsin
Contact Name	Brad Boldt
Contact Address	1980 4th Ave, Baldwin, WI 54002
Phone / Fax	(715) 760-0340
Email Address	brad@villageofbaldwin.com
Contract Year(s)	2020
Contract Amount(s)	\$79,586.70

Fahrner Asphalt Sealers, LLC Crackfill References

Owner	City of Inver Grove Heights
Owner Project # / ID	
Project Description	Rich Valley Athletic Complex
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dakota / Minnesota
Contact Name	Brian Swoboda
Contact Address	8168 Barbara Ave, Inver Grove Heights, MN 55077
Phone / Fax	(651) 450-2582
Email Address	bswoboda@invergroveheights.org
Contract Year(s)	2020
Contract Amount(s)	\$30,488.90

Owner	City of Wausau
Owner Project # / ID	
Project Description	[YEAR] Street Sealcoating Project
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Marathon / Wisconsin
Contact Name	Eric Lindman, P.E.
Contact Address	407 Grant St, Wausau, WI 54403-4783
Phone / Fax	(715) 261-6740 / (715) 261-6759
Email Address	
Contract Year(s)	2018 / 2019
Contract Amount(s)	\$87,735.05 / \$110,217.48

Owner	City of Mequon
Owner Project # / ID	3686-19
Project Description	[YEAR] Crack Sealing
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Ozaukee / Wisconsin
Contact Name	Jeremy Dandy
Contact Address	11333 N Cedarburg Rd 60W, Mequon, WI 53092
Phone / Fax	(262) 236-2932
Email Address	jdandy@ci.mequon.wi.us
Contract Year(s)	2018 / 2019
Contract Amount(s)	\$69,354.00 / \$149,850.00

Owner	St Louis County
Owner Project # / ID	CP 0000-235367, SAP 069-030-036 / CP 0000-278673
Project Description	Crack Sealing And Crack Repair Special
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Lake, St. Louis / Minnesota
Contact Name	James Foldesi, P.E.
Contact Address	4787 Midway Rd, Duluth, MN 55811
Phone / Fax	(218) 625-3830
Email Address	
Contract Year(s)	2015 / 2019
Contract Amount(s)	\$903,324.36 / \$1,097,970.96

Owner	Wisconsin Department of Transportation
Owner Project # / ID	Multiple
Project Description	Northwest Region Crackfill
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Multiple - Northwest Region / Wisconsin
Contact Name	Mohamad Hayek
Contact Address	718 W Clairemont Ave, Eau Claire, WI 54701
Phone / Fax	(715) 836-2065
Email Address	mohamad.hayek@dot.wi.gov
Contract Year(s)	2017 / 2018
Contract Amount(s)	\$1,419,063.50 / \$544,935.90

Fahrner Asphalt Sealers, LLC Crackfill References

Owner	Minnesota Department of Transportation
Owner Project # / ID	Multiple
Project Description	Rout & Seal Bituminious Pavement Cracks
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Multiple - District 6 / Minnesota
Contact Name	Gary Lovelace, Resident Engineer, District 6
Contact Address	PO Box 6177, Rochester, MN 55903
Phone / Fax	(507) 286-7530
Email Address	
Contract Year(s)	2015 / 2018
Contract Amount(s)	\$1,612,245.00 / \$249,689.06

Owner	City of Inver Grove Heights
Owner Project # / ID	2015-09A, 2018-09A
Project Description	Crackfill
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dakota / Minnesota
Contact Name	Brian Swoboda
Contact Address	8168 Barbara Ave, Inver Grove Heights, MN 55077
Phone / Fax	(651) 450-2582
Email Address	bswoboda@invergrovehights.org
Contract Year(s)	2015 / 2018
Contract Amount(s)	\$152,723.49 / \$45,483.29

Owner	Iowa Department of Transportation
Owner Project # / ID	Multiple
Project Description	Statewide HMA Crack Filling
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Statewide / Iowa
Contact Name	Steven McElmeel, P.E.
Contact Address	1833 Industrial Rd N, Cherokee, IA 51012
Phone / Fax	(712) 225-5786
Email Address	
Contract Year(s)	2016 / 2018
Contract Amount(s)	\$416,607.48 / \$944,682.44

Owner	Town of Clayton
Owner Project # / ID	
Project Description	Various Roadways
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Polk / Wisconsin
Contact Name	Jamie Wood
Contact Address	167 70th Ave, Clayton, WI 54004
Phone / Fax	(715) 641-0221
Email Address	
Contract Year(s)	2018
Contract Amount(s)	\$30,752.00

Owner	Randolph Township
Owner Project # / ID	
Project Description	Various Streets
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Dakota / Minnesota
Contact Name	Mark Elliott
Contact Address	4365 292nd St E, Randolph, MN 55065
Phone / Fax	(651) 398-8637
Email Address	markelliott1969@gmail.com
Contract Year(s)	2018
Contract Amount(s)	\$10,962.00

Fahrner Asphalt Sealers, LLC Crackfill References

Owner	Michigan Department of Transportation
Owner Project # / ID	68041-131763
Project Description	Alpena TSC
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Alpena, Ogemaw / Michigan
Contact Name	Kimberly Mullins
Contact Address	1540 Airport Rd, Alpena, MI 49707
Phone / Fax	(989) 356-2231 / (989) 354-4142
Email Address	mullinsk@michigan.gov
Contract Year(s)	2018
Contract Amount(s)	\$430,606.76

Owner	Town of Wittenberg
Owner Project # / ID	
Project Description	Various Roadways
Type of Work	Polymastic Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Shawano / Wisconsin
Contact Name	Dick Beversdorf
Contact Address	PO Box 186, Wittenberg, WI 54499
Phone / Fax	(715) 253-2908
Email Address	
Contract Year(s)	2018
Contract Amount(s)	\$3,000.00

Owner	Michigan Department of Transportation
Owner Project # / ID	59045-126122
Project Description	M-46
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Gratiot, Montcalm / Michigan
Contact Name	Craig Taylor
Contact Address	7915 US Highway 131, Cadillac, MI 49601
Phone / Fax	(231) 775-3487 / (231) 775-0301
Email Address	
Contract Year(s)	2017
Contract Amount(s)	\$703,973.58

Owner	Village of Weston
Owner Project # / ID	
Project Description	[YEAR] Crack Sealing
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Marathon / Wisconsin
Contact Name	Mike Wodalski, P.E.
Contact Address	5500 Schofield Ave, Weston, WI 54476-4395
Phone / Fax	(715) 241-2636
Email Address	
Contract Year(s)	2015 / 2016
Contract Amount(s)	\$43,981.16 / \$58,501.87

Owner	City of Janesville
Owner Project # / ID	
Project Description	City Streets
Type of Work	Crackfill
Prime Contractor	Fahrner Asphalt Sealers LLC
County / State	Rock / Wisconsin
Contact Name	John Whitcomb
Contact Address	18 N Jackson, Janesville, WI 53547
Phone / Fax	(608) 755-3114
Email Address	
Contract Year(s)	2016
Contract Amount(s)	\$99,196.50

Document A310™ – 2010

Conforms with The American Institute of Architects AIA Document 310

Bid Bond

CONTRACTOR:

(Name, legal status and address)

Fahrner Asphalt Sealers, L.L.C.
316 Raemisch Road
Waunakee, WI 53597

SURETY:

(Name, legal status and principal place of business)

Western Surety Company
151 North Franklin Street
Chicago, IL 60606

Mailing Address for Notices

Western Surety Company
151 North Franklin Street
Chicago, IL 60606

OWNER:

(Name, legal status and address)

City of Lake Geneva
626 Geneva Street
Lake Geneva, WI 53147

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

BOND AMOUNT: Five Percent of the Amount Bid (5%)

PROJECT:

(Name, location or address, and Project number, if any)

2022 Joint & Crack Cleaning & Sealing

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 4th day of January 2022.

(Witness)

(Witness)

Fahrner Asphalt Sealers, L.L.C.

(Principal)

"NO CORPORATE
SEAL ADOPTED"

(Seal)

By:

(Title) Jim Rodumalski, Vice President

Western Surety Company

(Surety)

(Seal)

By:

(Title) Kelly Nicole Enghauser, Attorney-in-Fact

Surety Acknowledgment

State of Minnesota }
County of Hennepin } ss.

On this 4th day of January, 2022, before me personally came Kelly Nicole Enghauser, to me known, who being by me duly sworn, did depose and say that she is the Attorney-in-Fact of Western Surety Company described in and which executed the above instrument; that she knows the seal of said corporation; that the seal affixed to said instruments is such corporate seal, that it was so affixed by order of the Board of Directors of said corporation, and that she signed her name to it by like order.




Notary Public

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Laurie Pflug, Brian D Carpenter, Nicole Langer, Jessica Hoff, Craig Olmstead, Trisha Kasper, Blake S. Bohlig, Heather R. Goedtel, Kelly Nicole Enghausen, Michelle Halter, Individually

of Bloomington, MN, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 21st day of June, 2021.



WESTERN SURETY COMPANY

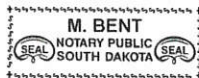
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 21st day of June, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



M. Bent, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 4th day of January, 2022.



WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

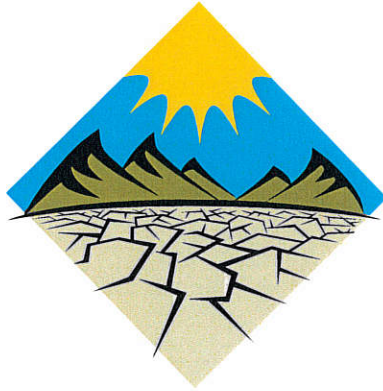
Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

CONTRACT DOCUMENT



PROJECT: 2022 JOINT & CRACK CLEANING & SEALING

OWNER: CITY OF LAKE GENEVA DPW
1065 CAREY STREET
LAKE GENEVA, WISCONSIN 53147 (262)248-6644

Contacts; Tom Earle, DPW
tearle@cityoflakegeneva.com

Neil Waswo, Superintendent.
nwaswo@cityoflakegeneva.com

Bid Opening: 04 Jan., 2022 10:00am.
City Hall, 626 Geneva Street
Lake Geneva, WI. 2nd floor meeting room

**CITY OF LAKE GENEVA
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2022 JOINT & CRACK CLEANING & SEALING**

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N/A

INSURANCE QUESTIONNAIRE & REFERENCES

OFFICIAL NOTICE TO BIDDERS

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**CITY OF LAKE GENEVA
NOTICE TO BIDDERS
2022 JOINT & CRACK CLEANING & SEALING**

Sealed proposals will be accepted by the City of Lake Geneva in the City Clerk's office at 626 Geneva Street, Lake Geneva, Wisconsin until 10am Tuesday, 04 Jan., 2022 for Joint & Crack Cleaning & Sealing, as specified in these bid documents.

Proposals must be sealed and submitted on the proposal forms and returned clearly marked 'City of Lake Geneva 2022 Joint and Crack Filling' with name of proposer, date and time of opening. No undated, unsigned, late, incomplete, emailed or faxed proposals will be considered. The City is not responsible for late or misdirected mail or cartage therefore hand delivery is advised.

Bidders must submit pre-qualification packet prior to the opening of bids by contacting the City Clerk's office or visiting the City website. Bid will not be awarded until Pre-Qual is approved.

All bids shall be F.O.B. destination, prepaid and allowed to the Clerk's Office with no charges for packing or cartage.

The City reserves the right to reject any or all proposals and to accept any proposal deemed most advantageous to the City of Lake Geneva.

Bidding documents are available by emailing the Director of Public Works, Mr Tom Earle at tearle@cityoflakegeneva.com or by appointment at the DPW offices, 1065 Carey St. Lake Geneva. (262)248-6644. .

The City of Lake Geneva is exempt from Federal Excise Tax and State Sales Tax; therefore, proposals should be made exclusive of these taxes. A Tax Exemption Certificate and/or Tax Exemption Registry number will be furnished to the successful proposer.

Insurance Requirements are: \$1,000,000 General Liability, Worker's Compensation - Statutory Limits, \$5,000,000 Employer's Liability. See pre-qualification form on website or Clerks Office.

Successful bidder shall properly hold the City of Lake Geneva harmless from all damages occurring in any way by bidders acts or negligence, or that of his employees, agents or workers. Completed Insurance questionnaire must be submitted with your proposal.

Contractor to include any clarifications to the specification in his proposal.

Proposed price shall be all-inclusive for Joint & Crack Cleaning & Sealing with no part being 'to be done by others'.

City of Lake Geneva

Ms. Lana Kropf
City Clerk
10 Nov., 2021

MINIMUM BID SPECIFICATION

(blank)

2022 Joint & Crack Cleaning & Sealing Specifications

CITY OF LAKE GENEVA MINIMUM BID SPECIFICATION JOINT & CRACK CLEANING & SEALING

DESCRIPTION: This work consists of sawing or routing and cleaning cracks and joints in asphalt surfaces and then sealing these prepared cracks and joints with an approved sealing material. It also includes removal and replacement of loose sealant from earlier work/contracts. The work excludes the long joint between the asphalt pavement and concrete gutter.

MATERIALS: The joint sealer shall be a material meeting requirements of ASTM D 3405. An elastic type, hot-pour sealer will be required. Or approved alternate. Material will be reheated only once and in small quantities. Prolonged heating up to six (6) hours will be permissible. Backer rod used in conjunction with this sealer shall be made of cellulose, cotton, or plastic foam. The backer rod must withstand, without damage, the high temperatures inherent to these sealers. The backer rod shall be of a size that compression is required for installation in the crack so it maintains its position during the filling operation.

All sealant materials and separating and blocking medium shall be certified or tested and approved by the engineer before being incorporated into the work. The Contractor shall furnish a complete written statement of the origin, composition and manufacture of any or all material that are to be used in the work. Where installation procedures or any part thereof are required to be in accordance with recommendations of the manufactures of sealing compounds, the Contractor shall submit catalogue data and copies of recommendations prior to installation of the materials.

EQUIPMENT

- A. Routing or sawing equipment shall be mechanical and power driven, capable of cutting the joints and cracks to the required dimensions. The router must have in-line wheels and cutting head capable of following random cracks and have depth control to insure consistent and accurate routing depths. Excessive spalling of the asphalt surface will not be permitted. Crack routing equipment will be permitted on asphalt pavement, but will not be permitted on Portland Cement Concrete Pavement.
- B. Two (2) air compressors will be required during asphalt crackfilling operations. They must be of sufficient size to maintain a minimum air pressure of 120 psi. and provide moisture and oil free compressed air. One compressor shall be used on asphalt pavement with an air wand to blow out the crack and clean off the road. The second shall be used with the heat lance. Note that one compressor is not of sufficient size to run both air wand and heat lance at the same time. Any request for an exception to this requirement shall be made at the time of bid including any credit.
- C. Water cleaning equipment shall be used on Portland Cement Concrete Pavement and be capable of delivering water with a pressure of 2,000 psi. from a nozzle to the crack or joint being cleaned, to remove existing joint sealer, debris, and loose material from the crack or joint.
- D. Sand blast equipment shall be capable of removing the existing sealant, saw slurry, silt or other foreign material from the vertical face of the crack or joint to the specified depth, leaving a clean, dry, newly exposed surface.
- E. Equipment used for heating and placing the hot-pour sealant material shall be of the oil-jacketed, double-boiler type heating kettle or other thermostatically controlled equipment of a type approved by the Engineer, equipped with both agitation and re-circulation systems, capable of heating the material to 410 degrees F. and pumping the material into the prepared cracks or joints with a wand applicator.

CONSTRUCTION

- A. Class I Cracks: On asphalt streets, cracks which have an average opening of 3/4" or less shall be routed or sawed to provide a minimum sealant reservoir of 3/4" width by a nominal 3/4" depth.

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- B. Class II Crack: Joints and cracks which do not require routing or sawing shall be considered Class II cracks. Construction joints on exposed concrete curb pans shall be considered Class II cracks and shall

not require backer rod or sawing. Asphalt cracks which have an average opening greater than 3/4" will not require routing or sawing, but they shall be thoroughly cleaned of all foreign material to a depth necessary to accommodate the sealer material and the backer rod to be used. Backer rod shall be placed in the crack to a depth that provides at least 3/4" clearance above the backer rod for the sealer. The backer rod shall be dry when placed.

- C. Asphalt cement concrete, Portland Cement Concrete, and foreign material resulting from crack preparation shall be cleared from the roadway by brooming, compressed air, mechanical sweeping, or other methods satisfactory to the Street Department Superintendent.
- D. Cracks shall be clean and dried prior to sealing.

The entire crack reservoir shall be filled with sealant to a level even with the roadway surface. A narrow "U" shaped squeegee may be used to aid in placement of the sealant. Sealant on the roadway surface in excess of one inch on each side of the crack edge will not be acceptable.

LIMITATIONS: Crack cleaning and sealing shall be done only when the ambient air and pavement surface temperatures are above 40 degrees F. When near this minimum, additional blow torch blasting or drying time, or both, may be necessary to assure a satisfactory bond to the crack surface.

Lanes may be opened to traffic only after the sealer has set sufficiently so it will not pick up under traffic. Powder or biodegradable paper may be applied to the sealer, but only after the sealer surface has set so as to avoid penetration of the powder or paper into the sealer.

Cracks shall be sealed within three (3) working days after routing or sawing preparation.

METHOD OF MEASUREMENT AND AWARD: This work will be measured lump sum based upon the number of streets checked off by the contractor from the list. In the event more than one contractor can perform on all streets, award shall be determined by the number of Type I and Type II lineal feet remaining to be performed for the City.

BASIS OF PAYMENT: This work will be paid lump sum in the amount of **\$35,000.00 (thirty five thousand dollars)**.

GUARANTEE OF WORK: Contractor shall guarantee that the cracks sealed shall remain sealed through the following three (3) winters. Contractor shall return to the project site each of the following three (3) summers and repair sealed cracks, which have lost their sealant bond at no additional cost. Failed sealed cracks will be identified by the Director of Public Works.

SUPPLEMENTAL SPECIFICATIONS

1. When being filled, all asphalt-cleaned cracks shall be dried by a high capacity blowtorch.
2. In all cases, cleaning shall include removal of vegetation from cracks.
3. All materials equipment, labor and traffic control shall be provided by the Contractor and included in the unit price bid.
4. At locations where crack sealant settles into the crack opening more than 1/4" below adjacent pavement, additional filling will be necessary.
5. A sample of sealant material to be used shall be submitted to the Engineering Division. Each batch of sealing compound delivered to the job site shall be accompanied by the manufacturer's certification stating that the sealant meets the requirement of the specifications.

Notice shall be given to the Street Department no less than 24 hours in advance to any crackfilling operation. The point of contact will be Mr. Neil Waswo, Superintendent of Public Works, phone (262) 248-6644. Office hours are 6:30 A.M. to 2:00 P.M., Monday through Thursday. Pg 6/23

6. Status reports identifying linear footage totals broken down by class types and location shall be provided in writing or email to the DPW Superintendent or Director of Public Works on a daily basis.

7. The locations of streets to be crackfilled are listed in priority order and attached in the back of the contract.
8. Work hour restrictions on all City streets from 6:00 A.M. to 10:00 P.M. **Work in the downtown area shall not take place after 12:00 noon on Fridays. .**
9. **No work shall be allowed in the downtown area between Memorial Day and Labor Day.**
10. The Contractor may store materials and equipment at his own risk as follows: at Street Garage, 1065 Carey Street, with admittance restricted to weekdays from **6am A.M. to 2:00 P.M. Monday through Thursday.**
11. The City requires that the asphalt pavement crackfilling is completed prior to any Portland Cement Pavement.
12. Pavement joint and crackfilling shall be started **as soon as possible after notice to proceed, and complete as much of the work as practical prior to the Wednesday before Memorial Day. All work shall be completed no later than 25 May, 2022 or as otherwise indicated on his bid.** Completion date may be a factor in bid award. Extensions will be given at the discretion of the City for weather related delays.
13. Qualifications of Contractor - The Contractor shall have been routing, cleaning and filling cracks per specifications for a minimum of 10 (ten) verifiable years.
14. Prequalification - All bidders must submit a list of five (5) previously completed crackfilling projects. Each project must have been in place for a minimum of three (3) winters.
15. On any street with a traffic signal pavement loop, the buried loops shall not be sawed or routed. It shall be cleaned with air pressure only and filled with crackfiller.
16. The Contractor shall provide "Crackfilling Notice Door Hangers" and shall be responsible for placing their name and phone number on them, and placing them on residence's doors one to three days prior to crackfilling work where applicable.
17. The Contractor shall maintain and utilize a mechanical street sweeper (minimum size: 16,000 GUW) at the work site to clean up debris and respond to dirt and dust complaints. Street sweeping debris may be disposed of in the Street Department yard, 1065 Carey Street, during normal working hours.
18. The Contractor shall be responsible for crackfilling all designated roadways. Temporary no parking signs may be placed at the approval of the DPW Superintendent. The Contractor shall be responsible for posting and removing the "No Parking" signs when necessary to crackfill streets.
19. Special consideration must be placed on any work on Main St as it is a State Connecting Highway. Any lane closures must be coordinated through the State DOT and City as it is also an oversize vehicle route. The State DOT provides an online form to apply for lane closures. It is the responsibility of the Contractor to coordinate the lane closure permit.
20. Work on South St must allow for the operation of school busses.
21. Any work on the Fire Dept lot must be coordinated with the On Duty Officer to not hinder any emergency response. A 24hr prior notice is required to the On Duty Officer.

BID PROPOSAL FORM

(blank)

2021 Joint & Crack Cleaning & Sealing
Proposal

**CITY OF LAKE GENEVA
PROPOSAL
2022 JOINT & CRACK CLEANING & SEALING**

Bid opening date: 04 Jan., 2022. **10:00am. Lake Geneva City Hall**

City of Lake Geneva
City Clerk, City Hall
626 Geneva Street
Lake Geneva, WI 53147
(262) 248-3673

City Clerk:

We recognize the City of Lake Geneva will expend the lump sum amount of **\$35,000.00** to clean and seal joints and cracks, in accordance with City of Lake Geneva specifications. We have reviewed the following list and attached map, taking all necessary field measurements, and have **placed an X in front of the streets that we will perform a combination of Class I and Class II joint and crack cleaning and sealing as follows:**

JOINT & CRACK CLEANING & SEALING-CLASS I & CLASS II

	<u>Street Name</u>	<u>From</u>	<u>To</u>
_____	Fire Dept Lot	Newer asphalt area in rear, seams.	
_____	LaSalle	Carey	Edgewood
_____	LaSalle Ct	Entire route	
_____	Linda Ln	Entire Route	
_____	Lookout	Linda	Miller
_____	Maxwell St.	Dodge	Pleasant
<u>X</u>	Miller Ct.	Entire Route	
<u>X</u>	E. & W Miller Ct	Entire Route	
<u>X</u>	Minihan Rd.	Entire Route	
<u>X</u>	South St.	Wells	Bonnie Brae
<u>X</u>	1070 Carey	New Asphalt	
<u>X</u>	Ceylon Ct.	Entire Route*	*check limits
_____	Carey St	LaSalle north to termini.	

MANDATORY ADD, separate from above.

Water Dept asphalt lot as described on attached map.

Price; \$ 4,600.00

Contact Utility Director with questions. Mr. Josh Gajewski. (262)248-2311

It is the intent that the checked list follows in priority order, but the size of some of the listed streets may necessitate skipping a street near the bottom of the list in favor of a lesser cost street.

If all streets are checked to be done for the budgeted amount, indicate the balance if any, of City funding remaining to be allocated to additional City street crack filling. \$ _____

Work started within 15 days of award.

City of Lake Geneva will pay within (30) days of completion of job.

Completion date if different than **25 May, 2022** _____

Guarantee/warranty (be specific): _____

Product literature included? ☐ Yes ☐ No

Comments: _____

We recognize the City will award this contract to the vendor whos proposal is deemed most advantageous to the City.

Respectfully Submitted,

Payment Terms:

_____ % _____ days

Net _____ days

Date: _____

Firm: Russell Standard _____

Signature:  _____

Address: PO Box 802 _____

Mars, PA 16046 _____

Phone: 724-625-1505 Fax: 724-625-1505 _____

A 5% Bid Bond shall be required. Amount of Bond; \$ 5% of Total Bid
Included; Yes X No _____

AGREEMENT

**AGREEMENT
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AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____ in the year 2021 by and between City of Lake Geneva (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK

- 1.1 CONTRACTOR shall assume all duties and responsibilities and complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The 2021 Joint & Crack Cleaning & Sealing -Various Locations in Lake Geneva, WI, in accordance with the plans and specifications and as required.

- 1.2 The Project for which the Work under the Contract Documents may be the whole or only a part of is generally described as follows:

2022 JOINT & CRACK CLEANING & SEALING CITY OF LAKE GENEVA WALWORTH COUNTY, WISCONSIN

ARTICLE 2. ENGINEER

- 2.1 The Project has been designed by the City of Lake Geneva and its Director of Public Works or his designee who is hereinafter called OWNER and OWNER'S representative, and assumes all duties and responsibilities and have the rights and authority assigned to OWNER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3. CONTRACT TIMES

- 3.1 The Work will be substantially completed and operational and ready for final payment in accordance with Item 12 of the Minimum Bid Specification no later than **May 25, 2022. It is the hope of the City that the Contractor may start the work as soon as possible after award and complete as much of the work as weather permits prior to winter.**
- 3.2 **Liquidated Damages.** OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.1 above, plus any extension thereof allowed in accordance with Paragraph 3.1 noted above. They also recognize that delays, expense and difficulties involved in proving in a legal or arbitration preceding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER \$500.00, for each day that expires after the time specified in

Paragraph 3.1 of Article 3 above for Substantial Completion until the Work is substantially complete.

- 3.3 Permitting CONTRACTOR or Surety to continue and finish the Work or any part of the Work after the times specified for completion, or after the date to which the times for completion may have been extended, shall in no way operate as a waiver on the part of OWNER of its rights under the Contract.

ARTICLE 4. CONTRACT PRICE

- 4.1 OWNER shall pay CONTRACTOR for the completion of the Work in accordance with the Contract Documents in current funds as shown in the Lump Sum Base Bid in the Bid Form in the amount of **Thirty-Five Thousand Dollars & No Cents (\$35,000.00) or actual lesser price.**

ARTICLE 5. PAYMENT PROCEDURES

- 5.1 CONTRACTOR shall submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by OWNER as provided in the General Conditions.

Progress Payments:

- 5.2 OWNER will make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by DPW Superintendent each month during construction as provided below. All progress payments will be on the basis of the progress of Work measured by the schedule of values established in the General Conditions (and in the case of Unit Price Work based on the number of units completed).

Retainage:

- 5.2.1 After each Application for Payment has been found acceptable by DPW, OWNER will pay 90% of the estimated value less any previous payments to CONTRACTOR until the Project is 50% complete. At 50% completion, further progress payments will be made in full to CONTRACTOR and no additional amounts will be retained unless OWNER determines that the character and progress of the Work is not proceeding satisfactorily. Amounts previously retained shall not be paid to CONTRACTOR. At 50% completion or any time thereafter when the character and progress of the Work is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10% of the value of the Work completed.
- 5.2.2 Upon Substantial Completion of the Work, the amount retained may be reduced. When the Work has been Substantially Completed except for Work which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of OWNER are valid reasons for non-completion, OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the work still to be completed or corrected.

- 5.3 Upon final completion and acceptance of the Work in accordance with the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by DPW as provided in said General Conditions.

ARTICLE 6. CONTRACTOR'S REPRESENTATIONS

- 6.1 CONTRACTOR has examined and carefully studied the Contract Documents (including the Addenda) and the other related data identified in the Bidding Documents including "technical data."
- 6.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance and furnishing of the Work.
- 6.3 CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
- 6.4 CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.
- 6.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.
- 6.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports, and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- 6.7 CONTRACTOR has given DPW written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR had discovered in the Contract Documents and the written resolution thereof by DPW is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicated and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 6.8 CONTRACTOR hereby covenants and agrees to pay all claims for labor performed and materials furnished, used or consumed in performing under this Agreement including, without limitations because of enumeration, fuel, lumber, building materials, machinery, vehicles, tractors, equipment, fixtures, apparatus, tools, appliances, supplies, electric energy, gasoline,

motor oil, lubricating oil, greases, state imposed taxes, premiums for workers compensation insurance, and contributions for unemployment insurance.

- 6.9 CONTRACTOR agrees, to the extent practicable, to maintain a list of all subcontractors and suppliers performing labor or furnishing material under this Agreement.

ARTICLE 7. CONTRACT DOCUMENTS

The Contract Documents, which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 7.1 This Agreement.
- 7.2 Exhibits to this Agreement. (Copy of entire Bid Form, etc.)
- 7.3 Performance, Payment and other Bonds (Not Applicable).
- 7.4 Notice of Award.
- 7.5 Notice to Proceed. (Issued separately)
- 7.6 General Conditions.
- 7.7 Specifications. (Also Known as Minimum Bid Specifications).
- 7.8 Wage Rate Requirements (Not Applicable).
- 7.9 Other Appendix items consisting of the plans and pages listed.
- 7.10 Drawings (Crackfilling Map).
- 7.11 Local Forms.
- 7.12 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All written Amendments and other documents amending, modifying or supplementing the Contract Documents pursuant to the General Conditions.

The documents listed in Article 7 above are attached to this Agreement (except as expressly noted otherwise above.)

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be amended, modified or supplemented as provided in the General Conditions.

ARTICLE 8. INSURANCE

8.1 The Contractor hereby agrees to assume and bear all risk of damage to, failure of the work under this contract, and all risks of any accident to any person or to the property of any person, from whatsoever cause arising due to operations under this contract, until the work herein provided for shall have been fully completed and accepted by the City.

8.2 The Contractor shall provide and pay for Public Liability, Property Damage and Workmen's Compensation Insurance with the following minimum limits of liability approved by the Utility Commission:

8.2.1 Workmen's Compensation and Employer's Liability.

Liability limits shall not be less than:

- | | | |
|-----|------------------------|---------------------------|
| (1) | Workmen's Compensation | Statutory |
| (2) | Employer's Liability | \$100,000 Each Occurrence |

8.2.2 Comprehensive Motor Vehicle Liability

Liability limits shall not be less than:

- | | | |
|-----|-----------------|--|
| (1) | Bodily Injury | \$ 500,000 Per Person
\$1,000,000 Each Occurrence |
| (2) | Property Damage | \$ 250,000 Each Occurrence |

8.2.3 Comprehensive General Liability

Liability limits shall be not less than:

- | | | |
|-----|--|---|
| (1) | Personal Injury | \$1,000,000 Aggregate |
| (2) | Bodily Injury | \$ 500,000 Each Occurrence
\$5,000,000 Aggregate |
| (3) | Property Damage | \$ 250,000 Each Occurrence |
| (4) | Completed Operations and Products Liability coverage for life of the Contract and maintain coverage for one (1) year after final acceptance by the Utility Commission. | |
| (5) | Named insured for this policy shall be: CITY OF LAKE GENEVA. | |

8.2.4 Owner's Protective Liability (Independent Contractors Insurance)

Liability limits shall not be less than:

- | | | |
|-----|-----------------|--|
| (1) | Bodily Injury | \$ 500,000 Each Occurrence |
| (2) | Property Damage | \$ 250,000 Each Occurrence
\$ 250,000 Aggregate |

8.2.5 Umbrella Excess Liability

(1) The liability limits shall not be less than:

\$1,000,000 Each Occurrence

Pg 18/23

8.3 The City shall be free and clear of any liabilities, including attorney's fees, and all other encumbrances resulting from all project-related claims.

ARTICLE 9. MISCELLANEOUS

- 9.1 All references to the General Conditions in any Contract Document shall be interpreted to include reference to any corresponding Supplementary Conditions, whether stated or unstated in such reference.
- 9.2 Terms used in this Agreement which are defined in the General Conditions will have the meanings indicated in the General Conditions.
- 9.3 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.4 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement. One counterpart each has been delivered to OWNER/ENGINEER and CONTRACTOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on _____, 2021, (which is the effective Date of the Agreement).

Attest:

(CONTRACTOR)

(Signature)

printed name

:

Address of Contractor/proposer

(If CONTRACTOR is a corporation, attach
evidence of authority to sign.)

Contractor phone and email _____

CONTRACTOR'S License No. _____ (If required by state or municipal law)

Attest: Ms Lana Kropf
City Clerk

Ms Charlene Klein
Mayor

(signature)

(signature)

Address for giving notices:

626 Geneva Street

Lake Geneva, WI 53147

In accordance with the requirements of Wis. Statute 62.15(12), I hereby certify that sufficient funds are available to pay the liability that will accrue hereunder.

City of Lake Geneva Comptroller, Ms Karen Hall

NOTICE OF AWARD

(blank)

CITY OF LAKE GENEVA

2022 Joint & Crack Cleaning & Sealing – Various Locations

NOTICE OF AWARD

Date _____

TO: _____

ADDRESS: _____

Contract: **City of Lake Geneva 2022 Joint & Crack Cleaning & Sealing**
(Insert Name of Contract as it appears in the Bidding Documents.)

Project: To do Joint & Crack Cleaning & Sealing at Various Locations, Lake Geneva, WI

You are notified that your Bid dated _____ for the above Contract has been considered. You have been awarded a Contract for

2022 Joint & Crack Cleaning & Sealing -Various Locations, in Lake Geneva, WI 53147

(Indicate total Work, alternates or sections or Work awarded.)

The Contract Price of your Contract is

Thirty-Five Thousand Dollars & No Cents
\$35,000.00

Or actual price of \$ _____

REFERENCES

1. **Name:** **See attached**

Contact:

Address:

Phone:

2. **Name:**

Contact:

Address:

Phone:

3. **Name:**

Contact:

Address:

Phone:

4. **Name:**

Contact:

Address:

Phone:

Crack Sealing References
2020

#8

Contract	Description
120001-	City of Defiance - Defiance - OH - Crack Sealing
120002-	City of Lawrenceburg - Deaborn, IN - Crack Sealing
120003-	Mt. Lebanon - Allegheny - Crack Sealing
120005-	Upper St. Clair - Allegheny - Crack Sealing
120044-	City of Jeannette - West - Crack Sealing
120068-	Connoquenessing Twp - Butler - Crack Seal
120111-	City of Pittsburgh - Allegheny - Crack Sealing
120121-	Peters Twp - Wash - Crack Sealing
120132-	Shade Township - Somerset - Crack Sealing
120133-	Coweta Co - GA - Crack Sealing
120139-	Friedens Luth Church - Somerset - Crack Seal
120140-	Rural Valley - Armstrong - Crack Sealing
320023-	Cumberland, Adams- CRACK
320172-	Manchester Borough, York Co
320183-	Chambersburg Borough- Franklin Co- Crack Seal
320200-	Penn, Perry Co- Crack Seal
320205-	East Providence Twp- Bedford Co- Crack Seal
320209-	Borough of Waynesboro-Crack Seal
320215-	Montgomery Twp. Franklin Co-Crack Seal
320216-	Shirley, Huntingdon - Crack Seal
320217-	Middle Paxton, Dauphin- Crack Seal
320218-	Gregg, Union- Crack Seal
320219-	Eldred, Lycoming- Crack Seal

BID BOND

KNOW ALL MEN BY THESE PRESENTS: That we **Russell Standard Corporation**, Principal,
P.O. Box 802, Mars, PA 16046
and **Western Surety Company**, Surety, are held and firmly bound
One PPG Place, Suite 2920, Pittsburgh, PA. 15222
unto **City of Lake Geneva, 1065 Carey Street, Lake Geneva, WI 53147**, Obligee,
in the sum of **5% of Total Bid**

Dollars (\$) ,
for the payment of which we bind ourselves, our legal representatives, successors and assigns,
jointly and severally, firmly by these presents.

WHEREAS, Principal has submitted or is about to submit a proposal to Obligee on a contract
for

Joint & Crack Cleaning & Sealing

NOW, THEREFORE, if the said contract be awarded to Principal and Principal shall, within
such time as may be specified, enter into the contract in writing and give such bond or bonds as
may be specified in the bidding or contract documents with surety acceptable to Obligee; or if
Principal shall fail to do so, pay to Obligee the damages which Obligee may suffer by reason of
such failure not exceeding the penalty of this bond, then this obligation shall be void; otherwise to
remain in full force and effect.

Signed, sealed, and dated this **4** day of **January, 2022**

Russell Standard Corporation

Principal

By:



(Seal)

Mike Rowe, Director of Pavement Preservation

Western Surety Company

Surety

By:



(Seal)

Julieann Johnston

,Attorney-in-Fact

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Linda Donahue, Michael Dercoli, Michael D Ward, Neal W Smith, Alan R Weiler, Kathleen A Vansovich, Vicky Lynn Dielman, Geneva L Maher, Denise Nelson, Stephanie Mc Quillen, Julieann Johnston, Karen A Townsend, Deborah L Williams, Individually

of Columbus, OH, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 14th day of July, 2020.



WESTERN SURETY COMPANY

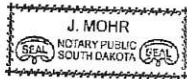
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 14th day of July, 2020, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



J. Mohr, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 4 day of JANUARY 2022

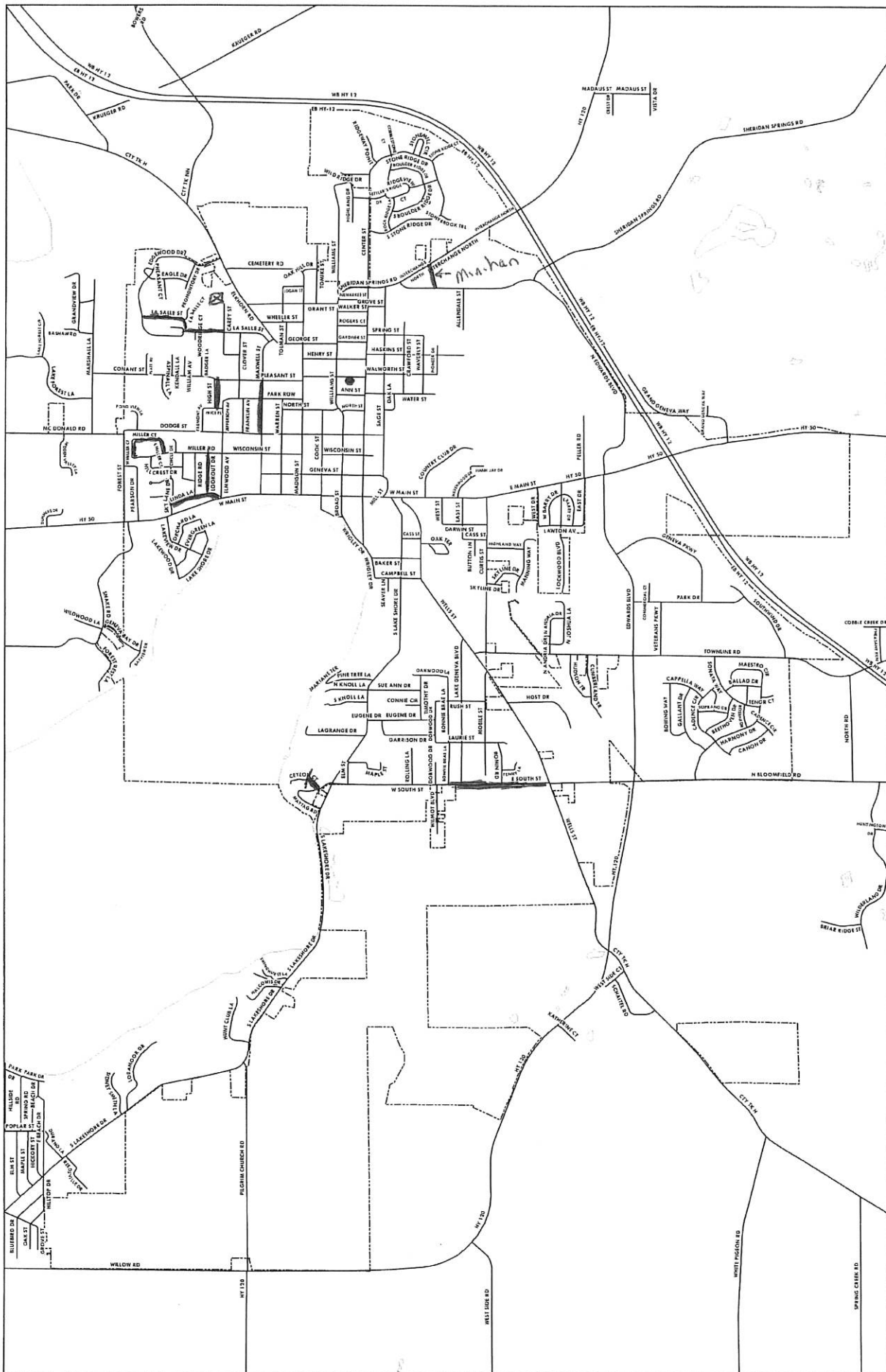


WESTERN SURETY COMPANY

L. Nelson, Assistant Secretary

Form F4280-7-2012

Go to www.cnasurety.com > Owner / Oblige Services > Validate Bond Coverage, if you want to verify bond authenticity.



BID PROPOSAL FORM

(blank)

2021 Joint & Crack Cleaning & Sealing
Proposal

**CITY OF LAKE GENEVA
PROPOSAL
2022 JOINT & CRACK CLEANING & SEALING**

Bid opening date: 04 Jan., 2022. **10:00am. Lake Geneva City Hall**

City of Lake Geneva
City Clerk, City Hall
626 Geneva Street
Lake Geneva, WI 53147
(262) 248-3673

City Clerk:

We recognize the City of Lake Geneva will expend the lump sum amount of **\$35,000.00** to clean and seal joints and cracks, in accordance with City of Lake Geneva specifications. We have reviewed the following list and attached map, taking all necessary field measurements, and have **placed an X in front of the streets that we will perform a combination of Class I and Class II joint and crack cleaning and sealing as follows:**

JOINT & CRACK CLEANING & SEALING-CLASS I & CLASS II

	<u>Street Name</u>	<u>From</u>	<u>To</u>
<u>x</u>	Fire Dept Lot	Newer asphalt area in rear, seams.	
<u>x</u>	LaSalle	Carey	Edgewood
<u>x</u>	LaSalle Ct	Entire route	
<u>x</u>	Linda Ln	Entire Route	
<u>x</u>	Lookout	Linda	Miller
<u>x</u>	Maxwell St.	Dodge	Pleasant
<u>x</u>	Miller Ct.	Entire Route	
<u>x</u>	E. & W Miller Ct	Entire Route	
<u>x</u>	Minihan Rd.	Entire Route	
<u>x</u>	South St.	Wells	Bonnie Brae
<u>x</u>	1070 Carey	New Asphalt	
<u>x</u>	Ceylon Ct.	Entire Route*	*check limits
<u>x</u>	Carey St	LaSalle north to termini.	

MANDATORY ADD, separate from above.

Water Dept asphalt lot as described on attached map. Price; \$ 3,200.00
Contact Utility Director with questions. Mr. Josh Gajewski. (262)248-2311

It is the intent that the checked list follows in priority order, but the size of some of the listed streets may necessitate skipping a street near the bottom of the list in favor of a lesser cost street.

If all streets are checked to be done for the budgeted amount, indicate the balance if any, of City funding remaining to be allocated to additional City street crack filling. \$ None

Work started within 15 days of award.

City of Lake Geneva will pay within (30) days of completion of job.

Completion date if different than **25 May, 2022** N/A

Guarantee/warranty (be specific): Material Warranty for 3 years

Product literature included? ☐ Yes ☒ No

Comments: _____

We recognize the City will award this contract to the vendor whose proposal is deemed most advantageous to the City.

Respectfully Submitted,

Payment Terms:

_____% _____days

Net 30 days

Date: 1/4/22

Firm: Thunder Road, LLC

Signature: *John Berg*

Address: W297 S3549 Boettcher Rd

Geneseo, WI 53189

Phone: 608-220-5184 Fax: 866-462-4293

A 5% Bid Bond shall be required. Amount of Bond; \$ _____
Included; Yes x No _____



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

4/23/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER R&R Insurance Services Inc N14 W23900 Stone Ridge Drive Waukesha WI 53188	CONTACT NAME: Christine Miramontes PHONE (A/C, No, Ext): (262) 953-7209 FAX (A/C, No): (262) 953-7209 E-MAIL ADDRESS: Christine.Miramontes@rrins.com																					
INSURED Thunder Road LLC W297 S3549 Boettcher Rd Genesee WI 53189	<table border="1"><tr><th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A:</td><td>Secura Insurance</td><td>22543</td></tr><tr><td>INSURER B:</td><td></td><td></td></tr><tr><td>INSURER C:</td><td></td><td></td></tr><tr><td>INSURER D:</td><td></td><td></td></tr><tr><td>INSURER E:</td><td></td><td></td></tr><tr><td>INSURER F:</td><td></td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Secura Insurance	22543	INSURER B:			INSURER C:			INSURER D:			INSURER E:			INSURER F:		
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INSURER D:																						
INSURER E:																						
INSURER F:																						

COVERAGES**CERTIFICATE NUMBER:** CL2142210029**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☐ LOC ☒ OTHER: Blanket AI PNC WOS			CP3342382 CGE1037 AI, WOS, PNC	5/1/2021	5/1/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ ALL OWNED AUTOS ☒ HIRED AUTOS ☒ Blanket AI PNC ☐ SCHEDULED AUTOS ☒ NON-OWNED AUTOS ☐ Blanket WOS			CA3342383 CAE0131 PNC, AI, WOS	5/1/2021	5/1/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	☒ UMBRELLA LIAB ☒ EXCESS LIAB ☐ DED ☒ RETENTION \$ 0			CU3342386 CUE2266 PNC	5/1/2021	5/1/2022	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WC3342384	5/1/2021	5/1/2022	☒ PER STATUTE OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
	Contractors Equipment			CP3342382	5/1/2021	5/1/2022	leased or rented equipment 100,000
	Installation Floater			CP3342382	5/1/2021	5/1/2022	Installation Floater \$ 25,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

For Information Only

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Daniel Scheider/CB513

Dan Scheider

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MERCHANTS BONDING COMPANY™

MERCHANTS NATIONAL BONDING, INC. P.O. BOX 14498, DES MOINES, IOWA 50306-3498

PHONE: (800) 678-8171 FAX: (515) 243-3854

Bid Bond

CONTRACTOR:

(Name, legal status and address)

Thunder Road, LLC
W 297 S 3549 Boettcher Road
Waukesha, WI 53189

OWNER:

(Name, legal status and address)

City of Lake Geneva
626 Geneva St
Lake Geneva, WI 53147

BOND AMOUNT: Five Percent of Bid Amount
5 %

PROJECT:

(Name, location or address, and Project number, if any)
2022 Joint & Crack Sealing

Bond Number: 409295

SURETY:

(Name, legal status and principal place
of business)

Merchants National Bonding, Inc.
A Corporation
6700 Westown Parkway, West Des Moines, IA 50266

This document has important legal
consequences. Consultation with
an attorney is encouraged with
respect to its completion or
modification.

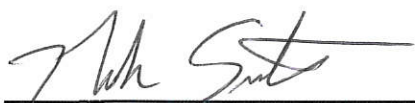
Any singular reference to
Contractor, Surety, Owner or
other party shall be considered
plural where applicable.

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 7th day of December, 2021


(Witness)

Thunder Road, LLC

(Principal)

Owner

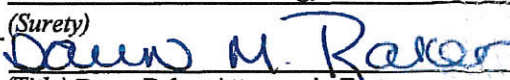
(Title)

(Seal)


(Witness)

Merchants National Bonding, Inc.

(Surety)


(Title) Dawn Baker Attorney-in-Fact

(Seal)

CON 0657 (2/15)

Printed in cooperation with American Institute of Architects (AIA). The language in this document conforms exactly to the language used in AIA Document A310-Bid Bond-2010

MERCHANTS
BONDING COMPANY™
POWER OF ATTORNEY

Bond #: 409295

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Dawn Baker

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 7th day of December, 2021.



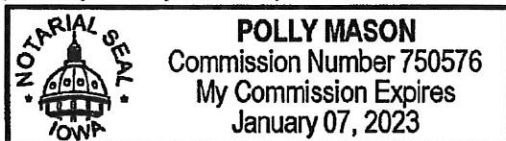
MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By

Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 7th day of December, 2021, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



Polly Mason

Notary Public

(Expiration of notary's commission
does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 7th day of December, 2021.



William Warner Jr.

Secretary

CONTRACT DOCUMENT



PROJECT: 2022 JOINT & CRACK CLEANING & SEALING

OWNER: CITY OF LAKE GENEVA DPW
1065 CAREY STREET
LAKE GENEVA, WISCONSIN 53147 (262)248-6644

Contacts; Tom Earle, DPW
tearle@cityoflakegeneva.com

Neil Waswo, Superintendent.
nwaswo@cityoflakegeneva.com

Bid Opening: 04 Jan., 2022 10:00am.
City Hall, 626 Geneva Street
Lake Geneva, WI. 2nd floor meeting room

**CITY OF LAKE GENEVA
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2022 JOINT & CRACK CLEANING & SEALING**

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BID BOND	N/A
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AGREEMENT

PERFORMANCE BOND	N/A
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PAYMENT BOND	N/A
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NOTICE OF AWARD

PREVAILING WAGE RATE DETERMINATION	N/A
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INSURANCE QUESTIONNAIRE & REFERENCES

OFFICIAL NOTICE TO BIDDERS

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**CITY OF LAKE GENEVA
NOTICE TO BIDDERS
2022 JOINT & CRACK CLEANING & SEALING**

Sealed proposals will be accepted by the City of Lake Geneva in the City Clerk's office at 626 Geneva Street, Lake Geneva, Wisconsin until 10am Tuesday, 04 Jan., 2022 for Joint & Crack Cleaning & Sealing, as specified in these bid documents.

Proposals must be sealed and submitted on the proposal forms and returned clearly marked 'City of Lake Geneva 2022 Joint and Crack Filling' with name of proposer, date and time of opening. No undated, unsigned, late, incomplete, emailed or faxed proposals will be considered. The City is not responsible for late or misdirected mail or cartage therefore hand delivery is advised.

Bidders must submit pre-qualification packet prior to the opening of bids by contacting the City Clerk's office or visiting the City website. Bid will not be awarded until Pre-Qual is approved.

All bids shall be F.O.B. destination, prepaid and allowed to the Clerk's Office with no charges for packing or cartage.

The City reserves the right to reject any or all proposals and to accept any proposal deemed most advantageous to the City of Lake Geneva.

Bidding documents are available by emailing the Director of Public Works, Mr Tom Earle at tearle@cityoflakegeneva.com or by appointment at the DPW offices, 1065 Carey St. Lake Geneva. (262)248-6644. .

The City of Lake Geneva is exempt from Federal Excise Tax and State Sales Tax; therefore, proposals should be made exclusive of these taxes. A Tax Exemption Certificate and/or Tax Exemption Registry number will be furnished to the successful proposer.

Insurance Requirements are: \$1,000,000 General Liability, Worker's Compensation - Statutory Limits, \$5,000,000 Employer's Liability. See pre-qualification form on website or Clerks Office.

Successful bidder shall properly hold the City of Lake Geneva harmless from all damages occurring in any way by bidders acts or negligence, or that of his employees, agents or workers. Completed Insurance questionnaire must be submitted with your proposal.

Contractor to include any clarifications to the specification in his proposal.

Proposed price shall be all-inclusive for Joint & Crack Cleaning & Sealing with no part being 'to be done by others'.

City of Lake Geneva

Ms. Lana Kropf
City Clerk
10 Nov., 2021

MINIMUM BID SPECIFICATION

(blank)

2022 Joint & Crack Cleaning & Sealing Specifications

CITY OF LAKE GENEVA MINIMUM BID SPECIFICATION JOINT & CRACK CLEANING & SEALING

DESCRIPTION: This work consists of sawing or routing and cleaning cracks and joints in asphalt surfaces and then sealing these prepared cracks and joints with an approved sealing material. It also includes removal and replacement of loose sealant from earlier work/contracts. The work excludes the long joint between the asphalt pavement and concrete gutter.

MATERIALS: The joint sealer shall be a material meeting requirements of ASTM D 3405. An elastic type, hot-pour sealer will be required. Or approved alternate. Material will be reheated only once and in small quantities. Prolonged heating up to six (6) hours will be permissible. Backer rod used in conjunction with this sealer shall be made of cellulose, cotton, or plastic foam. The backer rod must withstand, without damage, the high temperatures inherent to these sealers. The backer rod shall be of a size that compression is required for installation in the crack so it maintains its position during the filling operation.

All sealant materials and separating and blocking medium shall be certified or tested and approved by the engineer before being incorporated into the work. The Contractor shall furnish a complete written statement of the origin, composition and manufacture of any or all material that are to be used in the work. Where installation procedures or any part thereof are required to be in accordance with recommendations of the manufactures of sealing compounds, the Contractor shall submit catalogue data and copies of recommendations prior to installation of the materials.

EQUIPMENT

- A. Routing or sawing equipment shall be mechanical and power driven, capable of cutting the joints and cracks to the required dimensions. The router must have in-line wheels and cutting head capable of following random cracks and have depth control to insure consistent and accurate routing depths. Excessive spalling of the asphalt surface will not be permitted. Crack routing equipment will be permitted on asphalt pavement, but will not be permitted on Portland Cement Concrete Pavement.
- B. Two (2) air compressors will be required during asphalt crackfilling operations. They must be of sufficient size to maintain a minimum air pressure of 120 psi. and provide moisture and oil free compressed air. One compressor shall be used on asphalt pavement with an air wand to blow out the crack and clean off the road. The second shall be used with the heat lance. Note that one compressor is not of sufficient size to run both air wand and heat lance at the same time. Any request for an exception to this requirement shall be made at the time of bid including any credit.
- C. Water cleaning equipment shall be used on Portland Cement Concrete Pavement and be capable of delivering water with a pressure of 2,000 psi. from a nozzle to the crack or joint being cleaned, to remove existing joint sealer, debris, and loose material from the crack or joint.
- D. Sand blast equipment shall be capable of removing the existing sealant, saw slurry, silt or other foreign material from the vertical face of the crack or joint to the specified depth, leaving a clean, dry, newly exposed surface.
- E. Equipment used for heating and placing the hot-pour sealant material shall be of the oil-jacketed, double-boiler type heating kettle or other thermostatically controlled equipment of a type approved by the Engineer, equipped with both agitation and re-circulation systems, capable of heating the material to 410 degrees F. and pumping the material into the prepared cracks or joints with a wand applicator.

CONSTRUCTION

- A. Class I Cracks: On asphalt streets, cracks which have an average opening of 3/4" or less shall be routed or sawed to provide a minimum sealant reservoir of 3/4" width by a nominal 3/4" depth.
- B. Class II Crack: Joints and cracks which do not require routing or sawing shall be considered Class II cracks. Construction joints on exposed concrete curb pans shall be considered Class II cracks and shall

not require backer rod or sawing. Asphalt cracks which have an average opening greater than 3/4" will not require routing or sawing, but they shall be thoroughly cleaned of all foreign material to a depth necessary to accommodate the sealer material and the backer rod to be used. Backer rod shall be placed in the crack to a depth that provides at least 3/4" clearance above the backer rod for the sealer. The backer rod shall be dry when placed.

- C. Asphalt cement concrete, Portland Cement Concrete, and foreign material resulting from crack preparation shall be cleared from the roadway by brooming, compressed air, mechanical sweeping, or other methods satisfactory to the Street Department Superintendent.
- D. Cracks shall be clean and dried prior to sealing.

The entire crack reservoir shall be filled with sealant to a level even with the roadway surface. A narrow "U" shaped squeegee may be used to aid in placement of the sealant. Sealant on the roadway surface in excess of one inch on each side of the crack edge will not be acceptable.

LIMITATIONS: Crack cleaning and sealing shall be done only when the ambient air and pavement surface temperatures are above 40 degrees F. When near this minimum, additional blow torch blasting or drying time, or both, may be necessary to assure a satisfactory bond to the crack surface.

Lanes may be opened to traffic only after the sealer has set sufficiently so it will not pick up under traffic. Powder or biodegradable paper may be applied to the sealer, but only after the sealer surface has set so as to avoid penetration of the powder or paper into the sealer.

Cracks shall be sealed within three (3) working days after routing or sawing preparation.

METHOD OF MEASUREMENT AND AWARD: This work will be measured lump sum based upon the number of streets checked off by the contractor from the list. In the event more than one contractor can perform on all streets, award shall be determined by the number of Type I and Type II lineal feet remaining to be performed for the City.

BASIS OF PAYMENT: This work will be paid lump sum in the amount of **\$35,000.00 (thirty five thousand dollars)**.

GUARANTEE OF WORK: Contractor shall guarantee that the cracks sealed shall remain sealed through the following three (3) winters. Contractor shall return to the project site each of the following three (3) summers and repair sealed cracks, which have lost their sealant bond at no additional cost. Failed sealed cracks will be identified by the Director of Public Works.

SUPPLEMENTAL SPECIFICATIONS

1. When being filled, all asphalt-cleaned cracks shall be dried by a high capacity blowtorch.
2. In all cases, cleaning shall include removal of vegetation from cracks.
3. All materials equipment, labor and traffic control shall be provided by the Contractor and included in the unit price bid.
4. At locations where crack sealant settles into the crack opening more than 1/4" below adjacent pavement, additional filling will be necessary.
5. A sample of sealant material to be used shall be submitted to the Engineering Division. Each batch of sealing compound delivered to the job site shall be accompanied by the manufacturer's certification stating that the sealant meets the requirement of the specifications.

Notice shall be given to the Street Department no less than 24 hours in advance to any crackfilling operation. The point of contact will be Mr. Neil Waswo, Superintendent of Public Works, phone (262) 248-6644. Office hours are 6:30 A.M. to 2:00 P.M., Monday through Thursday. Pg 6/23

6. Status reports identifying linear footage totals broken down by class types and location shall be provided in writing or email to the DPW Superintendent or Director of Public Works on a daily basis.

7. The locations of streets to be crackfilled are listed in priority order and attached in the back of the contract.
8. Work hour restrictions on all City streets from 6:00 A.M. to 10:00 P.M. **Work in the downtown area shall not take place after 12:00 noon on Fridays. .**
9. **No work shall be allowed in the downtown area between Memorial Day and Labor Day.**
10. The Contractor may store materials and equipment at his own risk as follows: at Street Garage, 1065 Carey Street, with admittance restricted to weekdays from **6am A.M. to 2:00 P.M. Monday through Thursday.**
11. The City requires that the asphalt pavement crackfilling is completed prior to any Portland Cement Pavement.
12. Pavement joint and crackfilling shall be started **as soon as possible after notice to proceed, and complete as much of the work as practical prior to the Wednesday before Memorial Day. All work shall be completed no later than 25 May, 2022 or as otherwise indicated on his bid.** Completion date may be a factor in bid award. Extensions will be given at the discretion of the City for weather related delays.
13. Qualifications of Contractor - The Contractor shall have been routing, cleaning and filling cracks per specifications for a minimum of 10 (ten) verifiable years.
14. Prequalification - All bidders must submit a list of five (5) previously completed crackfilling projects. Each project must have been in place for a minimum of three (3) winters.
15. On any street with a traffic signal pavement loop, the buried loops shall not be sawed or routed. It shall be cleaned with air pressure only and filled with crackfiller.
16. The Contractor shall provide "Crackfilling Notice Door Hangers" and shall be responsible for placing their name and phone number on them, and placing them on residence's doors one to three days prior to crackfilling work where applicable.
17. The Contractor shall maintain and utilize a mechanical street sweeper (minimum size: 16,000 GUW) at the work site to clean up debris and respond to dirt and dust complaints. Street sweeping debris may be disposed of in the Street Department yard, 1065 Carey Street, during normal working hours.
18. The Contractor shall be responsible for crackfilling all designated roadways. Temporary no parking signs may be placed at the approval of the DPW Superintendent. The Contractor shall be responsible for posting and removing the "No Parking" signs when necessary to crackfill streets.
19. Special consideration must be placed on any work on Main St as it is a State Connecting Highway. Any lane closures must be coordinated through the State DOT and City as it is also an oversize vehicle route. The State DOT provides an online form to apply for lane closures. It is the responsibility of the Contractor to coordinate the lane closure permit.
20. Work on South St must allow for the operation of school busses.
21. Any work on the Fire Dept lot must be coordinated with the On Duty Officer to not hinder any emergency response. A 24hr prior notice is required to the On Duty Officer.

BID PROPOSAL FORM

(blank)

2021 Joint & Crack Cleaning & Sealing
Proposal

**CITY OF LAKE GENEVA
PROPOSAL
2022 JOINT & CRACK CLEANING & SEALING**

Bid opening date: 04 Jan., 2022. 10:00am. Lake Geneva City Hall

City of Lake Geneva
City Clerk, City Hall
626 Geneva Street
Lake Geneva, WI 53147
(262) 248-3673

City Clerk:

We recognize the City of Lake Geneva will expend the lump sum amount of **\$35,000.00** to clean and seal joints and cracks, in accordance with City of Lake Geneva specifications. We have reviewed the following list and attached map, taking all necessary field measurements, and have **placed an X in front of the streets that we will perform a combination of Class I and Class II joint and crack cleaning and sealing as follows:**

JOINT & CRACK CLEANING & SEALING-CLASS I & CLASS II

	<u>Street Name</u>	<u>From</u>	<u>To</u>
X	Fire Dept Lot	Newer asphalt area in rear, seams.	
X	LaSalle	Carey	Edgewood
X	LaSalle Ct	Entire route	
X	Linda Ln	Entire Route	
X	Lookout	Linda	Miller
X	Maxwell St.	Dodge	Pleasant
X	Miller Ct.	Entire Route	
X	E. & W Miller Ct	Entire Route	
X	Minihan Rd.	Entire Route	
X	South St.	Wells	Bonnie Brae
X	1070 Carey	New Asphalt	
X	Ceylon Ct.	Entire Route*	*check limits
X	Carey St	LaSalle north to termini.	
X	High Street		

MANDATORY ADD, separate from above.

Water Dept asphalt lot as described on attached map. Price; \$ 2,625.00
Contact Utility Director with questions. Mr. Josh Gajewski. (262)248-2311

It is the intent that the checked list follows in priority order, but the size of some of the listed streets may necessitate skipping a street near the bottom of the list in favor of a lesser cost street.

If all streets are checked to be done for the budgeted amount, indicate the balance if any, of City funding remaining to be allocated to additional City street crack filling. \$ 10,240.00

Work started within 15 days of award.

City of Lake Geneva will pay within (30) days of completion of job.

Completion date if different than **25 May, 2022** Same

Guarantee/warranty (be specific): 3 year warranty for the material pulling out of the cracks.

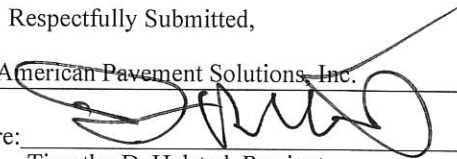
The warranty does not cover for overband wear.

Product literature included? ☒ Yes ☐ No

Comments: _____

We recognize the City will award this contract to the vendor whos proposal is deemed most advantageous to the City.

Payment Terms:
2 % 10 days
Net 30 days
Date: 12/29/2021

Respectfully Submitted,
Firm: American Pavement Solutions, Inc.
Signature: 
Timothy D. Helstad, Presient
Address: 1455 Gruber Rd., P.O. Box 13007
Green Bay, WI 54307-3007
Phone: (920) 662-9662 Fax: (920) 662-9655

A 5% Bid Bond shall be required. Amount of Bond; \$ 0.00
Included; Yes _____ No X

DESCRIPTION DEERY 102 is a hot applied, single component, elastically modified composition of asphalt cement, virgin synthetic polymer, premium rubber, and other modifiers. The sealant contains no solvent, is pre-reacted and conforms to the requirements of **ASTM D6690 Type II**, **ASTM D3405**, **AASHTO M324 Type II** and **AASHTO M301**. Material is tested for low temperature performance at -20°F (-29°C) using 50% extension. VOC=0 g/l. Previously labeled as CMC #102.

USE DEERY 102 is a moderate viscosity pavement preservation sealant intended for highway, street and aviation applications for sealing longitudinal and transverse joints and random cracks in Asphalt or Concrete pavements where a free flowing material is desirable. Properly installed, DEERY 102 is an effective barrier against damage from debris and moisture infiltration into cracks and joints within regions experiencing moderate high and low pavement temperatures.

HEATING Sealant shall be heated in a hot-oil jacketed melter capable of constant mechanical agitation and equipped with a calibrated thermometer to monitor sealant temperature. Material shall be heated to and maintained at the Recommended Application Temperature during use. Material can be cooled and then reheated, but only if prolonged heating is avoided. Prolonged heating at or above Recommended Application Temperature may severely damage product. If overheating damage occurs, immediately drain machine completely and refill with new material.

APPLICATION DEERY 102 is pre-reacted and can be applied immediately after heating to Recommended Application Temperature. With pavement temperature at 40°F (4°C) or higher, place material into clean, dry crack or prepared reservoir by means of a hand-held pour pot, wheeled push bander or wand applicator. Squeegee any excess sealant tight to pavement surface. Pavement may be warmed to 40°F (4°C) or higher with a Hot Air Lance.

PROPERTIES of DEERY 102

When sampled and heated to maximum heating temperature in accordance with ASTM D5167:

TEST	METHOD	SPECIFICATION
Cone Penetration @ 77°F (25°C)	ASTM D5329	90 dmm maximum
Flow @ 140°F (60°C)	ASTM D5329	3.0 mm maximum
Softening Point	ASTM D5329	176°F (80°C) minimum
Bond @ -20°F (-29°C), 50% ext., 12.7 mm sample	ASTM D5329	Pass 3 cycles
Resilience @ 77°F (25°C)	ASTM D5329	60% minimum
Asphalt Compatibility	ASTM D5329	Pass
Recommended Application Temperature	ASTM D5167	380-400°F (193-204°C)*
Maximum Heating Temperature	ASTM D6690	400°F (204°C)

*Temperature of product measured at pavement surface. Use highest Recommended Application Temperature in cool weather.

*Prolonged heating at or above Recommended Application Temperature may severely damage product.

PACKAGING Material is packaged in cardboard boxes sized to accommodate a maximum of 40 lb (18.0 kg). Material contained in each box is wrapped in a quick melt liner which is dissolved and incorporated into the melted product. Standard packaging is 30 lb (13.6 kg) per box, palletized 75 boxes per pallet with an approximate net weight of 2,250 lb (1,021.0 kg). Pallets are moisture protected with a plastic wrapping and bound with a minimum of two layers of UV resistant stretch wrap.

For additional information contact:



Superior Supply

Asphalt & Concrete Restoration Products

Toll-free 888.268.9599
superiorsupplyinc.com

PERFORMANCE Temperature fluctuations, site conditions, surface preparation, traffic, installation technique, material selection, shape factor and surface treatment compatibility influence the effectiveness and useful life of Pavement Preservation treatments. Consider and monitor each element for optimum results. Purchaser and end user should determine applicability for use in their specific conditions.

WARRANTY Manufacturer warrants that these products meet applicable ASTM, AASHTO, Federal or State specifications at time of shipment. Techniques used for the preparation of the cracks and joints prior to sealing or filling are beyond our control as are the use and application of the products; therefore, manufacturer shall not be responsible for improperly applied or misused products. Remedies against manufacturer, as agreed to by manufacturer, are limited to replacing nonconforming product or refund (full or partial) of purchase price from manufacturer. All claims for breach of this warranty must be made within three (3) months of the date of use or twelve (12) months from the date of delivery by manufacturer, whichever is earlier. There shall be no other warranties expressed or implied. **For optimum performance, follow manufacturer recommendations for product installation.**



420 N. Roosevelt Ave. • Chandler AZ 85226
1-800-528-8242 • (602) 276-0406 • FAX (480) 961-0513
www.crafco.com



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
12/28/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER HNI Risk Services P.O. Box 510187 New Berlin WI 53151		CONTACT NAME: Amy Shaver PHONE (A/C, No, Ext): (262)782-3940 FAX (A/C, No): (262)782-4198 E-MAIL ADDRESS: ashaver@hni.com	
INSURED American Pavement Solutions Inc. THSMA, Inc., Daffinson Transport, LLC PO Box 13007 Green Bay WI 54307-3007		INSURER(S) AFFORDING COVERAGE INSURER A: West Bend Mutual INSURER B: Columbia Casualty Company INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 15350 31127	

COVERAGES

CERTIFICATE NUMBER: 21/22 Addl Insd Cert

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

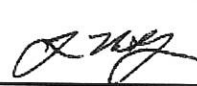
INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☐ LOC ☐ OTHER:			A403492	04/08/2021	04/08/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY			A403492	04/08/2021	04/08/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE DED ☐ RETENTION \$ 0			A403492	04/08/2021	04/08/2022	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000
	☒ WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	1727244	04/08/2021	04/08/2022	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
B	Pollution Liability			C6024313193	04/26/2021	04/26/2022	Occurrence \$1,000,000 Aggregate \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

City of Lake Geneva is Listed Additional Insured

CERTIFICATE HOLDER

CANCELLATION

City of Lake Geneva 1065 Carey Street Lake Geneva WI 53147	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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AGREEMENT

**AGREEMENT
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AGREEMENT

THIS AGREEMENT is dated as of the ____ day of _____ in the year 2021 by and between City of Lake Geneva (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK

- 1.1 CONTRACTOR shall assume all duties and responsibilities and complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The 2021 Joint & Crack Cleaning & Sealing -Various Locations in Lake Geneva, WI, in accordance with the plans and specifications and as required.

- 1.2 The Project for which the Work under the Contract Documents may be the whole or only a part of is generally described as follows:

**2022 JOINT & CRACK CLEANING & SEALING
CITY OF LAKE GENEVA
WALWORTH COUNTY, WISCONSIN**

ARTICLE 2. ENGINEER

- 2.1 The Project has been designed by the City of Lake Geneva and its Director of Public Works or his designee who is hereinafter called OWNER and OWNER'S representative, and assumes all duties and responsibilities and have the rights and authority assigned to OWNER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3. CONTRACT TIMES

- 3.1 The Work will be substantially completed and operational and ready for final payment in accordance with Item 12 of the Minimum Bid Specification no later than **May 25, 2022. It is the hope of the City that the Contractor may start the work as soon as possible after award and complete as much of the work as weather permits prior to winter.**
- 3.2 **Liquidated Damages.** OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.1 above, plus any extension thereof allowed in accordance with Paragraph 3.1 noted above. They also recognize that delays, expense and difficulties involved in proving in a legal or arbitration preceding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER \$500.00, for each day that expires after the time specified in

Paragraph 3.1 of Article 3 above for Substantial Completion until the Work is substantially complete.

- 3.3 Permitting CONTRACTOR or Surety to continue and finish the Work or any part of the Work after the times specified for completion, or after the date to which the times for completion may have been extended, shall in no way operate as a waiver on the part of OWNER of its rights under the Contract.

ARTICLE 4. CONTRACT PRICE

- 4.1 OWNER shall pay CONTRACTOR for the completion of the Work in accordance with the Contract Documents in current funds as shown in the Lump Sum Base Bid in the Bid Form in the amount of **Thirty-Five Thousand Dollars & No Cents (\$35,000.00) or actual lesser price.**

ARTICLE 5. PAYMENT PROCEDURES

- 5.1 CONTRACTOR shall submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by OWNER as provided in the General Conditions.

Progress Payments:

- 5.2 OWNER will make monthly progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by DPW Superintendent each month during construction as provided below. All progress payments will be on the basis of the progress of Work measured by the schedule of values established in the General Conditions (and in the case of Unit Price Work based on the number of units completed).

Retainage:

- 5.2.1 After each Application for Payment has been found acceptable by DPW, OWNER will pay 90% of the estimated value less any previous payments to CONTRACTOR until the Project is 50% complete. At 50% completion, further progress payments will be made in full to CONTRACTOR and no additional amounts will be retained unless OWNER determines that the character and progress of the Work is not proceeding satisfactorily. Amounts previously retained shall not be paid to CONTRACTOR. At 50% completion or any time thereafter when the character and progress of the Work is not satisfactory, additional amounts may be retained but in no event shall the total retainage be more than 10% of the value of the Work completed.
- 5.2.2 Upon Substantial Completion of the Work, the amount retained may be reduced. When the Work has been Substantially Completed except for Work which cannot be completed because of weather conditions, lack of materials or other reasons which, in the judgment of OWNER are valid reasons for non-completion, OWNER may make additional payments, retaining at all times an amount sufficient to cover the estimated cost of the work still to be completed or corrected.

- 5.3 Upon final completion and acceptance of the Work in accordance with the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by DPW as provided in said General Conditions.

ARTICLE 6. CONTRACTOR'S REPRESENTATIONS

- 6.1 CONTRACTOR has examined and carefully studied the Contract Documents (including the Addenda) and the other related data identified in the Bidding Documents including "technical data."
- 6.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, performance and furnishing of the Work.
- 6.3 CONTRACTOR is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, performance, and furnishing of the Work.
- 6.4 CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies, or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.
- 6.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.
- 6.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports, and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.
- 6.7 CONTRACTOR has given DPW written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR had discovered in the Contract Documents and the written resolution thereof by DPW is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicated and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 6.8 CONTRACTOR hereby covenants and agrees to pay all claims for labor performed and materials furnished, used or consumed in performing under this Agreement including, without limitations because of enumeration, fuel, lumber, building materials, machinery, vehicles, tractors, equipment, fixtures, apparatus, tools, appliances, supplies, electric energy, gasoline, motor oil, lubricating oil, greases, state imposed taxes, premiums for workers compensation insurance, and contributions for unemployment insurance.

- 6.9 CONTRACTOR agrees, to the extent practicable, to maintain a list of all subcontractors and suppliers performing labor or furnishing material under this Agreement.

ARTICLE 7. CONTRACT DOCUMENTS

The Contract Documents, which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

- 7.1 This Agreement.
- 7.2 Exhibits to this Agreement. (Copy of entire Bid Form, etc.)
- 7.3 Performance, Payment and other Bonds (Not Applicable).
- 7.4 Notice of Award.
- 7.5 Notice to Proceed. (Issued separately)
- 7.6 General Conditions.
- 7.7 Specifications. (Also Known as Minimum Bid Specifications).
- 7.8 Wage Rate Requirements (Not Applicable).
- 7.9 Other Appendix items consisting of the plans and pages listed.
- 7.10 Drawings (Crackfilling Map).
- 7.11 Local Forms.
- 7.12 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All written Amendments and other documents amending, modifying or supplementing the Contract Documents pursuant to the General Conditions.

The documents listed in Article 7 above are attached to this Agreement (except as expressly noted otherwise above.)

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be amended, modified or supplemented as provided in the General Conditions.

ARTICLE 8. INSURANCE

- 8.1 The Contractor hereby agrees to assume and bear all risk of damage to, failure of the work under this contract, and all risks of any accident to any person or to the property of any person, from whatsoever cause

arising due to operations under this contract, until the work herein provided for shall have been fully completed and accepted by the City.

8.2 The Contractor shall provide and pay for Public Liability, Property Damage and Workmen's Compensation Insurance with the following minimum limits of liability approved by the Utility Commission:

8.2.1 Workmen's Compensation and Employer's Liability.

Liability limits shall not be less than:

- | | | |
|-----|------------------------|---------------------------|
| (1) | Workmen's Compensation | Statutory |
| (2) | Employer's Liability | \$100,000 Each Occurrence |

8.2.2 Comprehensive Motor Vehicle Liability

Liability limits shall not be less than:

- | | | |
|-----|-----------------|--|
| (1) | Bodily Injury | \$ 500,000 Per Person
\$1,000,000 Each Occurrence |
| (2) | Property Damage | \$ 250,000 Each Occurrence |

8.2.3 Comprehensive General Liability

Liability limits shall be not less than:

- | | | |
|-----|--|---|
| (1) | Personal Injury | \$1,000,000 Aggregate |
| (2) | Bodily Injury | \$ 500,000 Each Occurrence
\$5,000,000 Aggregate |
| (3) | Property Damage | \$ 250,000 Each Occurrence |
| (4) | Completed Operations and Products Liability coverage for life of the Contract and maintain coverage for one (1) year after final acceptance by the Utility Commission. | |
| (5) | Named insured for this policy shall be: CITY OF LAKE GENEVA. | |

8.2.4 Owner's Protective Liability (Independent Contractors Insurance)

Liability limits shall not be less than:

- | | | |
|-----|-----------------|--|
| (1) | Bodily Injury | \$ 500,000 Each Occurrence |
| (2) | Property Damage | \$ 250,000 Each Occurrence
\$ 250,000 Aggregate |

8.2.5 Umbrella Excess Liability

- | | | |
|-----|--|-----------------------------|
| (1) | The liability limits shall not be less than: | |
| | | \$1,000,000 Each Occurrence |

Pg 18/23

8.3 The City shall be free and clear of any liabilities, including attorney's fees, and all other encumbrances resulting from all project-related claims.

ARTICLE 9. MISCELLANEOUS

- 9.1 All references to the General Conditions in any Contract Document shall be interpreted to include reference to any corresponding Supplementary Conditions, whether stated or unstated in such reference.
- 9.2 Terms used in this Agreement which are defined in the General Conditions will have the meanings indicated in the General Conditions.
- 9.3 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.4 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement. One counterpart each has been delivered to OWNER/ENGINEER and CONTRACTOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on _____, 2021, (which is the effective Date of the Agreement).

Attest:

(CONTRACTOR)

(Signature)

printed name

:

Address of Contractor/proposer

(If CONTRACTOR is a corporation, attach
evidence of authority to sign.)

Contractor phone *and email* _____

CONTRACTOR'S License No. _____ (If required by state or municipal law)

Attest: Ms Lana Kropf
City Clerk

Ms Charlene Klein
Mayor

(signature)

(signature)

Address for giving notices:
626 Geneva Street

Lake Geneva, WI 53147

In accordance with the requirements of Wis. Statute 62.15(12), I hereby certify that sufficient funds are available to pay the liability that will accrue hereunder.

City of Lake Geneva Comptroller, Ms Karen Hall

NOTICE OF AWARD

(blank)

CITY OF LAKE GENEVA

2022 Joint & Crack Cleaning & Sealing – Various Locations

NOTICE OF AWARD

Date _____

TO: _____

ADDRESS: _____

Contract: **City of Lake Geneva 2022 Joint & Crack Cleaning & Sealing**
(Insert Name of Contract as it appears in the Bidding Documents.)

Project: To do Joint & Crack Cleaning & Sealing at Various Locations, Lake Geneva, WI

You are notified that your Bid dated _____ for the above Contract has been considered. You have been awarded a Contract for

2022 Joint & Crack Cleaning & Sealing -Various Locations, in Lake Geneva, WI 53147

(Indicate total Work, alternates or sections or Work awarded.)

The Contract Price of your Contract is

Thirty-Five Thousand Dollars & No Cents
\$35,000.00

Or actual price of \$ _____

1. **Name:**

 Contact:

 Address:

 Phone:

2. **Name:**

 Contact:

 Address:

 Phone:

3. **Name:**

 Contact:

 Address:

 Phone:

4. **Name:**

 Contact:

 Address:

 Phone:

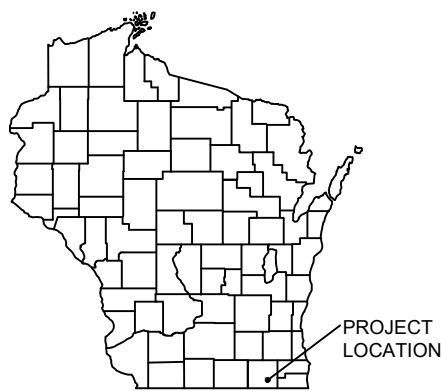
City of Lake Geneva.

- 1. Curb lines.**
 - a. Curb lines shall be cleaned with compressed air and sealed at the discretion of the Superintendent.**
 - b. Contractor shall supply a per lineal foot price on curb line sealing applicable to the above 1.a.**

Price per lineal foot of curb line. \$ _____ per lineal foot.

2022 STREET IMPROVEMENTS

CITY OF LAKE GENEVA WALWORTH COUNTY, WISCONSIN



SHEET INDEX

G - GENERAL SHEETS

G 1	TITLE SHEET
G 2-6	DETAILS
TYP 1-5	TYPICAL SECTIONS

P - ROAD CONSTRUCTION PLANS

P 1-8	SANITARY PLANS
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R - ROAD CONSTRUCTION AND STORM SEWER PLANS

R 1-3	PLAN & PROFILE SHEETS
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LEGEND

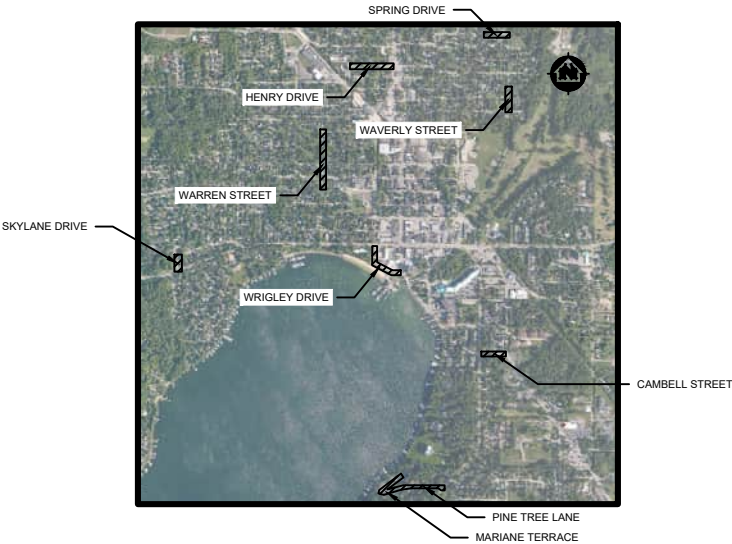
	EXISTING WATER MAIN
	EXISTING WATER MAIN, VALVE & HYDRANT
	EXISTING WATER SERVICE & CURB STOP
	PROPOSED WATER MAIN, VALVE, & HYDRANT
	PROPOSED WATER SERVICE & CURB STOP
	EXISTING SANITARY SEWER & MANHOLE
	PROPOSED SANITARY SEWER & MANHOLE
	EXISTING FORCEMAIN
	EXISTING STORM SEWER & INLET
	PROPOSED STORM SEWER & INLET
	PROPOSED STORM SEWER & MANHOLE
	BURIED ELECTRIC
	BURIED GAS & VALVE
	BURIED CABLE TELEVISION
	BURIED TELEPHONE
	BURIED FIBER OPTICS
	OVERHEAD UTILITY
	RAILROAD TRACKS
	EXISTING CURB & GUTTER
	PROPOSED CURB & GUTTER
	EXISTING SIDEWALK
	PROPOSED SIDEWALK
	EXISTING CULVERT PIPE
	PROPOSED CULVERT PIPE
	FENCE LINE
	DRAINAGE ARROW
	SILT FENCE
	RIGHT-OF-WAY
	BASELINE
	PROPERTY LINE
	TREE LINE
	BENCHMARK
	IRON PIPE
	IRON ROD
	CONTROL POINT
	UTILITY POLE & GUY
	SOIL BORING
	LIGHT POLE
	PEDESTAL
	STREET SIGN
	MAILBOX
	FLAGPOLE
	TREE - DECIDUOUS
	TREE - CONIFEROUS
	TREE TO BE REMOVED

UTILITIES

VILLAGE OF PARDEEVILLE
LAKE GENEVA PUBLIC WORKS DEPARTMENT
TOM EARLE, DIRECTOR OF PUBLIC WORKS
1065 CAREY STREET
LAKE GENEVA, WI 53147
PHONE: (262) 248-6644
EMAIL: TEARLE@CITYOFLAKEGENEVA.COM

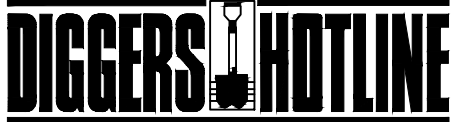
SEWER & WATER
LAKE GENEVA UTILITY COMMISSION
JOSH GAJEWSKI, UTILITY COMMISSION DIRECTOR
P.O. BOX 187
361 MAIN STREET
LAKE GENEVA, WI 53147
PHONE: (262) 248-2311
EMAIL: JGAJEWSKI@LGUTILITIES.ORG

GAS:
WE ENERGIES
BRIAN BARTELS, GAS OPERATIONS SUPERVISOR
1870 HAYNES DRIVE
SUN PRAIRIE, WI 53590
PHONE: (920) 262-6879
EMAIL: BRIAN.BARTELS@WE-ENERGIES.COM



LOCATION MAP

NOT TO SCALE



Dial 811 or (800) 242-8511
www.DiggersHotline.com

NOTE:
UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND CONTRACTOR
SHALL HAVE APPROPRIATE UTILITY MARK EXACT LOCATIONS PRIOR TO
CONSTRUCTION.

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			
PLOT DATE: 1/6/2022 11:22 AM, G:\19\19995\19995004\CADD\Construction Documents\19995004 Title.dwg					

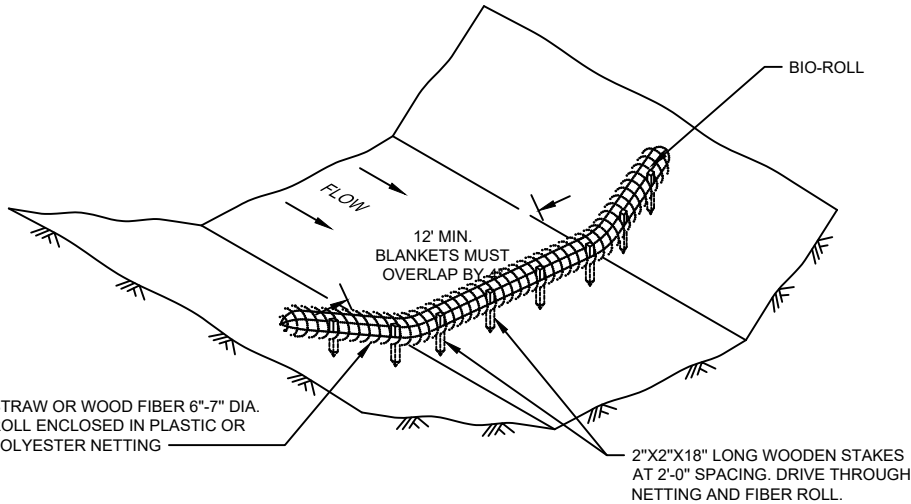
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com
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2022 STREET IMPROVEMENTS
CITY OF LAKE GENEVA
WALWORTH COUNTY, WISCONSIN

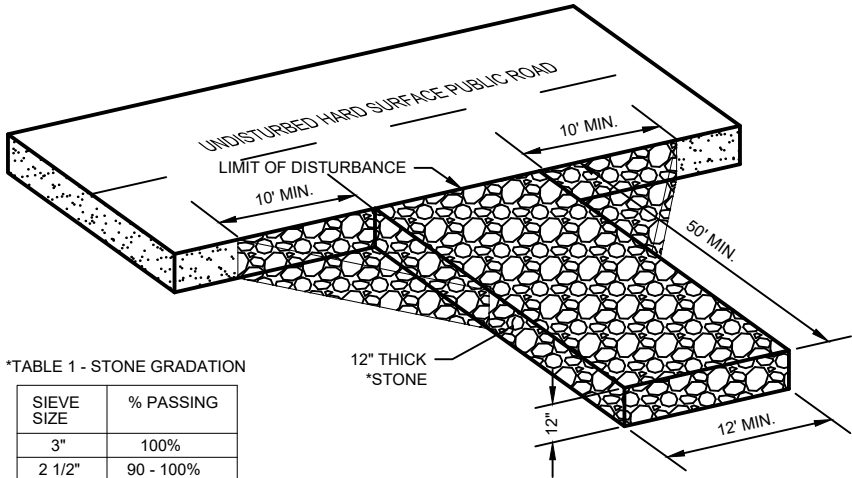
TITLE
PROJECT NO: 19995004
SHEET G1

CONSTRUCTION SITE
EROSION CONTROL REQUIREMENTS

- SECTION NR216.46 OF WISCONSIN STATE ADMINISTRATIVE CODE IDENTIFIES REQUIREMENTS FOR CONSTRUCTION SITE AND POST-CONSTRUCTION EROSION CONTROL. IT IS THE INTENT OF THESE PLANS TO SATISFY THESE REQUIREMENTS. THE METHODS AND STRUCTURES USED TO CONTROL EROSION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL IMPLEMENT AN APPROPRIATE MEANS OF CONTROLLING EROSION DURING SITE OPERATION AND UNTIL THE VEGETATION IS RE-ESTABLISHED. ADJUSTMENTS TO THE CONTROL SYSTEM SHALL BE MADE AS REQUIRED.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE WISCONSIN DNR'S CONSERVATION PRACTICE STANDARDS. THESE STANDARDS ARE PERIODICALLY UPDATED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AND REFERENCE THE MOST RECENTLY RELEASED STANDARD.
- THIS INFORMATION IS ONLY ONE PART OF THE OVERALL EROSION CONTROL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY ALSO BE SHOWN ON THE CONTRACT DRAWINGS AND IN THE ACCOMPANYING SPECIFICATIONS.
- ADDITIONAL EROSION CONTROL MEASURES, AS REQUESTED IN WRITING BY THE STATE OR LOCAL INSPECTORS, OR THE OWNER'S ENGINEER, SHALL BE INSTALLED WITHIN 24 HOURS.
- THE AREA OF EROSION LAND EXPOSED TO THE ELEMENTS BY GRUBBING, EXCAVATION, TRENCHING, BORROW AND FILL OPERATIONS AT ANY ONE TIME SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE. FOR ANY DISTURBED AREA THAT REMAINS INACTIVE FOR GREATER THAN 7 WORKING DAYS, OR WHERE GRADING WORK EXTENDS BEYOND THE PERMANENT SEEDING DEADLINES, THE SITE MUST BE TREATED WITH TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING AND/OR MULCHING. ALL DISTURBED AREAS SHALL BE TREATED WITH PERMANENT STABILIZATION MEASURES WITHIN 3 WORKING DAYS OF FINAL GRADING.
- ALL EROSION CONTROL MEASURES AND STRUCTURES SERVING THE SITE MUST BE INSPECTED AT LEAST WEEKLY OR WITHIN 24 HOURS OF THE TIME 0.5 INCHES OF RAIN HAS OCCURRED. ALL NECESSARY REPAIR AND MAINTENANCE WILL BE DONE AT THIS INSPECTION TIME.
- ALL EROSION CONTROL DEVICES AND/OR STRUCTURES SHALL BE PROPERLY INSTALLED PRIOR TO CLEARING AND GRUBBING OPERATIONS WITHIN THEIR RESPECTIVE DRAINAGE AREAS. THESE SHALL BE PROPERLY MAINTAINED FOR MAXIMUM EFFECTIVENESS UNTIL VEGETATION IS RE-ESTABLISHED.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY INSTALLED PRIOR TO ANY SOIL DISTURBANCE.
- ANY SLOPES STEEPER THAN 3H:1V SHALL BE STAKED WITH EROSION CONTROL FABRIC UNLESS INDICATED ON THE PLAN.
- ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
- WIND EROSION SHALL BE KEPT TO A MINIMUM DURING CONSTRUCTION. WATERING, MULCH, OR A TACKING AGENT MAY BE REQUIRED TO PROTECT NEARBY RESIDENCES AND WATER RESOURCES.
- CHANNELIZED RUNOFF ENTERING THE PROJECT SITE FROM ADJOINING LANDS SHALL BE DIVERTED THROUGH NATURALLY OR ARTIFICIALLY EROSION-RESISTANT CONVEYANCES. IF CHANNELIZED RUNOFF CANNOT BE DIVERTED, SITE BEST MANAGEMENT PRACTICES MUST ACCOUNT FOR THE ADDITIONAL FLOW RATES AND EROSION POTENTIAL THAT SUCH RUNOFF PRESENTS.
- THE CONTRACTOR SHALL TAKE ALL POSSIBLE PRECAUTIONS TO PREVENT SOILS FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. PAVED SURFACES ADJACENT TO CONSTRUCTION SITE VEHICLE ACCESS SHALL BE SWEEPED AND/OR SCRAPPED (NOT FLUSHED) PERIODICALLY TO REMOVE SOIL, DIRT, AND/OR DUST.
- EROSION CONTROLS SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF TEMPORARY STOCKPILES. ANY SOIL STOCKPILE THAT REMAINS FOR MORE THAN 30 DAYS SHALL BE COVERED OR TREATED WITH STABILIZATION PRACTICES SUCH AS TEMPORARY OR PERMANENT SEEDING AND MULCHING. ALL STOCK PILES SHALL BE PLACED AT LEAST 75 FEET FROM STREAMS OR WETLANDS.
- ADDITIONAL EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, SANITARY SEWER, WATER MAIN, ETC.) SHALL INCLUDE THE FOLLOWING:
 - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - BACKFILL, COMPACT, AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
 - DISCHARGE OF TRENCH WATER OR DEWATERING EFFLUENT MUST BE PROPERLY TREATED TO REMOVE SEDIMENT IN ACCORDANCE WITH THE WDNR CONSERVATION PRACTICE STANDARD 1061 - DEWATERING OR A SUBSEQUENT WDNR DEWATERING STANDARD PRIOR TO DISCHARGE INTO A STORM SEWER, DITCH, DRAINAGEWAY, OR WETLAND OR LAKE.
- ALL DRAINAGE CULVERTS, STORM DRAIN INLETS, MANHOLES, OR ANY OTHER EXISTING STRUCTURES THAT COULD BE DAMAGED BY SEDIMENTATION SHALL BE PROTECTED ACCORDING TO THE VARIOUS METHODS PROVIDED IN THE PRINTED CONSERVATION PRACTICE STANDARDS.
- ANY SOIL EROSION THAT OCCURS AFTER FINAL GRADING AND/OR STABILIZATION MUST BE REPAIRED AND THE STABILIZATION WORK REDONE.
- THE FIRST SIX WEEKS AFTER INITIAL STABILIZATION, ALL NEWLY SEEDED AND MULCHED AREAS SHALL WATERED WHENEVER 7 DAYS ELAPSE WITHOUT A RAIN EVENT.
- WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY BMP'S SUCH AS SILT FENCES, STRAW BALES, AND SEDIMENT TRAPS SHALL BE REMOVED AND THESE AREAS STABILIZED.
- ALL TEMPORARY BEST MANAGEMENT PRACTICES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED.
- ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITH SEED AND MULCH UNLESS OTHERWISE SPECIFIED. A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE APPLIED TO ALL AREAS TO BE SEEDED OR SODDED.



BIOROLL
NO SCALE



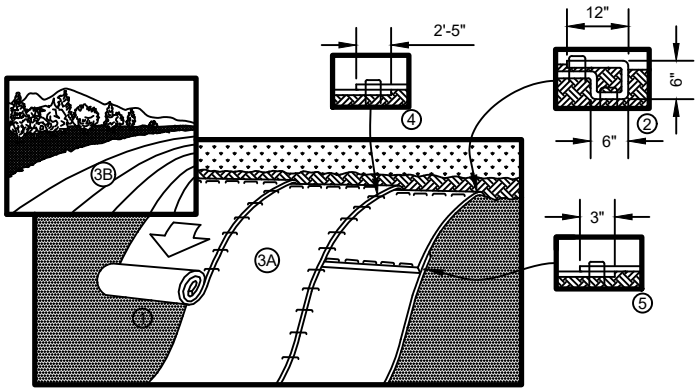
*TABLE 1 - STONE GRADATION

SIEVE SIZE	% PASSING
3"	100%
2 1/2"	90 - 100%
1 1/2"	25 - 60%
3/4"	0 - 20%
3/8"	0 - 5%

NOTES:

- TRACKING PAD WIDTH SHALL BE AT LEAST THE FULL WIDTH OF HTE EGRESS POINT OR 12' WIDE MINIMUM.
- TRACKING PAD LENGTH SHALL BE 50' FOR CONSTRUCTION SITES, 30' FOR SINGLE FAMILY RESIDENTIAL, OR AS SPECIFIED IN THE CONTRACT DOCUMENTS. LENGTH OF TRACKING PAD MAY NEED TO BE INCREASE OR ADDITIONAL SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED BY THE CONTRACTOR IS SEDIMENT TRACK-OUT OCCURS
- GEOTEXTILE FABRIC TYPE R SHALL BE INSTALLED BETWEEN THE STONE AND SUBGRADE ON SITES WHERE HIGH GROUND WATER IS OBSERVED.
- CONTRACTOR SHALL CLEAN STREET/ROADWAY ADJACENT TO ALL CONSTRUCTION ACCESS POINTS AT THE END OF EACH WORKDAY OR MORE FREQUENTLY IF REQUESTED.

STONE TRACKING PAD
NO SCALE

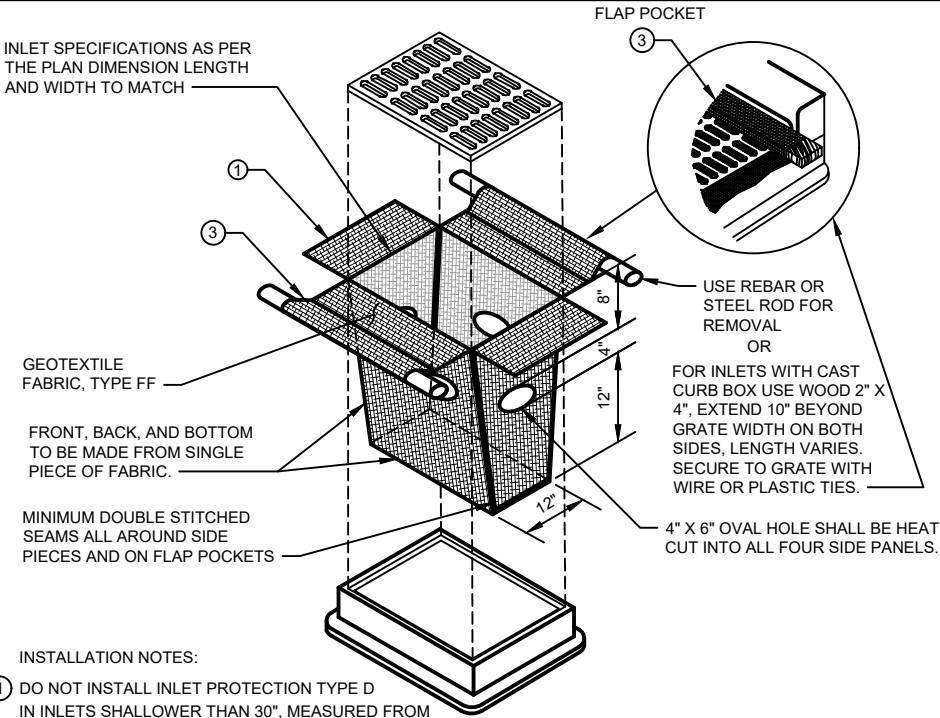


- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2'-5" (5 CM-12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
- CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.

NOTE:

*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL BLANKET DETAIL
NO SCALE

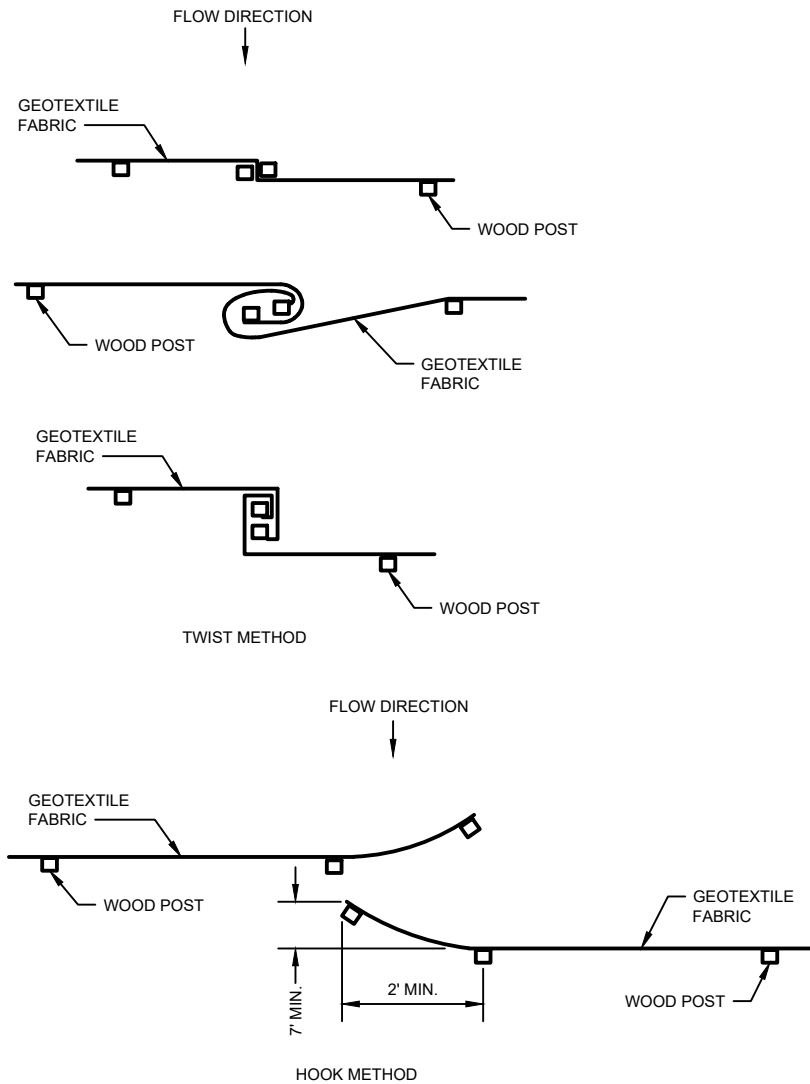


INSTALLATION NOTES:

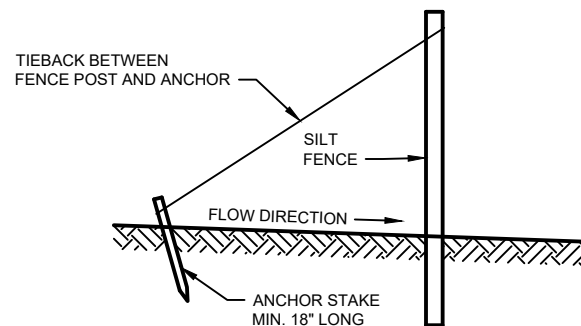
- DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
- THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION, TYPE D

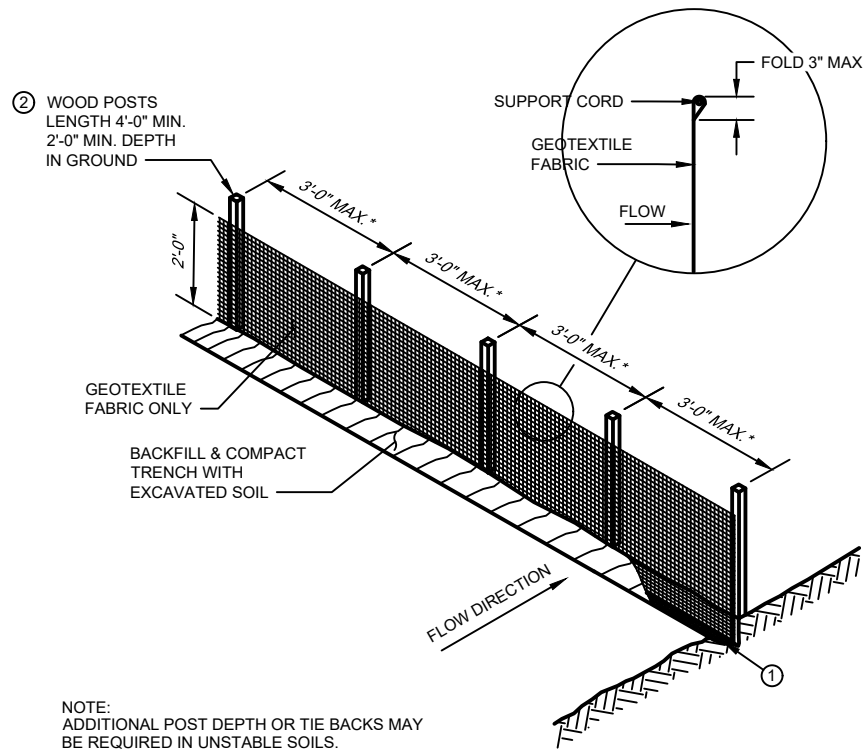
NO SCALE
CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE



JOINING TWO LENGTHS OF SILT FENCE ③



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)



NOTE:
ADDITIONAL POST DEPTH OR TIE BACKS MAY
BE REQUIRED IN UNSTABLE SOILS.

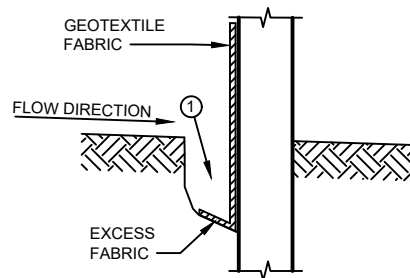
* 8'-0" POST SPACING ALLOWED IF A WOVEN
GEOTEXTILE FABRIC IS USED, OR IF THE SILT
FENCE IS FACTORY ASSEMBLED.

ATTACH THE FABRIC TO THE POSTS WITH
WIRE STAPLES OR WOODEN LATH AND NAILS.

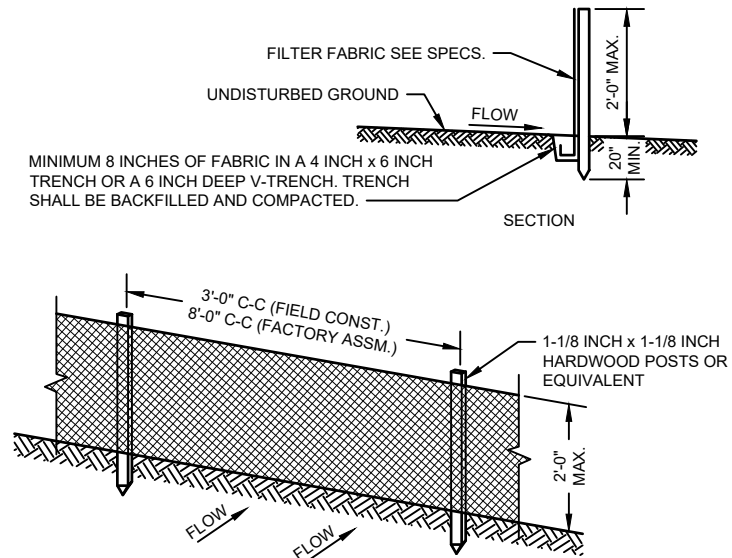
SILT FENCE

GENERAL NOTES

1. TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
2. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" x 1 1/8" OF OAK OR HICKORY.
3. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: A) TWIST METHOD -- OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK METHOD -- HOOK THE END OF EACH SILT FENCE LENGTH.



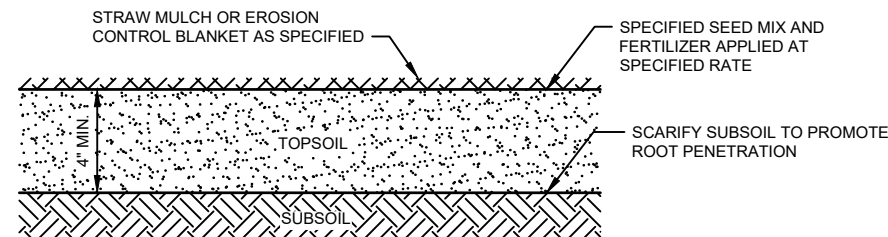
TRENCH DETAIL



GENERAL NOTES:

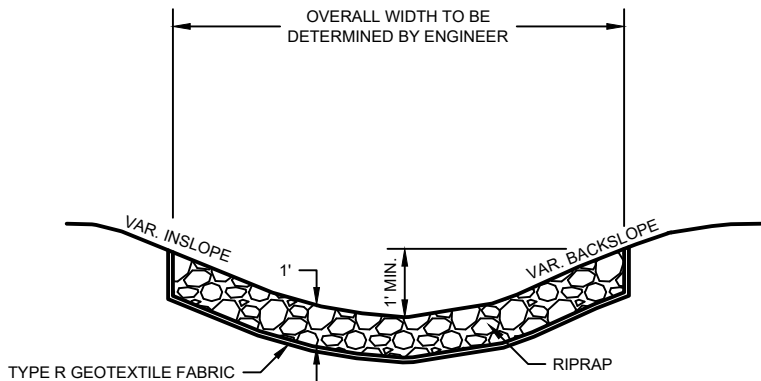
1. ENDS OF FENCE SHALL BE TURNED UPSLOPE 1 TO 2 FEET IN ELEVATION TO PREVENT FLANKING.
2. STAPLE FABRIC WITH 1/2 INCH (MINIMUM) STAPLES TO THE UPSLOPE SIDE OF THE POSTS.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.

TYPICAL SILT FENCE INSTALLATION AT SITE PERIMETER DETAIL
NO SCALE



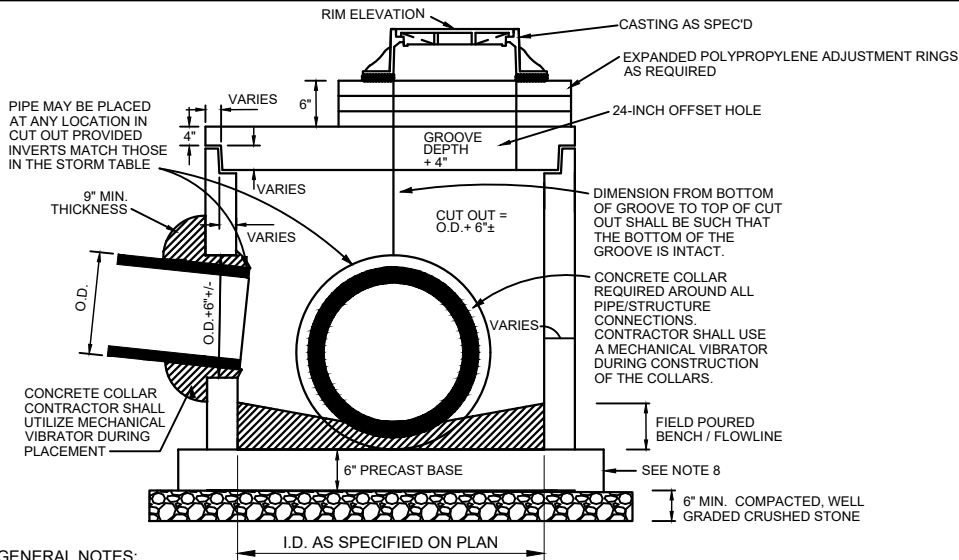
NOTE: WHERE REQUIRED, PLANT HERBACEOUS PLUGS
ACCORDING TO PLAN, OR AS DIRECTED BY ENGINEER.

TOPSOIL AND SEEDING DETAIL
NO SCALE



TYPICAL RIPRAP INSTALLATION

NO SCALE

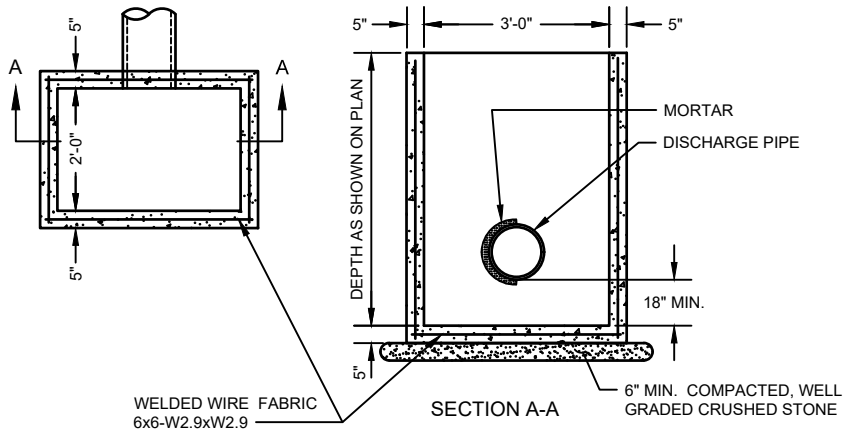


GENERAL NOTES:

- SEE PLANS FOR SIZE, NUMBER, AND LOCATION OF PIPES.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.
- DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.
- ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.
- PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR WELL GRADED CRUSHED STONE. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
- ALL BAR STEEL AND WELDED WIRE FABRIC REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.
- OVERHANGING BASE NOT REQUIRED WHERE INTEGRAL BASE IS ALLOWED. SEE SPECIAL PROCEDURES OR CONTACT ENGINEER TO VERIFY.

STORM MANHOLE DETAIL

NO SCALE

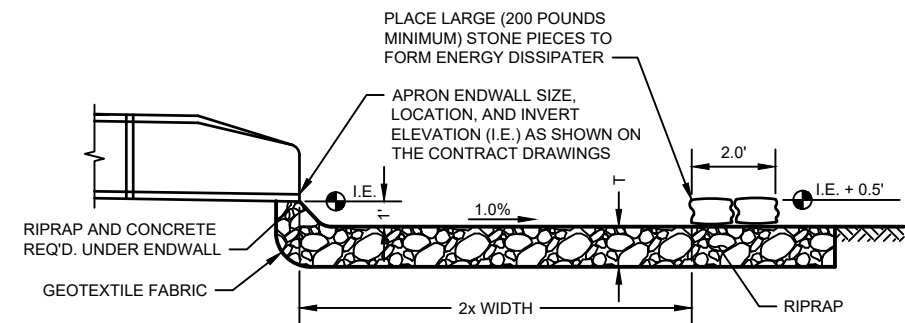


GENERAL NOTES:

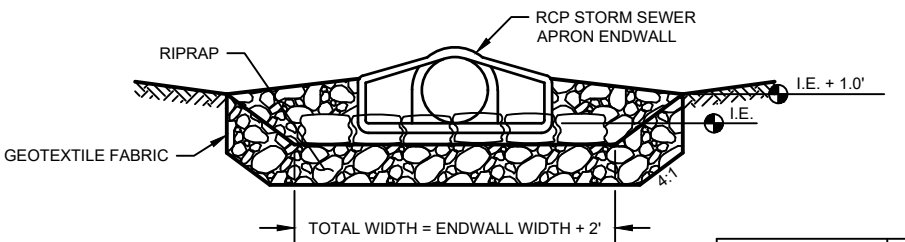
- SEE PLANS FOR SIZE, NUMBER, AND LOCATION OF PIPES.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.
- DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.
- ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.
- PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS FOR WELL GRADED CRUSHED STONE. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.
- PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.
- ALL BAR STEEL AND WELDED WIRE FABRIC REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

2' x 3' INLET WITH SUMP DETAIL

NO SCALE



SIDE VIEW



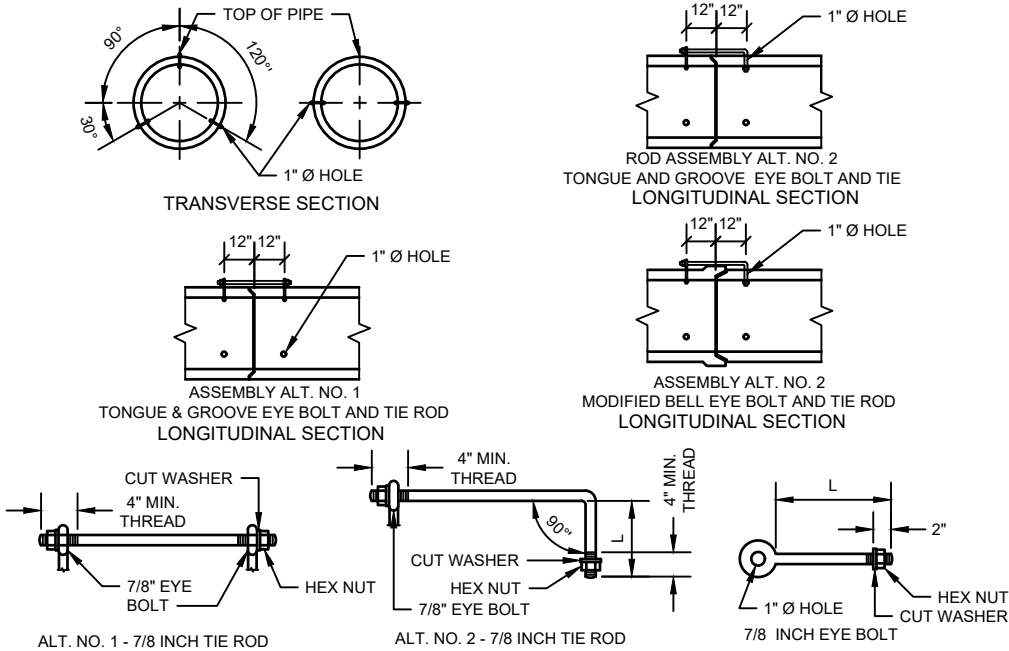
FRONT VIEW

GENERAL NOTES:

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE SPECIFICATIONS.
- THE RIPRAP CLASS AND GEOTEXTILE FABRIC TYPE SHALL BE AS SHOWN ON THE PLANS AND REQUIRED IN THE SPECIFICATIONS.

STORM SEWER OUTFALL DETAIL

NO SCALE



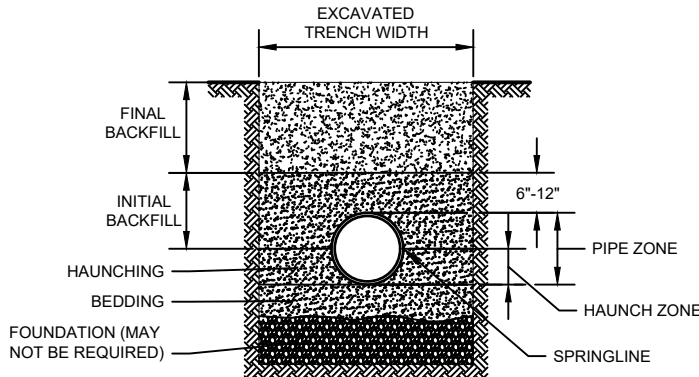
EYE BOLT DIMENSION TABLE		
PIPE SIZE (INCHES)	LENGTH, L (INCHES)	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18 TO 24	4 1/2	5 1/2
30	5	7
36	5 1/2	7
42	5	
48	6 1/2	
60	7 1/2	
72	8 1/2	

GENERAL NOTES:

- CONCRETE CULVERT PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED ON THE PLAN OR AS DIRECTED BY THE ENGINEER.
- DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- HOLES SHALL BE FILLED WITH A NON-SHRINK GROUT OR A NON-SHRINK EPOXY GROUT AS DIRECTED BY THE ENGINEER.
- BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

CONCRETE PIPE JOINT TIE DETAIL

NO SCALE

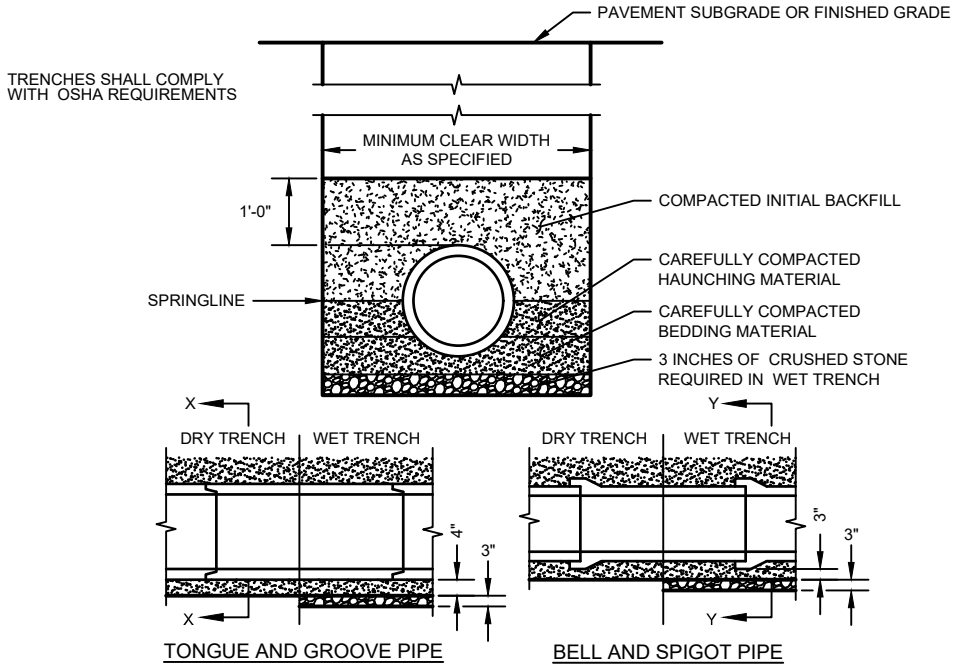


GENERAL NOTES:

- DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO ASTM D2321.
- CLASS II EMBEDMENT MATERIAL SHALL BE CLEAN, COARSE-GRAINED SOILS WITH LITTLE TO NO FINES. NO PARTICLES LARGER THAN 1 1/2-INCHES SHALL BE USED IN THE PIPE EMBEDMENT.
- WHERE HYDRAULIC GRADIENT EXISTS USE A WELL-GRADED MIXTURE TO MINIMIZE MIGRATION OF FINES FROM ADJACENT SOIL.
- CLASS II MATERIAL IS SUITABLE AS A FOUNDATION AND FOR REPLACING OVER-EXCAVATED AND UNSTABLE TRENCH BOTTOM. INSTALL AND COMPACT IN 6-INCH MAXIMUM LAYERS.
- INSTALL AND COMPACT BEDDING IN 6-INCH MAXIMUM LAYERS. LEVEL FINAL GRADE BY HAND. MINIMUM DEPTH 4 INCH (6 INCH IN ROCK CUTS.)
- INSTALL AND COMPACT HAUNCHING IN 6-INCH MAXIMUM LAYERS. WORK IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT.
- INSTALL AND COMPACT INITIAL BACKFILL TO A MINIMUM OF 6 INCH ABOVE PIPE CROWN.
- EMBEDMENT COMPACTION:
MINIMUM DENSITY 85% STANDARD PROCTOR. USE HAND TAMPERS OR VIBRATORY COMPACTORS.

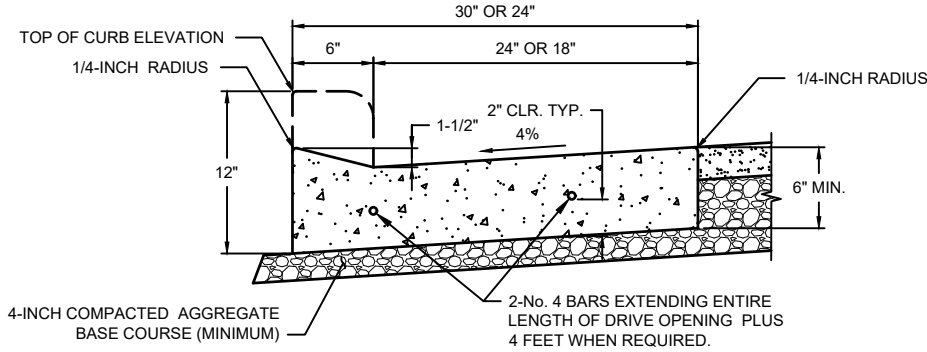
CLASS II - FLEXIBLE PIPE EMBEDMENT DETAIL

NO SCALE

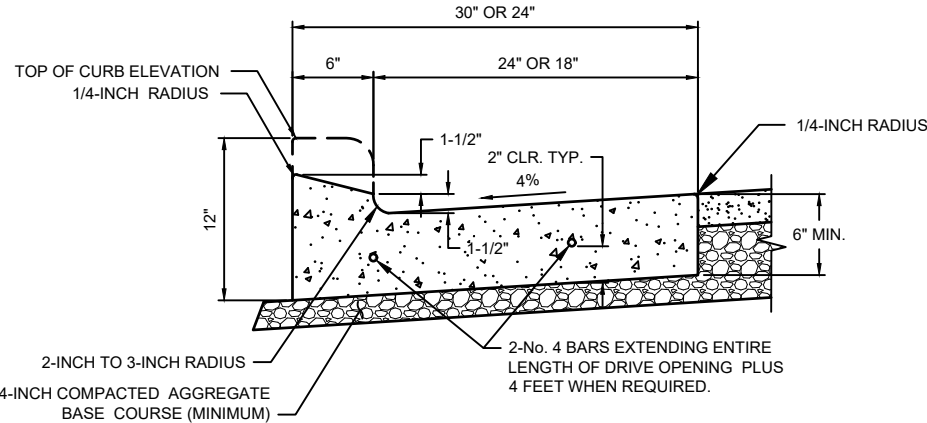


- GENERAL NOTES:
- BEDDING AND HAUNCHING MATERIAL SHALL BE WELL-GRADED 3/4 TO 1/4 INCH CRUSHED STONE OR OTHER NON-COHESIVE MATERIAL NOT SUBJECT TO MIGRATION AND FREE OF DEBRIS, ORGANIC MATERIAL, AND LARGE STONES.
 - BEDDING MATERIAL TO BE PLACED BEFORE SETTING PIPE, 4 INCH MINIMUM UNDER BARREL WITH 3 INCH MINIMUM UNDER BELL.
 - INITIAL BACKFILL SHALL BE DENSELY COMPACTED, NON-COHESIVE FINELY DIVIDED MATERIAL FREE OF DEBRIS, ORGANIC MATERIAL, AND LARGE STONES.
 - IN ROCK OR OTHER UNCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVEREXCAVATED A MINIMUM OF 6-INCHES AND REFILLED WITH GRANULAR MATERIAL.

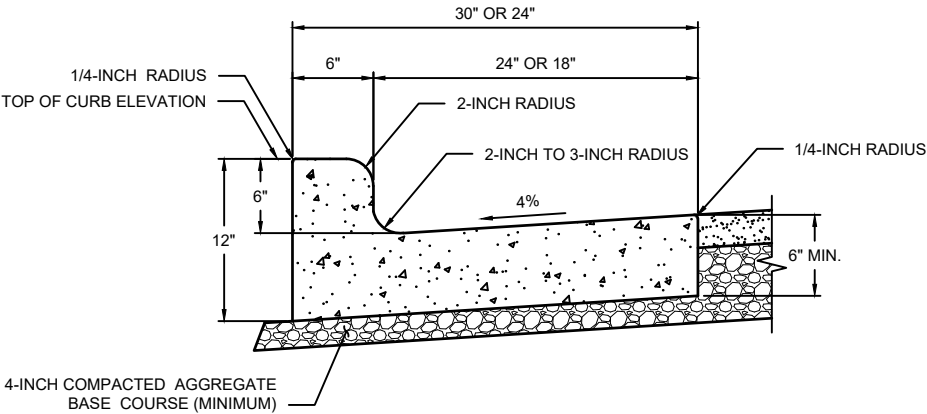
CLASS "B" EMBEDMENT FOR RIGID PIPE DETAIL
NO SCALE



DRIVEWAY SECTION



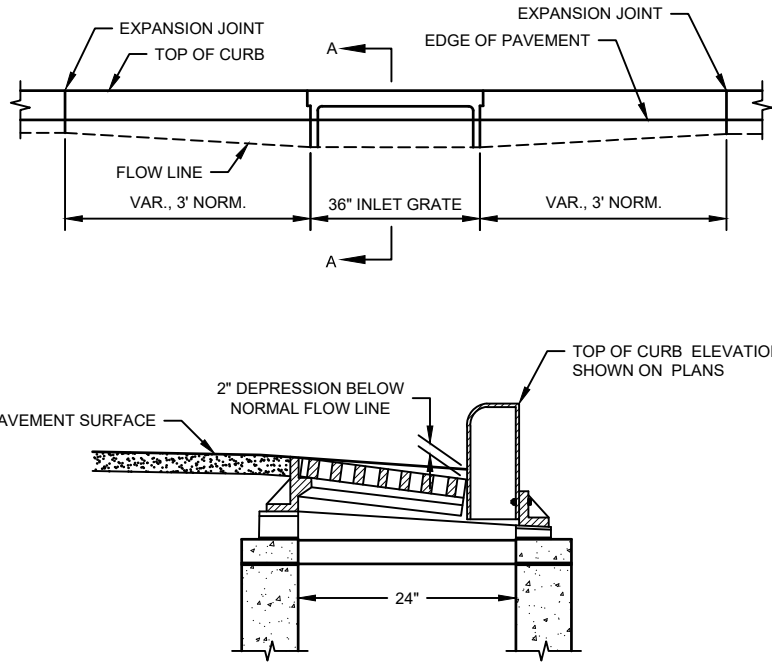
SPECIAL DRIVEWAY SECTION



STANDARD SECTION

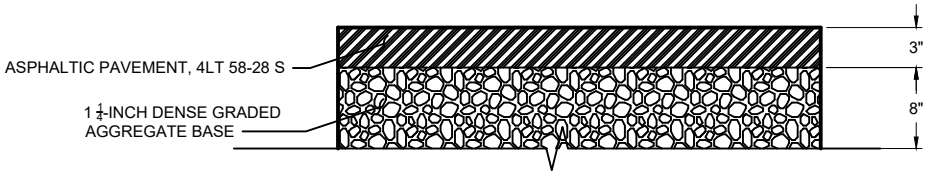
TYPE L CURB AND GUTTER DETAIL
NO SCALE

NOTE TO SPECIFIER: DELETE REINFORCEMENT IF NOT REQUIRED, OR VERIFY THAT REINFORCEMENT IS CALLED OUT IN PLANS/SPECS

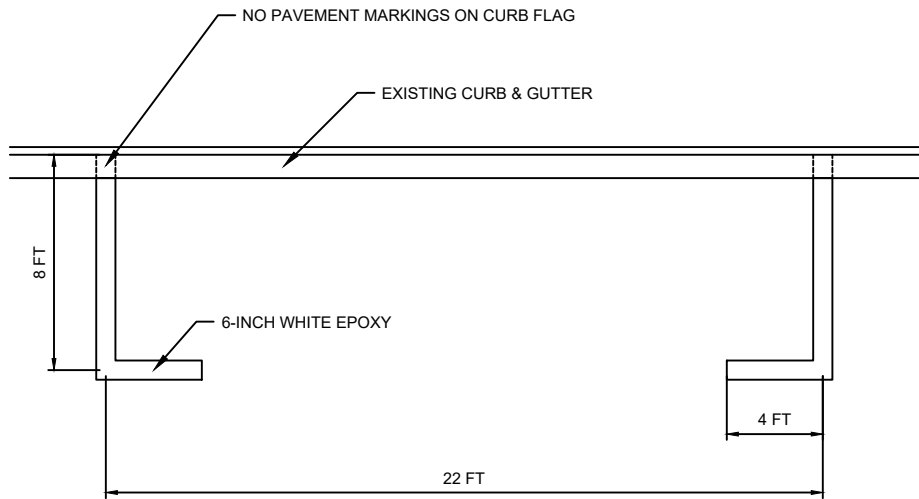


SECTION A-A

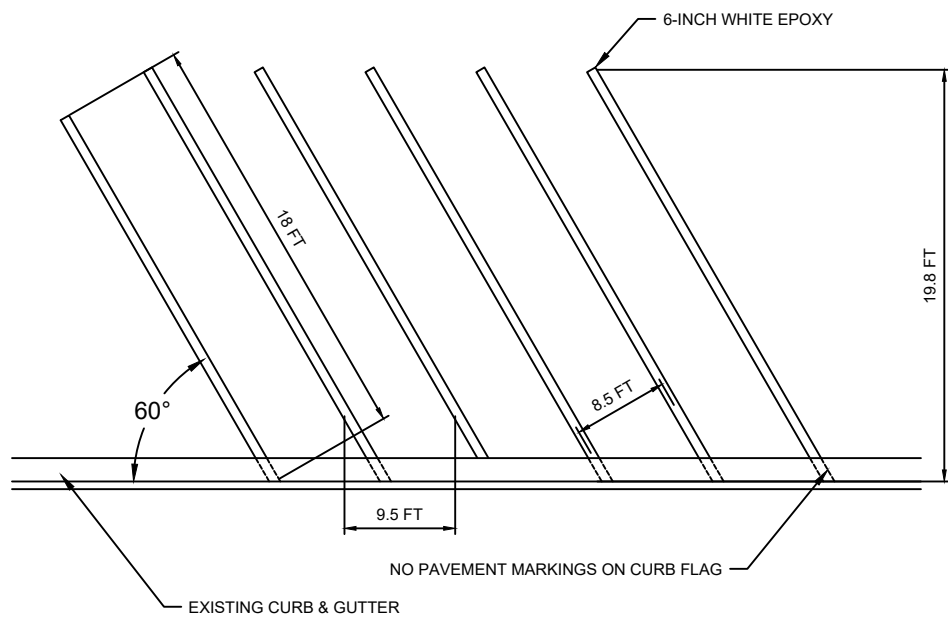
CURB AND GUTTER AT INLETS DETAIL
NO SCALE



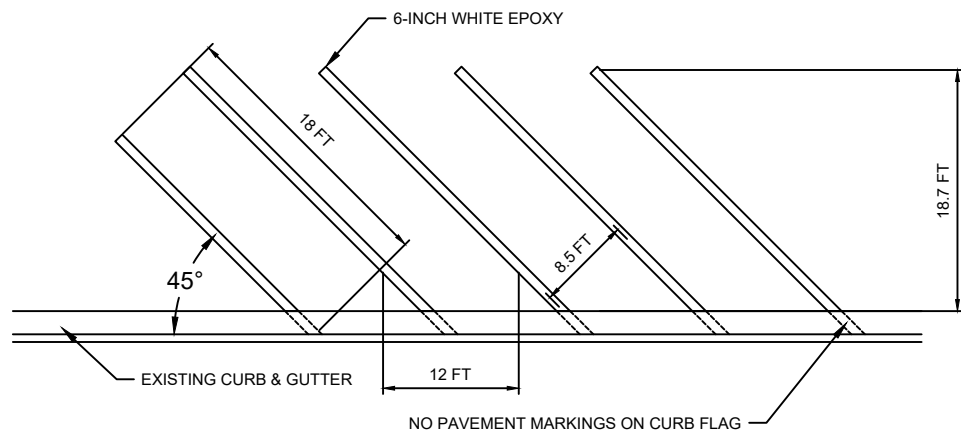
ASPHALT DRIVE DETAIL
NO SCALE



PARALLEL PARKING STALL PAVEMENT MARKINGS
NO SCALE



60° PARKING STALL PAVEMENT MARKINGS
NO SCALE



45° PARKING STALL PAVEMENT MARKINGS
NO SCALE

PROJECT DATE:	DRAWN BY: MJW	DATE: 12/1/2021
	DESIGNED BY: JLJ	
	CHECKED BY: JLJ	
PLOT DATE: Thursday, January 6, 2022 11:22:57 AM, G:\19\19995\19995004\CADD\Construction Documents\19995004 Details.dwg		

PRELIMINARY

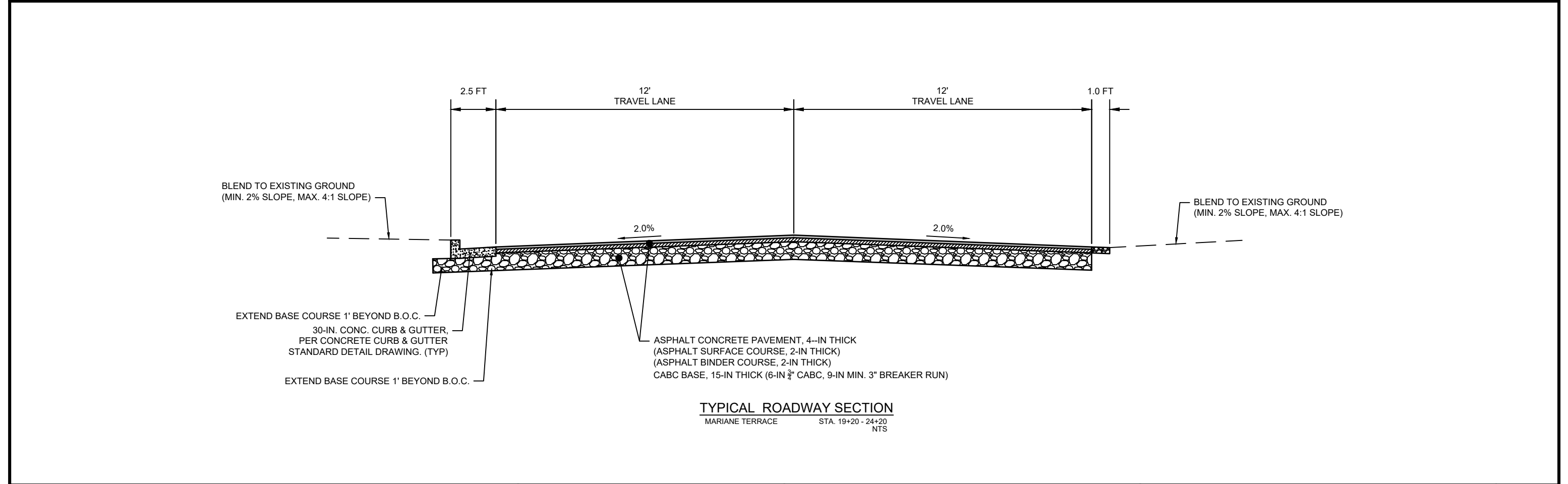
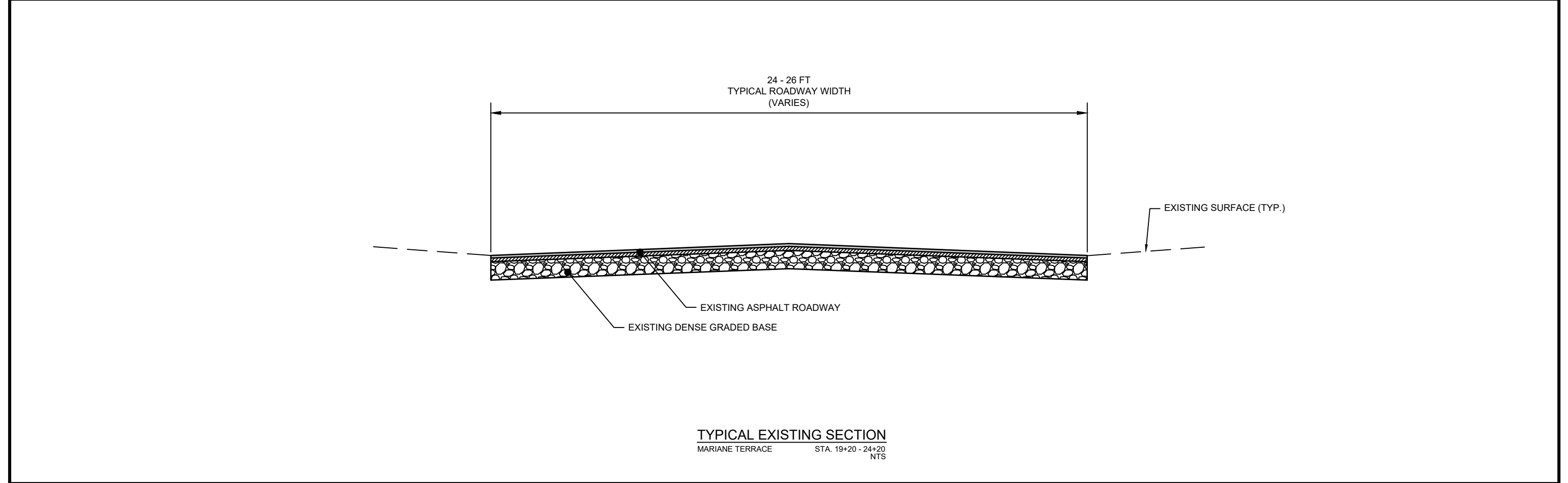


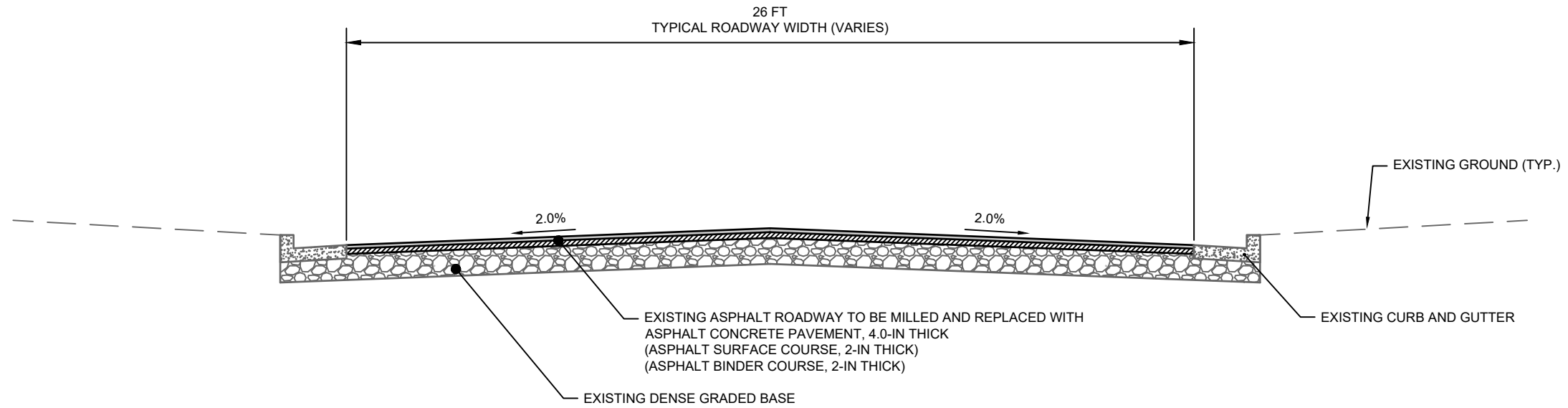
ENGINEERING | ARCHITECTURE | SURVEYING
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2022 STREET IMPROVEMENTS
CITY OF LAKE GENEVA
WALWORTH COUNTY, WISCONSIN

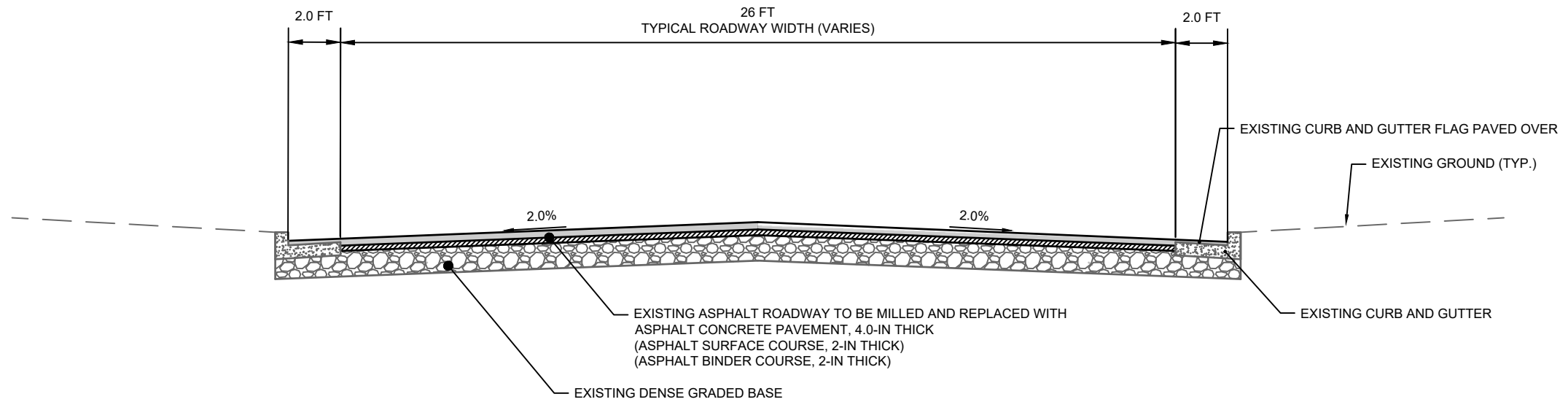
DETAILS

PROJECT NO:
19995004
SHEET
G6





TYPICAL SECTION
PINE TREE LANE NTS



TYPICAL SECTION
SKYLANDE DRIVE NTS

PROJECT DATE: .	DRAWN BY: MJW	NO. 1	DATE 12/15/2021	REVISION CONCEPT EXHIBITS	BY MJW
	DESIGNED BY: JIJ	-	-		-
	CHECKED BY: JIJ	-	-		-
PLOT DATE: 1/6/2022 11:23 AM, G:\19\19995\19995004\CADD\Construction Documents\19995004 Typical Sections.dwg					

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WALWORTH COUNTY, WISCONSIN

TYPICAL SECTIONS

PROJECT NO:
19995004
SHEET
TYP2



		NO.	DATE	REVISION		BY
PROJECT DATE: .	DRAWN BY: MJW	1	12/15/2021	CONCEPT EXHIBITS		MJW
	DESIGNED BY: JIJ	-	-			
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PLOT DATE: 1/6/2022 11:23 AM, G:\191\19995\19995004\CADD\Construction Documents\19995004 Typical Sections.dwg						

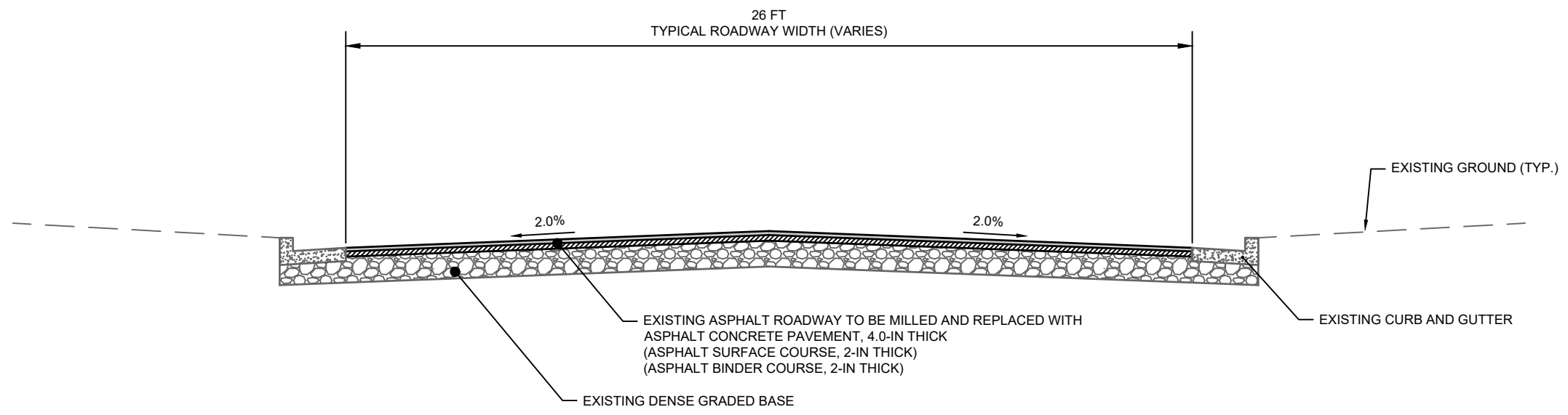


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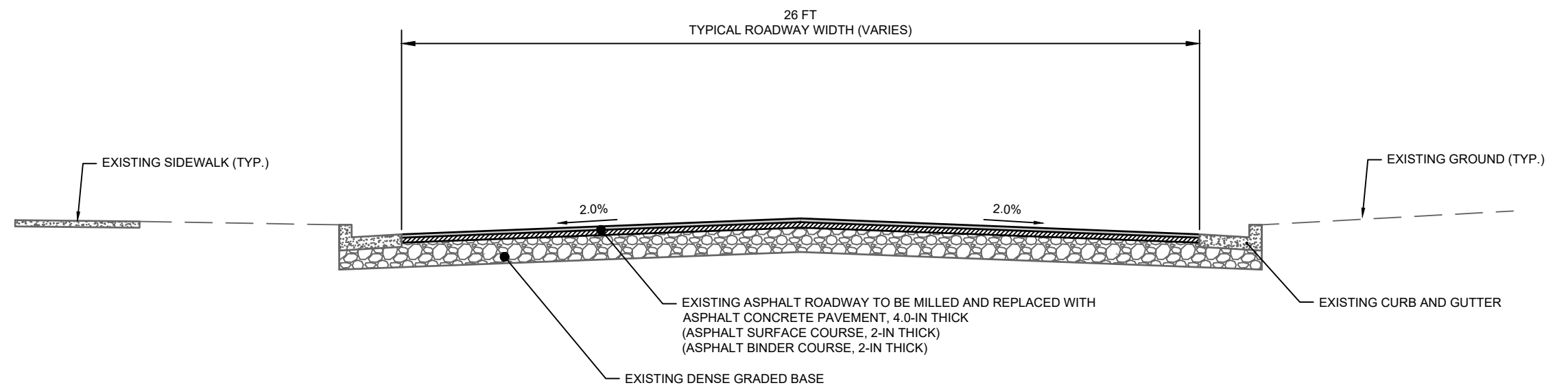
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CITY OF LAKE GENEVA
WALWORTH COUNTY, WISCONSIN

