VILLAGE OF CALEDONIA UTILITY DISTRICT MEETING AGENDA

Wednesday, February 1, 2023 – 6:00 p.m.
Caledonia Village Hall – 5043 Chester Lane
THIS WILL BE AN IN-PERSON MEETING

1. **Meeting Called to Order**
2. **Roll Call**
3. **Approval of Minutes**
   - **a.** Utility District Regular Meeting – January 11, 2023
4. **Citizen Comments**
5. **Communications and Announcements**
   - **a.** Racine Water Utility Agenda & Minutes
   - **b.** Racine Wastewater Utility Agenda & Minutes
   - **c.** Utility Operator Staffing Update
6. **Approval of O&M Bills**
   - **a.** O&M Bills related to the Sewer, Water & Storm Water Utility District
7. **Project Updates**
   - **a.** Construction Contract Status
   - **b.** Riverbend Lift Station Safety Site, Lift Station & Forcemain Upgrade
   - **c.** Annual Televising Program – Sanitary Sewer
   - **d.** Water Impact Fee / Sewer Connection Fee Update
   - **e.** Hoods Creek Attenuation Basin Expansion
   - **f.** Central Lift Station Safety Site & Attenuation Basin
   - **g.** North Kremer Watermain Project
   - **h.** Dominican Lift Station Rehab Project
   - **i.** Concord Apartments Meter Vault
   - **j.** Washington Meadows Watermain Project
   - **k.** TID #4 Elevated Storage Tank & Adams Road Watermain
   - **l.** Hoods Creek – Aldebaran Brushing Project
   - **m.** Douglas Avenue OMG Ditch Project
   - **n.** Turtle Creek Restoration
   - **o.** Westview Village Storm Improvements
8. **Action Items**
   - **a.** Change Order – Erie Street Sanitary Sewer Improvement Project
   - **b.** Final Acceptance – Erie Street Sanitary Sewer Improvement Project
   - **c.** Approval – Caledonia Corporate Park Infrastructure Plans

9. **Adjournment**

Village of Caledonia Utility District Meeting
January 11, 2023

1. Meeting Called to Order – The Regular Meeting of the Village of Caledonia Utility District was held on Wednesday, January 11, 2023. The meeting was called to order by President Howard Stacey at 6:00pm.

2. Roll Call – Those present were President Howard Stacey, Commissioners Robert Kaplan, Dave Ruffalo and Tony Minto. Commissioner John Strack arrived at 6:13pm. Trustee Wishau and Commissioner Pirk were excused. Also, present were Utility Operations Supervisor Robert Lui, and Public Services Director Anthony Bunkelman.

3. Approval of Minutes

a. Upon a motion by Commissioner Minto and seconded by Commissioner Kaplan, the Commission approved the minutes from the Utility District's previous regular meeting held December 7, 2022. A copy of the minutes has been furnished to each Commissioner. **Motion carried.**

4. Citizens Comments

None

5. Communications and Announcements

a. Racine Water Utility Agenda & Minutes

The Commission looked over the minutes from the November 15th meeting of the Racine Water Utility. Director Bunkelman gave a brief summary of the action taken by the Utility.

b. Racine Wastewater Utility Agenda & Minutes

The Commission looked over the minutes from the November 15th meeting of the Racine Wastewater Utility. Director Bunkelman gave a brief summary of the action taken by the Utility.

Director Bunkelman informed the Utility District that Utility District Operator Alex Parker has submitted his resignation. A posting for the position was going to be done by the end of the week.

6. Approval of O&M Bills

a. Commissioner Minto moved to approve of the Sewer Utility Invoices from the previous Utility District meeting in the amount of $5,945,328.26. Seconded by Commissioner Kaplan. **Motion carried.**

Commissioner Minto moved to approve the current Sewer Utility Invoices in the amount of $48,303.33. Seconded by Commissioner Ruffalo. **Motion carried**.

b. Commissioner Minto moved to approve of the Water Utility Invoices from the previous Utility District meeting in the amount of $916,667.73. Seconded by Commissioner Kaplan. **Motion carried.**

Commissioner Minto moved to approve the current Water Utility Invoices in the amount of $591,748.62. Seconded by Commissioner Kaplan. **Motion carried**.

c. Commissioner Minto moved to approve of the Storm Water Utility Invoices from the previous Utility District meeting in the amount of $177,142.90. Seconded by Commissioner Kaplan. **Motion carried.**

Commissioner Minto moved to approve the current Storm Water Utility Invoices in the amount of $8,473.50. Seconded by Commissioner Kaplan. **Motion carried**.

7. Project Updates

a. Construction Contract Status

The current contract statuses were shared with the Commissioners.

b. Riverbend Lift Station Safety Site, Lift Station & Forcemain Upgrade

Working on Facility Plan. Looking to schedule additional flow monitoring and looking at a potential site near the Root River Interceptor for a potential storage tank.

c. Annual Televising Program – Sanitary Sewer

Continuing to perform repairs that staff can perform.

d. Water Impact Fee / Sewer Connection Fee Update

Reviewing information received.

e. Hoods Creek Attenuation Basin Expansion

Concrete work has been completed. Mechanical work continues. Start up and testing on the Air Exchanger was started on January 5th. The Contractor was also working on caulking and sealing the cells from the various concrete pours.

f. Central Lift Station Safety Site & Attenuation Basin

Facilities Plan was updated with the Public Hearing Minutes and submitted to the Wisconsin DNR for final approval. Continue to work on Preliminary Design. Proposed to be bid in December 2023 with Construction March 2024 – September 2025.

g. North Kremer Watermain Project

Awaiting Final Pay Request.

h. Dominican Lift Station Rehab Project

Start up on one of the new pumps was done on January 4th. Will operate on 1 new pump with the bypass as a backup until the second pump is returned. Anticipating Second pump to be delivered near the end of January. Keeping constant contact with LW Allen on status of pump. Generator Startup and testing started on January 10th.

i. Concord Apartments Meter Vault
Meter head will be installed on the master meter when the jumpers have been installed. Waiting for parts to be delivered.

j. Washington Meadows Watermain
Balance of project will be performed in 2023.

k. TID #4 Elevated Storage Tank & Adams Road Watermain
Design continues.

l. Hoods Creek – Aldebaran Brushing Project
Left message with Contractor about starting work.

m. Douglas Avenue – OMG Ditch Project
Trees removed from the channel. Contractor waiting for proper weather to start grading. Excavated material will be brought to Crawford Park for future sledding hill. Coordinating with Riley as necessary.

n. Turtle Creek Restoration
Letters went out in December from Village for upcoming appraisals. Easement areas were staked, and Southern Wisconsin Appraisal is sending letters for meetings for appraisals.

o. Westview Village Storm Improvements
Contractor completed work. Will need to perform any final restoration / touch up in Spring. Will need to process a Change Order for time when received.

8. Action Items

a. Ross Holdings LLC, 7 ½ Mile Road – Storm Water Management Plan Approval
Director Bunkelman gave a brief summary of the Storm Water Management Plan Update for the project. The Storm Water Management Plan meets the Village Ordinance and is ready for Utility District Approval.

Commissioner Minto moved to approve the Storm Water Management Plan for Ross Holdings LLC for Lot 1 of CSM No. 3332. Seconded by Commissioner Ruffalo. **Motion carried.**

b. Ross Holdings LLC, 7 ½ Mile Road – Site Improvement Plan Approval
Director Bunkelman gave a brief summary of the Site Improvement Plan and the grading of the site with the Storm Water Pond. There also is a necessary Declaration of Restrictive Covenants document needed for being within the District but not having Sewer and Water available at this time.

Commissioner Minto moved to approve the Site Improvement Plan for Ross Holdings LLC for Lot 1 of CSM No 3332 subject to the condition of execution of a Declaration

of Restrictive Covenants document for Sanitary Sewer and Water connections when they become available. Seconded by Commissioner Ruffalo. **Motion carried.**

c. Eaton, 11131 Adams Road – Water Request

Director Bunkelman gave a presentation of potential solutions to provide water to the Eaton Property. There are also several concerns with the amount of water that Eaton may need which will determine which alternative for Eaton would be pursued. To appropriately review the alternatives the Water Demand for Eaton would need to be provided. After it is received a cost estimate can be generated.

Commissioner Ruffalo moved to authorize the Caledonia Utility District Staff to work with Foth Infrastructure & Environment LLC to provide a cost estimate to provide a safe and sustainable water supply to Eaton subject to the following. Eaton to provide the water demand for the facility and Foth to provide a professional services cost estimate for the study. Seconded by Commissioner Kaplan. **Motion carried.**

9. Adjournment

Upon a motion by Commissioner Ruffalo and seconded by Commissioner Strack, the Commission moved to adjourn the regular meeting at 6:55pm. **Motion carried.**

Respectively submitted,
Anthony A. Bunkelman P.E.
Public Services Director

City of Racine

Meeting Agenda

Waterworks Commission

City Hall
730 Washington Ave.
Racine, WI 53403
www.cityofracine.org

Tuesday, January 17, 2023 | **4:00 PM** | **City Hall, Room 207 A/B**

ROLL CALL

0032-23 **Subject:** Approval of Minutes for the November 15, 2022, Meeting

Attachments: water minutes 11.15.22

0044-23 **Subject:** Approval of Stipulation Agreement to Final Payment on Contract W-21-1, Perry Ave Tank Roof Replacement, General Construction Services (Contractor)

Attachments: stipulation and agreement _GCS_ signed

0033-23 **Subject:** Report Update on Contract W-20-7, Low Lift Pump/VFD Project

Attachments: w-20-7 progress update letters

0034-23 **Subject:** Report Update on Plant Monitoring Requirements

0035-23 **Subject:** Bid Opening Results on Contract W-23-1, Basin Tank Cleaning Services

Attachments: w-23-1_bid opening results_basin tank cleaning

0850-22 **Subject:** Bid Opening Results on Contract W-21-3, 42" Water Main Phase 3

Attachments: w-21-3 re-bid opening results rm letter

Adjournment

If you are disabled and have accessibility needs or need information interpreted for you, please contact the Water Utility Administration Office at 262.636.9181, at least 48 hours prior to this meeting.

City of Racine

Meeting Minutes - Draft

Waterworks Commission

City Hall
730 Washington Ave.
Racine, WI 53403
www.cityofracine.org

Tuesday, January 17, 2023 | **4:00 PM** | **City Hall, Room 207 A/B**

ROLL CALL

PRESENT: 6 - Natalia Taft, John Tate II, Matthew Rejc, Cory Mason, Stacy Sheppard and Jason Meekma

EXCUSED: 2 - Paul Vornholt and Trevor Jung

0032-23 **Subject:** Approval of Minutes for the November 15, 2022, Meeting

A motion was made by Mayor Mason, seconded by Taft, that this file be Approved

0044-23 **Subject:** Approval of Stipulation Agreement to Final Payment on Contract W-21-1, Perry Ave Tank Roof Replacement, General Construction Services (Contractor)

The Waterworks Commission approved final payment to Contract W-21-1 on September 20, 2022, with a withholding of $45,742.30 as a potential penalty for Contractor non-compliance with the City of Racine Works Program. The City Attorney's Office has finalized the Stipulation and Agreement with the Contractor with terms of retaining a monetary penalty of $36,255.00, and a $9,487.30 refund to the Contractor. The City Attorney's Office requests approval of the Stipulation Agreement.

A motion was made by Mayor Mason, seconded by Taft, that this file be Approved

0033-23 **Subject:** Report Update on Contract W-20-7, Low Lift Pump/VFD Project

Water Utility Superintendent, Joel Brunner, provided update on Contract W-20-7, which involves the upgrade of three pump motors as well as VFD's. The contract opened with bids in May 2021, and construction commencing in June of 2021. Supply chain issues have caused project delays. The new anticipated completion date is now June of 2024.

A motion was made by Taft, seconded by Rejc, that this file be Received and Filed

0034-23 **Subject:** Report Update on Plant Monitoring Requirements

Water Utility Superintendent, Joel Brunner, provided update on new federal and state regulations for water monitoring in 2023.

A motion was made by Taft, seconded by Sheppard, that this file be Received and Filed

0035-23

Subject: Bid Opening Results on Contract W-23-1, Basin Tank Cleaning Services

The Water Utility Director submitted bid results on Contract W-23-1, in the amount of $335,000.00, and recommended approval to the lowest responsible bidder, that being Full Service Organics Management.

A motion was made by Mayor Mason, seconded by Sheppard, that this file be Approved

0850-22

Subject: Bid Opening Results on Contract W-21-3, 42" Water Main Phase 3

The Water Utility Director submitted bid results on Contract W-21-3, and requested that the Commission follow recommendation from Engineering Consultant, Ruekert-Mielke, to reject the bids based on inflationary cost and re-bid in the fall of 2023. The Village of Mt. Pleasant is not supportive of paying it's roughly half cost share of the $16,018,000.00 bid. The current bids represent the third time this contract has been bid and costs continue to escalate. The initial low bid cost was $7,492,500.00 in March 2021, which was rejected by Commission because of City construction activity traffic concerns. The Contract was bid a second time in January 2022 at a low bid cost of $8,482,341.75, which was ultimately rejected by Commission because local impacted area business owners had concerns about construction causing street access issues and business revenue loss.

A motion was made by Mayor Mason, seconded by Meekma, that this file be Denied

Adjournment

There being no further business, the meeting was adjourned at 4:40 p.m.

City of Racine

Meeting Agenda

Wastewater Commission

City Hall
730 Washington Ave.
Racine, WI 53403
www.cityofracine.org

Tuesday, January 17, 2023 | **4:30 PM** | **City Hall, Room 207 A/B**

ROLL CALL

0036-23 **Subject:** Approval of Minutes for the November 15, 2022, Meeting

Attachments: ww minutes 11.15.22

0038-23 **Subject:** Approval of 2023 Waste Hauler Rates

Attachments: waste hauler rates_2023

0039-23 **Subject:** Request by the Village of Caledonia for the approval of a Sanitary Sewer Extension for the Glen at Waters Edge Subdivision

Attachments: sse req_caled_glen at water's edge subdv

0040-23 **Subject:** Request by the Village of Caledonia for the approval of a Sanitary Sewer Extension for Caledonia Corporate Park

Attachments: sse req_caled_caled corp park

0041-23 **Subject:** Consideration and Approval of Resolution Authorizing Purchase of Land and Easements Related to Chicory Road Sewer Improvements Project

Attachments: chicory rd land acquis apprsl

chicory rd land acquisition resolution

0042-23 **Subject:** Approval of a Contract Amendment with Synagro regarding the Biosolids Contract and Authorization for the Wastewater Commission President to sign the Amendment

Attachments: third amendment to biosolids agreement_rev 12.01.22

0043-23 **Subject:** Approval of Proposal from SEH regarding Air Permit Engineering Consulting Services

Attachments: seh proposal_air permit eng consult svc

Adjournment

If you are disabled and have accessibility needs or need information interpreted for you, please contact the Wastewater Utility Administration Office at 262.636.9181 at least 48 hours prior to this meeting.

City of Racine

Meeting Minutes - Draft

Wastewater Commission

City Hall
730 Washington Ave.
Racine, WI 53403
www.cityofracine.org

Tuesday, January 17, 2023 | **4:30 PM** | **City Hall, Room 207 A/B**

ROLL CALL

PRESENT: 9 - Natalia Taft, John Hewitt, Robert Lui, Stacy Sheppard, Claude Lois, John Tate II, Matthew Rejc, Cory Mason and Jason Meekma

EXCUSED: 3 - Dean Rosenberg, Paul Vornholt and Trevor Jung

0036-23 **Subject:** Approval of Minutes for the November 15, 2022, Meeting

A motion was made by Hewitt, seconded by Lui, that this file be Approved

0038-23 **Subject:** Approval of 2023 Waste Hauler Rates

Wastewater Utility Director presented new Waste Hauler Rates for 2023 to recover Utility costs attributed to treatment, analysis, and administration of waste delivered by tanker truck to the Wastewater Treatment Plant. The rate for PATS will be $20.81/1000 gal., and the rate for Stericycle will be $12.93/1000 gal.

A motion was made by Lois, seconded by Lui, that this file be Approved

0039-23 **Subject:** Request by the Village of Caledonia for the approval of a Sanitary Sewer Extension for the Glen at Waters Edge Subdivision

The Wastewater Utility Director presented the sewer extension request for The Glen at Water's Edge Subdivision within the Village of Caledonia. Per Sewer Agreement Section 3.3a, the Commission is required to approve all SSR party sewer extensions. The Village of Caledonia Utility District has reviewed and approved project plans, and sufficient sewer capacity is available. The extension entails approximately 2,143.7 L.F OF 8" diameter sanitary sewer.

A motion was made by Lui, seconded by Sheppard, that this file be Approved

0040-23 **Subject:** Request by the Village of Caledonia for the approval of a Sanitary Sewer Extension for Caledonia Corporate Park

The Wastewater Utility Director presented the sewer extension request for Caledonia Corporate Park within the Village of Caledonia. Per Sewer Agreement Section 3.3a, the Commission is required to approve all SSR party sewer extensions. The Village of Caledonia Utility District has reviewed and approved project plans, and sufficient sewer capacity is available. The extension entails approximately 823.6 L.F OF 10" diameter PVC sanitary sewer.

A motion was made by Lui, seconded by Lois, that this file be Approved

0041-23

Subject: Communication sponsored by Alder Taft, on behalf of the Wastewater Commission, for Consideration and Approval of Resolution Authorizing Purchase of Land and Easements Related to Chicory Road Sewer Improvements Project

Recommendation of the Wastewater Commission on 01-17-2023: That the Consideration and Approval of Resolution Authorizing Purchase of Land and Easements Related to Chicory Road Sewer Improvements Project, be Approved & Referred to the Finance & Personnel Committee.

Fiscal Note: The negotiated agreed cost with the property owner, KJJ Real Estate LLC, is $103,700.00, based on independent appraisal.

Wastewater Utility Director requested approval of a resolution that would authorize the Utility's Attorney, Stan Riffle, to complete the contract for the purchase of 0.673 acres of land at 2745 Chicory Road, that would be used for the construction of a 1.66 MG storage basin to help alleviate flooding issues in the area.

A motion was made by Lois, seconded by Lui, that this file be Referred Finance and Personnel Committee

0042-23

Subject: Approval of a Contract Amendment with Synagro regarding the Biosolids Contract and Authorization for the Wastewater Commission President to sign the Amendment

Wastewater Utility Director requested approval of a Contract Amendment between the Utility and Synagro originally dating to 2013. This Amendment would help to clarify existing ambiguities regarding the annual CPI rate adjustment calculation. By contract, the biosolids wet ton disposal fee is adjusted annually by CPI, and quarterly by the cost of diesel fuel. As a 20-year contract, the fee adjustments serve to continually maintain the fee with economic influences. No significant financial impact to the Utility resulting from this Amendment is expected.

A motion was made by Sheppard, seconded by Meekma, that this file be Approved

0043-23

Subject: Approval of Proposal from SEH regarding Air Permit Engineering Consulting Services

Wastewater Utility Director requested approval of a proposal from SEH, which would provide support with obtaining a construction permit for a new biogas fueled engine-generator. Other specifications of the proposal are to help with revising the current operations permit, assisting with emission and compliance reporting, and providing support with other air quality and environmental related issues as needed.The cost of the proposal is not to exceed $50,000.

A motion was made by Lui, seconded by Sheppard, that this file be Approved

Adjournment

There being no further business, the meeting was adjourned at 5:04 p.m.

FUND	Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	GL Account and Title
ACH - SUPERFLEET							
Water Utility Fund	1730	ACH - SUPERFLEET	11/20/2022	DEC-22; FUEL PURCHASES	12/20/2022	70.87	500-00-63200 Fuel, Oil, Fluids
Sewer Utility Fund	1730	ACH - SUPERFLEET	11/20/2022	DEC-22; FUEL PURCHASES	12/20/2022	70.88	501-00-63200 Fuel, Oil, Fluids
Total ACH - SUPERFLEET:						141.75	
ACH - WE ENERGIES							
Water Utility Fund	380	ACH - WE ENERGIES	1/4/23	DEC-22; GAS & ELECTRIC	01/12/2023	1,738.29	500-00-64140 Utilities
Sewer Utility Fund	380	ACH - WE ENERGIES	1/4/23	DEC-22; GAS & ELECTRIC	01/12/2023	12,747.43	501-00-64140 Utilities
Storm Water Utility Fund	380	ACH - WE ENERGIES	1/4/23	DEC-22; GAS & ELECTRIC	01/12/2023	259.72	502-00-64140 Utilities
Total ACH - WE ENERGIES:						14,745.44	
AQUA BACKFLOW, INC							
Water Utility Fund	127	AQUA BACKFLOW, INC	2023-0019	BACKFLOW PRENTATIVE INSP	01/04/2023	1,785.00	500-00-64240 Building Repairs & Maintenance
Total AQUA BACKFLOW, INC:						1,785.00	
BADGER METER INC.							
Water Utility Fund	163	BADGER METER INC.	1550946	300 M-25 METERS FOR CHANGI	01/09/2023	16,575.00	500-18701-107 CIP - Meters
Water Utility Fund	163	BADGER METER INC.	80116635	BEACON METER READING SUP	12/29/2022	3,360.00	500-18701-107 CIP - Meters
Total BADGER METER INC.:						19,935.00	
BOARDMAN & CLARK LLP							
Water Utility Fund	2115	BOARDMAN & CLARK LLP	249689	SEWER CHARGE DISPUTE	01/09/2023	1,040.00	500-00-61100 Legal Fees
Total BOARDMAN & CLARK LLP:						1,040.00	
CITIES & VILLAGES MUTUAL INSURANCE CO.							
Water Utility Fund	367	CITIES & VILLAGES MUTUAL IN	2023APP 9	Q1-2023; WORKERS COMP	01/09/2023	2,481.25	500-00-50260 Workers Compensation
Sewer Utility Fund	367	CITIES & VILLAGES MUTUAL IN	2023APP 9	Q1-2023; WORKERS COMP	01/09/2023	2,481.25	501-00-50260 Workers Compensation
Storm Water Utility Fund	367	CITIES & VILLAGES MUTUAL IN	2023APP 9	Q1-2023; WORKERS COMP	01/09/2023	2,350.00	502-00-50260 Workers Compensation
Water Utility Fund	367	CITIES & VILLAGES MUTUAL IN	2023APP 9	2023 GENERAL LIABILITY & AUT	01/09/2023	14,145.00	500-00-60100 General Liability Insurance
Sewer Utility Fund	367	CITIES & VILLAGES MUTUAL IN	2023APP 9	2023 GENERAL LIABILITY & AUT	01/09/2023	14,145.00	501-00-60100 General Liability Insurance
Storm Water Utility Fund	367	CITIES & VILLAGES MUTUAL IN	2023APP 9	2023 GENERAL LIABILITY & AUT	01/09/2023	2,273.00	502-00-60100 General Liability Insurance
Total CITIES & VILLAGES MUTUAL INSURANCE CO.:						37,875.50	

FUND	Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	GL Account and Title
FOTH INFRASTRUCTURE & ENVIRO, LLC							
Storm Water Utility Fund	666	FOTH INFRASTRUCTURE & EN	81556	STH 32 STREAM RESTORATION	12/23/2022	4,378.80	502-00-65154 HWY 32 Stream Restoration
Storm Water Utility Fund	666	FOTH INFRASTRUCTURE & EN	81557	WESTVIEW VILLAGE STORMWA	12/23/2022	727.00	502-00-65156 Westview Village Storm
Total FOTH INFRASTRUCTURE & ENVIRO, LLC:						5,105.80	
G & F EXCAVATING							
Water Utility Fund	687	G & F EXCAVATING	35636	WATERBREAK AT LONE ELM D	12/27/2022	4,890.00	500-00-64240 Building Repairs & Maintenance
Water Utility Fund	687	G & F EXCAVATING	35638	1810 4 1/2 MILE RD. WATERBRE	01/04/2023	5,925.00	500-00-64240 Building Repairs & Maintenance
Water Utility Fund	687	G & F EXCAVATING	35642	VALVE # 32-112 REPAIR	01/09/2023	6,076.25	500-00-64240 Building Repairs & Maintenance
Total G & F EXCAVATING:						16,891.25	
KORTENDICK HARDWARE							
Sewer Utility Fund	1096	KORTENDICK HARDWARE	155154	HOODS CREEK BASIN; LOCKS	01/09/2023	35.07	501-18736-000 CIP-Hoods Creek Attenuation
Total KORTENDICK HARDWARE:						35.07	
NETWORK SPECIALIST OF RACINE, INC.							
Water Utility Fund	1390	NETWORK SPECIALIST OF RAC	43499	OFFICE 365; ANNUAL LICENSE	12/28/2022	157.50	500-00-64320 IT Infrastructure
Sewer Utility Fund	1390	NETWORK SPECIALIST OF RAC	43499	OFFICE 365; ANNUAL LICENSE	12/28/2022	157.50	501-00-64320 IT Infrastructure
Water Utility Fund	1390	NETWORK SPECIALIST OF RAC	43599	FEB-23; REMOTE BACK-UP	01/07/2023	125.00	500-00-64320 IT Infrastructure
Sewer Utility Fund	1390	NETWORK SPECIALIST OF RAC	43599	FEB-23; REMOTE BACK-UP	01/07/2023	125.00	501-00-64320 IT Infrastructure
Total NETWORK SPECIALIST OF RACINE, INC.:						565.00	
OAK CREEK WATER UTILITY							
Water Utility Fund	1423	OAK CREEK WATER UTILITY	5136	DEC-22; BAC "T" SAMPLES	01/03/2023	365.00	500-00-62560 Water Sampling and Testing
Water Utility Fund	1423	OAK CREEK WATER UTILITY	5141	JAN-23 BAC "T" SAMPLES	01/05/2023	365.00	500-00-62560 Water Sampling and Testing
Total OAK CREEK WATER UTILITY:						730.00	
ROOT PIKE WIN							
Storm Water Utility Fund	1697	ROOT PIKE WIN	111-287	2023 RESPECT OUR WATERS C	12/06/2022	4,455.00	502-00-62102 MS4 - PUBLIC EDUCATION
Total ROOT PIKE WIN:						4,455.00	
STRAND ASSOCIATES INC.							
Storm Water Utility Fund	1893	STRAND ASSOCIATES INC.	0192318	DEC. 2022 ILLICIT DISCHARGE	01/12/2023	603.33	502-00-62101 MS4 - ILLICIT DISCHARGE

FUND	Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	GL Account and Title
Total STRAND ASSOCIATES INC.:						603.33	
UTILITY VENDOR REFUND							
Water Utility Fund	8996	UTILITY VENDOR REFUND	100-0145-25	UTILITY BILL REFUND (DOUBLE	01/11/2023	76.39	500-00-46251 Residential Service
Water Utility Fund	8996	UTILITY VENDOR REFUND	100-0145-25	UTILITY BILL REFUND (DOUBLE	01/11/2023	15.53	500-00-46255 Public Fire Protection
Sewer Utility Fund	8996	UTILITY VENDOR REFUND	100-0145-25	UTILITY BILL REFUND (DOUBLE	01/11/2023	170.00	501-00-46251 Residential Service
Water Utility Fund	8996	UTILITY VENDOR REFUND	172-0002-10	UTILITY BILL REFUND (DOUBLE	01/11/2023	54.67	500-00-46251 Residential Service
Water Utility Fund	8996	UTILITY VENDOR REFUND	172-0002-10	UTILITY BILL REFUND (DOUBLE	01/11/2023	15.53	500-00-46255 Public Fire Protection
Sewer Utility Fund	8996	UTILITY VENDOR REFUND	172-0002-10	UTILITY BILL REFUND (DOUBLE	01/11/2023	170.00	501-00-46251 Residential Service
Water Utility Fund	8996	UTILITY VENDOR REFUND	175-0006-40	UTILITY BILL REFUND (DOUBLE	01/11/2023	131.47	500-00-46251 Residential Service
Water Utility Fund	8996	UTILITY VENDOR REFUND	175-0006-40	UTILITY BILL REFUND (DOUBLE	01/11/2023	18.13	500-00-46255 Public Fire Protection
Sewer Utility Fund	8996	UTILITY VENDOR REFUND	175-0006-40	UTILITY BILL REFUND (DOUBLE	01/11/2023	198.52	501-00-46251 Residential Service
Total UTILITY VENDOR REFUND:						850.24	
WISPARK LLC..							
Water Utility Fund	2193	WISPARK LLC..	1-5-23	WISPARK WATER BILL REFUND	01/06/2023	11,953.15	500-00-46252 Commercial Service
Total WISPARK LLC..:						11,953.15	
Grand Totals:						116,711.53	

Totals by Fund

Sewer Utility Fund	$30,300.65
Storm Water Utility Fund	15,046.85
Water Utility Fund	71,364.03
Totals	**$116,711.53**

FUND	Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	GL Account and Title
A.W. OAKES & SONS, INC							
Storm Water Utility Fund	9	A.W. OAKES & SONS, INC	PAY APP # 1	HWY 32 STREAM RESTORATIO	01/23/2023	33,634.75	502-00-65154 HWY 32 Stream Restoration
Storm Water Utility Fund	9	A.W. OAKES & SONS, INC	PAY APP # 2	HWY 32 STREAM CROSSING	01/24/2023	49,128.30	502-00-65154 HWY 32 Stream Restoration
Total A.W. OAKES & SONS, INC:						82,763.05	
ACH - SIMPLIFILE, LC							
Storm Water Utility Fund	768	ACH - SIMPLIFILE, LC	JAN 2023	STORM WATER DRAINAGE EAS	01/12/2023	35.25	502-00-61100 Legal Fees
Total ACH - SIMPLIFILE, LC:						35.25	
AMERICAN LEAK DETECTION							
Water Utility Fund	79	AMERICAN LEAK DETECTION	91608	GOLEYS LANE LEAK DETECTIO	10/05/2022	635.00	500-00-64240 Building Repairs & Maintenance
Water Utility Fund	79	AMERICAN LEAK DETECTION	92098	OH DENNIS SALOON LEAK DET	11/01/2022	450.00	500-00-64240 Building Repairs & Maintenance
Water Utility Fund	79	AMERICAN LEAK DETECTION	93134	ERIE ST. / KENTWOOD LEACK	11/07/2022	450.00	500-00-64240 Building Repairs & Maintenance
Total AMERICAN LEAK DETECTION:						1,535.00	
AUGUST WINTER & SONS, INC							
Sewer Utility Fund	9246	AUGUST WINTER & SONS, INC	PAY APP # 5	DOMINICAN LS UPGRADE	01/17/2023	17,190.00	501-18739-000 CIP-Dominican Lift Station
Total AUGUST WINTER & SONS, INC:						17,190.00	
BADGER METER INC.							
Water Utility Fund	163	BADGER METER INC.	1552160	CONCORD APTS METER PART	01/13/2023	3,651.80	500-18701-107 CIP - Meters
Water Utility Fund	163	BADGER METER INC.	1552812	13301 4 MILE METER	01/17/2023	721.11	500-18701-107 CIP - Meters
Total BADGER METER INC.:						4,372.91	
CORE & MAIN LP							
Water Utility Fund	405	CORE & MAIN LP	S179798	CURBSTOP REPAIR PARTS	01/12/2023	961.40	500-00-64240 Building Repairs & Maintenance
Water Utility Fund	405	CORE & MAIN LP	S201173	WATERMAIN REPAIR PARTS	01/12/2023	2,734.72	500-00-64240 Building Repairs & Maintenance
Total CORE & MAIN LP:						3,696.12	
DIGGERS HOTLINE							
Water Utility Fund	519	DIGGERS HOTLINE	230 1 68901 P	2023 LOCATES PRE PAYMENT	01/16/2023	1,288.83	500-00-64240 Building Repairs & Maintenance
Sewer Utility Fund	519	DIGGERS HOTLINE	230 1 68901 P	2023 LOCATES PRE PAYMENT	01/16/2023	1,288.83	501-00-64240 Building Repairs & Maintenance
Storm Water Utility Fund	519	DIGGERS HOTLINE	230 1 68901 P	2023 LOCATES PRE PAYMENTA	01/16/2023	1,288.84	502-00-64240 Building Repairs & Maintenance

FUND	Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	GL Account and Title
Total DIGGERS HOTLINE:						3,866.50	
EAGLE EXCAVATING & GRADING, LLC							
Storm Water Utility Fund	2412	EAGLE EXCAVATING & GRADIN	5399	INSTALL CULVERT 8706 NICHO	01/23/2023	500.00	502-00-64240 Building Repairs & Maintenance
Total EAGLE EXCAVATING & GRADING, LLC:						500.00	
G & F EXCAVATING							
Water Utility Fund	687	G & F EXCAVATING	35652	INDIAN TRAIL WATERBREAK	01/18/2023	3,398.13	500-00-64240 Building Repairs & Maintenance
Water Utility Fund	687	G & F EXCAVATING	35661	4812 LORA ST; INSTALL CLAY D	01/24/2023	1,948.50	500-18735-107 CIP - North Kremer Watermain
Sewer Utility Fund	687	G & F EXCAVATING	35662	REPAIR SEWER AT FINISHING T	01/24/2023	1,260.00	501-00-64240 Building Repairs & Maintenance
Total G & F EXCAVATING:						6,606.63	
LIGHTHOUSE COMMUNICATIONS							
Water Utility Fund	1170	LIGHTHOUSE COMMUNICATIO	1210123	4TH QTR. 2022 UTILITY BILLING	01/21/2023	3,295.77	500-00-64040 Postage & Shipping
Sewer Utility Fund	1170	LIGHTHOUSE COMMUNICATIO	1210123	4TH QTR. 2022 UTILITY BILLING	01/21/2023	3,295.77	501-00-64040 Postage & Shipping
Water Utility Fund	1170	LIGHTHOUSE COMMUNICATIO	1210123	4TH QTR. 2022 UTILITY BILLING	01/21/2023	1,151.54	500-00-64030 Office Supplies
Sewer Utility Fund	1170	LIGHTHOUSE COMMUNICATIO	1210123	4TH QTR. 2022 UTILITY BILLING	01/21/2023	1,151.54	501-00-64030 Office Supplies
Total LIGHTHOUSE COMMUNICATIONS:						8,894.62	
MIRON CONSTRUCTION CO., INC.							
Sewer Utility Fund	9227	MIRON CONSTRUCTION CO., IN	PAY APP # 6	HOODS CREEK BASIN; PAY APP	01/24/2023	471,546.00	501-18736-000 CIP-Hoods Creek Attenuation
Total MIRON CONSTRUCTION CO., INC.:						471,546.00	
OAK CREEK WATER UTILITY							
Water Utility Fund	1423	OAK CREEK WATER UTILITY	5149	JAN-23 BAC "T" SAMPLES	01/23/2023	365.00	500-00-62560 Water Sampling and Testing
Total OAK CREEK WATER UTILITY:						365.00	
PTS CONTRACTORS, INC.							
Water Utility Fund	9106	PTS CONTRACTORS, INC.	PAY APP # 6	N. KREMER WATERMAIN REPL	01/24/2023	161,792.39	500-18735-107 CIP - North Kremer Watermain
Total PTS CONTRACTORS, INC.:						161,792.39	
RACINE WATER & WASTEWATER UTILITIES							
Water Utility Fund	1574	RACINE WATER & WASTEWATE	16587	OCT, NOV & DEC 2022 SAMPLE	01/17/2023	1,350.00	500-00-62560 Water Sampling and Testing

FUND	Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	GL Account and Title
Sewer Utility Fund	1574	RACINE WATER & WASTEWATE	9092	Q4-22; SEWER TREATMENT	01/23/2023	433,229.32	501-00-62550 Sewer Treatment Charges
Total RACINE WATER & WASTEWATER UTILITIES:						434,579.32	
REESMANS EXCAVATING & GRADING							
Water Utility Fund	1610	REESMANS EXCAVATING & GR	PAY APP # 1 W	WASHINGTON MEADOWS WAT	01/17/2023	361,930.00	500-18737-107 CIP - WASHINGTON MEADOWS
Total REESMANS EXCAVATING & GRADING:						361,930.00	
UTILITY VENDOR REFUND							
Sewer Utility Fund	8996	UTILITY VENDOR REFUND	003-0170-00	UTILITY BILL REFUND (DOUBLE	01/25/2023	170.00	501-00-46251 Residential Service
Total UTILITY VENDOR REFUND:						170.00	
WANASEK CORP							
Storm Water Utility Fund	2097	WANASEK CORP	PAY APP # 3	WESTVIEW VILLAGE; STORM I	01/17/2023	2,688.12	502-00-65156 Westview Village Storm
Total WANASEK CORP:						2,688.12	
WAREHOUSE DIRECT							
Water Utility Fund	2099	WAREHOUSE DIRECT	5417859-0	PAPER, STAPLES, FILES	01/20/2023	125.58	500-00-64030 Office Supplies
Sewer Utility Fund	2099	WAREHOUSE DIRECT	5417859-0	PAPER, STAPLES, FILES	01/20/2023	125.58	501-00-64030 Office Supplies
Total WAREHOUSE DIRECT:						251.16	
Grand Totals:						1,562,782.07	

Payment Totals By Fund

Sewer Utility Fund	$ 929,257.04
Storm Water Utility Fund	$ 87,275.26
Water Utility Fund	$ 546,249.77
Totals	**$1,562,782.07**

STH 32 Utility Improvements DOT

Sewer & Water

Contractor	**Payne and Dolan Inc.**		
Original Contract	**$**	**266,043.63**	
Change Order	$	(32,046.02)	-12.0%
Engineering (DOT)	$	19,334.03	
Current Contract	**$**	**253,331.64**	
Pay Request	$	3.12	12/11/2018
Pay Request	$	868.07	6/4/2019
Pay Request	$	2,645.08	8/1/2019
Ray Request	$	2,766.76	9/4/2019
Pay Request	$	7,396.43	10/3/2019
Pay Request	$	92,497.63	11/1/2019
Pay Request	$	80,448.04	12/2/2019
Pay Request	$	64,166.90	1/2/2020
Pay Request	$	2,645.08	2/3/2020
Pay Request	$	1,014.86	3/2/2020
Pay Request	$	1,655.72	4/1/2020
Pay Request	$	405.27	6/1/2020
Pay Request	$	1,500.29	9/2/2020
Pay Request	$	268.21	12/1/2020
Pay Request	$	288.56	5/3/2021
Pay Request	$	24.20	12/1/2022
Check Received	$	(5,262.58)	
Remaining on Contract	$	0.00	0.0%
Foth Engineering/Review (7/23/2019 - 6/3/2020)	$	61,034.29	
Total Project Cost	**$**	**314,365.93**	
Revised 2019 CIP	$	350,000.00	

North Kremer Watermain

Water

Contractor	**PTS Contractors Inc**		
Original Contract	**$**	**2,681,000.00**	
Change Order #1 - #10	$	(26,624.53)	-0.99%
Current Contract	**$**	**2,654,375.47**	
Pay Request #1	$	573,596.56	
Retainage	$	30,189.29	
Pay Request #2	$	781,206.79	
Retainage	$	36,835.71	
Pay Request #3	$	340,809.90	
Pay Request #4	$	542,749.45	
Pay Request #5	$	303,018.87	
Pay Request #6	$	161,792.39	
	$	2,770,198.96	
Remaining on Contract (Including Retainage)	$	(48,798.49)	-2%
Design Engineering (2020 - 8/23/2021)	**$**	**206,069.12**	7.69%
Construction Services (7/28/2021 to 11/16/2021)	**$**	**98,024.74**	3.66%
G & F Excavating (Charles Street	**$**	**2,535.00**	
Ray Hintz (Top Soil Charles Stree	**$**	**24.00**	
Racine County (Pavement Repair Charles Street)			
Total Project Cost	**$**	**2,961,028.33**	

Erie Street Sanitary Sewer Improvements

Sewer

Contractor	**Reesman's**		
Original Contract	**$**	**842,759.00**	
Change Order #1	$	-	0.00%
Change Order #2	$	-	
Change Order #3	$	(3,035.00)	-0.36%
Change Order #4	$	28,189.14	3.34%
Change Order #5	$	2,666.56	0.32%
Change Order #6	$	7,350.00	0.87%
Change Order #7	$	3,634.58	0.43%
Change Order #8	$	39,228.92	4.65%
Current Contract	**$**	**920,793.20**	9.26%
Pay Request #1	$	176,119.17	
Retainage	$	9,269.43	
Pay Request #2	$	374,210.13	
Retainage	$	12,696.37	
Pay Request #3	$	342,607.86	
Pay Request #4	$	27,856.04	
Remaining on Contract (Including Retainage)	$	0.00	0.0%
Design Engineering (3/29/2020 - 10/18/2021)	**$**	**117,471.95**	13.94%
Legal Review	$	94.80	
Construction Services (11/16/2021 - 12/23/2022)	**$**	**102,505.86**	12.16%
Total Project Cost	**$**	**1,140,865.81**	

Dominican Lift Station Improvements

Sewer

Contractor	**August Winter & Sons, Inc**		
Original Contract	**$**	**718,500.00**	
Change Order #1	$	-	0.00%
Change Order #2	$	4,560.00	0.63%
Change Order #3	$	-	
Change Order #4	$	1,382.00	0.19%
Current Contract	**$**	**724,442.00**	0.82%
Pay Request #1	$	66,667.77	
Retainage	$	3,508.83	
Pay Request #2	$	121,096.88	
Retainage	$	6,373.52	
Pay Request #3	$	228,397.30	
Retainage	$	8,228.70	
Pay Request #4	$	155,779.00	
Pay Request #5	$	17,190.00	
Remaining on Contract (Including Retainage)	$	135,311.05	19%
Design Engineering (3/29/2020 - 10/18/2021)	**$**	**234,943.90**	32.70%
Construction Services			0.00%
Starnet (Building & Controls)	$	93,496.00	
We Energies	$	8,926.04	
Total Project Cost	**$**	**1,061,807.94**	

Hoods Creek Attenutation Basin Expansion

Sewer

Contractor	**Miron Construction**		
Original Contract	**$**	**10,209,403.20**	
Change Order #1	$	-	0.00%
Change Order #2	$	-	0.00%
Change Order #3	$	60,787.06	0.60%
Change Order #4	$	8,210.32	0.08%
Change Order #5	$	1,321.33	0.01%
Total	$	70,318.71	0.69%
Current Contract	**$**	**10,279,721.91**	
Pay Request #1	$	503,595.85	
Retainage	$	26,505.04	
Pay Request #2	$	668,836.92	
Retainage	$	35,201.95	
Pay Request #3	$	2,856,043.90	
Retainage	$	153,318.10	
Pay Request #4	$	2,875,931.51	
Retainage	$	41,729.67	
Pay Request #5	$	1,505,021.00	
Pay Request #6	$	471,546.00	
Remaining on Contract (Including Retainage)	$	1,398,746.73	14%
Design Engineering (9/28/2020-5/26/2022)	**$**	**431,789.35**	4.23%
Construction Services (5/26/2022-6/23/2022)	**$**	**45,541.30**	0.45%
Gabriel Novac #1	$	82,590.00	
Gabriel Novac #2	$	165,180.00	
Gabriel Novac #3			
Total	$	247,770.00	
Total Project Cost	**$**	**11,004,822.56**	

Washington Meadows Watermain
Water

Contractor	**Reesman's**		
Original Contract	**$**	**1,681,981.35**	
Current Contract	**$**	**1,681,981.35**	0.00%
Pay Request #1	$	361,930.00	
Retainage	$	19,048.95	
Remaining on Contract (Including Retainage)	$	1,320,051.35	78.5%
Design Engineering 1/23/2022 to 6/23/2022	**$**	**97,246.35**	5.78%
Construction Services 7/29/2022 to 7/29/2022	**$**	**1,002.50**	0.06%
Total Project Cost	**$**	**1,780,230.20**	

Westview Village Stormwater Improvements

Storm Water

Contractor	**The Wanasek Corp**		
Original Contract	**$**	**154,465.00**	
Current Contract	**$**	**154,465.00**	0.00%
Pay Request #1	$	123,394.69	
Retainage	$	6,494.46	
Pay Request #2	$	22,689.14	
Retainage	$	1,194.16	
Pay Request #3	$	2,688.12	
Remaining on Contract (Including Retainage)	$	5,693.05	3.7%
Design Engineering	**$**	**62,613.56**	40.54%
Construction Services			0.00%
Total Project Cost	**$**	**217,078.56**	

STH 32 Stream Restoration Project

Storm Water

Contractor	**A.W. Oakes**		
Original Contract	**$**	**279,831.00**	
Current Contract	**$**	**279,831.00**	0.00%
Pay Request #1	$	33,634.75	
Retainage	$	1,770.25	
Pay Request #2	$	49,128.30	
Retainage	$	2,585.70	
Remaining on Contract (Including Retainage)	$	197,067.95	70.4%
Design Engineering			0.00%
Construction Services			0.00%
Total Project Cost	**$**	**279,831.00**	

CALEDONIA UTILITY DISTRICT
PROJECT SUMMARY WORKSHEET

Riverbend Drive Lift Station Safety Site & Forcemain Upgrade

- Working on facility plan. Looking to schedule additional flow monitoring and looking at a potential site near the Root River Interceptor for a potential storage tank.

Annual Televising Program – Sanitary Sewer

- Continuing to perform repairs that staff can perform.

Water Impact Fee / Sewer Connection Fee Update

- Reviewing information received.

Hoods Creek Attenuation Basin Expansion

- Pouring hatch walls and setting hatches. Grinding channels as necessary. Pouring fillets as necessary for washouts. Caulking joints continues. Wet well work completed. Piping for pump 3 being done. Mechanical work continues. Substantial completion approximately early June.

Central Lift Station Safety Site & Attenuation Basin

- Design continues. Will be meeting with Foth to discuss some design decisions in the near future. Proposed to be bid in December 2023 with Construction March 2024 – September 2025.

North Kremer Watermain Project

- Awaiting Final Pay Request.

Dominican Lift Station Rehab Project

- LW Allen anticipates the second week of February for pump to be delivered.

Concord Apartments Meter Vault

- Head installed on Master meter. Will keep other meters in to compare the water loss anticipated.

Washington Meadows Watermain

- Balance of the project will be done in 2023.

TID #4 Elevated Storage Tank & Adams Road Watermain

- Had meeting with Development Director to discuss setbacks, landscaping and permitting procedure through Plan Commission. Will need Site Plan Approval & Conditional Use Permit. Will be supplying applications soon for necessary approvals.

CALEDONIA UTILITY DISTRICT
STORM WATER PROJECTS
PROJECT SUMMARY WORKSHEET

Hoods Creek – Aldebaran Brushing Project

- Left message with Contractor about starting work.

Douglas Avenue – OMG Ditch Project

- Contractor looking to start grading next week pending weather. Excavated material will be brought to Crawford Park for future sledding hill. Coordinating with Riley as necessary.

Turtle Creek Restoration

- Southern Wisconsin Appraisal scheduling meetings for appraisals.

Westview Village Storm Improvements

- Contractor completed work. Will need to perform any final restoration / touch up in Spring. Will need to process a Charge Order for time when received.

MEMORANDUM

DATE: **Friday, January 27, 2023**

TO: **Caledonia Utility District**

FROM: **Anthony A. Bunkelman P.E.**
Public Services Director

RE: **Erie Street Sanitary Sewer Improvements – Change Order #8**

BACKGROUND INFORMATION

Change Order #8 on the Erie Street Sanitary Sewer Improvements Project is for adjusting miscellaneous quantities to match what was installed/used on the project. The adjustment of 21 Bid items and accounting all the plusses and minuses results in a Final Change Order of $39,228.92. See Attached Contractors Application for all adjusted quantities.

Change Order #8 adjusts the contract by 4.65% and Change Orders to date have adjusted the contract by 9.26%.

It is recommended that Change Order #8 be approved.

RECOMMENDATION

Move to approve Change Order #8 in the amount of $39,228.92 for the Erie Street Sanitary Sewer Improvements Project.

SECTION 00 63 62
CHANGE ORDER

No. 8
Date of Issuance: January 27, 2023 Effective Date: January 27, 2023
Owner: Village of Caledonia Utility District

Project: Erie Street Sanitary Sewer Improvements	Owner's Contract No.: 19C030.05
Contractor: The Reesman Company	Date of Contract: 7/6/2022
Engineer: Foth Infrastructure & Environment, LLC	Engineer's Project No.: 19C030.05

The Contract Documents are modified as follows upon execution of this Change Order:

Item No.	Description	Cost
CCO # 8	**ACCOUNTING CLOSE-OUT / PROJECT COMPLETION**	
	NET INCREASE IN CONTRACT QUANTITIES	$39,228.92
	Grand Total =	**$39,228.92**

Attachments (List Documents Supporting Change)

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: $ 842,759.00 .	Original Contract Times: ☐ Working Days ☒ Calendar Days Substantial Completion (days or date): May 31, 2022 Ready for Final Payment (days or date): July 31, 2022
[Increase] [~~Decrease~~] from previously approved Change Orders No. 1-7 : $ 38,805.28 .	[Increase] [~~Decrease~~] from previously approved Change Orders No. 1-7: Substantial Completion (days): June 16, 2022 Ready for Final Payment (days): July 31, 2022
Contract Price prior to this Change Order: $ 881,564.28 .	Contract Times prior to this Change Order: Substantial Completion (days or date): June 16, 2022 Ready for Final Payment (days or date): July 31, 2022
[Increase] [~~Decrease~~] of this Change Order: $ 39,228.92 .	[Increase] [~~Decrease~~] of this Change Order: Substantial Completion (days or date): June 16, 2022 Ready for Final Payment (days or date): July 31, 2022
Contract Price incorporating this Change Order: $ 920,793.20 .	Contract Times with all approved Change Orders: Substantial Completion (days or date): June 16, 2022 Ready for Final Payment (days or date): July 31, 2022

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By:_____	By:_____	By:_____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date:_____	Date:_____	Date:_____

By:_____ Date:_____

Approved by Funding Agency (if applicable)

CONTINUATION SHEET

AIA Document G702, Application And Certificate For Payment, containing Contractor's signed Certification is attached

Schedule of Values Page 1 of 2

Application no.: 4
Invoice No.: 22EESC1:04
Invoice Date: 12.15.22

Project Name

From 6.1.22 To 12.15.22

A	B				C	D	E	F	G	H	I	J	K
						WORK COMPLETED							
ITEM NUMBER	DESCRIPTION OF WORK	BID QUANTITY	UNIT	UNIT PRICE	SCHEDULED VALUE	(D+E+F) OF PREVIOUS APPLICATION	QUANTITY THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL QUANTITY COMPLETE (D+E+F)	AMOUNT THIS PERIOD (G*H)	TOTAL AMOUNT COMPLETED AND STORED TO DATE (G*I)	BALANCE TO FINISH (C-I)	% COMPLETE (I/C)
	Erie St Sanitary Sewer Improvements												
10	Mobilization/Demobilization	1.000	LS	9000	$9,000.00	1.00	0.00	0.00	1.00	$0.00	$9,000.00	$0.00	100%
20	Traffic Control	1.000	LS	13000	$13,000.00	1.00	0.00	0.00	1.00	$0.00	$13,000.00	$0.00	100%
30	Clearing & Grubbing	1.000	LS	3900	$3,900.00	1.00	0.00	0.00	1.00	$0.00	$3,900.00	$0.00	100%
40	Tree Removal	275.000	ID	26.7	$7,342.50	334.30	0.00	0.00	334.30	$0.00	$8,925.81	($1,583.31)	122%
50	Remove & Replace Signing	1.000	LS	400	$400.00	1.00	0.00	0.00	1.00	$0.00	$400.00	$0.00	100%
60	Remove & Replace Postal Boxes	1.000	LS	775	$775.00	1.00	0.00	0.00	1.00	$0.00	$775.00	$0.00	100%
70	Pothole & Verify Force Main Elevation	3.000	EA	900	$2,700.00	3.00	0.00	0.00	3.00	$0.00	$2,700.00	$0.00	100%
80	Stripping, Stockpiling & Respreading Topsoil	1.000	LS	12275	$12,275.00	1.00	0.00	0.00	1.00	$0.00	$12,275.00	$0.00	100%
90	Sanitary Sewer Manhole, 48" (6)	165.000	VF	665	$67,830.00	101.00	0.00	0.00	101.00	$0.00	$67,165.00	$665.00	99%
100	Sanitary Sewer Polymer Concrete Manhole, 48" (2)	32.000	VF	1150	$36,800.00	32.00	0.00	0.00	32.00	$0.00	$36,800.00	$0.00	100%
110	8" PVC Sanitary Sewer, Granular Backfill	60.000	LF	166	$9,960.00	99.00	0.00	0.00	99.00	$0.00	$16,434.00	($6,474.00)	165%
120	15" SDR-26 PVC Sanitary Sewer, Granular Backfill	850.000	LF	219	$186,150.00	851.00	0.00	0.00	851.00	$0.00	$186,369.00	($219.00)	100%
130	Dual 10" HDPE Force Main, Spoil Backfill	330.000	LF	137	$45,210.00	326.00	0.00	0.00	326.00	$0.00	$44,662.00	$548.00	99%
140	FM Discharge Polymer Cone MH Structure (1)	1.000	LS	23150	$23,150.00	1.00	0.00	0.00	1.00	$0.00	$23,150.00	$0.00	100%
150	Bituminous Tack Coat	300.000	GAL	3.3	$990.00	150.00	0.00	0.00	150.00	$0.00	$495.00	$495.00	50%
160	CMP Driveway Culverts - 12" Diameter	30.000	LF	74	$2,220.00	74.00	0.00	0.00	74.00	$0.00	$5,476.00	($3,256.00)	247%
170	CMP Flared End Sections - 12" Diameter	4.000	EA	327	$1,308.00	6.00	0.00	0.00	6.00	$0.00	$1,962.00	($654.00)	150%
180	Sawcut Pavement, Full Depth	1,850.000	LF	1.15	$2,127.50	1,840.00	0.00	0.00	1840.00	$0.00	$2,116.00	$11.50	99%
190	1 1/4" Dense Graded Base (HMA Base)	830.000	TON	53.75	$44,612.50	830.00	0.00	0.00	830.00	$0.00	$44,612.50	$0.00	100%
200	3/4" Dense Base(HMA Base Drive & Shoulder)	960.000	TON	24.9	$23,904.00	2,291.40	0.00	0.00	2291.40	$0.00	$57,055.86	($33,151.86)	239%
210	HMA Binder Course	620.000	TON	112.8	$69,936.00	672.73	0.00	0.00	672.73	$0.00	$75,883.94	($5,947.94)	109%
220	HMA Surface Course	710.000	TON	120.4	$85,484.00	324.63	0.00	0.00	324.63	$0.00	$39,085.45	($15,801.45)	155%
230	Connect to Exist Sanitary Sewerage System	5.000	EA	1275	$6,375.00	6.00	0.00	0.00	6.00	$0.00	$7,650.00	($1,275.00)	120%
240	Silt Fence	2,300.000	LF	3.15	$7,245.00	1,888.00	0.00	0.00	1888.00	$0.00	$5,947.20	$1,297.80	82%
250	6" Sanitary Lateral	330.000	LF	168	$55,440.00	269.00	0.00	0.00	269.00	$0.00	$45,192.00	$10,248.00	82%
260	Pavement Markings	1,570.000	LF	2.35	$3,689.50	0.00	0.00	0.00	0.00	$0.00	$0.00	$3,689.50	0%
270	Sanitary Lateral Televising	1.000	LS	3630	$3,630.00	1.00	0.00	0.00	1.00	$0.00	$3,630.00	$0.00	100%
280	Topsoil, Seed, Fertilizer, & Erosion Matting	4,100.000	SY	2.85	$11,685.00	3,209.10	797.62	0.00	4006.72	$2,273.22	$11,419.15	$265.85	98%
290	Light Pole Removal & Salvage	5.000	EA	295	$1,475.00	4.00	0.00	0.00	4.00	$0.00	$1,180.00	$295.00	80%
300	10" PVC Sanitary Sewer, Granular Backfill	15.000	LF	163	$2,445.00	24.00	0.00	0.00	24.00	$0.00	$3,912.00	($1,467.00)	160%
310	15" SDR-35 PVC Sanitary Sewer, Granular Backfill	700.000	LF	217	$151,900.00	695.00	0.00	0.00	695.00	$0.00	$150,815.00	$1,085.00	99%
400	Pole Hold Allowance	1.000	LS	10000	$10,000.00	0.00	0.00	0.00	0.00	$0.00	$0.00	$10,000.00	0%
500	Stored Materials Base Contract		LS	0									
	Base Contract				$842,759.00			$0.00		$2,273.22	**$881,987.92**	-$39,228.92	105%

CONTINUATION SHEET Schedule of Values Page 2 of 2

AIA Document G702, Application And Certificate For Payment,
containing Contractor's signed Certification is attached.

Application no.: 4
Invoice No.: 22EESC1.04
Invoice Date: 12 15 22

Project Name

From 6 1 22 To 12 15 22

A	B				C	D	E	F	G	H	I	J	K
						WORK COMPLETED							
ITEM NUMBER	DESCRIPTION OF WORK	BID QUANTITY	UNIT	UNIT PRICE	SCHEDULED VALUE	(D+E) PREVIOUS APPLICATION	QUANTITY THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL QUANTITY COMPLETE (D+E+F)	AMOUNT THIS PERIOD (F x C) + E	TOTAL AMOUNT COMPLETED AND STORED TO DATE (G x C)	BALANCE TO FINISH (C - I)	% COMPLETE (I / C)
	Change Orders												
	C/O No 3 - HDPE to C900	1	LS	($3,035.00)	($3,035.00)	1.00	0.00		1.00	$0.00	($3,035.00)	$0.00	100%
	C/O No 4 Alternate Traffic Route	1	LS	$28,189.14	$28,189.14	1.00	0.00		1.00	$0.00	$28,189.14	$0.00	100%
	C/O No 5 Aluminum Culvert On Kentwood	1	LS	$2,666.56	$2,666.56	1.00	0.00		1.00	$0.00	$2,666.56	$0.00	100%
	C/O No 6 Sewer Overflow Abandonment	1	LS	$7,350.00	$7,350.00	1.00	0.00		1.00	$0.00	$7,350.00	$0.00	100%
	C/O No 7 Additional Lawn Restoration	1	LS	$3,634.58	$3,634.58	0.00	1.00		1.00	$3,634.58	$3,634.58	$0.00	100%
	Change Order Totals				$38,805.28			$0.00		$3,634.58	$38,805.28	$0.00	100%
	Base and Change Order Combined				$881,564.28			$0.00		$5,907.80	**$920,793.20**	-$39,228.92	104%

MEMORANDUM

DATE: **Friday, January 27, 2023**

TO: **Caledonia Utility District**

FROM: **Anthony A. Bunkelman P.E.**
Public Services Director

RE: **Final Acceptance Erie Street Sanitary Sewer Improvements**

BACKGROUND INFORMATION

Reesman's Excavating & Grading Inc. has submitted the final pay request for the Erie Street Sanitary Sewer Improvements Project. The work was started and completed in 2022. This payment is for the final adjustment of quantities and retainage.

The Final Lien waivers have been requested and will be submitted prior to issuing the check.

RECOMMENDATION

Move to recommend Final Acceptance of the Erie Street Sanitary Sewer Improvement Project.

MEMORANDUM

DATE: **Friday, January 27, 2023**

TO: **Caledonia Utility District**

FROM: **Anthony A. Bunkelman P.E.**
Public Services Director

RE: **Caledonia Corporate Park – Infrastructure Plan Approval**

BACKGROUND INFORMATION

Andrew Shoaf P.E. of Pinnacle Engineering Group has prepared an Infrastructure Plan for the Caledonia Corporate Park, a commercial business park located on the South side of Highway K, just East of the East Frontage Road. The Caledonia Corporate Park has proposed 4 buildings (warehouse/distribution) of varying sizes. 2 of the proposed buildings are projected to start construction in 2023. In order to construct the 2 buildings, there is public infrastructure that is required to be installed.

The Infrastructure Plan is for the necessary Sanitary Sewer, Watermain, Storm Sewer, and Public Road Improvements that are necessary for the development.

The proposed Sanitary Sewer will serve Building I, Building II and Building III. Building IV will require a new Sanitary Sewer run from the South (TID #4 Phase 4). The Watermain will serve all of the buildings and will be looped within the development back to Highway K. The Storm Sewer will serve all of the buildings and the public road by taking the storm water runoff back to the Storm Water Ponds.

Previously the Caledonia Utility District approved the Storm Water Management Plan and the Mass Grading Plan for the development.

The Infrastructure Plan has been submitted and reviewed by the Village Engineer, the Public Services Director, and the Utility District's Consultant. The Plans are in conformance with the Ordinance and are ready for Utility District Approval.

Included in this packet are the Infrastructure Plans.

RECOMMENDATION

Move to approve the Infrastructure Plan for Caledonia Corporate Park subject to the following condition.

The Design Engineer providing a Professional Engineer stamped plan.

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

PUBLIC CIVIL ENGINEERING INFRASTRUCTURE PLANS

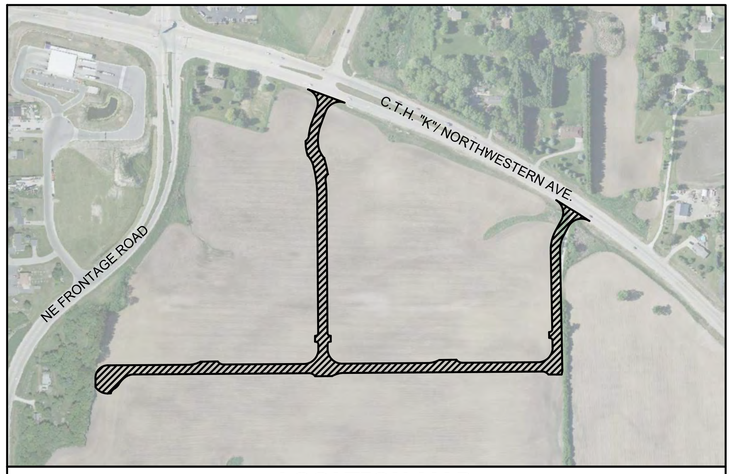
FOR

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

PLANS PREPARED FOR

ZILBER PROPERTY GROUP SM



LOCATION MAP
SCALE: 1" = 300'

NORTH

INDEX OF SHEETS

C-1	COVER SHEET
C-2	PROJECT OVERVIEW
C-3	TYPICAL SECTION
C-4	DEMOLITION PLAN
C-5 - C-10	EROSION CONTROL PLAN
C-11 - C-20	PLAN DETAILS
C-21 - C-30	GRADING PLAN AND PROFILE
C-31 - C-40	STORM SEWER PLAN AND PROFILE
C-41 - C-50	UTILITY PLAN AND PROFILE
C-51 - C-56	TRAFFIC CONTROL
C-57 - C-59	CONSTRUCTION DETAILS
	WISDOT STANDARD DETAILS
	WISDOT SIGN PLATES
XS-1 - XS-9	CROSS SECTIONS
L-1 - L-8	LANDSCAPE PLAN

REQUIRED SUBMITTALS FOR APPROVAL

1. PIPE BEDDING & TRENCH BACKFILL - GRADATION
2. MANHOLE BACKFILL - GRADATION

REQUIRED SUBMITTALS FOR RECORDS

1. WATER MAIN PIPES, VALVES, HYDRANTS & FITTINGS
2. SANITARY SEWER PIPE & FITTINGS
3. STORM SEWER PIPE, STRUCTURES, & FITTINGS
4. TRACER WIRE
5. UNDERGROUND UTILITY LOCATION RECORD DRAWINGS
6. CHEMICAL SOIL STABILIZATION MIX DESIGN (IF APPLICABLE)
7. DOWEL & TIE BARS

PROJECT TEAM CONTACTS

CIVIL ENGINEER:
ANDREW SHOAF, P.E.
PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD
BROOKFIELD, WI 53186
MAIN: (262) 754-8888
E-MAIL: andrew.shoaf@pinnacle-engr.com

SURVEYOR:
JOHN KONOPACKI, P.L.S.
PINNACLE ENGINEERING GROUP
20725 WATERTOWN ROAD
BROOKFIELD, WI 53186
MAIN: (262) 754-8888
E-MAIL: john.konopacki@pinnacle-engr.com

ARCHITECT:
MARK NATZKE
SENIOR ASSOCIATE
ZIMMERMAN ARCHITECTURAL STUDIOS, INC.
2122 WEST MT. VERNON AVENUE
MILWAUKEE, WI 53233
(414) 918-1413

APPLICANT:
JASON LUEDERS
ZILBER PROPERTY GROUP
710 N. PLANKINGTON AVENUE
MILWAUKEE, WI 53202
(630) 344-3718

EXPIRATION DATE: JULY 31, 2024

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

PINNACLE ENGINEERING GROUP, LLC - ENGINEER'S LIMITATION

PINNACLE ENGINEERING GROUP, LLC AND THEIR CONSULTANTS DO NOT WARRANT OR GUARANTEE THE ACCURACY AND COMPLETENESS OF THE DELIVERABLES HEREIN BEYOND A REASONABLE DILIGENCE. IF ANY MISTAKES, OMISSIONS, OR DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DELIVERABLES, THE ENGINEER SHALL BE PROMPTLY NOTIFIED PRIOR TO BID SO THAT HE MAY HAVE THE OPPORTUNITY TO TAKE WHATEVER STEPS NECESSARY TO RESOLVE THEM. FAILURE TO PROMPTLY NOTIFY THE ENGINEER OF SUCH CONDITIONS SHALL ABSOLVE THE ENGINEER FROM ANY RESPONSIBILITY FOR THE CONSEQUENCES OF SUCH FAILURE. ACTIONS TAKEN WITHOUT THE KNOWLEDGE AND CONSENT TO THE ENGINEER, OR IN CONTRADICTION TO THE ENGINEER'S DELIVERABLES OR RECOMMENDATIONS, SHALL BECOME THE RESPONSIBILITY NOT OF THE ENGINEER BUT OF THE PARTIES RESPONSIBLE FOR TAKING SUCH ACTION.

FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

LEGEND

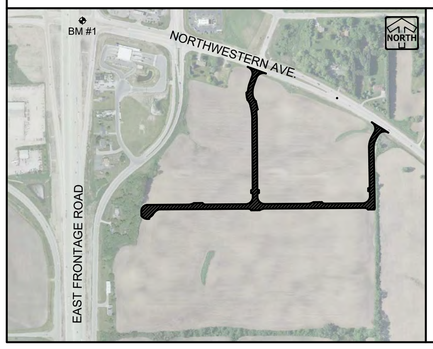
	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	◎	◉
STORM SEWER MANHOLE	◎	◉
STORM SEWER AREA DRAIN		▣
STORM SEWER INLET (ROUND CASTING)	○	●
STORM SEWER INLET (RECTANGULAR CASTING)	□	■
PRECAST FLARED END SECTION	◁	◀
CONCRETE HEADWALL	⊂	⊂
AIR RELEASE ASSEMBLY	⊗	⊕
VALVE BOX	⊞	⊞
FIRE HYDRANT		
BUFFALO BOX	⊙	●
CLEANOUT	⊡	⊡
SANITARY SEWER	——▷——	——▶——
FORCE MAIN	——\/\/——	——\/\/——
STORM SEWER	——)——	——)——
DRAIN TILE	——)——	——)——
WATER MAIN	—W—	—W—
UTILITY CROSSING		—(X)—
LIGHTING		
ELECTRICAL CABLE	—E—	—E—
OVERHEAD WIRES	—OHW—	—OHW—
CAUTION EXISTING UTILITIES NEARBY		CAUTION
ELECTRICAL TRANSFORMER OR PEDESTAL	E	
POWER POLE	—o—	—●—
POWER POLE WITH LIGHT		
STREET SIGN		
GAS MAIN	—G—	—G—
TELEPHONE LINE	—T—	—T—
CONTOUR	749	749
SPOT ELEVATION	×(750.00)	×750.00
WETLANDS		
FLOODWAY		
FLOODPLAIN		
HIGH WATER LEVEL (HWL)		
NORMAL WATER LEVEL (NWL)		
DIRECTION OF SURFACE FLOW		GRASS / PAVEMENT
DITCH OR SWALE		
DIVERSION SWALE		
OVERFLOW RELIEF ROUTING		
TREE WITH TRUNK SIZE	6" 6"	
SOIL BORING	B-1	B-1
TOPSOIL PROBE	P-1	P-1
FENCE LINE, TEMPORARY SILT	—SF—	—SF—
FENCE LINE, WIRE	—○—	—○—
FENCE LINE, CHAIN LINK OR IRON	—□—	—□—
FENCE LINE, WOOD OR PLASTIC	—×—	—×—
CONCRETE SIDEWALK		
CURB AND GUTTER		
DEPRESSED CURB		
REVERSE PITCH CURB & GUTTER		
EASEMENT LINE		

ABBREVIATIONS

BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FF	FINISHED FLOOR	ST	STORM SEWER
FG	FINISHED GRADE	T	TANGENCY OF CURVE
FL	FLOW LINE	TB	TOP OF BANK
FP	FLOODPLAIN	TC	TOP OF CURB
FR	FRAME	TF	TOP OF FOUNDATION
FW	FLOODWAY	TP	TOP OF PIPE
HWL	HIGH WATER LEVEL	TS	TOP OF SIDEWALK
INV	INVERT	TW	TOP OF WALK
L	LENGTH OF CURVE	WM	WATER MAIN
MH	MANHOLE	△	INTERSECTION ANGLE

3

BENCHMARKS



BENCHMARK 1: REFERENCE BENCHMARK: CAST IRON MONUMENT WITH BRASS CAP AT THE NORTHEAST CORNER OF THE SOUTHWEST ¼ SECTION 30, TOWN 4 NORTH, RANGE 22 EAST, ELEVATION = 779.56.

VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988(12), (NAVD88) HORIZONTAL DATUM: Wisconsin State Plane Coordinate System, South Zone (N.A.D. 1983/2011). The south line of the Southwest ¼ of Section 30, Township 4 North, Range 22 East has a bearing of S89°35'06"W.

FOR REVIEW ONLY

www.pinnacle-engr.com

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE · NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

COVER SHEET

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI | AJS
PEG PM | START DATE 04/20/22
SCALE N.T.S.

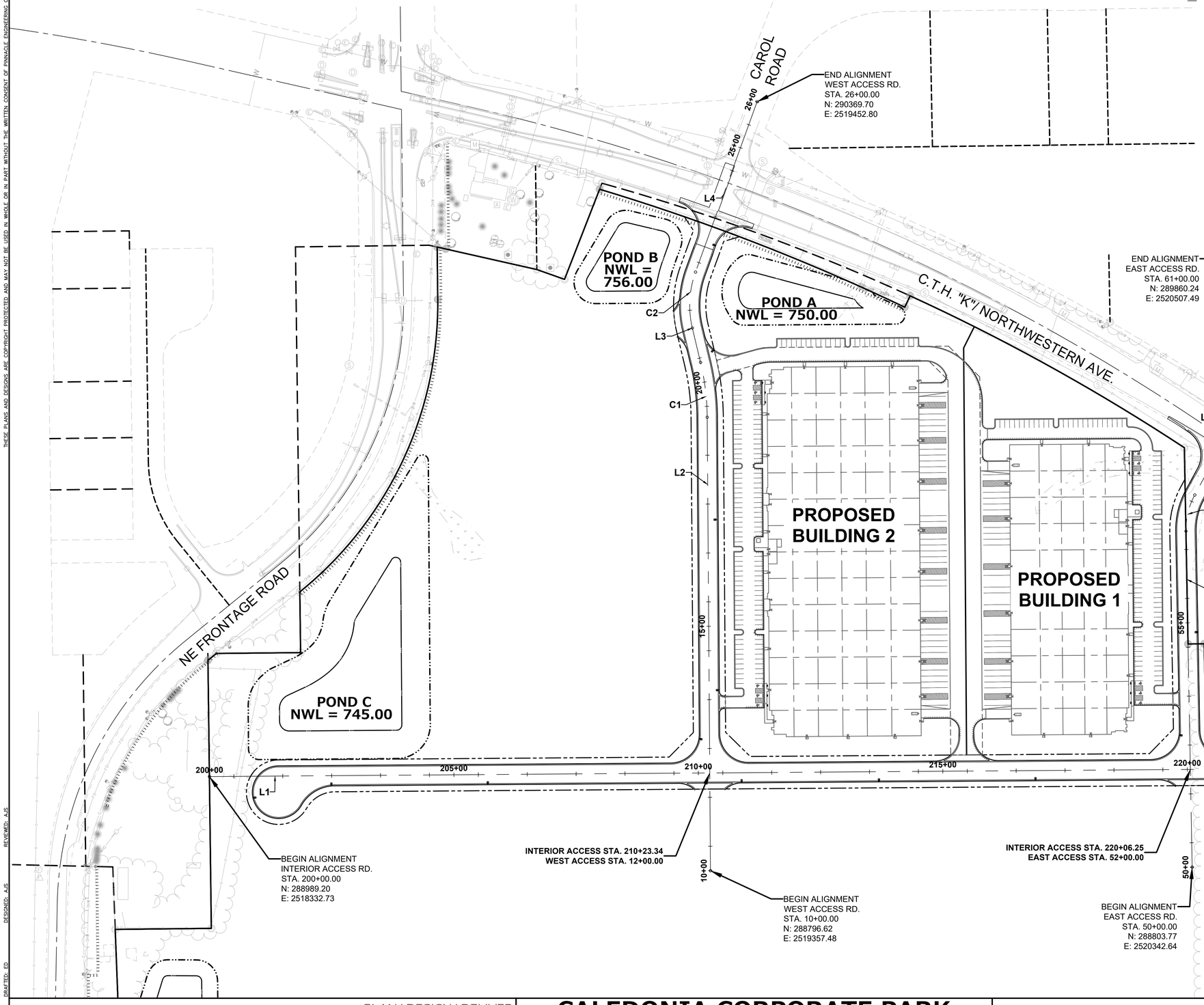
SHEET
C-1
C-59

© COPYRIGHT 2019

COVER SHEET

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY COVER SHEET.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



INTERIOR ACCESS RD.

LINE TABLE				
LINE	LENGTH	BEARING	BEGIN STATION	END STATION
L1	2200.000	N89° 35' 05.81"E	200+00.00	222+00.00

WEST ACCESS RD.

LINE TABLE				
LINE	LENGTH	BEARING	BEGIN STATION	END STATION
L2	927.761	N0° 24' 54.19"W	10+00.00	19+27.76
L3	72.217	N13° 24' 20.83"W	20+41.13	21+13.34
L4	370.499	N19° 52' 15.18"E	22+29.50	26+00.00

EAST ACCESS RD.

LINE TABLE				
LINE	LENGTH	BEARING	BEGIN STATION	END STATION
L5	687.456	N1° 03' 53.07"W	50+00.00	56+87.46
L6	335.369	N28° 24' 49.83"E	57+64.63	61+00.00

WEST ACCESS RD.

CURVE TABLE							
Curve #	Radius	Length	Tangent	Chord	Delta	PC Station	PT Station
C1	500.00'	113.37'	56.93'	113.12'	12° 59' 27"	19+27.76	20+41.13
C2	200.00'	116.16'	59.77'	114.53'	33° 16' 36"	21+13.34	22+29.50

EAST ACCESS RD.

CURVE TABLE							
Curve #	Radius	Length	Tangent	Chord	Delta	PC Station	PT Station
C3	150.00'	77.17'	39.46'	76.33'	29° 28' 43"	56+87.46	57+64.63

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

www.pinnacle-engr.com

FOR REVIEW ONLY

PROJECT OVERVIEW

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

PROJECT OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

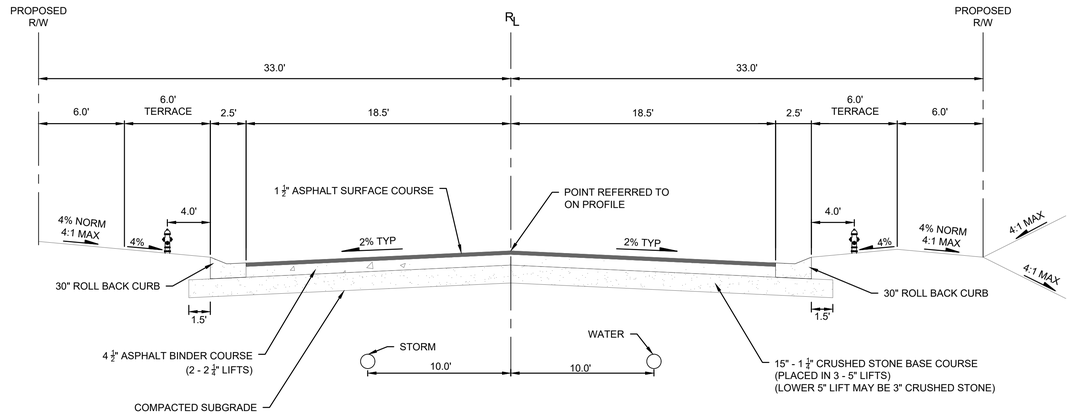
PEG JOB No. 1912.00 WI
PEG PM: AJS
START DATE: 04/20/22
SCALE: 1" = 100'

SHEET
C-2
C-59

© COPYRIGHT 2018

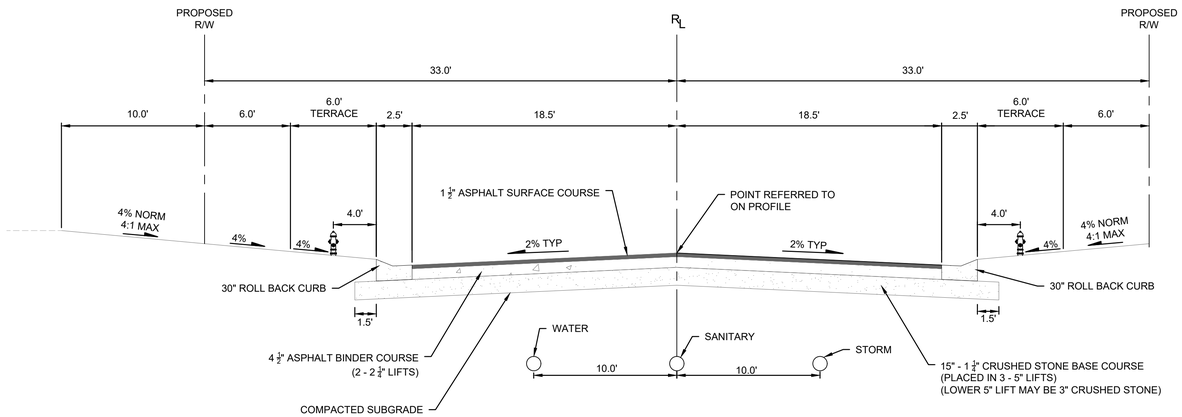
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PROJECT OVERVIEW.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



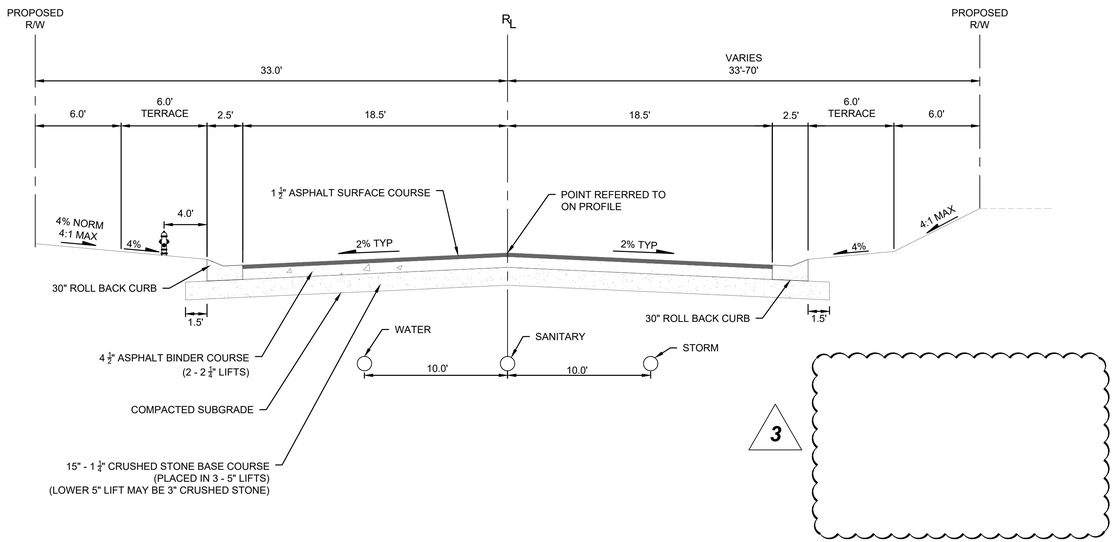
TYPICAL FINISHED SECTION

INTERIOR ACCESS RD.
STA. 700+63 - STA. 702+40
STA. 202+40 - STA. 220+25



TYPICAL FINISHED SECTION

WEST ACCESS RD.
STA. 12+00 - STA. 23+64



TYPICAL FINISHED SECTION

EAST ACCESS RD.
STA. 52+00 - STA. 58+74

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

TYPICAL SECTION

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE N.T.S.

SHEET
C-3
C-59

FOR REVIEW ONLY
TYPICAL SECTION

© COPYRIGHT 2019

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TYPICAL SECTIONS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP LLC

LEGEND

- XXXX XXXX — SAW CUT
- REMOVE CULVERT / STORM SEWER
- REMOVE EXISTING 6" HMA PAVEMENT
- REMOVE EXISTING GRAVEL DRIVEWAY / SHOULDER
- REMOVE EXISTING TREE
- REMOVE CONCRETE CURB AND GUTTER
- REMOVE EXISTING 10" CONCRETE PAVEMENT

CAROL ROAD

C.T.H. "K" / NORTHWESTERN AVE.

24+00

REMOVE EXISTING INLET

SALVAGE GRATE

371 LF SAWCUT

PROTECT EXISTING MANHOLE

127 LF OF CURB & GUTTER REMOVAL

GAS VALVE TO BE RELOCATED BY OTHERS

23+00

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

20 LF SAWCUT

159 LF SAWCUT

192 LF SAWCUT

59+00

4

C.T.H. "K" / NORTHWESTERN AVE.

REMOVE 45 LF OF 24" CULVERT

58+00

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

FOR REVIEW ONLY

DEMOLITION PLAN

www.pinnacle-engr.com

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

DEMOLITION PLAN

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-4
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 DEMOLATION PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

LEGEND

- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- SILT FENCE
- ORANGE SAFETY FENCE
- INLET PROTECTION, TYPE C UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- 4" TOPSOIL, SEED, FERTILIZER AND WISDOT URBAN TYPE A EROSION MAT
- 4" TOPSOIL, SEED, FERTILIZER AND DOUBLE NETTED WISDOT CLASS I TYPE B EROSION MAT

SHEET C-9

CAROL ROAD

25+00

26+00

POND B
NWL = 756.00

POND A
NWL = 750.00

C.T.H. "K" / NORTHWESTERN AVE.

60+00

61+00

SHEET C-10

SHEET C-8

PROPOSED BUILDING 2

PROPOSED BUILDING 1

15+00

65+00

NE FRONTAGE ROAD

POND C
NWL = 745.00

SHEET C-6

200+00

205+00

210+00

215+00

220+00

222+00

SHEET C-7

10+00

50+00

SF

www.pinnacle-engr.com

FOR REVIEW ONLY

EROSION CONTROL PLAN OVERVIEW

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

EROSION CONTROL PLAN OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 100'

SHEET
C-5
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 EROSION CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- SF — SILT FENCE
- ORANGE SAFETY FENCE
- INLET PROTECTION, TYPE C UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- 4" TOPSOIL, SEED, FERTILIZER AND WISDOT URBAN TYPE A EROSION MAT
- 4" TOPSOIL, SEED, FERTILIZER AND DOUBLE NETTED WISDOT CLASS I TYPE B EROSION MAT

POND C
NWL = 745.00

RIP RAP, MED (TYP)

INLET PROTECTION TYPE D

INLET PROTECTION TYPE D

INTERIOR ACCESS ROAD

COORDINATE EROSION CONTROL WITH MASS GRADING

SILT FENCING INSTALLED DURING MASS GRADING SHALL REMAIN IN PLACE UNLESS CONFLICTS PROPOSED INFRASTRUCTURE AND GRADING

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

STA. 205+00

MATCHLINE

200+00 201+00 202+00 203+00 204+00 205+00

PHASE 2 PHASE 1

WEST ACCESS ROAD

13+00 12+00 11+00

INTERIOR ACCESS ROAD

206+00 207+00 208+00 209+00 210+00 211+00

STA. 211+50

COORDINATE EROSION CONTROL WITH MASS GRADING

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

FOR REVIEW ONLY

EROSION CONTROL PLAN

www.pinnacle-engr.com

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

EROSION CONTROL PLAN

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-6
C-59

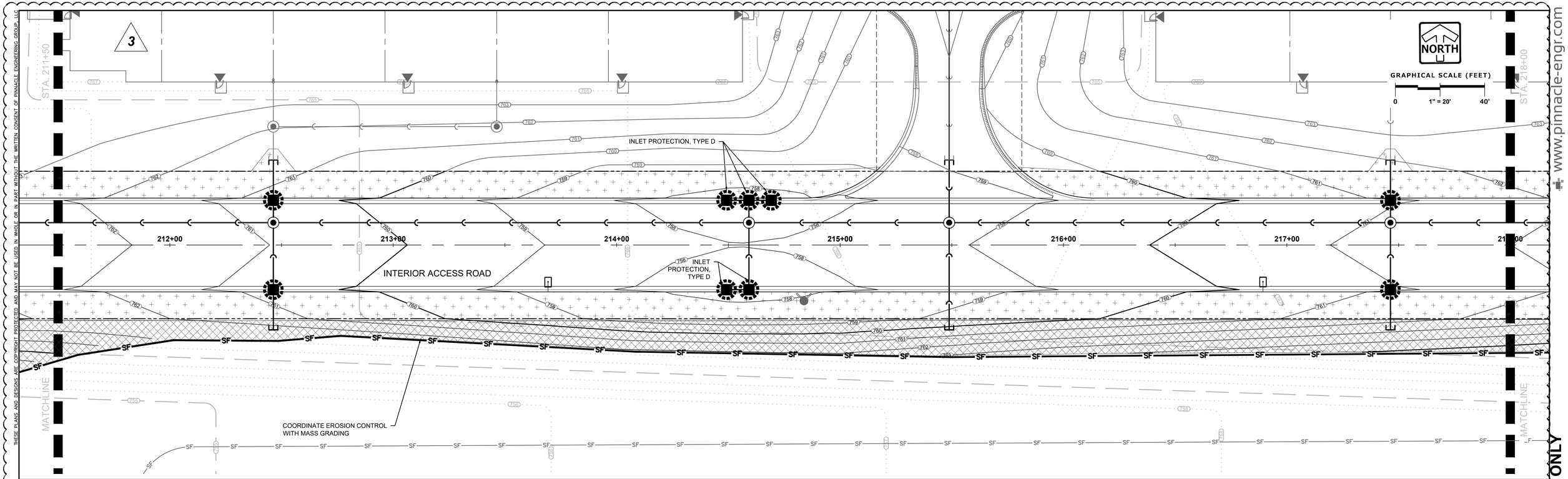
©COPYRIGHT 2019

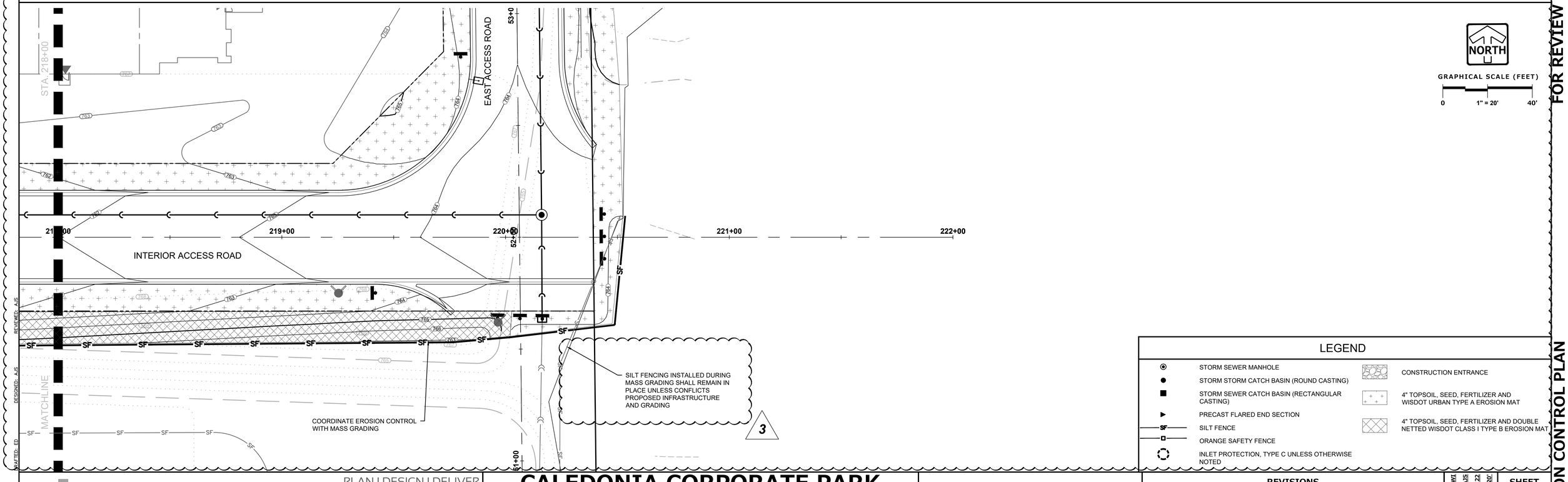
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 EROSION CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

FOR REVIEW ONLY





LEGEND

- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- SF — SILT FENCE
- ORANGE SAFETY FENCE
- INLET PROTECTION, TYPE C UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- 4" TOPSOIL, SEED, FERTILIZER AND WISDOT URBAN TYPE A EROSION MAT
- 4" TOPSOIL, SEED, FERTILIZER AND DOUBLE NETTED WISDOT CLASS I TYPE B EROSION MAT

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

EROSION CONTROL PLAN

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PES PM: AJS
START DATE: 04/20/22
SCALE: 1" = 20'

SHEET
C-7
C-59

EROSION CONTROL PLAN

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 EROSION CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

3

LEGEND

- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- SF — SILT FENCE
- ORANGE SAFETY FENCE
- INLET PROTECTION, TYPE C UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- 4" TOPSOIL, SEED, FERTILIZER AND WISDOT URBAN TYPE A EROSION MAT
- 4" TOPSOIL, SEED, FERTILIZER AND DOUBLE NETTED WISDOT CLASS I TYPE B EROSION MAT

PHASE 2

PHASE 1

INTERIOR ACCESS ROAD

WEST ACCESS ROAD

INLET PROTECTION, TYPE D

INLET PROTECTION, TYPE D

10+00 11+00 12+00 13+00 14+00 15+00 16+00

210+00 211+00

STA. 16+00

MATCHLINE

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

www.pinnacle-engr.com

FOR REVIEW ONLY

STA. 16+00

MATCHLINE

17+00 18+00 19+00 20+00 21+00 22+00

WEST ACCESS ROAD

INLET PROTECTION, TYPE D

INLET PROTECTION, TYPE D

RIP RAP (TYP)

COORDINATE EROSION CONTROL WITH MASS GRADING

POND B NWL = 756.00

POND A NWL = 750.00

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

EROSION CONTROL PLAN

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

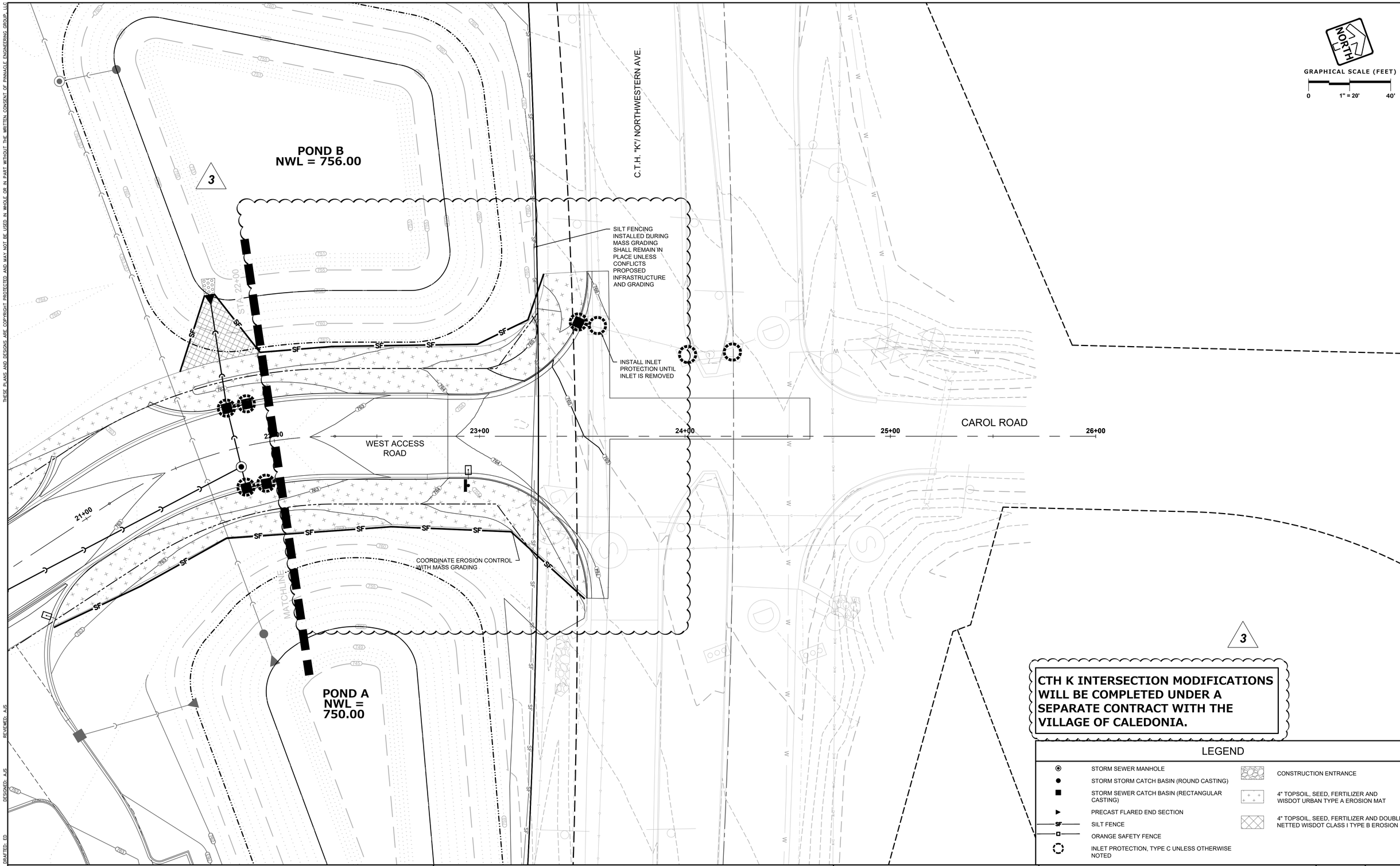
SHEET
C-8
C-59

©COPYRIGHT 2019

EROSION CONTROL PLAN

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 EROSION CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



LEGEND

- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- SF — SILT FENCE
- ORANGE SAFETY FENCE
- INLET PROTECTION, TYPE C UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- 4" TOPSOIL, SEED, FERTILIZER AND WISDOT URBAN TYPE A EROSION MAT
- 4" TOPSOIL, SEED, FERTILIZER AND DOUBLE NETTED WISDOT CLASS I TYPE B EROSION MAT

FOR REVIEW ONLY

EROSION CONTROL PLAN

www.pinnacle-engr.com

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

EROSION CONTROL PLAN

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

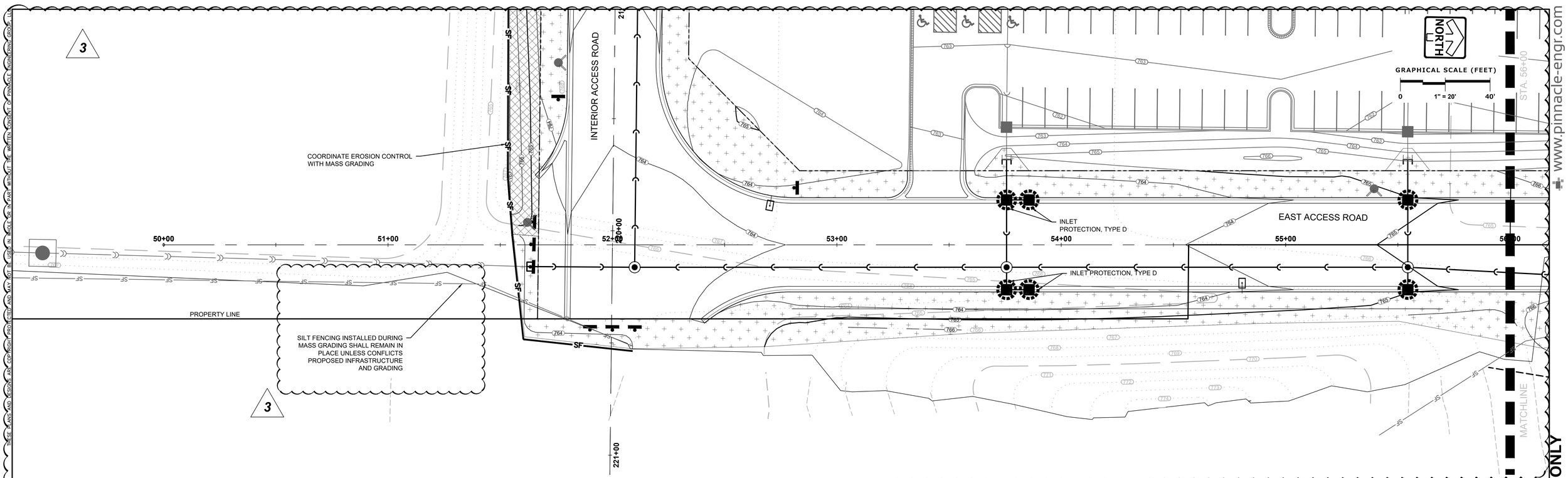
PEG JOB No. 1912.00 WI
PEG PM: AJS
START DATE: 04/20/22
SCALE: 1" = 20'

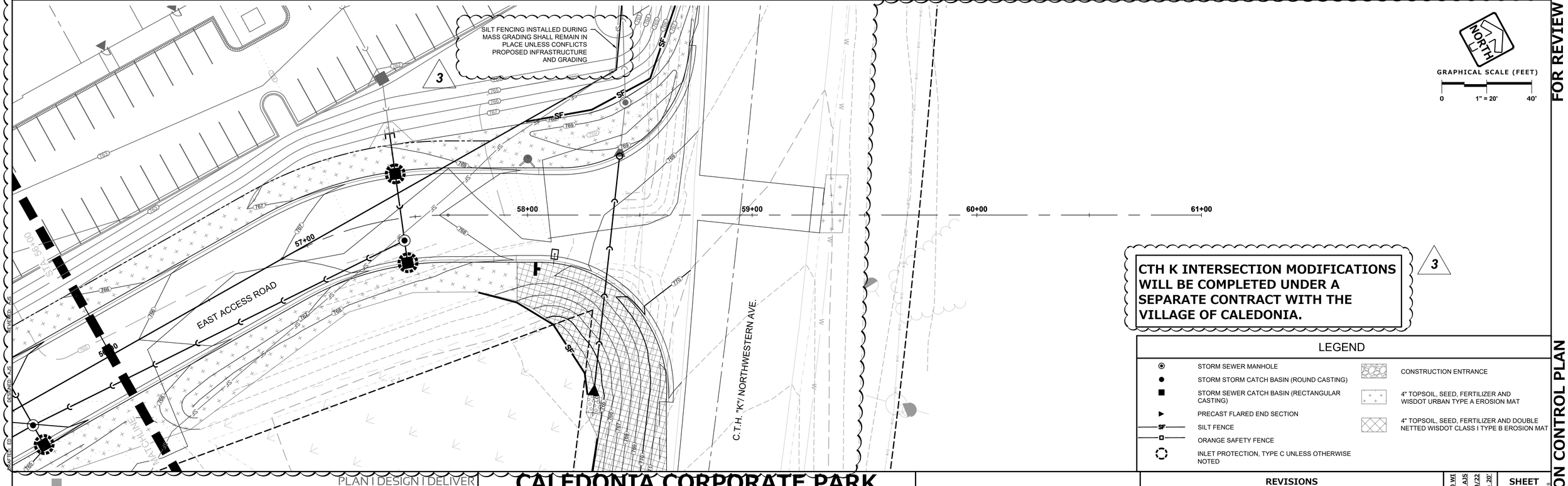
SHEET
C-9
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 EROSION CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHTED PROPERTY AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC





CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.

3

LEGEND

- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST FLARED END SECTION
- SF — SILT FENCE
- ORANGE SAFETY FENCE
- INLET PROTECTION, TYPE C UNLESS OTHERWISE NOTED
- CONSTRUCTION ENTRANCE
- 4" TOPSOIL, SEED, FERTILIZER AND WISDOT URBAN TYPE A EROSION MAT
- 4" TOPSOIL, SEED, FERTILIZER AND DOUBLE NETTED WISDOT CLASS I TYPE B EROSION MAT

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

EROSION CONTROL PLAN

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-10
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

EROSION CONTROL PLAN

DESIGNED AJS
REVIEWED AJS
DRAFTED ED

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 EROSION CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ¾" UPPER LAYER (5 MT 58-28 S)
- 2 ¼" LOWER LAYER (3 MT 58-28 S)
- 8" 1-¼" BASE AGGREGATE DENSE

5 ½" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ½" LOWER LAYER (3 MT 58-28 S)
- 13" 1-¼" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" SURFACE COURSE
- 4 ½" BINDER COURSE (2 - 2 ¼" LIFTS)
- 15" 1-¼" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-¼" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO VILLAGE OF CALEDONIA STANDARDS.

ALL WORK WITHIN CTH K SHALL FOLLOW RACINE COUNTY STANDARDS.

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 100' 200'

SHEET C-18
CAROL ROAD
26+00
25+00
POND B
NWL = 756.00
POND A
NWL = 750.00
C.T.H. "K" / NORTHWESTERN AVE.
61+00
60+00
SHEET C-20
SHEET C-17
20+00
PROPOSED BUILDING 2
PROPOSED BUILDING 1
SHEET C-16
15+00
55+00
SHEET C-19
NE FRONTAGE ROAD
POND C
NWL = 745.00
200+00
205+00
210+00
215+00
220+00
222+00
10+00
50+00
SHEET C-12
SHEET C-13
SHEET C-14
SHEET C-15

FOR REVIEW ONLY

PLAN DETAILS OVERVIEW

www.pinnacle-engr.com

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

PLAN DETAILS OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PES PM AJS
START DATE 04/20/22
SCALE 1" = 100'

SHEET
C-11
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

NE FRONTAGE ROAD

PROPERTY LINE

POND C
NWL = 745.00

STA. 205+00

66.0'
R.O.W

30" ROLL BACK CURB

INTERIOR ACCESS ROAD

37.0'

200+00 | 201+00 | 202+00 | 203+00 | 204+00 | 205+00

P.C.
201+41.3
18.5 L

P.T.
202+56.2
18.5 R

30" ROLL BACK CURB

CTR. 51.5' R
201+41.3
33.0 R

P.C.C.
201+85.8
58.9 R

4

30" ROLL BACK CURB

CTR. 81.5' R
202+56.2
100.0 R

MATCHLINE

NORTH

GRAPHICAL SCALE (FEET)
0 | 1" = 20' | 40'

LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ¾" UPPER LAYER (5 MT 58-28 S)
- 2 ¾" LOWER LAYER (3 MT 58-28 S)
- 8" 1-¼" BASE AGGREGATE DENSE

5 ½" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ½" LOWER LAYER (3 MT 58-28 S)
- 13" 1-¼" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" SURFACE COURSE
- 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
- 15" 1-¼" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-¼" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-12
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

PLAN DETAILS

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

FOR REVIEW ONLY

STA. 205+00

STA. 211+50

WEST ACCESS ROAD

INTERIOR ACCESS ROAD

66.0' R.O.W

37.0'

30" ROLL BACK CURB

NO OUTLET
W14-2
30"X30"

STOP
R1-1
30"X30"

CTR. 61.5' R
209+43.3
80.0 L

CTR. 61.5' R
211+03.3
80.0 L

PHASE 2

PHASE 1

P.T.
210+04.8
80.0 L

P.T.
210+41.8
80.0 L

P.C.
209+43.3
18.5 L

P.C.
211+03.3
18.5 L

BEGIN DRIVEWAY CURB
STA, 209+58.3
18.5 R

30" DEPRESSED
CURB AND GUTTER
AT DRIVEWAY

END DRIVEWAY CURB
STA, 210+88.3
18.5 R

W5-56
18"X18"
TEMPORARY

W5-56
18"X18"

CTR. 51.5' R
209+58.3
70.0 R

CTR. 51.5' R
210+88.3
70.0 R

20+00 206+00 207+00 208+00 209+00 210+00 211+00

14+00 13+00 12+00 11+00 10+00

MATCHLINE

MATCHLINE

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" UPPER LAYER (5 MT 58-28 S)
- 2 ½" LOWER LAYER (3 MT 58-28 S)
- 8" 1-¼" BASE AGGREGATE DENSE

5 ¼" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ¼" LOWER LAYER (3 MT 58-28 S)
- 13" 1-¼" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ¼" SURFACE COURSE
- 4 ¼" BINDER COURSE (2 - 2 ⅛ " LIFTS)
- 15" 1-¼" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-¼" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

REVIEWED: A.JS

DESIGNED: A.JS

DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM A.JS
START DATE 04/20/22
SCALE 1" = 20'

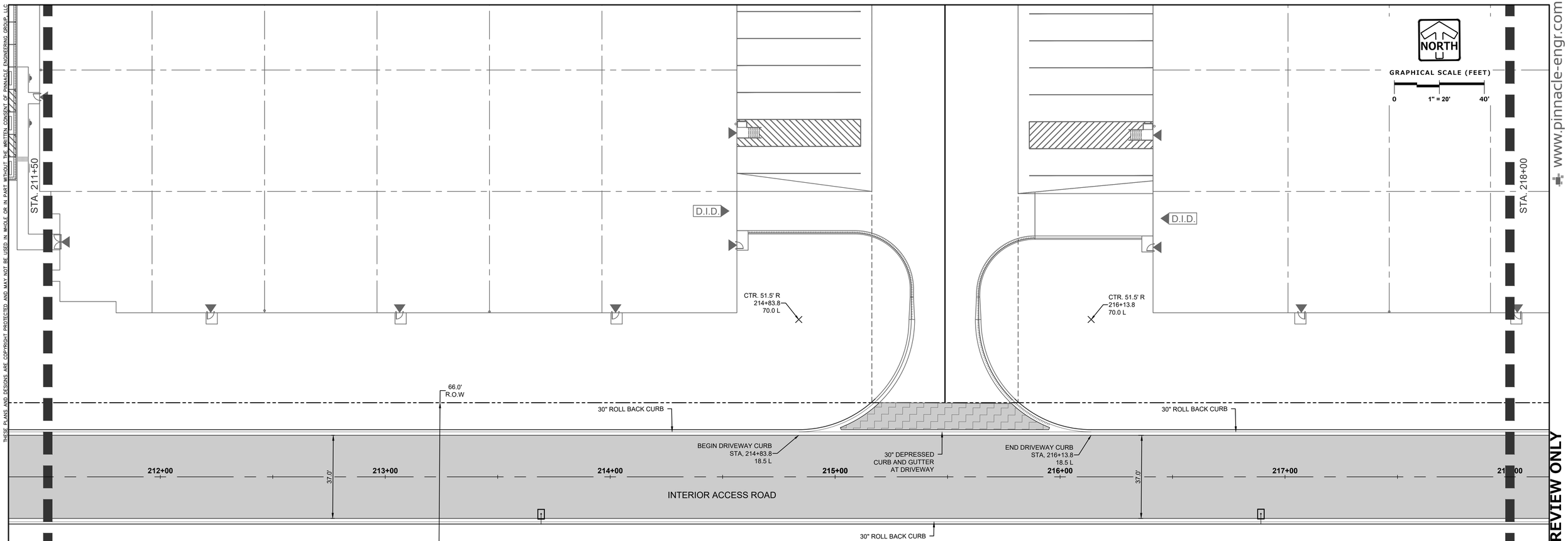
SHEET
C-13
C-59

© COPYRIGHT 2019

PLAN DETAILS

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ¾" UPPER LAYER (5 MT 58-28 S)
- 2 ¼" LOWER LAYER (3 MT 58-28 S)
- 8" 1-½" BASE AGGREGATE DENSE

5 ½" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ½" LOWER LAYER (3 MT 58-28 S)
- 13" 1-½" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" SURFACE COURSE
- 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
- 15" 1-½" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-½" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-14
C-59

© COPYRIGHT 2019

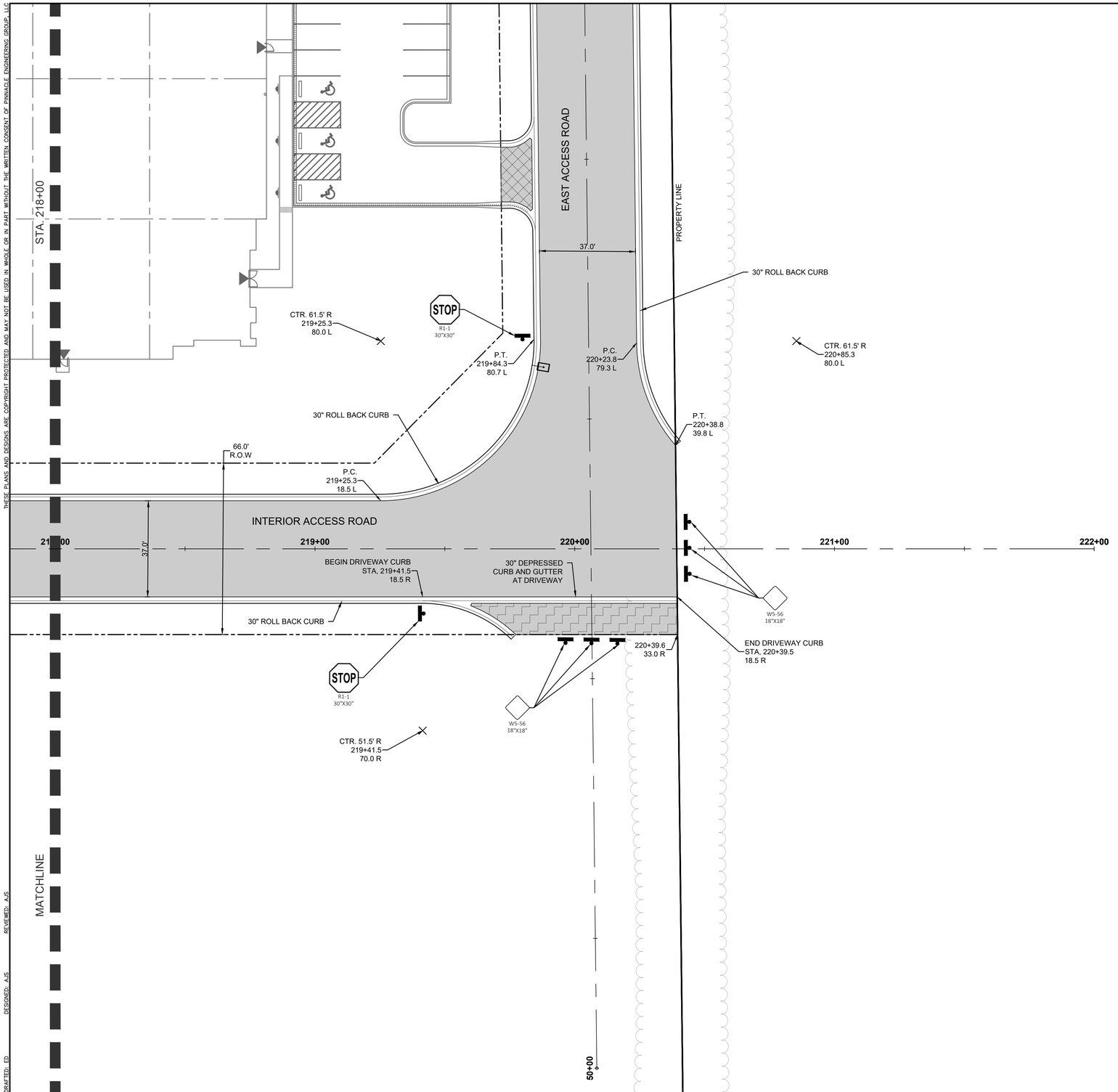
FOR REVIEW ONLY

PLAN DETAILS

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

www.pinnacle-engr.com

FOR REVIEW ONLY

LEGEND

- 4" ASPHALTIC CONCRETE PAVEMENT
  - 1 ¾" UPPER LAYER (5 MT 58-28 S)
  - 2 ¾" LOWER LAYER (3 MT 58-28 S)
  - 8" 1-¼" BASE AGGREGATE DENSE
- 5 ½" ASPHALTIC CONCRETE PAVEMENT
  - 2" UPPER LAYER (5 MT 58-28 S)
  - 3 ½" LOWER LAYER (3 MT 58-28 S)
  - 13" 1-¼" BASE AGGREGATE DENSE
- 6" ASPHALTIC CONCRETE PAVEMENT
  - 1 ½" SURFACE COURSE
  - 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
  - 15" 1-¼" CRUSHED STONE BASE COURSE
- 8" ASPHALTIC CONCRETE PAVEMENT
  - 2" UPPER LAYER (4 HT 58-28 S)
  - 3" UPPER/LOWER LAYER (3 HT 58-28 S)
  - 3" LOWER LAYER (3 HT 58-28 S)
  - 15" 1-¼" BASE AGGREGATE DENSE
- CONCRETE PAVEMENT
  - 10 ½" P.C.C.
  - 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-15
C-59

PLAN DETAILS

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ¾" UPPER LAYER (5 MT 58-28 S)
- 2 ¼" LOWER LAYER (3 MT 58-28 S)
- 8" 1-¼" BASE AGGREGATE DENSE

5 ¼" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ½" LOWER LAYER (3 MT 58-28 S)
- 13" 1-¼" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" SURFACE COURSE
- 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
- 15" 1-¼" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-¼" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

INTERIOR ACCESS ROAD

66.0' R.O.W

W5-56 18"X18" TEMPORARY

209+00

37.0'

P.C. 12+18.5 80.0 L

PHASE 2

CTR. 61.5' R 12+80.0 80.0 L

30" ROLL BACK CURB

PHASE 1

STOP R1-1 30"X30"

W5-56 18"X18"

210+00

P.T. 12+80.0 18.5 L

66.0' R.O.W

30" ROLL BACK CURB

WEST ACCESS ROAD

37.0'

10+00 11+00 12+00 13+00 14+00 15+00 16+00

BEGIN DRIVEWAY CURB STA, 13+22.4 18.5 R

30" DEPRESSED CURB AND GUTTER AT DRIVEWAY

END DRIVEWAY CURB STA, 13+66.4 18.5 R

P.T. 12+80.0 18.5 R

CTR. 11.5' R 13+22.4 30.0 R

CTR. 11.5' R 13+66.4 30.0 R

30" ROLL BACK CURB

P.C. 12+18.5 80.0 R

211+00

CTR. 61.5' R 12+80.0 80.0 R

STA. 16+00

MATCHLINE

STA. 211+50

212+00

MATCHLINE

www.pinnacle-engr.com

FOR REVIEW ONLY

PLAN DETAILS

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-16
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ¾" UPPER LAYER (5 MT 58-28 S)
- 2 ¾" LOWER LAYER (3 MT 58-28 S)
- 8" 1-¼" BASE AGGREGATE DENSE

5 ½" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ½" LOWER LAYER (3 MT 58-28 S)
- 13" 1-¼" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" SURFACE COURSE
- 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
- 15" 1-½" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-¼" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

STA. 16+00

STA. 22+00

POND B
NWL =
756.00

CTR. 51.5' R
21+77.6
70.0 L

4

CTR. 51.5' R
20+68.4
70.0 L

W5-56
18"X18"
TEMPORARY

66.0'
R.O.W

30" ROLL BACK CURB

30" ROLL BACK CURB

BEGIN DRIVEWAY CURB
STA, 20+68.4
18.5 L

30" DEPRESSED
CURB AND GUTTER
AT DRIVEWAY

END DRIVEWAY CURB
STA, 21+77.6
18.5 L

21+00

22+00

WEST ACCESS ROAD

16+00

17+00

18+00

19+00

20+00

37.0'

END DRIVEWAY CURB
STA, 20+94.2
18.5 R

30" ROLL BACK CURB

BEGIN DRIVEWAY CURB
STA, 19+79.7
18.5 R

30" DEPRESSED
CURB AND GUTTER
AT DRIVEWAY

30" ROLL BACK CURB

CTR. 36.5' R
19+79.5
55.0 R

CTR. 56.5' R
20+93.8
75.0 R

MATCHLINE

POND A
NWL =
750.00

MATCHLINE

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

FOR REVIEW ONLY

PLAN DETAILS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PES PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-17
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

POND B
NWL = 756.00

STA. 22+00

CTR. 60.0' R
22+94.7
78.0 L

CONCRETE CURB & GUTTER
30-INCH TYPE A

CONCRETE CURB &
GUTTER TRANSITION
STA. 22+74.5
18.5 L

66.0'
R.O.W

30" ROLL BACK CURB

22+84.5
18.0 L

P.C.
22+94.7
18.0 L

10.0'

37.0'

WEST ACCESS
ROAD

21+00

22+00

23+00

24+00

25+00

26+00

C.T.H. "K" / NORTHWESTERN AVE.

P.T.
23+54.7
80.4 L

23+62.8
80.5 L

23+63.4
18.5 L

24+60.8
18.5 L

20.0'

24+60.8
1.4 R

23+63.4
1.6 R

22+84.5
18.0 R

P.C.
22+94.5
18.0 R

10.0'

30" ROLL BACK CURB

CONCRETE CURB &
GUTTER TRANSITION
STA. 22+74.5
18.5 R

STOP
R1-1
30"X30"

CONCRETE CURB & GUTTER
30-INCH TYPE A

P.T.
23+54.5
78.9 R

23+62.6
79.1 R

CTR 60.0' R
22+94.5
78.0 R

MATCHLINE

POND A
NWL =
750.00

LEGEND

4" ASPHALTIC CONCRETE PAVEMENT
- 1 ¾" UPPER LAYER (5 MT 58-28 S)
- 2 ¼" LOWER LAYER (3 MT 58-28 S)
- 8" 1-¼" BASE AGGREGATE DENSE

5 ½" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (5 MT 58-28 S)
- 3 ½" LOWER LAYER (3 MT 58-28 S)
- 13" 1-¼" BASE AGGREGATE DENSE

6" ASPHALTIC CONCRETE PAVEMENT
- 1 ½" SURFACE COURSE
- 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
- 15" 1-¼" CRUSHED STONE BASE COURSE

8" ASPHALTIC CONCRETE PAVEMENT
- 2" UPPER LAYER (4 HT 58-28 S)
- 3" UPPER/LOWER LAYER (3 HT 58-28 S)
- 3" LOWER LAYER (3 HT 58-28 S)
- 15" 1-¼" BASE AGGREGATE DENSE

CONCRETE PAVEMENT
- 10 ½" P.C.C.
- 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

FOR REVIEW ONLY

PLAN DETAILS

© COPYRIGHT 2019

www.pinnacle-engr.com

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM: AJS
START DATE: 04/20/22
SCALE: 1" = 20'

SHEET
C-18
C-59

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

FOR REVIEW ONLY

MATCHLINE

STA. 218+00

NORTH

GRAPHICAL SCALE (FEET)
0 1" = 20' 40'

STA. 56+00

INTERIOR ACCESS ROAD

219+00

CTR. 61.5' R
52+80.9
80.0 L

P.C.
52+19.4
80.7 L

STOP
R1-1
30"X30"

30" ROLL BACK CURB

4

CTR. 11.5' R
53+22.5
30.0 L

P.T.
52+80.9
18.5 L

BEGIN DRIVEWAY CURB
STA, 53+22.5
18.5 L

30" DEPRESSED CURB AND GUTTER AT DRIVEWAY

CTR. 11.5' R
53+66.4
30.0 L

END DRIVEWAY CURB
STA, 53+66.5
18.5 L

66.0'
R.O.W

33.0'
R.O.W

30" ROLL BACK CURB

EAST ACCESS ROAD

W5-56
18"X18"

50+00 51+00 52+00 53+00 54+00 55+00 56+00

30.0'

52+80.9
18.5 R

30" ROLL BACK CURB

PROPERTY LINE

ROW LINE

W5-56
18"X18"

221+00

CTR. 61.5' R
52+79.1
80.0 R

222+00

MATCHLINE

LEGEND

- 4" ASPHALTIC CONCRETE PAVEMENT
  - 1 ¾" UPPER LAYER (5 MT 58-28 S)
  - 2 ¾" LOWER LAYER (3 MT 58-28 S)
  - 8" 1-¼" BASE AGGREGATE DENSE
- 5 ½" ASPHALTIC CONCRETE PAVEMENT
  - 2" UPPER LAYER (5 MT 58-28 S)
  - 3 ½" LOWER LAYER (3 MT 58-28 S)
  - 13" 1-¼" BASE AGGREGATE DENSE
- 6" ASPHALTIC CONCRETE PAVEMENT
  - 1 ¼" SURFACE COURSE
  - 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
  - 15" 1-¼" CRUSHED STONE BASE COURSE
- 8" ASPHALTIC CONCRETE PAVEMENT
  - 2" UPPER LAYER (4 HT 58-28 S)
  - 3" UPPER/LOWER LAYER (3 HT 58-28 S)
  - 3" LOWER LAYER (3 HT 58-28 S)
  - 15" 1-¼" BASE AGGREGATE DENSE
- CONCRETE PAVEMENT
  - 10 ½" P.C.C.
  - 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-19
C-59

PLAN DETAILS

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

www.pinnacle-engr.com

FOR REVIEW ONLY

58+79.3
123.2 L

58+81.3
123.2 L

CTR. 60.0' R
58+15.0
78.0 L

10.0'

P.T.
58+74.9
75.5 L

PROPERTY LINE

CONCRETE CURB & GUTTER
4-INCH SLOPE 36-INCH TYPE D

CONCRETE CURB &
GUTTER TRANSITION
STA. 57+95.0
18.5 L

30" ROLL BACK CURB

ROW LINE

10.0'

P.C.
58+15.0
18.0 L

58+00

37.0'

P.C.
58+05.0
18.0 R

57+00

MATCHLINE

10.0'

CONCRETE CURB &
GUTTER TRANSITION
STA. 57+85.0
18.5 R

STOP
R1-1
30"X30"

EAST ACCESS ROAD

37.0'

56+00

30" ROLL BACK CURB

CONCRETE CURB & GUTTER
4-INCH SLOPED 36-INCH TYPE D

ROW LINE

STA. 56+00

CTR. 60.0' R
58+05.0
78.0 R

58+61.7
83.1 R

P.T.
58+64.7
83.4 R

C.T.H. "K"/ NORTHWESTERN AVE.

58+64.0
141.5 R

58+62.0
141.3 R

4

58+76.6
17.7 L

59+27.4
12.4 L

SHOULDER
REPLACEMENT

59+00

60+00

61+00

58+75.7
2.3 R

59+25.4
7.5 R

LEGEND

- 4" ASPHALTIC CONCRETE PAVEMENT
  - 1 ¾" UPPER LAYER (5 MT 58-28 S)
  - 2 ¾" LOWER LAYER (3 MT 58-28 S)
  - 8" 1-¼" BASE AGGREGATE DENSE
- 5 ½" ASPHALTIC CONCRETE PAVEMENT
  - 2" UPPER LAYER (5 MT 58-28 S)
  - 3 ½" LOWER LAYER (3 MT 58-28 S)
  - 13" 1-¼" BASE AGGREGATE DENSE
- 6" ASPHALTIC CONCRETE PAVEMENT
  - 1 ½" SURFACE COURSE
  - 4 ½" BINDER COURSE (2 - 2 ¼ " LIFTS)
  - 15" 1-¼" CRUSHED STONE BASE COURSE
- 8" ASPHALTIC CONCRETE PAVEMENT
  - 2" UPPER LAYER (4 HT 58-28 S)
  - 3" UPPER/LOWER LAYER (3 HT 58-28 S)
  - 3" LOWER LAYER (3 HT 58-28 S)
  - 15" 1-¼" BASE AGGREGATE DENSE
- CONCRETE PAVEMENT
  - 10 ½" P.C.C.
  - 6" BASE AGGREGATE DENSE 1 ¼ - INCH WITH COMPACTED BASE (TYP.)

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

PLAN DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM: AJS
START DATE: 04/20/22
SCALE: 1" = 20'

SHEET
C-20
C-59

© COPYRIGHT 2019

PLAN DETAILS

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 PLAN DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO VILLAGE OF CALEDONIA STANDARDS.

ALL WORK WITHIN CTH K SHALL FOLLOW RACINE COUNTY STANDARDS.

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

www.pinnacle-engr.com

FOR REVIEW ONLY

GRADING PLAN AND PROFILE OVERVIEW

CAROL ROAD

SHEET C-28

25+00

26+00

POND B
NWL = 756.00

POND A
NWL = 750.00

C.T.H. "K" / NORTHWESTERN AVE.

