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LEGEND	
	STREET CENTERLINE
	SURVEY BASELINE
	COUNTY SECTION QUARTER
	SIXTEENTH CORPORATE LIMITS
EXISTING	
	RIGHT OF WAY
	PERMANENT EASEMENT
	PROPERTY LINE
	R.R. RIGHT OF WAY
	SANITARY SEWER AND MANHOLE
	FORCE MAIN
	SANITARY SEWER SERVICE & CLEANOUT
	WATER MAIN, HYDRANT AND VALVE
	WATER SERVICE AND CURB STOP BOX
	WATER VALVE MANHOLE
	STORM SEWER, APRON, MANHOLE AND CATCH BASIN
	CULVERT
	BULKHEAD
	BURIED FIBER OPTIC CABLE
	BURIED FIBER OPTIC DUCT OR CONDUIT
	BURIED PHONE CABLE AND PEDESTAL
	BURIED PHONE DUCT OR CONDUIT AND MANHOLE
	BURIED TV CABLE AND PEDESTAL
	BURIED ELECTRIC CABLE
	BURIED ELECTRIC DUCT OR CONDUIT AND MANHOLE
	OVERHEAD ELECTRIC, POLE AND DOWN GUY ANCHOR
	LIGHT POLE
	TRAFFIC SIGNAL STANDARD
	GAS MAIN
	GAS SIGN, VALVE AND VENT
	RETAINING WALL
	SOIL BORING
	TRAVERSE POINT
	CONCRETE CURB AND GUTTER
	EXISTING PAVEMENT OR SIDEWALK
	SIGN (HWY, PARK, STOP, ETC.)
	STREET NAME SIGN
	DITCH
	RAILROAD TRACKS
	FENCE (UNIDENTIFIED)
	BARBED WIRE FENCE
	CHAIN LINK FENCE
	ELECTRIC WIRE FENCE
	WOOD FENCE
	WOVEN WIRE FENCE
	CABLE GUARDRAIL
	DECIDUOUS AND CONIFEROUS TREE
	BUSH-SHRUB
	WETLAND
PROPOSED	
	NEW RIGHT OF WAY
	SAWCUT PAVEMENT
	SANITARY SEWER AND MANHOLE
	FORCE MAIN
	SANITARY SEWER SERVICE & CLEANOUT
	WATER MAIN, HYDRANT AND VALVE
	WATER SERVICE AND CURB STOP BOX
	WATER VALVE MANHOLE
	STORM SEWER, MANHOLE AND CATCH BASIN
	CULVERT
	CURB CUT
	DRAIN PIPE
	DITCH
	CONCRETE CURB AND GUTTER
	CONCRETE SIDEWALK
	SILT FENCE
	LIGHT TYPE SPECIAL
	LIGHT TYPE SPECIAL 1
	TRAFFIC SIGNAL, STANDARD
	SIGN (HWY, PARK, STOP, ETC.)
	STREET LIGHT FEED POINT
	STREET LIGHTING CABLE
	PROPOSED CONCRETE
	PROPOSED BITUMINOUS