TYPICAL SECTIONS

PROJECT NO. 19995004
SHEET TYP3



TYPICAL SECTION
SPRING STREET NTS



TYPICAL SECTION
WARREN STREET NTS

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			

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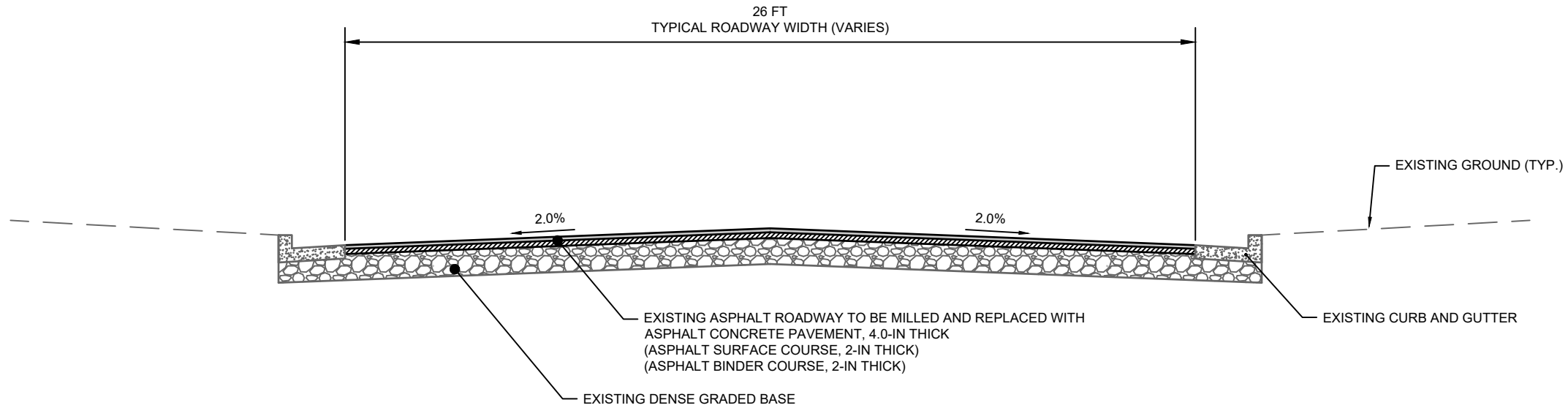


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TYPICAL SECTIONS

PROJECT NO:
19995004
SHEET
TYP4



TYPICAL SECTION
WAVERLY STREET NTS

PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			
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TYPICAL SECTIONS

PROJECT NO:
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TYP5



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
12/15/2021	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
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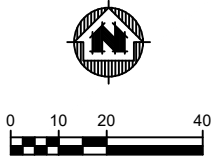
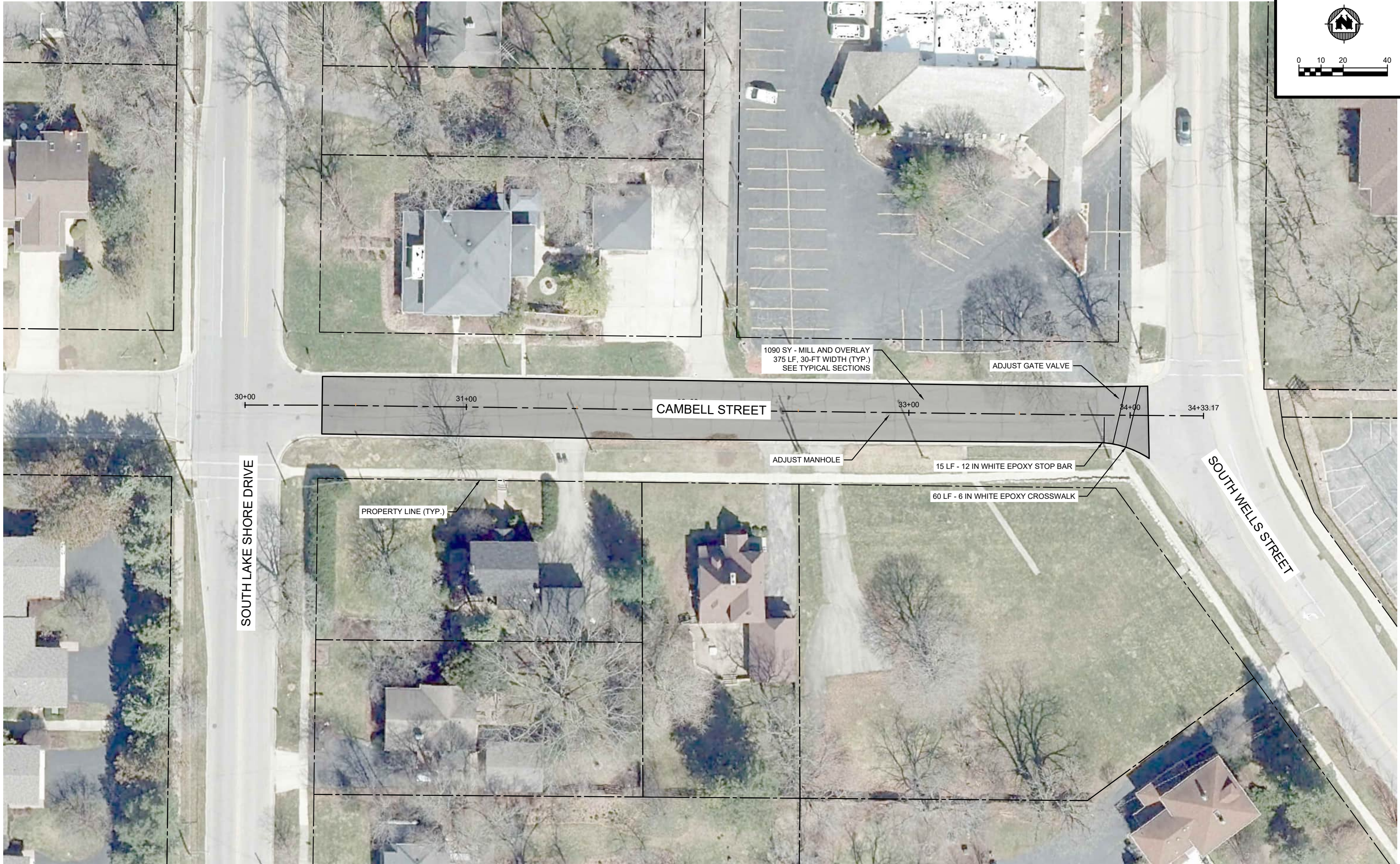


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ROAD CONSTRUCTION PLAN - PINE TREE LANE & MARIANE
TERRACE

PROJECT NO.
19995004
SHEET
P1



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			
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ROAD CONSTRUCTION PLAN - CAMBELL STREET

PROJECT NO:
19995004
SHEET
P2



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			
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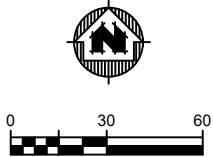
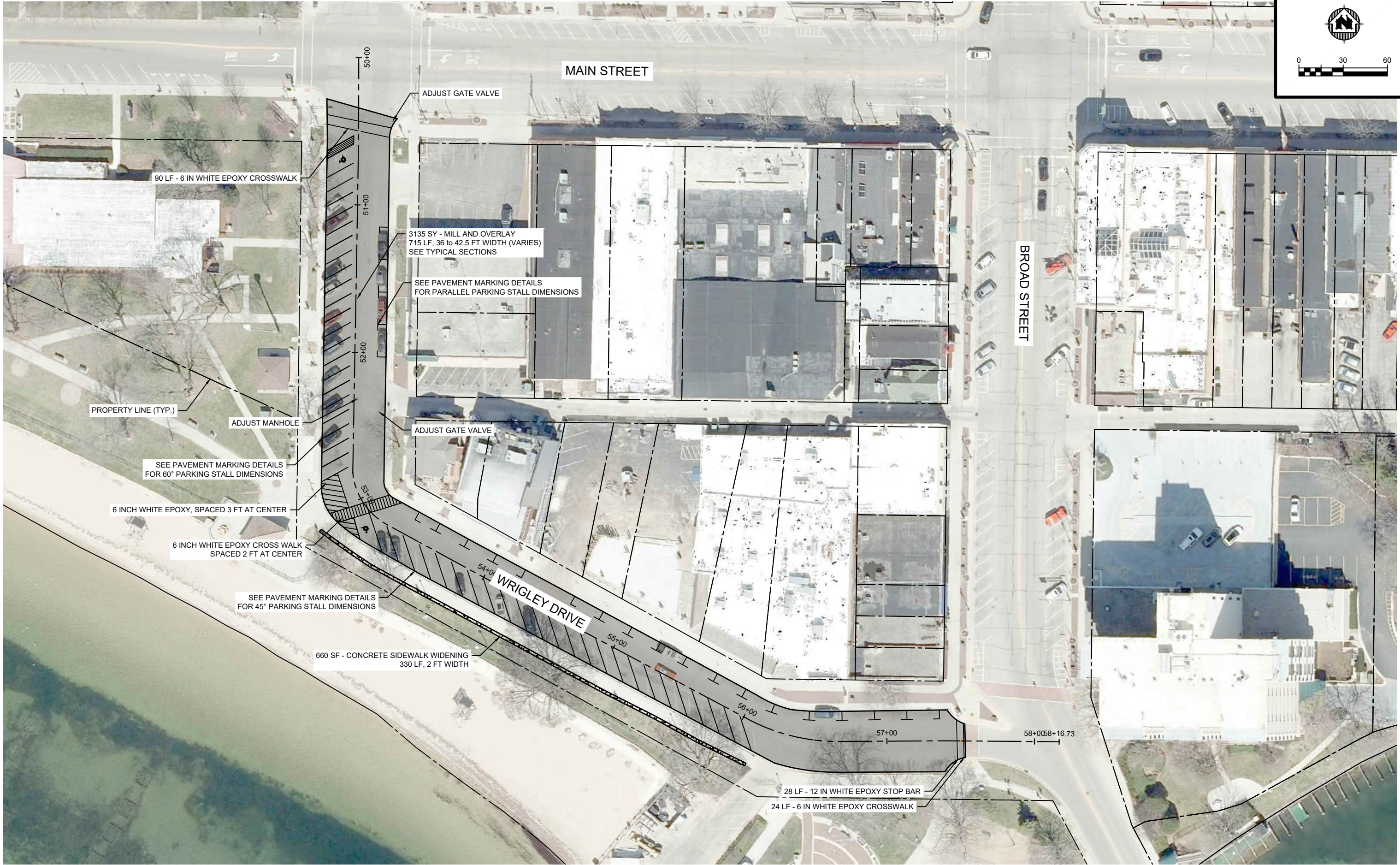


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ROAD CONSTRUCTION PLAN - SKY LANE DRIVE

PROJECT NO:
19995004
SHEET
P3



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			

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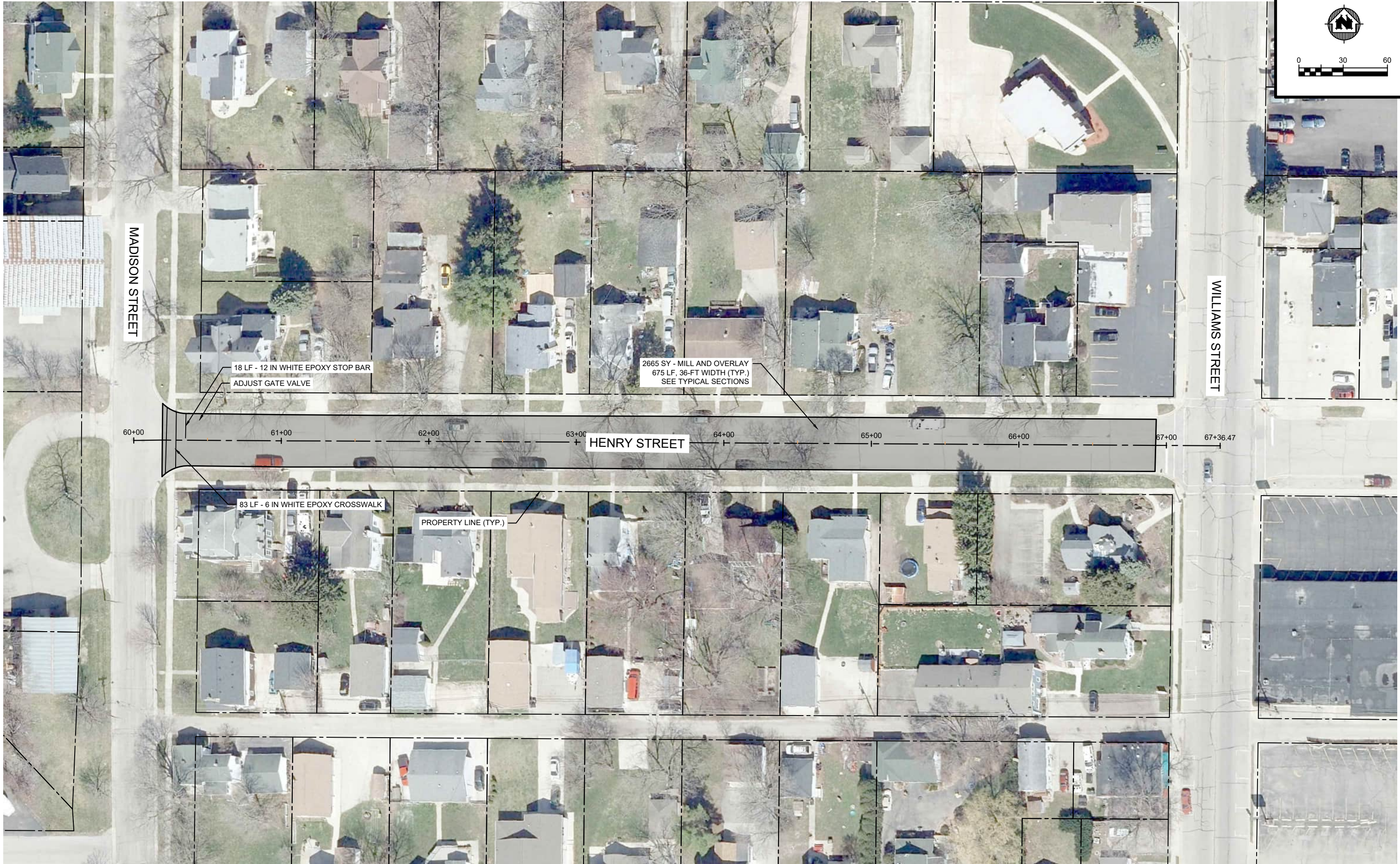


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ROAD CONSTRUCTION PLAN - WRIGLEY DRIVE

PROJECT NO:
19995004
SHEET
P4



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
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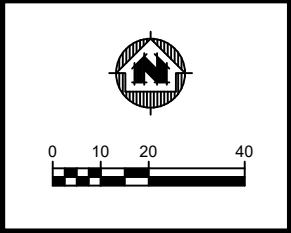
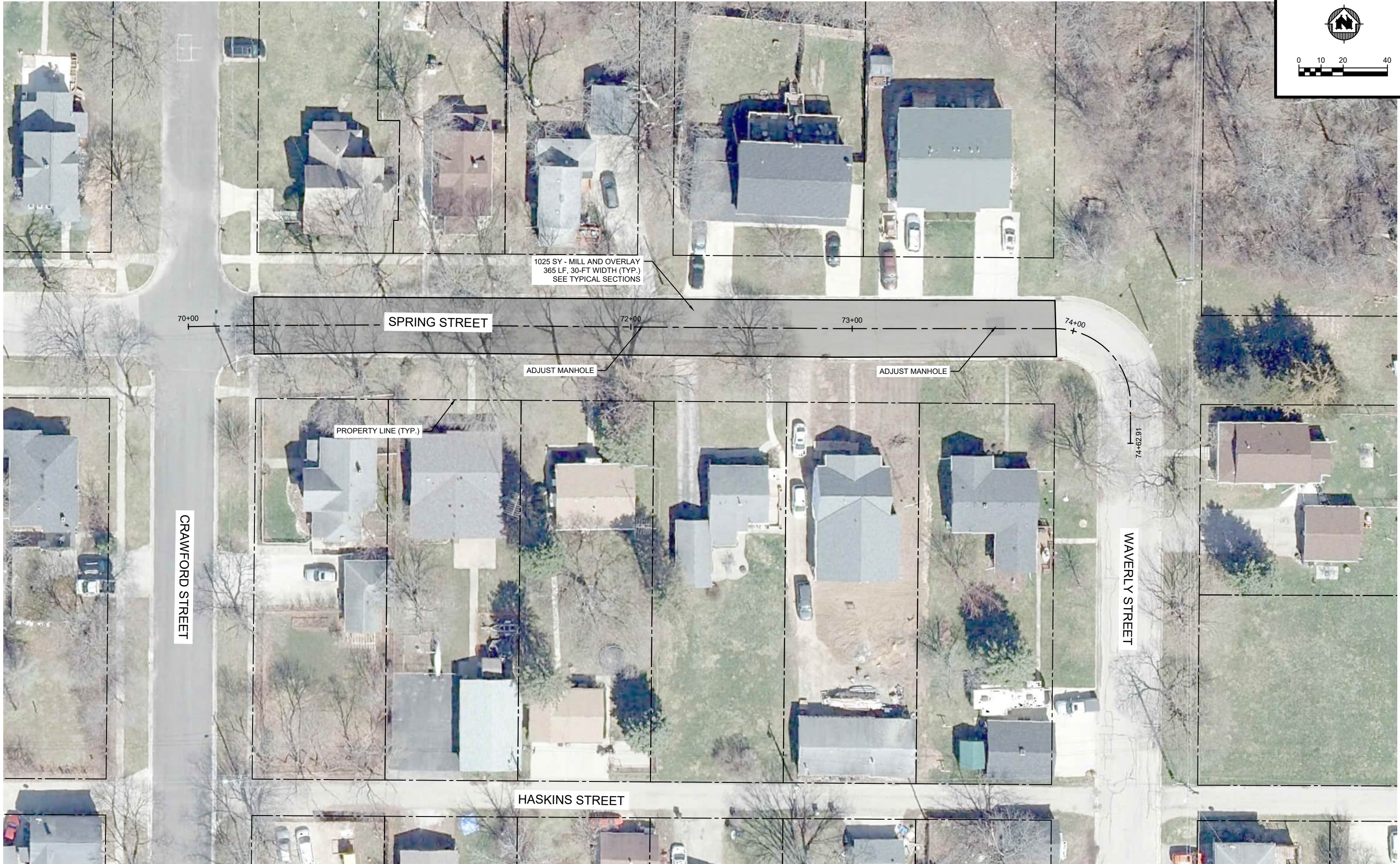


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ROAD CONSTRUCTION PLAN - HENRY STREET

PROJECT NO:
19995004
SHEET
P5



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			

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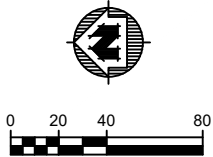
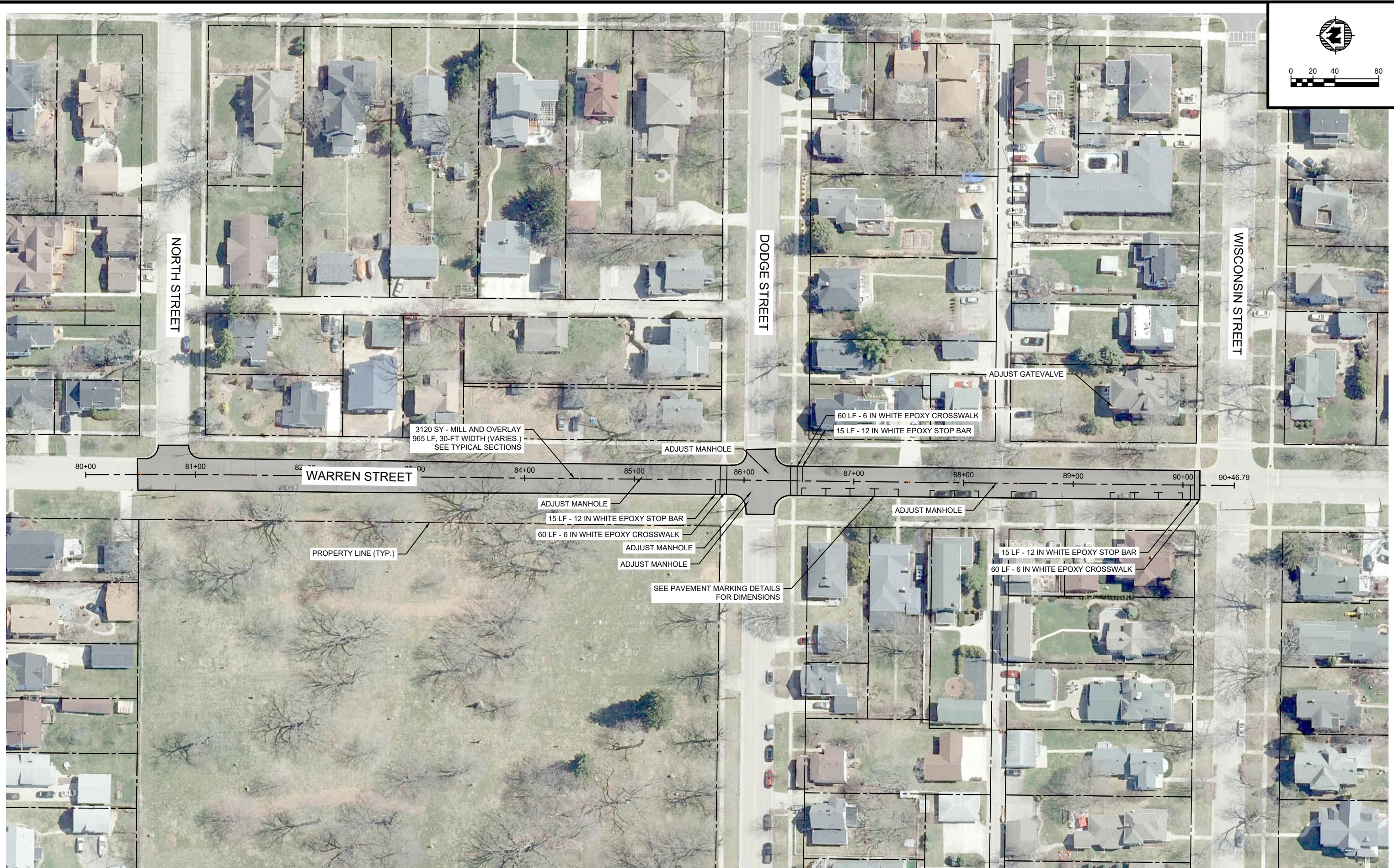


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ROAD CONSTRUCTION PLAN - SPRING STREET

PROJECT NO:
19995004
SHEET
P6



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			
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ROAD CONSTRUCTION PLAN - WARREN STREET

PROJECT NO:
19995004
SHEET
P7



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
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PLOT DATE: 1/6/2022 11:24 AM, G:\19\19995\19995004\CADD\Construction Documents\19995004 Plan Sheets.dwg					

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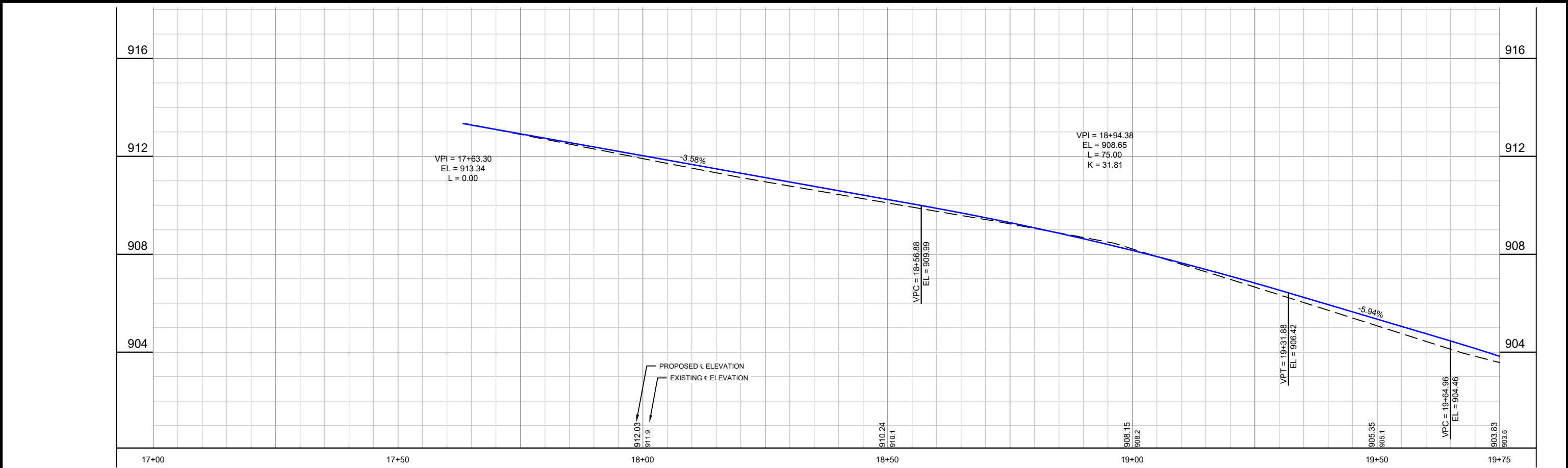
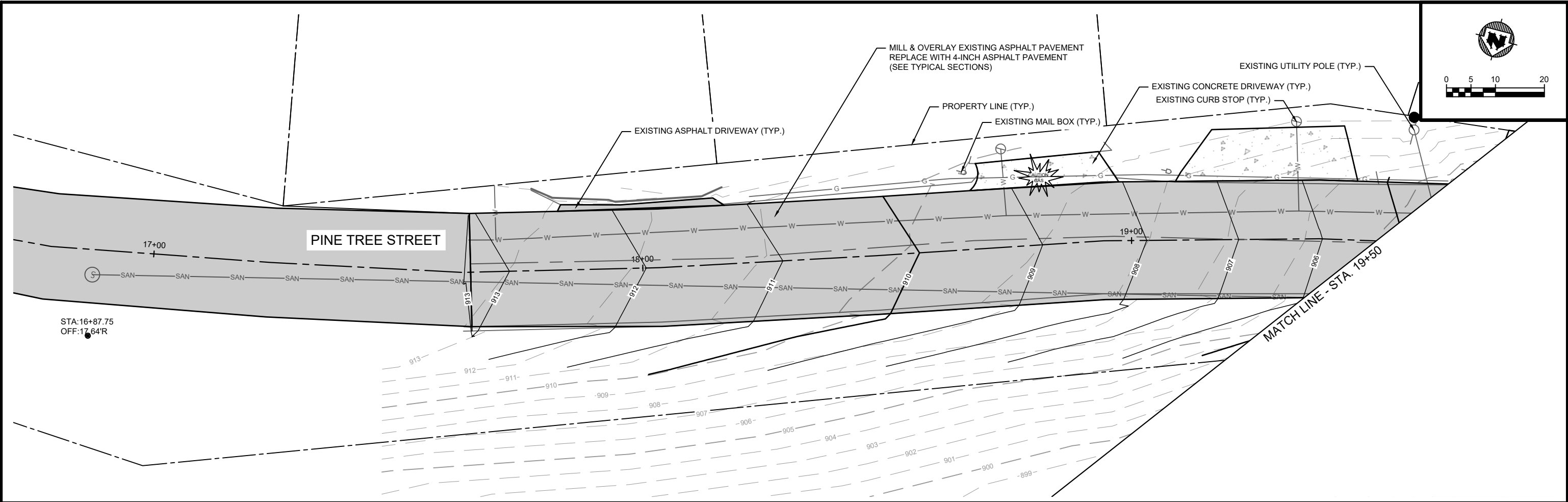


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ROAD CONSTRUCTION PLAN - WAVERLY STREET

PROJECT NO:
19995004
SHEET
P8



PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
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PLOT DATE: 1/6/2022 11:25 AM, G:\19\19995\19995004\CADD\Construction Documents\19995004 Plan and Profile - Mariane Terrace.dwg

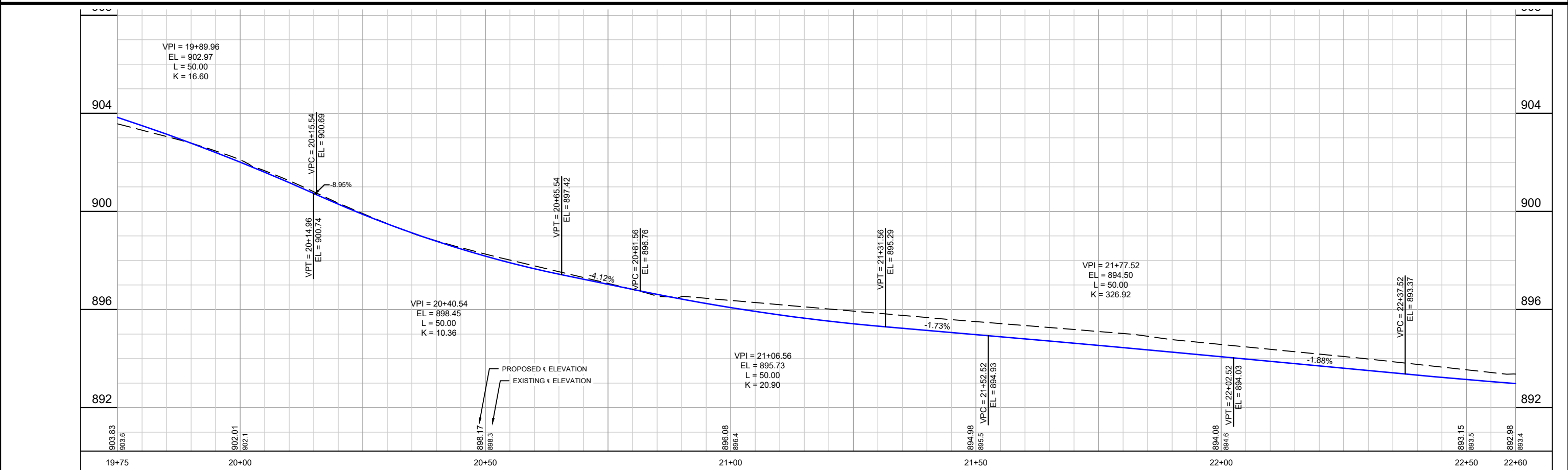
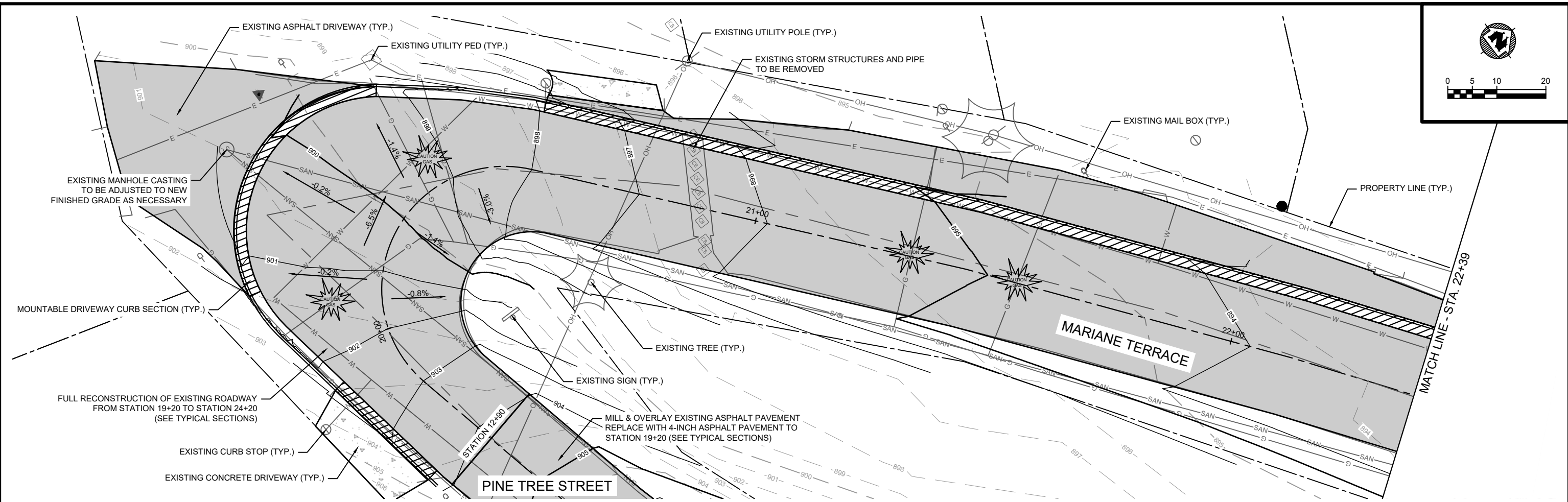
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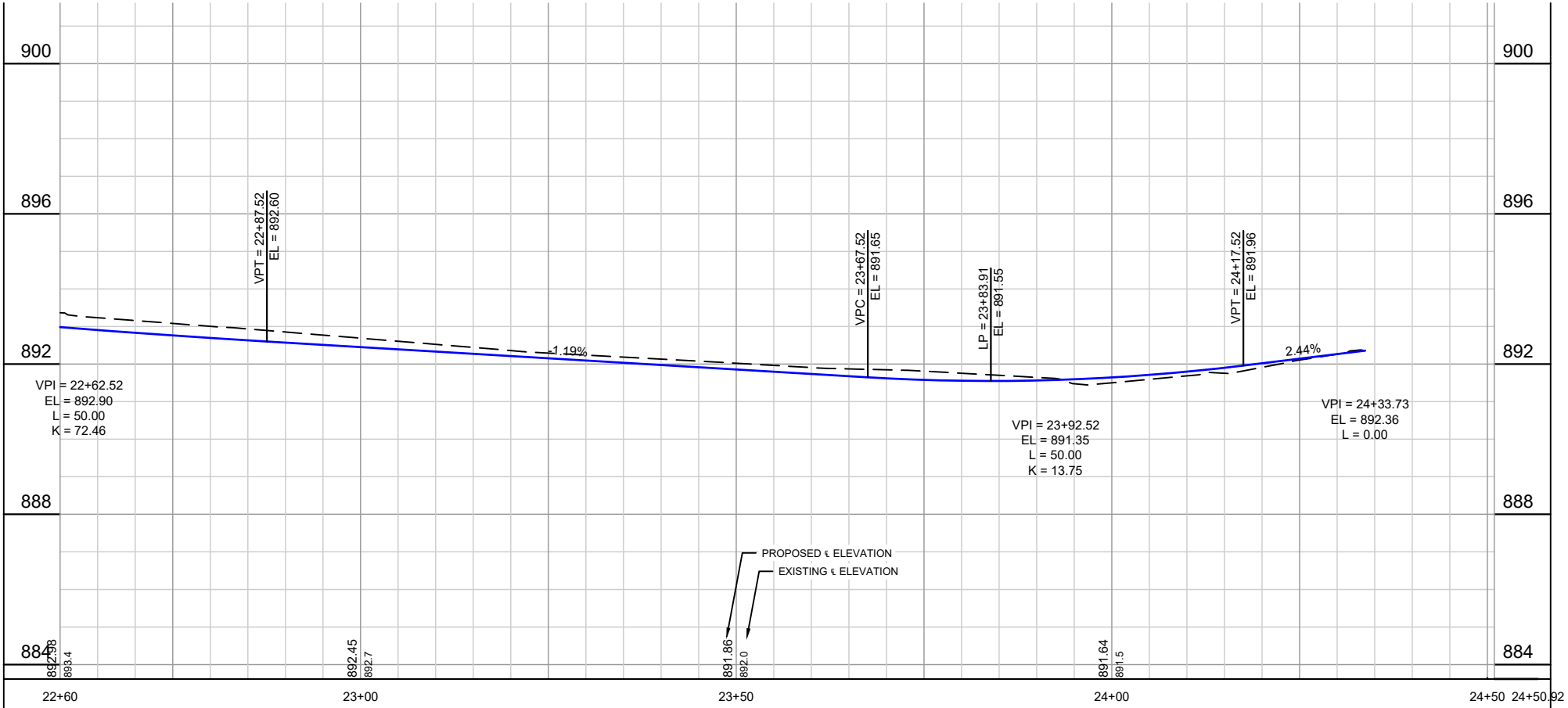
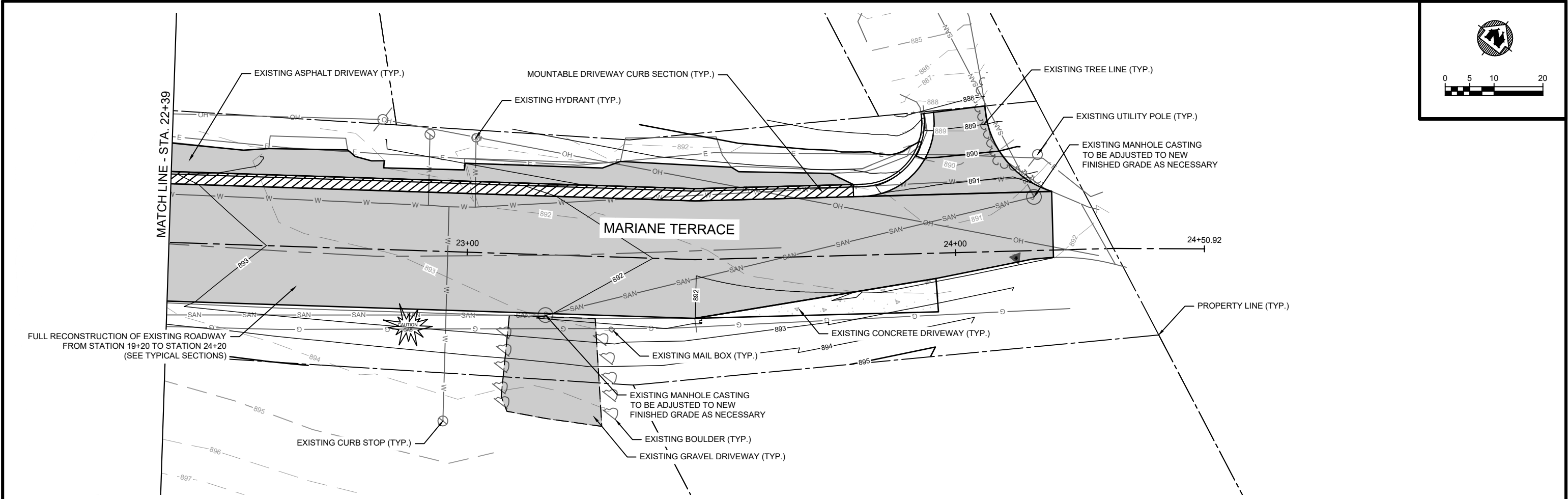
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WALWORTH COUNTY, WISCONSIN

PLAN & PROFILE - MARIANE TERRACE

PROJECT NO.: 19995004
SHEET R1





PROJECT DATE:	DRAWN BY:	NO.	DATE	REVISION	BY
12/15/2021	MJW	1	12/15/2021	CONCEPT EXHIBIT	MJW
	DESIGNED BY:	JLJ			
	CHECKED BY:	JLJ			

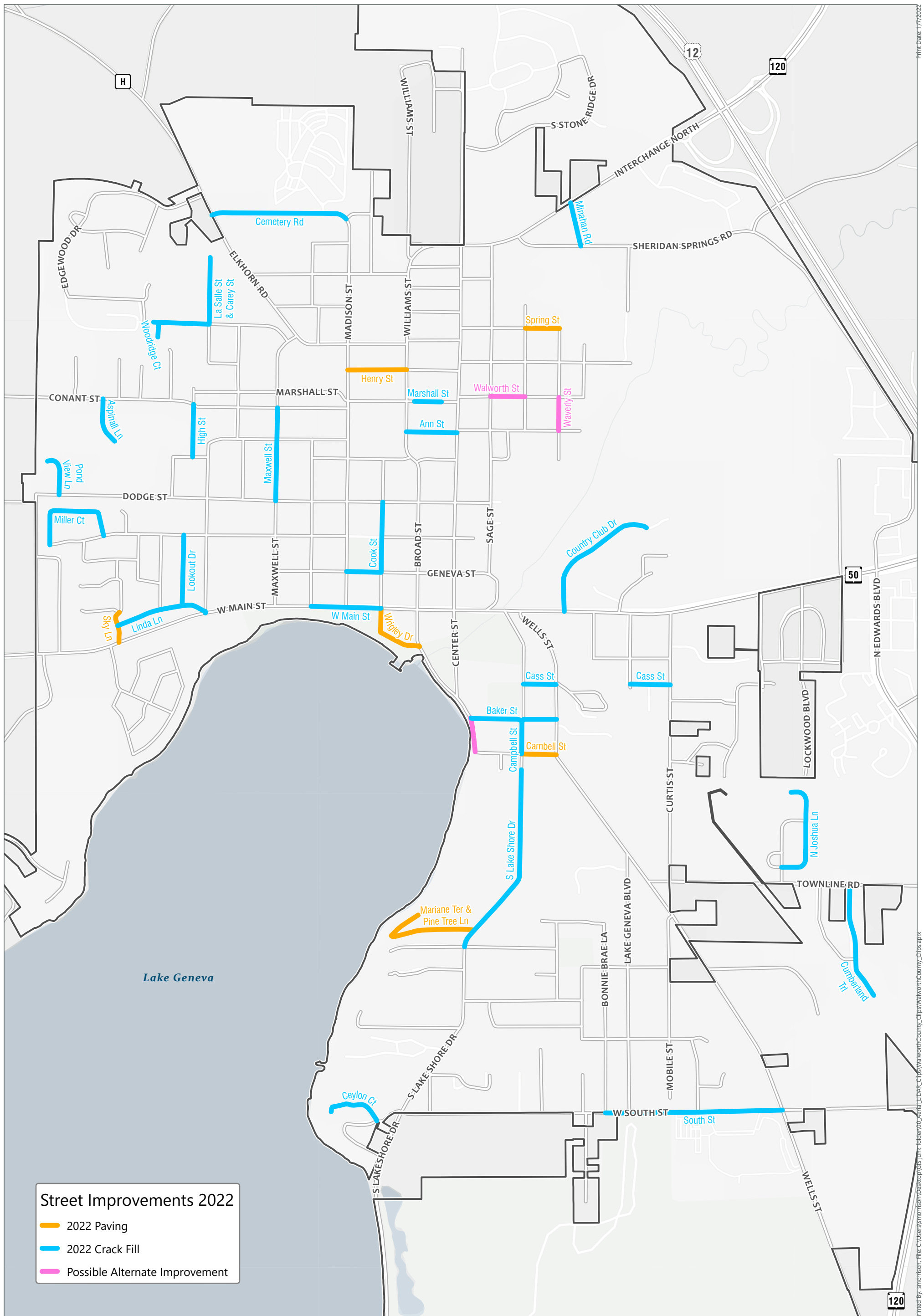
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PLAN & PROFILE - MARIANE TERRACE

PROJECT NO:
19995004
SHEET
R3



**PREANNEXATION AND
DEVELOPMENT AGREEMENT**

Document Number

Document Name

THIS PREANNEXATION AND DEVELOPMENT AGREEMENT (Agreement) is made this 28 day of August, 2003, among the CITY OF LAKE GENEVA, Walworth County, Wisconsin (City), LAKE GENEVA UTILITY COMMISSION, Walworth County, Wisconsin (Utility Commission), BANK ONE TRUST COMPANY, N.A., as Successor Trustee of the Olivia M. Miller Revocable Trust dated February 26, 1985, Milwaukee County, Wisconsin (Seller), and FAIRWYN, LTD., a Wisconsin corporation, Walworth County, Wisconsin (Developer).

RECITALS

WHEREAS, the City is a Wisconsin municipal corporation, organized and existing pursuant to Wis. Stat. ch. 62, with authority to enter into this Agreement under its zoning and annexation ordinances, as well as the general home rule authority vested in it under Wisconsin law; and

WHEREAS, the Utility Commission is a municipal entity, organized and existing pursuant to law, which commission is authorized to own, operate, and regulate the utilities located within the City, including the water utilities located therein; and

WHEREAS, the Seller is the owner of certain real property, which FairWyn Investment Company, LLC, an Illinois limited liability company (FairWyn Investments), is purchasing under a certain Real Estate Purchase/Sale Agreement, dated March 5, 2002, with Seller, which property includes the real property commonly known as vacant land, one hundred fifty (150) acres, more or less, in the Town of Geneva (Town), Walworth County, Wisconsin, more particularly described in the attached Exhibit 1 incorporated herein, and depicted in the attached Exhibit 2 incorporated herein (Property); and in accordance with the provisions set forth below; and

WHEREAS, the Developer has an option to purchase the Property in portions from time to time from FairWyn Investments, and will be the ultimate owner thereof; and

WHEREAS, the Developer and the City desire that the Property be annexed to the City pursuant to the Petition for Direct Annexation by Unanimous Consent of Electors and Property Owners, attached hereto as Exhibit 3 and incorporated herein by reference (Petition); and

Recording Area

Name and Return Address
GODFREY, LEIBSLE, BLACKBOURN &
HOWARTH, S.C.
11 North Wisconsin Street
Post Office Box 260
Elkhorn, Wisconsin 53121

Parcel Identification Number (PIN)

WHEREAS, the Developer desires to develop the Property as a fully-integrated, phased residential development of approximately thirty (30) duplexes, approximately one hundred sixty-three (163) single-family lots with a minimum size of ten thousand one hundred twenty-five (10,125) square feet, and ten (10) single-family estate lots ranging in size from approximately forty thousand (40,000) square feet to approximately three (3) acres, as depicted on a certain Conceptual Neighborhood Plan for the Property, dated July 24, 2003, a copy of which is attached hereto as Exhibit 4 and incorporated herein, with provisions for a conservation easement and public use benefits for the portion of the Property located within a primary environmental corridor, and using engineering standards for sewer, water, and roads pursuant to this Agreement, named by the Developer as "Stone Ridge" (Development); and

WHEREAS, the Developer and the City desire that the temporary zoning of the Property upon annexation shall be: Two-Family Residential-6 (TR-6) Zoning District; SR-4 Single-Family Residential-4 Zoning District; and CR-5ac Countryside Residential Zoning District, more particularly described in Exhibits C-1 through C-3 to the Petition (collectively, Zoning); and

WHEREAS, the Development conforms to the City's 1997 Comprehensive Master Plan for the Property, projecting Two-Family/Mixed and Single-Family residential uses for the Property; and

WHEREAS, the City is willing to annex the Property pursuant to this Agreement; and

WHEREAS, the Utility Commission agrees to the provisions of this Agreement, and is executing the same pursuant to the terms, conditions, and provisions of this Agreement which relate to and include the utilities for which the Utility Commission has jurisdiction thereof, including, but not limited to, water and sewer system utilities; and

WHEREAS, the City, the Utility Commission, the Seller, and the Developer desire to enter into this Agreement.

NOW, THEREFORE, the City, the Utility Commission, the Seller, and the Developer enter into this Agreement on the date first set forth above, and agree as follows:

SECTION 1 RESTATEMENT OF RECITALS

1.01 The Recitals set forth hereinabove are restated in the text of this Agreement by reference as if set forth in full herein, and as such constitute agreements by and between the parties made part and parcel of this Agreement.

SECTION 2 ANNEXATION OF PROPERTY

2.01 Within a reasonable time after the entry into this Agreement, the Developer shall cause the Petition to be signed and filed with the City, and the other appropriate governmental authorities.

2.02 The City may adopt, within a reasonable time after the filing of the Petition, an annexation ordinance annexing the Property to the City, substantially in the form attached as Exhibit D to the Petition (Annexation Ordinance).

2.03 Temporary zoning of the Property may be the Zoning described in the Recitals to this Agreement, and as further set forth in Exhibits C-1 through C-3 to the Petition and the Annexation Ordinance.

2.04 If the City does not adopt the Annexation Ordinance within a reasonable time, but not exceeding one hundred twenty (120) days of the filing of the Petition, as provided, then, in that event, the City agrees that the Developer may, at its option, withdraw the Petition, and this Agreement shall be deemed null and void.

2.05 If the City adopts the Annexation Ordinance, the City shall promptly thereafter make all filings and perform all other acts required by Wisconsin Statutes to perfect and complete the annexation of the Property.

2.06 Upon the completion and perfection of the annexation of the Property pursuant to the Annexation Ordinance, the Developer shall cause petitions to be signed and filed with the City to make the permanent zoning of the Property conform with the boundaries and districts of the temporary zoning of the Property, with a conditional use for cluster residential development in the portion of the Property to be zoned CR-5ac, Countryside Residential Zoning District.

SECTION 3 PUBLIC AND PRIVATE IMPROVEMENTS

3.01 **Phasing/Staging.** The portions of the Development designated for single-family and multi-family development shall be developed in phases (Phased Development). It is estimated that it may take up to ten (10) years or more to fully develop, construct, and sell the Phased Development. As the Development proceeds, the Developer will install all necessary infrastructure, including streets, sanitary sewer and related facilities, surface water drainage and water mains and related facilities (collectively, Improvements), as may be necessary to serve each individual phase so undertaken. All Improvements shall comply with City and state standards, to be reviewed and approved by the City Engineer, as provided below, and then dedicated and conveyed or transferred to the City pursuant to this

Agreement. The sequence, order, and pace of the phasing/staging shall remain in the sole discretion of the Developer; provided, however, that once construction of the Improvements has commenced for a particular phase, the same shall be completed in such phase within one (1) year of such commencement. However, each phase commenced by the Developer, including the initial phase, shall be a "stand alone" phase. A "stand alone" phase means the completed Improvements shall service each initial phase in such a manner that the residential dwellings and utilities constructed therein are fully serviceable and functional without being dependent upon the timing of the construction or order of any other phase. The initial phase of the Development shall include only those Improvements for which the construction of the Water Tower Facilities, as defined in subsection 3.04.h., below, is not required to provide adequate water pressure to the Improvements, but for which water and sewer lines from the City must be extended; i.e., the duplexes and any neighboring single-family residences for which the Water Tower Facilities are not required, estimated to total eighty (80) to ninety (90) units. The second phase of the Development shall include the Improvements within the balance of the portion of the Property to be zoned SR-4 Single-Family Residential-4 Zoning District for which the Water Tower Facilities are required. The third phase of the Development shall include the Improvements within the portion of the Property to be zoned CR-5ac Countryside Residential Zoning District.

3.02 The Developer shall furnish, or cause to be furnished, all labor and services, material, and work for the construction and completion of the Improvements for the subject phase of the Development. The parties acknowledge and agree that the Developer may have any or all of the Improvements constructed and supplied by various contractors, and the City specifically agrees that this shall be permitted. The City declares that the Developer may employ any such general contractor or subcontractors, in its own discretion and of its own choosing. The contractors, however, must be qualified in the sole reasonable judgment of the City Engineer.

3.03 The Developer will construct and complete, or cause to be constructed and completed, the Improvements for the subject phase of the Development in a thorough, workmanlike, and substantial manner in every respect, to the satisfaction and approval of both the City Engineer and the City Council, within the times specified herein and in strict accordance with the instructions and information contained in this Agreement, the performance bond, and the plans and specifications, all of which documents are hereby made a part of this Agreement and form the Agreement documents as fully as if the same were set forth at length herein. The Developer, however, shall not be considered in default of any of the terms, covenants, and conditions of this Agreement if the Developer fails to perform any of its obligations hereunder and such failure is caused, in whole or in part, by any act of God, weather conditions, strikes, labor shortages, fires, casualties, shortages of materials, work stoppages, or other matters beyond the reasonable control of the Developer. In the event that any matters set forth in this section delay the Developer's ability to timely perform its obligations under this Agreement, the date upon which said obligations were to be completed shall be extended for a like number of days.

3.04 The following are the Improvements which will be required by the City for any phase of the Development which is commenced by the Developer:

- a. **Survey Monuments.** The Developer shall install survey monuments, placed in accordance with requirements of Wis. Stat. § 236.15.
- b. **Roads, Streets, Traffic Signal Light.**
 1. After the installation of temporary block corner monuments by the Developer, and establishment of street grades by the City Council from plans provided by the Developer, the Developer shall grade the right-of-way of all dedicated streets in accordance with plans and standard specifications reviewed and approved by the City Engineer.
 2. Those roads and streets described in the plans and specifications as "private streets and roads" shall be deemed private; all other said roads and streets depicted in said plans and specifications shall be dedicated to the City as public streets. Private roads and streets shall be maintained and repaired at the sole cost and expense of the Developer or the homeowners' association to be formed.
 3. After the installation of all utility and stormwater drainage Improvements, the Developer shall surface all roadways in dedicated streets to the widths as shown on the approved plans. Said surfacing shall be done in accordance with plans and standard specifications reviewed and approved by the City Engineer. All streets shall have a street width of twenty-eight feet (28') from curb face to curb face and, as a minimum, a three inch (3") blacktop mat (bituminous concrete pavement). Parking shall be allowed on one (1) side only, and appropriate signage designating the same shall be placed in the Development in accordance with the laws, regulations, and zoning ordinance (Code) of the City.
 4. No occupancy permit for each individual phase will be issued until all Improvements are completed within such phase, as well as placement of the first lift of

asphalt (Binder Course); provided, however, the occupancy permits for residential dwellings shall be issued by the City prior to installation of the final layer of asphaltic pavement. *See* Section 8.01 hereof.

5. Traffic Signal/Light, Controlled Intersection. If in the future the Wisconsin Department of Transportation or the County of Walworth, Wisconsin, as the case may be, determine and by warrant order a traffic signal/light at said intersection, then the Developer shall be responsible for one-half (1/2) of the cost of the installation of said traffic signal/light, as determined by the traffic analysis of HNTB, dated October 30, 2002, for the Miller Property Development-Lake Geneva, the results of which the City hereby acknowledges, and a copy of a summary of which, dated February 4, 2003, is attached hereto as Exhibit 5 and incorporated herein.
6. Access to Development. Vehicular and pedestrian access to the Development shall be by Center Street and Williams Street to future Highway H, as depicted in the plans and specifications reviewed and approved by the City Engineer. Additional alternative or access routes are available in the future, as shown in the plans and specifications reviewed and approved by the City Engineer.
- c. Curb and Gutter. The City acknowledges and agrees that the Development is urban in its nature and, therefore, the requirement of curb and gutter installation is necessary.
- d. Sidewalks. The Developer shall install sidewalks in accordance with the plans and specifications reviewed and approved by the City Engineer. The sidewalks shall be located on one (1) side of the street only, which such side shall be determined by the City Engineer. The City, however, agrees that the Developer may defer the construction of sidewalks on each lot until the construction of a dwelling unit on each of the lots is completed, thus avoiding unnecessary damage and destruction to the sidewalk, but the sidewalk for each lot shall be completed prior to the issuance of the final occupancy permit therefor.

- e. **Public Sanitary Sewerage Systems.** The Developer shall construct sanitary sewers in such a manner as to make adequate sanitary sewerage service available to each lot within the subject phase of the Development. The size, type, and installation of all sanitary sewers and laterals to street line (including such lift stations as may be necessary) shall be in accordance with plans and standard specifications prepared as called for in this Agreement and the engineering plans approved by the City Engineer. Any oversizing costs for installation of facilities greater than that required to service the Development shall be borne by the City to the extent that the same is an incremental cost, which such cost shall also include the cost of such oversized facilities. The City shall pay the cost of such oversizing within a reasonable time from its receipt of an invoice for the cost of such oversized facilities, not exceeding ninety (90) days. The Developer agrees that the City will not accept the sewer Improvements for each phase until all the sanitary sewers for each phase have been installed in accordance with plans and specifications reviewed and approved by the City.
- f. **Stormwater Drainage Facility.** The Developer shall construct stormwater drainage facilities, which include catch basins and inlets, storm sewers, road ditches and open channels, detention/retention basins, and lift stations as may be required for the subject phase of the Development. All such facilities are to be of adequate size and grade to hydraulically accommodate maximum potential volumes of flow. The type of facility required, the design criteria, and the sizes and grades are to be approved by the City Engineer. The storm drainage facilities shall be designed to present no hazard to life or property. The size, type, and installation of all stormwater drains and sewers proposed to be constructed shall be in accordance with plans and standard specifications approved by the City Engineer. The Developer agrees that the City will not accept the stormwater drainage facility until the stormwater drainage facility has been installed in accordance with plans and specifications reviewed and approved by the City.
- g. **Public Water Supply Facility.** The Developer shall construct water mains in such a manner as to make adequate water service available to each lot within the subject phase of the Development. The size, type, and installation of all public

water mains proposed to be constructed shall be in accordance with plans and standard specifications approved by the City Engineer. One (1) one inch (1") copper water service shall be installed for each lot to the street line. The Development, however, shall require the construction of a water tower on a portion of the Property to assist in providing the public water supply service. See subsection 3.04.h., following. Any oversizing costs for installation of facilities greater than that required to service the Development shall be borne by the City to the extent that the same is an incremental cost, which such cost shall also include the cost of the construction and installation of such oversized facilities. The City shall pay the cost of such oversizing within a reasonable time from its receipt of an invoice for the cost of the construction and installation of such oversized facilities, not exceeding ninety (90) days. The Developer agrees that the City will not accept the public water supply facility until the public water supply facility for each phase has been installed in accordance with plans and specifications reviewed and approved by the City.

- h. **Water Tower and Related Facilities.** A water tower and booster station will be required to serve the Development (except the initial phase thereof), as well as other lands adjacent to the Development. The Utility Commission shall construct and install a water tower and booster station, and related facilities (collectively, Water Tower Facilities), in such size, type, and manner as provided for in the plans and specifications reviewed and approved by the City Engineer. It is estimated that the size of the Water Tower Facilities will require two hundred thousand (200,000) gallons of storage, at an estimated construction cost, including engineering and other soft costs, of Seven Hundred Sixty Thousand Dollars (\$760,000.00) (Estimated Cost). Five Hundred Thousand Dollars (\$500,000.00) of the Estimated Cost shall be financed by the Developer, pursuant to a certain Reimbursement Agreement of even date among the City, the Utility Commission, and the Developer (Reimbursement Agreement). The City shall be responsible for the Two Hundred Sixty Thousand Dollars (\$260,000.00) balance of the Estimated Cost, pursuant to the Reimbursement Agreement. To the extent that the storage capacity of the Water Tower Facilities exceeds two hundred thousand (200,000) gallons, the City and the Utility Commission shall bear the additional expense of such excess capacity.

i. **Other Utilities.**

1. The Developer shall cause electrical power, gas, telephone facilities, and cable television service to be installed in such a manner as to make adequate service available to each lot in the Development. All electrical power, gas, telephone facilities, and cable television service shall be located, where practicable, in underground conduits.
2. Plans indicating proposed locations of all electrical power, gas, and telephone distribution and transmission lines required to service the subject phase of the Development shall be reviewed and approved by the City Engineer.

j. Street lights and signs for the subject phase of the Development shall be installed at the Developer's cost and shall conform to City standards. Installation shall be approved by the City Engineer and Utilities Director. Following installation and approval, said lights and signs shall be deemed the property of the City, and the City shall maintain same. Such Improvements shall be located within the right-of-way to be dedicated to the City.

k. **Landscaping.** The Developer hereby agrees:

1. To preserve, to the maximum extent possible, existing trees, shrubbery, vines, and grasses not actually lying in public roadways drainageways, building foundation sites, private driveways, paths, and trails by use of sound conservation practices.
2. To remove and lawfully dispose of all destroyed trees, brush, stumps, shrubs, and other natural growth and all rubbish. The Developer shall not bury any of the above in any portion of the Property.

l. **Conservation Area/Park Area.** The Development has within its boundaries areas designated as primary environmental corridors (collectively, Conservation Area). The Conservation Area shall be conveyed to the City or a qualified trustee, so as to qualify for beneficial tax treatment of a conservation easement, whichever the City and the

Developer may mutually agree. In accordance with the provisions of Code § 66.97, the Conservation Area shall be dedicated as a park and recreation area for use by the general public, and to qualify the land to the public for public park and open space. This park and open space requirement exceeds the requirement of Code § 66.97, of five percent (5%) of the gross land within the Development for dedication of a park and open space requirement, and as such shall be in lieu of any and all park fees as required by Code § 66.97(2). Included in such Conservation Area, the Developer shall construct, at its own expense, a tot lot, the type, location, and size of which shall be approved by the City.

SECTION 4 DEDICATION

4.01 Subject to all of the other provisions of this Agreement, the Developer shall, without charge to the City, upon completion of all of the above-described Improvements for the subject phase of the Development, unconditionally give, grant, convey, and fully dedicate same to the City, its successors and assigns, forever, free and clear of all encumbrances, together with, including, without limitation, all buildings, structures, mains, conduits, pipes, lines, and appurtenances which may in any way be a part of or pertain to such Improvements, and together with all necessary easements for access and maintenance thereto. Subject to all of the other provisions of this Agreement, the Developer shall, without charge to the Utility Commission, unconditionally give, grant, convey, and fully dedicate to the Utility Commission, its successors and assigns, forever, free and clear of all encumbrances, the real property on which the Water Tower Facilities are to be constructed, together with all the necessary easements for access and maintenance thereto. After such dedication, the City and the Utility Commission shall have the right to connect or integrate other sewer or water facilities with those facilities provided hereunder as the City and the Utility Commission decide, with no consent required of the Developer; provided, however, that such connection or integration shall not in any way affect the construction of the Improvements of any subsequent phase of the Development.

SECTION 5 PLANS AND SPECIFICATIONS

5.01 The engineering plans and specifications for the subject phase of the Development shall be approved by the City Engineer. The City Engineer shall be responsible for the planning and design of the water and sanitary sewer facilities within the Development. The Developer shall be responsible for reimbursement to the City for the cost thereof, which such payment shall be made within thirty (30) days of the Developer's receipt

of an invoice for the payment thereof. Prior to undertaking such services by the City Engineer, the City shall provide the Developer with an estimated cost of such services by the City Engineer for the planning and designing of the water and sanitary sewer facilities.

5.02 The Developer shall keep itself supplied with the latest issues of all plans and specifications for the subject phase of the Development, and shall keep one (1) copy thereof at the site of the work, in good order and available to the City Engineer, or his inspectors, representatives, or agents.

5.03 At least two (2) complete copies of the plans and specifications for the subject phase of the Development shall be filed with the City Clerk, together with two (2) sets of plans and specifications, one (1) set each in Mylar and digital format, of the plans to the City Engineer, and all such plans shall remain the property of the City.

5.04 The City Engineer shall promptly furnish the Developer with such additional instructions, by means of drawings, plans, or otherwise, as is required to proceed with the work on the subject phase of the Development. All such drawings and additional instructions shall be consistent with this Agreement and reasonably inferable therefrom.

5.05 All work shall be executed in conformity with such plans and specifications, including additional instructions. The Developer shall cause no work to be performed without proper drawings, plans, and specifications.

5.06 If any additional plans or specifications are prepared by the Developer, the cost of same shall be paid for by the Developer. If any additional plans or specifications are prepared by the City Engineer, the Developer shall pay to the City all costs incurred by the City for the preparation of said plans and specifications, which costs shall include engineering, legal, administrative, and all other miscellaneous costs. The Developer shall pay to the City all costs incurred by the City Engineer when he reviews the plans and specifications that are prepared by, or at the direction of, the Developer for the subject phase of the Development.

5.07 The Developer shall file with the City Engineer a complete set of "AS BUILT DRAWINGS," one (1) set each in Mylar and digital format, for all of the work performed under this Agreement upon the completion of the subject phase of the Development.

SECTION 6 CONSTRUCTION AND INSPECTION

6.01 **Commencement.** No construction, installation, or Improvements shall commence for the subject phase of the Development until the Developer has made

arrangements for inspection and construction staking, and the City Engineer has given written authorization.

6.02 **Inspection.** The Developer, prior to any work within the subject phase of the Development, shall make arrangements with the City Engineer to provide for adequate inspection during construction. The City Engineer, and/or his inspector, shall inspect and approve all work to assure that the approved plans and specifications comply with the Code and any other applicable governmental authority. The City Engineer shall approve all work prior to release of the sureties.

6.03 The City Engineer, his inspectors, representatives, or agents, shall, at all times, have unrestricted access to all parts of the work and to other places where or in which the preparation of materials and other integral parts of the work are being carried on and conducted.

6.04 The Developer shall provide all facilities and assistance requested or required to carry out the work of supervision and inspection by the City Engineer, his inspectors, representatives, or agents, for the subject phase of the Development.

6.05 Inspection of the work by these authorities or their representatives shall in no manner be presumed to relieve, in any degree, the responsibility or obligations of the Developer or to constitute the Developer as an agent of the City.

6.06 No material of any kind shall be used in the work for the subject phase of the Development until it has been inspected and accepted by the City Engineer, or his inspector. All rejected materials shall be immediately removed from the Property. Any materials or workmanship found at any time to be defective shall be replaced or remedied at once, regardless of previous inspection. Inspection of materials shall be promptly made and, where practicable, at the source of supply.

6.07 Whenever the specifications, the instructions of the City Engineer, the Code, or the laws, ordinances, or regulations of any public authority require work to be specifically treated or approved, the Developer's contractor shall give the City Engineer timely notice of its readiness for inspection, and if the inspection is by another authority, of the date fixed for such inspection.

6.08 The Developer and every contractor or person doing or contracting to do any work contemplated by this Agreement shall keep itself fully informed of all national and state laws and the Code in any manner affecting the work for the subject phase of the Development, and shall at all times observe and comply with such national and state laws and the Code regardless of whether such national and state laws and the Code are mentioned herein, and shall indemnify the City, its officers, agents, and employees, against any claim or liability arising from or based on the violation of any national and state laws and the Code.

6.09 The Developer shall secure, at its own expense, all necessary certificates and permits from municipal or other public authorities required in connection with the work for the subject phase of the Development, and shall give all notices required by law, ordinance, or regulation and the Code. The Developer shall pay all fees and charges incident to be due for the lawful prosecution of the work contemplated by this Agreement and any extra work performed by the Developer.

6.10 The Developer shall pay to the City for all engineering supervision of construction, construction staking, and all inspection costs by the City Engineer, or his inspector, for the subject phase of the Development.

SECTION 7 PROTECTION OF WORK, PROPERTY, AND PERSONS

7.01 The Developer shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work on the subject phase of the Development. The Developer will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury, or loss to, all employees on the work and other persons who may be affected thereby, all the work and all materials or equipment to be incorporated therein, whether in storage on or off the Property, and other property at the Property, or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction on the subject phase of the Development.

7.02 The Developer shall provide all necessary privy accommodations for the use of its contractors, and shall maintain the same in a clean and sanitary condition. The Developer shall not create or permit any nuisance to the public or to residents in the vicinity of the work on the subject phase of the Development.

7.03 The Developer will comply with all applicable safety laws, ordinances, rules, regulations, orders of any public body having jurisdiction, and the Code. The Developer will erect and maintain, as required by the conditions and progress of the work on the subject phase of the Development, all necessary safeguards for safety and protection. The Developer will notify owners of adjacent properties when prosecution of the work may affect them. The Developer will remedy all damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by the Developer's contractors or any subcontractors, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them be liable.

7.04 In emergencies affecting the safety of persons or the work or property at the Property, or adjacent thereto, the Developer shall immediately act to prevent threatened damage, injury, or loss.

SECTION 8 TIME FOR COMPLETION OF WORK; PERFORMANCE BOND

8.01 It is anticipated that commencement of construction of the water and sewer for the initial phase of the Development will occur no later than May 2004, and of the roadway, no later than May 2005. The term of this Agreement shall expire on the tenth (10th) anniversary date of such commencement of construction; provided, however, that the Developer may seek extension as reasonably necessary to complete the Development.

The City acknowledges and agrees that during the construction of each phase, the Developer will not have to lay the final layer of asphaltic pavement to avoid damage and account for settling; provided, however, that said final layer shall be constructed within twenty-four (24) months of the time the Developer commences the construction of the segment of road within the subject phase. Prior to the installation of the final layer of asphalt pavement, the Developer shall repair all damaged road base and replace binder course as required by the City Engineer. As the road construction continues, each segment shall be dedicated to the City by the Developer upon its acceptance pursuant to this Agreement.

No building permit will be issued to any lot within the subject phase of the Development until installation of sanitary sewer, water, electrical power, gas, telephone facilities, cable television service, and a Binder Course of asphalt base on the roadway adjacent to the parcel has been completed. However, the Developer intends to construct not more than three (3) single-family model homes and one (1) duplex model home within the Development. The City agrees to issue building permits to the Developer for such model homes upon approval of the engineering drawings, acceptance by the City of a letter of credit, and upon the Developer filing appropriate applications therefor, although the roadway and other Improvements located therein have not been constructed or installed. Occupancy, however, will not be granted to the Developer for such model homes prior to compliance with all the terms listed in subsection 3.04.b.4. hereof.

8.02 An irrevocable letter of credit will be filed with the City prior to construction of the subject phase of the Development. The procedure for the filing of the letter of credit shall be as follows: A letter of credit up to the amount equal to one hundred twenty percent (120%) of the public Improvements for the subject phase of the Development shall be issued by a financial institution acceptable to the City. Said letter of credit may be reduced from time to time by the value of Improvements for the subject phase of the Development previously completed and fully paid. The security will be reduced proportionately as each aspect of the construction for the subject phase of the Development has been completed and paid for. Should additional Improvements for the subject phase of the Development be added or the cost of the intended Improvements for the subject phase of the Development prove to be larger than originally anticipated, the surety on the letter of credit shall be immediately supplemented to include any additional amounts or other estimated costs with respect to said Improvements.

8.03 No act of the City, of the City Engineer, or of any representative of either, in inspecting the work on the subject phase of the Development, or any extension of time for the completion of the work, shall be regarded as an acceptance of such work or any part thereof, or of materials used therein, either wholly or in part. Acceptance shall be evidenced only by the final certificate of the City Engineer. No waiver of any breach of this Agreement by the City of anyone acting on its behalf shall be held as a waiver of any other subsequent breach thereof. Any remedy provided herein shall be taken and construed as cumulative.

8.04 In the event the Developer fails to complete the work within the specified time for the subject phase of the Development, commits a breach of any of the other covenants hereunder, or if the Developer becomes insolvent, or is declared bankrupt, or commits any act of bankruptcy or insolvency, or makes an assignment for the benefit of creditors, or from any other cause whatsoever, does not carry on the work in an acceptable manner, the City shall give notice in writing to the Developer and his surety of such delay, neglect, or default, specifying the same, and if the Developer, within a period of ten (10) days after such notice, does not proceed in accordance therewith, then the City shall, upon written certificate from the City Engineer of the fact of such delay, neglect, or default, and the Developer's failure to comply with such notice, have full power and authority to call upon the surety or complete the work in accordance with the terms of this Agreement; or the City may take over the work for the subject phase of the Development, including any or all materials and equipment on the ground as may be suitable and acceptable, and may complete the work for the subject phase of the Development by or on its own account, or may enter into a new agreement with another party for the completion of the subject phase of the Development, according to the terms and provisions hereof, or use such other methods as, in its opinion, shall be required for such completion of in an acceptable manner. All costs and charges incurred by the City, together with the cost of completing the work for the subject phase of the Development under this Agreement, shall be charged to the Developer, and the Developer and its surety shall be liable therefor.

SECTION 9 RISK OF LOSS

9.01 The risk of loss or damage of any kind whatsoever to materials stored on the Property which are to be incorporated into any phase of the Development, and the risk of damage or destruction to the Development or any part thereof, at any time prior to the completion and acceptance of the work to be performed under this Agreement, is assumed by the Developer.

SECTION 10 DEVELOPER'S INSURANCE

10.01 The Developer shall not commence, or cause to be commenced, work on the subject phase of the Development under this Agreement until it has obtained all insurance required under this subsection, and such insurance has been approved by the City; nor shall the Developer allow any contractor or subcontractor to commence work on the subject phase of the Development under this Agreement until all such insurance required of the Developer has been so obtained and approved.

- a. **Compensation Insurance.** The Developer shall take out and maintain during the life of this Agreement, Workmen Compensation Insurance for all of its employees employed at the Property, and in case any work is sublet, the Developer shall require all contractors and subcontractors to similarly provide Workmen Compensation Insurance for all of their employees, unless such employees are covered by the protection afforded by the Developer. In case any class of employees at the Property for the subject phase of the Development are engaged in hazardous work under this Agreement, but are not protected under the Workmen Compensation Statute, the Developer shall provide, and shall cause such contractor and subcontractor to provide, Employer's Liability Insurance for the protection of any employees not otherwise protected.
- b. **Public Liability and Property Damage Insurance.** The Developer shall take out and maintain during the life of this Agreement such public liability and property damage insurance as shall protect the Developer and any contractor or subcontractor performing work covered by this Agreement from claims for damages for personal injury, including accidental death, as well as from claims for property damages, which may arise from operations under this Agreement, whether such operations be by itself or by any contractor or subcontractor, or by anyone directly or indirectly employed by any of them, and the amount of such insurance shall be as follows: Public liability insurance in an amount not less than One Million Dollars (\$1,000,000.00) for injuries, including accidental death, to any one (1) person, and subject to the same limit for each person in an amount not less than Two Million Dollars (\$2,000,000.00) on account of one (1) accident, and property damage insurance in an amount of not less than Five Hundred Thousand Dollars (\$500,000.00).

10.02 The Developer shall require each and every contractor and subcontractor to obtain and maintain similar policies with the same limits stipulated above,

including contractor's contingent or protective insurance, if necessary to protect the Developer from damage claims arising from operations under this Agreement.

10.03 **Insurance Covering Special Hazards.** The following special hazards shall be covered by rider or riders to the public liability and/or property damage insurance policy or policies herein before required to be furnished by the Developer, or by separate policies of insurance, in amounts not less than Three Hundred Thousand Dollars (\$300,000.00) to cover injury to underground structures such as wires, conduits, pipes and sewers, and explosions of any kind, including blasting, and public liability insurance of Two Hundred Fifty Thousand Dollars (\$250,000.00)/Five Hundred Thousand Dollars (\$500,000.00), with property damage not less than One Hundred Thousand Dollars (\$100,000.00) for each and every truck or other motor vehicle used in hauling materials to or from the Property.

10.04 **Proof of Carriage of Insurance.** Prior to commencement of work hereunder, the Developer shall furnish to, and obtain approval from the City Administrator, of certificates of insurance relating to all coverages required hereby and herein.

10.05 **Cancellation of Insurance.** Each policy shall provide that it is noncancellable for a period of thirty (30) days following written notice of intention to cancel given by the insurance carrier via certified mail.

10.06 **Endorsements.** The Developer will secure a contractual endorsement covering the hold harmless and indemnity agreements contained in Section 11 hereof.

SECTION 11 HOLD HARMLESS AND INDEMNITY AGREEMENT

11.01 The Developer agrees to indemnify and hold harmless the City, its agents and employees, from any and all claims of all persons, entities, or the like for damages of any kind relating to injury, death, or property damage arising directly or indirectly out of the work performed or to be performed under this Agreement, including extra work, by reason of negligent or wrongful conduct in whole or in part on the part of:

- a. The Developer, or any of its servants, employees, personnel, agents, representatives, contractors, or subcontractors, or the agents of said respective parties, or persons performing any work under this Agreement or in connection with any work performed under this Agreement.
- b. The City, or any of its officers, supervisors, officials, agents, servants, employees or personnel, or independent contractors (collectively, Agents) for which the City is responsible for

any liability, except this provision shall not apply to negligent acts or omissions or wrongful conduct by the City or its Agents with respect to the design or inspection of the work performed by the City or any of its Agents, as provided in this Agreement.

- c. The Developer hereby warrants that all Improvements required herein will utilize good quality materials and workmanship. The Developer further agrees to warrant all Improvements for a period of one (1) year from the date of completion against any and all defects in material or workmanship.

11.02 The Developer agrees to assume the defense of any action filed to which this hold harmless agreement applies, and to pay all costs and attorney fees incurred in connection therewith, and to pay any final judgments entered in an action to which this hold harmless agreement and indemnification agreement applies.

11.03 This indemnity and hold harmless agreement shall be applicable regardless of any provision of immunity provided for by law.

11.04 The Developer further agrees that prior to commencement of work under this Agreement, it will deposit with the City Administrator certificates of insurance relating to the foregoing, together with a contractual indemnity endorsement relating to this hold harmless agreement.

SECTION 12 MISCELLANEOUS

12.01 There are no representations, covenants, warranties, promises, agreements, conditions, or undertakings, oral or written, between the City and the Developer, other than as set forth herein and in the Reimbursement Agreement, which is to be read and interpreted in conjunction with this Agreement as to the subject matter hereof. Except as otherwise expressly provided herein, no subsequent alteration, amendment, change, or addition to this Agreement shall be binding upon either party unless made in writing by the City Council and the Developer, and signed by them.

12.02 The City shall cooperate with the Developer in the Developer's endeavors to obtain required permits and approvals from all other governmental or quasi-governmental agencies or boards, whether federal, state, or local, with jurisdiction over any aspect or part of the Development, which support and assistance shall also extend to any public and private utility companies. The City shall also cooperate with the Developer in obtaining all necessary easements and shall grant the Developer access to all City owned

rights-of-way to enable the Developer's provision of sanitary sewer, water service, and electrical service to the Property, in accordance with the Developer's plans and specifications reviewed and approved by the City Engineer.

12.03 If allowed by law, the Development shall be assessed as improved property in only those phases that have been actually improved and developed by the Developer. The remainder of the property not so improved or developed shall be assessed as agricultural land. If the provisions of this subsection should conflict with any future change in present state law relating to appropriate methods of assessment, then the provisions of said changed state law shall prevail.

12.04 It is understood that the Developer, and the Developer's successors and assigns, shall be required to pay sanitary and water hook-up fees/impact fees, in accordance with the City Code, at such time as each future building connection is made. Hook-up fees/impact fees for building connections within the City shall be in accordance with the schedules used throughout the City.

12.05 In the event that any provision of this Agreement conflicts with applicable state or federal law, such conflict shall not affect the other provisions of this Agreement which can be given effect without the conflicting provision, and, to this end, the provisions of this Agreement are declared to be severable and the invalidity or partial invalidity or unenforceability of any one (1) provision or portion hereof shall not affect the validity or enforceability of the remaining portions of said provision or any other provisions of this Agreement.

12.06 The City does not, in any way or for any purpose, become a partner, employer, principal, agent, or joint venturer of or with the Developer.

12.07 This Agreement shall be construed without reference to titles of any sections or subsections hereof, which are inserted only for convenience.

12.08 This Agreement, and all of the terms, covenants, and conditions hereof and of the various instruments executed and delivered pursuant hereto, shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. The Developer shall be permitted to assign any and all of its rights hereunder; provided, however, the City shall be notified, in writing, of any such assignment within thirty (30) days before the effective date of such assignment, and such written notice shall include the name, address, and telephone number of the assignee; and, provided further, that such assignment shall not be effective unless and until the assignee satisfies the City that it may succeed to the letter of credit as provided under this Agreement, in such manner and form acceptable to the City Attorney, or assignee provides a new letter of credit acceptable to the City.

12.09 This Agreement shall be construed under the laws of the State of Wisconsin.

12.10 This Agreement, and all other documents or instruments that may be required by this Agreement, may be executed in several counterparts, each of which shall be deemed an original, but all of which shall constitute one (1) and the same instrument. In addition, this Agreement may contain more than one (1) counterpart of the signature page, and this Agreement may be executed by the affixing of the signatures of each of the signers to one (1) of such counterpart signature pages; all of such counterpart signature pages shall be read as though one (1), and shall have the same force and effect as though all of the signers had signed a single signature page.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first written above.

CITY:

CITY OF LAKE GENEVA, a Wisconsin municipal corporation



By: Charles C. Rude
Charles Rude, Mayor

Attest: Diana A. Dykstra
Diana A. Dykstra, City Clerk

APPROVAL OF COMMON COUNCIL

This Agreement was approved by the Common Council of the City of Lake Geneva by Resolution dated the 25 day of August, 2003.

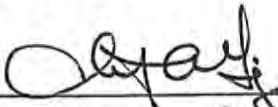
LAKE GENEVA UTILITY COMMISSION

By: Birdell Brellenthin
Birdell Brellenthin
Its: President

Attest: _____

Its: _____

BANK ONE TRUST COMPANY, N.A., as Successor
Trustee of the Olivia M. Miller Revocable Trust dated
February 16, 1985

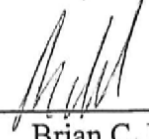
By: 
 CHRISTOPHER A. GEIGER
Its: TRUSTEE

Attest: _____

Its: _____

DEVELOPER:

FAIRWYN, LTD., a Wisconsin corporation

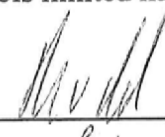
By: 

Brian C. Pollard

Its: President

The undersigned, FAIRWYN INVESTMENT COMPANY, LLC, as the purchaser of the property described in the above Preannexation and Development Agreement (Agreement), signs this Agreement for the sole purpose of indicating its consent to the Agreement, the provisions thereof, and the entry into the Agreement by the parties thereto.

FAIRWYN INVESTMENT COMPANY, LLC, an Illinois limited liability company

By: 

Brian C. Pollard

Its: Manager

Exhibit 1	Legal Description of the Property
Exhibit 2	Scale Map of the Property
Exhibit 3	Petition for Direct Annexation
Exhibit A	Legal Description of the Subject Territory
Exhibit B	Scale Map
Exhibit C-1	Two-Family Residential-6 (TR-6) Zoning District
Exhibit C-2	SR-4 Single-Family Residential-4 Zoning District
Exhibit C-3	CR-5ac Countryside Residential Zoning District
Exhibit D	An Ordinance Providing for Direct Annexation by Unanimous Consent of Electors and Property Owners of Territory Located in the Town of Geneva, Walworth County, Wisconsin, to the City of Lake Geneva, Walworth County, Wisconsin [to be adopted by the City prior to any action taken by the City]
Exhibit 4	Conceptual Neighborhood Plan
Exhibit 5	Traffic Study Summary

EXHIBIT 1

LEGAL DESCRIPTION OF THE PROPERTY

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET AND THE POINT OF BEGINNING; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 762.23 FEET TO THE NORTHEAST CORNER OF SAID STREET AND THE NORTHEAST CORNER OF ROSEBUD SUBDIVISION; THENCE ALONG THE NORTHERLY LINE OF SAID SUBDIVISION, S 89DEG 31MIN 19SEC W, 375.51 FEET TO THE NORTHWEST CORNER OF LOT 1 OF BLOCK 2 OF SAID ROSEBUD SUBDIVISION; THENCE CONTINUE ALONG THE NORTHERLY LINE OF SAID SUBDIVISION, N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET; THENCE S 89DEG 42MIN 34SEC W, 954.90 FEET; THENCE N 00DEG 17MIN 26SEC W, 200.00 FEET; THENCE N 89DEG 32MIN 26SEC E, 32.00 FEET; THENCE N 00DEG 24MIN 30SEC W, 1226.19 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12 ; THENCE ALONG SAID HIGHWAY, S 89DEG 58MIN 07SEC E, 1049.67 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 1564.35 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 58DEG 17MIN 40SEC E, 1029.19 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 38DEG 01MIN 32SEC E, 310.36 FEET; THENCE S 89DEG 21MIN 10SEC W, 516.56 FEET; THENCE S 00DEG 21MIN 50SEC E, 1468.97 FEET; THENCE S 89DEG 33MIN 32SEC W, 468.25 FEET; THENCE S 00DEG 18MIN 52SEC E, 567.00 FEET; THENCE S 56DEG 26MIN 42SEC W, 78.48 FEET; THENCE N 00DEG 54MIN 13SEC W, 115.28 FEET; THENCE N 00DEG 28MIN 10SEC W, 280.26 FEET; THENCE S 88DEG 34MIN 50SEC W, 238.41 FEET; THENCE N 00DEG 28MIN 06SEC W, 518.61 FEET; THENCE S 88DEG 19MIN 11SEC W, 100.05 FEET; THENCE S 00DEG 28MIN 06SEC E, 582.61 FEET; THENCE S 89DEG 37MIN 19SEC W, 891.76 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT 2

SCALE MAP OF THE PROPERTY

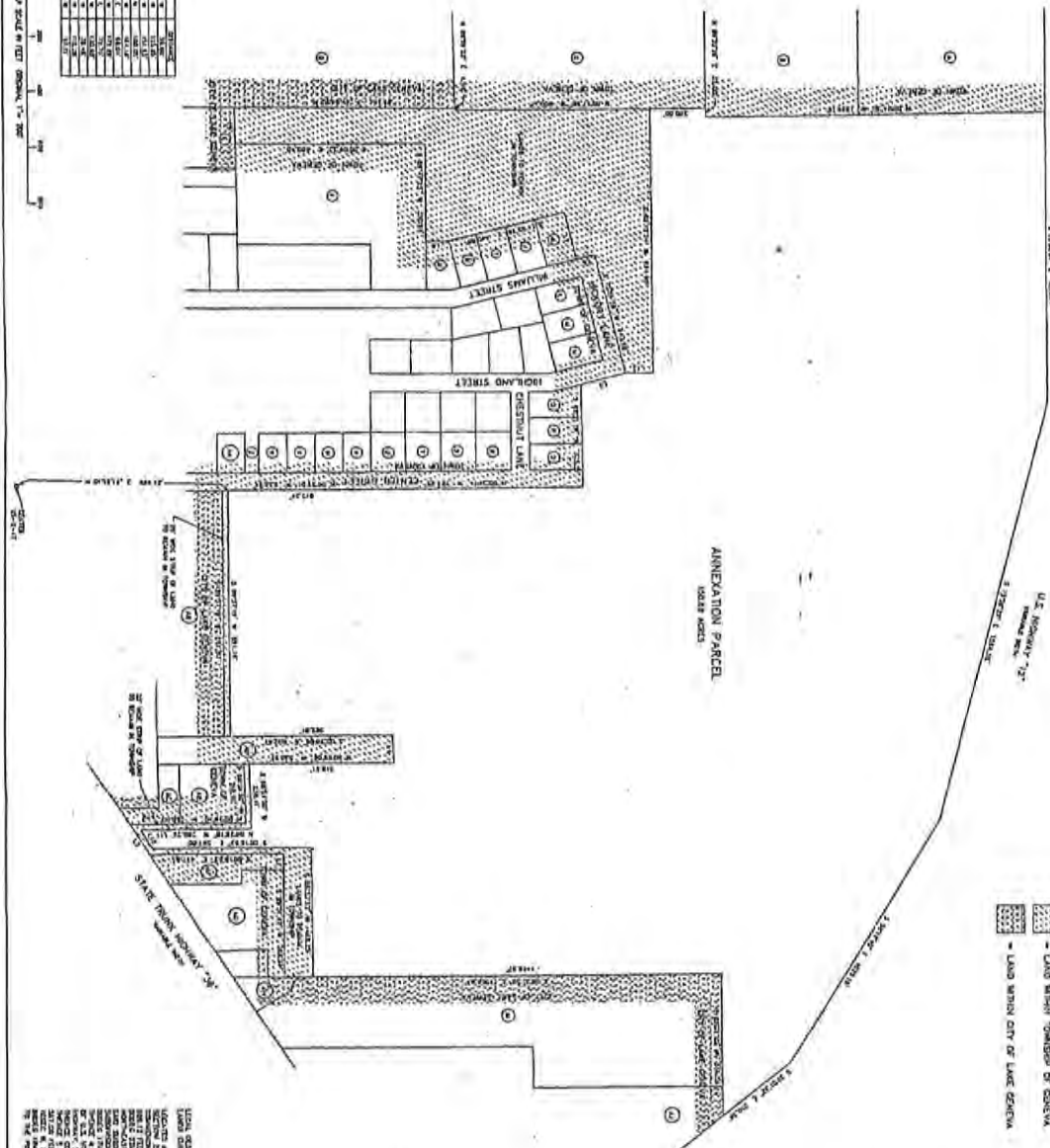
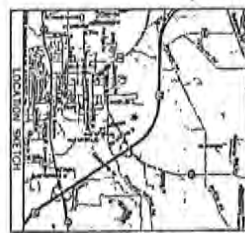
LANDS LOCATED IN PART OF THE SW 1/4 & SE 1/4 OF SECTION 24 AND 8
T42S R12E NE 1/4 & NE 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH,
RANGE 17 EAST, WILMOTHA COUNTY, WISCONSIN

1. 1972-1973

MAKING LEADS FOR LAND
ABUTTING AVERA PARK

LAND WITHIN CITY OF LAKE GENewa

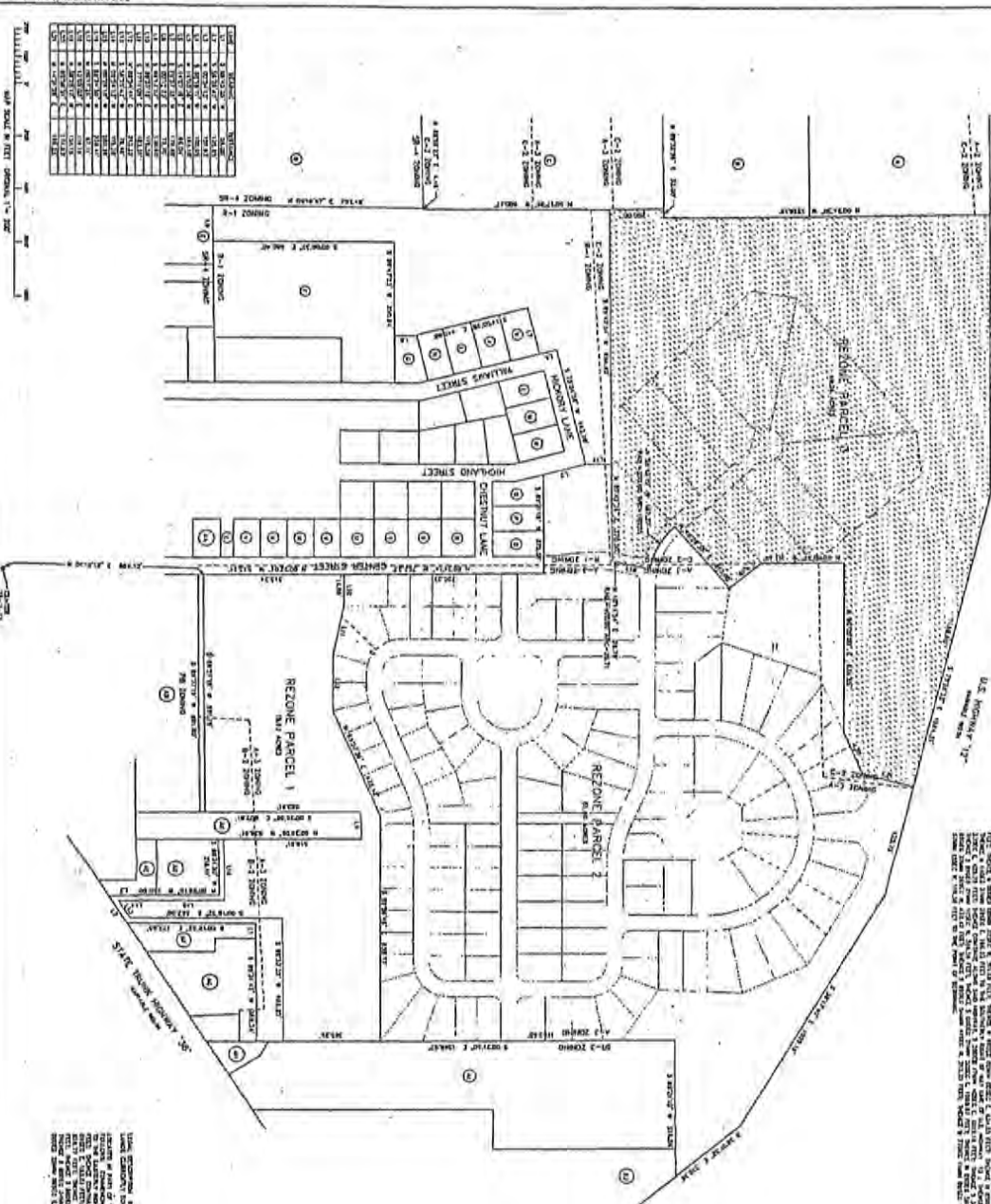
LAND WITHIN TOWNSHIP OF GENewa



- [illegible]

[illegible]

LANDS LOCATED IN PART OF THE SW 1/4 & SE 1/4 OF SECTION 24 AND IN PART OF THE NW 1/4 & NE 1/4 OF SECTION 25, ALL IN TOWNSHIP 2 NORTH, RANGE 12 EAST, WASHINGTON COUNTY, WISCONSIN

[illegible]

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100

[illegible]

INDEX & COMMENTS OF RELEVANT LARGES (continued)

- [illegible]

EXHIBIT 3

PETITION FOR DIRECT ANNEXATION

**PETITION FOR DIRECT ANNEXATION BY UNANIMOUS
CONSENT OF ELECTORS AND PROPERTY OWNERS OF
TERRITORY LOCATED IN THE TOWN OF GENEVA,
WALWORTH COUNTY, WISCONSIN, TO THE CITY OF LAKE
GENEVA, WALWORTH COUNTY, WISCONSIN,
PURSUANT TO WIS. STAT. § 66.0217(2)**

TO: Common Council of the City of Lake Geneva,
Walworth County, Wisconsin
c/o Diana A. Dykstra, City Clerk
Lake Geneva City Hall
626 Geneva Street
Lake Geneva, WI 53147

Town Board of the Town of Geneva,
Walworth County, Wisconsin
c/o Debra Kirch, Town Clerk
Geneva Town Hall
N3496 Como Road
Lake Geneva, WI 53147

George Hall
Municipal Boundary Review
State of Wisconsin Department of Administration
P.O. Box 1645
Madison, WI 53701-1645

THIS PETITION of Bank One Trust Company, N.A., as Trustee of the Olivia M. Miller Trust (Petitioner), as the owner of record of all of the real property in the territory sought to be annexed, such territory being more particularly described below, does respectfully state, represent, and show to the Common Council as follows:

1. Petitioner, whose address is Bank One Trust Company, N.A., 111 East Wisconsin Avenue, Milwaukee, Wisconsin 53202, Attention: Christopher A. Geiger, is the sole owner of record of the real property in the territory sought to be annexed, such property being located in Sections 24 and 25, Town of Geneva, Walworth County, Wisconsin, and more particularly described in the attached Exhibit A incorporated herein (Subject Territory).

2. Petitioner respectfully requests all of the Subject Territory be annexed to the City of Lake Geneva, Walworth County, Wisconsin.

3. Attached hereto as Exhibit B and incorporated herein by reference is a scale map of the Subject Territory, in accordance with the provisions of Wis. Stat. §§ 66.0217(2) and 66.0217(5).

4. No electors reside in the Subject Territory sought to be annexed hereunder. The current population of the Subject Territory sought to be annexed hereunder is zero (0).

5. Petitioner will cause this Petition, the legal description, and the scale map of the Subject Territory to be annexed to be filed with the City Clerk of the City of Lake Geneva, Walworth County, Wisconsin, the Town Clerk of the Town of Geneva, Walworth County, Wisconsin, and the State of Wisconsin, Department of Administration, in accordance with the provisions of Wis. Stat. § 66.0217(2).

6. Petitioner requests the Subject Territory described herein be temporarily zoned as Two-Family Residential-6 (TR-6) Zoning District, in accordance with the attached Exhibit C-1 incorporated herein; SR-4 Single-Family Residential-4 Zoning District, in accordance with the attached Exhibit C-2 incorporated herein; and CR-5ac Countryside Residential Zoning District, in accordance with the attached Exhibit C-3 incorporated herein. Petitioner's request for the assignment of temporary zoning is made pursuant to Wis. Stat. § 66.0217(8).

7. Petitioner requests the City of Lake Geneva adopt an Annexation Ordinance, in substantial conformity with the attached Exhibit D, prior to any action by the City.

8. Petitioner believes this Petition and the Subject Territory sought to be annexed hereunder meet all legal requirements for annexation, and that such annexation is in the public interest.

Dated this ____ day of _____, 2003.

BANK ONE TRUST COMPANY, N.A., as Trustee of the
Olivia M. Miller Trust

By: _____
Christopher Geiger, Real Estate Manager

This instrument drafted by:
GODFREY, LEIBSLE, BLACKBOURN &
HOWARTH, S.C.
11 North Wisconsin Street
Post Office Box 260
Elkhorn, Wisconsin 53121
Telephone: (262) 723-3220
Facsimile: (262) 723-5091

EXHIBIT A

LEGAL DESCRIPTION OF SUBJECT TERRITORY

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET AND THE POINT OF BEGINNING; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 762.23 FEET TO THE NORTHEAST CORNER OF SAID STREET AND THE NORTHEAST CORNER OF ROSEBUD SUBDIVISION; THENCE ALONG THE NORTHERLY LINE OF SAID SUBDIVISION, S 89DEG 31MIN 19SEC W, 375.51 FEET TO THE NORTHWEST CORNER OF LOT 1 OF BLOCK 2 OF SAID ROSEBUD SUBDIVISION; THENCE CONTINUE ALONG THE NORTHERLY LINE OF SAID SUBDIVISION, N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET; THENCE S 89DEG 42MIN 34SEC W, 954.90 FEET; THENCE N 00DEG 17MIN 26SEC W, 200.00 FEET; THENCE N 89DEG 32MIN 26SEC E, 32.00 FEET; THENCE N 00DEG 24MIN 30SEC W, 1226.19 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12 ; THENCE ALONG SAID HIGHWAY, S 89DEG 58MIN 07SEC E, 1049.67 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 1564.35 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 58DEG 17MIN 40SEC E, 1029.19 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 38DEG 01MIN 32SEC E, 310.36 FEET; THENCE S 89DEG 21MIN 10SEC W, 516.56 FEET; THENCE S 00DEG 21MIN 50SEC E, 1468.97 FEET; THENCE S 89DEG 33MIN 32SEC W, 468.25 FEET; THENCE S 00DEG 18MIN 52SEC E, 567.00 FEET; THENCE S 56DEG 26MIN 42SEC W, 78.48 FEET; THENCE N 00DEG 54MIN 13SEC W, 115.28 FEET; THENCE N 00DEG 28MIN 10SEC W, 280.26 FEET; THENCE S 88DEG 34MIN 50SEC W, 238.41 FEET; THENCE N 00DEG 28MIN 06SEC W, 518.61 FEET; THENCE S 88DEG 19MIN 11SEC W, 100.05 FEET; THENCE S 00DEG 28MIN 06SEC E, 582.61 FEET; THENCE S 89DEG 37MIN 19SEC W, 891.76 FEET TO THE POINT OF BEGINNING. (End of legal description.)

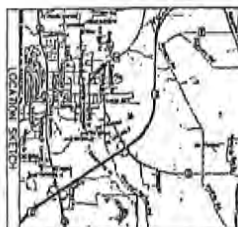
EXHIBIT B
SCALE MAP

LANDS LOCATED IN PART OF THE SW 1/4 & SE 1/4 OF SECTION 24 AND
PART OF THE NW 1/4 & NE 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH,
RANGE 77 EAST, BALWORTH COUNTY, MISSISSIPPI

U.S. HIGHWAY 12
MOUNTAIN VIEW
10000' E 10000'

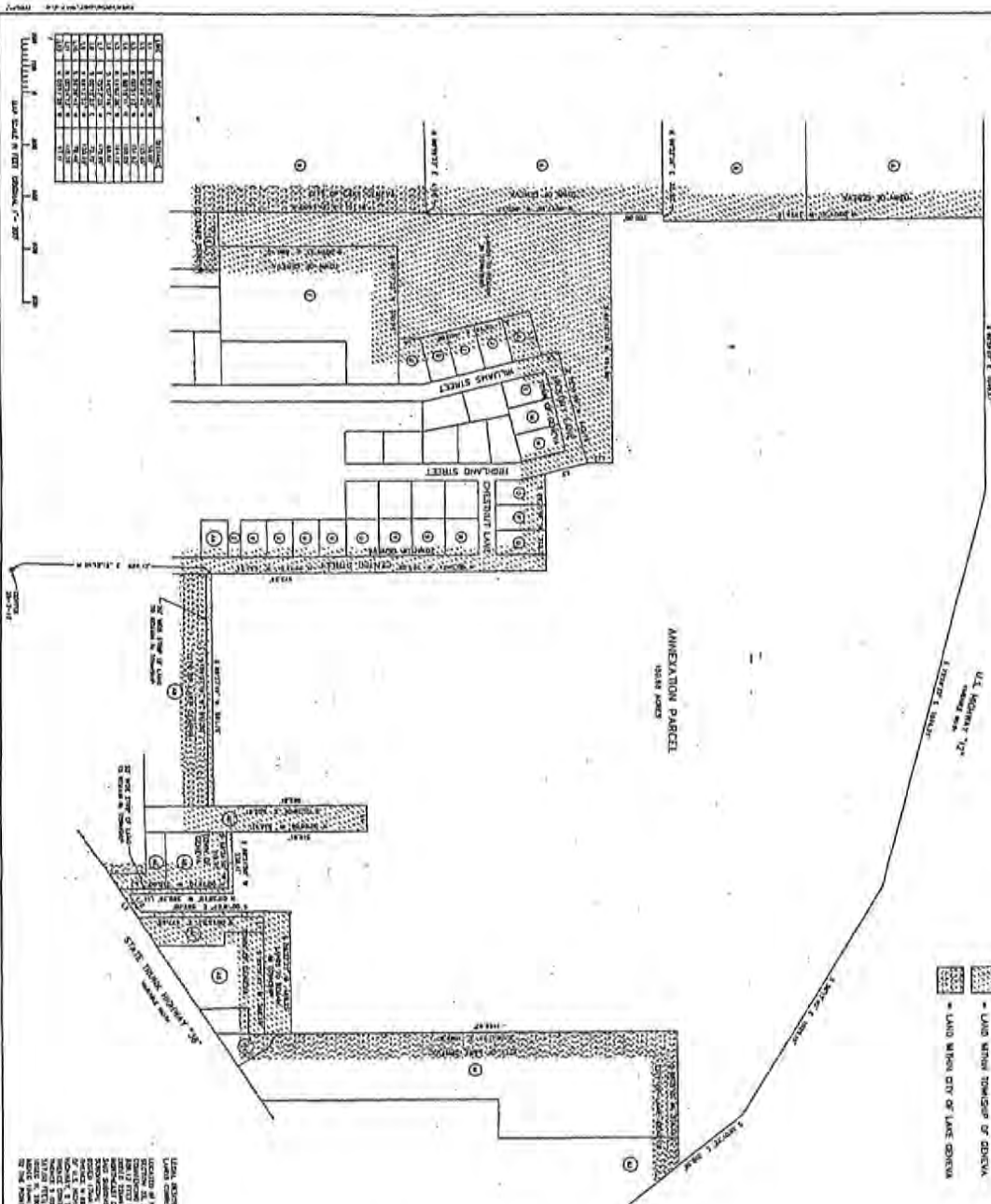
MATCHING LEGEND FOR LANDS
AFFECTING ANNEXATION PARCEL.

	- LAND WITHIN TOWNSHIP OF GENEVA
	- LAND WITHIN CITY OF LAKE GENEVA



TOWN OF STHEVA, WALNORTH COUNTY, WISCONSIN

ANNEXATION PARCEL



WALTER J. APOSTOLIS OF ABINGTON LAGO COMMUNITY

- [illegible]

USING BOLDNESS AND OTHER FACTORS TO MEASURE THE EFFECTS OF GROWTH ON THE COST OF CARE

[illegible]

FARRIS, HANSEN & ASSOCIATES, INC.
ENGINEERING - ARCHITECTURE - SURVEYING
3 RIDGWAY COURT P.O. BOX 137
EUXENHORN, WISCONSIN 53123
OFFICE: (262) 782-2000 FAX: (262) 782-8886

- WORK ORDERED BY -
BRIAN POLLARD
FABRYN, LTD.
851 PARK DRIVE, SLATE 104
LAKE COHEN, W. 02147

01/03/2001
105

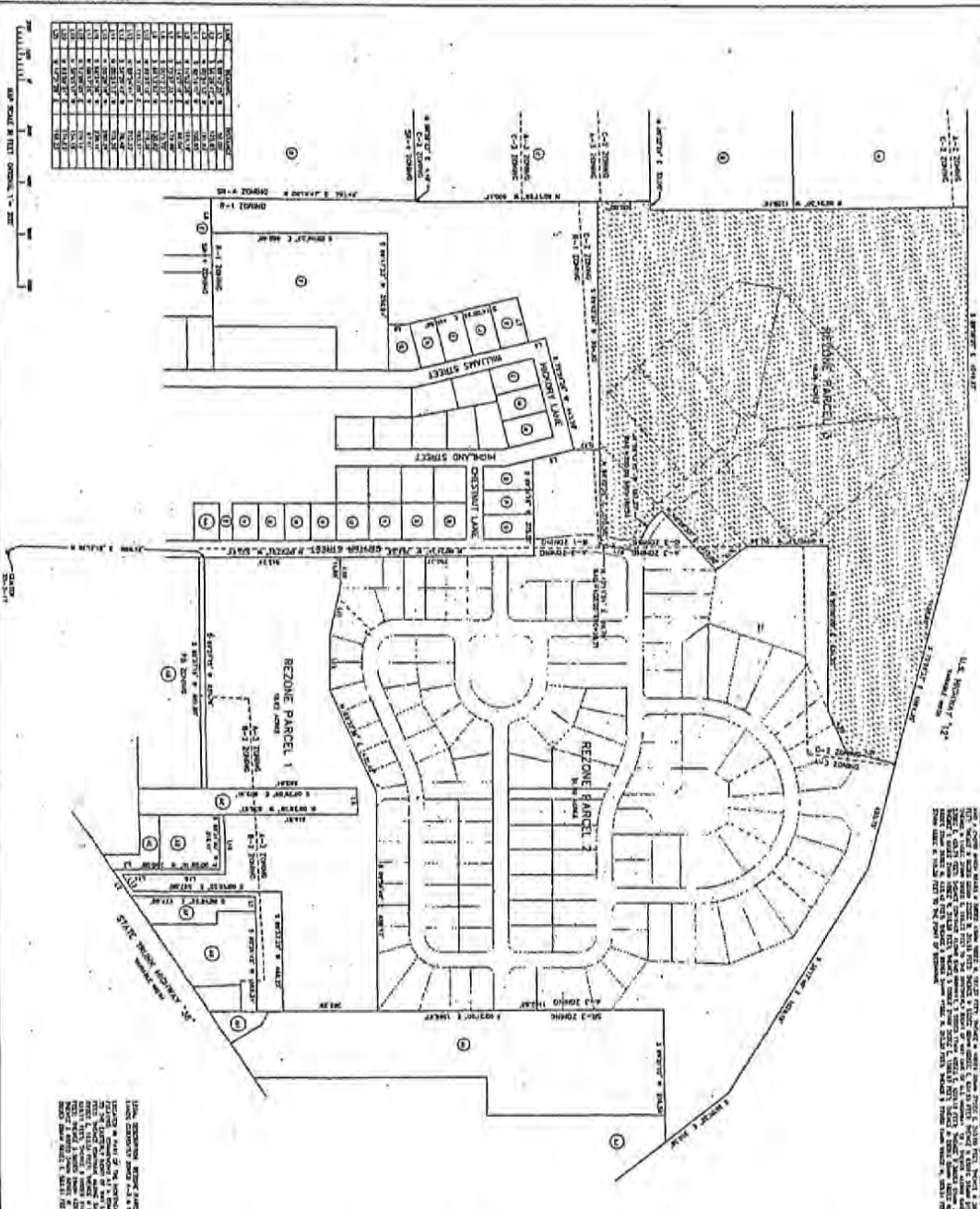
1000 11 11 11 11

REZONE SKETCH & LEGAL DESCRIPTIONS

LANDS LOCATED IN PART OF THE SW 1/4 & SE 1/4 OF SECTION 34 AND IN PART OF THE SW 1/4 & SE 1/4 OF SECTION 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN

THIS REZONE SKETCH AND LEGAL DESCRIPTIONS ARE HEREBY SUBMITTED TO THE BOARD OF SUPERVISORS OF WASHINGTON COUNTY, WISCONSIN, FOR THEIR REVIEW AND APPROVAL. THE LANDS DESCRIBED HEREIN ARE OWNED BY THE STATE OF WISCONSIN, DEPARTMENT OF NATURAL RESOURCES, AND ARE CURRENTLY ZONED AS STATE LANDS. THE LANDS DESCRIBED HEREIN ARE BEING REZONED TO A RESIDENTIAL ZONE. THE REZONE SKETCH AND LEGAL DESCRIPTIONS WERE PREPARED BY FARRIS, HANSEN & ASSOCIATES, INC., A PROFESSIONAL ENGINEERING AND ARCHITECTURAL FIRM, AND ARE BASED ON AERIAL PHOTOGRAPHS AND SURVEY DATA. THE REZONE SKETCH AND LEGAL DESCRIPTIONS ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE BOARD OF SUPERVISORS OF WASHINGTON COUNTY, WISCONSIN.

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- LEGAL DESCRIPTIONS OF REZONE PARCELS**
1. A certain parcel of land, situated in the SW 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
2. A certain parcel of land, situated in the SE 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
3. A certain parcel of land, situated in the SW 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
4. A certain parcel of land, situated in the SE 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
5. A certain parcel of land, situated in the SW 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
6. A certain parcel of land, situated in the SE 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
7. A certain parcel of land, situated in the SW 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
8. A certain parcel of land, situated in the SE 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
9. A certain parcel of land, situated in the SW 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
10. A certain parcel of land, situated in the SE 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
11. A certain parcel of land, situated in the SW 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
12. A certain parcel of land, situated in the SE 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
13. A certain parcel of land, situated in the SW 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
14. A certain parcel of land, situated in the SE 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
15. A certain parcel of land, situated in the SW 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
16. A certain parcel of land, situated in the SE 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
17. A certain parcel of land, situated in the SW 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
18. A certain parcel of land, situated in the SE 1/4 of Section 34, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
19. A certain parcel of land, situated in the SW 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...
20. A certain parcel of land, situated in the SE 1/4 of Section 35, T4N, R10E, S41E, WASHINGTON COUNTY, WISCONSIN, containing 1.00 acre, more or less, and being more particularly described as follows: ...

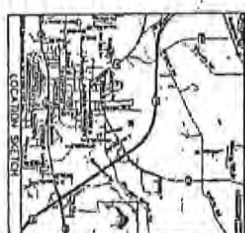


EXHIBIT C-1

LEGAL DESCRIPTION OF TWO-FAMILY RESIDENTIAL-6 (TR-6) ZONING DISTRICT

LOCATED IN PART OF THE NORTHEAST 1/4 OF SECTION 25, TOWN 2 NORTH, RANGE 17 EAST, WAL WORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET AND THE POINT OF BEGINNING; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 11.86 FEET; THENCE N 89DEG 57MIN 15SEC E, 119.38 FEET; THENCE S 77DEG 11MIN 09SEC E, 183.51 FEET; THENCE N 89DEG 54MIN 41SEC E, 213.32 FEET; THENCE N 65DEG 37MIN 36SEC E, 432.42 FEET; THENCE S 89DEG 56MIN 48SEC E, 859.77 FEET; THENCE S 00DEG 21MIN 50SEC E, 1568.97 FEET; THENCE S 89DEG 33 MIN 32SEC W, 468.25 FEET; THENCE S 00DEG 18MIN 52SEC E, 567.00 FEET; THENCE S 56DEG 26MIN 42SEC W, 78.48 FEET; THENCE N 00DEG 54 MIN 13SEC W, 115.28 FEET; THENCE N 00DEG 28MIN 10SEC W, 280.26 FEET; THENCE S 88DEG 34MIN 50SEC W, 238.41 FEET; THENCE N 00DEG 28MIN 06SEC W, 518.61 FEET; THENCE S 88DEG 19MIN 11SEC W, 100.05 FEET; THENCE S 00DEG 28MIN 06SEC E, 582.61 FEET; THENCE S 89DEG 37MIN 19SEC W, 891.76 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT C-2

LEGAL DESCRIPTION OF SR-4 SINGLE-FAMILY RESIDENTIAL-4 ZONING DISTRICT

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 11.86 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID CENTER STREET, N 00DEG 34MIN 14SEC W, 750.37 FEET; THENCE S 89DEG 31MIN 19SEC W, 375.51 FEET; THENCE N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET; THENCE N 89DEG 42MIN 34SEC E, 370.50 FEET; THENCE 26.71 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 400.00 FEET AND A CHORD WHICH BEARS N 10DEG 14MIN 54SEC E, 26.70 FEET; THENCE N 12DEG 05MIN 02SEC E, 114.19 FEET; THENCE 190.55 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET AND A CHORD WHICH BEARS N 59DEG 43MIN 10SEC W, 187.37 FEET; THENCE N 48DEG 28MIN 37SEC E, 313.00 FEET; THENCE N 38DEG 25MIN 17SEC W, 154.18 FEET; THENCE N 00DEG 00MIN 32SEC W, 311.66 FEET; THENCE N 90DEG 00MIN 00SEC E, 634.55 FEET; THENCE N 65DEG 56MIN 51SEC E, 174.83 FEET; THENCE N 14DEG 31MIN 28SEC E, 196.23 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12 ; THENCE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 425.75 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 58DEG 17MIN 40SEC E, 1029.19 FEET; THENCE S 38DEG 01MIN 32SEC E, 310.36 FEET; THENCE S 89DEG 21MIN 10SEC W, 516.56 FEET; THENCE S 00DEG 21MIN 50SEC E, 1568.97 FEET; THENCE N 89DEG 56MIN 48SEC W, 859.77 FEET; THENCE S 65DEG 37MIN 36SEC W, 432.42 FEET; THENCE S 89DEG 54MIN 41SEC W, 213.32 FEET; THENCE N 77DEG 11MIN 09SEC W, 183.51 FEET; THENCE S 89DEG 57MIN 15SEC W, 119.38 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT C-3

LEGAL DESCRIPTION OF CR-5ac COUNTRYSIDE RESIDENTIAL ZONING DISTRICT

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 762.23 FEET; THENCE S 89DEG 31MIN 19SEC W, 375.51 FEET; THENCE N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET TO THE POINT OF BEGINNING; THENCE S 89DEG 42MIN 34SEC W, 954.90 FEET; THENCE N 00DEG 17MIN 26SEC W, 200.00 FEET; THENCE N 89DEG 32MIN 26SEC E, 32.00 FEET; THENCE N 00DEG 24MIN 30SEC W, 1226.19 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12 ; THENCE ALONG SAID HIGHWAY, S 89DEG 58MIN 07SEC E, 1049.67 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 1138.60 FEET; THENCE S 14DEG 31MIN 28SEC W, 196.23 FEET; THENCE S 65DEG 56MIN 51SEC W, 174.83 FEET; THENCE S 90DEG 00MIN 00SEC W, 634.55 FEET; THENCE S 00DEG 00MIN 32SEC E, 311.66 FEET; THENCE S 38DEG 25MIN 17SEC E, 154.18 FEET; THENCE S 48DEG 28MIN 37SEC W, 313.00 FEET; THENCE 190.55 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 300.00 FEET AND A CHORD WHICH BEARS S 59DEG 43MIN 10SEC E, 187.37 FEET; THENCE S 12DEG 05MIN 02SEC W, 114.19 FEET; THENCE 26.71 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 400.00 FEET AND A CHORD WHICH BEARS S 10DEG 14MIN 54SEC W, 26.70 FEET; THENCE S 89DEG 42MIN 34SEC W, 370.50 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT D

AN ORDINANCE PROVIDING FOR DIRECT ANNEXATION BY UNANIMOUS CONSENT OF ELECTORS AND PROPERTY OWNERS OF TERRITORY LOCATED IN THE TOWN OF GENEVA, WALWORTH COUNTY, WISCONSIN, TO THE CITY OF LAKE GENEVA, WALWORTH COUNTY, WISCONSIN

WHEREAS, Bank One Trust Company, N.A., as Trustee of the Olivia M. Miller Trust (Petitioner), has made and filed with the City Clerk of the City of Lake Geneva (City) a Petition for Direct Annexation by unanimous consent of electors and property owners of territory located in the Town of Geneva, Walworth County, Wisconsin, to the City of Lake Geneva, Walworth County, Wisconsin, pursuant to Wis. Stat. § 66.0217(2) (Annexation Petition), in the office of the City Clerk for the City of Lake Geneva, Walworth County, Wisconsin, on the ____ day of _____, 2003, requesting the annexation to the City of lands described in Exhibit A attached hereto and incorporated herein by reference (Subject Territory), which such lands are contiguous to the City; and

WHEREAS, it appears by acknowledgment of receipt on file herein that Petitioner has filed a duplicate original of the Annexation Petition, including a legal description and scale map of the Subject Territory, with the Town Clerk of the Town of Geneva, Walworth County, Wisconsin, and the State of Wisconsin, Department of Administration, within five (5) days after filing the Annexation Petition with the City Clerk; and

WHEREAS, it further appears that all of the requirements of Wis. Stat. § 66.0217(2) have been fully complied with, and that the State of Wisconsin, Department of Administration, has reviewed the proposed annexation and, by letter, found it to be in the public interest, and said letter has been duly considered and reviewed by the City and/or the City's Counsel; and

WHEREAS, the proposed annexation was referred to the Plan Commission of the City, and said Plan Commission has recommended annexing the Subject Territory to the City; and

WHEREAS, the Common Council of the City of Lake Geneva, Walworth County, Wisconsin, makes the following findings with respect to the Subject Territory to be annexed:

- a. That the annexation of the Subject Territory proposed to be annexed to the City of Lake Geneva, Walworth County, Wisconsin, is in the best interest of the City.
- b. That the annexation of the Subject Territory proposed to be annexed will enable the City to regulate and control development of these lands which are contiguous to the City.

- c. That, upon annexation, the Subject Territory shall be temporarily zoned pursuant to Wis. Stat. § 66.0217(8) in the Two-Family Residential-6 (TR-6) Zoning District, in accordance with the attached Exhibit C-1 incorporated herein; SR-4 Single-Family Residential-4 Zoning District, in accordance with the attached Exhibit C-2 incorporated herein; and CR-5ac Countryside Residential Zoning District, in accordance with the attached Exhibit C-3 incorporated herein
- d. That the annexation of the Subject Territory does not create a Town island under the provisions of Wis. Stat. § 66.0221.
- e. That the City is in need of additional lands suitable for single-family and multi-family residential development.

NOW, THEREFORE, the Common Council of the City of Lake Geneva, Walworth County, Wisconsin, does ordain as follows:

1. Those lands comprising the Subject Territory to be annexed, as described in Exhibit A attached hereto and incorporated herein by reference, be, and the same hereby are, annexed to the City of Lake Geneva, Walworth County, Wisconsin.
2. Those lands comprising the Subject Territory shall be temporarily zoned pursuant to Wis. Stat. § 66.0217(8) in the Two-Family Residential-6 (TR-6) Zoning District, in accordance with the attached Exhibit C-1 incorporated herein; SR-4 Single-Family Residential-4 Zoning District, in accordance with the attached Exhibit C-2 incorporated herein; and CR-5ac Countryside Residential Zoning District, in accordance with the attached Exhibit C-3 incorporated herein
3. Those lands comprising the Subject Territory shall be included within Supervisory Districts 14 and 23 and in Aldermanic Districts 3 and 4 of the City of Lake Geneva.
4. This Ordinance, and the annexation hereby effected, shall be in full force and effect from and after its passing and posting.
5. The City Clerk shall immediately, after the final enactment hereof, file such certified copies with all parties as required by State Statute to be so served.
6. All ordinances or parts of ordinances inconsistent with or contravening the provisions of this Ordinance are hereby repealed.

Adopted, passed, and approved by the Common Council of the City of Lake Geneva,
Walworth County, Wisconsin, this _____ day of _____, 2003.

Charles Rude, Mayor

ATTEST:

Diana A. Dykstra, City Clerk

1st Reading _____
2nd Reading _____
Adopted _____
Published _____

APPROVED AS TO FORM:

Michael J. Rielly, City Attorney

EXHIBIT A

LEGAL DESCRIPTION OF THE SUBJECT TERRITORY

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET AND THE POINT OF BEGINNING; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 762.23 FEET TO THE NORTHEAST CORNER OF SAID STREET AND THE NORTHEAST CORNER OF ROSEBUD SUBDIVISION; THENCE ALONG THE NORTHERLY LINE OF SAID SUBDIVISION, S 89DEG 31MIN 19SEC W, 375.51 FEET TO THE NORTHWEST CORNER OF LOT 1 OF BLOCK 2 OF SAID ROSEBUD SUBDIVISION; THENCE CONTINUE ALONG THE NORTHERLY LINE OF SAID SUBDIVISION, N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET; THENCE S 89DEG 42MIN 34SEC W, 954.90 FEET; THENCE N 00DEG 17MIN 26SEC W, 200.00 FEET; THENCE N 89DEG 32MIN 26SEC E, 32.00 FEET; THENCE N 00DEG 24MIN 30SEC W, 1226.19 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12; THENCE ALONG SAID HIGHWAY, S 89DEG 58MIN 07SEC E, 1049.67 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 1564.35 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 58DEG 17MIN 40SEC E, 1029.19 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 38DEG 01MIN 32SEC E, 310.36 FEET; THENCE S 89DEG 21MIN 10SEC W, 516.56 FEET; THENCE S 00DEG 21MIN 50SEC E, 1468.97 FEET; THENCE S 89DEG 33MIN 32SEC W, 468.25 FEET; THENCE S 00DEG 18MIN 52SEC E, 567.00 FEET; THENCE S 56DEG 26MIN 42SEC W, 78.48 FEET; THENCE N 00DEG 54MIN 13SEC W, 115.28 FEET; THENCE N 00DEG 28MIN 10SEC W, 280.26 FEET; THENCE S 88DEG 34MIN 50SEC W, 238.41 FEET; THENCE N 00DEG 28MIN 06SEC W, 518.61 FEET; THENCE S 88DEG 19MIN 11SEC W, 100.05 FEET; THENCE S 00DEG 28MIN 06SEC E, 582.61 FEET; THENCE S 89DEG 37MIN 19SEC W, 891.76 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT C-1

LEGAL DESCRIPTION OF TWO-FAMILY RESIDENTIAL-6 (TR-6) ZONING DISTRICT

LOCATED IN PART OF THE NORTHEAST 1/4 OF SECTION 25, TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET AND THE POINT OF BEGINNING; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 11.86 FEET; THENCE N 89DEG 57MIN 15SEC E, 119.38 FEET; THENCE S 77DEG 11MIN 09SEC E, 183.51 FEET; THENCE N 89DEG 54MIN 41SEC E, 213.32 FEET; THENCE N 65DEG 37MIN 36SEC E, 432.42 FEET; THENCE S 89DEG 56MIN 48SEC E, 859.77 FEET; THENCE S 00DEG 21MIN 50SEC E, 1568.97 FEET; THENCE S 89DEG 33 MIN 32SEC W, 468.25 FEET; THENCE S 00DEG 18MIN 52SEC E, 567.00 FEET; THENCE S 56DEG 26MIN 42SEC W, 78.48 FEET; THENCE N 00DEG 54 MIN 13SEC W, 115.28 FEET; THENCE N 00DEG 28MIN 10SEC W, 280.26 FEET; THENCE S 88DEG 34MIN 50SEC W, 238.41 FEET; THENCE N 00DEG 28MIN 06SEC W, 518.61 FEET; THENCE S 88DEG 19MIN 11SEC W, 100.05 FEET; THENCE S 00DEG 28MIN 06SEC E, 582.61 FEET; THENCE S 89DEG 37MIN 19SEC W, 891.76 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT C-2

LEGAL DESCRIPTION OF SR-4 SINGLE-FAMILY RESIDENTIAL-4 ZONING DISTRICT

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 11.86 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE ALONG SAID CENTER STREET, N 00DEG 34MIN 14SEC W, 750.37 FEET; THENCE S 89DEG 31MIN 19SEC W, 375.51 FEET; THENCE N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET; THENCE N 89DEG 42MIN 34SEC E, 370.50 FEET; THENCE 26.71 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 400.00 FEET AND A CHORD WHICH BEARS N 10DEG 14MIN 54SEC E, 26.70 FEET; THENCE N 12DEG 05MIN 02SEC E, 114.19 FEET; THENCE 190.55 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET AND A CHORD WHICH BEARS N 59DEG 43MIN 10SEC W, 187.37 FEET; THENCE N 48DEG 28MIN 37SEC E, 313.00 FEET; THENCE N 38DEG 25MIN 17SEC W, 154.18 FEET; THENCE N 00DEG 00MIN 32SEC W, 311.66 FEET; THENCE N 90DEG 00MIN 00SEC E, 634.55 FEET; THENCE N 65DEG 56MIN 51SEC E, 174.83 FEET; THENCE N 14DEG 31MIN 28SEC E, 196.23 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12 ; THENCE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 425.75 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 58DEG 17MIN 40SEC E, 1029.19 FEET; THENCE S 38DEG 01MIN 32SEC E, 310.36 FEET; THENCE S 89DEG 21MIN 10SEC W, 516.56 FEET; THENCE S 00DEG 21MIN 50SEC E, 1568.97 FEET; THENCE N 89DEG 56MIN 48SEC W, 859.77 FEET; THENCE S 65DEG 37MIN 36SEC W, 432.42 FEET; THENCE S 89DEG 54MIN 41SEC W, 213.32 FEET; THENCE N 77DEG 11MIN 09SEC W, 183.51 FEET; THENCE S 89DEG 57MIN 15SEC W, 119.38 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT C-3

LEGAL DESCRIPTION OF CR-5ac COUNTRYSIDE RESIDENTIAL ZONING DISTRICT

LOCATED IN PART OF THE SOUTHWEST 1/4 & SOUTHEAST 1/4 OF SECTION 24 AND IN PART OF THE NORTHWEST 1/4 & NORTHEAST 1/4 OF SECTION 25, ALL IN TOWN 2 NORTH, RANGE 17 EAST, WALWORTH COUNTY, WISCONSIN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A CONCRETE COUNTY MONUMENT FOUND MARKING THE CENTER OF SAID SECTION 25; THENCE N 01DEG 12MIN 12SEC E, 886.12 FEET TO THE EASTERLY RIGHT OF WAY LINE OF CENTER STREET; THENCE ALONG SAID STREET, N 00DEG 22MIN 01SEC W, 513.24 FEET; THENCE CONTINUE ALONG SAID STREET, N 00DEG 34MIN 14SEC W, 762.23 FEET; THENCE S 89DEG 31MIN 19SEC W, 375.51 FEET; THENCE N 14DEG 03MIN 38SEC W, 164.18 FEET; THENCE N 00DEG 17MIN 26SEC W, 97.11 FEET TO THE POINT OF BEGINNING; THENCE S 89DEG 42MIN 34SEC W, 954.90 FEET; THENCE N 00DEG 17MIN 26SEC W, 200.00 FEET; THENCE N 89DEG 32MIN 26SEC E, 32.00 FEET; THENCE N 00DEG 24MIN 30SEC W, 1226.19 FEET TO THE SOUTHERLY RIGHT OF WAY LINE OF U.S. HIGHWAY 12 ; THENCE ALONG SAID HIGHWAY, S 89DEG 58MIN 07SEC E, 1049.67 FEET; THENCE CONTINUE ALONG SAID HIGHWAY, S 75DEG 28MIN 33SEC E, 1138.60 FEET; THENCE S 14DEG 31MIN 28SEC W, 196.23 FEET; THENCE S 65DEG 56MIN 51SEC W, 174.83 FEET; THENCE S 90DEG 00MIN 00SEC W, 634.55 FEET; THENCE S 00DEG 00MIN 32SEC E, 311.66 FEET; THENCE S 38DEG 25MIN 17SEC E, 154.18 FEET; THENCE S 48DEG 28MIN 37SEC W, 313.00 FEET; THENCE 190.55 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 300.00 FEET AND A CHORD WHICH BEARS S 59DEG 43MIN 10SEC E, 187.37 FEET; THENCE S 12DEG 05MIN 02SEC W, 114.19 FEET; THENCE 26.71 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 400.00 FEET AND A CHORD WHICH BEARS S 10DEG 14MIN 54SEC W, 26.70 FEET; THENCE S 89DEG 42MIN 34SEC W, 370.50 FEET TO THE POINT OF BEGINNING. (End of legal description.)

EXHIBIT 4

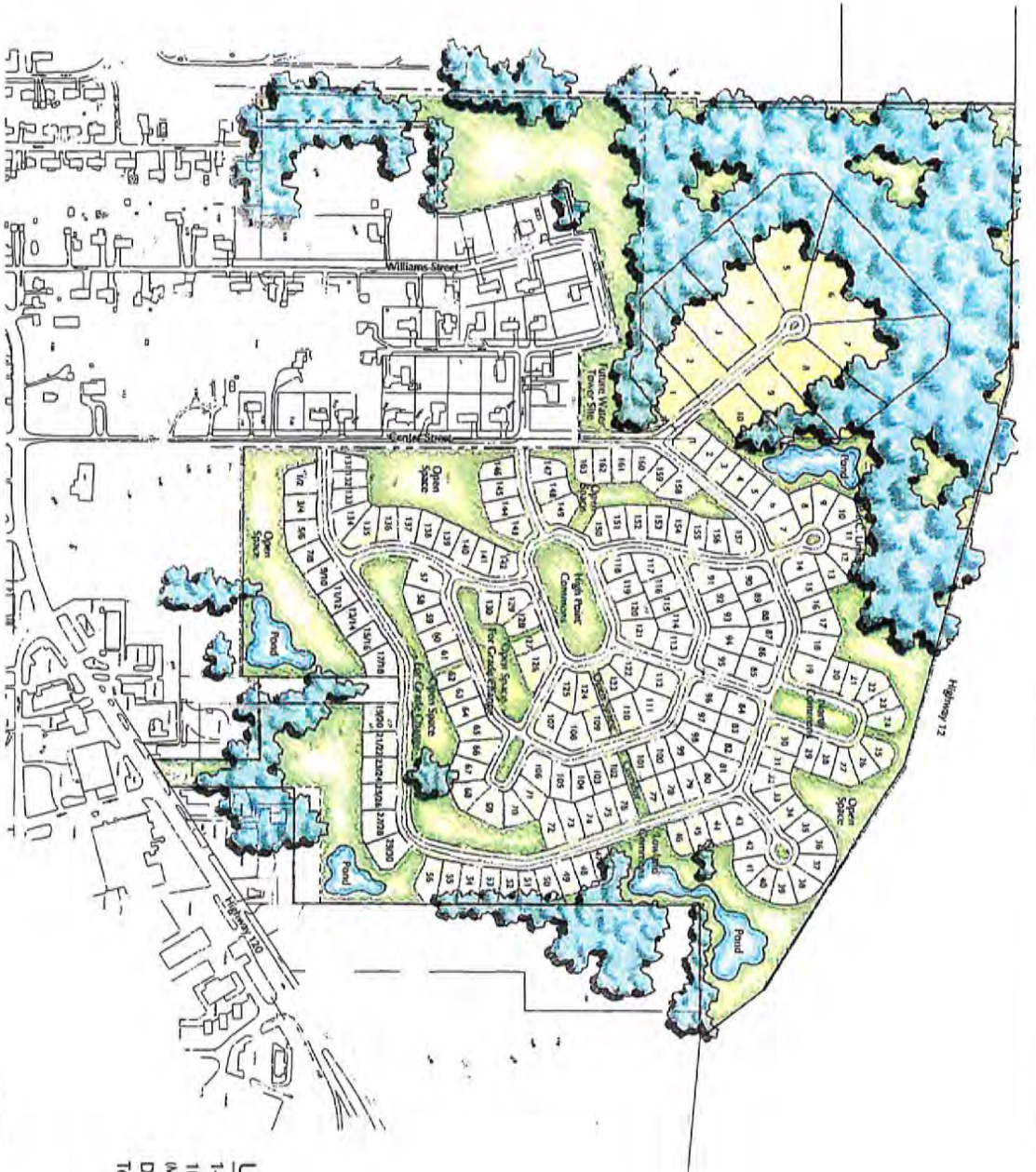
CONCEPTUAL NEIGHBORHOOD PLAN

Conceptual Neighborhood Plan

Miller Property

Lake Geneva, Wisconsin

24 July 2003



Unit Breakdown:

1-3 Acre Lots	10
10,000 s.f. Lots (Min. 75 x 135)	163
Duplex Units	30
Total	203

EXHIBIT 5

TRAFFIC STUDY SUMMARY



ARCHITECTS ENGINEERS PLANNERS

11414 West Park Place
Suite 300
Milwaukee, Wisconsin
53224

February 4, 2003

(414) 359-2300
FAX (414) 359-2310

The Honorable Mayor & Council Members
City of Lake Geneva

10 East Doty
Suite 615
Madison, Wisconsin
53703

(608) 259-0045
FAX (608) 259-0084

RE: Miller Properties Development - Traffic Impact Study

www.hntb.com

Dear Mayor Rude & Council Members:

This letter is intended to provide a summary of the information presented in the traffic impact analysis report that was completed for the Miller Properties development.

1. **New traffic** - This proposed development is comprised of 142 single family houses and 85 town houses. The volume of traffic expected to be generated by this development is calculated based on the nationally recognized reference (ITE Trip Generation), which is accepted by WisDOT. The development is expected to generate 190 trips (125 in/65 out) during the weekday evening peak hour. Based on traffic counts, the existing 42 homes generate approximately 35 evening peak hour trips at the Center Street intersection, as illustrated on Exhibit C-1.
2. **Development schedule** - All of the development traffic was included in the Year 2002 total traffic analysis, which represents a "worst case" scenario. However, the development is not expected to be fully occupied for 10 years.
3. **Future traffic volumes** - The Year 2012 background traffic volumes were developed based on the WisDOT projections, which consider the impacts of the STH 120 bypass. Upon completion of the STH 120 bypass, traffic on Sheridan Street is expected to decline significantly and then increase at a moderate rate thereafter. It will take approximately 10 years for the traffic on Sheridan Street to grow back to the existing levels. Therefore, the Year 2012 background (no development) traffic volumes are expected to be similar to existing traffic volumes.
4. **Alternate access** - This traffic study represents a "worst case" scenario, where all development traffic would use Center Street. Actually, Williams Street to the west is a minor alternate route. It is also anticipated that a planned access to the east will connect with the signalized intersection of STH 120 with Geneva Square. This future connection to the east is expected to reroute traffic, especially traveling to/from the east and minimize impacts to the Center Street intersection.
5. **Recommended Improvements** - The recommended improvements for existing traffic conditions are shown on Exhibit A-1. A southbound exclusive left-turn lane is

The HNTB Companies

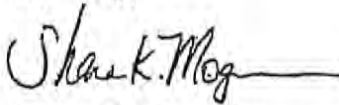
OFFICES: ALEXANDRIA, VA; ANNAPOLIS, MD; ATLANTA, GA; AUSTIN, TX; BATON ROUGE, LA; BOSTON, MA; CHARLESTON, SC; CHARLESTON, WV; CHICAGO, IL; CLEVELAND, OH; COLUMBUS, OH; DALLAS, TX; DENVER, CO; DETROIT, MI; ELKINS, WV; FAIRFIELD, NJ; FT. WORTH, TX; HARTFORD, CT; HOUSTON, TX; INDIANAPOLIS, IN; IRVINE, CA; KANSAS CITY, MO; KNOXVILLE, TN; LANING, MI; LOS ANGELES, CA; LOUISVILLE, KY; MADISON, WI; MIAMI, FL; MILWAUKEE, WI; MINNEAPOLIS, MN; NASHVILLE, TN; NEW YORK, NY; OAKLAND, CA; ORLANDO, FL; OYMLAND, NH; NY PLYNOUTH MEETING, PA; PORTLAND, ME; PORTLAND, OR; RALEIGH, NC; ST. LOUIS, MO; SALT LAKE CITY, UT; SAN ANTONIO, TX; SAN BERNARDINO, CA; SAN FRANCISCO, CA; SAN JOSE, CA; SEATTLE, WA; TAMPA, FL; TOLEDO, OH; WASHINGTON, D.C.

recommended to accommodate the development traffic, as shown on Exhibit A-2. The southbound left-turn lane will give more opportunity for vehicles to accept gaps in traffic along STH 120, reducing the delay for the southbound left-turn movement.

6. **Traffic Signal** – A traffic signal warrant analysis was conducted for the STH 120 intersection with Center Street as part of this traffic study. With or without the development, the northbound approach has the higher volumes for the minor street, which decides whether warrants are met. Therefore, regardless of the development, the existing traffic volumes warrant a traffic signal at the STH 120 intersection with Center Street.

If you have any questions or comments, please call me at (414) 359-2300.

Sincerely,

A handwritten signature in cursive script, reading "Shana K. Mogensen", followed by a horizontal line.

Shana K. Mogensen
HNTB Corporation









WisDOT DTSD SER
Planning Unit 4
Ryan Bernard, P.E.
141 NW Barstow St, 2nd Floor
Waukesha, WI 53188

Governor Tony Evers
Secretary Craig Thompson
wisconsindot.gov
Telephone: (262) 548-6471
Email: Ryan.Bernard@dot.wi.gov



January 11, 2022

Mr. Tom Earle:

The following is an update on the status of project ID 3170-09-00 STH 50, City of Lake Geneva (Forest St to Grand Geneva Way). The following project scoping items are being investigated by the Wisconsin Department of Transportation at this time:

- The Department is working to finalize the proposed project pavement scope (i.e. milling and paving depths) using the pavement core data that were just received from WisDOT's SER Soils Unit.
- The Department is reviewing the City's request for expansion between Curtis Street and Edwards Boulevard. Expected completion of the review is to be determined.
- The Department is reviewing the City's request for sidewalk construction between Curtis Street and Edwards Boulevard (regardless of expansion results/pavement scope).
- Drainage items of concern have been reviewed internally at the Department and externally with City staff. The scope of work to be included has been agreed upon.

The Department is seeking input from the City of Lake Geneva on the following project scoping items:

- The Department required cost estimates for specialized signal equipment (non-standard poles) requested by the City for use in the project cost estimate.
- Initial results of the operational analysis using Tuesday count data at STH 120/Edwards Boulevard indicate that intersection operations would be improved by converting the westernmost southbound left turn lane to an additional southbound through lane. The Department is seeking input about possible conflicts with this modification, particularly concerning operations under weekend traffic.

Outcomes of the above investigations will be discussed further at the project Local Officials Meeting (date to be determined). Based on the outcomes of the above scoping items, the SMA between WisDOT and the City of Lake Geneva may need to be updated before final scope certification.

Please let me know if you have any questions regarding the information provided in this memo.

Sincerely,

Ryan Bernard, PE
Project Manager
WisDOT – SE Region SPO
(262) 548-6471
Ryan.Bernard@dot.wi.gov

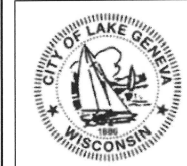


7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

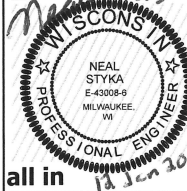
NORTH ARROW:



SCALE: 1" = 1.0 MI



SEAL:



SHEET:

TITLE SHEET

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

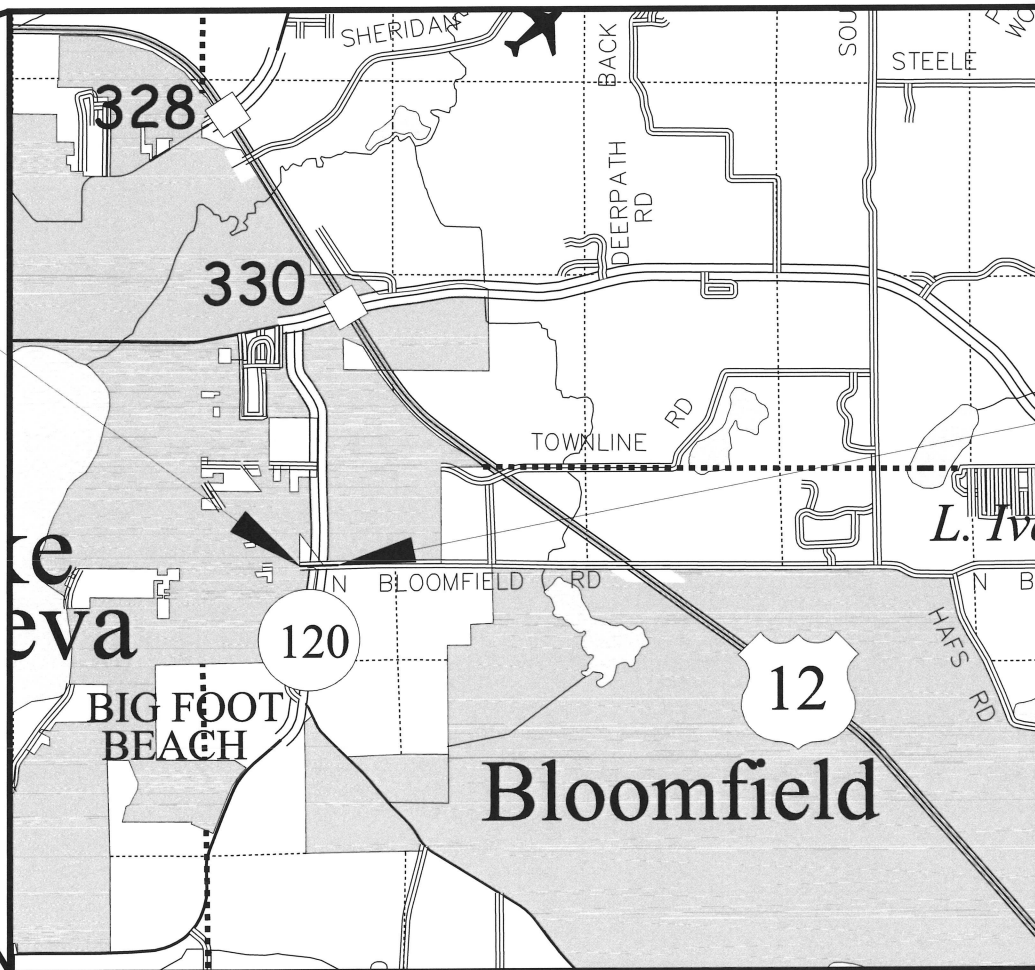
SHEET NUMBER:

1

BLOOMFIELD ROAD CITY OF LAKE GENEVA, WALWORTH COUNTY, WISCONSIN



BEGIN PROJECT
STA 200+43.92



END PROJECT
STA 209+95.35

SHEET INDEX

SHEET NO.

TITLE SHEET	1
GENERAL NOTES	2
PROJECT OVERVIEW	3
EXISTING TYPICAL SECTIONS	4
PROPOSED TYPICAL SECTIONS	5
CONSTRUCTION DETAILS	6-7
PLAN DETAILS	8-11
EROSION CONTROL	12-15
SIGNING PLAN	16-20
SIGNAL PLANS	21-28
PAVEMENT MARKING	29-30
TRAFFIC CONTROL PLANS	31-41
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STANDARD DETAIL DRAWINGS	54-124
SIGN PLATES	125-154
CROSS SECTIONS	155-166

LAYOUT
SCALE 0 1 MI

****ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF
LAKE GENEVA LAND DEVELOPMENT STANDARDS, AND THE STANDARD
SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION;
LATEST ADDITIONS AND REVISIONS.**

COORDINATES ON THE PLAN ARE REFERENCED TO
THE WISCONSIN COUNTY COORDINATE SYSTEM, WALWORTH COUNTY

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED
TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88).