SHEET C-30

60+00

61+00

SHEET C-27

20+00

PROPOSED BUILDING 2

PROPOSED BUILDING 1

SHEET C-26

15+00

65+00

SHEET C-29

NE FRONTAGE ROAD

POND C
NWL = 745.00

SHEET C-22

SHEET C-23

SHEET C-24

SHEET C-25

200+00

702+70

700+20

205+00

210+00

215+00

220+00

222+00

10+00

50+00

NOTE: FOR AREAS WITH MORE THAN 3.0' OF FILL, CONTRACTOR SHALL PROVIDE GEO-TECHNICAL REPORTS TO THE VILLAGE

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

GRADING PLAN AND PROFILE OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

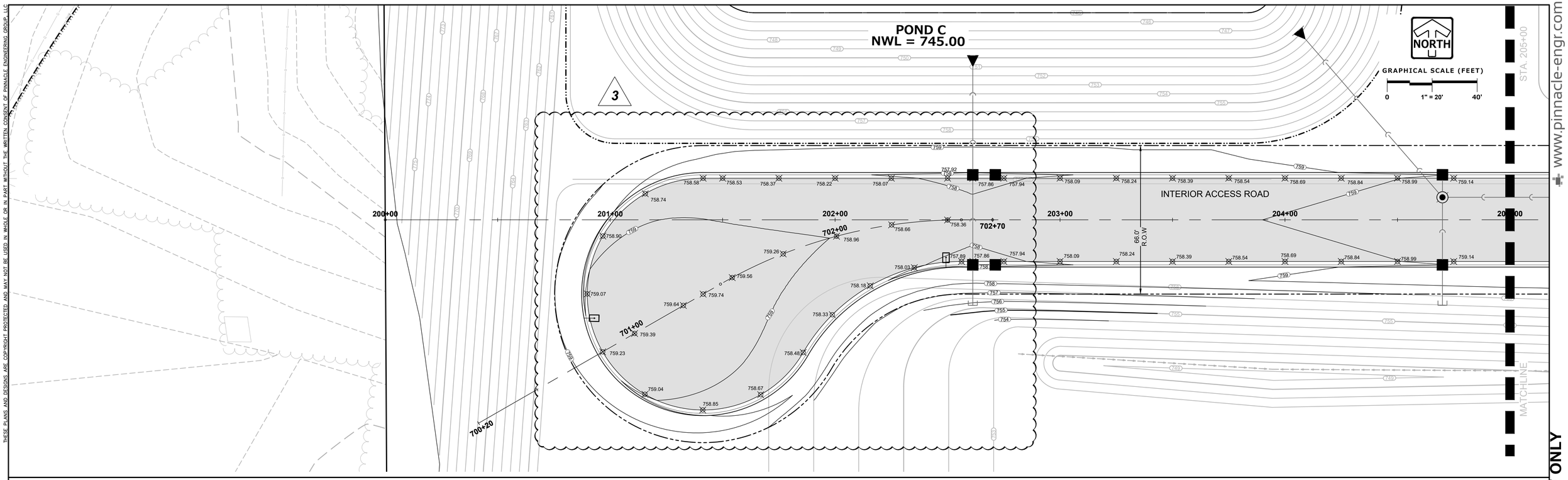
PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 100'

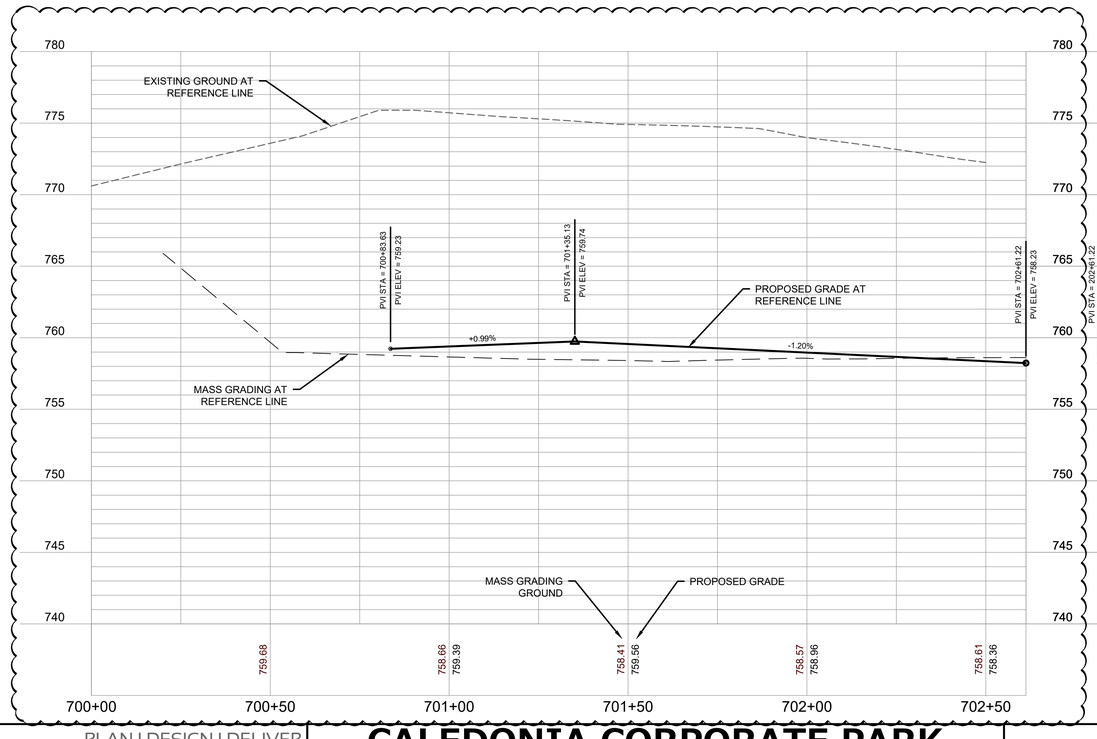
SHEET
C-21
C-59

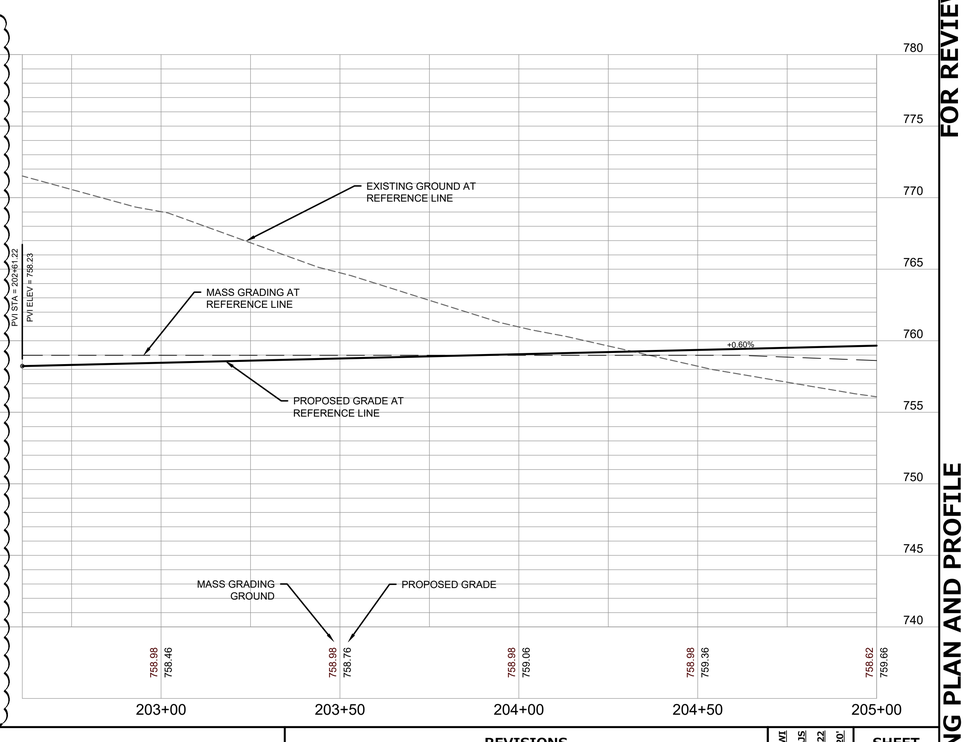
© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC







FOR REVIEW

GRADING PLAN AND PROFILE

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

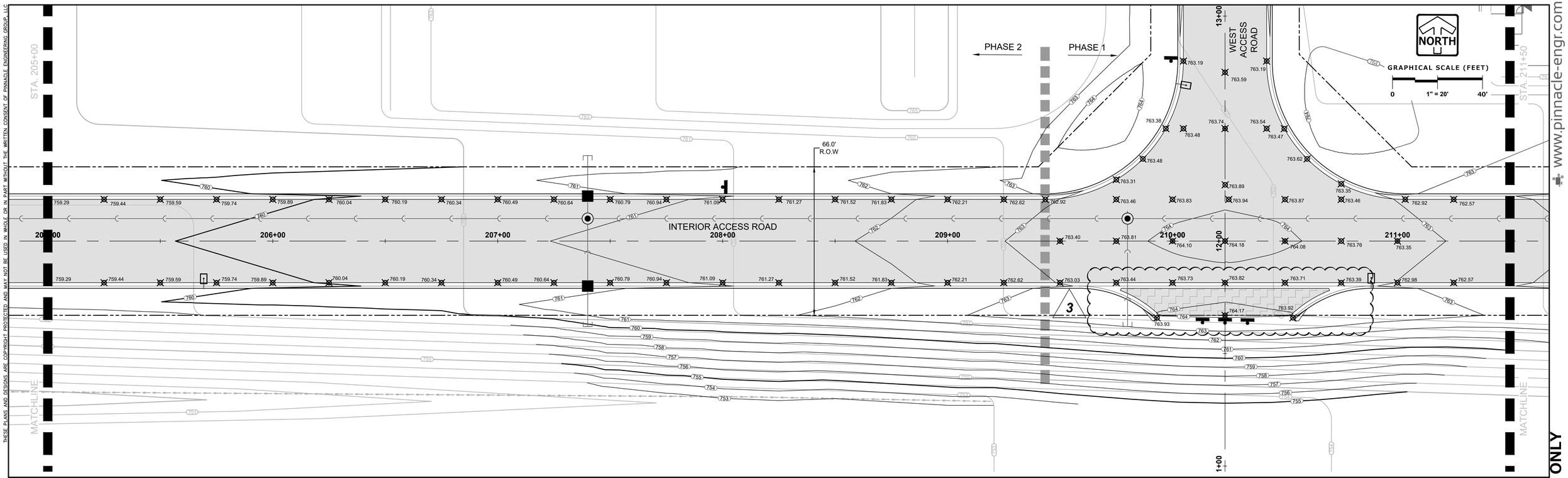
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

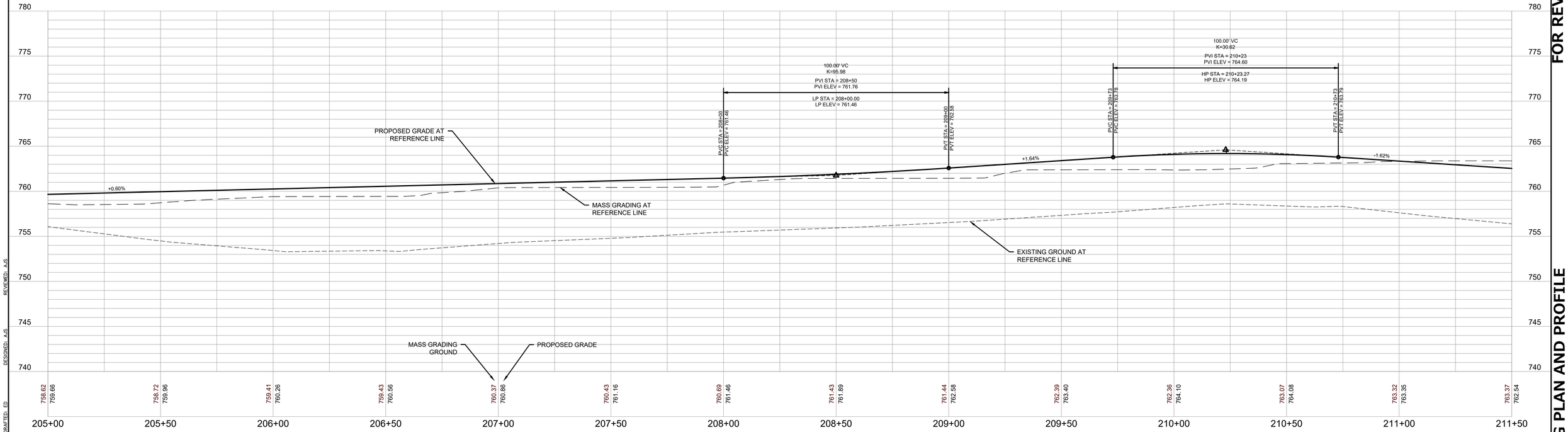
SHEET
C-22
C-59

©COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

FOR REVIEW ONLY

GRADING PLAN AND PROFILE

www.pinnacle-engr.com

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE | NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

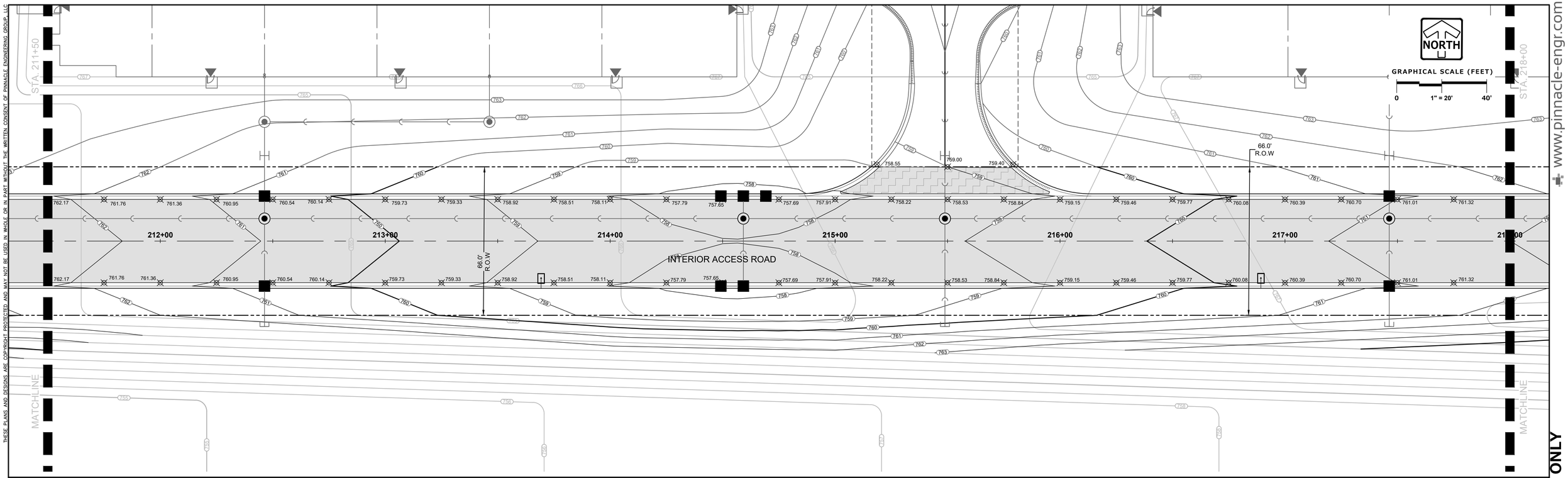
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

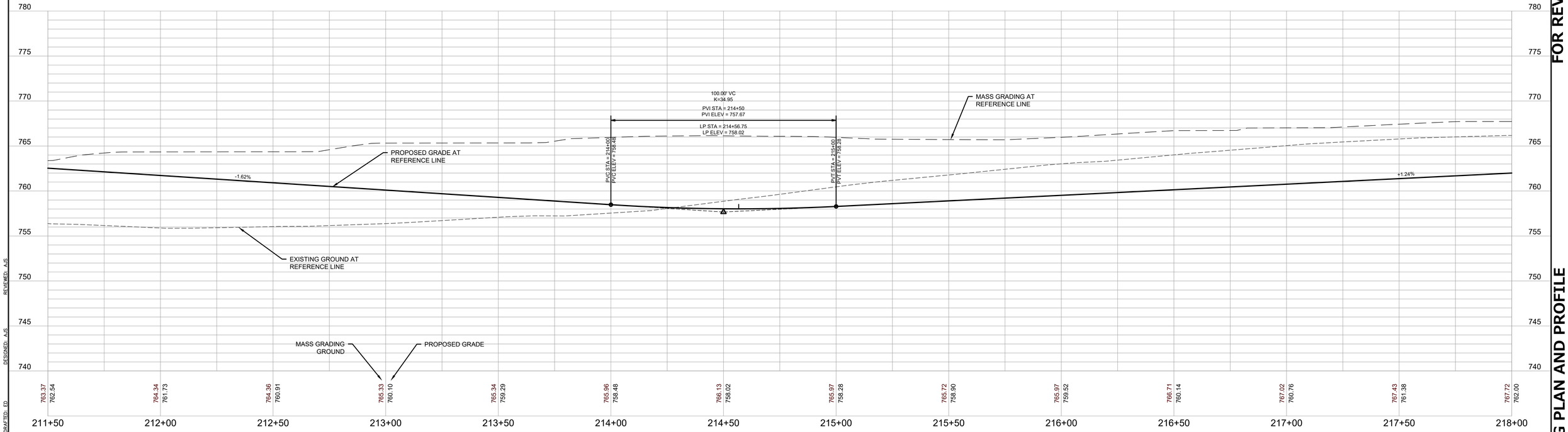
SHEET
C-23
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

FOR REVIEW ONLY

www.pinnacle-engr.com

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

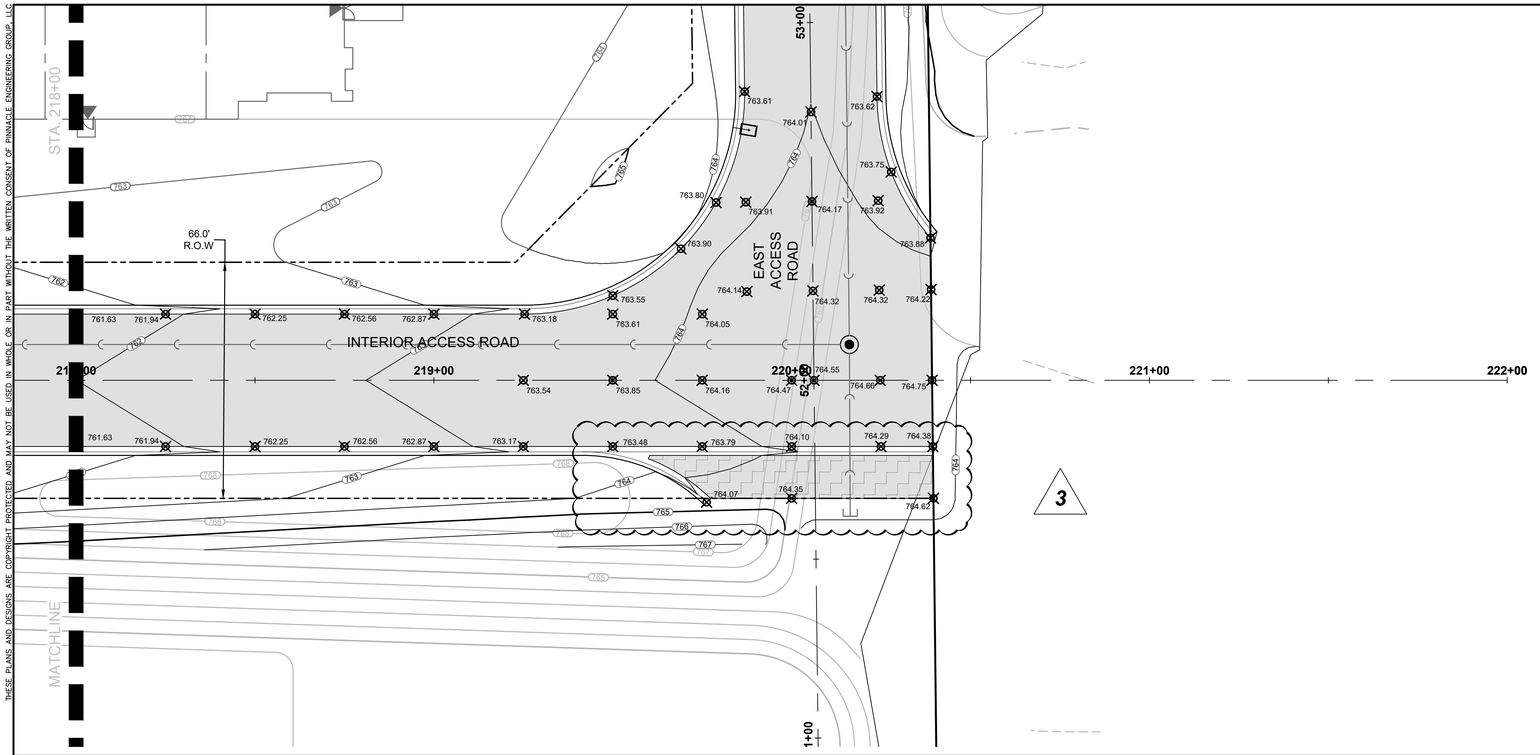
SHEET
C-24
C-59

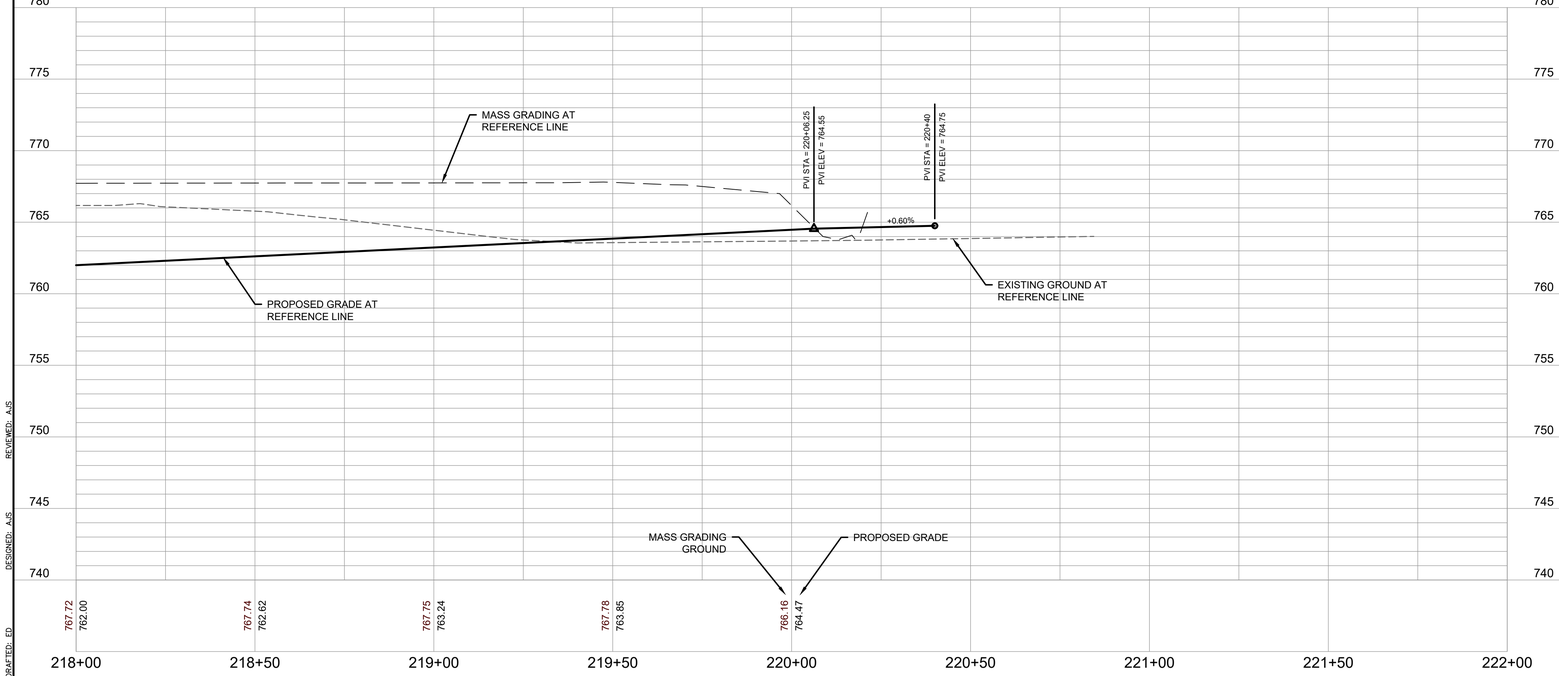
GRADING PLAN AND PROFILE

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC





NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

www.pinnacle-engr.com

FOR REVIEW ONLY

GRADING PLAN AND PROFILE

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

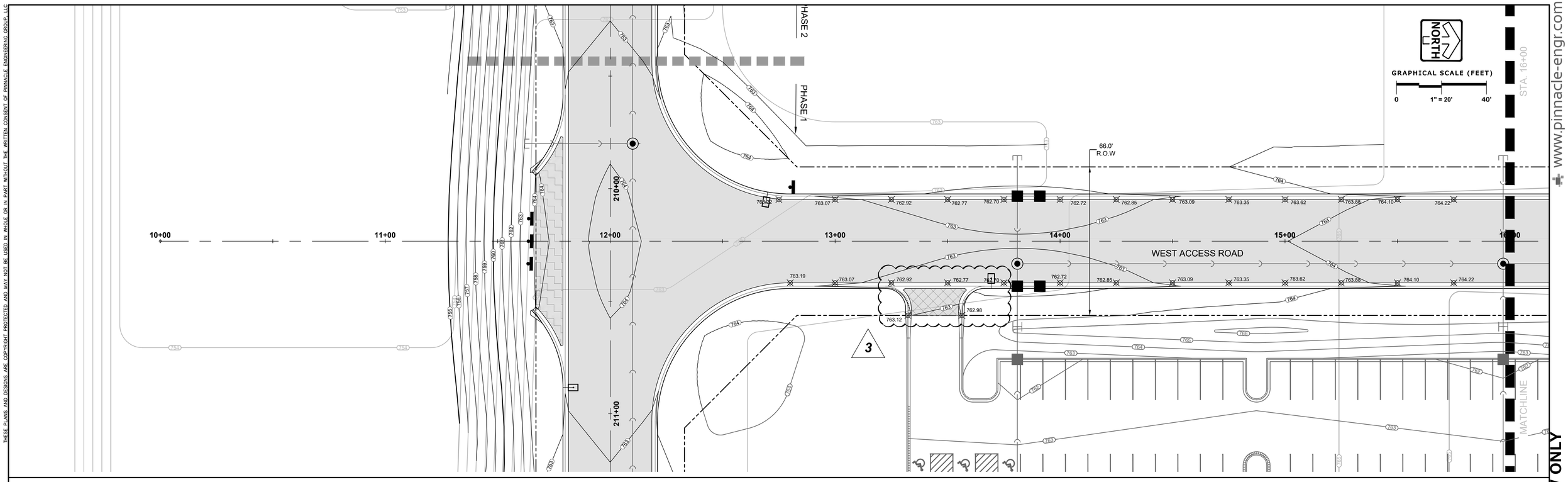
PEG JOB No. 1912.00 WI
PES PM AJS
START DATE 04/20/22
SCALE 1" = 20'

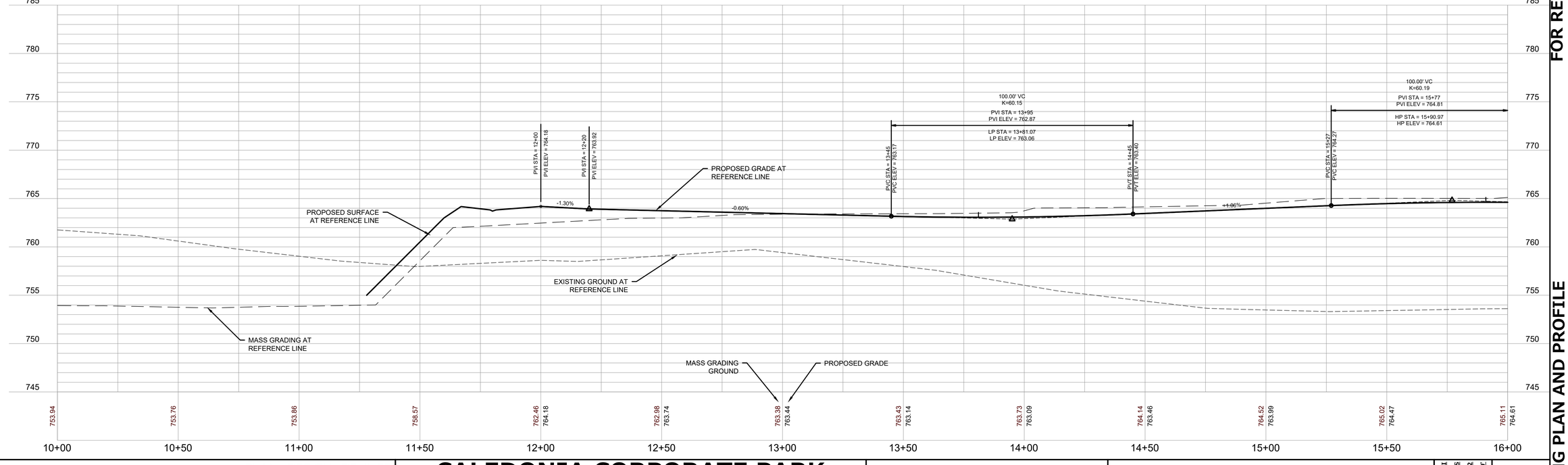
SHEET
C-25
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC





FOR REVIEW ONLY

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: FD

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

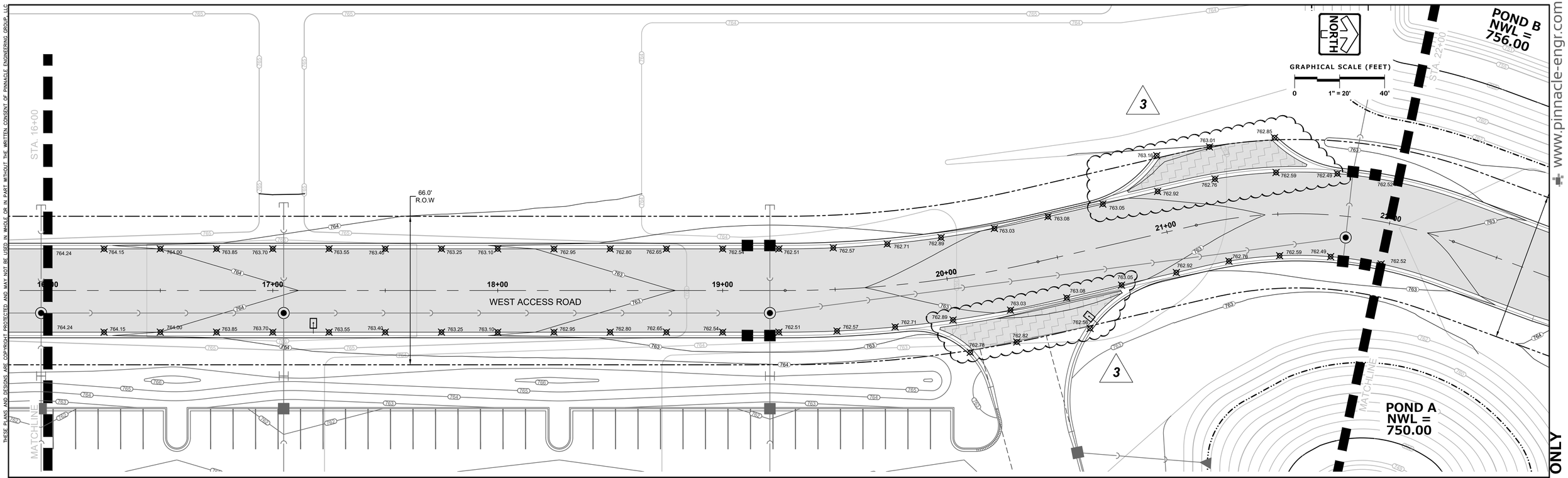
PEG JOB No. 1912.00 WI
PES PM AJS
START DATE 04/20/22
SCALE 1" = 20'

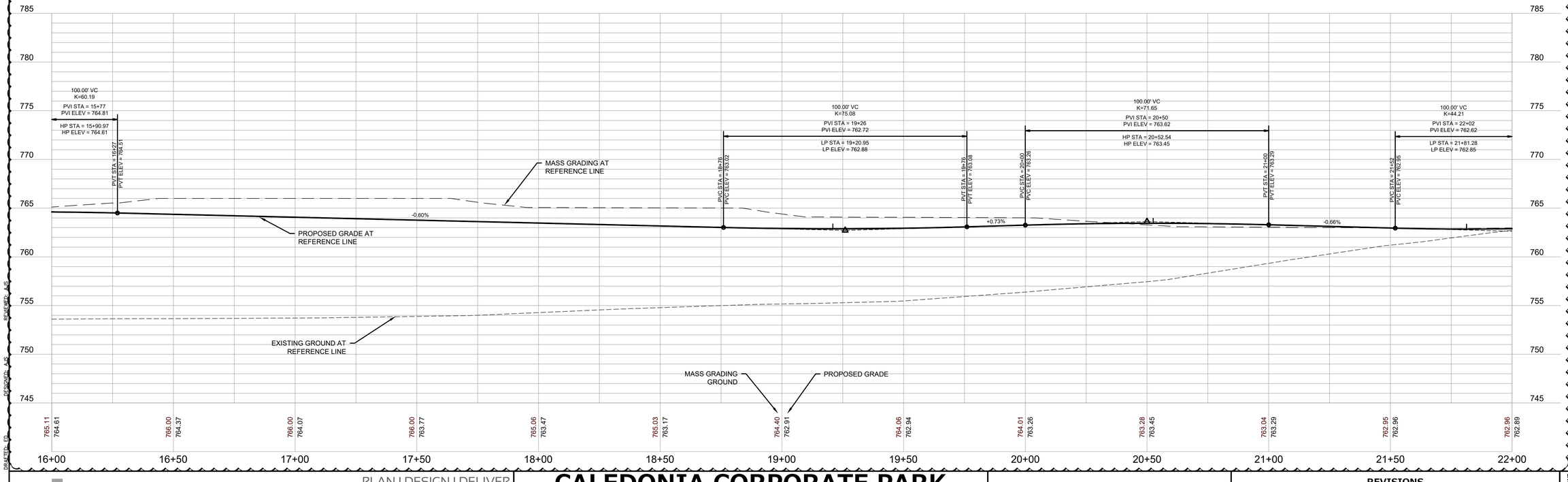
SHEET
C-26
C-59

© COPYRIGHT 2019

GRADING PLAN AND PROFILE

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG





3

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

DRAFTED: ED DESIGNED: AJS REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22
2	MUNICIPAL SUBMITTAL	7/25/22
3	MUNICIPAL SUBMITTAL	11/04/22
4	VILLAGE COMMENTS	12/12/22

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-27
C-59

© COPYRIGHT 2019

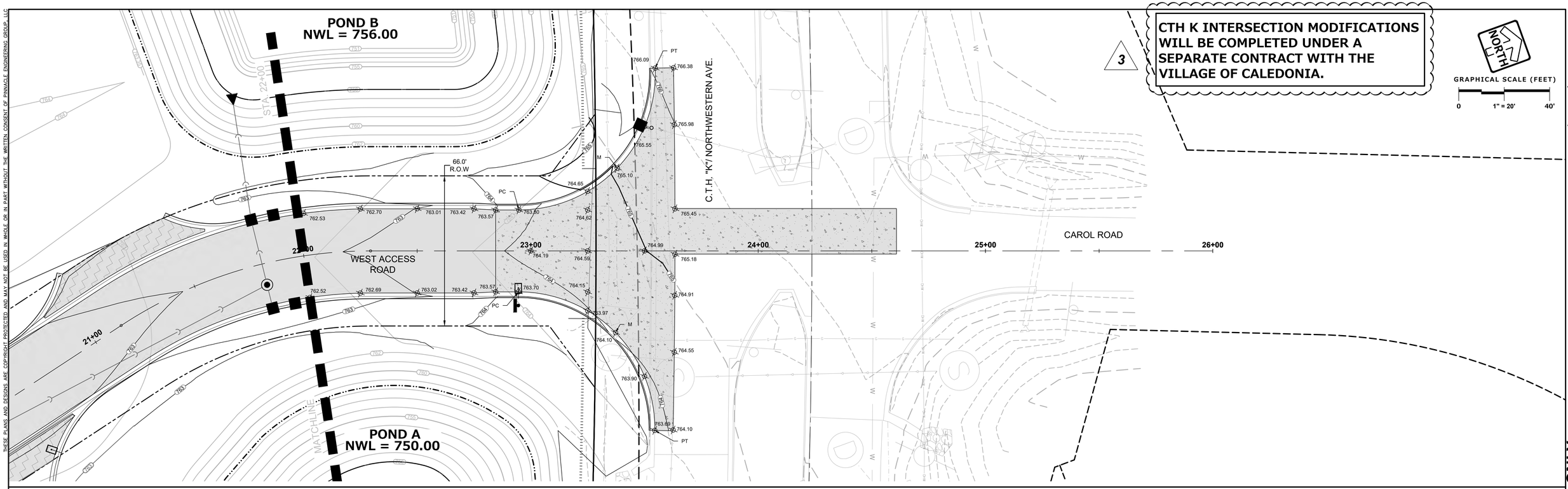
www.pinnacle-engr.com

FOR REVIEW ONLY

GRADING PLAN AND PROFILE

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



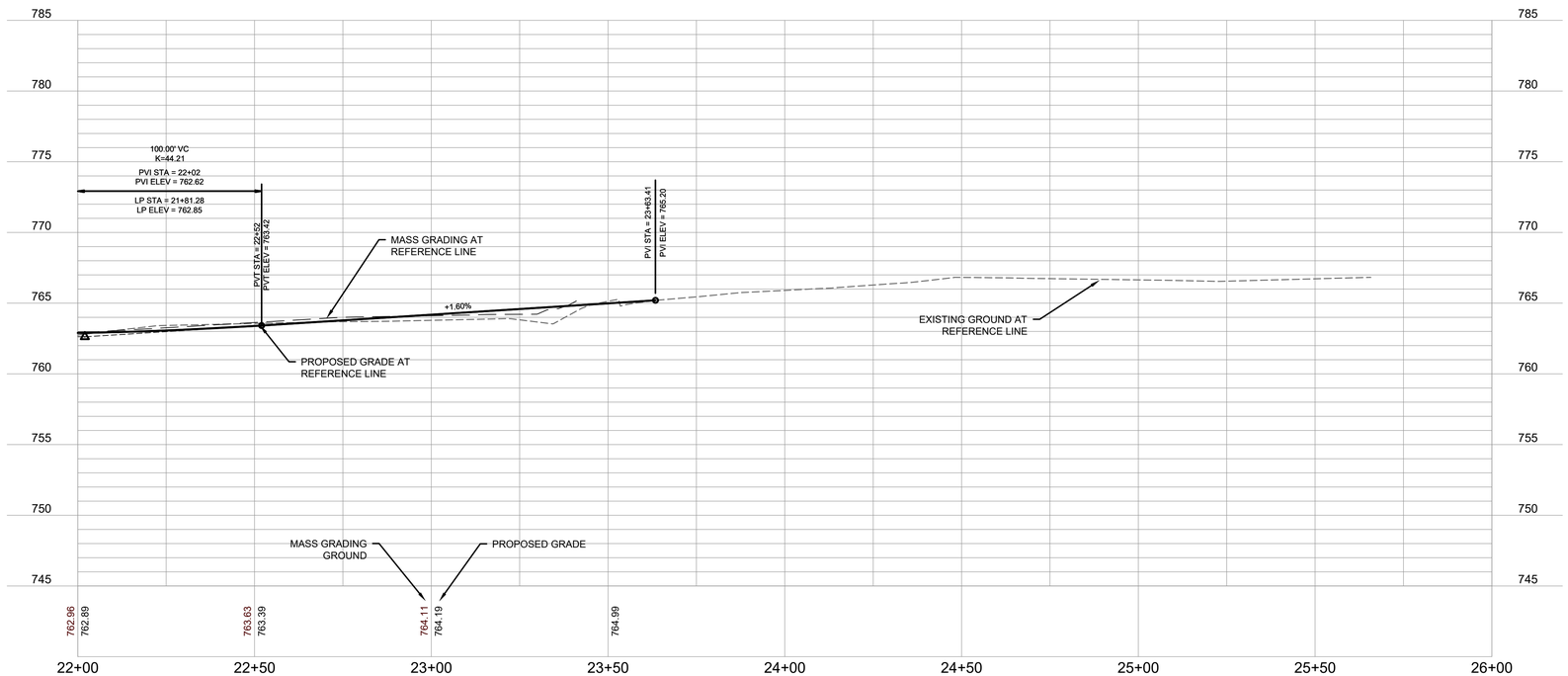
CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.

3

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'



FOR REVIEW ONLY

GRADING PLAN AND PROFILE

© COPYRIGHT 2019

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

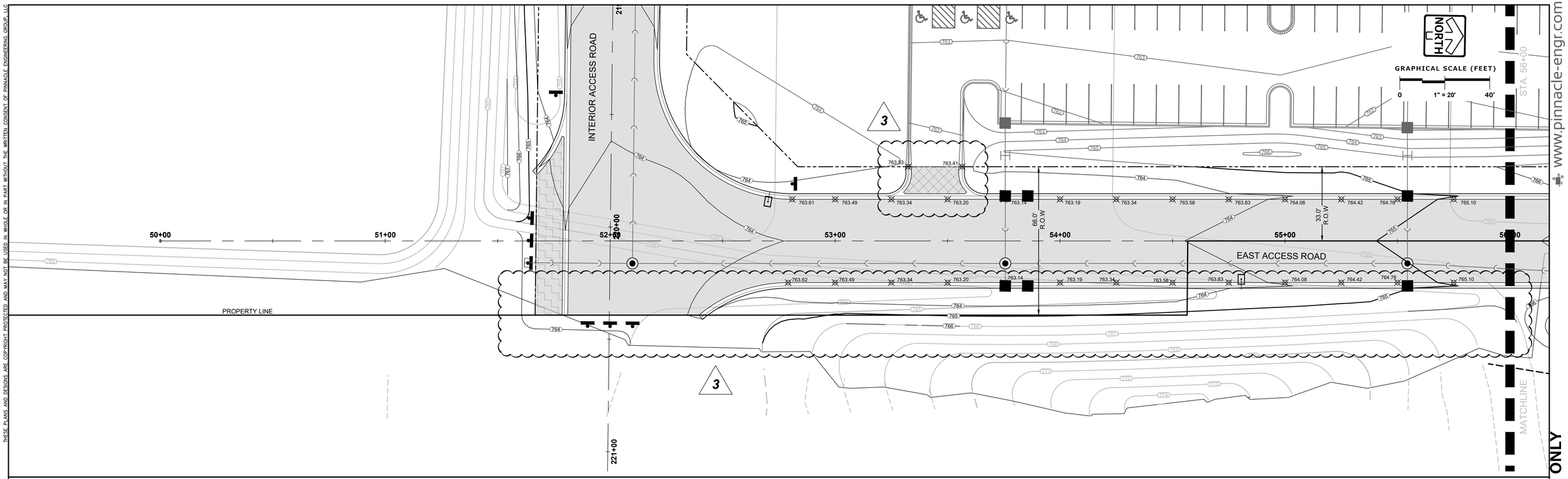
1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

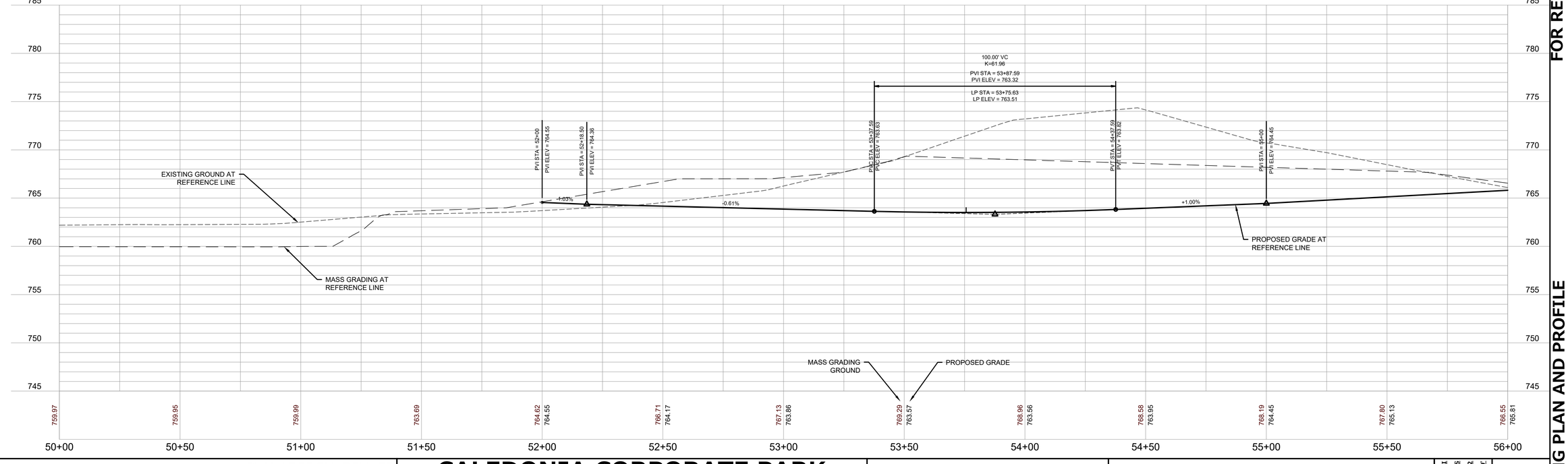
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-28
C-59

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No.**1912.00 WI**
PES PM **AJS**
START DATE **04/20/22**
SCALE **1" = 20'**

SHEET
C-29
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

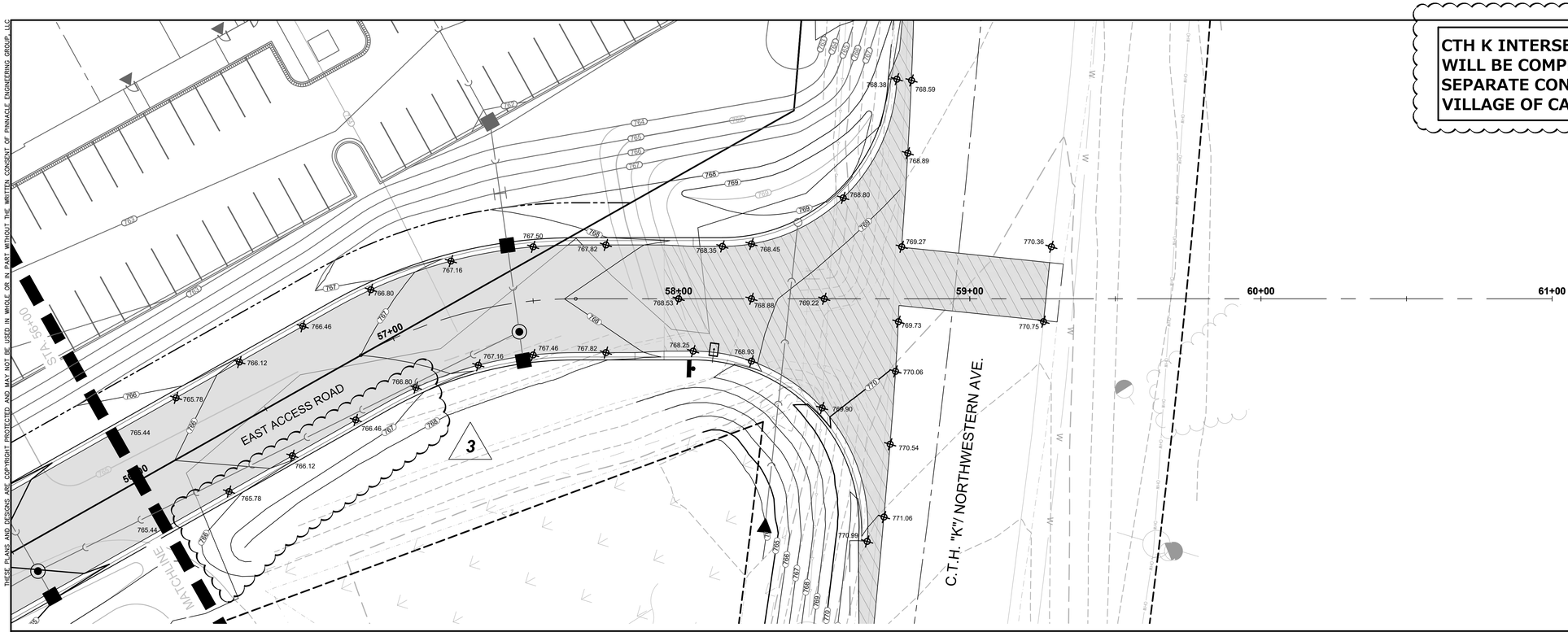
GRADING PLAN AND PROFILE

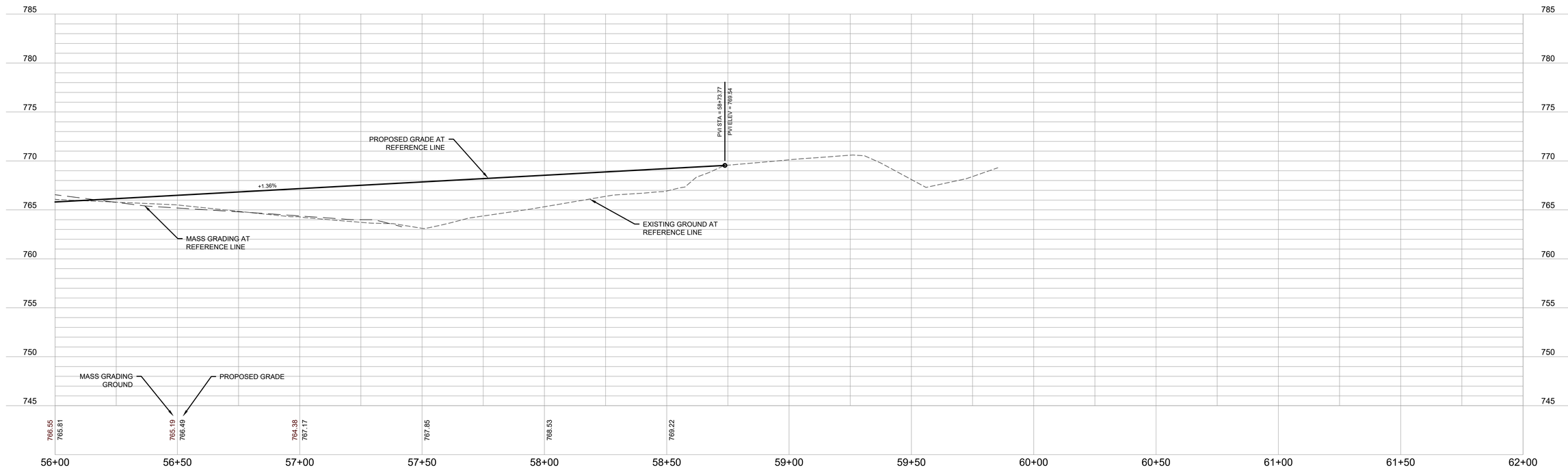
www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

GRADING PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-30
C-59

FOR REVIEW ONLY

GRADING PLAN AND PROFILE

© COPYRIGHT 2019

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY GRADING PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO VILLAGE OF CALEDONIA STANDARDS.

ALL WORK WITHIN CTH K SHALL FOLLOW RACINE COUNTY STANDARDS.

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- STORM SEWER
- DRAIN TILE

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

www.pinnacle-engr.com

FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE OVERVIEW

CAROL ROAD

SHEET C-38

3

POND B
NWL = 756.00

POND A
NWL = 750.00

C.T.H. "K" / NORTHWESTERN AVE.

SHEET C-40

SHEET C-37

PROPOSED BUILDING 2

PROPOSED BUILDING 1

SHEET C-36

SHEET C-39

NE FRONTAGE ROAD

POND C
NWL = 745.00

SHEET C-32

SHEET C-33

SHEET C-34

SHEET C-35

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

STORM SEWER PLAN AND PROFILE OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 100'

SHEET
C-31
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

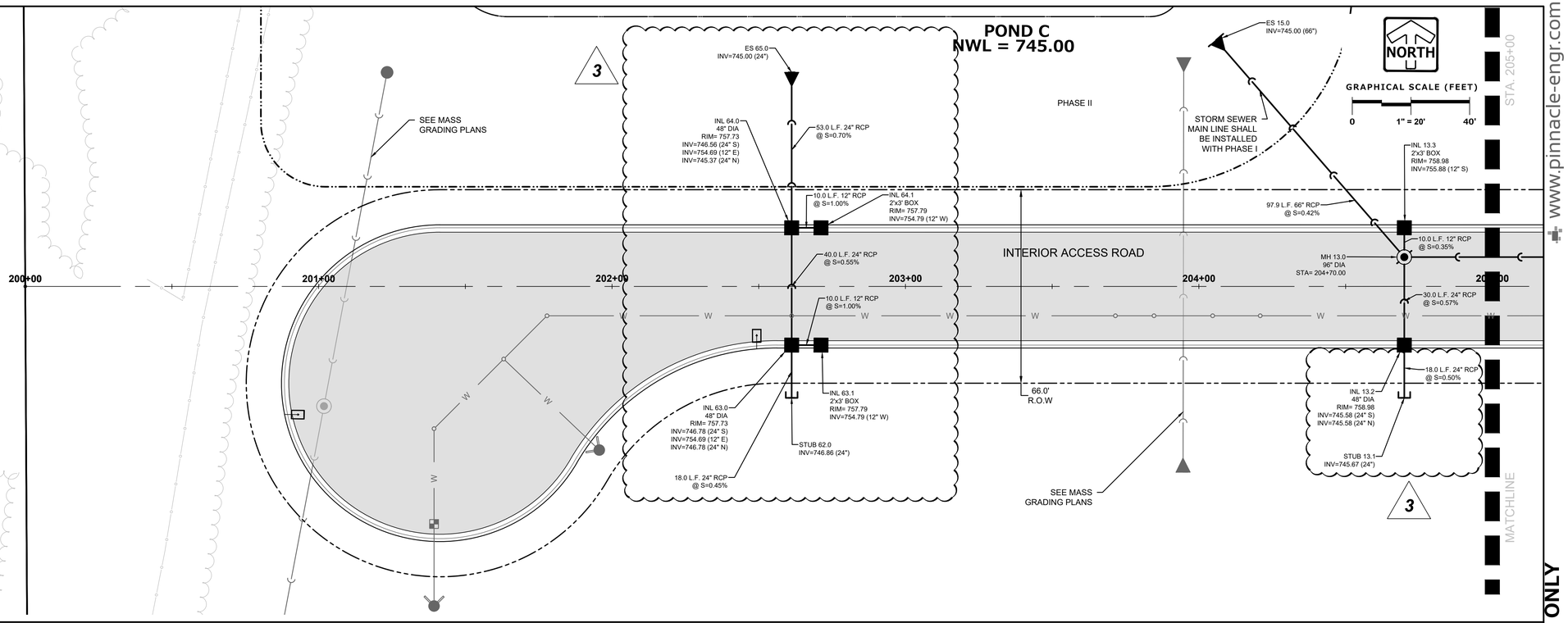
LEGEND

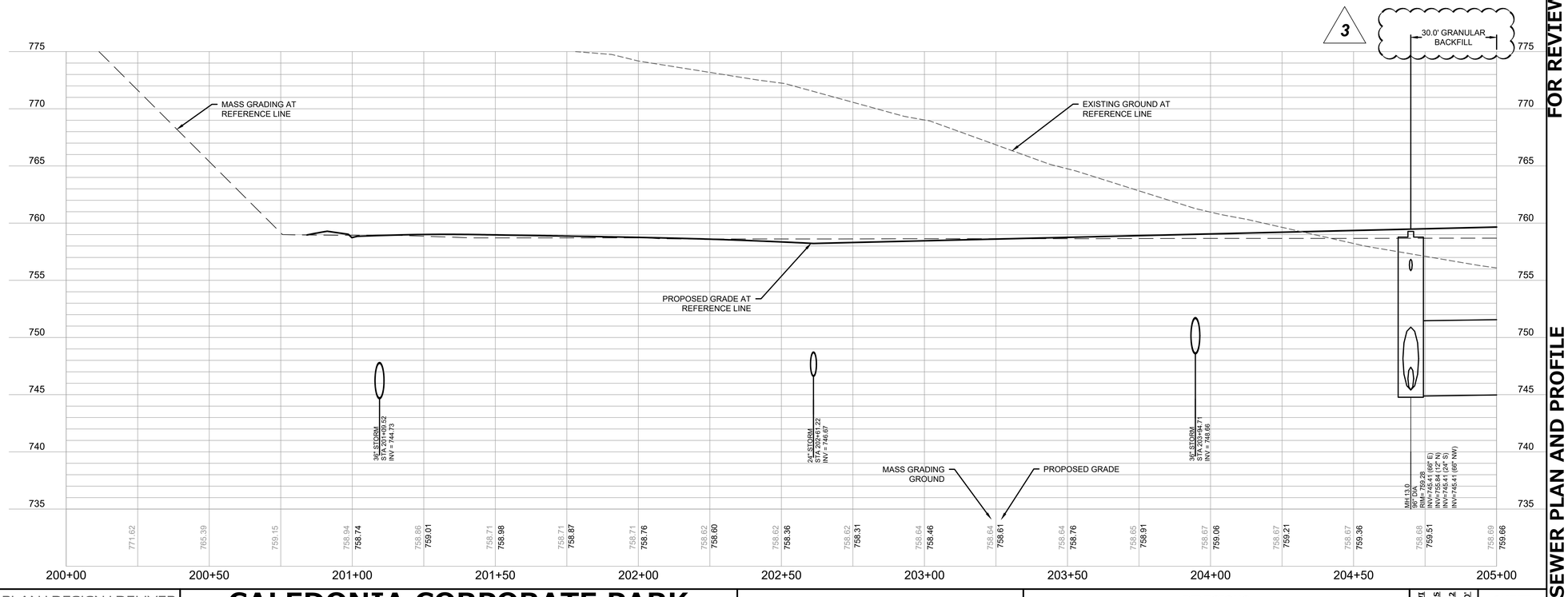
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- STORM SEWER
- DRAIN TILE

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.

STORM SEWER SHALL BE TIE BOLTED FOR A MINIMUM OF 3 JOINTS FROM ALL FLARED END SECTIONS (SEE S.D.D. 08F04)

3





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-32
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

DRAFTED: ED DESIGNED: AJS REVIEWED: AJS

PINNACLE ENGINEERING GROUP
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22
2	MUNICIPAL SUBMITTAL	7/25/22
3	MUNICIPAL SUBMITTAL	11/04/22
4	VILLAGE COMMENTS	12/12/22

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET C-33
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

SANITARY SEWER MANHOLE	CLEANOUT
STORM SEWER MANHOLE	VALVE BOX
STORM SEWER CATCH BASIN (ROUND CASTING)	FIRE HYDRANT
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	SANITARY SEWER
PRECAST CONCRETE FLARED END SECTION	STORM SEWER
	DRAIN TILE

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

STA. 211+50

STA. 218+00

MATCHLINE

MATCHLINE

INL 10.4
48" DIA
RIM= 760.48
INV=757.58 (15" N)
INV=757.58 (15" S)

STUB 10.3
INV=757.67 (15")

18.0 L.F. 15" RCP
@ S=0.50%

SEE BUILDING 2
PLANS

MH 10.0
96" DIA
STA= 212+46.34

10.0 L.F. 15" RCP
@ S=0.55%

30.0 L.F. 30" RCP
@ S=0.65%

INL 10.2
60" DIA
RIM= 760.48
INV=747.91 (30" S)
INV=747.91 (30" N)

18.0 L.F. 30" RCP
@ S=0.60%

STUB 10.1
INV=748.02 (30")

INL 9.4
2'x3' BOX
RIM= 757.53
INV=754.44 (12" W)
INV=754.44 (12" E)
INV=754.44 (12" S)

10.0 L.F. 12" RCP
@ S=0.20%

10.0 L.F. 12" RCP
@ S=0.20%

INL 9.3
2'x3' BOX
RIM= 757.53
INV=754.46 (12" E)

INL 9.5
2'x3' BOX
RIM= 757.55
INV=754.46 (12" W)

10.0 L.F. 12" RCP
@ S=0.75%

MH 9.0
84" DIA
STA= 214+59.21

30.0 L.F. 12" RCP
@ S=0.35%

INL 9.1
2'x3' BOX
RIM= 757.53
INV=754.46 (12" E)

10.0 L.F. 12" RCP
@ S=0.20%

INL 9.2
2'x3' BOX
RIM= 757.53
INV=754.44 (12" W)
INV=754.44 (12" N)

SEE BUILDING 2
PLANS

STUB 8.2
INV=750.59 (36")

28.0 L.F. 36" RCP
@ S=0.60%

MH 8.0
96" DIA
STA= 215+48.84

48.0 L.F. 24" RCP
@ S=0.40%

STUB 8.1
INV=748.62 (24")

66.0'
R.O.W

SEE BUILDING 1
PLANS

STUB 7.3
INV=757.93 (12")

18.0 L.F. 12" SCH 40 PVC
@ S=1.04%

INL 7.4
48" DIA
RIM= 760.84
INV=757.74 (12" N)
INV=757.49 (15" S)

10.0 L.F. 15" RCP
@ S=0.40%

MH 7.0
72" DIA
STA= 217+46.34

30.0 L.F. 18" RCP
@ S=0.60%

18.0 L.F. 18" RCP
@ S=0.45%

INL 7.2
60" DIA
RIM= 760.84
INV=749.00 (18" S)
INV=749.00 (18" N)

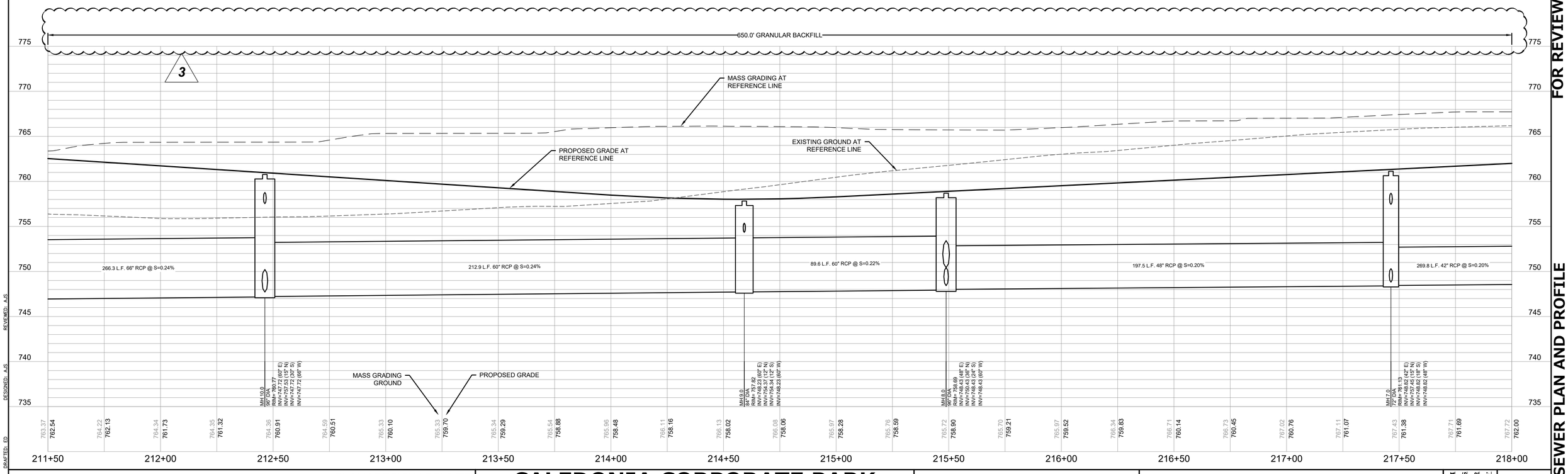
STUB 7.1
INV=749.08 (18")

212+00 213+00 214+00 215+00 216+00 217+00

20.0'

INTERIOR ACCESS ROAD

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.



PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-34
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

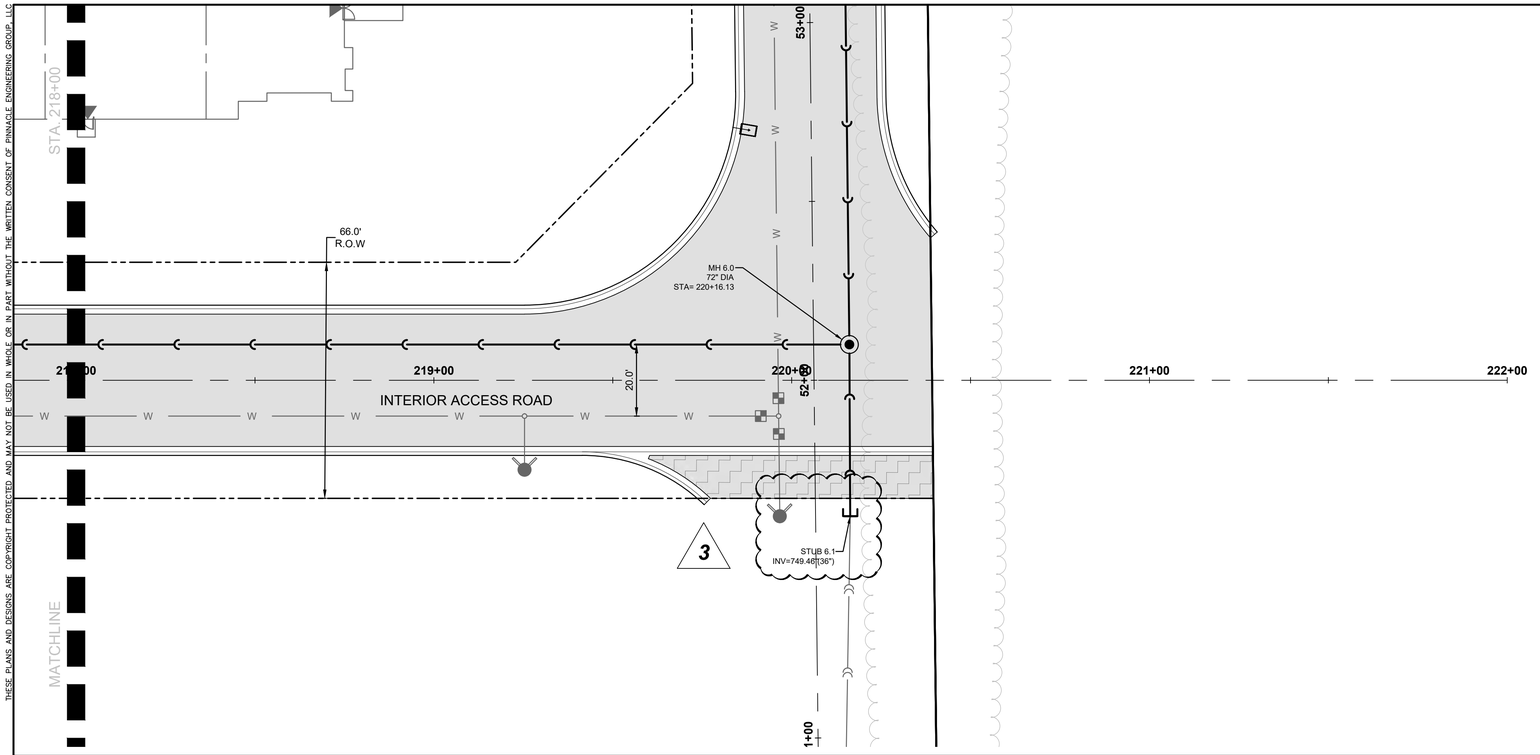
STORM SEWER PLAN AND PROFILE

www.pinnacle-engr.com

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



LEGEND

◉	SANITARY SEWER MANHOLE	▣	CLEANOUT
◉	STORM SEWER MANHOLE	▣	VALVE BOX
●	STORM SEWER CATCH BASIN (ROUND CASTING)	◀	FIRE HYDRANT
■	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	——▶——	SANITARY SEWER
▶	PRECAST CONCRETE FLARED END SECTION	——)———	STORM SEWER
		——)———	DRAIN TILE

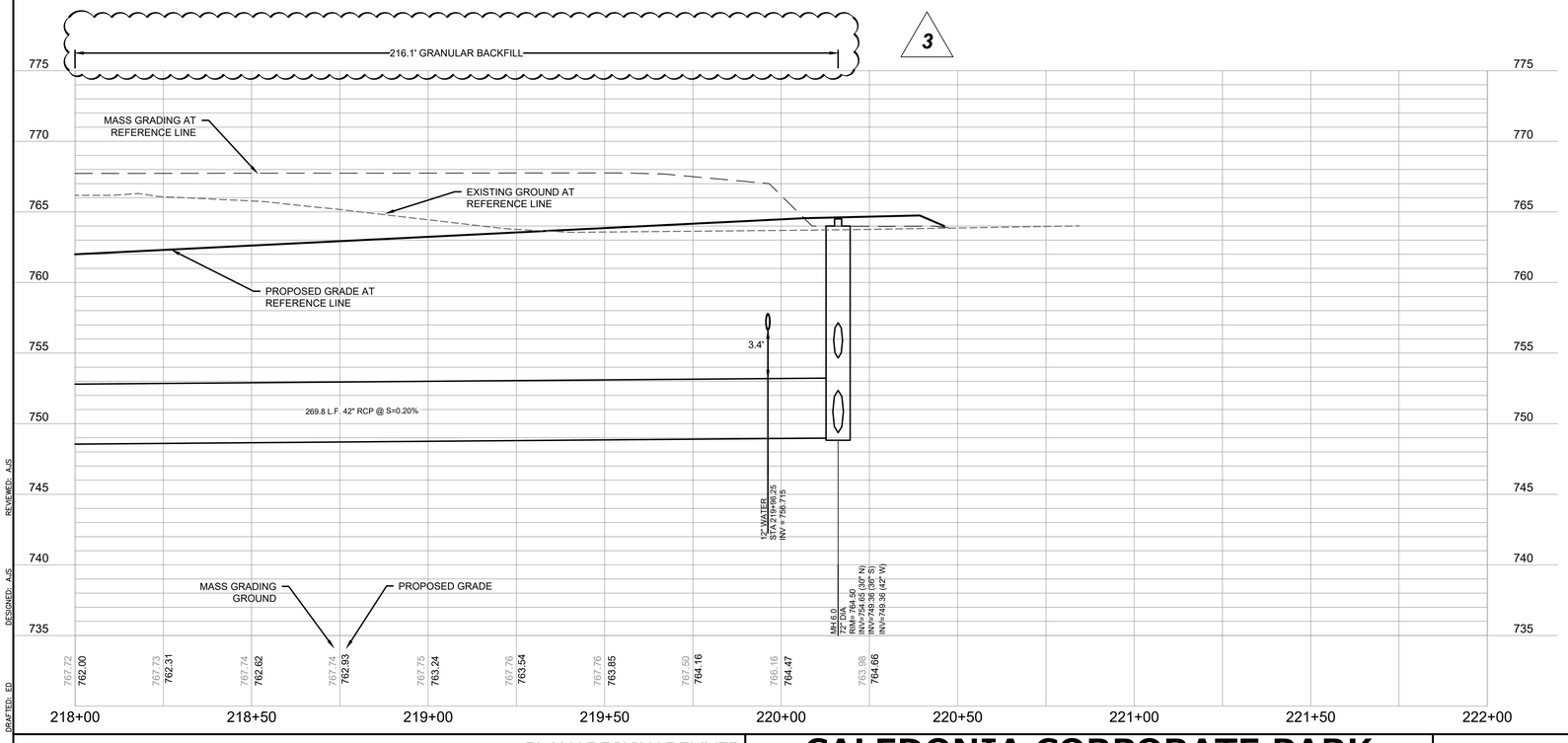
NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.

3



REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

FOR REVIEW ONLY

www.pinnacle-engr.com

STORM SEWER PLAN AND PROFILE

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No.**1912.00 WI**
PES PM **AJS**
START DATE **04/20/22**
SCALE **1" = 20'**

SHEET
C-35
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

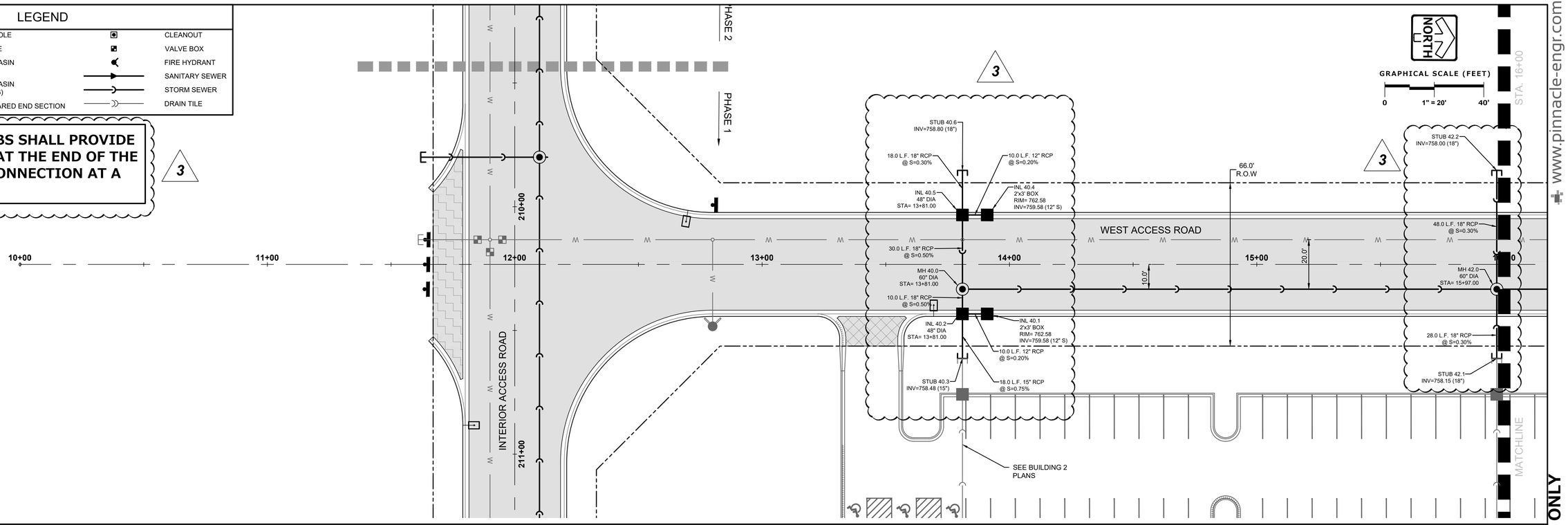
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

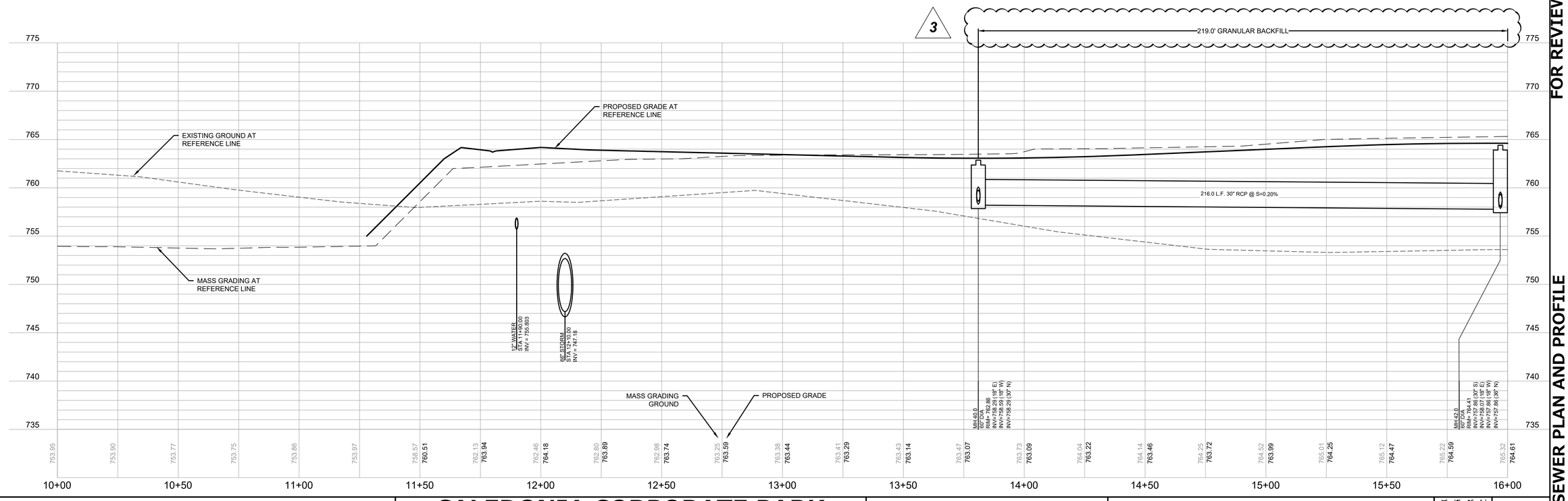
LEGEND

SANITARY SEWER MANHOLE	CLEANOUT
STORM SEWER MANHOLE	VALVE BOX
STORM SEWER CATCH BASIN (ROUND CASTING)	FIRE HYDRANT
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	SANITARY SEWER
PRECAST CONCRETE FLARED END SECTION	STORM SEWER
	DRAIN TILE

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.