CITY OF

BIDDING DOCUMENTS

NORTHFIELD, MINNESOTA

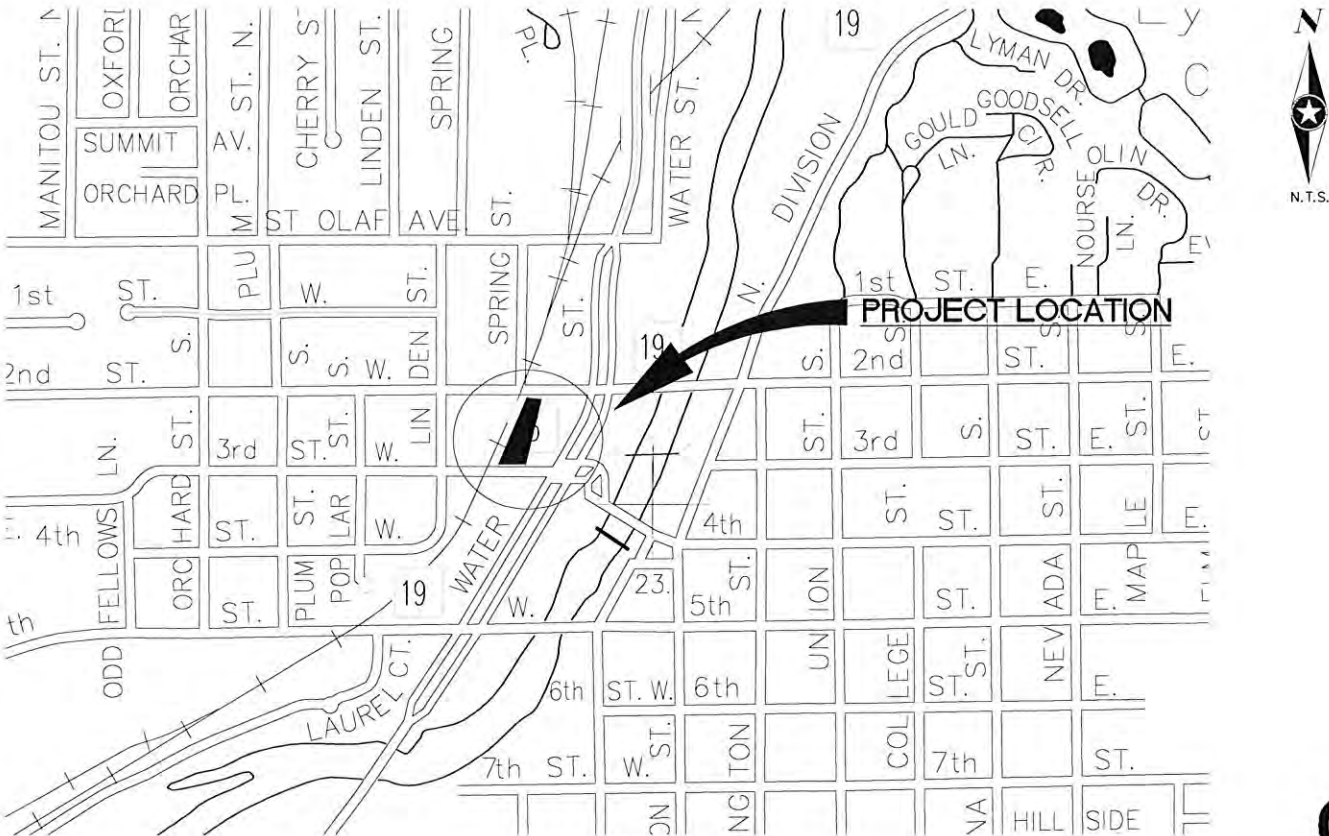
CONSTRUCTION PLANS

FOR

SIDEWALK, PARKING LOT AND STALLS, AND CONCRETE CURB AND GUTTER

HISTORIC DEPOT AND TRANSIT HUB IMPROVEMENTS

CITY PROJECT NO.XXXX



NOTE:
THE SUBSURFACE UTILITY QUALITY INFORMATION IN THIS PLAN IS LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02 ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."
THE CONTRACTOR SHALL CALL THE GOPHER STATE ONE CALL SYSTEM AT 811 BEFORE COMMENCING EXCAVATION.



GOVERNING SPECIFICATIONS
THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN EXCEPT AS MODIFIED BY THE SPECIFICATIONS FOR THIS PROJECT.
THE 2016 EDITION OF "STANDARD CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS FOR UTILITY AND STREET CONSTRUCTION FOR CITY OF NORTHFIELD, MINNESOTA"
ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MMUTCD, INCLUDING "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS", - CURRENT EDITION.

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS, REMOVALS, AND ESTIMATED QUANTITIES
3	TYPICAL SECTIONS
4	DETAILS
5	SITE, SIGNING AND STRIPING PLAN
6	SITE PLAN- SPOT ELEVATIONS
7	PROPOSED UTILITIES
8	PLAN AND PROFILE
9-10	CROSS SECTIONS
11	LIGHTING PLAN
12-13	LIGHTING DETAILS

THIS PLAN CONTAINS 13 SHEETS.

PROJECT LOCATION


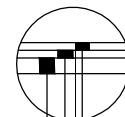


RECOMMENDED FOR APPROVAL: CITY OF NORTHFIELD ENGINEER		6-11-19 DATE
 PHONE: 952.912.2600 10901 RED CIRCLE DRIVE #300 MINNETONKA, MN 55343-9302 www.sehinc.com		
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. WAYNE HOULE, PE		FILE NO. NF140077 1 13
Date: 6/11/2019 Lic. No. 25057		

SECTION A
STA. 100+31 TO 101+19

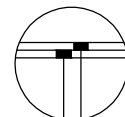
SECTION B
STA. 101+19 TO 102+78

SECTION C
STA. 102+78 TO 103+43



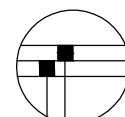
2" TYPE SP 9.5 WEARING COURSE (SPWEA330C)
 BITUMINOUS TACK COAT APPLIED AT 0.10 GALLONS/SQ YD
 2" TYPE SP 9.5 WEARING COURSE (SPWEA330C)
 9" AGGREGATE BASE CLASS 5

INSET A- BITUMINOUS DRIVEWAY



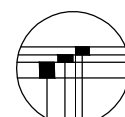
4" CONCRETE WALK
4" AGGREGATE BASE CLASS 5

INSET B- CONCRETE SIDEWALK



3" TYPE SP 9.5 WEARING COURSE (SPWEA330C)
6" AGGREGATE BASE CLASS 5

INSET C- BITUMINOUS SHARED USED PATH



2" TYPE SP 9.5 WEARING COURSE (SPWEA330C)
BITUMINOUS TACK COAT APPLIED AT 0.10 GALLONS/SQ YD
2" TYPE SP 9.5 WEARING COURSE (SPWEA330C)
9" EXISTING AGGREGATE BASE CLASS 5

INSET D- BITUMINOUS ROAD PATCH

PERENNIAL RAIN GARDEN
FULL SUN

APPROX. 6'W x 15'L

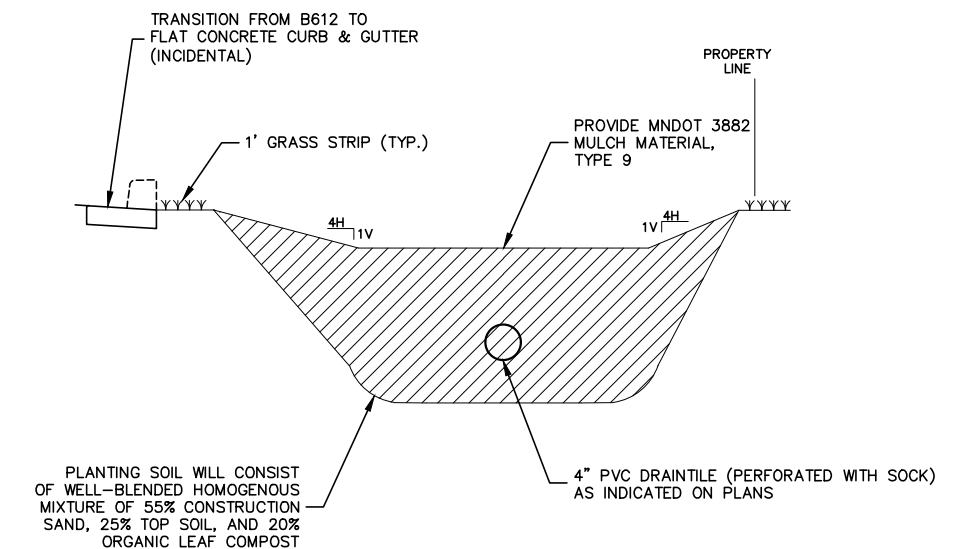
Full Sun						
	Indiv Qty per					
Code	Type	Common Name	Botanical Name	Size	Root	Spacing
HY	15	Hello Yellow Butterfly Weed	Asclepias Tuberosa	#1	Cont.	1.5' O.C.
BFI	21	Blueflag Iris	Iris Versicolor	#1	Cont.	1.5' O.C.
WT	14	White Turtlehead	Chelone Glabra	#1	Cont.	1.5' O.C.
BS	12	Brown Eyed Susan	Rudbeckia Triloba	#1	Cont.	1.5' O.C.
LB	12	Little Bluestem	Schizachium Scoparium	#1	Cont.	1.5' O.C.