Toll Free (800) 242-8811
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

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RELEASE:
BID SET

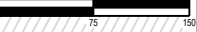
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 150'



SEAL:



all in

SHEET:
PROJECT
OVERVIEW

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

3



7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

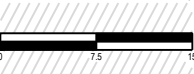
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NORTH ARROW:



SCALE: 1" = 15'



SEAL:

all in

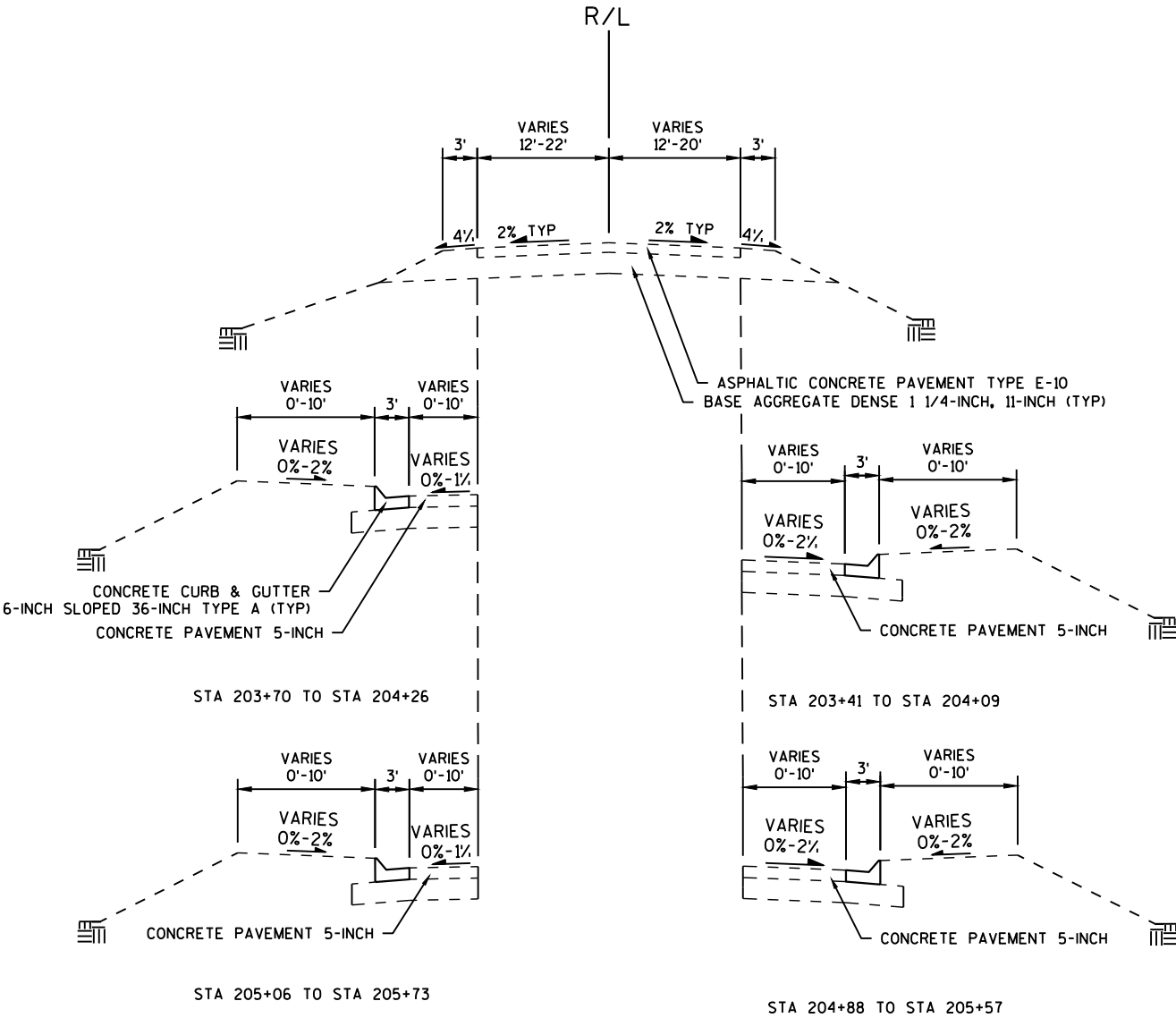
SHEET:

EXISTING TYPICAL
SECTIONS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

4



TYPICAL EXISTING SECTION

BLOOMFIELD ROAD

STA 200+43 TO STA 204+26

STA 204+88 TO STA 209+96

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT: _____



RELEASE:
BID SET

REVISIONS:

[illegible]

NORTH ARROW:



SCALE: 1" = 15'



SEAL:

all in

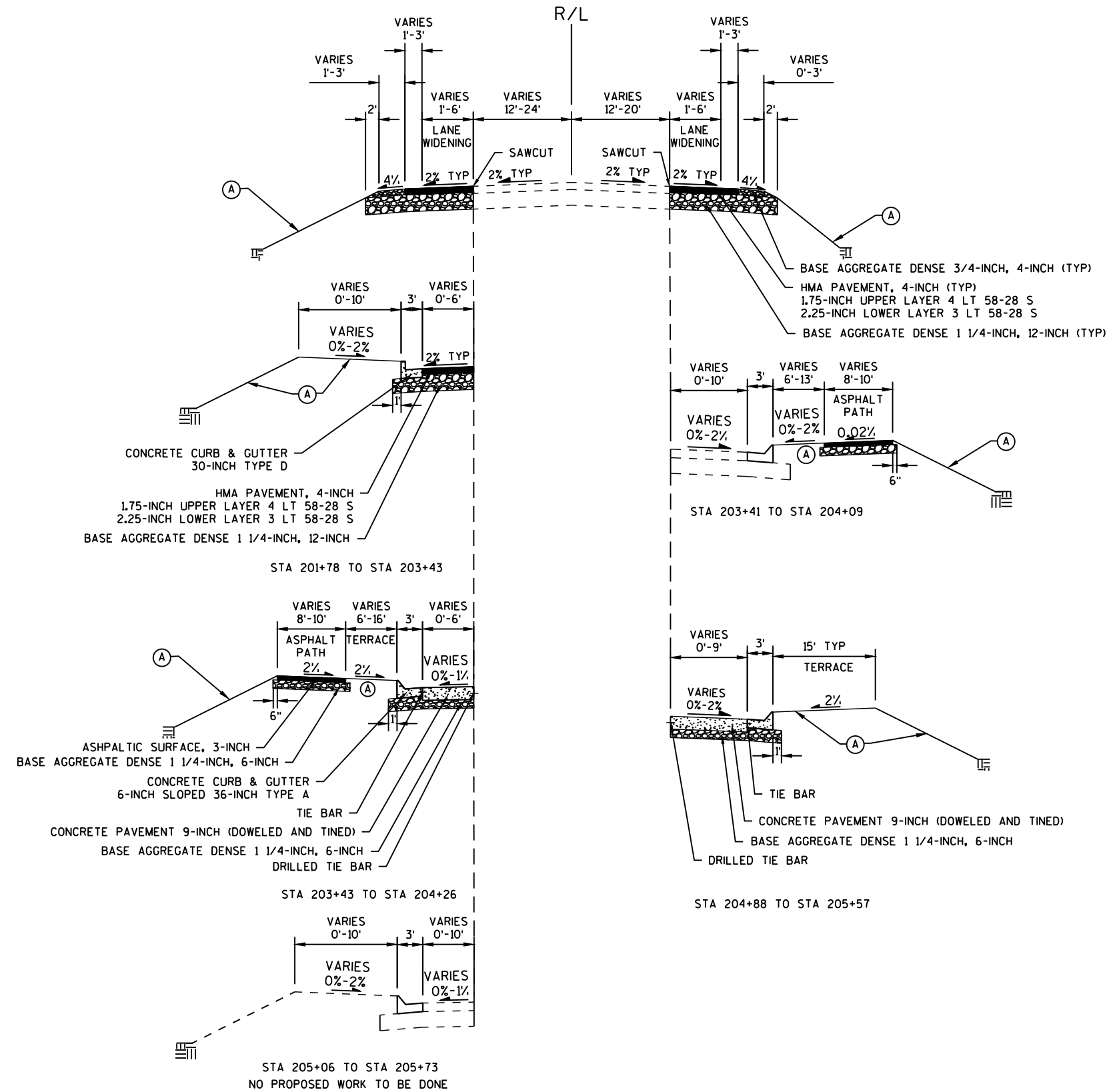
SHEET:

PROPOSED TYPICAL SECTIONS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

5



TYPICAL FINISHED SECTION
BLOOMFIELD ROAD

STA 200+43 TO STA 204+26
STA 204+88 TO STA 209+96

(A) RESTORATION AND EROSION MAT
PER "RESTORE DISTURBED AREAS" BID ITEM



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: X" = XX'

SEAL:

all in

SHEET:

CONSTRUCTION
DETAILS

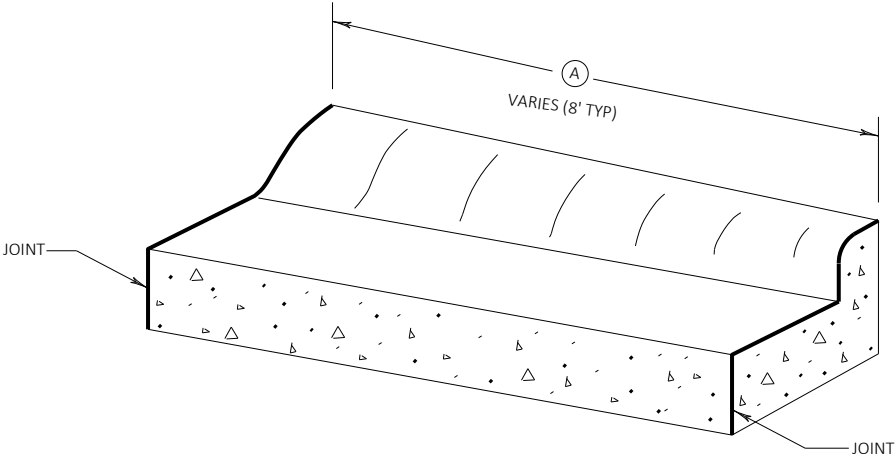
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

6

NOTE

- (A) 30" CURB & GUTTER TYPE D TO CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A (TO BE MEASURED & PAID FOR AS CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A FOR VERTICAL FACE TO SLOPE FACE TRANSITIONS.



VERTICAL FACE TO ROLL FACE
BLOOMFIELD ROAD
STA 203+43.45 TO STA 203+51.43 LT



PROJECT:
ROOMFIELD ROAD
STH 120
(TOWARDS BOULEVARD)
TRAFFIC SIGNAL PROJEC

LAKE GENEVA

ENT: _____



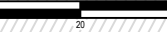
PLEASE:
D SET

VISIONS:	
DATE	DESCRIPTION

RIGHT ARROW:



SALE: $1^* = 1$



AL:

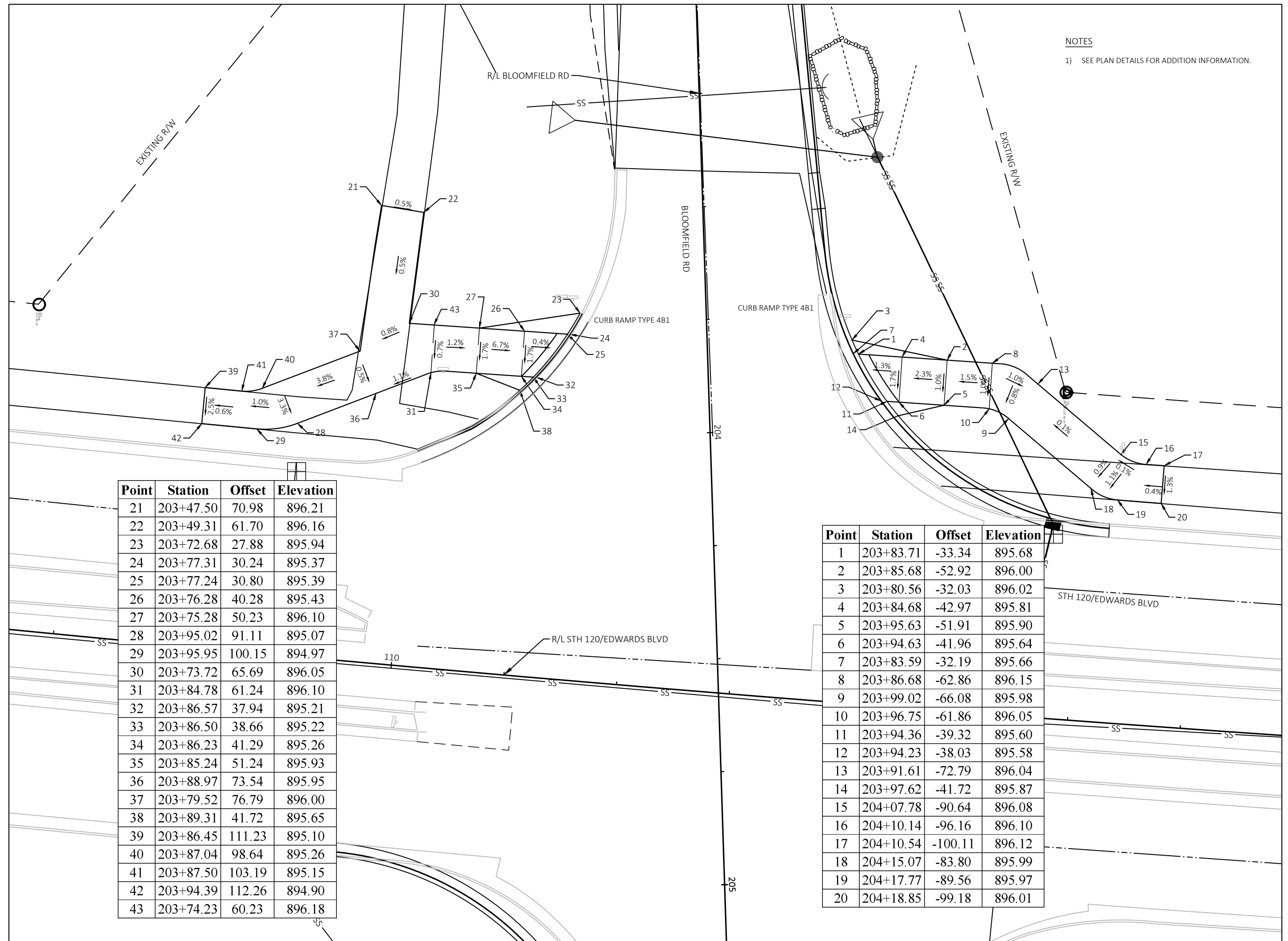
I in

CONSTRUCTION DETAILS - CURB RAMPS

PROJECT MANAGER:	GR
PROJECT NUMBER:	21.0437
SIGNED BY:	NR
DRAWN BY:	WA
CHECKED BY:	A
DATE:	01/13/20

SHEET NUMBER: _____

7



FILENAME: D:\Walworth_Co\Lake Geneva_City\Gov\210437 Bloomfield and Edwards Signal\Design\210347\SheetsPlan\021010_cd.dwg

PROJECT:
ROOMFIELD ROAD
STH 120
(TOWARDS BOULEVARD)
TRAFFIC SIGNAL PROJEC

LAKE GENEVA

ENT: _____



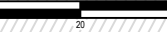
PLEASE:
D SET

[illegible]

RIGHT ARROW:



SALE: 1* =



AL:

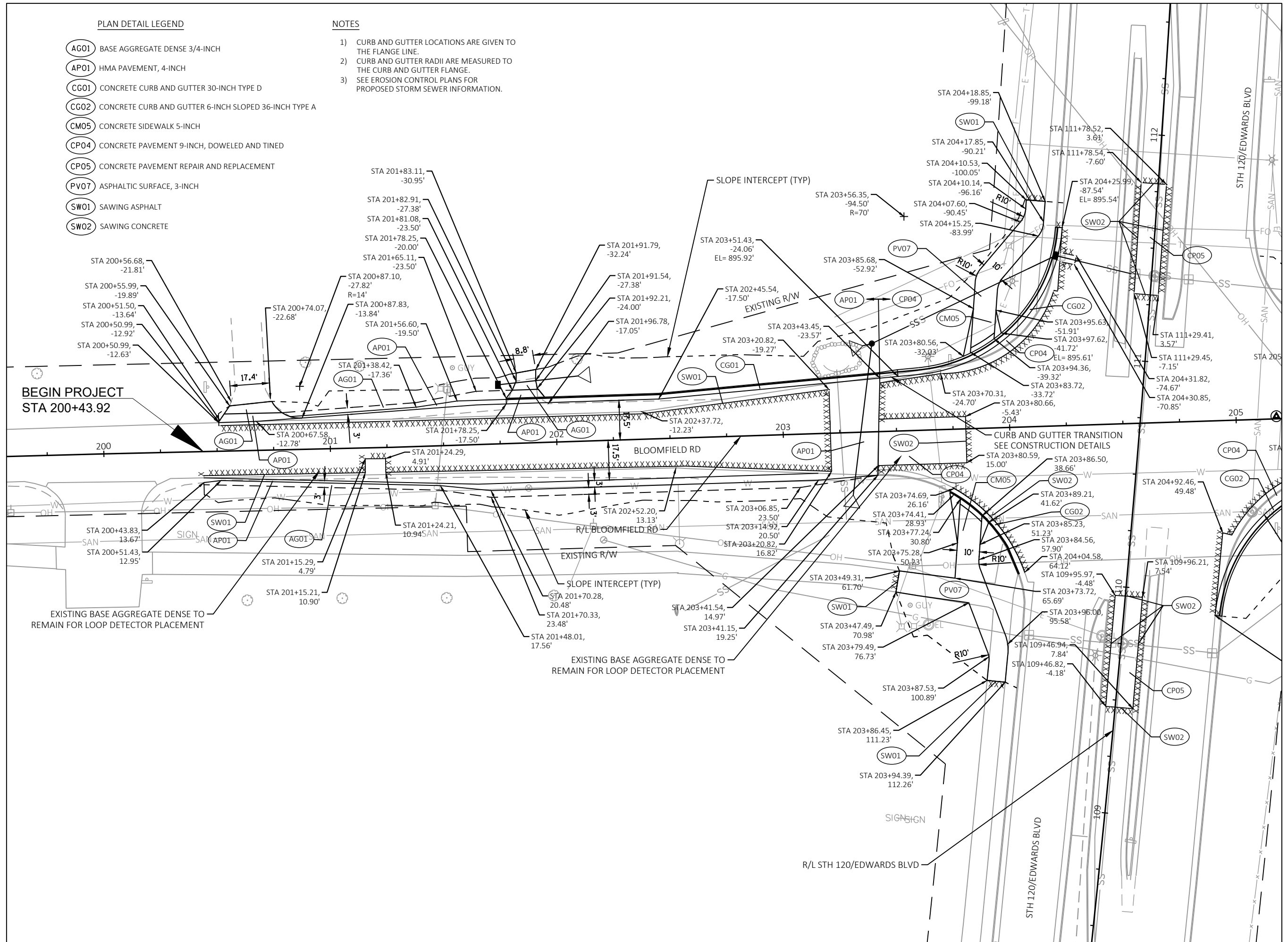
I in

PLAN DETAILS

PROJECT MANAGER:	GR
PROJECT NUMBER:	21.0437
SIGNED BY:	NR
DRAWN BY:	WA
CHECKED BY:	A
DATE:	01/13/20

SHEET NUMBER:

3

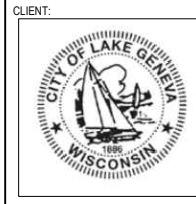




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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



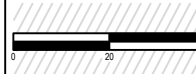
RELEASE:
BID SET

REVISIONS:		
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:

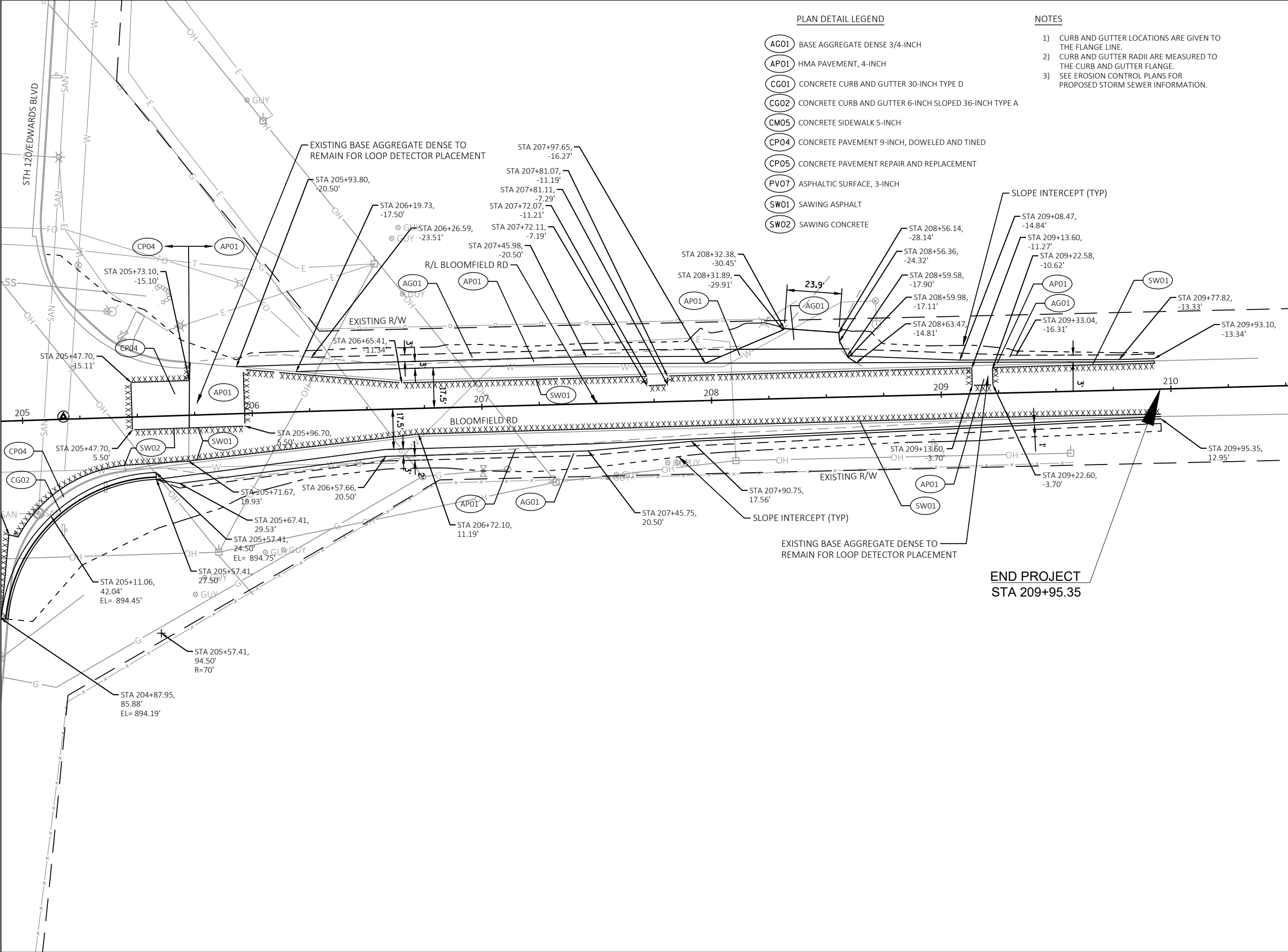
all in

SHEET:
PLAN DETAILS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

9





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

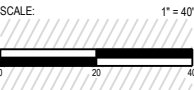
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



SEAL:

all in

SHEET:

PLAN DETAILS

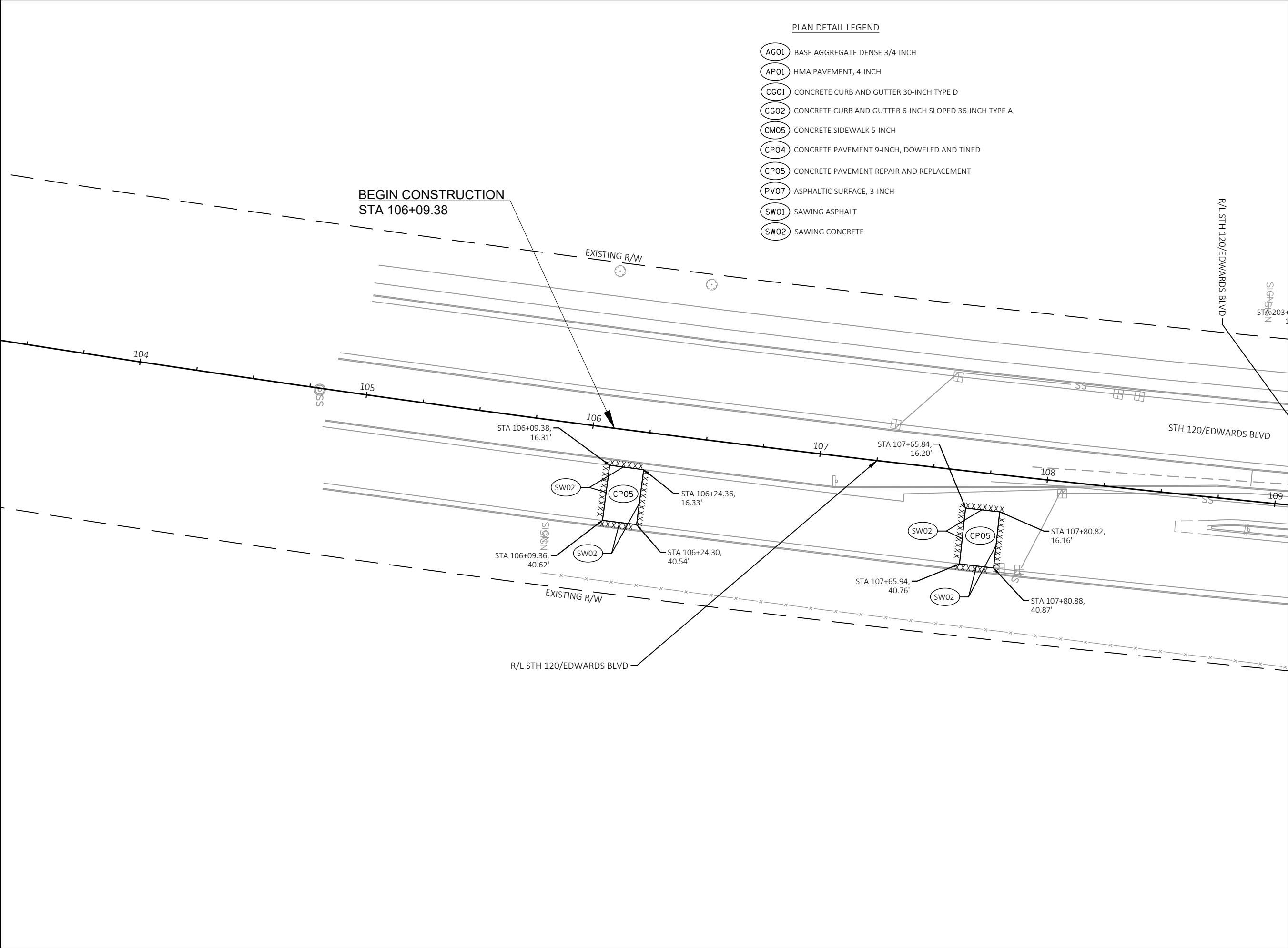
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

10

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP01 HMA PAVEMENT, 4-INCH
- CG01 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CG02 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A
- CM05 CONCRETE SIDEWALK 5-INCH
- CP04 CONCRETE PAVEMENT 9-INCH, DOWELED AND TINED
- CP05 CONCRETE PAVEMENT REPAIR AND REPLACEMENT
- PV07 ASPHALTIC SURFACE, 3-INCH
- SW01 SAWING ASPHALT
- SW02 SAWING CONCRETE





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

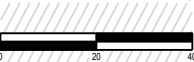
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:

all in

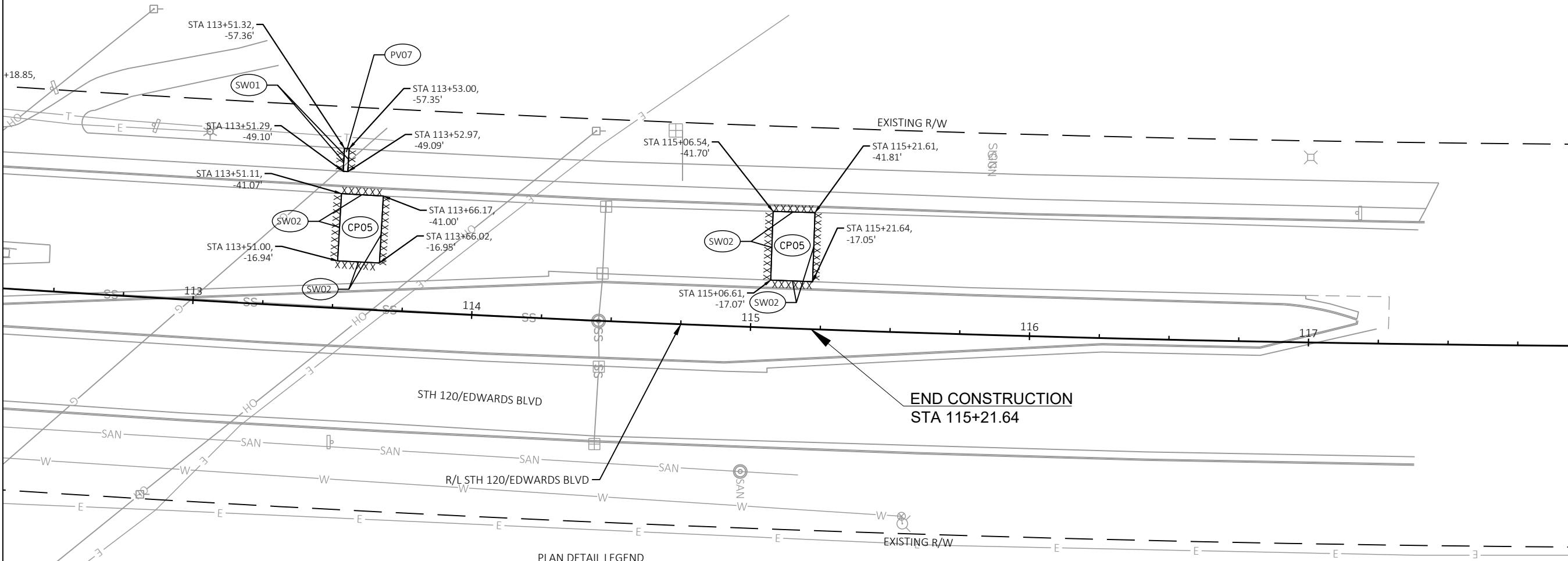
SHEET:

PLAN DETAILS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

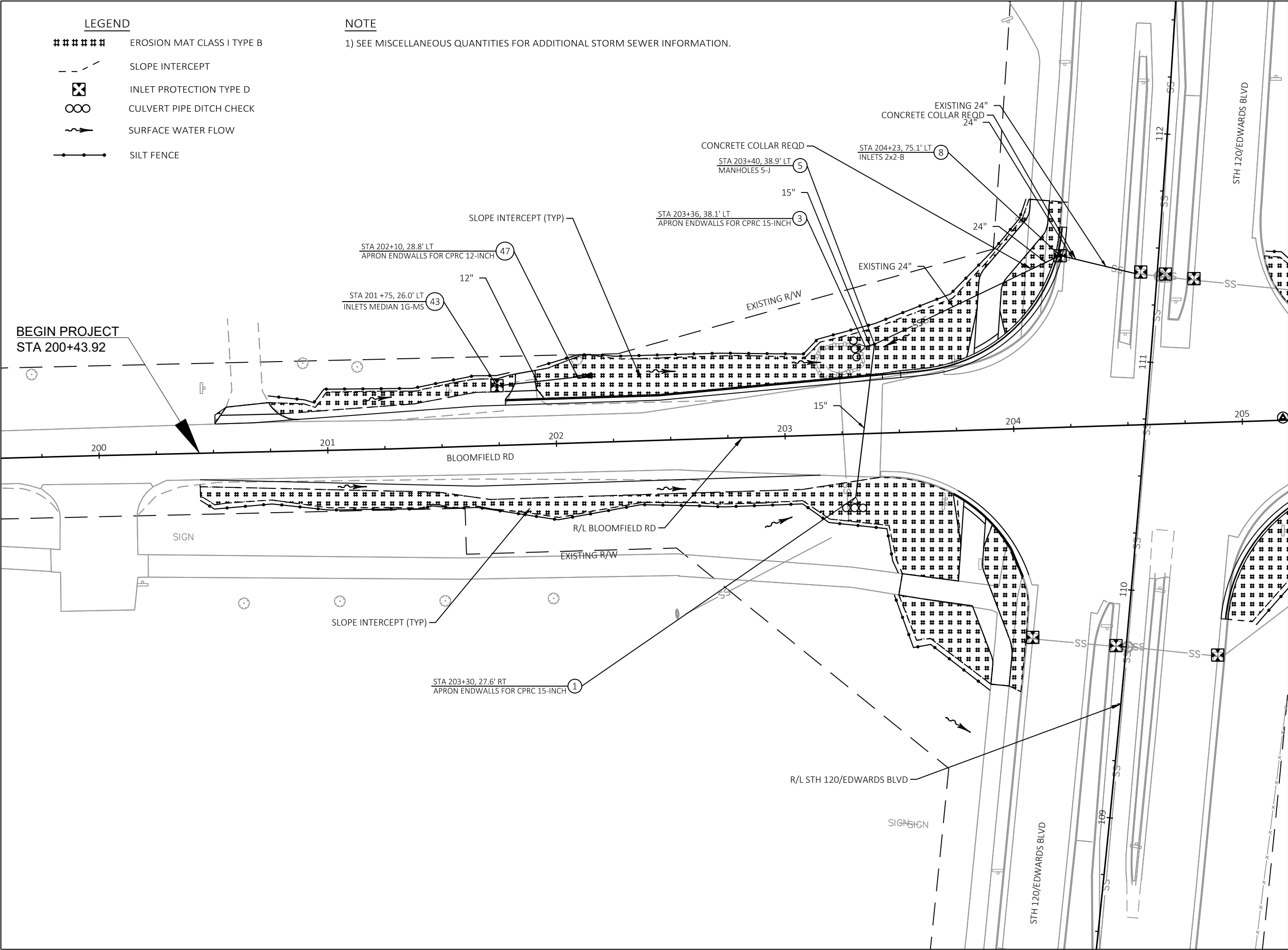
SHEET NUMBER:

11



PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE 3/4-INCH
- AP01 HMA PAVEMENT, 4-INCH
- CG01 CONCRETE CURB AND GUTTER 30-INCH TYPE D
- CG02 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A
- CM05 CONCRETE SIDEWALK 5-INCH
- CP04 CONCRETE PAVEMENT 9-INCH, DOWELED AND TINED
- CP05 CONCRETE PAVEMENT REPAIR AND REPLACEMENT
- PV07 ASPHALTIC SURFACE, 3-INCH
- SW01 SAWING ASPHALT
- SW02 SAWING CONCRETE



LEGEND

- ##### EROSION MAT CLASS I TYPE B
- - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE D
- ∞ CULVERT PIPE DITCH CHECK
- ~ SURFACE WATER FLOW
- SILT FENCE

NOTE

1) SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL STORM SEWER INFORMATION.



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

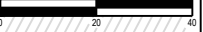
LOCATION:
LAKE GENEVA

CLIENT:


RELEASE:
BID SET

#	DATE	DESCRIPTION

NORTH ARROW:


SCALE: 1" = 40'


SEAL:


all in

SHEET:
EROSION CONTROL
PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
12



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



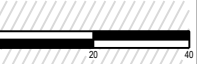
RELEASE:
BID SET

REVISIONS:		
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:



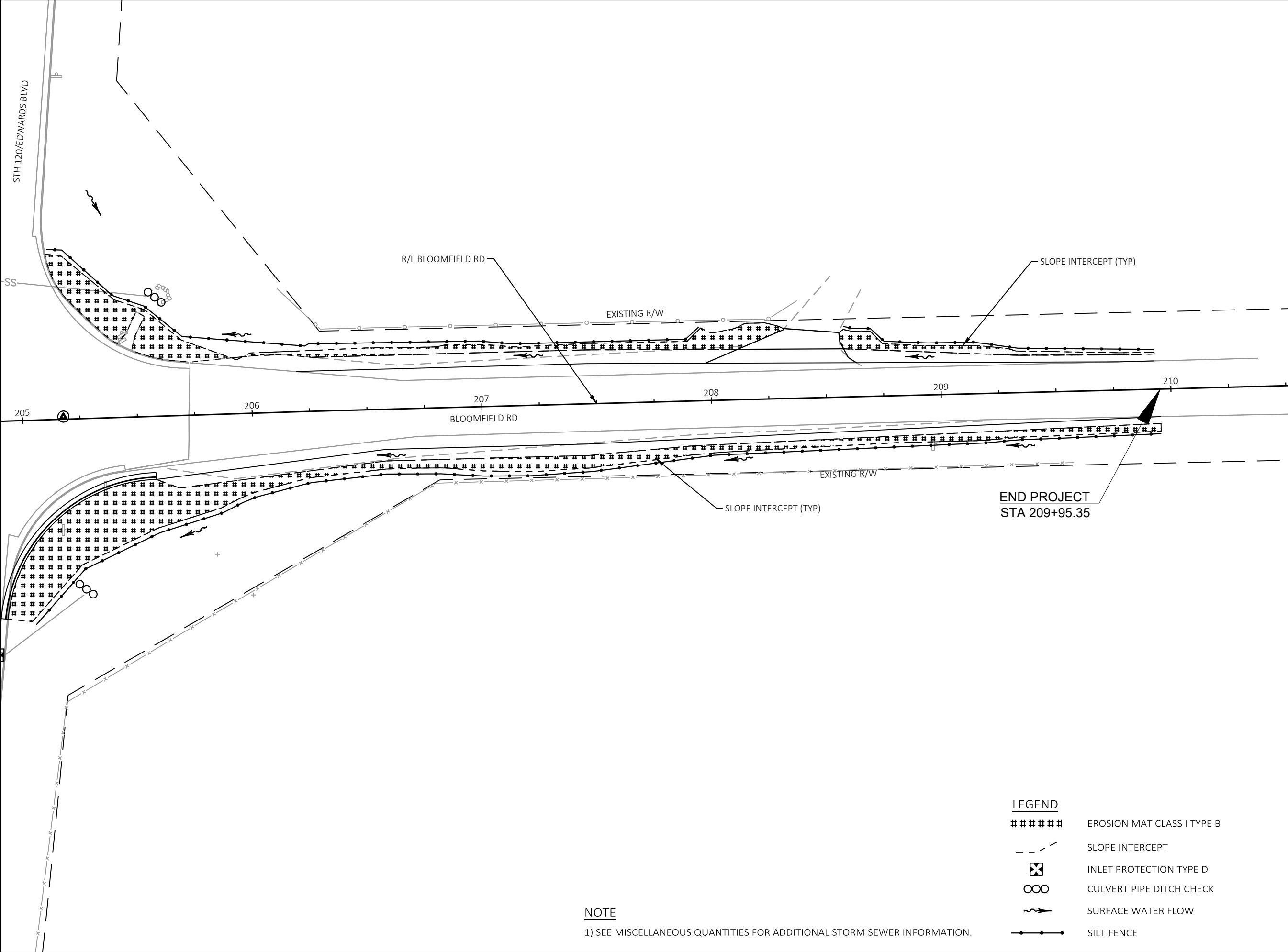
all in

SHEET:
EROSION CONTROL
PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

13



LEGEND

- ##### EROSION MAT CLASS I TYPE B
- - - SLOPE INTERCEPT
- ⊠ INLET PROTECTION TYPE D
- ∞ CULVERT PIPE DITCH CHECK
- ~> SURFACE WATER FLOW
- SILT FENCE

NOTE

1) SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL STORM SEWER INFORMATION.



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

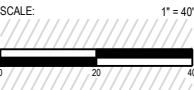
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



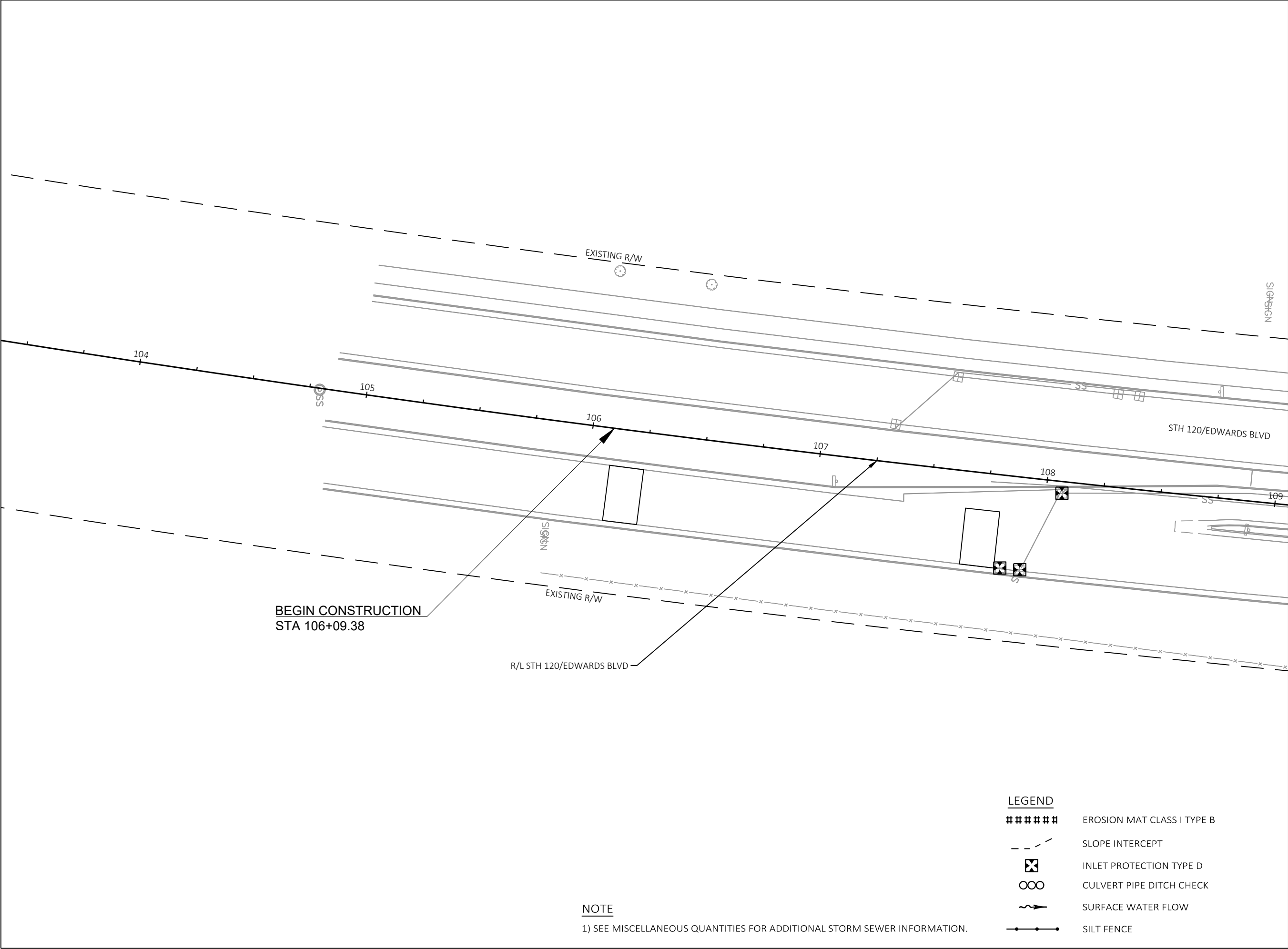
SEAL:

all in

SHEET:
EROSION CONTROL
PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
14





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

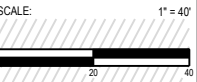
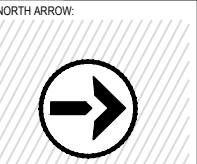
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



SEAL:

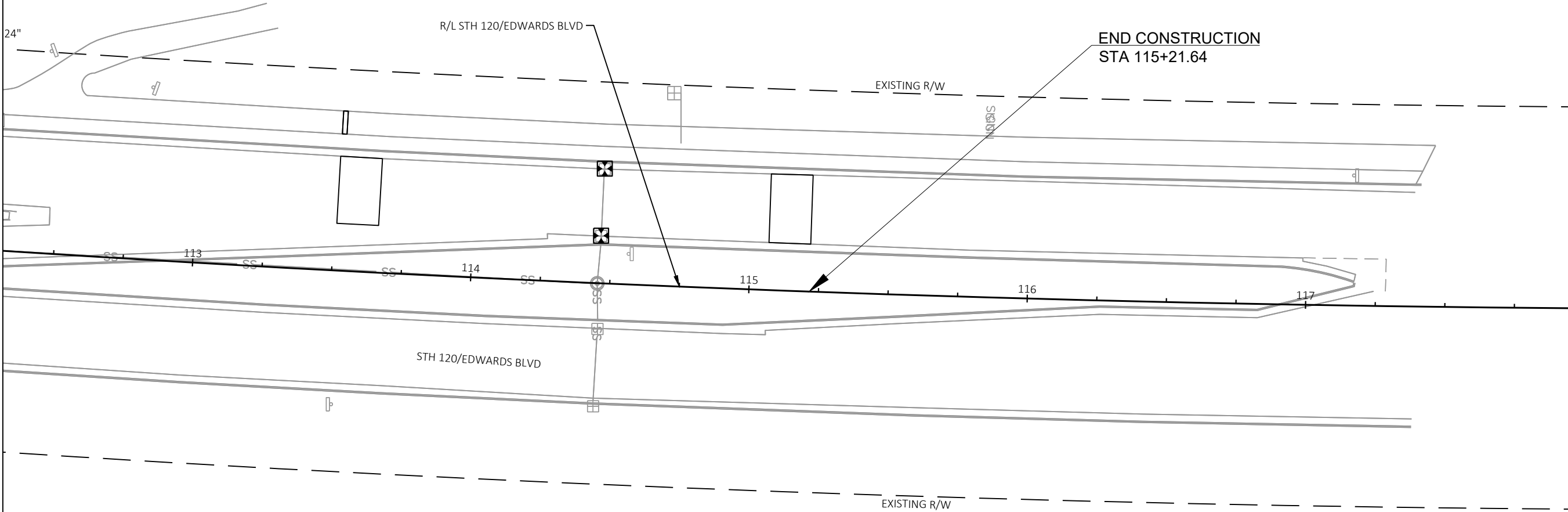
all in

SHEET:

EROSION CONTROL PLAN	
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

15



LEGEND

- ##### EROSION MAT CLASS I TYPE B
- - - - - SLOPE INTERCEPT
- ⊗ INLET PROTECTION TYPE D
- ∞ CULVERT PIPE DITCH CHECK
- ~> SURFACE WATER FLOW
- SILT FENCE

NOTE

1) SEE MISCELLANEOUS QUANTITIES FOR ADDITIONAL STORM SEWER INFORMATION.



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

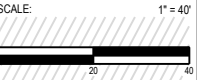
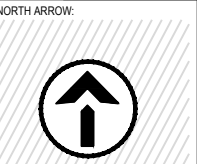
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



SEAL:

all in

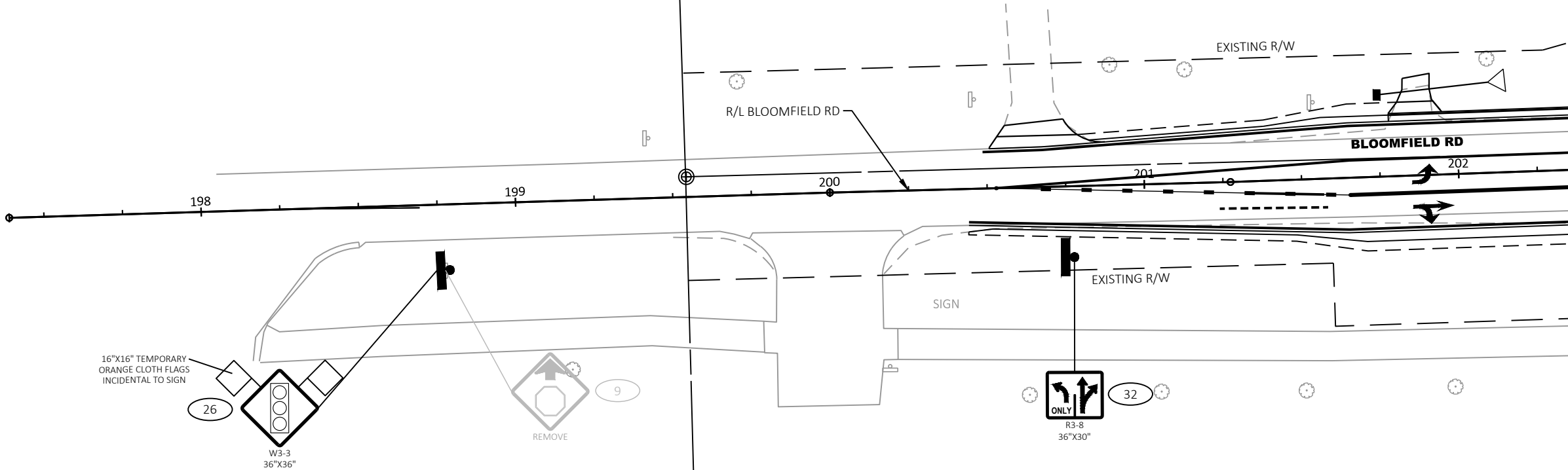
SHEET:

SIGNING PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

16





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

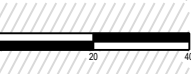
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:

all in

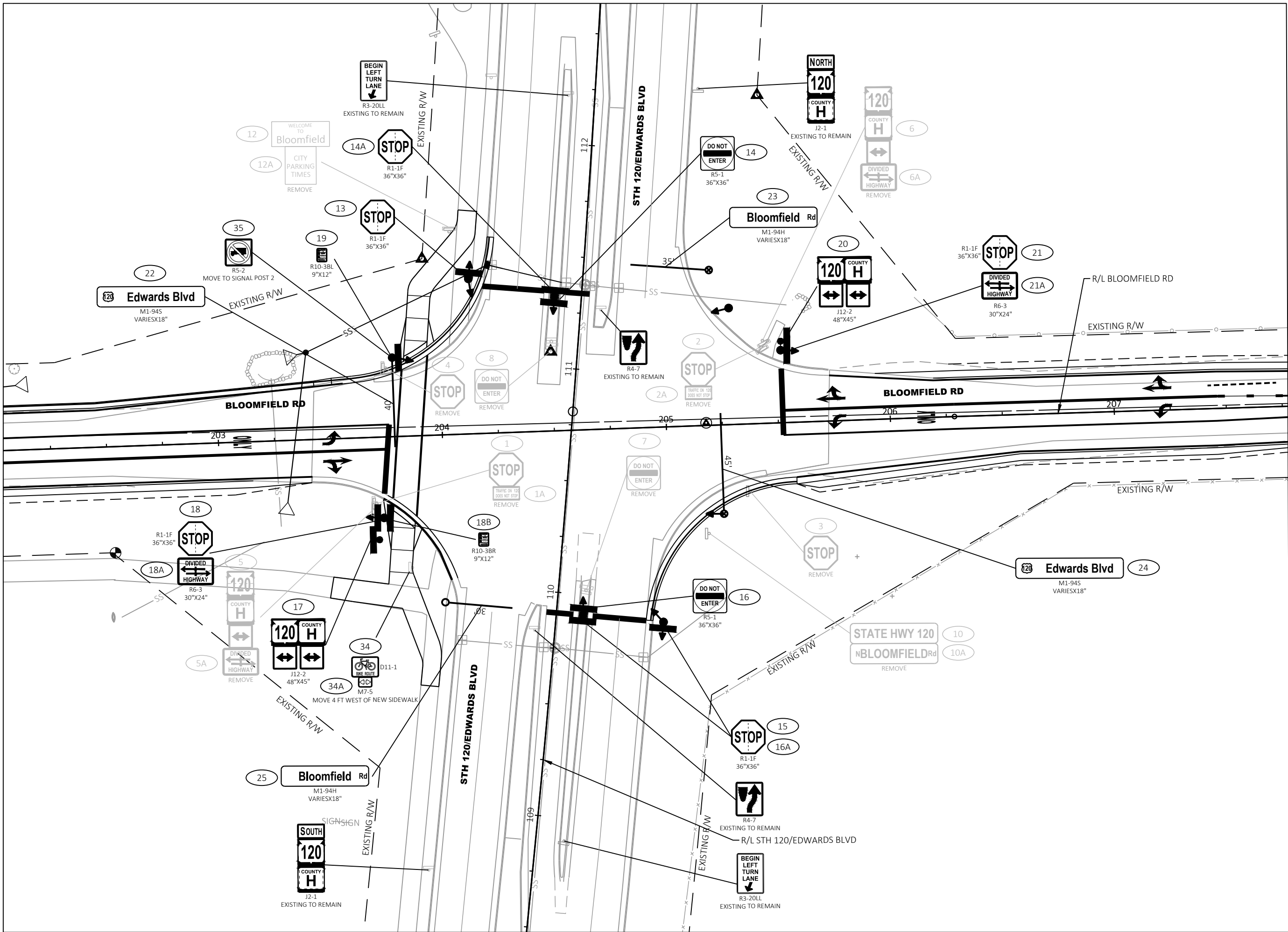
SHEET:

SIGNING PLAN

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

17





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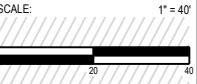
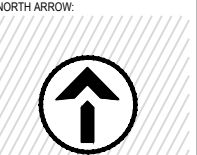
PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:		
#	DATE	DESCRIPTION



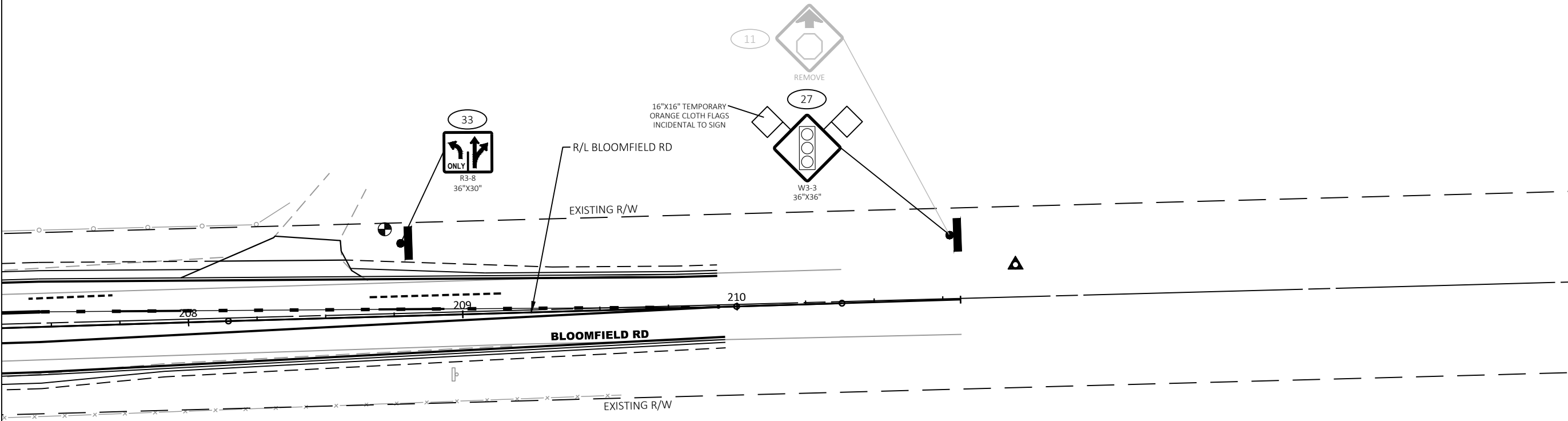
SEAL:

all in

SHEET:
SIGNING PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
18





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

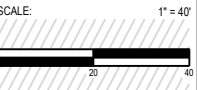
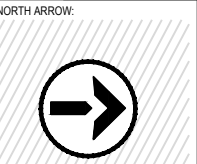
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



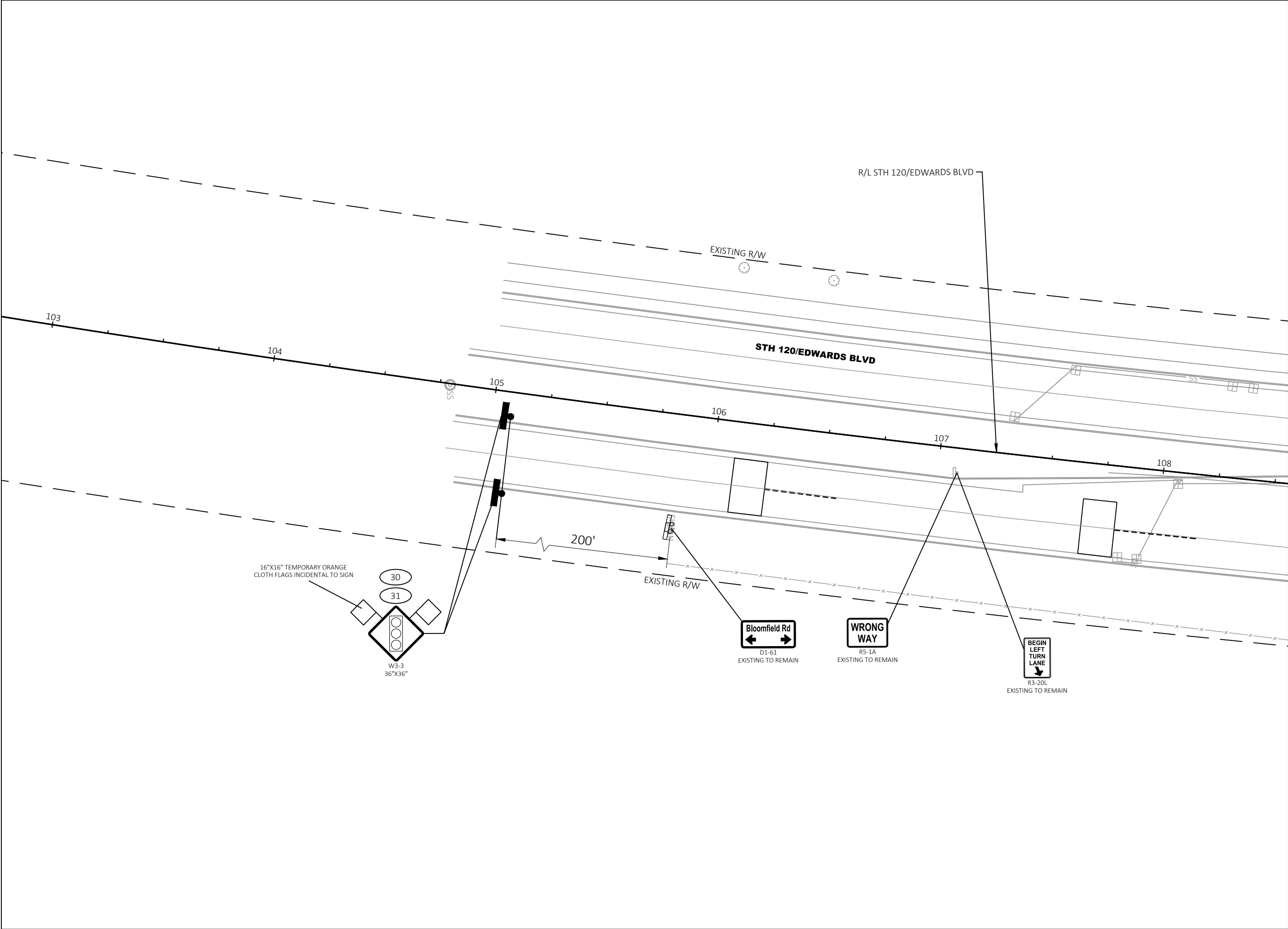
SEAL:

all in

SHEET:
SIGNING PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
19





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

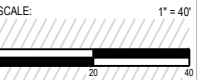
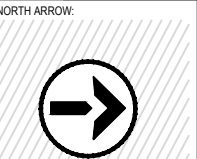
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



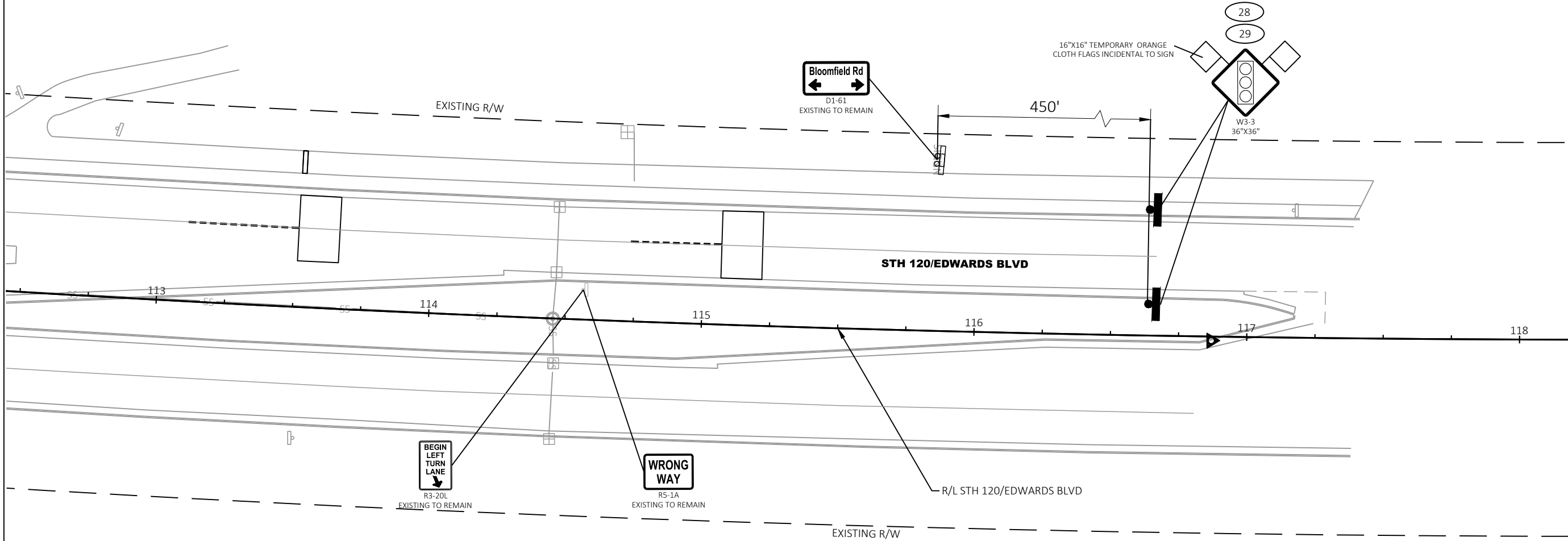
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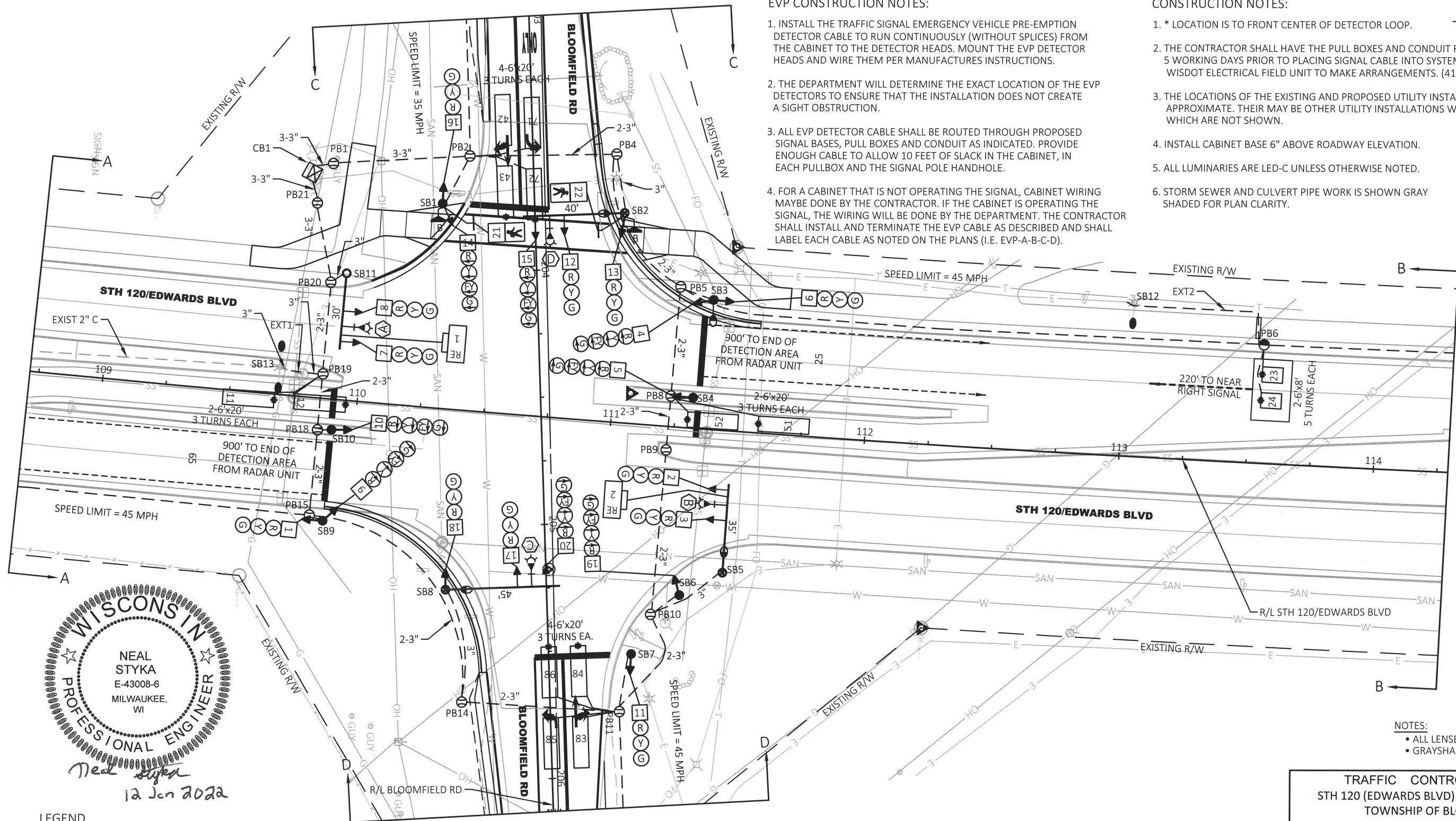
all in

SHEET:
SIGNING PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
20





LEGEND

- ☒ CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- ◀ SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL OR TRANSFORMER BASE
- (XX) ○ MONOTUBE - TYPE 10 BASE, POLE, 15'-30' ARM
- (XX) ● MONOTUBE - TYPE 10 SPECIAL BASE, POLE, 35'-45' ARM

- ⬇ PEDESTRIAN HEAD
- ★ CONFIRMATION LIGHT
- ⌘ LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- ⌘ RADAR DETECTION AREA
- ⓪ PULL BOX, 24" X 42"

- ♂ ACCESSIBLE PEDESTRIAN PUSH BUTTON
- PULL BOX, 24" X 36"
- XX SIGNAL HEAD NUMBER
- Ⓡ RED CIRCULAR INDICATOR
- Ⓢ YELLOW CIRCULAR INDICATOR
- Ⓢ GREEN CIRCULAR INDICATOR
- Ⓡ RED ARROW
- Ⓢ YELLOW ARROW
- Ⓢ GREEN ARROW
- ♂ WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- Ⓢ EVP DESIGNATOR
- ♂ EVP DETECTOR HEAD

- RX RADAR DETECTOR
- LUMINAIRE AND ARM
- LUMINAIRE ONLY
- STRUCTURE NUMBERS**
- SB2 = S-64-1116-1
- SB5 = S-64-1116-2
- SB8 = S-64-1116-3
- SB11 = S-64-1116-4

NOTES:

- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
STH 120 (EDWARDS BLVD) & BLOOMFIELD RD
TOWNSHIP OF BLOOMFIELD
WALWORTH COUNTY

SIGNAL NO. **S64-1496** CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

DATE **1/13/22**

APPROVED

DATE **1/13/22**

REGION CONTACT: D. WOLFORD
DESIGNED BY: KAPUR
REVISED BY:

David M. E.
REGIONAL TRAFFIC ENGINEER

James R. L.
STATE TRAFFIC ENGINEER

PAGE 1 OF 4

PROJECT NO: 0663-22-103

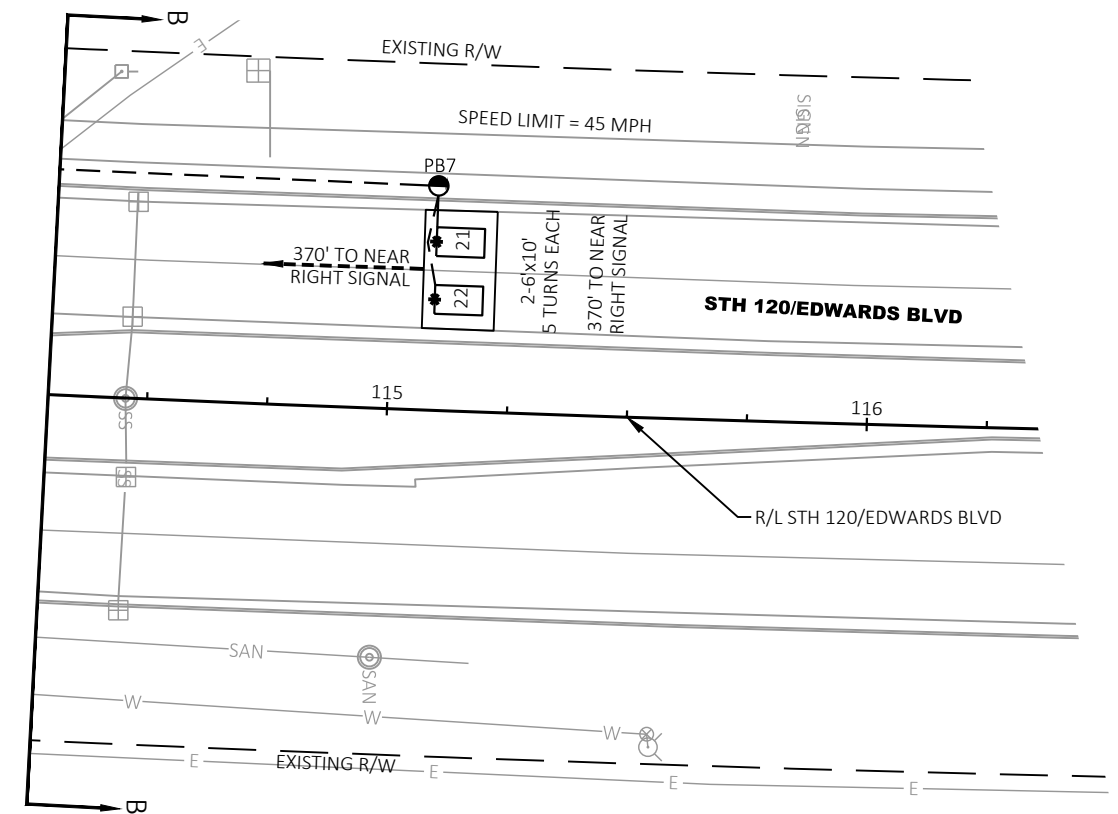
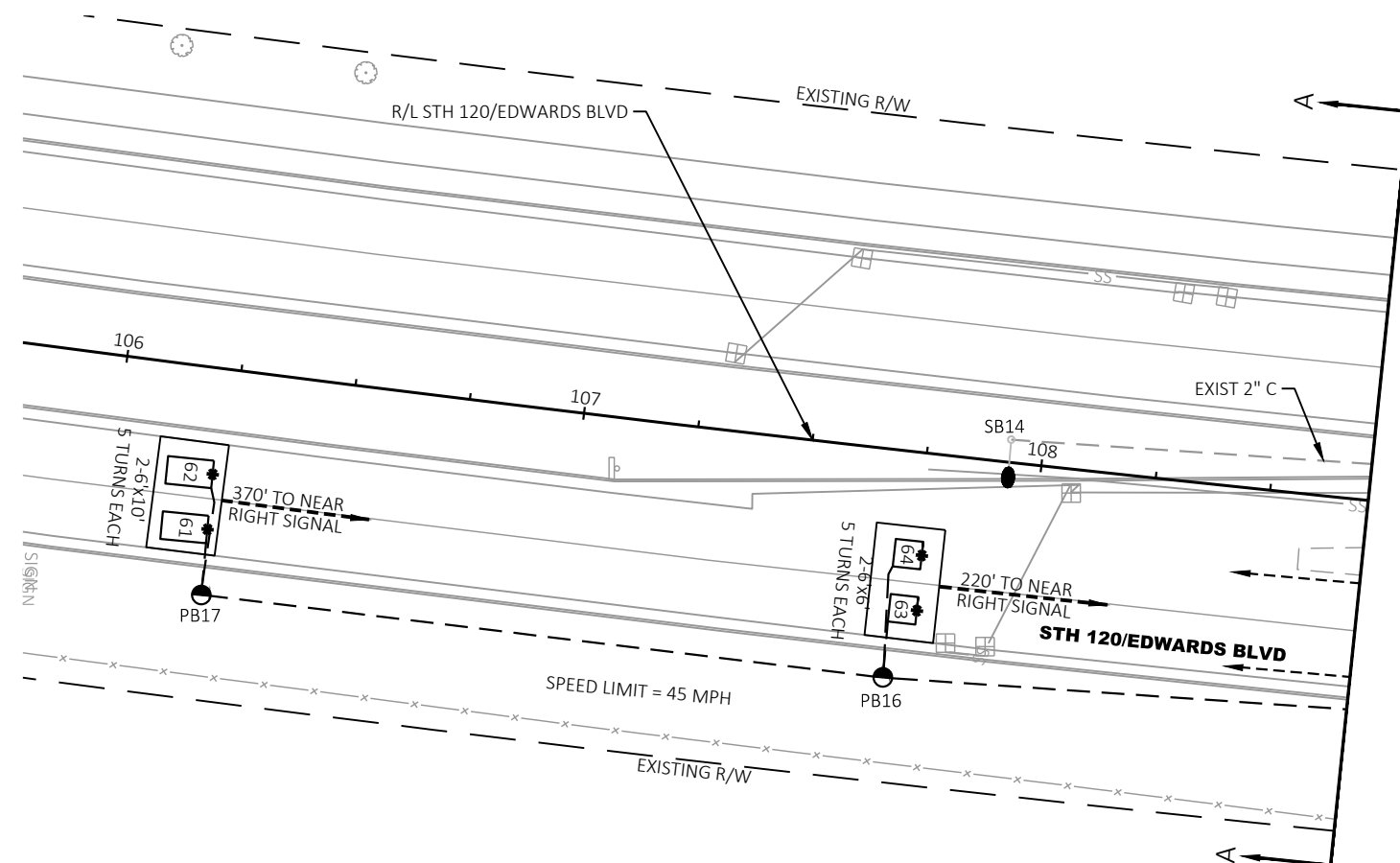
HWY: STH 120

COUNTY: WALWORTH

TRAFFIC SIGNAL PLAN

SHEET 21

E



TRAFFIC CONTROL SIGNAL
STH 120 (EDWARDS BLVD) & BLOOMFIELD RD
TOWNSHIP OF BLOOMFIELD
WALWORTH COUNTY

SIGNAL NO. S64-1496

REGION CONTACT: D. WOLFORD
DESIGNED BY: KAPUR
REVISED BY:

PAGE 2 OF 4

PROJECT NO: 0663-22-103

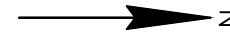
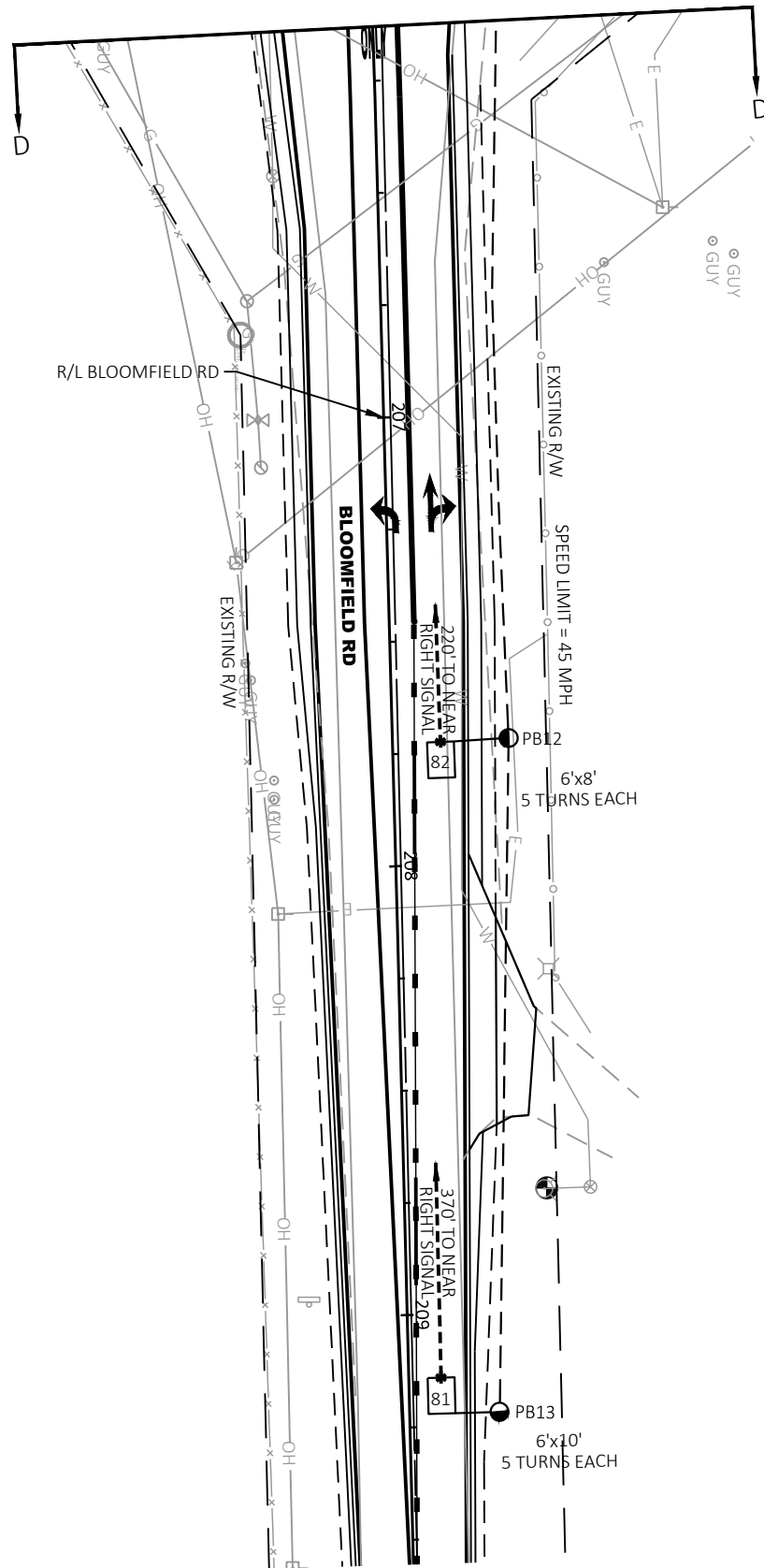
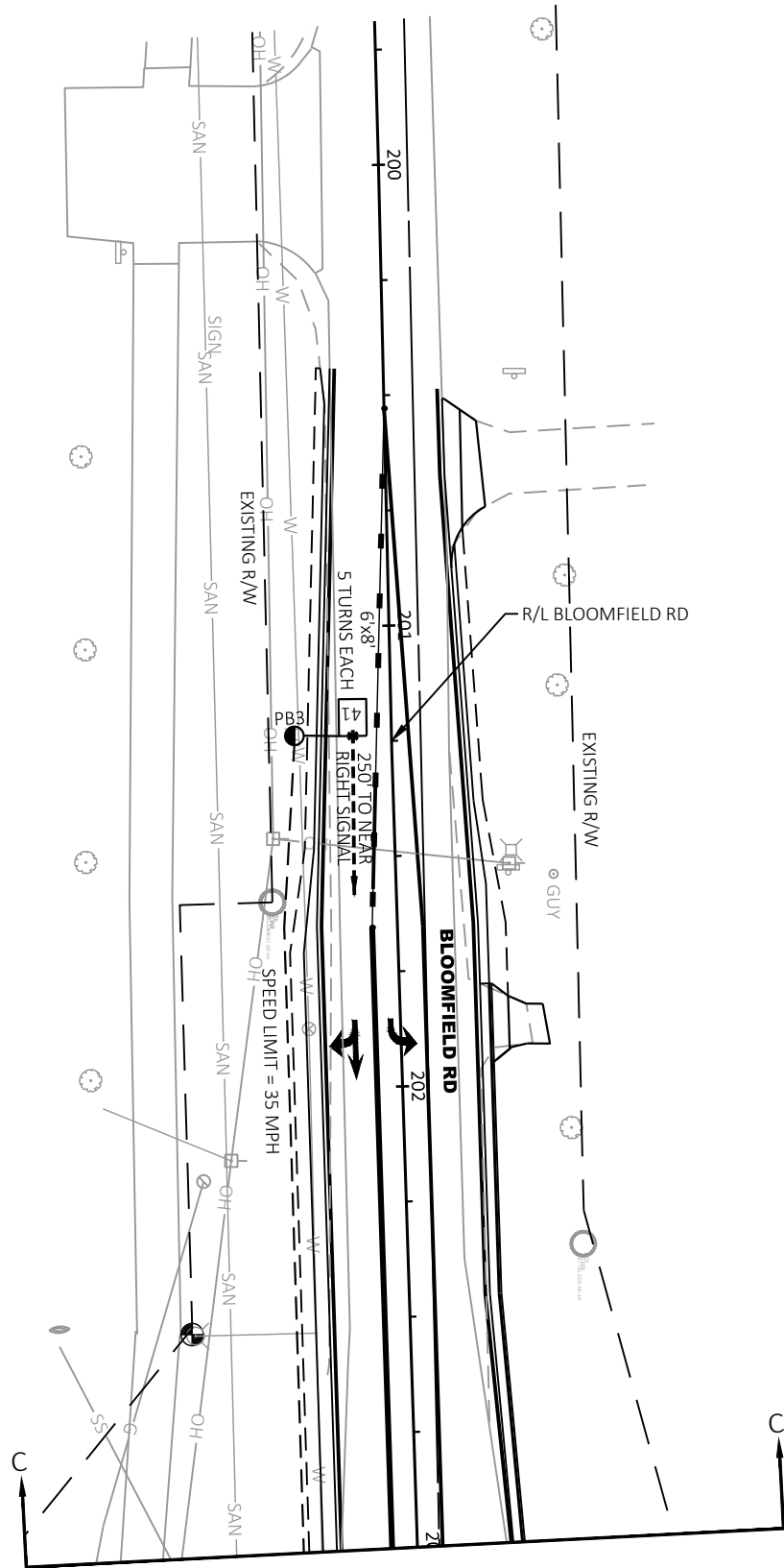
HWY: STH 120

COUNTY: WALWORTH

TRAFFIC SIGNAL PLAN

SHEET 22

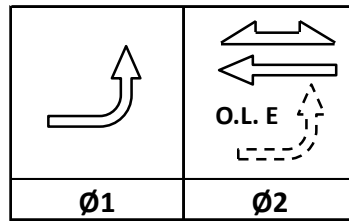
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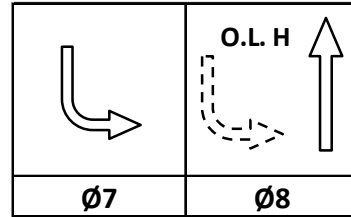
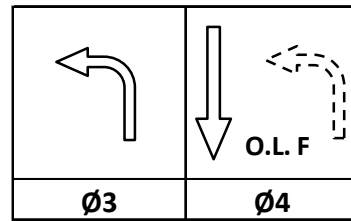
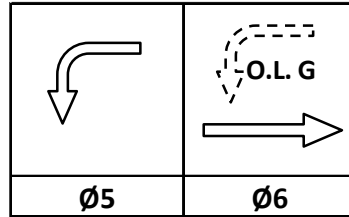
TRAFFIC CONTROL SIGNAL STH 120 (EDWARDS BLVD) & BLOOMFIELD RD TOWNSHIP OF BLOOMFIELD WALWORTH COUNTY	
SIGNAL NO. S64-1496	
REGION CONTACT: D. WOLFORD DESIGNED BY: KAPUR REVISED BY:	PAGE 3 OF 4

	HEAD NUMBERS	FLASH
Ø1	4,5	R
Ø2	6,7,8	R
Ø3	14,15	R
Ø4	16,17,18	R
Ø5	9,10	R
Ø6	1,2,3	R
Ø7	19,20	R
Ø8	11,12,13	R
Ø2P	21,22	
Ø4P		
Ø6P		
Ø8P		
OLE	4,5	-
OLF	14,15	-
OLG	9,10	-
OLH	19,20	-

RING 1



RING 2



BARRIER



DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	23	41	43	52	62	64
CALLED PHASE	1	2	2	4	4	5	6	6
CALL OPTION	X	X	X		X	X	X	X
DELAY TIME					X			
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME				X				
USE ADDED INITIAL		X	X				X	X
CROSS SWITCH PHASE	2					6		

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	24	42	51	61	63	71
CALLED PHASE	1	2	2	4	5	6	6	7
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME				X				
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL		X	X			X	X	
CROSS SWITCH PHASE	2				6			8

19	17	23	21	27	25	31	29
72	82	84	86				
7	8	8	8				
X		X	X				
X		X	X				
X	X	X	X				
	X						
8							

20	18	24	22	28	26	32	30
81	83	85					
8	8	8					
	X	X					
	X						
X	X	X					
X							

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

GENERAL NOTES:

- PHASE 3 AND 5 TO BE OMITTED AT ALL TIMES EXCEPT DURING PRE-EMPTION

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT				
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.

AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	X
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	X
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	X
LIFT BRIDGE	
QUEUE DETECTION	

35	33	39	37	43	41	47	45
25							
2							
X							
X							

36	34	40	38	44	42	48	46
65							
6							
X							
X							

DETECTOR INPUT	
PLAN LOOP DETECTOR*(S)	
CALLED PHASE	
CALL OPTION	
DELAY TIME	
EXTENTION OPTION	
EXTEND TIME	
USE ADDED INITIAL	
CROSS SWITCH PHASE	

DETECTOR INPUT	
PLAN LOOP DETECTOR*(S)	
CALLED PHASE	
CALL OPTION	
DELAY TIME	
EXTENTION OPTION	
EXTEND TIME	
USE ADDED INITIAL	
CROSS SWITCH PHASE	

STH 120 (EDWARDS BLVD) & BLOOMFIELD RD	
TOWNSHIP OF BLOOMFIELD	
WALWORTH COUNTY	
SIGNAL NO: S64-1496	CABINET TYPE: TS2-E
CONTROLLER TYPE: ECONOLITE	
DATE: 1/2022	PAGE NUMBER: 4 OF 4

PROJECT ID:	0663-22-103
INTERSECTION:	STH 120 (EDWARDS BOULEVARD) AND BLOOMFIELD ROAD

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB1 TO	NO. OF CONDUCTORS	HEAD NO.	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	FLASHING <YELLOW>	D/WALK	WALK	PED NEUTRAL	OTHER
SB1	12	14				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		16	RED	ORANGE	GREEN								
		21								BLU	BLK		
		B										WHT/BLK	BLU/BLK
SB2	12	12	RED	ORANGE	GREEN								
		13	RED	ORANGE	GREEN								
		15				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		22								BLU	BLK		
		B										WHT/BLK	BLU/BLK
SB3	12	4				RED	ORG	GRN	BLK/WHT				
		6	RED/BLK	ORG/BLK	GREEN/BLK								
SB4	7	5				RED	ORG	GRN	BLK				
SB5	7	2	RED	ORANGE	GREEN								
		3	RED	ORANGE	GREEN								
SB6	7	19				RED	ORG	GRN	BLK				
SB7	7	11	RED	ORANGE	GREEN								
SB8	12	17	RED	ORANGE	GREEN								
		18	RED	ORANGE	GREEN								
		20				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB9	12	1	RED	ORANGE	GREEN								
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB10	7	10				RED	ORG	GRN	BLK				
SB11	12	7	RED	ORANGE	GREEN								
		8	RED	ORANGE	GREEN								

- NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
 2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
 3. AT THE SIGNAL BASES, CONNECT ON TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART.
CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.

(CONTINUED ON NEXT SHEET)

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
PB1	CB1
PB2	SB1
PB4	SB2
PB5	SB3
PB8	SB4
PB9	SB4
PB10	SB5
PB11	SB7
PB14	SB8
PB15	SB9
PB18	SB10
PB19	SB10
PB20	SB11
PB21	CB1

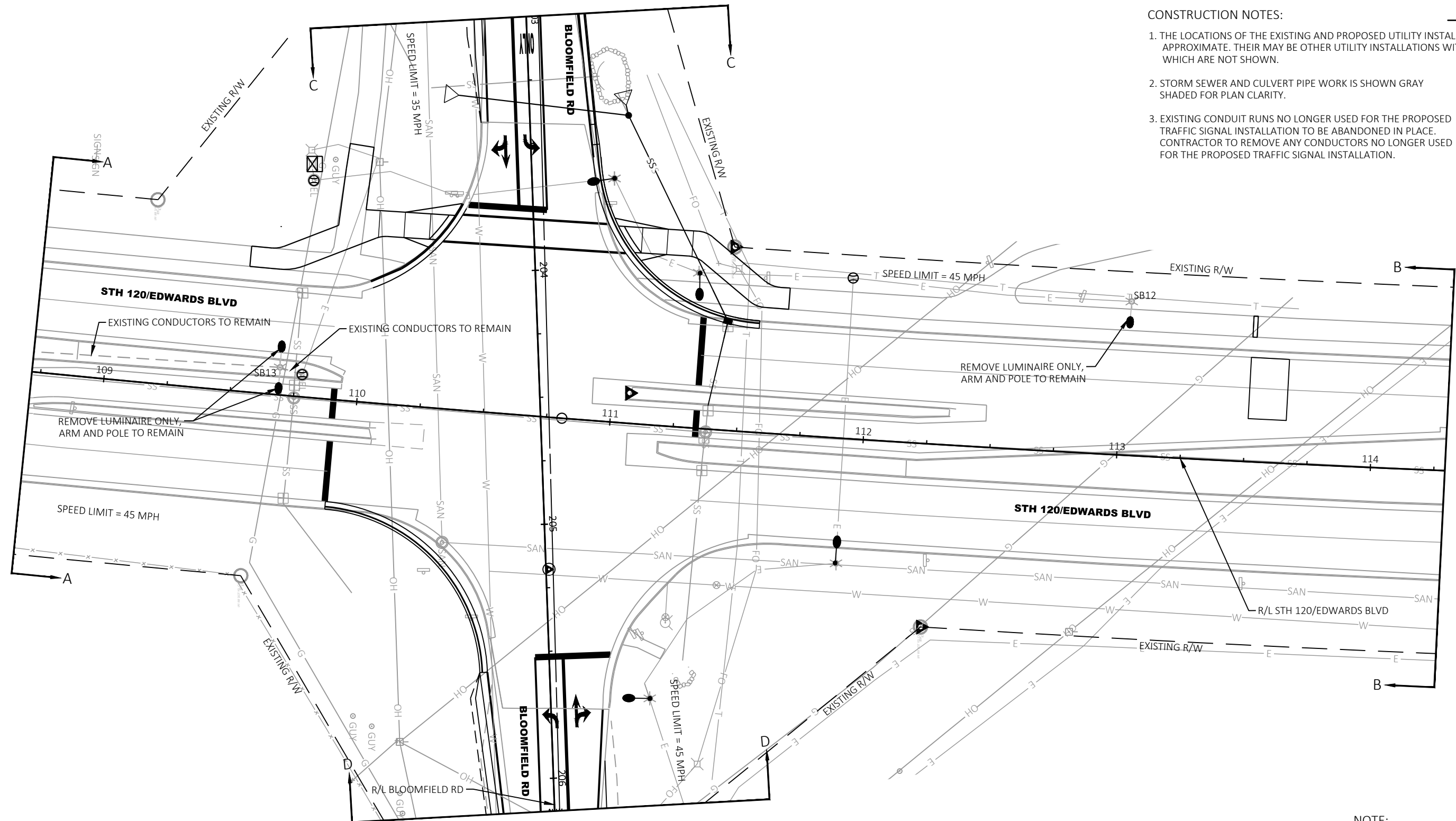
EMERGENCY VEHICLE PREEMPTION	
FROM	TO
CB1	SB11 (HEAD A)
CB1	SB5 (HEAD B)
CB1	SB8 (HEAD C)
CB1	SB1 (HEAD D)

CONFIRMATION BEACON CABLE TRAFFIC SIGNAL 3-14 AWG	
FROM	TO
CB1	SB11 (HEAD A)
CB1	SB5 (HEAD B)
CB1	SB8 (HEAD C)
CB1	SB1 (HEAD D)

RADAR DETECTION CABLE	
FROM	TO
CB1	SB11 (RE1)
CB1	SB5 (RE2)

CONSTRUCTION NOTES:

1. THE LOCATIONS OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THEIR MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. STORM SEWER AND CULVERT PIPE WORK IS SHOWN GRAY SHADED FOR PLAN CLARITY.
3. EXISTING CONDUIT RUNS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS NO LONGER USED FOR THE PROPOSED TRAFFIC SIGNAL INSTALLATION.



LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- PULL BOX, 24" X 42"
- LUMINAIRE AND ARM
- LUMINAIRE ONLY

NOTE:
GRAYSHADE REPRESENTS EXISTING TO REMAIN.
BOLD REPRESENTS EXISTING TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 120 (EDWARDS BLVD) & BLOOMFIELD RD
TOWNSHIP OF BLOOMFIELD
WALWORTH COUNTY

SIGNAL NO. **S64-1496**

REGION CONTACT: D. WOLFORD
DESIGNED BY: KAPUR
REVISED BY:

PAGE 1 OF 2

PROJECT NO: 0663-22-103

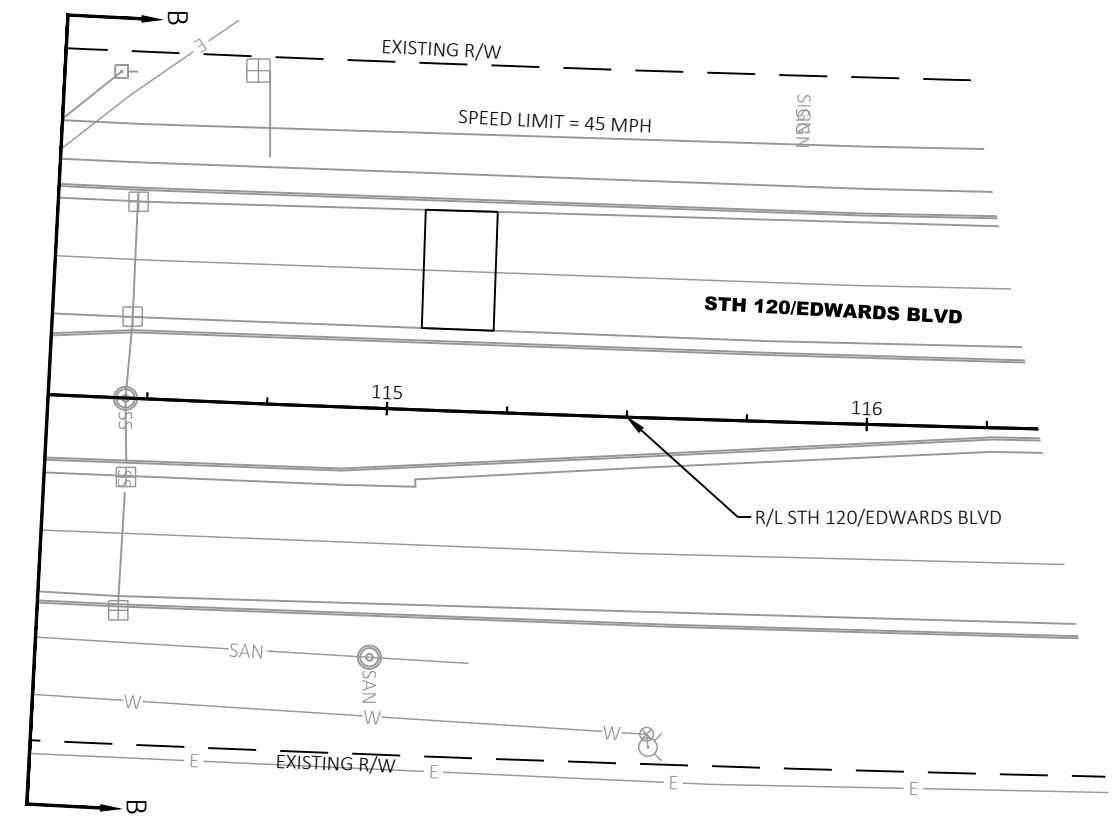
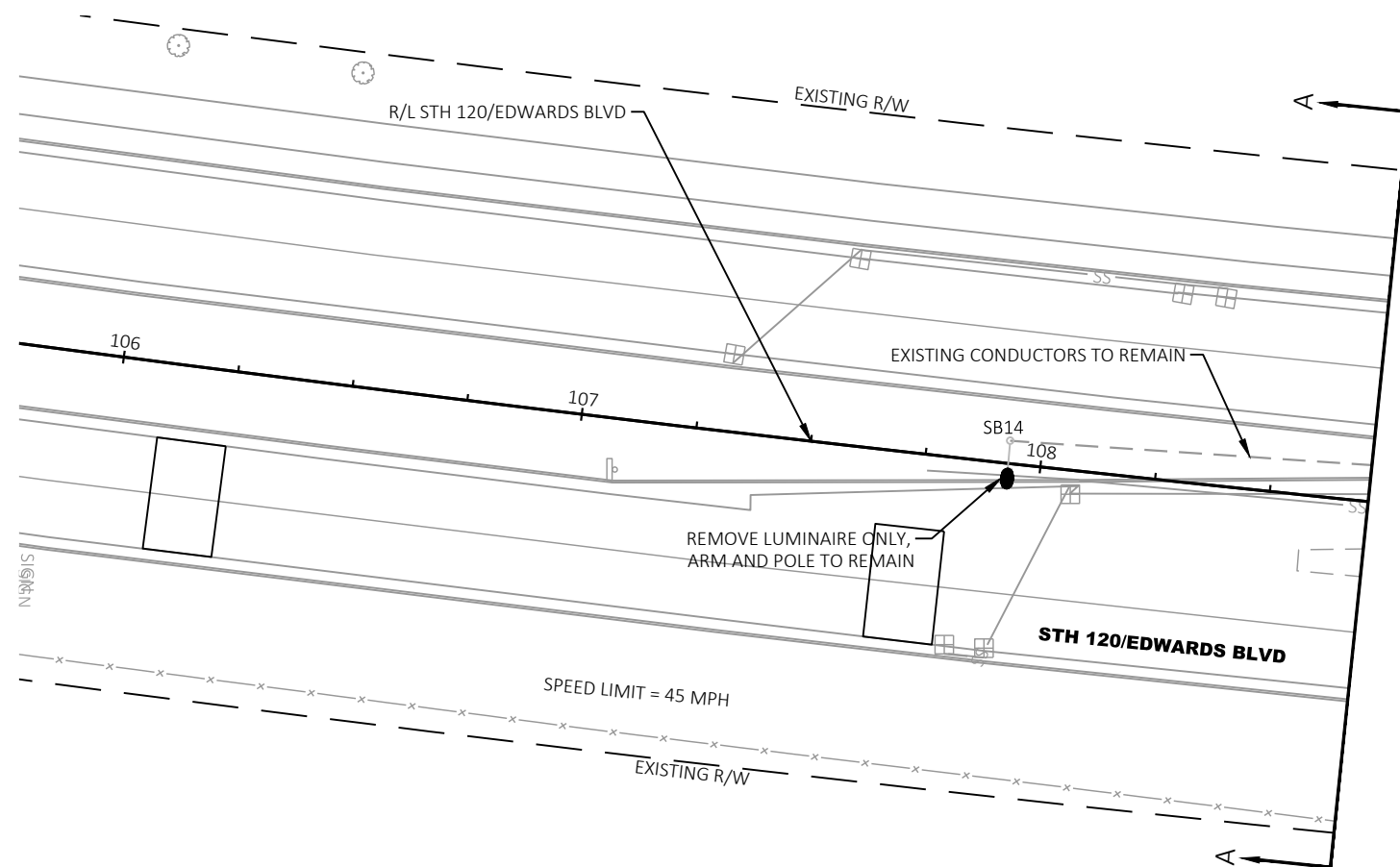
HWY: STH 120

COUNTY: WALWORTH

TRAFFIC SIGNAL REMOVAL PLAN

SHEET 27

E



TRAFFIC CONTROL SIGNAL
STH 120 (EDWARDS BLVD) & BLOOMFIELD RD
TOWNSHIP OF BLOOMFIELD
WALWORTH COUNTY

SIGNAL NO. S64-1496

REGION CONTACT: D. WOLFORD
DESIGNED BY: KAPUR
REVISED BY:

PAGE 2 OF 2



PROJECT:
ROOMFIELD ROAD
STH 120
(TOWARDS BOULEVARD)
TRAFFIC SIGNAL PROJEC

LAKE GENEVA

ENT: _____



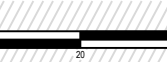
PLEASE:
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[illegible]

RIGHT ARROW:



SALE: $1^* = 1$



AL:

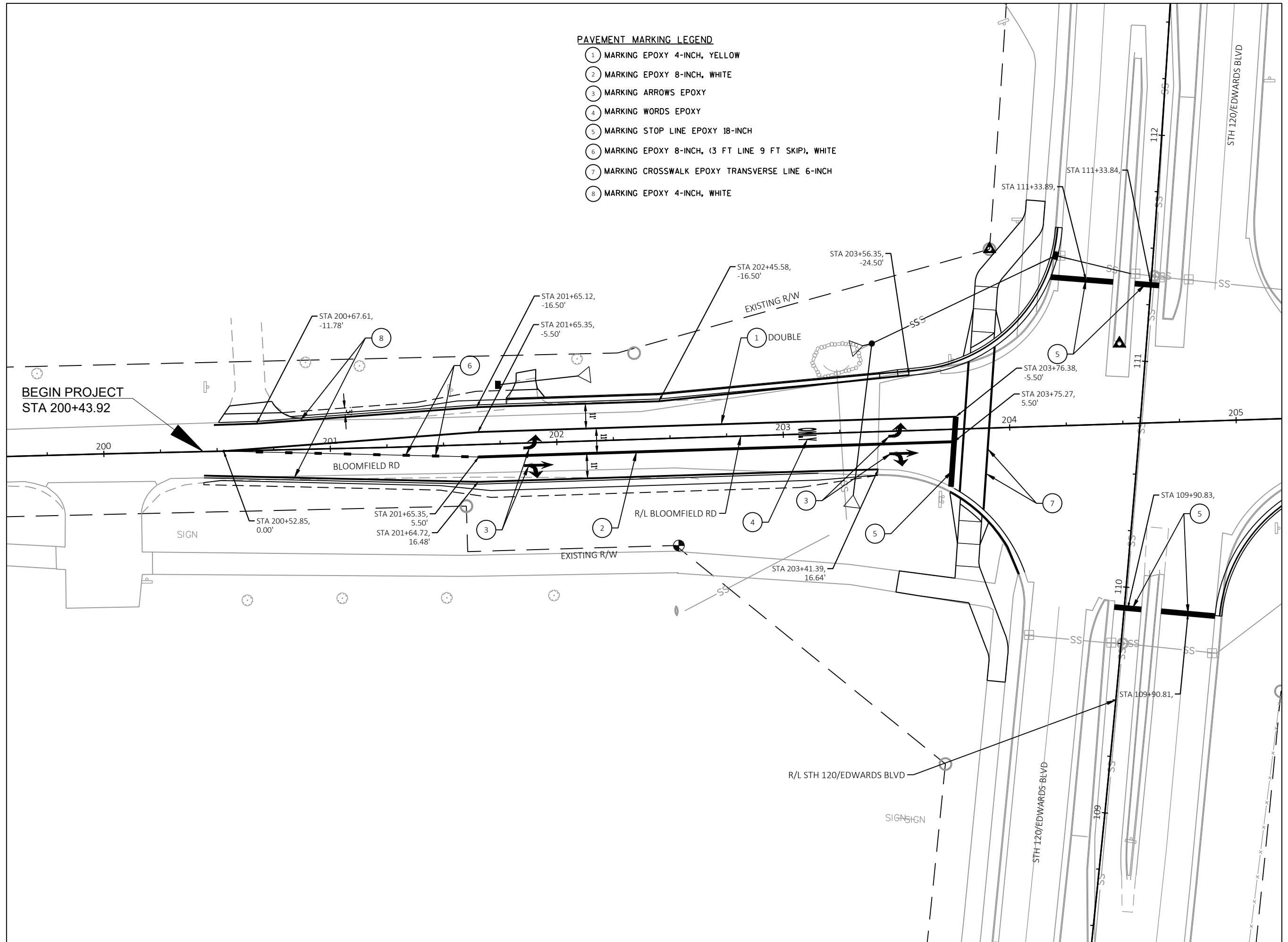
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MEETING: PAVEMENT MARKING

PROJECT MANAGER:	GL
PROJECT NUMBER:	21.0437
SIGNED BY:	NR
DRAWN BY:	WAW
CHECKED BY:	AR
DATE:	01/13/20

SHEET NUMBER: _____

29





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Milwaukee, Wisconsin 53217
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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



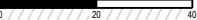
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BID SET

REVISIONS:		
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:

all in

SHEET:
PAVEMENT
MARKING

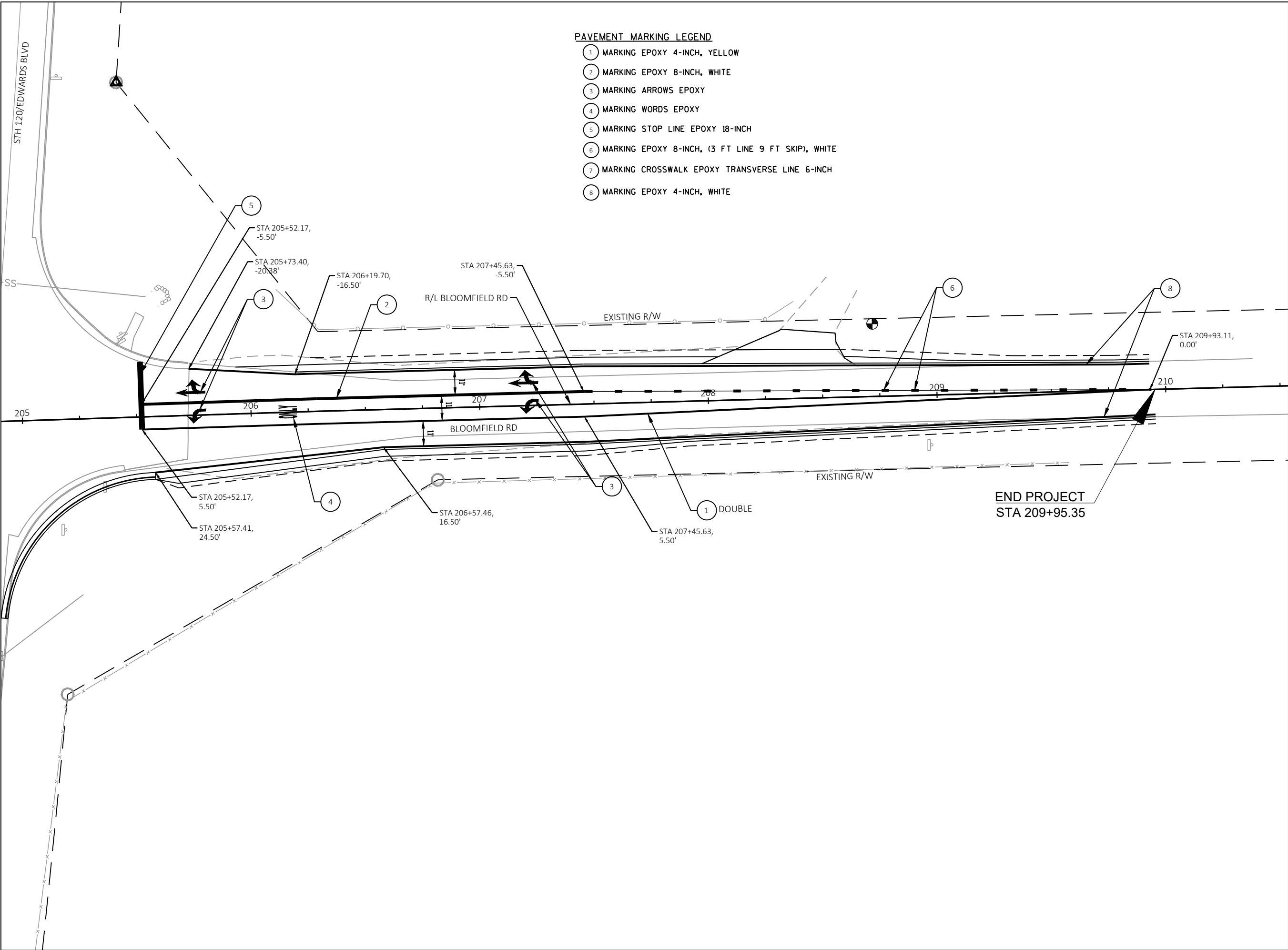
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

30

PAVEMENT MARKING LEGEND

- 1 MARKING EPOXY 4-INCH, YELLOW
- 2 MARKING EPOXY 8-INCH, WHITE
- 3 MARKING ARROWS EPOXY
- 4 MARKING WORDS EPOXY
- 5 MARKING STOP LINE EPOXY 18-INCH
- 6 MARKING EPOXY 8-INCH, (3 FT LINE 9 FT SKIP), WHITE
- 7 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
- 8 MARKING EPOXY 4-INCH, WHITE





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

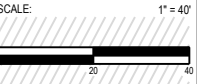
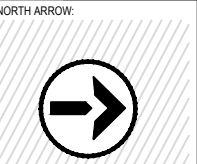
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



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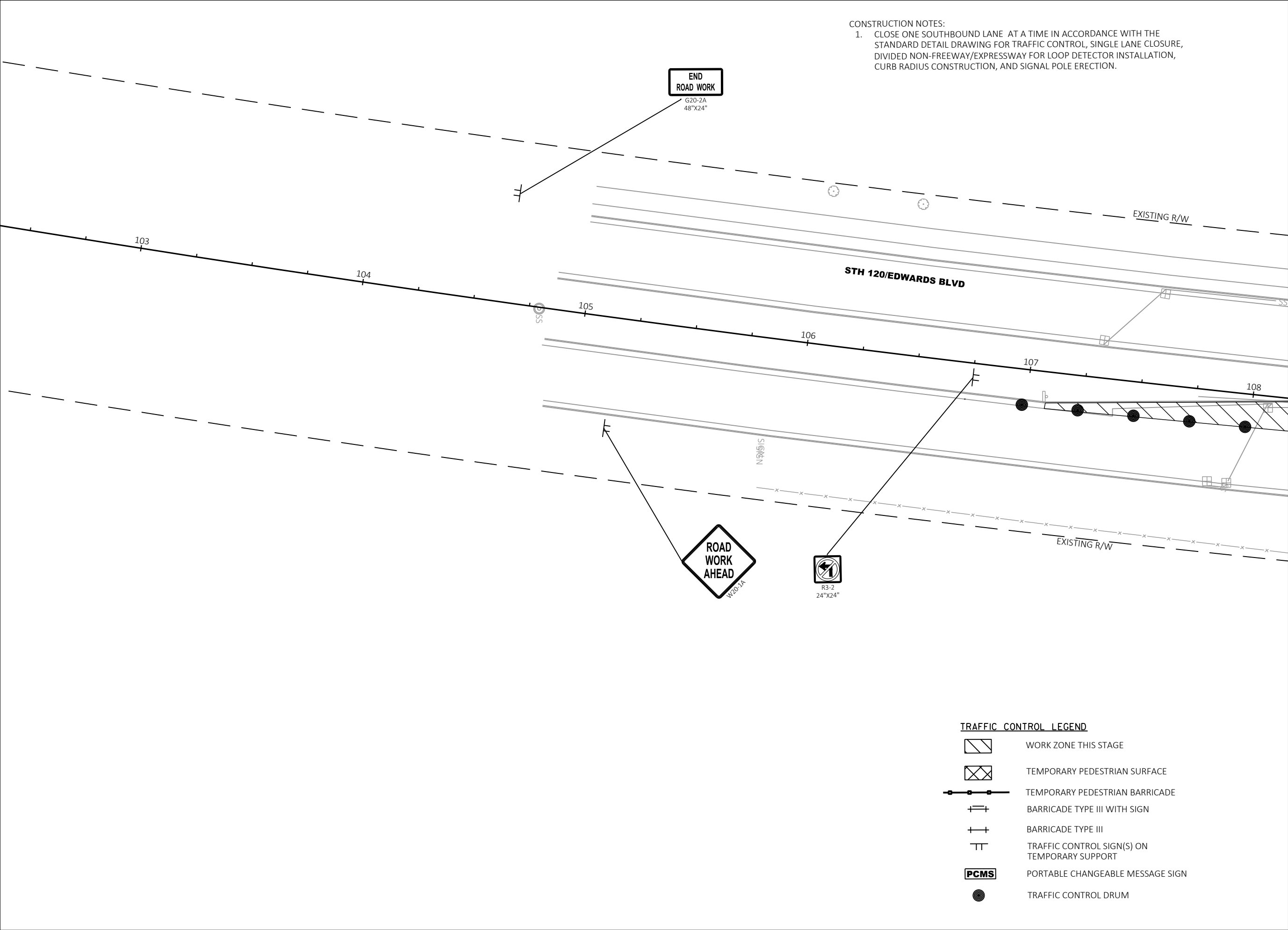
SHEET:

TRAFFIC CONTROL STAGE 1	
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

31

- CONSTRUCTION NOTES:
- CLOSE ONE SOUTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION, AND SIGNAL POLE ERECTION.





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 40'

SEAL:

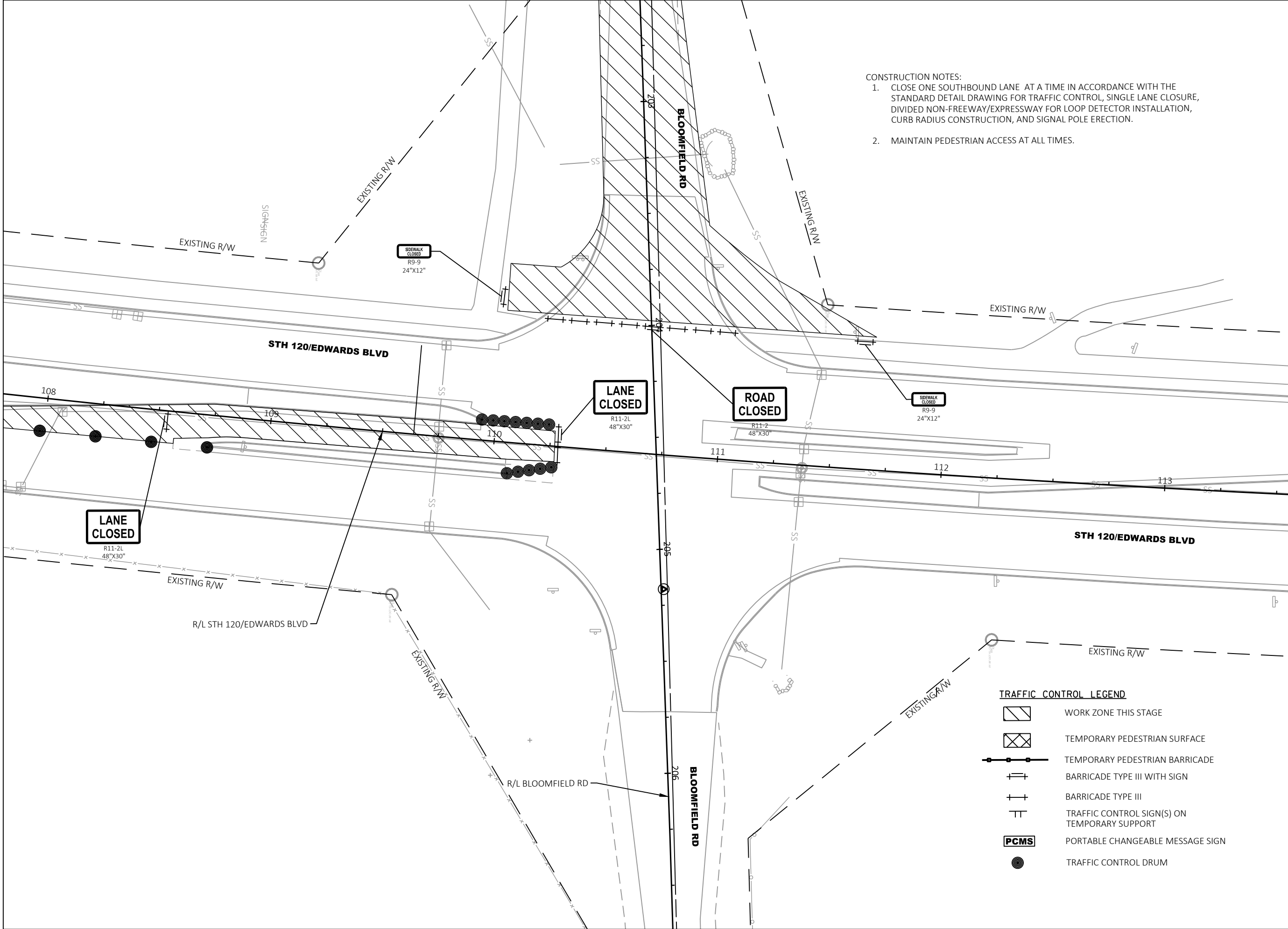
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SHEET:

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
32

- CONSTRUCTION NOTES:
- CLOSE ONE SOUTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION, AND SIGNAL POLE ERECTION.
 - MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES.



TRAFFIC CONTROL LEGEND

	WORK ZONE THIS STAGE
	TEMPORARY PEDESTRIAN SURFACE
	TEMPORARY PEDESTRIAN BARRICADE
	BARRICADE TYPE III WITH SIGN
	BARRICADE TYPE III
	TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
	PORTABLE CHANGEABLE MESSAGE SIGN
	TRAFFIC CONTROL DRUM



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

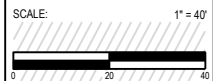
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



SEAL:

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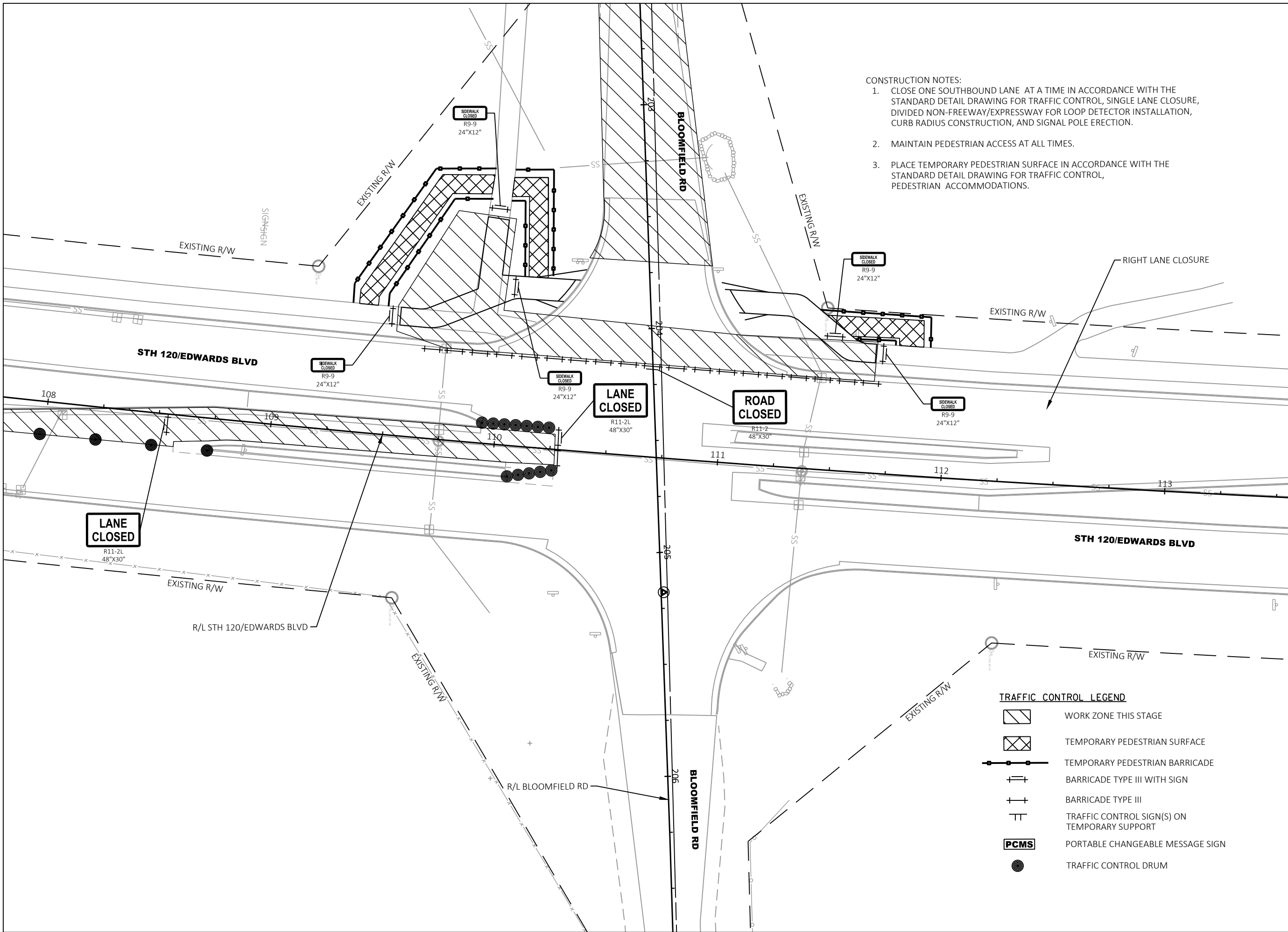
SHEET:
TRAFFIC CONTROL
STAGE 1B

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
33

CONSTRUCTION NOTES:

1. CLOSE ONE SOUTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION, AND SIGNAL POLE ERECTION.
2. MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES.
3. PLACE TEMPORARY PEDESTRIAN SURFACE IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS.



TRAFFIC CONTROL LEGEND

- WORK ZONE THIS STAGE
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- BARRICADE TYPE III WITH SIGN
- BARRICADE TYPE III
- TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC CONTROL DRUM

TRAFFIC CONTROL LEGEND

-  WORK ZONE THIS STAGE
-  TEMPORARY PEDESTRIAN SURFACE
-  TEMPORARY PEDESTRIAN BARRICADE
-  BARRICADE TYPE III WITH SIGN
-  BARRICADE TYPE III
-  TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
-  PORTABLE CHANGEABLE MESSAGE SIGN
-  TRAFFIC CONTROL DRUM

CONSTRUCTION NOTES:
1. CLOSE ONE SOUTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION, AND SIGNAL POLE ERECTION.



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

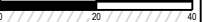
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



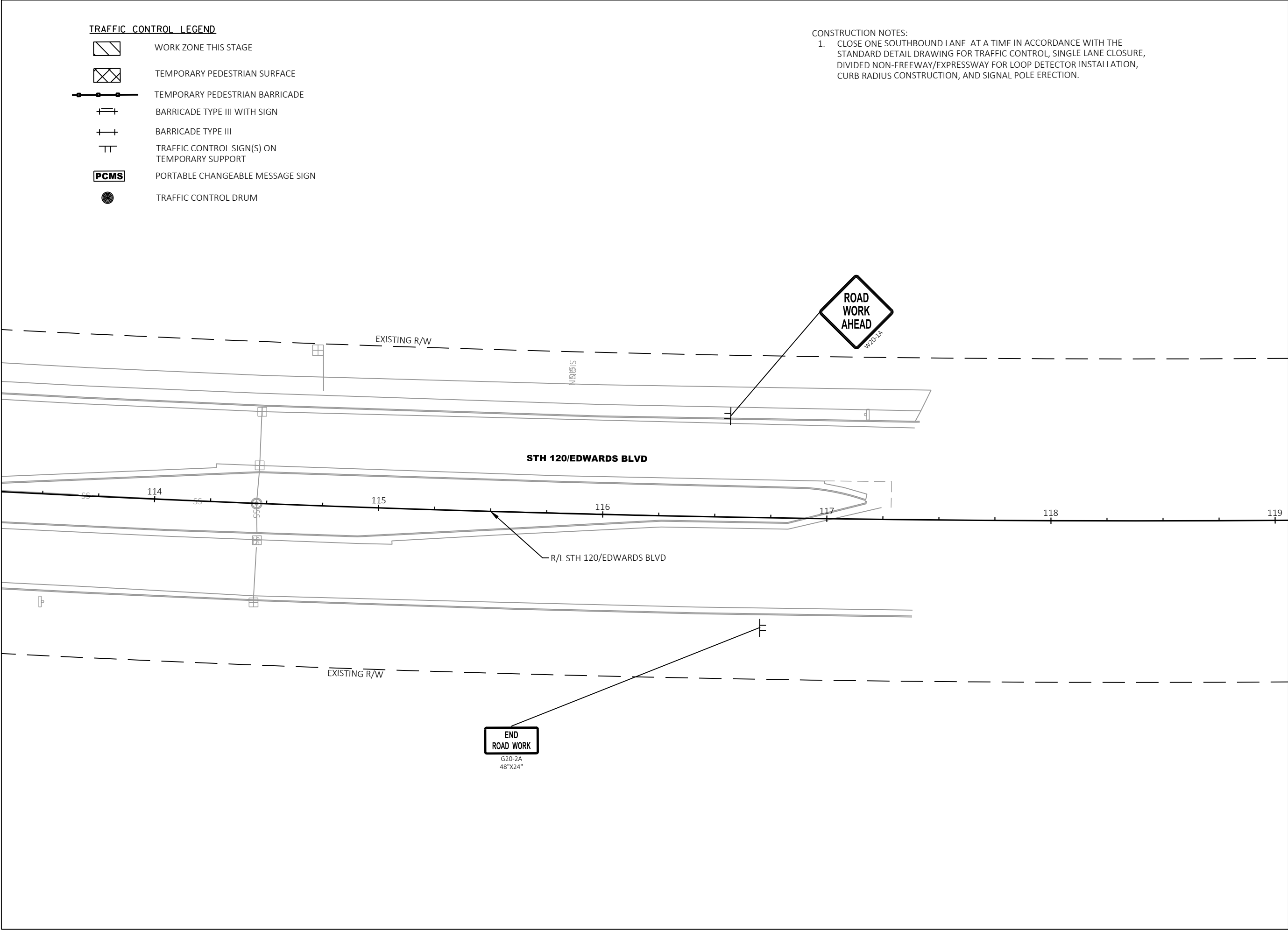
SEAL:

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SHEET:
TRAFFIC CONTROL
STAGE 1

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:
34





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Milwaukee, Wisconsin 53217
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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

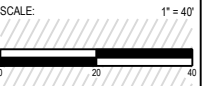
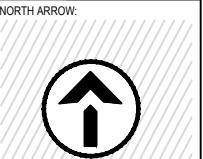
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



SEAL:

all in

SHEET:
TRAFFIC CONTROL
STAGE 1

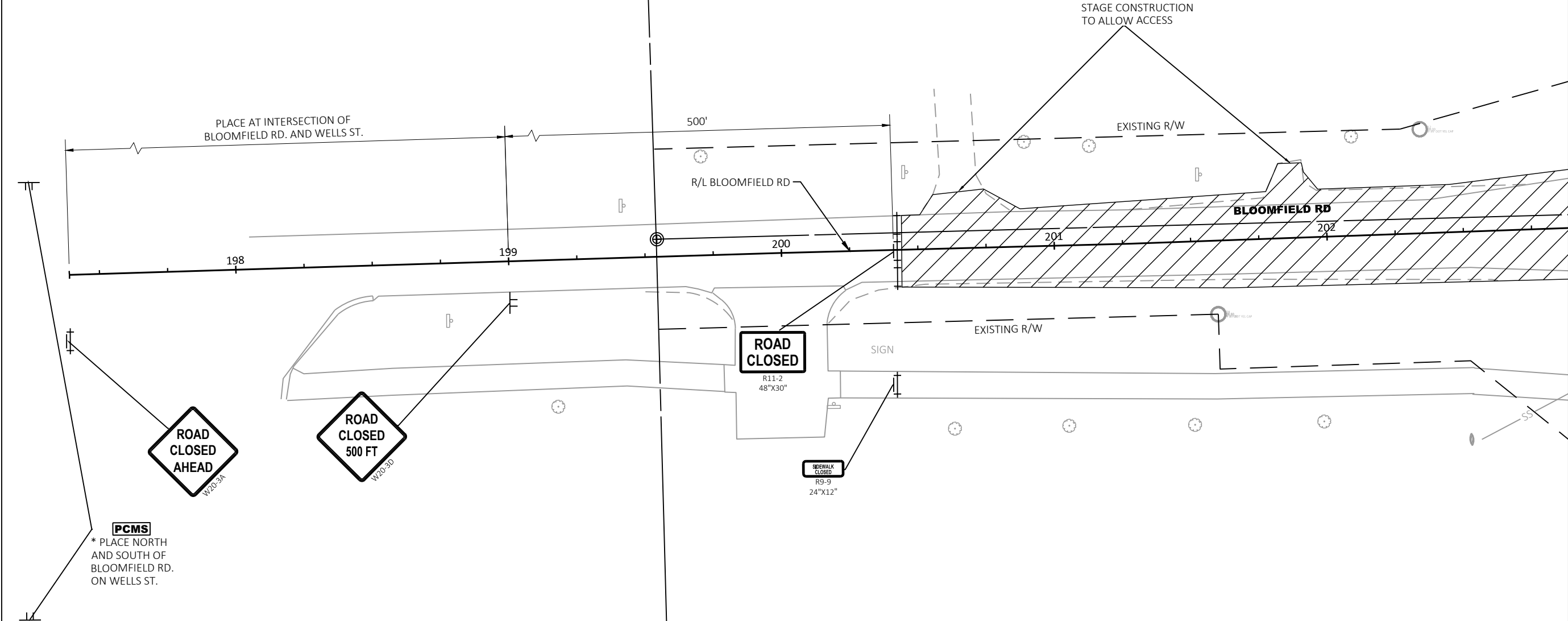
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

35

TRAFFIC CONTROL LEGEND

- WORK ZONE THIS STAGE
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- BARRICADE TYPE III WITH SIGN
- BARRICADE TYPE III
- TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC CONTROL DRUM

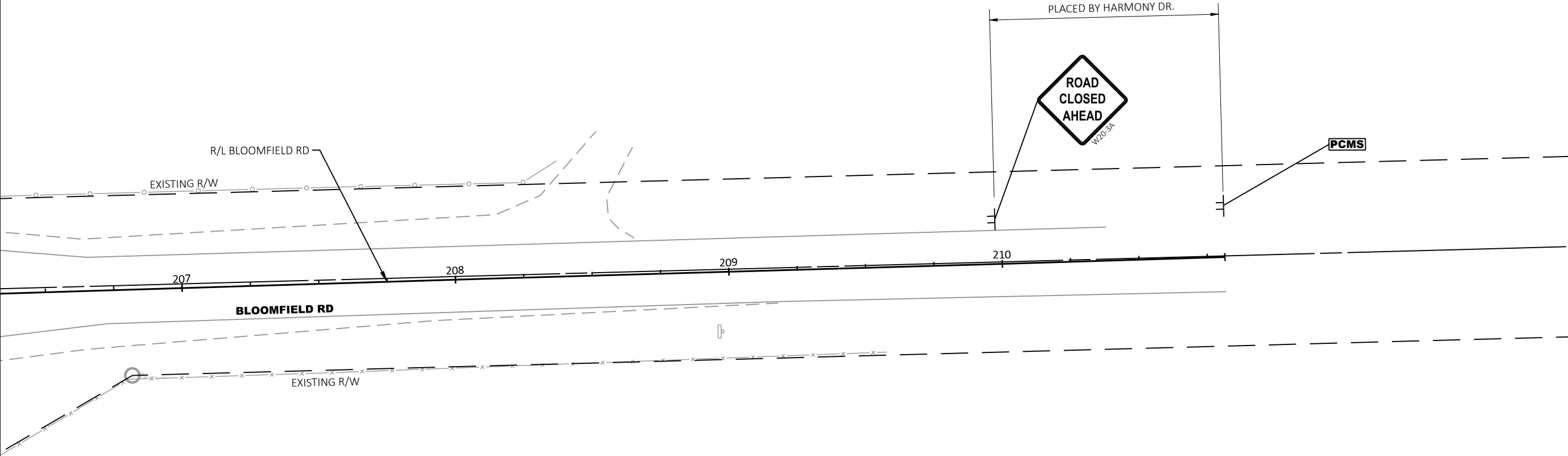


TRAFFIC CONTROL DRUM



TRAFFIC CONTROL LEGEND

- WORK ZONE THIS STAGE
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- BARRICADE TYPE III WITH SIGN
- BARRICADE TYPE III
- TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC CONTROL DRUM



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

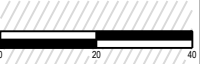
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:



all in

SHEET:

TRAFFIC CONTROL
STAGE 1

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

36



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

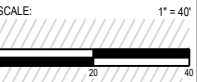
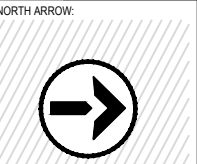
LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION



SEAL:

all in

SHEET:

TRAFFIC CONTROL STAGE 2	
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

37

CONSTRUCTION NOTES:
1. CLOSE ONE NORTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION AND SIGNAL POLE ERECTION.

END
ROAD WORK
G20-2A
48"X24"

ROAD
WORK
AHEAD
W20-1A

- TRAFFIC CONTROL LEGEND
- WORK ZONE THIS STAGE
 - TEMPORARY PEDESTRIAN SURFACE
 - TEMPORARY PEDESTRIAN BARRICADE
 - BARRICADE TYPE III WITH SIGN
 - BARRICADE TYPE III
 - TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
 - PORTABLE CHANGEABLE MESSAGE SIGN
 - TRAFFIC CONTROL DRUM



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Milwaukee, Wisconsin 53217
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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: 1" = 40'

SEAL:

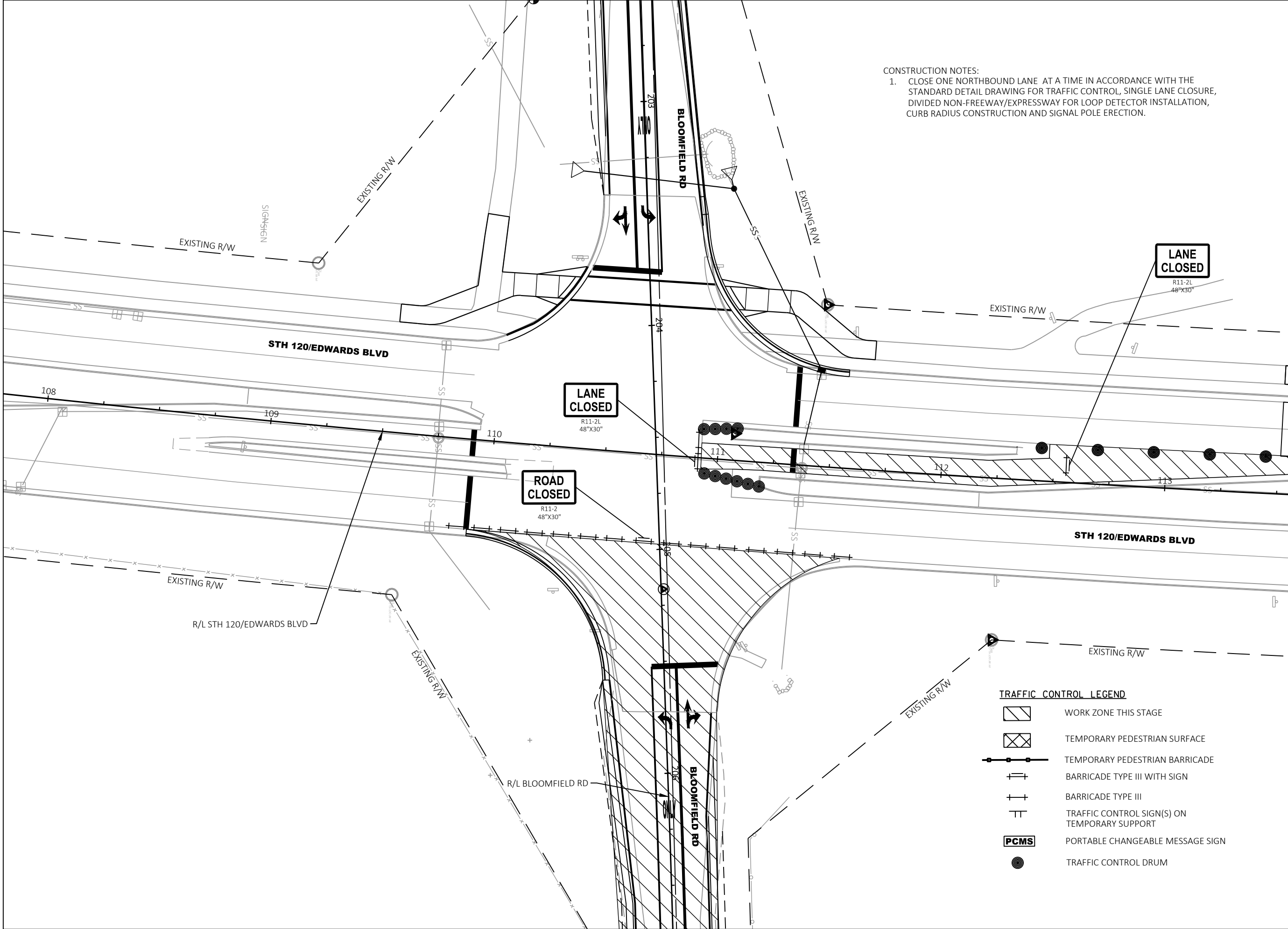
all in

SHEET:

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
38

- CONSTRUCTION NOTES:
1. CLOSE ONE NORTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION AND SIGNAL POLE ERECTION.



TRAFFIC CONTROL LEGEND

- 

WORK ZONE THIS STAGE
- 

TEMPORARY PEDESTRIAN SURFACE
- 

TEMPORARY PEDESTRIAN BARRICADE
- 

BARRICADE TYPE III WITH SIGN
- 

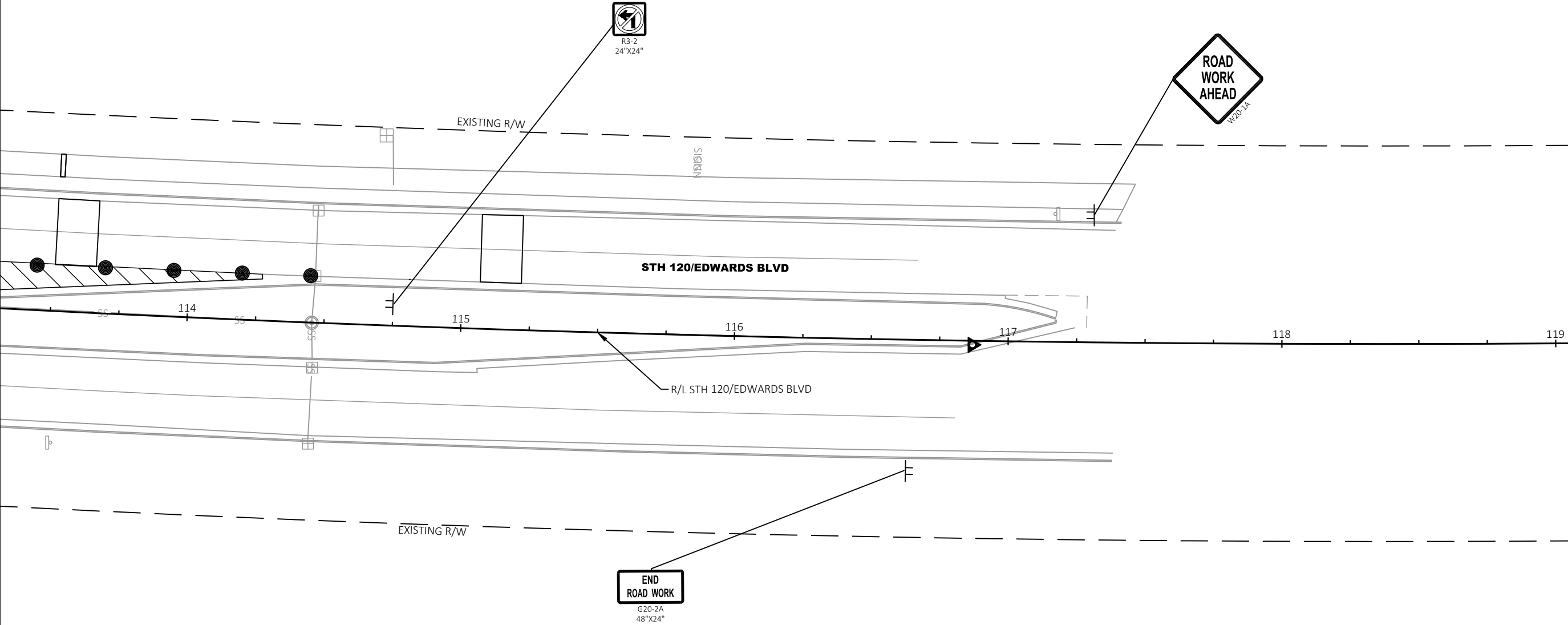
BARRICADE TYPE III
- 

TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- 

PORTABLE CHANGEABLE MESSAGE SIGN
- 

TRAFFIC CONTROL DRUM

- CONSTRUCTION NOTES:
- CLOSE ONE NORTHBOUND LANE AT A TIME IN ACCORDANCE WITH THE STANDARD DETAIL DRAWING FOR TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY FOR LOOP DETECTOR INSTALLATION, CURB RADIUS CONSTRUCTION AND SIGNAL POLE ERECTION.