3





PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-36
C-59

© COPYRIGHT 2019

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

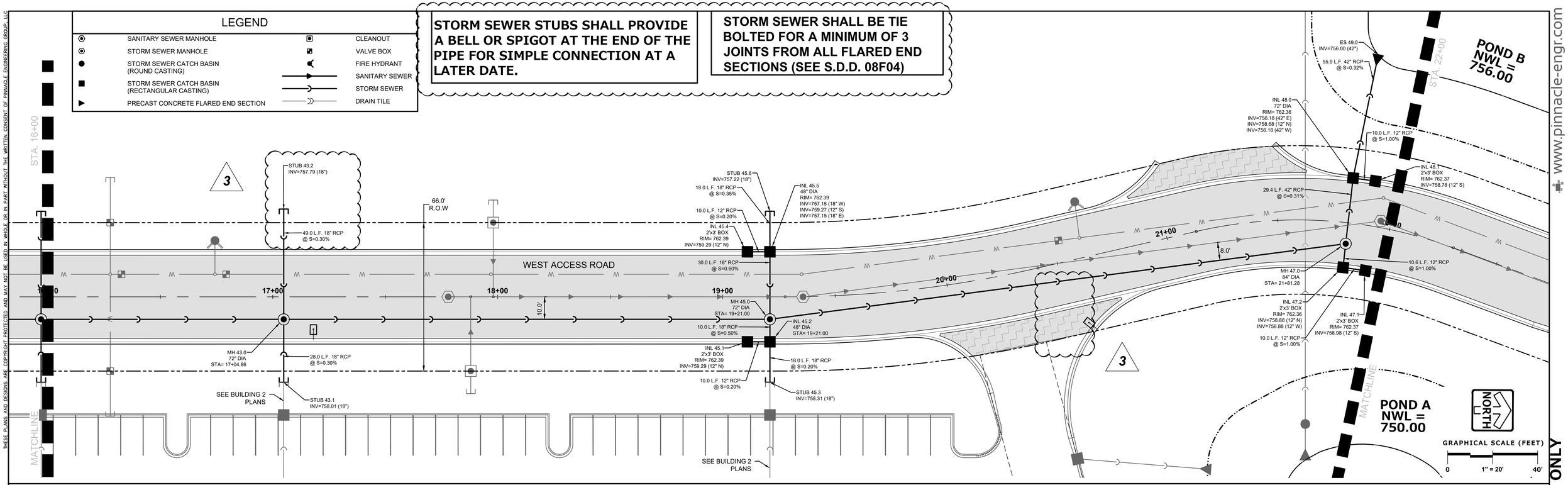
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

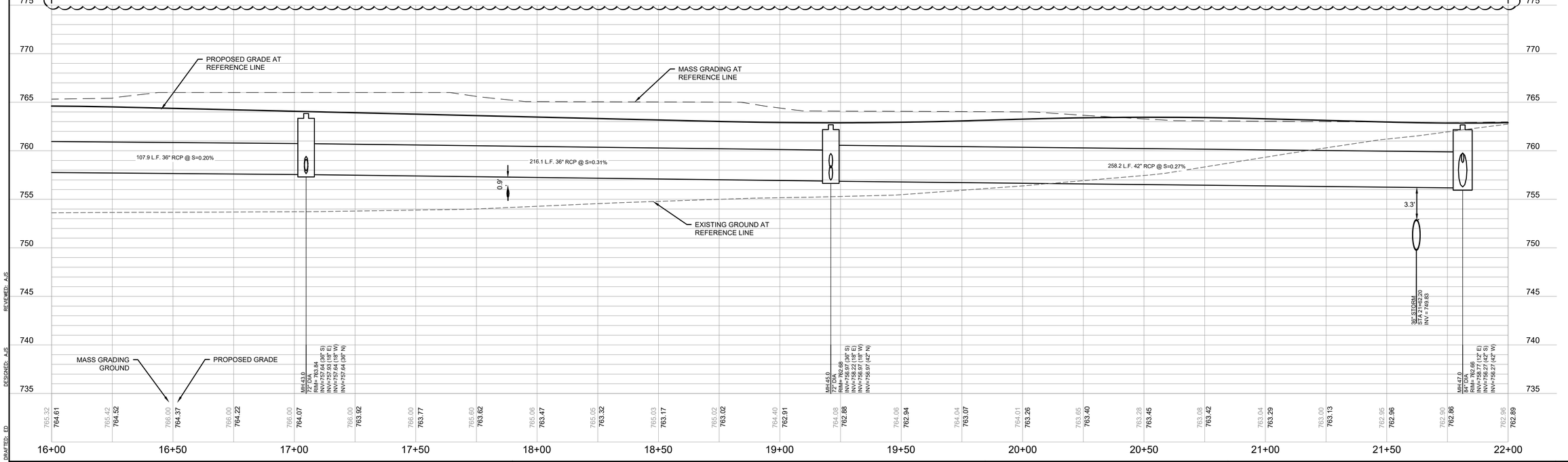
LEGEND

SANITARY SEWER MANHOLE	CLEANOUT
STORM SEWER MANHOLE	VALVE BOX
STORM SEWER CATCH BASIN (ROUND CASTING)	FIRE HYDRANT
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	SANITARY SEWER
PRECAST CONCRETE FLARED END SECTION	STORM SEWER
	DRAIN TILE

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.

STORM SEWER SHALL BE TIE BOLTED FOR A MINIMUM OF 3 JOINTS FROM ALL FLARED END SECTIONS (SEE S.D.D. 08F04)





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No.**1912.00 WI** AJS
PES PM _____ **04/20/22**
START DATE _____
SCALE _____ **1" = 20'**

SHEET
C-37
C-59

© COPYRIGHT 2019

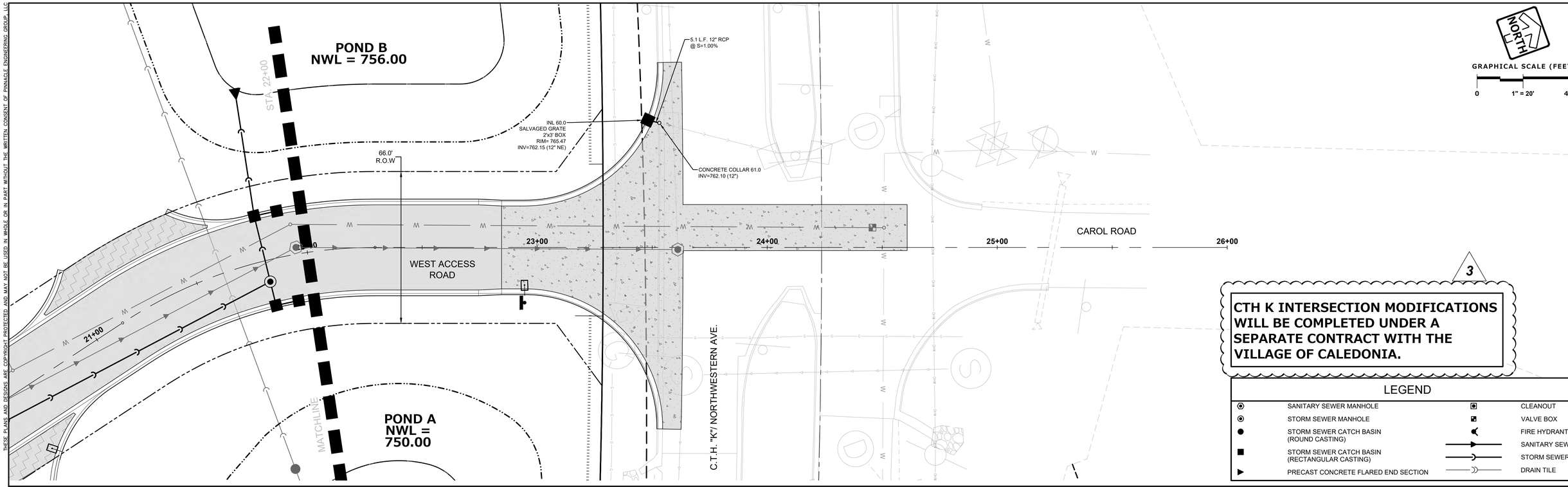
FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



3

CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.

LEGEND

◉	SANITARY SEWER MANHOLE	▣	CLEANOUT
◉	STORM SEWER MANHOLE	▪	VALVE BOX
●	STORM SEWER CATCH BASIN (ROUND CASTING)	◀	FIRE HYDRANT
■	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	——▶——	SANITARY SEWER
▶	PRECAST CONCRETE FLARED END SECTION	——◡——	STORM SEWER
		——◡——	DRAIN TILE

www.pinnacle-engr.com

FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-38
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

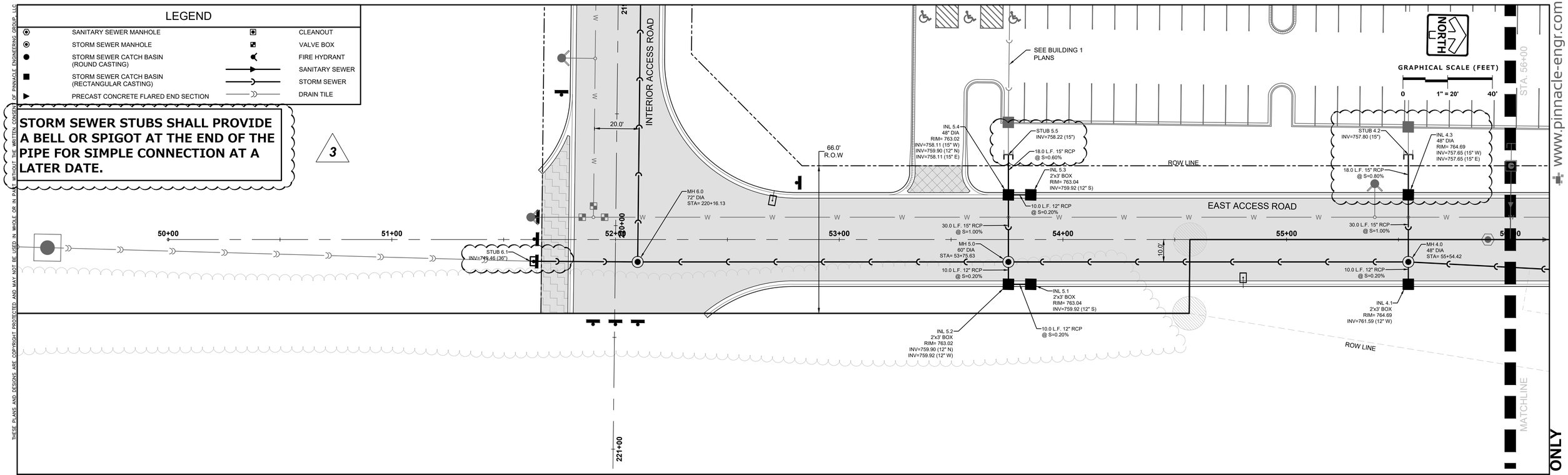
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

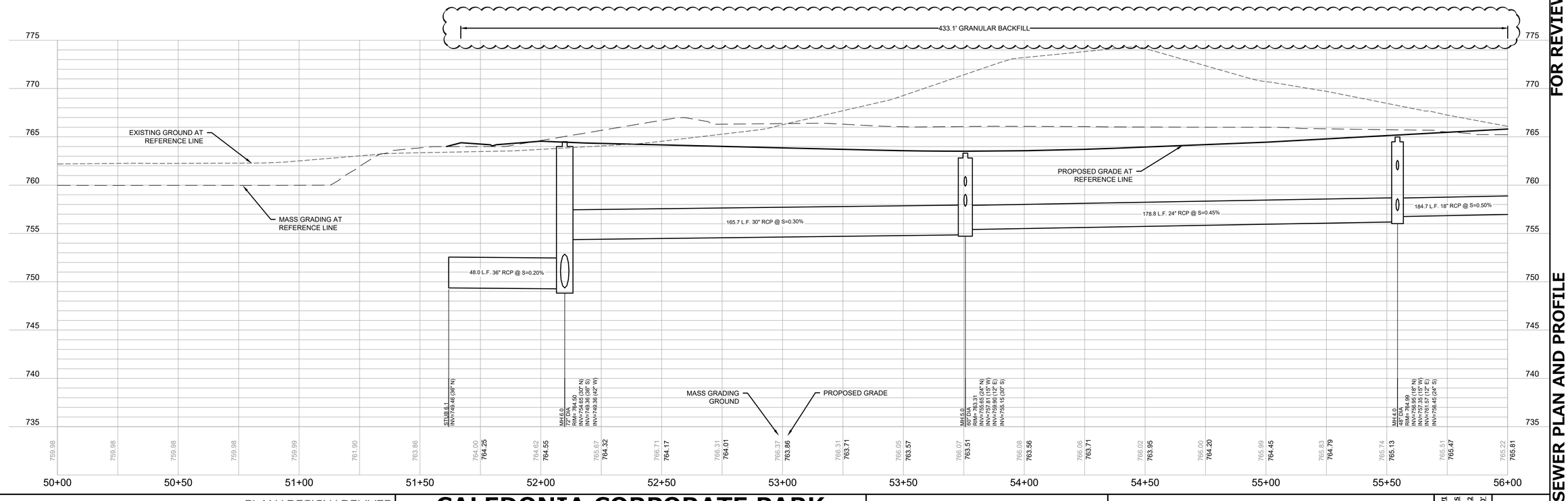
LEGEND

SANITARY SEWER MANHOLE	CLEANOUT
STORM SEWER MANHOLE	VALVE BOX
STORM SEWER CATCH BASIN (ROUND CASTING)	FIRE HYDRANT
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	SANITARY SEWER
PRECAST CONCRETE FLARED END SECTION	STORM SEWER
	DRAIN TILE

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.

3





PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-39
C-59

© COPYRIGHT 2019

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

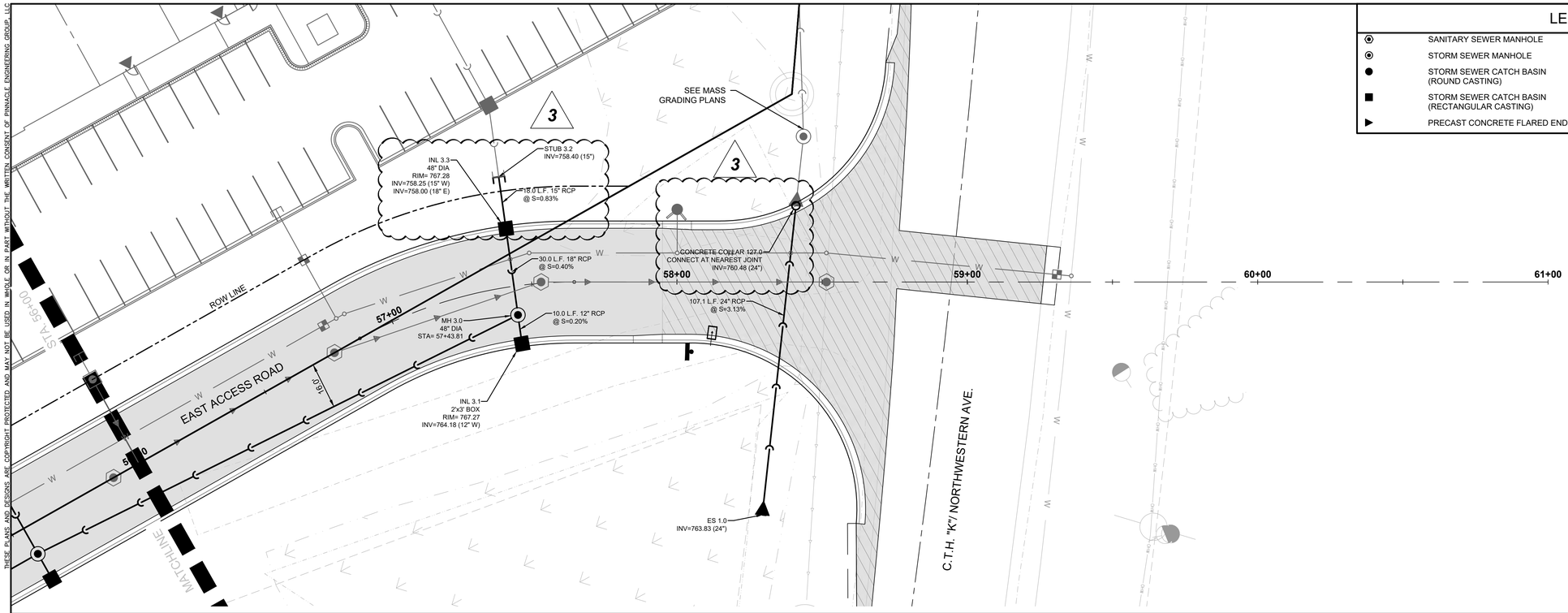
FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



LEGEND

SANITARY SEWER MANHOLE		CLEANOUT	
STORM SEWER MANHOLE		VALVE BOX	
STORM SEWER CATCH BASIN (ROUND CASTING)		FIRE HYDRANT	
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)		SANITARY SEWER	
PRECAST CONCRETE FLARED END SECTION		STORM SEWER	
		DRAIN TILE	

NORTH

GRAPHICAL SCALE (FEET)

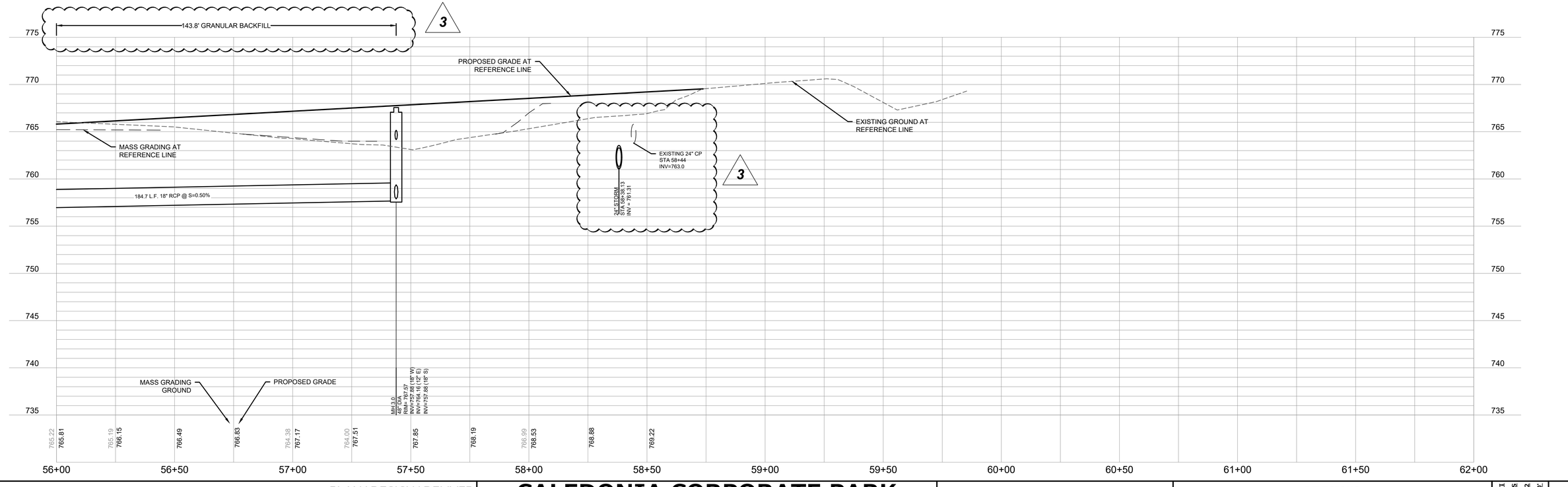
0 1" = 20' 40'

3

STORM SEWER SHALL BE TIE BOLTED FOR A MINIMUM OF 3 JOINTS FROM ALL FLARED END SECTIONS (SEE S.D.D. 08F04)

CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.

STORM SEWER STUBS SHALL PROVIDE A BELL OR SPIGOT AT THE END OF THE PIPE FOR SIMPLE CONNECTION AT A LATER DATE.



REVIEWED: AJS

DESIGNED: AJS

DRAFTED: FD

FOR REVIEW ONLY

STORM SEWER PLAN AND PROFILE

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

STORM SEWER PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No.1912.00 WI AJS
PEG PM 04/20/22
START DATE
SCALE 1" = 20'

SHEET
C-40
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY STORM SEWER PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

ALL WORK WITHIN PUBLIC R.O.W. SHALL CONFORM TO VILLAGE OF CALEDONIA STANDARDS.

ALL WORK WITHIN C.T.H. "K" SHALL FOLLOW RACINE COUNTY STANDARDS.

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- STORM SEWER
- DRAIN TILE

CAROL ROAD

SHEET C-48

C.T.H. "K" / NORTHWESTERN AVE.

SHEET C-50

POND B
NWL = 756.00

POND A
NWL = 750.00

SHEET C-47

PROPOSED BUILDING 2

PROPOSED BUILDING 1

SHEET C-49

NE FRONTAGE ROAD

POND C
NWL = 745.00

SHEET C-42

SHEET C-43

SHEET C-44

SHEET C-45

www.pinnacle-engr.com

FOR REVIEW ONLY

UTILITY PLAN AND PROFILE OVERVIEW

© COPYRIGHT 2019

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 100'

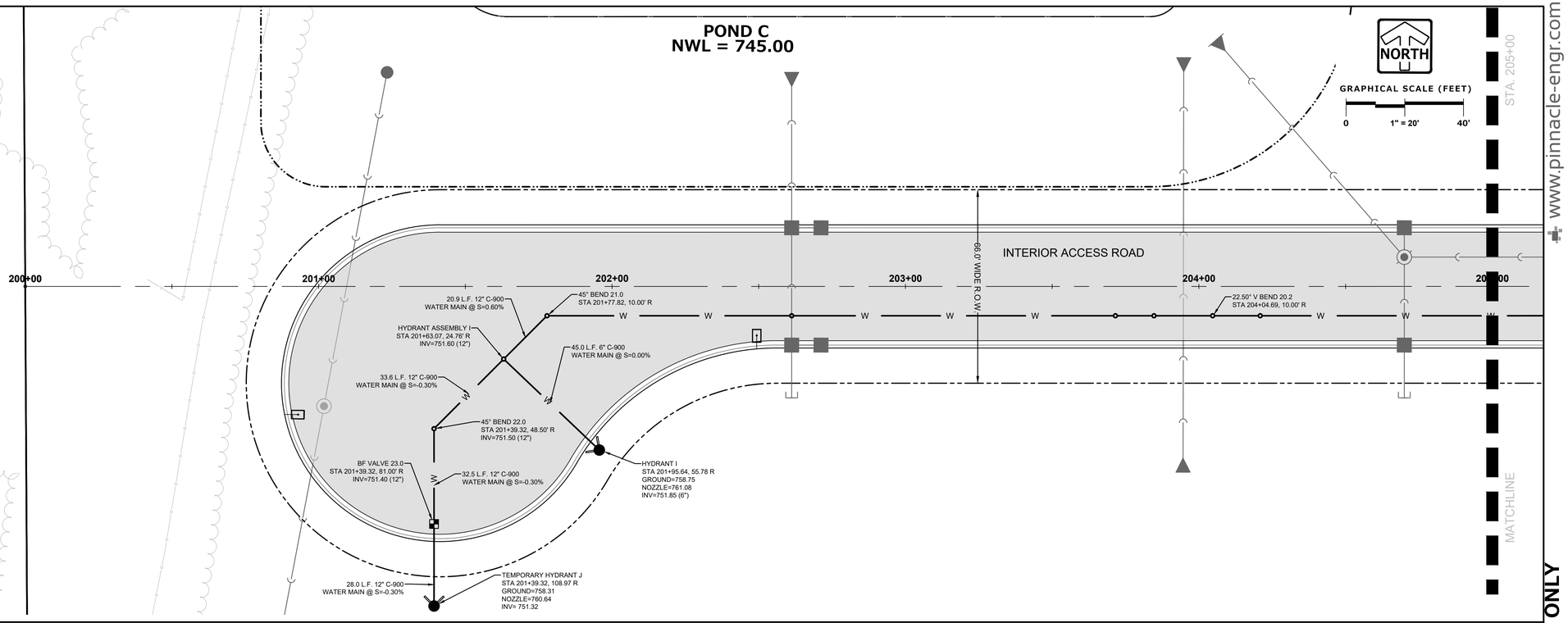
SHEET
C-41
C-59

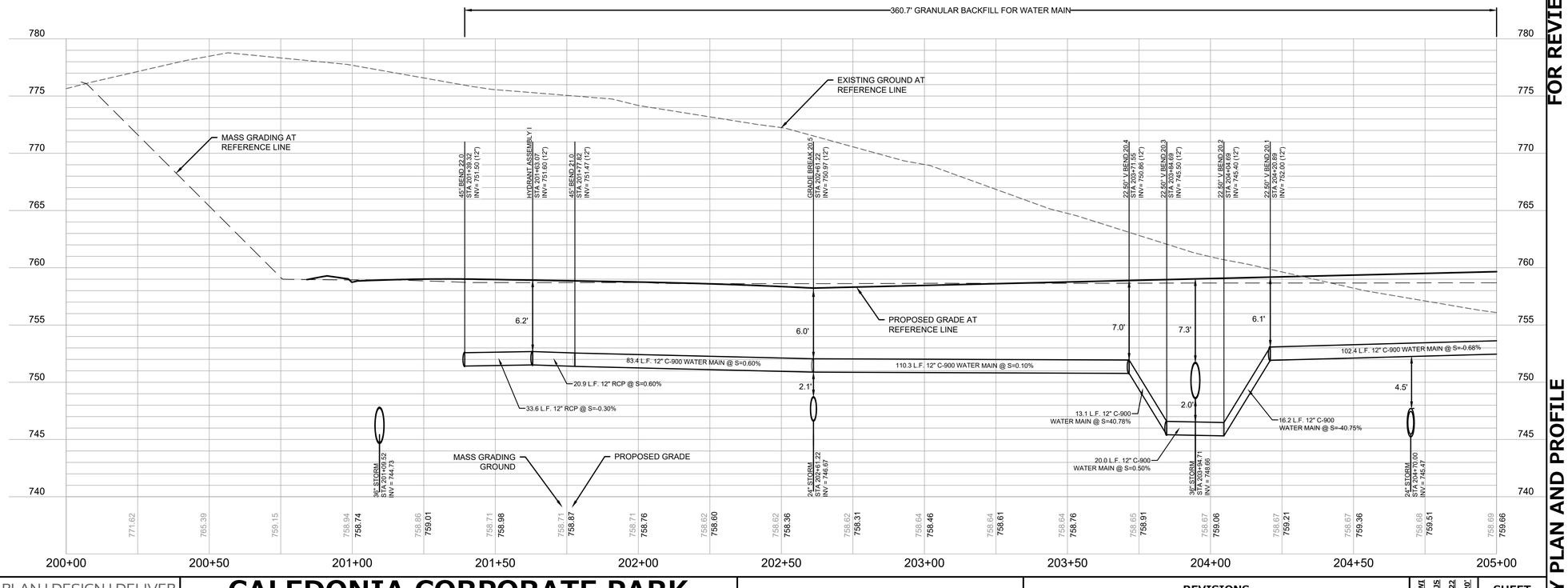
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- STORM SEWER
- DRAIN TILE





FOR REVIEW ONLY

UTILITY PLAN AND PROFILE

www.pinnacle-engr.com

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-42
C-59

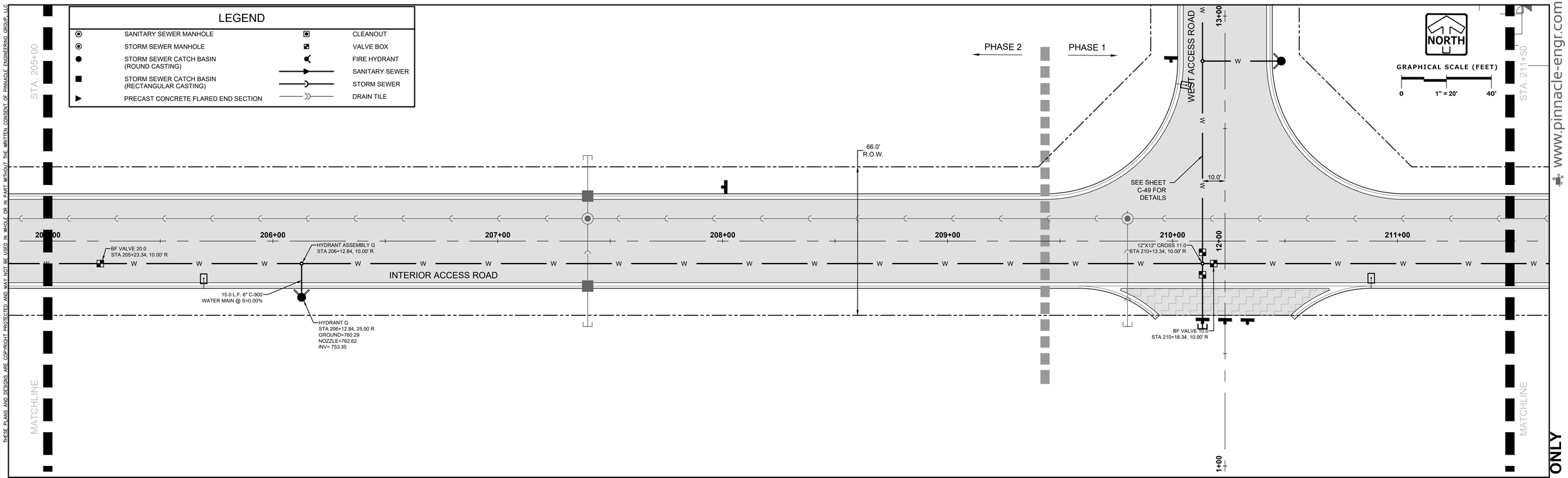
© COPYRIGHT 2019

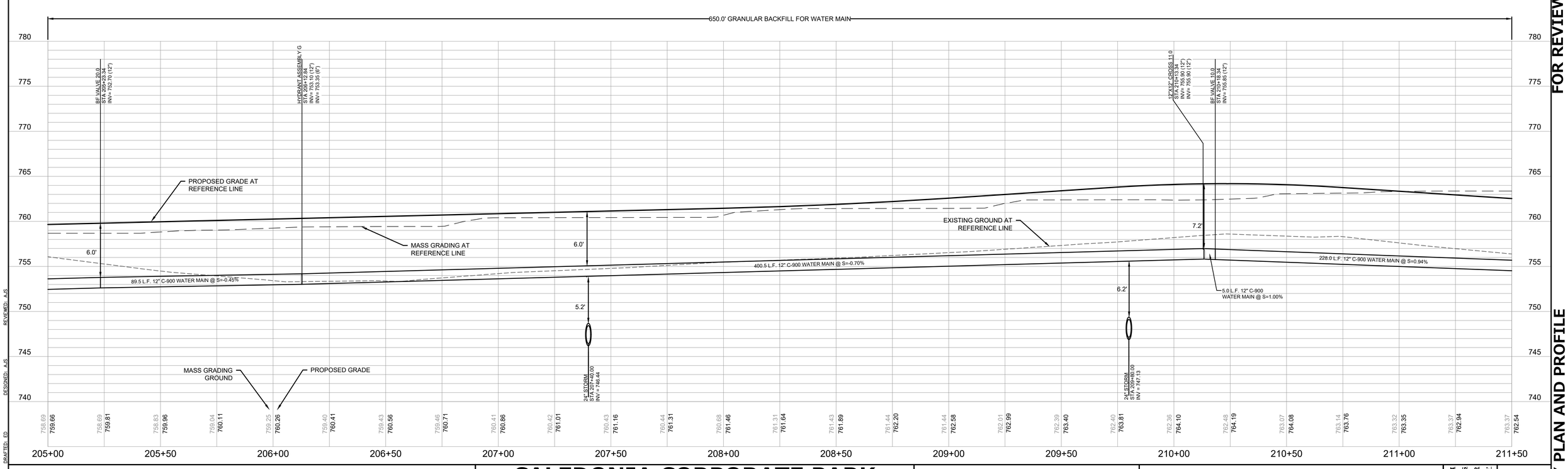
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

SANITARY SEWER MANHOLE		CLEANOUT	
STORM SEWER MANHOLE		VALVE BOX	
STORM SEWER CATCH BASIN (ROUND CASTING)		FIRE HYDRANT	
		SANITARY SEWER	
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)		STORM SEWER	
PRECAST CONCRETE FLARED END SECTION		DRAIN TILE	





REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE -NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-43
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

UTILITY PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

FOR REVIEW ONLY

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

No.	Description	Date
1	DRT CHECKSET	7/8/22
2	MUNICIPAL SUBMITTAL	7/25/22
3	MUNICIPAL SUBMITTAL	11/04/22
4	VILLAGE COMMENTS	12/12/22

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-44
C-59

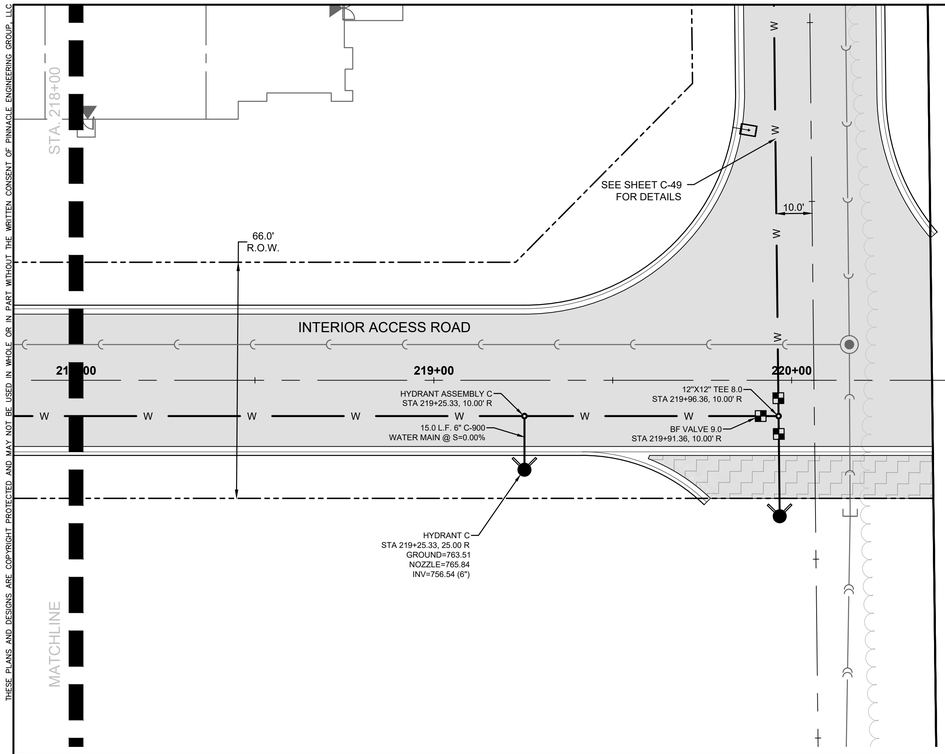
© COPYRIGHT 2019

UTILITY PLAN AND PROFILE

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



LEGEND

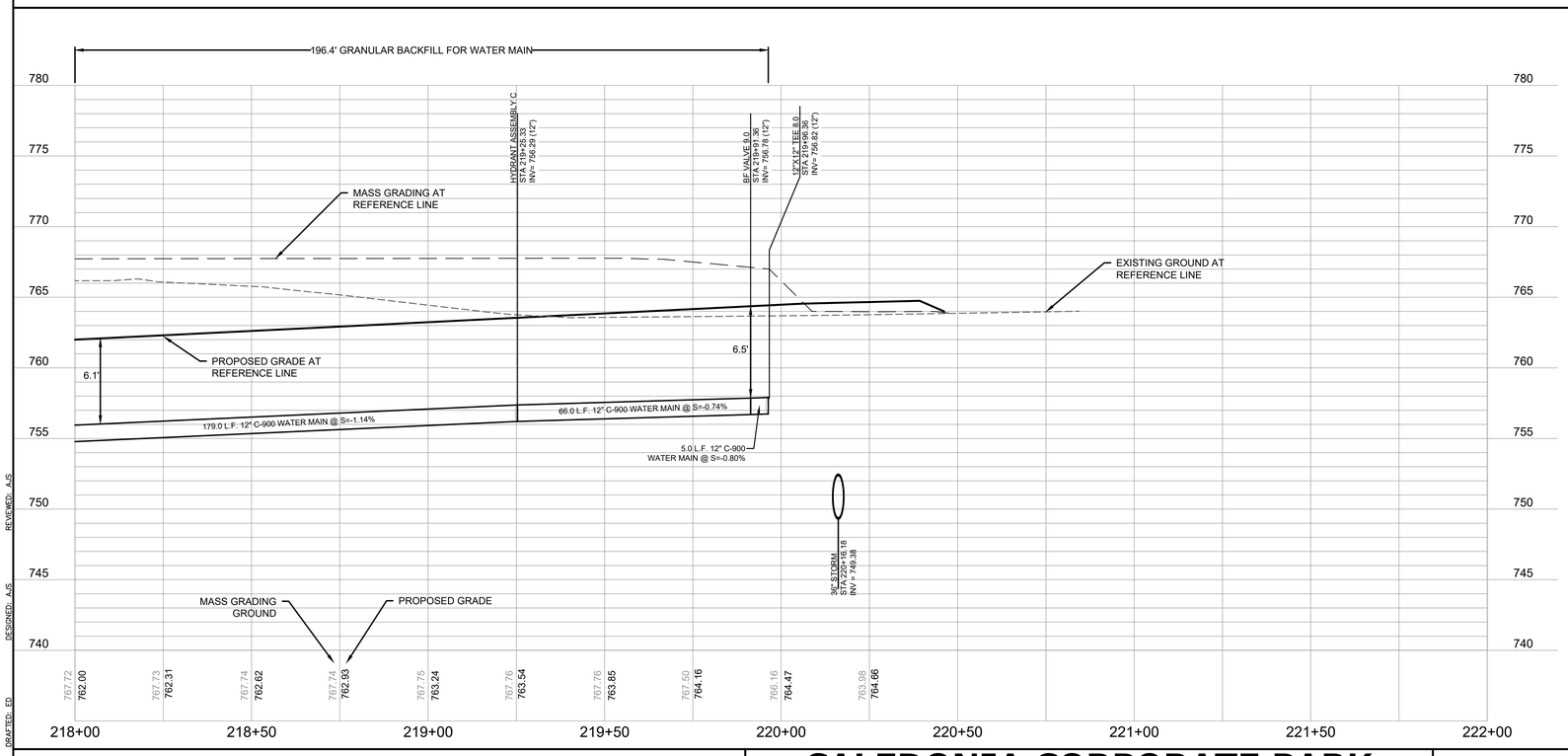
◉	SANITARY SEWER MANHOLE	▣	CLEANOUT
◉	STORM SEWER MANHOLE	▣	VALVE BOX
●	STORM SEWER CATCH BASIN (ROUND CASTING)	◀	FIRE HYDRANT
■	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	——▶——	SANITARY SEWER
▶	PRECAST CONCRETE FLARED END SECTION	——▷——	STORM SEWER
		——)——	DRAIN TILE

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

www.pinnacle-engr.com



REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-45
C-59

©COPYRIGHT 2019

FOR REVIEW ONLY

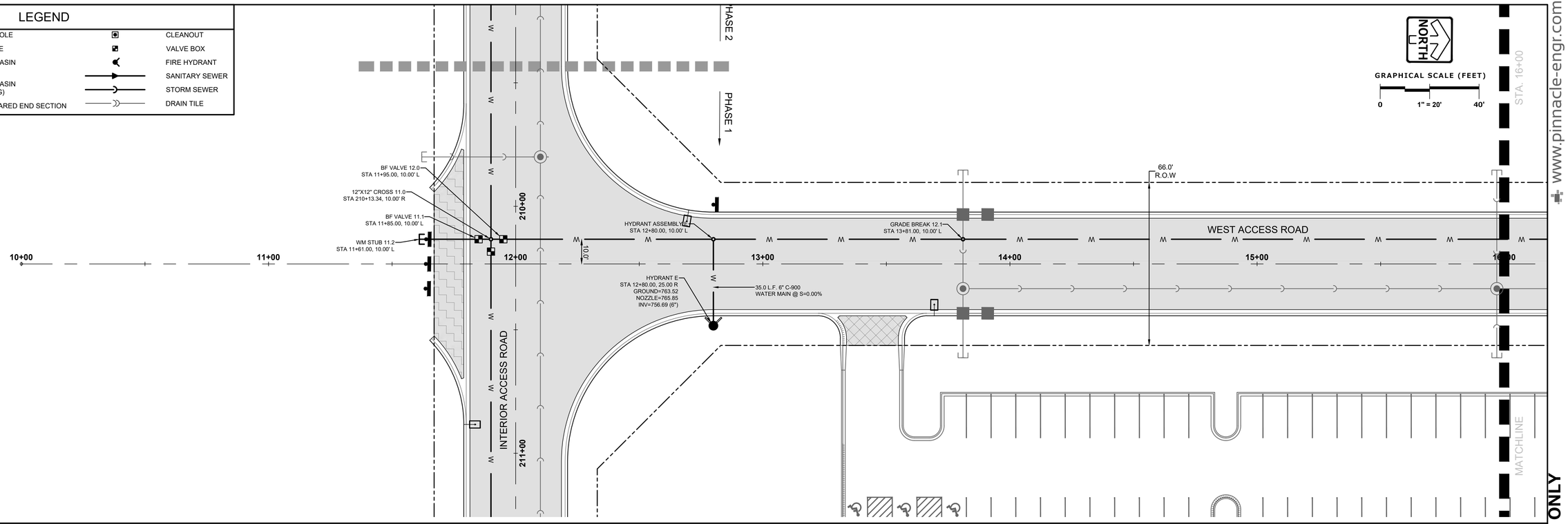
UTILITY PLAN AND PROFILE

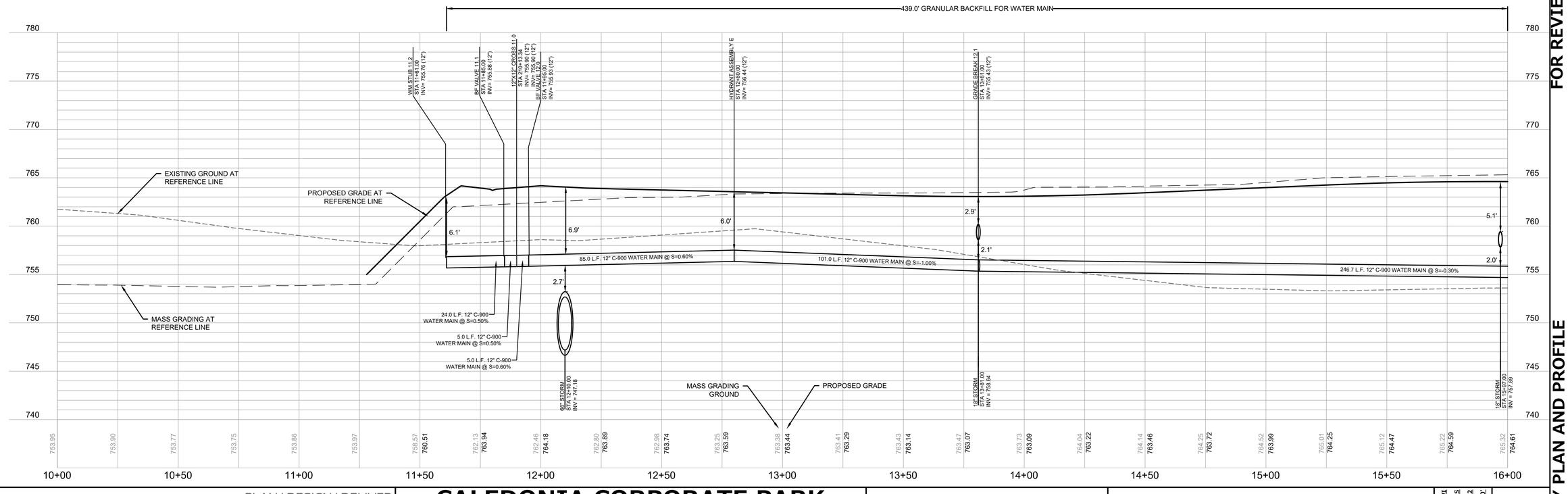
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

SANITARY SEWER MANHOLE		CLEANOUT	
STORM SEWER MANHOLE		VALVE BOX	
STORM SEWER CATCH BASIN (ROUND CASTING)		FIRE HYDRANT	
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)		SANITARY SEWER	
PRECAST CONCRETE FLARED END SECTION		STORM SEWER	
		DRAIN TILE	





PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE I NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-46
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

UTILITY PLAN AND PROFILE

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

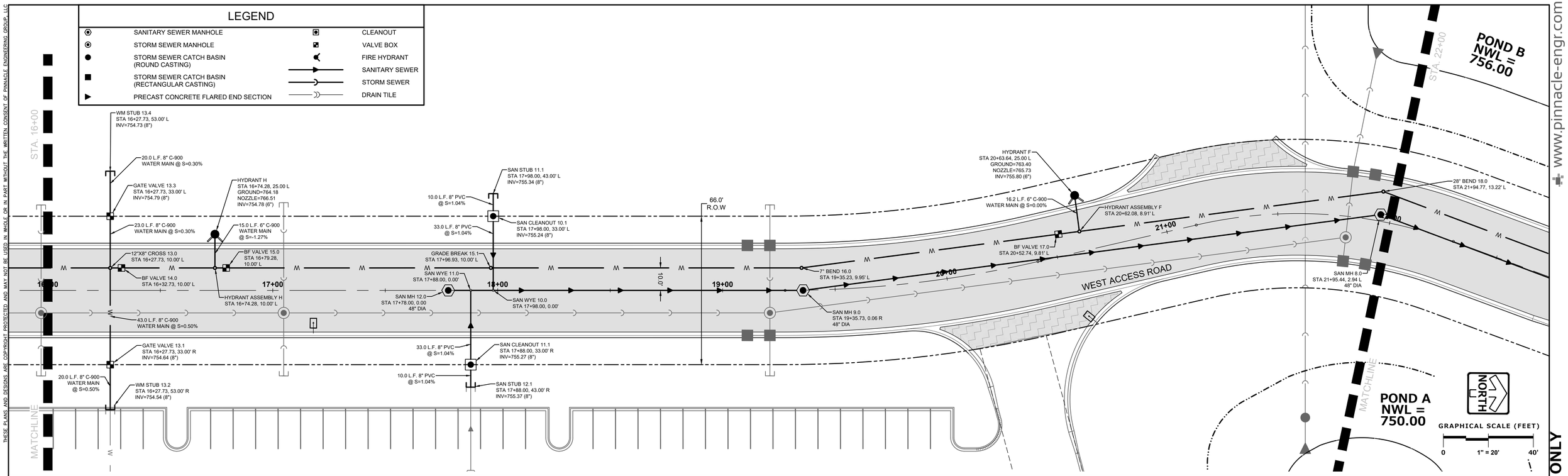
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

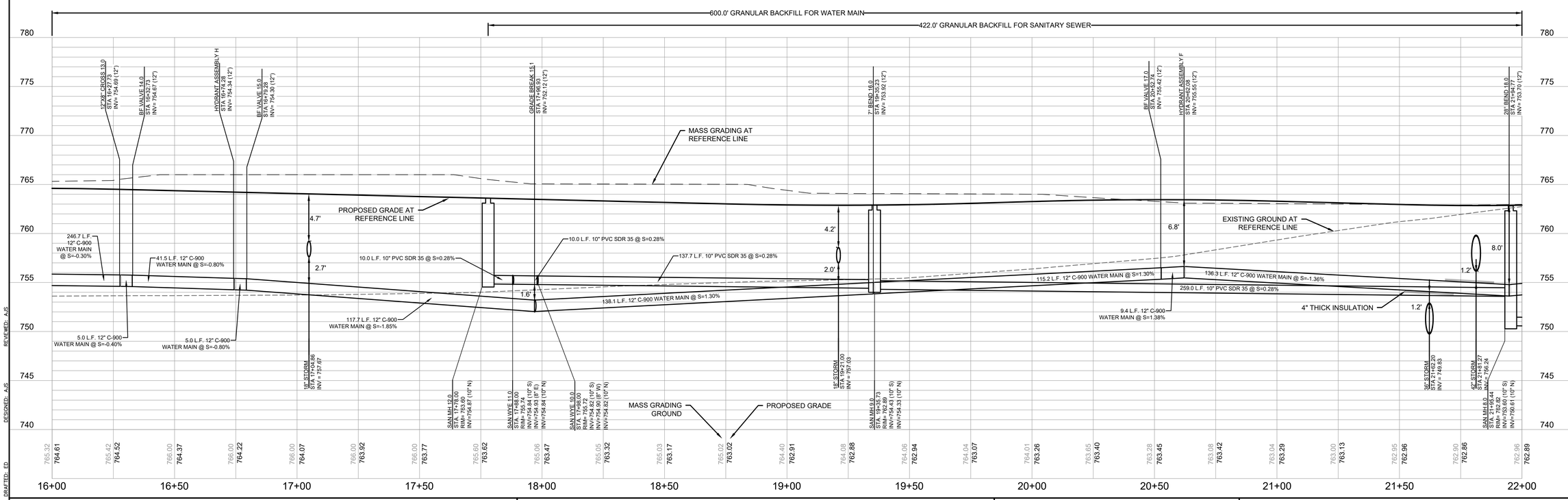
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

www.pinnacle-engr.com

LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM SEWER CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- PRECAST CONCRETE FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- SANITARY SEWER
- STORM SEWER
- DRAIN TILE





FOR REVIEW

UTILITY PLAN AND PROFILE

© COPYRIGHT 2019

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

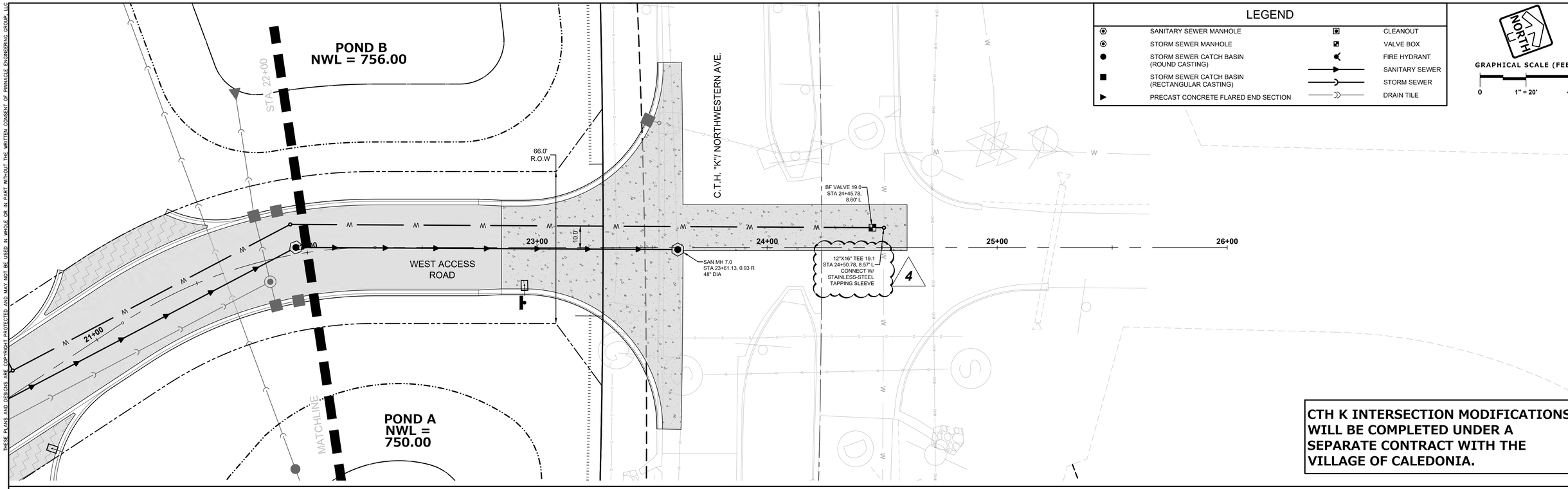
1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

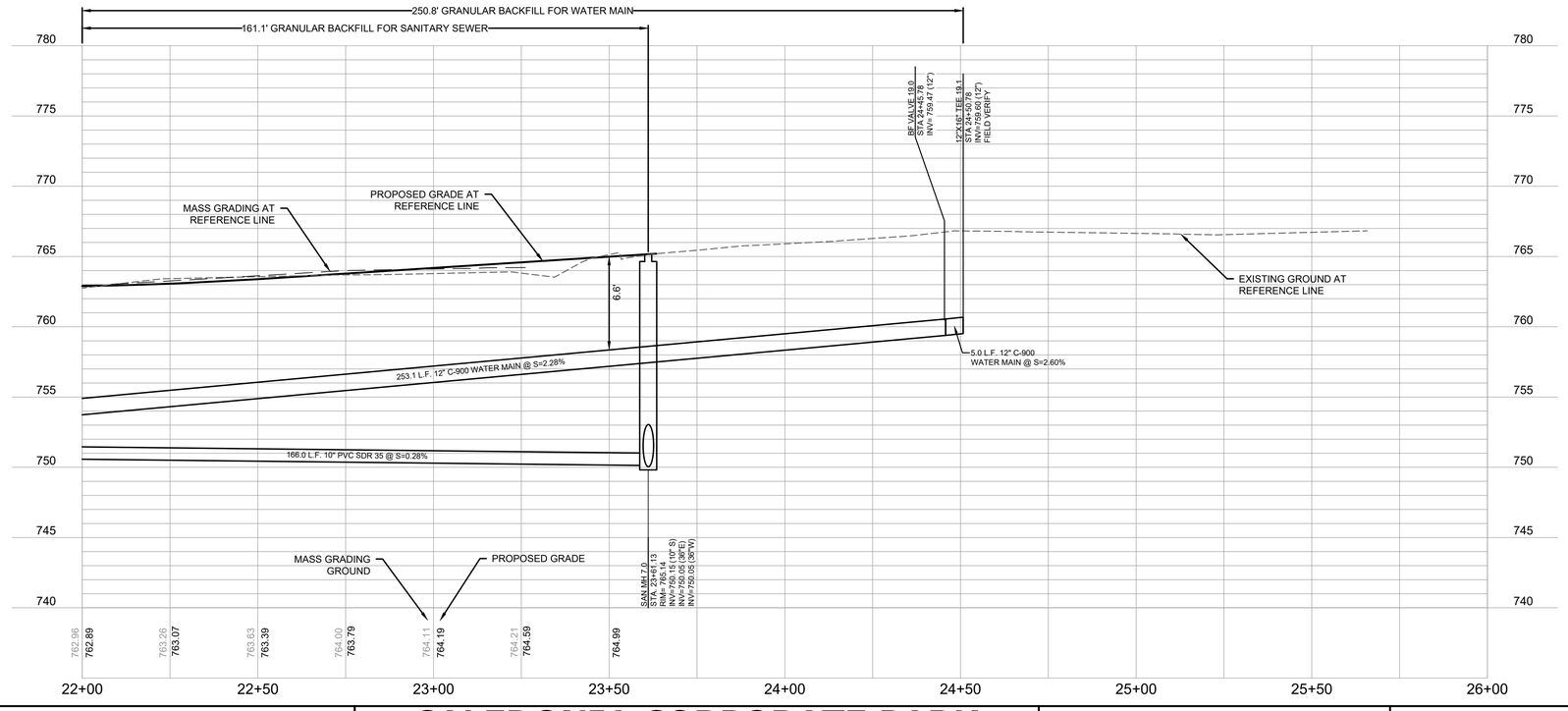
SHEET
C-47
C-59

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.



PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-48
C-59

©COPYRIGHT 2019

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

FOR REVIEW ONLY

UTILITY PLAN AND PROFILE

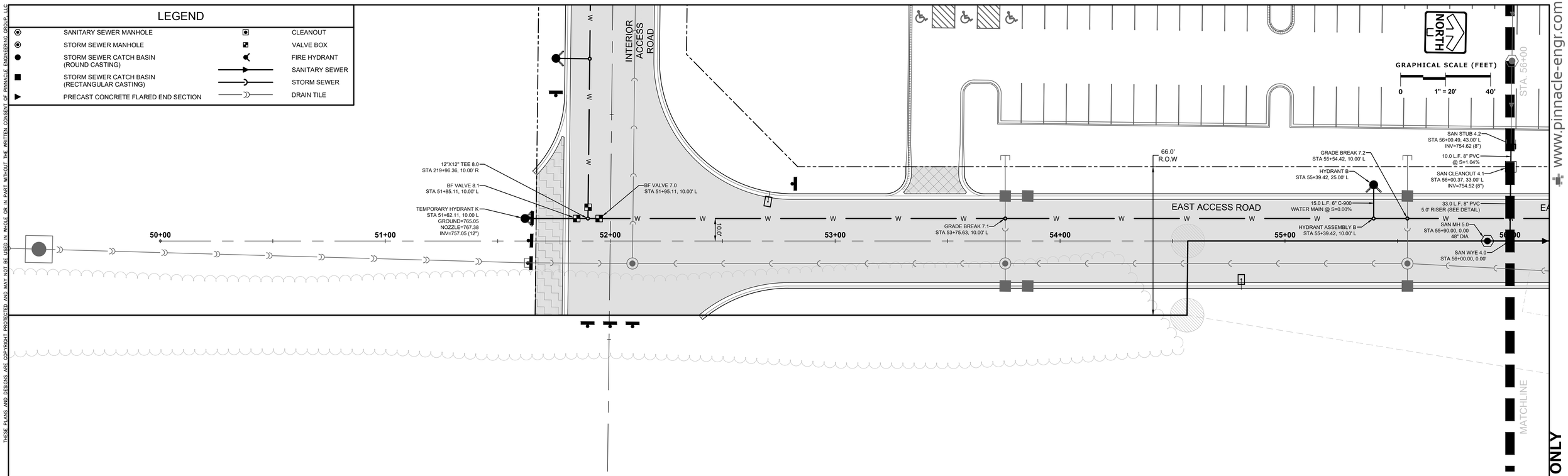
www.pinnacle-engr.com

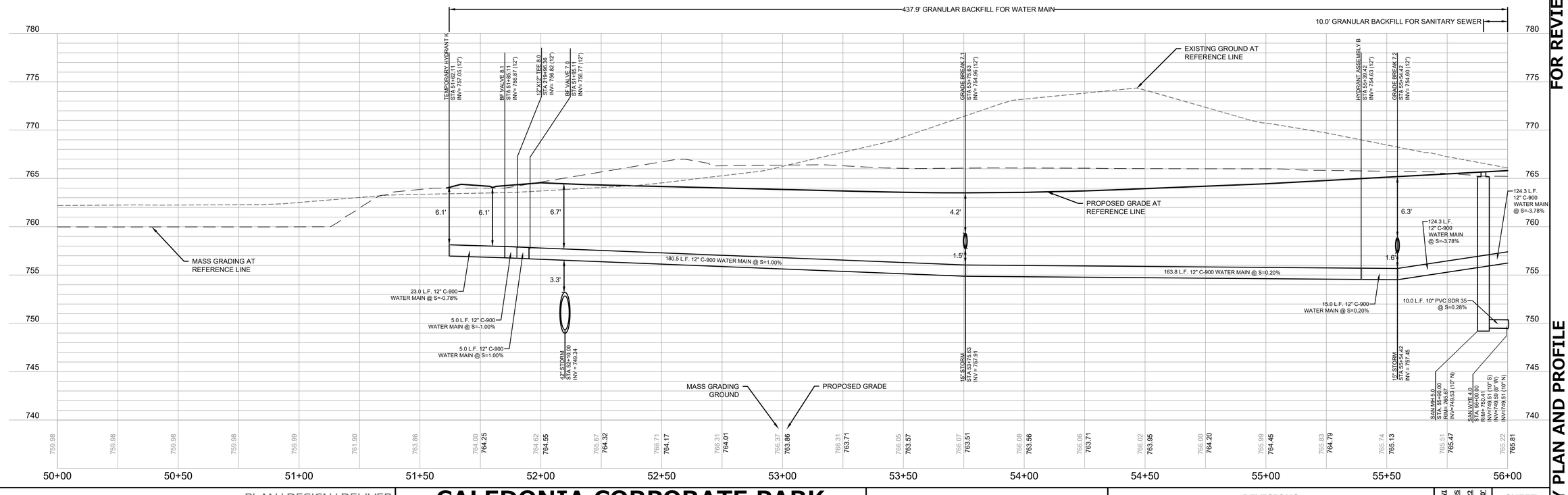
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

SANITARY SEWER MANHOLE	CLEANOUT
STORM SEWER MANHOLE	VALVE BOX
STORM SEWER CATCH BASIN (ROUND CASTING)	FIRE HYDRANT
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)	SANITARY SEWER
PRECAST CONCRETE FLARED END SECTION	STORM SEWER
	DRAIN TILE





FOR REVIEW

UTILITY PLAN AND PROFILE

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

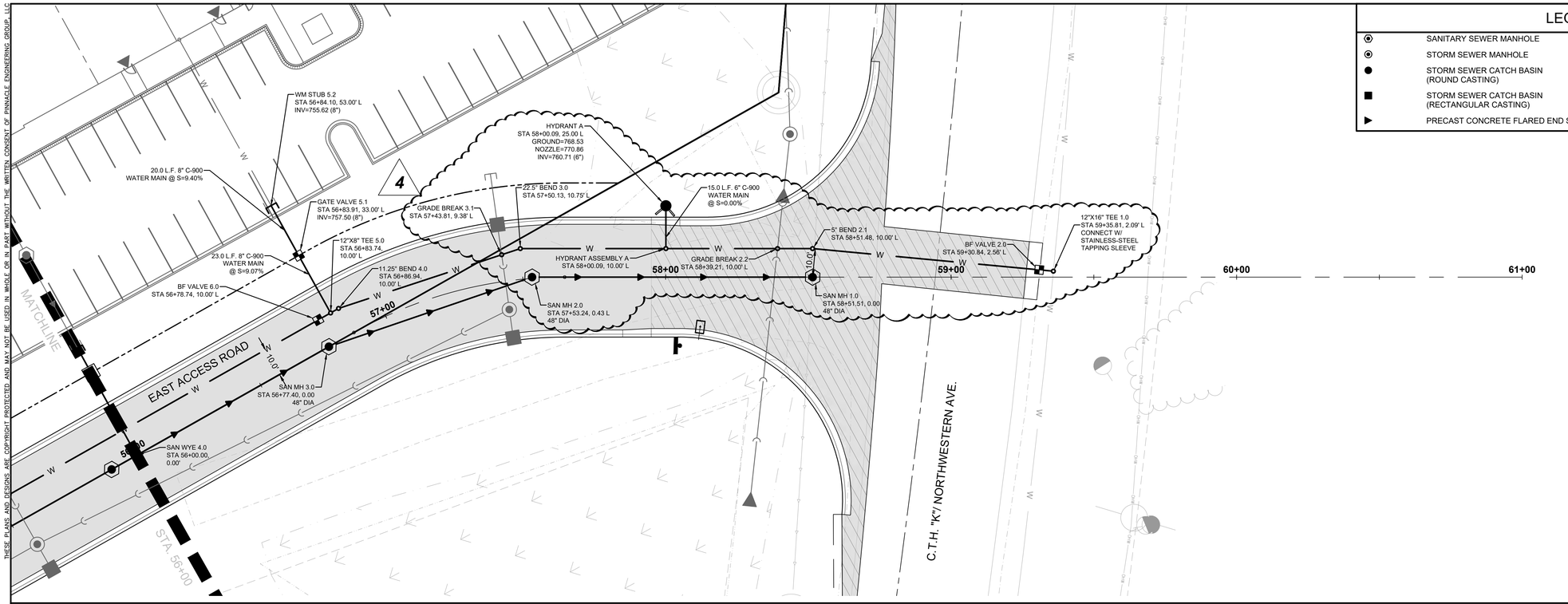
SHEET
C-49
C-59

©COPYRIGHT 2019

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



LEGEND

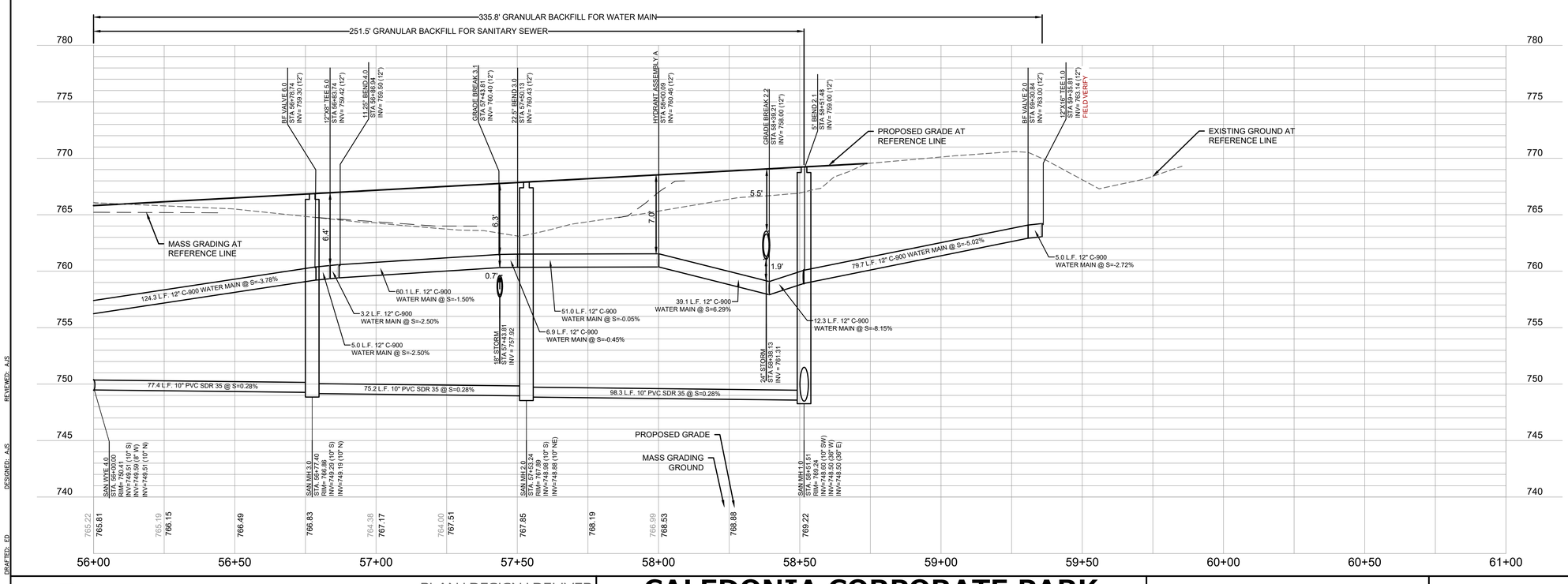
SANITARY SEWER MANHOLE		CLEANOUT	
STORM SEWER MANHOLE		VALVE BOX	
STORM SEWER CATCH BASIN (ROUND CASTING)		FIRE HYDRANT	
STORM SEWER CATCH BASIN (RECTANGULAR CASTING)		SANITARY SEWER	
PRECAST CONCRETE FLARED END SECTION		STORM SEWER	
		DRAIN TILE	

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

CTH K INTERSECTION MODIFICATIONS WILL BE COMPLETED UNDER A SEPARATE CONTRACT WITH THE VILLAGE OF CALEDONIA.