GENERAL NOTES:

1. NO PLANT SUBSTITUTIONS WILL BE ACCEPTED UNLESS PRIOR APPROVAL IS REQUESTED OF THE ENGINEER BY THE CONTRACTOR PRIOR TO THE SUBMISSION OF BID.
2. PERENNIAL AND SHRUB RAIN GARDEN SHALL BE PLANTED BY THE CONTRACTOR IN 2017/2018.

PLANTING NOTES:

1. ALL PERENNIALS SHALL HAVE TRIANGULAR SPACING.
2. CONTAINER GROWN PLANTS SHALL HAVE ROOTS LOOSENEED AND PULLED OUT TO PREVENT PLANT FROM BECOMING ROOT BOUND.



RAIN GARDEN/DRAINAGE SWALE

DRAWN BY: AB
DESIGNER: AB
CHECKED BY: WH
DESIGN TEAM

NO.	BY	DATE	REVISIONS	

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Wayne Houle Date: 6/11/2019
SIGNATURE
WAYNE HOULE Lic. No. 25057



PHONE: 952.912.2600
10901 RED CIRCLE DRIVE #300
MINNETONKA, MN 55343-9302
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HISTORIC DEPOT AND TRANSIT HUB NORTHFIELD, MN

TYPICAL SECTIONS

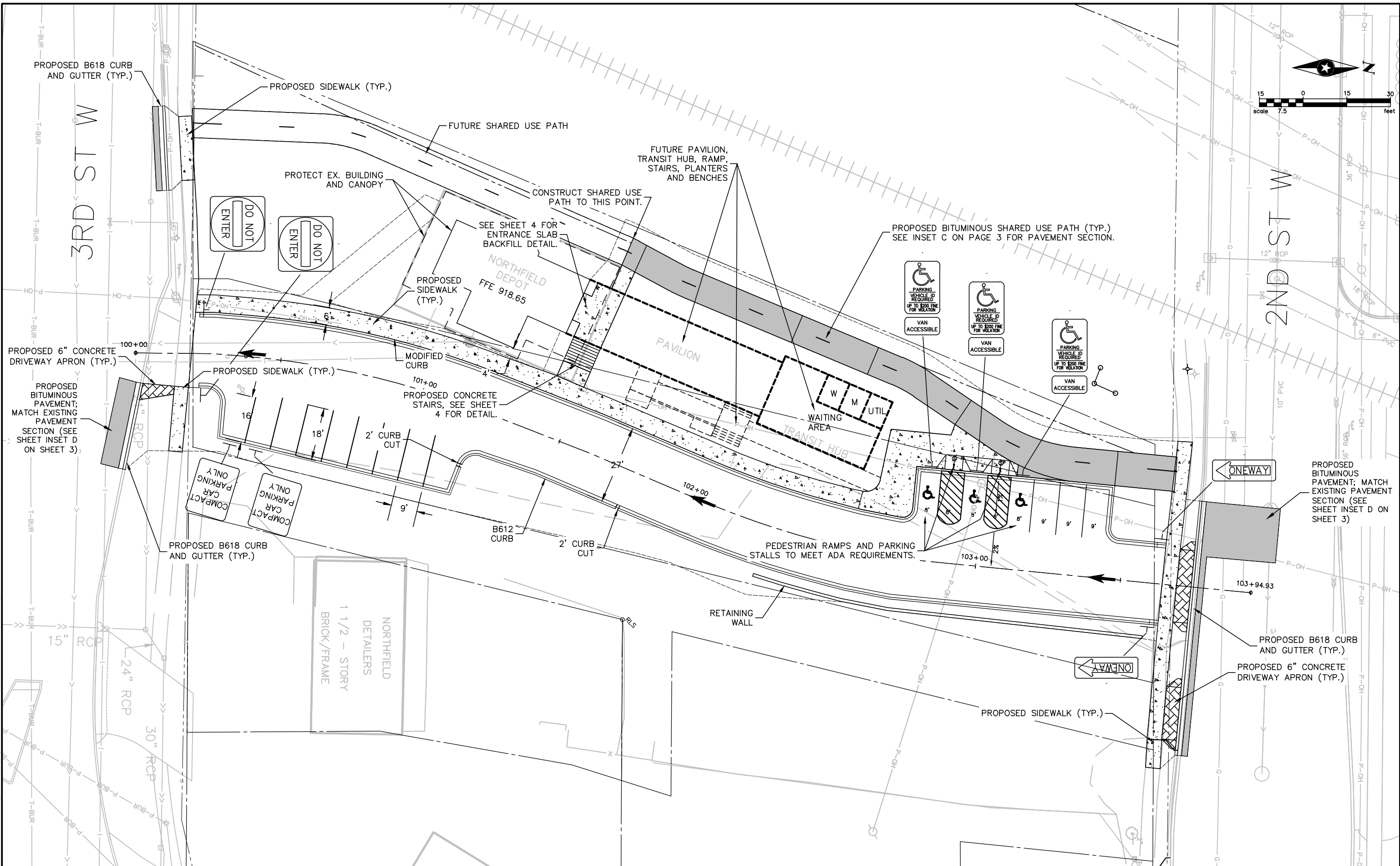
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DATE:
6/11/2019