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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

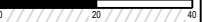
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:



all in

SHEET:
TRAFFIC CONTROL
STAGE 2

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:
39



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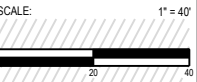
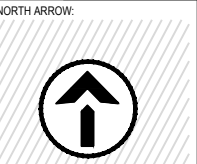
PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:		
#	DATE	DESCRIPTION



SEAL:

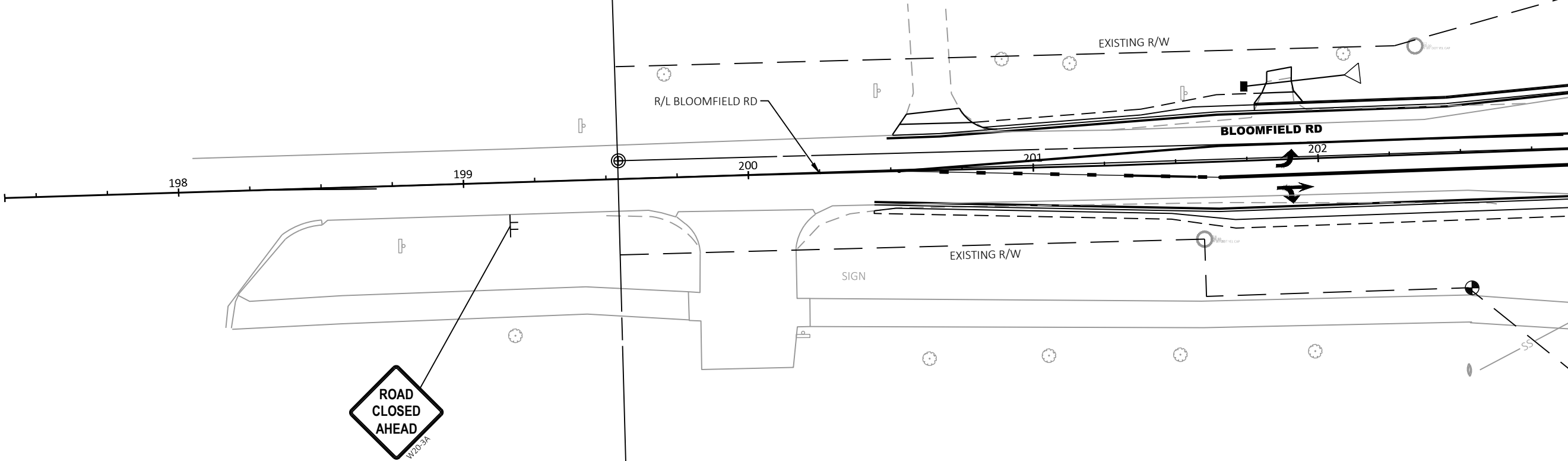
all in

SHEET:	
TRAFFIC CONTROL STAGE 2	
PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
40

TRAFFIC CONTROL LEGEND

- WORK ZONE THIS STAGE
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- BARRICADE TYPE III WITH SIGN
- BARRICADE TYPE III
- TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC CONTROL DRUM

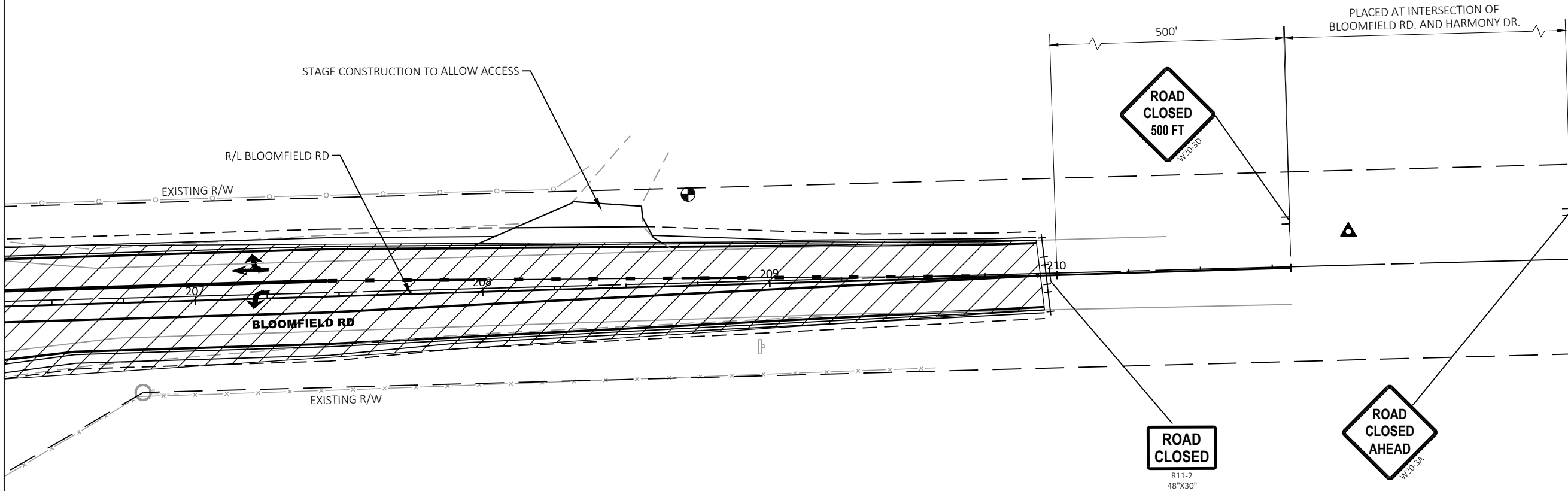


TRAFFIC CONTROL DRUM



TRAFFIC CONTROL LEGEND

- WORK ZONE THIS STAGE
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- BARRICADE TYPE III WITH SIGN
- BARRICADE TYPE III
- TRAFFIC CONTROL SIGN(S) ON TEMPORARY SUPPORT
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC CONTROL DRUM



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

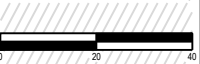
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 40'



SEAL:



all in

SHEET:

TRAFFIC CONTROL
STAGE 2

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

41

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

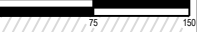
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 150'



SEAL:

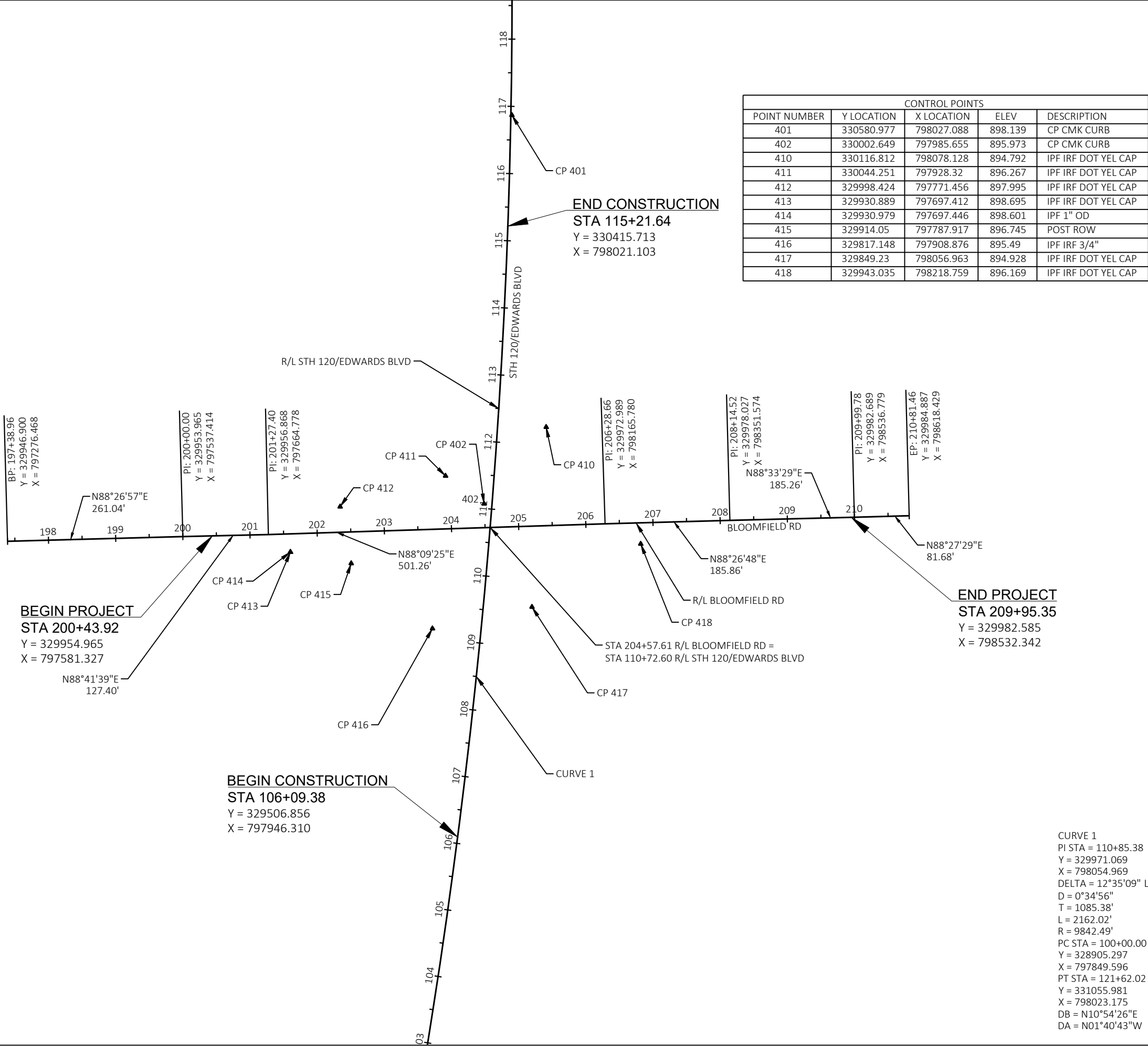


all in

SHEET:
ALIGNMENT PLAN

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
42





**711 N. Port Washington Road
Milwaukee, Wisconsin 53217
apurinc.com**

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: // // // // // X' = XX'



SEAL:

all in

SHEET:

MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

43

[illegible]

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

FILENAME: D:\Wolworth_Co\Lake Geneva_City\Gov\210437 Bloomfield and Edwards Signal\Quantities\Final\030201_MQ - final.dwg

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:

BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: X" = XX'



XX' XX' XX'

SEAL:



all in

SHEET:

MISCELLANEOUS
QUANTITIES

PROJECT MANAGER: GLG

PROJECT NUMBER: 21.0437.01

DESIGNED BY: NRS

DRAWN BY: WAW

CHECKED BY: AJB

DATE: 01/13/2022

EXCAVATION COMMON					205.0100	208.0100	312.0110	645.0220
					EXCAVATION COMMON	BORRO W	SELECT CRUSHED MATERIAL	GEOGRID TYPE SR
STATION	TO	STATION	OFFSET	LOCATION	CY	CY	TON	SY
200+44	-	210+00	LT	BLOOMFIELD RD	232	7	--	--
200+44	-	210+00	RT	BLOOMFIELD RD	342	1	--	--
203+56	-	204+26	LT	NW INTERSECTION CURB	78	--	--	--
204+88	-	205+57	RT	SE INTERSECTION CURB	48	2	--	--
SUBTOTAL					700	10	--	--
UNDISTRIBUTED*					70	--	147	70
TOTAL 0010					770	10	147	70

- * UNDISTRIBUTED FOR EBS
- 1) Cut Volume Includes Salvaged/Unusable Pavement Material on Bloomfield Road
- 2) EBS Excavation to be backfilled with Select Crushed Material. All EBS material is assumed to be wasted offsite.
- 3) Roadway Embankment = Unexpanded Fill
- 4) The storm sewer excavation is not included in this table and should be considered additional waste and is considered incidental to the storm sewer
- 5) Excess suitable material may be used for embankment on multi-use path

FINISHING ROADWAY	
213.0100.01	
FINISHING	
ROADWAY	
(PROJECT)	
(STH 120 &	
BLOOMFIELD)	
LOCATION	EACH
STH 120 & BLOOMFIELD	1
TOTAL 0010	1

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

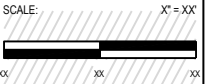


RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SEAL:

all in

SHEET:
MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

45

BASE AGGREGATE

				305.0110	305.0120	REMARKS
				BASE AGGREGATE DENSE 3/4-INCH	BASE AGGREGATE DENSE 1 1/4- INCH	
STATION	TO	STATION	LOCATION	TON	TON	
200+43.79	-	203+41.16	RT	78	--	SHOULDER
200+79.02	-	201+81.08	LT	25	--	SHOULDER
201+92.59	-	203+56.35	LT	41	--	SHOULDER
205+57.41	-	209+95.39	RT	180	--	SHOULDER
205+93.80	-	208+11.93	LT	122	--	SHOULDER
208+58.03	-	209+93.10	LT	54	--	SHOULDER
200+50.99	-	200+87.83	LT	10	10	DRIVEWAY
201+78.15	-	201+97.21	LT	7	5	DRIVEWAY
207+97.65	-	208+63.47	LT	24	33	DRIVEWAY
203+43.32	-	204+24.00	LT	--	33	INTERSECTION CURB & GUTTER
204+89.93	-	205+57.41	RT	--	14	INTERSECTION CURB & GUTTER
201+78.25	-	203+43.32	LT	--	47	NW BLOOMFIELD CURB & GUTTER
200+43.79	-	203+41.23	RT	--	220	UNDER HMA PAVEMENT
200+50.99	-	203+56.35	LT	--	168	UNDER HMA PAVEMENT
205+57.41	-	209+95.35	RT	--	292	UNDER HMA PAVEMENT
205+93.69	-	209+93.10	LT	--	226	UNDER HMA PAVEMENT
203+69.85	-	203+80.22	LT	--	9	UNDER CONCRETE SIDEWALK
203+69.85	-	203+79.85	RT	--	10	UNDER CONCRETE SIDEWALK
203+47.49	-	203+97.72	RT	--	44	UNDER ASPHALTIC SURFACE
203+69.85	-	204+18.85	LT	--	26	UNDER ASPHALTIC SURFACE
204+28.12	-	204+36.39	LT	--	3	UNDER ASPHALTIC SURFACE
203+56.35	-	204+25.99	LT	--	19	UNDER CONCRETE PAVEMENT
204+97.95	-	205+57.41	RT	--	25	UNDER CONCRETE PAVEMENT
TOTAL 0010				541	1,184	

DRILLED BARS

				416.0610	416.0620	REMARKS
				DRILLED TIE BARS	DRILLED DOWEL BARS	
STATION	TO	STATION	OFFSET	LOCATION	EACH	
111+56.15	-		LT	EDWARDS BLVD	3	C&G MATCHING
109+91.04	-		RT	EDWARDS BLVD	3	C&G MATCHING
110+01.58	-		LT	EDWARDS BLVD	3	C&G MATCHING
203+74.70	-		RT	BLOOMFIELD RD	3	C&G MATCHING
203+43.33	-	204+25.99	LT	BLOOMFIELD RD	42	NW G&G
203+74.70	-	204+04.58	RT	BLOOMFIELD RD	17	SW C&G
204+87.95	-	205+71.67	RT	BLOOMFIELD RD	38	SEC&G
109+46.82	-	109+96.21	RT	EDWARDS BLVD	33	16
115+06.54	-	115+21.64	LT	EDWARDS BLVD	10	32
113+51.00	-	113+66.17	LT	EDWARDS BLVD	10	32
111+29.41	-	111+78.54	LT	EDWARDS BLVD	33	16
106+09.36	-	106+24.36	RT	EDWARDS BLVD	10	32
107+65.84	-	107+80.88	RT	EDWARDS BLVD	10	32
203+41.54	-	203+69.88	LT/RT	BLOOMFIELD RD	16	16
205+47.70	-	205+73.68	LT/RT	BLOOMFIELD RD	17	16
TOTAL 0010				248	192	

CONCRETE PAVEMENT

				415.0090	416.1710	416.1720	REMARKS
				CONCRETE PAVEMENT 9- INCH	CONCRETE PAVEMENT REPAIR	CONCRETE PAVEMENT REPLACEMENT	
STATION	TO	STATION	OFFSET	LOCATION	SY	SY	
203+56.35	-	204+25.99	LT	BLOOMFIELD RD	42	--	NW Curb
204+97.95	-	205+57.41	RT	BLOOMFIELD RD	56	--	SE Curb
203+40.83	-	203+69.88	RT	BLOOMFIELD RD	88	--	Loops 43 & 72
205+47.70	-	205+73.68	LT	BLOOMFIELD RD	57	--	Loops 84 & 86
106+09.36	-	106+24.36	RT	EDWARDS BLVD	--	20	Loops 61 & 62
107+65.84	-	107+80.88	RT	EDWARDS BLVD	--	21	Loops 63 & 64
109+46.82	-	109+96.21	RT	EDWARDS BLVD	--	33	Loops 11 & 12
111+29.41	-	111+78.54	LT	EDWARDS BLVD	--	30	Loops 51 & 52
113+51.00	-	113+66.17	LT	EDWARDS BLVD	--	20	Loops 23 & 24
115+06.54	-	115+21.64	LT	EDWARDS BLVD	--	21	Loops 21 & 22
TOTAL 0010				243	145	145	

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED



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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA



RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:

SCALE: X" = XX"

XX' XX' XX'

SEAL:

all in

SHEET:

MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

46

ASPHALT

			455.0605	460.5223	460.5224	465.0105	465.0110		
			TACK	HMA	HMA	ASPHALTIC	ASPHALTIC		
			COAT	PAVEMENT 3 LT	PAVEMENT 4 LT	SURFACE	SURFACE		
				58-28 S	58-28 S		PATCHING		
STATION	TO	STATION	LOCATION	GAL	TON	TON	TON	TON	REMARKS
200+43.79	-	203+41.23	RT	18	34	26	--	--	
200+50.99	-	203+56.35	LT	14	26	20	--	--	
205+57.41	-	209+95.35	RT	24	45	35	--	--	
205+93.69	-	209+93.10	LT	19	35	27	--	--	
200+50.99	-	200+87.83	LT	--	2	1	--	--	DRIVEWAY
201+78.15	-	201+97.21	LT	--	1	1	--	--	DRIVEWAY
207+97.65	-	208+63.47	LT	--	5	4	--	--	DRIVEWAY
203+47.49	-	203+97.72	RT	--	--	--	18	--	S SIDEWALK
203+69.85	-	204+18.85	LT	--	--	--	11	--	N SIDEWALK
204+28.12	-	204+36.39	LT	--	--	--	1	--	N SIDEWALK REPLACEMENT
LOOPS				--	--	--		21	LOOPS
TOTAL 0010				75	148	114	30	21	

STORM SEWER

				520.8000	522.1012	522.1015	608.0312	608.0315	608.0324	611.0530	611.0606	611.0642	611.2005	611.3220	611.3901	633.5200					
				CONCRETE	APRON	APRON	STORM	STORM	STORM	MANHOLE	INLET	INLET	MANHOLES	INLETS	INLETS	MARKERS					
				COLLARS FOR	ENDWALLS	ENDWALLS	SEWER PIPE	SEWER PIPE	SEWER PIPE	COVERS	COVERS	COVERS	5-FT	2X2-FT	MEDIAN	CULVERT					
				PIPE	FOR CULVERT	FOR CULVERT	REINFORCE	REINFORCED	REINFORCED	TYPE J	TYPE B	TYPE MS	DIAMETER		1 GRATE	END					
					PIPE	PIPE	D CONCRETE	CONCRETE	CONCRETE												
					REINFORCED	REINFORCED	CLASS III 12-	CLASS III 15-	CLASS III 24-												
					CONCRETE 12-	CONCRETE 15-	INCH	INCH	INCH												
STRUCTURE FROM -	TO	STATION	OFFSET*	LOCATION	EACH	EACH	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	RIM**	DEPTH****	INVERT***	DISCHARGE	SLOPE
43		201+74.82	26.04' LT	BLOOMFIELD RD	--	--	--	--	--	--	--	1	--	--	1	--	897.46	2.79	894.67	--	--
47		202+10.18	29.22' LT	BLOOMFIELD RD	--	1	--	--	--	--	--	--	--	--	1	--	--	--	895.35	--	--
1		203+30.04	27.60' RT	BLOOMFIELD RD	--	--	1	--	--	--	--	--	--	--	1	--	--	--	893.22	--	--
3		203+36.52	41.17' LT	BLOOMFIELD RD	--	--	1	--	--	--	--	--	--	--	1	--	--	--	892.10	--	--
5		203+40.35	38.92' LT	BLOOMFIELD RD	--	--	--	--	--	1	--	--	1	--	--	--	895.11	2.72	891.40	--	--
8		204+22.70	75.12' LT	BLOOMFIELD RD	--	--	--	--	--	--	1	--	--	1	--	--	895.33	4.69	889.56	--	--
P2	1	- 5		BLOOMFIELD RD	--	--	--	67	--	--	--	--	--	--	--	--	--	--	893.22	892.12	0.0163
P4	5	- 3		BLOOMFIELD RD	--	--	--	4	--	--	--	--	--	--	--	--	--	--	892.10	892.06	0.0109
P9	8	- CC-2		BLOOMFIELD RD	1	--	--	--	7	--	--	--	--	--	--	--	--	--	889.57	889.53	0.0050
P44	43	47		BLOOMFIELD RD	--	--	36	--	--	--	--	--	--	--	--	--	--	--	895.50	895.35	0.0042
P7	8	- CC-1		BLOOMFIELD RD	1	--	--	--	14	--	--	--	--	--	--	--	--	--	889.89	889.56	0.0237
TOTAL 0010					2	1	2	36	71	21	1	1	1	1	1	3					

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
**RIM ELEV IS AT THE INLET COVER FLANGE LOCATION
***FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
****DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:

BID SET

REVISIONS:		
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: $X^* = XX'$



SEAL:

all in

SHEET:

MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

47

CURB & GUTTER

				601.0411	601.0555	
				CONCRETE	CONCRETE CURB	
				CURB & GUTTER	& GUTTER 6-	
				30-INCH TYPED	INCH SLOPED 36-	
					INCH TYPE A	
STATION	TO	STATION	LOCATION	LF	LF	REMARKS
201+78.25	-	203+43.32	LT	166	--	NW
203+43.32	-	204+24.00	LT	--	113	Intersection NW
203+74.70	-	204+04.58	RT	--	49	Intersection SW
204+89.93	-	205+57.41	RT	--	99	Intersection SE
TOTAL 0010				166	261	

FENCE SAFETY

	616.0700.S
	FENCE
	SAFETY
STATION	LF
UNDISTRIBUTED	750
TOTAL 0010	750

MOBILIZATION

	619.1000
	MOBILIZATION
LOCATION	EACH
STH 120 & BLOOMFIELD	1
TOTAL 0010	1

EROSION CONTROL & RESTORATION

	628.1504	628.1520	628.7020	628.7504	628.7555	SPV.0180.01
			INLET	TEMPORARY		SPECIAL
		SILT FENCE	PROTECTION	DITCH	CULVERT	(RESTORE
	SILT FENCE	MAINTENANCE	TYPE D	CHECKS	PIPE CHECKS	DISTURBED
LOCATION	LF	LF	EACH	LF	EACH	SY
West Half	743	743	7	--	2	1,054
East Half	947	947	6	--	2	672
SUM	1,690	1,690	13	--	4	1,726
UNDISTRIBUTED	423	423	6	30	--	173
TOTAL 0010	2,113	2,113	19	30	4	1,899

CONCRETE SIDEWALK

					602.0410	602.0605	
						CURB RAMP	
						DETECTABLE	
					CONCRETE	WARNING	
					SIDEWALK 5-	FIELD RADIAL	
					INCH	YELLOW	
CATEGORY	STATION	TO	STATION	LOCATION	SF	SF	REMARKS
0010	203+80.56	-	203+97.62	LT	188	25	N SIDEWALK
0010	203+74.71	-	203+89.21	RT	213	24	S SIDEWALK
				TOTAL 0010	401	49	

DUST CONTROL

	623.0200	624.0100
	DUST	
	CONTROL	
	SURFACE	WATER
LOCATION	SY	MGAL
STH 120 & BLOOMFIELD	2,339	4
TOTAL 0010	2,339	4

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

SIGNING

SIGN NO.	STATION	OFFSET	LOCATION	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE IN X IN	634.0816 POSTS TUBULAR STEEL 2X2-INCH X 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	SIGN MOUNTED ON SAME POST AS	REMARKS / NEW SIGN LOCATION
13	111+36.73	50.92' LT	EDWARDS BLVD	R1-1-F (2M)	STOP	36 X 36	--	--	7	--	--	--	--		MOUNT ON SIGNAL POLE 3
14	111+31.58	11.99' LT	EDWARDS BLVD	R5-1 (2M)	DO NOT ENTER	36 X 36	--	9	--	--	--	--	--		MOUNT ON SIGNAL POLE 4
14A				R1-1-F (2M)	STOP	36 X 36	--	--	7	--	--	--	--	14	
15	109+90.81	47.92' RT	EDWARDS BLVD	R1-1-F (2M)	STOP	36 X 36	--	--	7	--	--	--	--		MOUNT ON SIGNAL POLE 9
16	109+90.98	11.98' RT	EDWARDS BLVD	R5-1 (2M)	DO NOT ENTER	36 X 36	--	9	--	--	--	--	--		MOUNT ON SIGNAL POLE 10
16A				R1-1-F (2M)	STOP	36 X 36	--	--	7	--	--	--	--	16	
17	203+65.85	39.25' RT	BLOOMFIELD RD	J12-2 (2M)		48 X 45	1	15	--	--	--	--	--		
				M1-6	STH 120	24 X 24	--	--	--	--	--	--	--	ASSEMBLY J12-2	
				M1-5A	COUNTY H	24 X 24	--	--	--	--	--	--	--	ASSEMBLY J12-2	
				M6-4	LEFT - RIGHT ARROWS	21 X 21	--	--	--	--	--	--	--	ASSEMBLY J12-2	
18	203+68.17	35.92' RT	BLOOMFIELD RD	R1-1-F (2M)	STOP	36 X 36	--	--	7	--	--	--	--		MOUNT ON SIGNAL POLE 1
18A				R6-3 (2M)	DIVIDED HIGHWAY	30 X 24	--	5	--	--	--	--	--	18	
18B				R10-3BR	TO CROSS PUSH BUTTON (RIGHT ARROW)	9 X 12	--	1	--	--	--	--	--	18	
19	203+67.85	35.26' LT	BLOOMFIELD RD	R10-3BL	TO CROSS PUSH BUTTON (LEFT ARROW)	9 X 12	--	1	--	--	--	--	--		MOUNT ON SIGNAL POLE 2
20	205+52.13	36.90' LT	BLOOMFIELD RD	J12-2 (2M)		48 X 45	1	15	--	--	--	--	--		
				M1-6	STH 120	24 X 24	--	--	--	--	--	--	--	ASSEMBLY J12-2	
				M1-5A	COUNTY H	24 X 24	--	--	--	--	--	--	--	ASSEMBLY J12-2	
				M6-4	LEFT - RIGHT ARROWS	21 X 21	--	--	--	--	--	--	--	ASSEMBLY J12-2	
21	205+52.13	32.40' LT	BLOOMFIELD RD	R1-1-F (2M)	STOP	36 X 36	--	--	7	--	--	--	--		MOUNT ON SIGNAL POLE 7
21A				R6-3 (2M)	DIVIDED HIGHWAY	30 X 24	--	5	--	--	--	--	--	21	
22	203+67.85	35.26' LT	BLOOMFIELD RD	M1-94S	STH 120/EDWARDS BLVD	18 X 102	--	13	--	--	--	--	--	SIGNAL ARM 2	
23	111+48.22	52.06' RT	EDWARDS BLVD	M1-94H	BLOOMFIELD RD	18 X 102	--	13	--	--	--	--	--	SIGNAL ARM 5	
24	205+24.35	39.70' RT	BLOOMFIELD RD	M1-94S	STH 120/EDWARDS BLVD	18 X 102	--	13	--	--	--	--	--	SIGNAL ARM 8	
25	109+91.28	49.76' LT	EDWARDS BLVD	M1-94H	BLOOMFIELD RD	18 X 102	--	13	--	--	--	--	--	SIGNAL ARM 11	
26	198+78.27	22.28' RT	BLOOMFIELD RD	W3-3 (2M)	SIGNAL AHEAD W/ FLAGS	36 X 36	1	--	--	9	--	--	--		
27	210+77.86	23.30' LT	BLOOMFIELD RD	W3-3 (2M)	SIGNAL AHEAD W/ FLAGS	36 X 36	1	--	--	9	--	--	--		450 FT NORTH OF BLOOMFIELD RD SIGN
28	115+35.00	46.19' LT	EDWARDS BLVD	W3-3 (2M)	SIGNAL AHEAD W/ FLAGS	36 X 36	1	--	--	9	--	--	--		450 FT NORTH OF BLOOMFIELD RD SIGN
29	115+35.00	11.57' LT	EDWARDS BLVD	W3-3 (2M)	SIGNAL AHEAD W/ FLAGS	36 X 36	1	--	--	9	--	--	--		200 FT SOUTH OF BLOOMFIELD RD SIGN
30	105+92.07	45.52' RT	EDWARDS BLVD	W3-3 (2M)	SIGNAL AHEAD W/ FLAGS	36 X 36	1	--	--	9	--	--	--		200 FT SOUTH OF BLOOMFIELD RD SIGN
31	105+92.07	45.52' RT	EDWARDS BLVD	W3-3 (2M)	SIGNAL AHEAD W/ FLAGS	36 X 36	1	--	--	9	--	--	--		
32	200+77.18	22.57' RT	BLOOMFIELD RD	R3-8 (2M)	LANE CONTROL SIGN	36 X 30	1	8	--	--	--	--	--		LEFT ONLY / STRAIGHT & RIGHT ARROWS
33	208+78.05	26.50' LT	BLOOMFIELD RD	R3-8 (2M)	LANE CONTROL SIGN	36 X 30	1	8	--	--	--	--	--		LEFT ONLY / STRAIGHT & RIGHT ARROWS
34	110+05.55	65.72' LT	EDWARDS BLVD	D11-1	BIKE ROUTE SIGN		--	--	--	--	1	1	--		MOVE TO OTHER SIDE OF NEW SIDEWALK
34A				M7-5	DOUBLE ARROW (BICYCLE ROUTE)		--	--	--	--	1	--	--	34	
35	203+64.96	32.17' LT	BLOOMFIELD RD	R5-2	NO TRUCKS SYMBOL		--	--	--	--	1	--	--		SIGNAL POLE 2
			UNDISTRIBUTED				--	--	--	--	--	--	5		UNDISTRIBUTED

TOTAL 0010

10

128

45

54

3

1

5

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED



7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:

BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: X" = XX'



SEAL:

all in

SHEET:
MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

48

TRAFFIC CONTROL																				
					643.0300 TRAFFIC CONTROL		643.0420 TRAFFIC CONTROL		643.0715 TRAFFIC CONTROL		643.0800 TRAFFIC CONTROL		643.0900 TRAFFIC CONTROL		643.1050 TRAFFIC CONTROL		644.1420 TEMPORARY PEDESTRIAN		644.1810 TEMPORARY PEDESTRIAN	
STAGE DURATION					DRUMS		BARRICADES		WARNING		ARROW		SIGNS		SIGNS PCMS		SURFACE		BARRICADE	
STAGE	STATION TO	STATION	DAYS	LOCATION	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH**	DAY	SF		LF	
1	104+64	-	57	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	105+15	-	57	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	106+75	-	57	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	106+98	- 108+73	57	STH 120/EDWARDS BLVD	8	456	--	--	--	--	--	--	--	--	--	--	--		--	
1	108+54	-	57	STH 120/EDWARDS BLVD	--	--	1	57	--	--	--	--	1	57	--	--	--		--	
1	109+94	- 110+26	57	STH 120/EDWARDS BLVD	12	684	--	--	--	--	--	--	--	--	--	--	--		--	
1	110+30	-	57	STH 120/EDWARDS BLVD	--	--	2	114	--	--	--	--	1	57	--	--	--		--	
1	116+56	-	57	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	116+71	-	57	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	185+00	-	57	BLOOMFIELD RD	--	--	--	--	--	--	--	--	--	--	2	114	--		--	
1	197+39	-	57	BLOOMFIELD RD	--	--	1	57	--	--	--	--	1	57	--	--	--		--	
1	199+00	-	57	BLOOMFIELD RD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	200+41	-	57	BLOOMFIELD RD	--	--	1	57	--	--	--	--	1	57	--	--	--		--	
1	200+42	-	57	BLOOMFIELD RD	--	--	3	171	--	--	--	--	1	57	--	--	--		--	
1A	203+85	- 204+12	29	BLOOMFIELD RD	--	--	10	285	--	--	--	--	3	86	--	--	--		--	
1B	203+25	- 203+90	29	BLOOMFIELD RD	--	--	3	86	--	--	--	--	3	86	--	--	1,159		277	
1B	203+94	- 204+15	29	BLOOMFIELD RD	--	--	2	57	--	--	--	--	2	57	--	--	361		83	
1B	204+05	- 204+28	29	BLOOMFIELD RD	--	--	19	542	--	--	--	--	1	29	--	--	--		--	
1	209+98	-	57	BLOOMFIELD RD	--	--	--	--	--	--	--	--	1	57	--	--	--		--	
1	210+98	-	57	BLOOMFIELD RD	--	--	--	--	--	--	--	--	--	--	1	57	--		--	
1	UNDISTRIBUTED		29		71	2,033	2	66	28	787	2	66	25	721	--	--	--		--	
TOTAL STAGE 1						3,173		1,491		787		66		1,662		171		1,521		361
2	104+82	-	49	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	104+91	-	49	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	110+90	-	49	STH 120/EDWARDS BLVD	--	--	2	98	--	--	--	--	1	49	--	--	--		--	
2	110+93	- 111+19	49	STH 120/EDWARDS BLVD	10	490	--	--	--	--	--	--	--	--	--	--	--		--	
2	112+56	-	49	STH 120/EDWARDS BLVD	--	--	1	49	--	--	--	--	1	49	--	--	--		--	
2	112+44	- 114+44	49	STH 120/EDWARDS BLVD	9	441	--	--	--	--	--	--	--	--	--	--	--		--	
2	114+75	-	49	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	116+63	-	49	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	117+31	-	49	STH 120/EDWARDS BLVD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	199+16	-	49	BLOOMFIELD RD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	204+86	- 205+07	49	BLOOMFIELD RD	--	--	15	735	--	--	--	--	1	49	--	--	--		--	
2	209+95	- 209+98	49	BLOOMFIELD RD	--	--	3	147	--	--	--	--	1	49	--	--	--		--	
2	215+00	-	49	BLOOMFIELD RD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	222+10	-	49	BLOOMFIELD RD	--	--	--	--	--	--	--	--	1	49	--	--	--		--	
2	UNDISTRIBUTED		25		71	1,783	2	58	28	690	2	58	25	633	--	--	--		--	
TOTAL STAGE 2						2,714		1,087		690		58		1,221		0		0		0
TOTAL 0010						5,887		2,578		1,477		124		2,883		171		1,521		361

**FOR INFORMATION ONLY

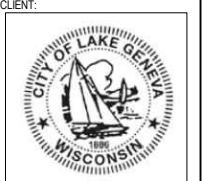
PAVEMENT MARKING											
					646.1020	646.3020		646.5020	646.5120	646.6120	646.7420
					MARKING LINE	MARKING LINE	MARKING LINE			MARKING	MARKING
					EPOXY 4-INCH	EPOXY 4-INCH	LINE EPOXY 8-	EPOXY 8-INCH	MARKING	MARKING	STOP LINE
					(YELLOW)	(WHITE)	INCH (WHITE)	(WHITE) (3 FT	ARROW EPOXY	WORD EPOXY	EPOXY 18-
STATION	TO	STATION	OFFSET	LOCATION	LF	LF	LF	LINE 9 FT SKIP)	EACH	EACH	INCH
200+47.55	-	204+57.61	LT/RT	BLOOMFIELD RD	647	605	210	28	4	1	31
204+57.61	-	209+94.24	LT/RT	BLOOMFIELD RD	882	858	193	62	4	1	30
108+71.66	-	112+47.83	LT/RT	EDWARDS BLVD	--	--	--	--	--	--	74
SUM					1,529	1,464	403	90	8	2	135
TOTAL 0010					2,993		493		8	2	135



7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
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PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:


RELEASE:
BID SET

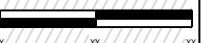
REVISIONS:

#	DATE	DESCRIPTION

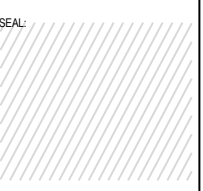
NORTH ARROW:



SCALE: X"=XX'



SEAL:



all in

SHEET:
MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
49

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

CONDUIT				
		652.0225	652.0235	652.0615
		CONDUIT	CONDUIT	
		RIGID	RIGID	
		NONMETALLIC	NONMETALLIC	
		SCHEDULE 40	SCHEDULE 40	CONDUIT
		2-INCH	3-INCH	SPECIAL 3-INCH
FROM	TO	LF	LF	LF
CB1	PB1	--	21	--
PB1	PB2	--	161	--
PB2	SB1	22	--	--
PB2	PB3	232	--	--
PB2	PB4	--	--	116
PB4	SB2	--	24	--
PB4	PB5	--	125	--
PB5	SB3	15	--	--
PB5	PB6	232	--	--
PB6	SB12	67	--	--
PB6	PB7	154	--	--
PB5	PB8	--	--	87
PB8	SB4	10	--	--
PB8	PB9	--	--	43
PB9	PB10	--	--	131
PB10	SB5	--	33	--
PB10	SB6	14	--	--
PB10	PB11	--	93	--
PB11	SB7	25	--	--
PB11	PB12	198	--	--
PB12	PB13	151	--	--
PB11	PB14	--	--	125
PB14	SB8	--	49	--
PB14	PB15	--	214	--
PB15	SB9	6	--	--
PB15	PB16	216	--	--
PB16	PB17	150	--	--
PB15	PB18	--	--	68
PB18	SB10	6	--	--
PB18	PB19	--	--	45
PB19	SB13	--	13	--
PB19	PB20	--	--	73
PB20	SB11	--	8	--
PB20	PB21	--	95	--
PB21	CB1	--	27	--
TOTAL 0010		1,498	863	688

LOOP & EVP DETECTOR CABLE						
		652.0800	655.0210	655.0700	655.0800	655.0900
		CONDUIT	CABLE TRAFFIC	LOOP	LOOP	TRAFFIC
		LOOP	SIGNAL 3-14	DETECTOR	DETECTOR	SIGNAL EVP
		DETECTOR	AWG	LEAD IN CABLE	WIRE	DETECTOR
FROM	TO	LF	LF	LF	LF	LF
CB1	Loop 11	73	--	76	198	--
CB1	Loop 12	65	--	76	183	--
CB1	Loop 21	41	--	566	178	--
CB1	Loop 22	53	--	566	203	--
CB1	Loop 23	37	--	412	158	--
CB1	Loop 24	47	--	412	179	--
CB1	Loop 41	38	--	292	160	--
CB1	Loop 42	66	--	60	184	--
CB1	Loop 43	66	--	60	184	--
CB1	Loop 51	88	--	224	228	--
CB1	Loop 52	61	--	224	175	--
CB1	Loop 61	43	--	497	183	--
CB1	Loop 62	55	--	497	207	--
CB1	Loop 63	36	--	348	145	--
CB1	Loop 64	48	--	348	169	--
CB1	Loop 71	74	--	60	201	--
CB1	Loop 72	75	--	60	203	--
CB1	Loop 81	42	--	649	180	--
CB1	Loop 82	40	--	499	165	--
CB1	Loop 83	65	--	301	182	--
CB1	Loop 84	68	--	301	188	--
CB1	Loop 85	76	--	301	204	--
CB1	Loop 86	77	--	301	206	--
CB1	SB11 (HEAD A)	--	130	--	--	130
CB1	SB5 (HEAD B)	--	458	--	--	458
CB1	SB8 (HEAD C)	--	410	--	--	410
CB1	SB2 (HEAD D)	--	242	--	--	242
TOTAL 0010		1,334	1,240	7,132	4,263	1,240

UNDERGROUND TRAFFIC SIGNAL CABLE

*				
		655.0240	655.0260	
		CABLE TRAFFIC	CABLE	
		SIGNAL 7-14	TRAFFIC	
		AWG	SIGNAL 12-14	
FROM	TO	LF	LF	
CB1	SB1	--	139	
CB1	SB2	--	207	
CB1	SB3	--	274	
CB1	SB4	328	--	
CB1	SB5	470	--	
CB1	SB6	451	--	
CB1	SB7	452	--	
CB1	SB8	--	399	
CB1	SB9	--	233	
CB1	SB10	184	--	
CB1	SB11	95	--	
TOTAL 0010		1,980	1,252	

* ADDITIONAL QUANTITIES FOUND ELSEWHERE

ABOVE GROUND TRAFFIC SIG CABLE

				*	
		655.0230	655.0240		
		CABLE TRAFFIC	CABLE TRAFFIC		
		SIGNAL 5-14	SIGNAL 7-14		
TO		AWG	AWG		
FROM HEAD NO.	LF	LF	LF		
SB1	14	--	19		
SB1	16	19	--		
SB1	21	15	--		
SB2	12	45	--		
SB2	13	19	--		
SB2	15	--	57		
SB2	22	15	--		
SB3	4	--	19		
SB3	6	19	--		
SB4	5	--	19		
SB5	2	54	--		
SB5	3	42	--		
SB6	19	--	19		
SB7	11	19	--		
SB8	17	50	--		
SB8	18	19	--		
SB8	20	--	61		
SB9	1	19	--		
SB9	9	--	19		
SB10	10	--	19		
SB11	7	48	--		
SB11	8	36	--		
TOTAL 0010		419	232		

* ADDITIONAL QUANTITIES FOUND ELSEWHERE



7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:


RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:


SCALE: X" = XX'


SEAL:


all in

SHEET:
MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:
50

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE

BID SET

REVISIONS:

[illegible]

NORTH ARROW:

SCALE: $X^* = XX'$ 

SEAL:

all in

SHEET:

MISCELLANEOUS
QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

51

				653.0135	653.0140
				PULL BOXES	PULL BOXES
				STEEL 24X36-	STEEL 24X42-
				INCH	INCH
PULL BOX NO.	STATION	OFFSET	LOCATION	EACH	EACH
PB1	203+55.44	78.46' RT	BLOOMFIELD RD	--	1
PB2	203+54.39	24.86' RT	BLOOMFIELD RD	--	1
PB3	201+23.46	21.09' RT	BLOOMFIELD RD	1	--
PB4	203+55.59	32.85' LT	BLOOMFIELD RD	--	1
PB5	111+23.31	55.08' LT	EDWARDS BLVD	--	1
PB6	113+54.64	46.66' LT	EDWARDS BLVD	1	--
PB7	115+09.06	46.78' LT	EDWARDS BLVD	1	--
PB8	111+22.77	12.03' LT	EDWARDS BLVD	--	1
PB9	111+22.51	9.15' RT	EDWARDS BLVD	--	1
PB10	205+36.82	40.54' LT	BLOOMFIELD RD	--	1
PB11	205+74.62	27.06' LT	BLOOMFIELD RD	--	1
PB12	207+72.15	25.88' LT	BLOOMFIELD RD	1	--
PB13	209+22.03	20.01' LT	BLOOMFIELD RD	1	--
PB14	205+68.74	34.68' RT	BLOOMFIELD RD	--	1
PB15	109+85.51	46.17' RT	EDWARDS BLVD	--	1
PB16	107+70.90	49.49' RT	EDWARDS BLVD	1	--
PB17	106+22.50	49.39' RT	EDWARDS BLVD	1	--
PB18	109+85.56	12.50' RT	EDWARDS BLVD	--	1
PB19	109+85.71	9.57' LT	EDWARDS BLVD	--	1
PB20	109+85.44	45.72' LT	EDWARDS BLVD	--	1
PB21	109+77.37	76.26' LT	EDWARDS BLVD	--	1
TOTAL 0010				7	14

BASE NO.	STATION	OFFSET	LOCATION	654.0101	654.0102	654.0110	654.0120	654.0217
								CONCRETE CONTROL CABINET
				CONCRETE BASES TYPE 1	CONCRETE BASES TYPE 2	CONCRETE BASES TYPE 10	CONCRETE BASES TYPE 10- SPECIAL	CONCRETE BASES TYPE 9 SPECIAL
				EACH	EACH	EACH	EACH	EACH
SB1	203+72.65	36.11' RT	BLOOMFIELD RD	1	--	--	--	--
SB2	203+78.74	35.26' LT	BLOOMFIELD RD	--	--	--	1	--
SB3	111+36.73	50.92' LT	EDWARDS BLVD	--	1	--	--	--
SB4	113+07.64	12.05' LT	EDWARDS BLVD	1	--	--	--	--
SB5	111+48.23	55.82' RT	EDWARDS BLVD	--	--	--	1	--
SB6	111+32.04	65.85' RT	EDWARDS BLVD	1	--	--	--	--
SB7	205+52.13	32.39' LT	BLOOMFIELD RD	1	--	--	--	--
SB8	205+24.35	39.70' RT	BLOOMFIELD RD	--	--	--	1	--
SB9	109+90.81	47.92' RT	EDWARDS BLVD	1	--	--	--	--
SB10	109+90.98	11.98' RT	EDWARDS BLVD	1	--	--	--	--
SB11	109+91.28	49.76' LT	EDWARDS BLVD	--	--	1	--	--
CB1	203+58.65	86.801' RT	BLOOMFIELD RD	--	--	--	--	1
TOTAL 0010				6	1	1	3	1

		655.0320	655.0610
		CABLE TYPE UF 2-	ELECTRICAL
		10 AWG	WIRE LIGHTING
		GROUNDED	12 AWG
FROM	TO	LF	LF
CB1	SB2	209	--
SB2	LUMIN (1)	--	144
SB2	SB3	151	--
SB3	LUMIN (1)	--	117
SB3	SB12	360	--
SB12	LUMIN (1)	--	117
CB1	SB8	403	--
SB8	LUMIN (1)	--	144
SB8	SB5	256	--
SB5	LUMIN (1)	--	144
CB1	SB13	161	--
SB13	LUMIN (2)	--	234
SB13	SB14	191	--
SB13	LUMIN (1)	--	117
TOTAL 0010		1,731	1,017

	657.0609	659.1125	SPV.0060.09
	LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT	LUMINAIRE S UTILITY LED C	SPECIAL (TRANSPORT & INSTALL LUMINAIRE ARMS STEEL 15-FT)
LOCATION	EACH	EACH	EACH
SB2	--	1	1
SB3	1	1	--
SB5	--	1	1
SB8	--	1	1
SB12	--	1	--
SB13	--	2	--
SB14	--	1	--
TOTAL 0010	1	8	3

655.0515		
ELECTRICAL WIRE		
TRAFFIC SIGNALS 10		
AWG		
STATION	TO	LF
CB1	SB1	130
SB1	SB2	143
SB2	SB3	140
SB3	SB4	107
SB4	SB5	187
SB5	SB6	73
SB6	SB7	125
SB7	SB8	176
SB8	SB9	201
SB9	SB10	85
SB10	SB11	127
SB11	CB1	95
PB1	CB1	34
PB2	SB1	58
PB4	SB2	60
PB5	SB3	51
PB8	SB4	30
PB9	SB4	67
PB10	SB5	120
PB11	SB7	93
PB14	SB8	117
PB15	SB9	58
PB18	SB10	58
PB19	SB10	64
PB20	SB11	108
PB21	CB1	100
TOTAL 0010		2,607

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT: _____



RELEASE:
BID SET

REVISIONS:

[illegible]

NORTH ARROW:



SCALE: $X^* = XX'$



X XX XX

SEAL:

all in

SHEET: MISCELLANEOUS QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

52

MONOTUBE, STANDARDS, PUSHBUTTON

SIGNAL BASE NO.	657.0100	657.0255	657.0310	657.0420	657.0425	SPV.0060.03	SPV.0060.05	SPV.0060.06	SPV.0060.07	SPV.0060.08	SPV.0060.11
		TRANSFORMER					SPECIAL	SPECIAL	SPECIAL	SPECIAL	SPECIAL
		BASES		TRAFFIC SIGNAL	TRAFFIC SIGNAL	SPECIAL	(TRANSPORT	(TRANSPORT	(TRANSPORT	(TRANSPORT	(TRANSPORT
		BREAKAWAY 11		STANDARDS	STANDARDS	(TRANSPORT	AND INSTALL	AND INSTALL	AND INSTALL	AND INSTALL	AND INSTALL
	PEDESTAL	1/2-INCH BOLT	POLES	ALUMINUM 13-	ALUMINUM 15-	AND INSTALL	POLES TYPE 10	MONOTUBE	MONOTUBE	MONOTUBE	MONOTUBE
	BASES	CIRCLE	TYPE 3	FT	FT	POLES TYPE 9)	SPECIAL)	ARMS 30-FT)	ARMS 40-FT)	ARMS 45-FT)	ARMS 35-FT)
	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
SB1	1	--	--	--	1	--	--	--	--	--	--
SB2	--	--	--	--	--	--	1	--	1	--	--
SB3	--	1	1	--	--	--	--	--	--	--	--
SB4	1	--	--	--	1	--	--	--	--	--	--
SB5	--	--	--	--	--	--	1	--	--	--	1
SB6	1	--	--	--	1	--	--	--	--	--	--
SB7	1	--	--	1	--	--	--	--	--	--	--
SB8	--	--	--	--	--	--	1	--	--	1	--
SB9	1	--	--	--	1	--	--	--	--	--	--
SB10	1	--	--	--	1	--	--	--	--	--	--
SB11	--	--	--	--	--	1	--	1	--	--	--
TOTAL 0010	6	1	1	1	5	1	3	1	1	1	1

SIGNAL AND PED FACES

RADAR

	SPV.0105.02
	SPECIAL (TRANSPORT
	AND INSTALL STATE
	FURNISHED RADAR
	DETECTION SYSTEM [STH
	120 & BLOOMFIELD])
LOCATION	LS
STH 120 & BLOOMFIELD	1
TOTAL 0010	1

FVP

	SPV.0105.01
	SPECIAL (TRANSPORT AND INSTALL STATE FURNISHED EVP DETECTOR HEADS WITH CONFIRMATION BEACONS [STH 120 & BLOOMFIELD])
LOCATION	LS
STH 120 & BLOOMFIELD	1
TOTAL 0010	1

		658.0173	658.0174	658.0416
		TRAFFIC	TRAFFIC	PEDESTRIAN
		SIGNAL FACE	SIGNAL FACE	SIGNAL FACE
		3S 12-INCH	4S 12-INCH	16-INCH
SIGNAL HEAD NO.	SIGNAL BASE NO.	EACH	EACH	EACH
1	SB9	1	--	--
2	SB5	1	--	--
3	SB5	1	--	--
4	SB3	--	1	--
5	SB4	--	1	--
6	SB3	1	--	--
7	SB11	1	--	--
8	SB11	1	--	--
9	SB9	--	1	--
10	SB10	--	1	--
11	SB7	1	--	--
12	SB2	1	--	--
13	SB2	1	--	--
14	SB1	--	1	--
15	SB2	--	1	--
16	SB1	1	--	--
17	SB8	1	--	--
18	SB8	1	--	--
19	SB6	--	1	--
20	SB8	--	1	--
21	SB1	--	--	1
22	SB2	--	--	1
TOTAL 0010		12	8	2

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CITY OF LAKE GENEVA
WISCONSIN

RELEASE:
BID SET

[illegible]

NORTH ARROW:



SCALE: $X^* = XX'$

[illegible]

all in

SHEET: MISCELLANEOUS QUANTITIES

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER: _____

53

					690.0150	690.0250	
					SAWING	SAWING	
					ASPHALT	CONCRETE	
STATION	TO	STATION	OFFSET	LOCATION	LF	LF	REMARKS
200+43.83	-	203+69.88	RT	BLOOMFIELD RD	315	103	
200+50.99	-	203+43.33	LT	BLOOMFIELD RD	286	--	
203+43.33	-	204+25.99	LT	BLOOMFIELD RD	--	157	INTERSECTION NW
204+87.95	-	205+71.67	RT	BLOOMFIELD RD	--	122	INTERSECTION SE
205+71.67	-	209+95.35	RT	BLOOMFIELD RD	434	--	
205+47.70	-	209+93.10	LT	BLOOMFIELD RD	471	79	
	-		LT	EDWARDS BLVD	25	--	NORTH SIDEWALK
	-		LT	EDWARDS BLVD	18	51	SOUTH SIDEWALK
106+09.36	-	106+24.36	RT	EDWARDS BLVD	--	79	Loops 61 & 62
107+65.84	-	107+80.88	RT	EDWARDS BLVD	--	80	Loops 63 & 64
109+46.82	-	109+96.21	RT	EDWARDS BLVD	--	123	Loops 11 & 12
111+29.41	-	111+78.54	LT	EDWARDS BLVD	--	121	Loops 51 & 52
113+51.00	-	113+66.17	LT	EDWARDS BLVD	--	79	Loops 23 & 24
115+06.54	-	115+21.64	LT	EDWARDS BLVD	--	80	Loops 21 & 22
TOTAL 0010					1,549	1,074	

			SPV.0060.51	SPV.0060.52
			SPECIAL (ADJUSTING SANITARY MANHOLE)	SPECIAL (ADJUSTING WATER VALVE BOXES)
STATION	OFFSET	LOCATION	EACH	EACH
205+04	41.2' RT	BLOOMFIELD RD	1	--
201+85	20.5' RT	BLOOMFIELD RD	--	1
206+44	23.8' RT	BLOOMFIELD RD	--	1
TOTAL 0010			1	2

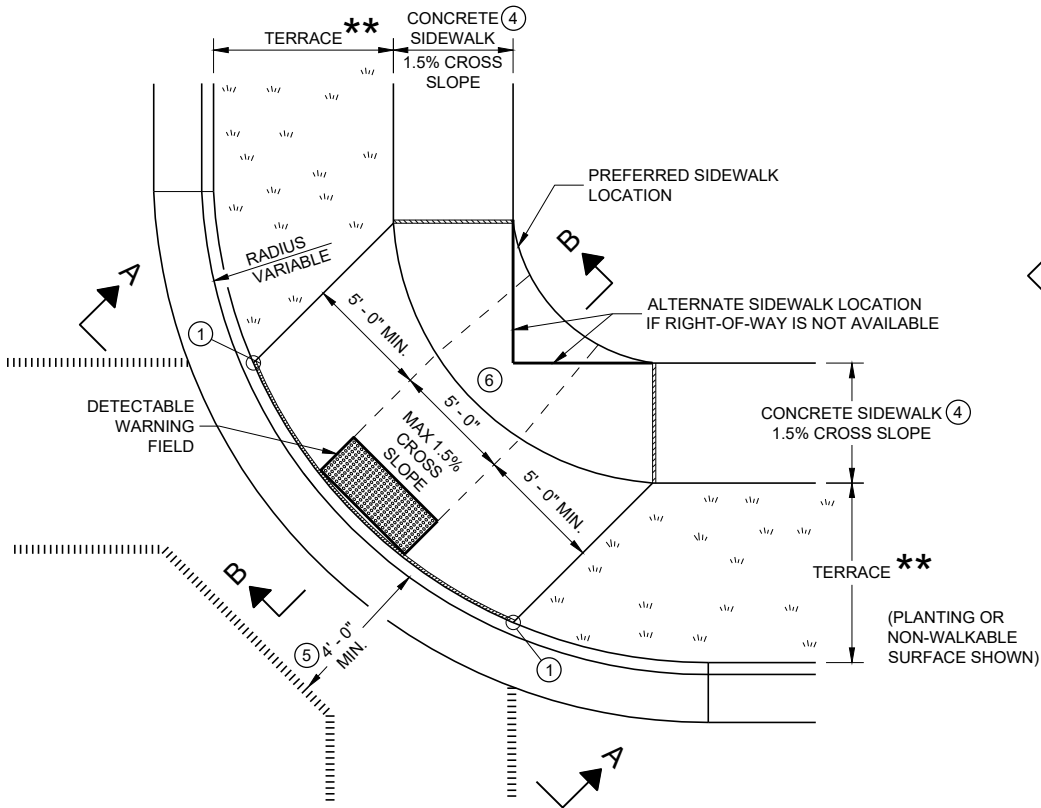
SPV.0075.01	
SPECIAL (PAVEMENT CLEANUP PROJECT)	
LOCATION	HRS
STH 120 & BLOOMFIELD	16
TOTAL 0010	16

SPV.0105.04		
SPECIAL (TRANSPORT AND		
INSTALL STATE		
FURNISHED TRAFFIC		
SIGNAL CABINET [STH 120		
& BLOOMFIELD])		
STATION	LOCATION	LS
203+58.65	BLOOMFIELD RD	1
TOTAL 0010		1

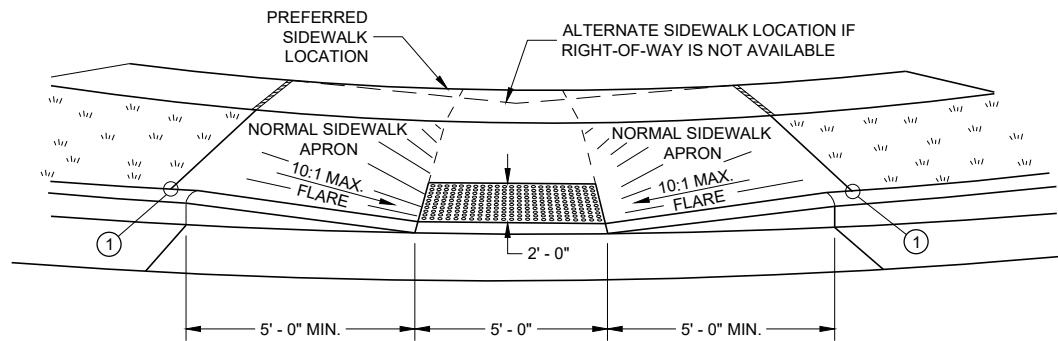
	SPV.0105.05
	SPECIAL (TRANSPORT AND INSTALL STATE FURNISHED AUDIBLE PEDESTRIAN SIGNAL SYSTEM [STH 120 & BLOOMFIELD])
LOCATION	LS
STH 120 AND BLOOMFIELD	1
TOTAL 0010	1

ALL ITEMS CATEGORY 0010
UNLESS OTHERWISE NOTED

SDD 08D05-a: Curb Ramps Types 1 and 1-A

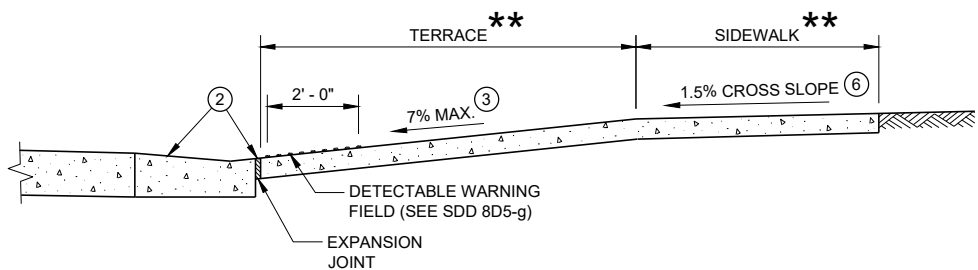


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

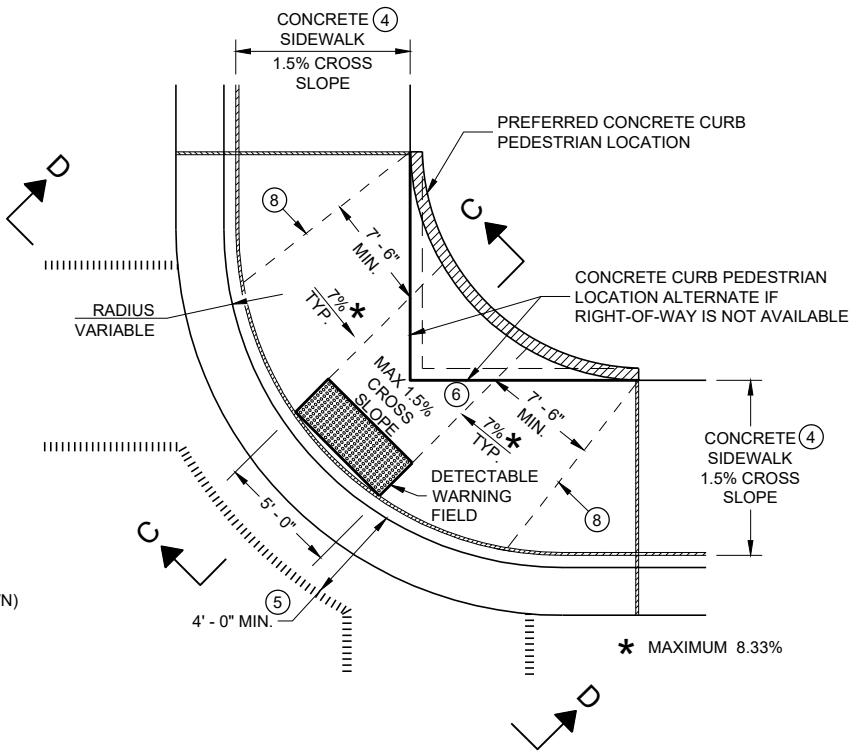


VIEW A - A FOR TYPE 1

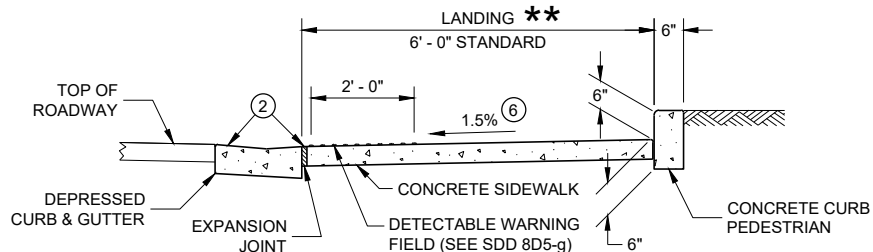
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



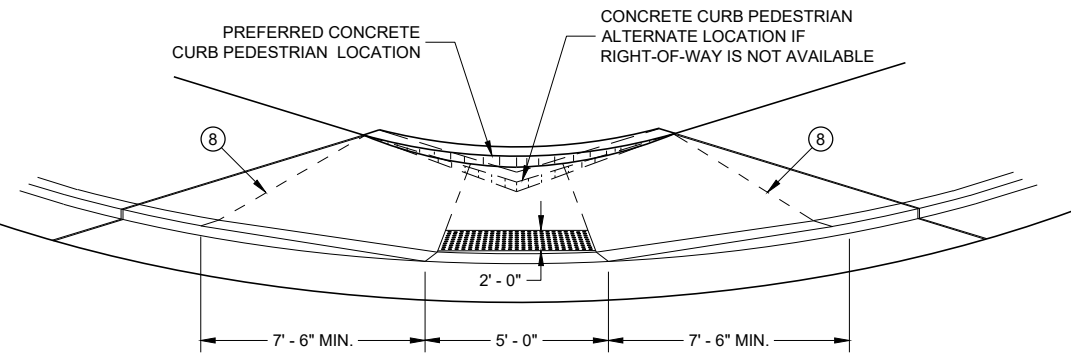
SECTION B - B FOR TYPE 1



PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

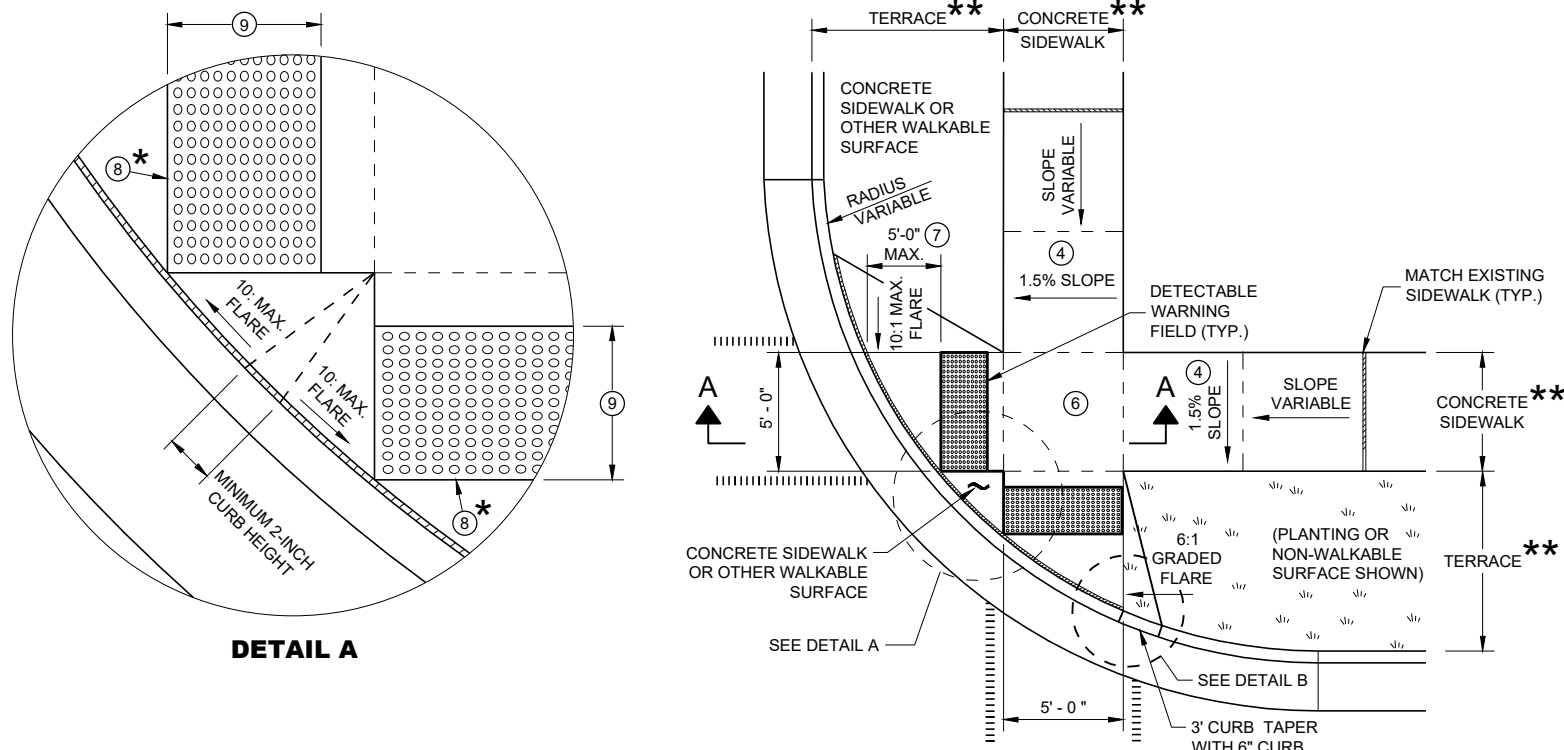
GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.
- TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.
- DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.
- SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
 - GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
 - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

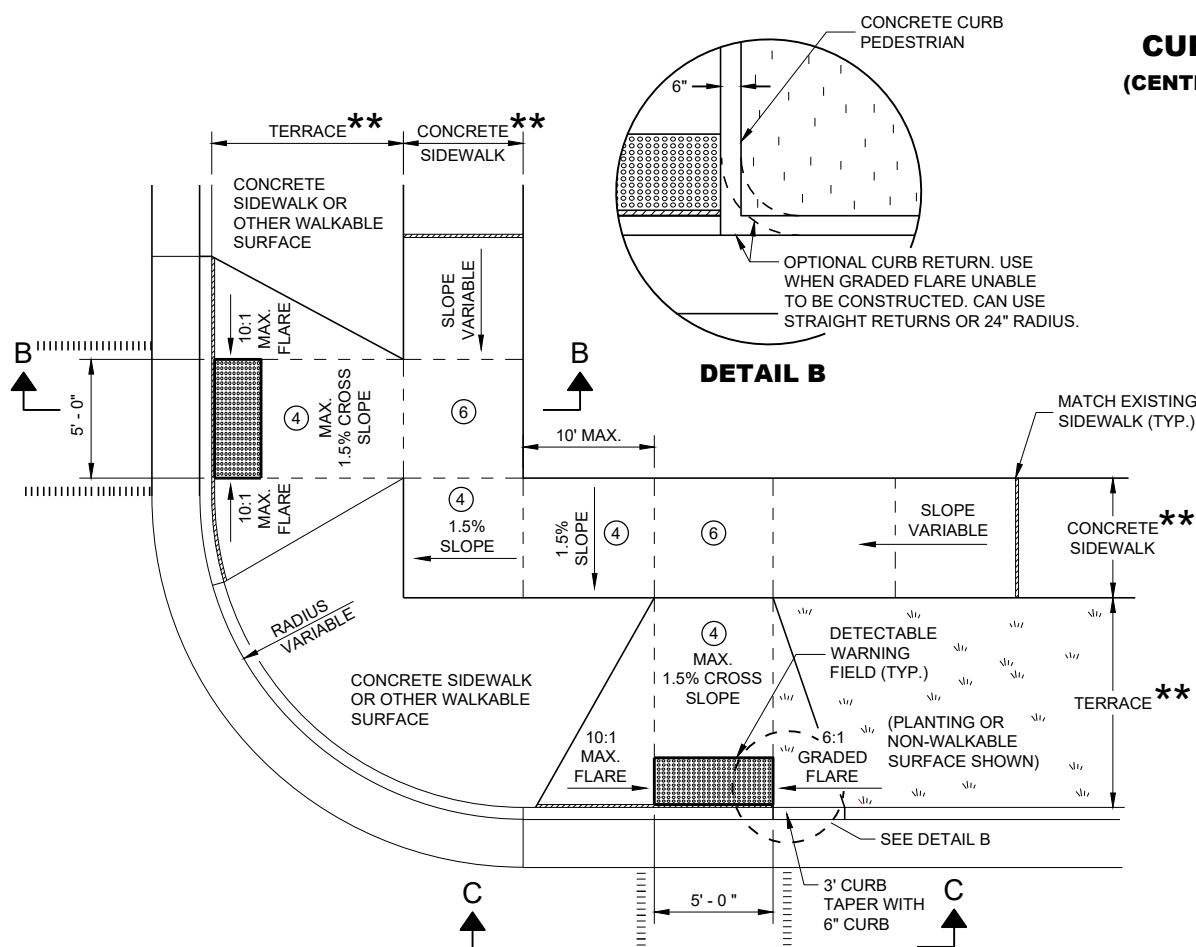
LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

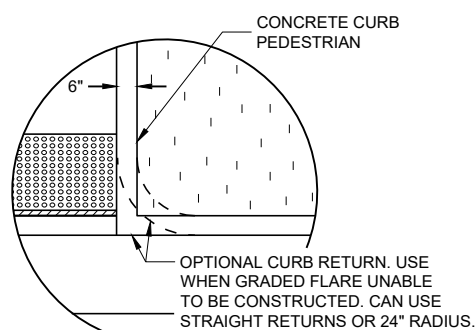
CURB RAMPS TYPE 1 AND 1-A



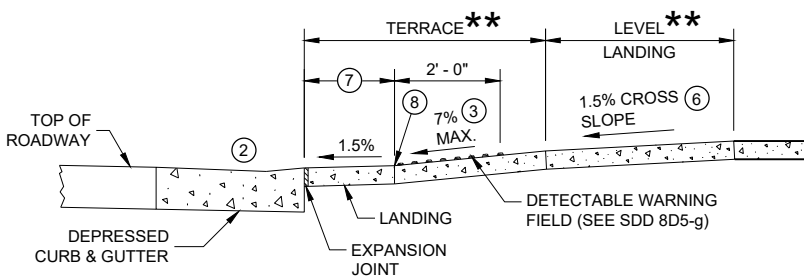
**PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)**



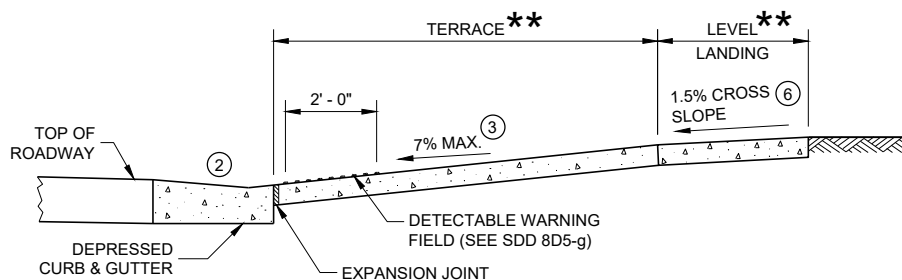
**PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)**



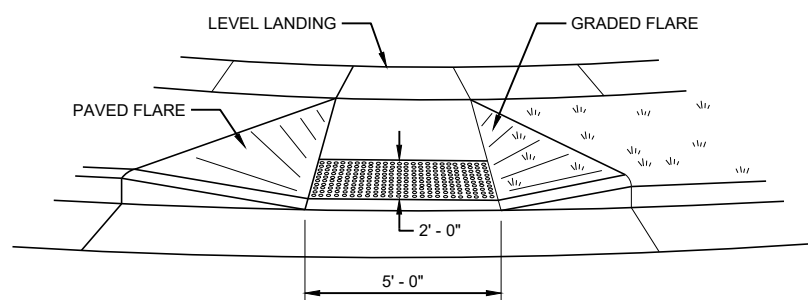
DETAIL B



SECTION A - A FOR TYPE 2



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/2 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

* MAXIMUM 2.0% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE BREAK

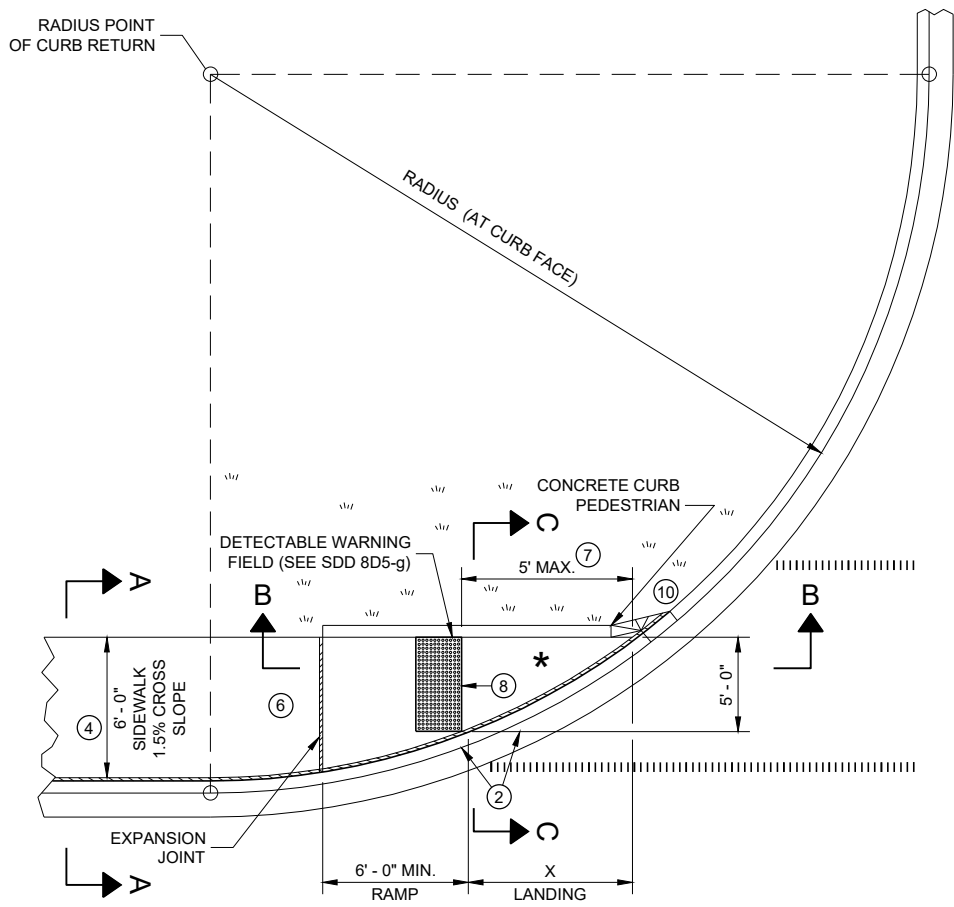
** WIDTH SHOWN ELSEWHERE
IN THE PLANS

LEGEND

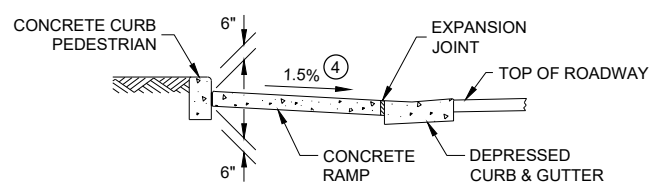
- 1/2" EXPANSION JOINT SIDEWALK
- - - - CONTRACTION JOINT SIDEWALK
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

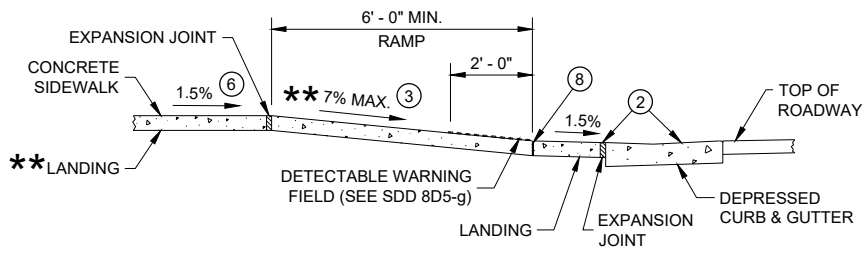
SDD 08D05-c Curb Ramps Types 4A and 4A1



PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

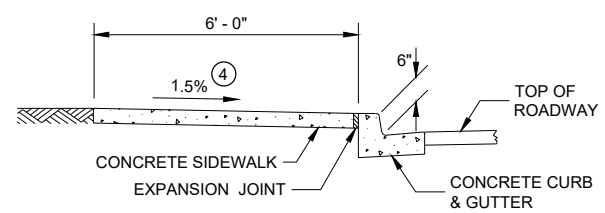


SECTION B - B FOR
TYPE 4A AND TYPE 4A1

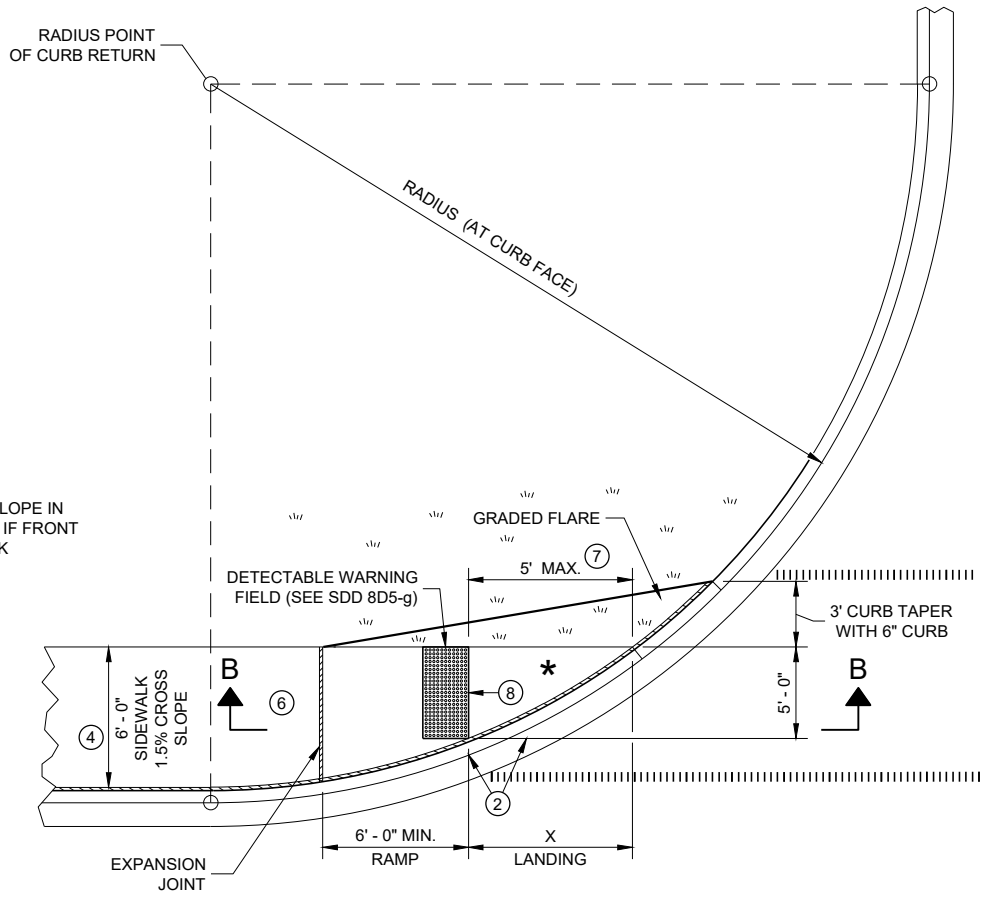
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



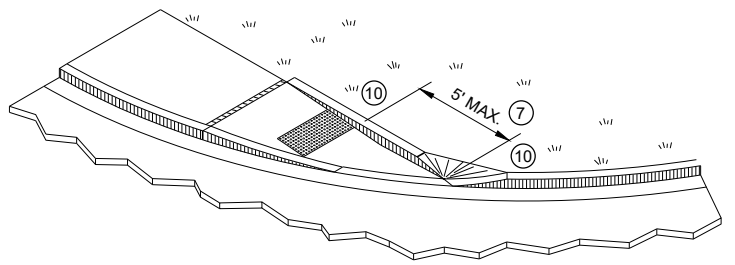
PLAN VIEW
CURB RAMP TYPE 4A1

GENERAL NOTES

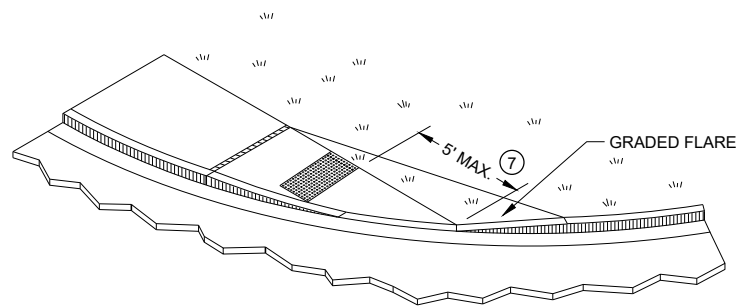
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



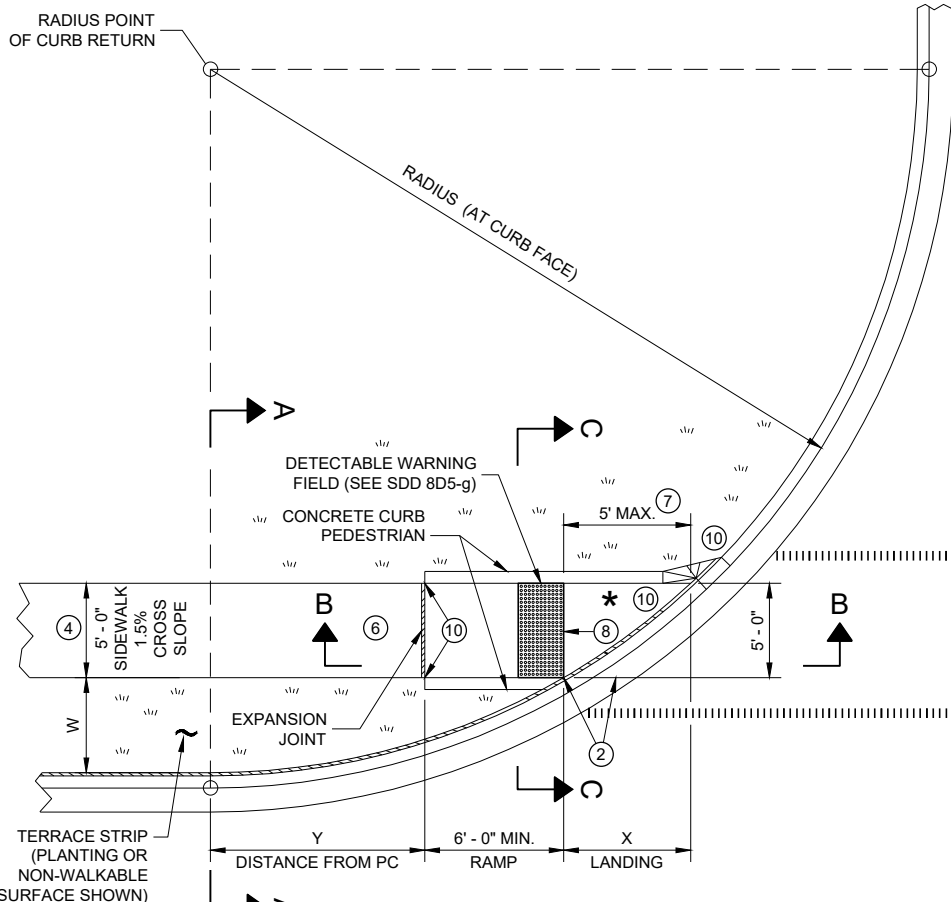
ISOMETRIC VIEW FOR TYPE 4A



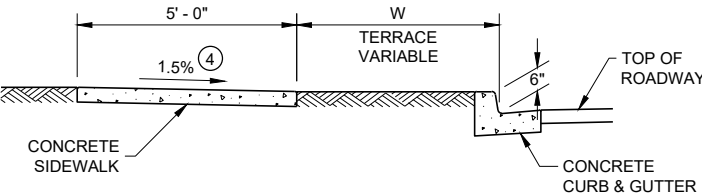
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS TYPE 4A AND 4A1

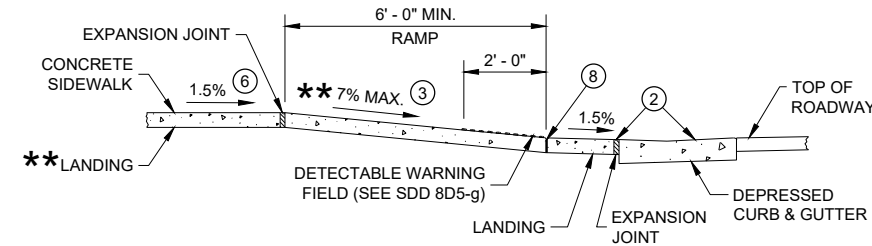
SDD 08D05-d: Curb Ramps Types 4B and 4B1



PLAN VIEW
CURB RAMP TYPE 4B



SECTION A - A FOR TYPE 4B



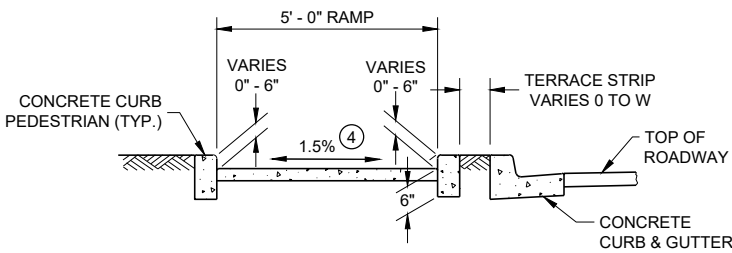
SECTION B - B FOR
TYPE 4B AND TYPE 4B1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

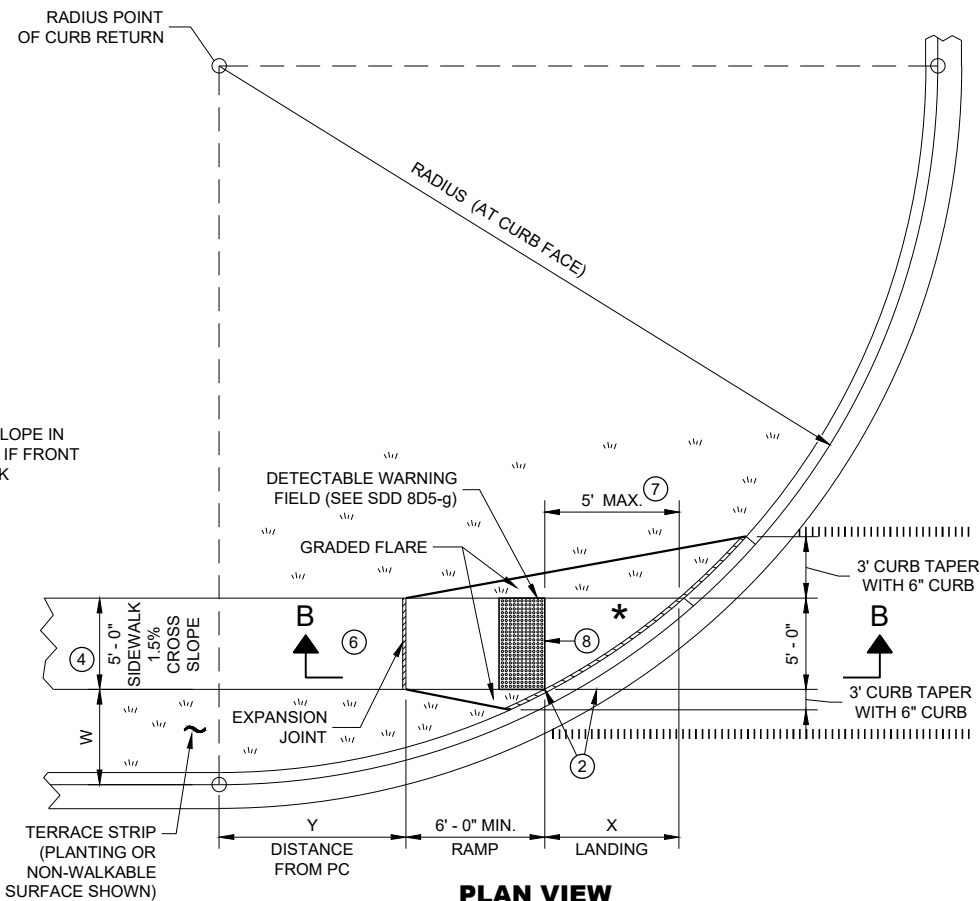
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 3/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET	5' - 9 3/4"	3' - 6 1/2"	4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET			6' - 9 1/4"	7' - 11 1/2"	6' - 0 1/4"	9' - 8"	5' - 5"	11' - 1 3/4"	4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET									6' - 1 3/4"	15' - 8 1/2"	5' - 8"	17' - 2"	5' - 3"	18' - 5 3/4"	4' - 10 3/4"	19' - 8 1/4"
50 FEET															5' - 10 1/4"	23' - 2"

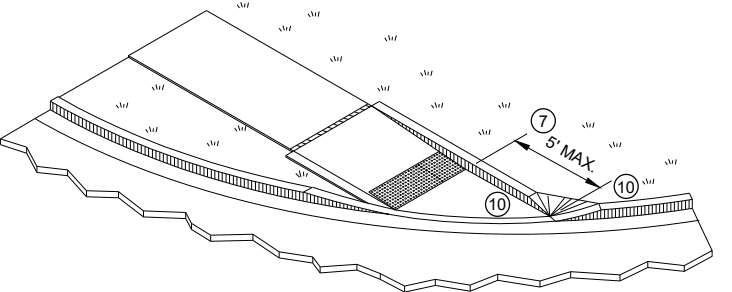
INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



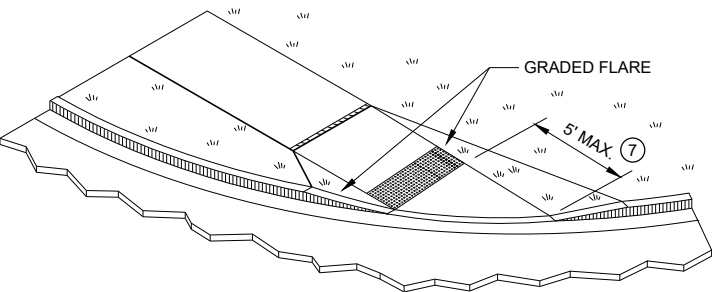
SECTION C - C FOR TYPE 4B



PLAN VIEW
CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

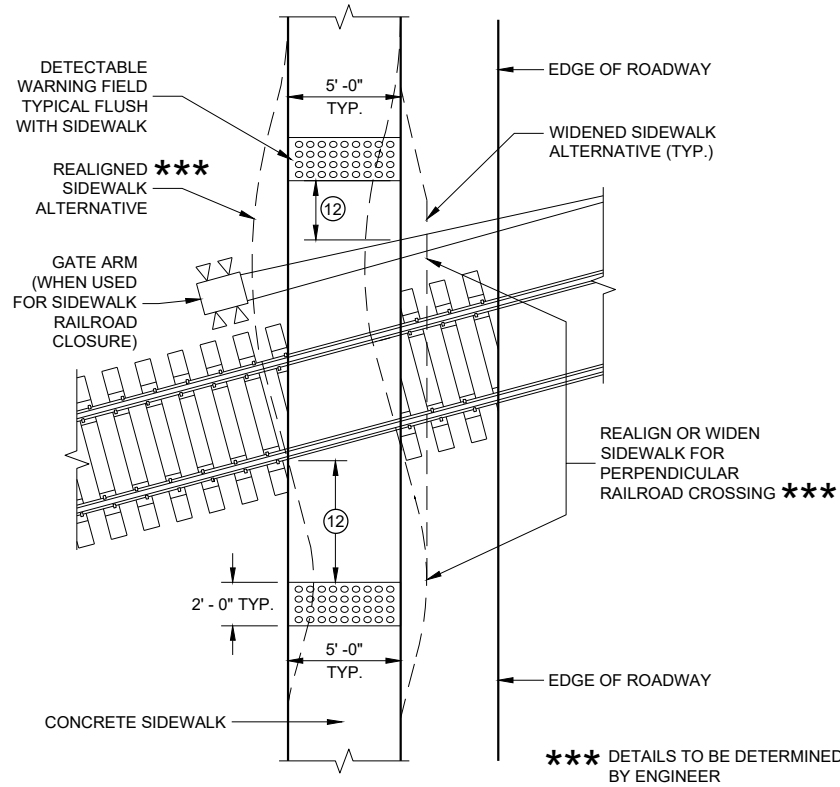
LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

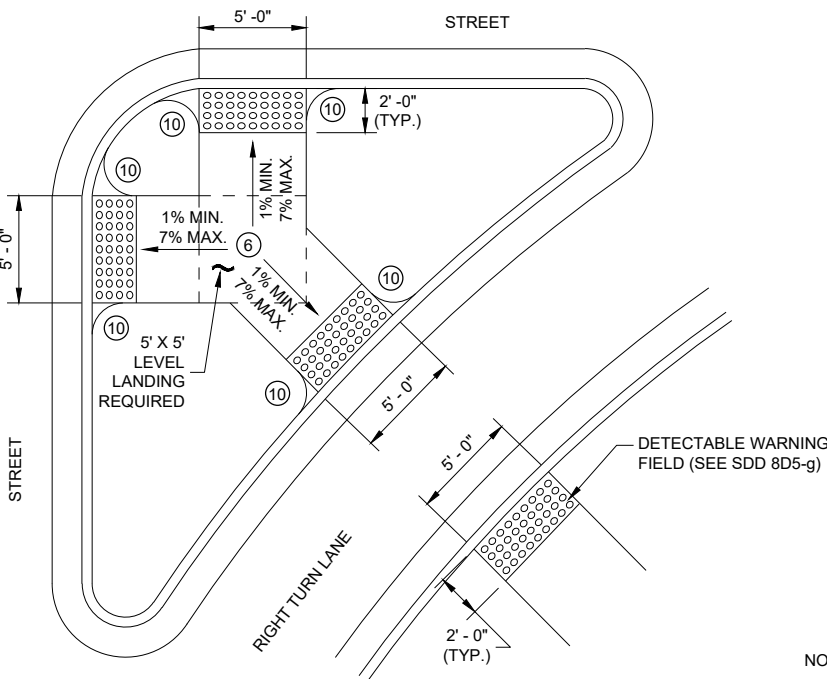
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

CURB RAMPS
TYPE 4B AND 4B1



CURB RAMP TYPE 8

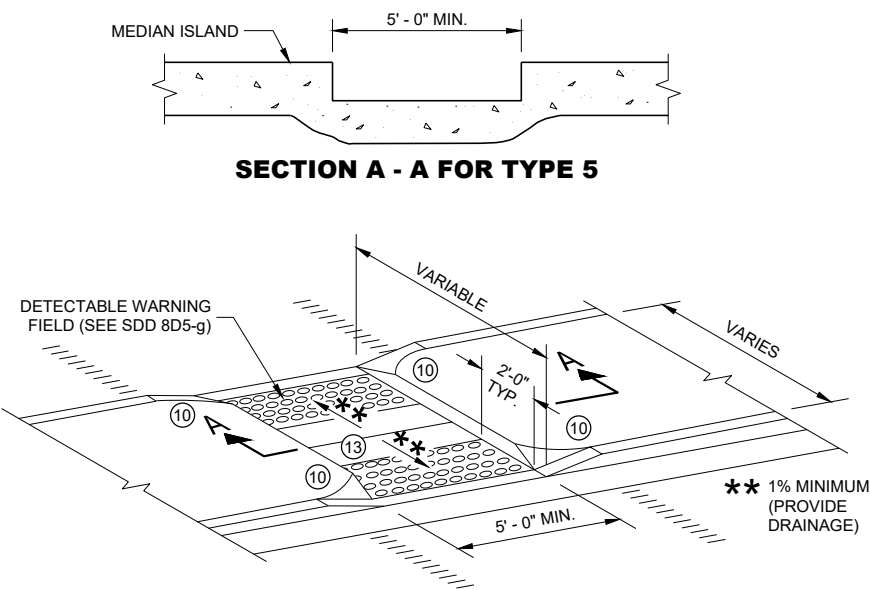
DETECTABLE WARNINGS AT RAILROAD CROSSING



CURB RAMP TYPE 6

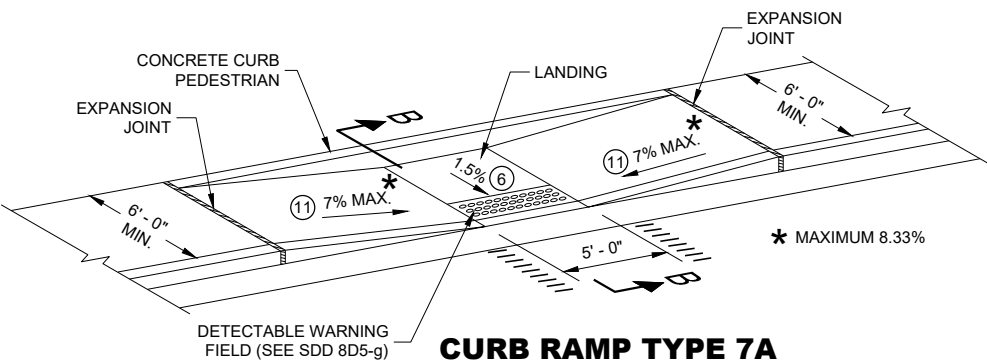
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



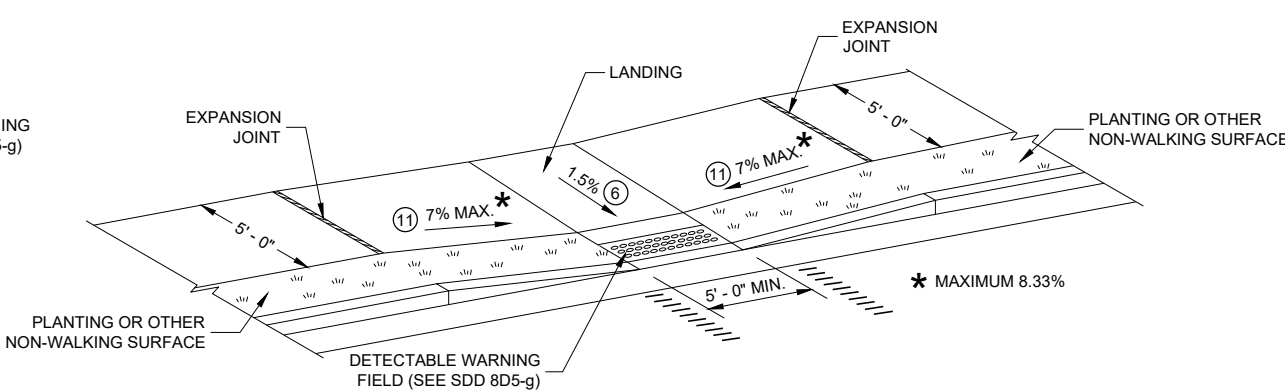
CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



CURB RAMP TYPE 7A

MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

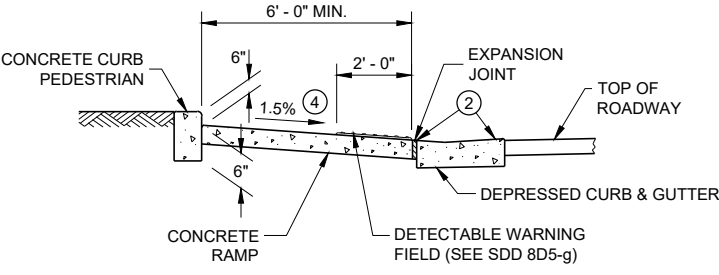
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

- ===== 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

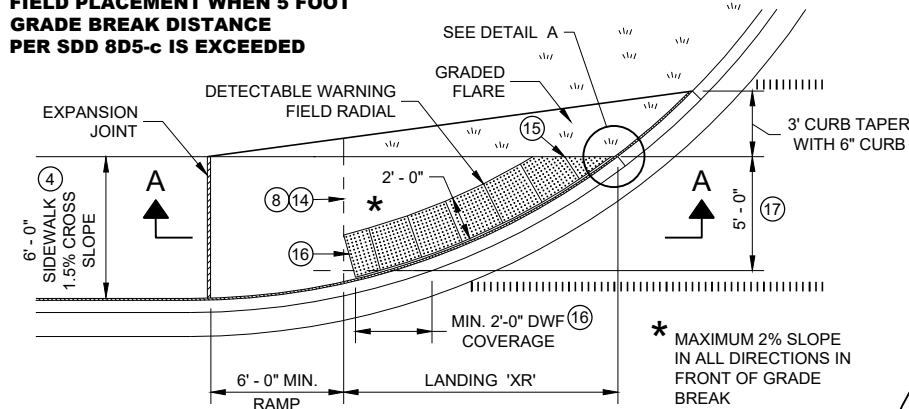


SECTION B - B FOR TYPE 7A

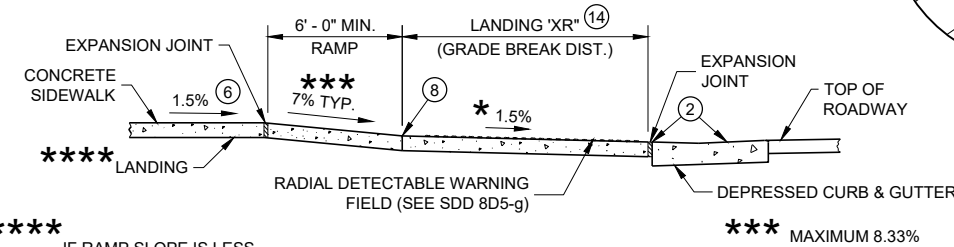
**CURB RAMPS
TYPE 5, 6, 7A, 7B & 8**

SDD 08D05-f Curb Ramps Radial Detectable Warning Field Applications

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

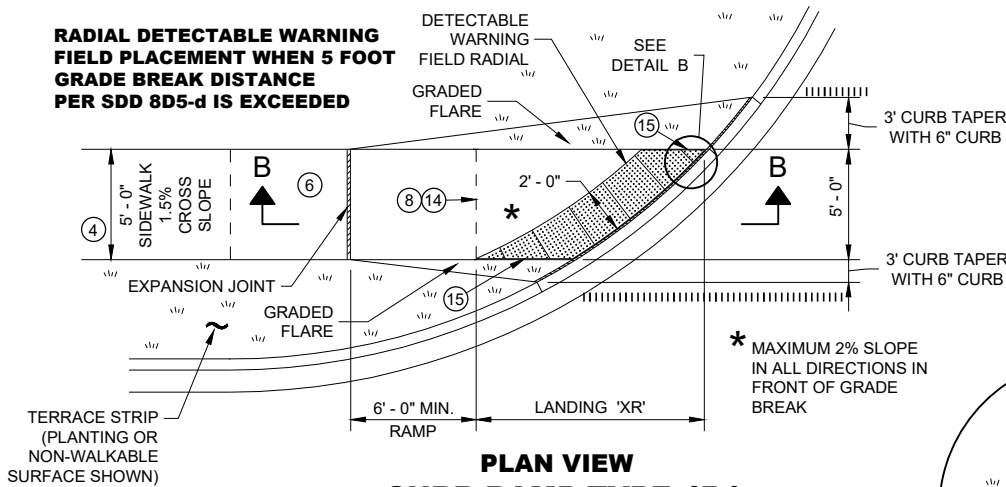


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

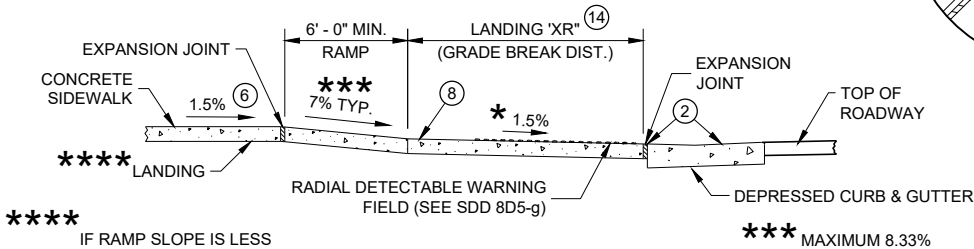


SECTION A - A FOR TYPE 4A1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



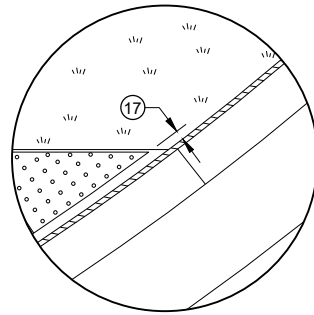
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



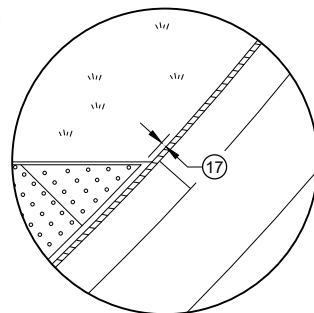
SECTION B - B FOR TYPE 4B1

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



DETAIL A

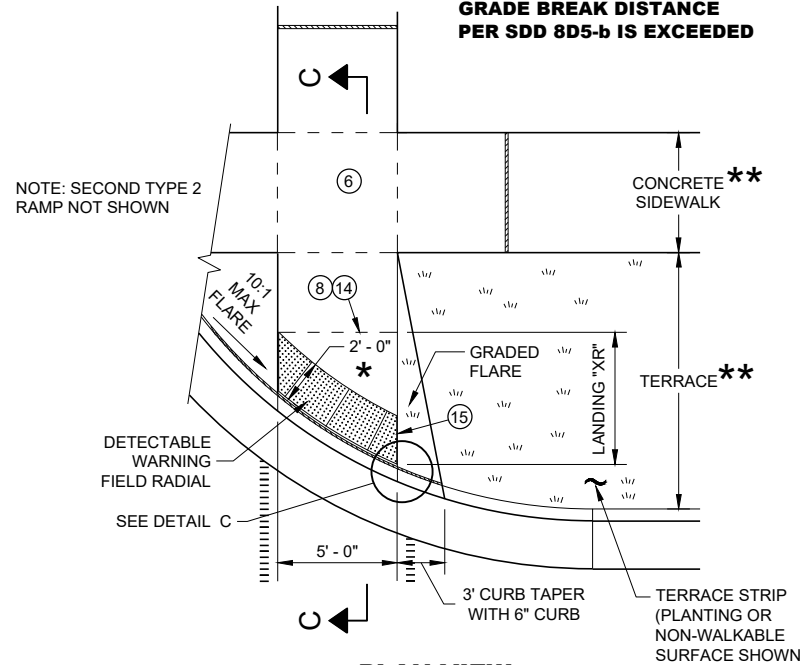


DETAIL B

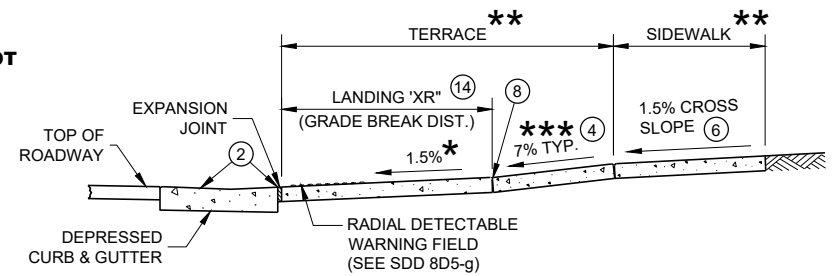
GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMP AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMP. TYPE 4A AND 4B CURB RAMP ARE NOT SHOWN.
- REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.
- FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.
- DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

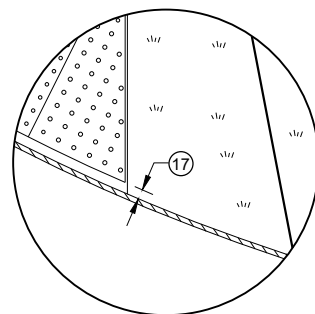
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED



**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



SECTION C - C FOR TYPE 2



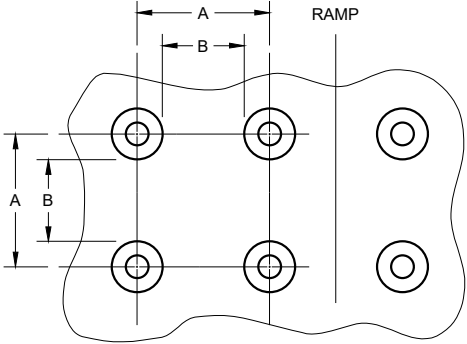
DETAIL C

CURB RAMP RADIAL DETECTABLE WARNING FIELD APPLICATIONS

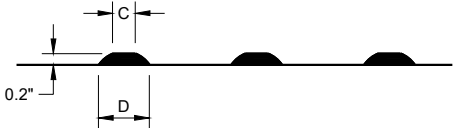
SDD 08D05-g: Curb Ramps Rectangular and Radial Detectable Warning Plates

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

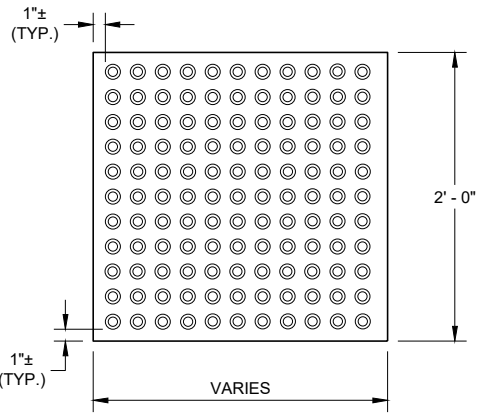


PLAN VIEW

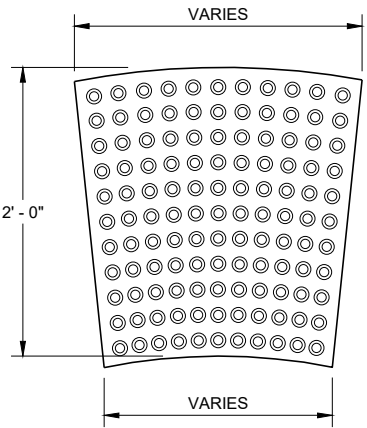


ELEVATION VIEW

TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL

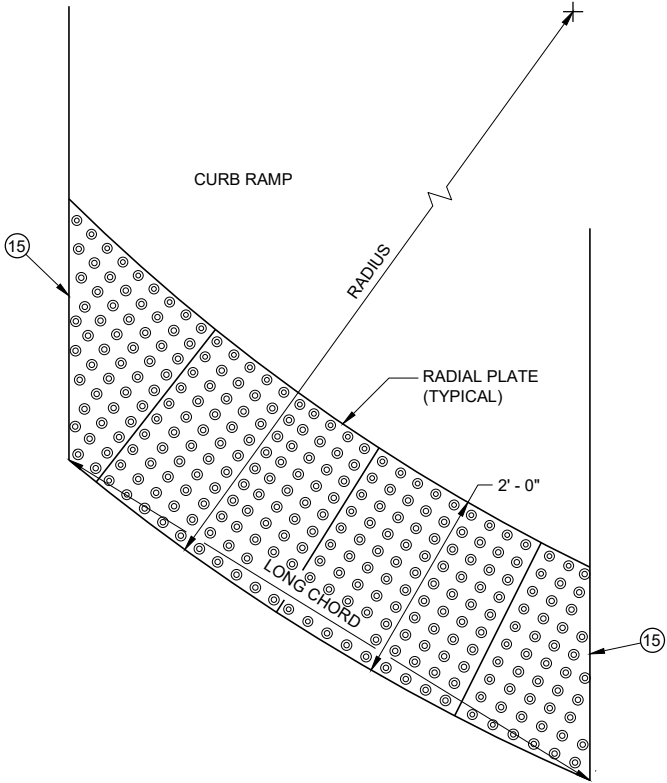


RECTANGULAR
PLATES



RADIAL
PLATES

PLAN VIEW DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

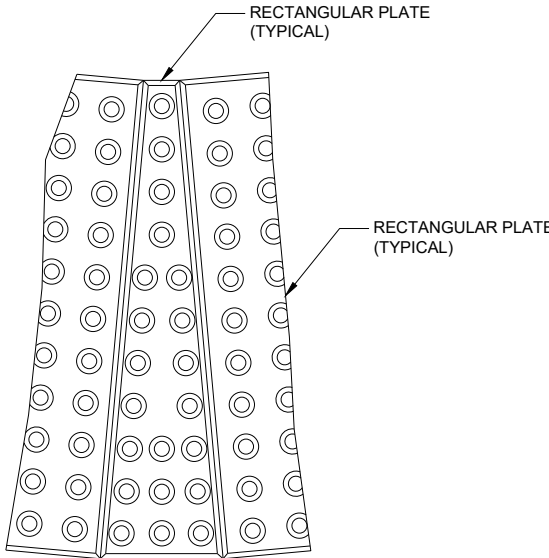
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



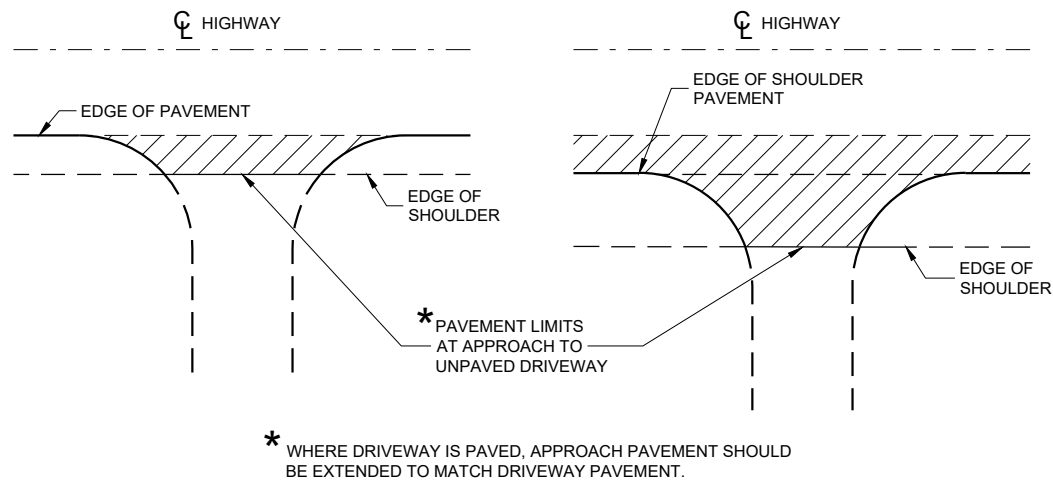
PLAN VIEW RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMP RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

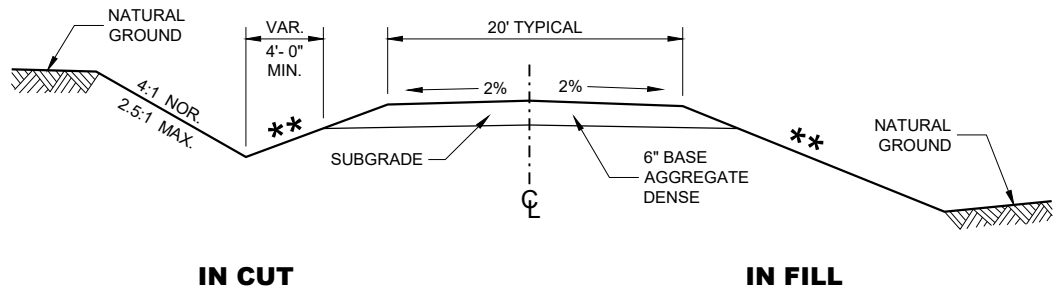
60



PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

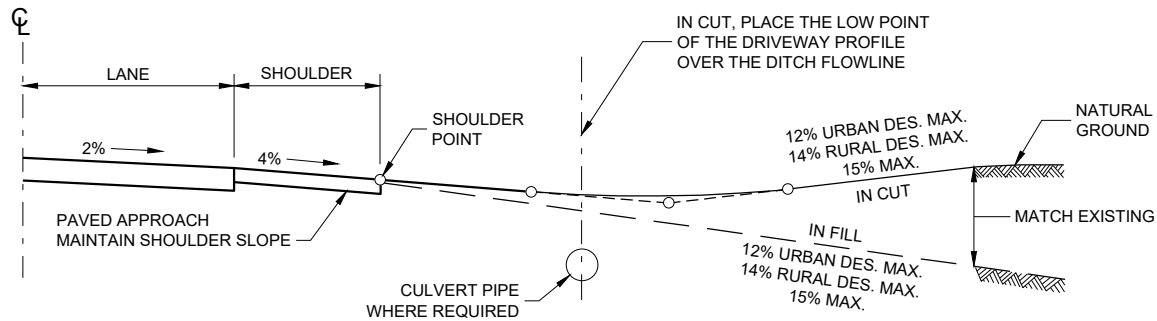
**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**



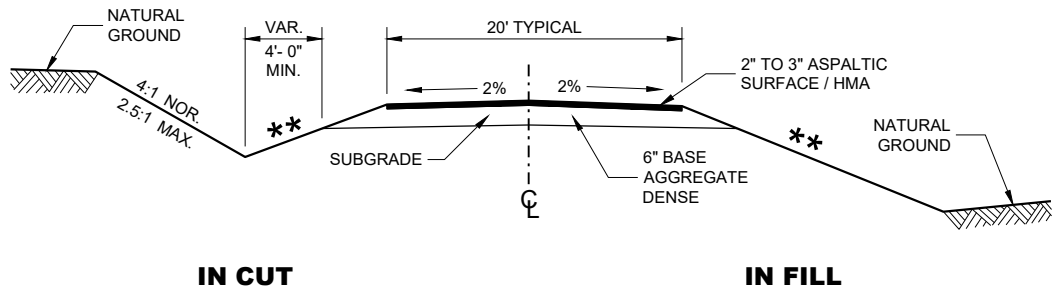
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

****** SLOPE CAN VARY WITH
SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



TYPICAL DRIVEWAY PROFILES



**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

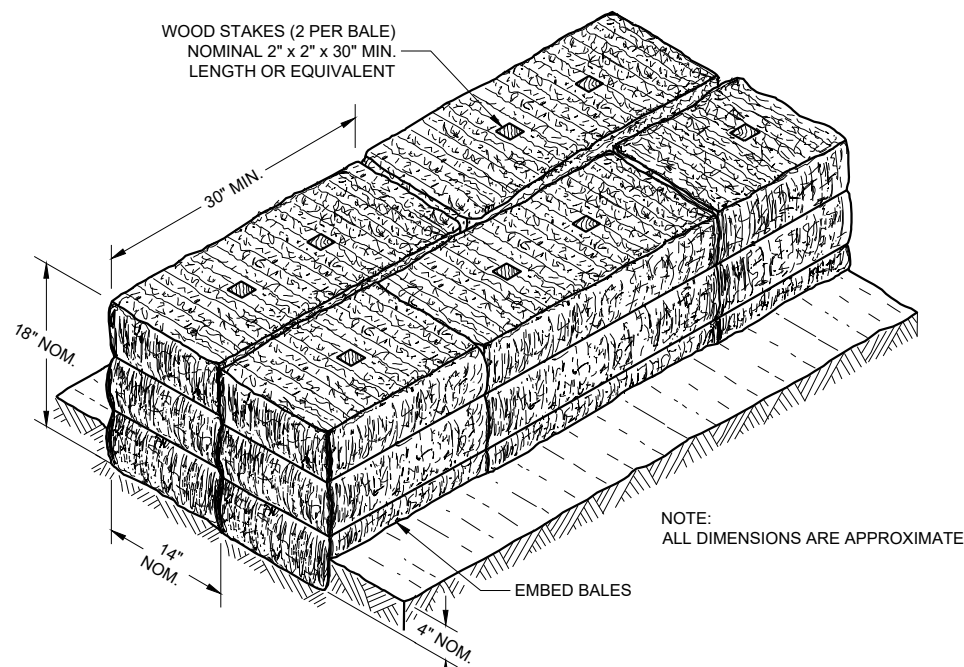
**DRIVEWAYS WITHOUT
CURB AND GUTTER**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

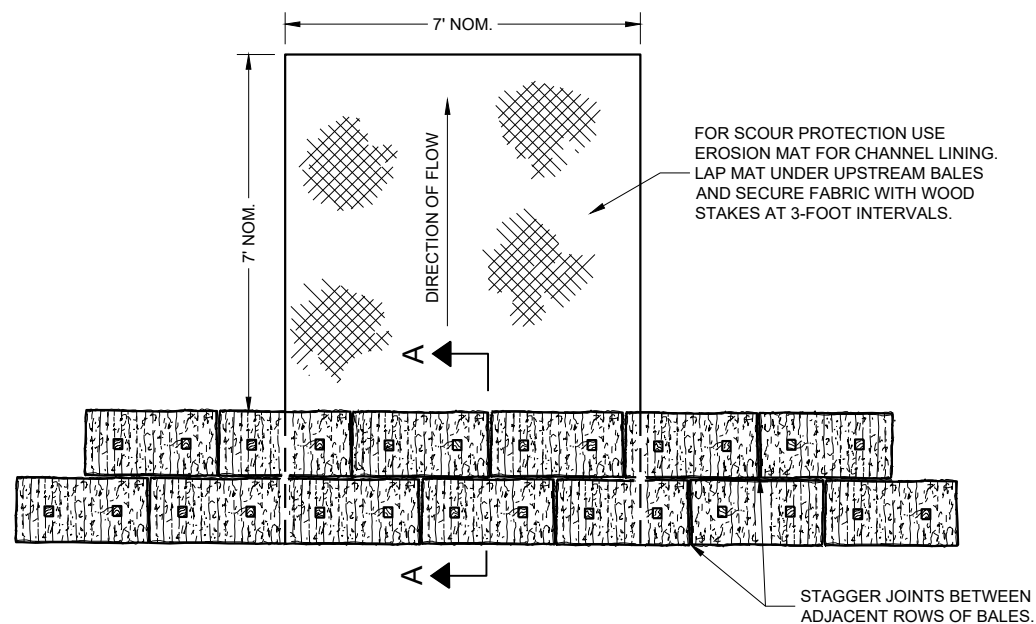
APPROVED
December 2017
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR



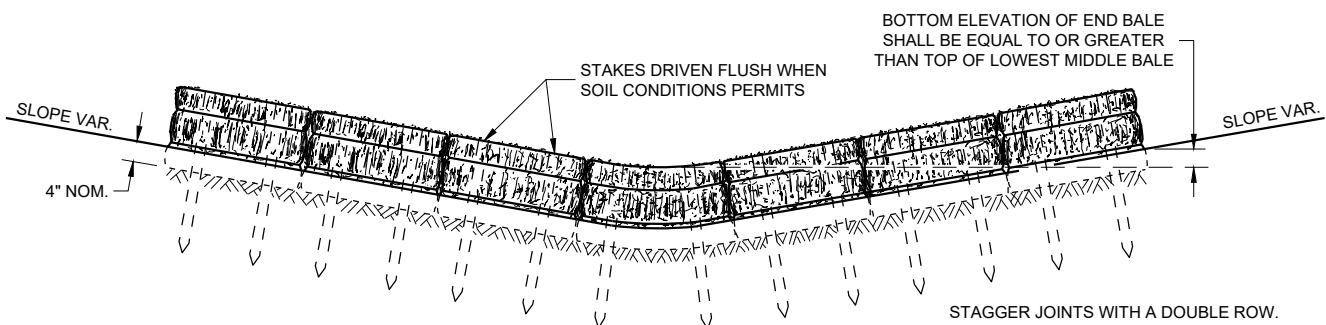
SDD 08E08 Typical Installations of Erosion Bales / Temporary Ditch Checks



SECTION A - A



PLAN VIEW



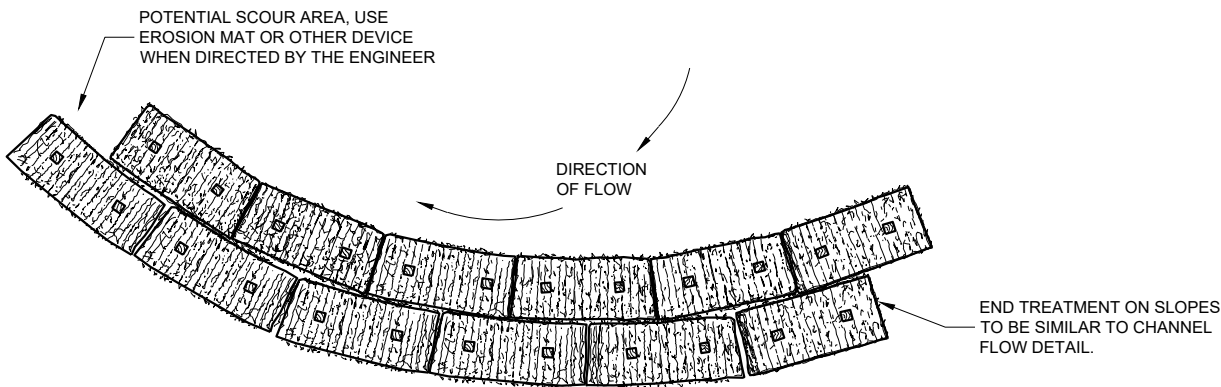
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES^①

GENERAL NOTES

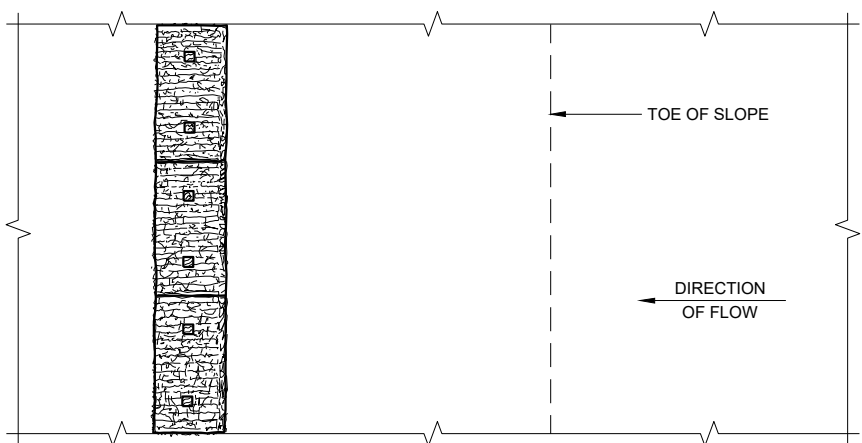
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS, EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

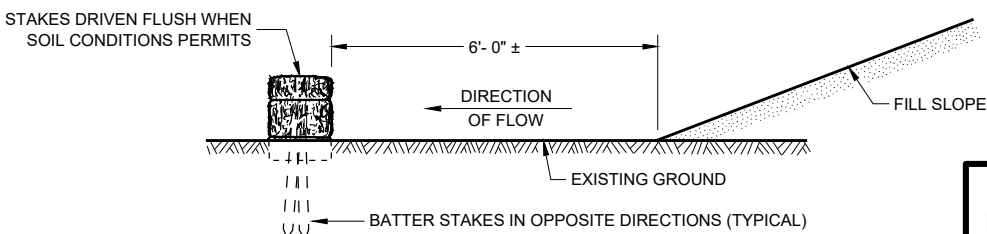


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN ELEVATION



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES/TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

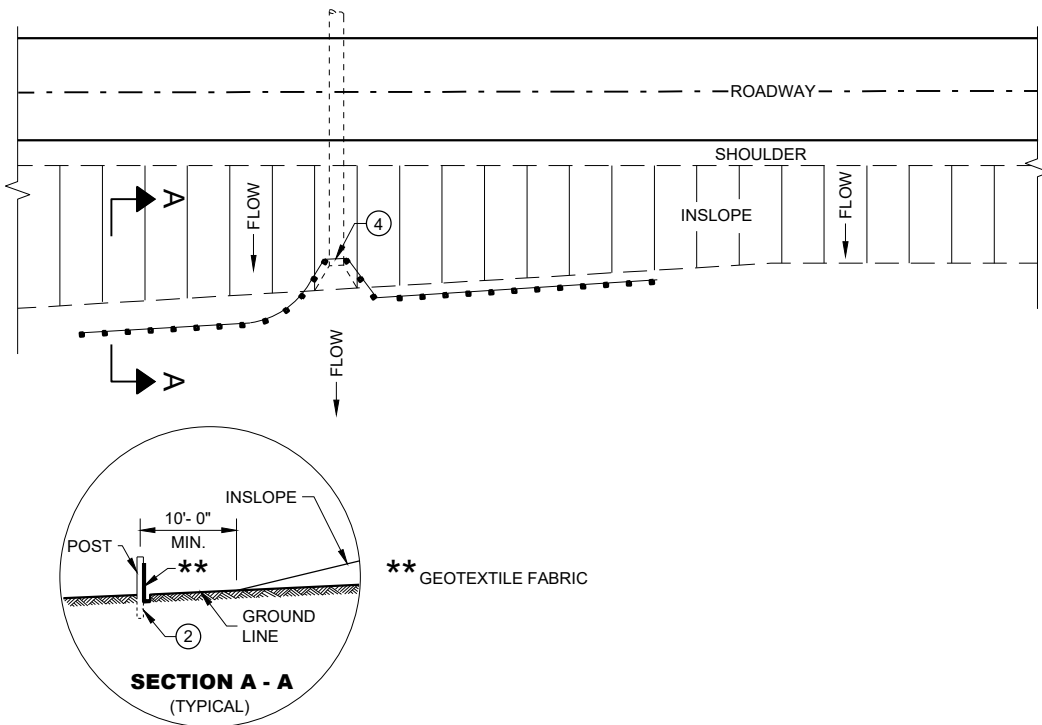
6/4/02

DATE

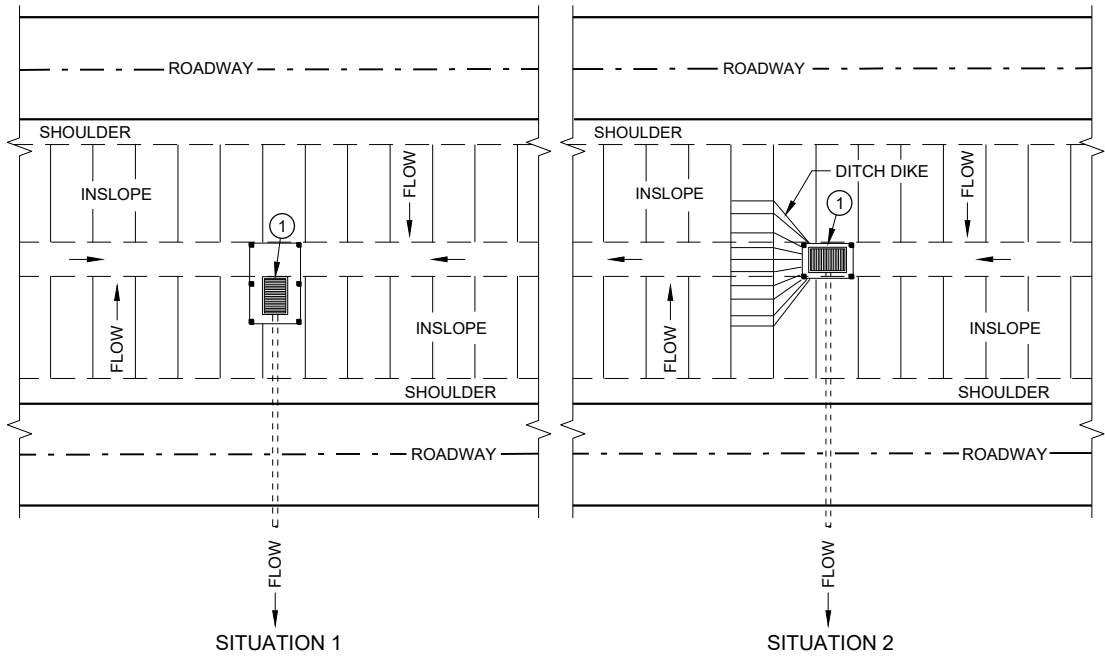
FHWA

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT
ENGINEER

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**PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE**

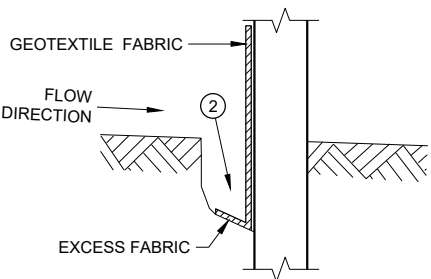


**PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS**

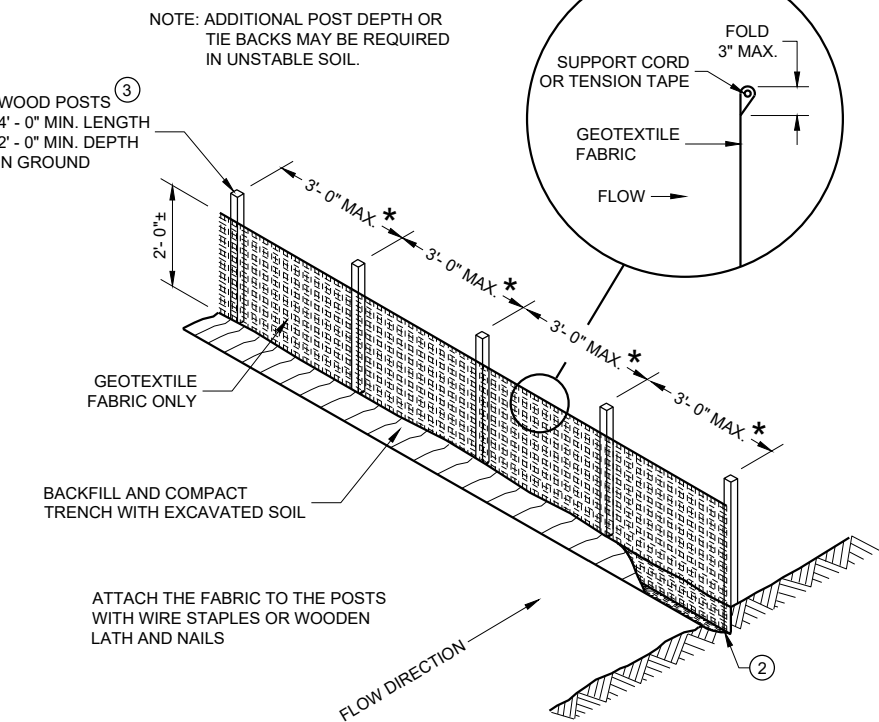
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

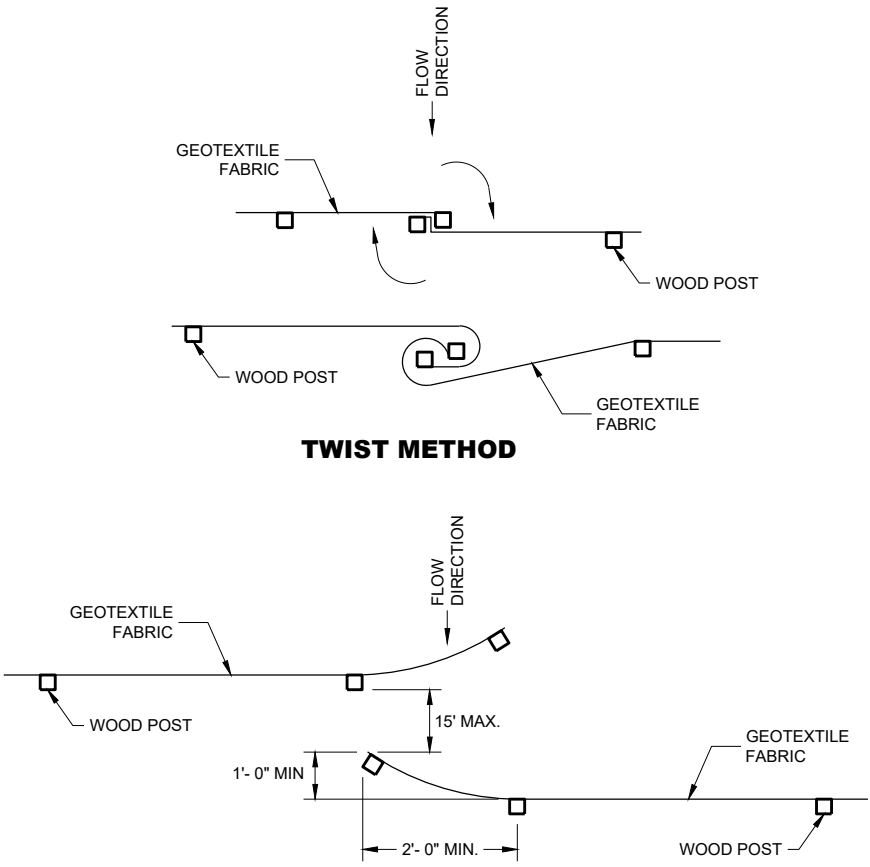


TRENCH DETAIL

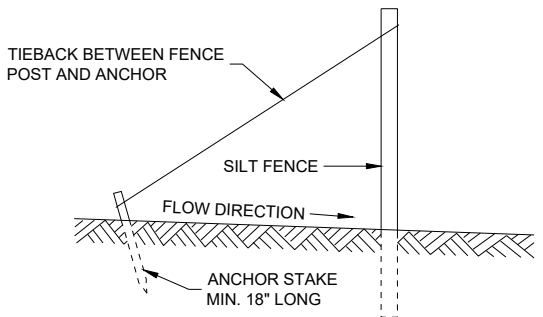


SILT FENCE

* NOTE: 8' - 0" SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



**SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)**

SILT FENCE

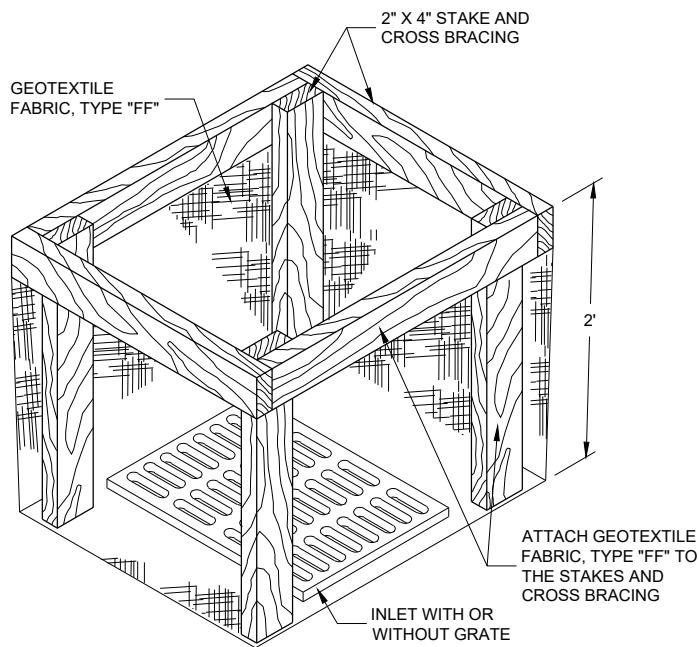
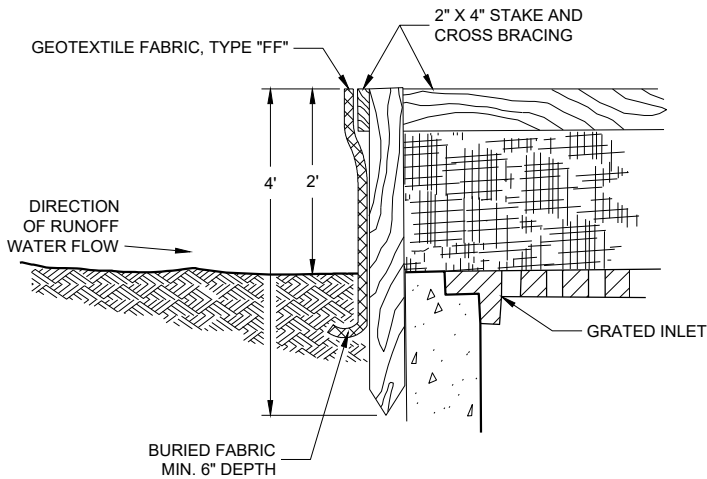
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/29/05
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT
ENGINEER

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FHWA

SDD 08E10 Inlet Protection, Types A, B, C and D



INLET PROTECTION, TYPE "A"

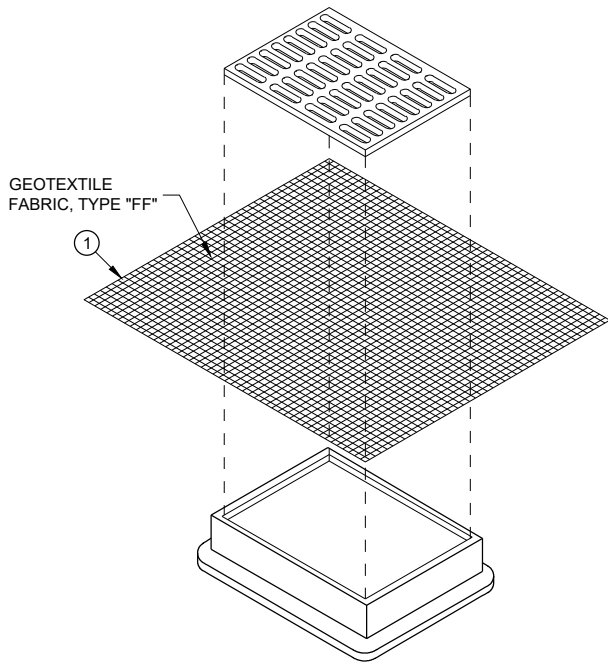
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

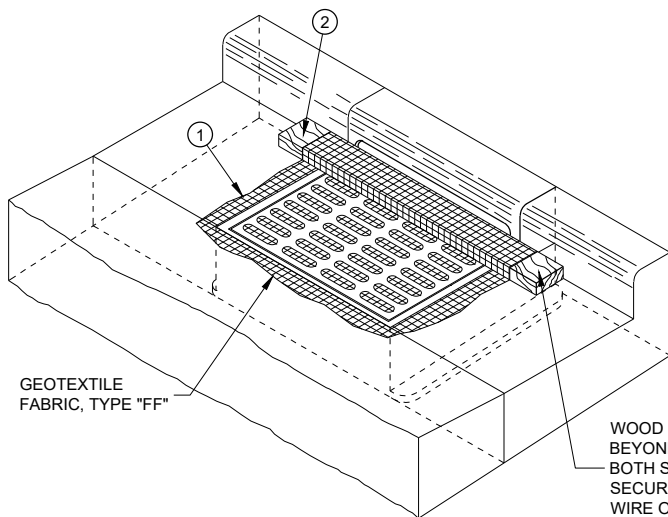
MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 1 FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- 2 FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- 3 FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE "B"
(WITHOUT CURB BOX)**
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



**INLET PROTECTION, TYPE "C"
(WITH CURB BOX)**

INSTALLATION NOTES

TYPES B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

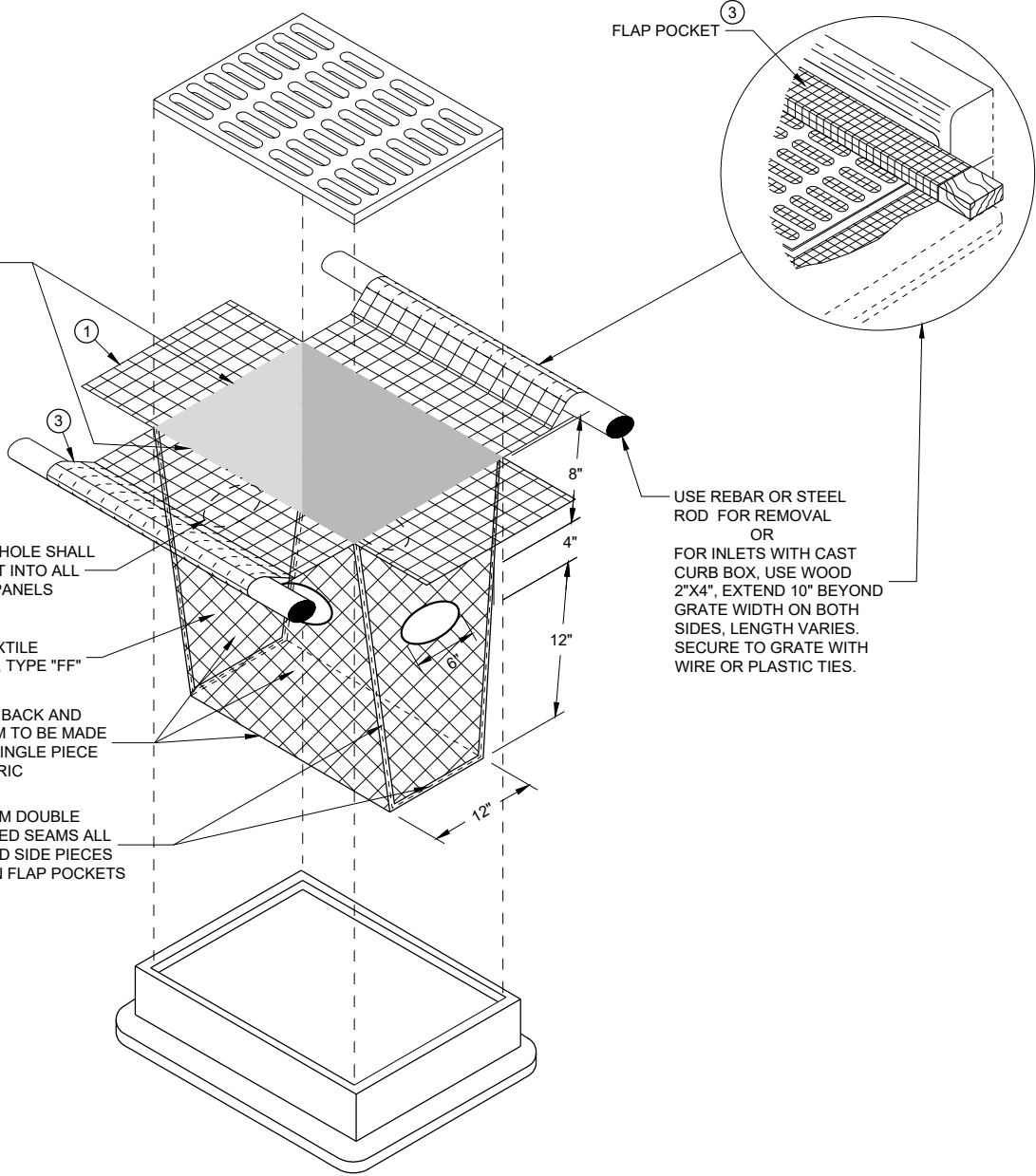
INLET SPECIFICATIONS AS PER THE PLAN. DIMENSION LENGTH AND WIDTH TO MATCH

4" x 6" OVAL HOLE SHALL BE HEAT CUT INTO ALL FOUR SIDE PANELS

GEOTEXTILE FABRIC, TYPE "FF"
FRONT, BACK AND BOTTOM TO BE MADE FROM SINGLE PIECE OF FABRIC

MINIMUM DOUBLE STITCHED SEAMS ALL AROUND SIDE PIECES AND ON FLAP POCKETS

WOOD 2" X 4" EXTENDS 8" BEYOND GRATE WIDTH ON BOTH SIDES. LENGTH VARIES. SECURE TO GRATE WITH WIRE OR PLASTIC TIES.