FOR REVIEW ONLY

UTILITY PLAN AND PROFILE

www.pinnacle-engr.com

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

UTILITY PLAN AND PROFILE

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-50
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY UTILITY PLAN AND PROFILE.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

NOTES:

1. COVER CONFLICTING EXISTING SIGNS AS NEEDED.
2. CONTRACTOR SHALL USE FLAGGING FOR TRAFFIC CONTROL FOR UTILITY WORK (WISDOT SDD 15C12-A).

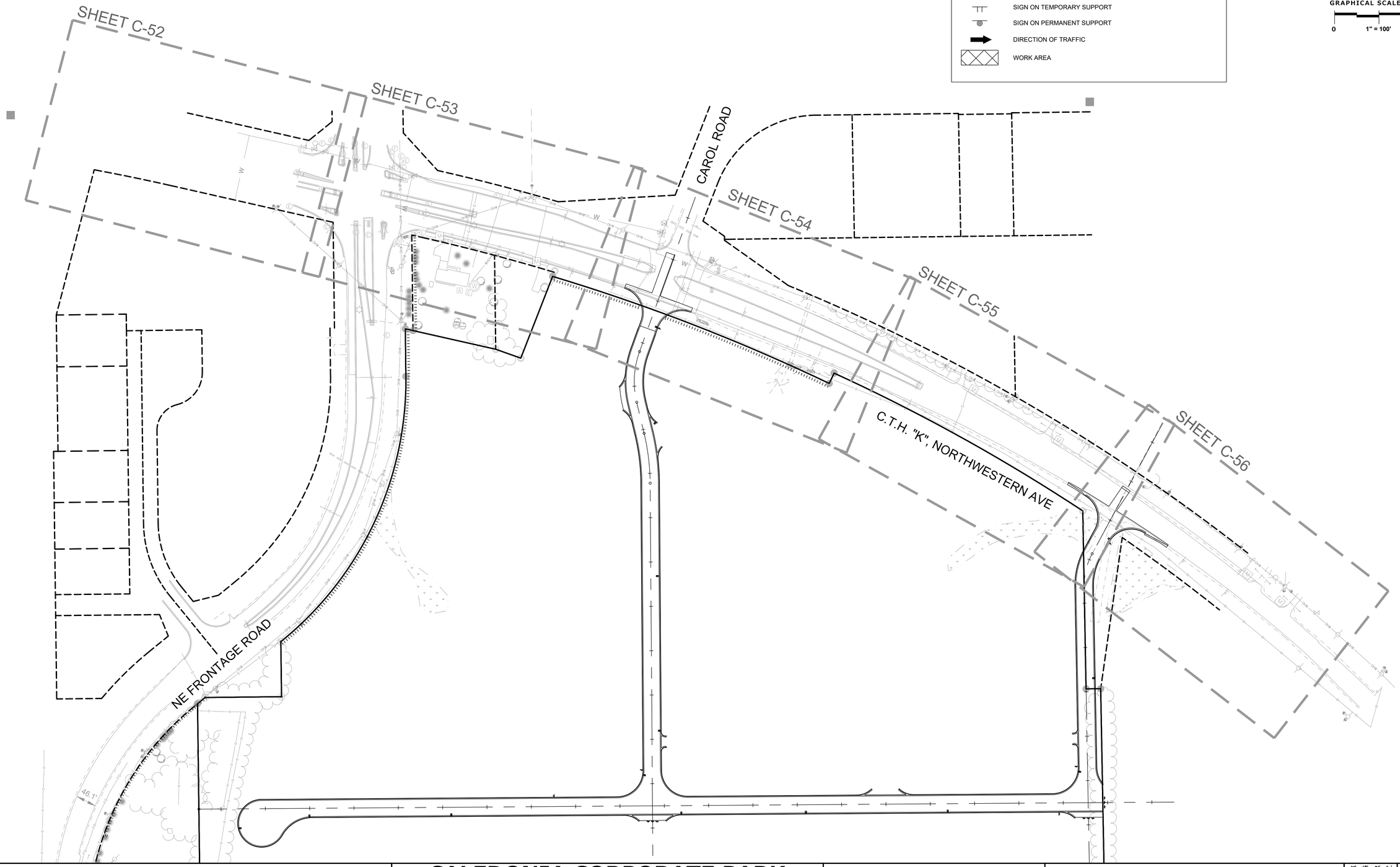
LEGEND

- TYPE III BARRICADE WITH SIGN & TWO "TYPE A" FLASHING LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 100' 200'



www.pinnacle-engr.com

FOR REVIEW ONLY

TRAFFIC CONTROL OVERVIEW

DRAFTED: ED DESIGNED: AJS REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

TRAFFIC CONTROL OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 100'

SHEET C-51 C-59

©COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TRAFFIC CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

- TYPE III BARRICADE WITH SIGN & TWO "TYPE A" FLASHING LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

NOTES:

1. COVER CONFLICTING EXISTING SIGNS AS NEEDED.
2. CONTRACTOR SHALL USE FLAGGING FOR TRAFFIC CONTROL FOR UTILITY WORK (WISDOT SDD 15C12-A).

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

ROAD WORK AHEAD W20.1A

RIGHT LANE CLOSED AHEAD W20.5A

W4-2R 36"X36"

C.T.H."K", NORTHWESTERN AVE

350'

350'

350'

MATCHLINE

MATCHLINE

www.pinnacle-engr.com

FOR REVIEW ONLY

TRAFFIC CONTROL

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

TRAFFIC CONTROL

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

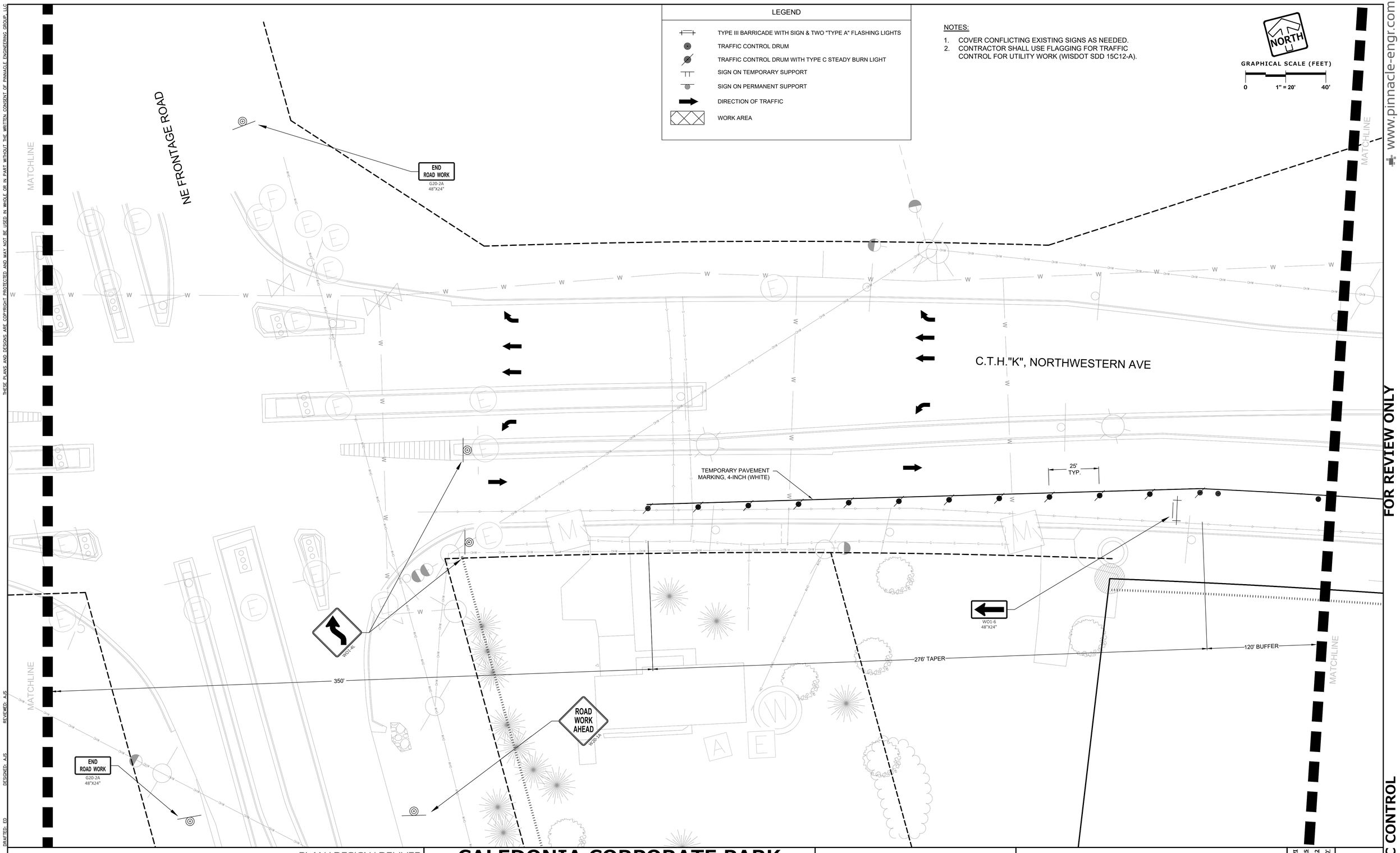
PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-52
C-59

©COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TRAFFIC CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



FOR REVIEW ONLY

www.pinnacle-engr.com

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

TRAFFIC CONTROL

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM: AJS
START DATE: 04/20/22
SCALE: 1" = 20'

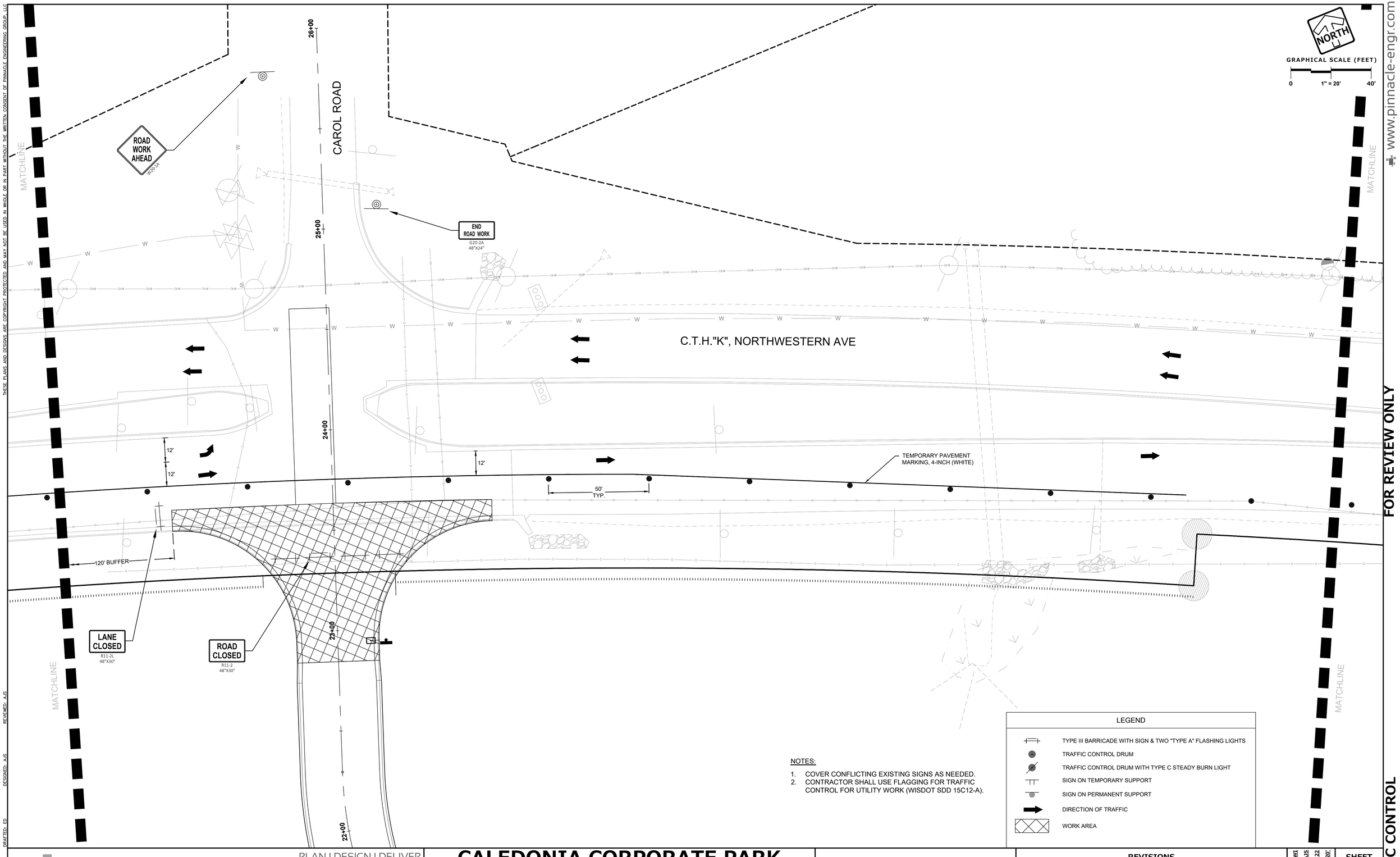
SHEET
C-53
C-59

TRAFFIC CONTROL

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TRAFFIC CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



NOTES:

1. COVER CONFLICTING EXISTING SIGNS AS NEEDED.
2. CONTRACTOR SHALL USE FLAGGING FOR TRAFFIC CONTROL FOR UTILITY WORK (WISDOT SDD 15C12-A).

FOR REVIEW ONLY

www.pinnacle-engr.com

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

TRAFFIC CONTROL

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM: AJS
START DATE: 04/20/22
SCALE: 1" = 20'

SHEET
C-54
C-59

TRAFFIC CONTROL

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TRAFFIC CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

LEGEND

- TYPE III BARRICADE WITH SIGN & TWO "TYPE A" FLASHING LIGHTS
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

NOTES:

1. COVER CONFLICTING EXISTING SIGNS AS NEEDED.
2. CONTRACTOR SHALL USE FLAGGING FOR TRAFFIC CONTROL FOR UTILITY WORK (WISDOT SDD 15C12-A).

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

MATCHLINE

C.T.H."K", NORTHWESTERN AVE

TEMPORARY PAVEMENT MARKING, 4-INCH (WHITE)

50' TYP.

335' BUFFER

60+00

59+00

58+00

57+00

www.pinnacle-engr.com

FOR REVIEW ONLY

TRAFFIC CONTROL

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

TRAFFIC CONTROL

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

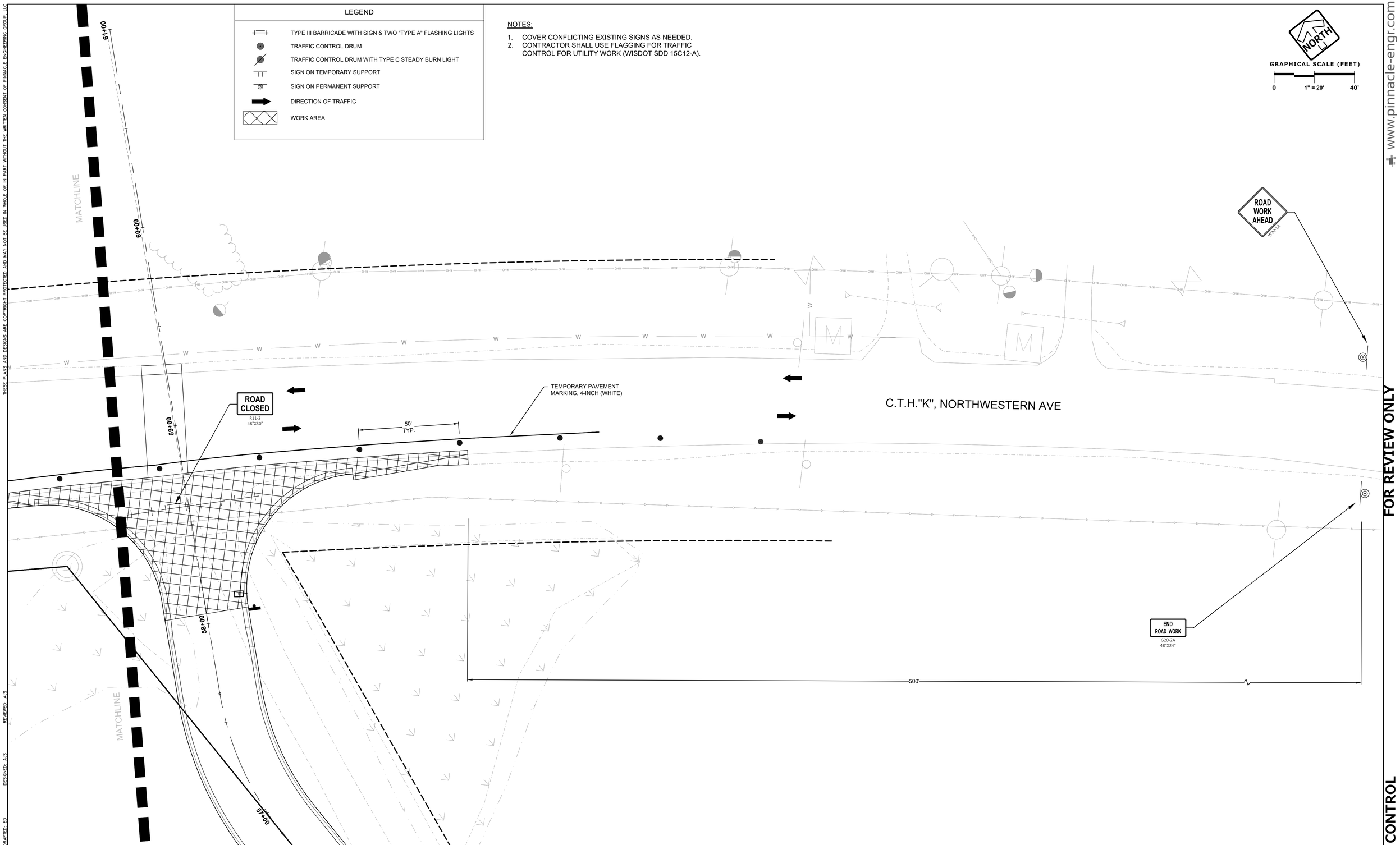
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-55
C-59

©COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TRAFFIC CONTROL.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

TRAFFIC CONTROL

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
C-56
C-59

DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 TRAFFIC CONTROL.DWG

© COPYRIGHT 2019

FOR REVIEW ONLY

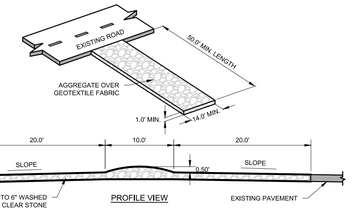
TRAFFIC CONTROL

www.pinnacle-engr.com

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

EROSION CONTROL SPECIFICATIONS & REQUIREMENTS

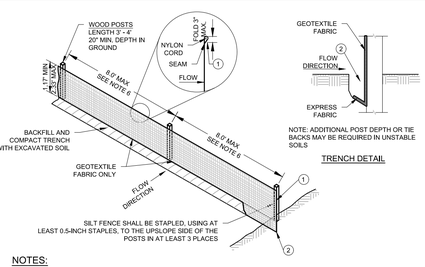
1. ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT (WPDES PERMIT NO. WI-S067831-4) FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMPs). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF AND UNDERSTAND THE BMP's PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
2. QUALIFIED PERSONNEL: (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH OR MORE PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERNAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH THE GENERAL PERMIT CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
3. POST WNDR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
4. KEEP COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
5. MODIFICATIONS TO THE APPROVED SWAPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMPS. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
6. OWNER/CONTRACTOR/DESIGN ENGINEER IS RESPONSIBLE FOR ROUTINE SITE INSPECTIONS AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR GREATER. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
7. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
8. WHEN POSSIBLE: PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL.
9. REFER TO THE WDNR STORMWATER CONSTRUCTION TECHNICAL STANDARDS.
10. INSTALL PERIMETER EROSION CONTROLS AND ROCK TRACKING PAD CONSTRUCTION ENTRANCES PRIOR TO ANY LAND-DISTURBUNG ACTIVITIES, INCLUDING CLEARING AND GRUBBING. USE WDNR TECHNICAL STANDARD STONE TRACKING PAD AND TIRE WASHING #1057 FOR ROCK CONSTRUCTION ENTRANCES.
11. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION. COMPLY WITH WDNR TECHNICAL STANDARD STORM DRAIN INLET PROTECTION FOR CONSTRUCTION SITES #1060.
12. WHERE POSSIBLE, STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA. CONDUCT TEMPORARY GRADING FOR EROSION CONTROL PER WDNR TECHNICAL STANDARD TEMPORARY GRADING PRACTICES FOR EROSION CONTROL #1067.
13. NOTIFY OWNER & ENGINEER IF DEWATERING IS SCHEDULED TO OCCUR IN AREAS OF SOIL AND/OR GROUNDWATER CONTAMINATION OR IF DEWATERING WILL OCCUR FROM A HIGH CAPACITY WELL (70 GPM OR MORE). DEWATERING ONLY AFTER THE APPROPRIATE WDNR DEWATERING DISCHARGE PERMIT HAS BEEN OBTAINED.
14. PUMPS MAY BE USED AS BYPASS DEVICES IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
15. PROVIDE ANTI-SCOUR PROTECTION AND MAINTAIN NON-EROSIVE FLOW DURING DEWATERING. LIMIT PUMPING TO EITHER (A) THE SEDIMENT BASIN/TRAP DESIGN DISCHARGE RATE, OR (B) THE BASIN DESIGN RELEASE RATE WITH THE CORRECTLY-FITTED HOSE AND GEOTEXTILE FILTER BAG. PERFORM DEWATERING OF ACCUMULATED SURFACE RUNOFF IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DEWATERING #1061.
16. COMPLETE AND STABILIZE SEDIMENT BASINS/TRAPS OR WET PONDS PRIOR TO MASS LAND DISTURBANCE TO CONTROL RUNOFF DURING CONSTRUCTION. REMOVE SEDIMENT AS NEEDED TO MAINTAIN 3 FEET OF DEPTH TO THE OUTLET, AND PROPERLY DISPOSE OF SEDIMENT REMOVED DURING MAINTENANCE (REFER TO NR 528). CONSTRUCT AND MAINTAIN THE SEDIMENT BASIN PER WDNR TECHNICAL STANDARD SEDIMENT BASIN #1064 AND SEDIMENT TRAP #1063.
17. CONSTRUCT AND PROTECT THE BIOINFLTRATION BASIN AND VEGETATION FROM RUNOFF AND SEDIMENT DURING CONSTRUCTION. REFERENCE THE WDNR TECHNICAL STANDARD BIORETENTION FOR INFILTRATION #1004. BIOINFILTRATION MAY BE USED AS A SEDIMENT BASIN DURING CONSTRUCTION. DO NOT EXCAVATE FINAL 1' OR INSTALL STONE/ENGINEERED MEDIA UNTIL UPSTREAM AREA IS STABILIZED. WHEN THIS ACCOMPLISHED, REMOVE THE FINAL 1' PLUS ANY SOIL WHICH APPEARS TO BE IMPACTED BY SEDIMENT AND COMPLETE CONSTRUCTION OF BIOINFILTRATION AREA.
18. INSTALL AND MAINTAIN SILT FENCING PER WDNR TECHNICAL STANDARD SILT FENCE #1056. REMOVE SEDIMENT FROM BEHIND SILT FENCES AND SEDIMENT BARRIERS BEFORE SEDIMENT REACHES A DEPTH THAT IS EQUAL TO ONE-HALF OF THE FENCE AND/OR BARRIER HEIGHT.
19. REPAIR BREAKS AND GAPS IN SILT FENCES AND BARRIERS IMMEDIATELY. REPLACE DECOMPOSING STRAW BALES (TYPICAL BALE LIFE IS 3 MONTHS). LOCATE, INSTALL AND MAINTAIN STRAW BALES PER WDNR TECHNICAL STANDARD DITCH CHECKS #1062.
20. INSTALL AND MAINTAIN FILTER SOCK IN ACCORDANCE WITH WDNR TECHNICAL STANDARD INTERIM MANUFACTURED PERIMETER CONTROL AND SLOPE INTERRUPTION PRODUCTS #1071.
21. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND STOCKPILES AS NEEDED WITH SILT FENCE OR OTHER PERIMETER CONTROL IF STOCKPILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
22. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS OR ANNUAL RYE, AS APPROPRIATE FOR REGION AND SOIL TYPE. OCTOBER 15 THROUGH COLD WEATHER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.
23. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.
24. SWEEP/CLEAN UP ALL SEDIMENT/TRASH THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS BEFORE THE END OF THE SAME WORKDAY OR AS DIRECTED BY THE MUNICIPALITY. SEPARATE SWEPT MATERIALS (SOILS AND TRASH) AND DISPOSE OF APPROPRIATELY.
25. OWNER IS RESPONSIBLE FOR CONTROLLING DUST PER WDNR TECHNICAL STANDARD DUST CONTROL ON CONSTRUCTION SITES #1068.
26. PROPERLY DISPOSE OF ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTE OR OTHER CONSTRUCTION MATERIALS) AND DO NOT ALLOW THESE MATERIALS TO BE CARRIED BY RUNOFF INTO THE RECEIVING CHANNEL.
27. COORDINATE WITH THE OWNER, ENGINEER AND DNR REPRESENTATIVE TO UPDATE THE LAND DISTURBANCE PERMIT TO INDICATE THE ANTICIPATED OR LIKELY DISPOSAL LOCATIONS FOR ANY EXCAVATED SOILS OR CONSTRUCTION DEBRIS THAT WILL BE HAULED OFF-SITE FOR DISPOSAL. THE DEPOSITED OR STOCKPILED MATERIAL NEEDS TO INCLUDE PERIMETER SEDIMENT CONTROL MEASURES (SUCH AS SILT FENCE, HAY BALES, FILTER SOCKS OR COMPACTED EARTHEN BERMS)
28. FOR NON-CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WISDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD NON-CHANNEL EROSION MAT #1052.
29. FOR CHANNELIZED FLOW ON DISTURBED OR CONSTRUCTED SLOPES, PROVIDE CLASS AND TYPE MATTING FOR THE SPECIFICATIONS UNLESS SPECIFIED OTHERWISE ON THE PLANS. SELECT EROSION MATTING FROM APPROPRIATE MATRIX IN WDOT'S WISDOT PRODUCT ACCEPTABILITY LIST (PAL); INSTALL AND MAINTAIN PER WDNR TECHNICAL STANDARD CHANNEL EROSION MAT #1053.
30. MAKE PROVISIONS FOR WATERING DURING THE FIRST 8 WEEKS FOLLOWING SEEDING OR PLANTING OF DISTURBED AREAS WHENEVER MORE THAN 7 CONSECUTIVE DAYS OF DRY WEATHER OCCUR.
31. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES (SUCH AS TEMPORARY SEDIMENT BASINS, DITCH CHECKS, EROSION CONTROL MATTING, SILT FENCING, FILTER SOCKS, WATTLES, SWALES, ETC) OR AS DIRECTED BY OWNER, MUNICIPALITY, OR DNR REPRESENTATIVE.
32. OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE WDNR REMEDIATION AND WASTE MANAGEMENT REQUIREMENTS FOR HANDLING AND DISPOSING OF CONTAMINATED MATERIALS. SITE-SPECIFIED INFORMATION FOR AREAS WITH KNOWN OR SUSPECTED SOIL AND/OR GROUNDWATER CONTAMINATION CAN BE FOUND IN WNDR'S BUREAU OF REMEDIATION AND REDEVELOPMENT TRACKING SYSTEM PUBLIC DATABASE.
33. MAINTAIN SOIL EROSION CONTROL DEVICE THROUGH THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS ARE FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCE ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
34. NOTIFY THE OWNER IMMEDIATELY IF THERE IS A DISCHARGE OF SEDIMENT AND/OR OTHER CONTAMINANTS.



NOTES:

1. ALL TRACKING PAD MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1057.
2. TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY TRAFFIC LEAVING THE SITE. CONTRACTOR SHALL VERIFY LOCATION WITH OWNER.
3. THE AGGREGATE FOR TRACKING PADS SHALL BE 3 TO 6 INCH CLEAR OR WASHED STONE. ALL MATERIALS TO BE RETAINED ON A 3-INCH SIEVE
4. THE AGGREGATE SHALL BE PLACED IN A LAYER AT LEAST 12-INCHES THICK, ON SITES WHERE SATURATED CONDITIONS ARE EXPECTED DURING THE LIFE OF THE PAD. THE PAD SHALL BE UNDERLAIN WITH GEOTEXTILE FABRIC WHICH MEETS MATERIAL SPECIFICATION 592 GEOTEXTILE, TABLE 1 OR 2, CLASS I, II OR IV, TO PREVENT MIGRATION OF UNDERLYING SOILS INTO THE STONE LAYER.
5. THE TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT. MINIMUM WIDTH IS 14 FEET FOR ONE-WAY TRAFFIC AND 20 FEET FOR TWO-WAY TRAFFIC, WITH AN ADDITIONAL INCREASE OF 4 FEET FOR TRAILER TRAFFIC. THE TRACKING PAD SHALL BE A MINIMUM 50-FEET LONG.
6. ANY SEDIMENT TRACKED ONTO A PUBLIC OR PRIVATE ROAD SHOULD BE REMOVED BY STREET CLEANING, NOT FLUSHING, AT THE END OF EACH WORKING DAY.
7. TRACKING PADS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24-HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5-INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
8. THE TRACKING PAD PERFORMANCE SHALL BE MAINTAINED BY SCRAPING OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.

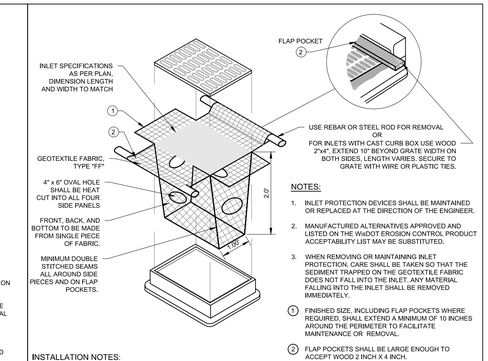
CONSTRUCTION ENTRANCE



NOTES:

1. ALL SILT FENCE MATERIALS AND INSTALLATION SHALL BE IN CONFORMANCE WITH WI DNR TECHNICAL STANDARD 1056.
2. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. SILT FENCE SHALL BE ANCHORED BY SPREADING AT LEAST 8-INCHES OF FABRIC IN A 4-INCH WIDE AND 6-INCH DEEP TRENCH OR 6-INCH DEEP V-TRENCH ON THE UPSLOPE SIDE OF THE FENCE. TRENCHES SHALL NOT BE EXCAVATED WIDER OR DEEPER THAN NECESSARY FOR PROPER INSTALLATION.
4. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
5. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1.125-INCHES x 1.125-INCHES OF DRIED OAK OR HICKORY.
6. SILT FENCE TO EXTEND ABOVE THE TOP OF PIPE, WHERE APPLICABLE.
7. POST SPACING SHALL BE SELECTED BASED ON GEOTEXTILE FABRIC (8-FEET FOR WOVEN AND 3-FEET FOR NON-WOVEN).

SILT FENCE



NOTES:

1. INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.
2. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE WinDOT EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
3. 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.

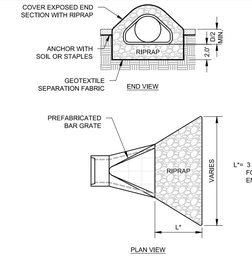
(1) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

(2) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH.

INSTALLATION NOTES:

1. DO NOT INSTALL INLET PROTECTION TYPE "D" IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
2. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.
3. 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 INCHES. WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCHES CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4 INCHES FROM THE BOTTOM OF THE BAG.

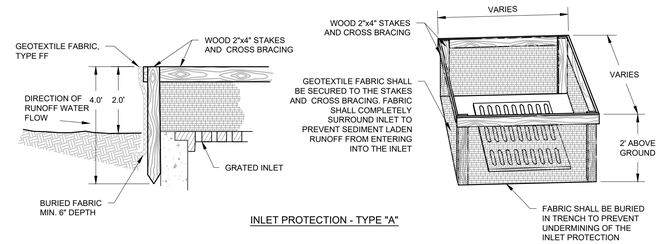
INLET PROTECTION - TYPE D



NOTES:

1. RIP RAP AND GEOTEXTILE FABRIC SHALL MEET REQUIREMENTS FOR STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

RIP RAP AT END SECTIONS



INLET PROTECTION - TYPE "A"

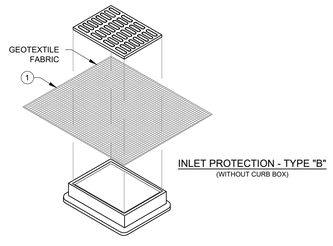
NOTES:

1. GEOTEXTILE FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I, WITH AN EOS OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
2. 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 POCKET WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

(2) FOR INLET PROTECTION, TYPE "C" (WITH CURB BOX), AN ADDITIONAL 18 INCHES 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.

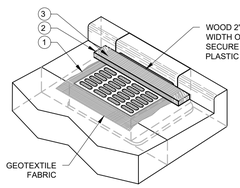


INLET PROTECTION - TYPE "B"
(WITHOUT CURB BOX)

TYPE "B" & "C" INSTALLATION NOTES

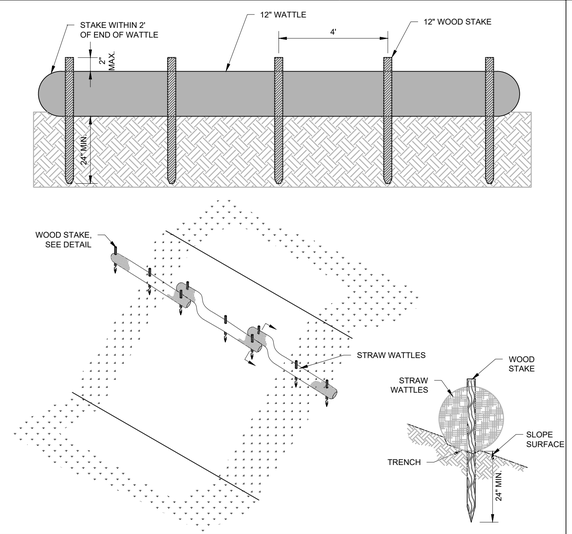
TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3 INCHES OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHODS TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.



INLET PROTECTION, TYPE "C"
(WITH CURB BOX)

INLET PROTECTION



STRAW WATTLE

FOR REVIEW ONLY

CONSTRUCTION DETAILS

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

CONSTRUCTION DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

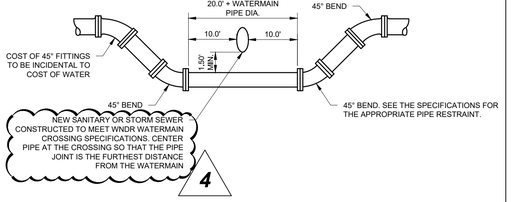
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE N.T.S.

SHEET
C-57
C-59

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 CONSTRUCTION DETAILS.DWG

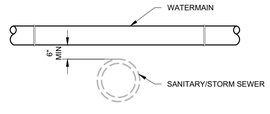
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



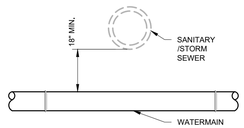
NOTES:

1. IN LIEU OF 45° BENDS, WATERMAIN DEPRESSION MAYBE CONSTRUCTED BY DEFLECTING THE WATERMAIN PER MANUFACTURER'S RECOMMENDATION TO ACHIEVE THE MINIMUM 16" OF VERTICAL SEPARATION.

WATER MAIN DEPRESSION



WATER MAIN OVER SANITARY/STORM SEWER

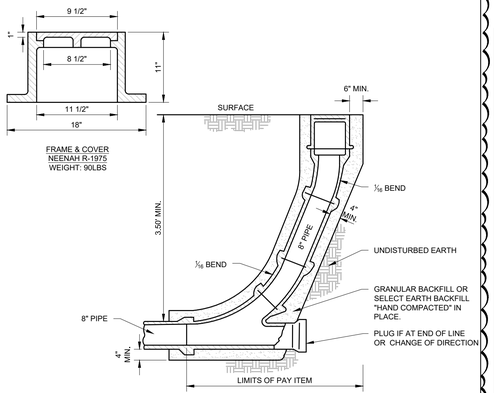


SANITARY/STORM SEWER OVER WATER MAIN

NOTES:

1. AT CROSSING, ONE FULL 18 FOOT LENGTH OF WATERMAIN SHALL BE CENTERED ON THE SEWER. MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 8 FEET.

WATER MAIN SEPARATION



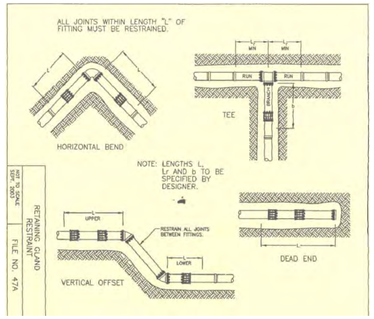
SANITARY SEWER CLEANOUT STRUCTURE

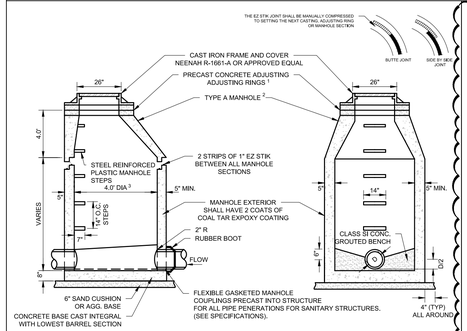
JOINT RESTRAINT DISTANCE (FT) PER FITTING						
FITTING	4"	6"	8"	12"	16"	20"
HORIZONTAL BEND-11.25°(L)	5'	5'	5'	5'	8'	8'
HORIZONTAL BEND-22.5°(L)	8'	8'	8'	10'	10'	15'
HORIZONTAL BEND-45°(L)	10'	10'	12'	16'	20'	26'
HORIZONTAL BEND-90°(L)	16'	20'	25'	32'	40'	52'
VERTICAL BEND-11.25°-UPPER (L)	6'	6'	8'	10'	12'	14'
VERTICAL BEND-11.25°-LOWER (L)	4'	4'	4'	4'	4'	6'
VERTICAL BEND-22.5°-UPPER (L)	8'	10'	14'	18'	24'	28
VERTICAL BEND-22.5°-LOWER (L)	4'	5'	5'	8'	8'	8'
VERTICAL BEND-45°-UPPER (L)	12'	20'	26'	40'	50'	60'
VERTICAL BEND-45°-LOWER (L)	5'	5'	6	10'	12'	14'
*RESTRAIN LARGER SIZED REDUCER-DIA	–	25'×	50'×	60'×	80'×	130'×
REDUCER-DIA 6"(L)	–	–	25'×	60'×	100'×	125'×
REDUCER-DIA 8"(L)	–	–	–	50'×	80'×	120'×
REDUCER-DIA 12"(L)	–	–	–	–	50'×	100'×
REDUCER-DIA 16"(L)	–	–	–	–	–	50'×
DEAD END(A,L)	40'	40'	60'	90'	120'	150'
TEE OR CROSS-RUN	10'	10'	10'	20'	30'	40'
TEE-4"BRANCH(b)	8'	6'	6'	6'	6'	6'
TEE-6"BRANCH(b)	–	8'	6'	6'	6'	6'
TEE-8"BRANCH(b)	–	–	10'	6'	6'	6'
TEE-12"BRANCH(b)	–	–	–	12'	6	6
TEE-16"BRANCH(b)	–	–	–	–	30	10'
TEE-20"BRANCH(b)	–	–	–	–	–	50'

*RESTRAINED SLEEVE FITTINGS ARE NOT ALLOWED WITHIN THE ABOVE DISTANCES. LENGTHS REFER TO L, Lr, OR b IN DETAIL

JOINT RESTRAINT DISTANCE PER FITTING

STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN
FILE NO. 47A

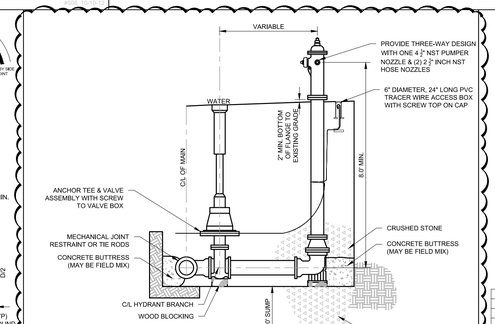




NOTES:

1. 1" EZ STIKE BETWEEN ALL ADJUSTMENT RINGS, BETWEEN TOP ADJUSTMENT RINGS AND FRAME, USE INTERNAL ADAPTOR SEAL RING, ALL JOINTS MUST BE BACKPLASTERED INSIDE AND OUT.
2. ALL BARREL JOINTS MUST HAVE EXTERIOR SEALS.
3. CHIMNEY SEALS SHALL BE INTERNAL/EXTERNAL SEALS.
4. STRUCTURE TO BE 4'-0" DIA UNLESS OTHERWISE INDICATED ON THE PLANS.

SANITARY MANHOLE

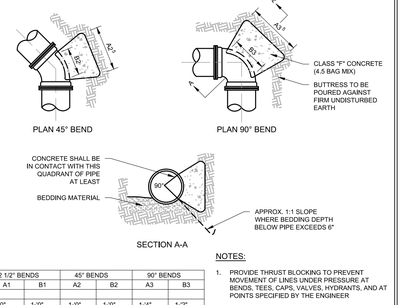


NOTES:

1. MEGALUG RESTRAINING GLANDS ON ALL MECHANICAL JOINTS, THE BOLTS & NUTS ARE TO BE HIGH STRENGTH LOW ALLOY STEEL (CORTEN) AS PER SECTION 11.6.5 OF A.W.W.A. C-111.
2. THE FOLLOWING HYDRANTS SHALL BE ALLOWED:

   "STANDARD" WATEROUS PACER MODEL WB-67
   MAIN VALVE OPENING: 5 ½"
   MINIMUM BARREL DIAMETER: 7"
   NOZZLE CAPS WITH NUT THE SAME SIZE AS THE OPERATING NUT AND CHAIN

FIRE HYDRANT

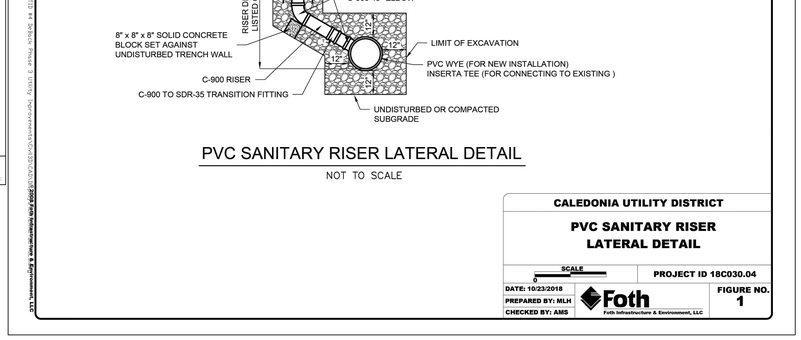


PIPE SIZE	22 1/2° BENDS A1	22 1/2° BENDS B1	45° BENDS A2	45° BENDS B2	90° BENDS A3	90° BENDS B3
6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-4"	1'-2"
8"	1'-0"	1'-0"	1'-4"	1'-2"	1'-10"	1'-6"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-8"	2'-6"	2'-4"	3'-10"	2'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-6"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

NOTES:

1. PROVIDE THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE ENGINEER
2. ALL BLOCKING SHALL BE WITH POURED CLASS SI CONCRETE AGAINST UNDISTURBED VERTICAL EARTH SURFACE
3. THRUST BLOCKS TO BE AT ALL BENDS 11½° OR GREATER
4. THE COST OF INSTALLING THE THRUST BLOCK SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE WATER
5. DIMENSION A2 & A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH M.J BOLTS

THRUST BLOCK



NOTE:
INSTALL VALVE BOX WITH LABEL "SEWER" OVER CLEANOUT, IN PLACE OF FROST SLEEVE, IF CLEANOUT IS IN ASPHALT

ALL BEDDING, COVER & BACKFILL MATERIAL SHALL BE CRUSHED STONE CHIPS CONFORMING TO PARAGRAPH 8.43.2(a) OF THE STANDARD SPECIFICATIONS FOR SEWER & WATER CONSTRUCTION. CONTRACTOR SHALL BE COMPENSATED AS "GRANULAR BACKFILL" PER PLANS.

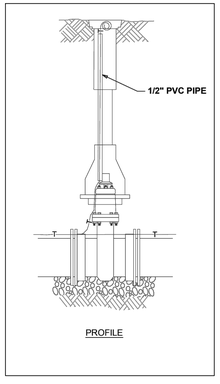
PVC SANITARY RISER LATERAL DETAIL

NOT TO SCALE

CALEDONIA UTILITY DISTRICT

PVC SANITARY RISER LATERAL DETAIL

SCALE: 0 | PROJECT ID 18C030.04
DATE: 10/23/2018 | FIGURE NO. 1
PREPARED BY: MLH
CHECKED BY: AMS
Foth Infrastructure & Environment, LLC



TRACER WIRE AT GATE & BUTTERFLY VALVES

© COPYRIGHT 2019 Pinnacle Engineering & Environment, LLC

REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

FOR REVIEW ONLY

CONSTRUCTION DETAILS

www.pinnacle-engr.com

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

CONSTRUCTION DETAILS

REVISIONS

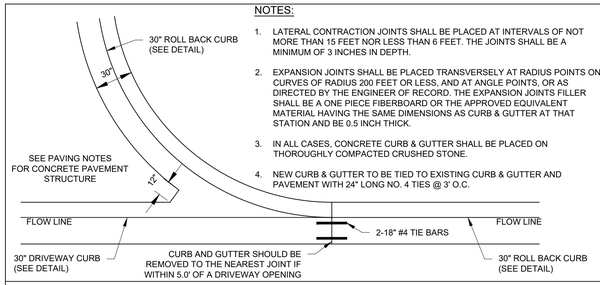
1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PES PM: AJS
START DATE: 04/20/22
SCALE: N.T.S.

SHEET
C-58
C-59

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 CONSTRUCTION DETAILS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

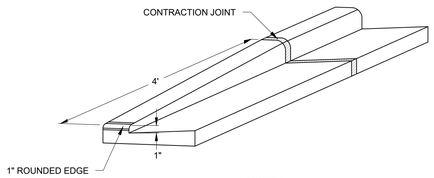


NOTES:

1. LATERAL CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF NOT MORE THAN 15 FEET NOR LESS THAN 6 FEET. THE JOINTS SHALL BE A MINIMUM OF 3 INCHES IN DEPTH.
2. EXPANSION JOINTS SHALL BE PLACED TRANSVERSELY AT RADIUS POINTS ON CURVES OF RADIUS 200 FEET OR LESS, AND AT ANGLE POINTS, OR AS DIRECTED BY THE ENGINEER OF RECORD. THE EXPANSION JOINTS FILLER SHALL BE A ONE PIECE FIBERBOARD OR THE APPROVED EQUIVALENT MATERIAL HAVING THE SAME DIMENSIONS AS CURB & GUTTER AT THAT STATION AND BE 0.5 INCH THICK.
3. IN ALL CASES, CONCRETE CURB & GUTTER SHALL BE PLACED ON THOROUGHLY COMPACTED CRUSHED STONE.
4. NEW CURB & GUTTER TO BE TIED TO EXISTING CURB & GUTTER AND PAVEMENT WITH 24" LONG NO. 4 TIES @ 3' O.C.

DRIVEWAY ENTRANCE

#633 2/20/15

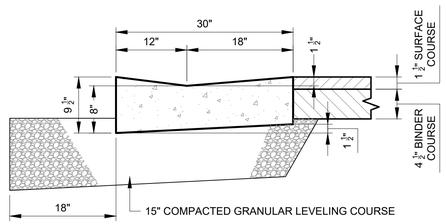


NOTES:

1. CONTRACTION JOINTS SHALL BE PLACED EVERY 10 FEET
2. EXPANSION JOINTS (3/4" EXPANSION FIBER MATERIAL) SHALL BE PLACED EVERY 300 FEET AND AT EVERY PC/PT AND 3 FEET FROM STRUCTURES

TAPER CURB HEAD

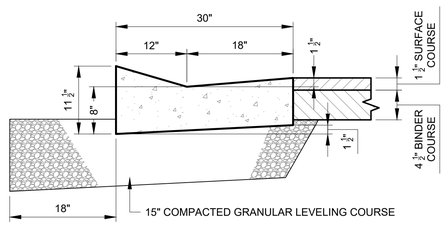
#623 10-11-12



NOTES:

1. TOOLED JOINTS SHALL BE PLACED EVERY 10'.
2. FELT EXPANSION JOINTS SHALL BE PLACED AT DISTANCE OF 300' & AT ALL PT'S & PC'S & 3 FT ON BOTH SIDES OF CATCH BASINS

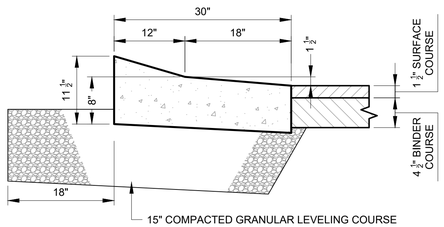
30" DRIVEWAY CURB



NOTES:

1. TOOLED JOINTS SHALL BE PLACED EVERY 10'.
2. FELT EXPANSION JOINTS SHALL BE PLACED AT DISTANCE OF 300' & AT ALL PT'S & PC'S & 3 FT ON BOTH SIDES OF CATCH BASINS

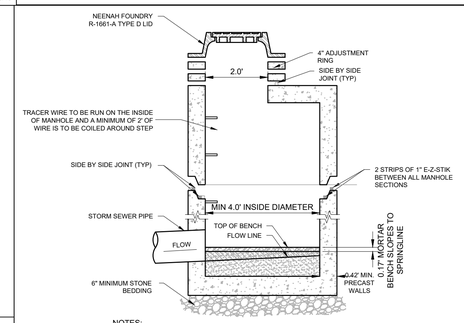
30" ROLL BACK CURB



NOTES:

1. TOOLED JOINTS SHALL BE PLACED EVERY 10'.
2. FELT EXPANSION JOINTS SHALL BE PLACED AT DISTANCE OF 300' & AT ALL PT'S & PC'S & 3 FT ON BOTH SIDES OF CATCH BASINS

30" REVERSE ROLL BACK CURB

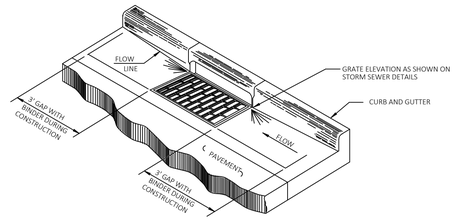


NOTES:

1. CLEAN UNDERSIDE OF ADJUSTING RING OR CAST IRON FRAME AND SET IN PLACE.
2. TUCK POINT MORTAR INTO ANNULAR CRACK AND BACKPLASTERED INSIDE AND OUTSIDE OF ALL JOINTS.
3. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT THE USE OF A FLAT TAPERED TOP.
4. MANHOLE CONSTRUCTION TO MEET REQUIREMENTS OF ASTM C478.
5. ECCENTRIC CONE SECTION OF MANHOLE TO BE SET OUTSIDE OF VEHICULAR WHEEL PATH NEAR OF ROADWAY.

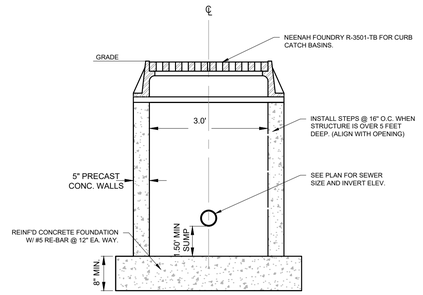
STORM SEWER MANHOLE

#606 06/28/16



(TYPE 3-H INLET SHOWN)

INTERIM CURB AND GUTTER AT INLET DURING CONSTRUCTION



NOTES:

1. EASY STICK, RUBBER GASKET OR APPROVED EQUIVALENT SHALL BE PLACED AT ALL JOINTS BETWEEN ADJUSTING RINGS FOR STORM CATCH BASINS.
2. THE FLAT TOP MAY BE USED IN LIEU OF THE TAPERED TOP WHEN FIELD CONDITIONS PROHIBIT USE OF A TAPERED TOP.

2' x 3' CATCH BASIN

REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

www.pinnacle-engr.com

FOR REVIEW ONLY

CONSTRUCTION DETAILS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com
PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING
WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

CONSTRUCTION DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

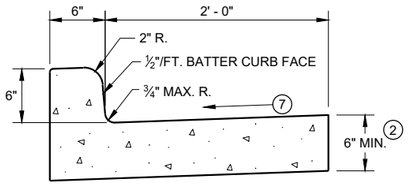
PEG JOB No. **1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
C-59
C-59

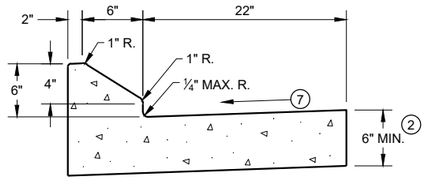
© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 CONSTRUCTION DETAILS.DWG

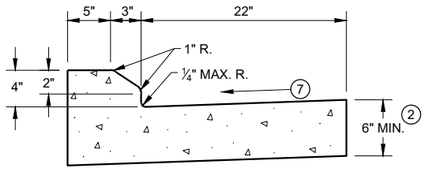
SDD 08D01-a Concrete Curb and Gutter



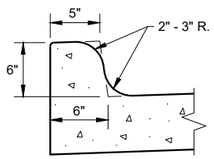
TYPES A (1) & D



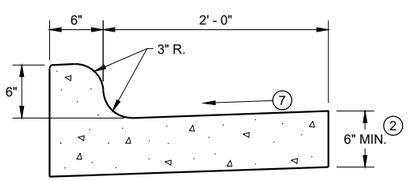
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

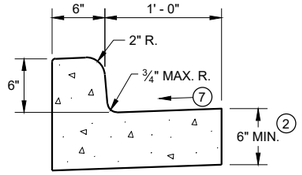


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



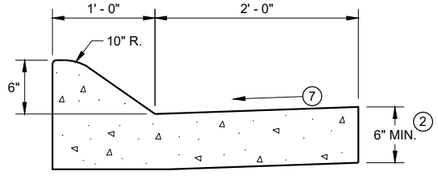
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

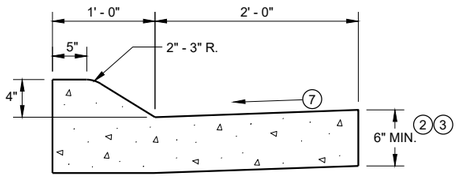


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

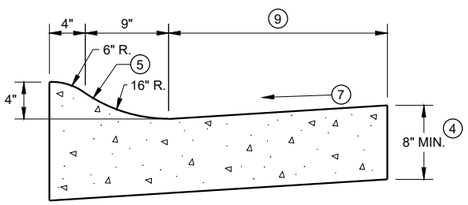


6" SLOPED CURB TYPES A (1) & D



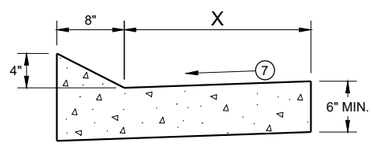
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

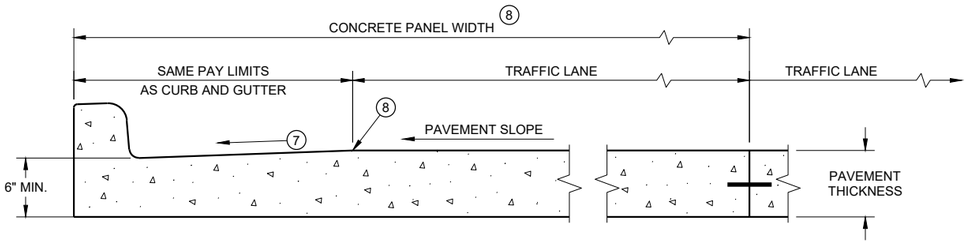


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

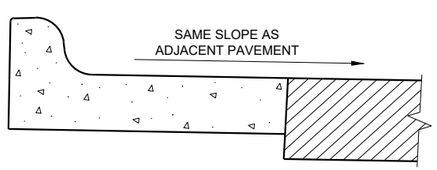
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

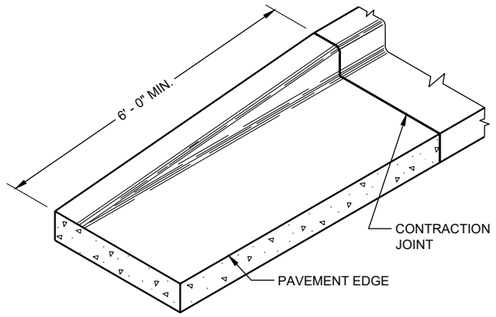
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

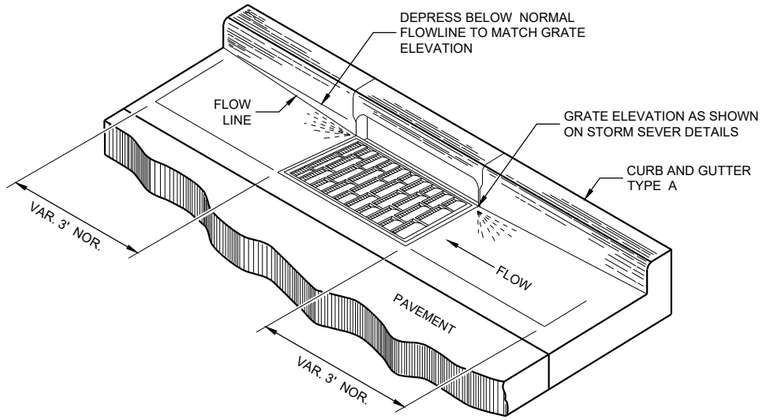
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-b Concrete Gutter, Ties, and Curb and Gutter Applications



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

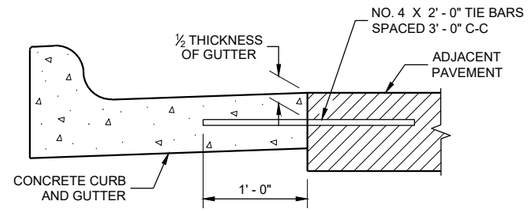
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

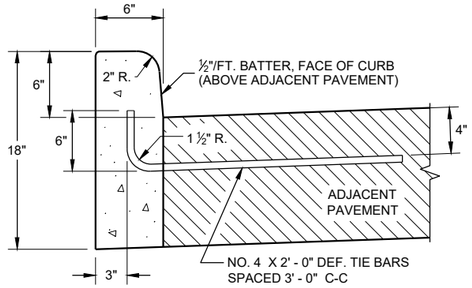
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

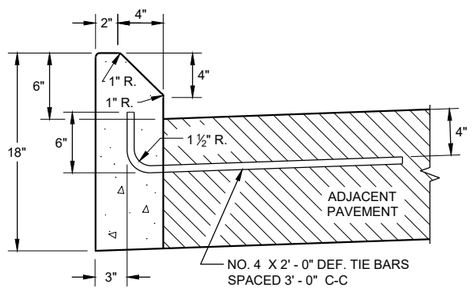
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

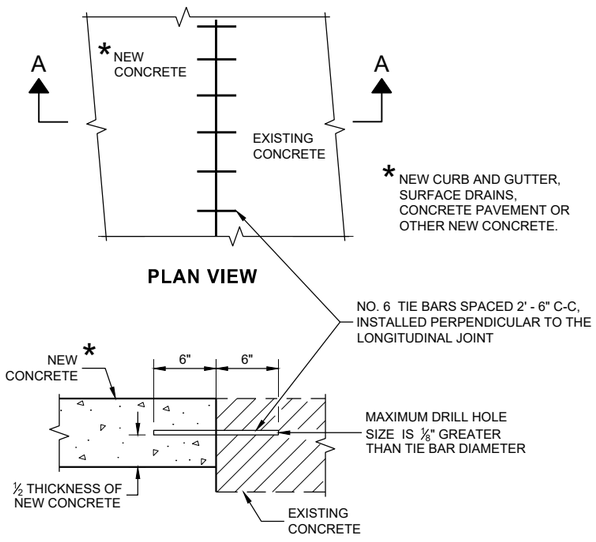


TYPES A (1) & D



TYPES G (1) & J

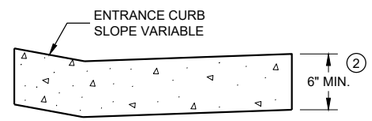
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Rodnery Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

SDD08D01 - 22b

6

SDD08D01 - 22b

SDD 8F1 Apron Endwalls for Culvert Pipe

METAL APRON ENDWALLS

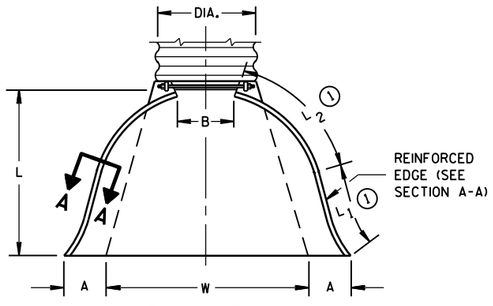
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

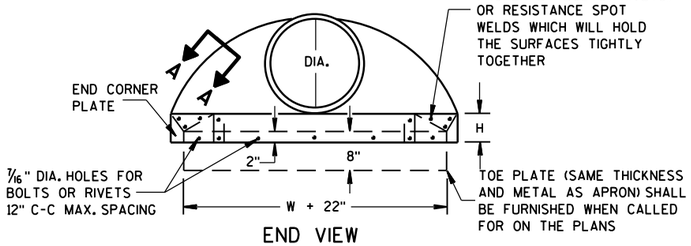
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 7/8	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 2/5 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

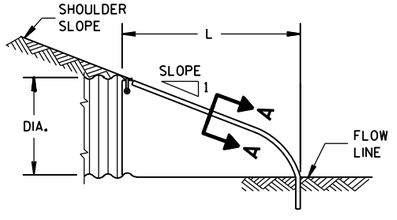
*MINIMUM
**MAXIMUM



PLAN VIEW

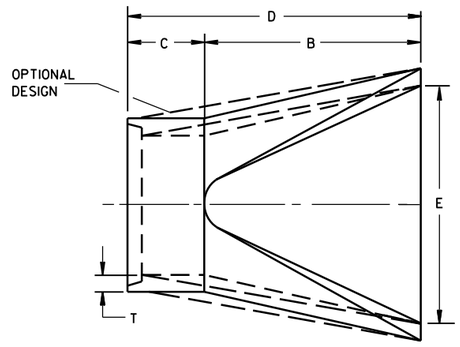


END VIEW

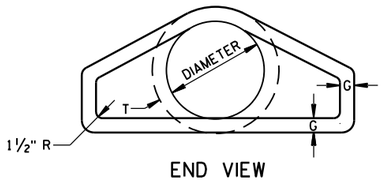


SIDE ELEVATION

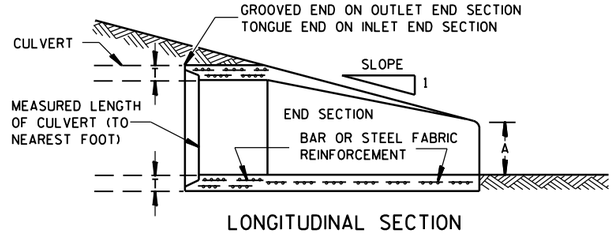
METAL ENDWALLS



PLAN

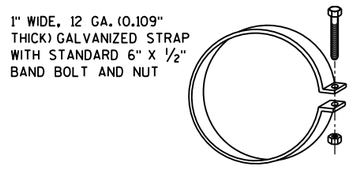


END VIEW



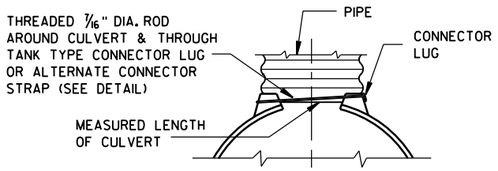
LONGITUDINAL SECTION

CONCRETE ENDWALLS

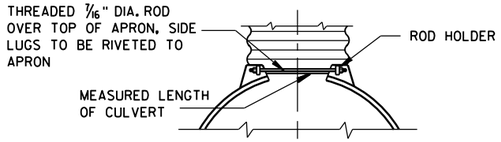


ALTERNATE FOR TYPE 1 CONNECTION

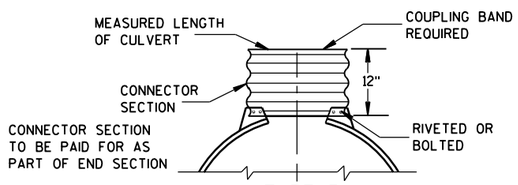
END SECTION CONNECTOR STRAP



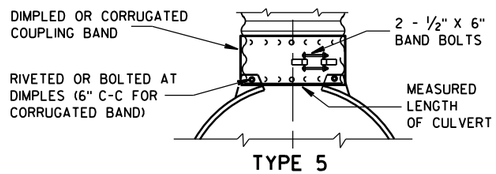
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

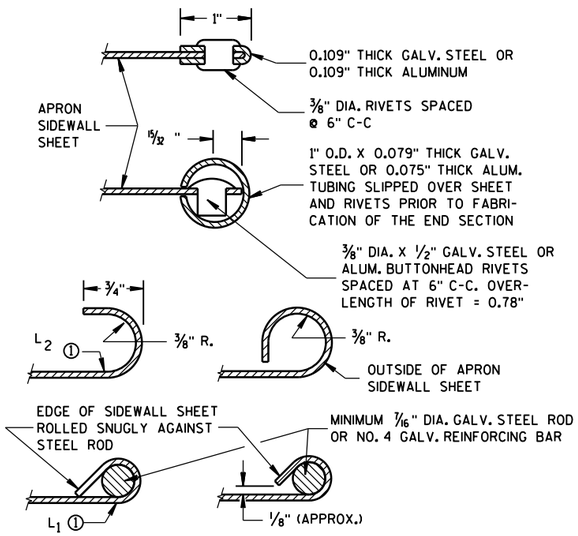
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

FHWA

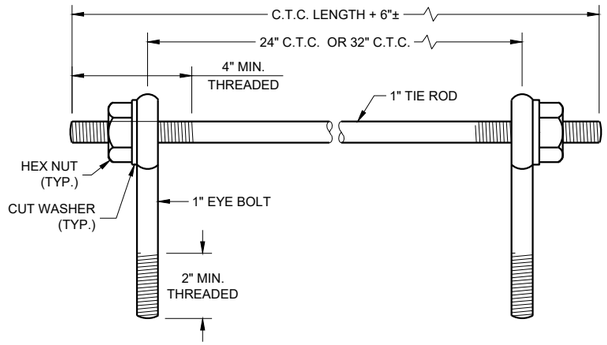
6

S.D.D. 8 F 1-11

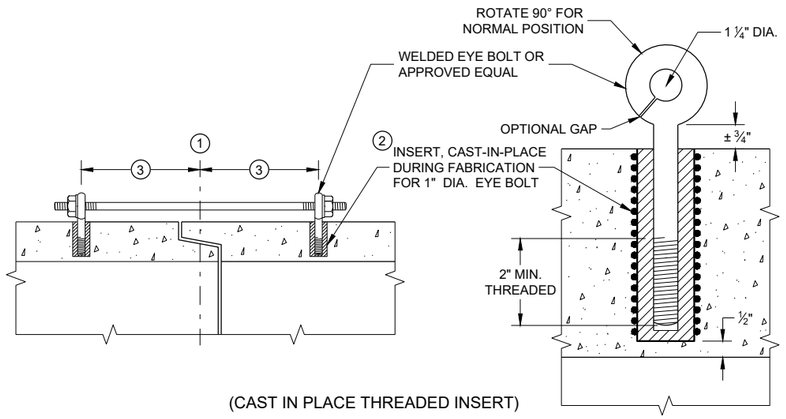
6

S.D.D. 8 F 1-11

SDD 08F04 Joint Ties for Concrete Pipe and Concrete Collar Detail



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

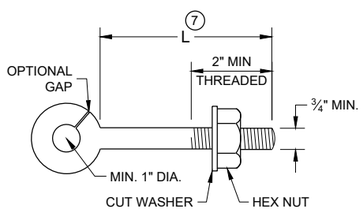
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