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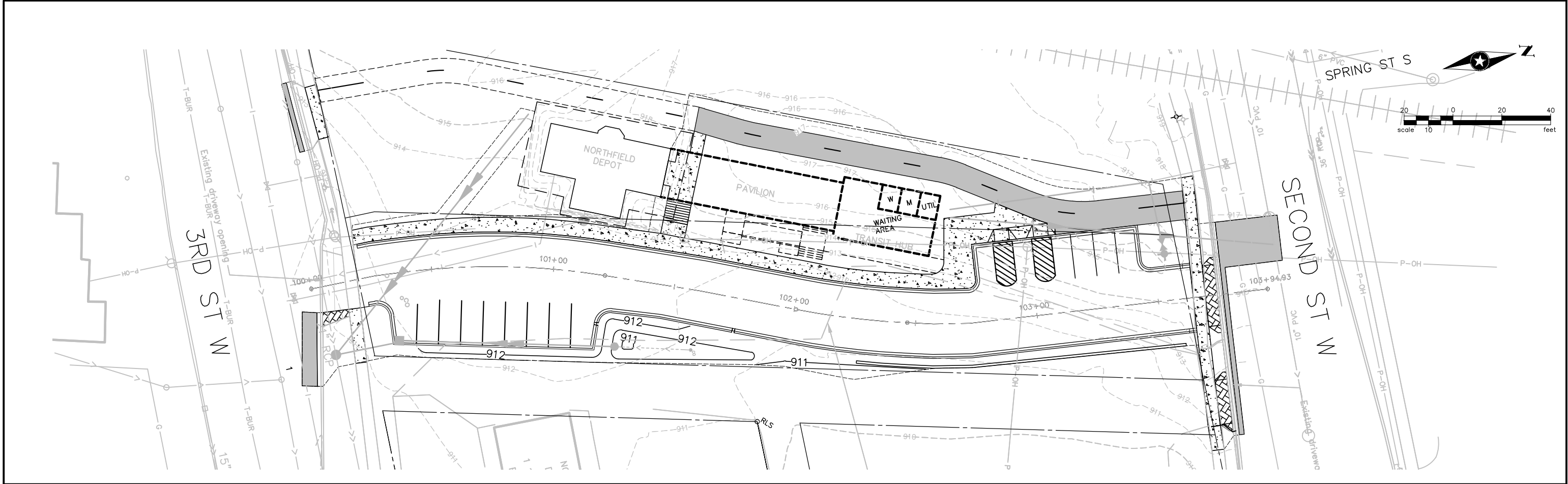
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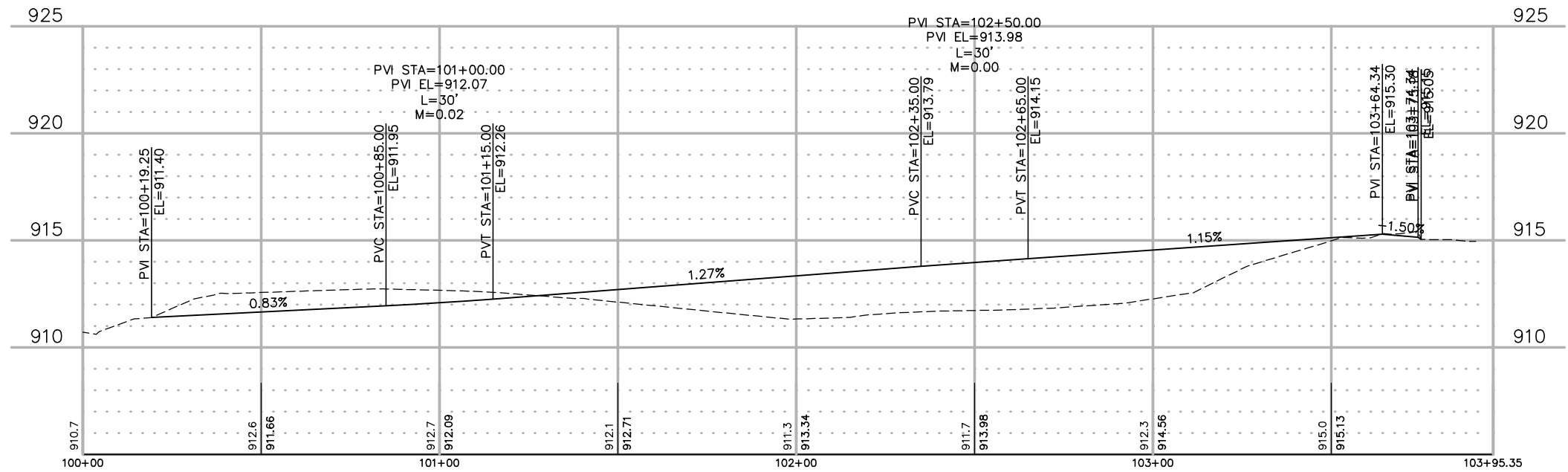


DRAWN BY: AB		DESIGNER: AB		CHECKED BY: WH		DESIGN TEAM		NO.		BY		DATE		REVISIONS		I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.		SIGNATURE: <i>Wayne Houle</i>		DATE: 6/11/2019		PRINTED NAME: WAYNE HOULE, P.E.		Lic. No. 25057		PHONE: 952.912.2600 10901 RED CIRCLE DRIVE #300 MINNETONKA, MN 55343-9302 www.sehinc.com		City Of Northfield Minnesota		HISTORIC DEPOT AND TRANSIT HUB NORTHFIELD, MN		SITE, SIGNING AND STRIPING PLAN		FILE NO. NF140077		DATE: 6/11/2019		5 13	
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HISTORIC DEPOT/TRANSIT HUB



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DESIGNER: AB
CHECKED BY: WH
DESIGN TEAM

NO.	BY	DATE	REVISIONS

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SIGNATURE: *Wayne Houle* Date: 6/11/2019
WAYNE HOULE, P.E. Lic. No. 25057
PRINTED NAME