INLET PROTECTION, TYPE "D"
(CAN BE INSTALLED IN ANY INLET WITH OR WITHOUT A CURB BOX AS PER NOTE 2)

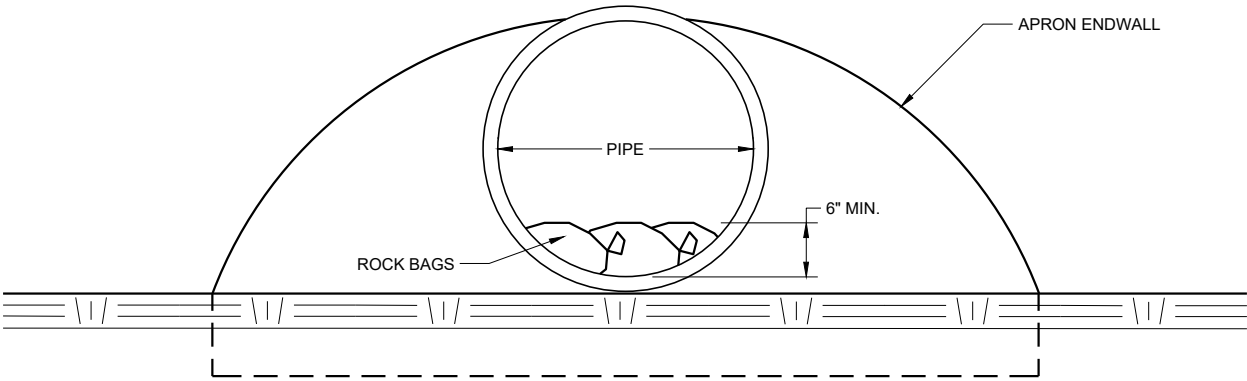
INLET PROTECTION TYPES A, B, C AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

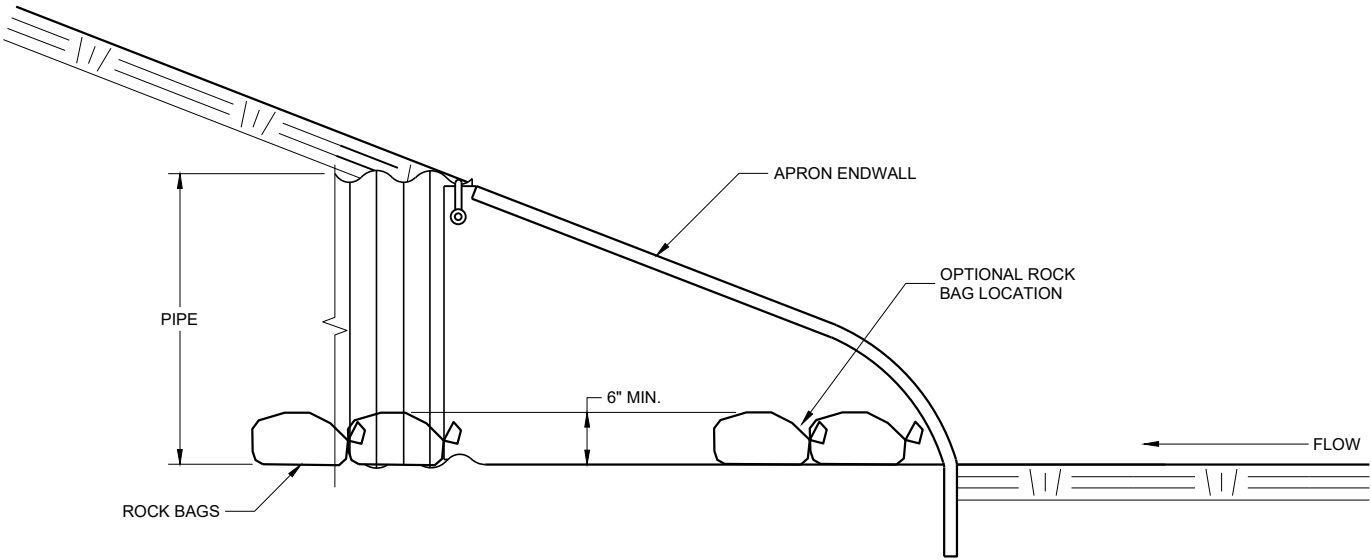
APPROVED
10/16/02
DATE /S/ Beth Cannestra
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



SDD 08E15 Culvert Pipe Check



END VIEW



SIDE VIEW

CULVERT PIPE CHECK (INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Daniel Schave
DATE EROSION CONTROL ENGINEER

FHWA

65

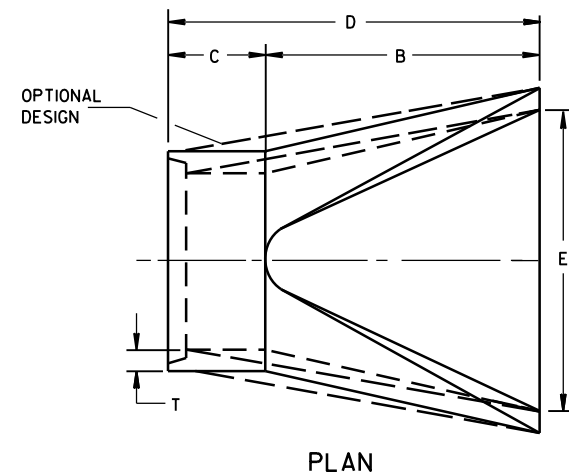


METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1/2")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

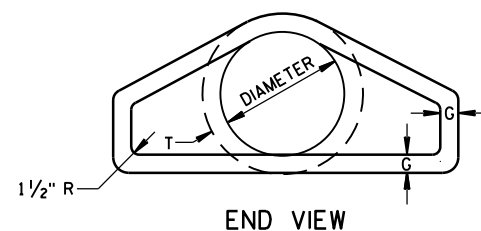
* EXCEPT CENTER PANEL
SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS											
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE			
	T	A	B	C	D	E	G				
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1			
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1			
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1			
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1			
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1			
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1			
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1			
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1			
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1			
48	5	24	72	26	98	84	5	3 to 1			
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 1/2 to 1			
60	6	30-35	60	39	99	96	5	2 to 1			
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1			
72	7	24-36	78	21	99	108	6	2 to 1			
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1			
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1			
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1			

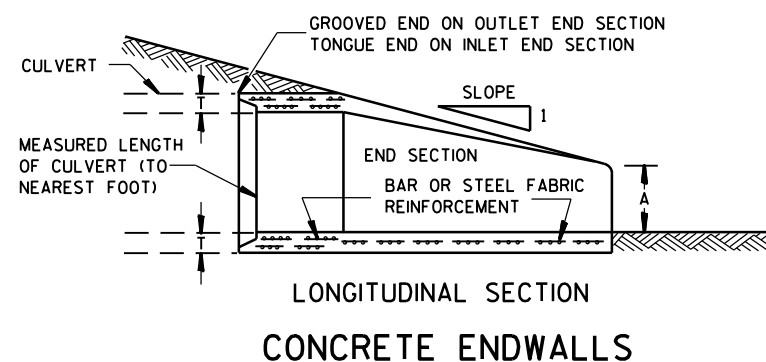
* MINIMUM
** MAXIMUM



PLAN



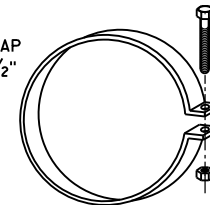
END VIEW



LONGITUDINAL SECTION

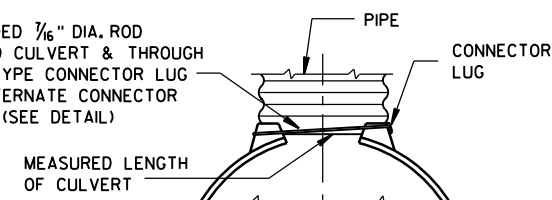
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP

THREADED 1/6" DIA. ROD AROUND CULVERT & THROUGH TANK TYPE CONNECTOR LUG OR ALTERNATE CONNECTOR STRAP (SEE DETAIL)



TYPE 1
FOR 12" THRU 24" CORR. PIPE

THREADED 1/6" DIA. ROD OVER TOP OF APRON, SIDE LUGS TO BE RIVETED TO APRON



TYPE 2
FOR 30" THRU 96" CORR. PIPE

MEASURED LENGTH OF CULVERT

CONNECTOR SECTION TO BE PAID FOR AS PART OF END SECTION

TYPE 3
FOR 42" THRU 96" CORR. PIPE

DIMPLED OR CORRUGATED COUPLING BAND

RIVETED OR BOLTED AT DIMPLES (6" C-C FOR CORRUGATED BAND)

2 - 1/2" X 6" BAND BOLTS

MEASURED LENGTH OF CULVERT

TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

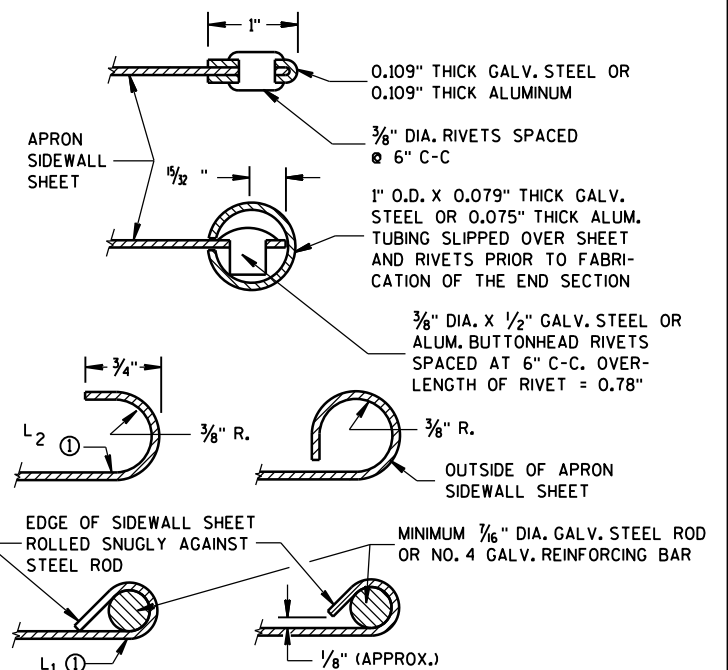
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

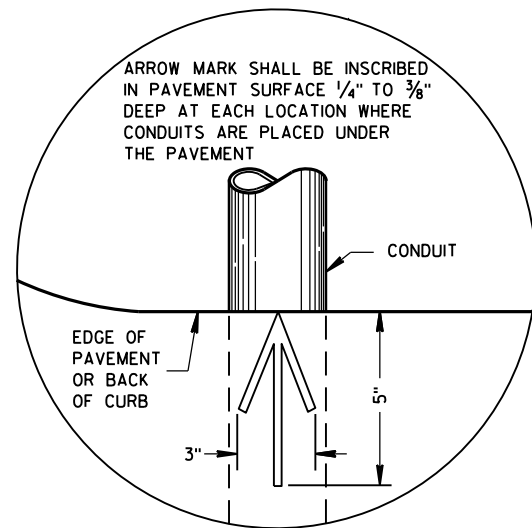
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

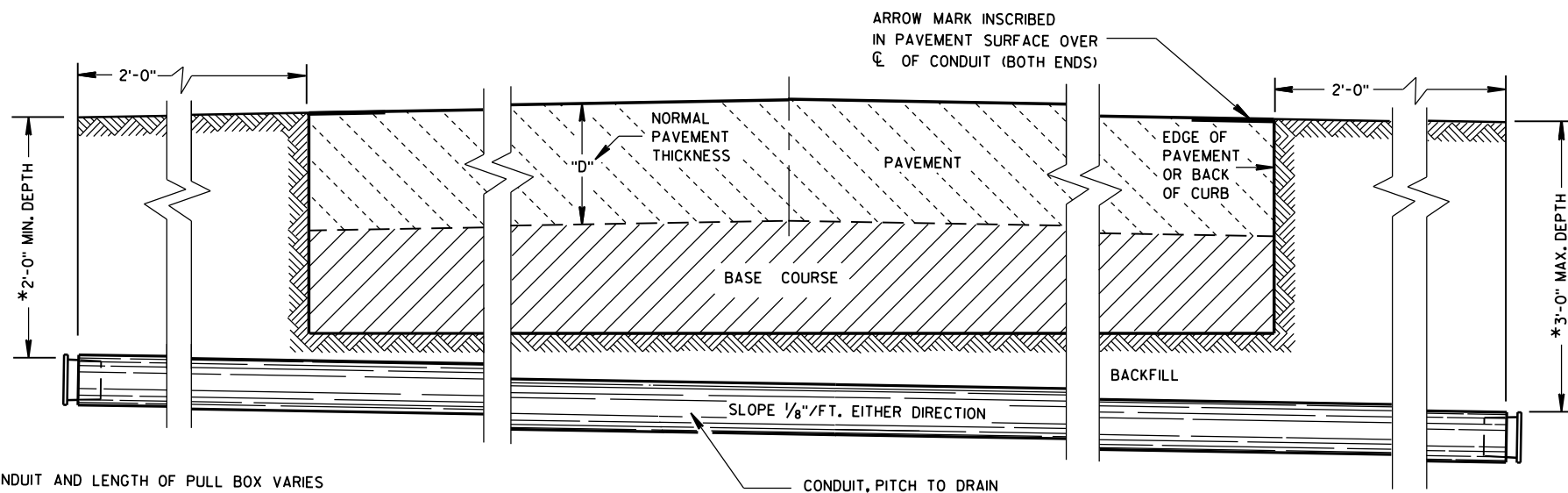
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-30-94
DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
66
FHWA



PLAN VIEW
ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

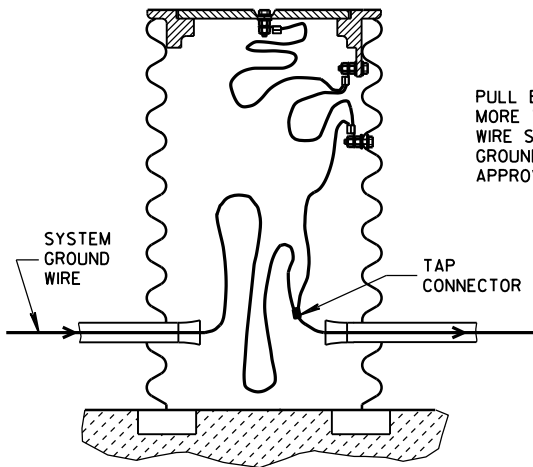
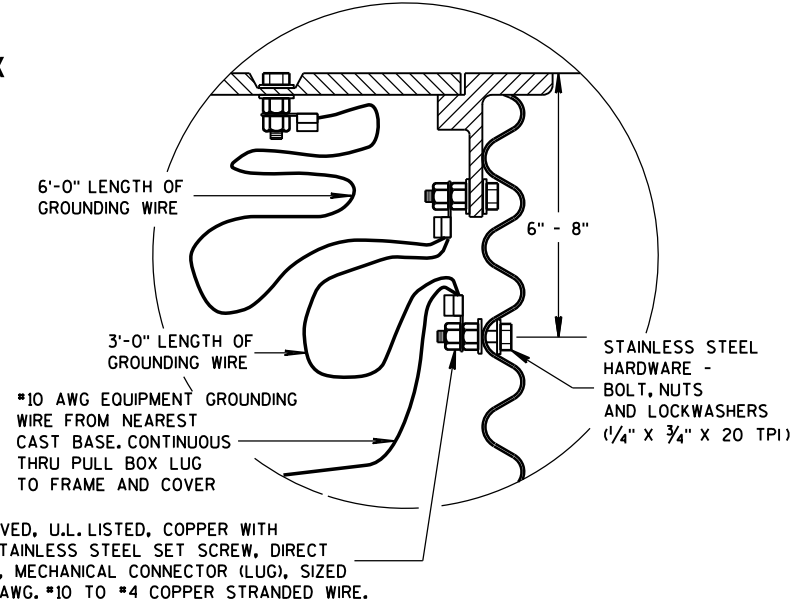
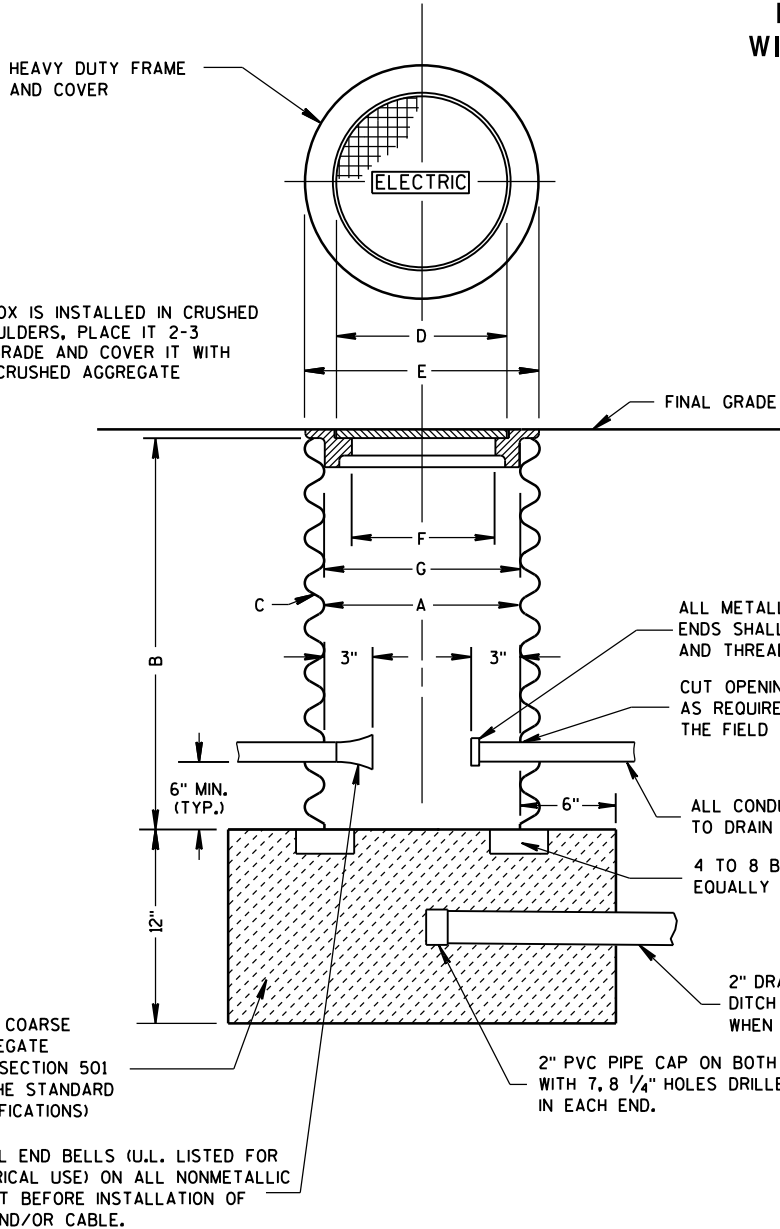
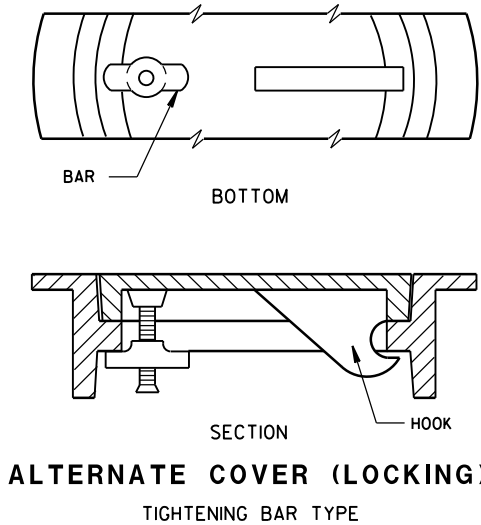
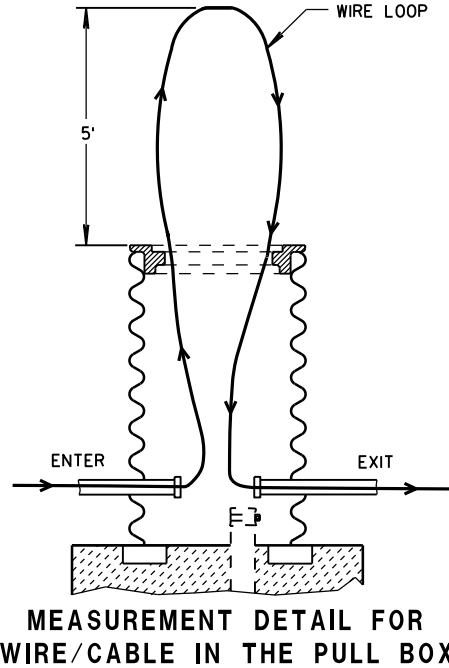
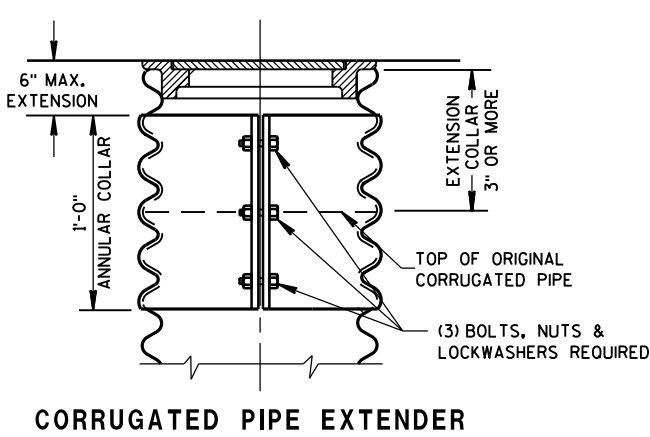
APPROVED
March, 2017 /S/ Ahmet Demirbilek 67
DATE STATE ELECTRICAL ENGINEER
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
FWHA

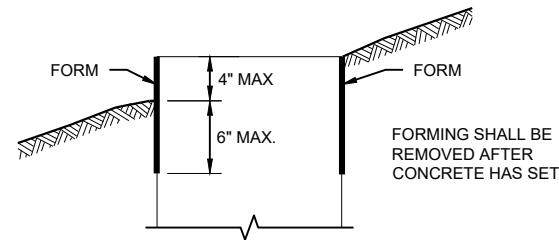
/S/ Ahmet Demirelek
STATE ELECTRICAL ENGINEER

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EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

SDD 9C2 Concrete Bases, Types 1, 2, 5 & 6

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

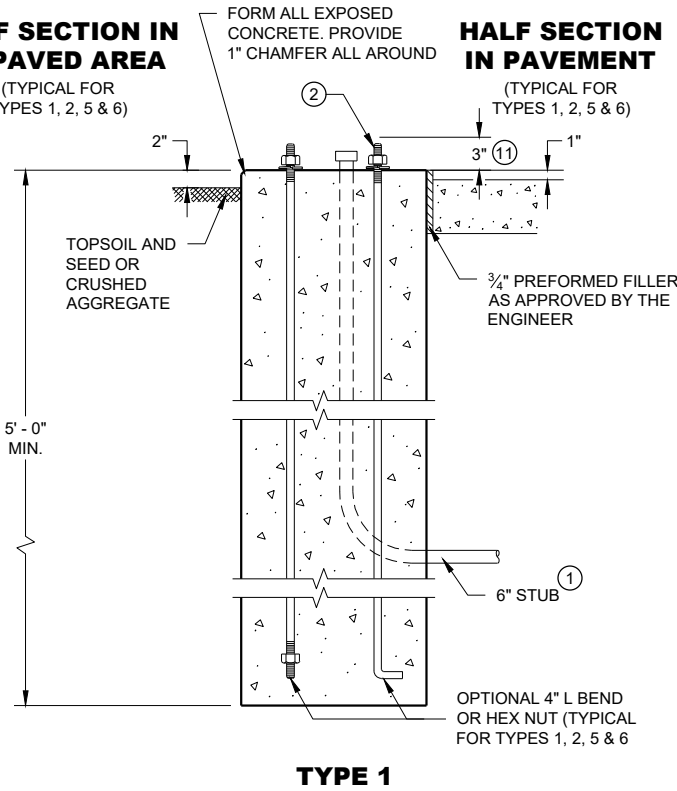
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

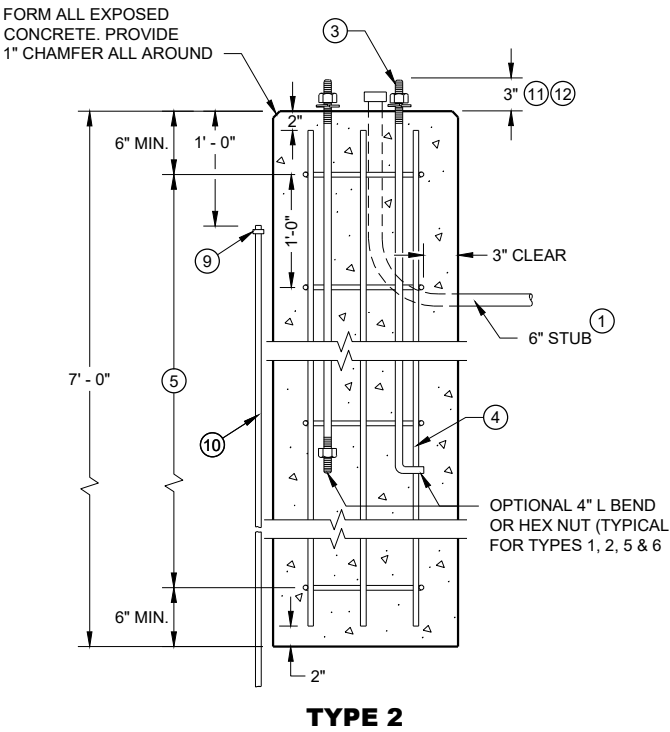
- THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.
- (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- (4) 1" DIA. X 5' - 0" ANCHOR RODS.
- (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.
- (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.
- (5) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- EXOTHERMIC CONNECTION TO EQUIPMENT GROUNDING CONDUCTOR
- 5/8" DIA. X 8' - 0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED
- ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/2" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- FOR NON - BREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA

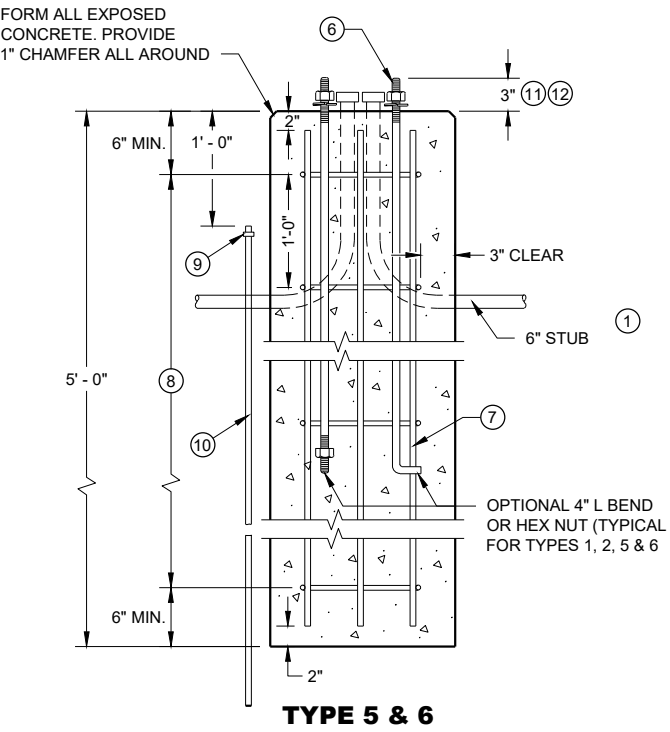


TYPE 1

HALF SECTION IN PAVEMENT



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Ahmet Demirelek
DATE STATE ELECTRICAL ENGINEER

FHWA

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

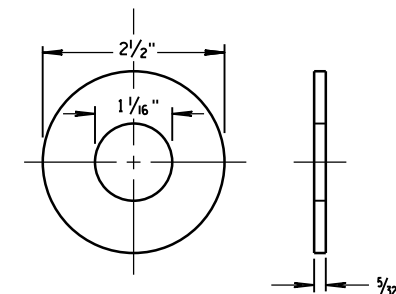
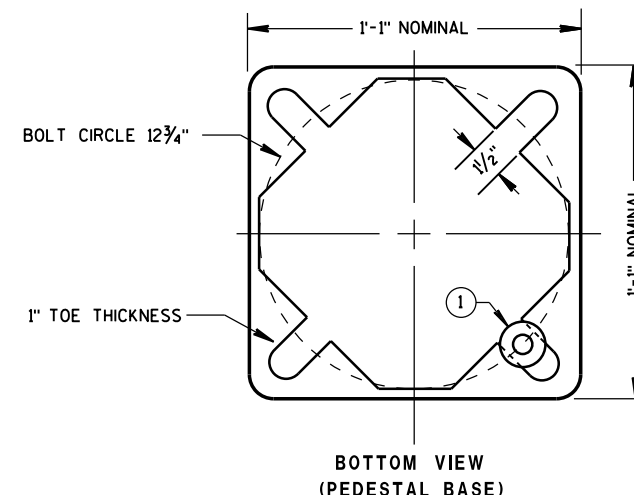
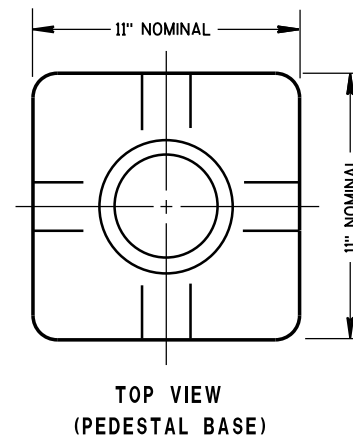
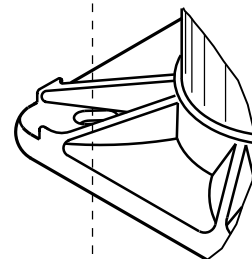
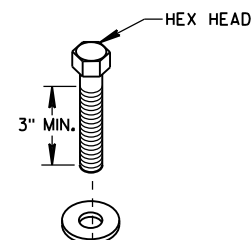
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

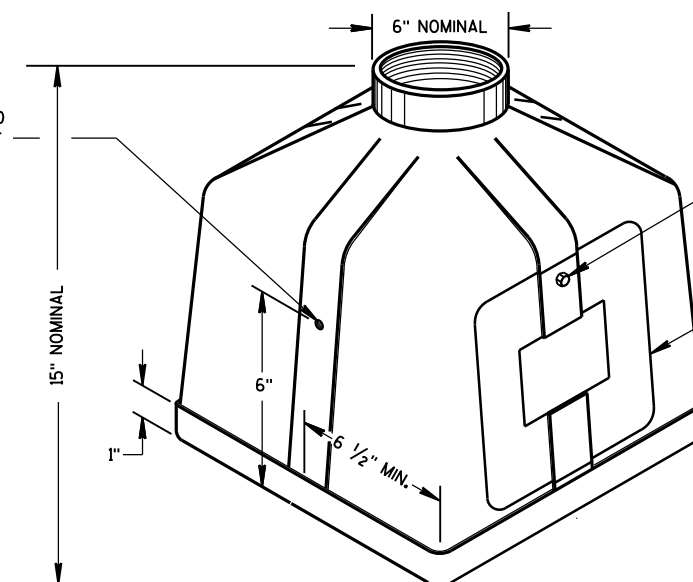
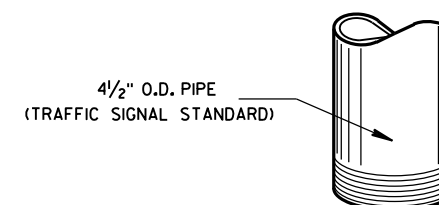
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

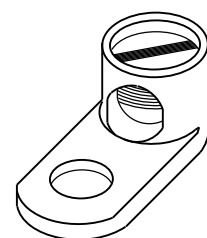
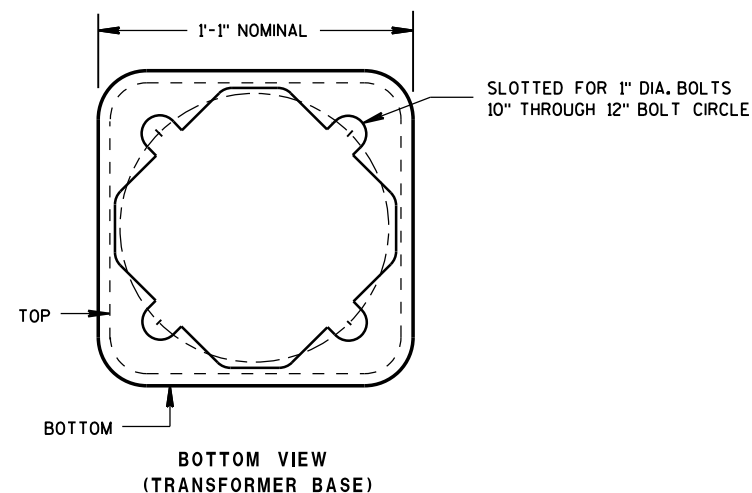


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER ①



ISOMETRIC VIEW PEDESTAL BASE

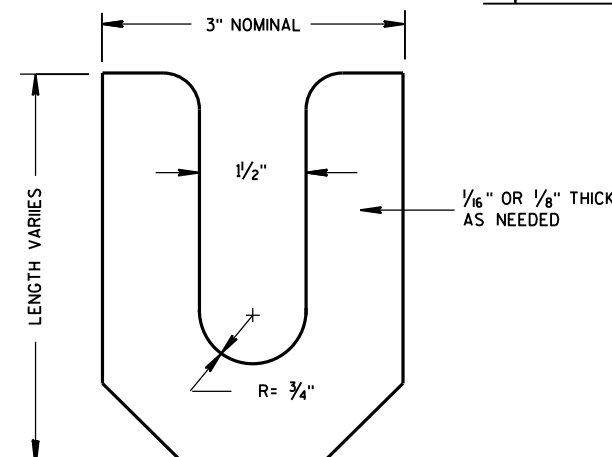
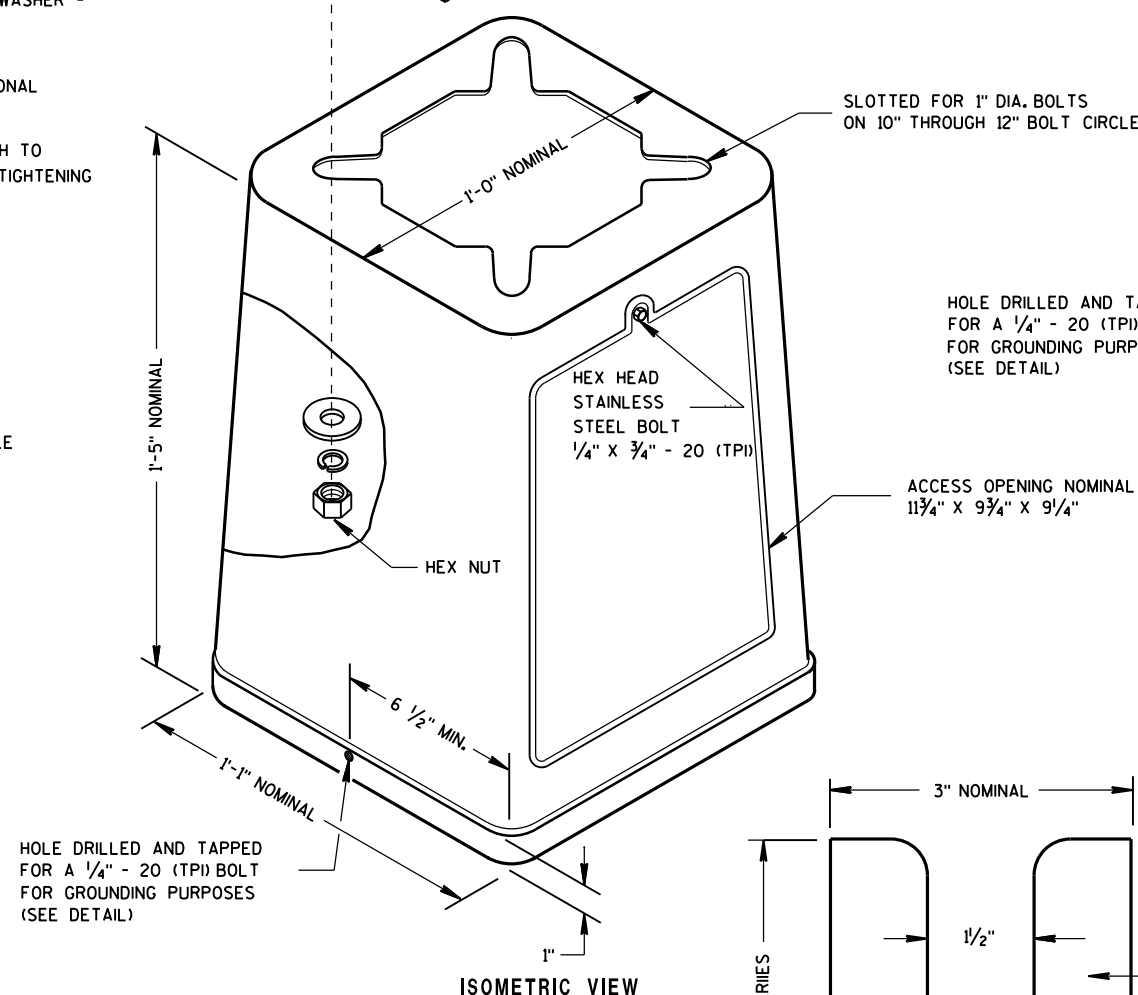


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
FWHA

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

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GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

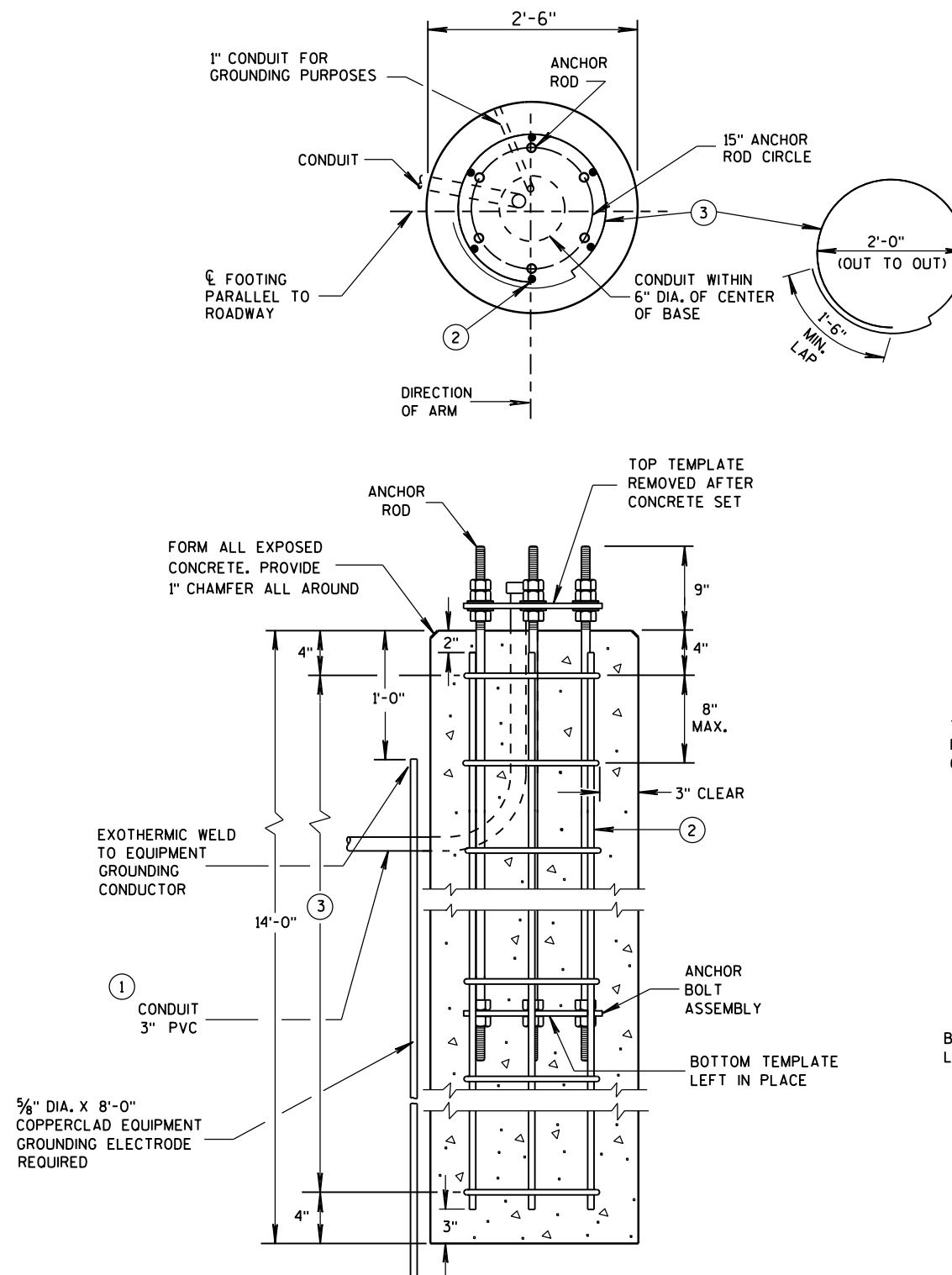
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

- ① THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

- ② (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

- ③ (2) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

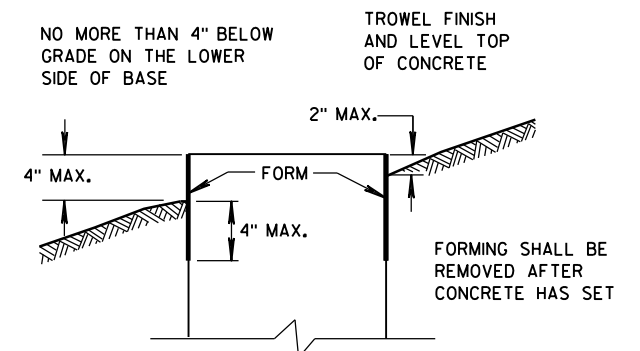
CONCRETE MASONRY	-----	$f_c=3,500$ p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	-----	$f_y=60,000$ p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)	-----	$f_y=55,000$ p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	-----	$f_y=36,000$ p.s.i.



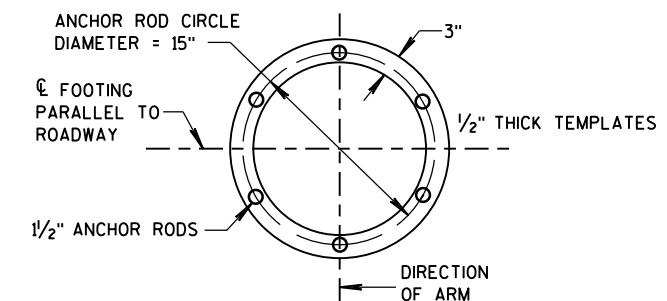
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

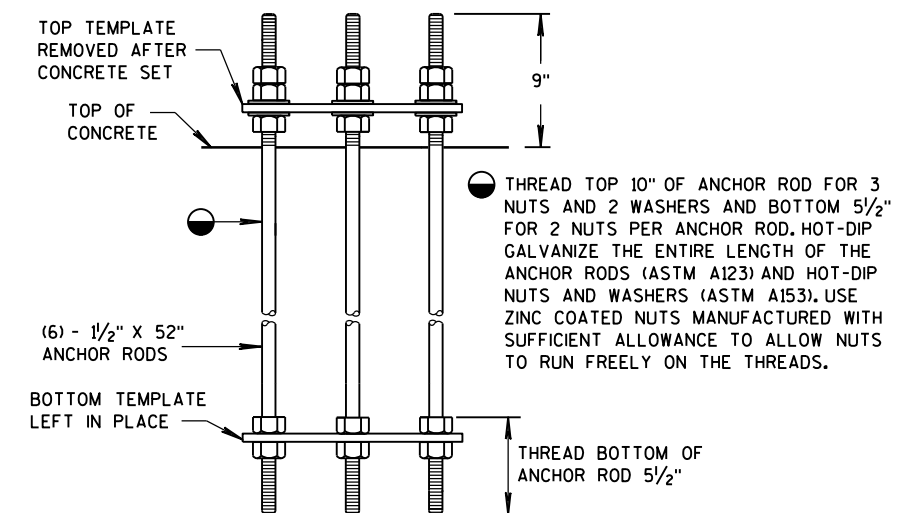
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	71
May 2017	/S/ Ahmet Demirbilek
DATE	STATE ELECTRICAL ENGINEER
FHWA	

SDD 09C15 Concrete Base Type 10 Special

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 1/2" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

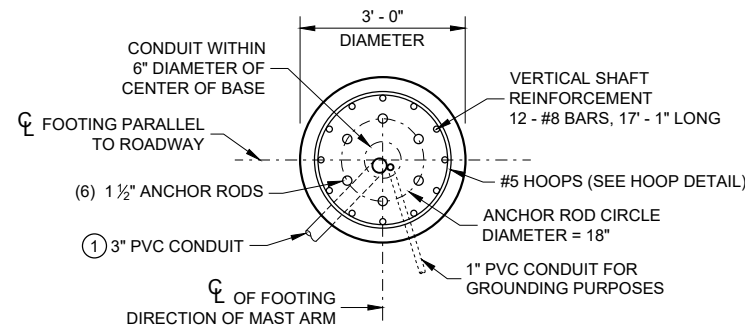
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

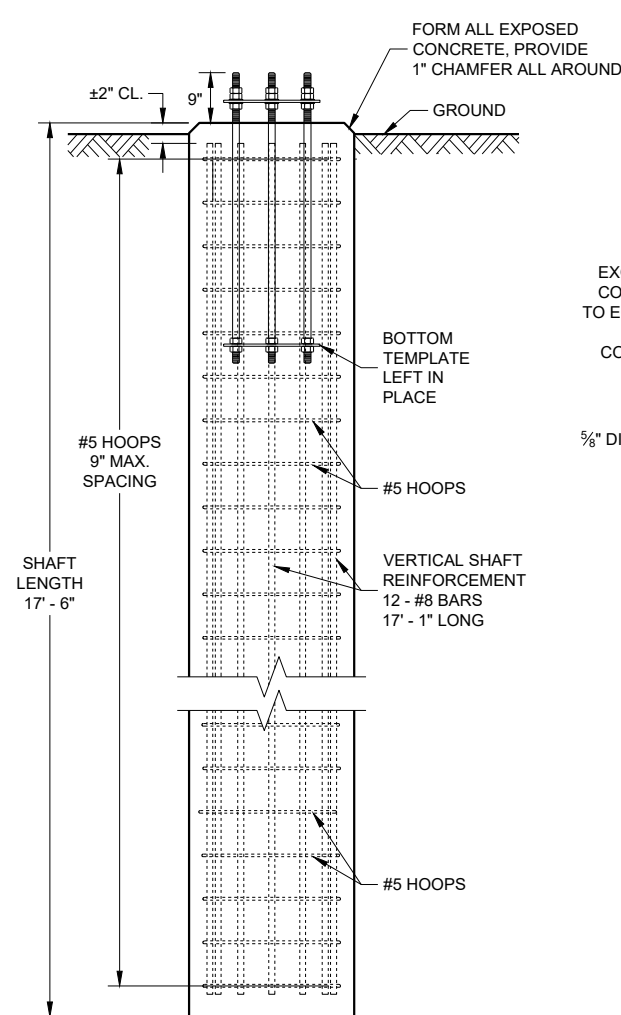
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

- ① THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

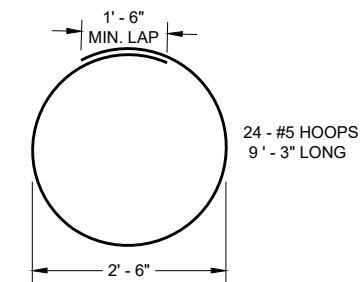
CONCRETE MASONRY.....fc = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



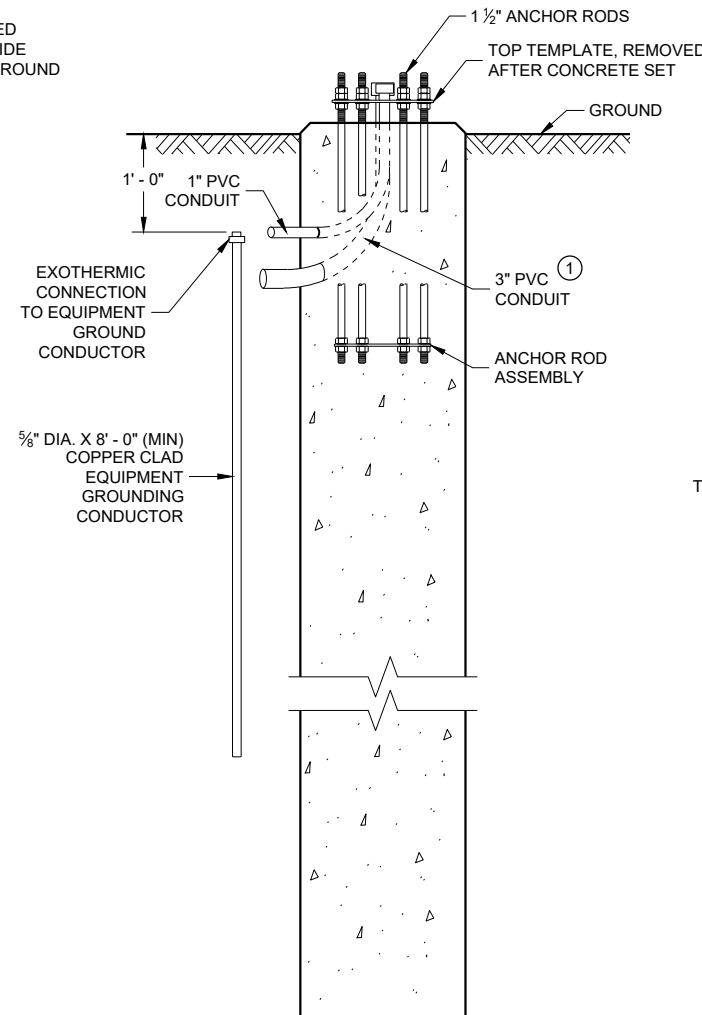
PLAN VIEW



ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)

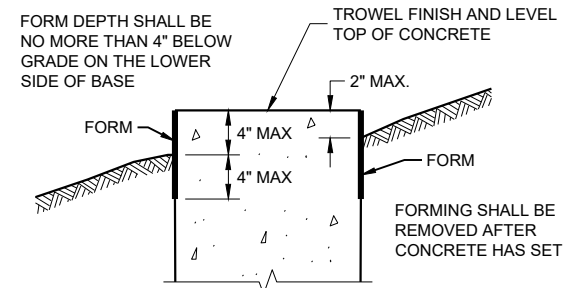


HOOP DETAIL

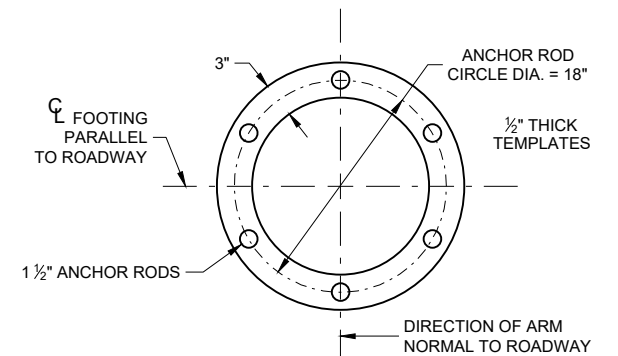


SIDE VIEW

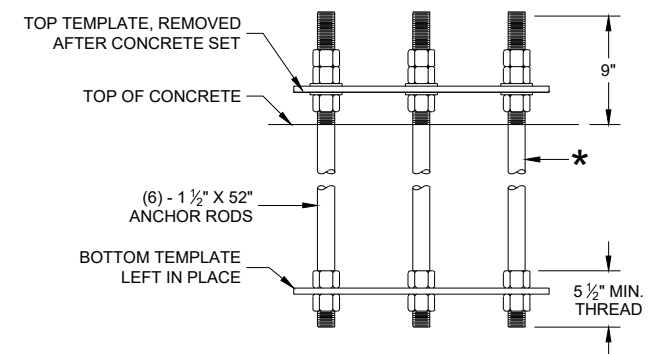
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

- * THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 1/2" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL (FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Alex Crabtree 72
DATE WIND LOADED STRUCTURES
FHWA PROGRAM LEADER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE, CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH, THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

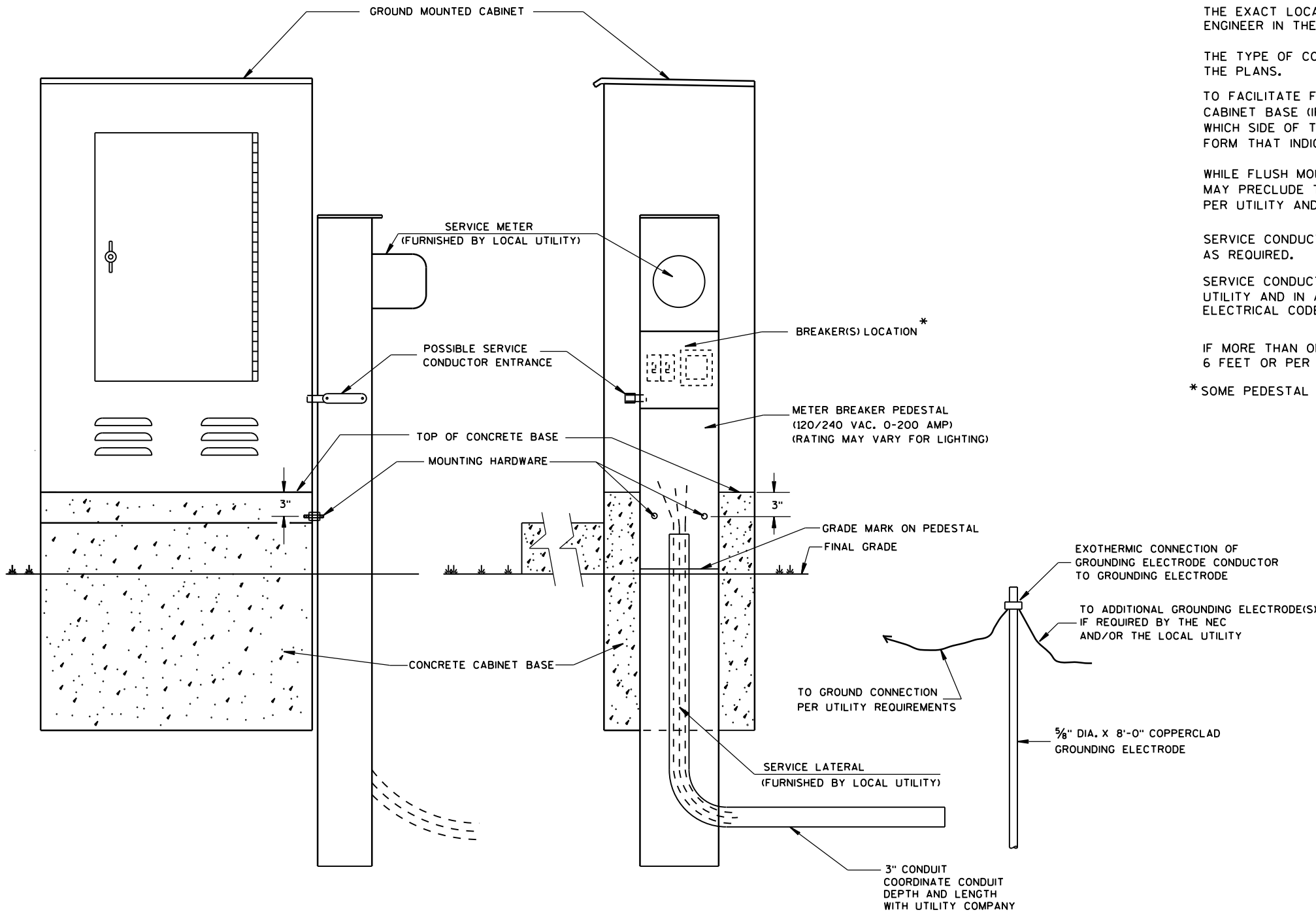
WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.



TYPICAL CABINET SERVICE INSTALLATION

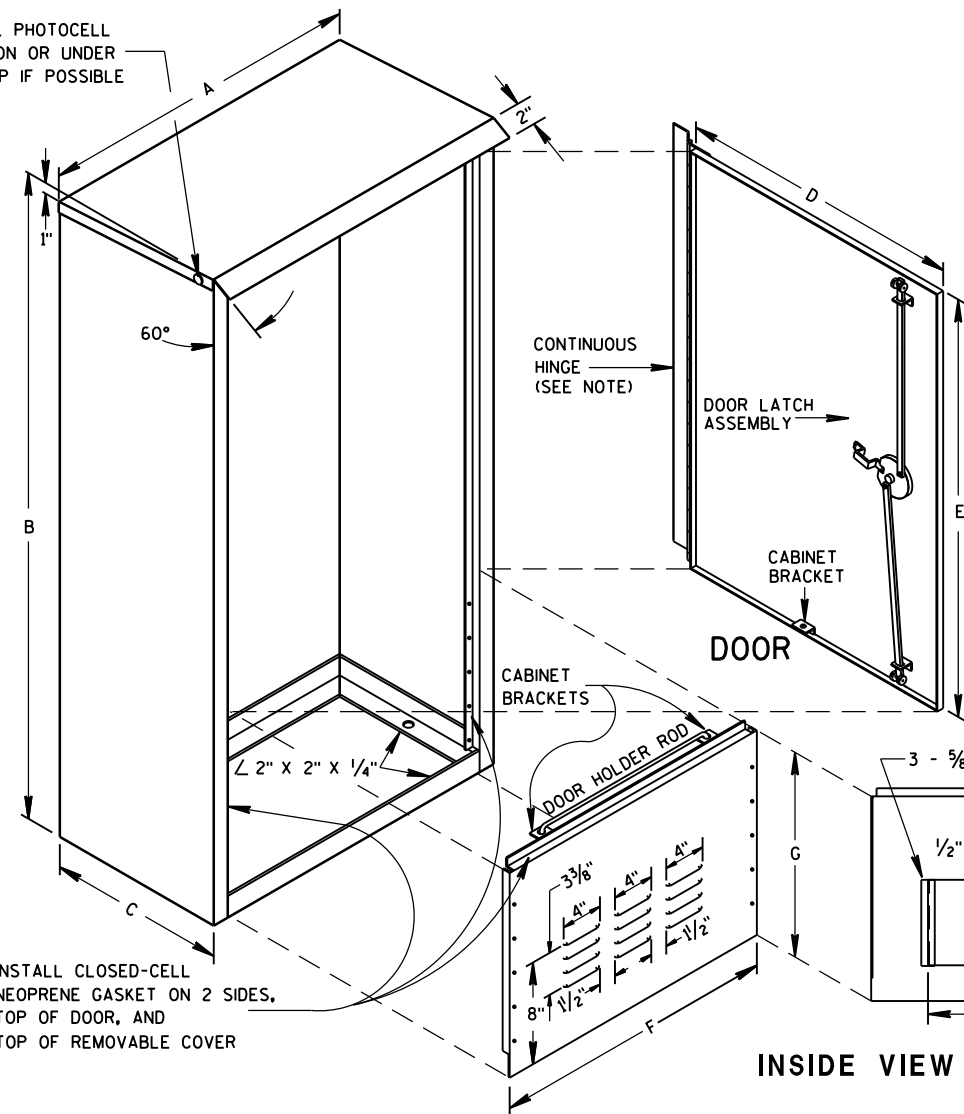
CABINET SERVICE INSTALLATION
(METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 /S/ Ahmet Demirbilek 73
DATE STATE ELECTRICAL ENGINEER
FHWA

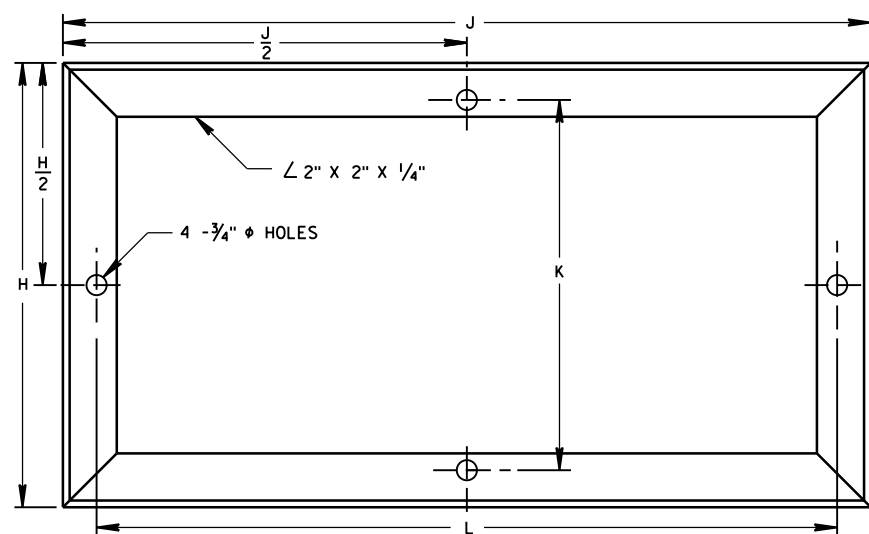


TYPICAL PHOTOCELL
LOCATION OR UNDER
DRIP LIP IF POSSIBLE

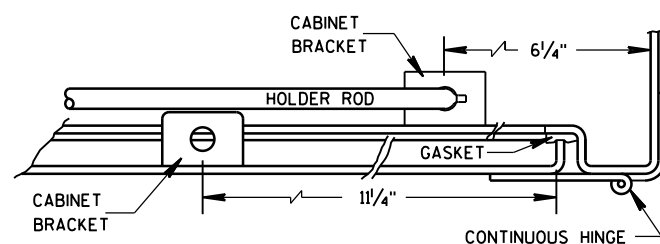


INSTALL CLOSED-CELL
NEOPRENE GASKET ON 2 SIDES,
TOP OF DOOR, AND
TOP OF REMOVABLE COVER

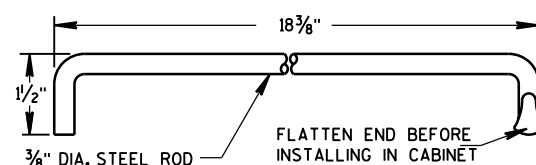
REMOVABLE COVER



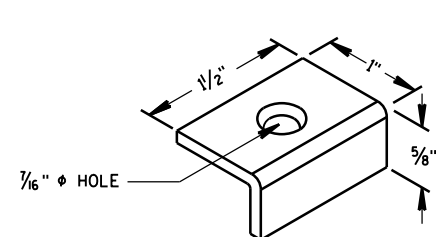
MOUNTING BASE



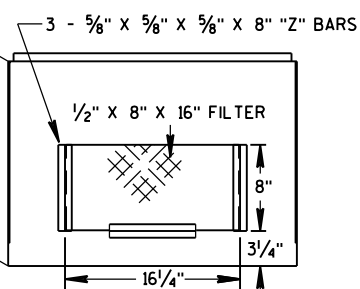
HINGE & DOOR HOLDER



HOLDER ROD



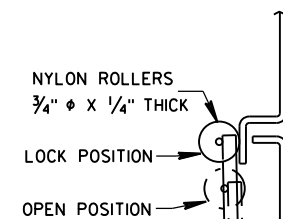
CABINET BRACKET



INSIDE VIEW SHOWING FILTER

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



LATCH BAR
GUIDE

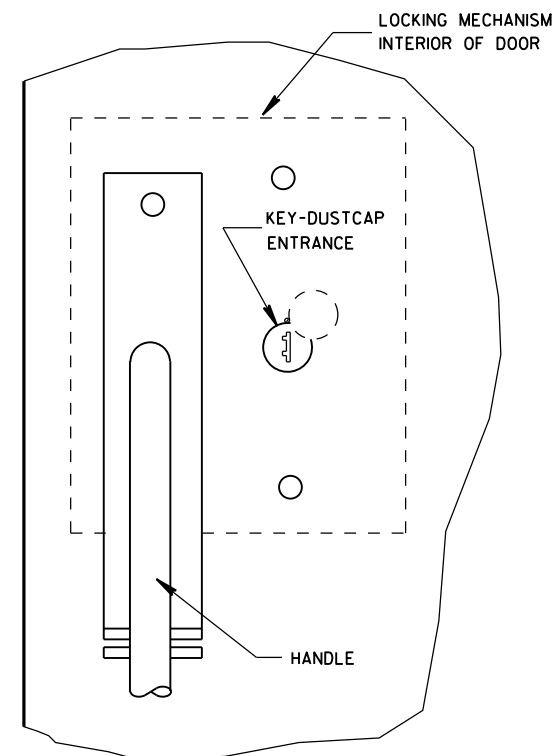
LOCK NO. 2510
WITH 2 KEYS AND
DUST CAP.
KEY NO. IR6380

LATCH BARS
1/2\"/>

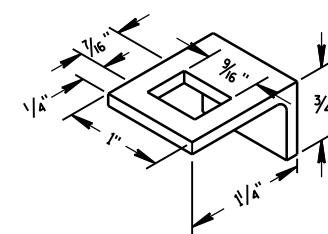
3/4\"/>

SIDE VIEW

LATCH ASSEMBLY



FRONT VIEW



LATCH BAR GUIDE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4\"/>

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

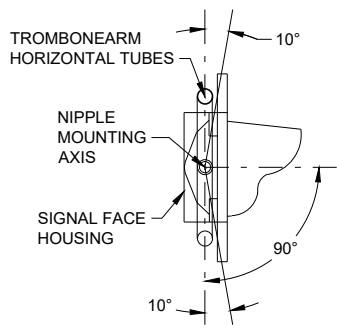
SIGNAL
CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE
FHWA

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

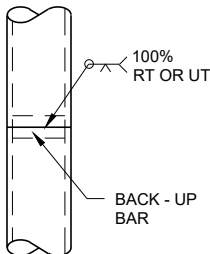
74



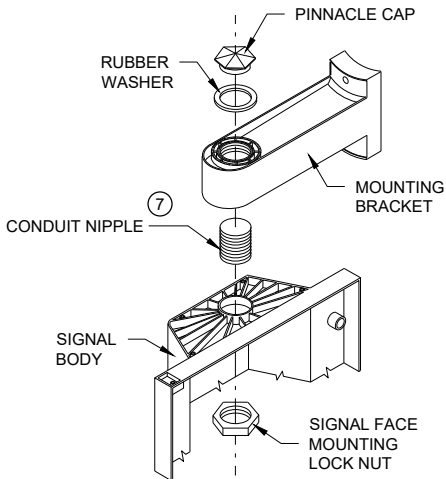
SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL (BANDED)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

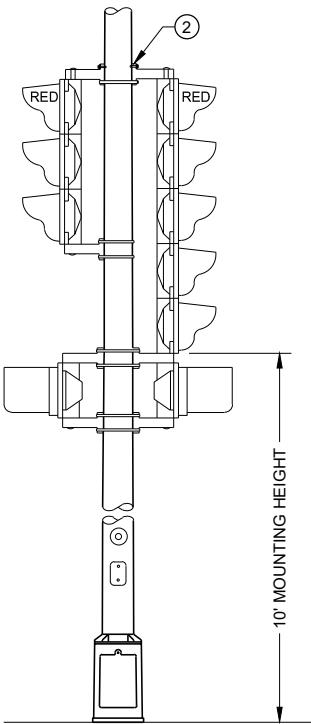
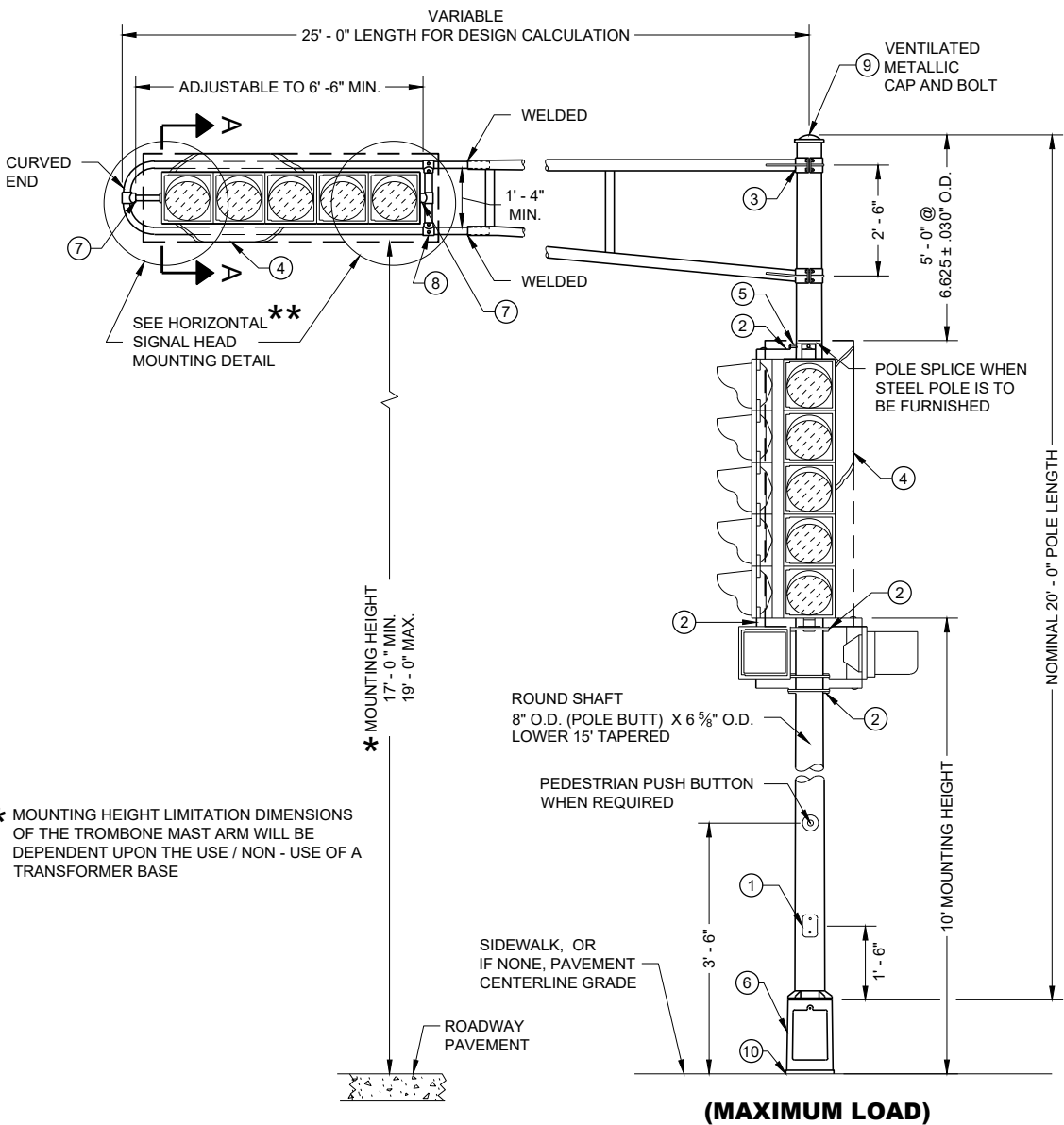
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

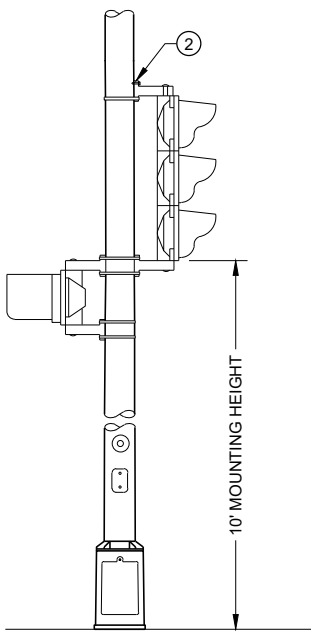
TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

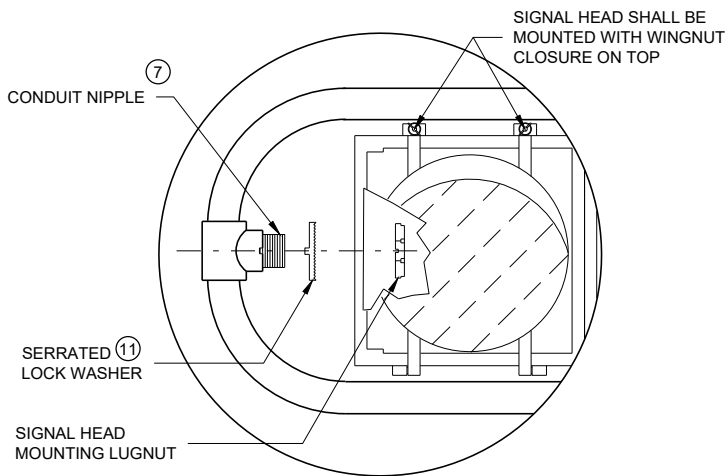
- ① 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 1/4" X 3/4" - 20 TPI, STAINLESS STEEL, HEX HEAD BOLTS.
- ② SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
- ③ GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- ④ SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- ⑤ POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.
- ⑥ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- ⑦ USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.
- ⑧ VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUTS THE SLIDING TYPE.
- ⑨ FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- ⑩ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.
- ⑪ USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



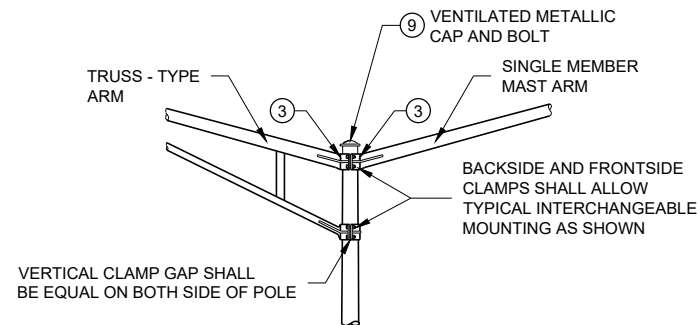
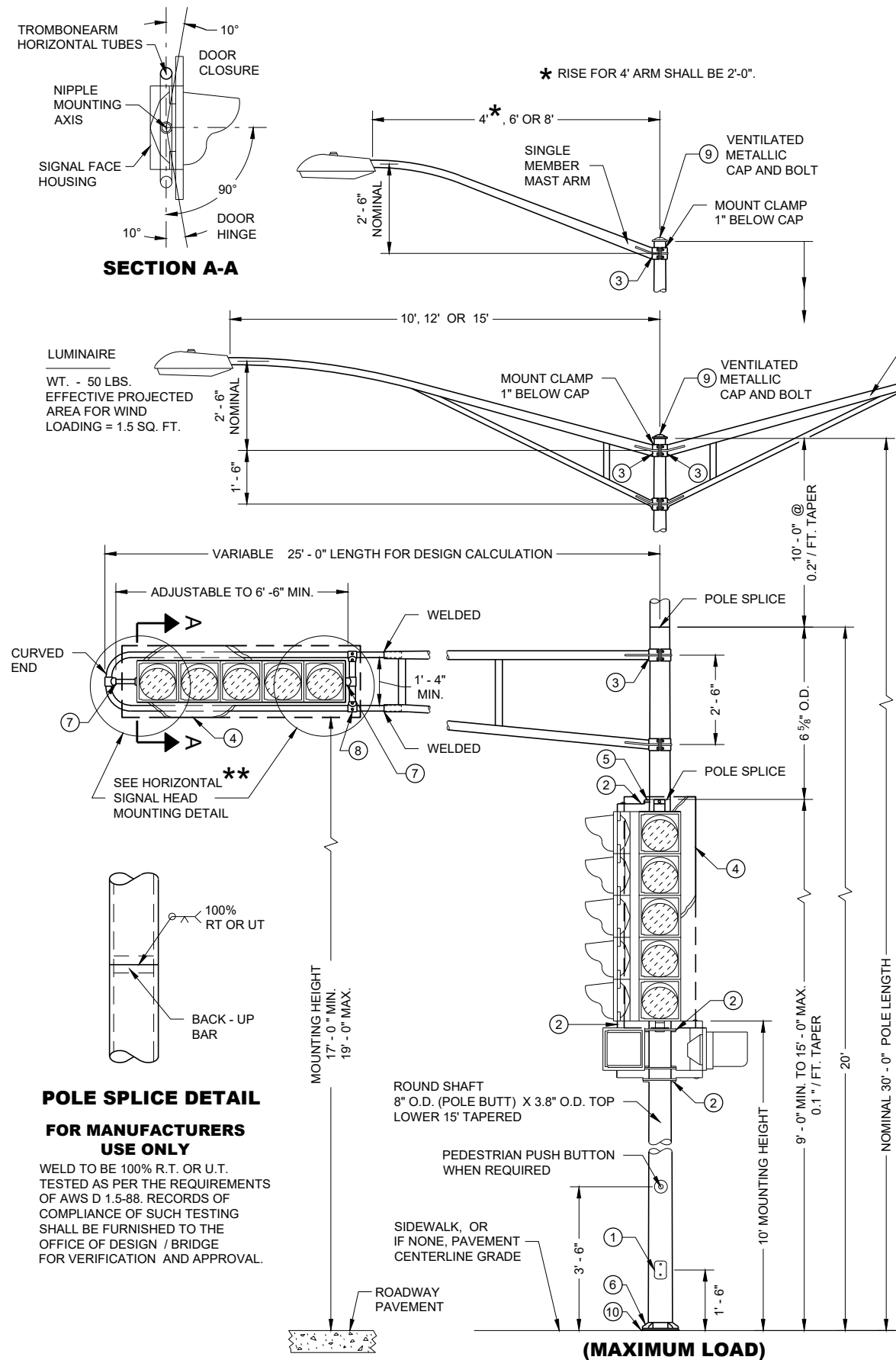
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

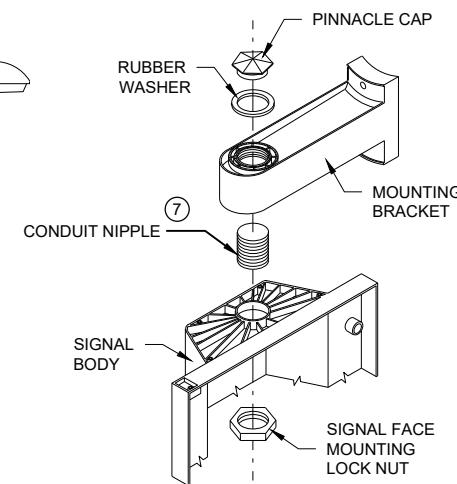
POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

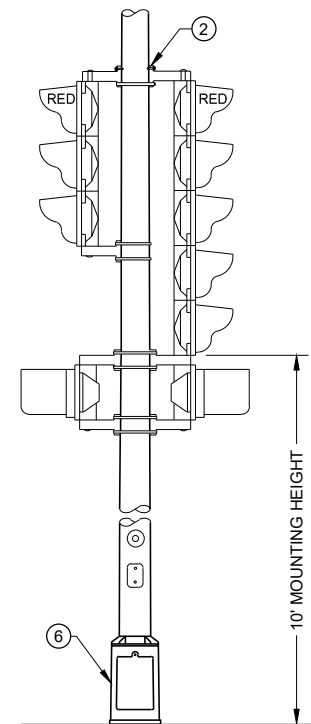
SDD 09E01-b Pole Mountings for Traffic Signals and Lighting Units, Type 3 (Heavy Duty)



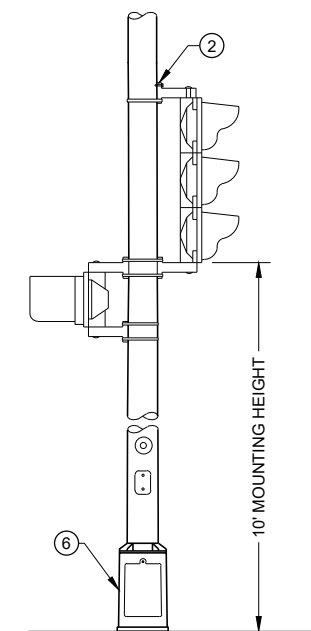
INTERCHANGEABLE MOUNTING DETAIL



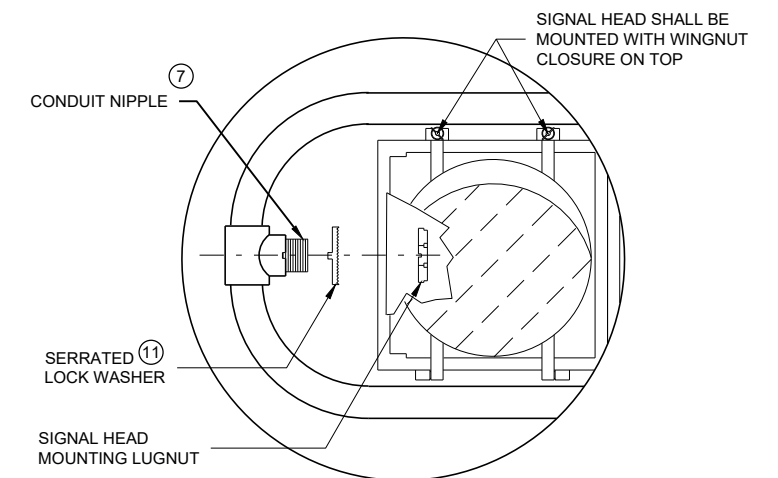
SIGNAL FACE MOUNTING DETAIL (BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

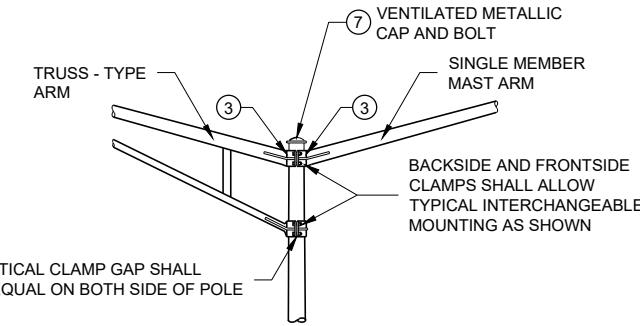
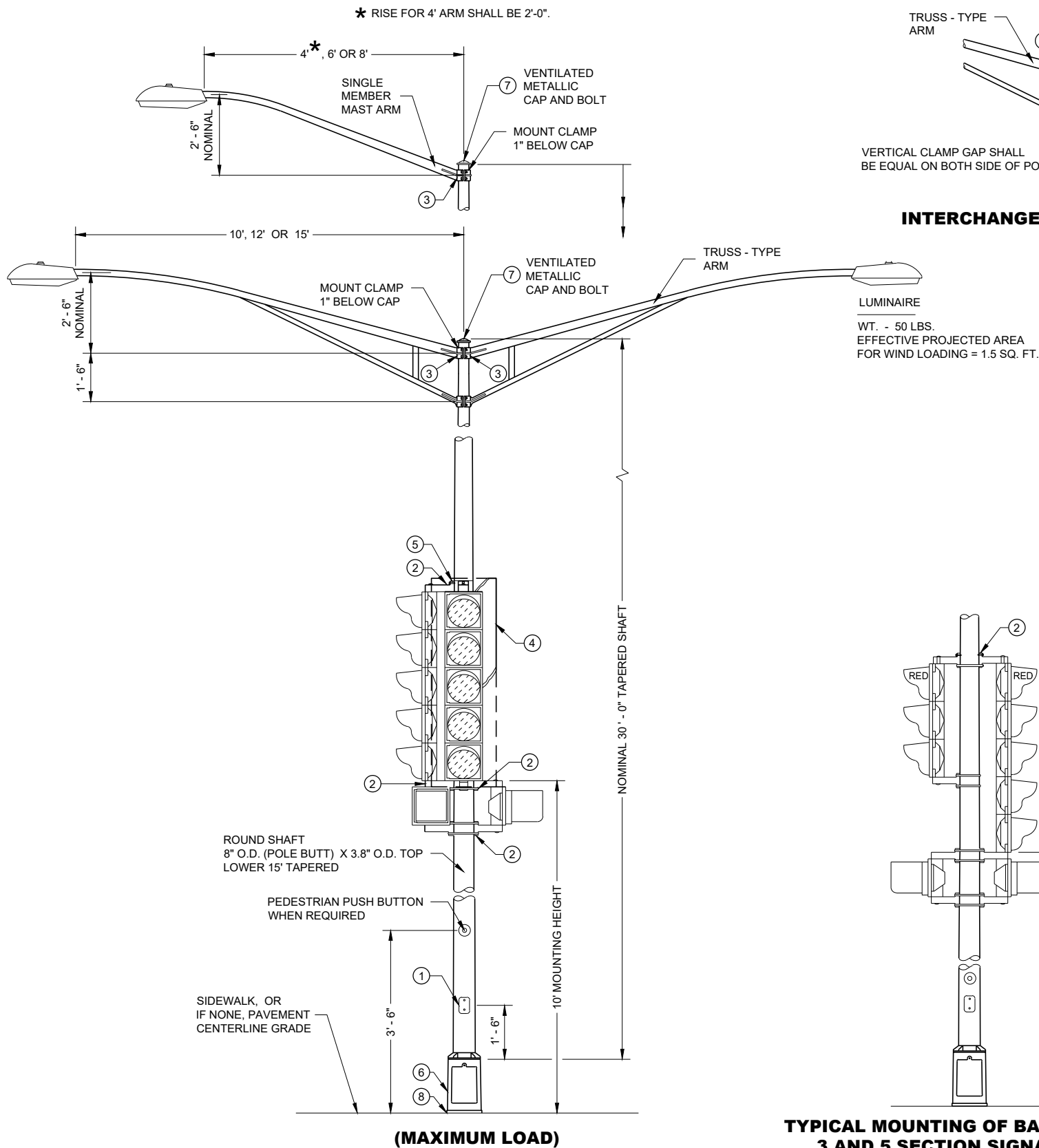
A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

- 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 1/4" X 3/4" - 20 TPI, STAINLESS STEEL, HEX HEAD BOLTS.
- SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
- GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
- CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.
- USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.
- VERTICAL STRUT (ADJUSTABLE), ONE (1) SET SCREW (1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
- FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
- USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

SDD 09E01-c Pole Mountings for Traffic Signals and Lighting Units, Type 4



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

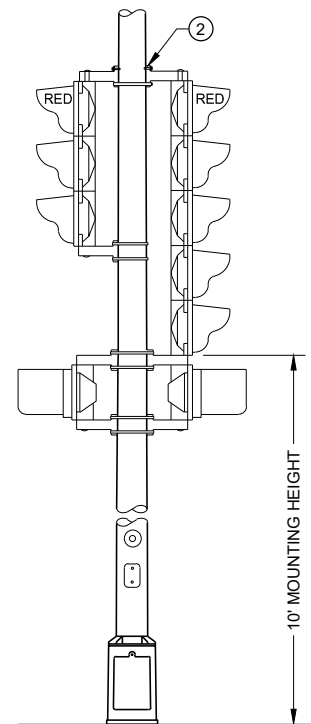
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

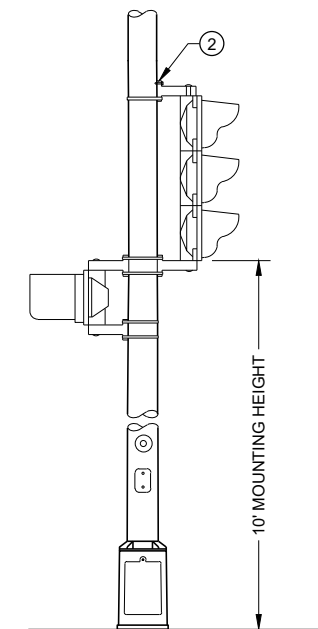
THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

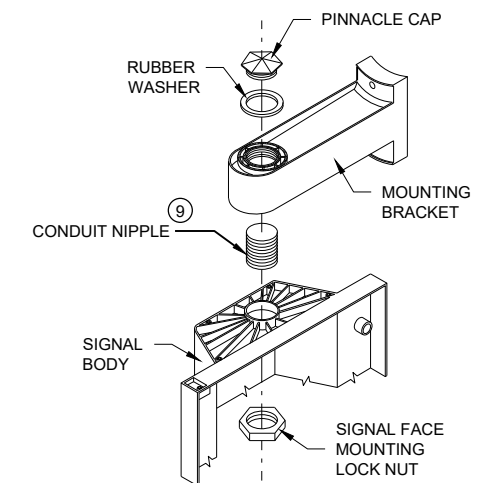
- 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 1/2" X 3/4" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
- SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
- GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 1/2" HOLE IN POLE SHAFT FOR WIRING.
- SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
- CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/2" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
- USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



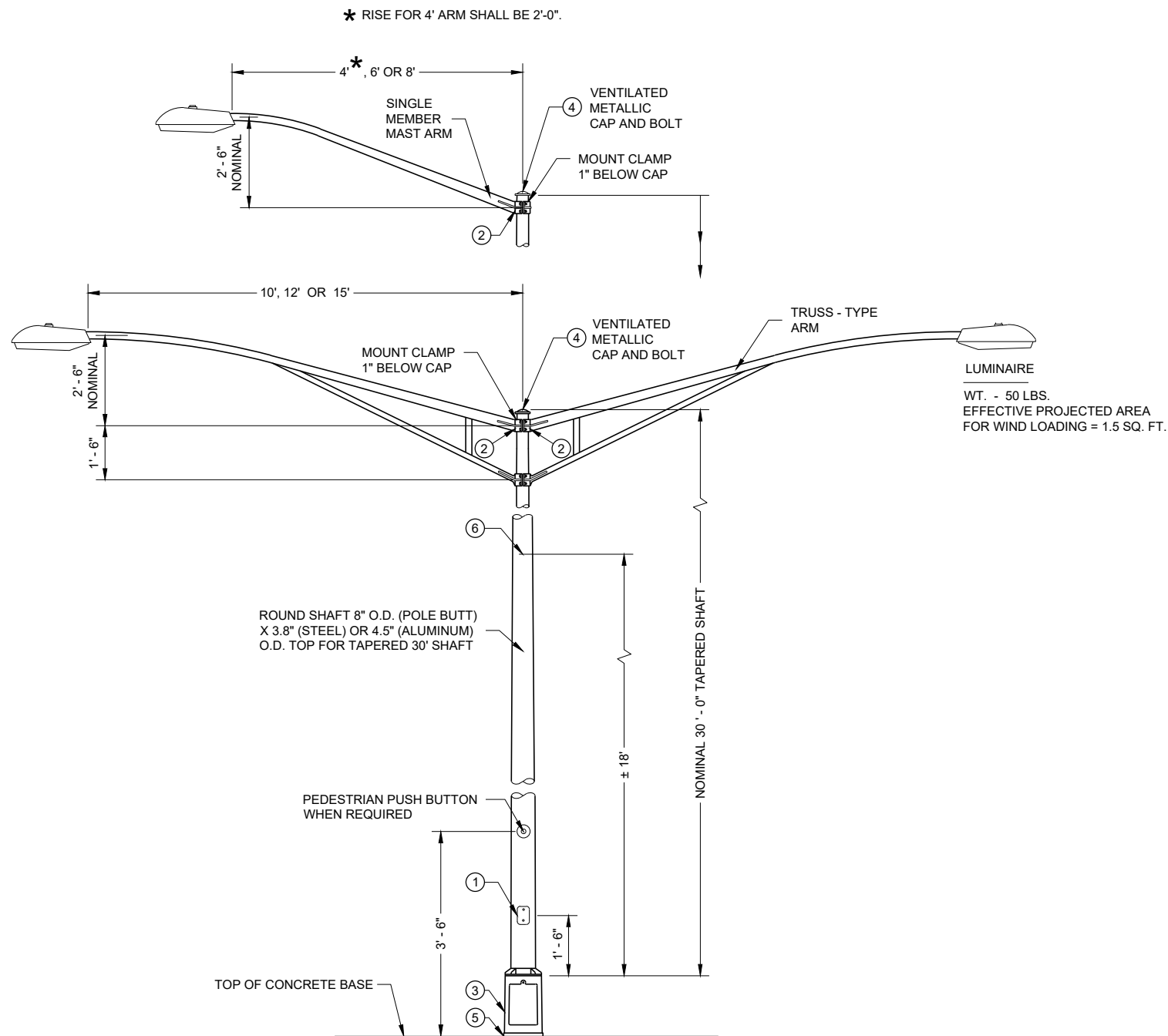
TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL (BANDED)

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 77



**TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY**

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVEING INSIDE THE POLE IS NOT ACCEPTABLE.

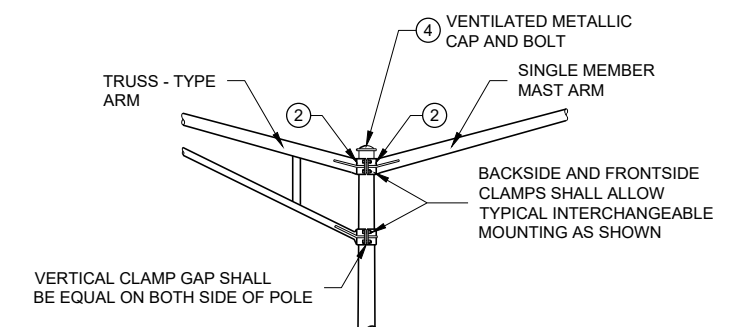
TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

- ① 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 3/4" X 3/4" - 20 TPI, STAINLESS STEEL, HEX HEAD BOLTS.
- ② GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- ③ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- ④ FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 3/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
- ⑥ INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

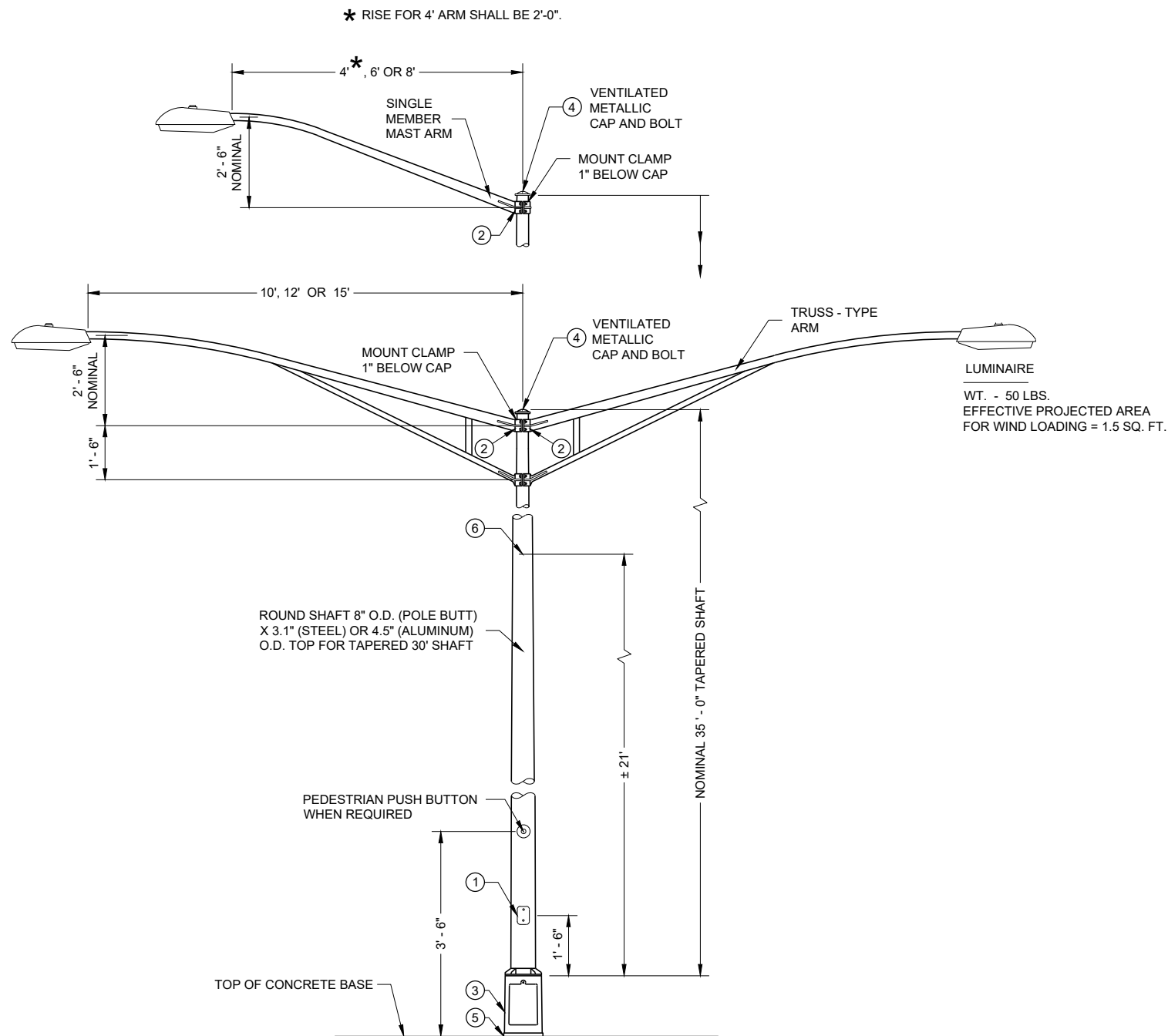


INTERCHANGEABLE MOUNTING DETAIL

**POLE MOUNTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 78

SDD 09E01-e Pole Mountings for Lighting Units, Type 6 (35 feet)



**TYPE 6 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY**

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVEING INSIDE THE POLE IS NOT ACCEPTABLE.

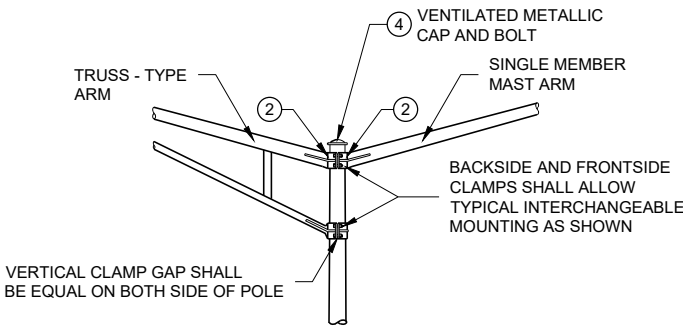
TYPE 6 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

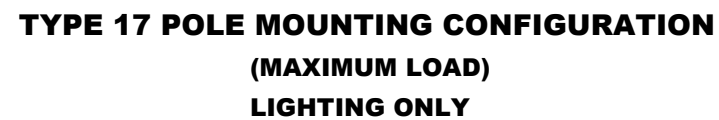
- ① 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 3/4" X 3/4" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
- ② GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- ③ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- ④ FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 3/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
- ⑥ INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



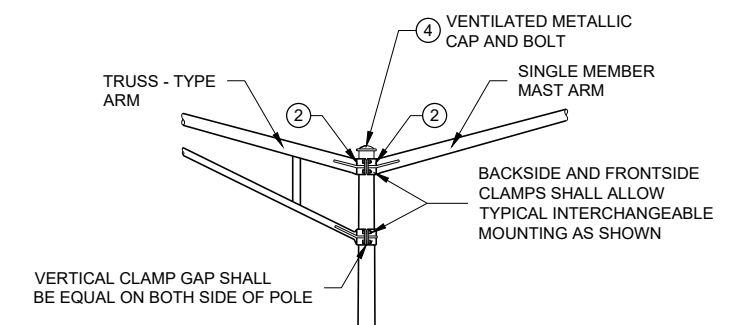
INTERCHANGEABLE MOUNTING DETAIL

**POLE MOUNTINGS FOR
LIGHTING UNITS, TYPE 6
(35 FEET)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

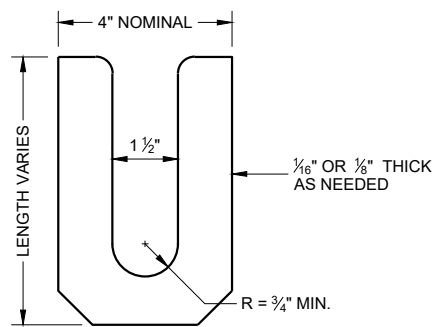


- ① 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.
- ② GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ¾" HOLE IN POLE SHAFT FOR WIRING.
- ③ CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.
- ④ FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- ⑤ SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
- ⑥ INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

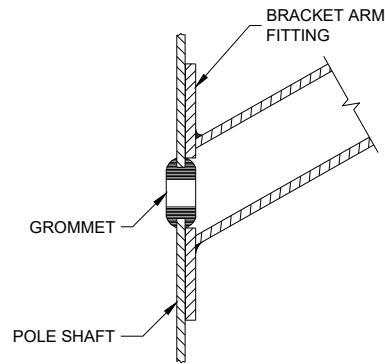


INTERCHANGEABLE MOUNTING DETAIL

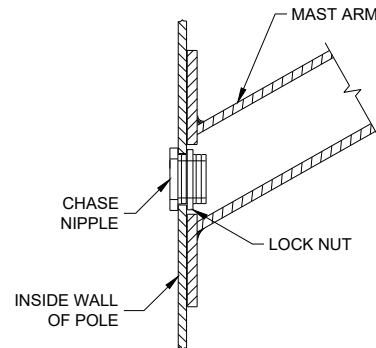
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)



LEVELING SHIM
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



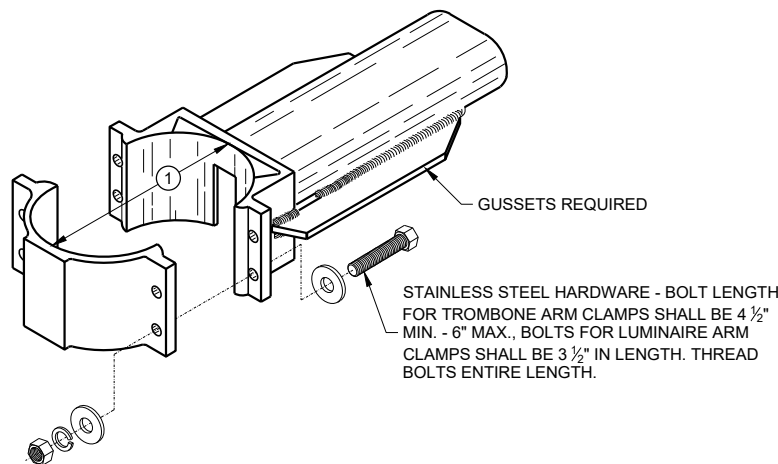
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

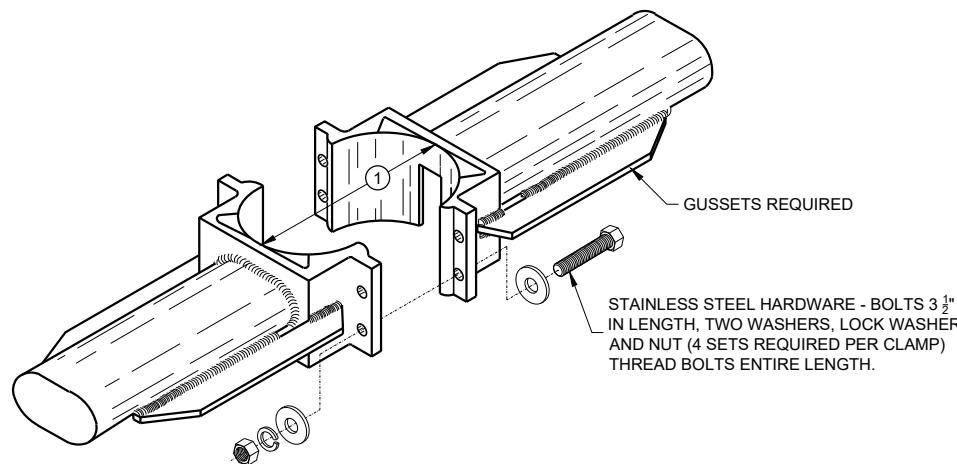
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- ① 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- ② INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- ③ BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.
- ④ LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

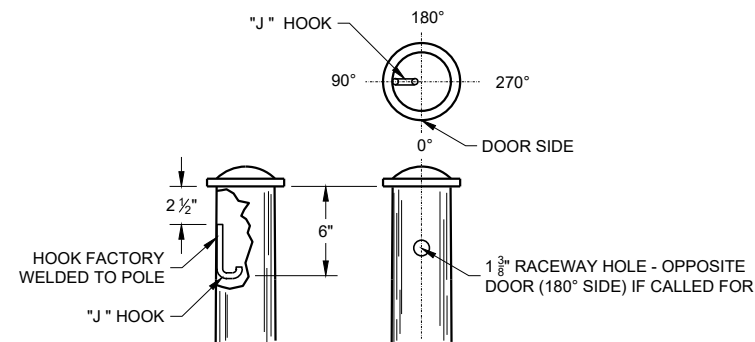
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



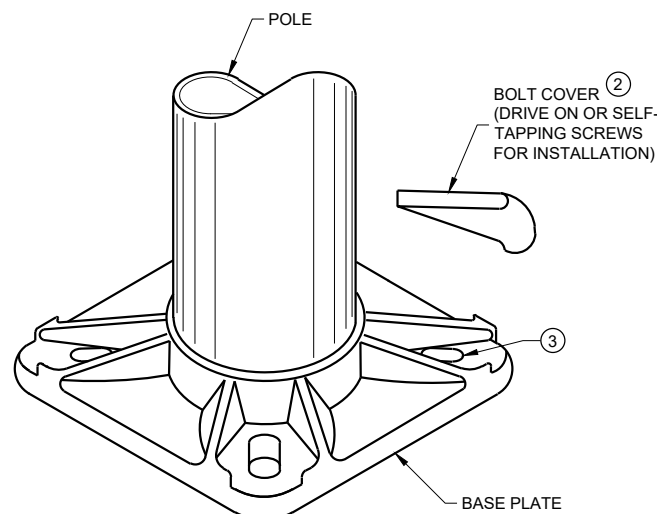
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



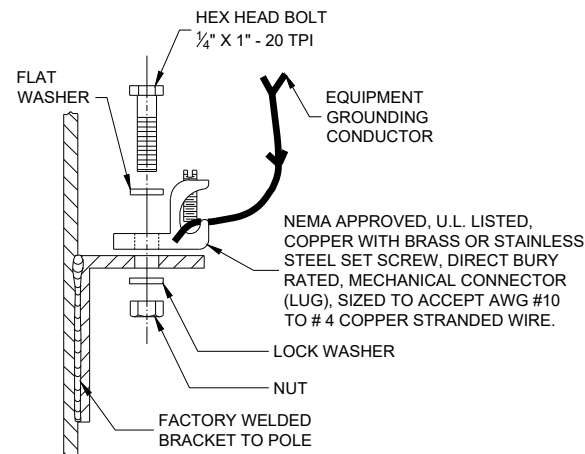
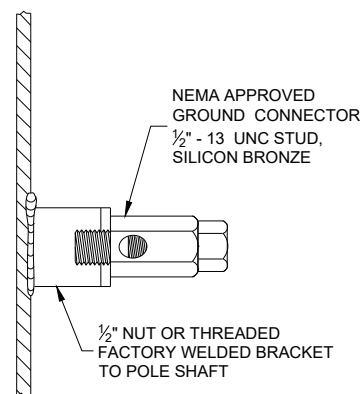
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



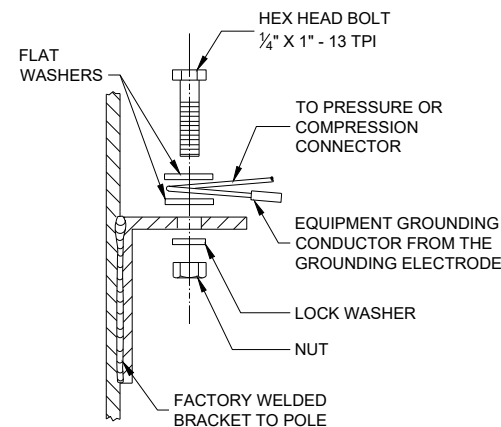
TYPICAL "J" HOOK LOCATION



BASE PLATE



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA

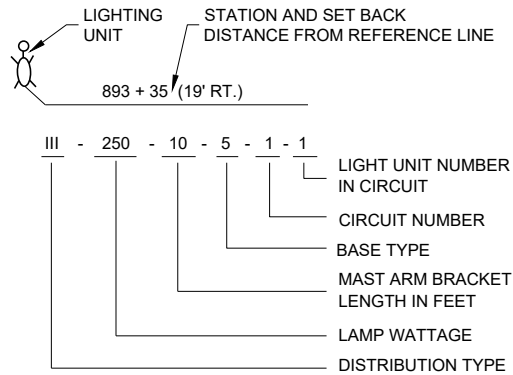
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GENERAL NOTES

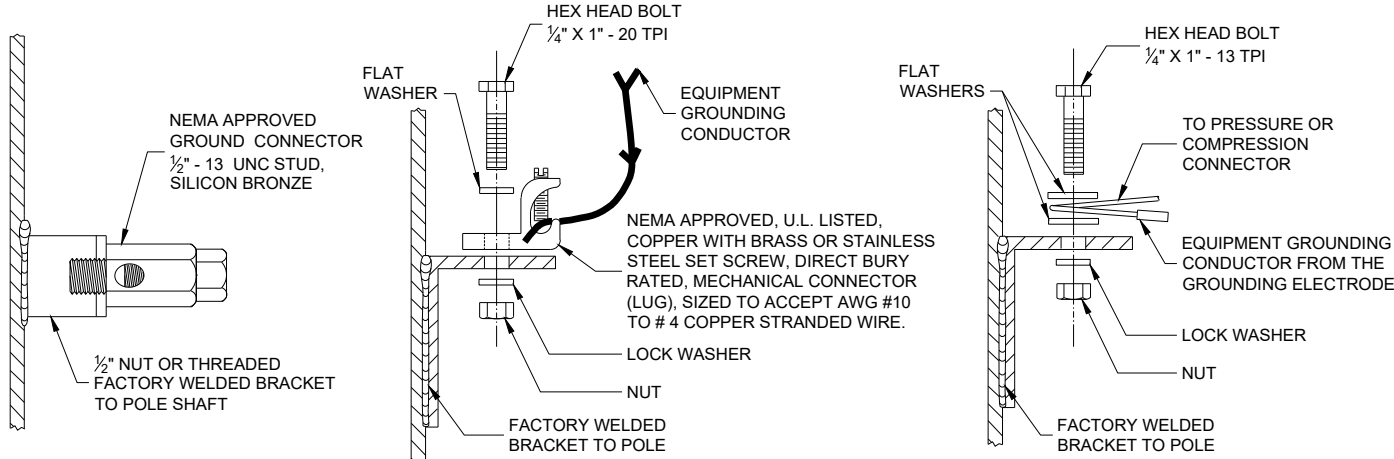
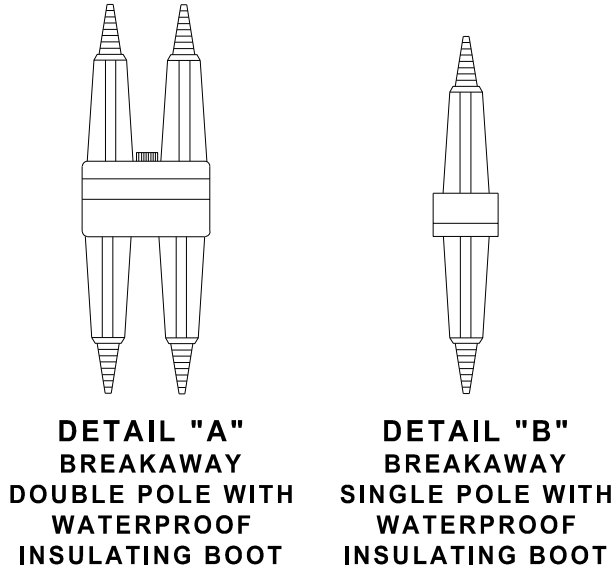
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

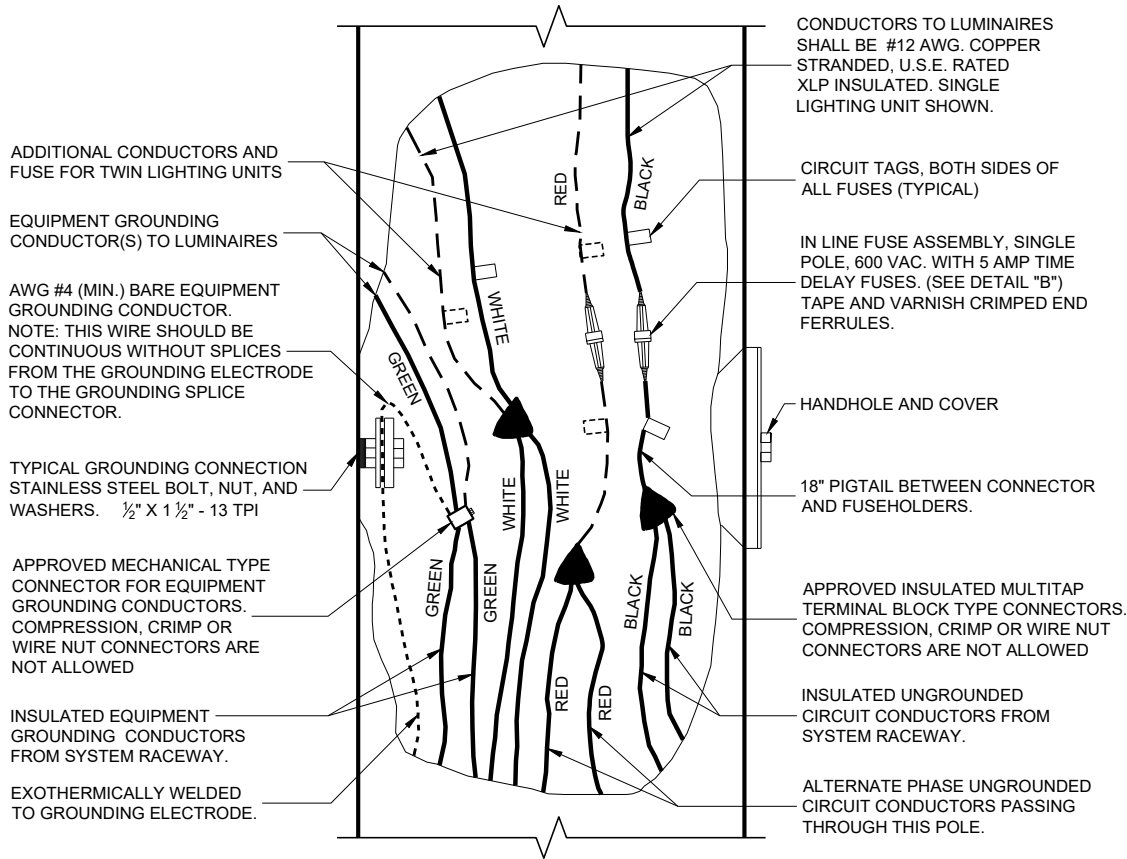


LIGHTING UNIT CODE (TYPICAL)

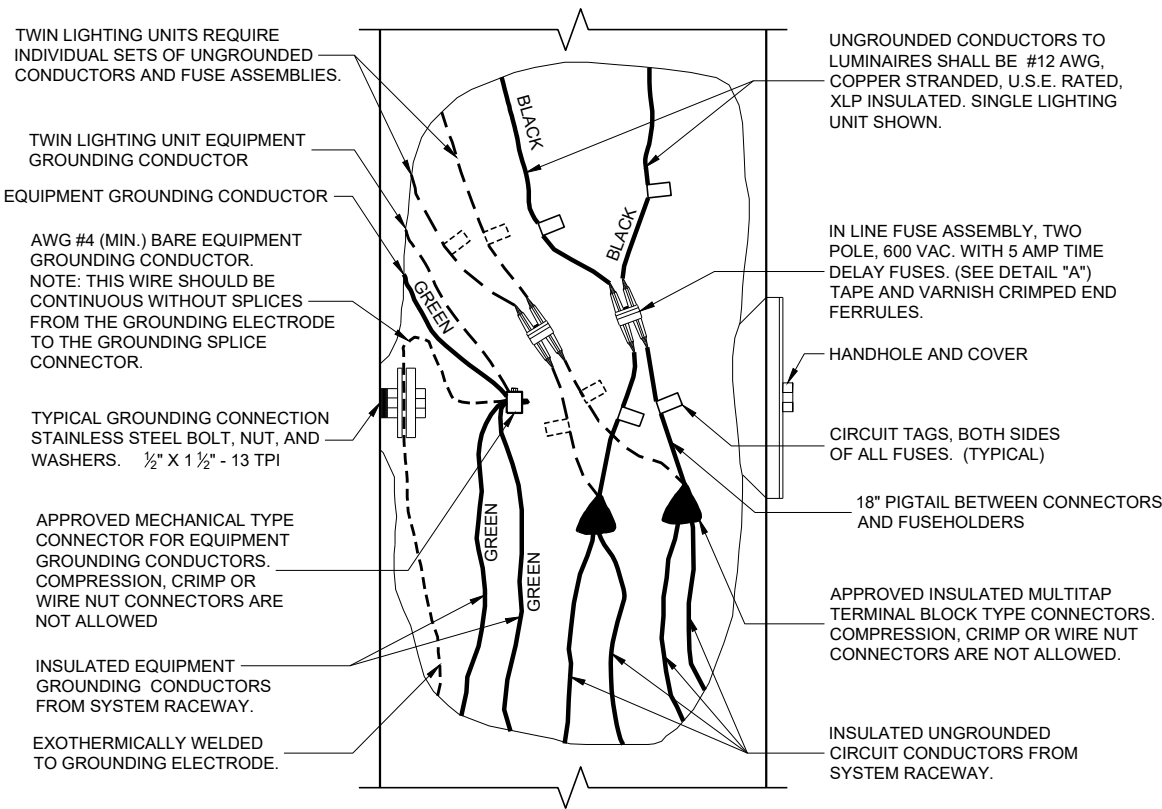


TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUND ED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUND ED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek 82
DATE STATE ELECTRICAL ENGINEER
FHWA



SDD 9e5 Traffic Signal Standard Ornamental Bracket Mountings (Typical) for 13 ft. or 15 ft.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

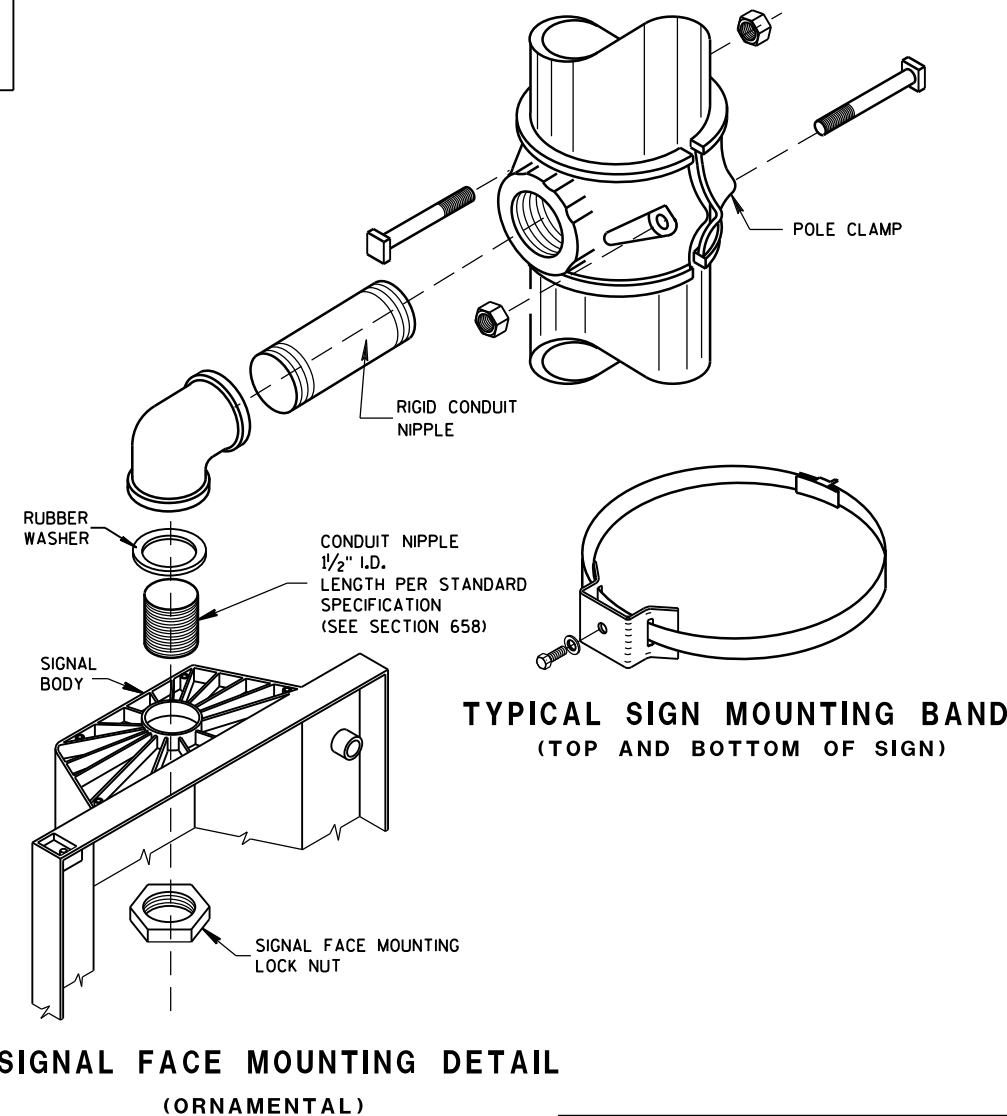
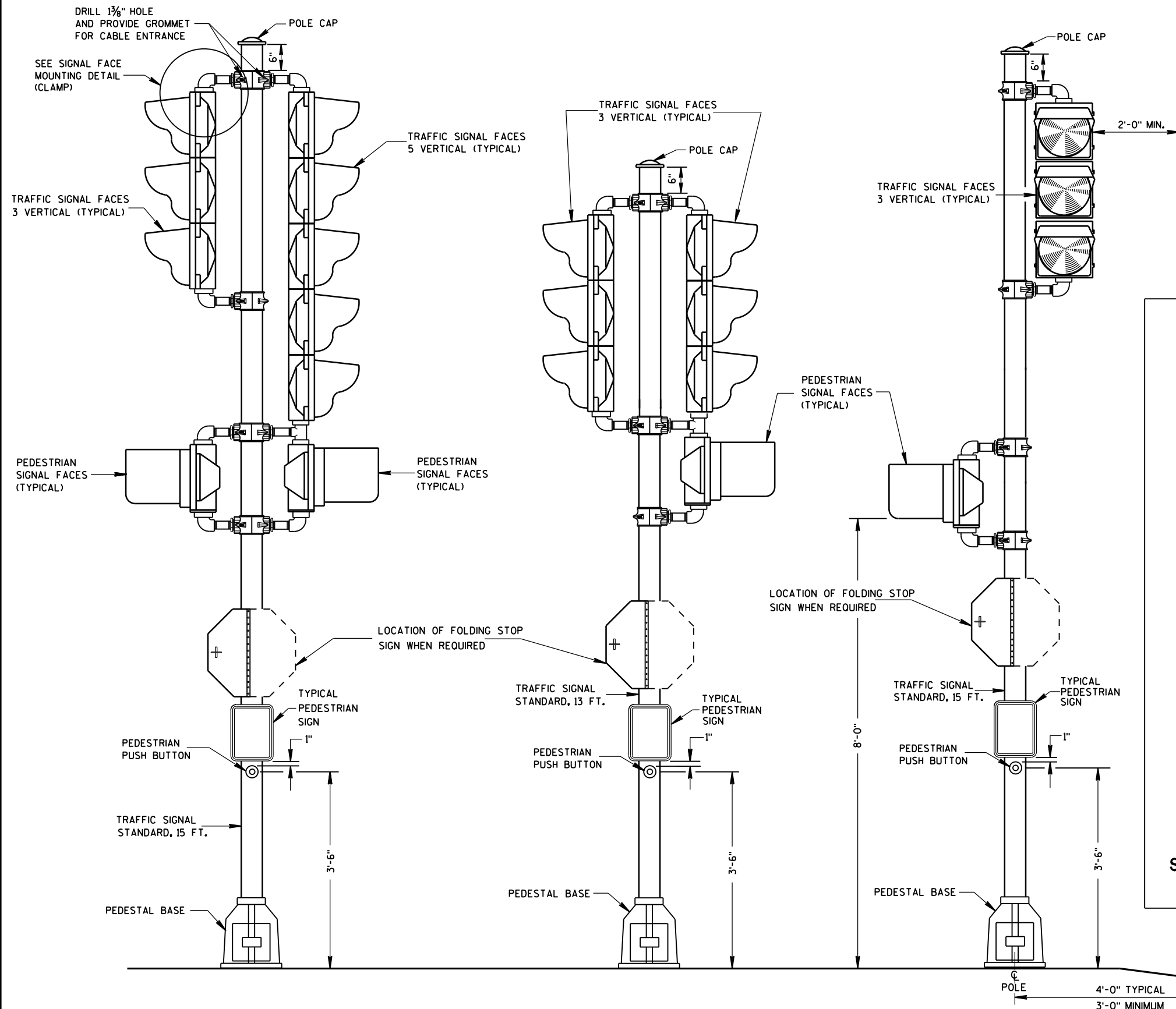
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TRAFFIC SIGNAL STANDARD-15 FT.

TRAFFIC SIGNAL STANDARD-13 FT.

TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

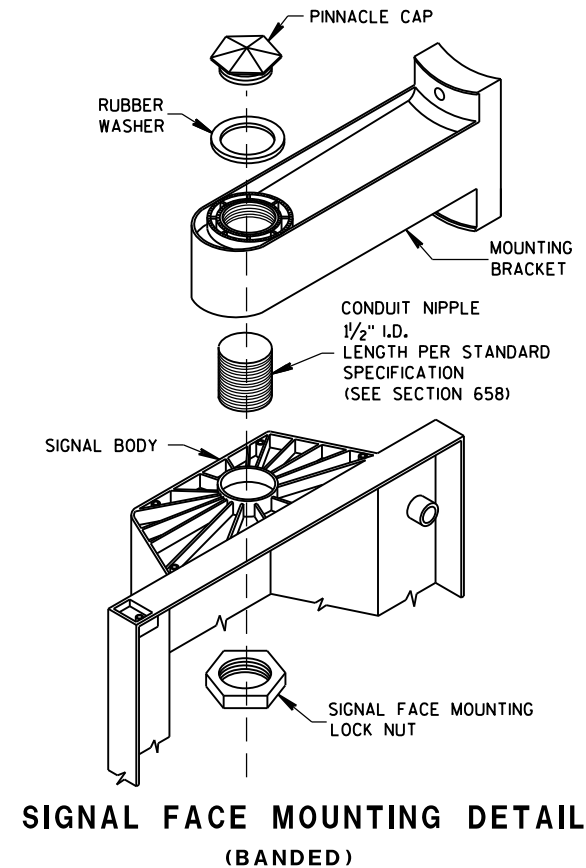
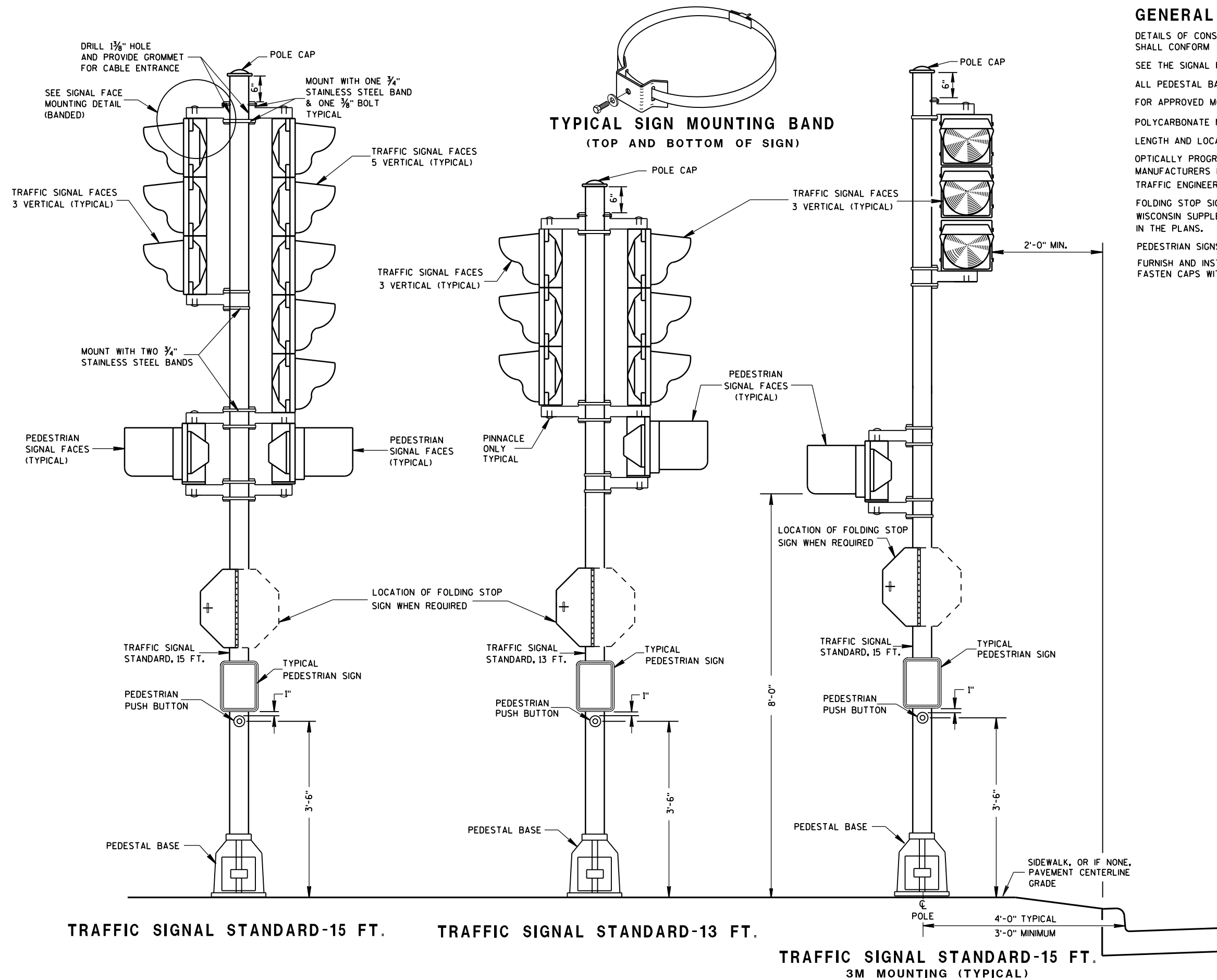
APPROVED
2/28/2013
DATE
FHWA

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

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SDD 9e6 Traffic Signal Standard Poly Bracket Mountings (Typical) 13 ft. or 15 ft.



TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

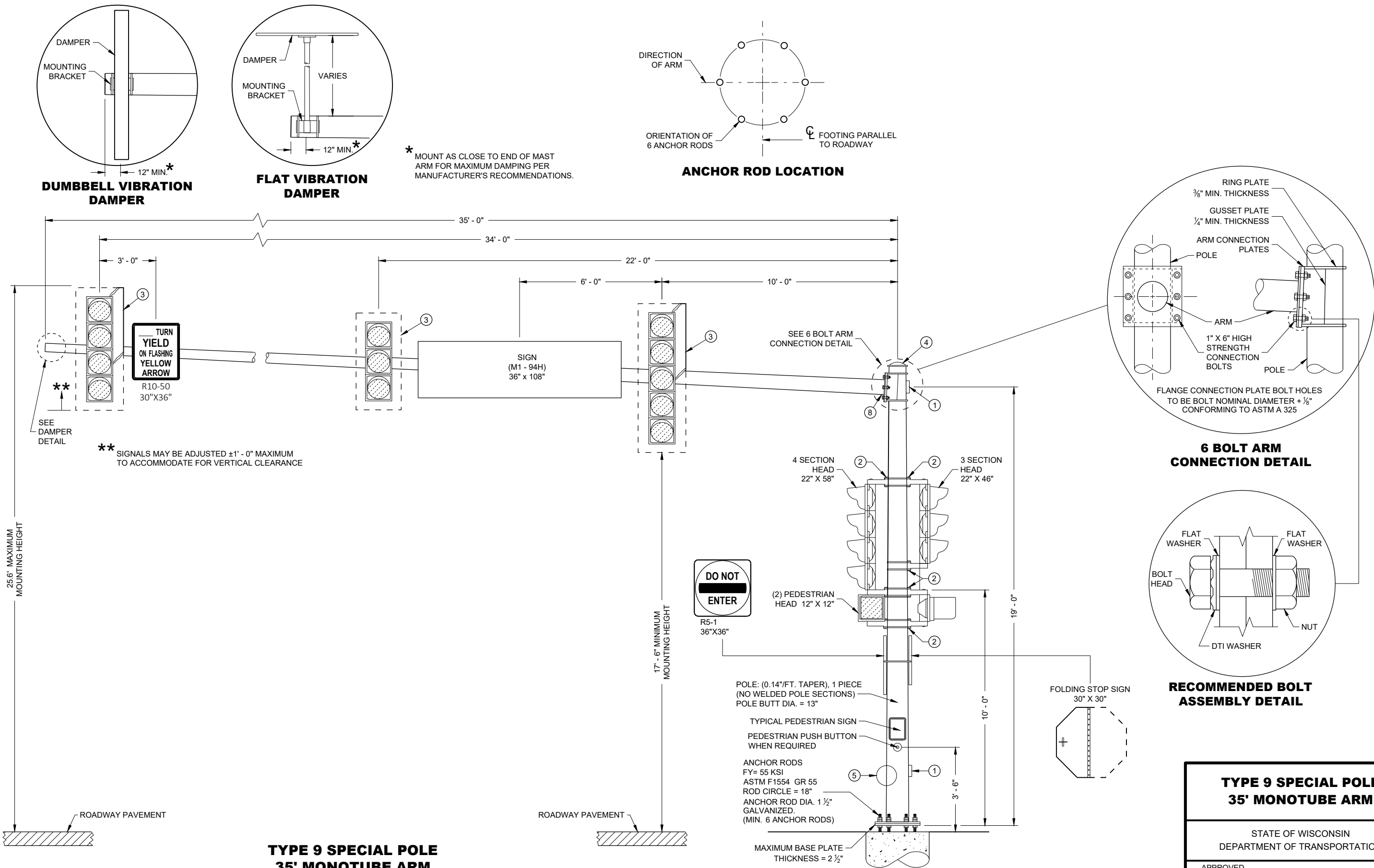
APPROVED
2/28/2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

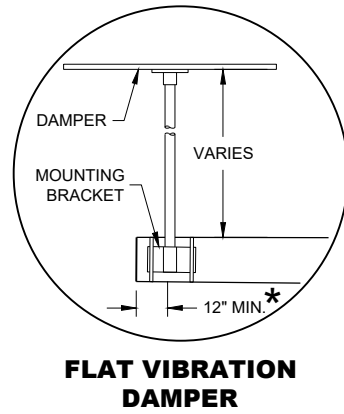
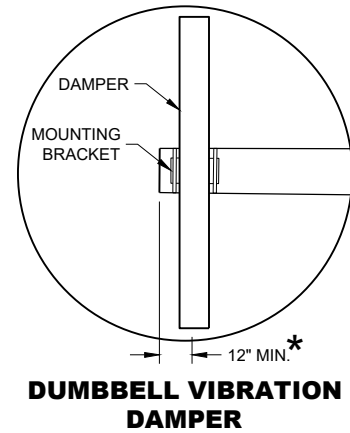
84

FHWA

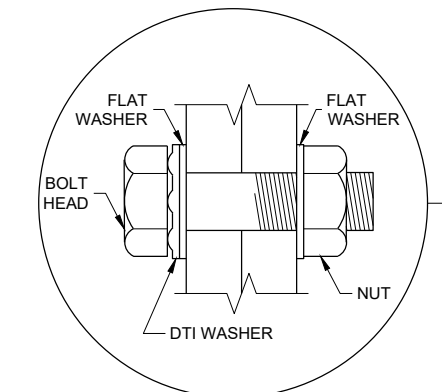
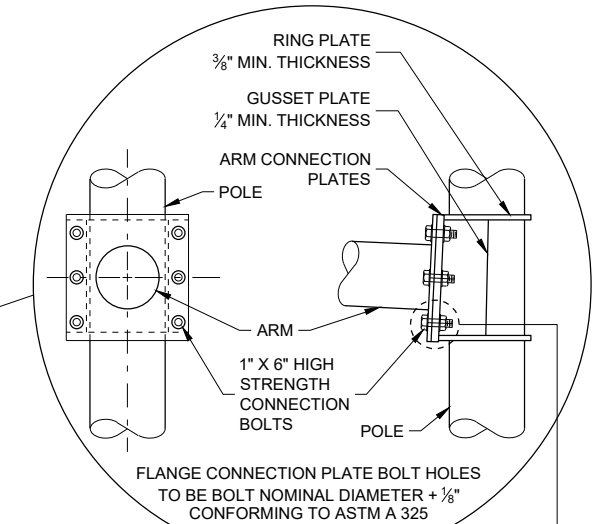
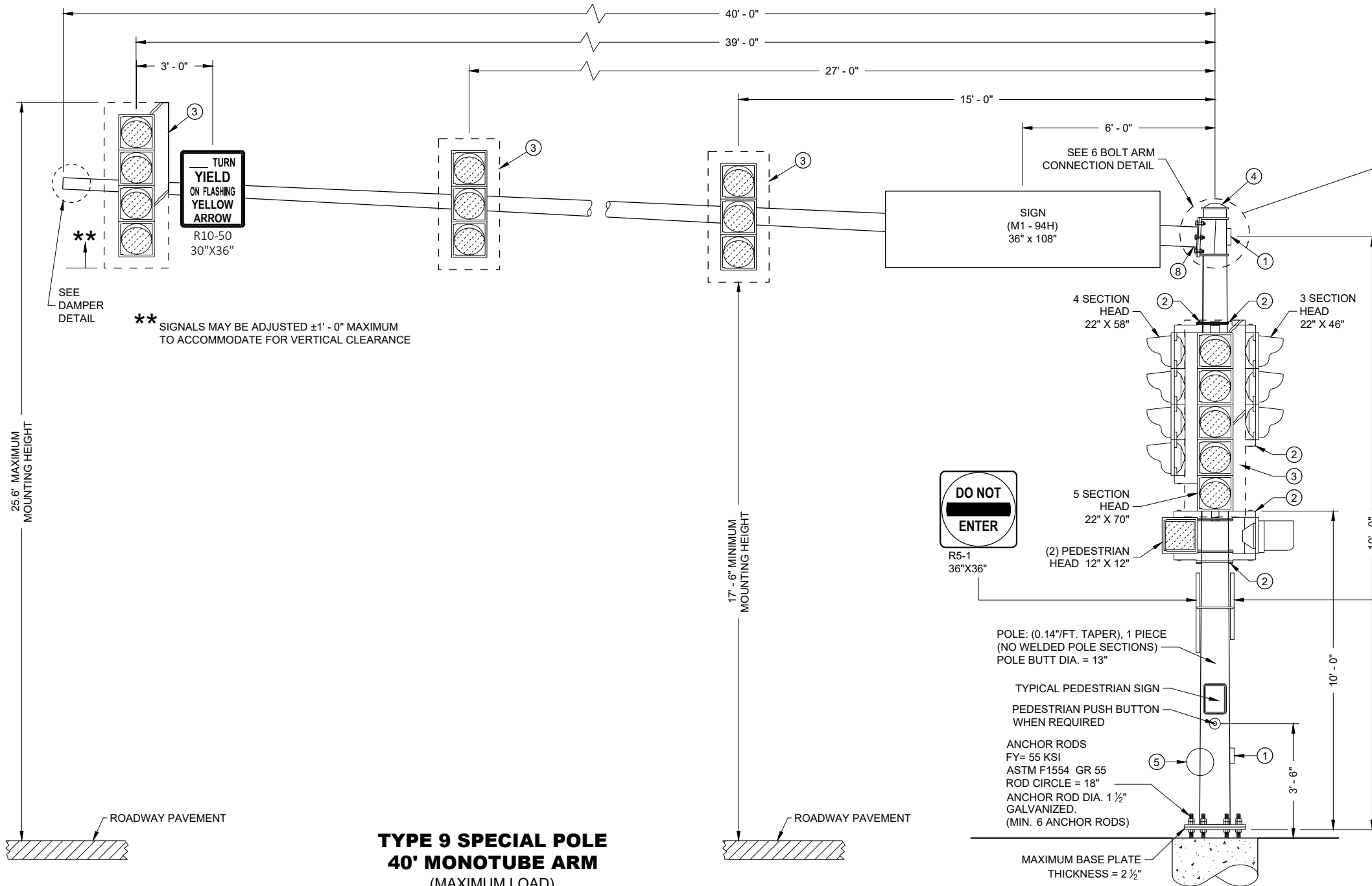
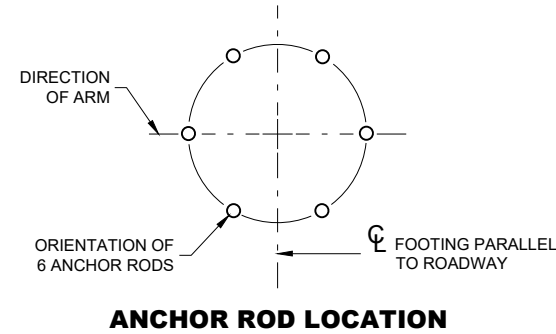




SDD 09E08-c Type 9 Special Pole, 40' Monotube Arm



* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



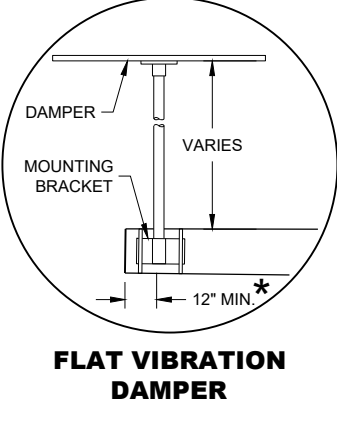
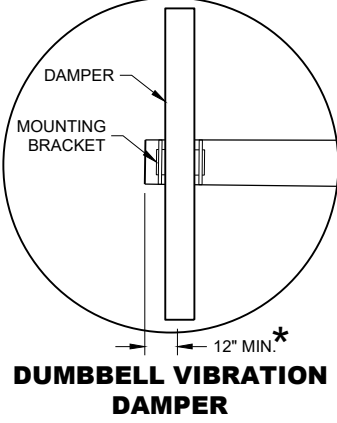
RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 9 SPECIAL POLE 40' MONOTUBE ARM

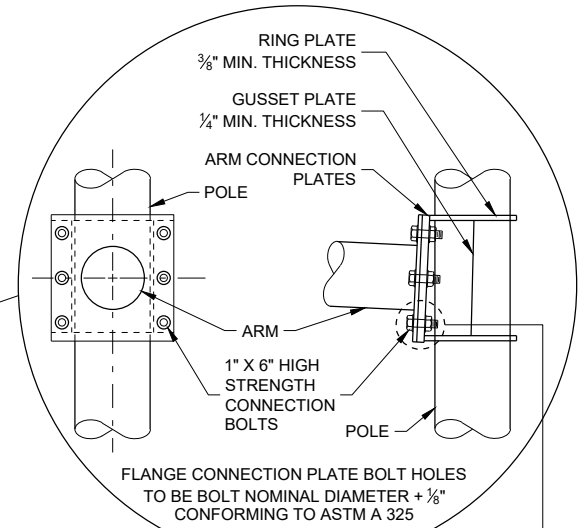
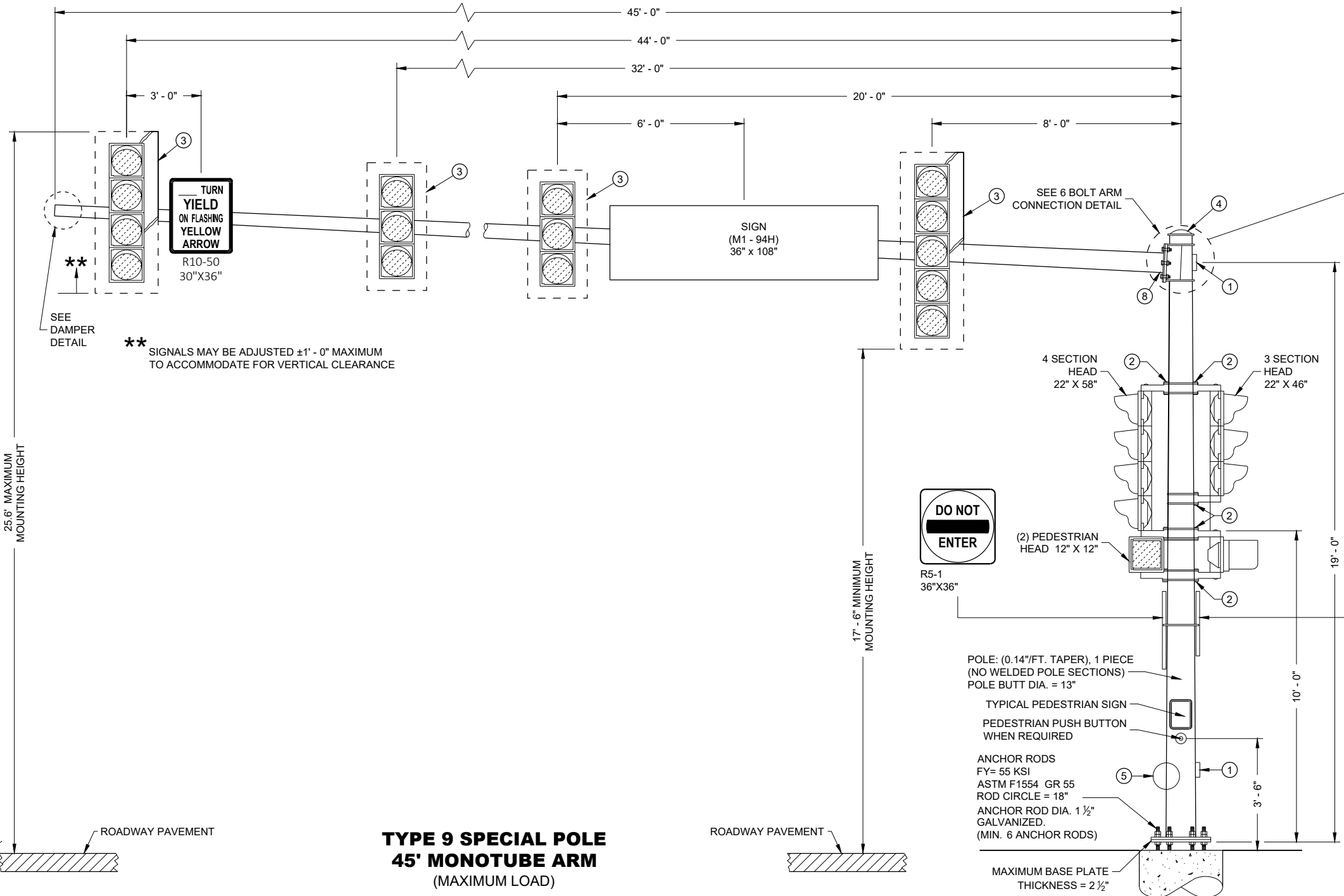
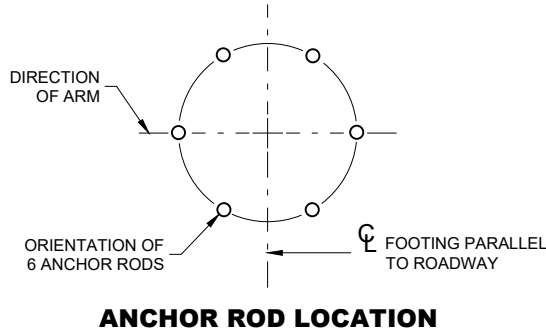
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Ahmet Demirebilek 87
DATE STATE ELECTRICAL ENGINEER
FHWA

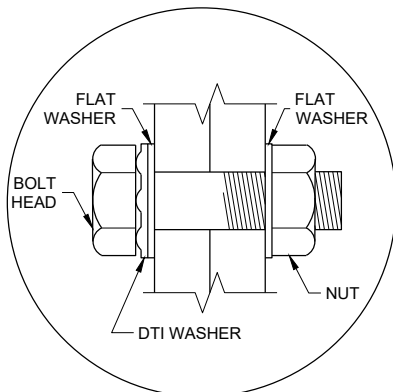
SDD 09E08-d Type 9 Special Pole, 45' Monotube Arm



* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



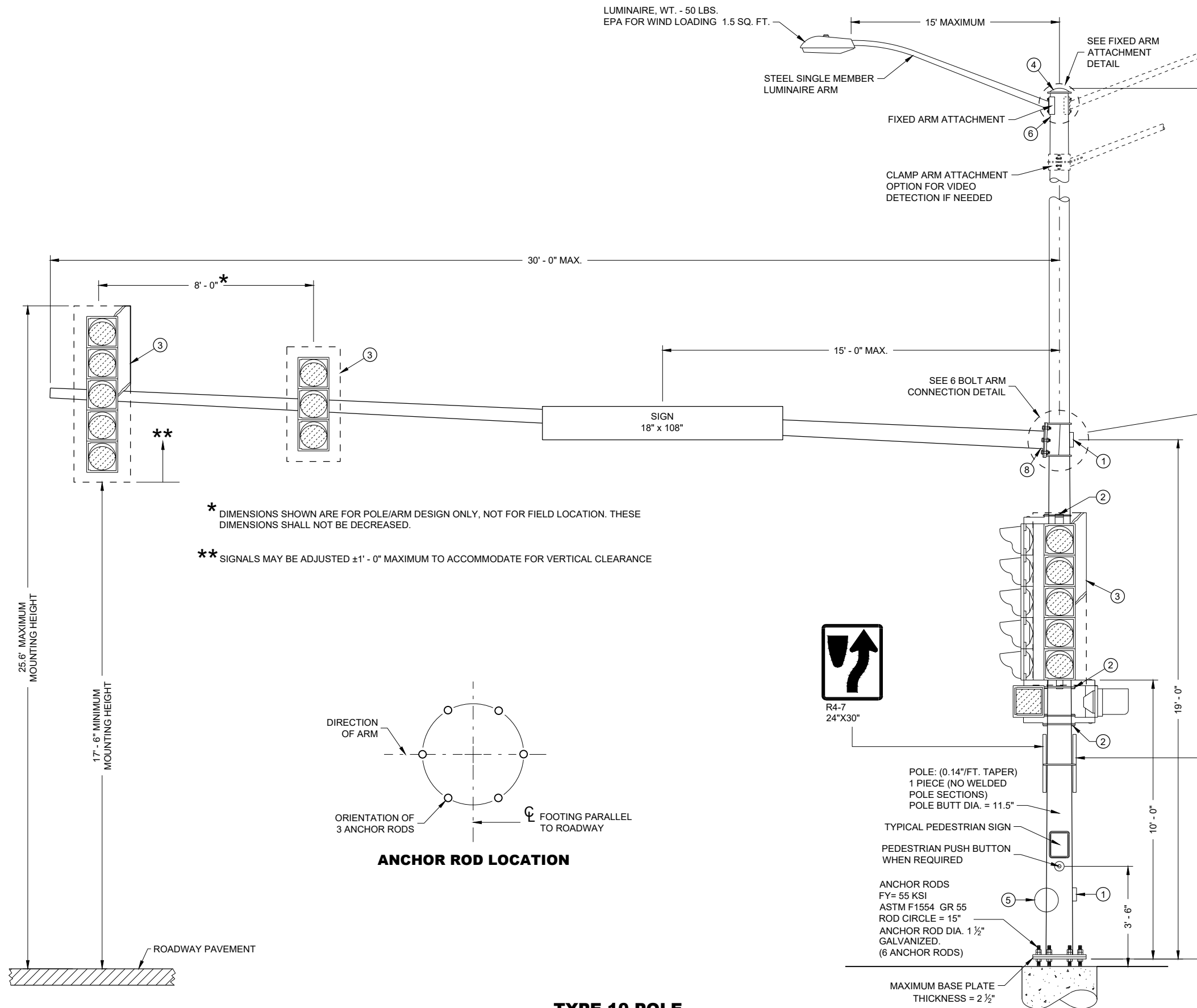
6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

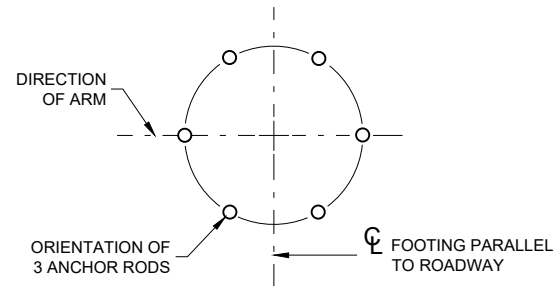
TYPE 9 SPECIAL POLE 45' MONOTUBE ARM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED August 2020 DATE	/S/ Ahmet Demirelek STATE ELECTRICAL ENGINEER
88	

SDD 09E08-e Type 10 Pole, 15' - 30' Monotube Arm



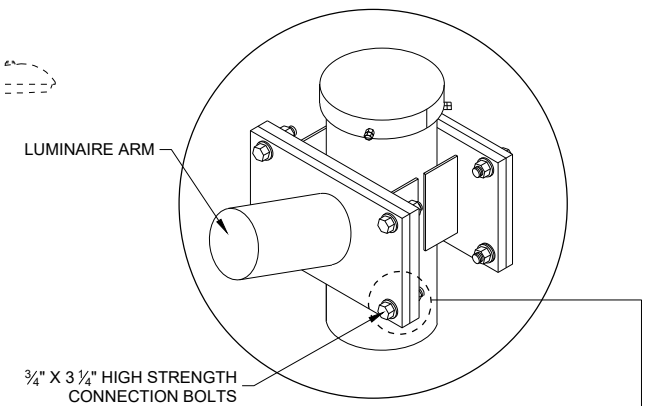
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED $\pm 1'$ - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

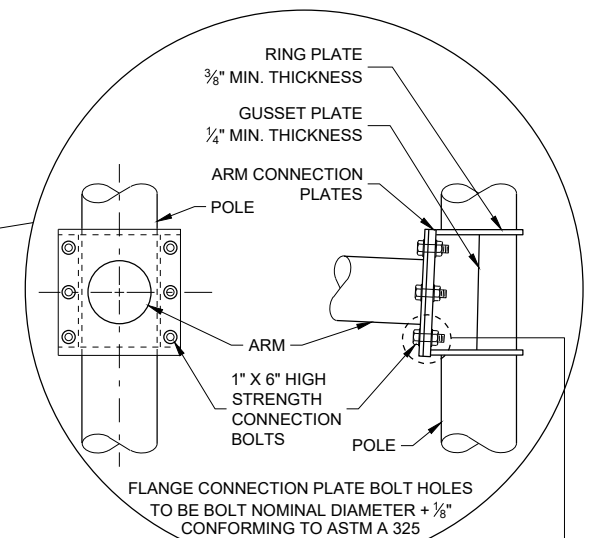


ANCHOR ROD LOCATION

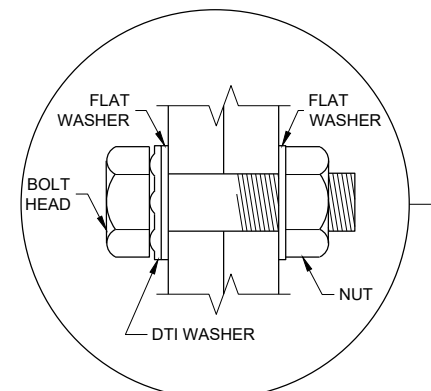
**TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)**



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



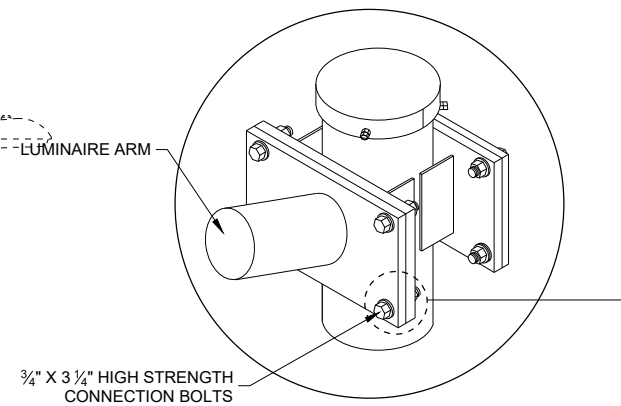
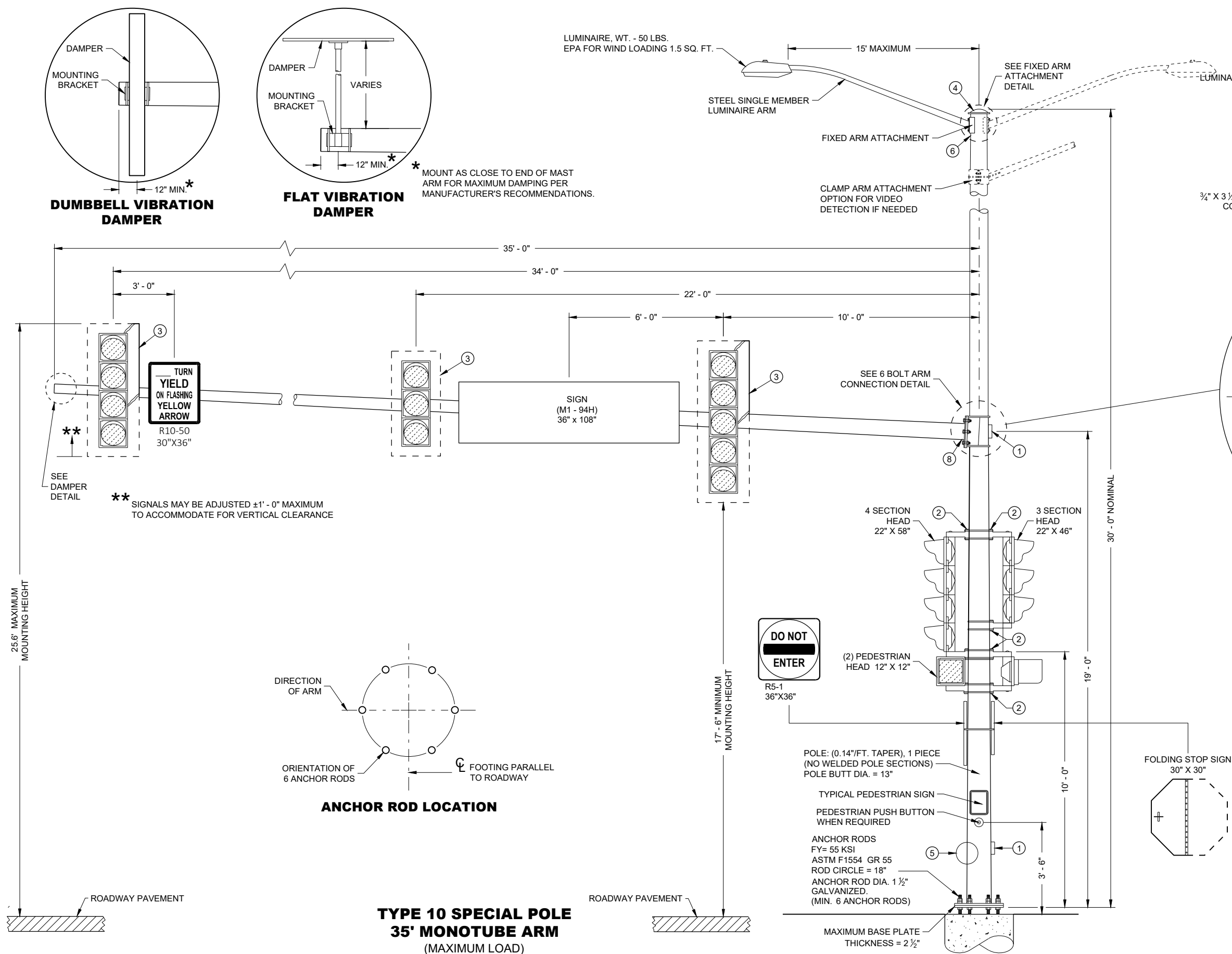
**RECOMMENDED BOLT
ASSEMBLY DETAIL**

**TYPE 10 POLE
15' - 30' MONOTUBE ARM**

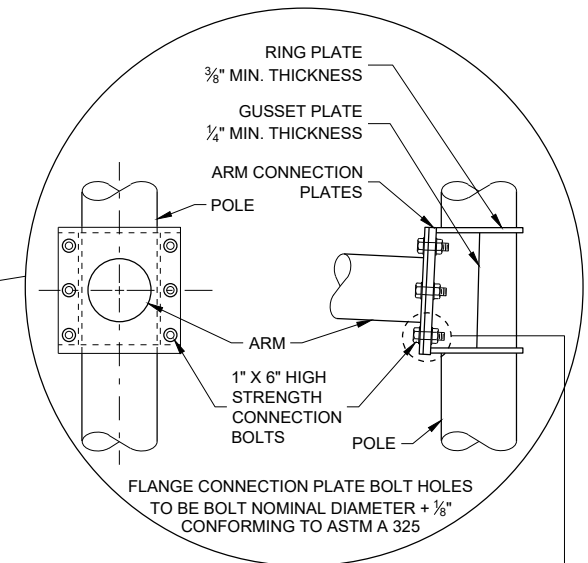
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Ahmet Demirelek 89
DATE STATE ELECTRICAL ENGINEER
FHWA

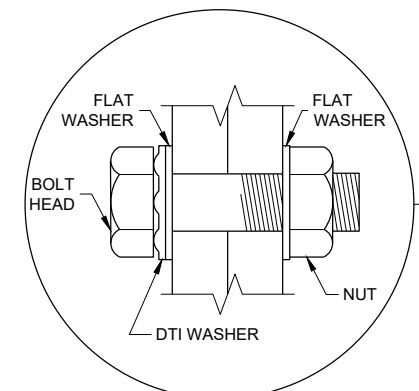
SDD 09E08 - 09f



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

**TYPE 10 SPECIAL POLE
35' MONOTUBE ARM**

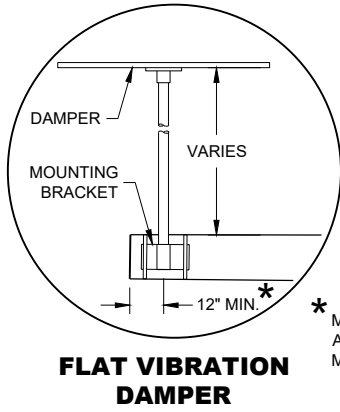
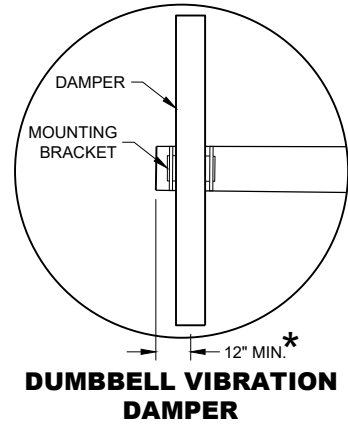
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 90
August 2020 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER

FHWA

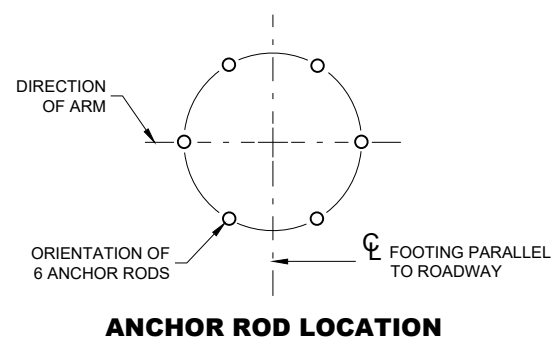
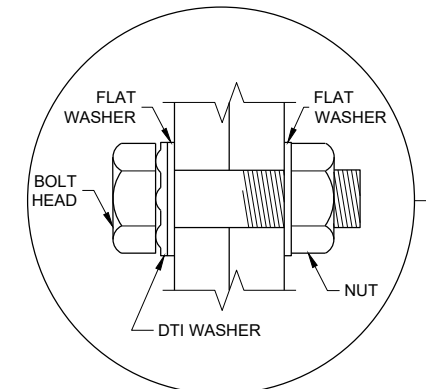
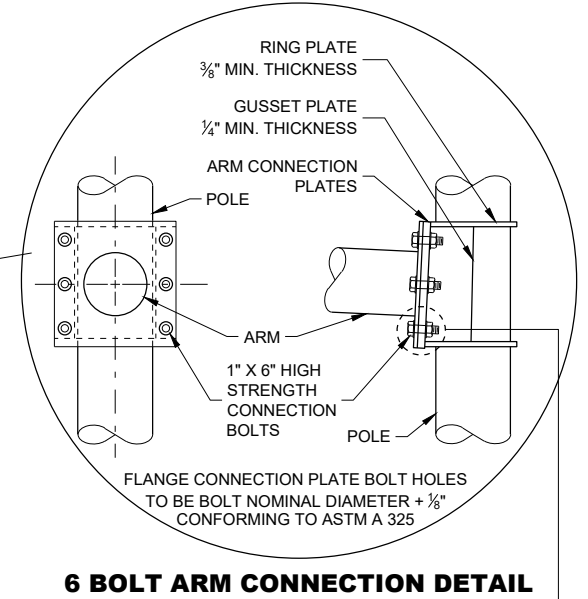
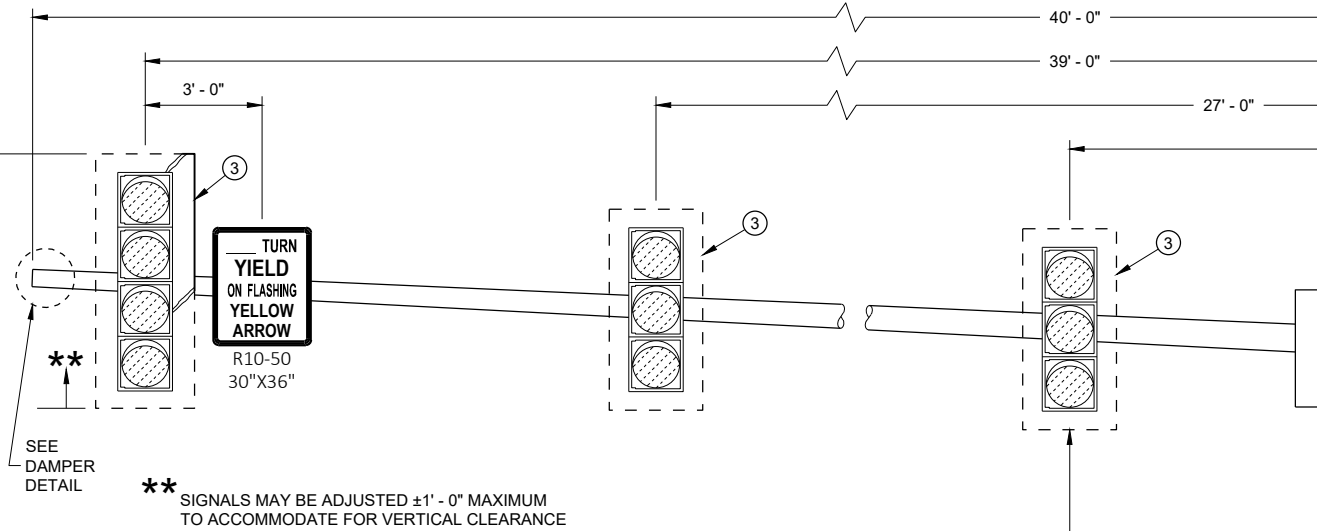
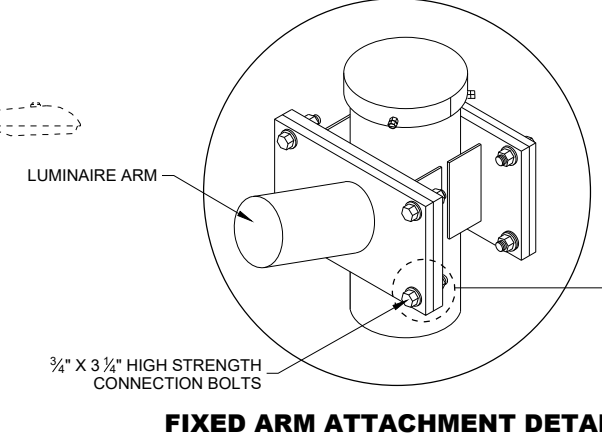
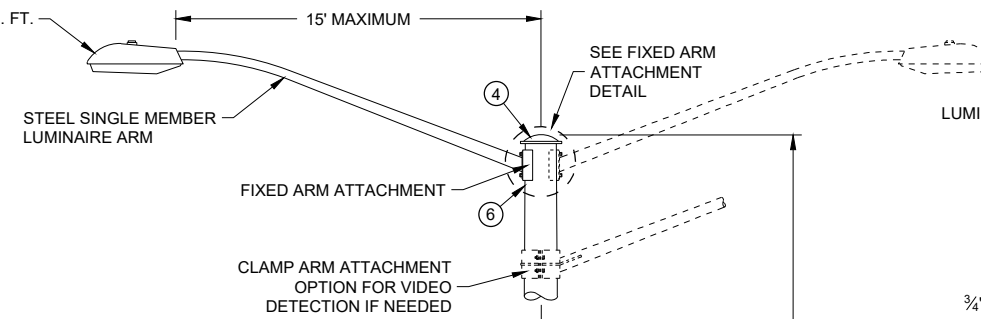
SDD 09E08 - 09f

SDD 09E08-g Type 10 Special Pole, 40' Monotube Arm

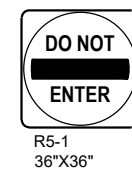


* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

LUMINAIRE, WT. - 50 LBS.
EPA FOR WIND LOADING 1.5 SQ. FT.