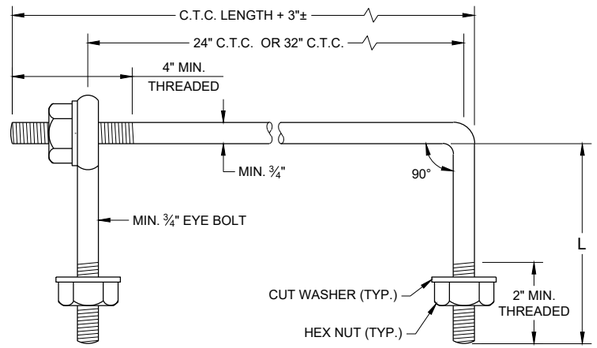
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

1. CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
2. THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
3. HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
4. BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
5. OPENING TO BE ROD DIAMETER PLUS 1 INCH.
6. LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.
7. EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

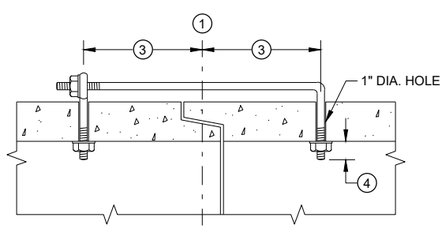


EYE BOLT 7

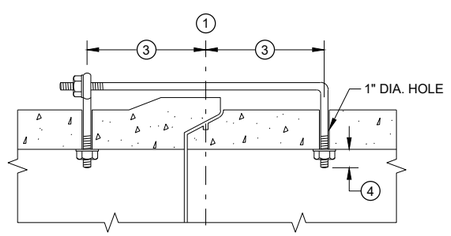
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

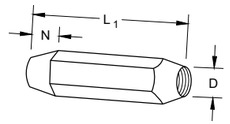
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

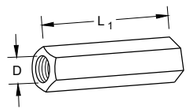
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



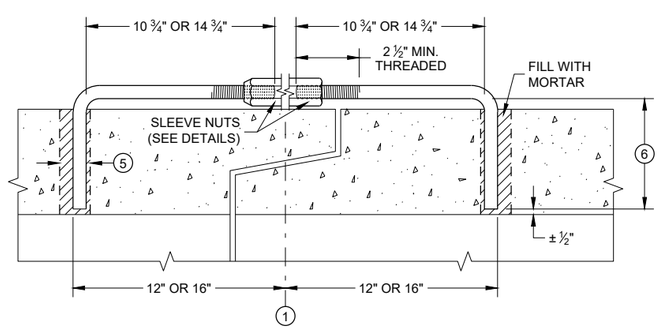
TAPERED



PLAIN

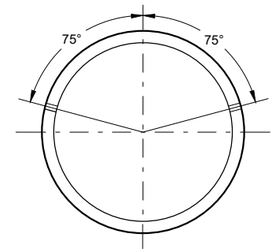
RIGHT AND LEFT THREADS

SLEEVE NUTS



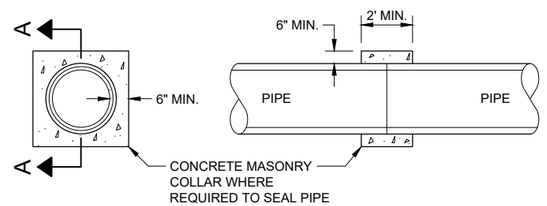
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

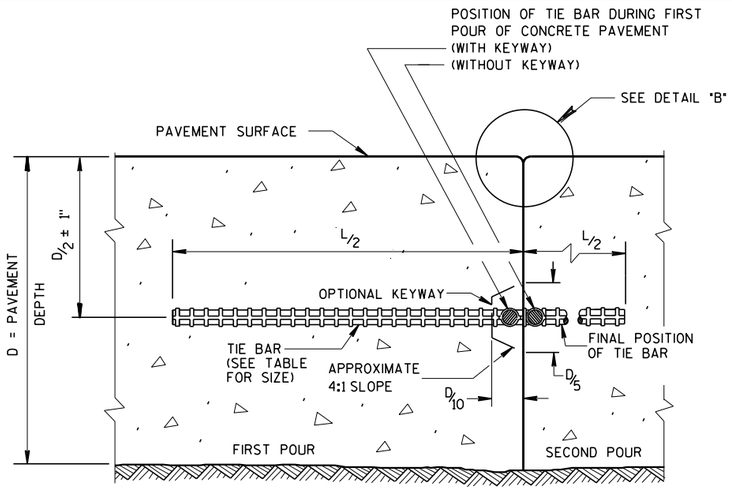
6

SDD 08F04 - 08

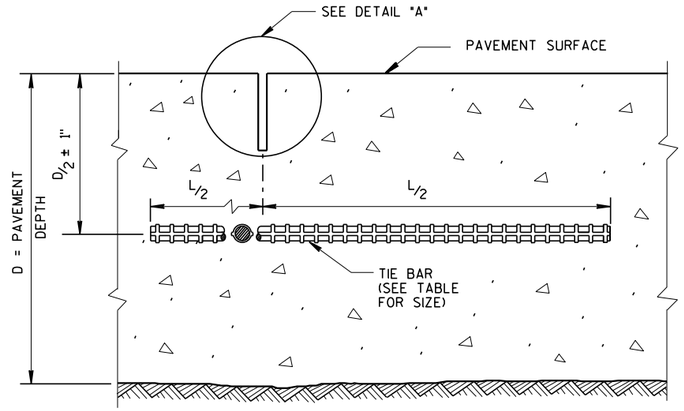
6

SDD 08F04 - 08

SDD 13C1 Concrete Pavement Longitudinal Joints and Ties



CONSTRUCTION JOINT



SAWED JOINT

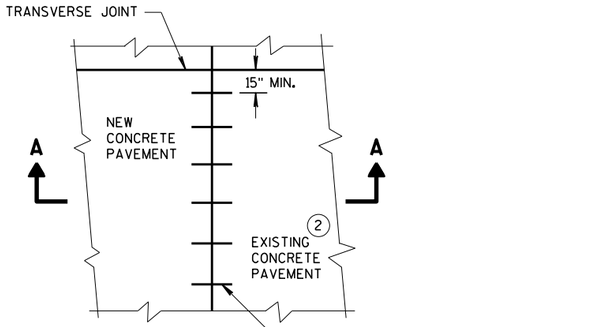
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

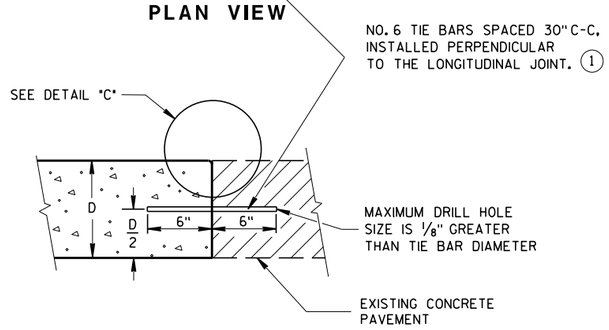
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

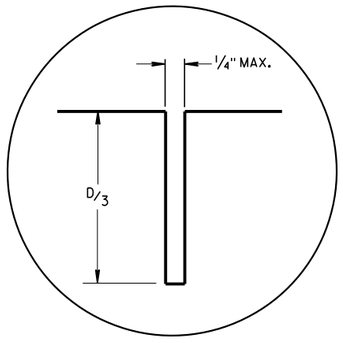
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



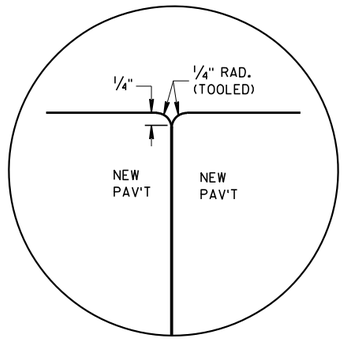
PLAN VIEW



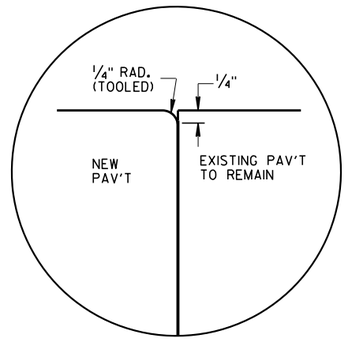
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



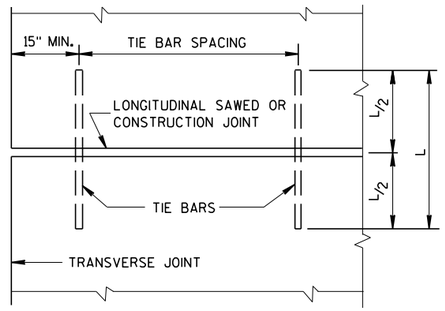
DETAIL "C"

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" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

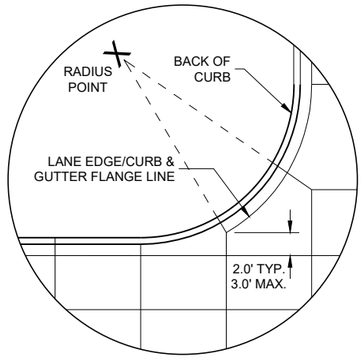
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERVISOR
FHWA

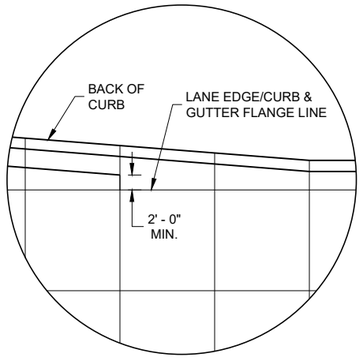
6

S.D.D. 13 C 1-19

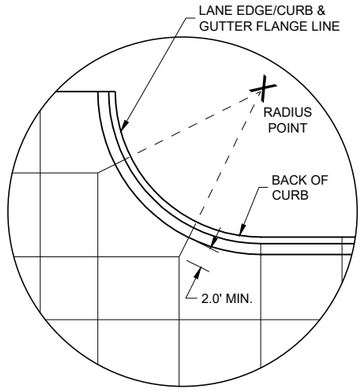
SDD 13C18-a Concrete Pavement Jointing



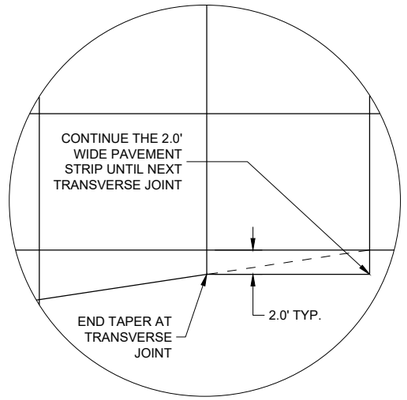
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

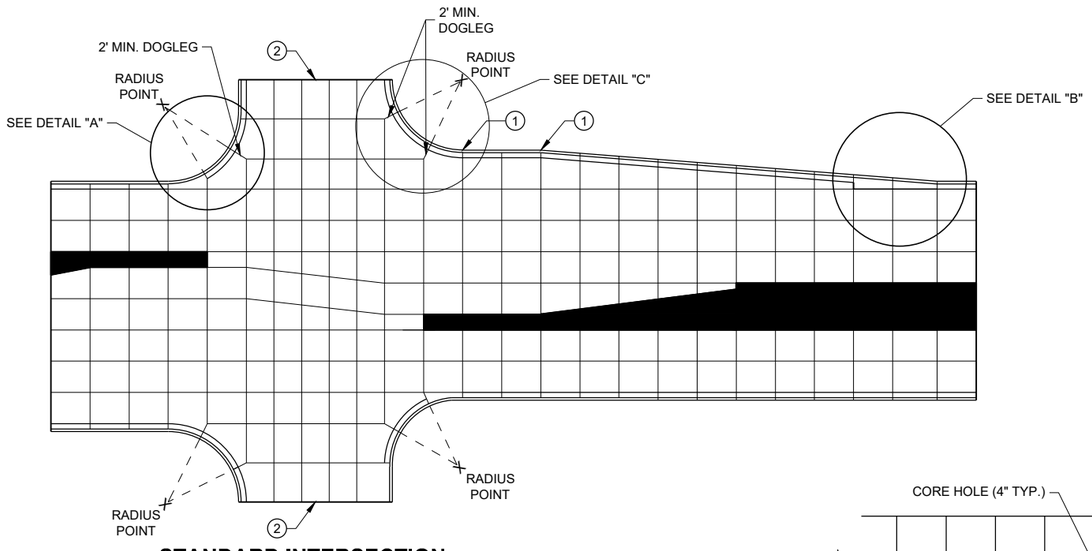
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.

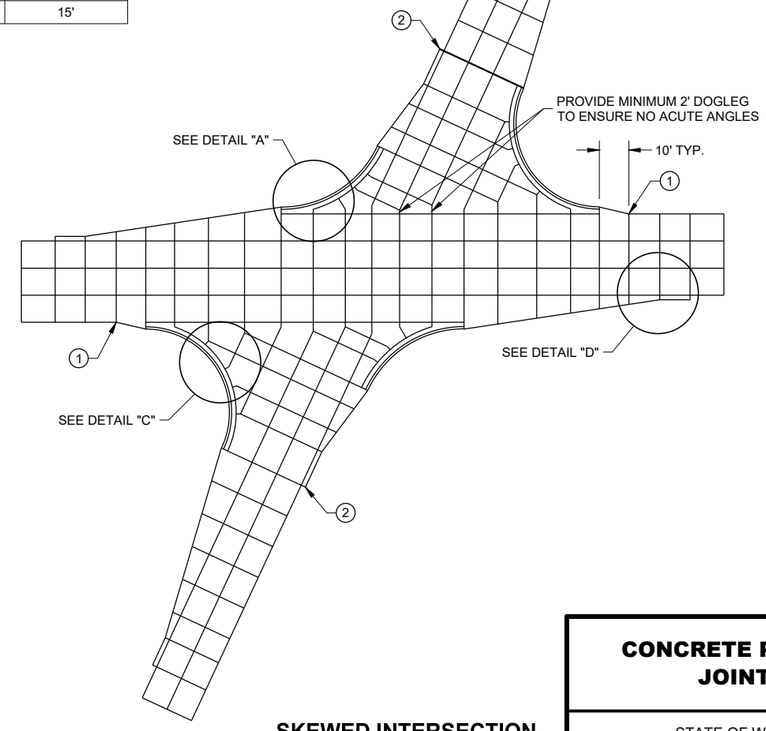
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



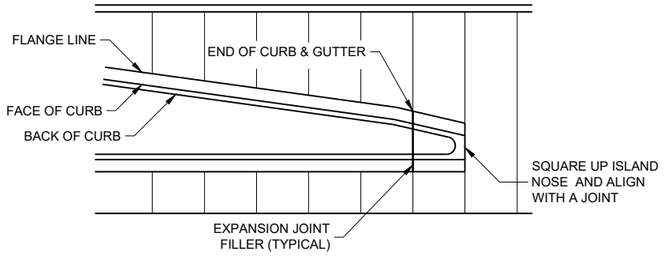
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

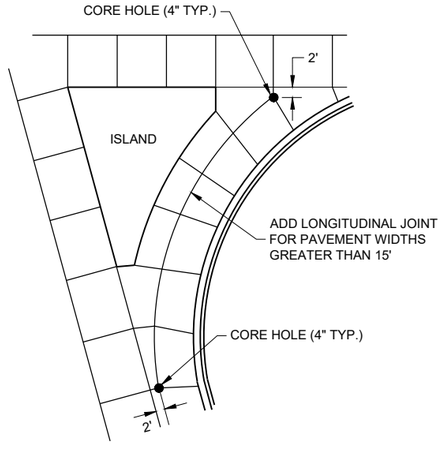
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

6

SDD 13C18 - 07a

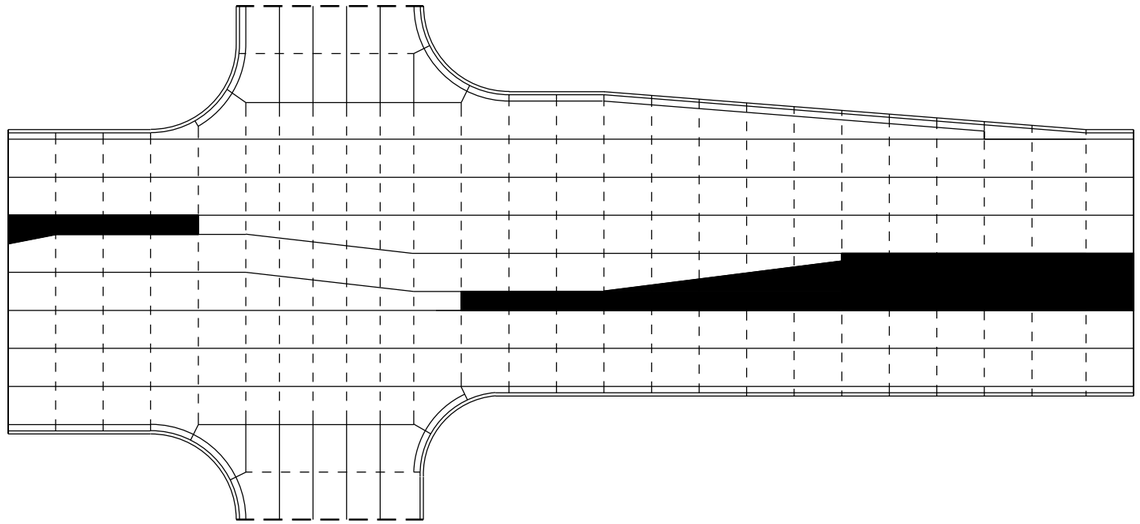
SDD 13C18-b Concrete Pavement Steel Reinforcement

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

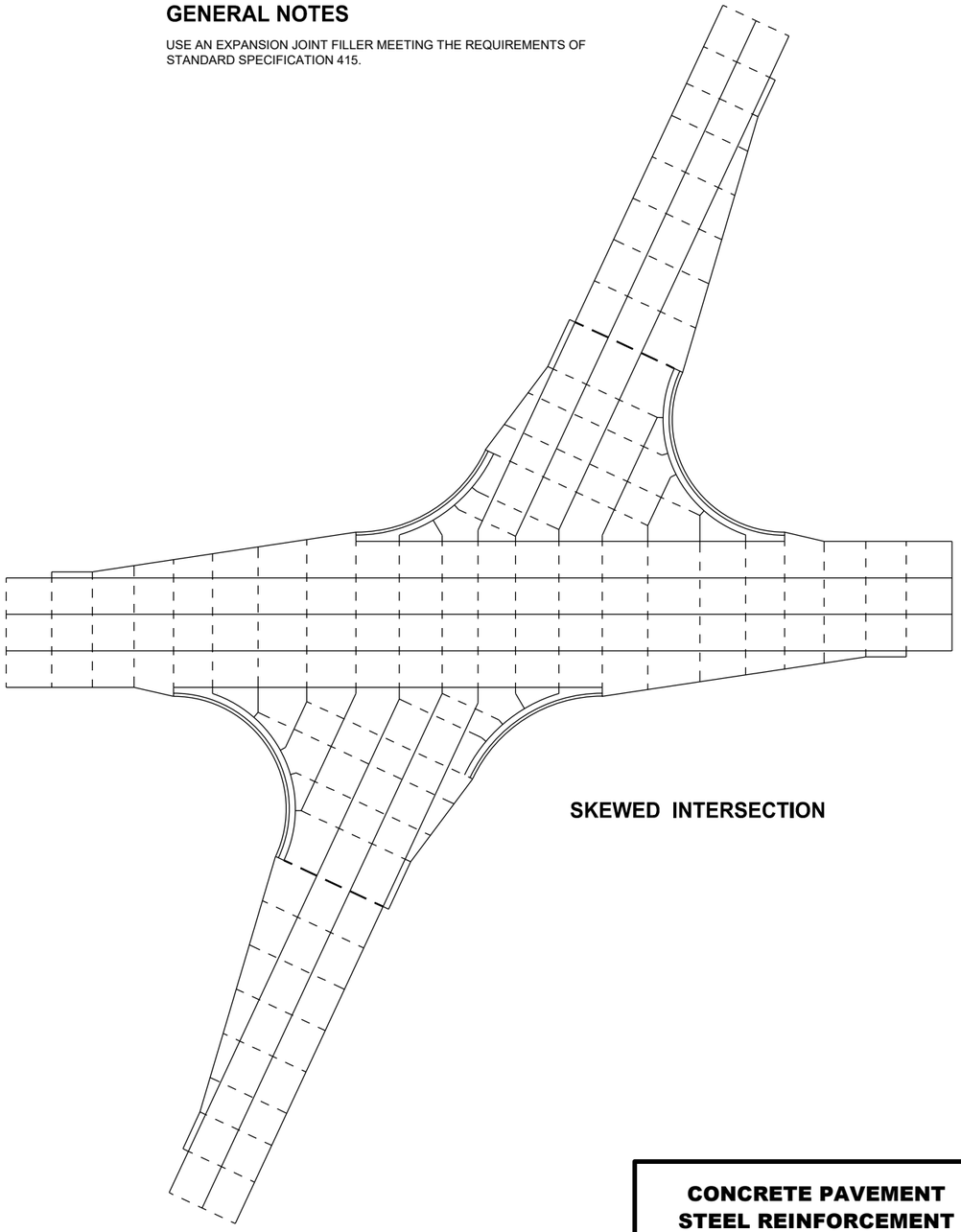
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

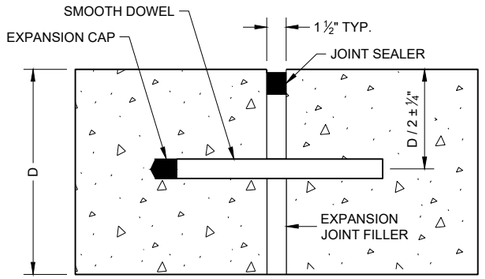
6

SDD 13C18 - 07b

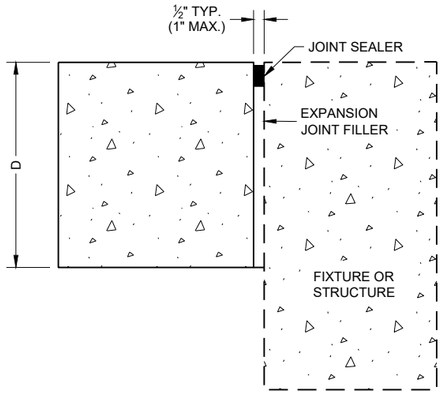
6

SDD 13C18 - 07b

SDD 13C18-c Concrete Pavement Joint Types



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

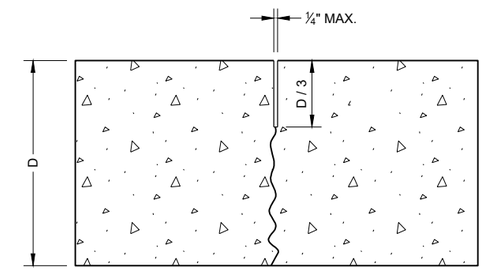
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

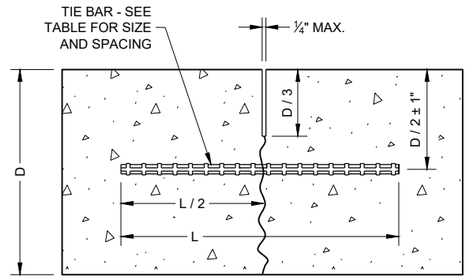
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

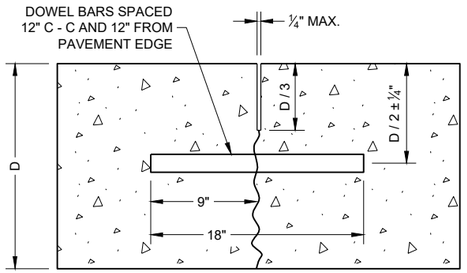
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

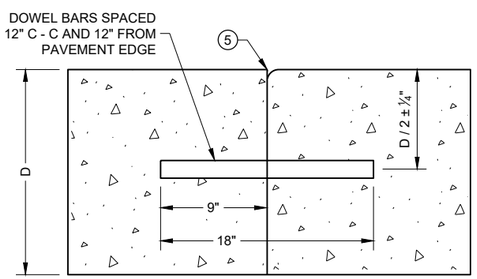


TIED LONGITUDINAL

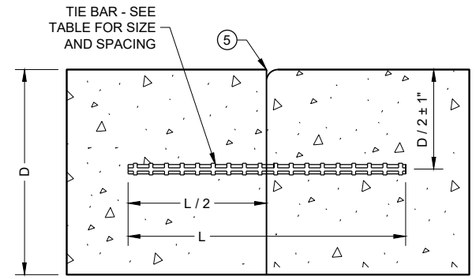


DOWELED TRANSVERSE

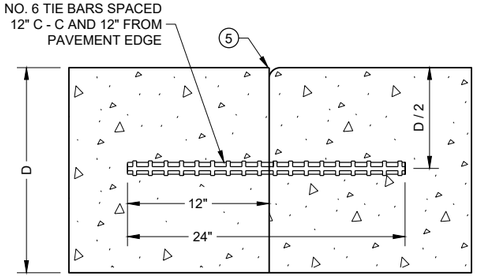
CONTRACTION JOINTS (2)



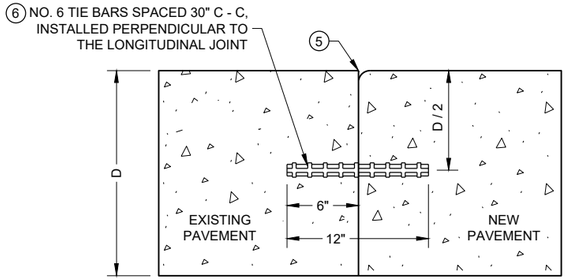
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

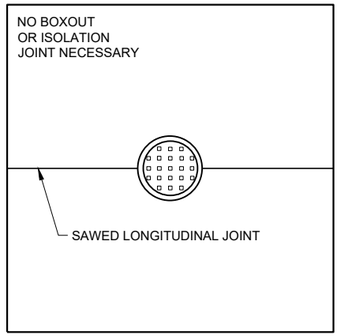
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13C18 - 07c

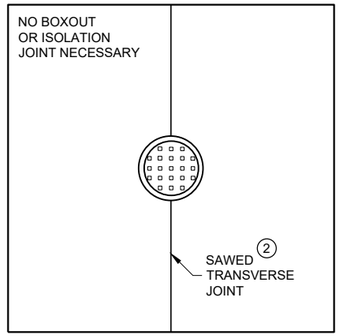
SDD 13C18 - 07c

6

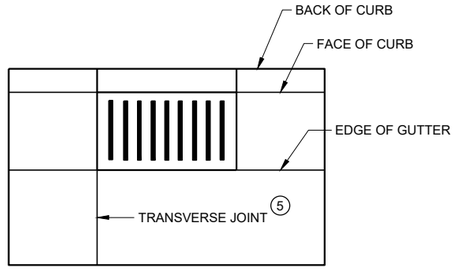
SDD 13C18-d Concrete Pavement Jointing at Utility Fixtures



MANHOLE WITH LONGITUDINAL JOINT



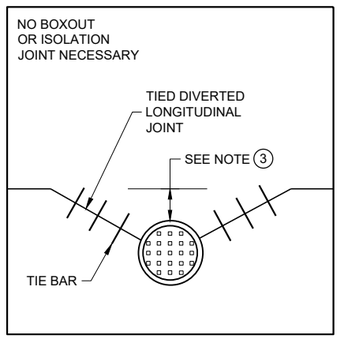
MANHOLE WITH TRANSVERSE JOINT



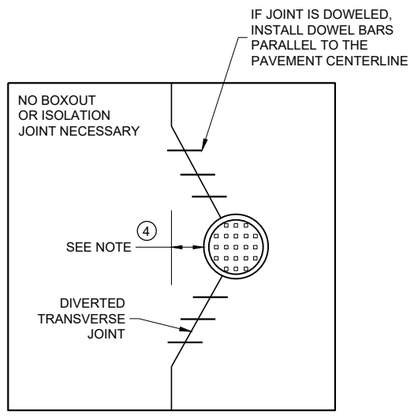
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

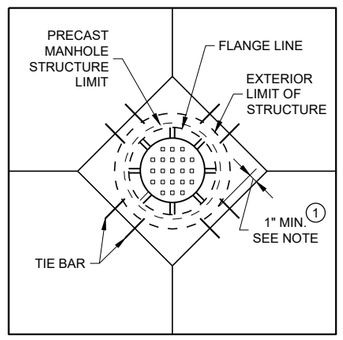
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

6

SDD 13C18 - 07d

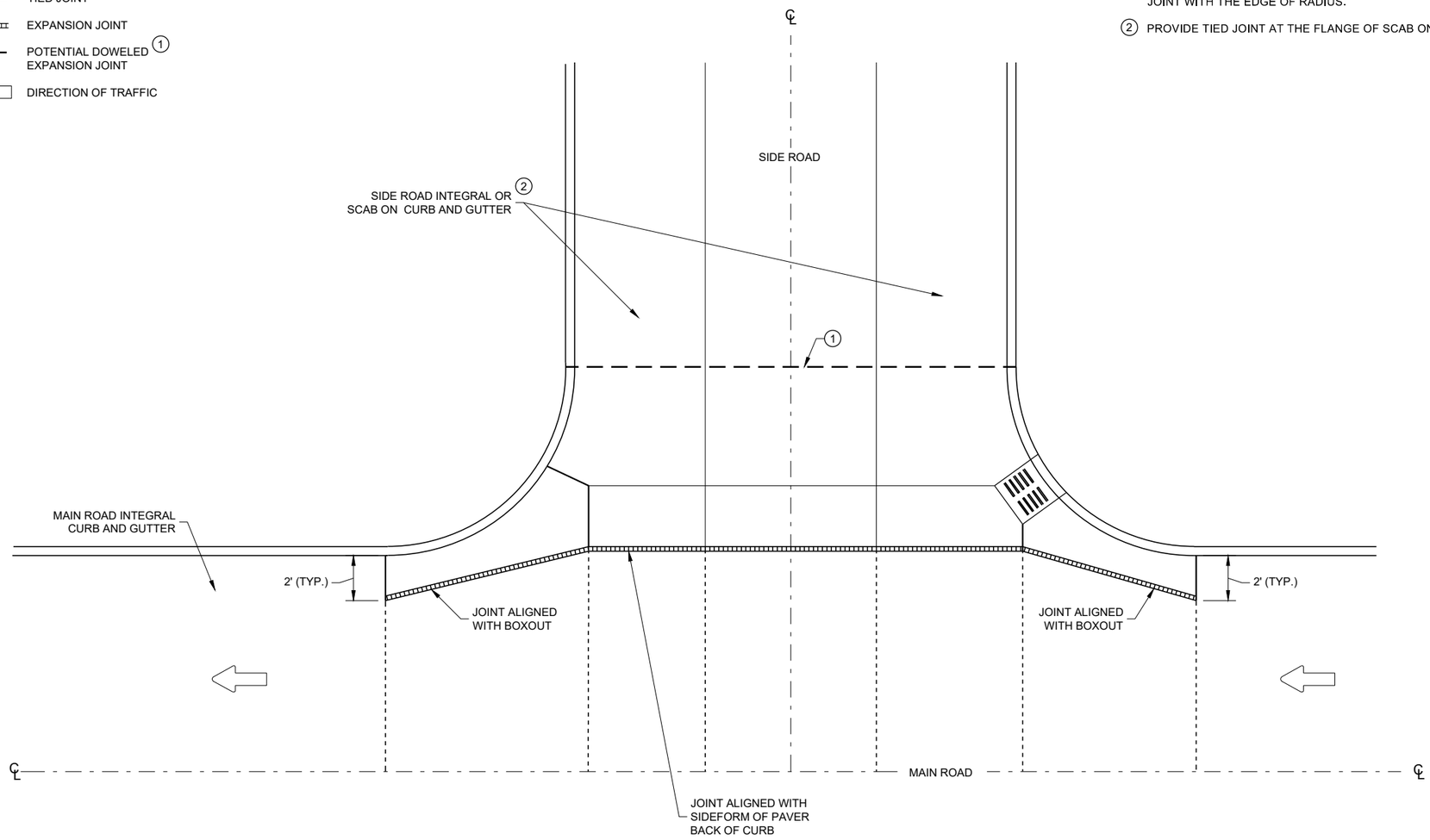
6

SDD 13C18 - 07d

SDD 13C18-f Concrete Pavement Intersection Boxout for Integral Curb and Gutter

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

6

SDD 13C18 - 07f

6

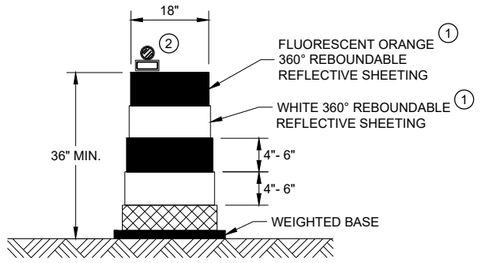
SDD 13C18 - 07f

SDD 15C11-b Channelizing Devices, Drums, Cones, Barricades and Vertical Panels

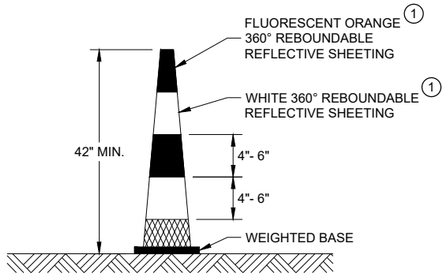
GENERAL NOTES

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

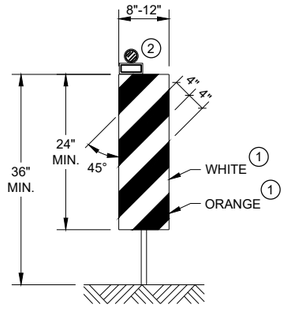


DRUM



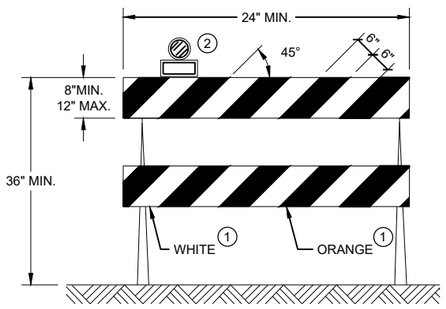
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



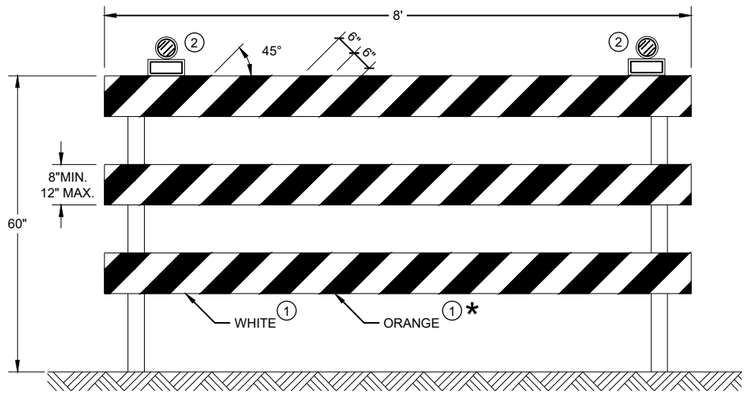
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C11 - 09b

SDD 15C12-a Traffic Control for Lane Closure With Flagging Operation

LEGEND

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

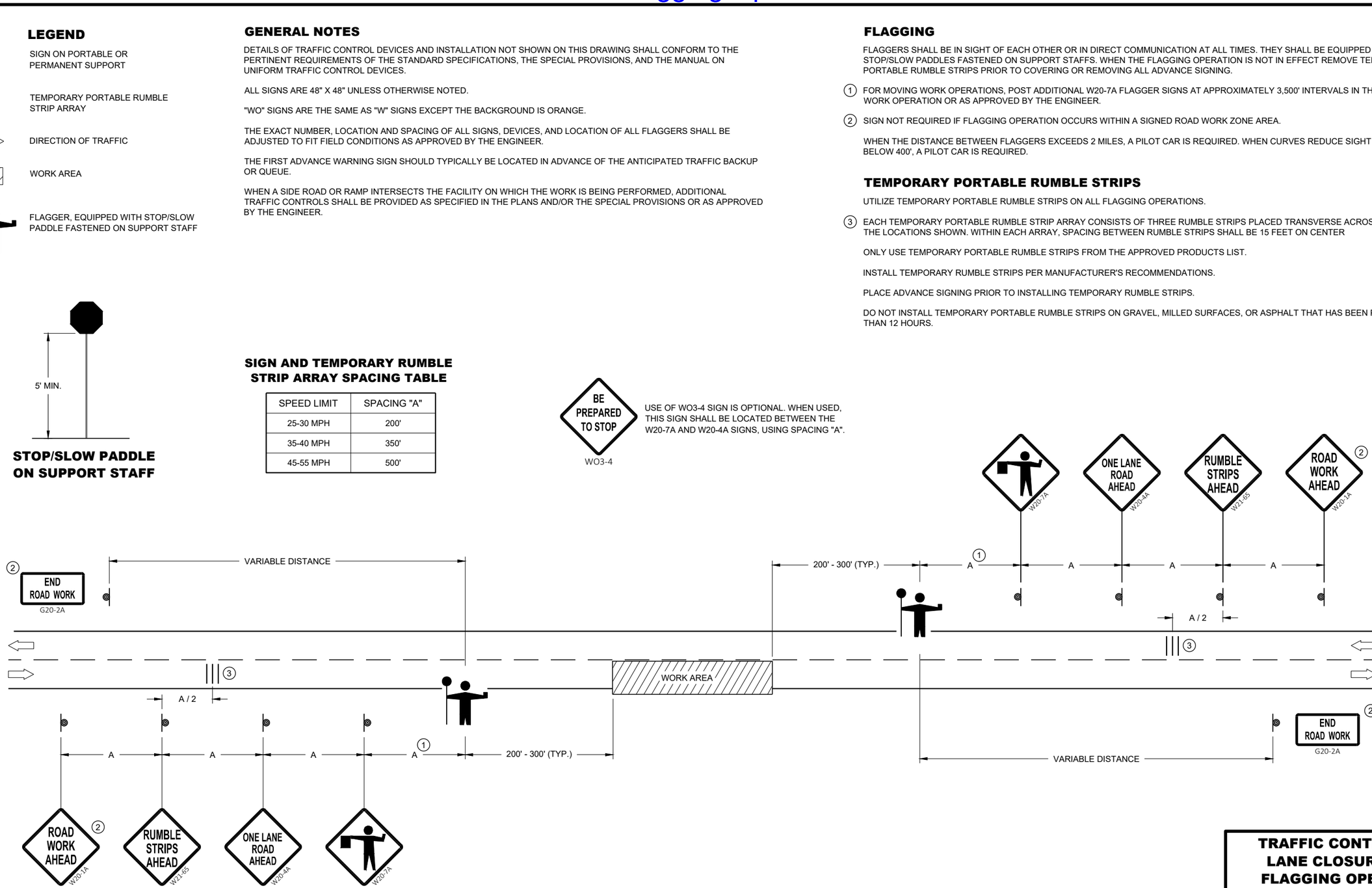
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C12 - 09a

6

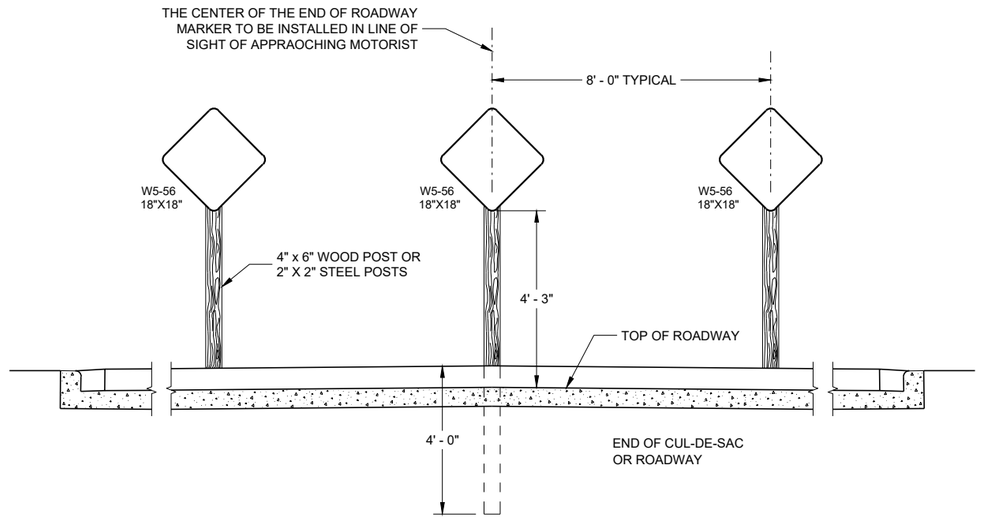
SDD 15C12 - 09a

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL SIGN INSTALLATION

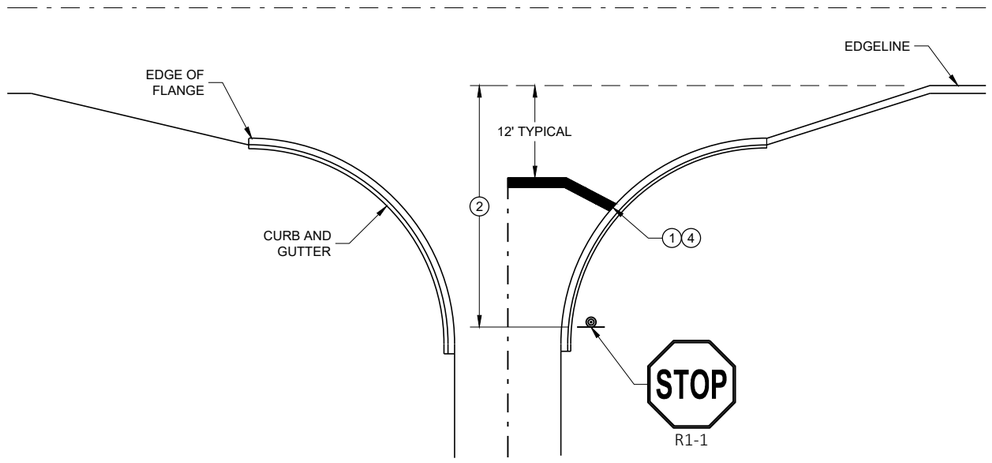
END-OF-ROADWAY SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

SDD 15C33 Stop Line and Crosswalk Pavement Marking

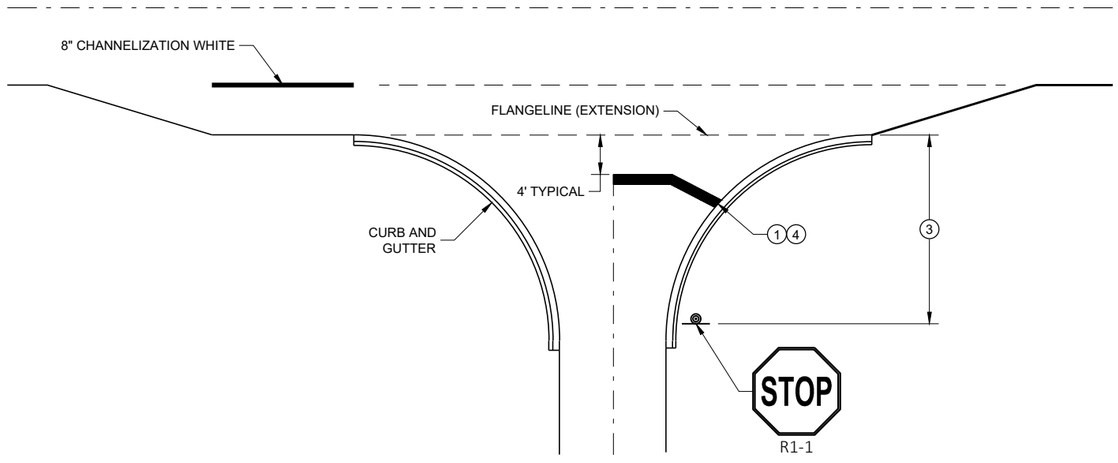
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

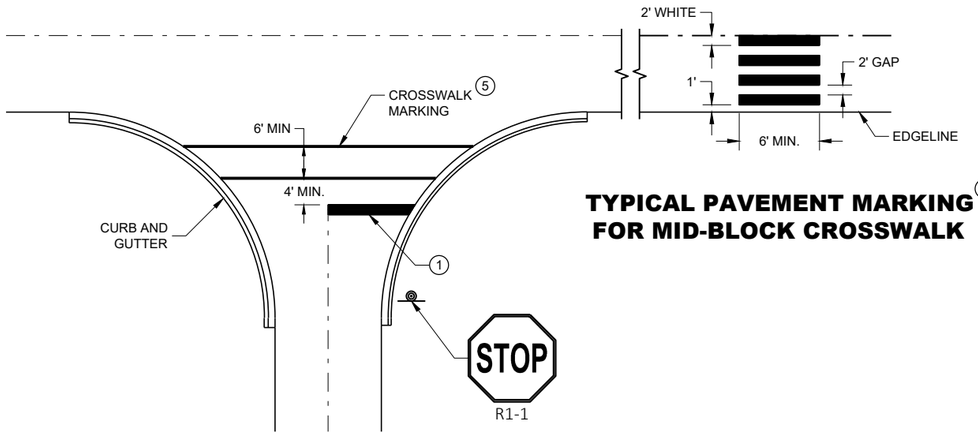
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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

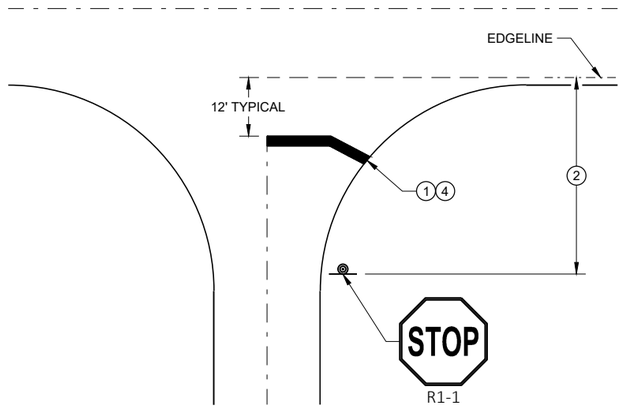


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING 5 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 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04

SDD 15D28 Traffic Control, Work on Shoulder or Parking Lane, Undivided Roadway

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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 THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

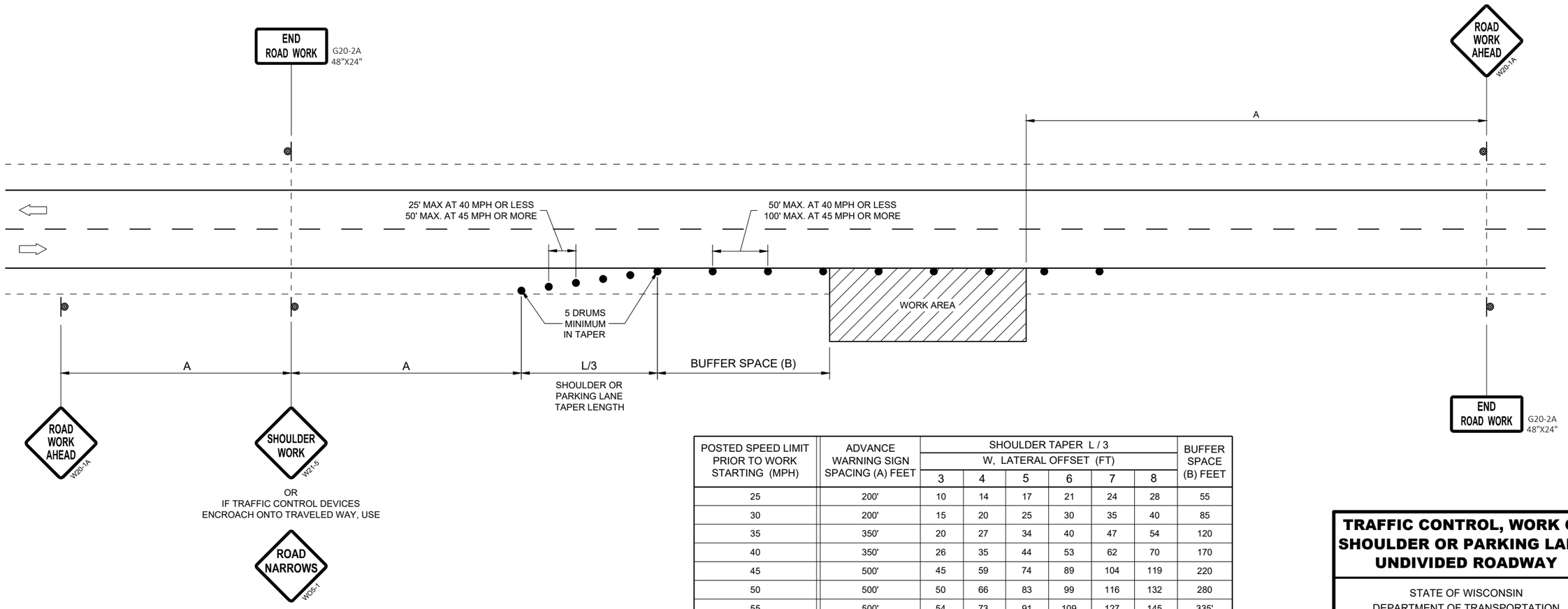
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D28 - 04

SDD 15D40-c Traffic Control, Partial Lane Shift Non-Freeway/Expressway or Multilane Divided 45 MPH and Under

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

GENERAL NOTES

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 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

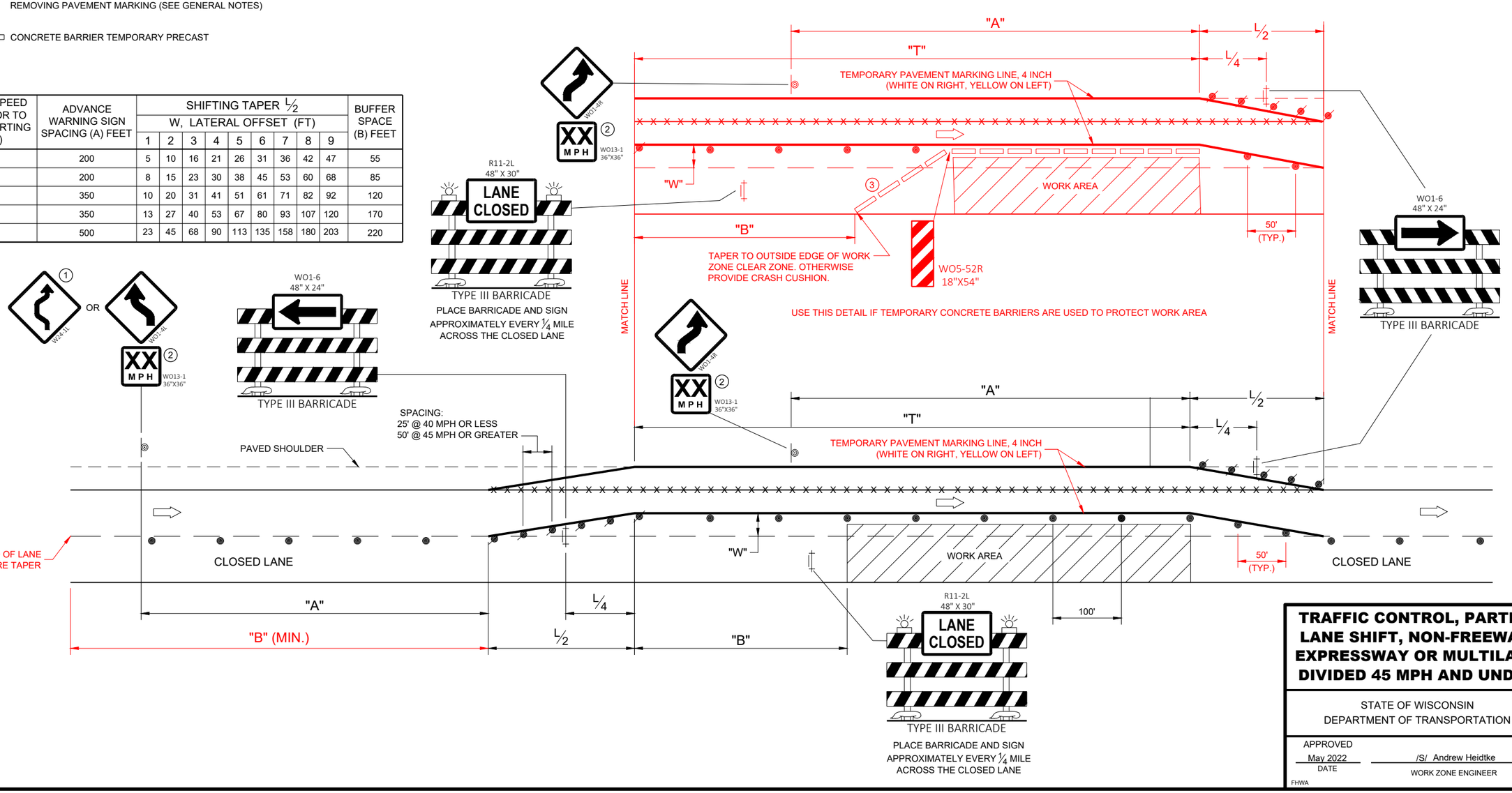
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	55
30	200	8	15	23	30	38	45	53	60	68	85
35	350	10	20	31	41	51	61	71	82	92	120
40	350	13	27	40	53	67	80	93	107	120	170
45	500	23	45	68	90	113	135	158	180	203	220



TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

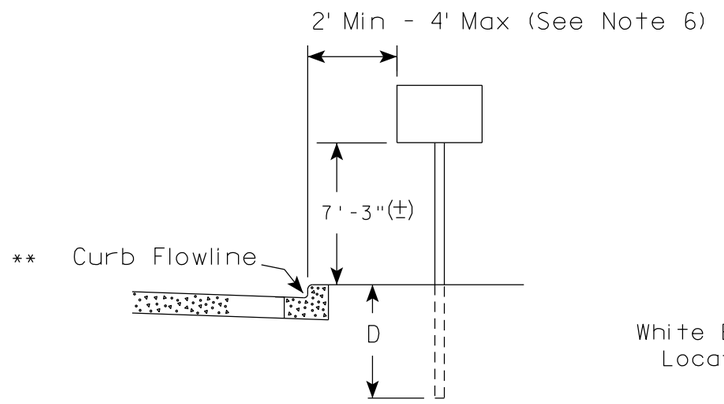
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

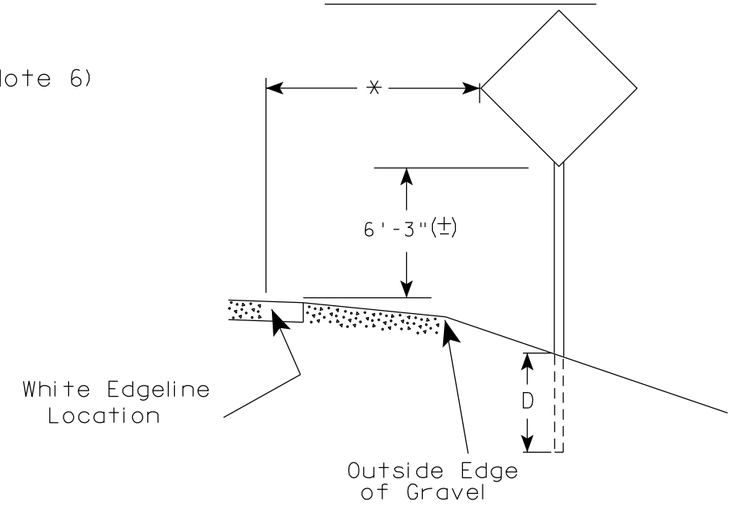
SDD 15D40 - 04c

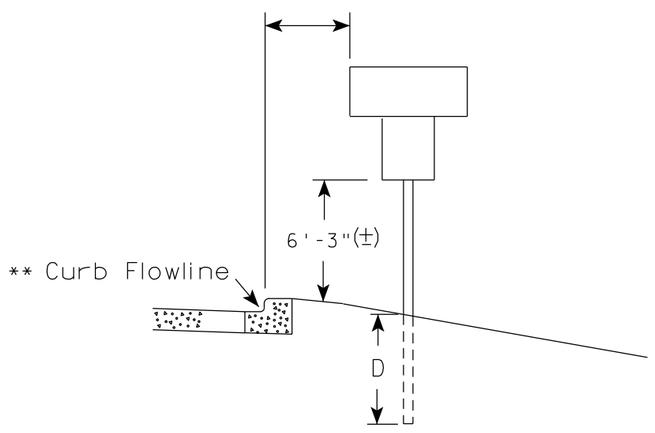
SDD 15D40 - 04c

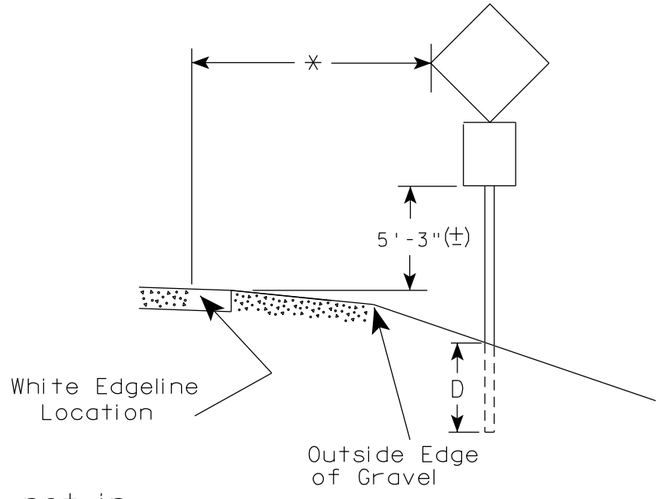
URBAN AREA



RURAL AREA (See Note 2)







** 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.

* 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

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. 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" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

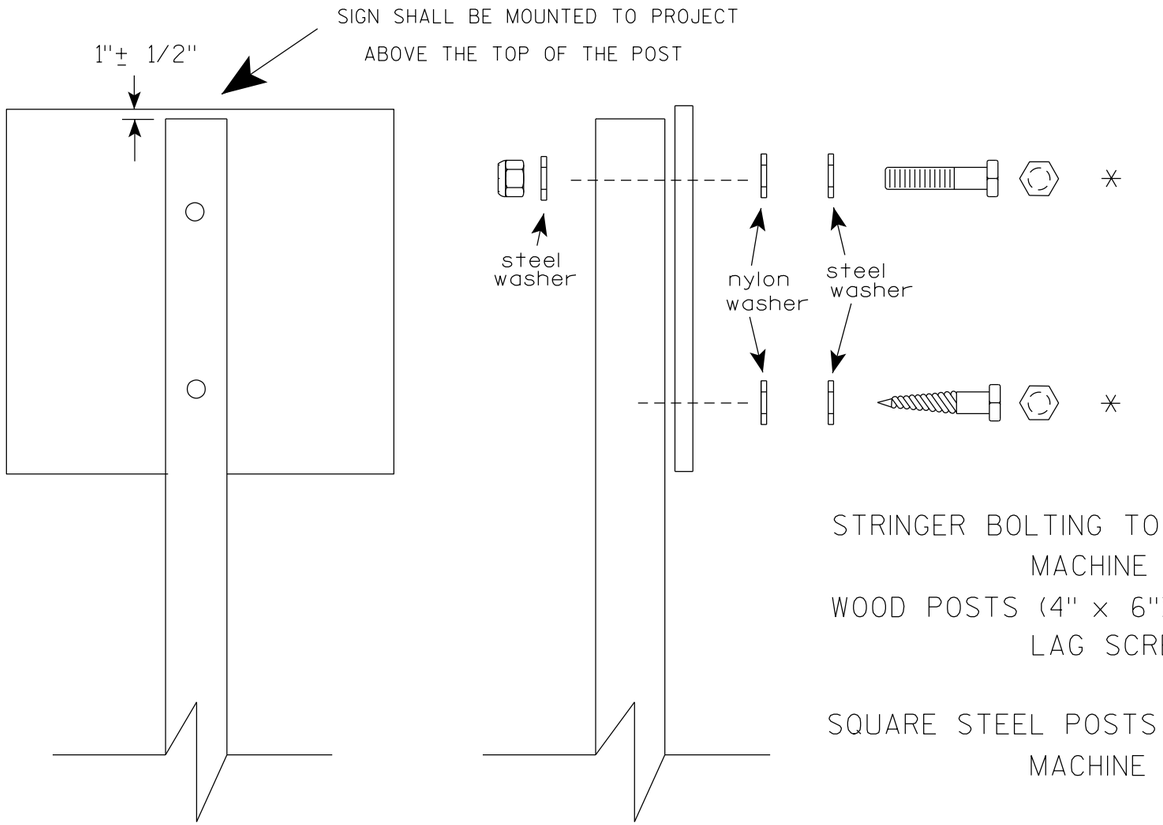
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

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:	E



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 - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 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 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 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.