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PHONE: 952.912.2600
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MINNETONKA, MN 55343-9302
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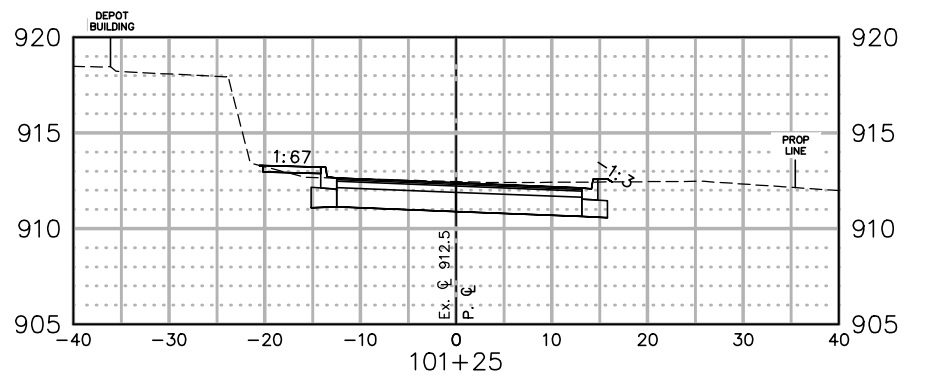
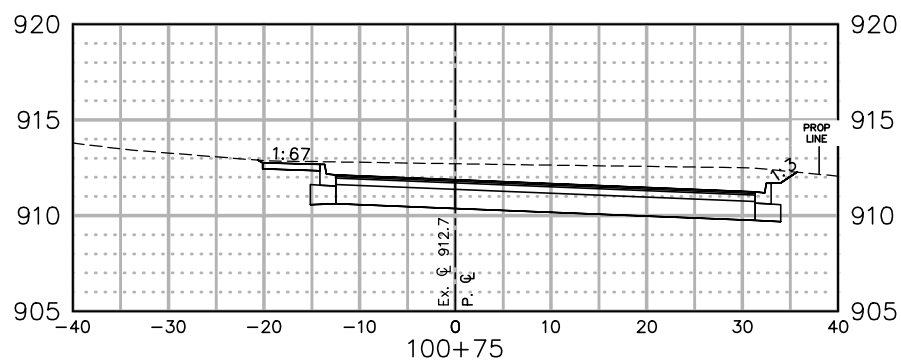