TYPE 10 SPECIAL POLE 40' MONOTUBE ARM (MAXIMUM LOAD)



POLE: (0.14"/FT. TAPER), 1 PIECE
(NO WELDED POLE SECTIONS)
POLE BUTT DIA. = 13"

TYPICAL PEDESTRIAN SIGN
PEDESTRIAN PUSH BUTTON
WHEN REQUIRED

ANCHOR RODS
FY= 55 KSI
ASTM F1554 GR 55
ROD CIRCLE = 18"
ANCHOR ROD DIA. 1 1/2"
GALVANIZED.
(MIN. 6 ANCHOR RODS)

MAXIMUM BASE PLATE
THICKNESS = 2 1/2"

FOLDING STOP SIGN
30" X 30"

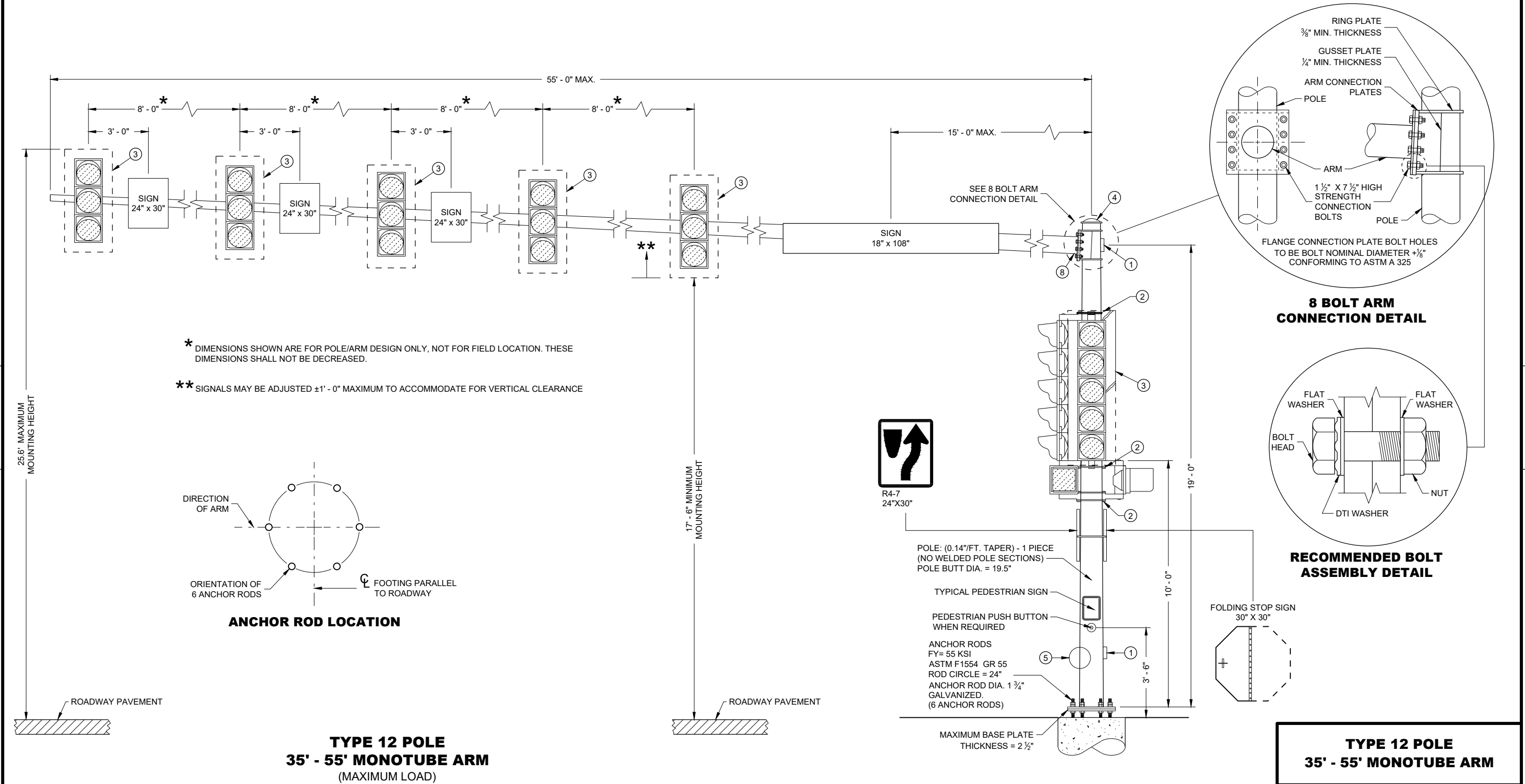
TYPE 10 SPECIAL POLE 40' MONOTUBE ARM

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DEPARTMENT OF TRANSPORTATION

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August 2020 /S/ Ahmet Demirelek
DATE STATE ELECTRICAL ENGINEER



SDD 09E08-i Type 12 Pole, 35' - 55' Monotube Arm





SDD 09E08-k General Notes and Hardware Details for Type 9, 10, 9/10 Special, 12, and 13 Poles with Monotube Arms

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH 3/4" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL 1/2" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

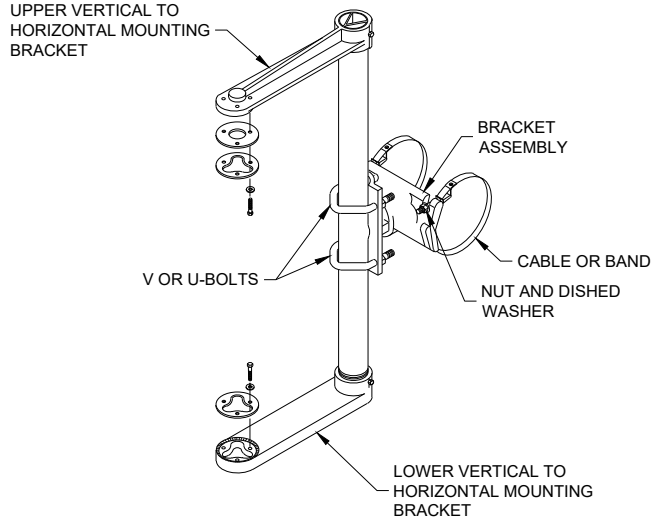
SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

- DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO 1/4" X 3/4" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.
- SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).
- SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.
- THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.
- FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR 1/4" X 3/4" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.
- FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.
- INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

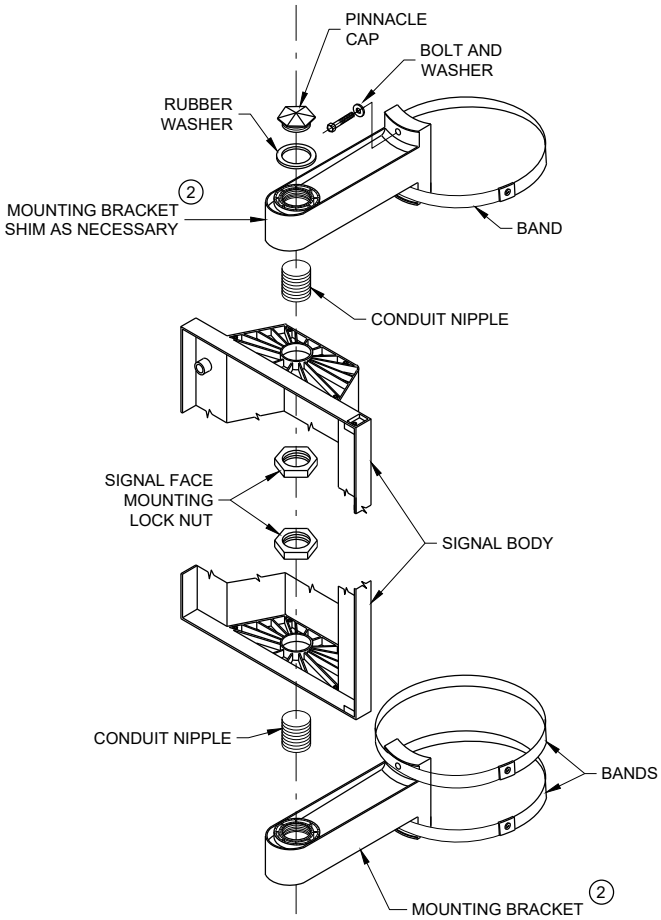
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

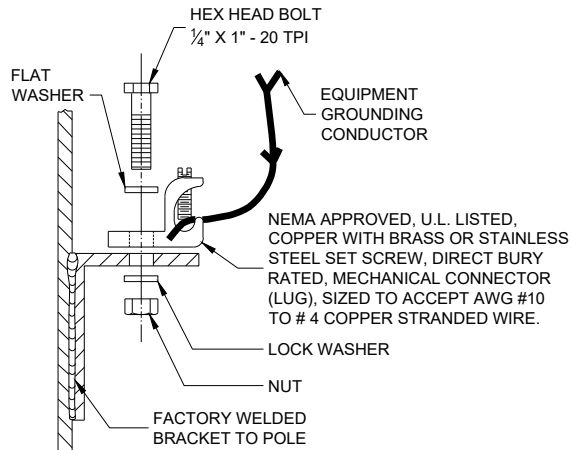
- FACTORY DRILLED 1/2" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.



**SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM**
(MOUNT PER MANUFACTURER'S RECOMMENDATION)

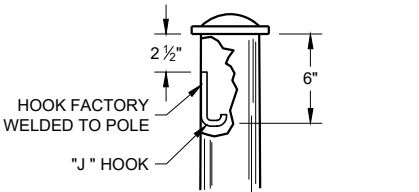


**SIGNAL FACE VERTICAL
MOUNTING DETAIL**

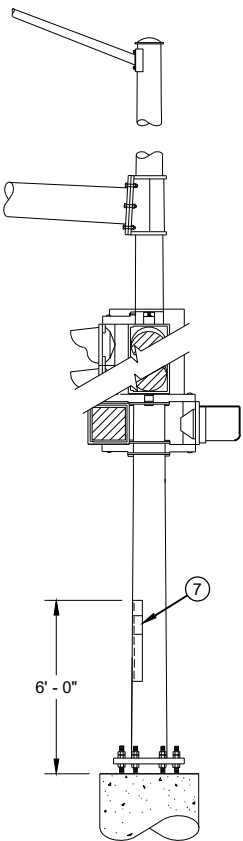


**TYPICAL GROUNDING
CONNECTIONS**

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



**TYPICAL "J" HOOK
WIRE SUPPORT**



**STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT**

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

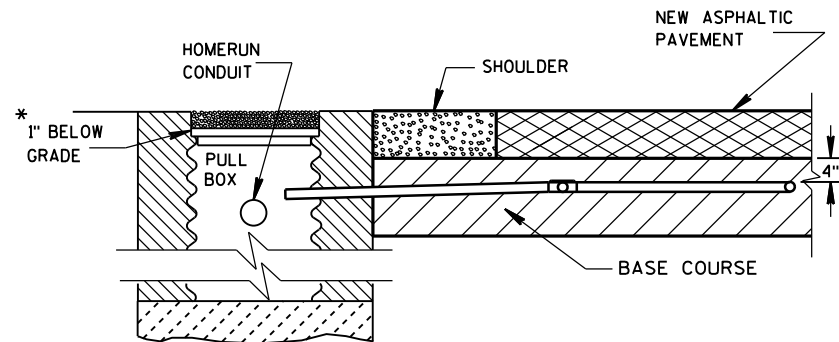
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL
FHWA ENGINEER

95



SDD 9f8 Loop Detector Placed in Crushed Aggregate Base (New Asphaltic Pavement)



SECTION A-A
NO CURB & GUTTER

DETECTOR LOOP INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

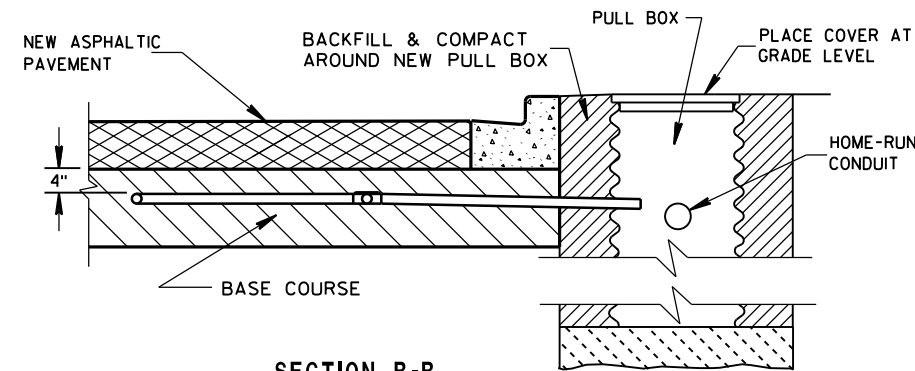
SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

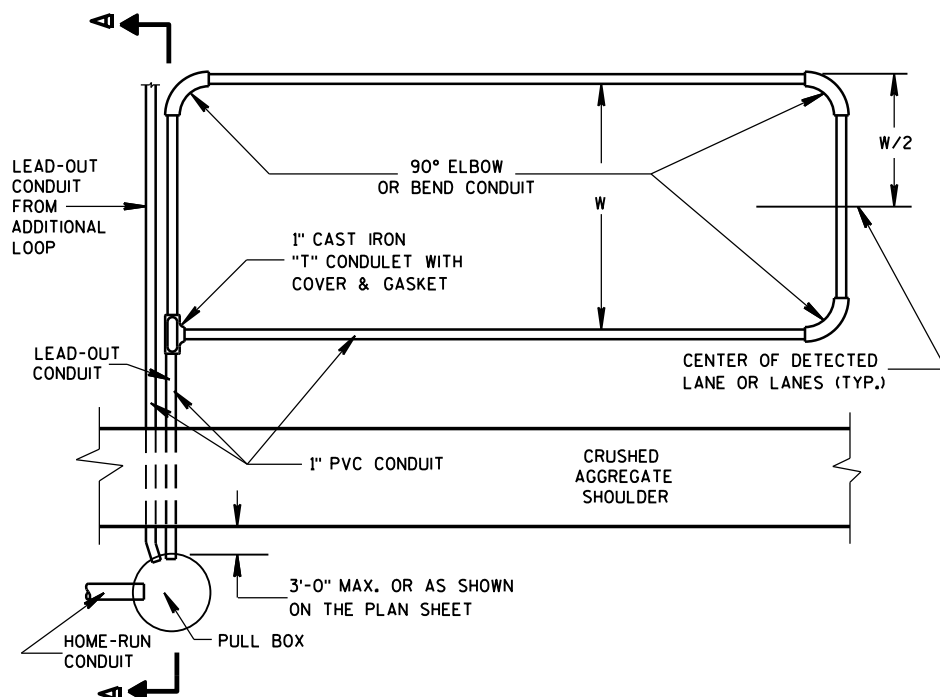
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

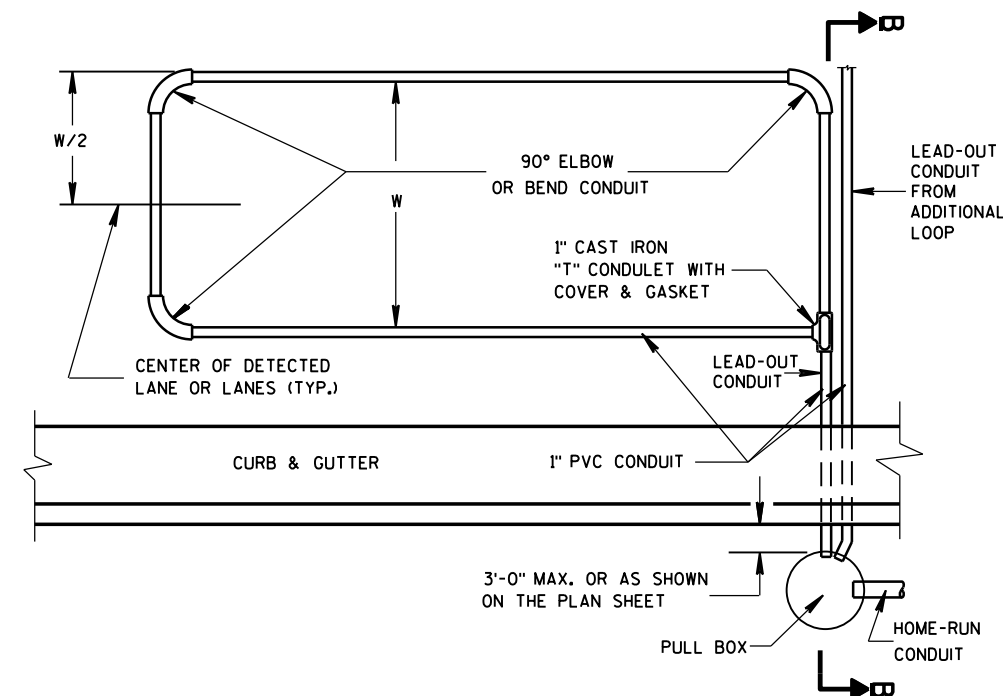


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR



TYPICAL PLAN OF LOOP DETECTOR

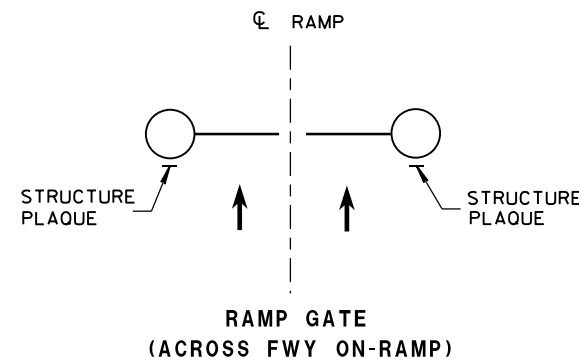
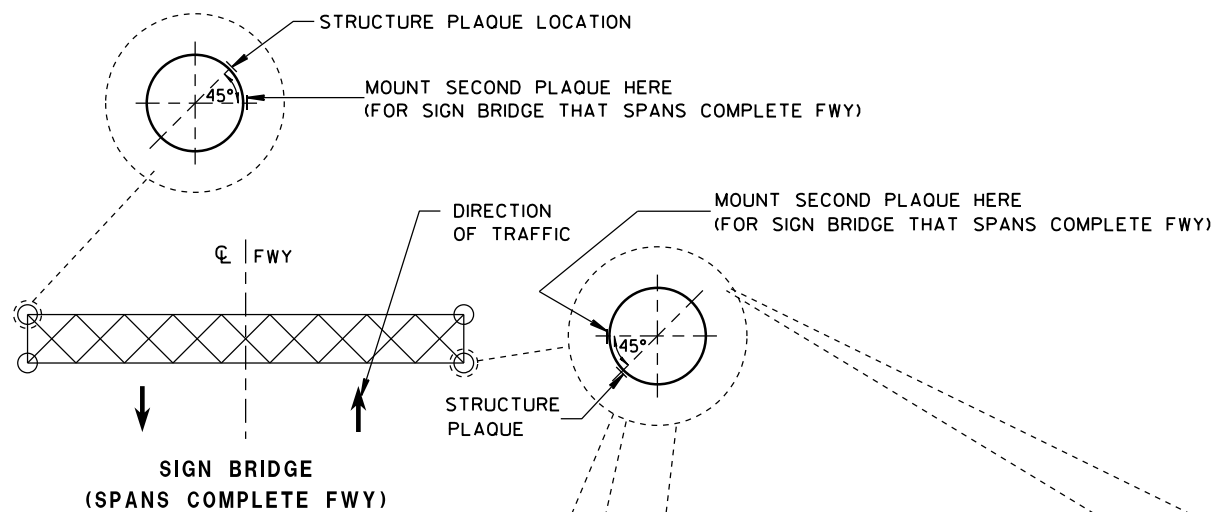
LOOP DETECTOR PLACED
IN CRUSHED AGGREGATE BASE
(NEW ASPHALTIC PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER
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FHWA



SDD 12a4 Structure Identification Plaques, Ramp Gates, Sign Bridges, Overhead Sign Supports and Traffic Signals



GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS;
FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

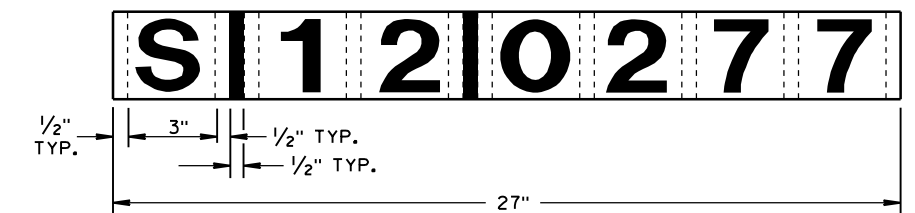
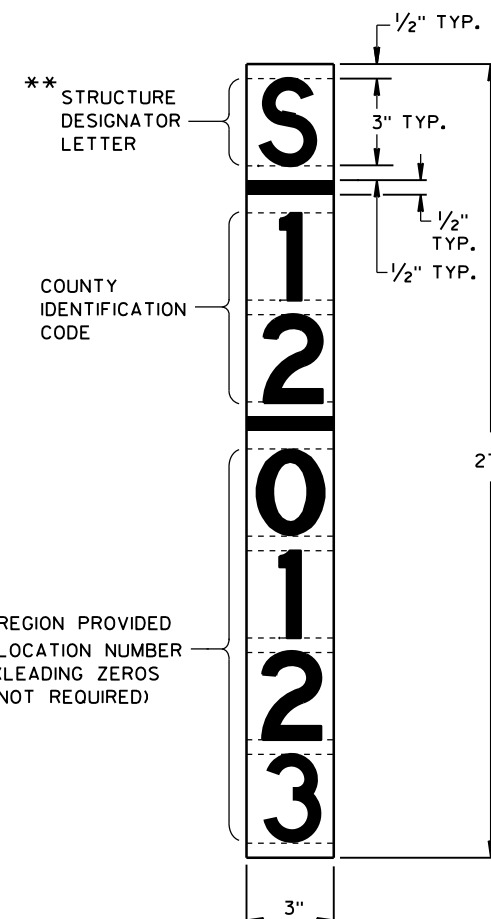
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/4/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN 97
FHWA	



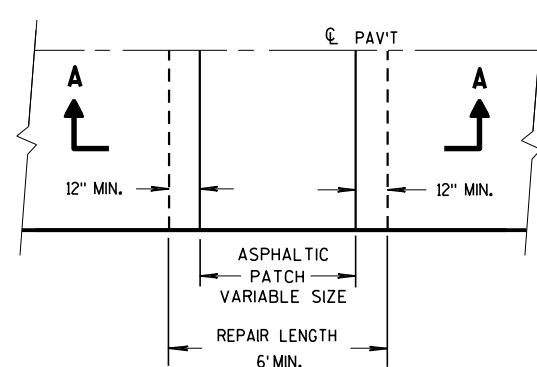
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

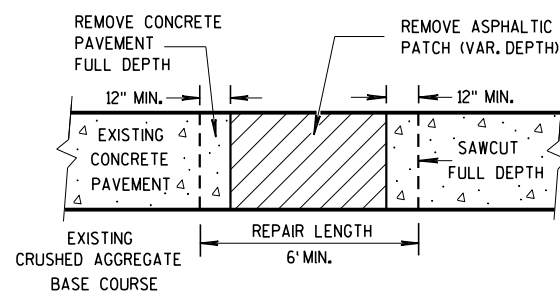
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

① DOWEL BARS MIGHT NOT EXIST.

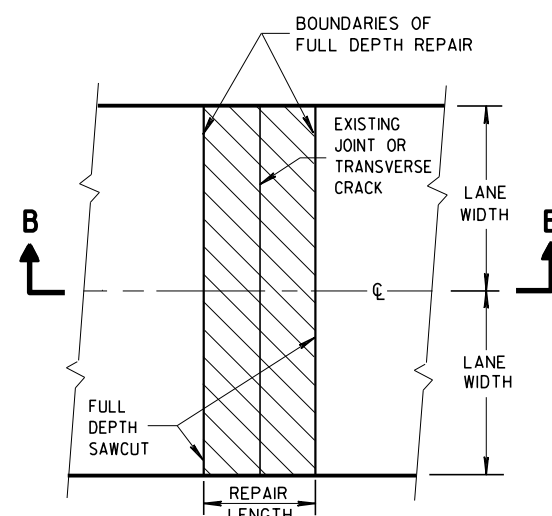


PLAN VIEW

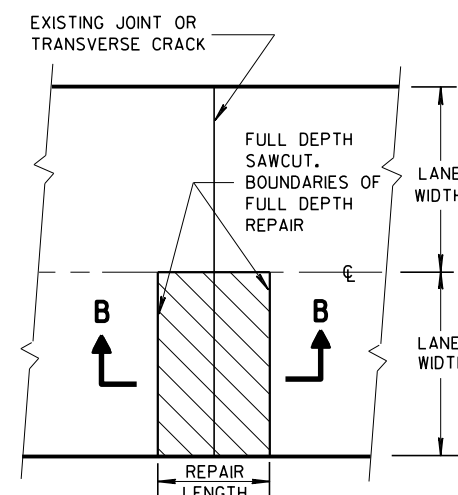


SECTION A-A

HMA PATCH REMOVAL

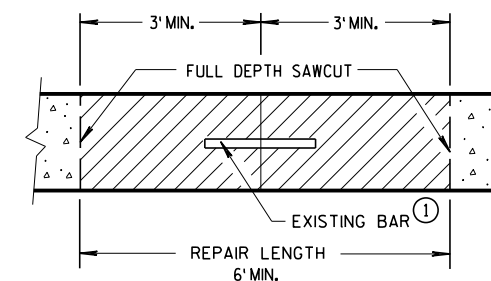


PLAN VIEW
(DOUBLE LANE REPAIR)

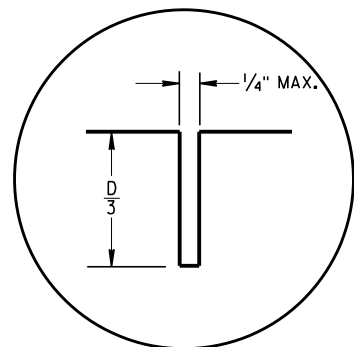


PLAN VIEW
(SINGLE LANE REPAIR)

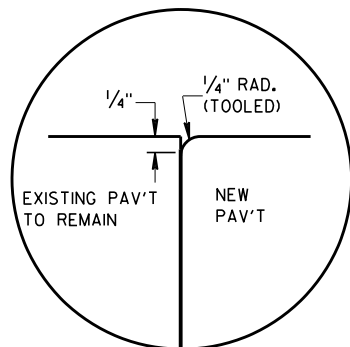
FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B-B
CONCRETE REMOVAL

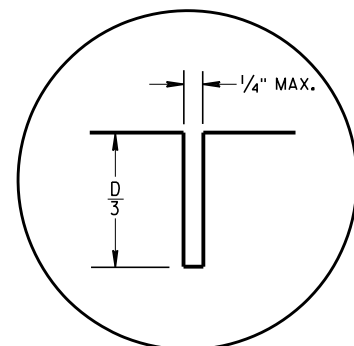


C1

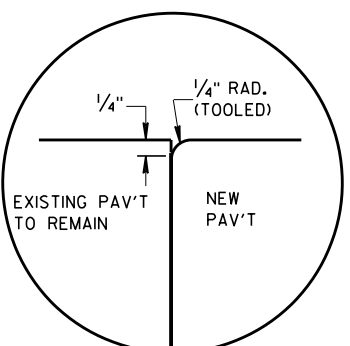


C2

TRANSVERSE JOINTS

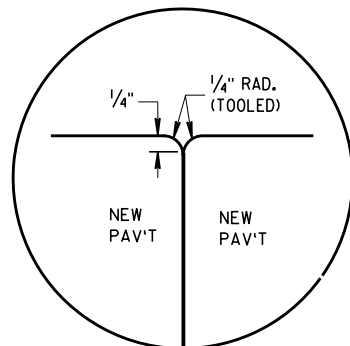


L1



L2

LONGITUDINAL JOINTS



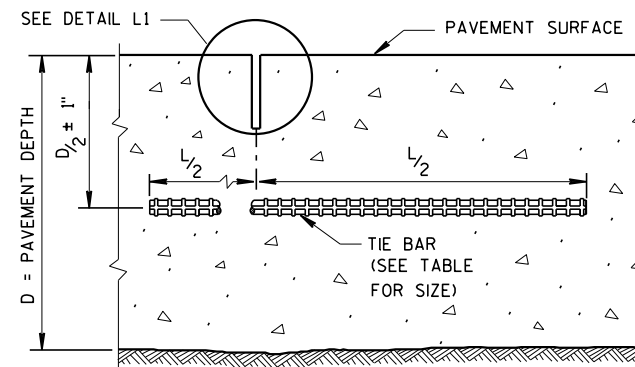
L3

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C
SAWED LONGITUDINAL JOINT

GENERAL NOTES

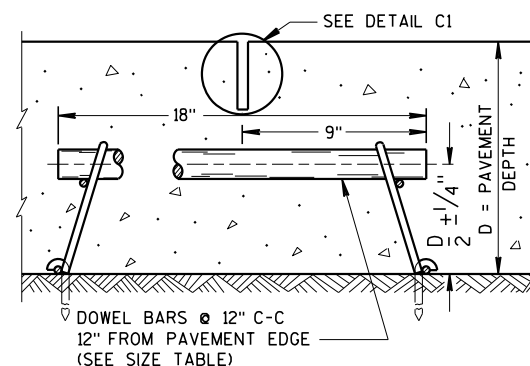
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

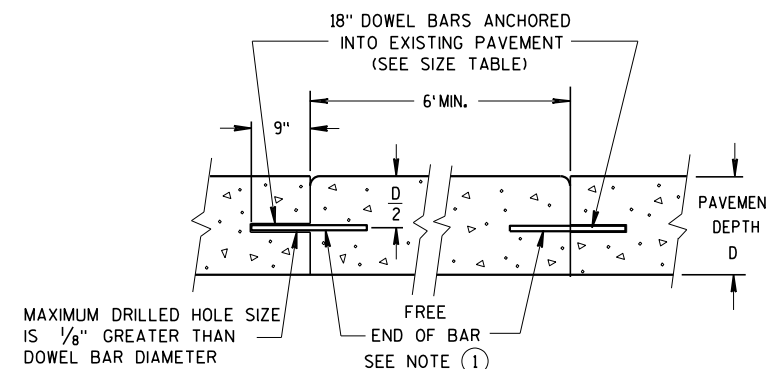
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

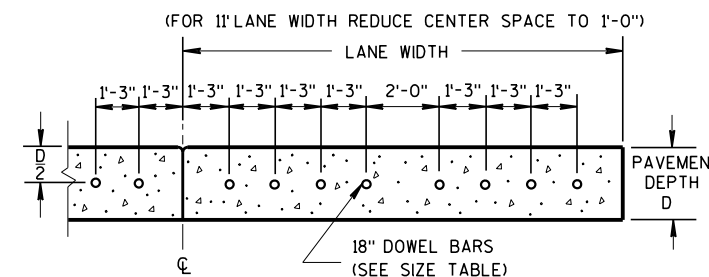
- 1 APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



SECTION F-F
CONTRACTION JOINT



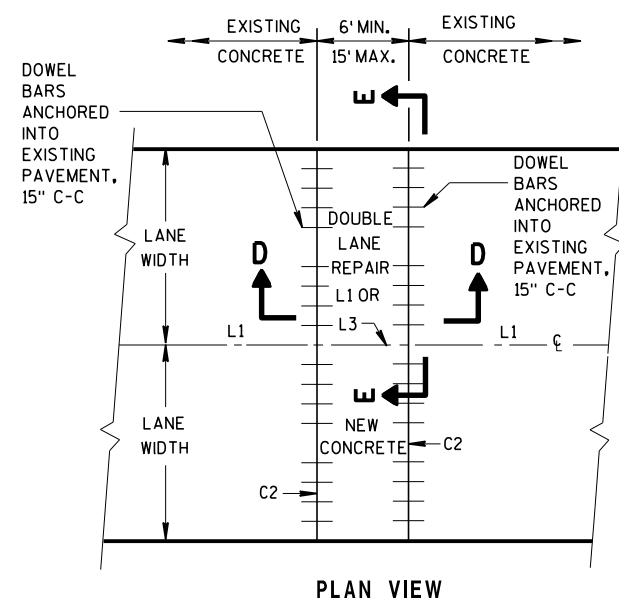
SECTION D-D



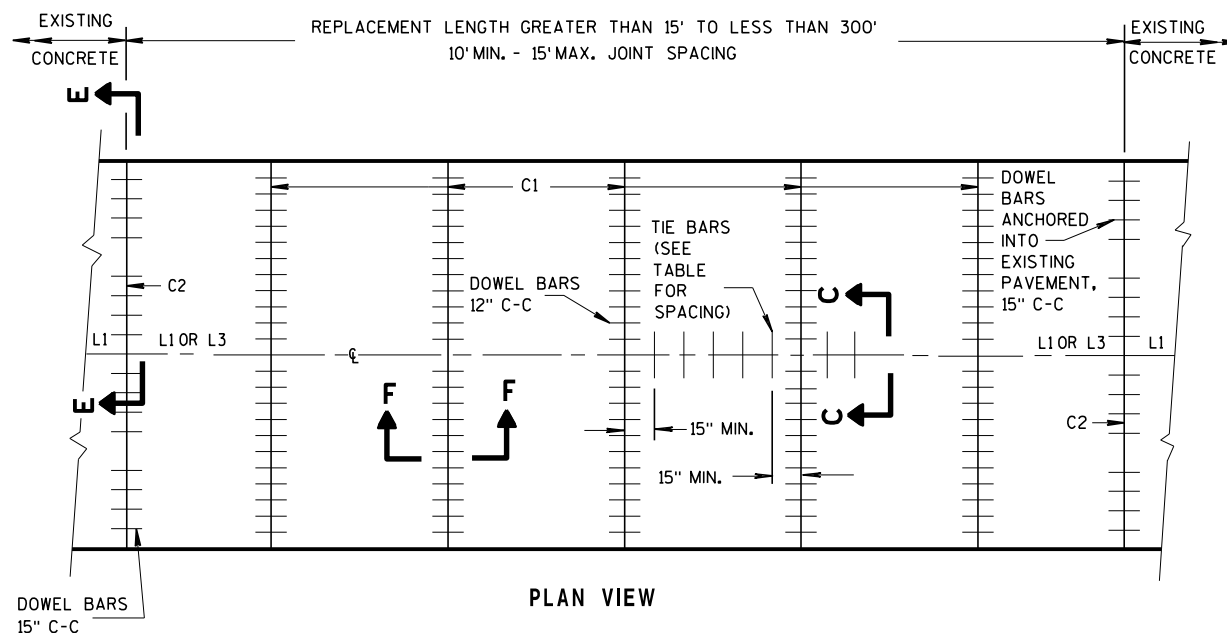
SECTION E-E
DRILLED DOWEL BAR CONSTRUCTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW
MULTI-LANE CONCRETE PAVEMENT REPAIR



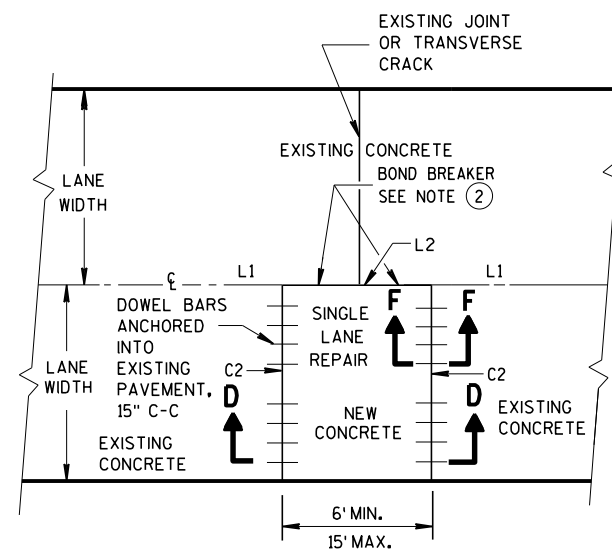
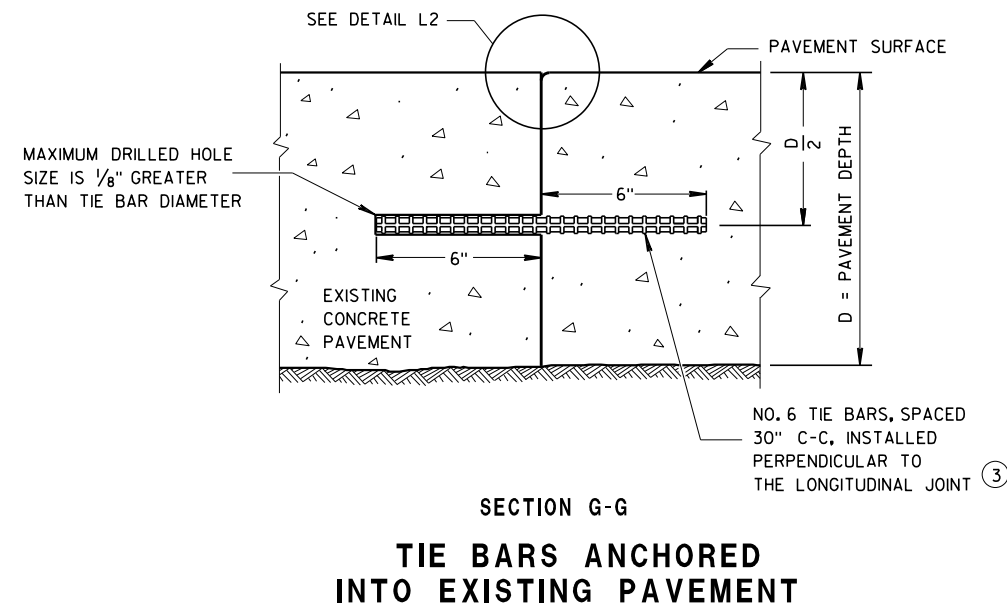
PLAN VIEW
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

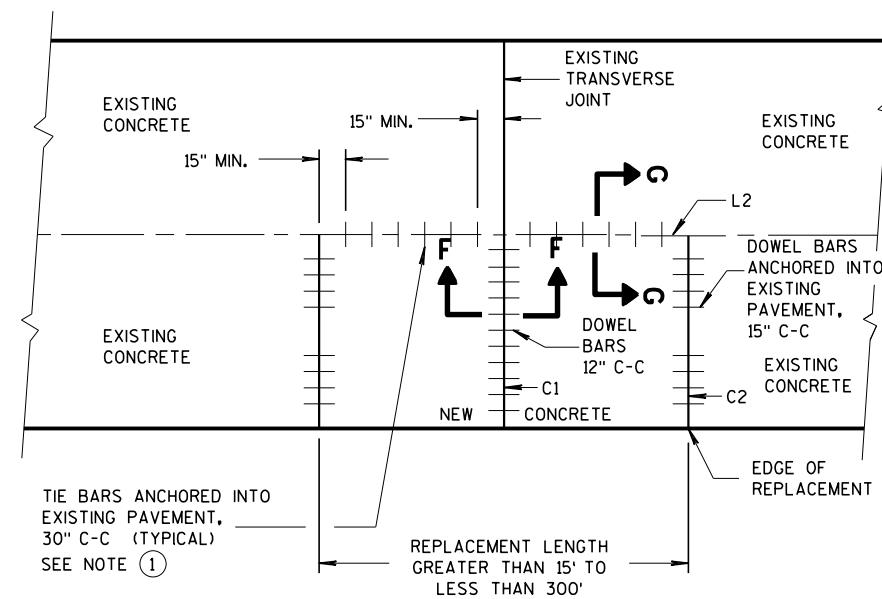
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- ① WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
- ② USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
- ③ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW
SINGLE LANE
CONCRETE PAVEMENT REPAIR



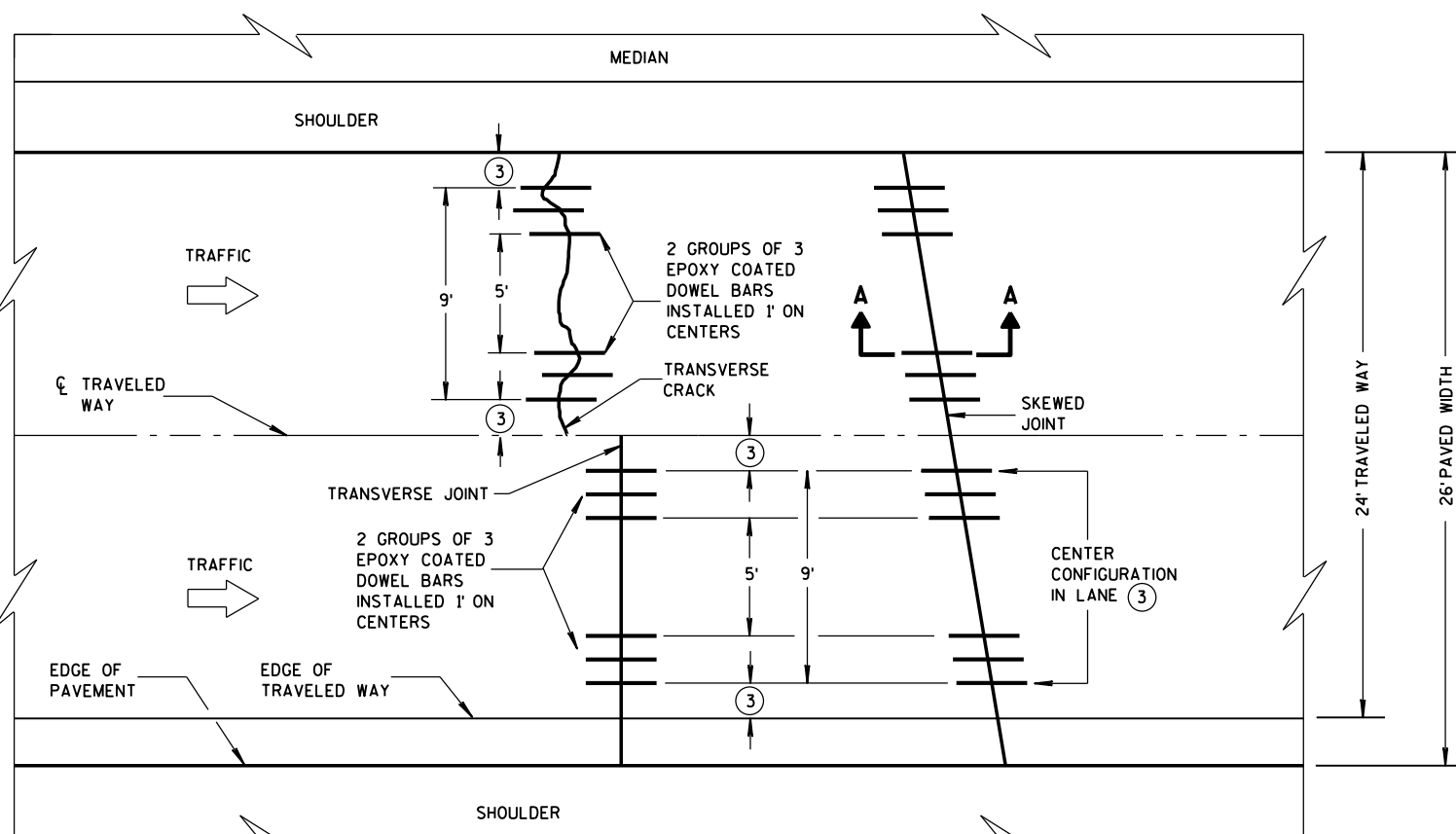
PLAN VIEW
SINGLE LANE
CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

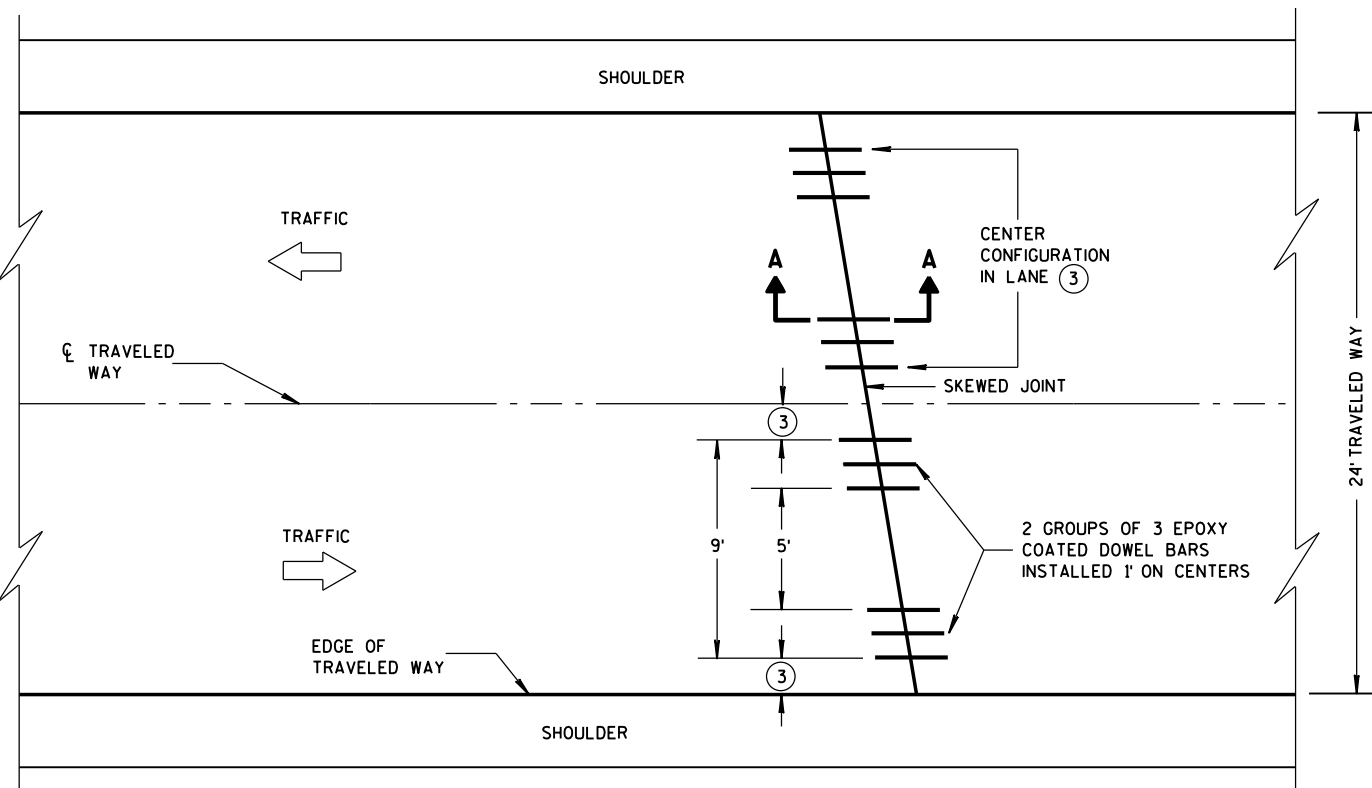
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	
March 2018	/S/ Peter Kemp, P.E.
DATE	PAVEMENT SUPERVISOR
FHWA	

00 |



RETROFIT DOWEL BAR SPACING
DIVIDED HIGHWAY



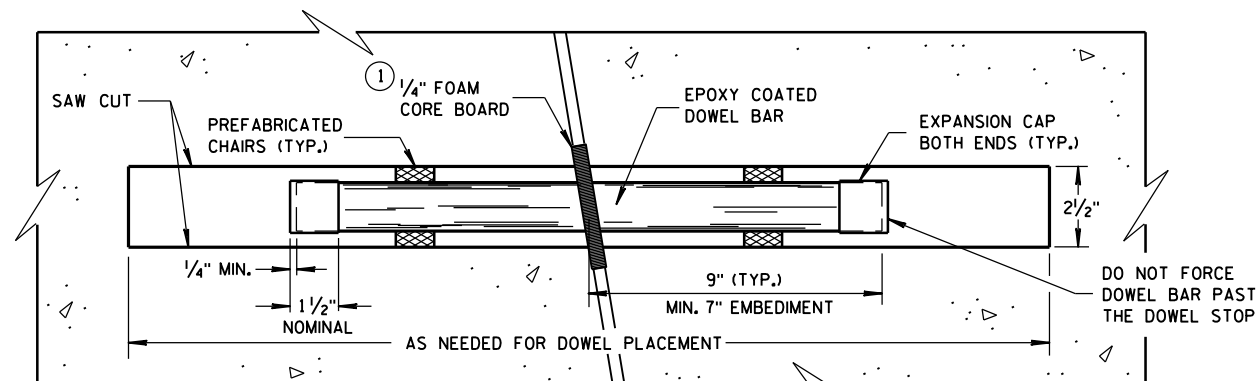
RETROFIT DOWEL BAR SPACING
TWO-LANE TWO-WAY HIGHWAY

RETROFIT DOWEL BAR INSTALLATION

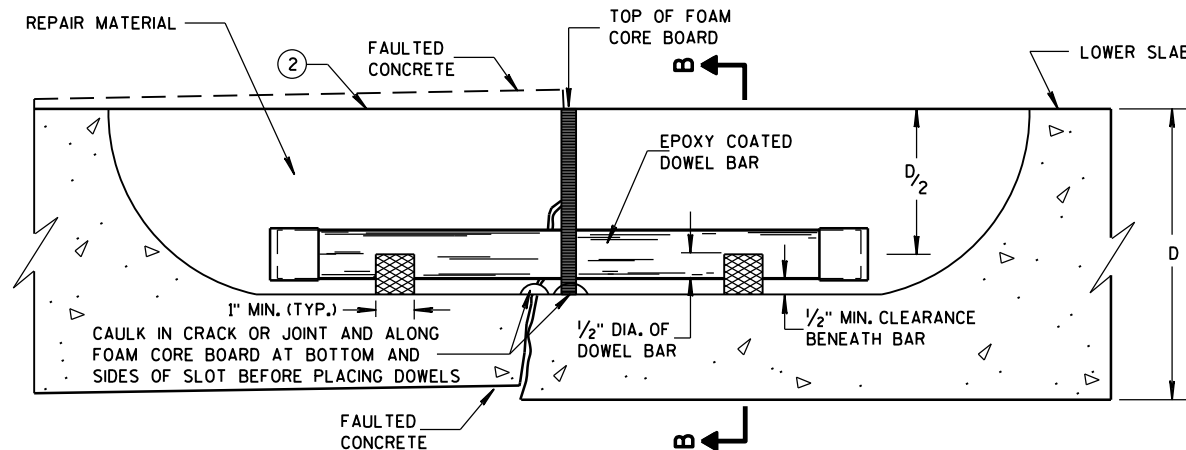
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIAL AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISION.

- 1 FOAM CORE BOARD IS TO BE SIZED AND SHAPED TO FIT INTO THE JOINT OR CRACK, EXTEND TO OR BEYOND THE TOP SURFACE OF THE LOWER SLAB, AND FIT TIGHTLY AROUND THE DOWEL.
- 2 FINISHED ELEVATION AFTER CONTINUOUS DIAMOND GRINDING, WHEN REQUIRED.
- 3 SAW THE SLOTS SO THAT THE OUTERMOST AND INNERMOST SLOTS ARE EQUALLY SPACED FROM THE EDGE OF PAVEMENT AND THE LONGITUDINAL JOINT, RESPECTIVELY.

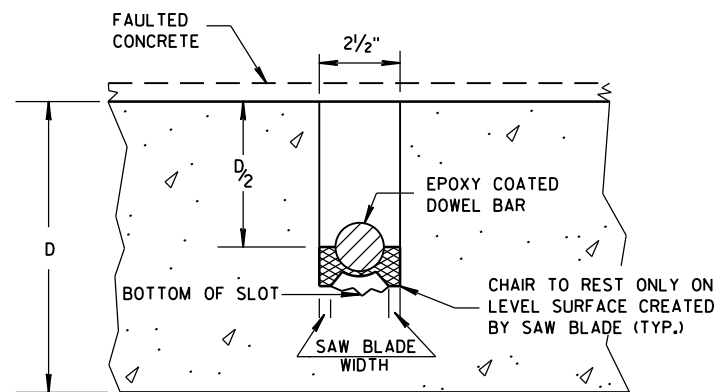


PLAN VIEW



SIDE VIEW
SECTION A-A

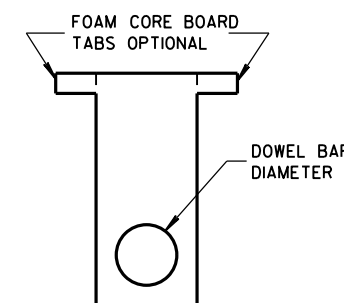
DOWEL BAR INSTALLATION DETAIL



SECTION B-B

PAVEMENT DEPTH	DOWEL BAR SIZE
9" OR LESS	1 1/4" X 18"
MORE THAN 9"	1 1/2" X 18"

DOWEL BAR SIZE TABLE

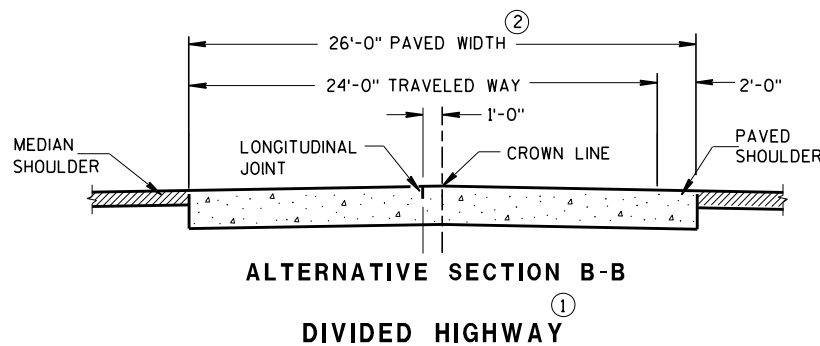
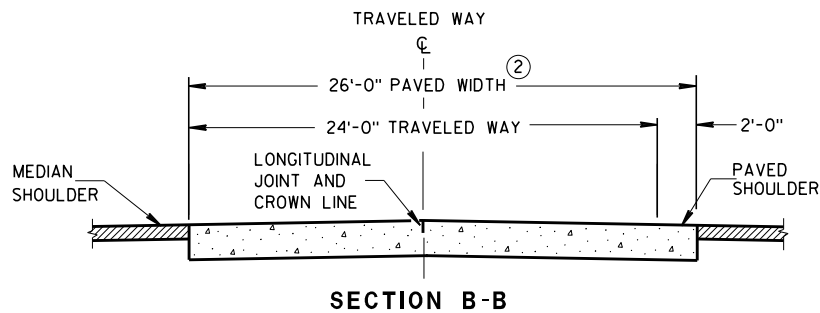
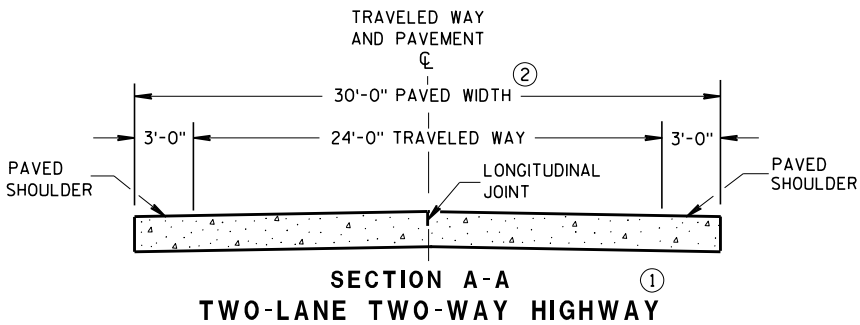


1/4" FOAM CORE BOARD

RETROFIT DOWEL BARS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2014 /S/ Laura Fenley 101
DATE PAVEMENT POLICY & DESIGN ENGINEER
FHWA



GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

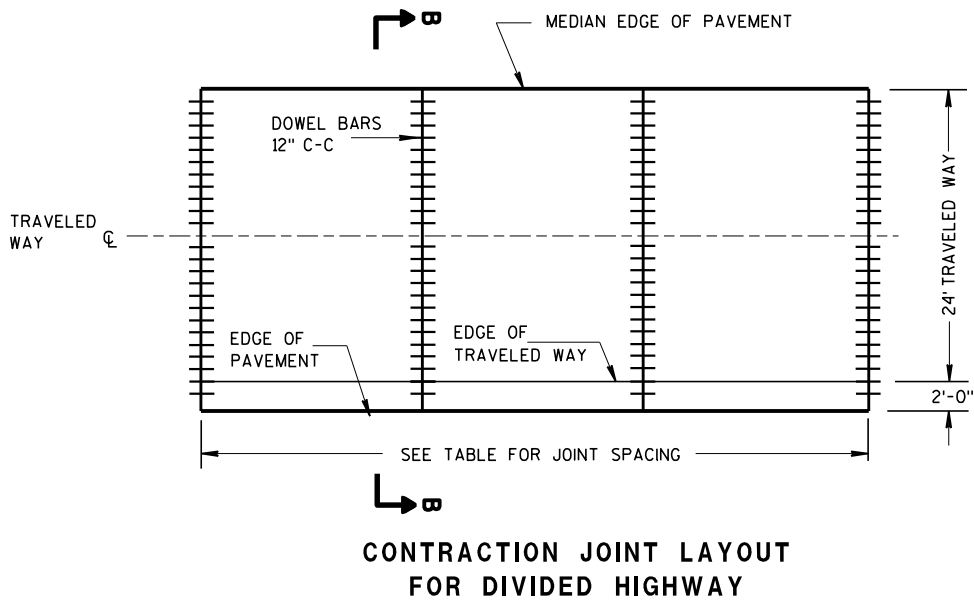
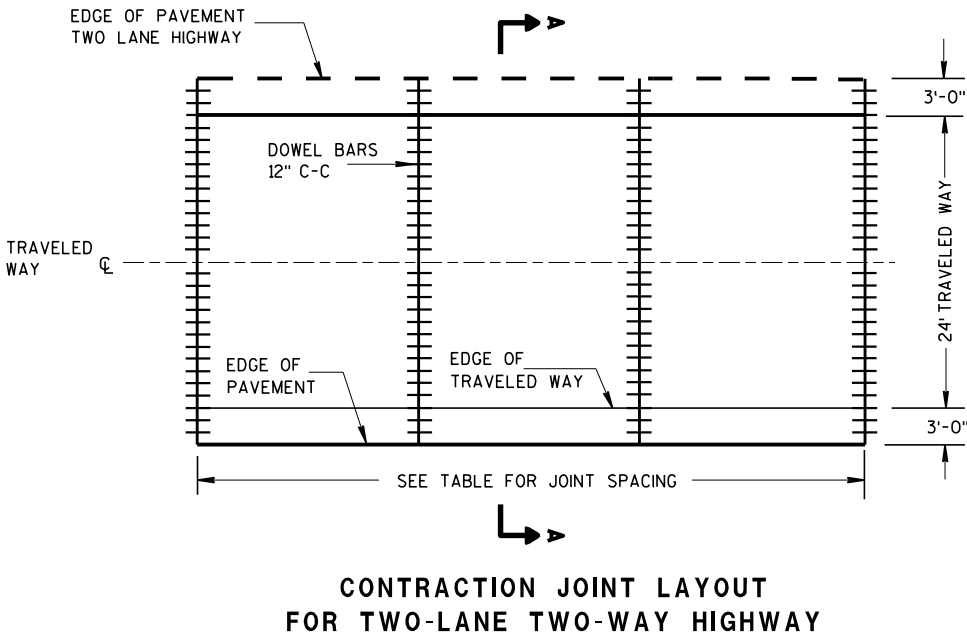
CONSTRUCTION JOINTS

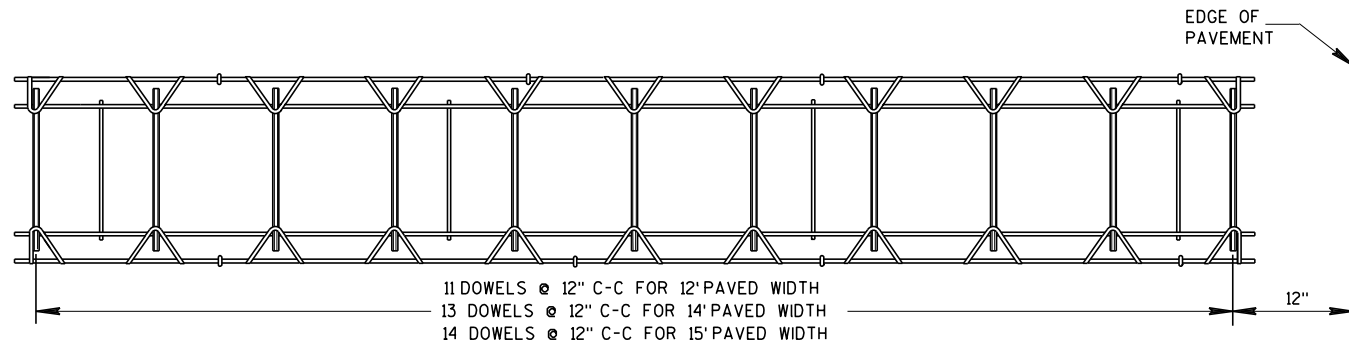
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

- ① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.
- ② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

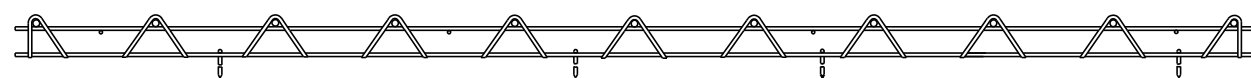
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'





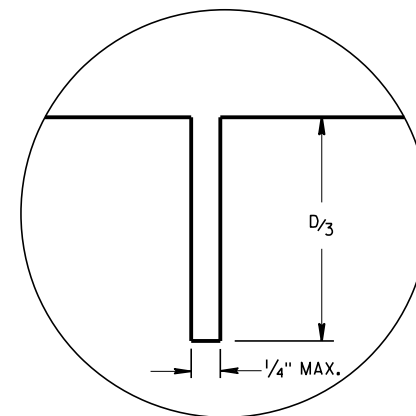
PLAN VIEW



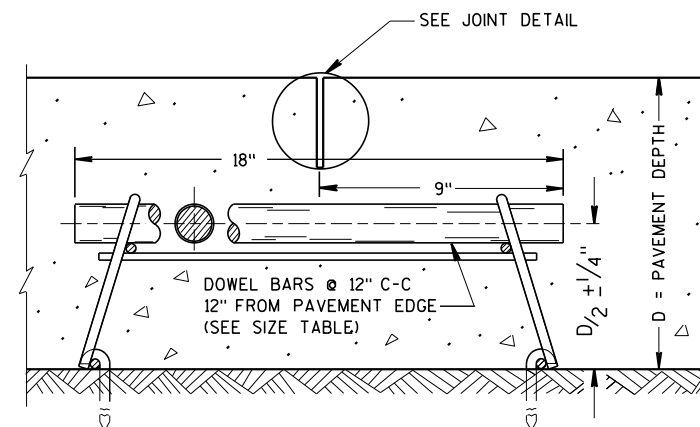
SIDE VIEW

(NORMAL TO CENTERLINE)

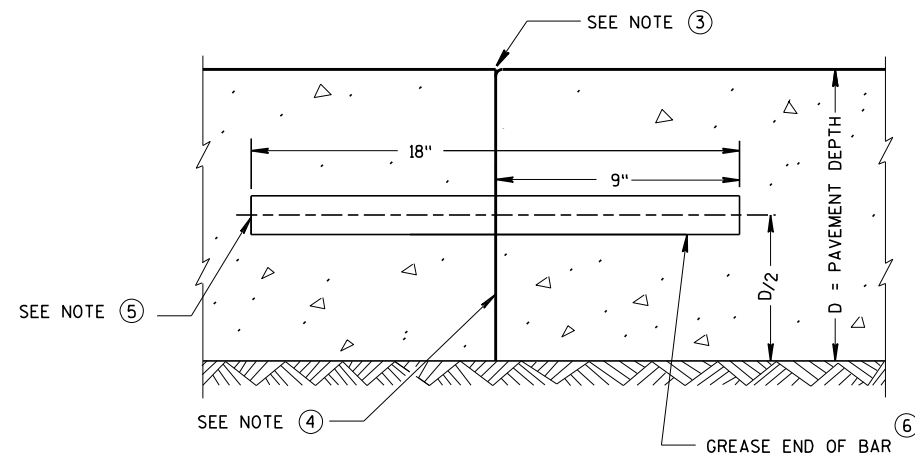
CONTRACTION JOINT DOWEL ASSEMBLY



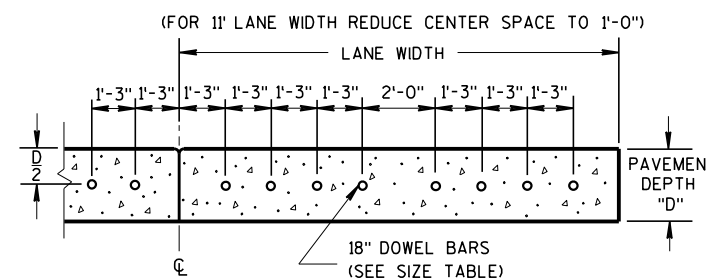
JOINT DETAIL



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT

GENERAL NOTES

1. OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
2. SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
3. FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
4. PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
5. INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.
6. APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
7. ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2018

DATE

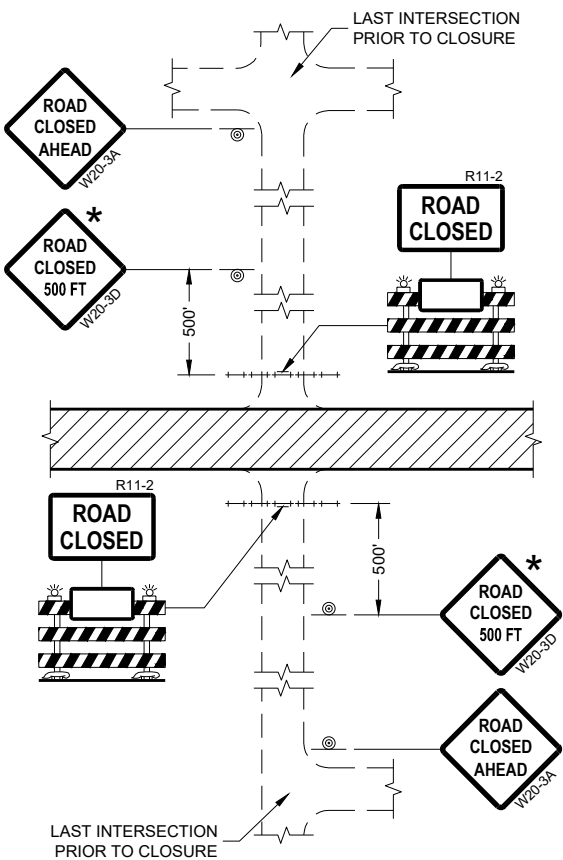
FHWA

/S/ Peter Kemp, P.E.

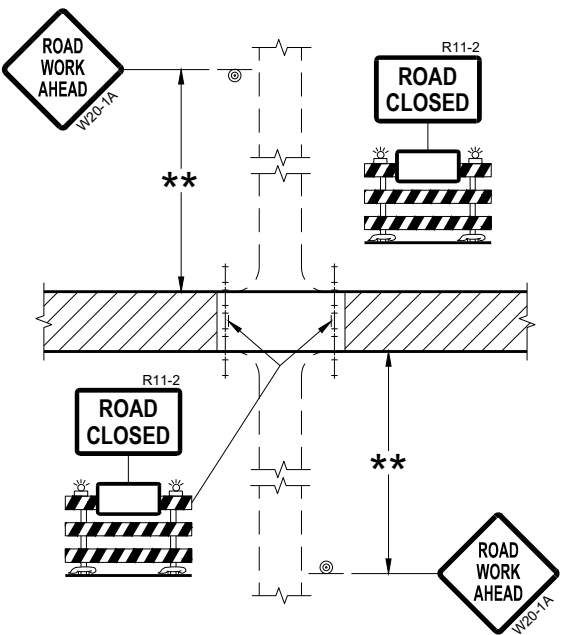
PAVEMENT SUPERVISOR

103

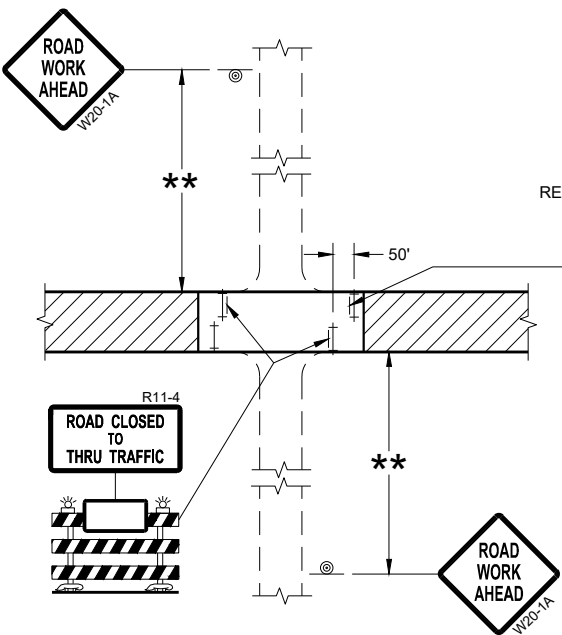
SDD 15C03 Barricades and Signs for Sideroad Closures



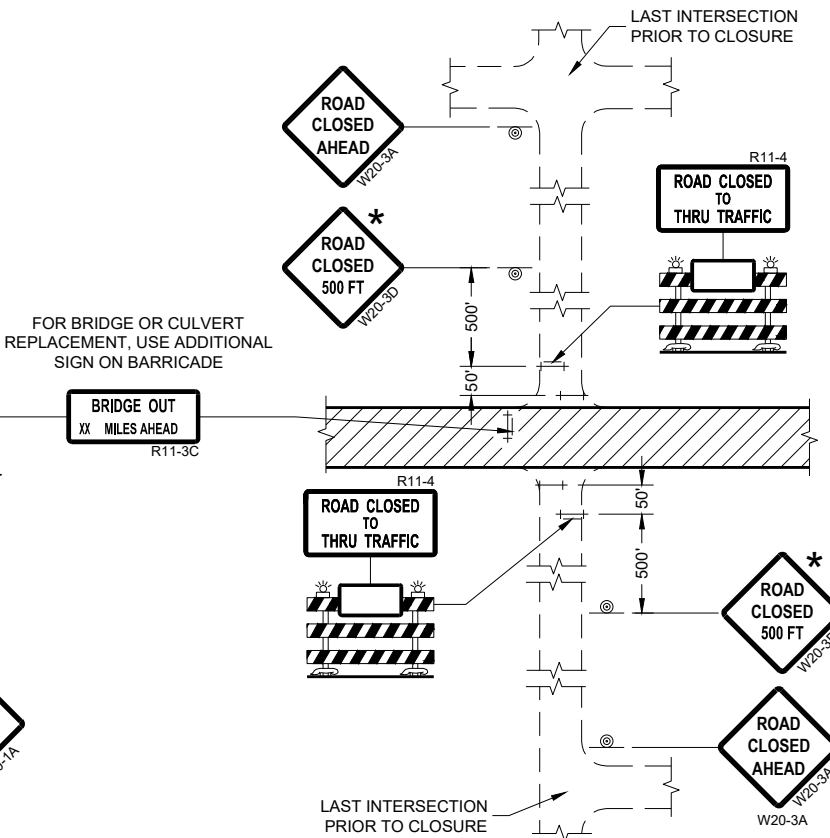
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊢ TYPE III BARRICADE
- ⊢ TYPE III BARRICADE WITH ATTACHED SIGN
- ⚡ TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

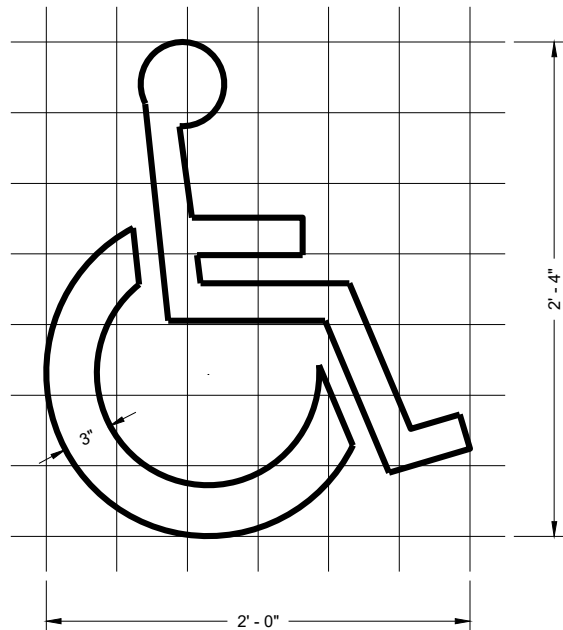
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke 104
DATE WORK ZONE ENGINEER
FHWA

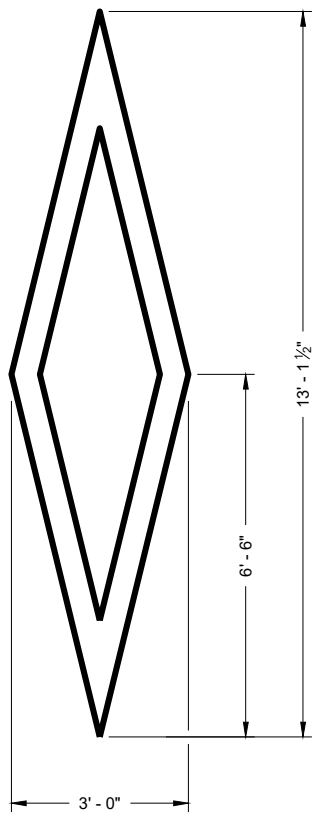


GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



HANDICAP SYMBOL



PREFERENTIAL
LANE SYMBOL

PAVEMENT MARKING SYMBOLS

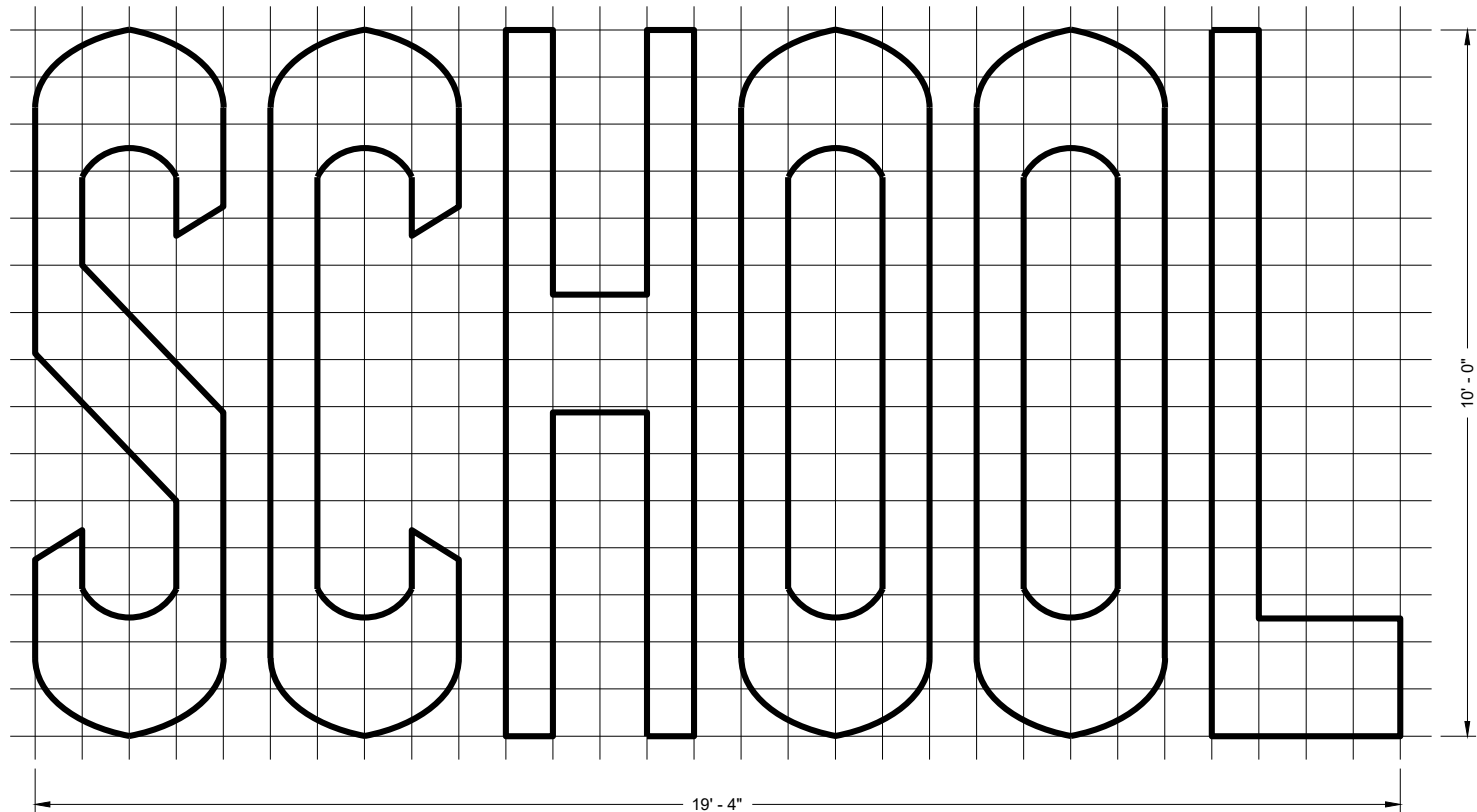
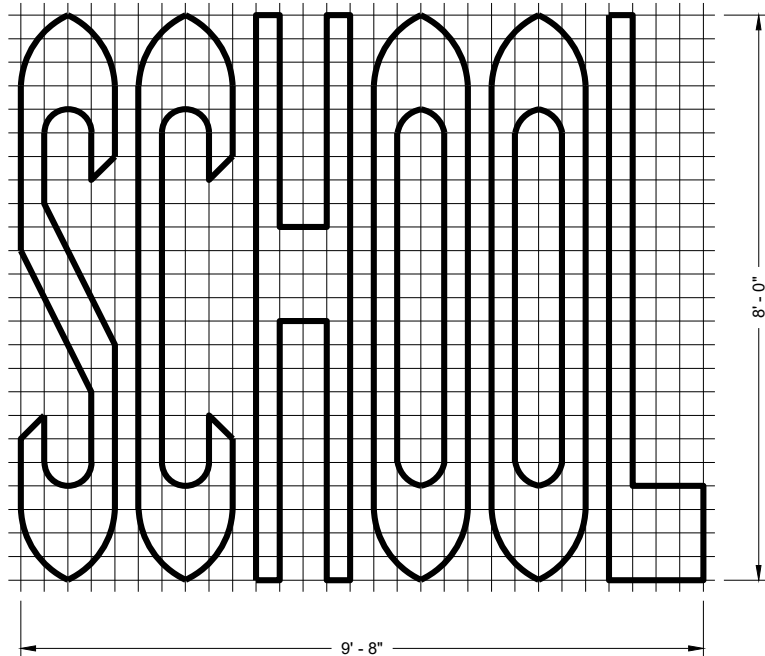
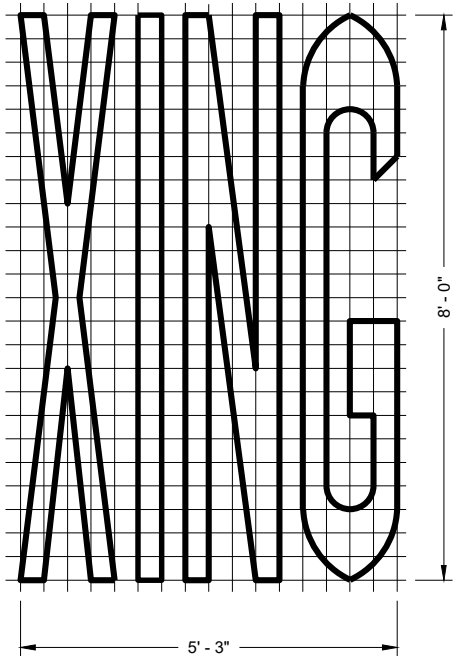
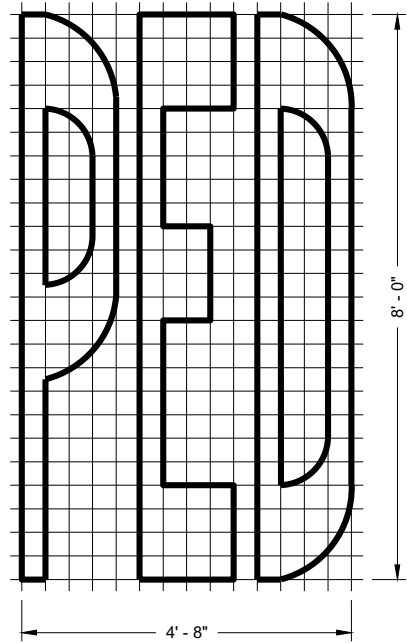
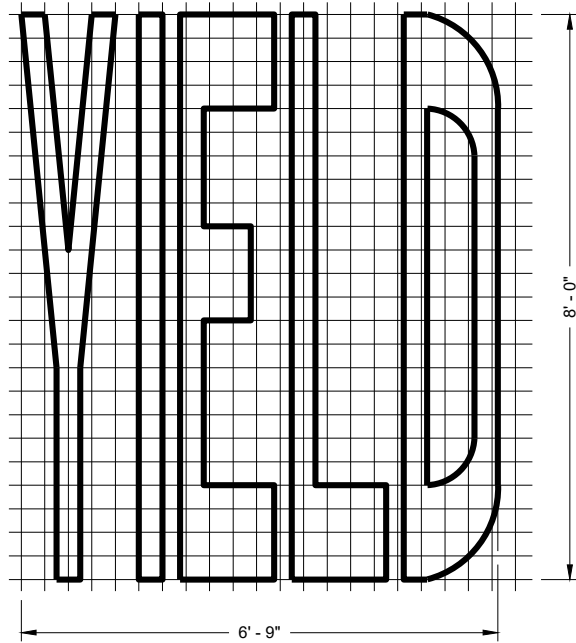
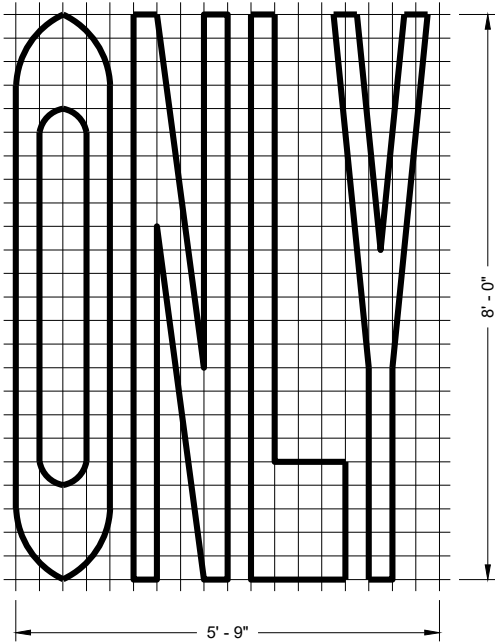
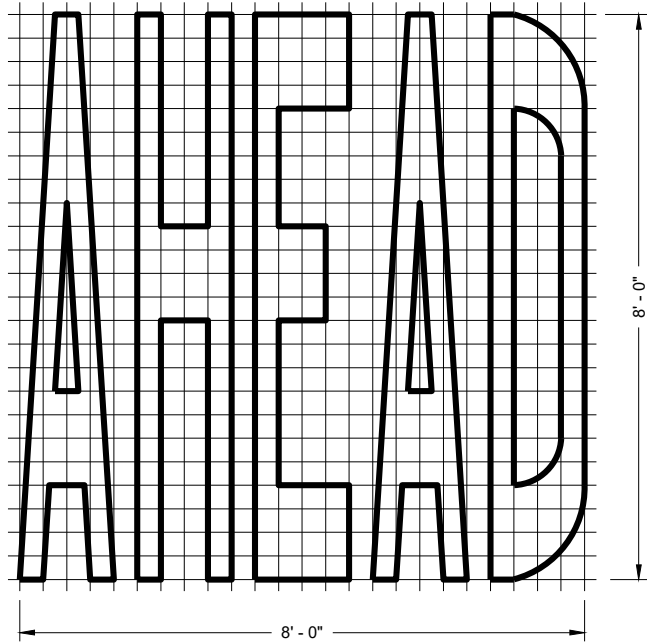
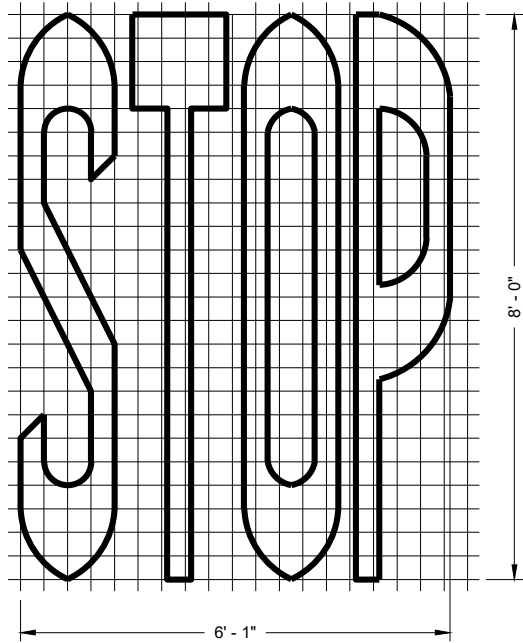
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED	/S/ Matthew Rauch	105
November 2019	DATE	STATE SIGNING AND MARKING ENGINEER

FHWA



SDD 15C07-b Pavement Marking Words



SINGLE LANE

TWO - LANE

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

106

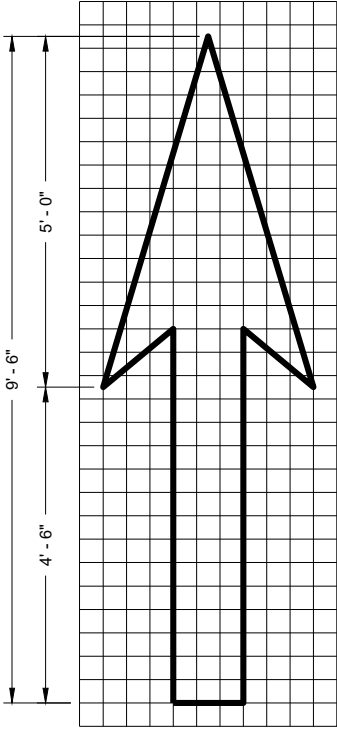
FHWA

6

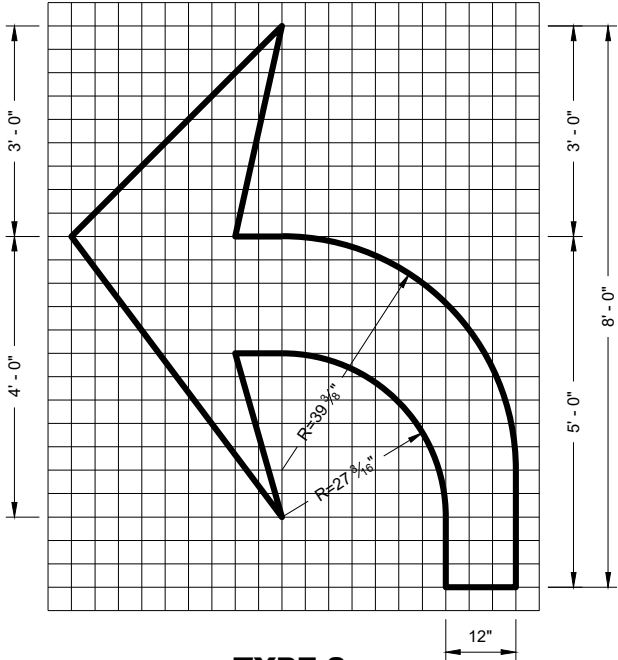
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SDD 15C07 - 15b

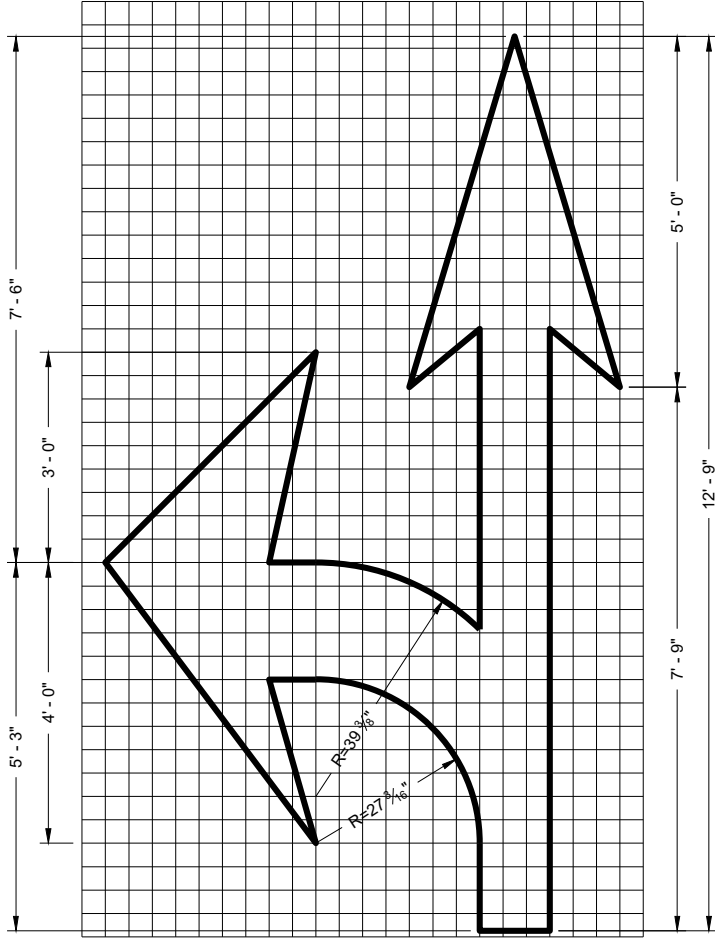
SDD 15C07 - 15b



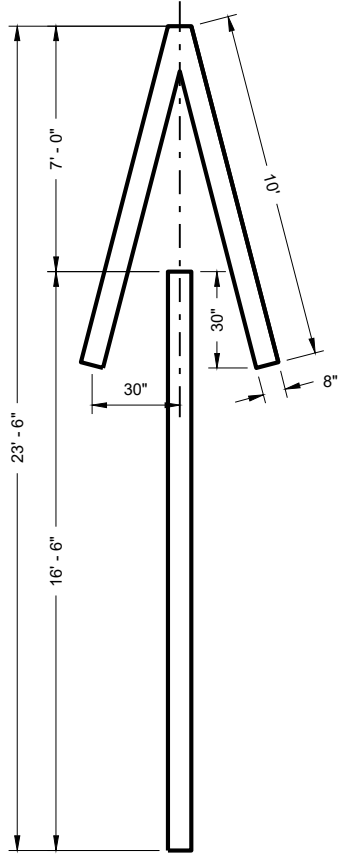
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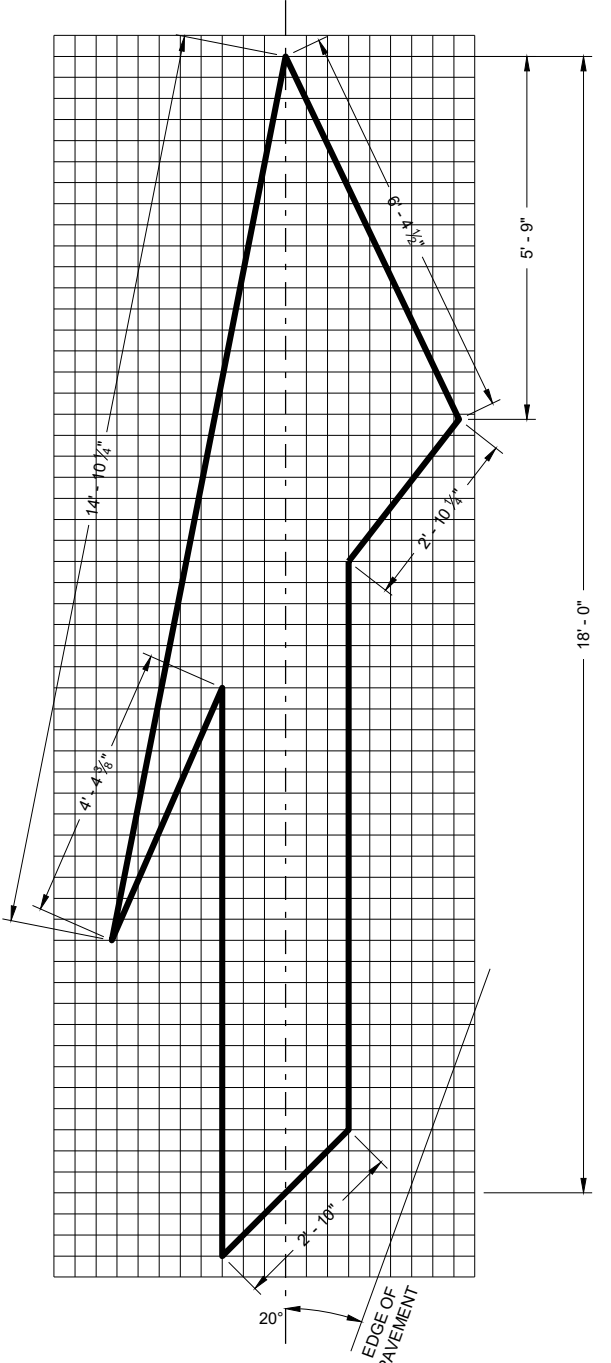
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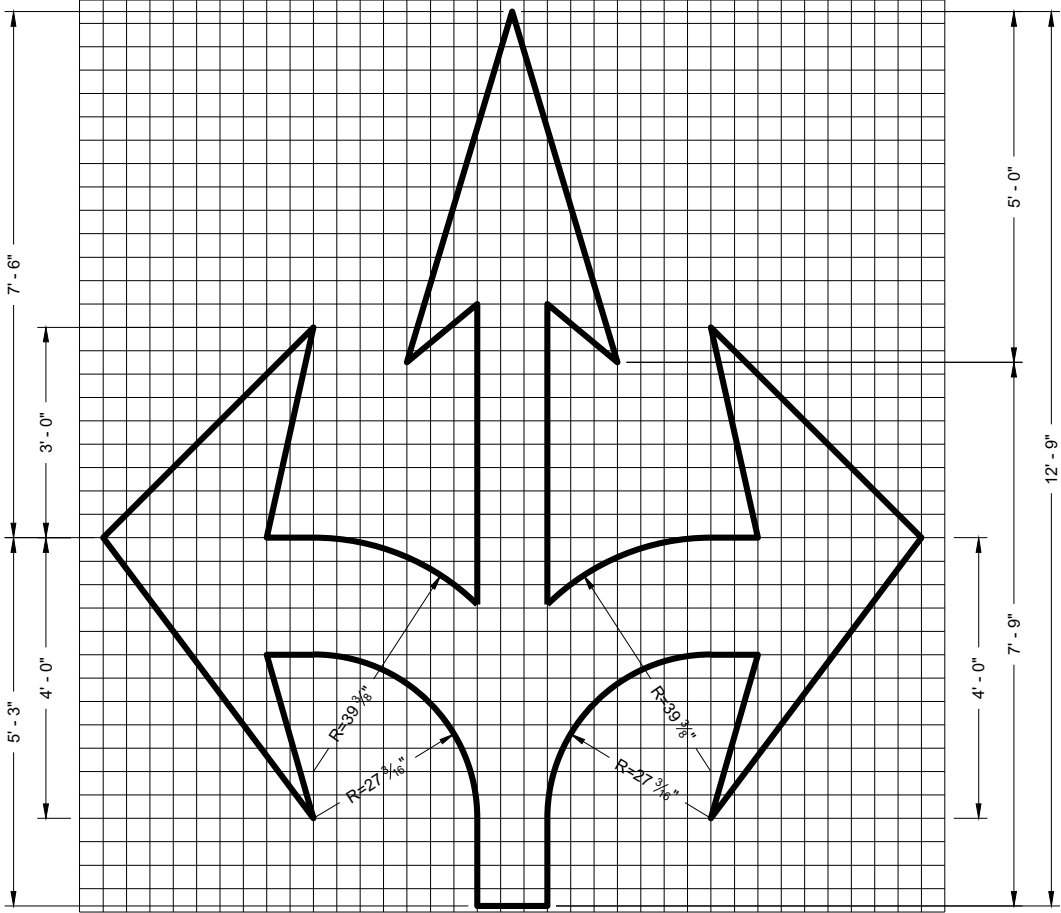
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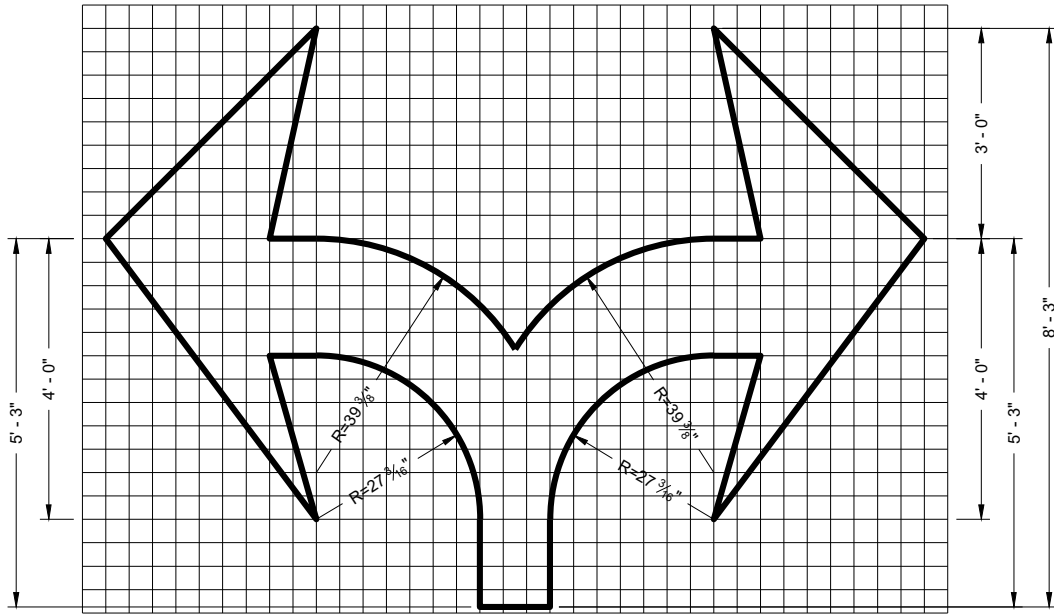
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

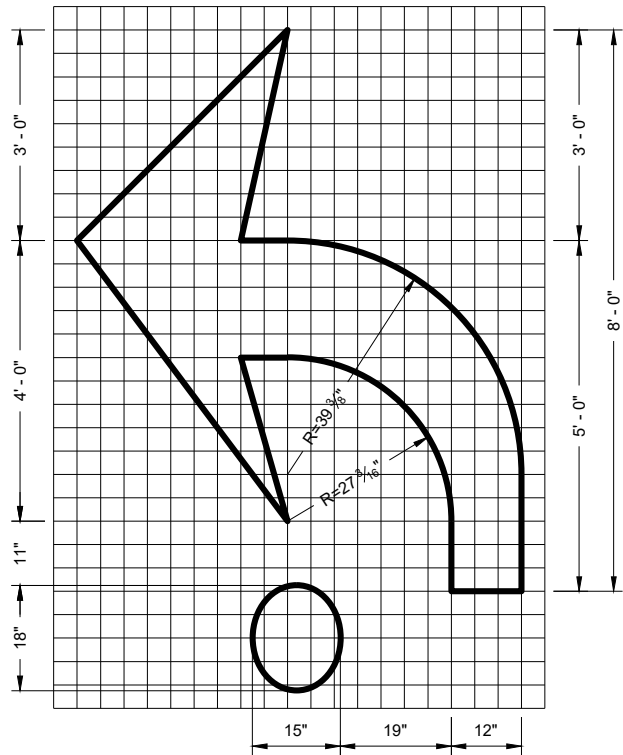
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

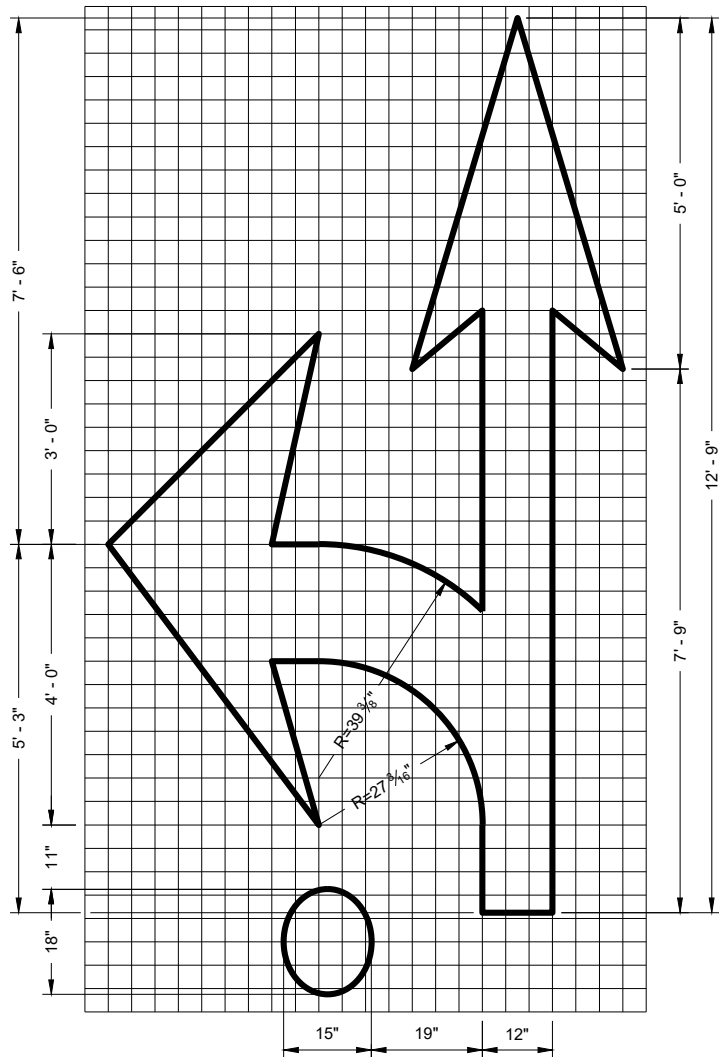
APPROVED
November 2019
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

GENERAL NOTES

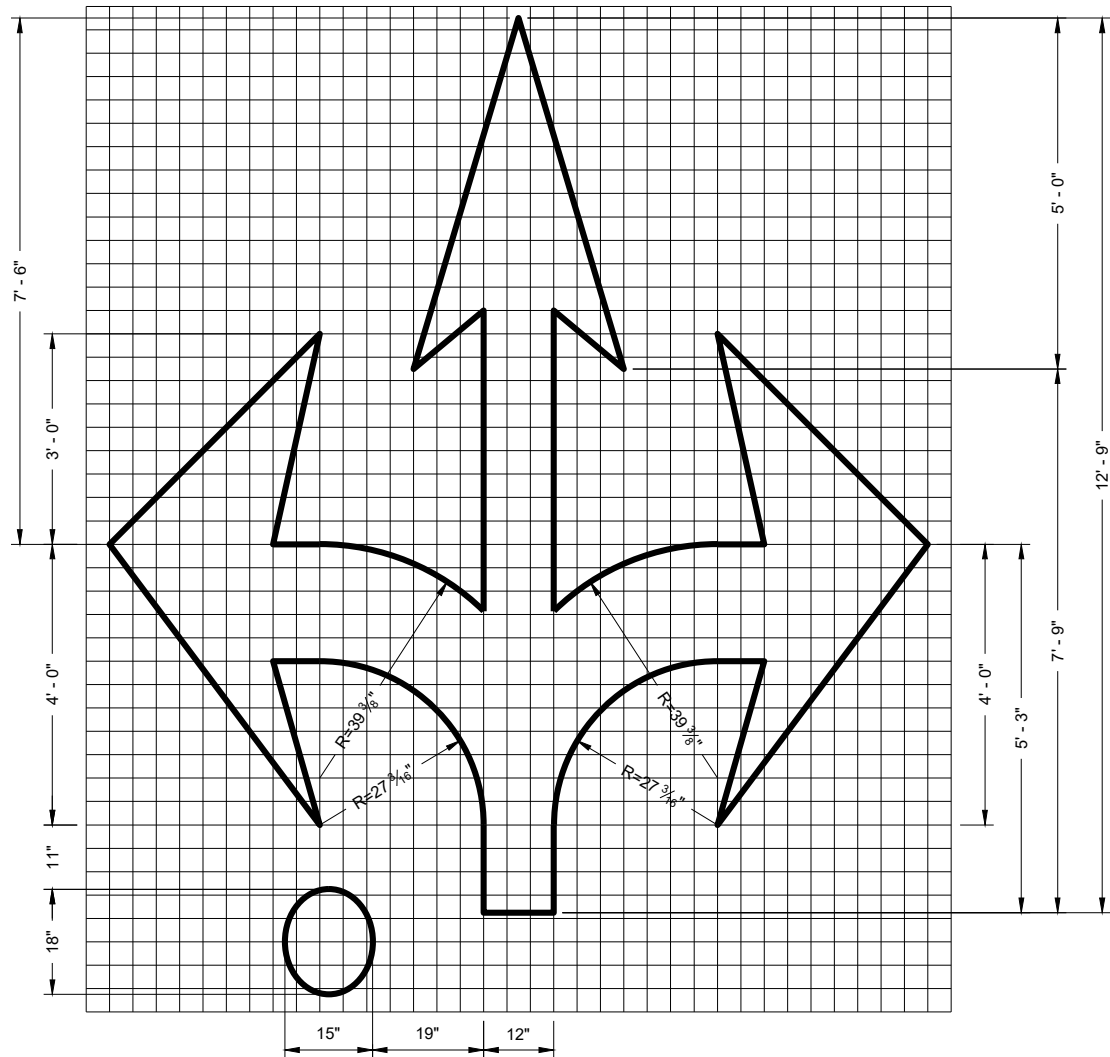
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



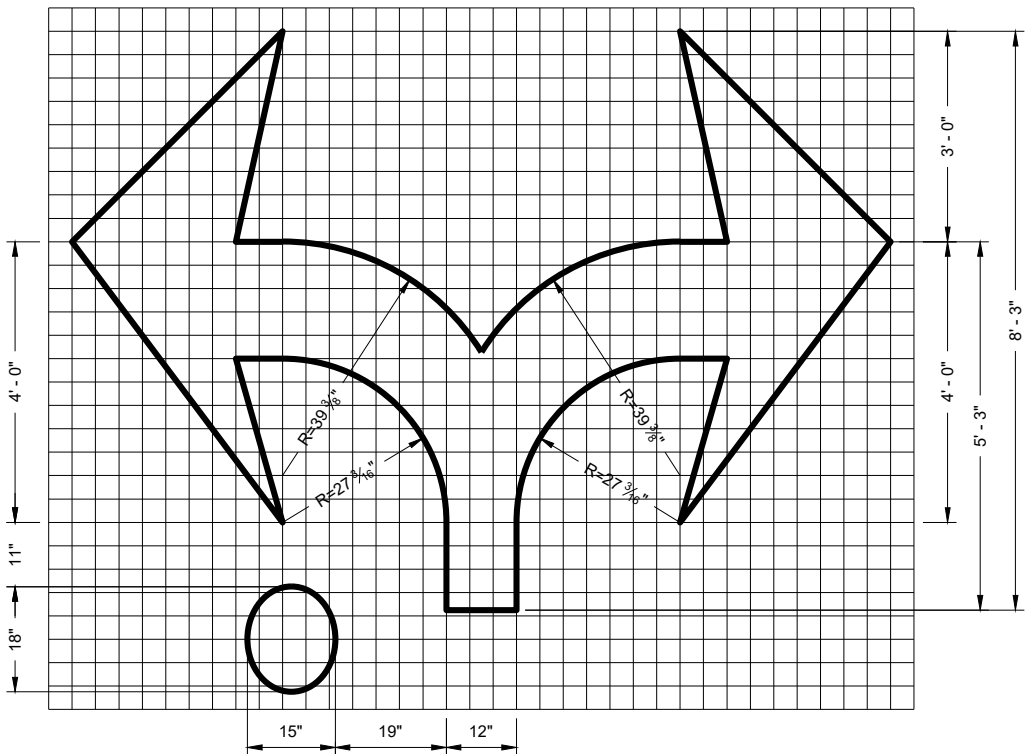
TYPE 2R



TYPE 3R



TYPE 6R



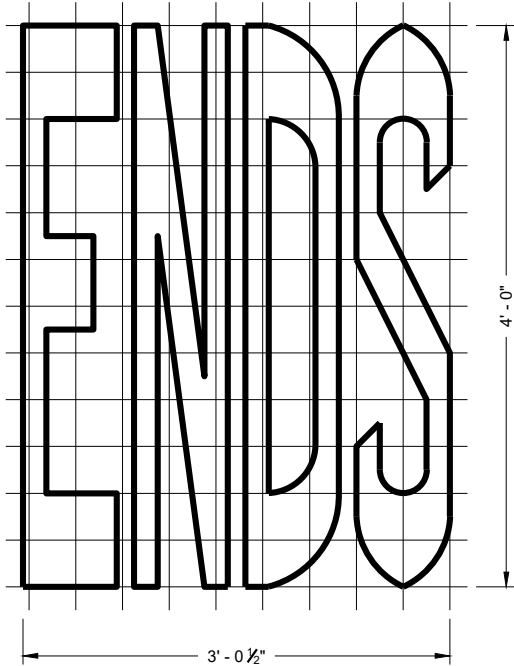
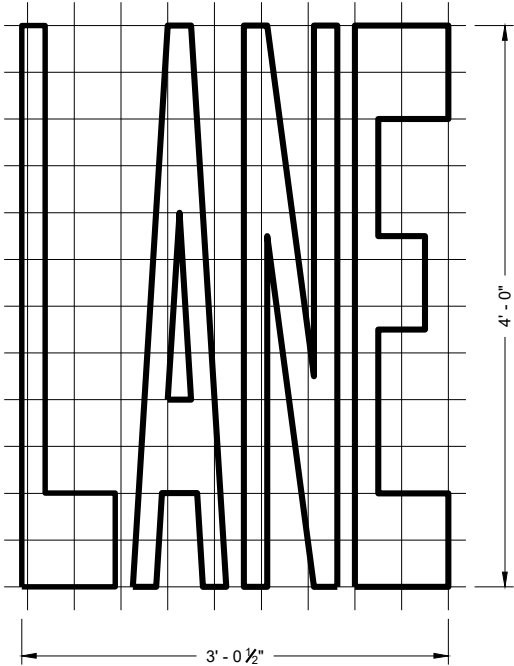
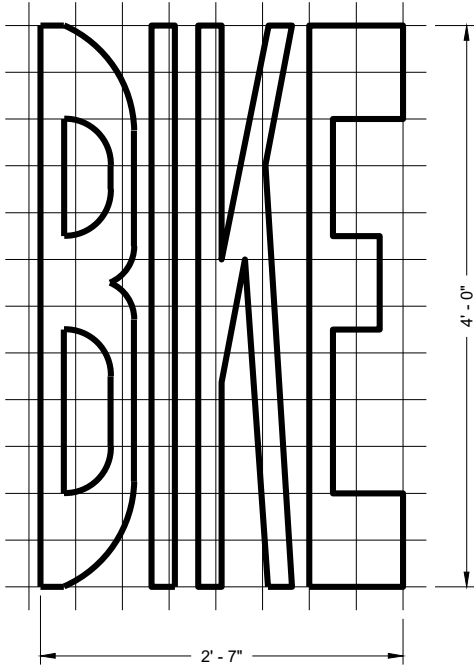
TYPE 7R

ROUNDAABOUT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER

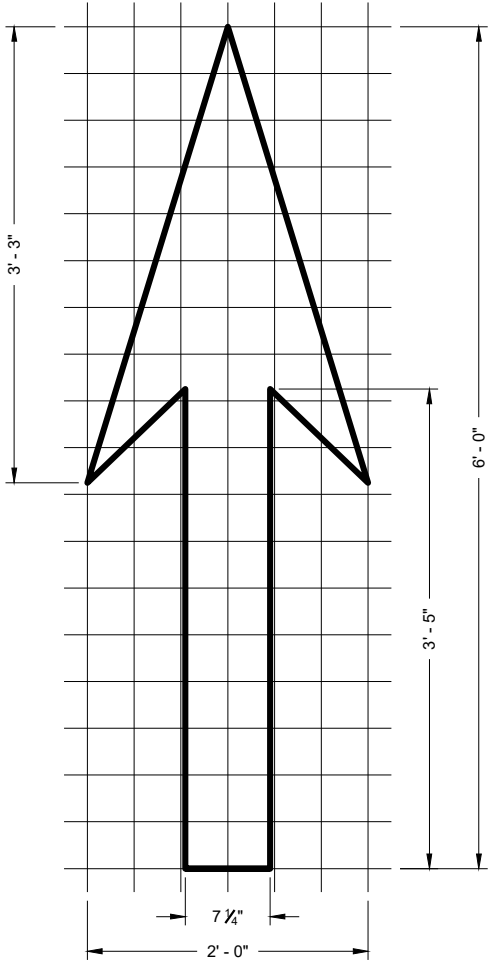
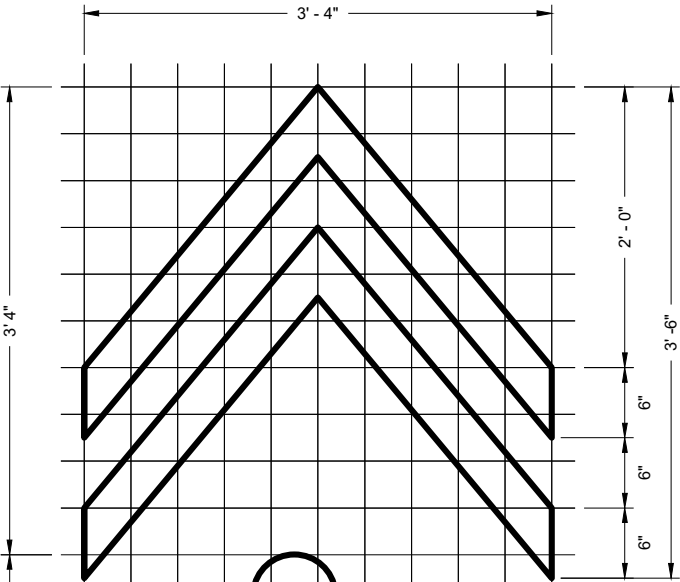
FHWA



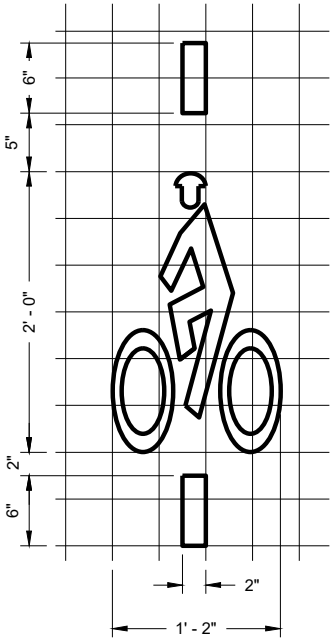
BIKE LANE WORDS

GENERAL NOTES

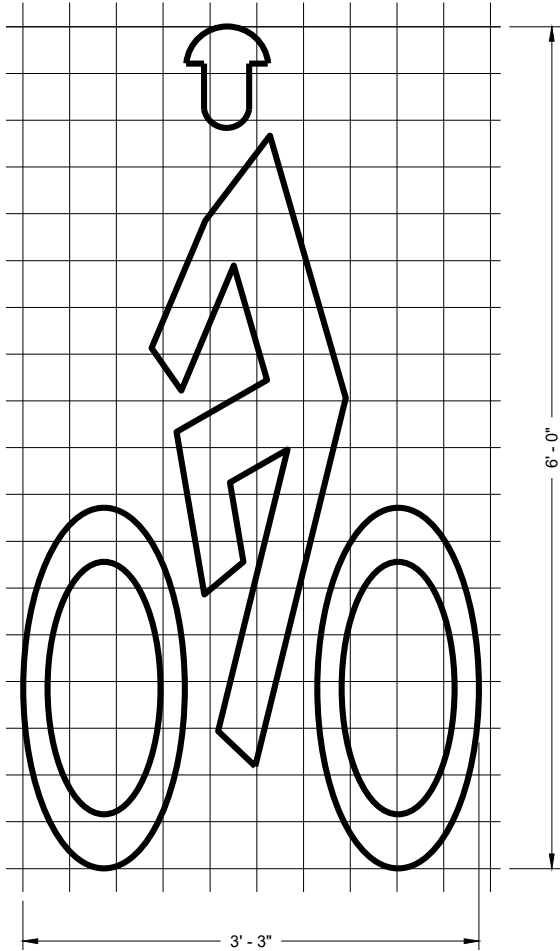
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



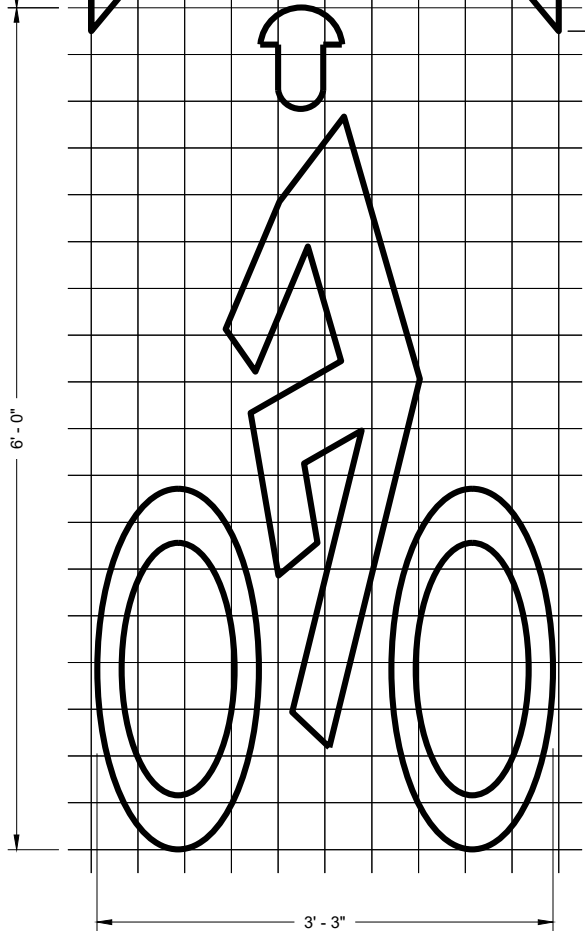
BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL



BIKE LANE SYMBOL FOR SHARED LANE

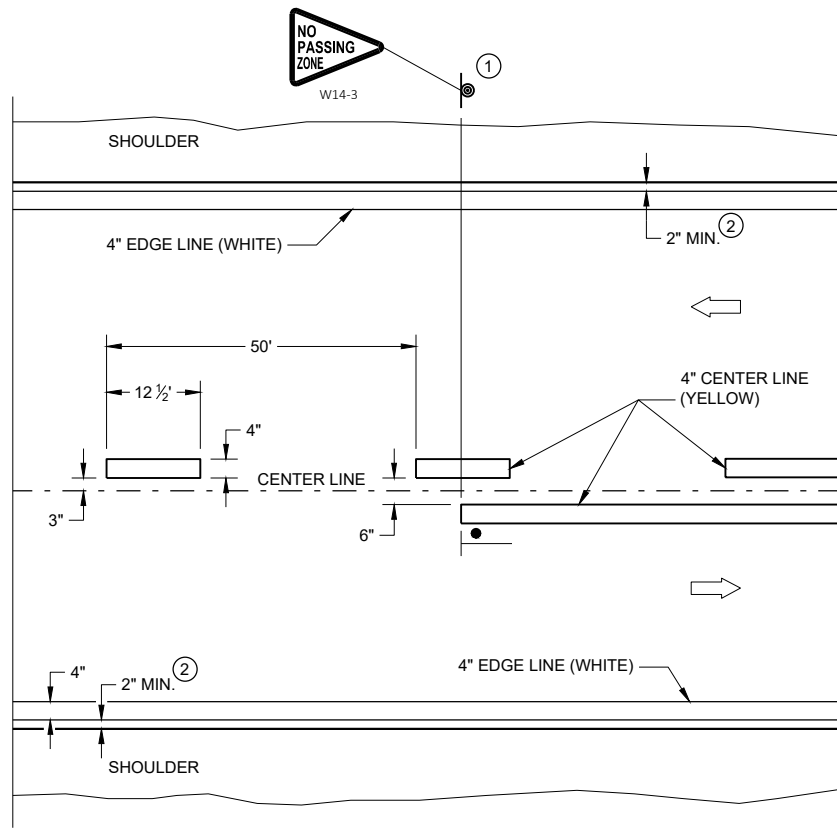
PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

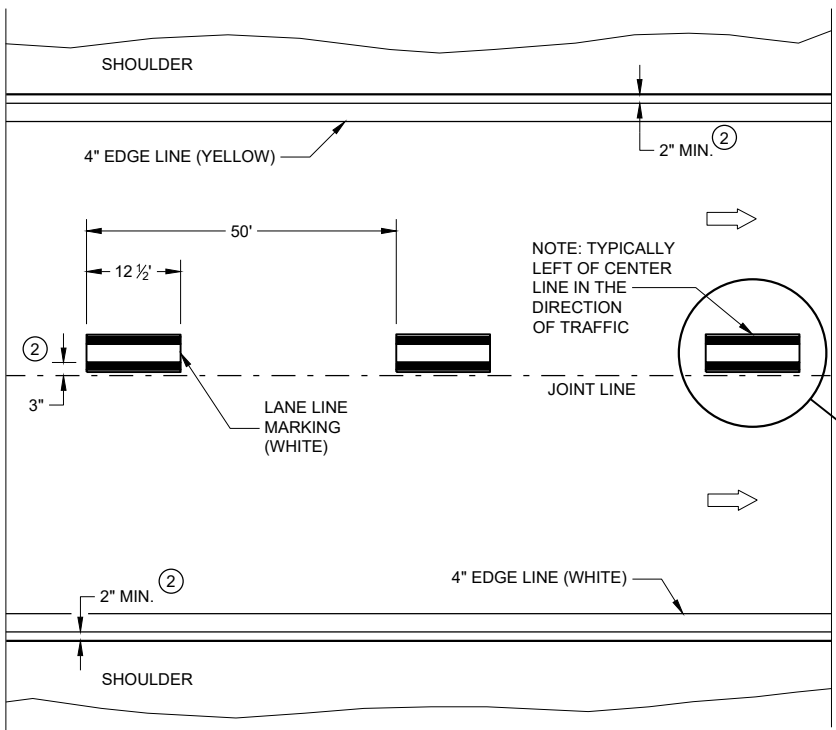
APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER

FHWA

SDD 15C08-a Longitudinal Marking (Mainline)

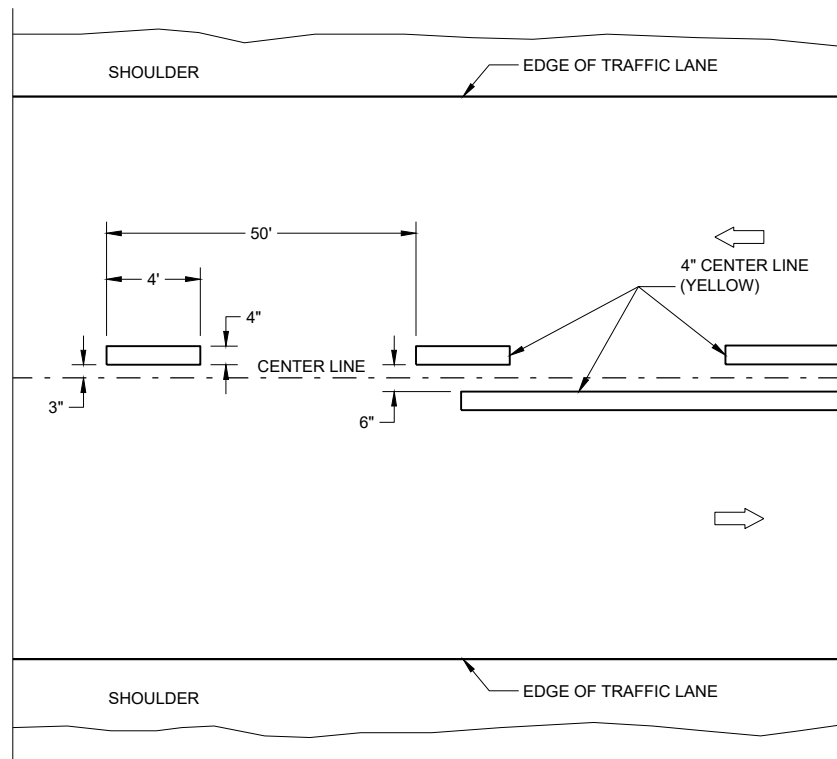


TWO WAY TRAFFIC

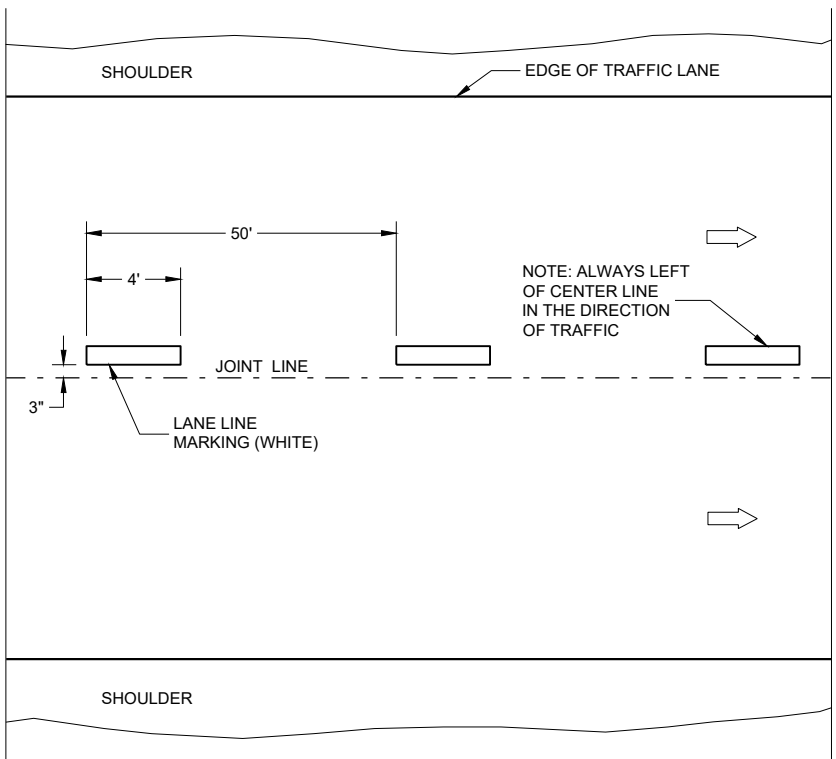


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

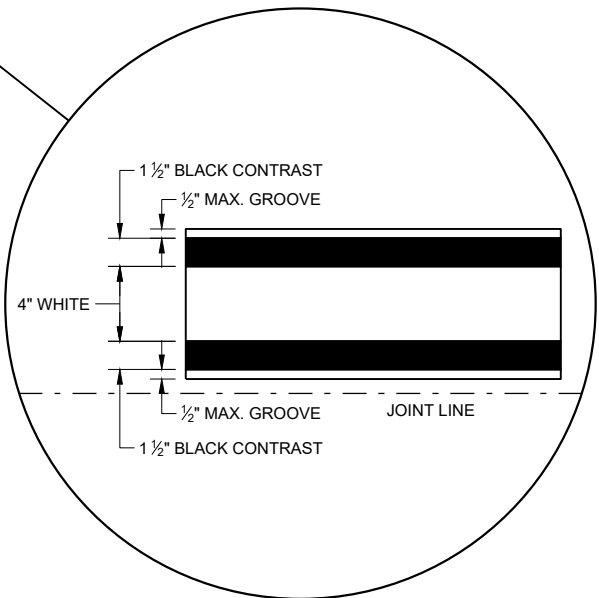
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- 1 LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- 2 MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND MARKING
ENGINEER

110

FHWA

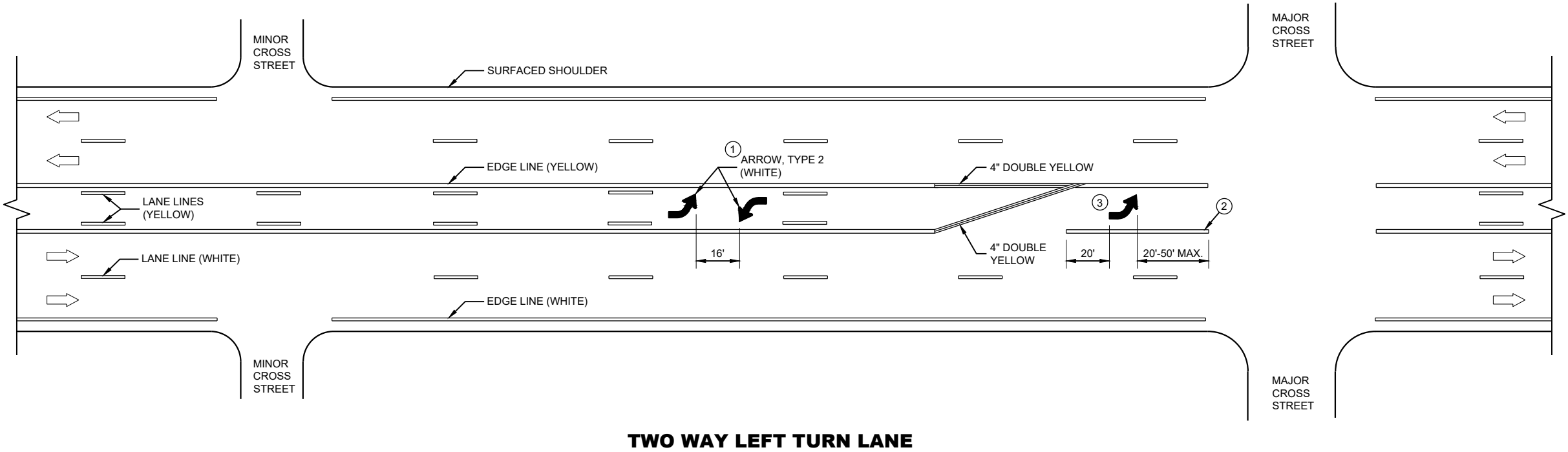


SDD 15C08-b Pavement Marking (Turn Lanes)

GENERAL NOTES

- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 8" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC

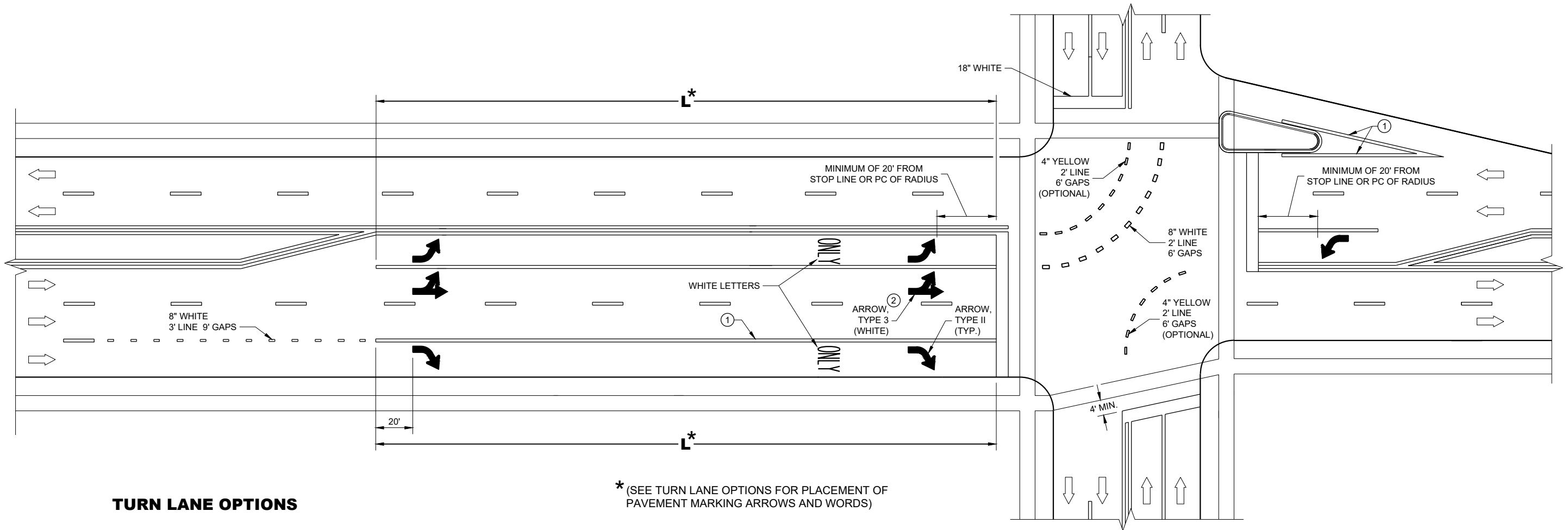


PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 111

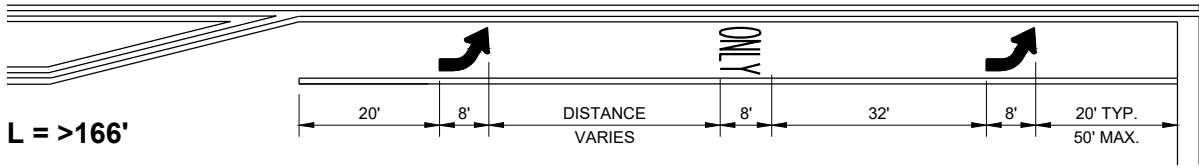
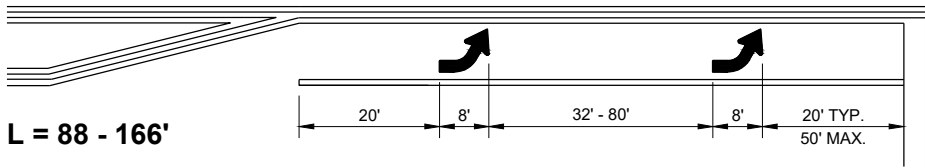
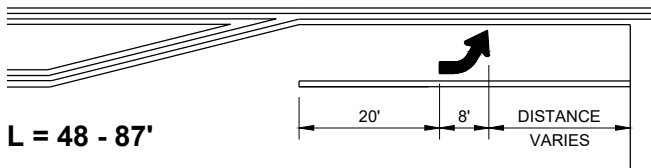
SDD 15C08 - 20b