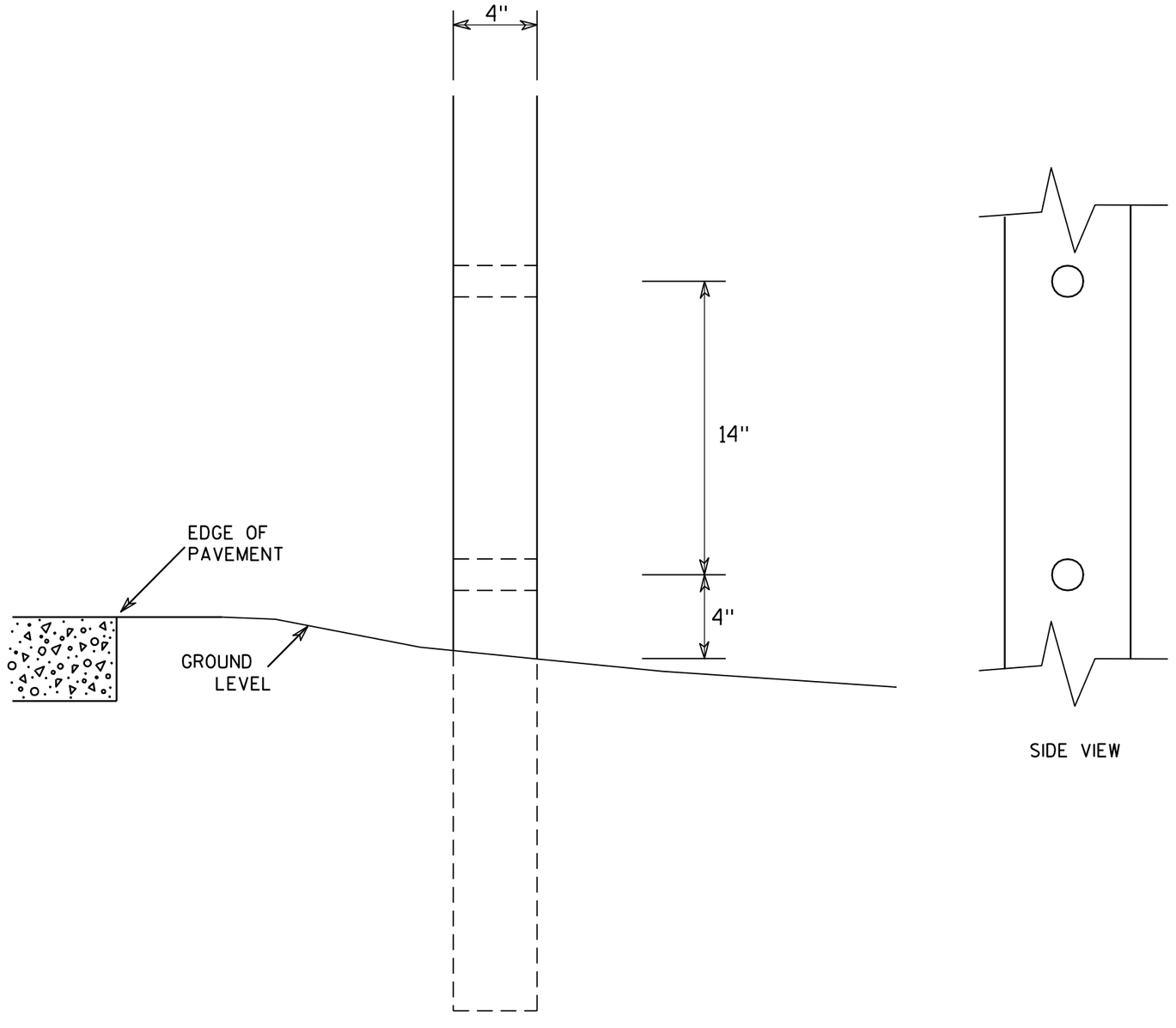
ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:				SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

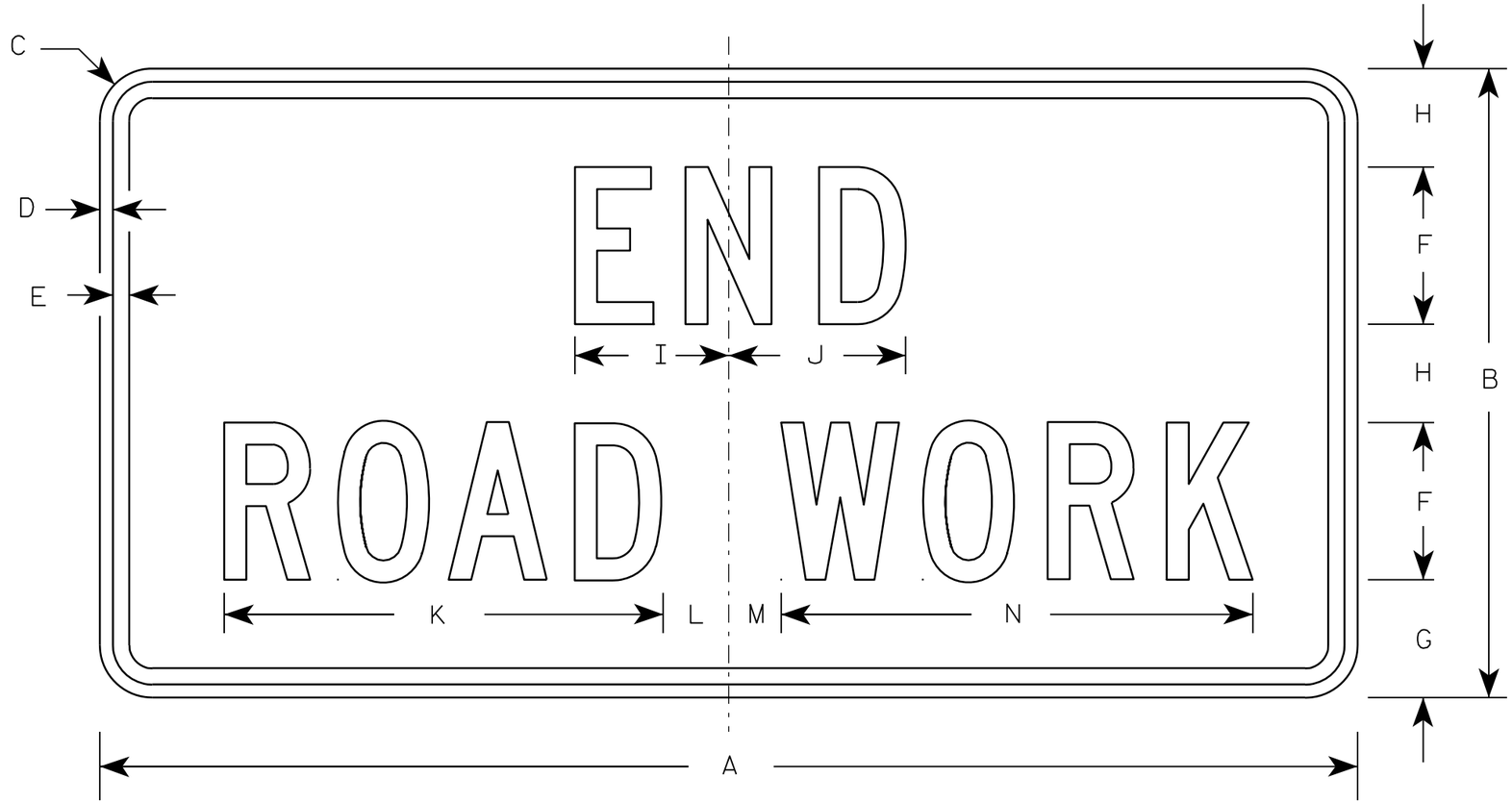
4 X 6 WOOD POST MODIFICATIONS

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:	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message 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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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 m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

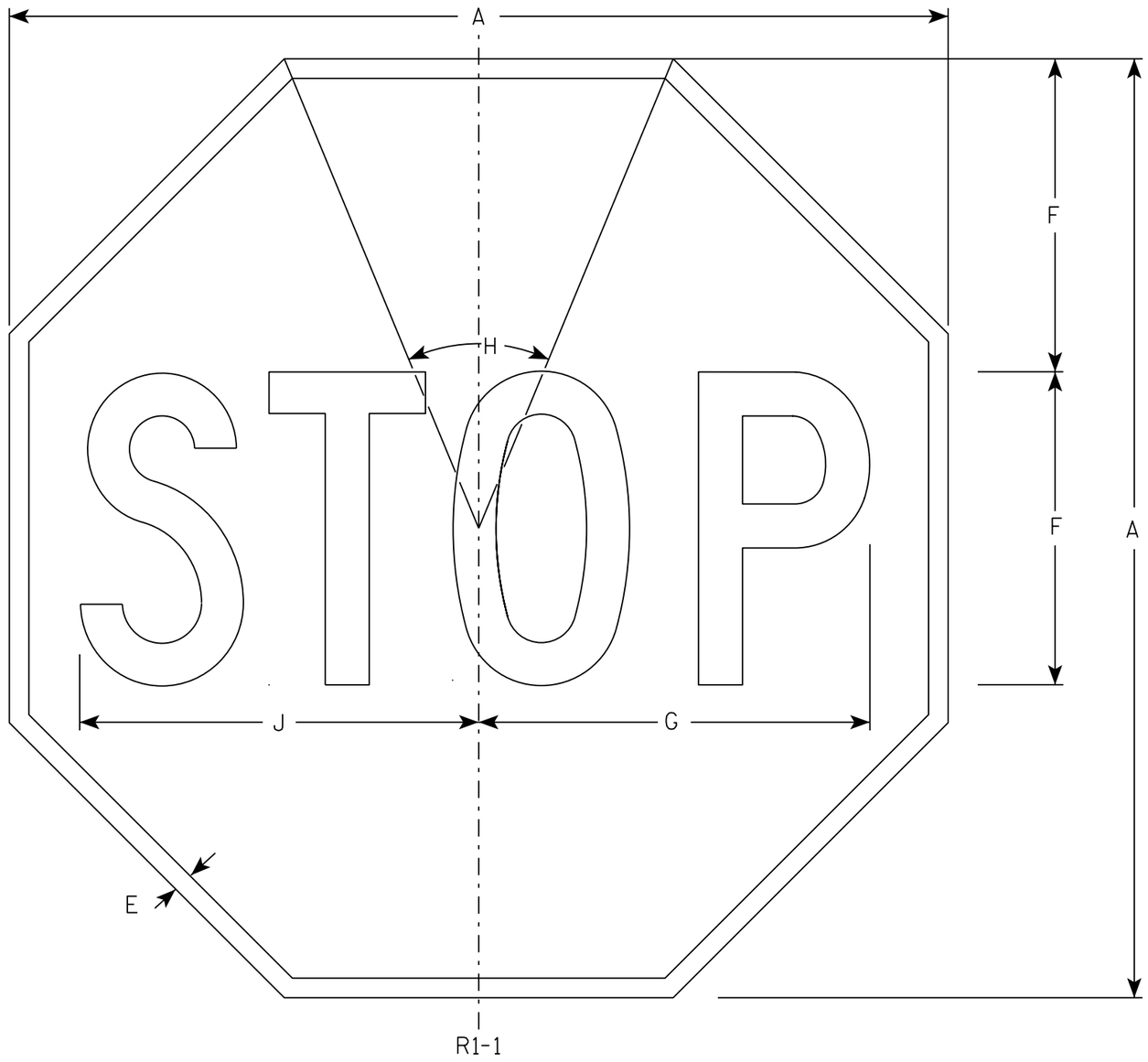
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

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				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

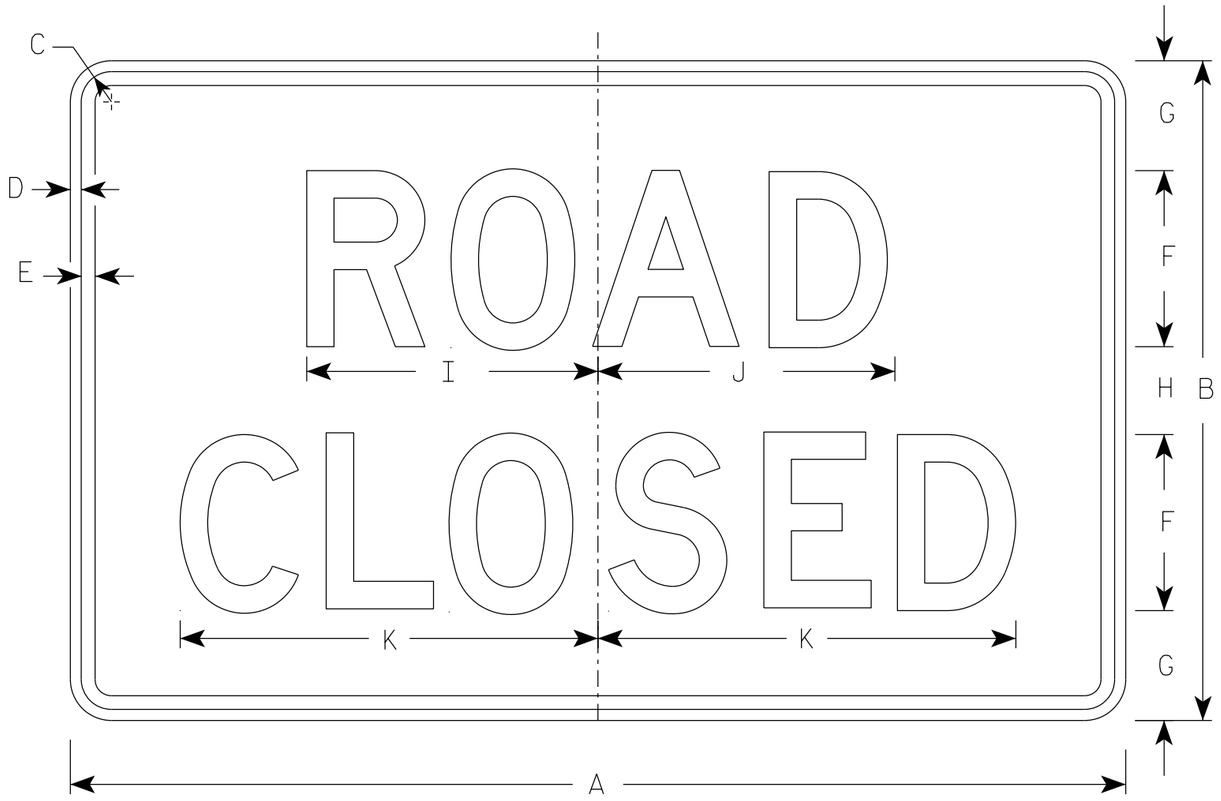
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

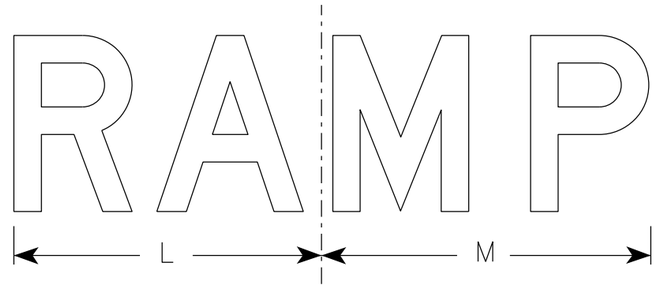
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



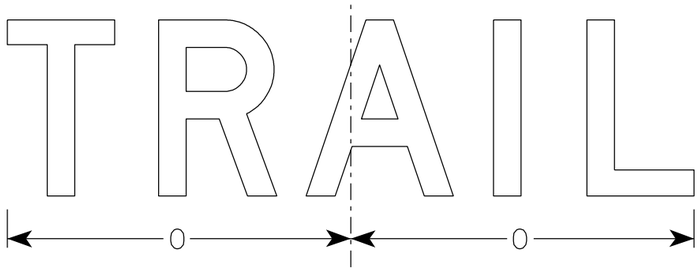
R11-2

NOTES

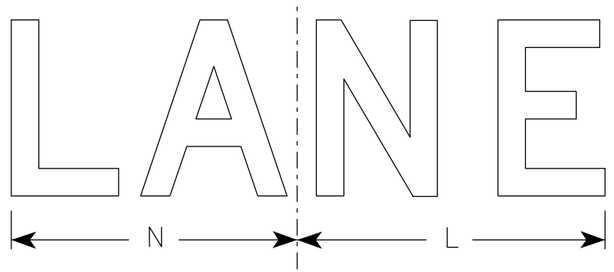
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

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	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

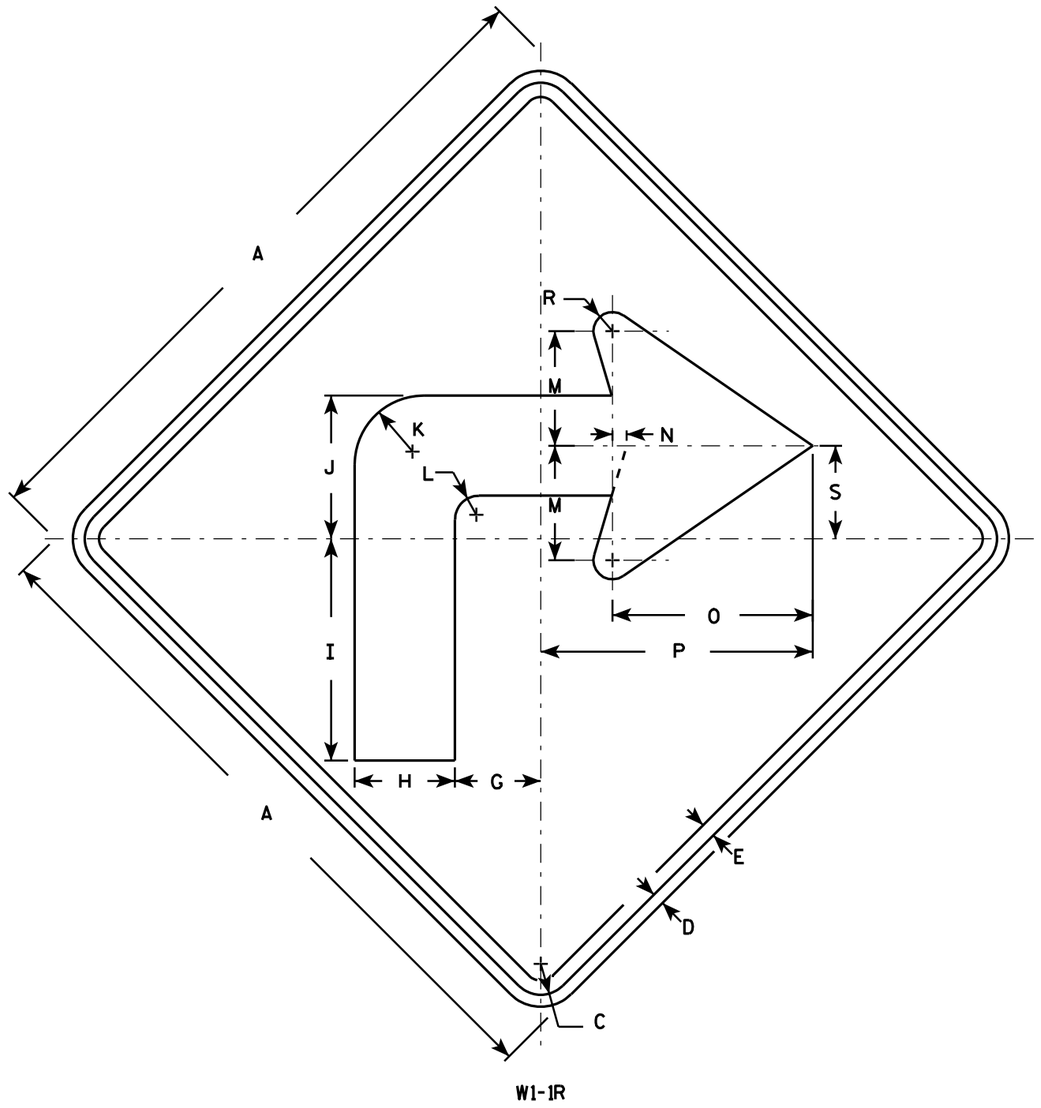
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W1-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
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. W1-1L is the same as W1-1R except the arrow is reversed along the vertical centerline.

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	24		1 1/8	3/8	1/2		3	3 1/2	7 3/4	5	2 1/2	7/8	4	1/2	7	9 1/2		5/8	3 1/4								4.0
2S	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
2M	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
3	36		1 5/8	5/8	3/4		4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	1 1/4	6	3/4	10 1/2	14 1/4		1	4 7/8								9.0
4	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0
5	48		2 1/4	3/4	1		6	7	15 1/2	10	4 7/8	1 5/8	8	1	14	19		1 1/4	6 1/2								16.0

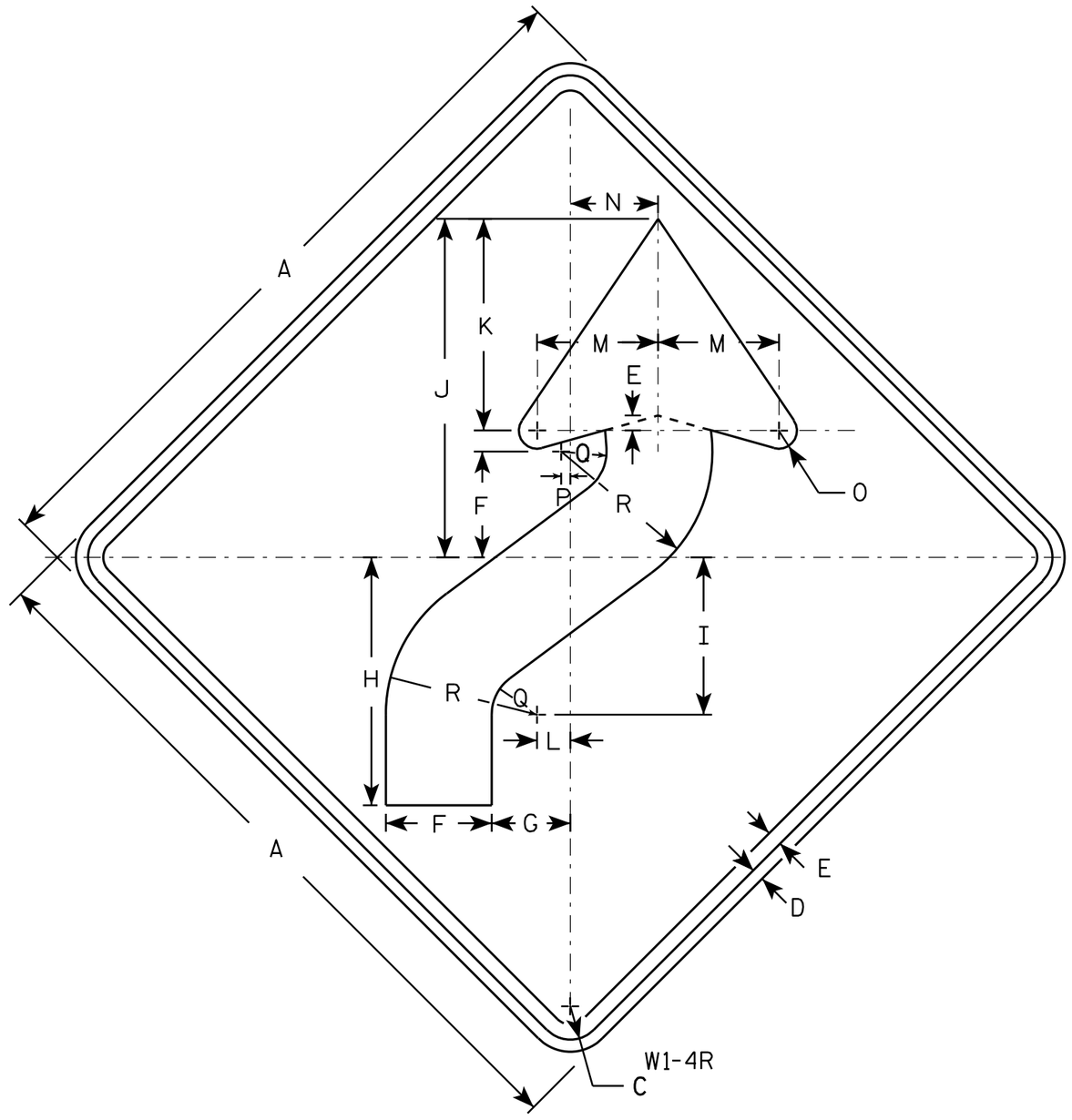
STANDARD SIGN
W1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-1.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
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. W1-4L is the same as W1-4R except the arrow is reversed along the vertical centerline.

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	24		1 1/8	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 3/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
3	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
4	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN

W1-4

WISCONSIN DEPT OF TRANSPORTATION

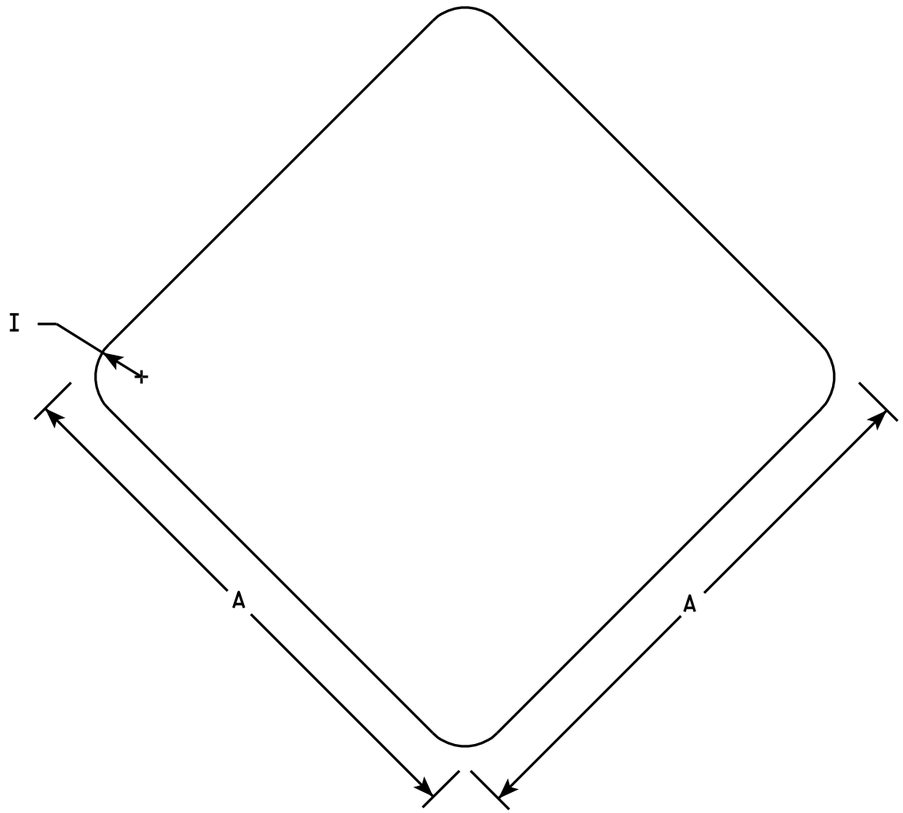
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-4.11

PROJECT NO: | HWY: | COUNTY: | | SHEET NO: E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W14.DGN PLOT DATE : 17-MAY-2012 13:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.706180:1.000000



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

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	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

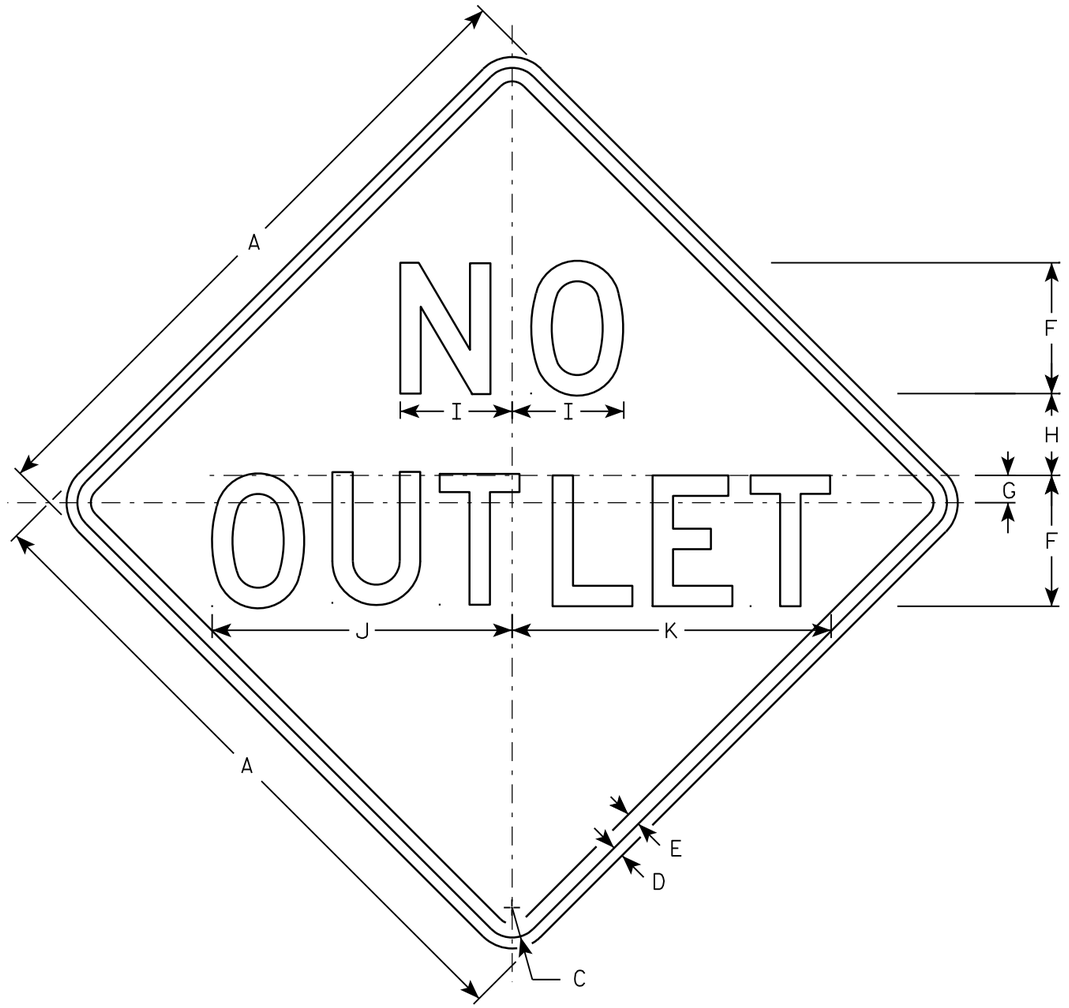
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W14-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   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.

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	24		1 1/8	3/8	1/2	5	1	2 3/4	4 1/8	11 3/4	12 3/8																4.0
2S	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
2M	30		1 3/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
3	36		1 5/8	5/8	3/4	7	1 3/8	4 5/8	6	16 1/8	17 1/8																9.0
4																											
5																											

STANDARD SIGN
W14-2

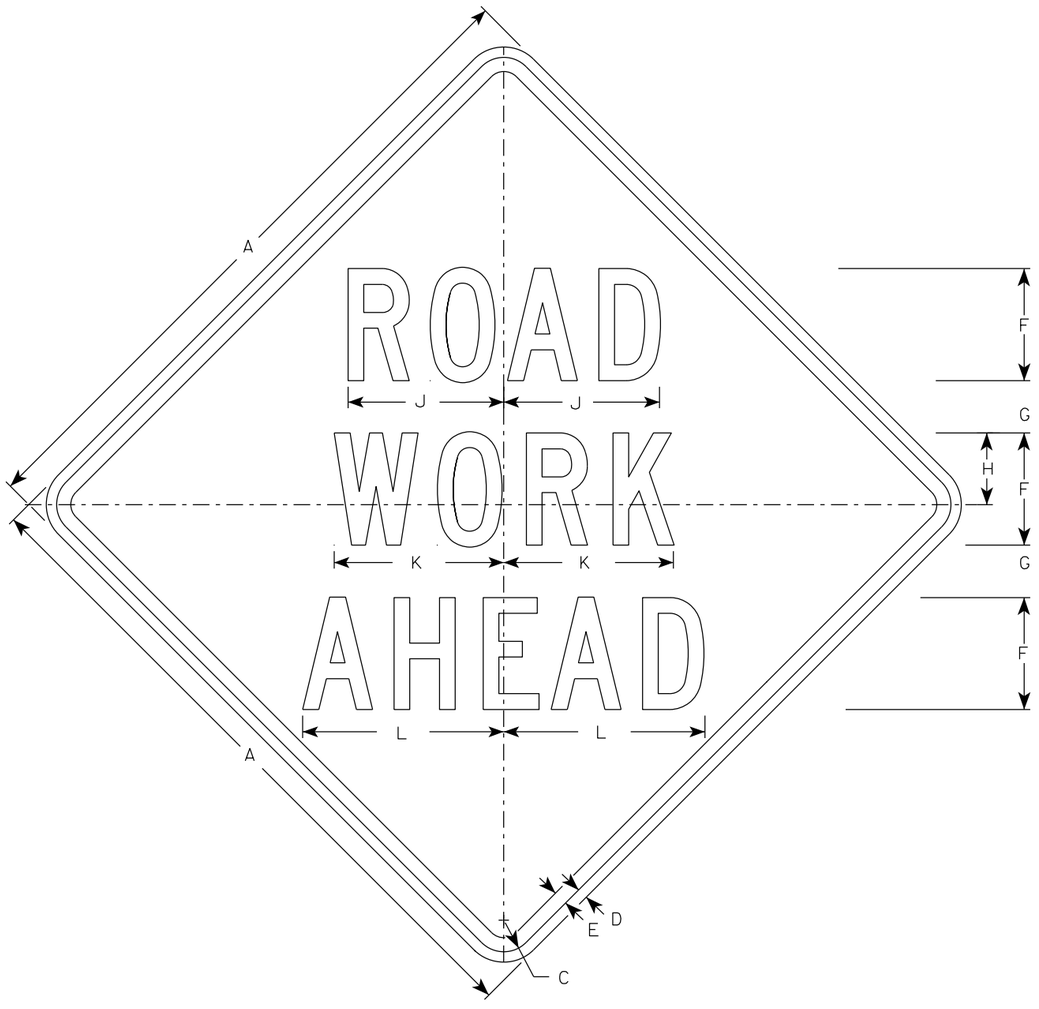
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

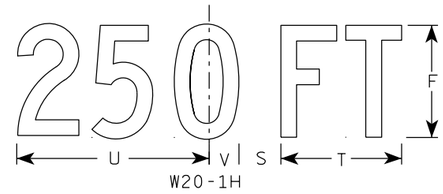
DATE 3/13/13 PLATE NO. W14-2.3

PROJECT NO:

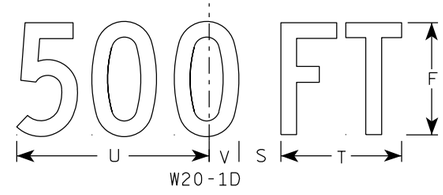
SHEET NO: E



W20-1A

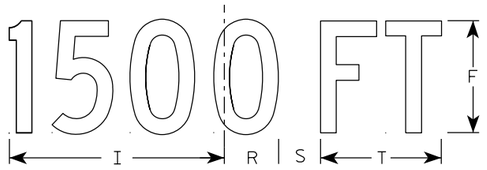


W20-1H



W20-1D

W20-1C



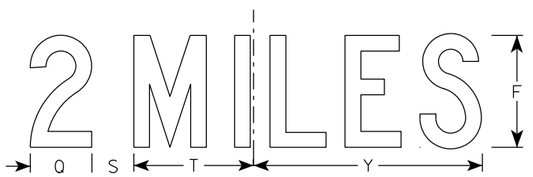
W20-1B

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message 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.

W20-1G

W20-1F



W20-1E

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	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

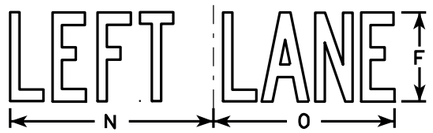
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

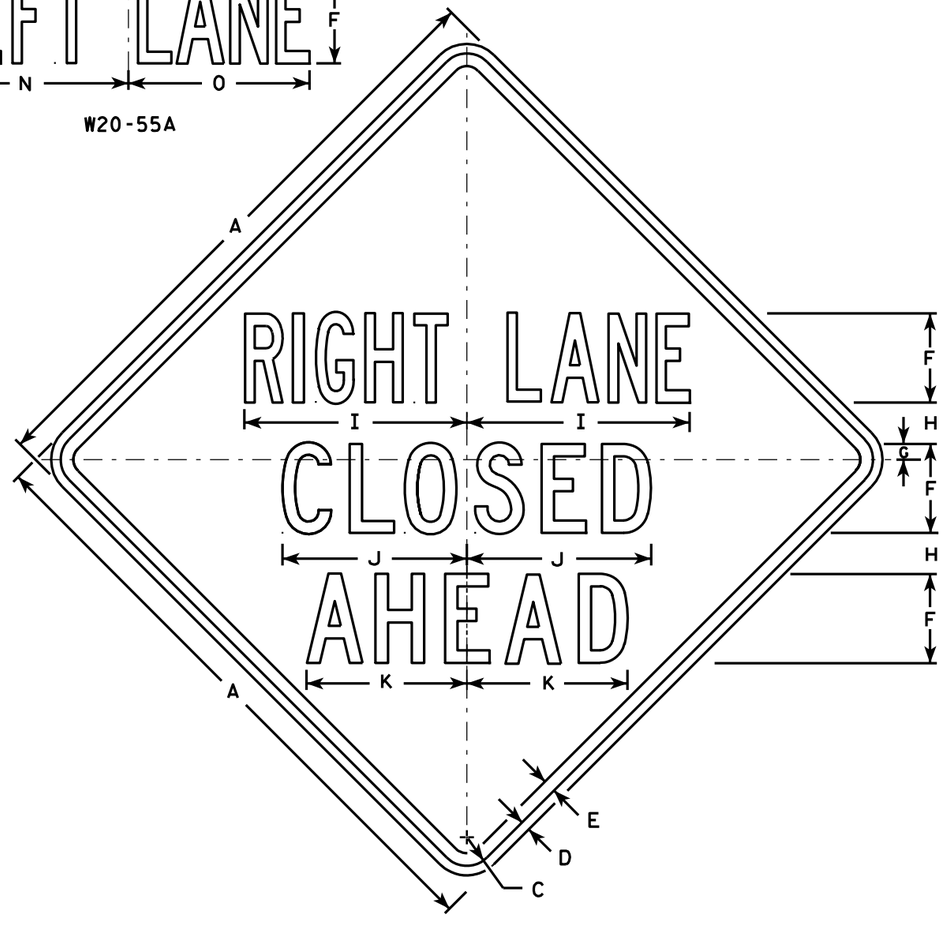
PROJECT NO:

SHEET NO: E

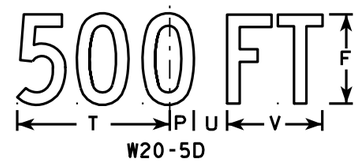
W20-56A



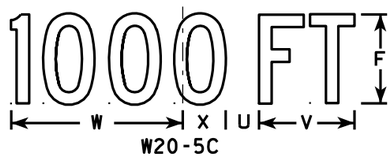
W20-55A



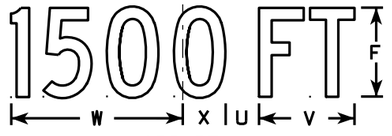
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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. " _____ LANE" is Series B.
   All other copy is Series C.

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	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

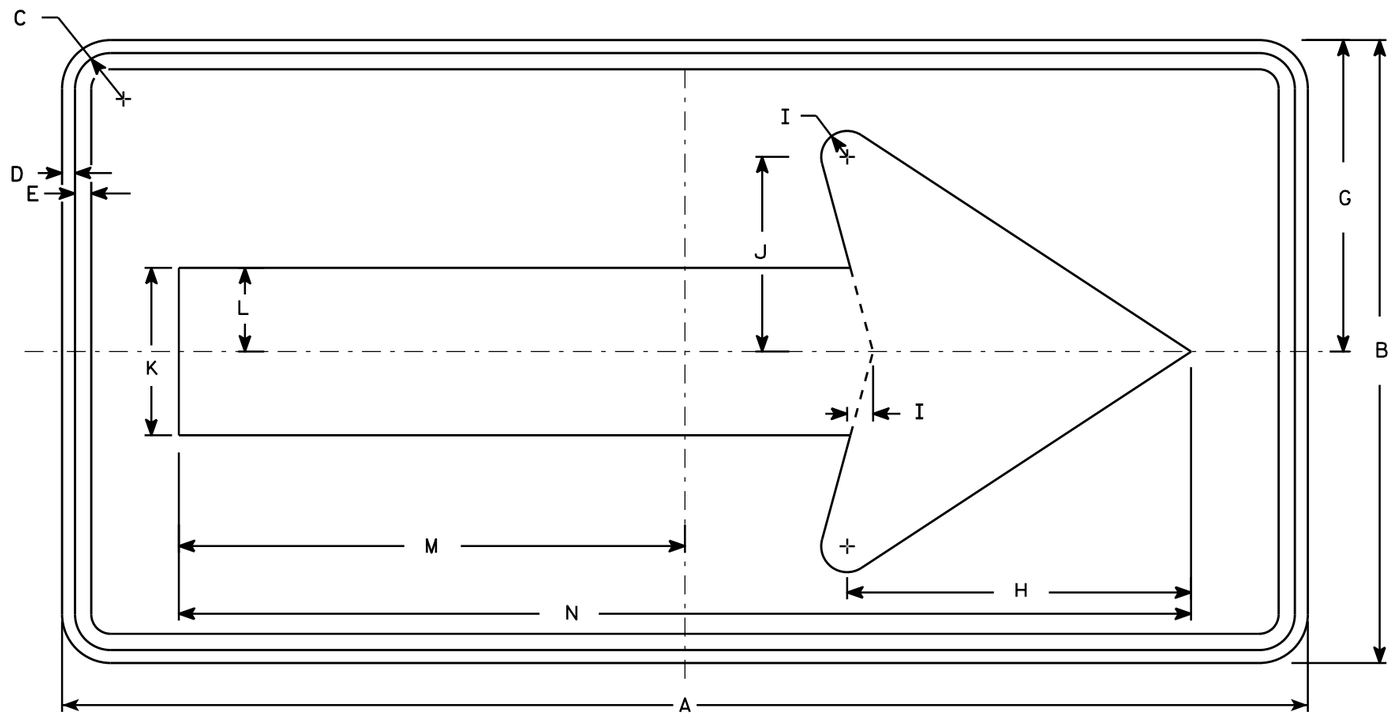
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
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.

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	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

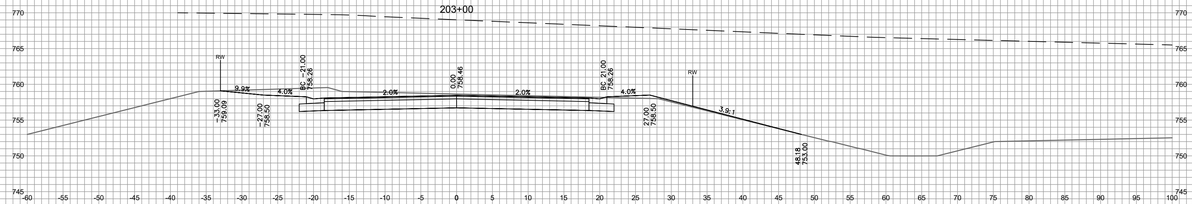
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

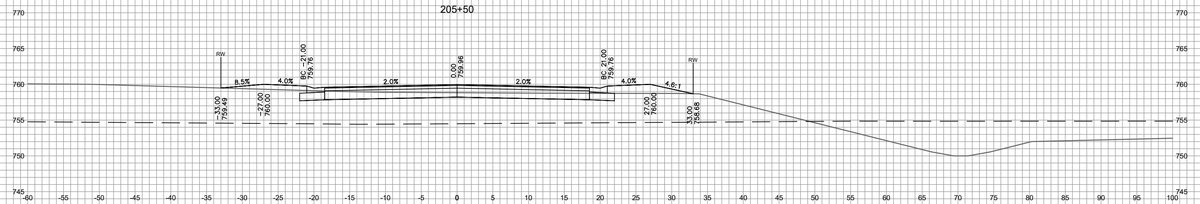
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

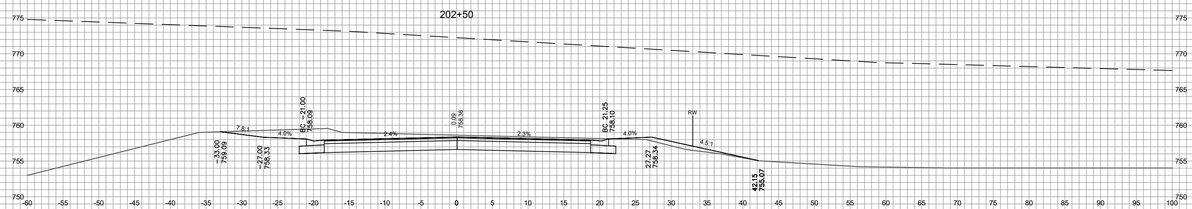
203+00



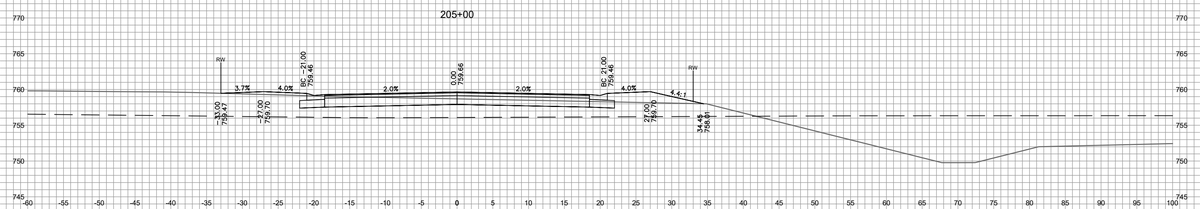
205+50



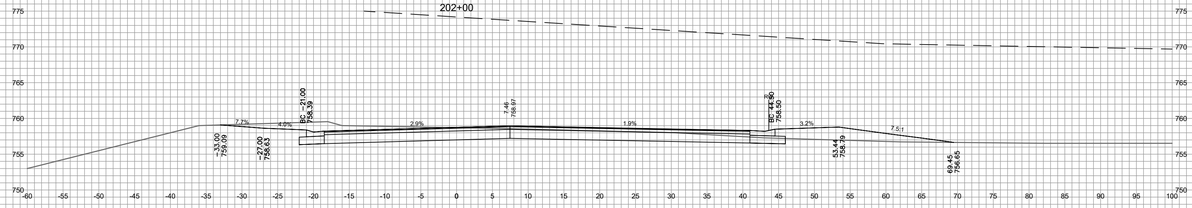
202+50



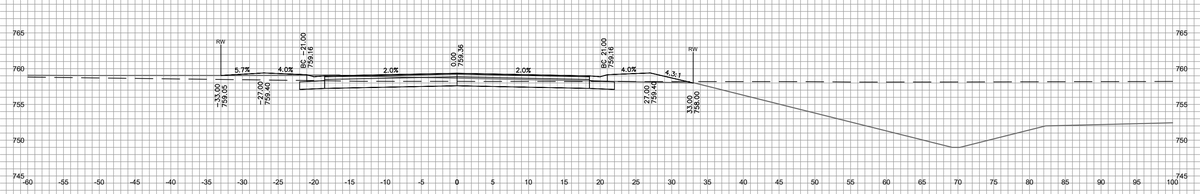
205+00



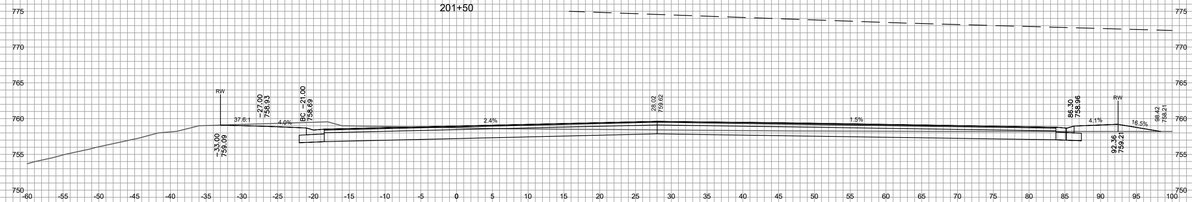
202+00



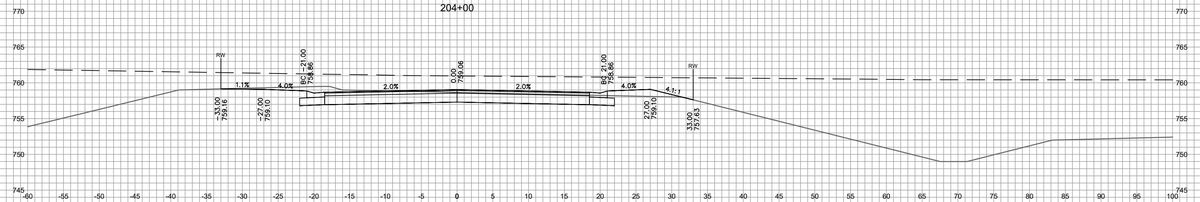
204+50



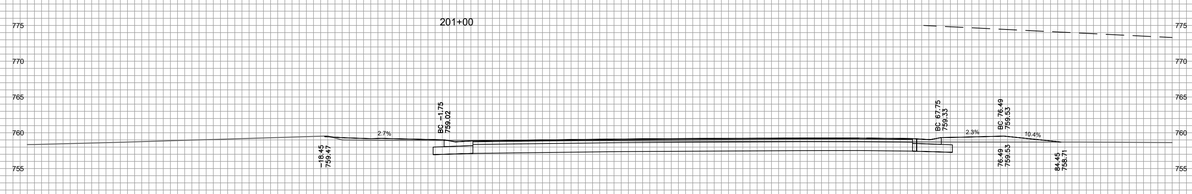
201+50



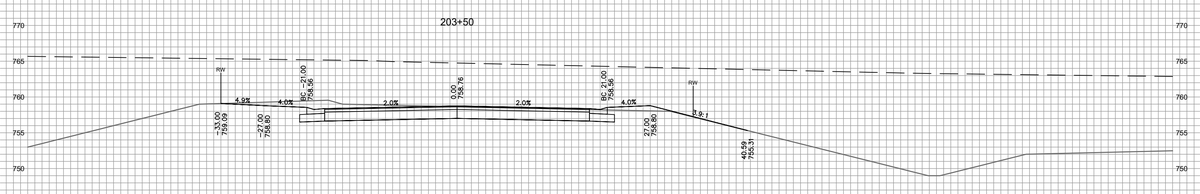
204+00



201+00



203+50



DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

INTERIOR ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. **1912.00 WI** | AJS
PEG PM
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
XS-1
C-59

© COPYRIGHT 2019

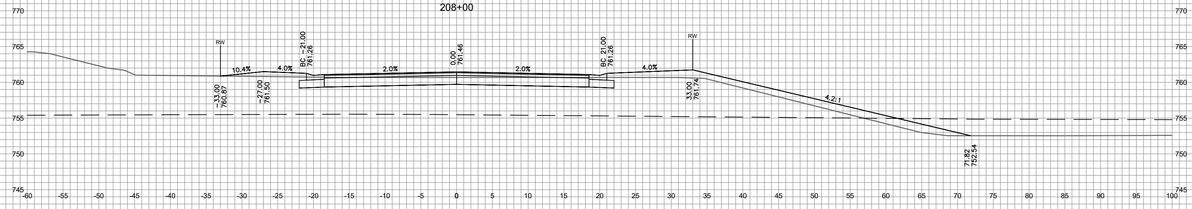
FOR REVIEW ONLY

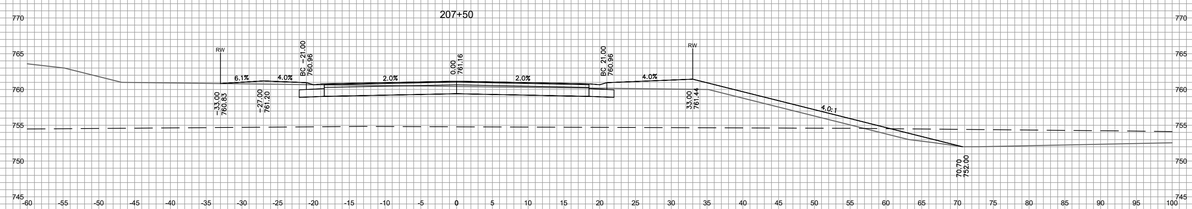
INTERIOR ACCESS ROAD CROSS SECTIONS

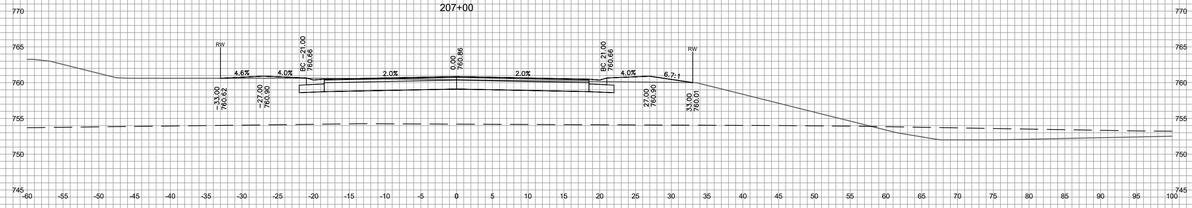
www.pinnacle-engr.com

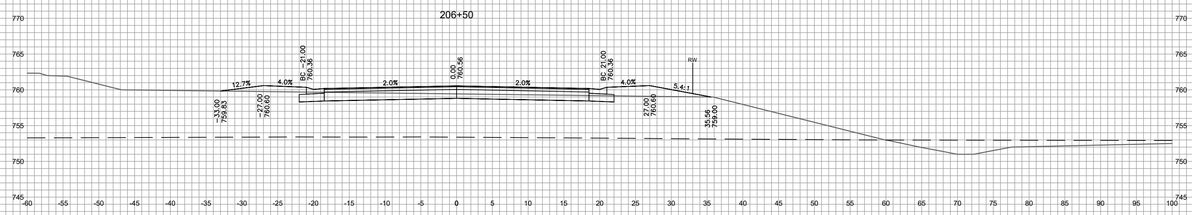
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

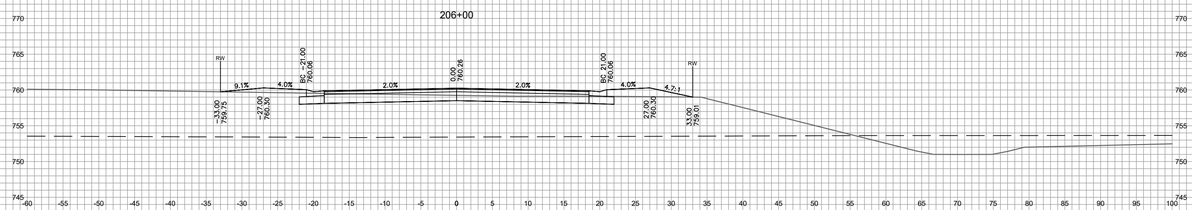
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

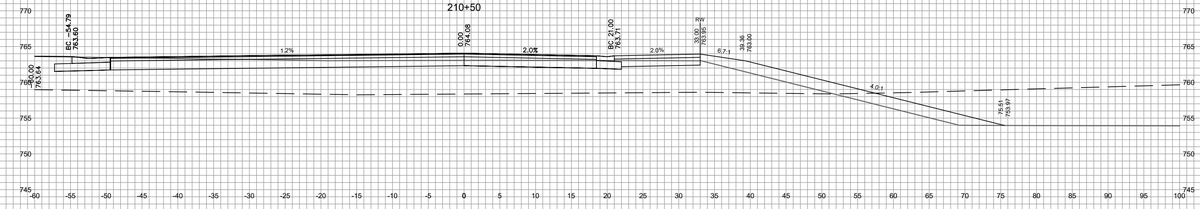


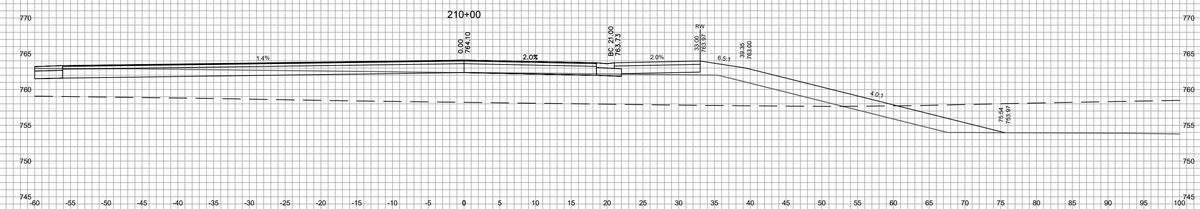


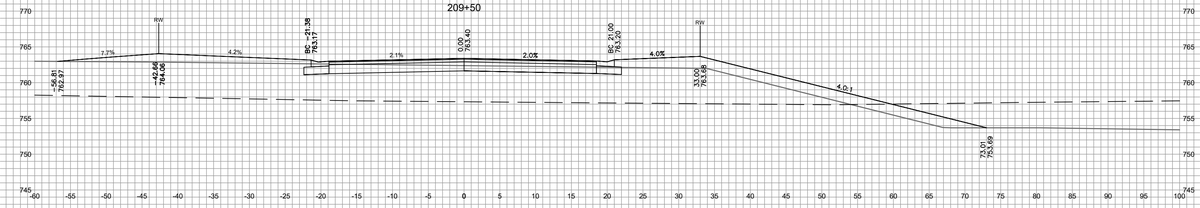


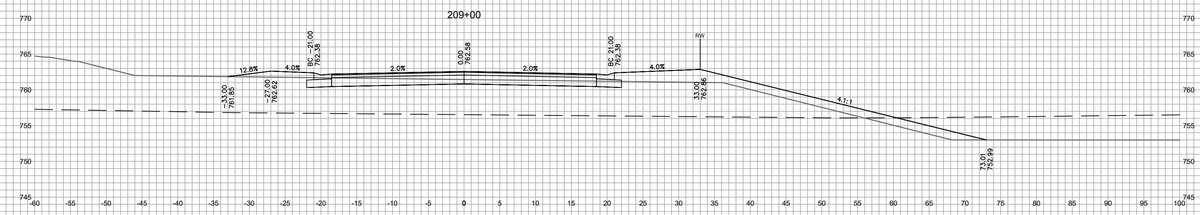


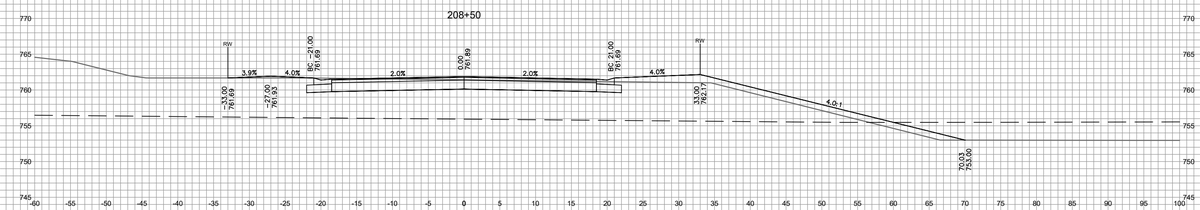












REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

INTERIOR ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE N.T.S.

SHEET
XS-2
C-59

©COPYRIGHT 2019

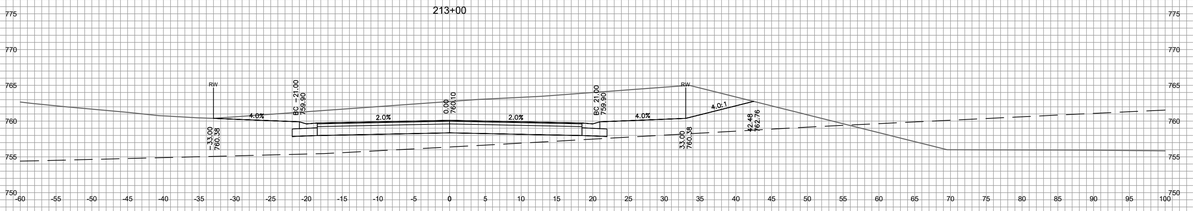
FOR REVIEW ONLY

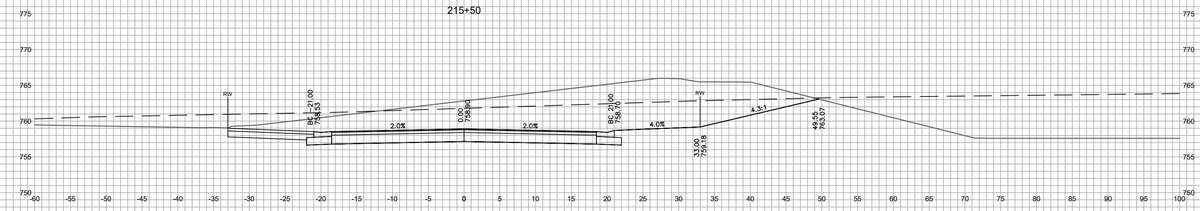
INTERIOR ACCESS ROAD CROSS SECTIONS

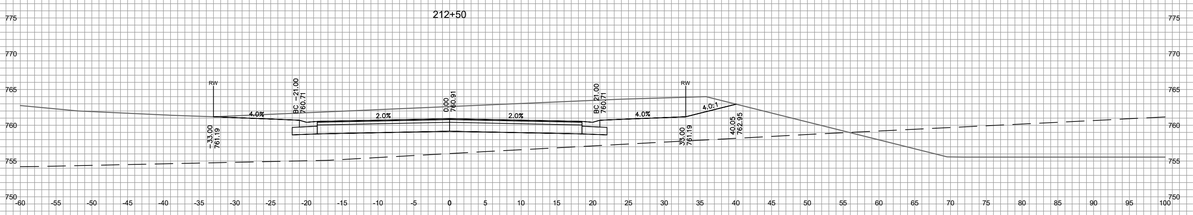
www.pinnacle-engr.com

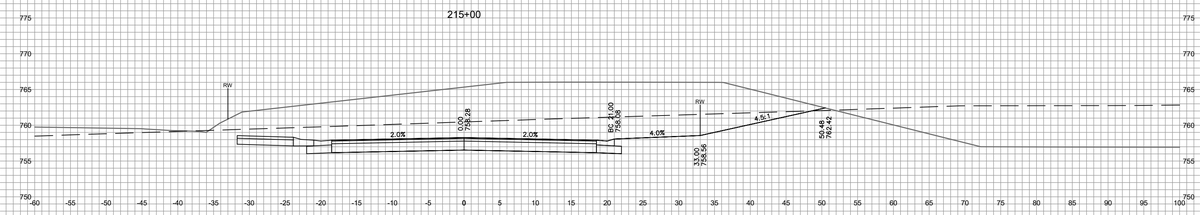
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

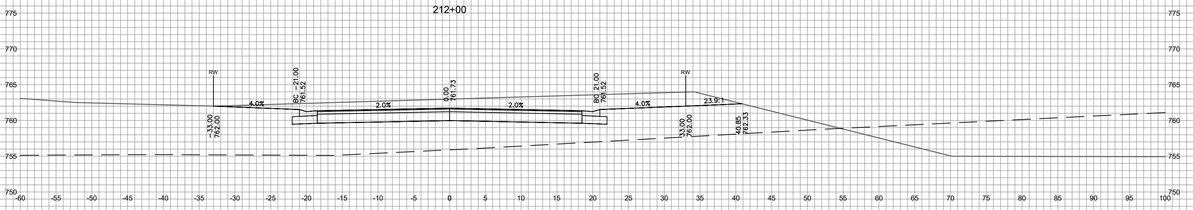
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

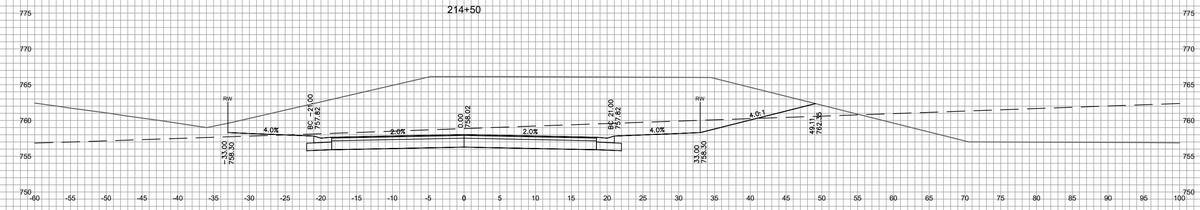


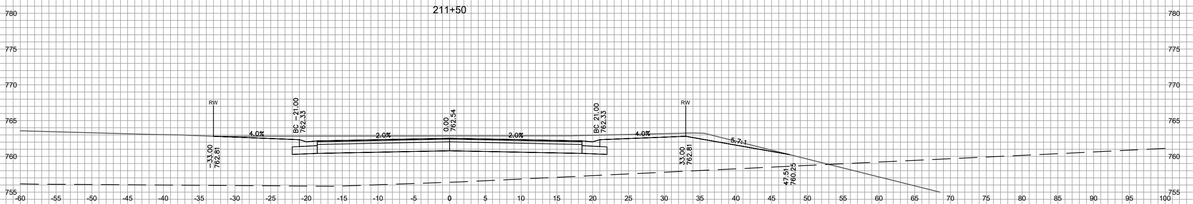


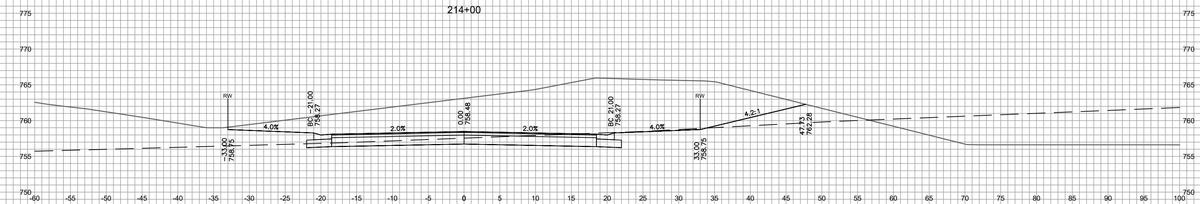


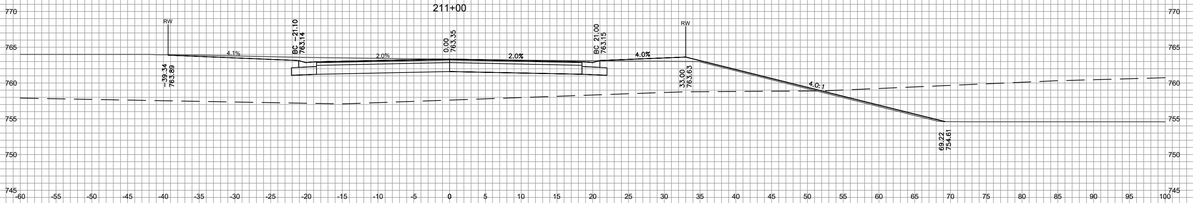


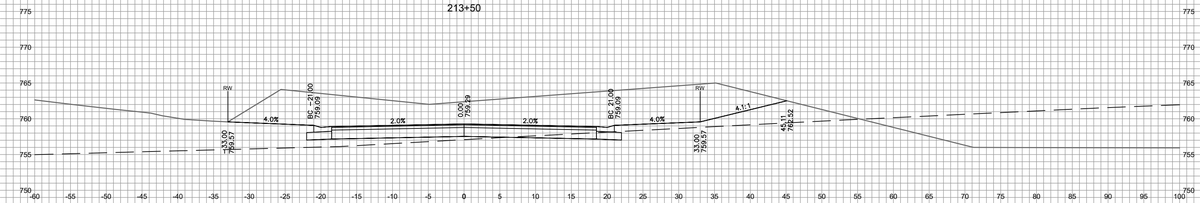












REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

INTERIOR ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No **1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
XS-3
C-59

© COPYRIGHT 2019

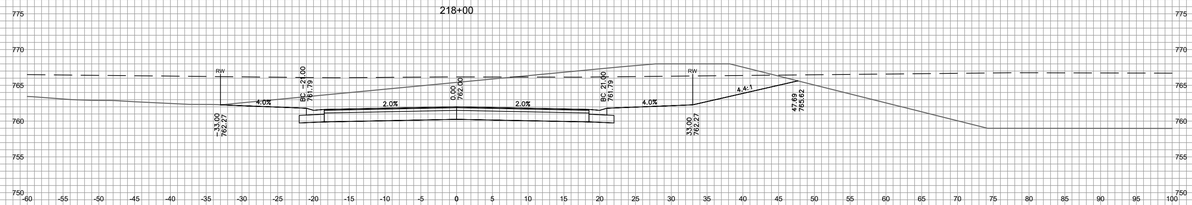
FOR REVIEW ONLY

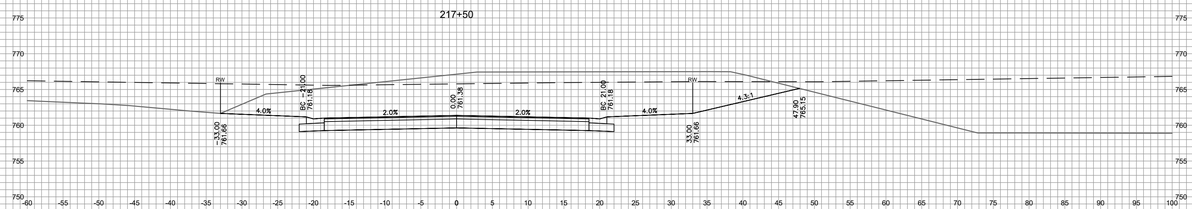
INTERIOR ACCESS ROAD CROSS SECTIONS

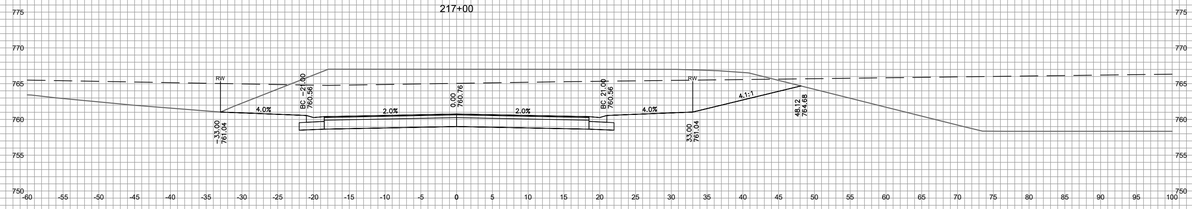
www.pinnacle-engr.com

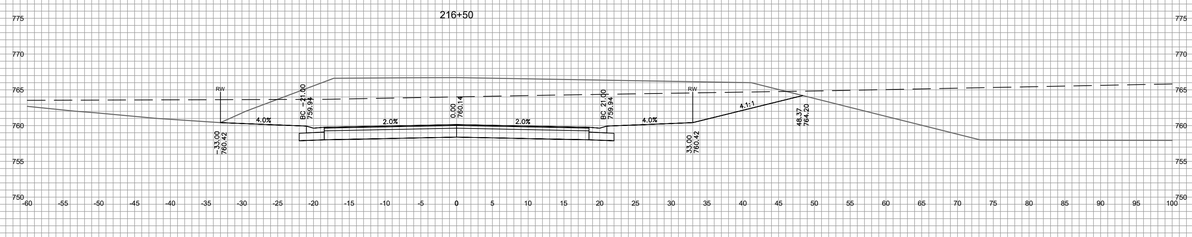
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

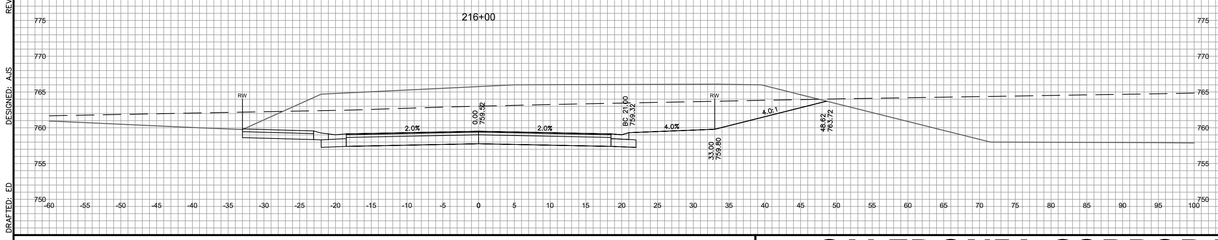
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