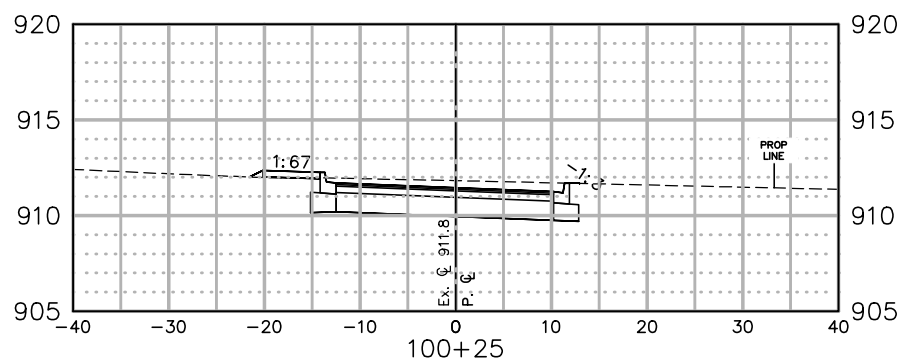
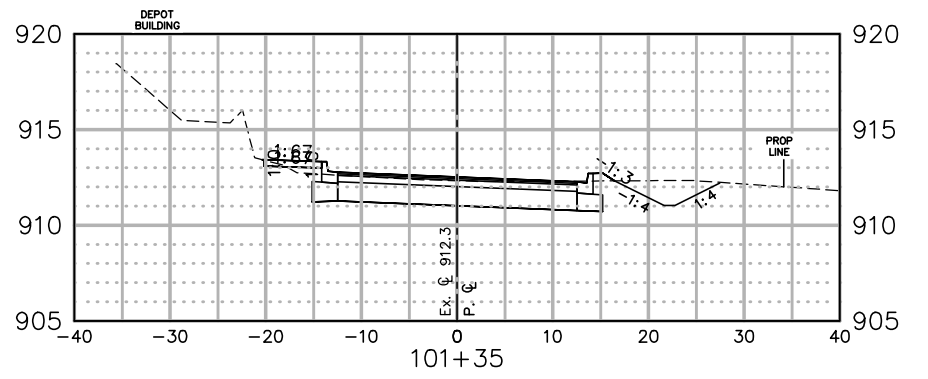
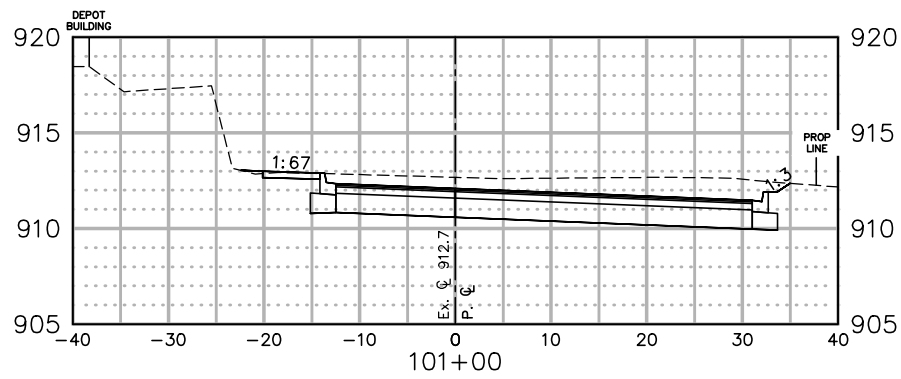
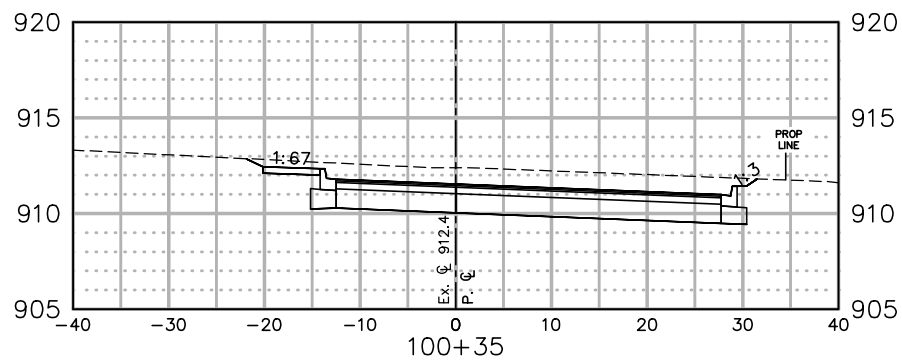
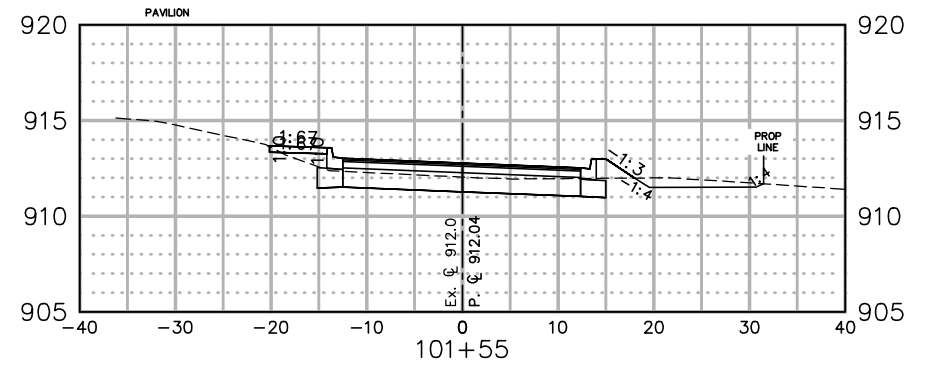
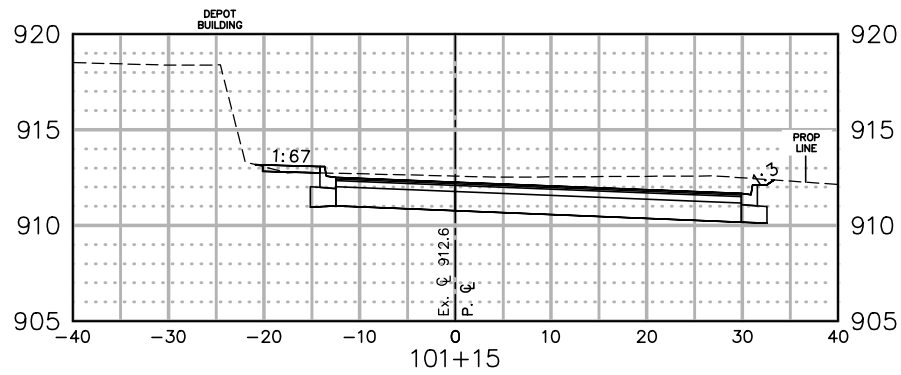
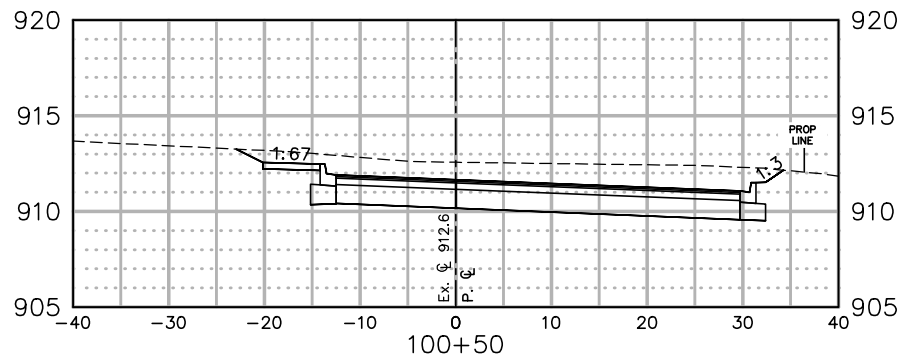
City Of
Northfield
Minnesota