SDD 15C08 - 20b



TURN LANE OPTIONS

LENGTH OF TURN BAY (L) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



*(SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

GENERAL NOTES

- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

→ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

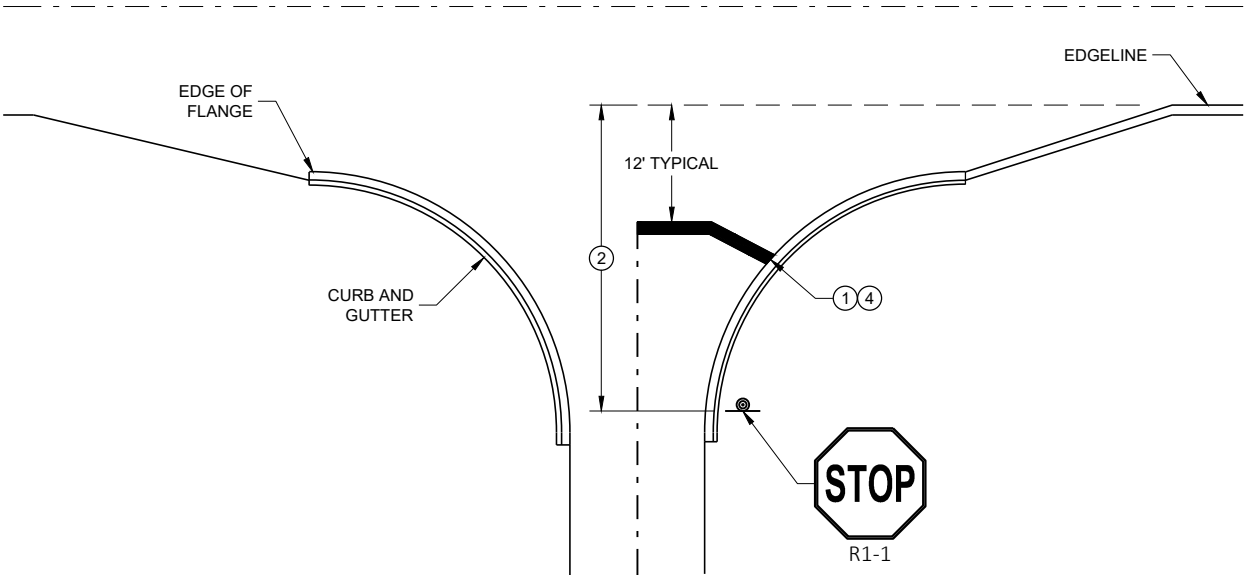
PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

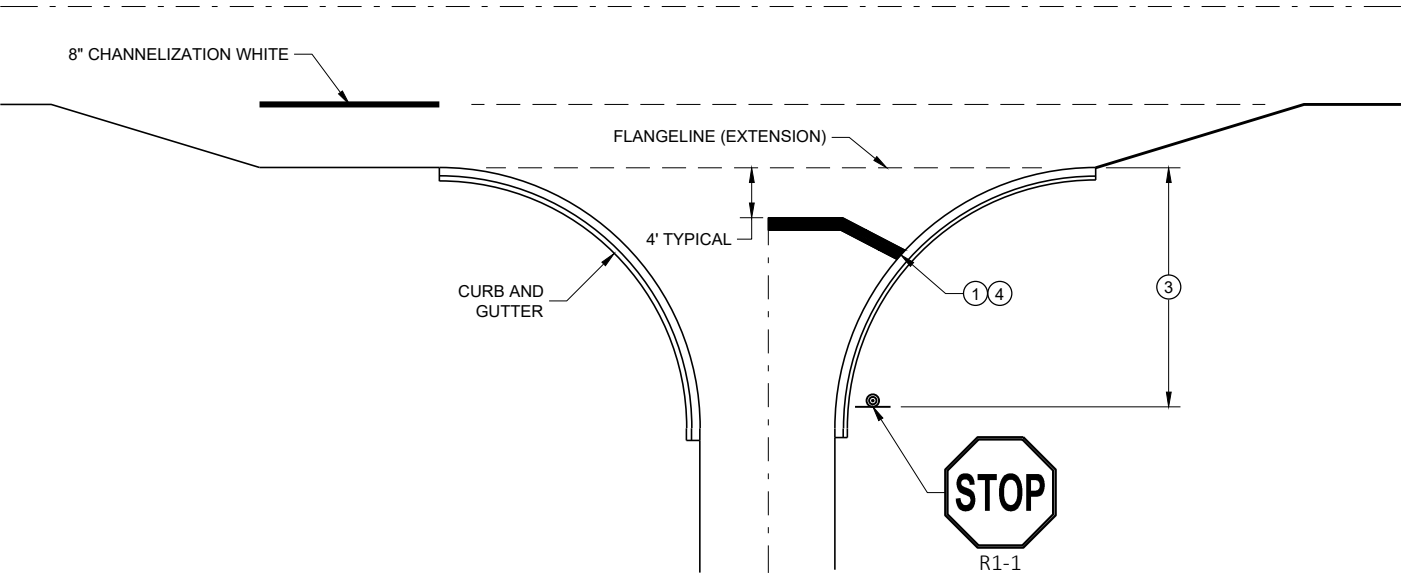
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

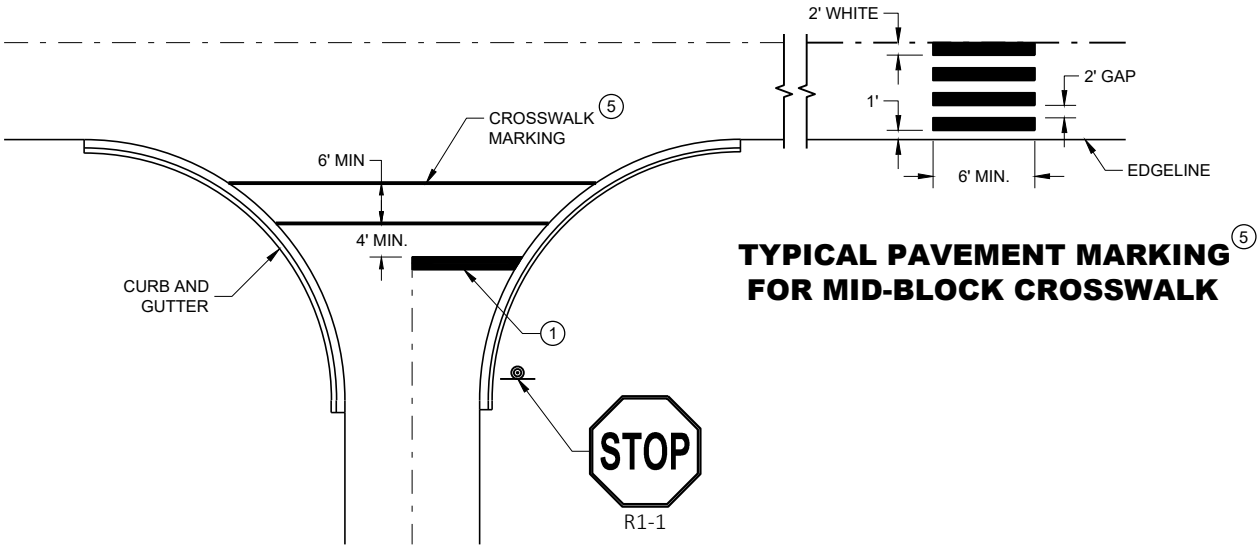
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
- ④ MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- ⑤ LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

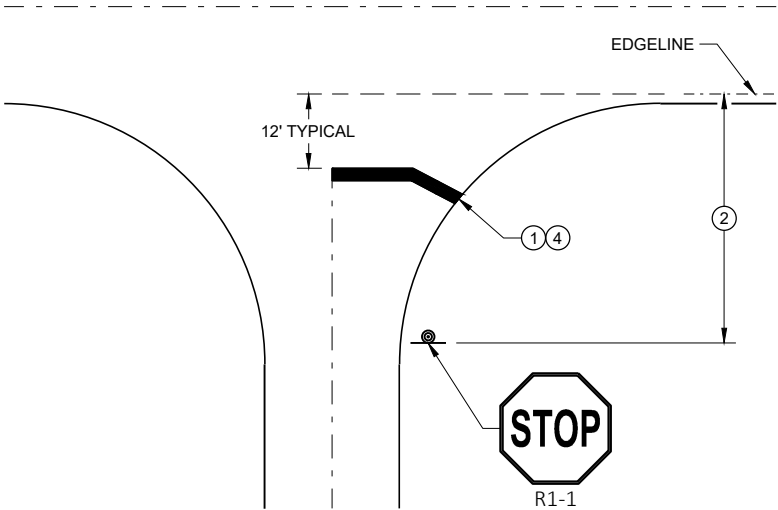


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

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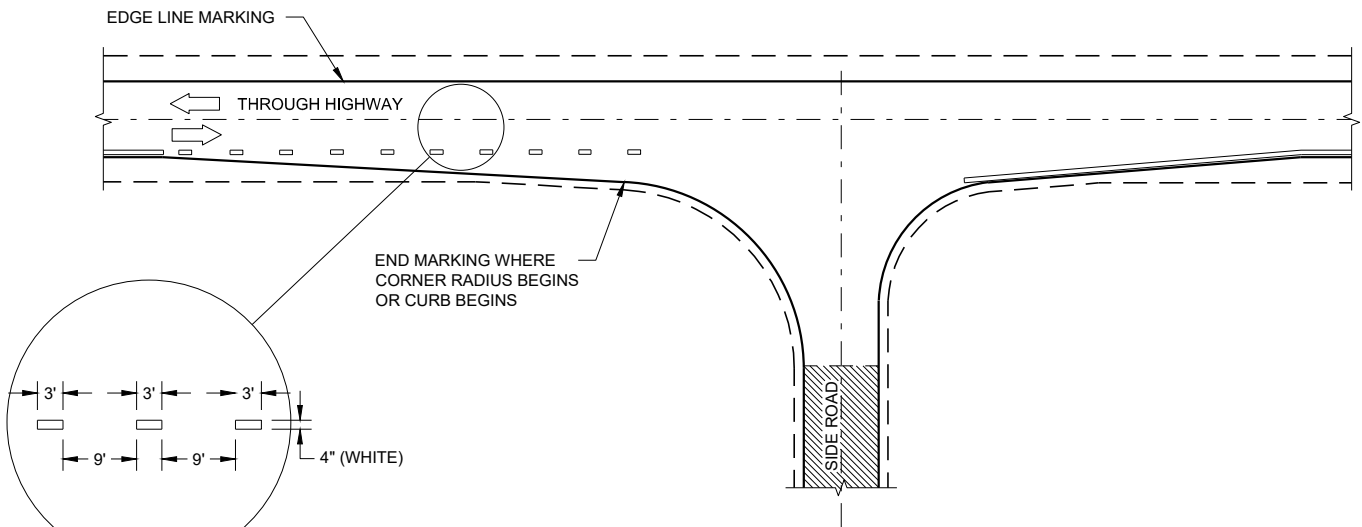
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

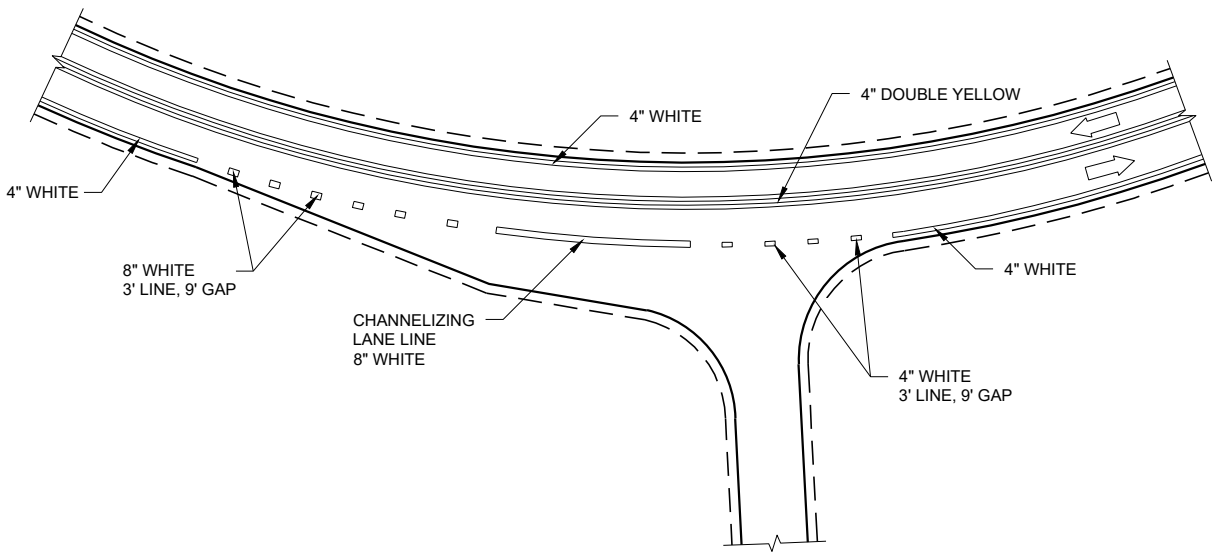
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

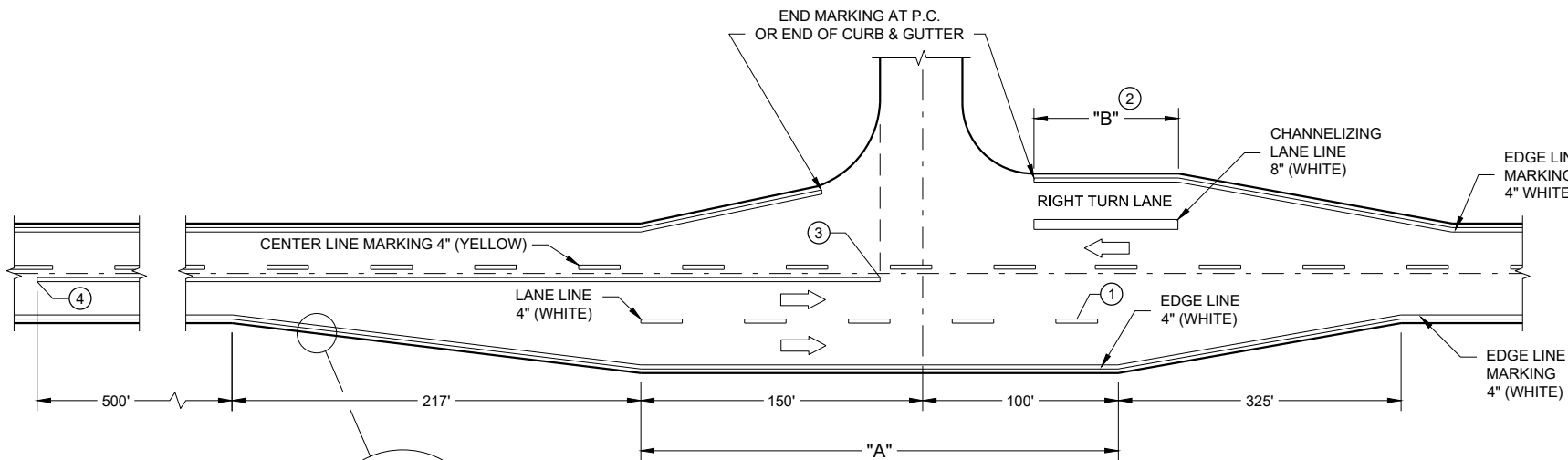
➡ DIRECTION OF TRAVEL



MINOR INTERSECTION



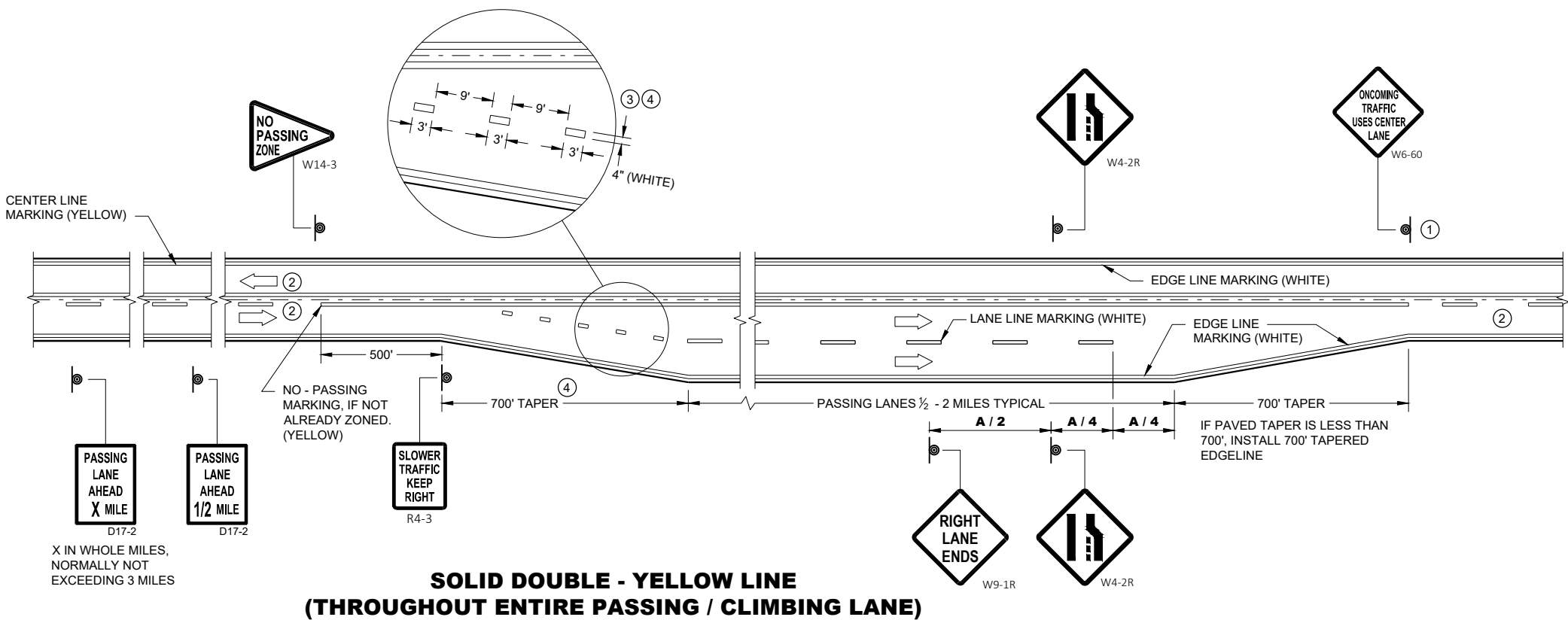
INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING
(INTERSECTIONS)

SDD 15C35-b Pavement Marking and Signing, Climbing Lane and Passing Lane



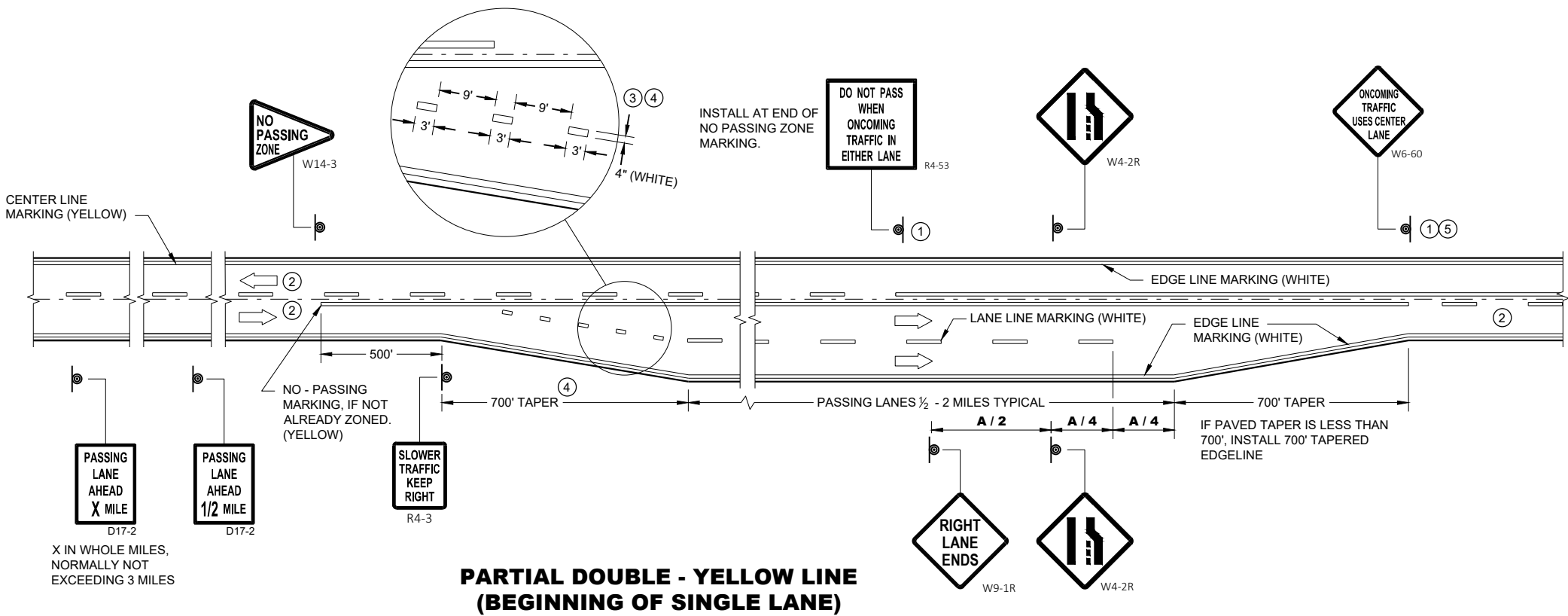
GENERAL NOTES

- 1 SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- 2 THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- 3 THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4 WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
- 5 REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

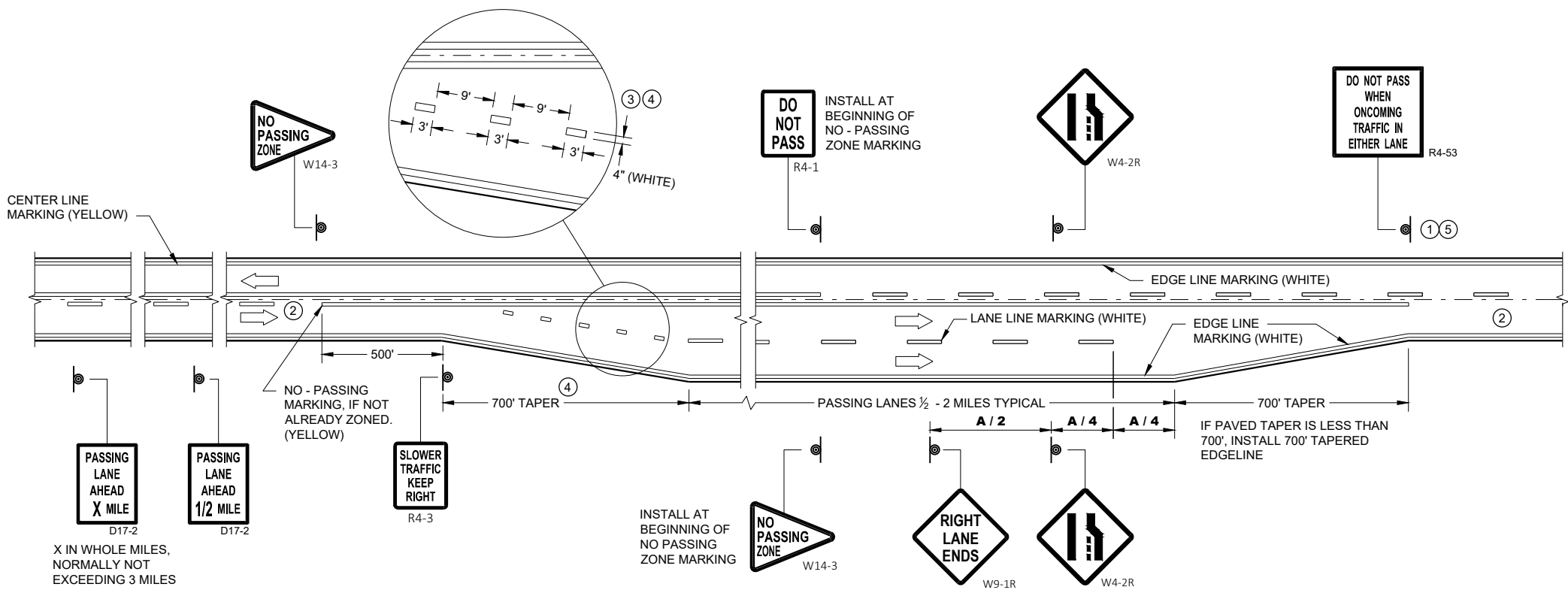
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



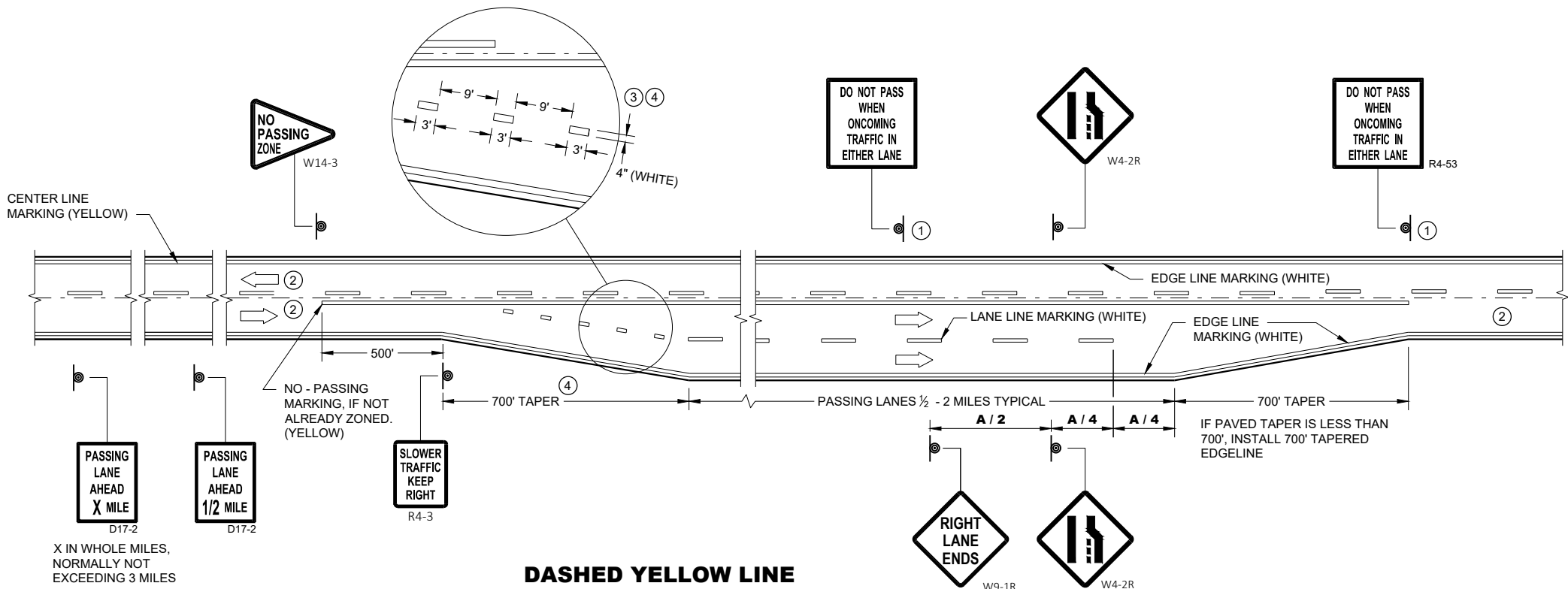
**PAVEMENT MARKING & SIGNING
(CLIMBING LANE &
PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 115

SDD 15C35-c Pavement Marking and Signing, Climbing Lane and Passing Lane



**SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)**



**DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)**

GENERAL NOTES

- 1 SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- 2 THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- 3 THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4 WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
- 5 REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA 116



SDD 15D20-a Traffic Control, Single Lane Closure, Divided Non-Freeway/Expressway

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

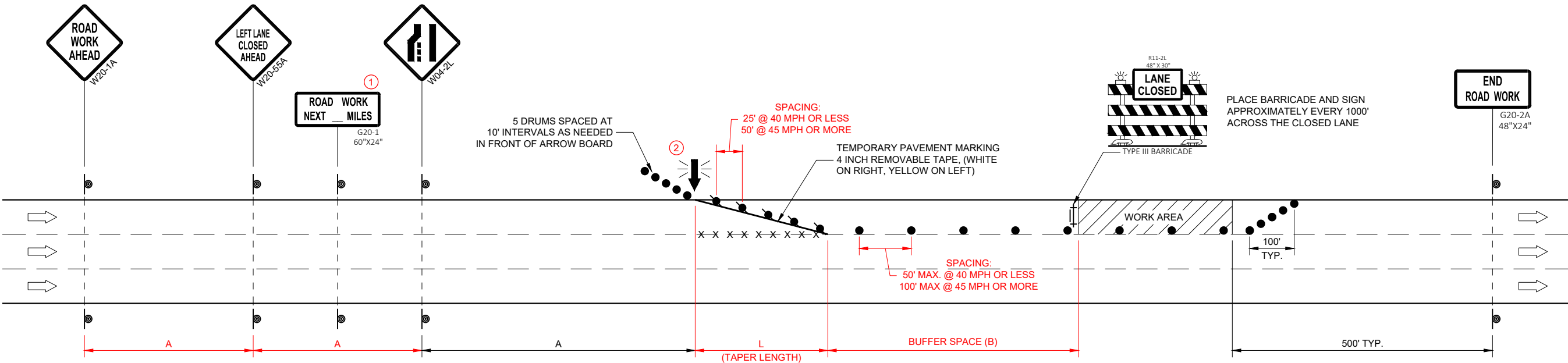
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE
/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
117
FHWA



SDD 15D20-b Traffic Control, Single Right Lane Closure, Undivided Non-Freeway/Expressway

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

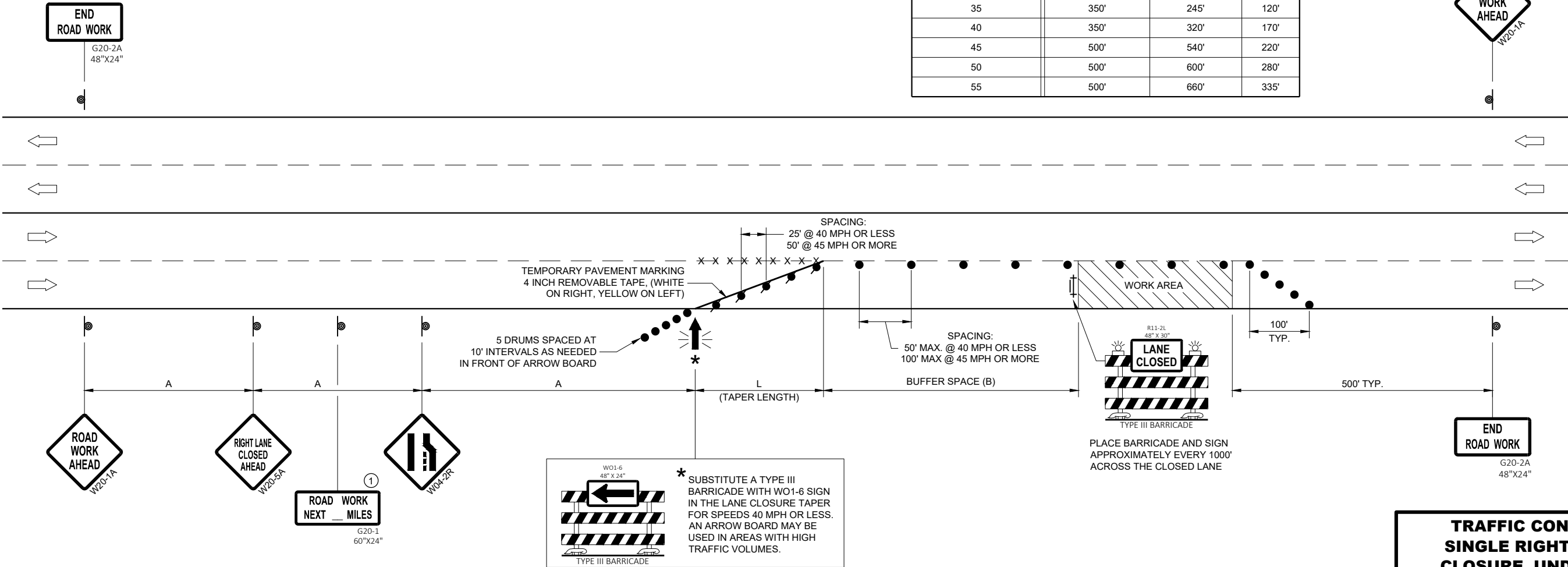
① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

6

6

SDD 15D20 - 05b

SDD 15D20 - 05b



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

118

FHWA



SDD 15D20-c Traffic Control, Single Left Lane Closure, Undivided Non-Freeway/Expressway

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

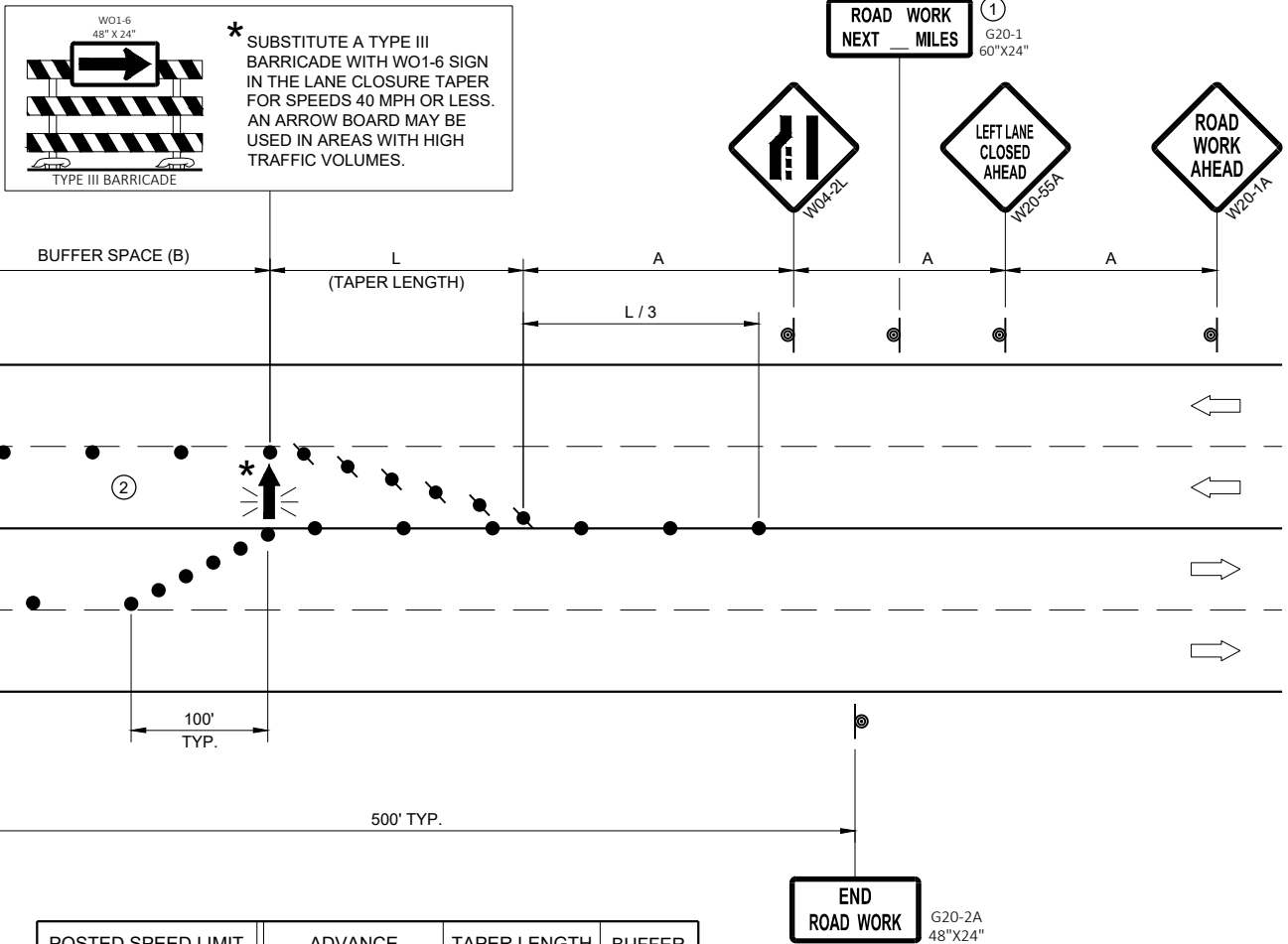
DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

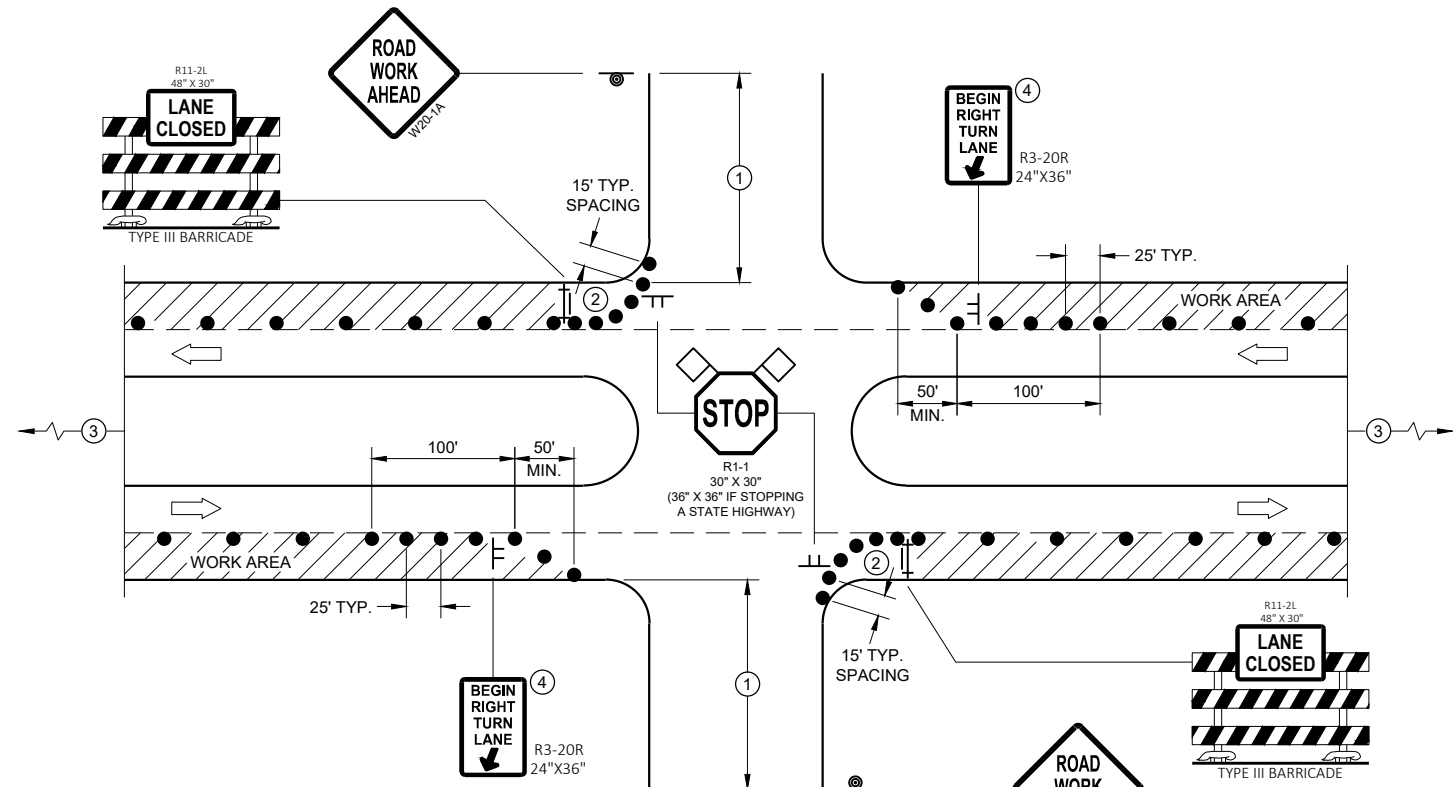
APPROVED
May 2020 /S/ Andrew Heidtke
DATE STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

119

SDD 15D20 - 05c

SDD 15D20 - 05c

SDD 15D21-a Traffic Control, Intersection Within Single Right Lane Closure



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

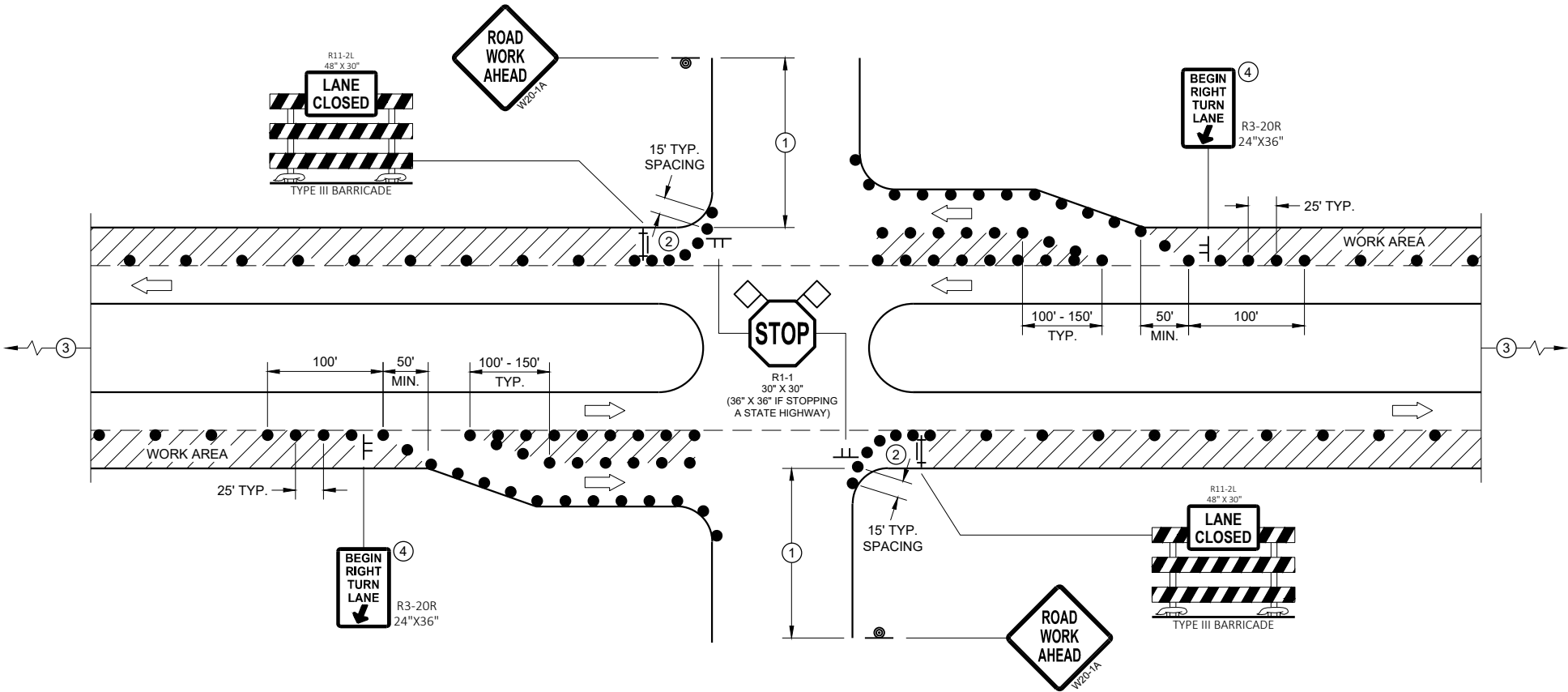
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- ④ MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

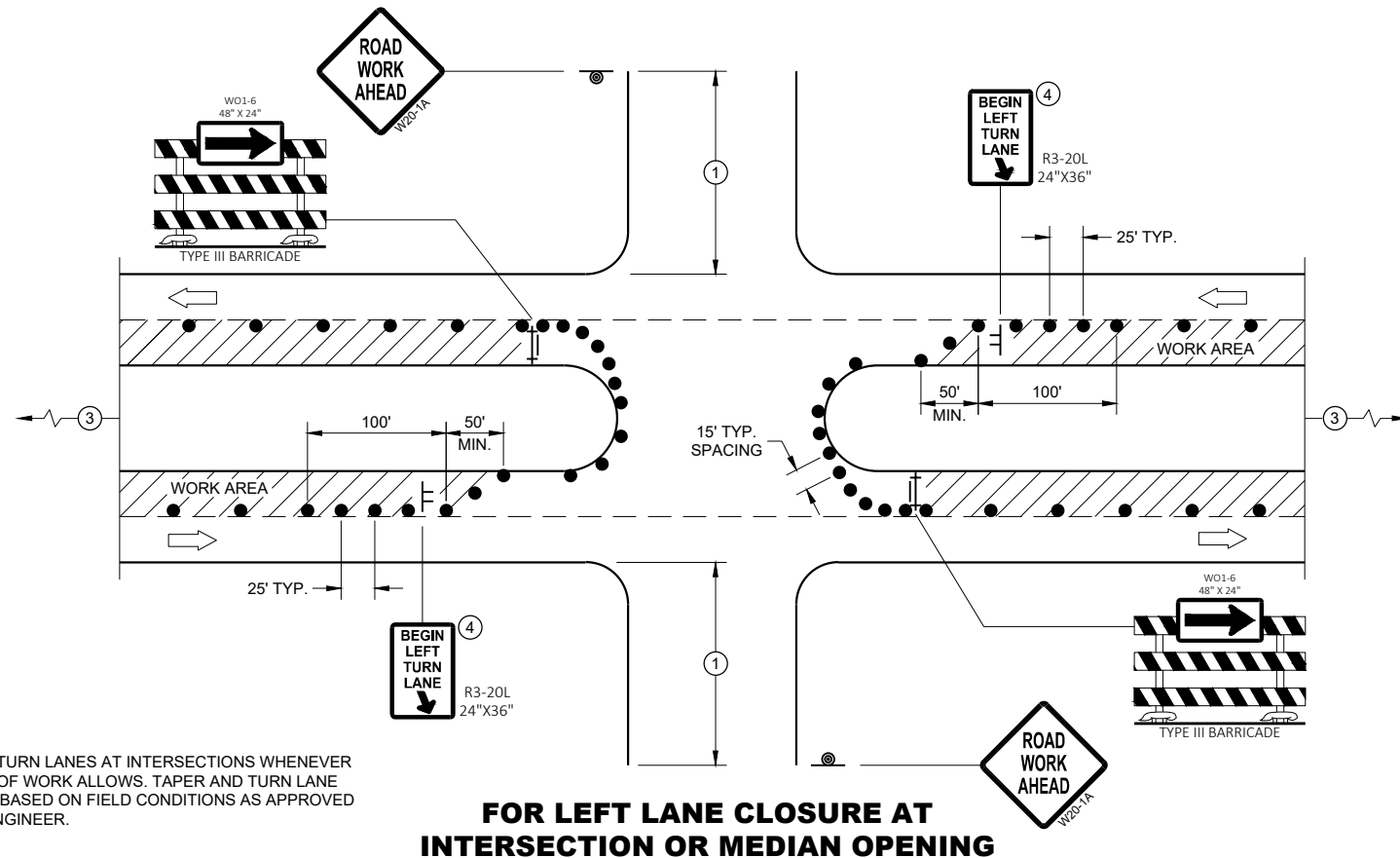
LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- ◇ FLAGS, 16" X 16" MIN., ORANGE
- ▨ WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 120

SDD 15D21-b Traffic Control, Intersection Within Single Left Lane Closure



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

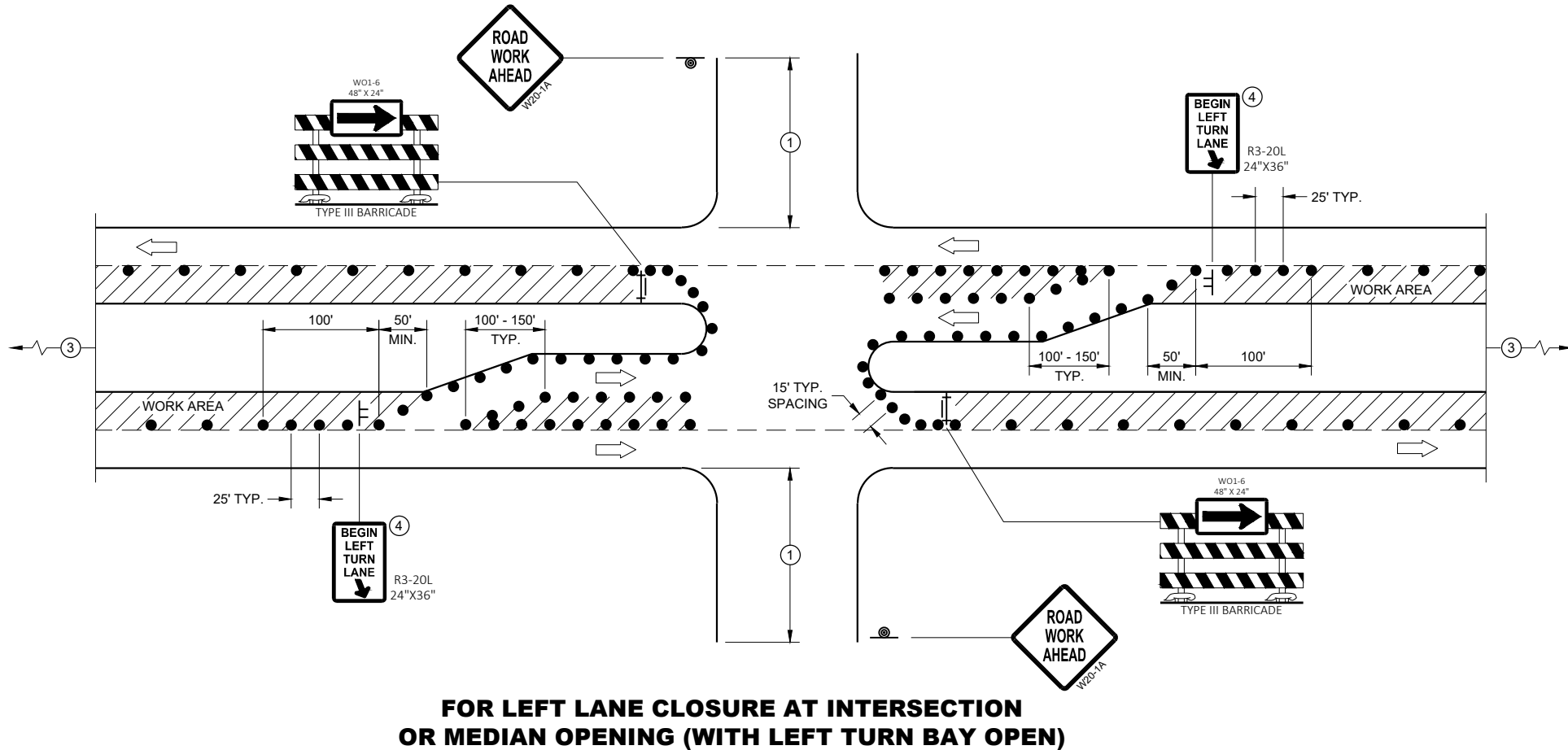
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.
- ④ MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- ⏏ SIGN ON TEMPORARY SUPPORT
- ⦿ SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- ⏏ TYPE III BARRICADE WITH ATTACHED SIGN
- ➡ DIRECTION OF TRAFFIC
- ◇ FLAGS, 16" X 16" MIN., ORANGE
- ▨ WORK AREA

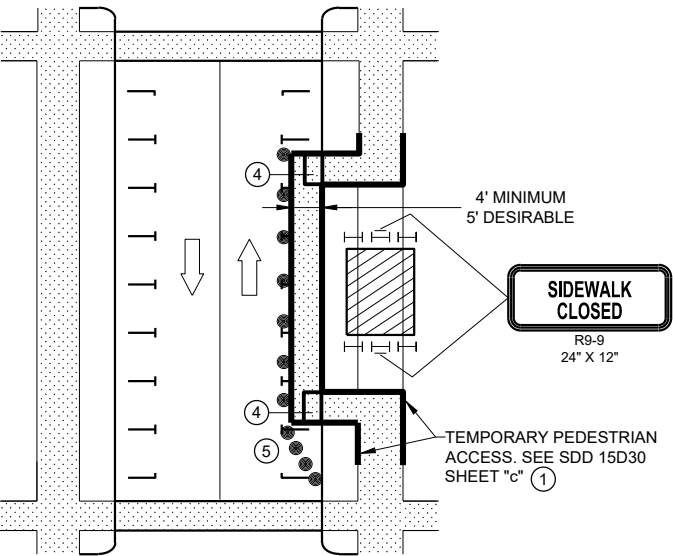
TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

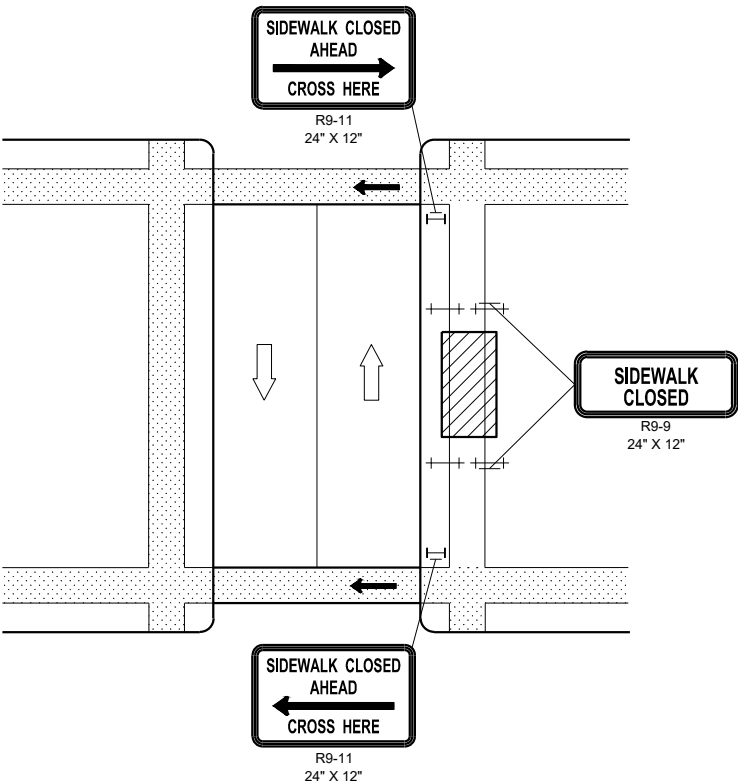
APPROVED
August 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
121

FHWA

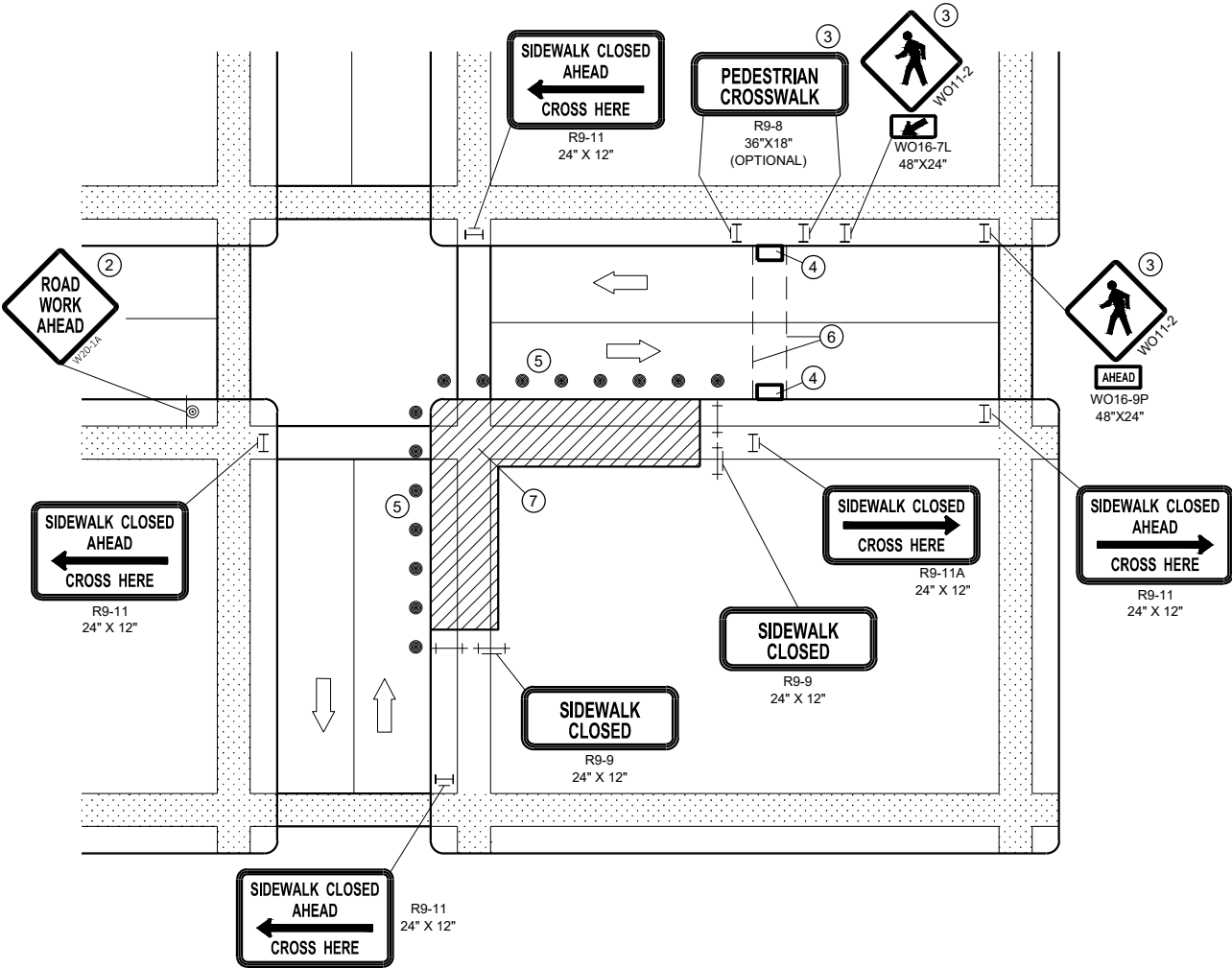
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE
IN PARKING LANE

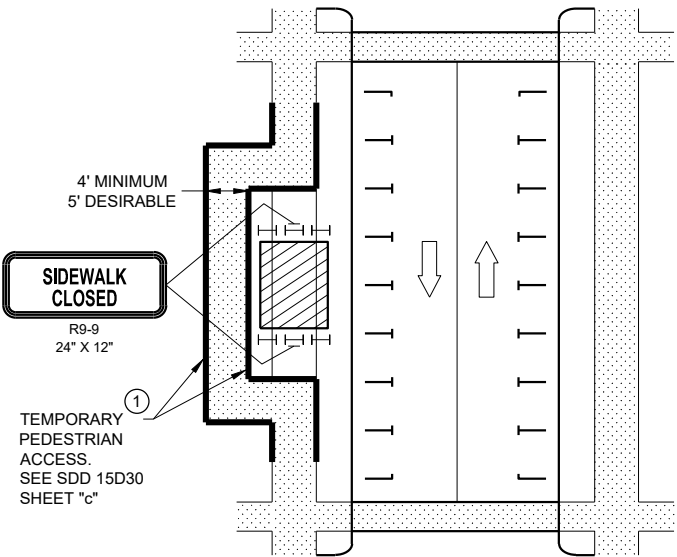


MID-BLOCK SIDEWALK
CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN, EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

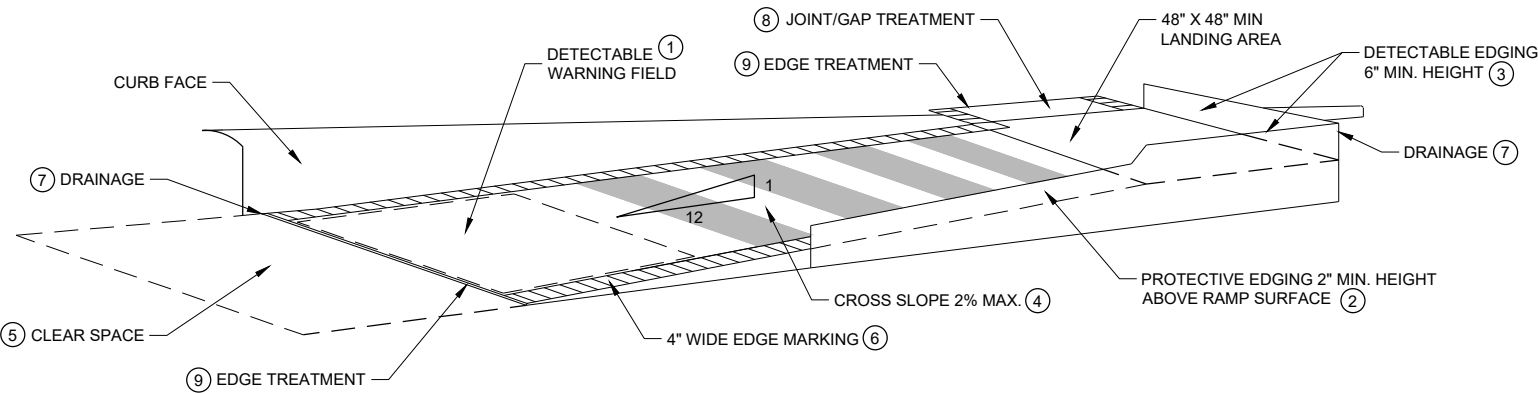
ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

- IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
- "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b".
- DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

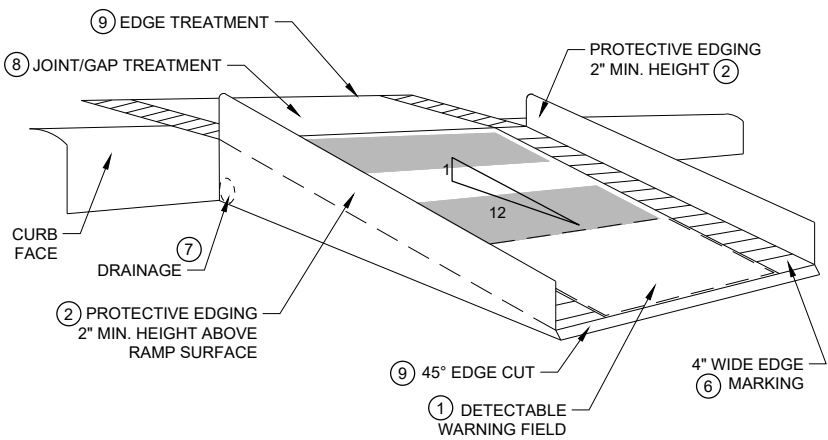
LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

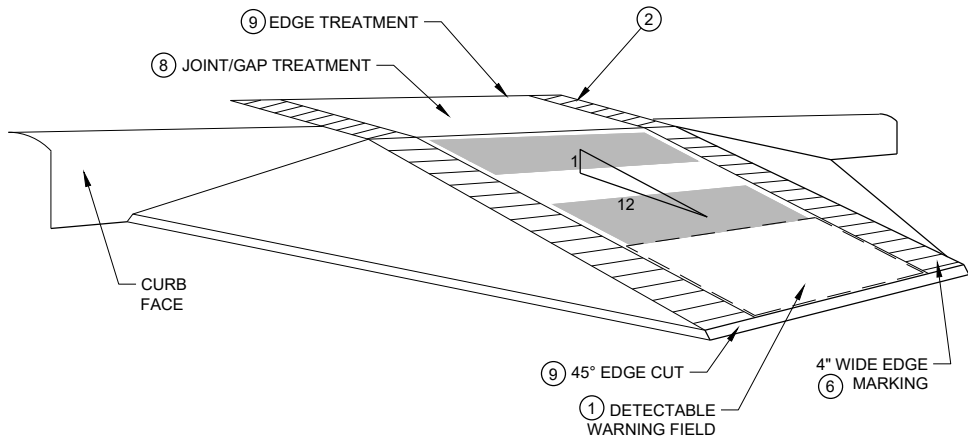
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE
EDGE

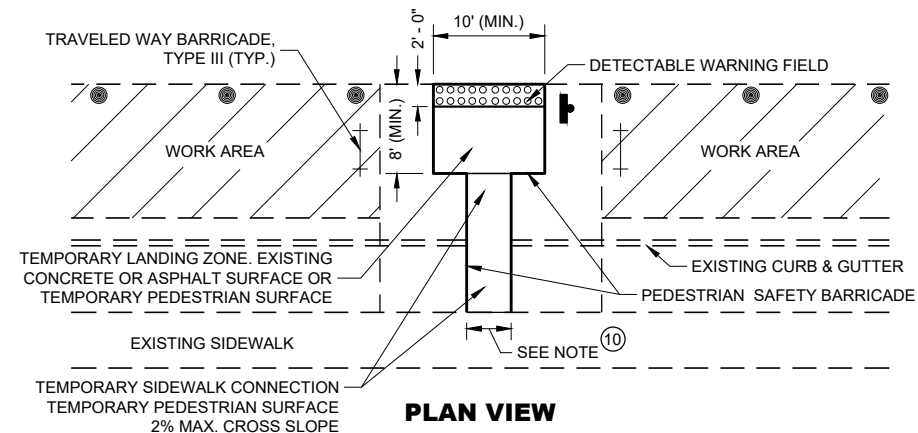


WITH SIDE APRON

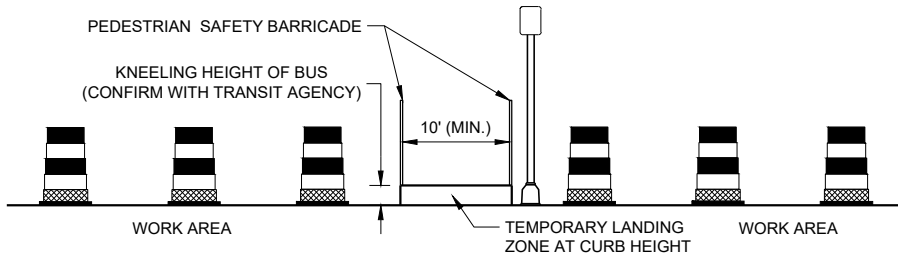
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
- ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.
- 1 CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
 - 2 PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
 - 3 DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
 - 4 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
 - 5 CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
 - 6 THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
 - 7 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
 - 8 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
 - 9 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
 - 10 5' WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW

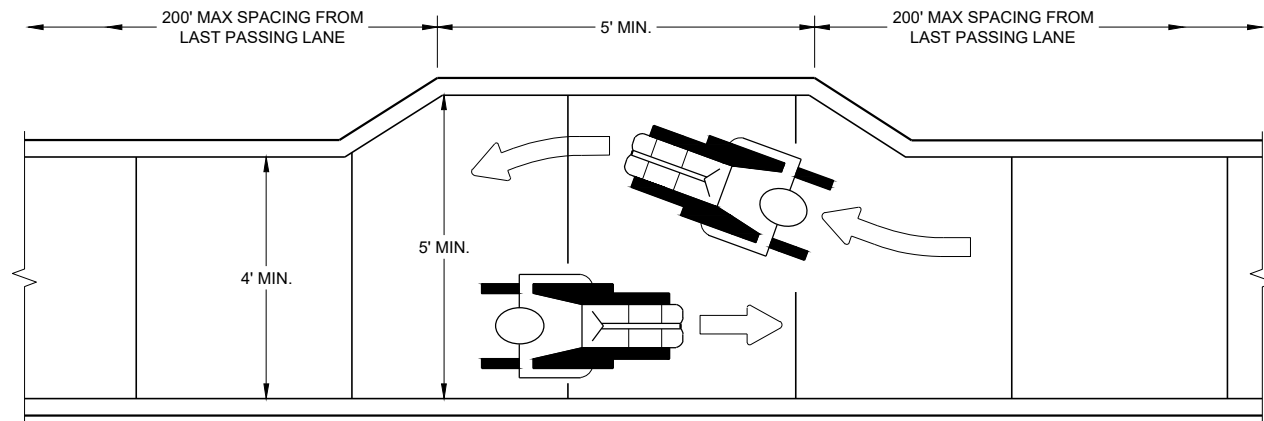


PROFILE VIEW

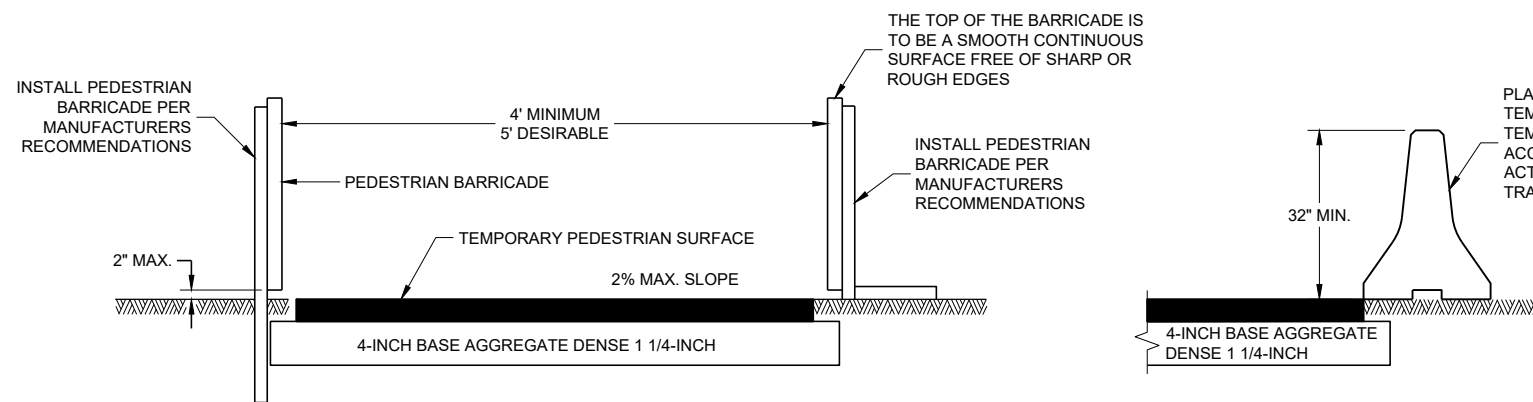
TEMPORARY BUS STOP PAD

LEGEND

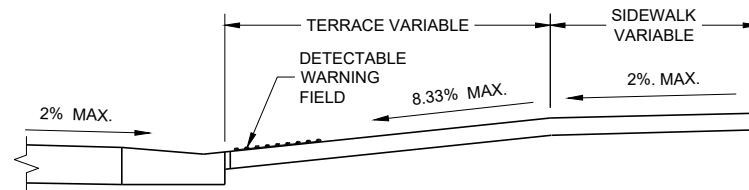
- TRAFFIC CONTROL DRUM
- ⊥ TYPE III BARRICADE
- ▨ WORK AREA



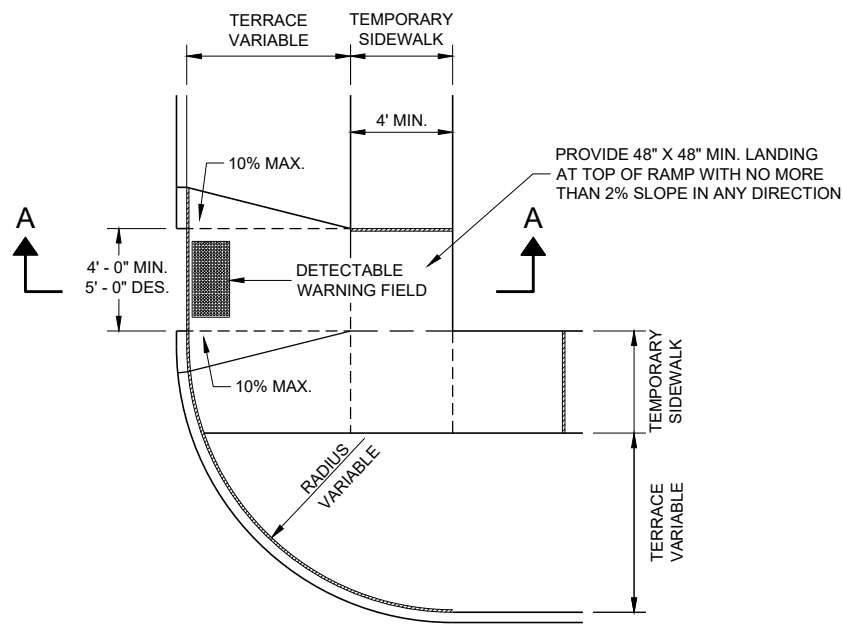
NARROW SIDEWALK PASSING DETAIL



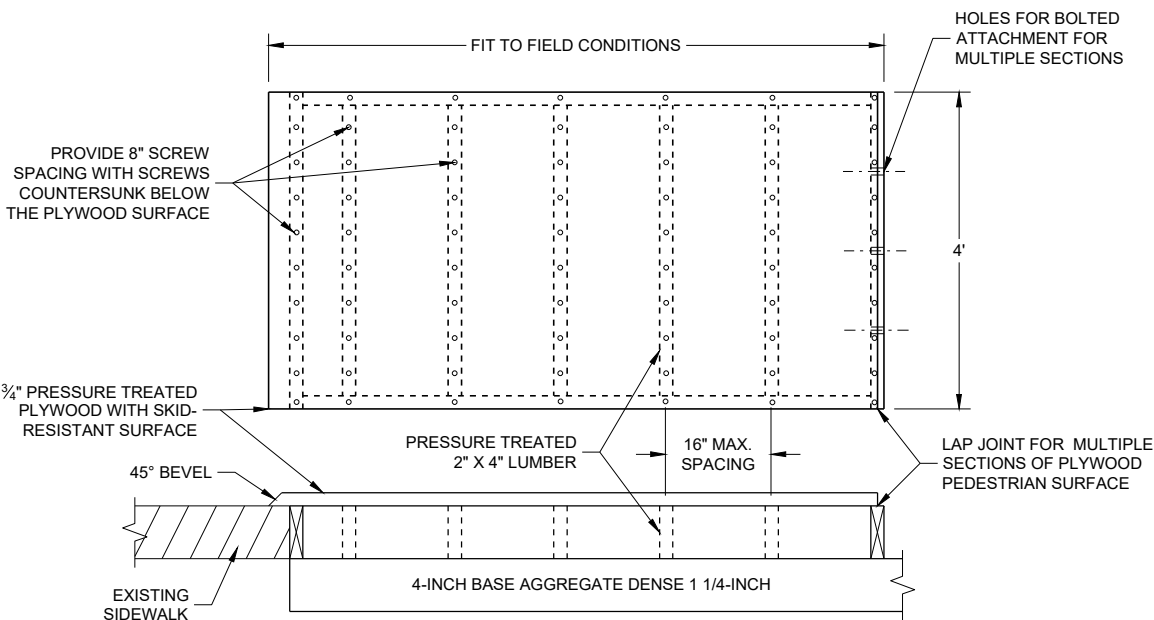
TEMPORARY PEDESTRIAN ACCESS



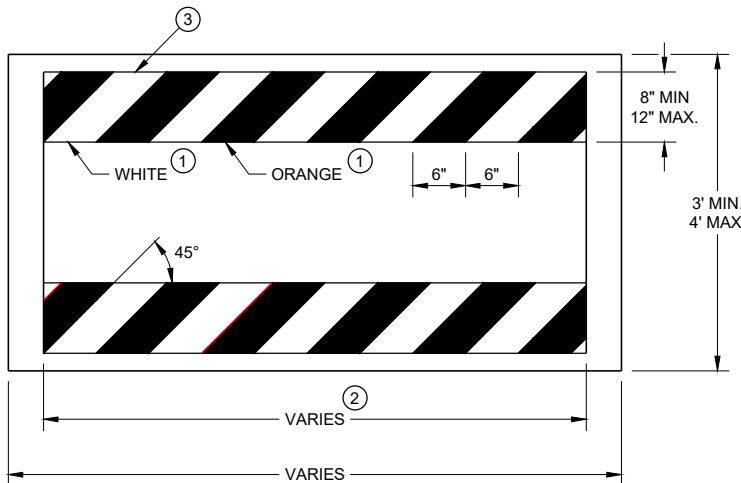
SECTION A - A



**PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)**



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE*

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

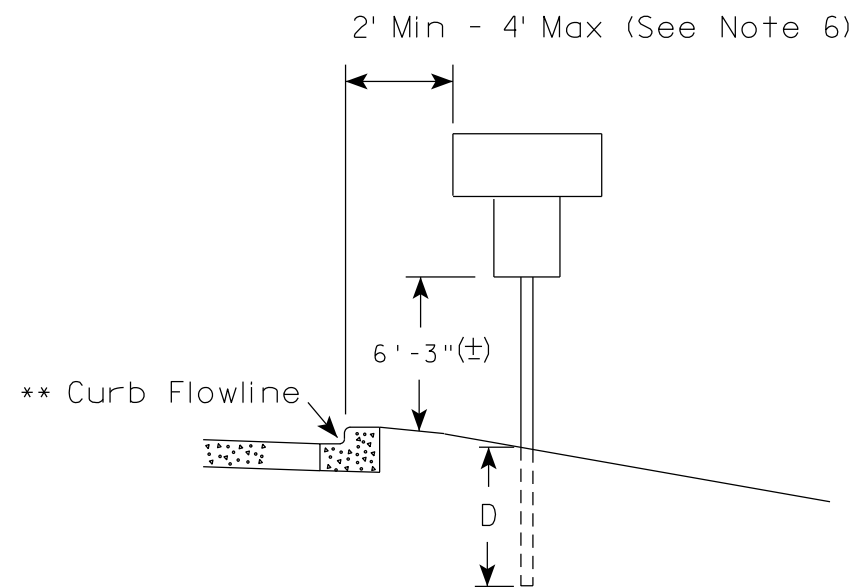
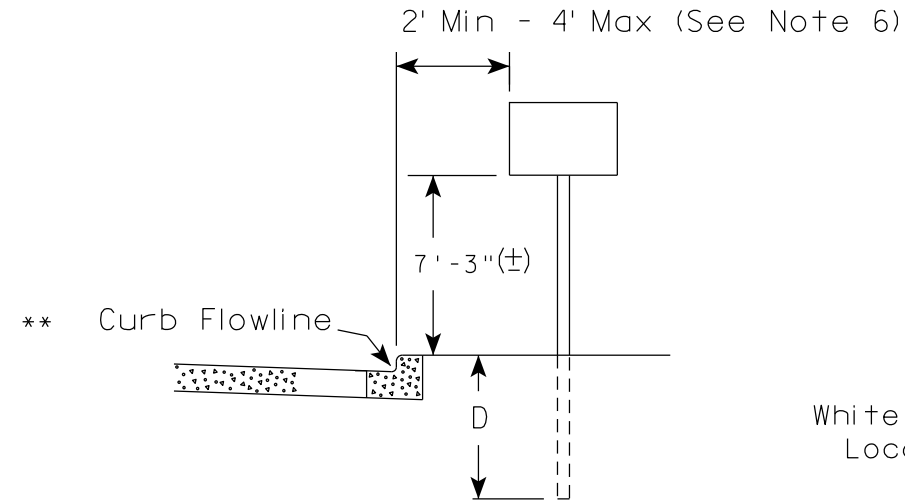
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

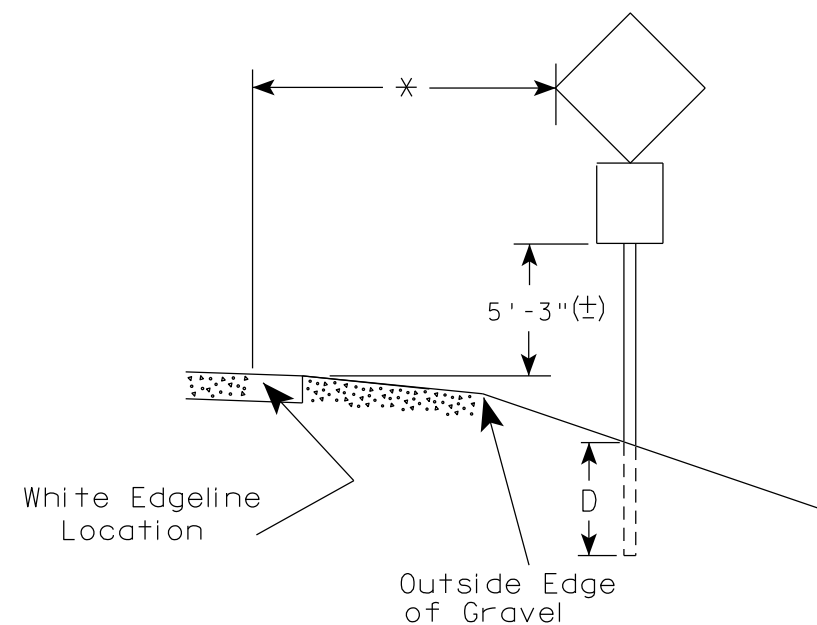
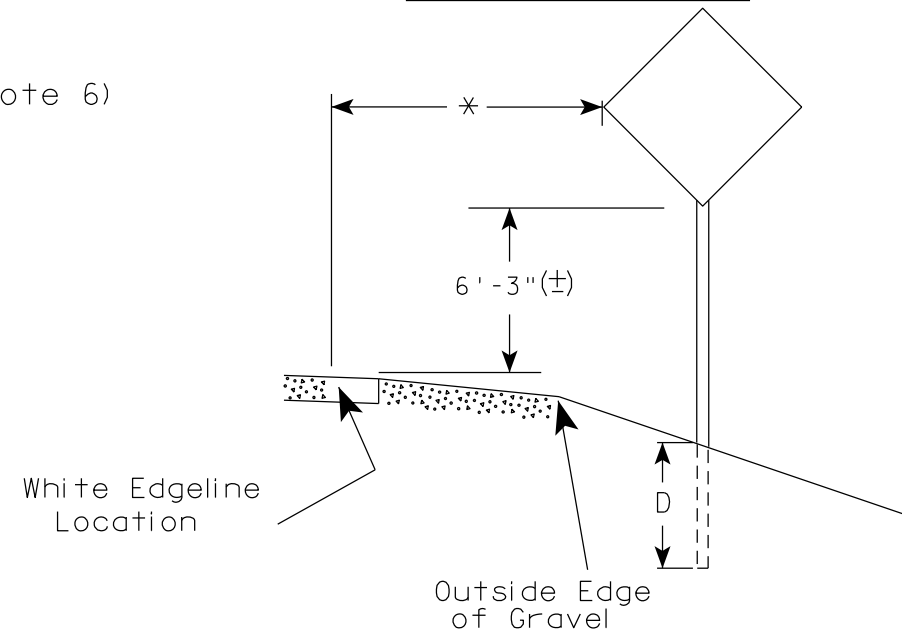
APPROVED
November 2019 /S/ Andrew Heidtke 124
DATE WORK ZONE ENGINEER
FHWA

URBAN AREA



✱✱ The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

RURAL AREA (See Note 2)



✱ 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

- Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
- If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
- For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
- Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- The (±) tolerance for mounting height is 3 inches.
- Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

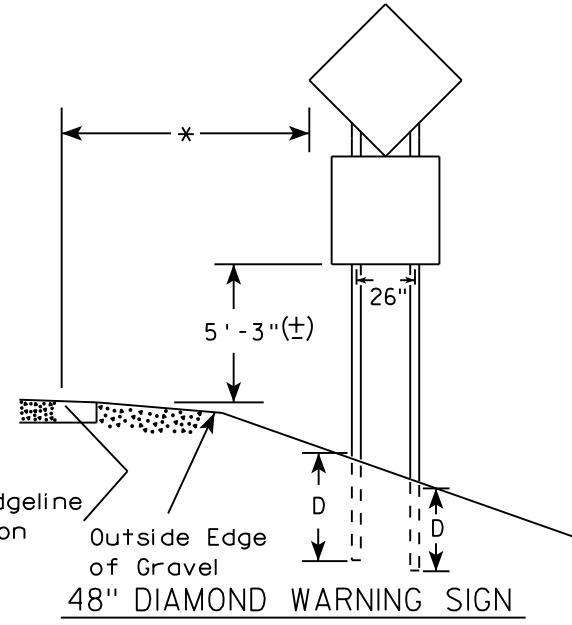
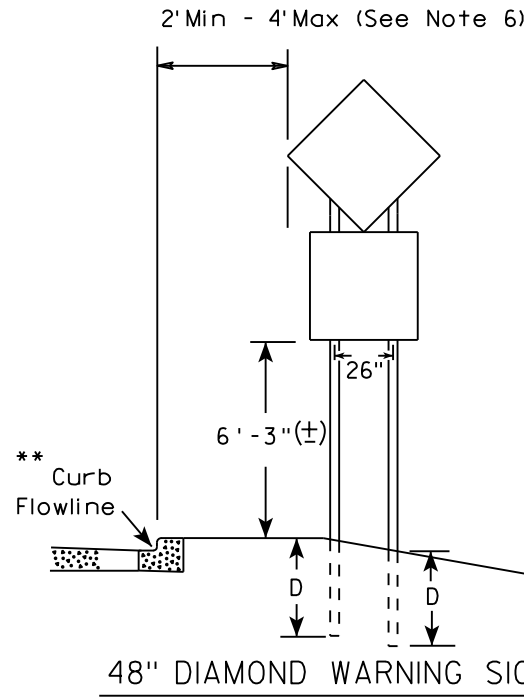
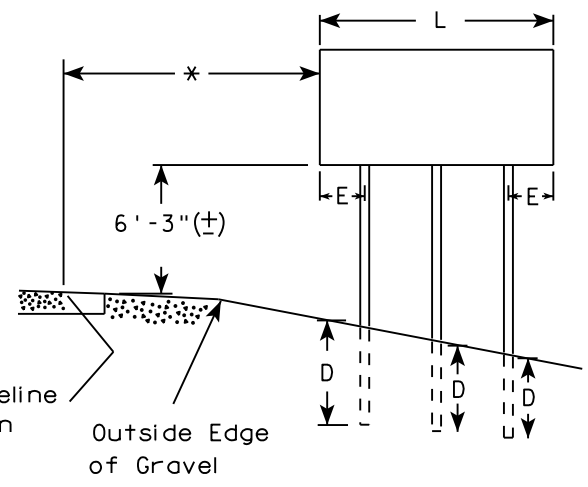
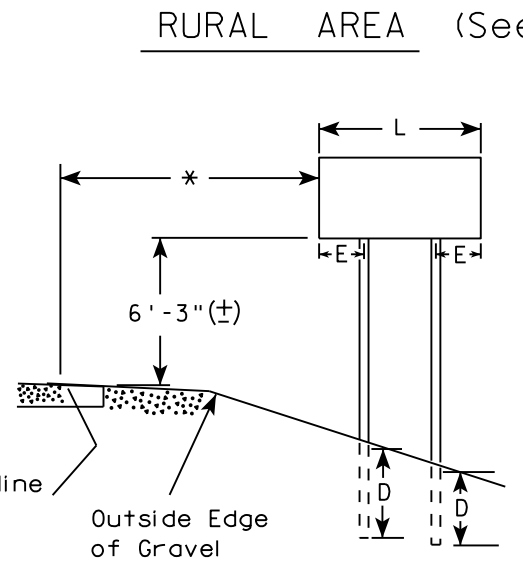
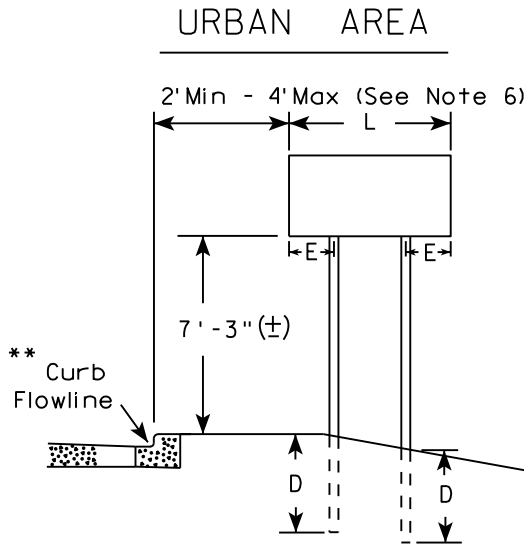
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 125

E



- GENERAL NOTES
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. J-Assemblies are considered to be one sign for mounting height.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

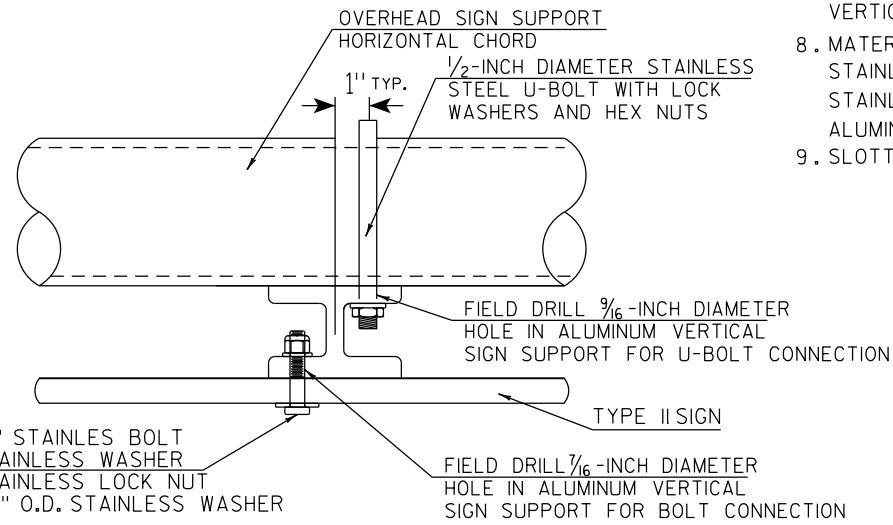
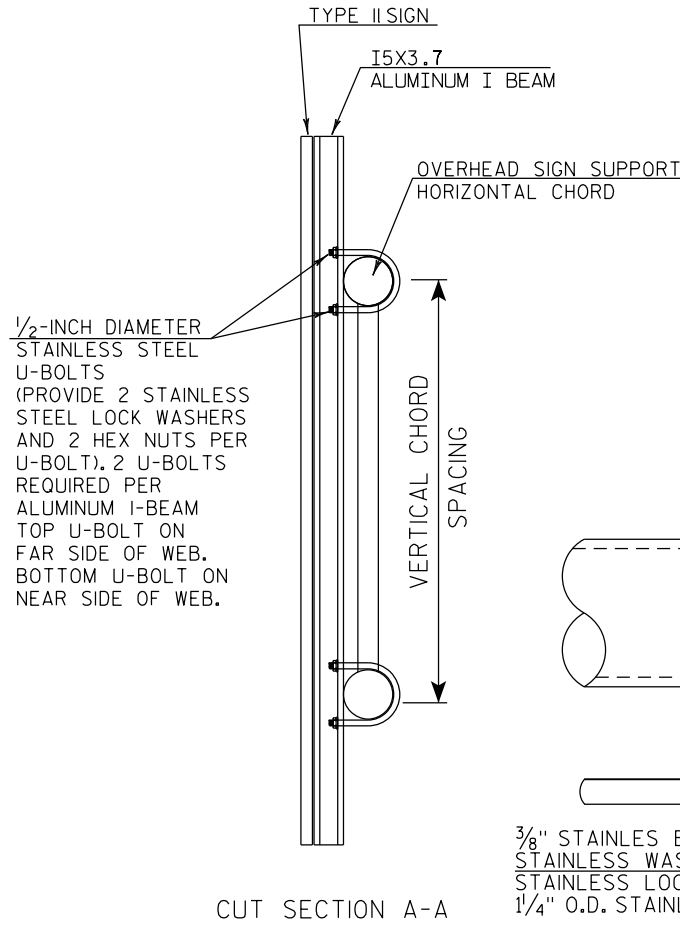
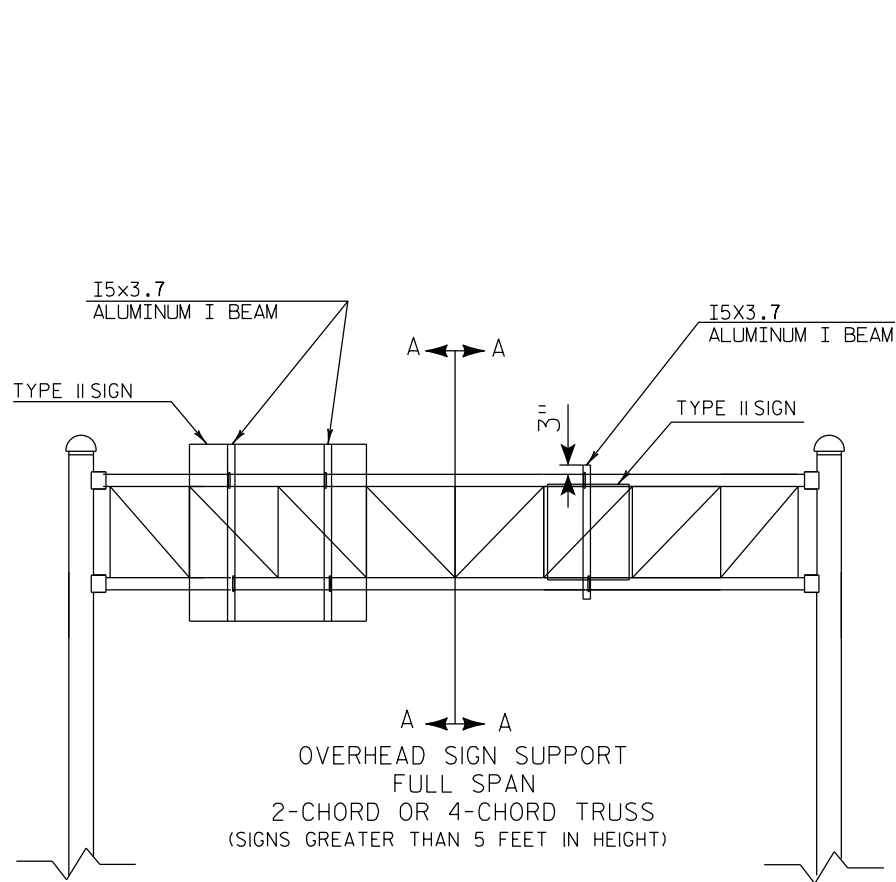
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

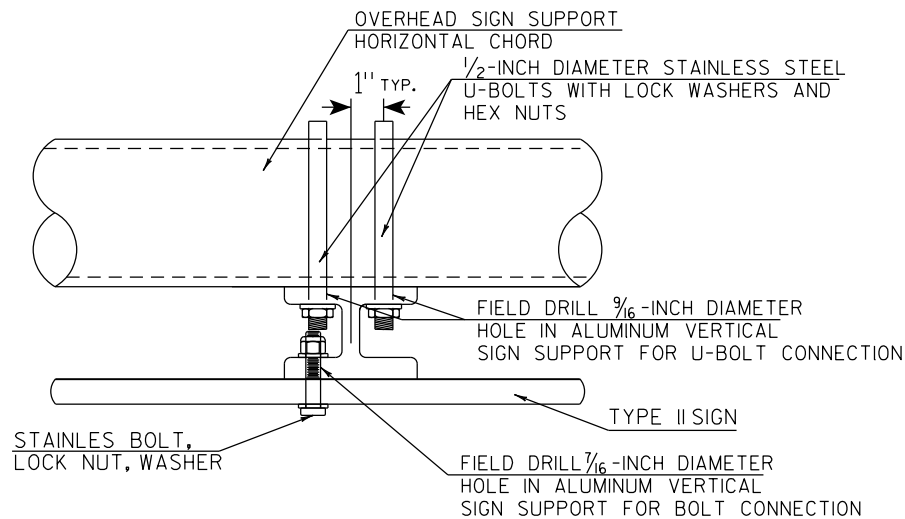
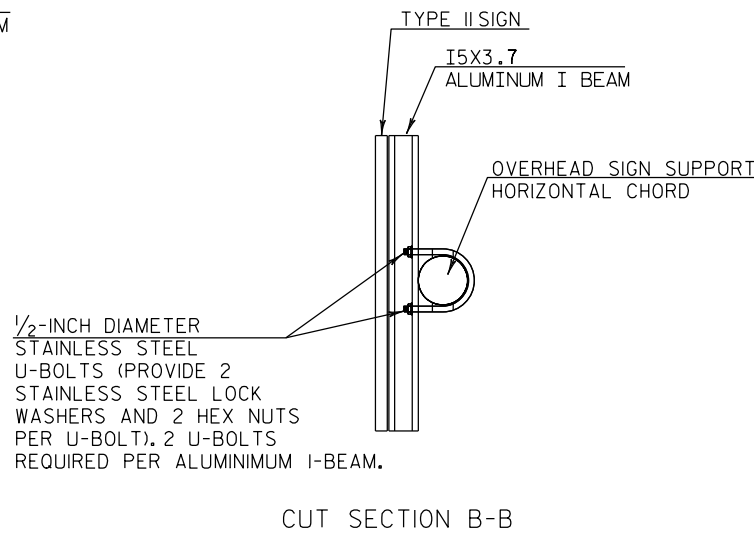
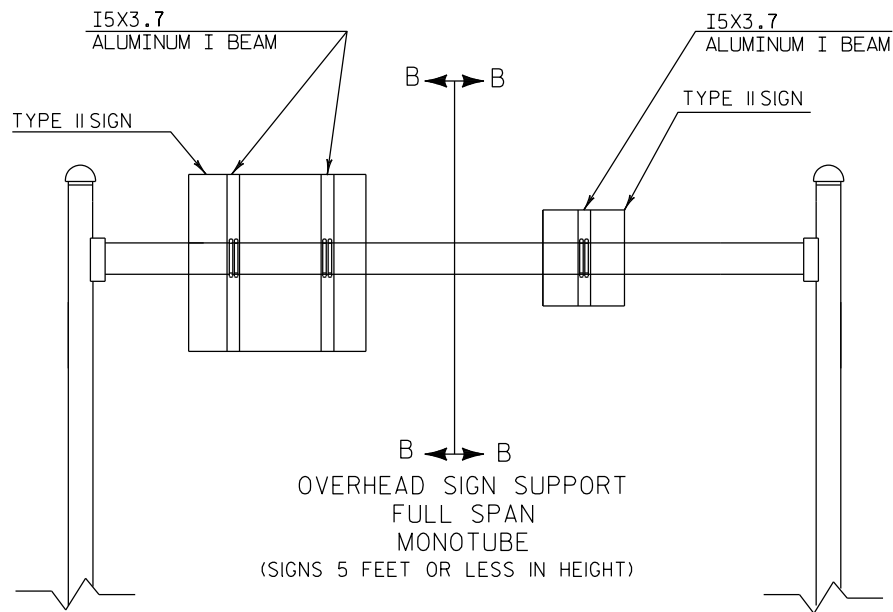
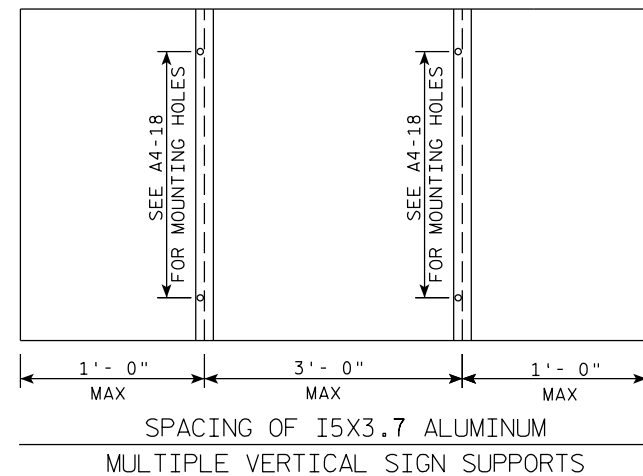
DATE 8/21/17 PLATE NO. A4-4.15

GENERAL NOTES

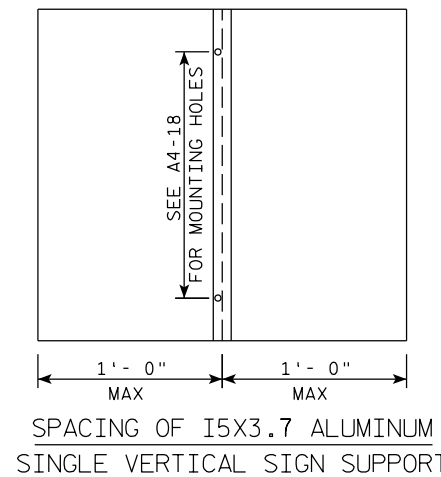
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE STAINLESS BOLTS AT BOLT HOLES IN SIGN PANEL PER SIGN PLATE A4-18.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
STAINLESS STEEL U-BOLTS, BOLTS, AND LOCKWASHERS ASTM 304.
STAINLESS STEEL HEX NUTS ASTM A276.
ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW



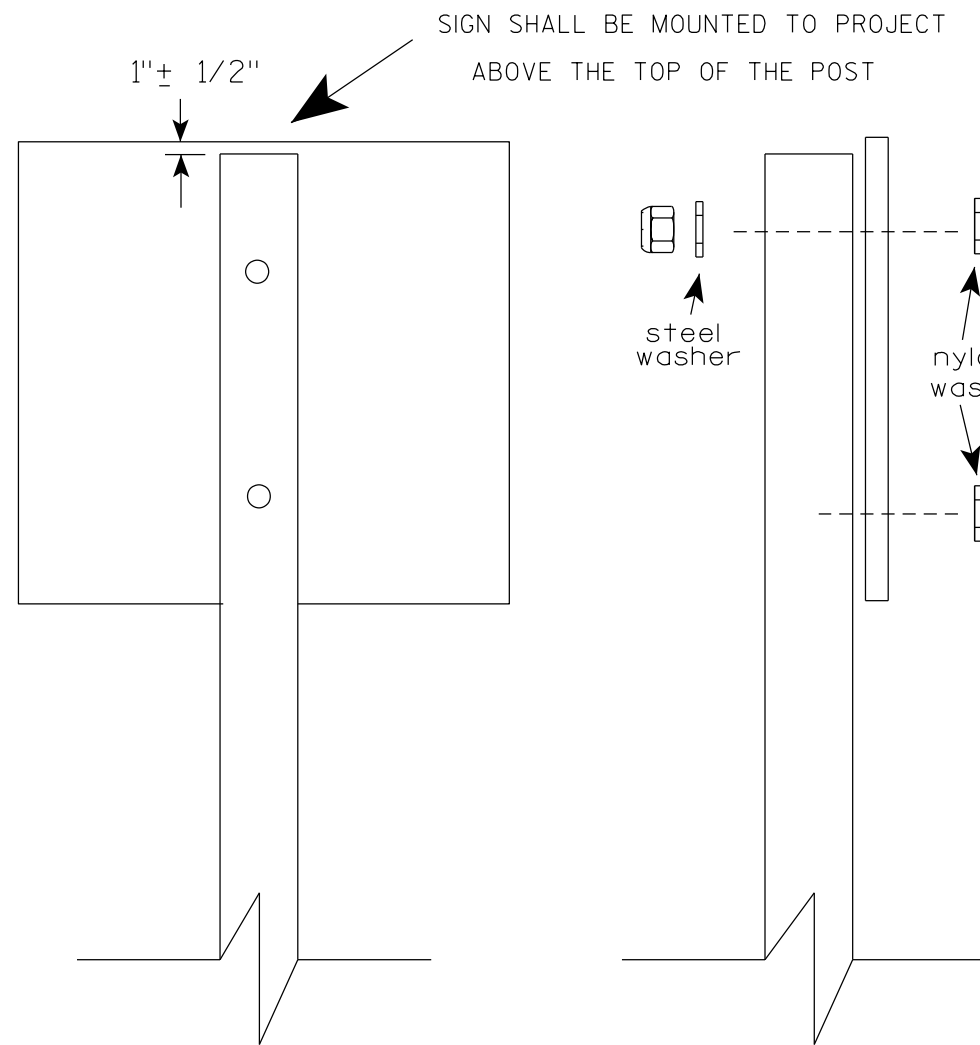
TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW



SPACING OF I5X3.7 ALUMINUM
SINGLE VERTICAL SIGN SUPPORT

TYPE II SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 1/07/20 PLATE NO. A4-7B.1



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

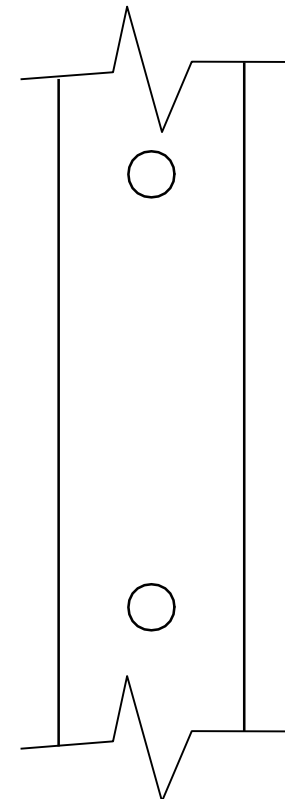
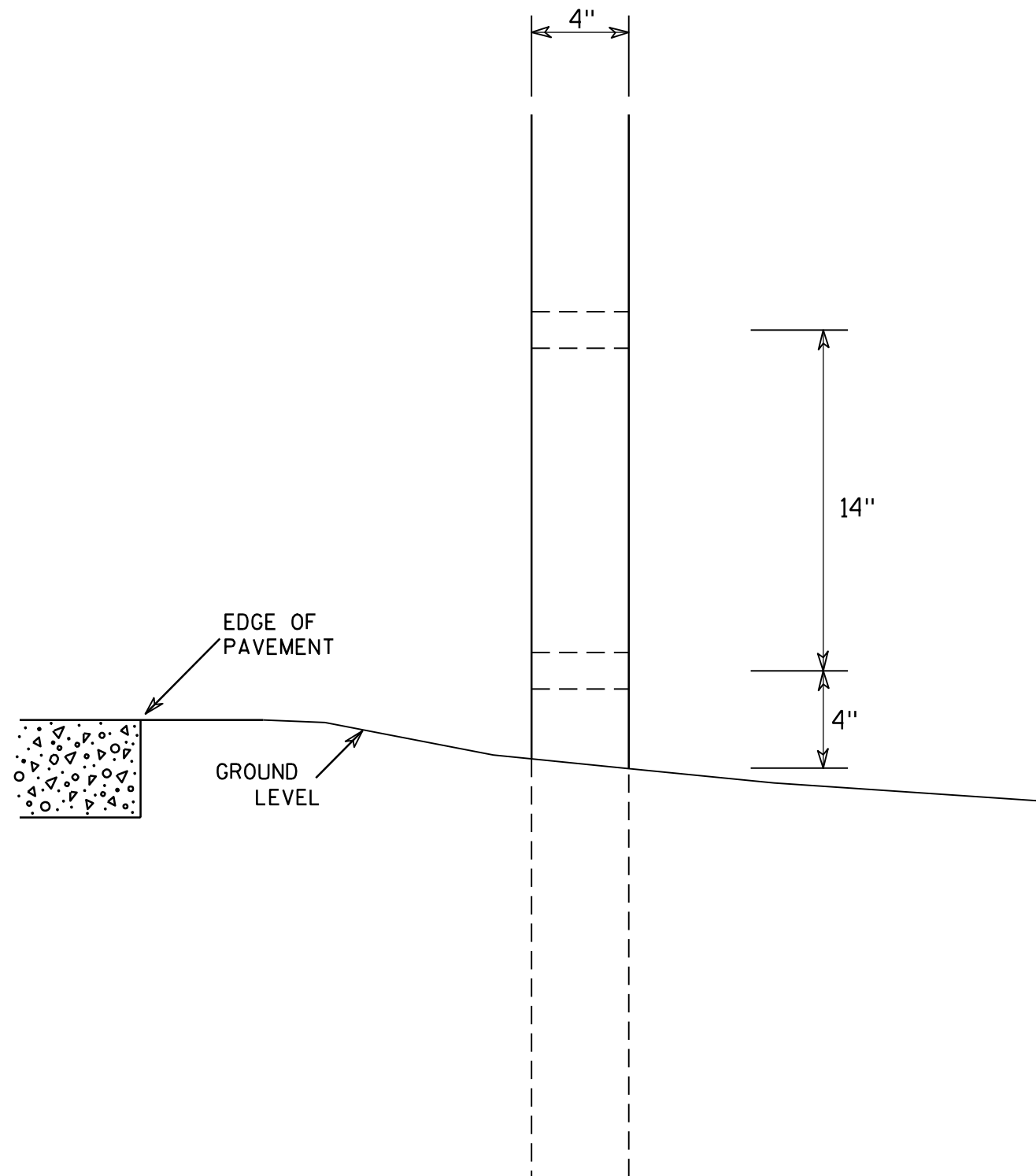
- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

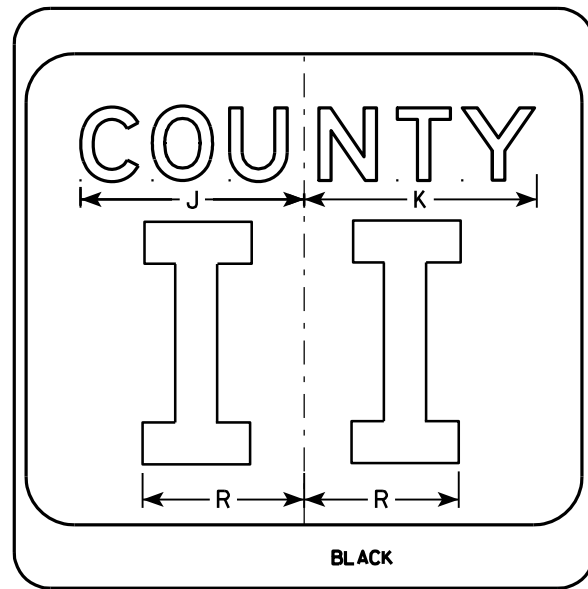
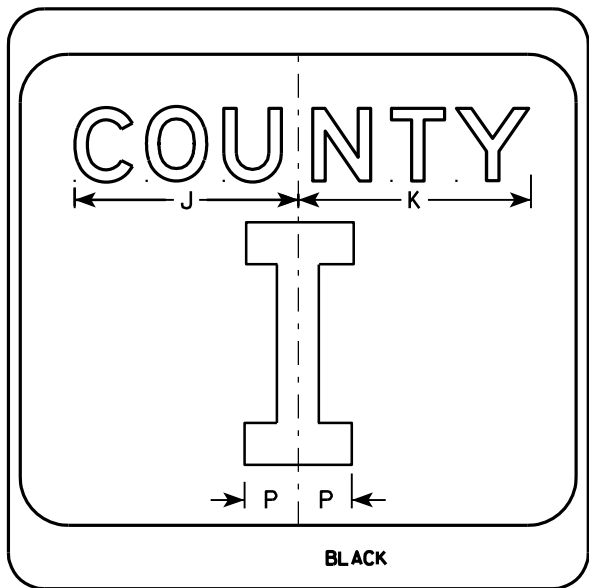
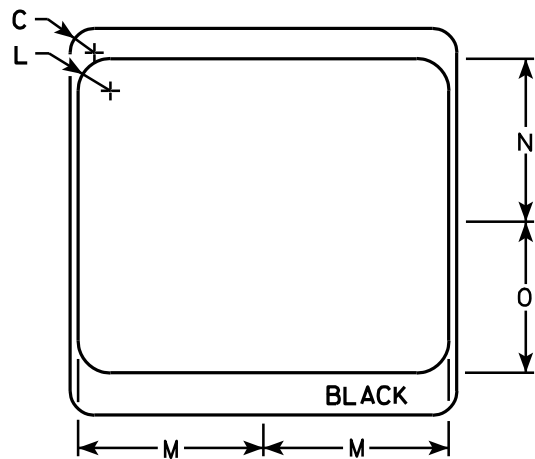
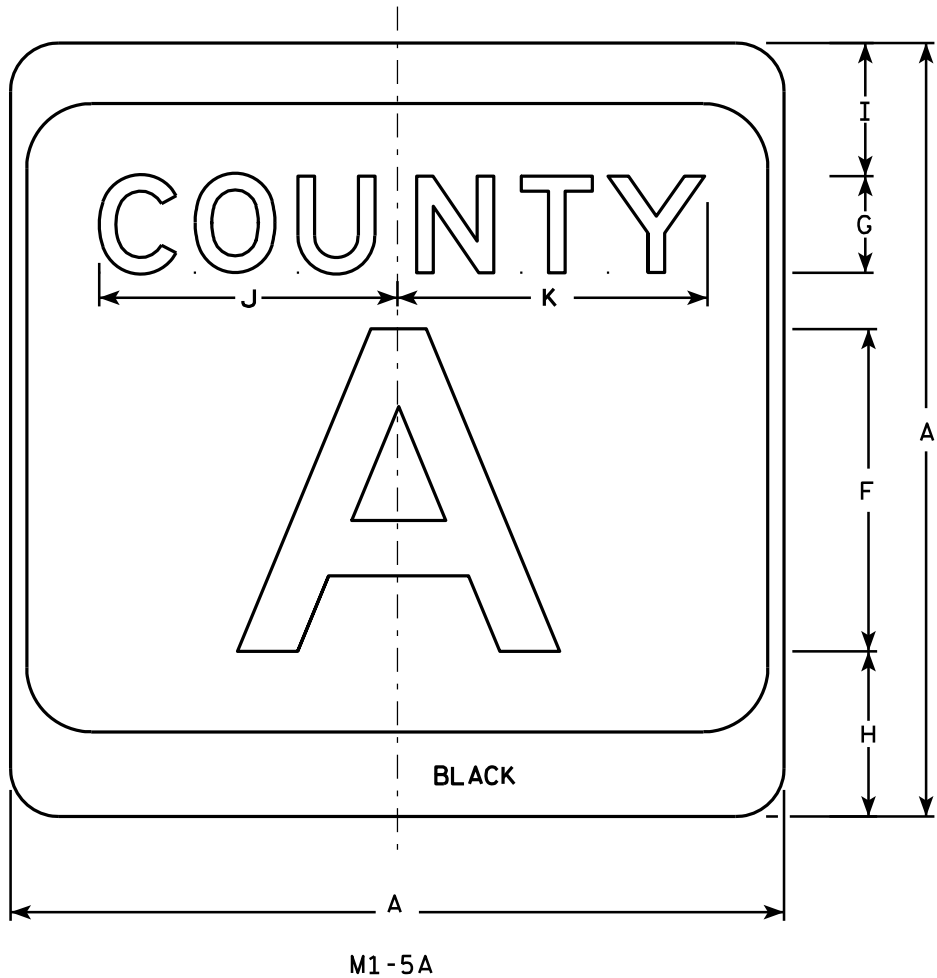
HWY:

COUNTY:

SHEET NO: 129

E

7



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 130	E
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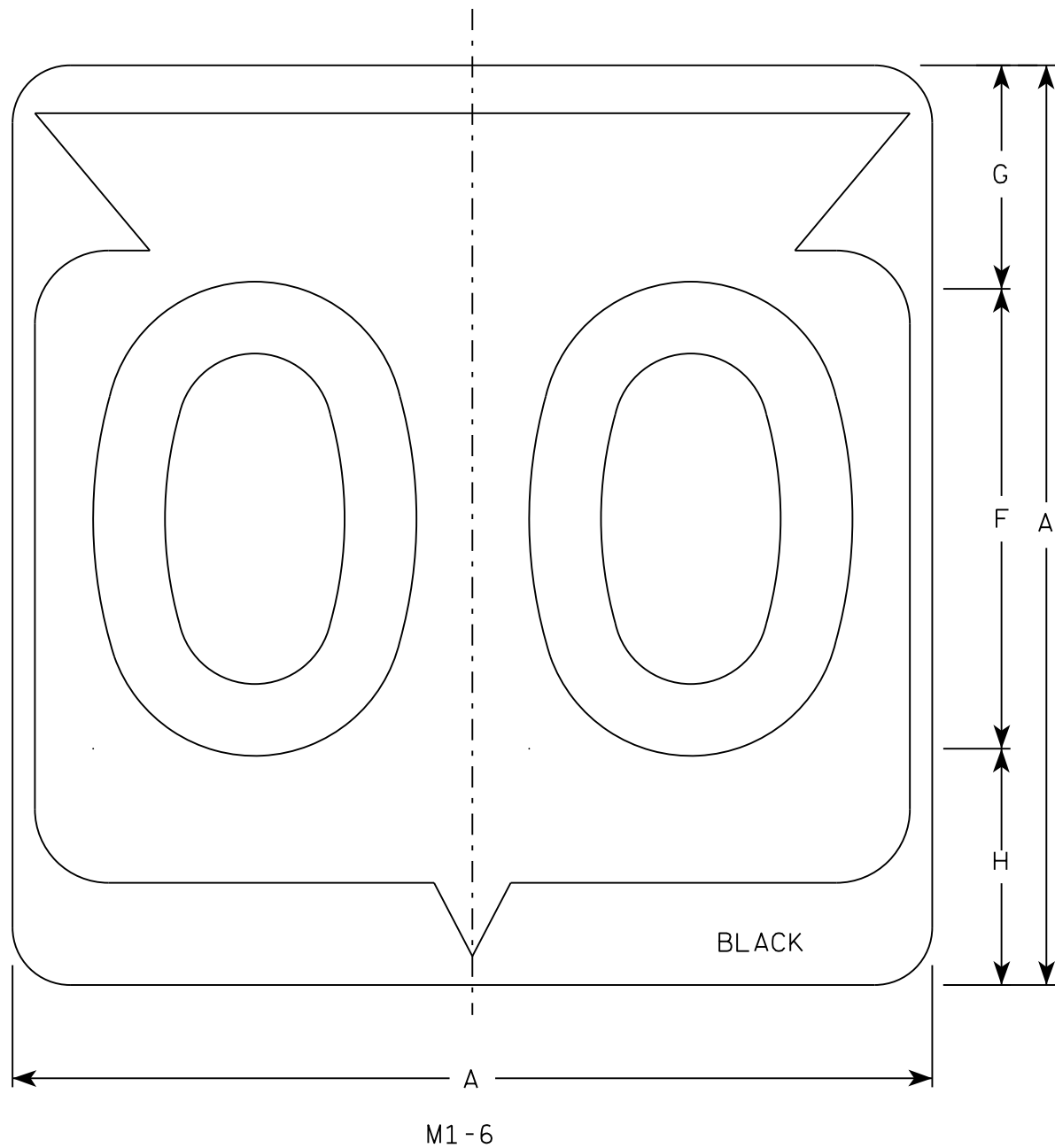
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

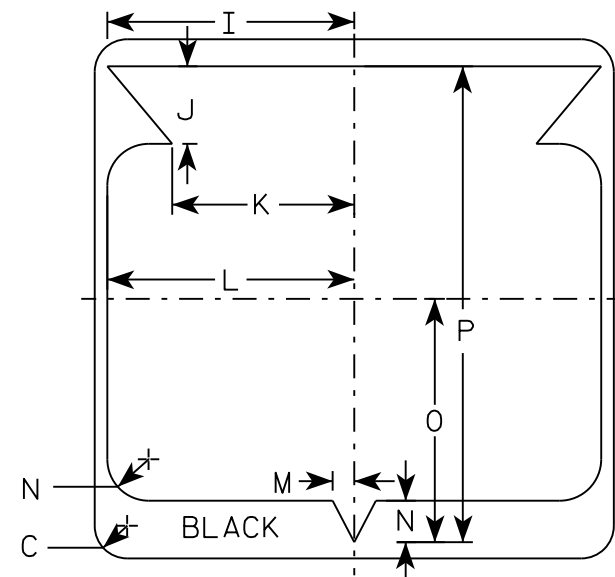
DATE 9/27/11 PLATE NO. M1-5A.8

7



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

SHEET NO: 131 E

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - D for Size 1 except when over 108" than Series C
C for Size 2 except when over 108" use Series B
- 4. Base material shall be 0.125 aluminum
- 5. Width may be no more than 108"

Typical for Overhead Street Name



M1-94H

*Minimum dimension is 6 inch for
Size 2 and 4 inch for Size 1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	Varies	18	3			6	8	5 5/8	4	3	6 5/8																Varies
2	Varies	18	3			9	12	4	6	4 1/2	5 1/2																Varies
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 132

E

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - Green
 - Message - White
- 3. Message Series - D for Size 1 except when over 108" use Series C
C for Size 2 except when over 108" use Series B
- 4. Base material shall be 0.125 aluminum
- 5. Width may be no more than 108"

Typical for Overhead Street Name with Shield



M1-94S

* Minimum dimension is 6 inches for Size 2 and 4 inches for Size 1.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	Varies	18	3			6	8	5 5/8	4	3	6 5/8																Varies
2	Varies	18	3			9	12	4	6	4 1/2	5 1/2																Varies
3																											
4																											
5																											

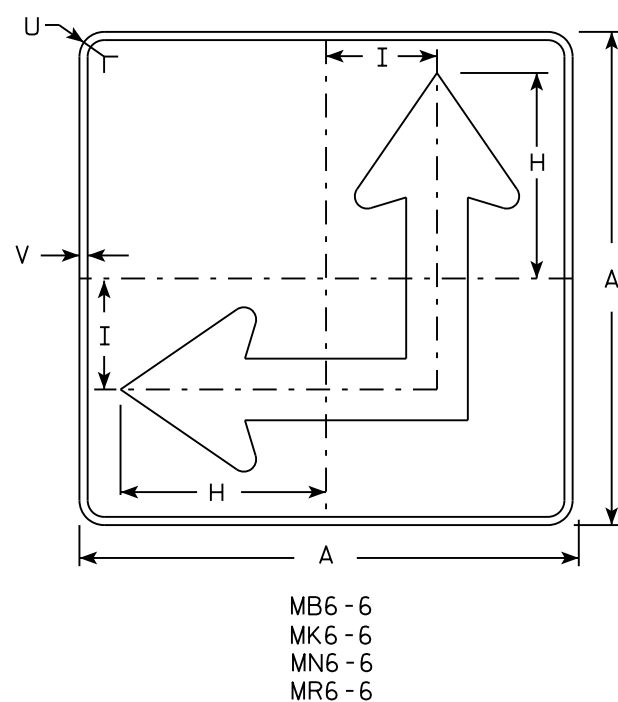
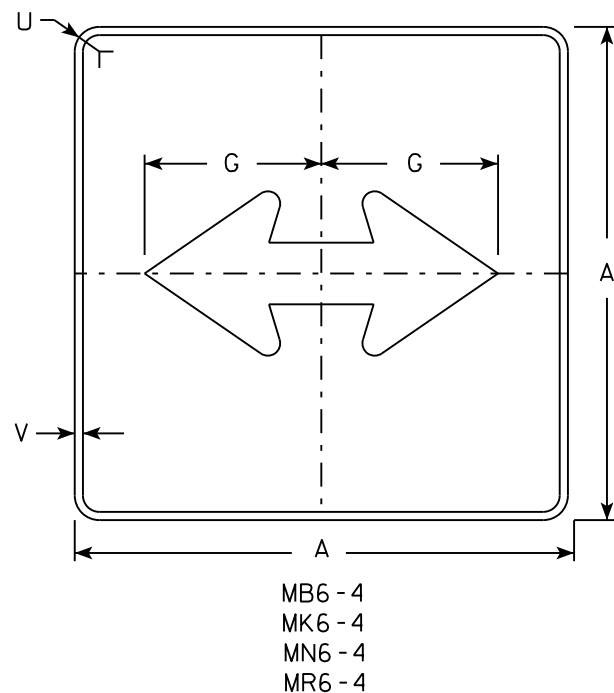
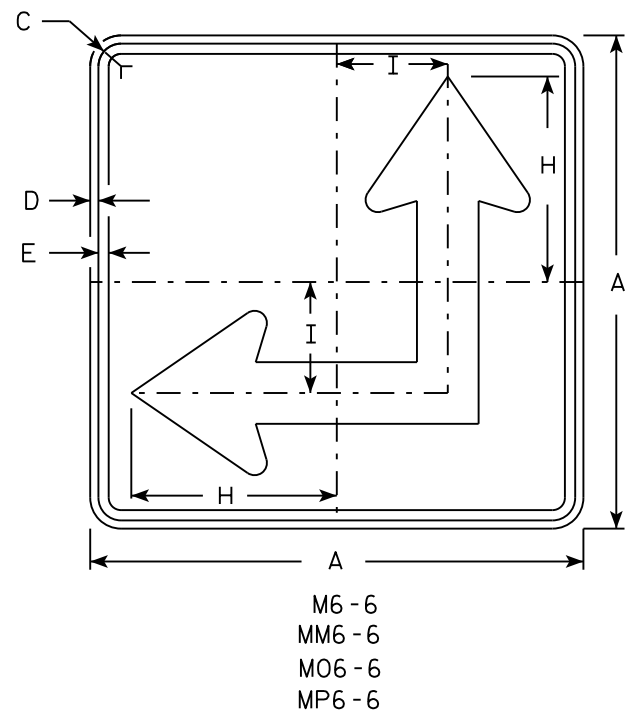
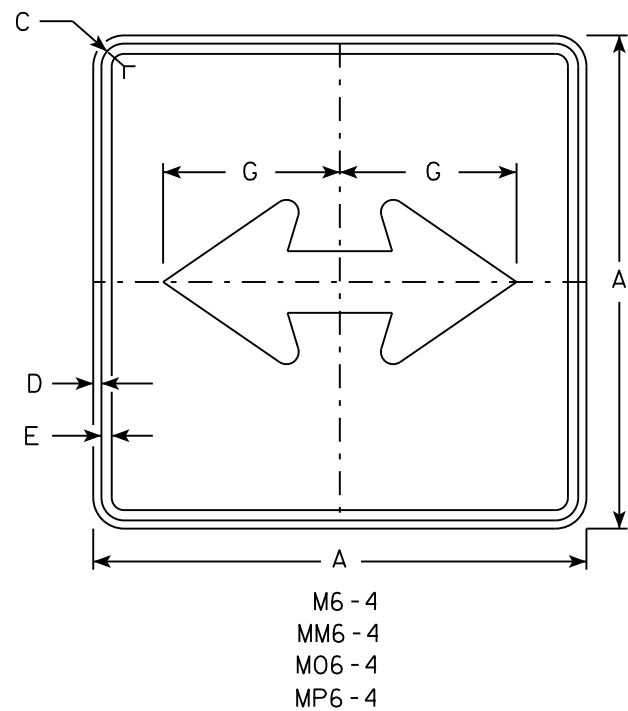
PROJECT NO:

HWY:

COUNTY:

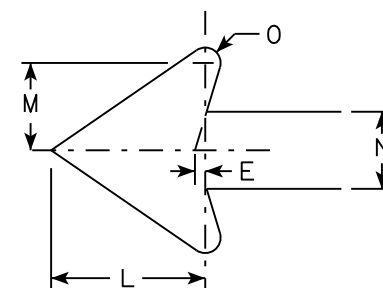
SHEET NO: 133

E



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See Note 4
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

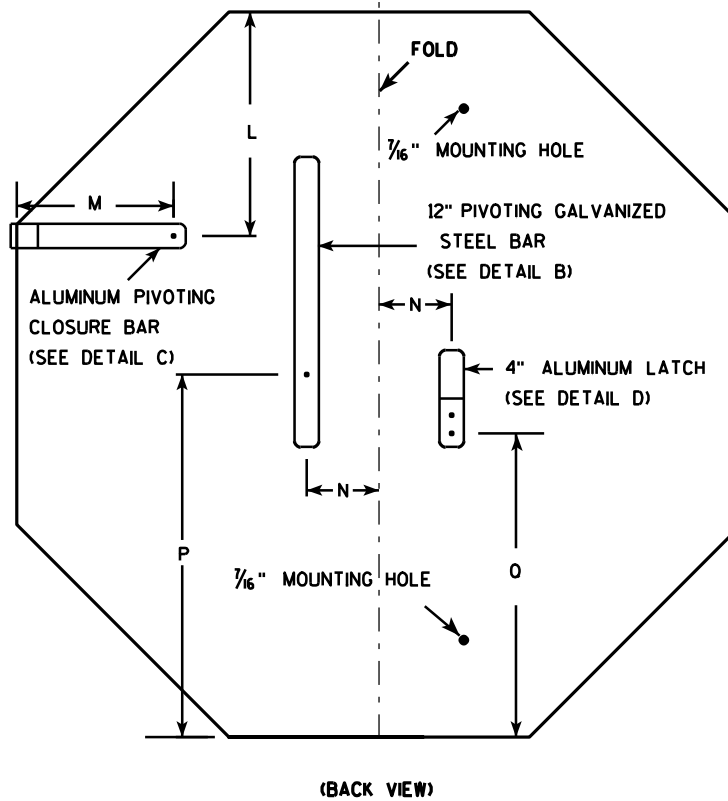
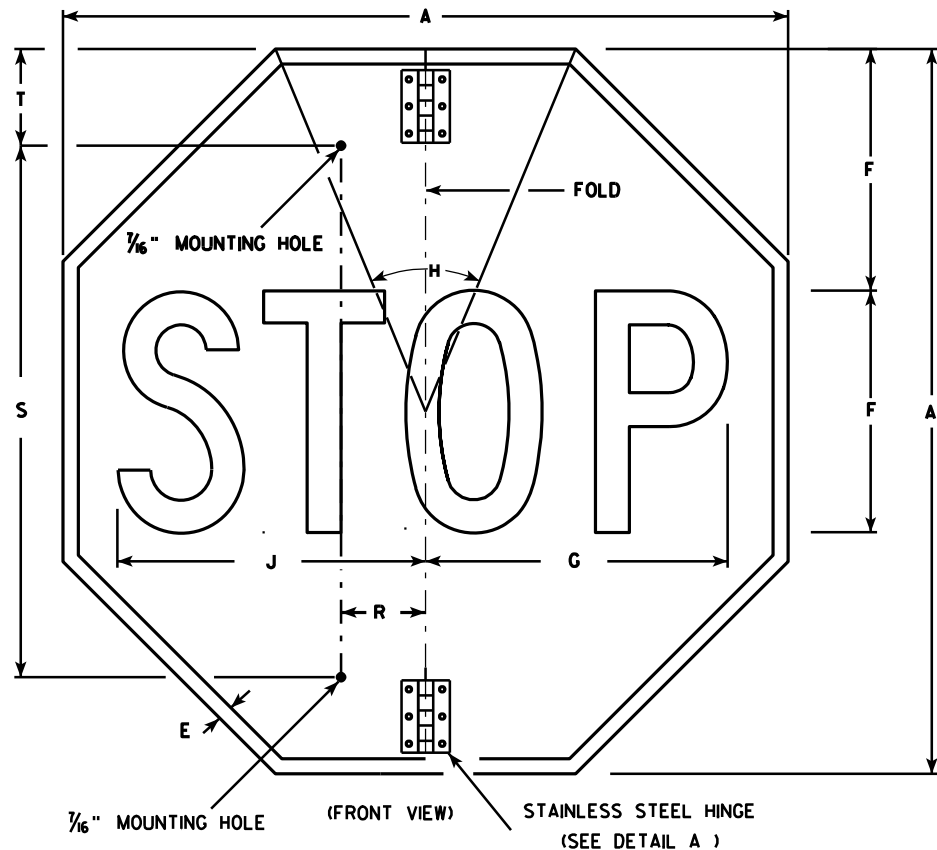
STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

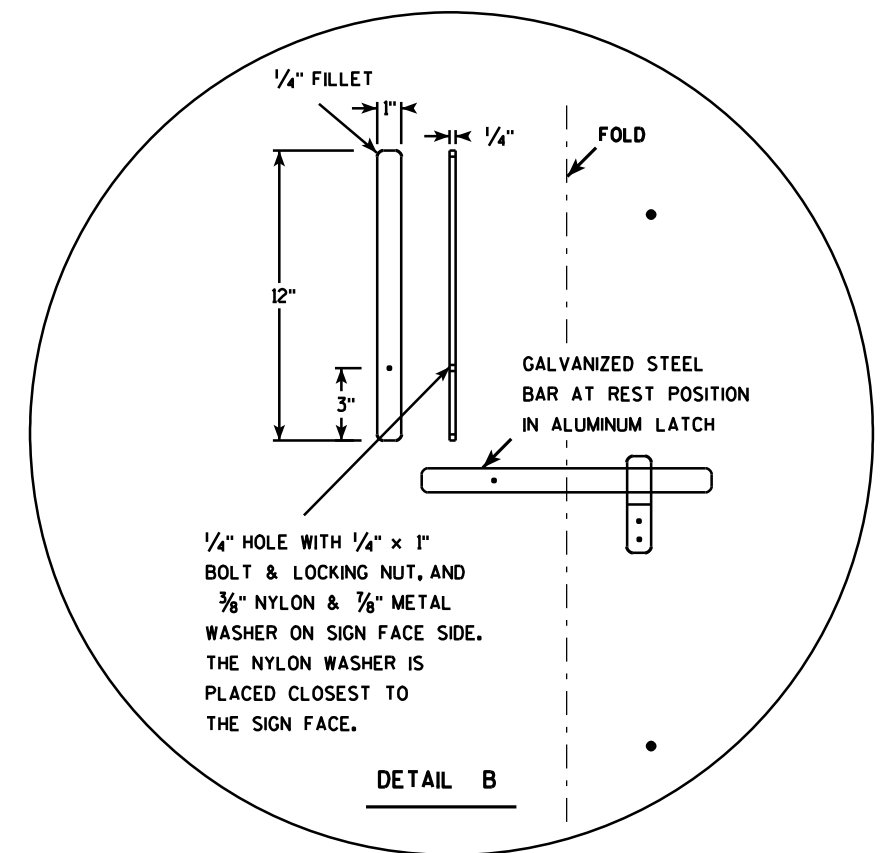
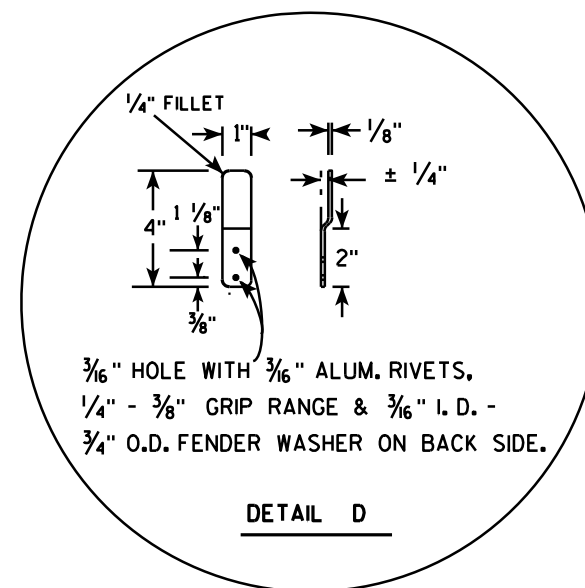
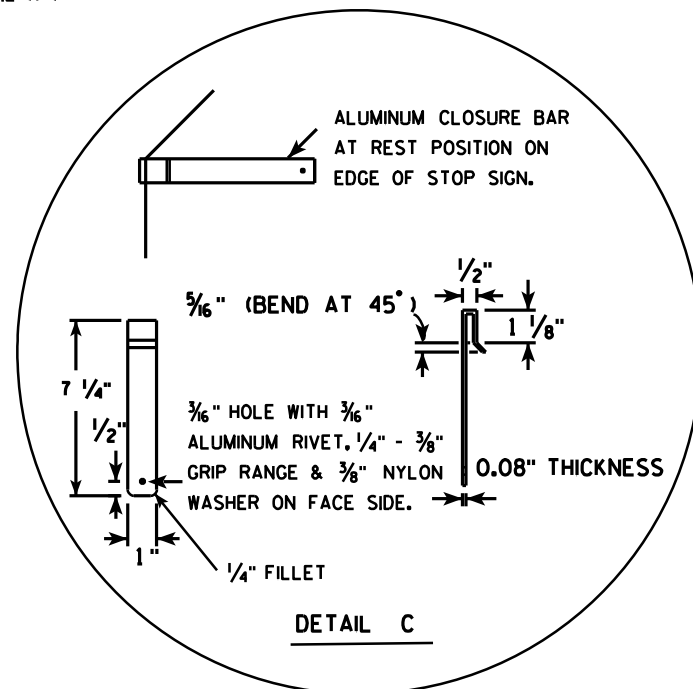
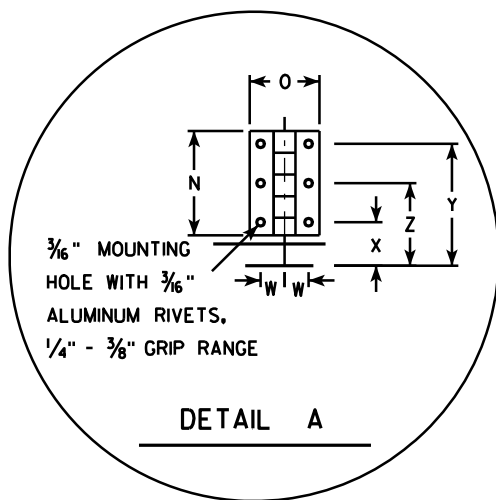
DATE 10/15/15

PLATE NO. M6-4.10



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/8	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/8	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/8	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 135	E
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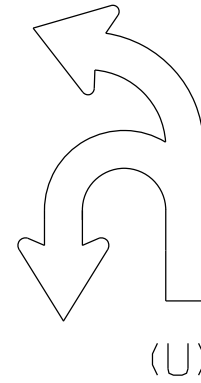
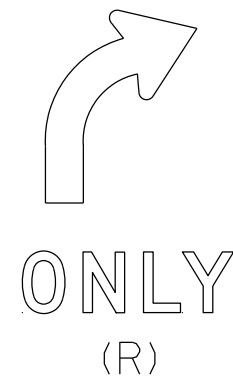
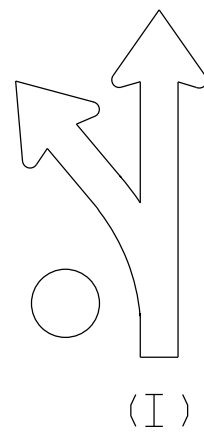
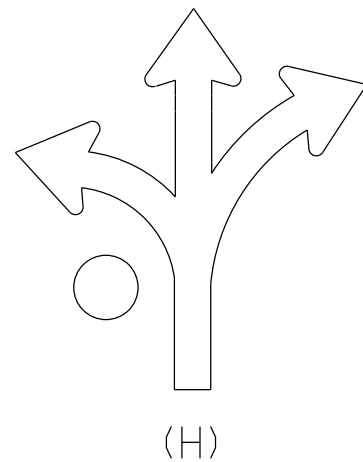
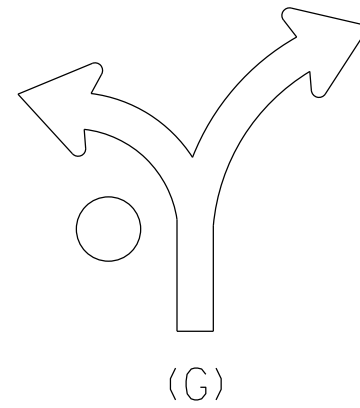
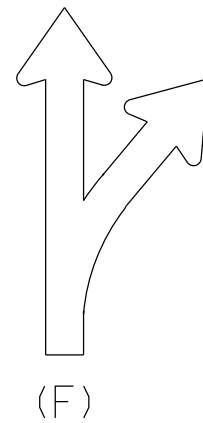
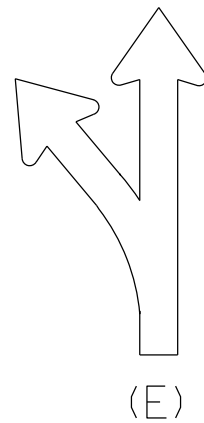
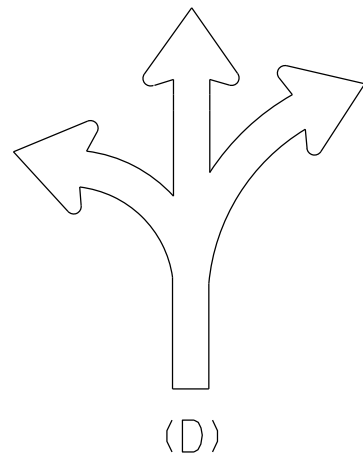
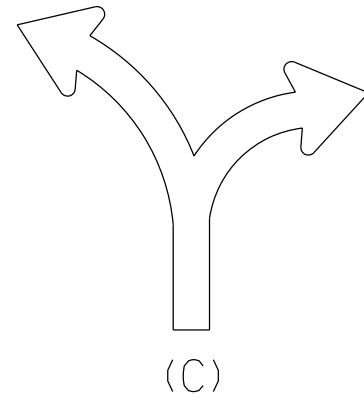
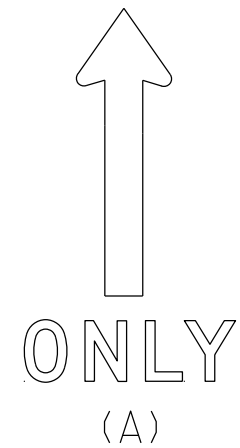
STANDARD SIGN

R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3



NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter = 3.75 sq ft for Size 2

6.0 sq ft for Size 3

10.0 sq ft for Size 4 or 5

2 Letters = 7.5 sq ft for Size 2

12.0 sq ft for Size 3

20.0 sq ft for Size 4 or 5

3 Letters = 11.25 sq ft for Size 2

18.0 sq ft for Size 3

30.0 sq ft for Size 4 or 5

4 Letters = 15.0 sq ft for Size 2

24.0 sq ft for Size 3

40.0 sq ft for Size 4 or 5

5 Letters = 18.75 sq ft for Size 2

30.0 sq ft for Size 3

50.0 sq ft for Size 4 or 5

6 Letters = 22.5 sq ft for Size 2

36.0 sq ft for Size 3

60.0 sq ft for Size 4 or 5

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq.Ft. changes.