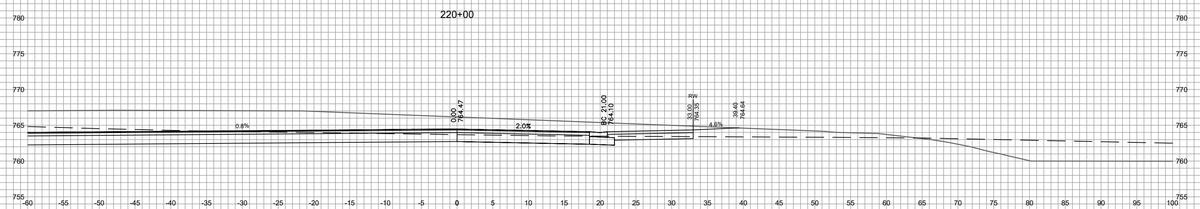


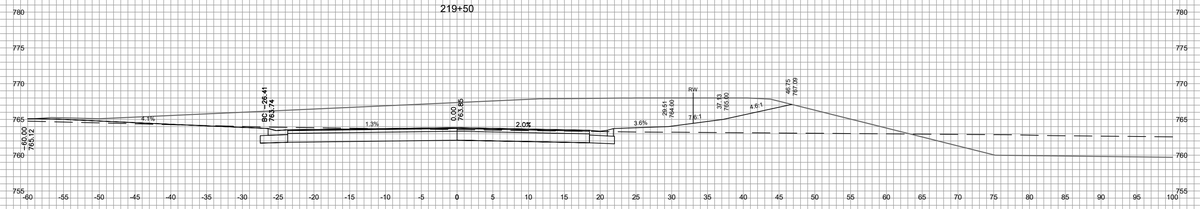


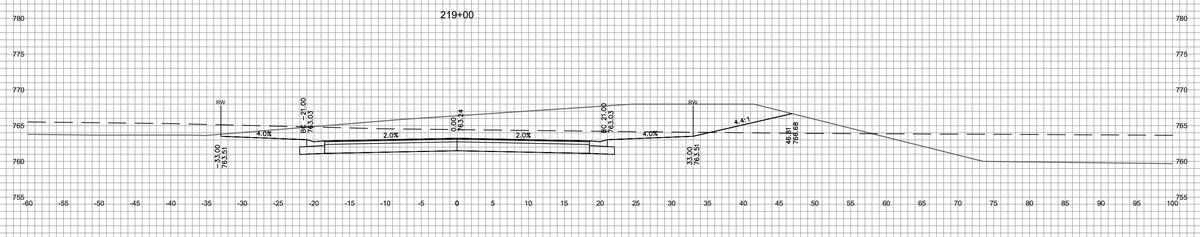


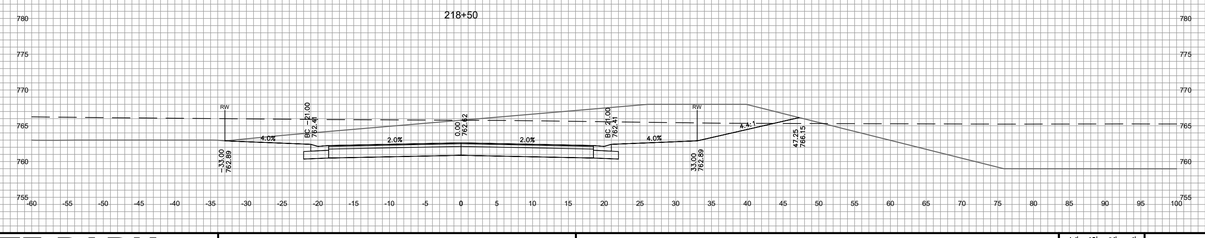












REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

INTERIOR ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No **1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
XS-4
C-59

© COPYRIGHT 2019

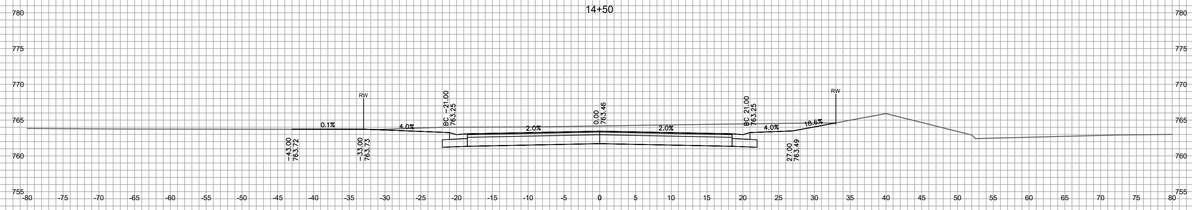
FOR REVIEW ONLY

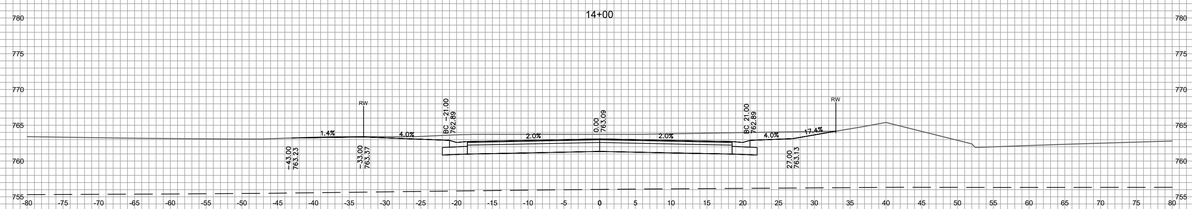
INTERIOR ACCESS ROAD CROSS SECTIONS

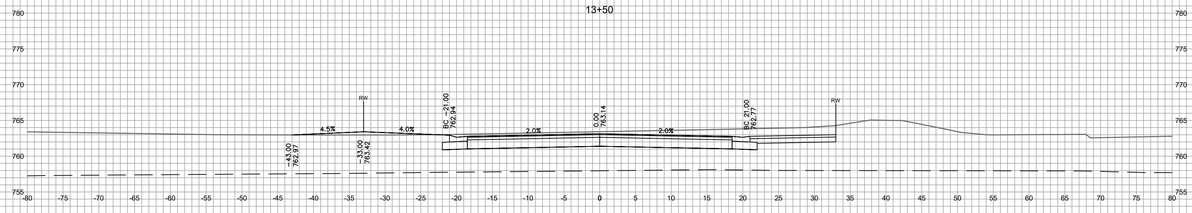
www.pinnacle-engr.com

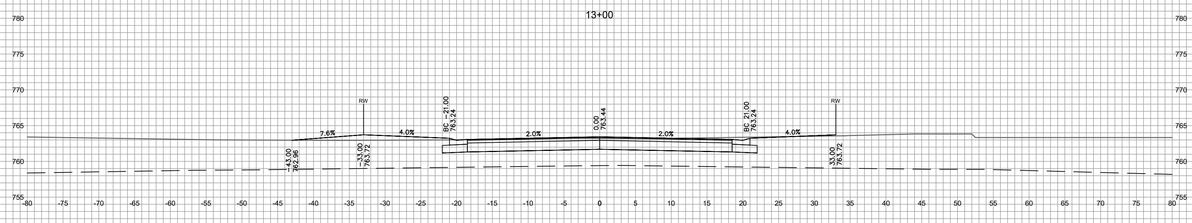
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

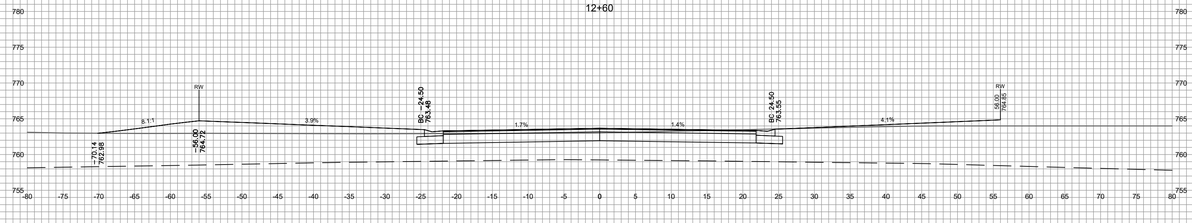
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

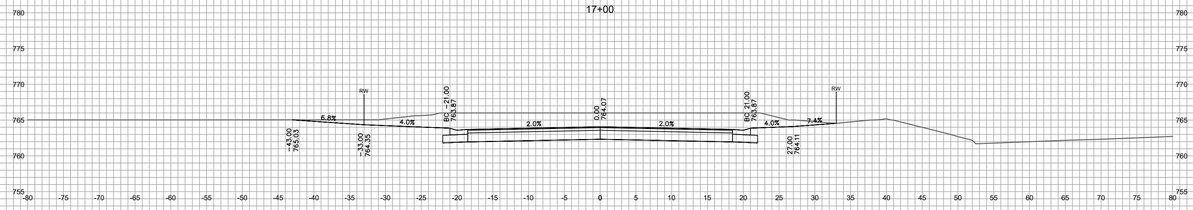


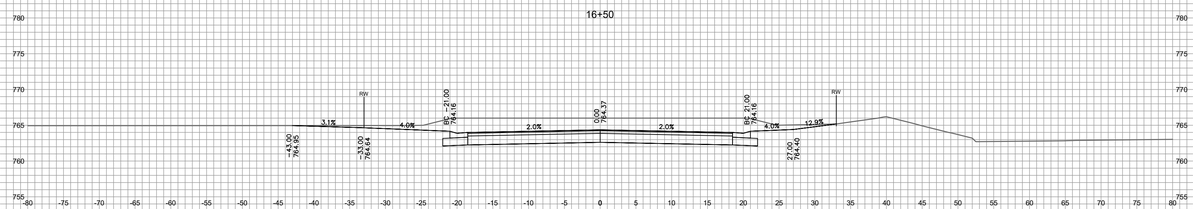


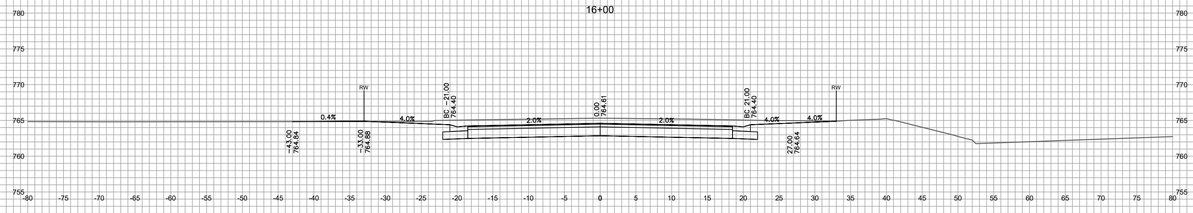


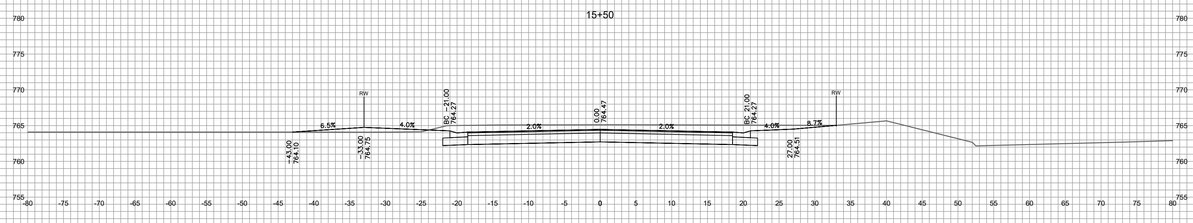


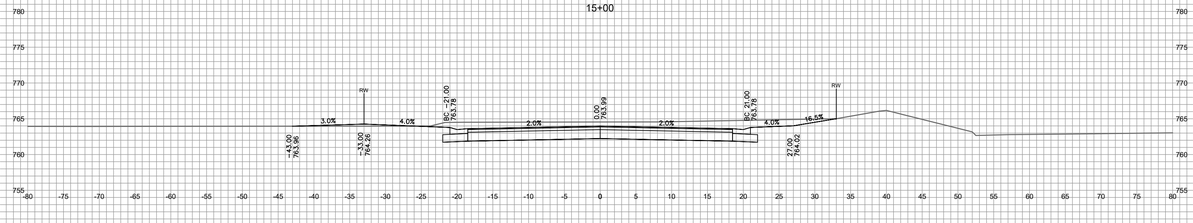












REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

www.pinnacle-engr.com

FOR REVIEW ONLY

WEST ACCESS ROAD CROSS SECTIONS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE - NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

WEST ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

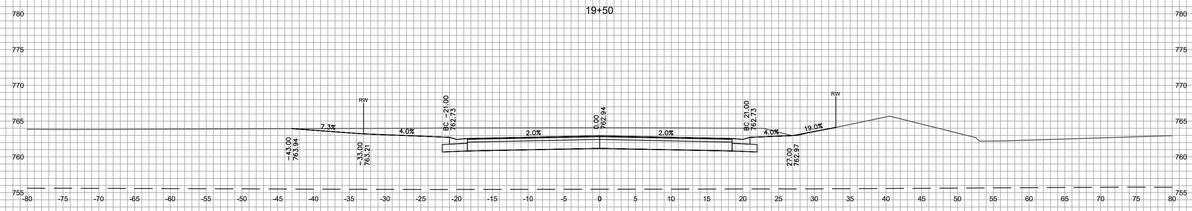
PEG JOB No. **1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

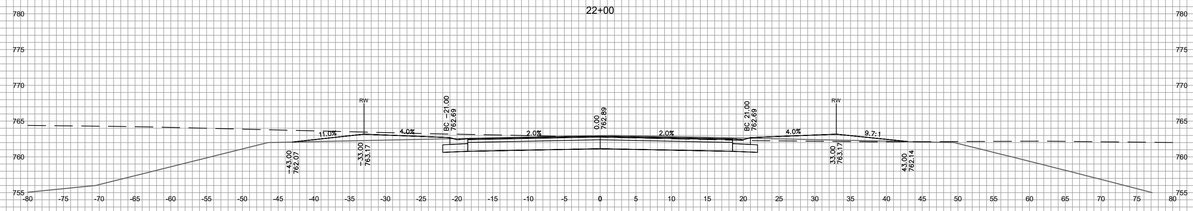
SHEET
XS-5
C-59

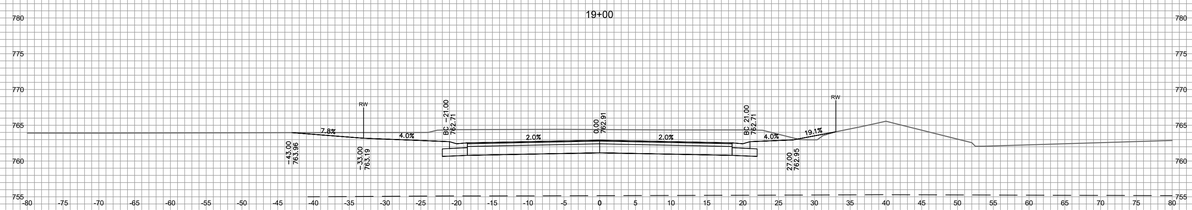
©COPYRIGHT 2019

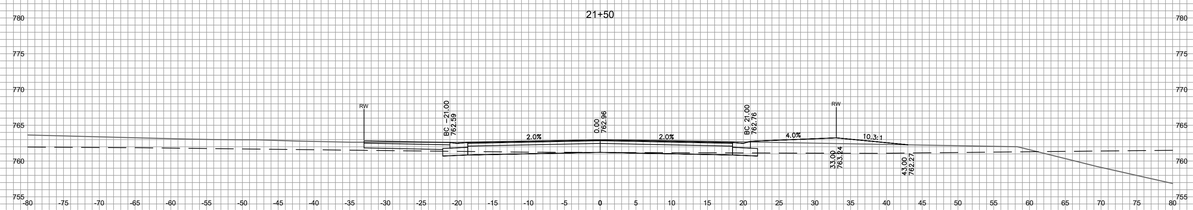
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

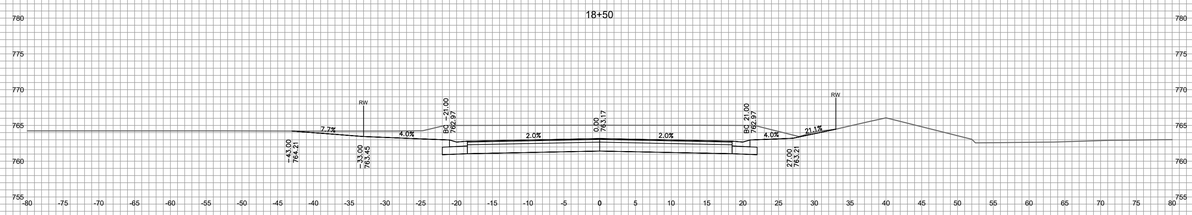
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

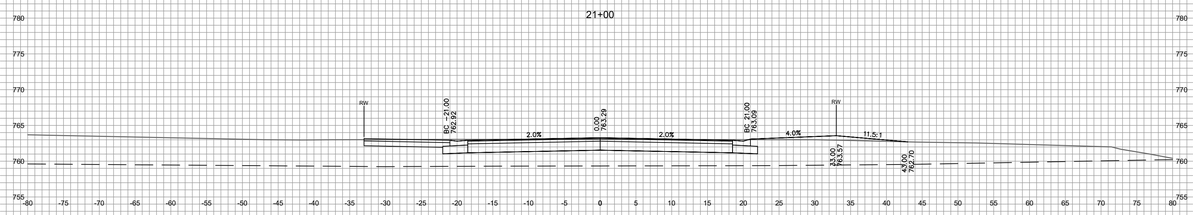


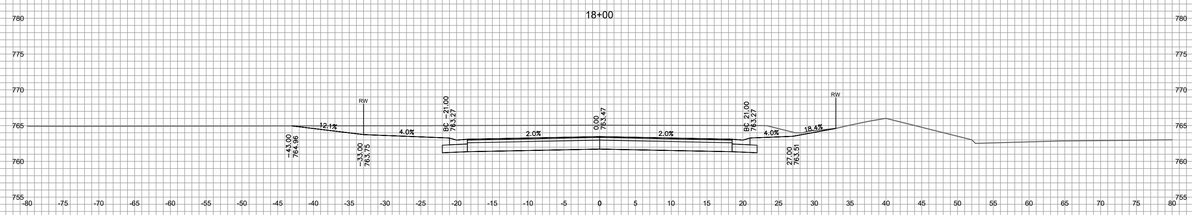


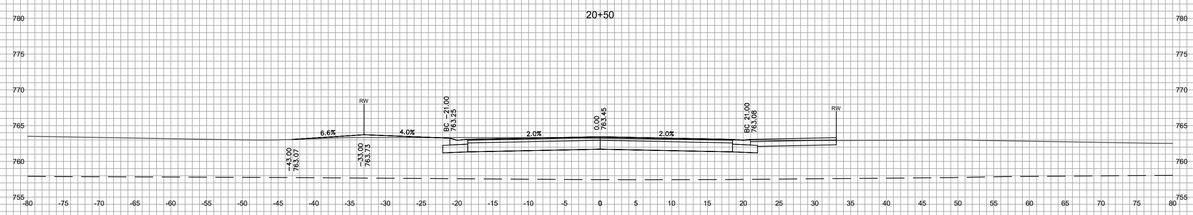


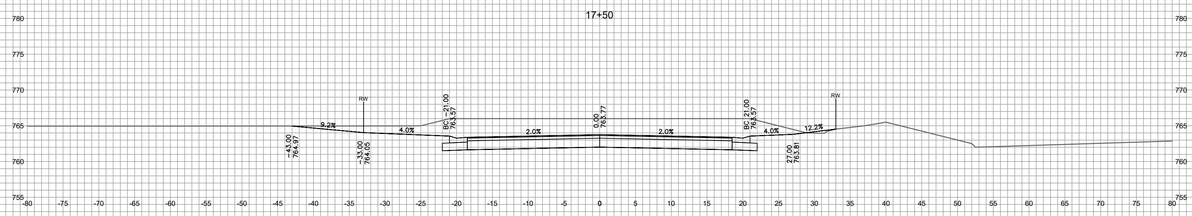


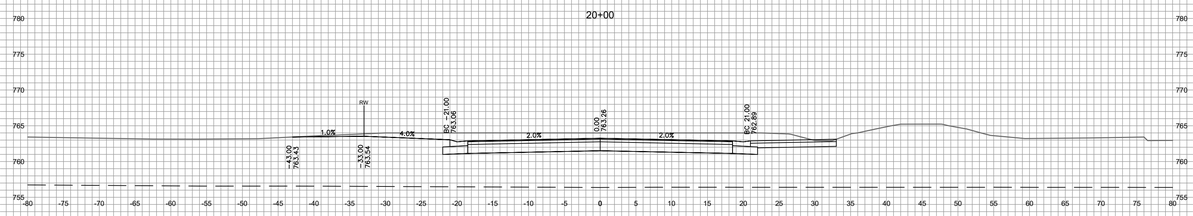












DRAFTED: ED
DESIGNED: AJS
REVIEWED: AJS

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

WEST ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. **1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
XS-6
C-59

© COPYRIGHT 2019

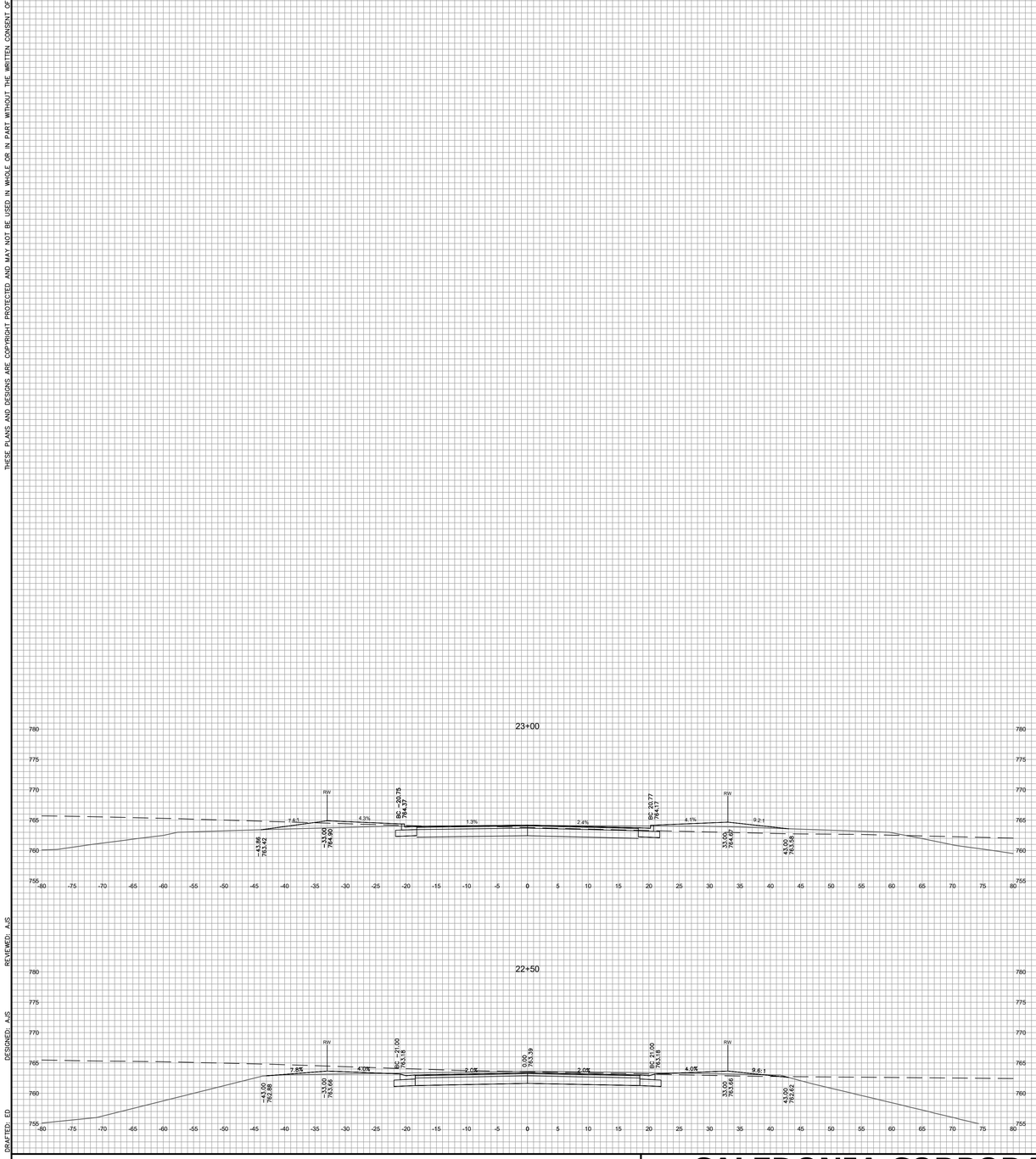
FOR REVIEW ONLY

WEST ACCESS ROAD CROSS SECTIONS

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP LLC



REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

WEST ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No.**1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
XS-7
C-59

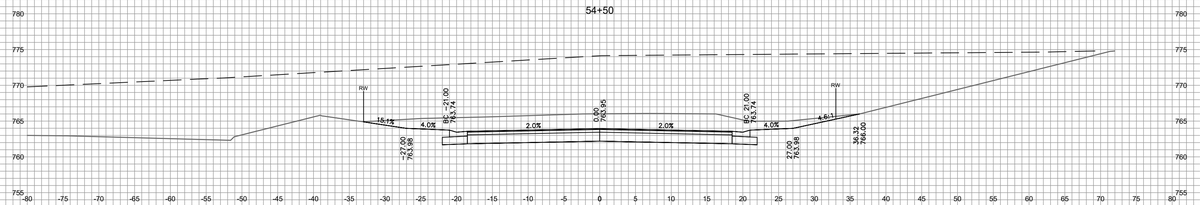
FOR REVIEW ONLY

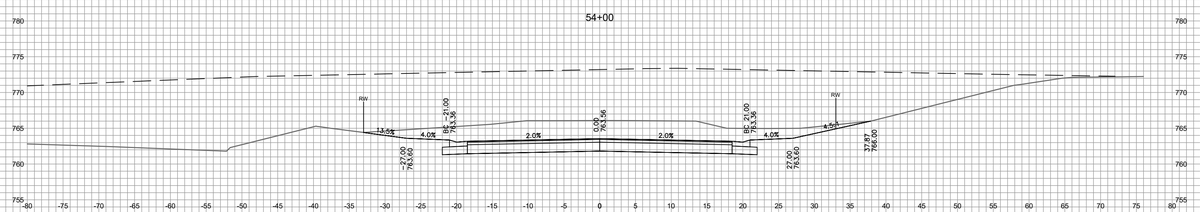
WEST ACCESS ROAD CROSS SECTIONS

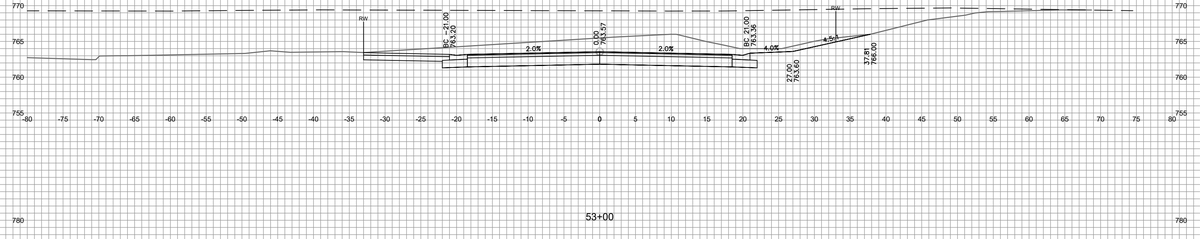
© COPYRIGHT 2019

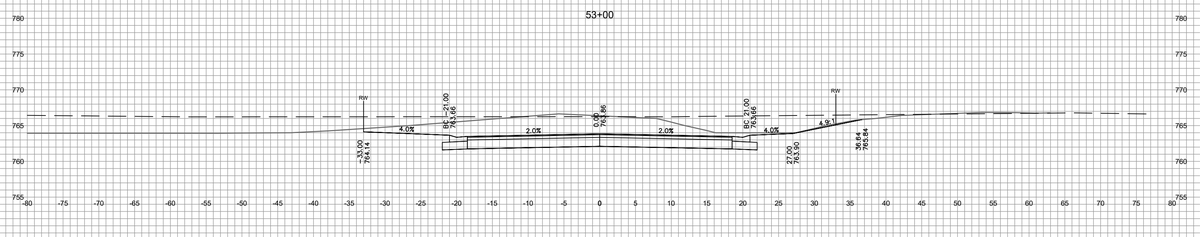
Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

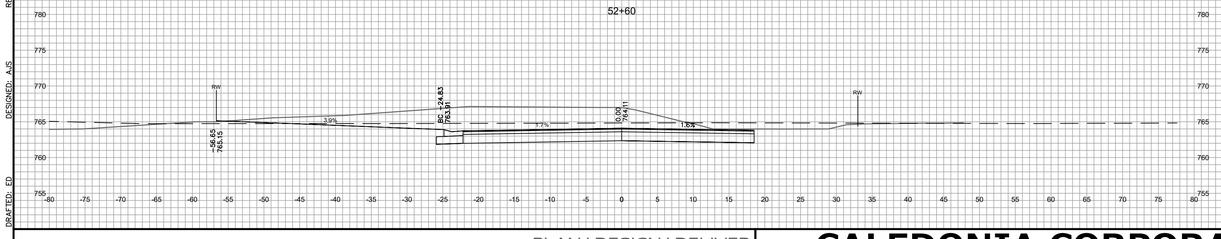
THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

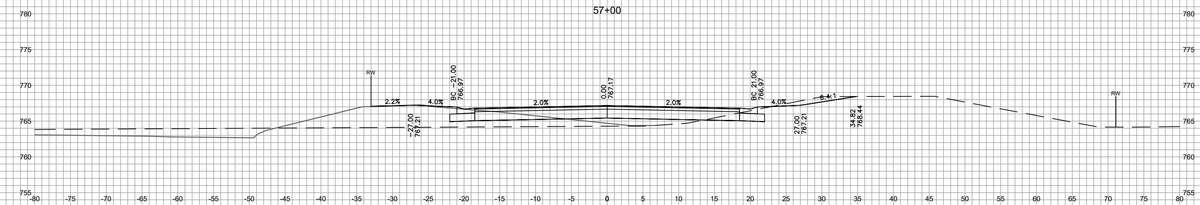


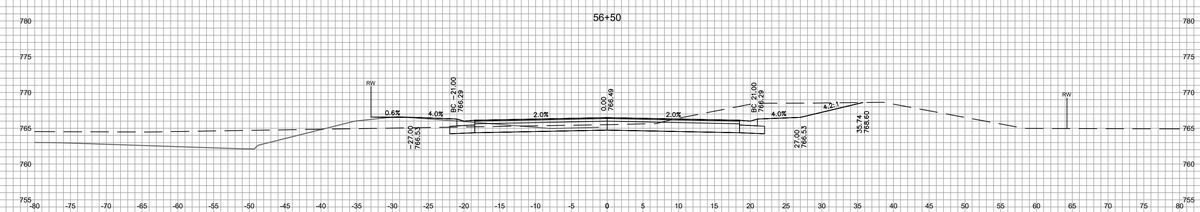


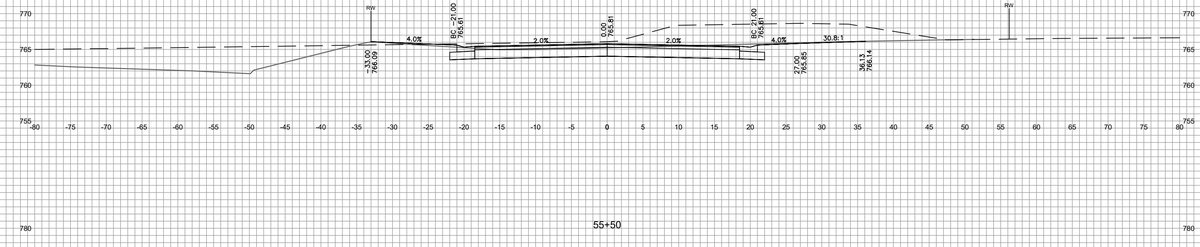


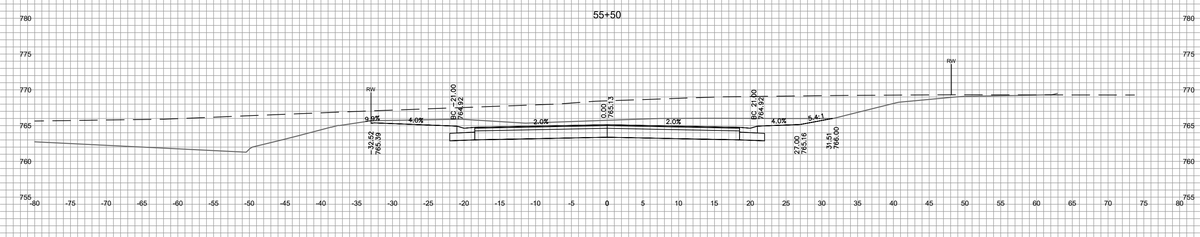


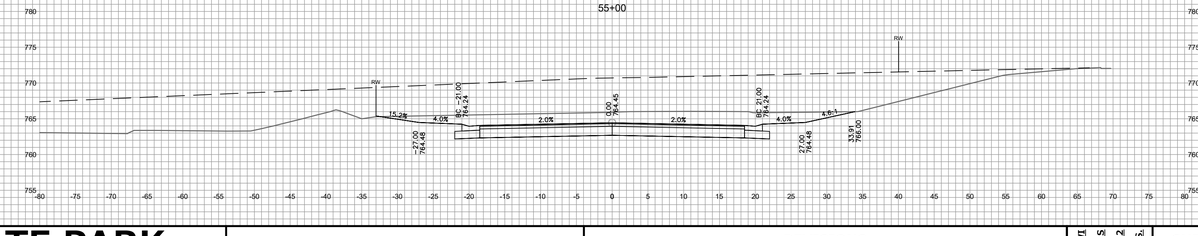












REVIEWED: AJS

DESIGNED: AJS

DRAFTED: ED

FOR REVIEW ONLY

EAST ACCESS ROAD CROSS SECTIONS

© COPYRIGHT 2019

www.pinnacle-engr.com

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

EAST ACCESS ROAD CROSS SECTIONS

REVISIONS

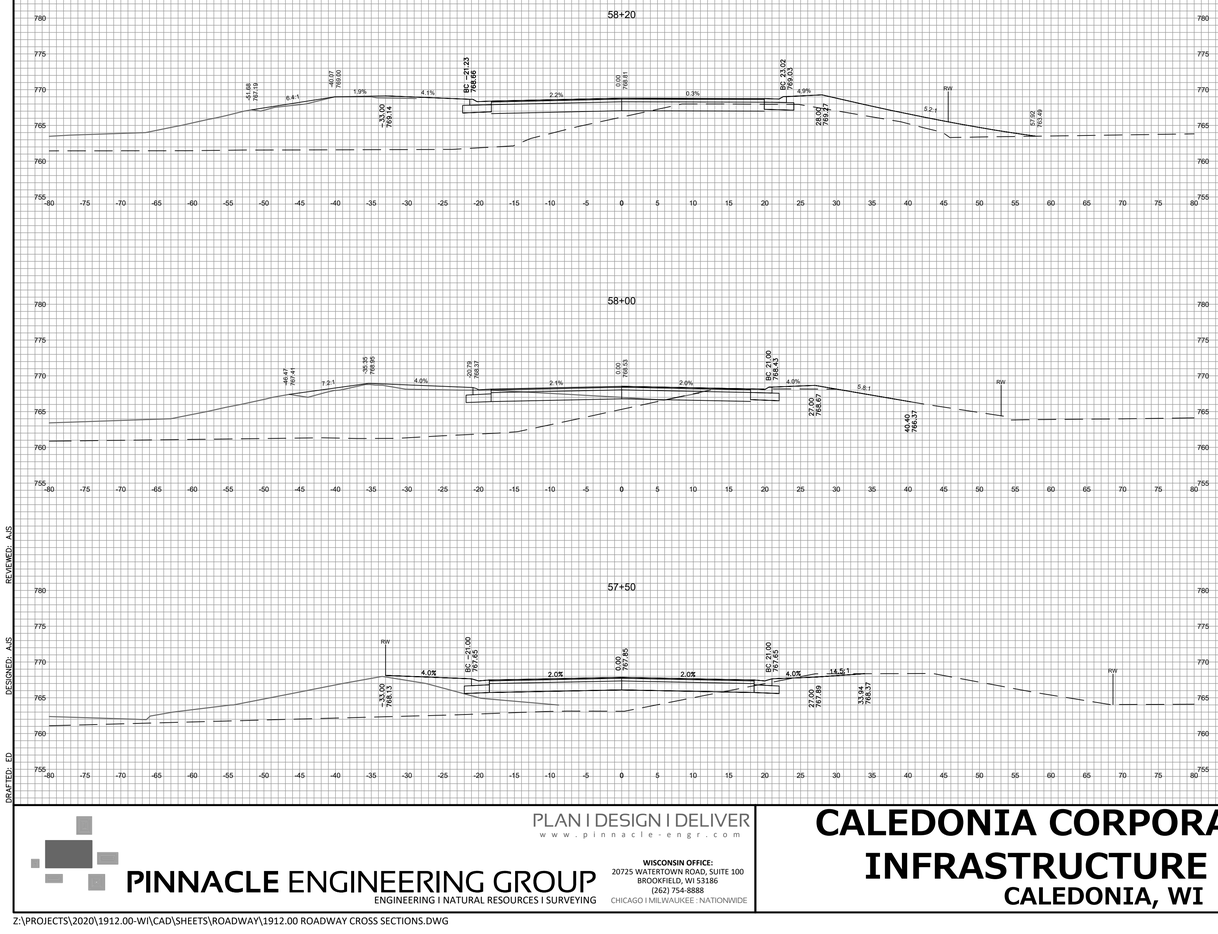
1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No **1912.00 WI**
PEG PM **AJS**
START DATE **04/20/22**
SCALE **N.T.S.**

SHEET
XS-8
C-59

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



REVIEWED: AJS
DESIGNED: AJS
DRAFTED: ED

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

EAST ACCESS ROAD CROSS SECTIONS

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE N.T.S.

SHEET
XS-9
C-59

© COPYRIGHT 2019

FOR REVIEW ONLY

EAST ACCESS ROAD CROSS SECTIONS

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 ROADWAY CROSS SECTIONS.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

NORTHWESTERN AVENUE
COUNTY TRUNK HIGHWAY "K"
(VARIABLE PUBLIC R.O.W.)

((D) 1324.11')

RAINWATER RENEWAL SEEDING - REFER TO BLDG 1 PLANS

POND B
NWL = 750.00

POND A
NWL = 750.00

RAINWATER RENEWAL SEEDING - REFER TO BLDG 1 PLANS

RAINWATER RENEWAL SEEDING

EXISTING TREELINE, TYP.

POND C
NWL = 745.00

EXISTING CONTOUR MAJOR, TYP.

EXISTING CONTOUR MINOR, TYP.

PROPOSED CONTOUR MINOR, TYP.

PROPOSED CONTOUR MAJOR, TYP.

WETLAND

SHEET L-2

SHEET L-3

SHEET L-4

SHEET L-5

SHEET L-6

SHEET L-7

PLANT SCHEDULE

STREET TREES	QTY	BOTANICAL / COMMON NAME	SIZE
	34	Acer freemanii `Autumn Fantasy` Autumn Fantasy Maple 50` T x 40` W	2" Cal.
	20	Celtis occidentalis `Chicagoland` Chicagoland Hackberry 50` T x 40` W	2" Cal.
	19	Gymnocladus dioicus Kentucky Coffee Tree 70` T x 45` W	2" Cal.
	25	Tilia tomentosa `Sterling` Sterling Silver Linden 45` T x 35` W	2" Cal.
	32	Ulmus x `Frontier` Frontier Elm 45` T x 30` W	2" Cal.

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME
	87,255 sf	Rain Garden	AGRECOL RAINWATER RENEWAL MIX

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 80' 160'

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

FOR REVIEW ONLY

LANDSCAPE OVERVIEW

www.pinnacle-engr.com

PLAN | DESIGN | DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING | NATURAL RESOURCES | SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO | MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE OVERVIEW

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

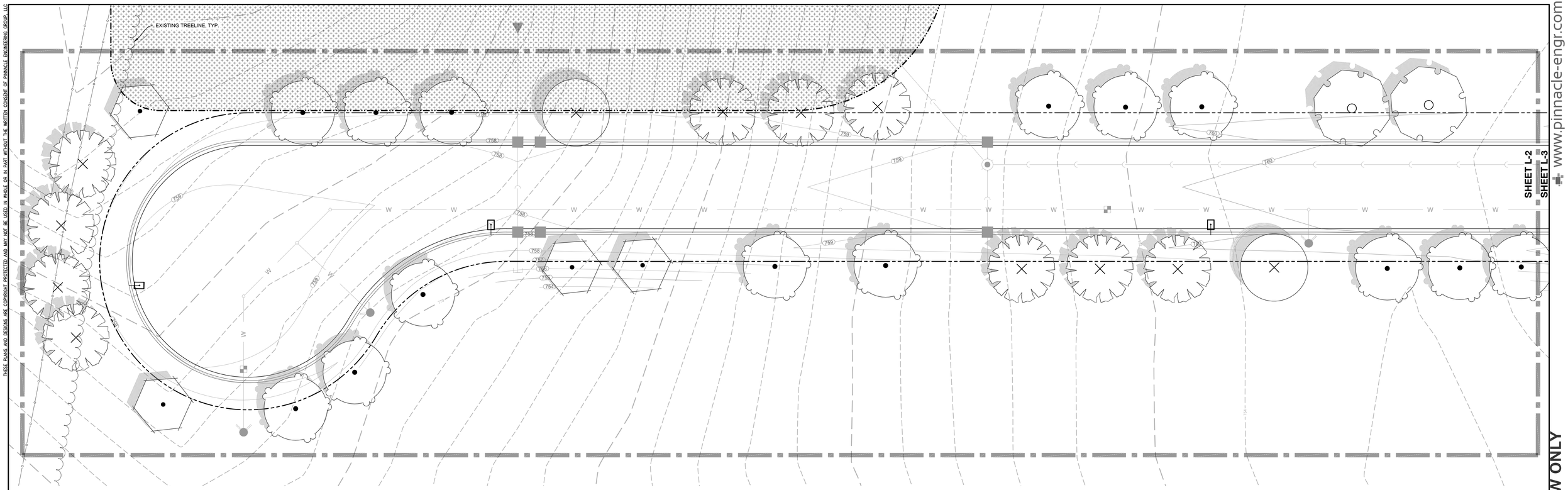
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 80'

SHEET
L-1
L-8

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



www.pinnacle-engr.com

FOR REVIEW ONLY

PLANT KEY

STREET TREES	BOTANICAL NAME	COMMON NAME
	Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple
	Celtis occidentalis `Chicagoland`	Chicagoland Hackberry
	Gymnocladus dioicus	Kentucky Coffee Tree
	Tilia tomentosa `Sterling`	Sterling Silver Linden
	Ulmus x `Frontier`	Frontier Elm

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

LANDSCAPE ENLARGEMENT

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE ENLARGEMENT

REVISIONS

1	DRT CHECKSET	7/8/22		
2	MUNICIPAL SUBMITTAL	7/25/22		
3	MUNICIPAL SUBMITTAL	11/04/22		
4	VILLAGE COMMENTS	12/12/22		

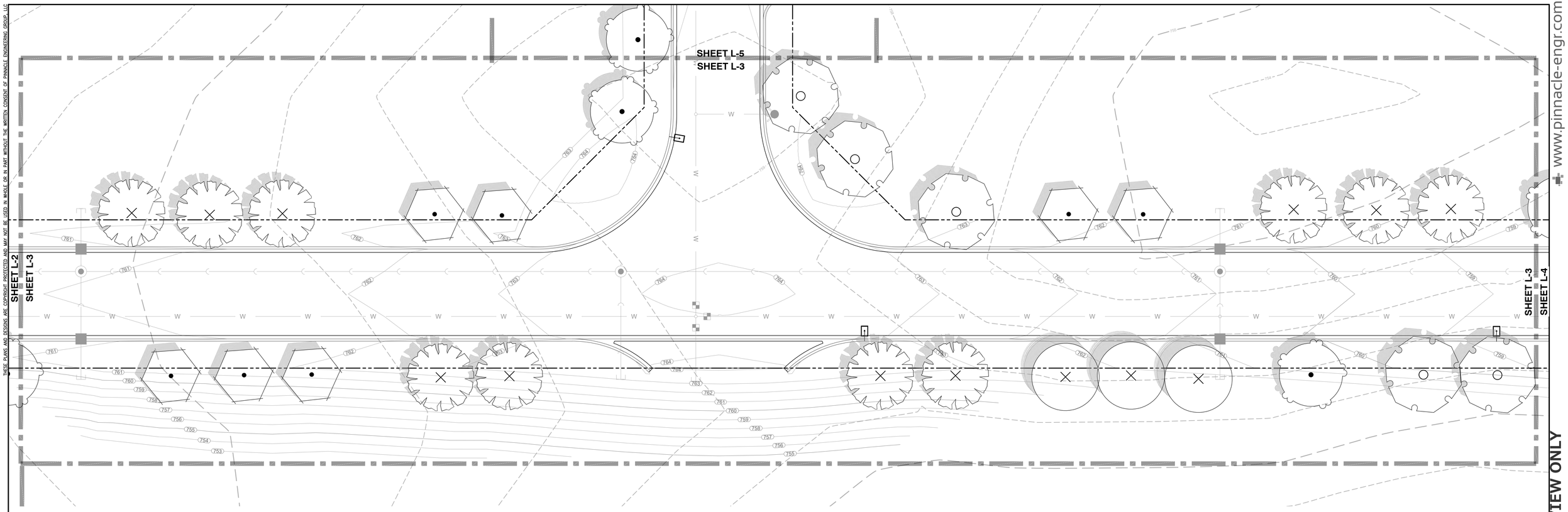
PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
L-2
L-8

©COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



PLANT KEY

STREET TREES	BOTANICAL NAME	COMMON NAME
	Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple
	Celtis occidentalis `Chicagoland`	Chicagoland Hackberry
	Gymnocladus dioicus	Kentucky Coffee Tree
	Tilia tomentosa `Sterling`	Sterling Silver Linden
	Ulmus x `Frontier`	Frontier Elm

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE ENLARGEMENT

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET L-3 L-8

FOR REVIEW ONLY

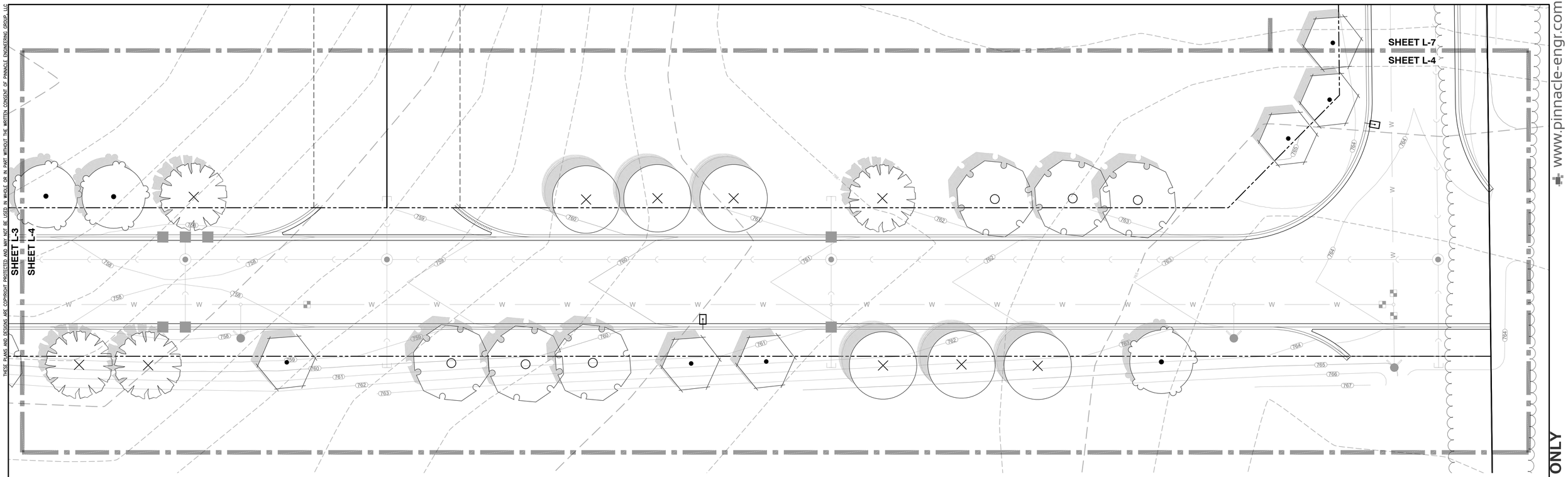
LANDSCAPE ENLARGEMENT

©COPYRIGHT 2019

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



PLANT KEY

STREET TREES	BOTANICAL NAME	COMMON NAME
	Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple
	Celtis occidentalis `Chicagoland`	Chicagoland Hackberry
	Gymnocladus dioicus	Kentucky Coffee Tree
	Tilia tomentosa `Sterling`	Sterling Silver Linden
	Ulmus x `Frontier`	Frontier Elm

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE :NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE ENLARGEMENT

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
L-4
L-8

©COPYRIGHT 2019

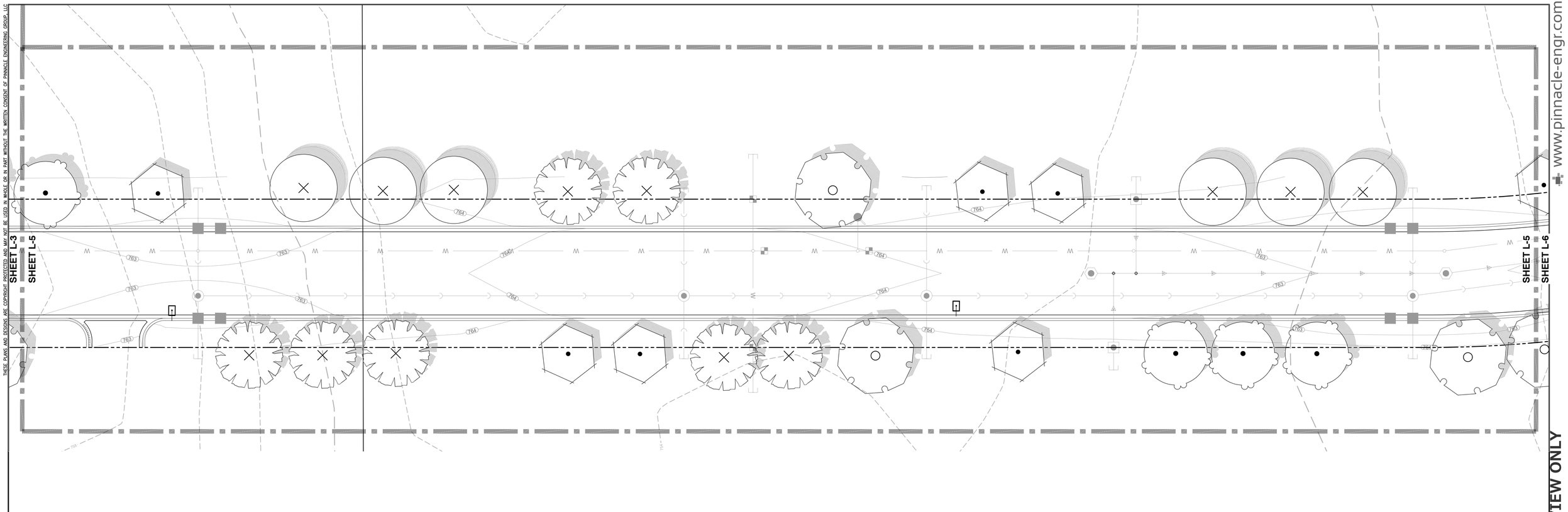
FOR REVIEW ONLY

LANDSCAPE ENLARGEMENT

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



PLANT KEY

STREET TREES	BOTANICAL NAME	COMMON NAME
	Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple
	Celtis occidentalis `Chicagoland`	Chicagoland Hackberry
	Gymnocladus dioicus	Kentucky Coffee Tree
	Tilia tomentosa `Sterling`	Sterling Silver Linden
	Ulmus x `Frontier`	Frontier Elm

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

FOR REVIEW ONLY

LANDSCAPE ENLARGEMENT

©COPYRIGHT 2019

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE ENLARGEMENT

REVISIONS

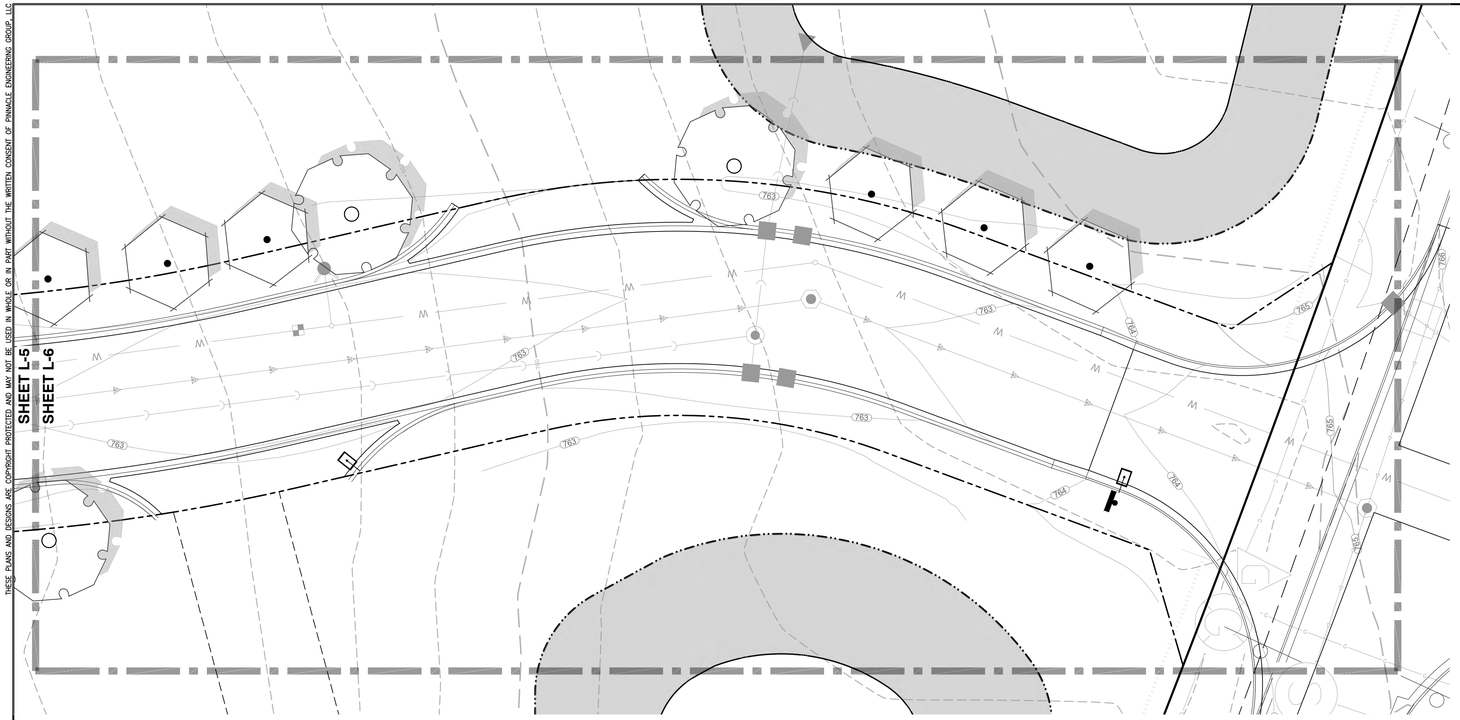
1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
L-5
L-8

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



PLANT KEY

STREET TREES	BOTANICAL NAME	COMMON NAME
	Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple
	Celtis occidentalis `Chicagoland`	Chicagoland Hackberry
	Gymnocladus dioicus	Kentucky Coffee Tree
	Tilia tomentosa `Sterling`	Sterling Silver Linden
	Ulmus x `Frontier`	Frontier Elm

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

DRAWN: JSJ
DESIGNED: JSJ
REVIEWED: DJB

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE ENLARGEMENT

REVISIONS

1	DRT CHECKSET	7/8/22	
2	MUNICIPAL SUBMITTAL	7/25/22	
3	MUNICIPAL SUBMITTAL	11/04/22	
4	VILLAGE COMMENTS	12/12/22	

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
L-6
L-8

©COPYRIGHT 2019

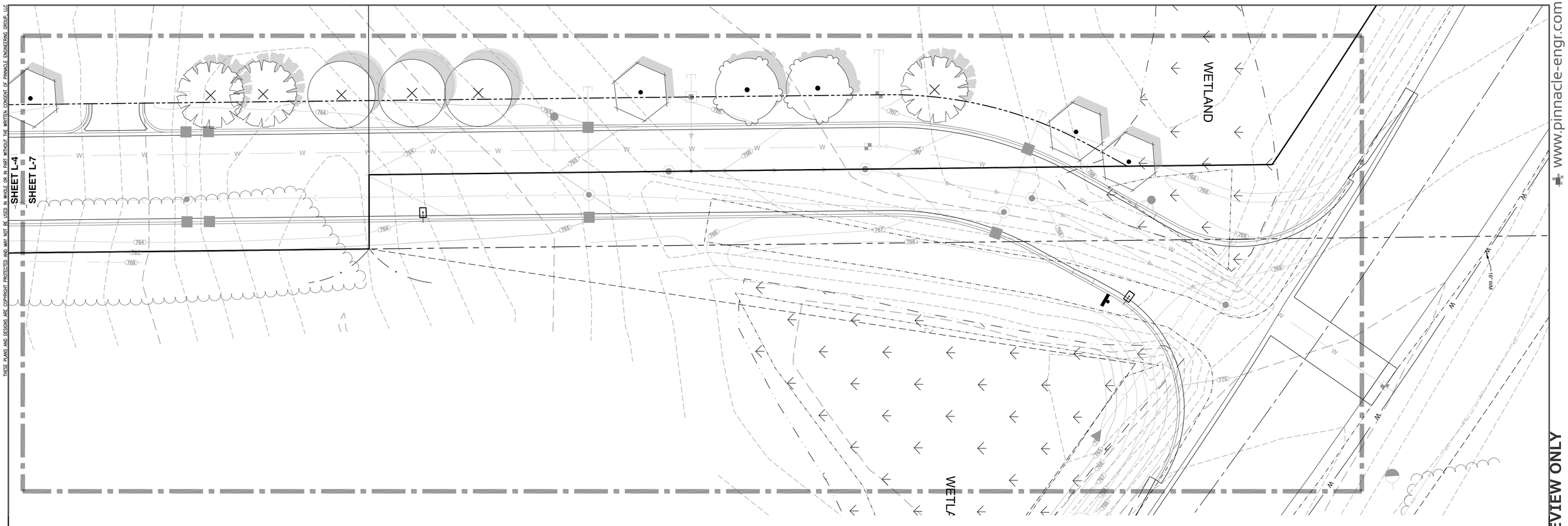
FOR REVIEW ONLY

LANDSCAPE ENLARGEMENT

www.pinnacle-engr.com

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC



PLANT KEY

STREET TREES	BOTANICAL NAME	COMMON NAME
	Acer freemanii `Autumn Fantasy`	Autumn Fantasy Maple
	Celtis occidentalis `Chicagoland`	Chicagoland Hackberry
	Gymnocladus dioicus	Kentucky Coffee Tree
	Tilia tomentosa `Sterling`	Sterling Silver Linden
	Ulmus x `Frontier`	Frontier Elm

NORTH

GRAPHICAL SCALE (FEET)

0 1" = 20' 40'

FOR REVIEW ONLY

LANDSCAPE ENLARGEMENT

www.pinnacle-engr.com

REVIEWED: DJB
DESIGNED: JSJ
DRAFTED: JSJ

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS

CALEDONIA, WI

LANDSCAPE ENLARGEMENT

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE 1" = 20'

SHEET
L-7
L-8

© COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG

THESE PLANS AND DESIGNS ARE COPYRIGHT PROTECTED AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PINNACLE ENGINEERING GROUP, LLC

GENERAL PLANTING NOTES

1. THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
3. NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
4. ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
5. ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
6. ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
7. TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MUTLI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
8. ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
9. BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
10. ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
11. ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
12. TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
13. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
14. WHILE PLANTING TREES BACKFILL $\frac{2}{3}$ OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
15. THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
16. ALL PLANTING BEDS SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
17. ALL PLANTING BEDS AND TREE RINGS SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
18. ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
19. FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
20. THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEEDED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
21. ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
22. ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
23. ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
24. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
25. TREES SHALL BE INSTALLED NO CLOSER THAN:
    - -10 FEET FROM ANY FIRE HYDRANT
    - - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, DRIVEWAYS, AND WATER SERVICE
26. THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
27. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
28. THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
29. THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
30. PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
31. THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

1. LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
2. THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
3. TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
4. SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
5. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
6. DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
7. FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
8. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
9. RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

NATIVE SEEDING & PLUG PLANTINGS

ESTABLISHMENT OF A VIABLE VEGETATION COMMUNITY WITHIN THE BIO INFILTRATION BASINS WILL BE COMPLETED BY HAND-BROADCASTING OF PRE-DESIGNED SEED MIXES AND PLANTING OF PERENNIALS TO CREATE A DYNAMIC PLANTING.

PRIOR TO SEEDING/PLUG PLANTING:

A. ALL WEEDS AND EXISTING VEGETATION SHALL BE REMOVED. EXISTING VEGETATION SHALL BE TREATED WITH GLYPHOSATE OR SIMILAR HERBICIDE BY A LICENSED PROFESSIONAL. TREATMENT SHALL OCCUR A MINIMUM OF 10 DAYS PRIOR TO SEEDING/PLANTING. VEGETATION STILL ALIVE AFTER INITIAL HERBICIDE TREATMENT SHALL BE TREATED A SECOND TIME PRIOR TO TILLING INTO THE SOIL.TREATED VEGETATION SHALL BE TILLED INTO THE SOIL NO EARLIER THAN 1 DAY PRIOR TO SEEDING.

B. PREPARATION OF SOIL PRIOR TO SEEDING
   1. REFER TO CIVIL PLANS FOR SOIL MIXTURE.
   2. ALL FOREIGN MATERIALS LARGER THAN 1-INCH SHALL BE REMOVED FROM THE SOIL PRIOR TO SEEDING OR PLANTING.
   3. AREA SHOULD BE FREE FROM UNSIGHTLY VARIATIONS, RIDGES, AND DEPRESSIONS.
   4. AVOID DRIVING OVER THE SPECIFIED AREA WITH MACHINERY.

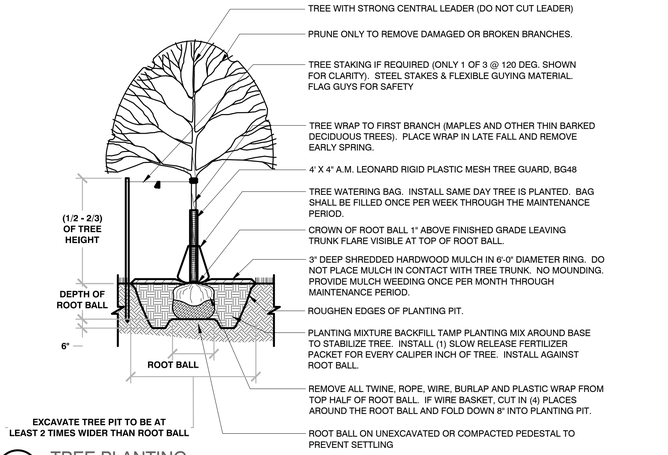
SPECIFICATIONS FOR HAND BROADCASTING:

SEEDING SHALL BE CONDUCTED IN LATE FALL (SEPTEMBER 1- SOIL FREEZE) SO THAT SEEDS MAY LIE DORMANT DURING THE WINTER, ALLOWING FOR STRATIFICATION, OR SPRING (MARCH 1-JUNE 1) TO ALLOW A COMPLETE GROWING SEASON TO BECOME ESTABLISHED.

A. COVER CROP
   1. ANNUAL RYE SHALL BE SPREAD AT A DENSITY OF 20 POUNDS PER ACRE DURING THE PLANTING OR SEEDING OF THE NATIVE PLANT SPECIES TO STABILIZE THE SOIL AND REDUCE THE GROWTH OF UNWANTED VEGETATION. THIS ANNUAL GRASS GROWS RAPIDLY WITHOUT COMPETING WITH THE WILDFLOWERS AND GRASSES THAT ARE PLANTED IN THE TARGET AREAS.
   2. WINTER WHEAT OR PERENNIAL RYE SHALL NOT BE USED AS A COVER CROP. THESE GRASSES MAY OUT COMPETE PRAIRIE SEEDLINGS, LEADING TO A REDUCTION IN THE SUCCESS OF THE PLANTINGS.

B. SEED MIX:
   1. MIX ALL NATIVE SEED WITH VERMICULITE ACCORDING TO AGRECOL RECOMMENDATIONS AND INSTALLATION GUIDELINES.
   2. BROADCAST HALF THE SEED OVER THE ENTIRE SITE OR TARGET AREA.
   3. BROADCAST THE OTHER HALF OF SEED PERPENDICULAR TO THE DIRECTION THAT THE FIRST HALF OF THE SEED WAS BROADCAST.
   4. COVER SEED WITH ¼-INCH TO ½-INCH OF SOIL (USE ANY EXCESS SOIL FROM THE SITE) WITH RAKE OR DRAG.
   5. ROLL SITE TO ENSURE FIRM SEED-TO-GROUND CONTACT.
   6. KEEP SEED CONSTANTLY WET THROUGH GERMINATION PERIOD. GENERALLY 3 WEEKS.

ALL SEEDING SHALL BE COVERED WITH 1-INCH OF CLEAN, NON-INVASIVE STRAW (NO MARSH HAY, OR REED CANARY GRASS) WITHOUT SEEDS, WITHIN SEVEN DAYS. WHEAT, RYE, OATS, OR BARLEY ARE ACCEPTABLE FORMS OF STRAW. THOSE AREAS OF SLOPES STEEPER THAN 8:1 (EIGHT FEET HORIZONTAL TO ONE FOOT VERTICAL) SHALL BE PLANTED NO LATER THAN OCTOBER 1 AND STAKED WITH AN EROSION CONTROL BLANKET TO PREVENT EROSION.



1 TREE PLANTING
1/4" = 1'-0" 329343-01

2 TREE PLANTING ON SLOPE
3/8" = 1'-0" 329343-02

www.pinnacle-engr.com
FOR REVIEW ONLY

LANDSCAPE GENERAL NOTES & DETAILS

REVIEWED: DJB
DESIGNED: JSJ
DRAWN: JSJ

PLAN I DESIGN I DELIVER
www.pinnacle-engr.com

PINNACLE ENGINEERING GROUP
ENGINEERING I NATURAL RESOURCES I SURVEYING

WISCONSIN OFFICE:
20725 WATERTOWN ROAD, SUITE 100
BROOKFIELD, WI 53186
(262) 754-8888
CHICAGO I MILWAUKEE : NATIONWIDE

CALEDONIA CORPORATE PARK INFRASTRUCTURE PLANS
CALEDONIA, WI

LANDSCAPE GENERAL NOTES & DETAILS

REVISIONS

1	DRT CHECKSET	7/8/22			
2	MUNICIPAL SUBMITTAL	7/25/22			
3	MUNICIPAL SUBMITTAL	11/04/22			
4	VILLAGE COMMENTS	12/12/22			

PEG JOB No. 1912.00 WI
PEG PM AJS
START DATE 04/20/22
SCALE VARIES

SHEET
L-8
L-8

©COPYRIGHT 2019

Z:\PROJECTS\2020\1912.00-WI\CAD\SHEETS\ROADWAY\1912.00 STREET TREE PLAN.DWG