**HISTORIC DEPOT
AND TRANSIT HUB
NORTHFIELD, MN**

PLAN AND PROFILE

FILE NO.
NF140077
DATE:
6/11/2019
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DRAWN BY: AB				
DESIGNER: AB				
CHECKED BY: WH				
DESIGN TEAM	NO.	BY	DATE	REVISIONS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: *Wayne Houle* Date: 6/11/2019
WAYNE HOULE, P.E. Lic. No. 25057
PRINTED NAME



HISTORIC DEPOT
AND TRANSIT HUB
NORTHFIELD, MN

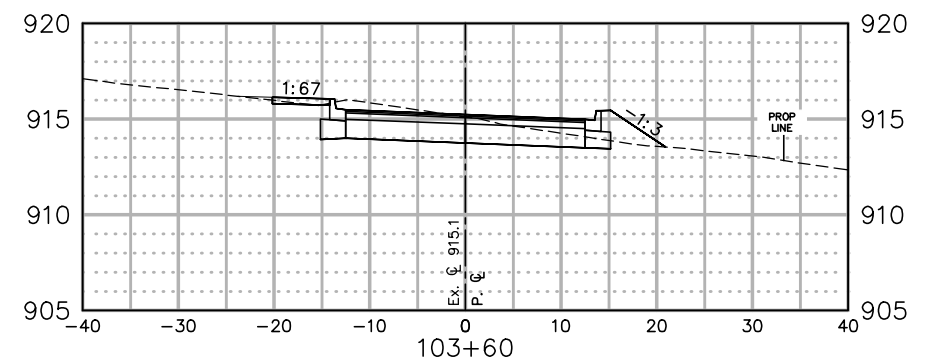
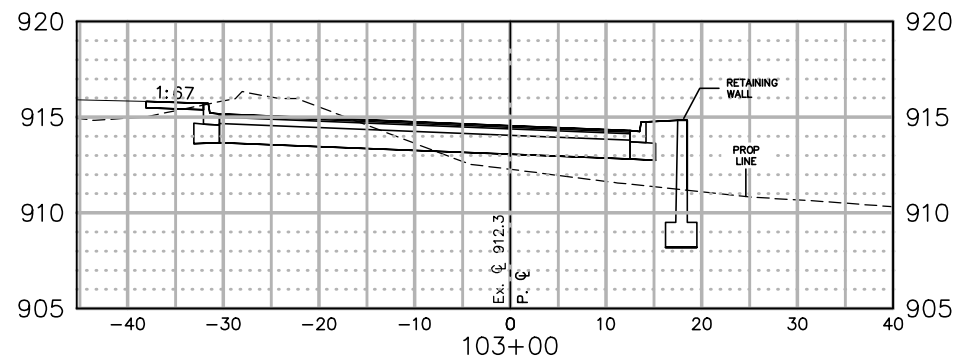
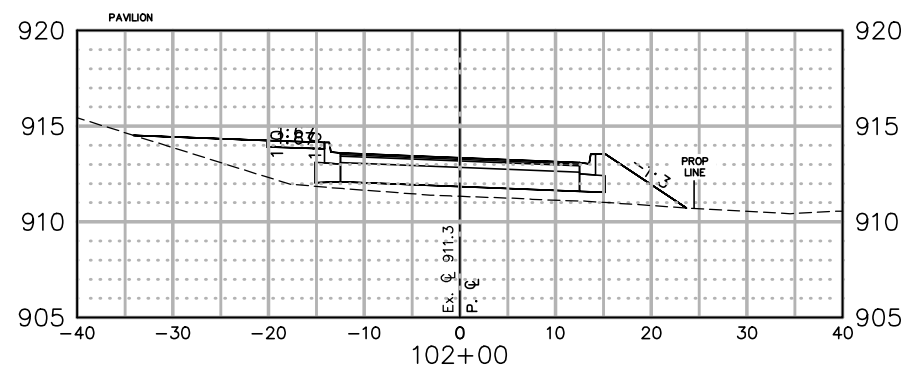
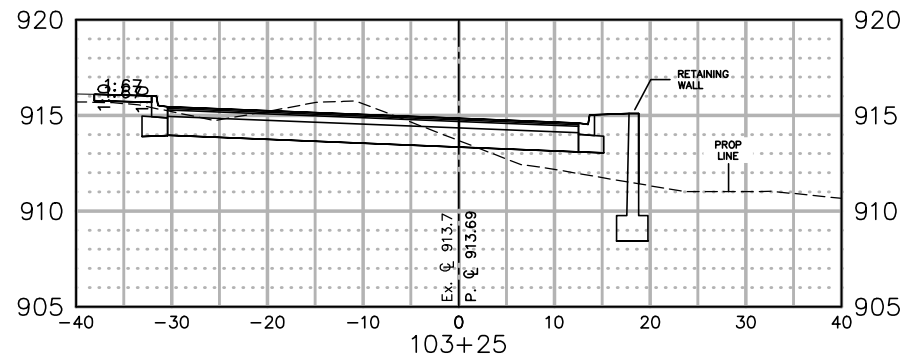
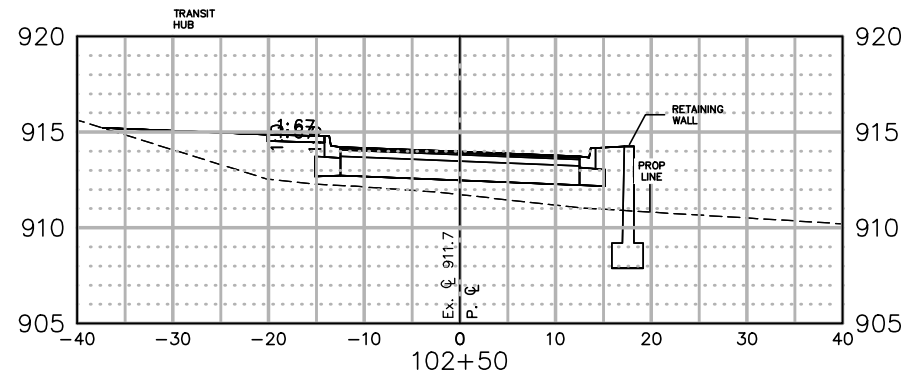
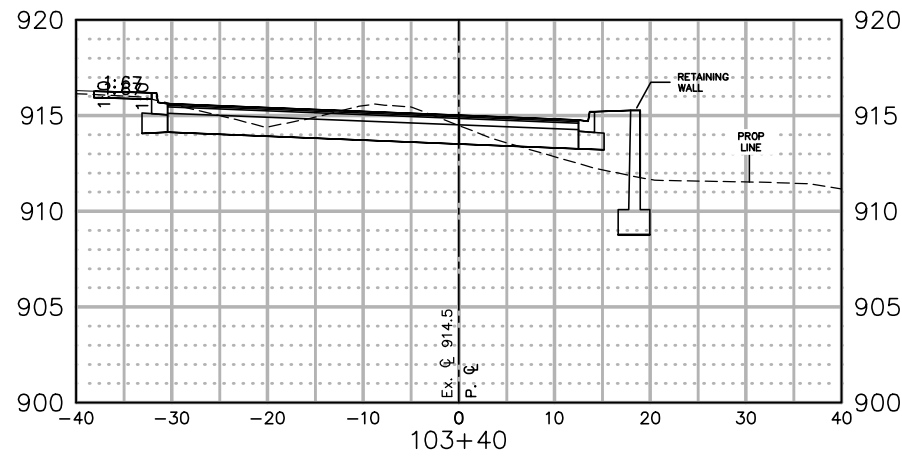
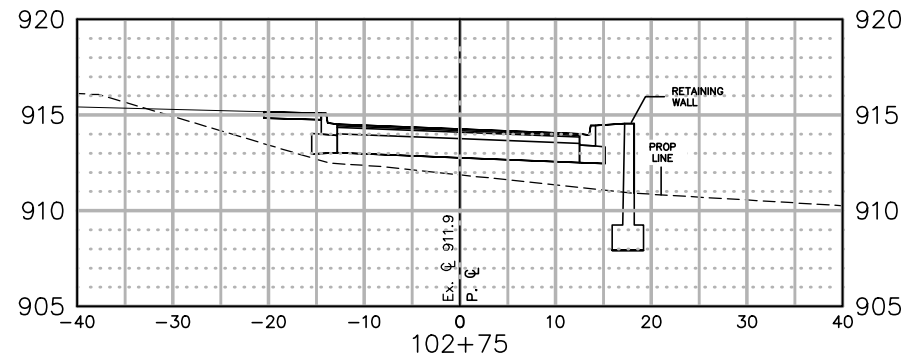
CROSS SECTIONS

FILE NO.
NF140077

DATE:
6/11/2019

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DESIGNER:	AB				
CHECKED BY:	WH				
DESIGN TEAM					
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Signature: *Wayne Houle* Date: 6/11/2019
Wayne Houle, P.E. Lic. No. 25057
PRINTED NAME

SEH
PHONE: 952.912.2600
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City Of
Northfield
Minnesota