Add the amounts when these letters are used:

1.25 sq ft for Size 2

1.5 sq ft for Size 3

2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn

PLOT DATE : 21-MAY 2019 4:37

PLOT BY : mscj9h

PLOT NAME :

SHEET NO: 136

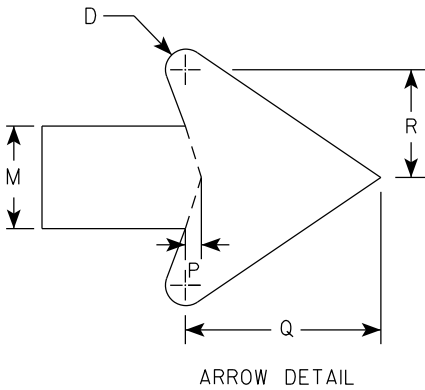
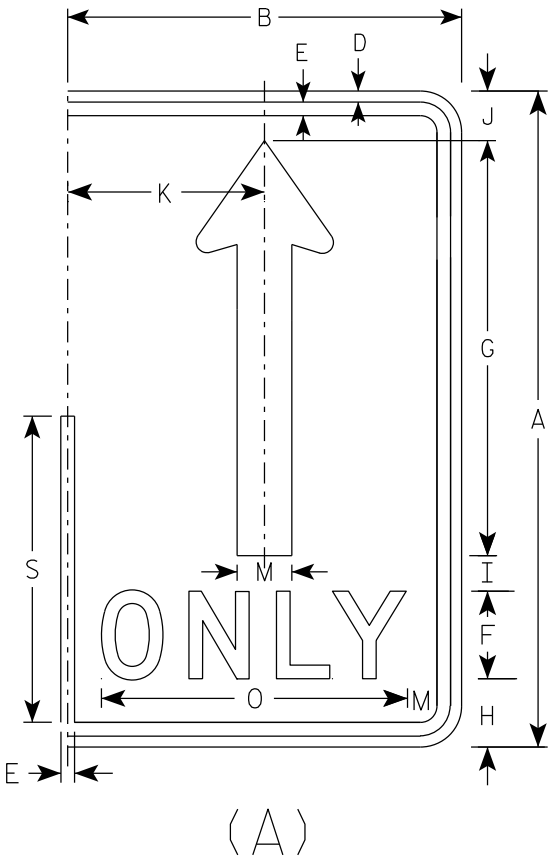
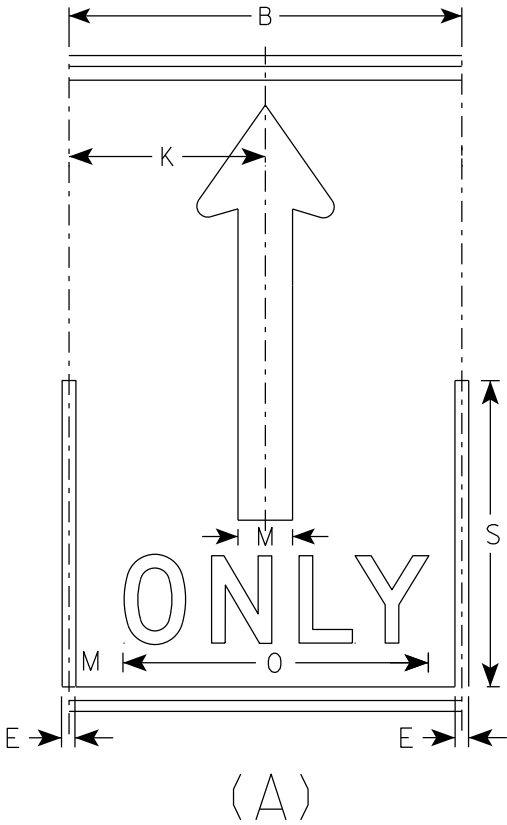
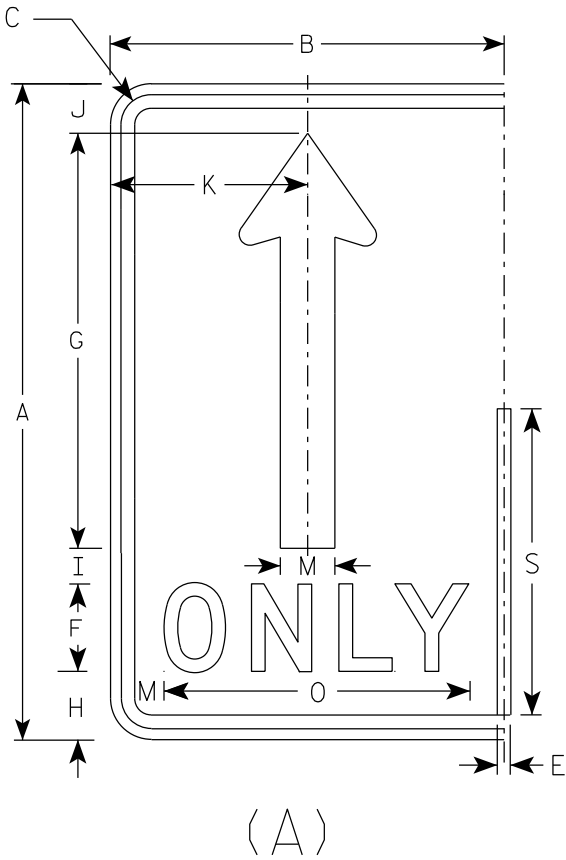
E

WISDOT/CADDs SHEET 42

7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8	4	19	3 1⁄8	1 5⁄8	2 1⁄4	9		2 1⁄2		14	3⁄8	4 3⁄4	2 5⁄8	14								3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8	4	19	3 1⁄8	1 5⁄8	2 1⁄4	9		2 1⁄2		14	3⁄8	4 3⁄4	2 5⁄8	14								3.75
3	36	24	1 3⁄8	1⁄2	5⁄8	5	22 3⁄4	3 3⁄4	1 3⁄4	2 3⁄4	12		3		17 5⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4								6.0
4	48	30	2 1⁄4	3⁄4	1	6	30 3⁄8	5 1⁄8	2 7⁄8	3 5⁄8	15		4		21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8								10.0
5	48	30	2 1⁄4	3⁄4	1	6	30 3⁄8	5 1⁄8	2 7⁄8	3 5⁄8	15		4		21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

7

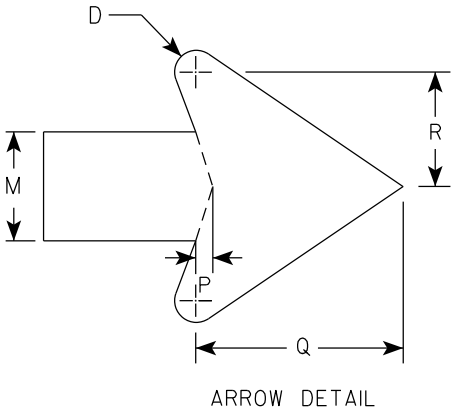
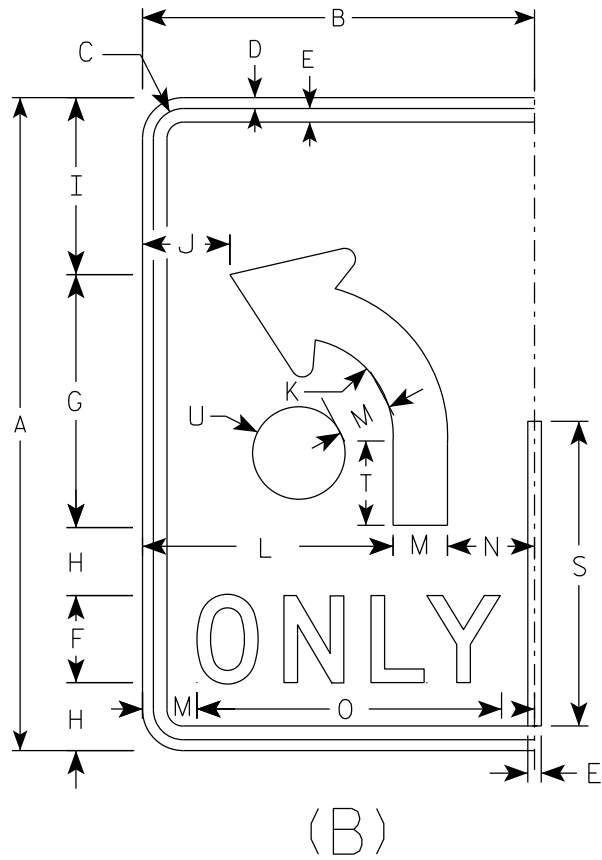
NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black

Message Series - D



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8	4	11 5⁄8	3 1⁄8	8 1⁄8	4	4 1⁄2	11 1⁄2	2 1⁄2	4	14	3⁄8	4 3⁄4	2 5⁄8	14	3 7⁄8	2 1⁄8						3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8	4	11 5⁄8	3 1⁄8	8 1⁄8	4	4 1⁄2	11 1⁄2	2 1⁄2	4	14	3⁄8	4 3⁄4	2 5⁄8	14	3 7⁄8	2 1⁄8						3.75
3	36	24	1 3⁄8	1⁄2	5⁄8	5	14	3 1⁄2	9 3⁄4	6	5 3⁄8	15	3	6	17 5⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4	4 5⁄8	2 1⁄2						6.0
4	48	30	2 1⁄4	3⁄4	1	6	18 5⁄8	5 1⁄8	13 1⁄8	6 1⁄8	7 1⁄4	18	4	8	21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8	6 1⁄4	3 3⁄8						10.0
5	48	30	2 1⁄4	3⁄4	1	6	18 5⁄8	5 1⁄8	13 1⁄8	6 1⁄8	7 1⁄4	18	4	8	21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8	6 1⁄4	3 3⁄8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

for State Traffic Engineer

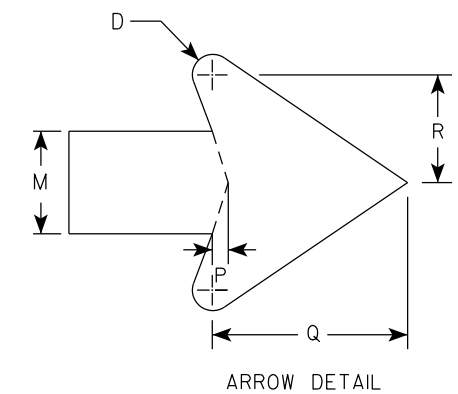
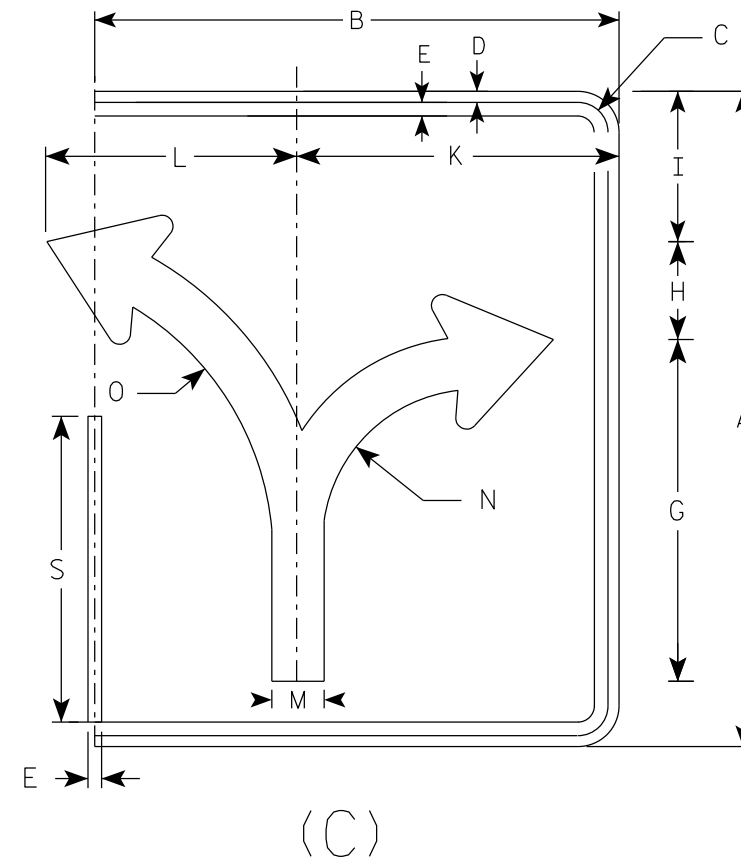
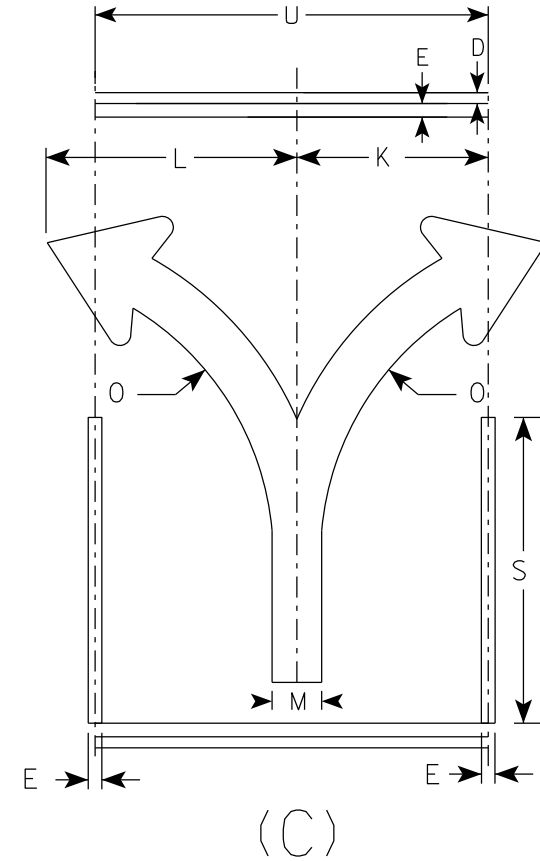
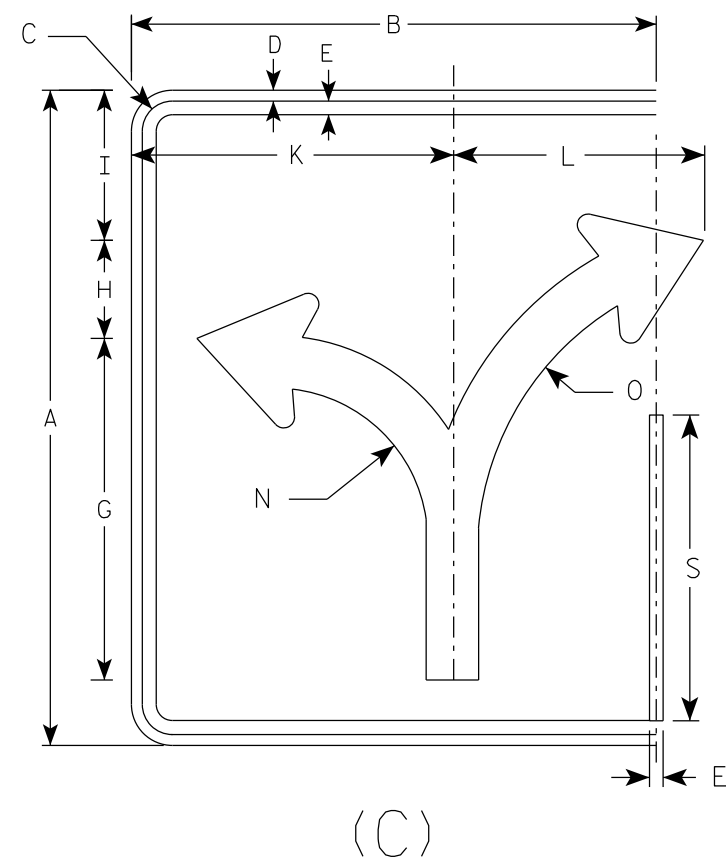
DATE 5/21/19

PLATE NO. R3-8.1

7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - None



7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS	MIDDLE
																											Area sq. ft.	Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 139	E
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STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

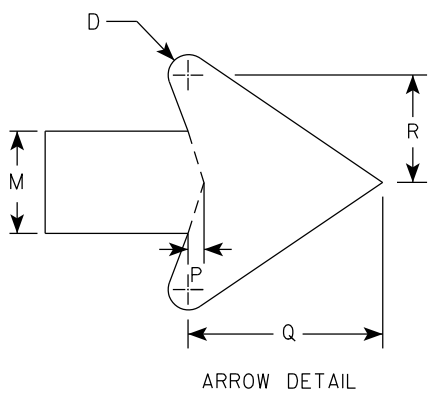
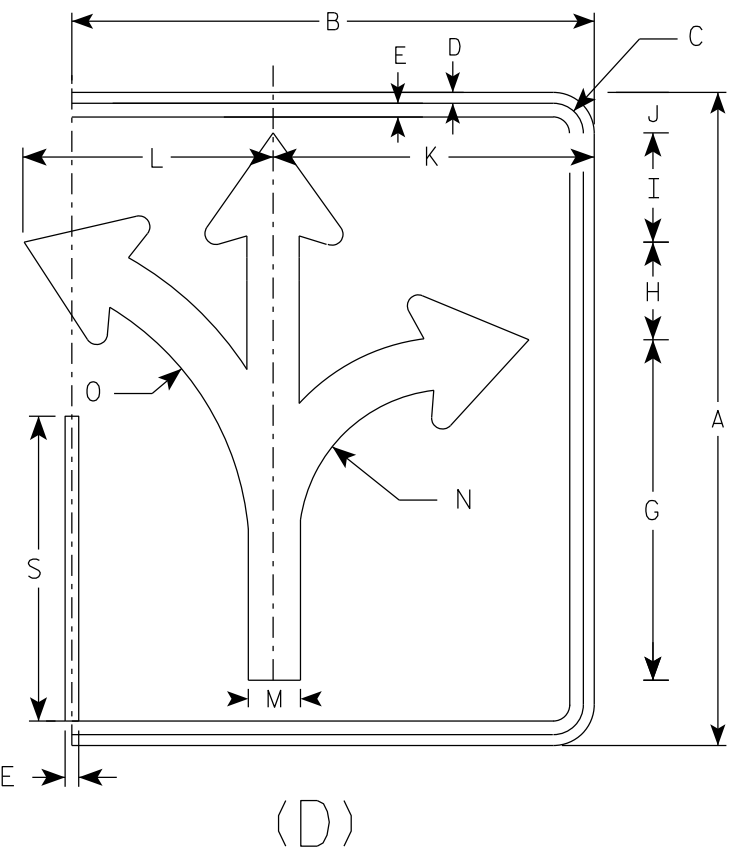
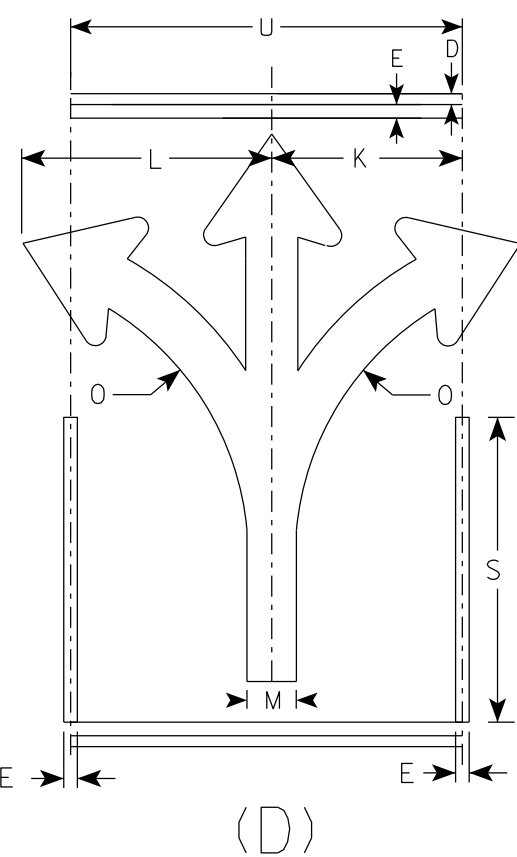
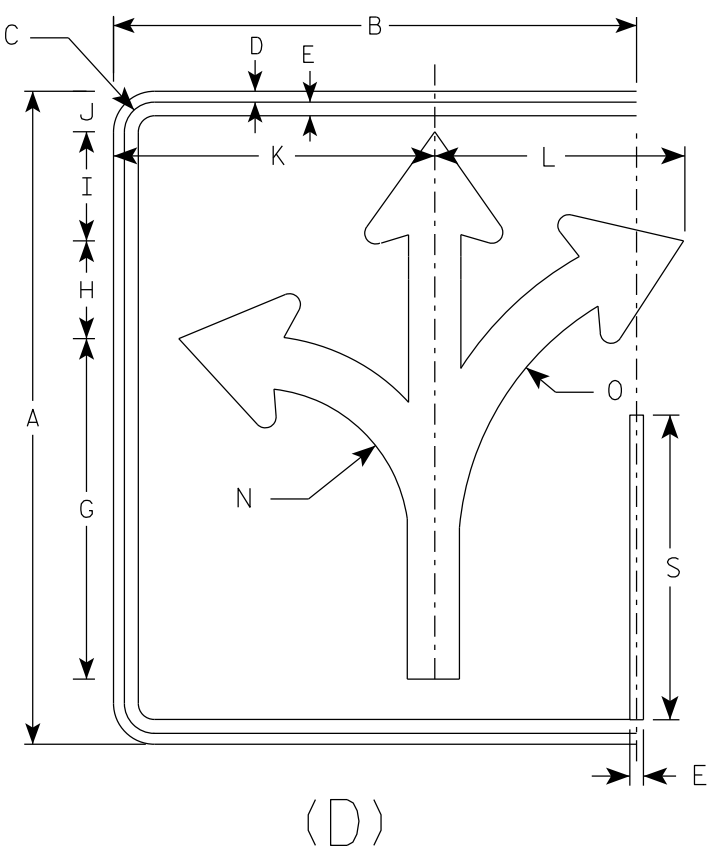
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



7

																											ENDS	MIDDLE
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. ft.
1																												
2S	30	24	1 3⁄8	1⁄2	5⁄8		15 5⁄8	4 1⁄2	5	1 7⁄8	14 3⁄4	11 1⁄2	2 3⁄8	7	13 1⁄4	3⁄8	4 1⁄2	2 1⁄2	14		18						5.0	3.75
2M	30	24	1 3⁄8	1⁄2	5⁄8		15 5⁄8	4 1⁄2	5	1 7⁄8	14 3⁄4	11 1⁄2	2 3⁄8	7	13 1⁄4	3⁄8	4 1⁄2	2 1⁄2	14		18						5.0	3.75
3	36	30	1 3⁄8	1⁄2	5⁄8		18 3⁄4	5 1⁄2	6	2 1⁄4	17 1⁄4	17 1⁄4	2 7⁄8	8 3⁄8	16	1⁄2	5 1⁄2	3	16 3⁄4		24						7.5	6.0
4	48	36	2 1⁄4	3⁄4	1		24 7⁄8	7 1⁄4	7 7⁄8	3 1⁄8	23 1⁄8	18	3 3⁄4	11 1⁄8	21 1⁄4	5⁄8	7 1⁄8	4	22 3⁄8		30						12.0	10.0
5	48	36	2 1⁄4	3⁄4	1		24 7⁄8	7 1⁄4	7 7⁄8	3 1⁄8	23 1⁄8	18	3 3⁄4	11 1⁄8	21 1⁄4	5⁄8	7 1⁄8	4	22 3⁄8		30						12.0	10.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 140

E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn

PLOT DATE : 21-MAY 2019 4:38

PLOT BY : mscj9h

PLOT NAME :

PLOT SCALE : \$\$.....plotscale.....\$\$WISDOT/CADDs SHEET 42

STANDARD SIGN
R3-8 (D) Arrow

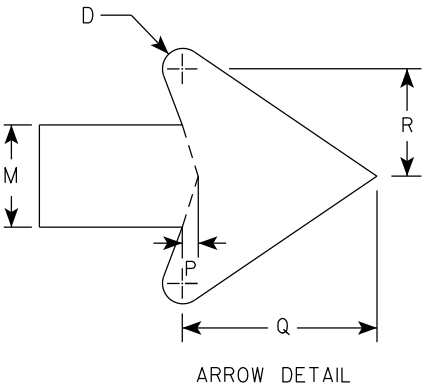
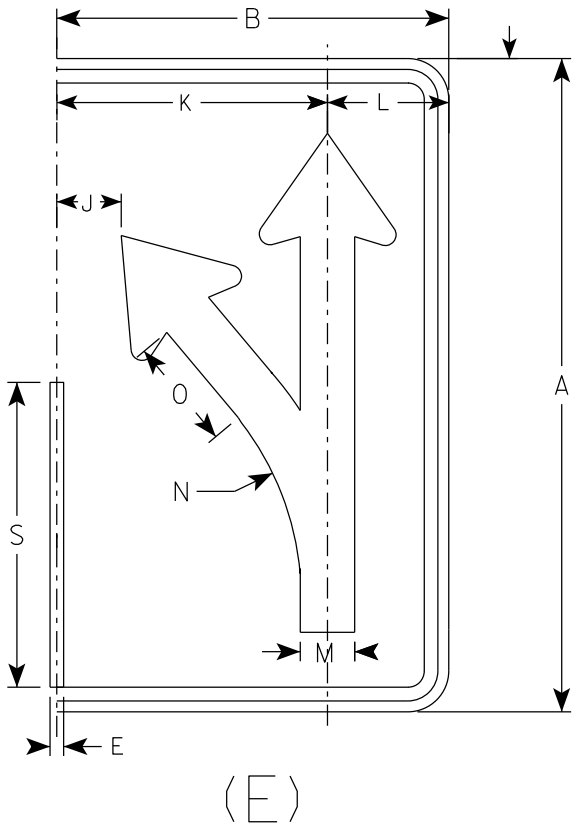
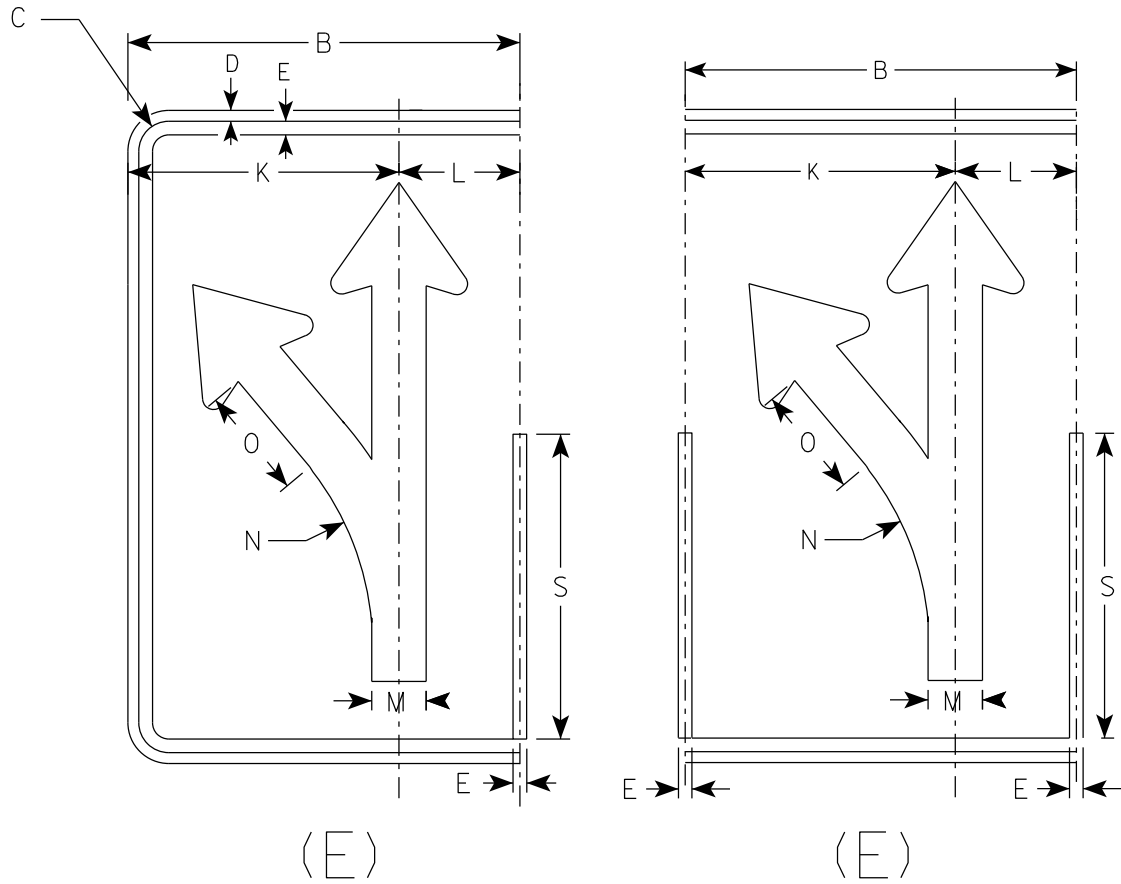
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8		18 1⁄4	4 3⁄4	3 1⁄4	3	12 1⁄2	5 1⁄2	2 1⁄2	13 1⁄4	5 1⁄8	3⁄8	4 3⁄4	2 5⁄8	14								3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8		18 1⁄4	4 3⁄4	3 1⁄4	3	12 1⁄2	5 1⁄2	2 1⁄2	13 1⁄4	5 1⁄8	3⁄8	4 3⁄4	2 5⁄8	14								3.75
3	36	24	1 3⁄8	1⁄2	5⁄8		21 7⁄8	5 5⁄8	4	4 7⁄8	16 1⁄8	7 3⁄4	3	15 7⁄8	6 1⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4								6.0
4	48	30	2 1⁄4	3⁄4	1		29 1⁄8	7 1⁄2	5 1⁄4	5 3⁄8	20 1⁄2	9 1⁄2	4	21 1⁄4	8 1⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8								10.0
5	48	30	2 1⁄4	3⁄4	1		29 1⁄8	7 1⁄2	5 1⁄4	5 3⁄8	20 1⁄2	9 1⁄2	4	21 1⁄4	8 1⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

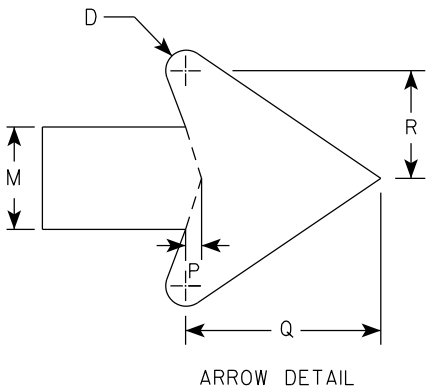
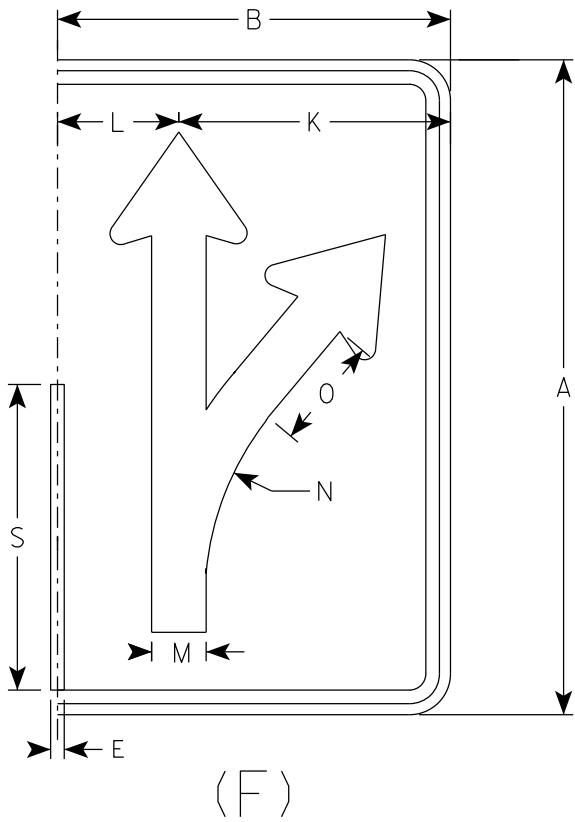
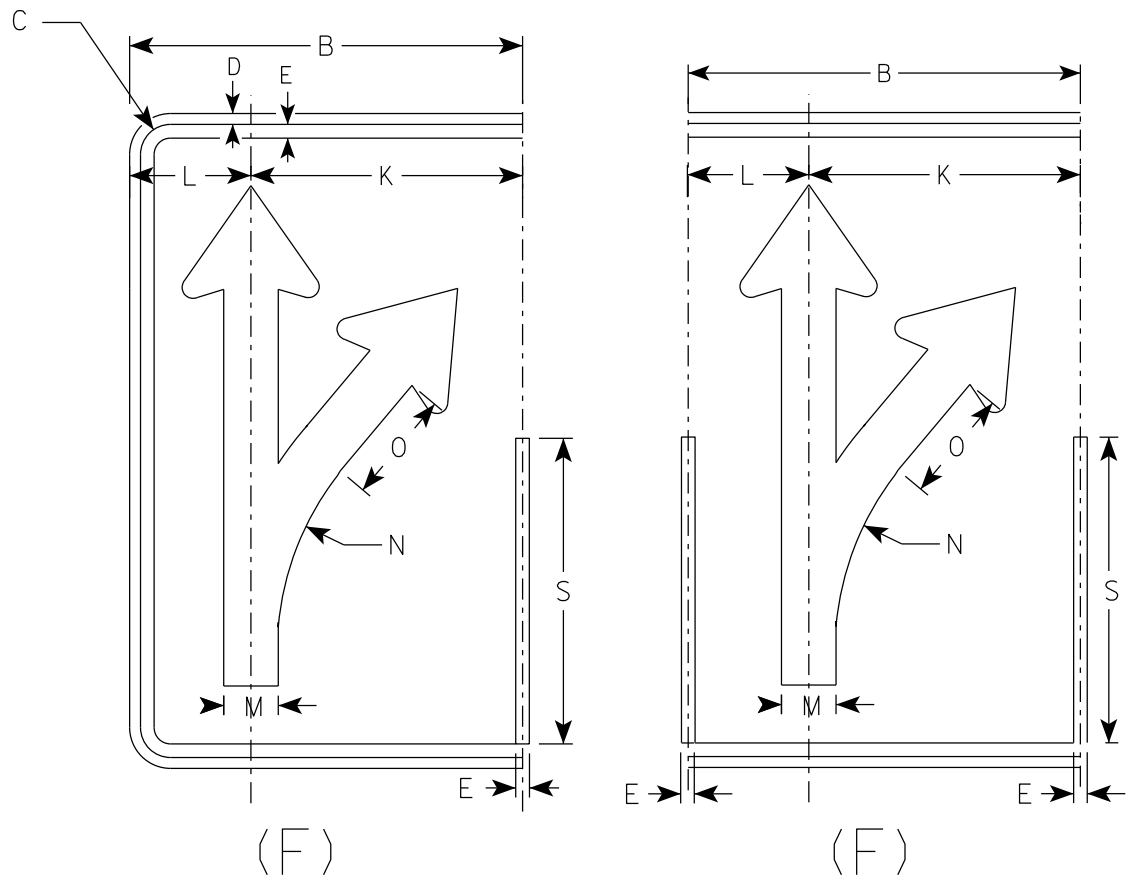
DATE 5/21/19 PLATE NO. R3-8.1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8		18 1⁄4	4 3⁄4	3 1⁄4	3	12 1⁄2	5 1⁄2	2 1⁄2	13 1⁄4	5 1⁄8	3⁄8	4 3⁄4	2 5⁄8	14								3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8		18 1⁄4	4 3⁄4	3 1⁄4	3	12 1⁄2	5 1⁄2	2 1⁄2	13 1⁄4	5 1⁄8	3⁄8	4 3⁄4	2 5⁄8	14								3.75
3	36	24	1 3⁄8	1⁄2	5⁄8		21 7⁄8	5 5⁄8	4	4 7⁄8	16 1⁄8	7 3⁄4	3	15 7⁄8	6 1⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4								6.0
4	48	30	2 1⁄4	3⁄4	1		29 1⁄8	7 1⁄2	5 1⁄4	5 3⁄8	20 1⁄2	9 1⁄2	4	21 1⁄4	8 1⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8								10.0
5	48	30	2 1⁄4	3⁄4	1		29 1⁄8	7 1⁄2	5 1⁄4	5 3⁄8	20 1⁄2	9 1⁄2	4	21 1⁄4	8 1⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8								10.0

PROJECT NO:

HWY:

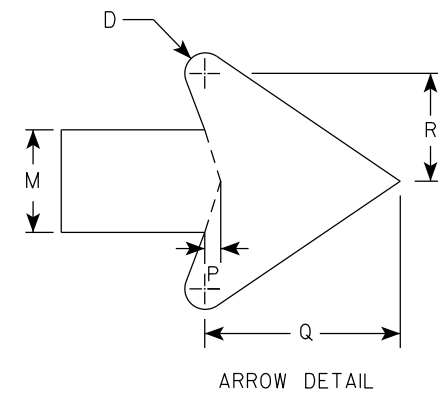
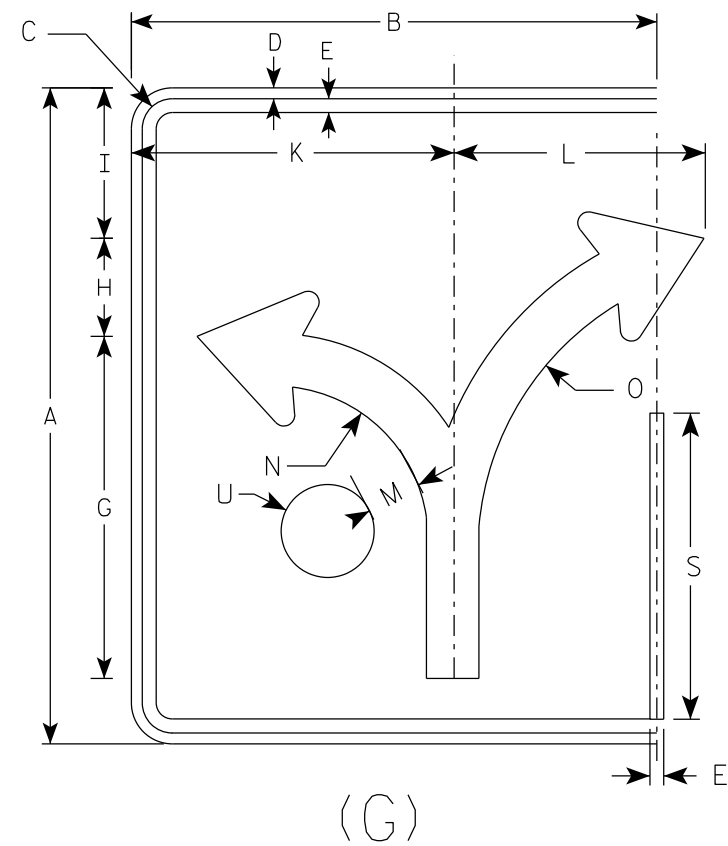
COUNTY:

SHEET NO: 142

E

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 3⁄8	½	5⁄8		15 5⁄8	4 ½	6 7⁄8		14 ¾	11 ½	2 3⁄8	7	13 ¼	3⁄8	4 ½	2 ½	14		2 ⅛						5.0
2M	30	24	1 3⁄8	½	5⁄8		15 5⁄8	4 ½	6 7⁄8		14 ¾	11 ½	2 3⁄8	7	13 ¼	3⁄8	4 ½	2 ½	14		2 ⅛						5.0
3	36	30	1 3⁄8	½	5⁄8		18 ¾	5 ½	8 ¼		17 ¼	17 ¼	2 7⁄8	8 3⁄8	16	½	5 ½	3	16 ¾		2 ½						7.5
4	48	36	2 ¼	¾	1		24 7⁄8	7 ¼	11		23 ⅛	18	3 ¾	11 ⅛	21 ¼	5⁄8	7 ⅛	4	22 3⁄8		3 3⁄8						12.0
5	48	36	2 ¼	¾	1		24 7⁄8	7 ¼	11		23 ⅛	18	3 ¾	11 ⅛	21 ¼	5⁄8	7 ⅛	4	22 3⁄8		3 3⁄8						12.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 143

E

STANDARD SIGN
R3-8 (G) Arrow

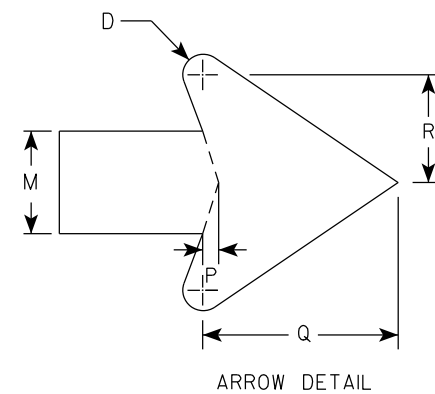
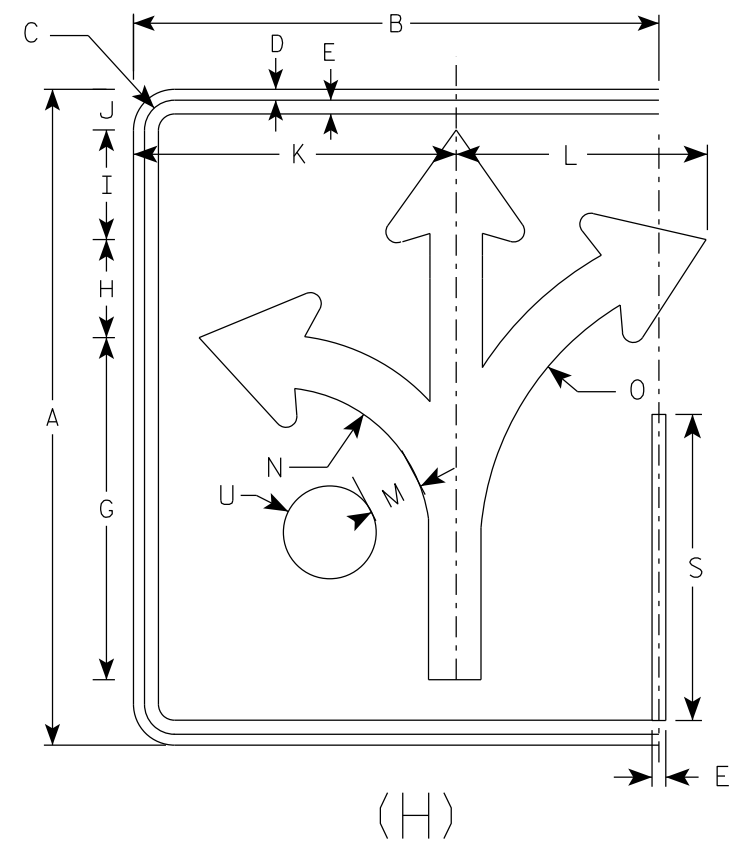
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 3⁄8	1⁄2	5⁄8		15 5⁄8	4 1⁄2	5	1 7⁄8	14 3⁄4	11 1⁄2	2 3⁄8	7	13 1⁄4	3⁄8	4 1⁄2	2 1⁄2	14		2 1⁄8						5.0
2M	30	24	1 3⁄8	1⁄2	5⁄8		15 5⁄8	4 1⁄2	5	1 7⁄8	14 3⁄4	11 1⁄2	2 3⁄8	7	13 1⁄4	3⁄8	4 1⁄2	2 1⁄2	14		2 1⁄8						5.0
3	36	30	1 3⁄8	1⁄2	5⁄8		18 3⁄4	5 1⁄2	6	3 1⁄8	17 1⁄4	17 1⁄4	2 7⁄8	8 3⁄8	16	1⁄2	5 1⁄2	3	16 3⁄4		2 1⁄2						7.5
4	48	36	2 1⁄4	3⁄4	1		24 7⁄8	7 1⁄4	7 7⁄8	3 1⁄8	23 1⁄8	18	3 3⁄4	11 1⁄8	21 1⁄4	5⁄8	7 1⁄8	4	22 3⁄8		3 3⁄8						12.0
5	48	36	2 1⁄4	3⁄4	1		24 7⁄8	7 1⁄4	7 7⁄8	3 1⁄8	23 1⁄8	18	3 3⁄4	11 1⁄8	21 1⁄4	5⁄8	7 1⁄8	4	22 3⁄8		3 3⁄8						12.0

PROJECT NO:		HWY:		COUNTY:		SHEET NO: 144		E
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STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

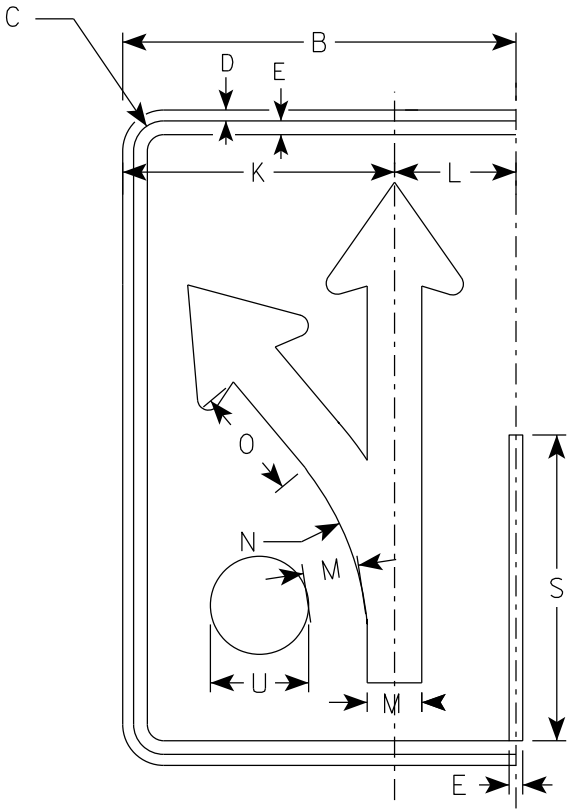
DATE 5/21/19 PLATE NO. R3-8.1

NOTES

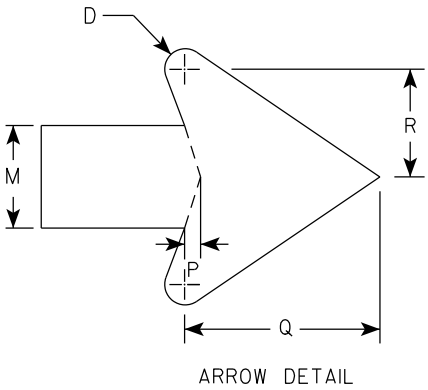
1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - None



(I)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8		18 1⁄4	4 3⁄4	3 1⁄4	3	12 1⁄2	5 1⁄2	2 1⁄2	13 1⁄4	5 1⁄8	3⁄8	4 3⁄4	2 5⁄8	14		2 1⁄8						3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8		18 1⁄4	4 3⁄4	3 1⁄4	3	12 1⁄2	5 1⁄2	2 1⁄2	13 1⁄4	5 1⁄8	3⁄8	4 3⁄4	2 5⁄8	14		2 1⁄8						3.75
3	36	24	1 3⁄8	1⁄2	5⁄8		21 7⁄8	5 5⁄8	4	4 7⁄8	16 1⁄8	7 3⁄4	3	15 7⁄8	6 1⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4		2 1⁄2						6.0
4	48	30	2 1⁄4	3⁄4	1		29 1⁄8	7 1⁄2	5 1⁄4	5 3⁄8	20 1⁄2	9 1⁄2	4	21 1⁄4	8 1⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8		3 3⁄8						10.0
5	48	30	2 1⁄4	3⁄4	1		29 1⁄8	7 1⁄2	5 1⁄4	5 3⁄8	20 1⁄2	9 1⁄2	4	21 1⁄4	8 1⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8		3 3⁄8						10.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 145

E

STANDARD SIGN

R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

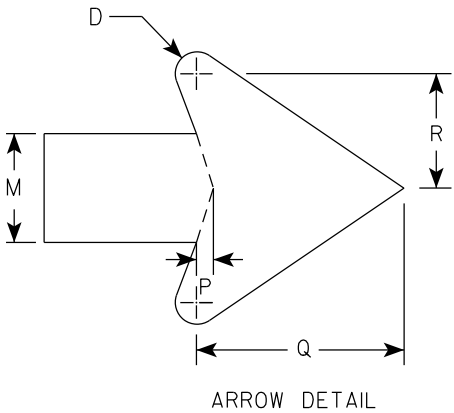
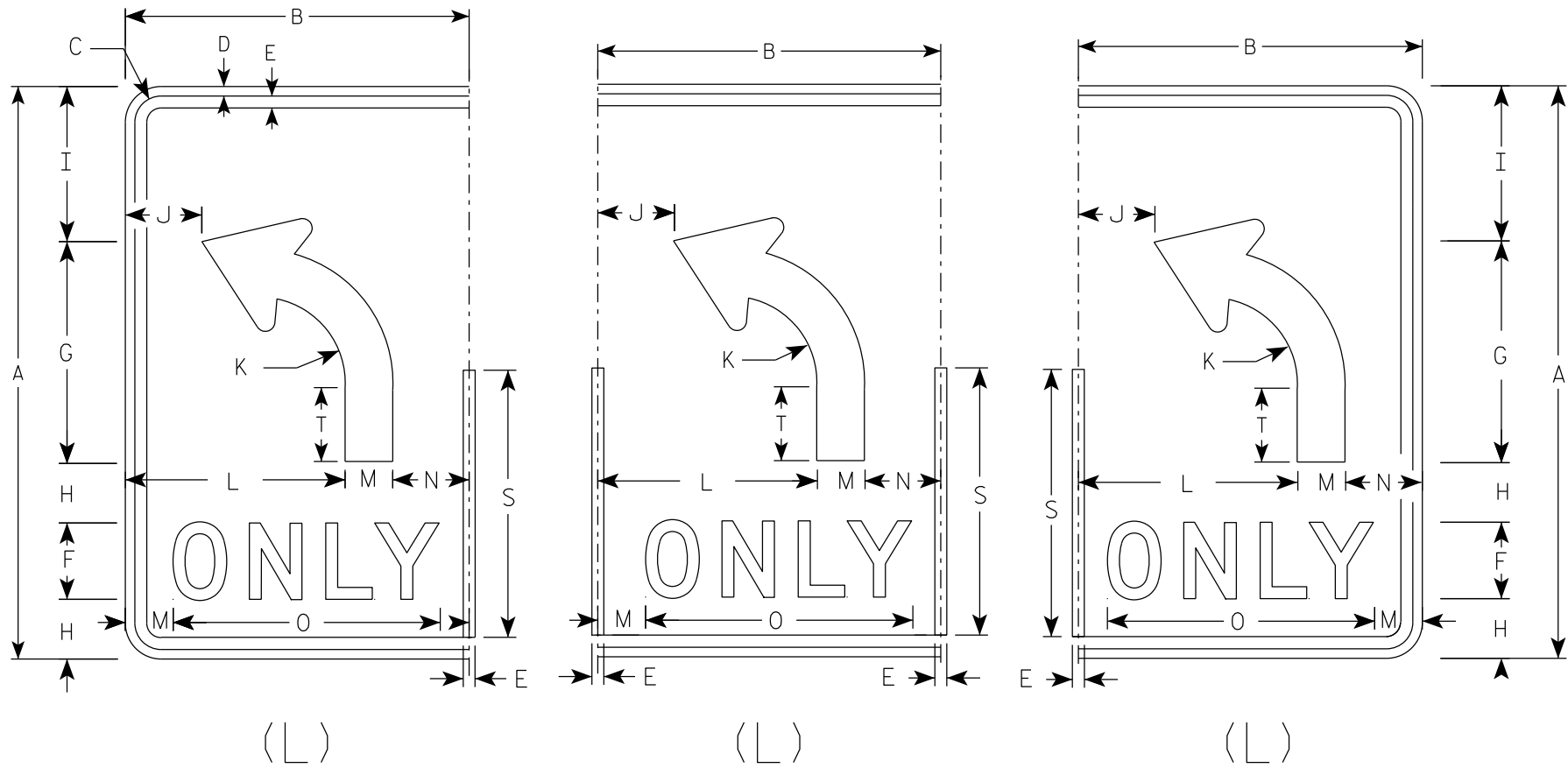
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8	4	11 5⁄8	3 1⁄8	8 1⁄8	4	4 1⁄2	11 1⁄2	2 1⁄2	4	14	3⁄8	4 3⁄4	2 5⁄8	14	3 7⁄8							3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8	4	11 5⁄8	3 1⁄8	8 1⁄8	4	4 1⁄2	11 1⁄2	2 1⁄2	4	14	3⁄8	4 3⁄4	2 5⁄8	14	3 7⁄8							3.75
3	36	24	1 3⁄8	1⁄2	5⁄8	5	14	3 1⁄2	9 3⁄4		5 3⁄8	15	3	6	17 5⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4	4 5⁄8							6.0
4	48	30	2 1⁄4	3⁄4	1	6	18 5⁄8	5 1⁄8	13 1⁄8	6 1⁄8	7 1⁄4	18	4	8	21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8	6 1⁄4							10.0
5	48	30	2 1⁄4	3⁄4	1	6	18 5⁄8	5 1⁄8	13 1⁄8	6 1⁄8	7 1⁄4	18	4	8	21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8	6 1⁄4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

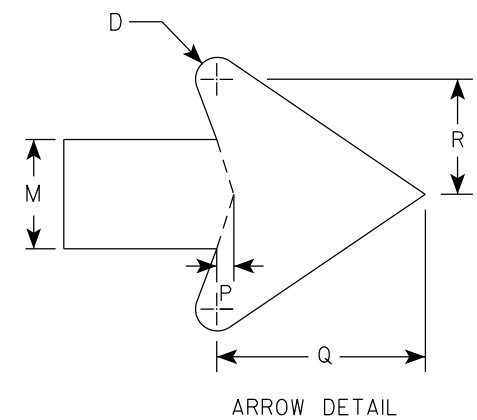
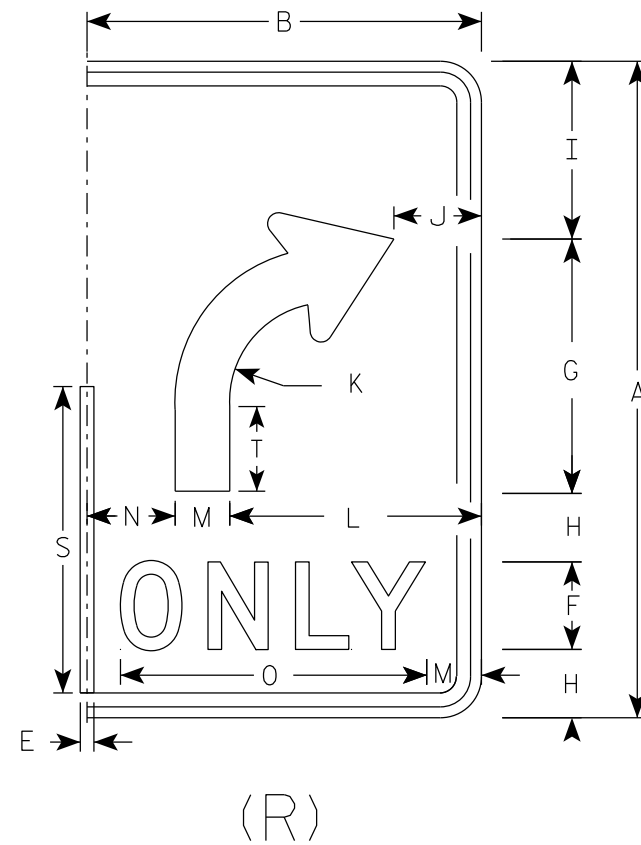
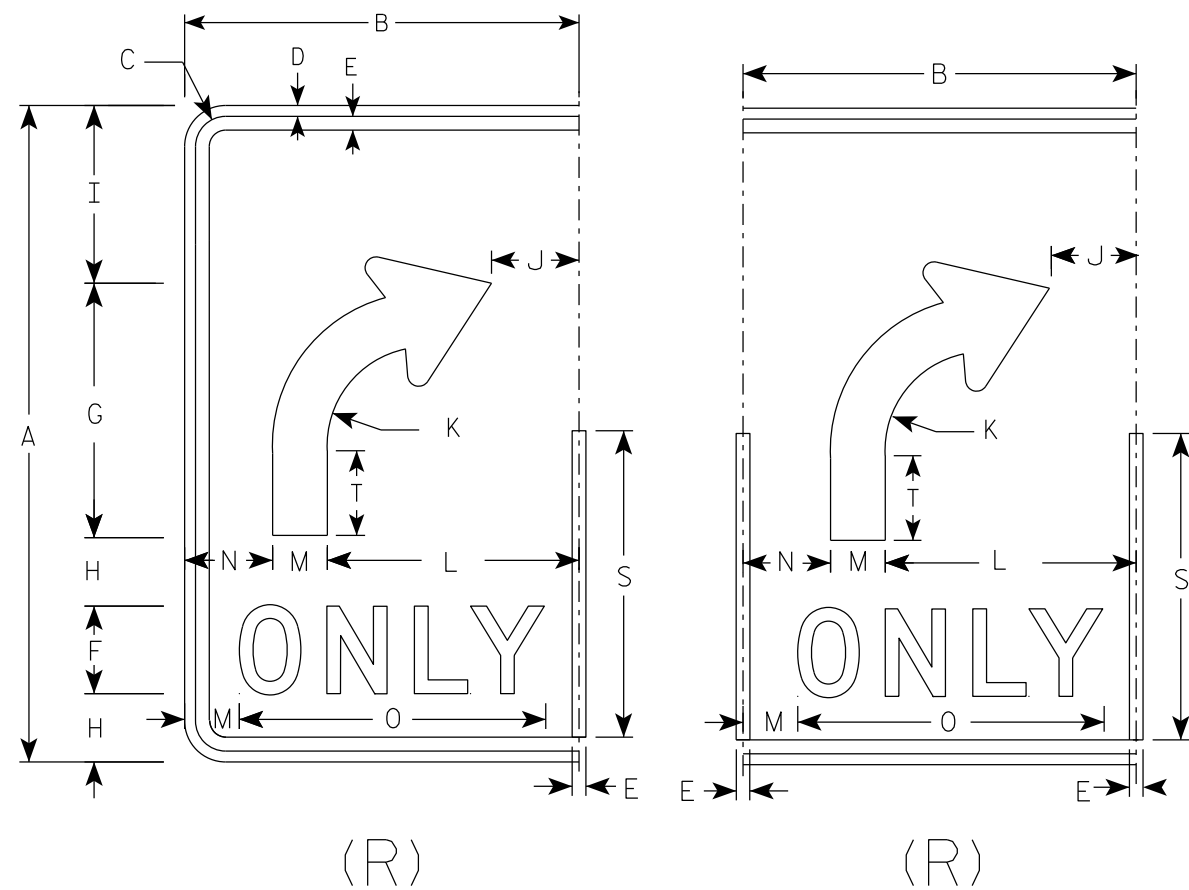
for State Traffic Engineer

DATE 5/21/19

PLATE NO. R3-8.1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	1⁄2	5⁄8	4	11 5⁄8	3 1⁄8	8 1⁄8	4	4 1⁄2	11 1⁄2	2 1⁄2	4	14	3⁄8	4 3⁄4	2 5⁄8	14	3 7⁄8							3.75
2M	30	18	1 3⁄8	1⁄2	5⁄8	4	11 5⁄8	3 1⁄8	8 1⁄8	4	4 1⁄2	11 1⁄2	2 1⁄2	4	14	3⁄8	4 3⁄4	2 5⁄8	14	3 7⁄8							3.75
3	36	24	1 3⁄8	1⁄2	5⁄8	5	14	3 1⁄2	9 3⁄4	6	5 3⁄8	15	3	6	17 5⁄8	1⁄2	5 3⁄4	3 1⁄8	16 3⁄4	4 5⁄8							6.0
4	48	30	2 1⁄4	3⁄4	1	6	18 5⁄8	5 1⁄8	13 1⁄8	6 1⁄8	7 1⁄4	18	4	8	21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8	6 1⁄4							10.0
5	48	30	2 1⁄4	3⁄4	1	6	18 5⁄8	5 1⁄8	13 1⁄8	6 1⁄8	7 1⁄4	18	4	8	21 3⁄4	5⁄8	7 5⁄8	4 1⁄4	22 3⁄8	6 1⁄4							10.0

STANDARD SIGN

R3-8 (R) Arrow

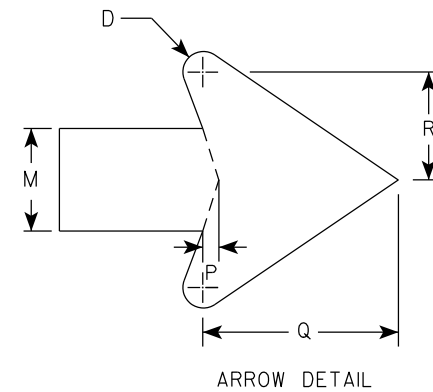
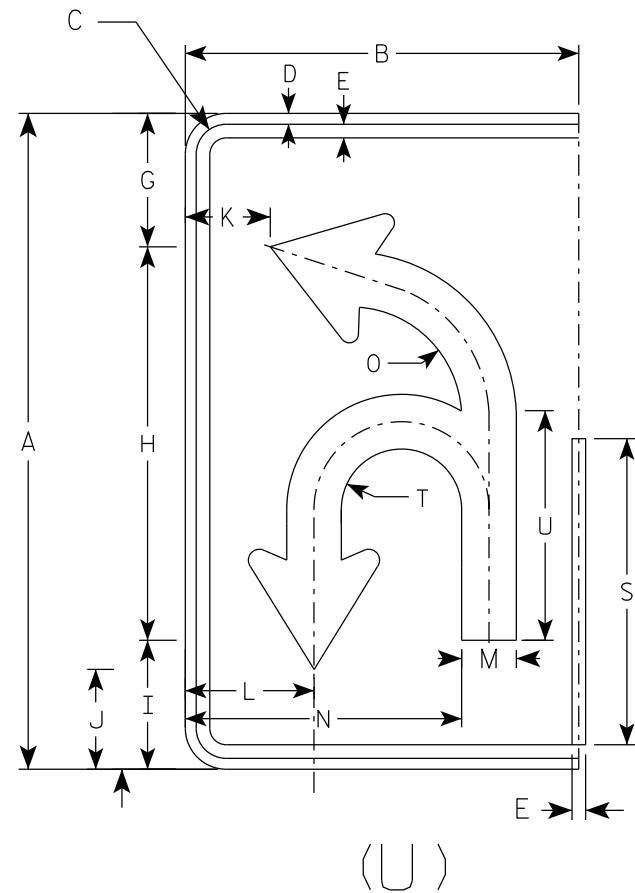
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - None



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 3⁄8	½	5⁄8		6 1⁄8	18	5 7⁄8	4 5⁄8	3 7⁄8	5 7⁄8	2 ½	12 5⁄8	5 1⁄8	3⁄8	4 ¾	2 5⁄8	14	2 ¾	10 ½						3.75
2M	30	18	1 3⁄8	½	5⁄8		6 1⁄8	18	5 7⁄8	4 5⁄8	3 7⁄8	5 7⁄8	2 ½	12 5⁄8	5 1⁄8	3⁄8	4 ¾	2 5⁄8	14	2 ¾	10 ½						3.75
3	36	24	1 3⁄8	½	5⁄8		21 7⁄8	21 5⁄8	7 1⁄8	5 ½	5 7⁄8	8 ¼	3	16 3⁄8	6 1⁄8	½	5 ¾	3 1⁄8	16 ¾	3 ¼	12 5⁄8						6.0
4	48	30	2 ¼	¾	1		29 1⁄8	28 ¾	9 3⁄8	7 ¼	6 7⁄8	10	4	20 7⁄8	8 1⁄8	5⁄8	7 5⁄8	4 ¼	22 3⁄8	4 3⁄8	16 ¾						10.0
5	48	30	2 ¼	¾	1		29 1⁄8	28 ¾	9 3⁄8	7 ¼	6 7⁄8	10	4	20 7⁄8	8 1⁄8	5⁄8	7 5⁄8	4 ¼	22 3⁄8	4 3⁄8	16 ¾						10.0

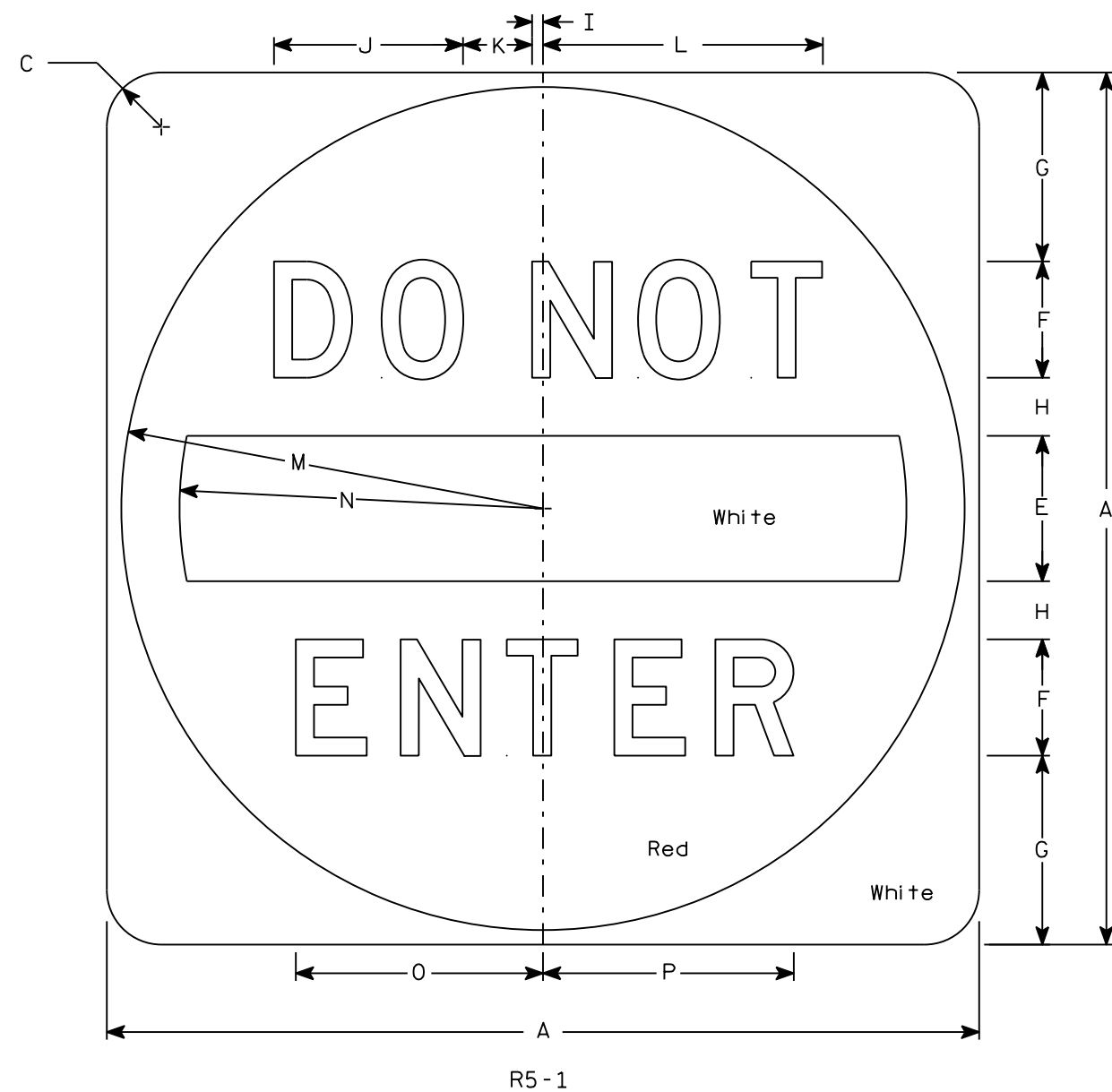
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

7



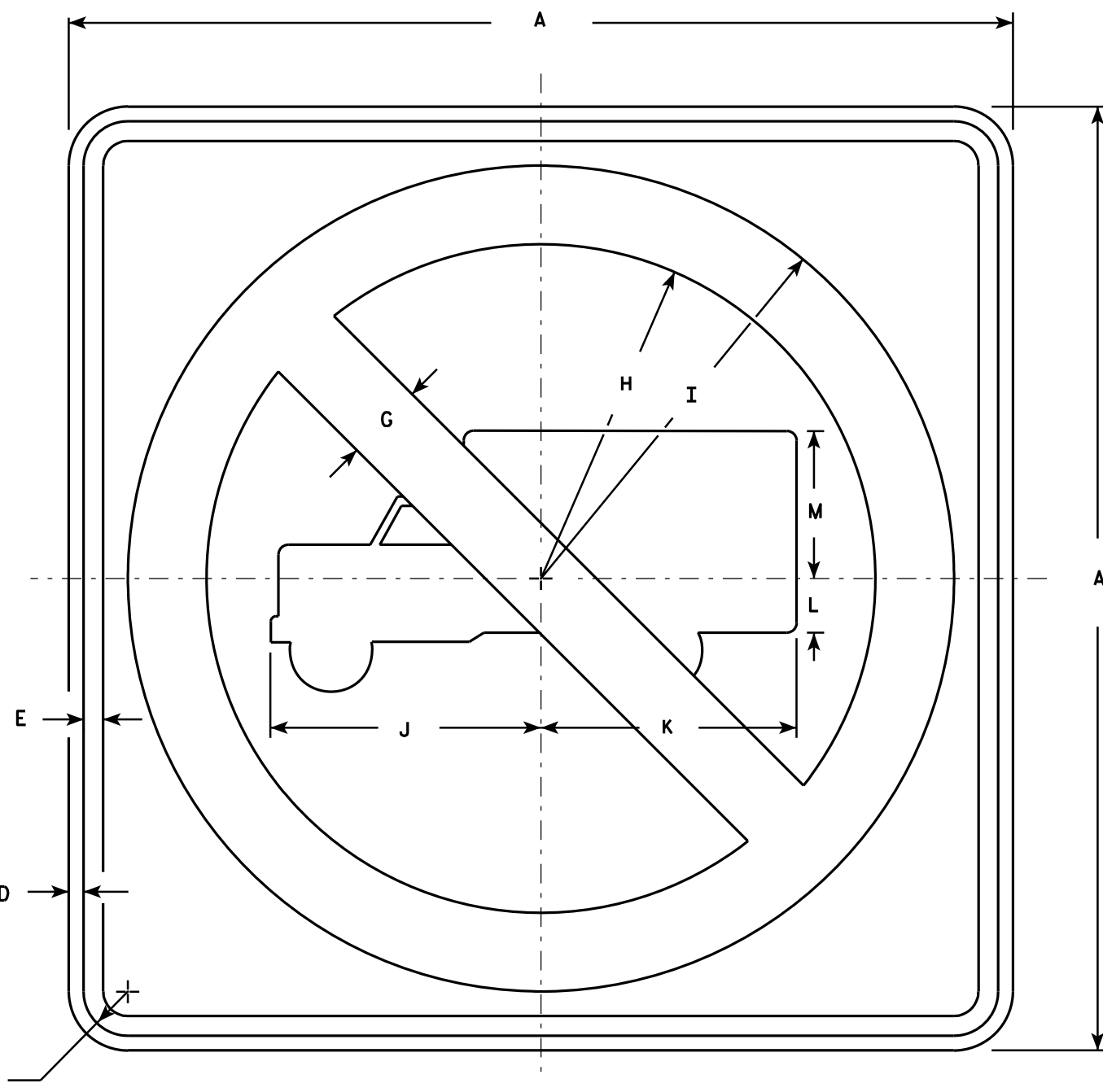
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - See detail
Message - White
3. Message Series - D

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.25
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN R5-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/15/18	PLATE NO. R5-1.16



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Circle & Diagonal - Reflective red.
Truck Symbol & Border - Non-reflective black.

7

7

R5-2

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/8	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 3/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		1 5/8	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-2.6

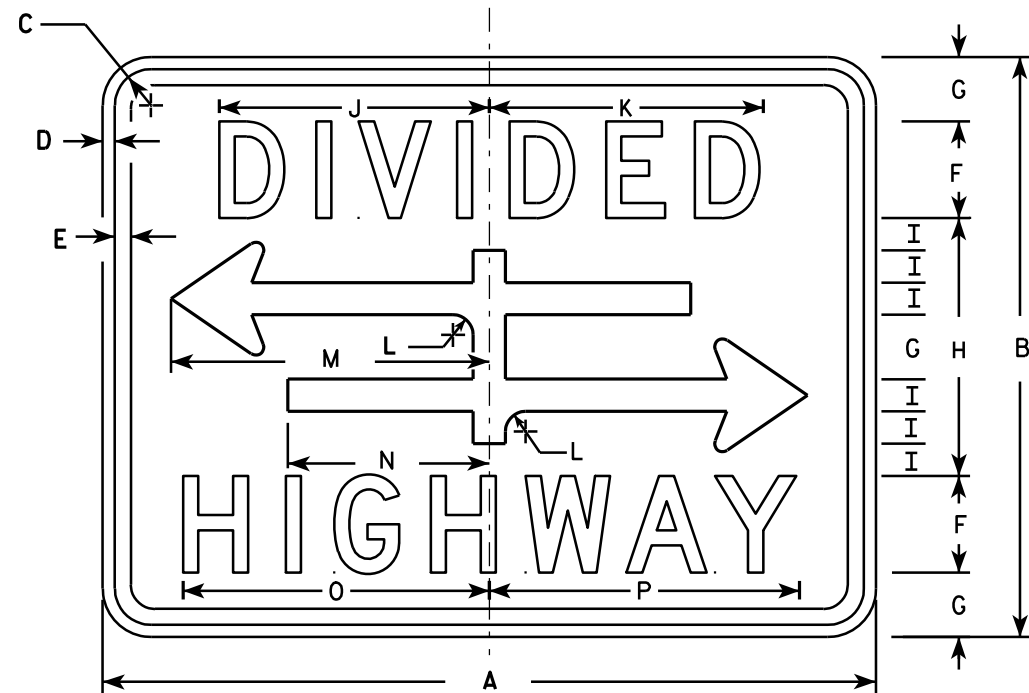
PROJECT NO:

HWY:

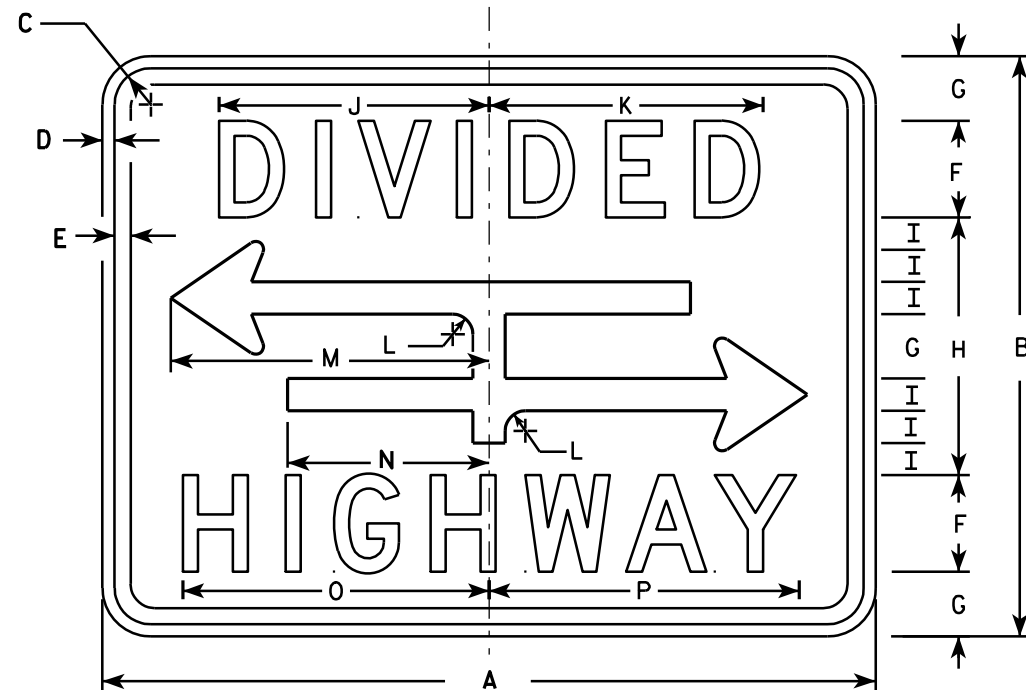
COUNTY:

SHEET NO: 150

E



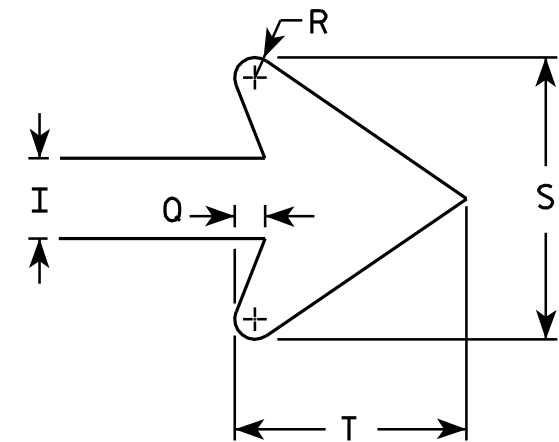
R6-3



R6-3A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

PROJECT NO:

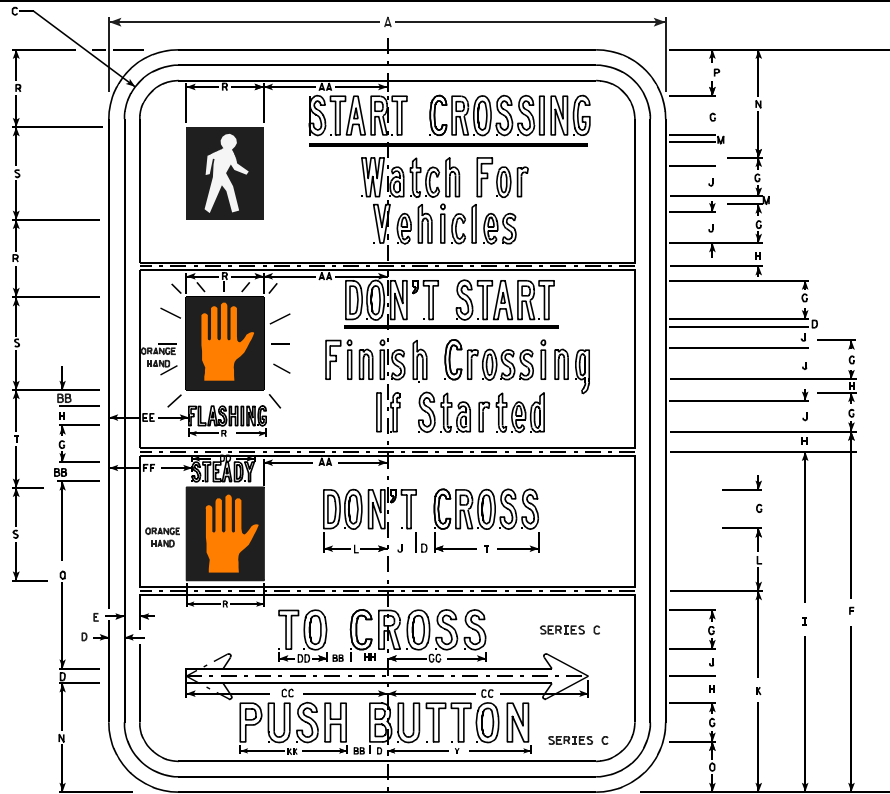
STANDARD SIGN
R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

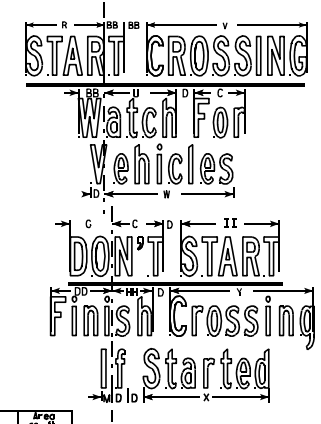
DATE 3/31/2011 PLATE NO. R6-3.5

SHEET NO: 151 E



NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - WHITE
Message - BLACK except Hand Symbol which is Orange with black background.
3. Message Series - B or as noted on the sign.
4. R10-3BR (right arrow)
R10-3BL (left arrow)
R10-3BD (double arrow)



R10-3B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	6	9	1/2	1/8	1/8	4 1/4	1/2	1/8	4 1/8	3/8	2 3/8	3/8	1/8	1 3/8	5/8	5/8	2 1/4	3/8	1 1/8	1 1/4	3/4	1 3/4	1 5/8	1 3/8	1 1/2	5/8	0.38
2S	9	12	3/8	1/4	1/4	5 1/8	3/8	3/8	5 1/2	1/2	3 1/4	1	1/8	1 3/4	3/8	3/4	3	1 1/4	1 1/2	1 5/8	1 1/8	2 5/8	2 1/8	2	2 3/8	1 3/8	0.75
2M	9	12	3/8	1/4	1/4	5 7/8	5/8	3/8	5 1/2	1/2	3 1/4	1	1/8	1 3/4	3/8	3/4	3	1 1/4	1 1/2	1 5/8	1 1/8	2 5/8	2 1/8	2	2 3/8	1 3/8	0.75
3																											
4																											
5																											

SIZE	AA	BB	CC	DD	EE	FF	GG	HH	II	JJ	KK	LL	MM	NN	OO	PP	QQ	RR	SS	TT	UU	VV	WW	XX	YY	ZZ	Area sq. ft.
1	1 1/2	1/4	2 1/4	5/8	5/8	5/8	1 1/8	3/8	1	1/2	1 1/8																
2S	2	3/8	3 1/4	1	1 1/4	1 3/8	1 5/8	5/8	1 5/8	3/4	1 3/4																
2M	2	3/8	3 1/4	1	1 1/4	1 3/8	1 5/8	5/8	1 5/8	3/4	1 3/4																
3																											
4																											
5																											

STANDARD SIGN

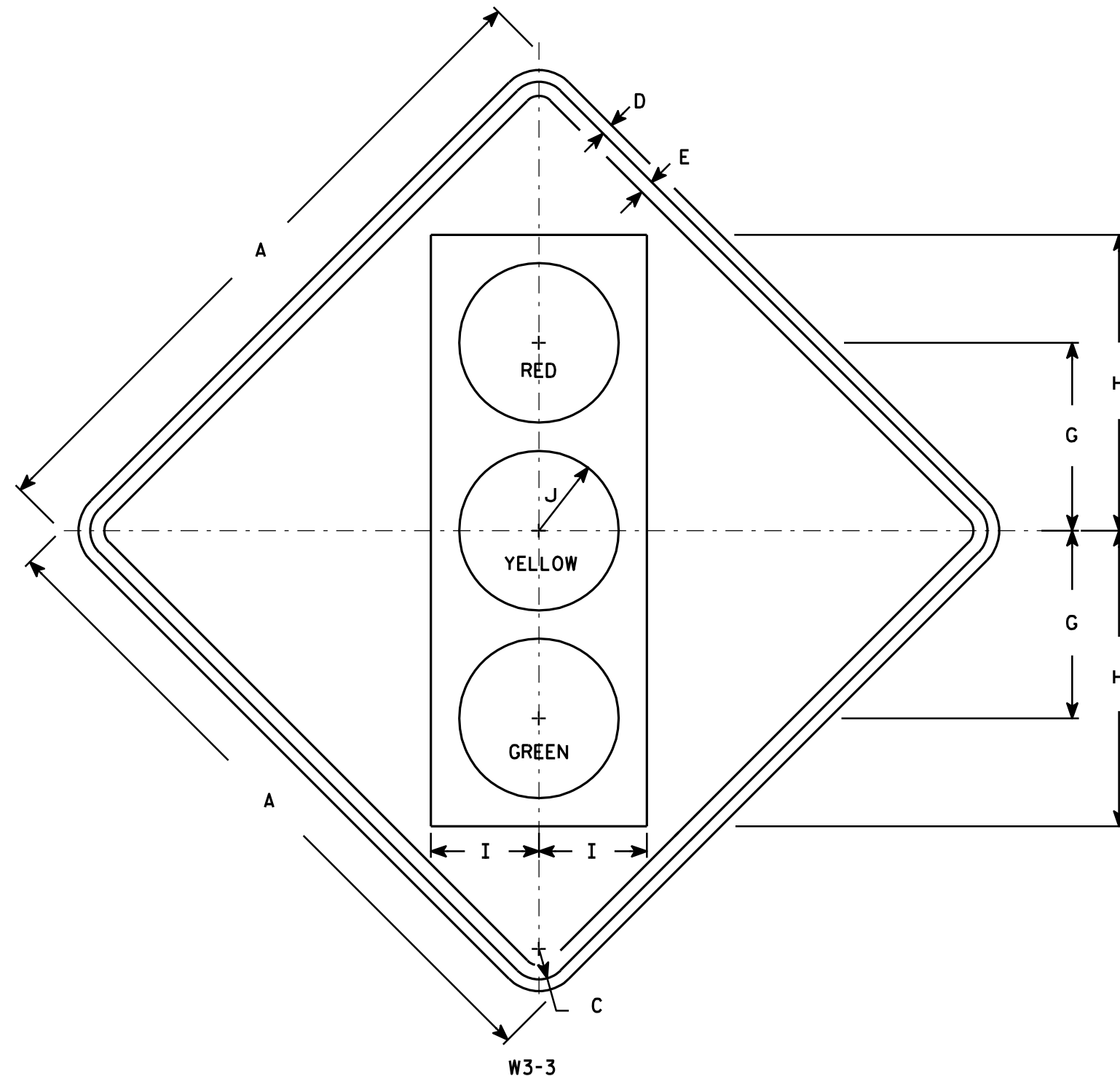
R10-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

For State Traffic Engineer

DATE 4/12/11 PLATE NO. R10-3B.2



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Yellow
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- Symbol and border are non-reflective black.
Top circle - Type H Reflectorized Red
Center circle - Same as background
Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 6/7/10

PLATE NO. W3-3.11

PROJECT NO:

HWY:

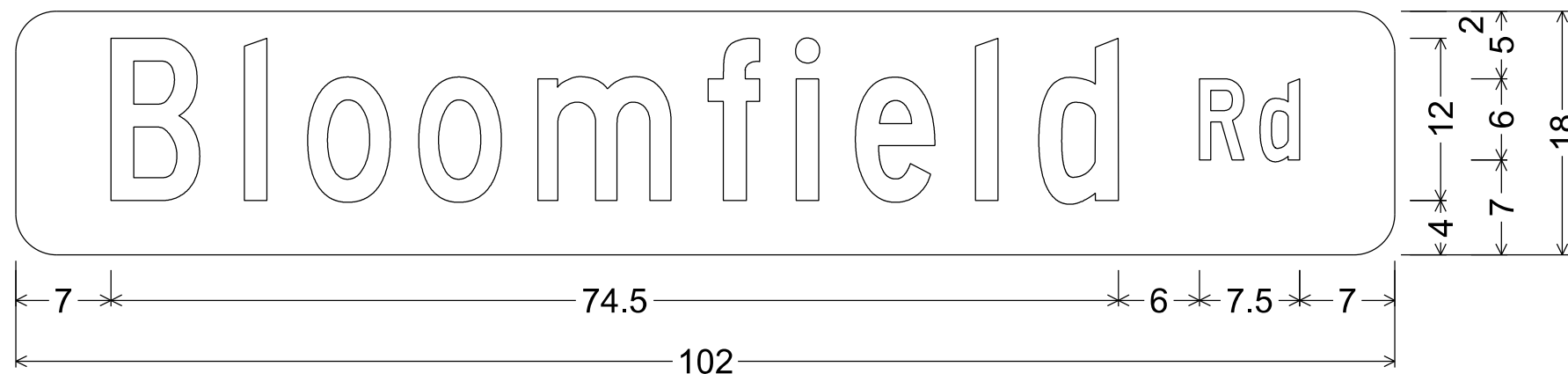
COUNTY:

SHEET NO: 153

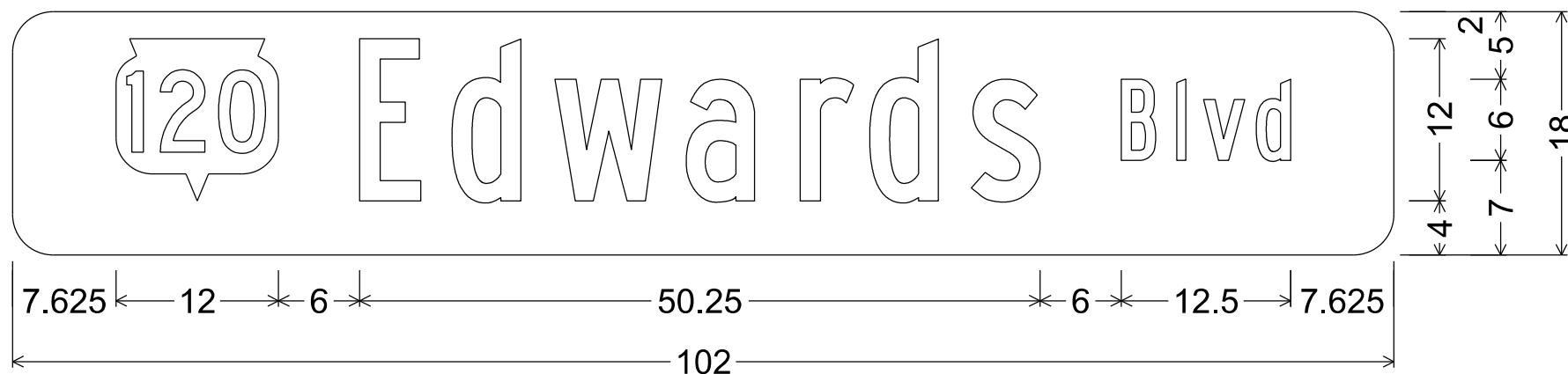
E

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
Background - Green
Message - White
3. Message Series - C or as noted



M1-94H; 3.000" Radius, No border



M1-94S; 3.000" Radius, No border
"Edwards", B; "Blvd", B

PROJECT:
ROOMFIELD ROAD
AT STH 120
(TOWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LAKE GENEVA

ENT: _____



PLEASE:
D SET

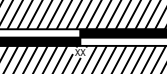
VISIONS:

[illegible]

IRTH ARROW:



SALE: _____ $X^* =)$



AL:

I in

CROSS SECTIONS

PROJECT MANAGER:	GR
PROJECT NUMBER:	21.0437
SIGNED BY:	NH
DRAWN BY:	WAW
CHECKED BY:	AA
DATE:	01/13/20

SHEET NUMBER: _____

155





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

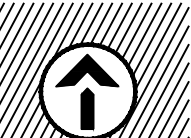


RELEASE:
BID SET

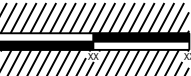
REVISIONS:

#	DATE	DESCRIPTION

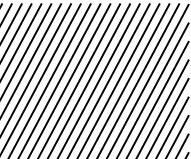
NORTH ARROW:



SCALE: 1" = 100'



SEAL:



all in

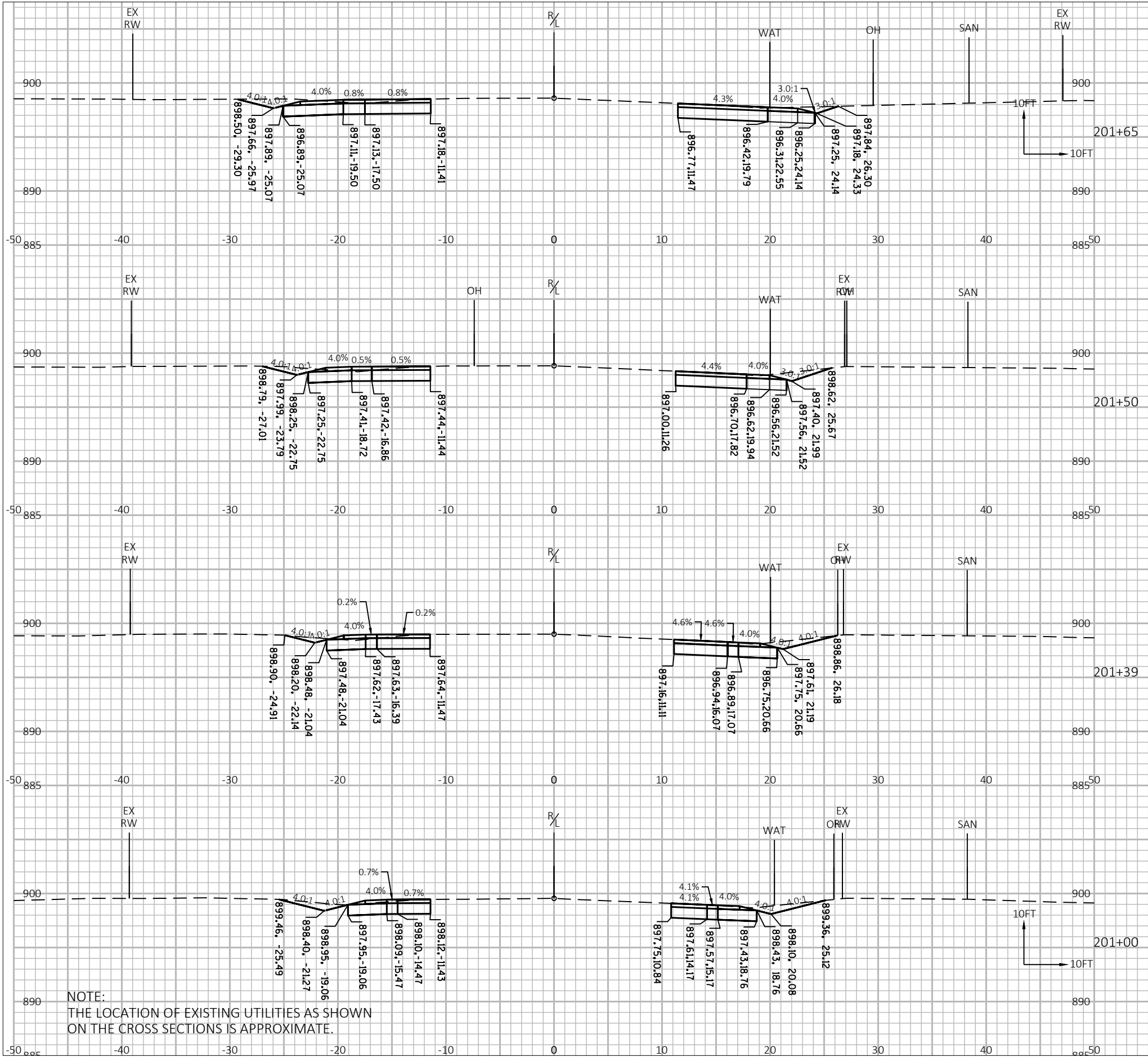
SHEET:

CROSS SECTIONS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

156





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

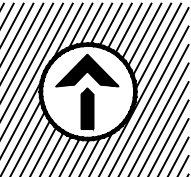


RELEASE:
BID SET

REVISIONS:

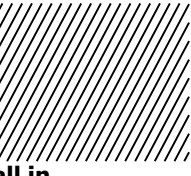
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'

SEAL:



all in

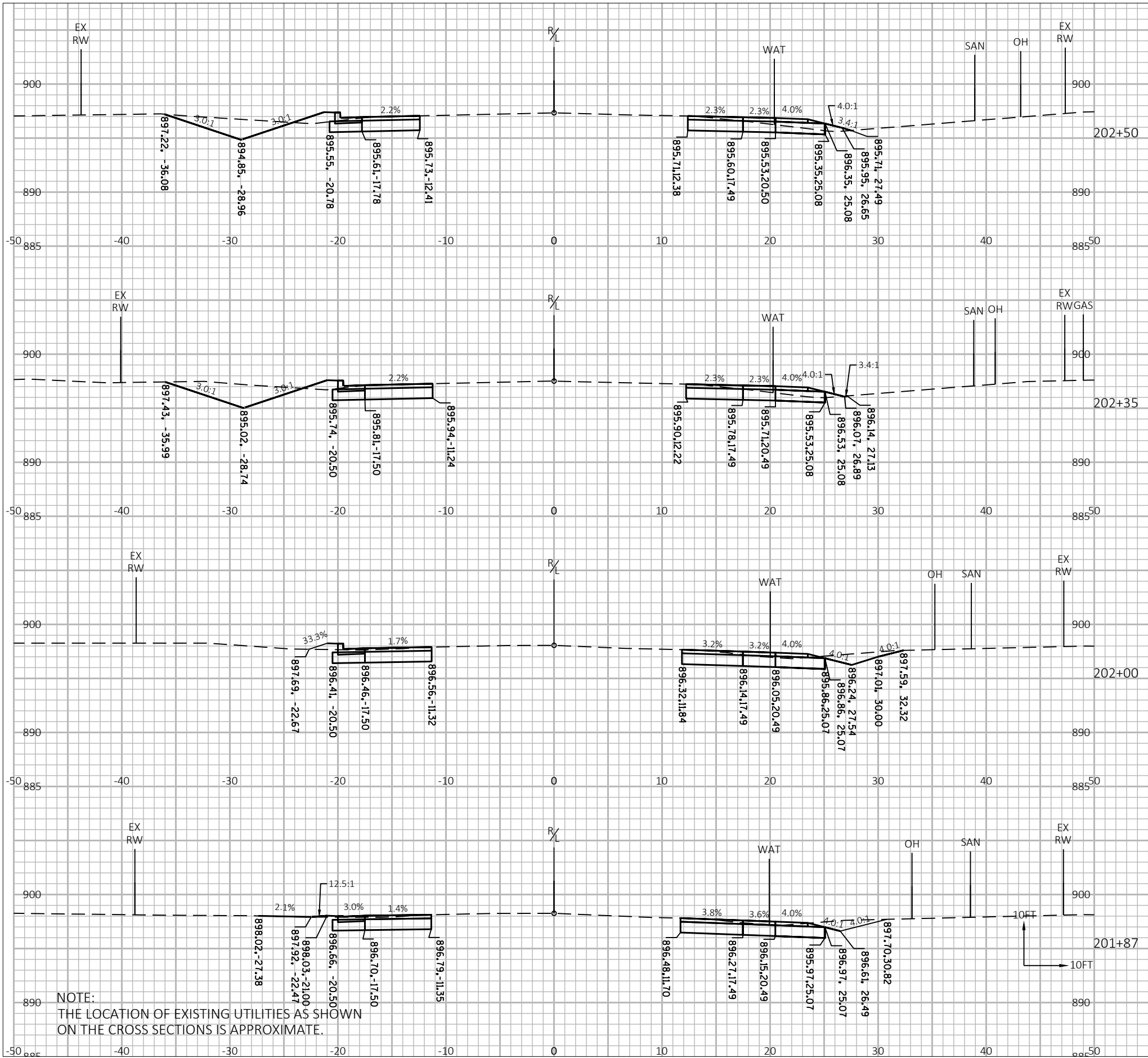
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: XXX
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

157





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

REVISIONS:

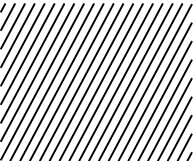
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'
0 10 20 30 40 50 60 70 80 90 100

SEAL:



all in

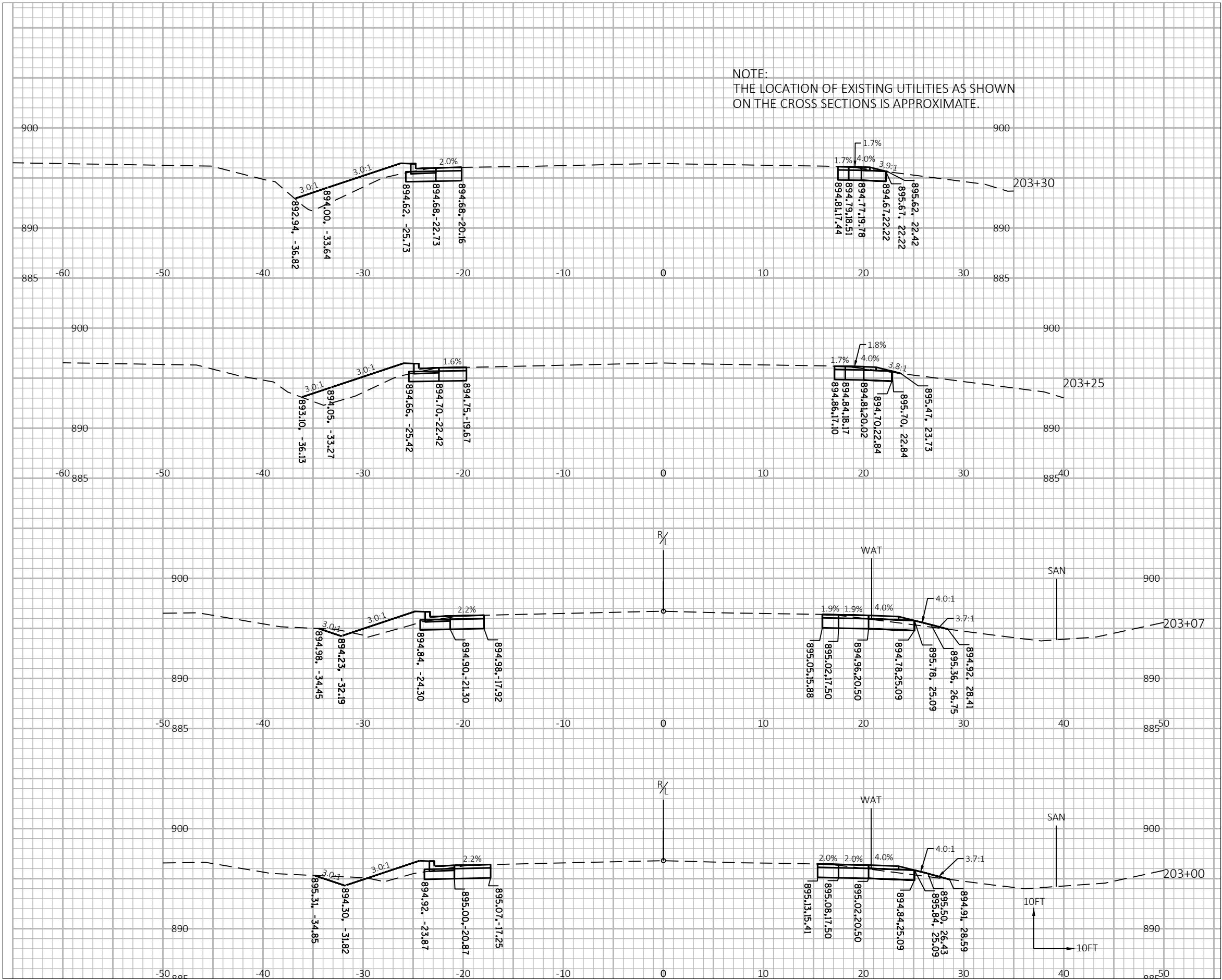
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

158





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

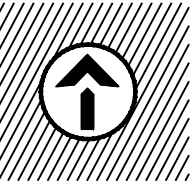


RELEASE:
BID SET

REVISIONS:

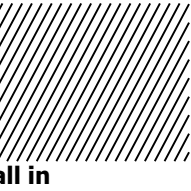
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'
0 10 20 30 40 50 60 70 80 90 100

SEAL:



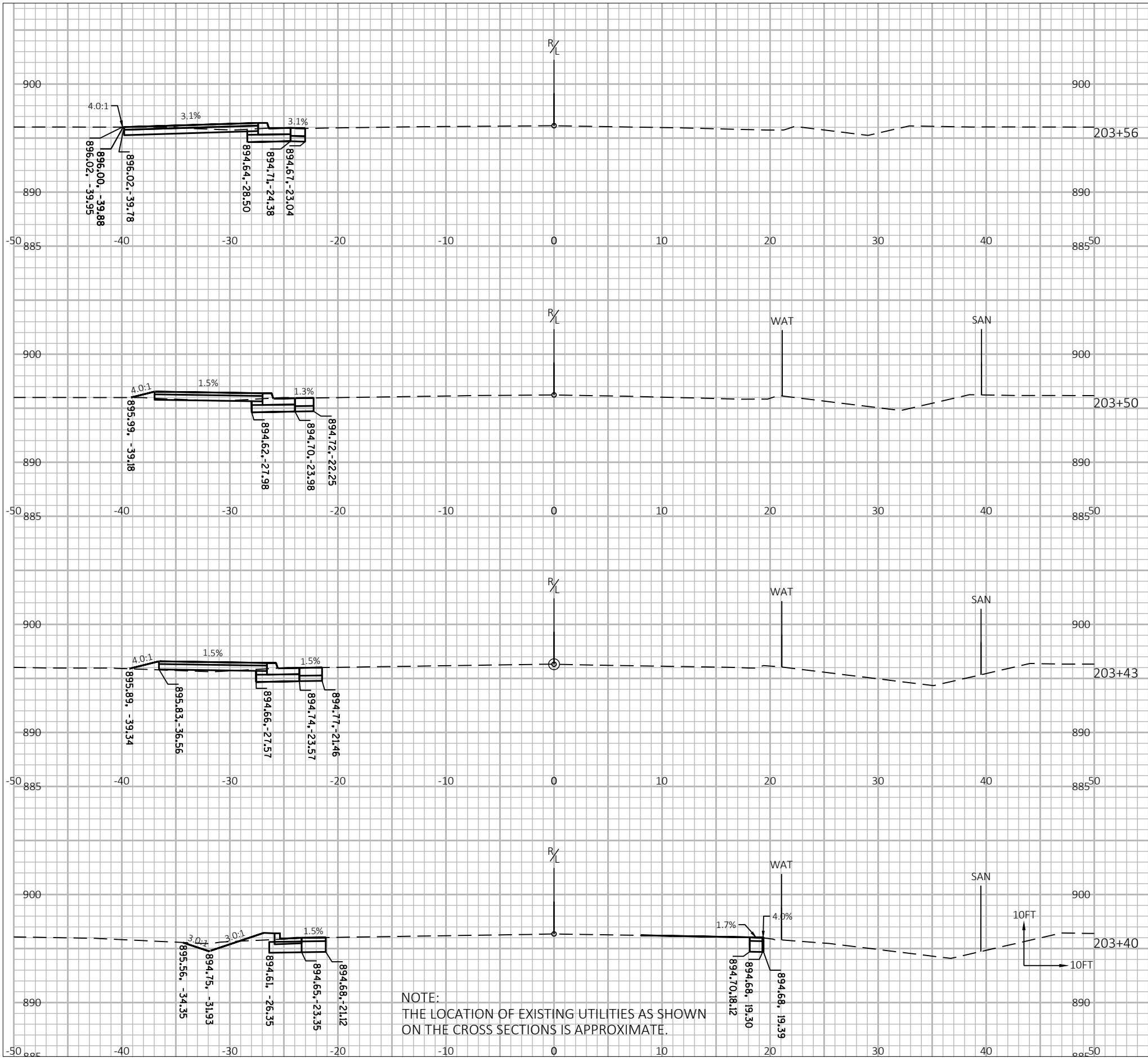
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

159





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

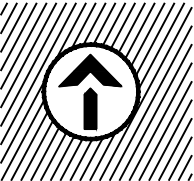


RELEASE:
BID SET

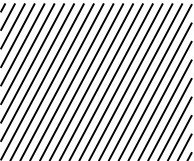
REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SEAL:



all in

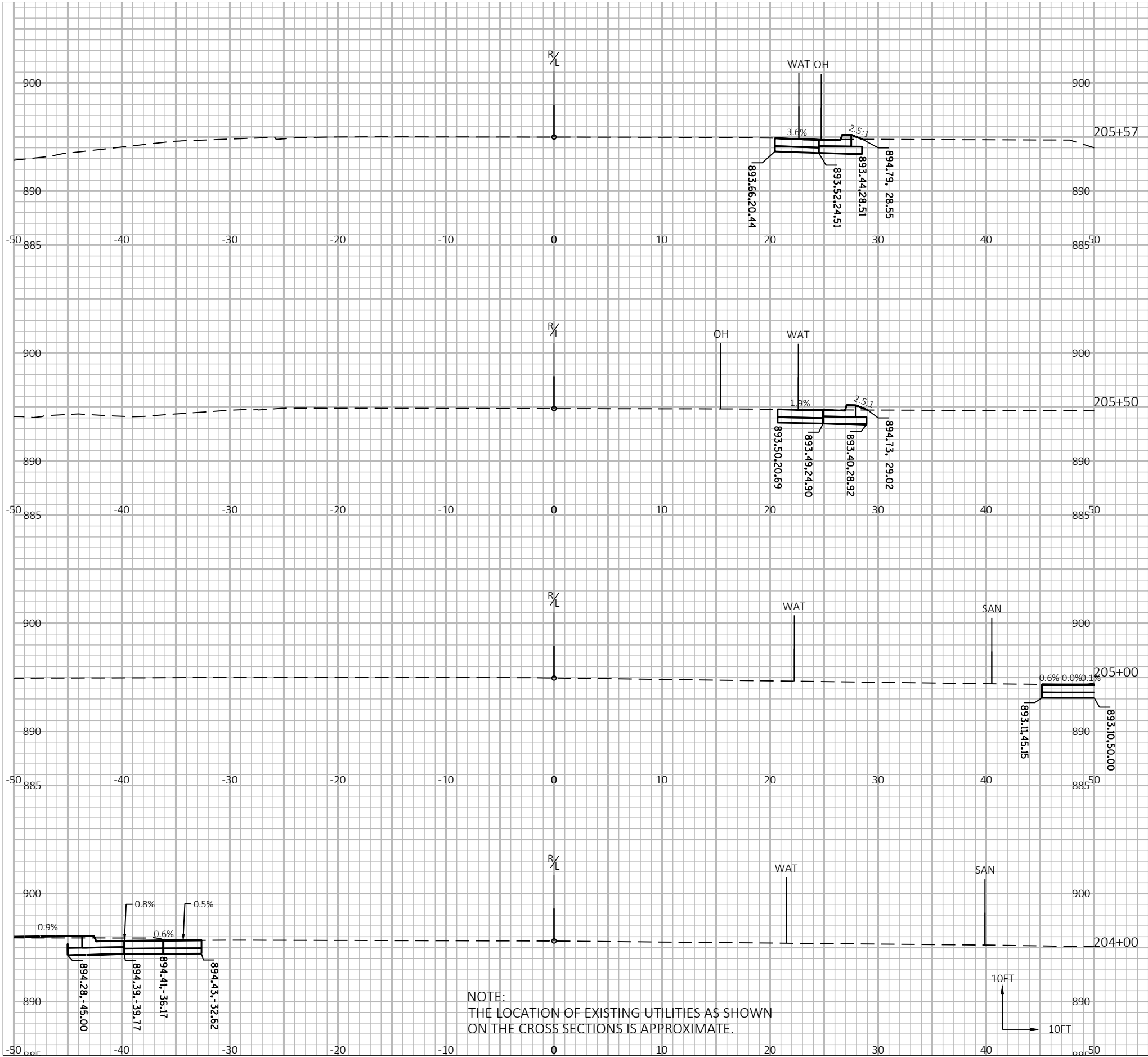
SHEET:

CROSS SECTIONS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

160





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

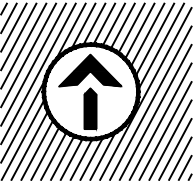


RELEASE:
BID SET

REVISIONS:

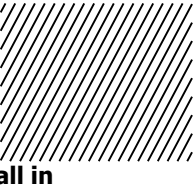
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'

SEAL:



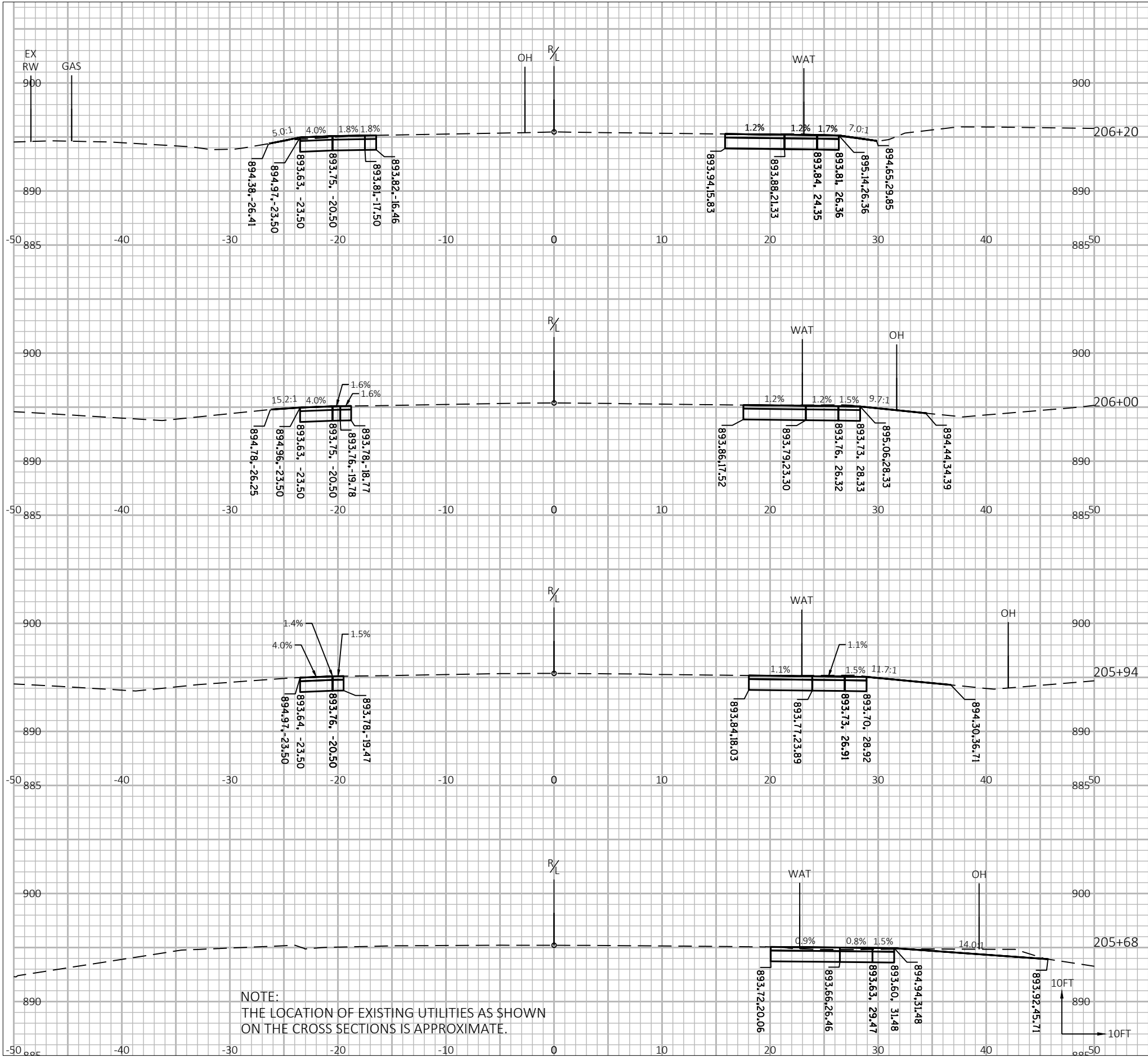
SHEET:

CROSS SECTIONS

PROJECT MANAGER:	GLG
PROJECT NUMBER:	21.0437.01
DESIGNED BY:	NRS
DRAWN BY:	WAW
CHECKED BY:	AJB
DATE:	01/13/2022

SHEET NUMBER:

161





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:



RELEASE:
BID SET

REVISIONS:

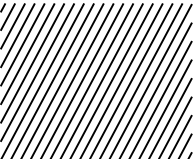
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'
0 10 20 30 40 50 60 70 80 90 100

SEAL:



all in

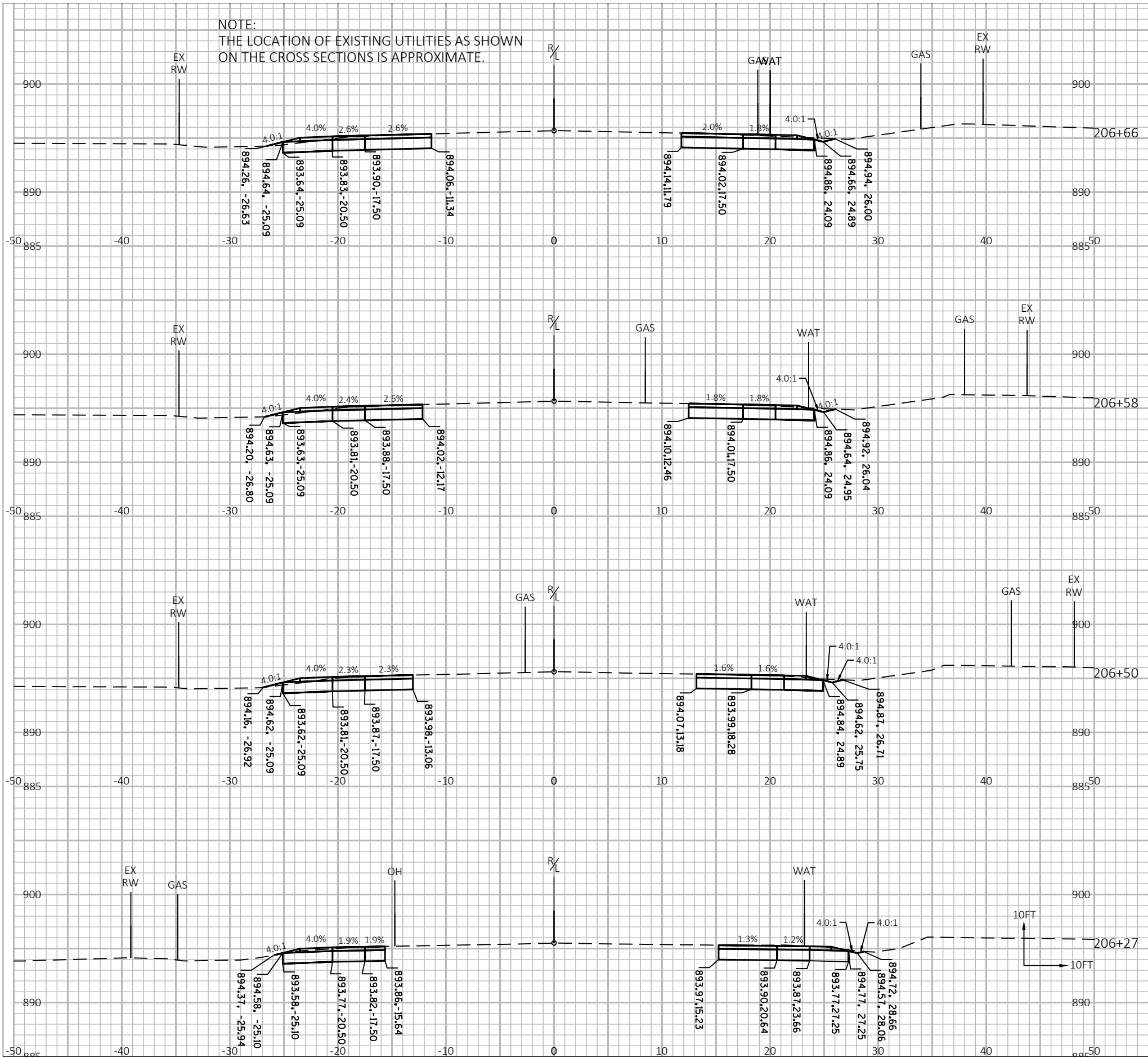
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

162





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

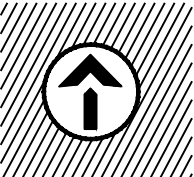


RELEASE:
BID SET

REVISIONS:

#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'

SEAL:

all in

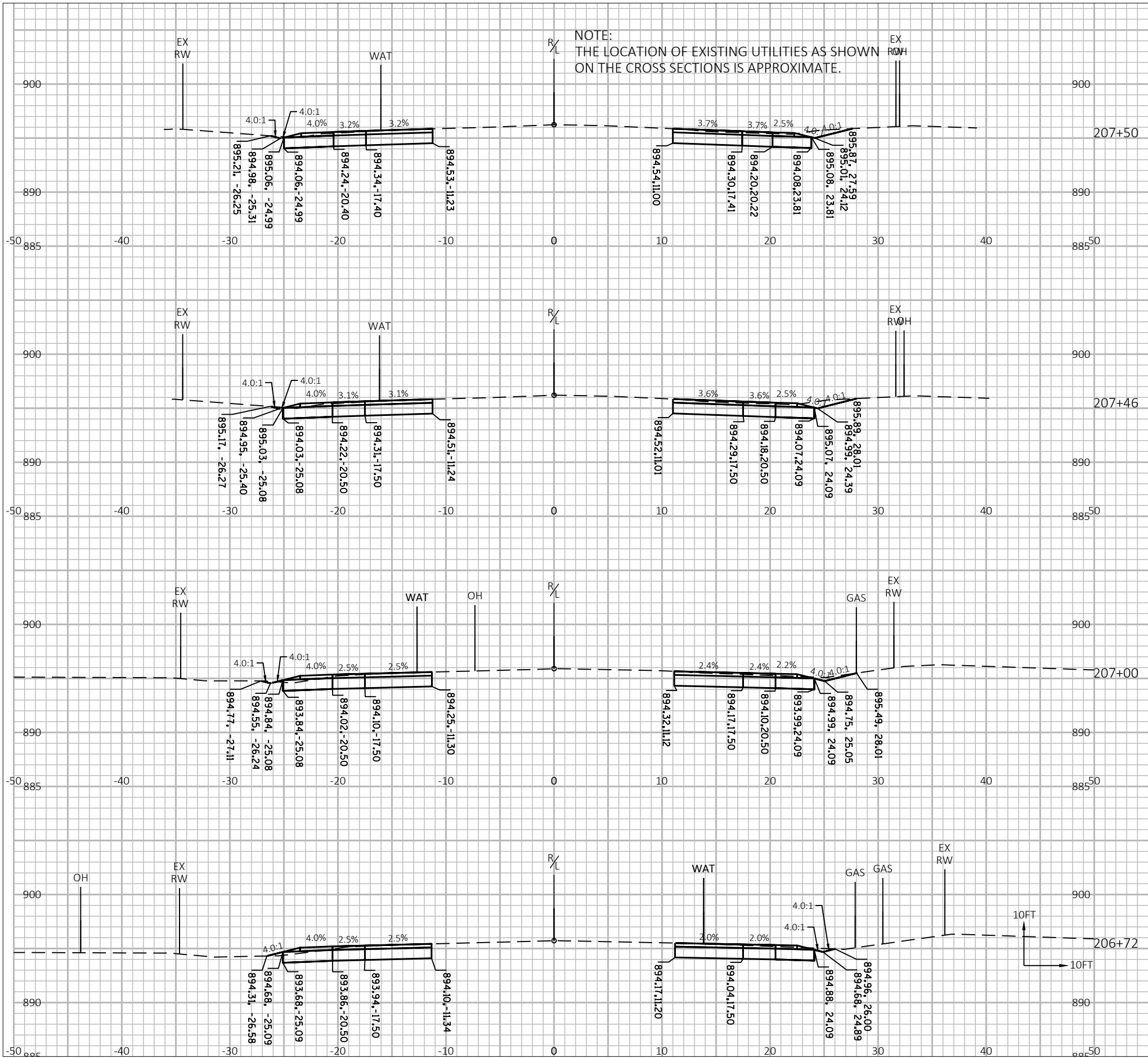
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

163





7711 N. Port Washington Road
Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

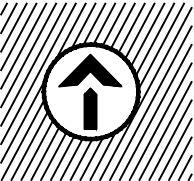


RELEASE:
BID SET

REVISIONS:

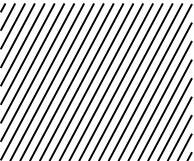
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'
0 10 20 30 40 50 60 70 80 90 100

SEAL:



all in

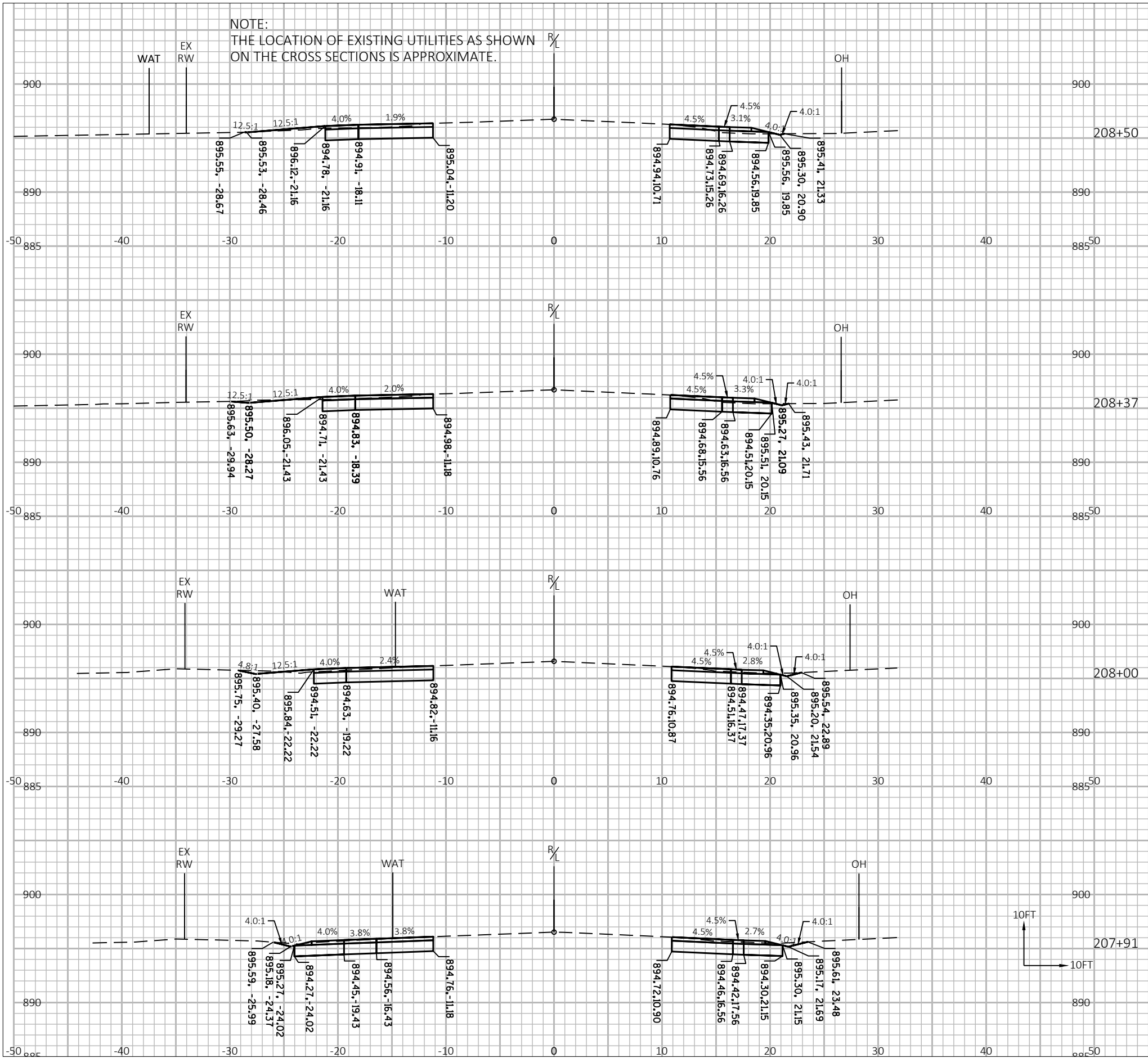
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

164





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BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

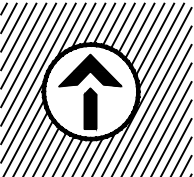


RELEASE:
BID SET

REVISIONS:

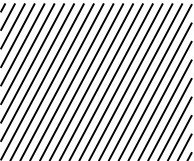
#	DATE	DESCRIPTION

NORTH ARROW:



SCALE: 1" = 100'
0 10 20 30 40 50 60 70 80 90 100

SEAL:



all in

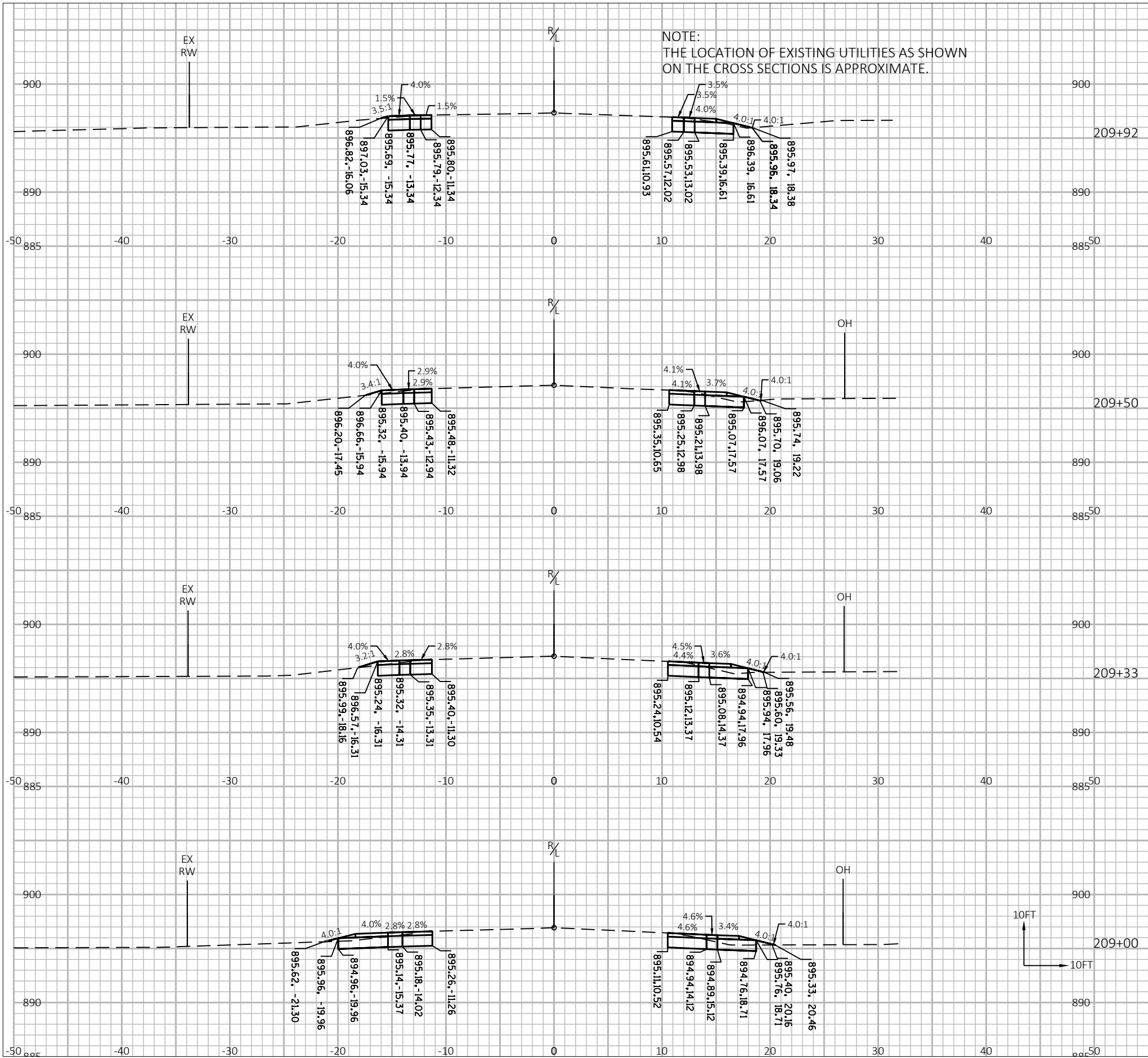
SHEET:

CROSS SECTIONS

PROJECT MANAGER: GLG
PROJECT NUMBER: 21.0437.01
DESIGNED BY: NRS
DRAWN BY: WAW
CHECKED BY: AJB
DATE: 01/13/2022

SHEET NUMBER:

165





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Milwaukee, Wisconsin 53217
kapurinc.com

PROJECT:
BLOOMFIELD ROAD
AT STH 120
(EDWARDS BOULEVARD)
TRAFFIC SIGNAL PROJECT

LOCATION:
LAKE GENEVA

CLIENT:

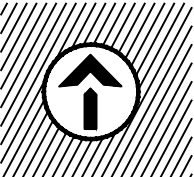


RELEASE:
BID SET

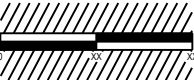
REVISIONS:

#	DATE	DESCRIPTION

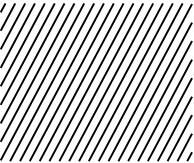
NORTH ARROW:



SCALE: 1" = 100'



SEAL:



all in

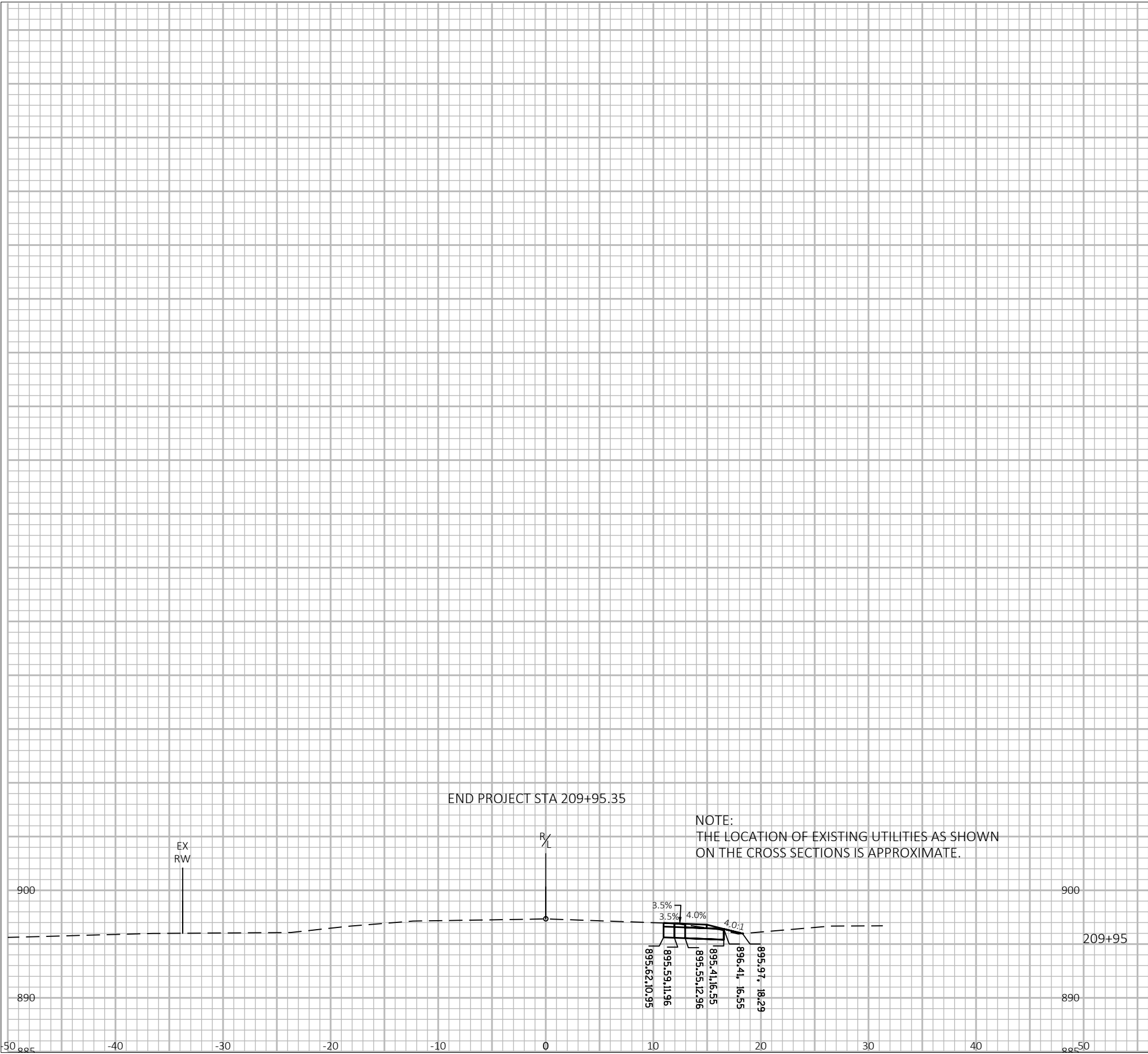
SHEET:

CROSS SECTIONS

PROJECT MANAGER:	GLG
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SHEET NUMBER:

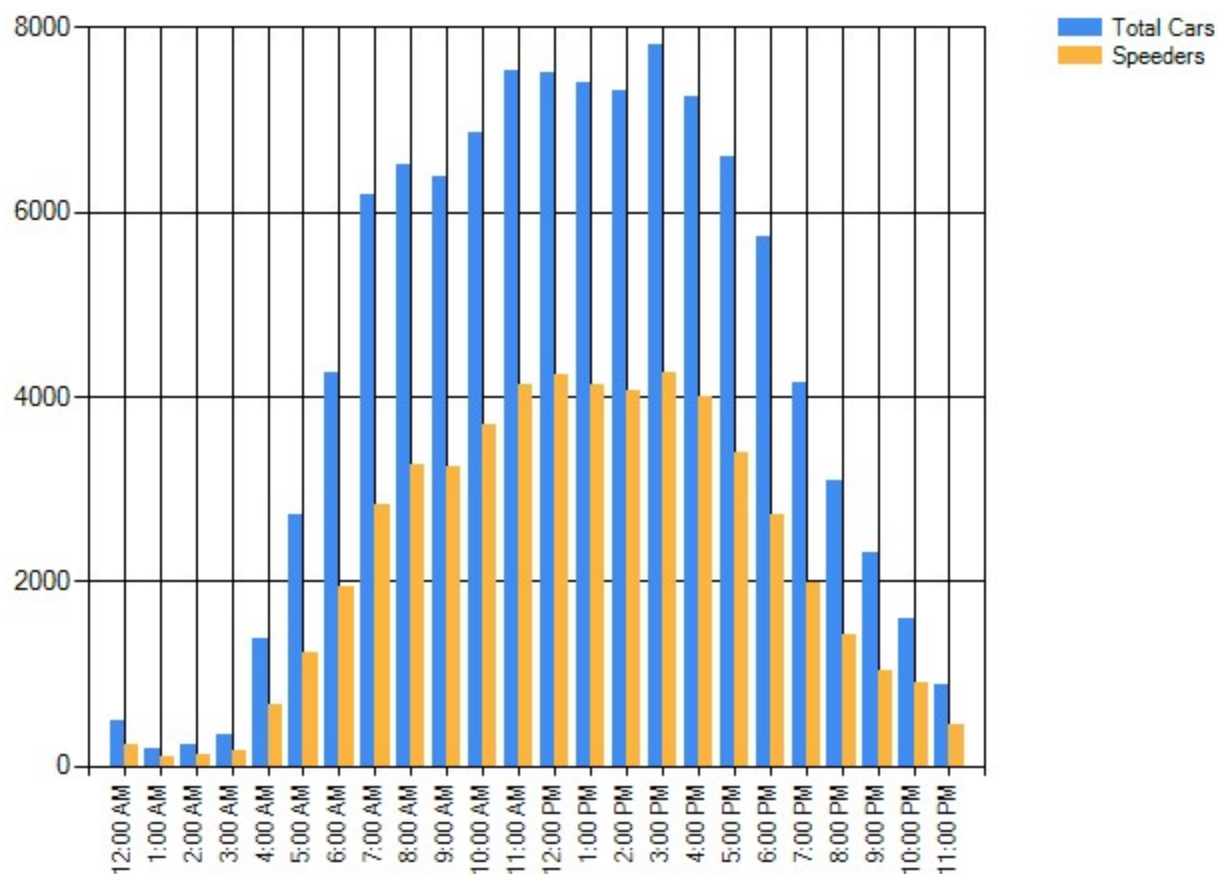
166



Date: 10/27/2021 12:00 AM
Report Start Date: 10/16/2021 10:00 AM
Report End Date: 10/26/2021 04:00 PM
Time Interval: 60 minutes
Speed Interval: 10 mph
Posted Speed Limit: 45 mph
Average Speed: 45 mph
Highest Speed: 97 mph
50th Percentile: 46 mph
85th Percentile: 51 mph
Number Above Speed Limit: 54283
Total Number of Vehicles: 104667

Comments:

Edwards Blvd just south of Townline facing north bound traffic(45mph zone-just south of 30mph zone) (2)





Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
Phone: (262) 248-4455

2021

Call Simple Lists

Printed On: 01/05/22 13:03

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
21-011185	07/13/21 22:25	Accident - Property Damage	Sr 120/Townline;LG		ACR	723	410



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
Phone: (262) 248-4455

2021

Call Simple Lists

Printed On: 01/05/22 12:48

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
21-008999	06/19/21 11:45	Accident - Property Damage	Townline Rd/S Edwards Blvd;LG		ACR	723	410
21-003667	03/22/21 14:15	Accident - Property Damage	Townline Rd/S Edwards Blvd;LG		ACR	722	409



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
Phone: (262) 248-4455

2021

Call Simple Lists

Printed On: 01/05/22 08:14

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
21-021587	12/24/21 16:48	Accident - Personal Injury	S Edwards Blvd/E Townline Rd;LG		ACR	719	372
21-016874	09/29/21 18:30	Accident - Fatal	S Edwards Blvd/E Townline Rd;LG		FI	713	183



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
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2020

Call Simple Lists

Printed On: 01/06/22 14:43

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
20-013883	09/03/20 16:10	Accident - Property Damage	Sr 120/Townline;LG		ACR	714	183
20-005168	04/24/20 15:24	Accident - Property Damage	Townline/Sr 120;LG		FIN	717	350



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
Phone: (262) 248-4455

2020

Call Simple Lists

Printed On: 01/06/22 14:43

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
20-015397	09/30/20 06:06	Accident - Property Damage	S Edwards Blvd/Townline Rd;LG		FIN	713	214



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
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2020

Call Simple Lists

Printed On: 01/06/22 14:44

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
20-000003	01/01/20 00:38	Accident - Property Damage	E Townline Rd/S Edwards Blvd;LG		CIT	703	144



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
Phone: (262) 248-4455

2019

Call Simple Lists

Printed On: 01/06/22 14:48

Lake Geneva

Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
19-005960	05/18/19 09:44	Accident - Personal Injury	Sr 120/Townline;LG		ACR	713	214



Lake Geneva Police Department
626 Geneva St.
Lake Geneva WI 53147
Phone: (262) 248-4455

2019

Call Simple Lists

Printed On: 01/06/22 14:49

Lake Geneva

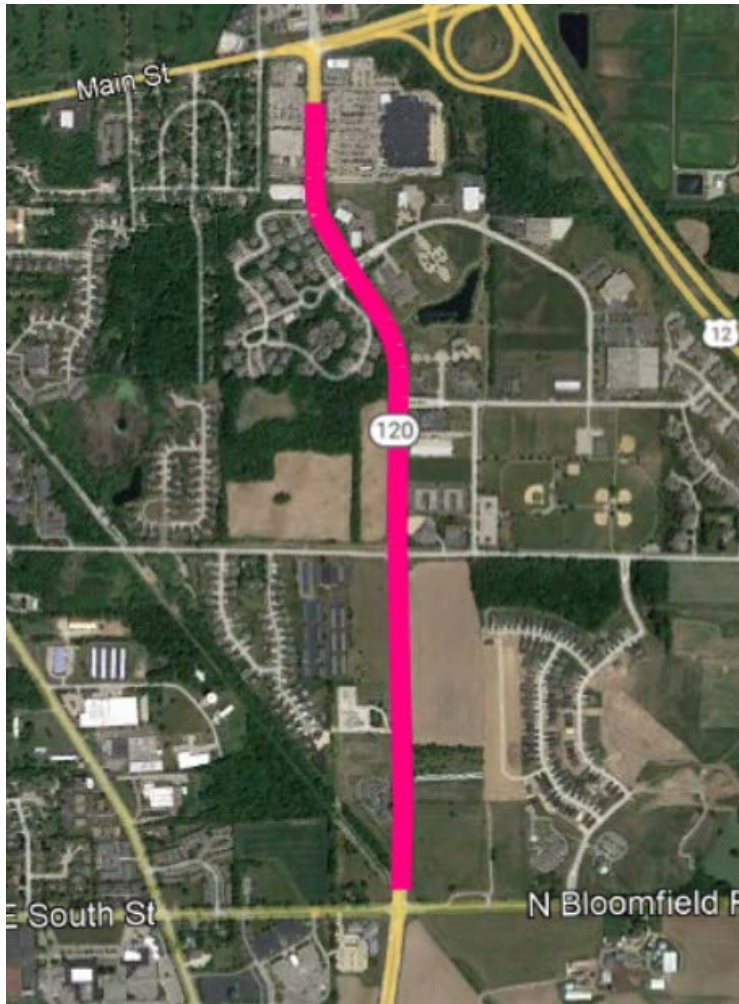
Call#	Reported Date	CAD CFS	Location	Common Name	Disp	Unit#	Officer(s)
19-017300	11/11/19 05:54	Accident - Property Damage	S Edwards Blvd/Townline Rd;LG		ACR	714	183

From: [Cindy Flower](#)
To: [Tom Earle](#); [City Clerk](#)
Cc: [City Administrator](#); [Mary Jo Fesenmaier](#); [Mayor](#)
Subject: Re: Mowing - cost savings
Date: Monday, January 17, 2022 6:12:58 PM
Attachments: [pastedImage.png](#)
[pastedImage.png](#)
[pastedImage.png](#)
[pastedImage.png](#)

Tom - Couple Areas to consider for the mowing cost savings for the Jan PWC Meeting are listed below. If PWC agrees to pursue perhaps we could discuss cost savings in Feb?

Lana - please include this in the packet for Jan PWC - thanks

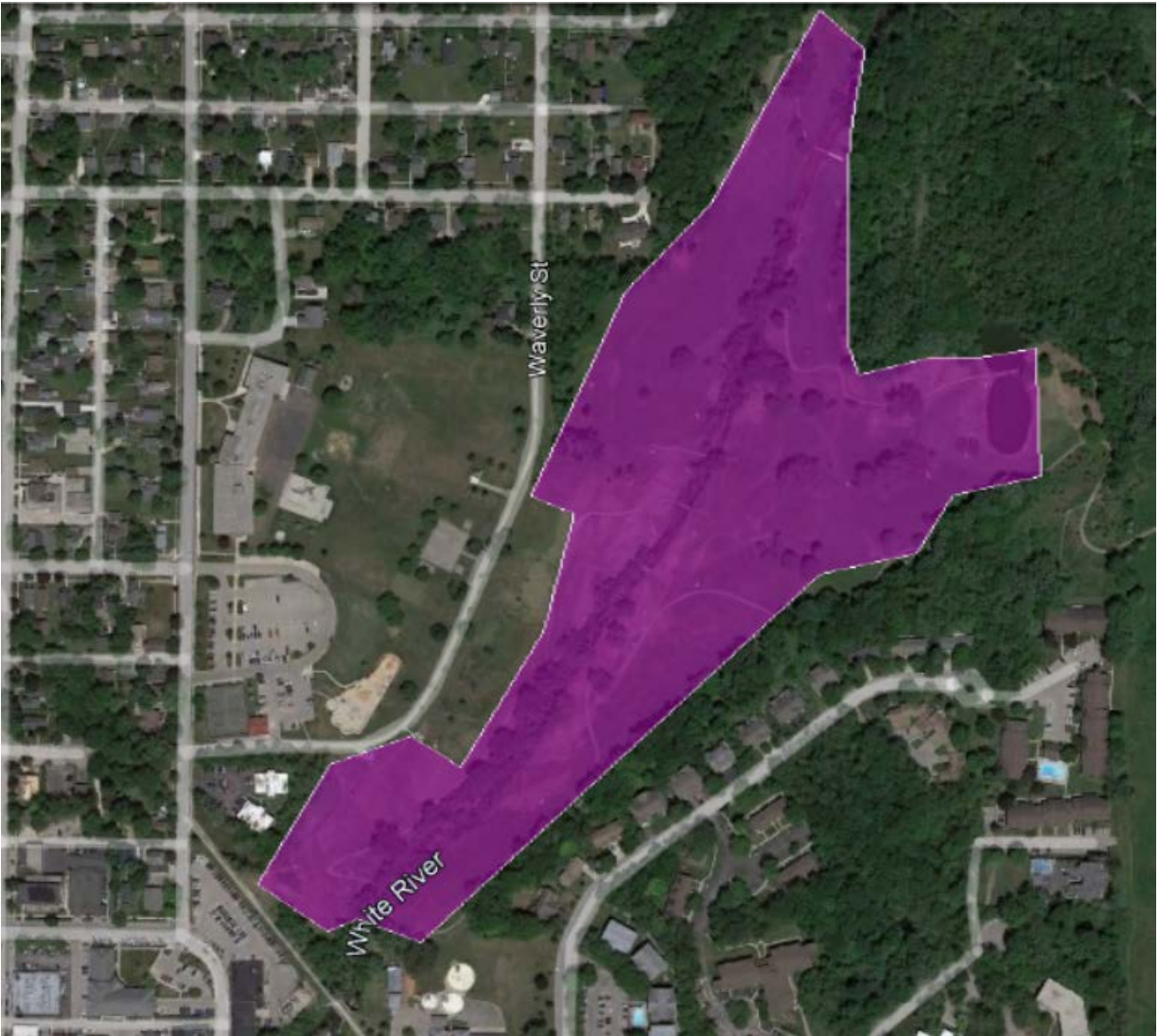
Edwards Blvd (Main to Bloomfield)



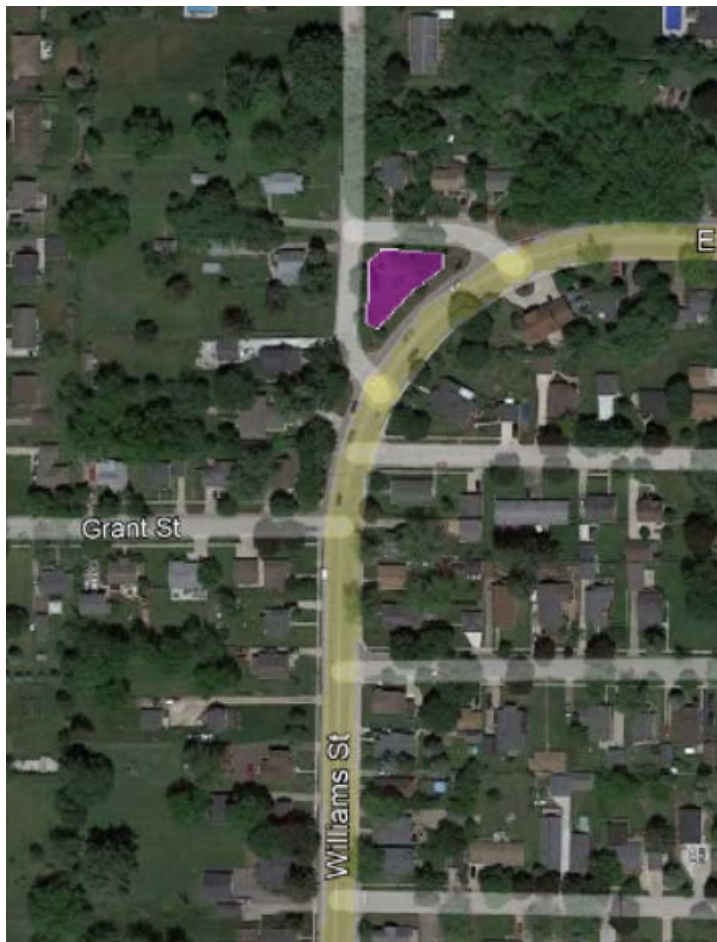
Possibly along the lakefront from the beach to Baker St in the steep areas



The Disc Golf Course



Triangular Park between Williams St and Center St



Others?

Cindy

From: Tom Earle

Sent: Sunday, January 2, 2022 6:23 AM

To: Cindy Flower

Cc: City Administrator; Mary Jo Fesenmaier; Carol Zimmermann; Jill Rodriguez; Karen Gallo; Beverly Leonard; Sarah McConnell; Kelley Happ; Mayor

Subject: Re: Mowing - cost savings

Good morning,

I would need a list of areas Council would like this done before I can get any cost estimate.

Tom Earle, Director

City of Lake Geneva Department of Public Works

Streets, Parks, Lakefront, Forestry, Cemeteries, Buildings and Grounds

1065 Carey St. Lake Geneva WI. 53147

(262)248-6644

Shipping/Receiving hours: Monday, 5am-2pm. Tues-Thurs, 6am-2pm. NO FRIDAYS. Call for Holiday schedules.

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email in error, please notify the sender, delete the email and do not use, disclose or store the information it contains.

From: Cindy Flower

Sent: Tuesday, December 28, 2021 11:51:09 AM

To: Tom Earle

Cc: City Administrator; Mary Jo Fesenmaier; Carol Zimmermann; Jill Rodriguez; Karen Gallo; Beverly Leonard; Sarah McConnell; Kelley Happ; Mayor

Subject: Mowing - cost savings

Tom - could you please report out at the Jan PWC if we have an opportunity for some of these mowing cost saving in Lake Geneva?

Native planting materials would also be supported by our Avian Committee.

This is Rotherham where council have planted 8 miles of wild flower verges. It has saved 25k in mowing costs. These photos posted by British Beekeeping Association!