**HISTORIC DEPOT
AND TRANSIT HUB
NORTHFIELD, MN**

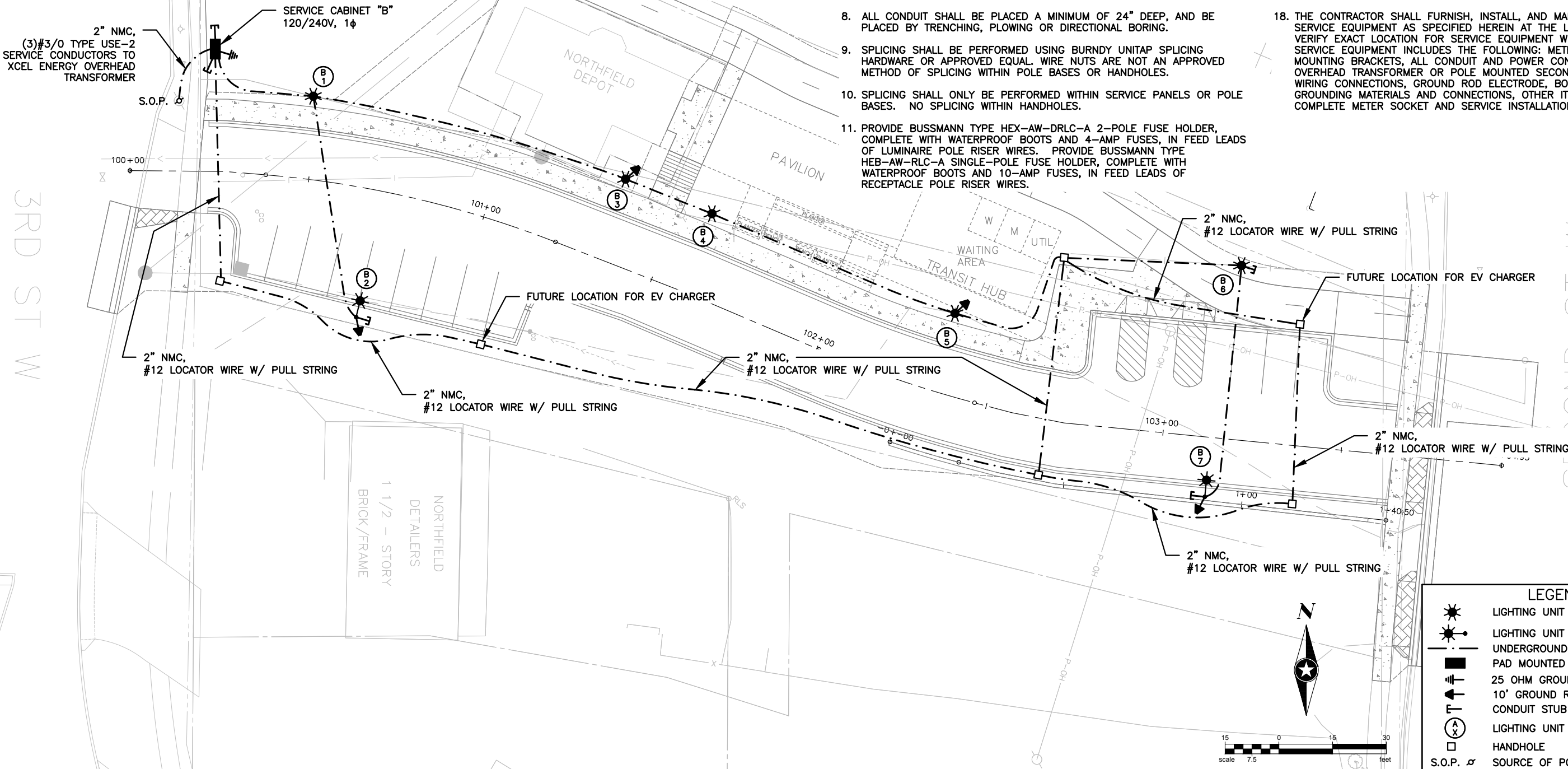
CROSS SECTIONS

FILE NO.
NF140077
DATE:
6/11/2019

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NOTES:

1. THIS WORK SHALL CONSIST OF FURNISHING ALL LABOR, EQUIPMENT, AND MATERIALS FOR THE CONSTRUCTION OF A COMPLETE AND OPERATIONAL LIGHTING SYSTEM.
2. CONTRACTOR SHALL FURNISH AS-BUILT PLANS THAT INDICATE ACCURATE LOCATIONS FOR CABLE, CONDUIT, SERVICE CABINET, LIGHT POLE, AND HANDHOLE LOCATIONS MEASURED FROM A KNOWN LOCATION.
3. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY PERMITS AND UTILITY COORDINATION.
4. ALL MATERIAL AND WORK SHALL BE IN ACCORDANCE WITH THE N.E.C.
5. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF SHOP DRAWINGS FOR ALL PROPOSED EQUIPMENT TO THE OWNER AND ENGINEER FOR REVIEW. THE SUBMITTED ITEMS MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK.
6. ALL MATERIALS SHALL BE UL LISTED.
7. ALL CONDUIT SHALL BE 2" NMC SCHEDULE 40 UNLESS OTHERWISE NOTED. ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, (2)#8 (LIGHTING), (3)#6 (RECEPTACLES), & (1)#8 GND.
8. ALL CONDUIT SHALL BE PLACED A MINIMUM OF 24" DEEP, AND BE PLACED BY TRENCHING, PLOWING OR DIRECTIONAL BORING.
9. SPLICING SHALL BE PERFORMED USING BURNDY UNITAP SPLICING HARDWARE OR APPROVED EQUAL. WIRE NUTS ARE NOT AN APPROVED METHOD OF SPLICING WITHIN POLE BASES OR HANDHOLES.
10. SPLICING SHALL ONLY BE PERFORMED WITHIN SERVICE PANELS OR POLE BASES. NO SPLICING WITHIN HANDHOLES.
11. PROVIDE BUSSMANN TYPE HEX-AW-DRLC-A 2-POLE FUSE HOLDER, COMPLETE WITH WATERPROOF BOOTS AND 4-AMP FUSES, IN FEED LEADS OF LUMINAIRE POLE RISER WIRES. PROVIDE BUSSMANN TYPE HEB-AW-RLC-A SINGLE-POLE FUSE HOLDER, COMPLETE WITH WATERPROOF BOOTS AND 10-AMP FUSES, IN FEED LEADS OF RECEPTACLE POLE RISER WIRES.
12. PROVIDE (3)#12 STRANDED XHHW-2 CONDUCTORS FROM POLE BASE TO EACH LUMINAIRE AND RECEPTACLE.
13. PROVIDE ADEQUATE CONDUCTOR LENGTH TO ENABLE SPLICES AND FUSE HOLDERS TO BE REMOVED FROM POLE HANDHOLE FOR MAINTENANCE.
14. HANDHOLES SHALL BE SIZED PER THE NEC. HANDHOLE: QUAZITE POLYMER CONCRETE #PG1324 BA12 (MINIMUM DIMENSIONS). COVER DESIGNED TO CARRY LIGHT TRAFFIC, MOLD "ELECTRIC" INTO COVER. PROVIDE 12" OF PEA GRAVEL BASE UNDER HANDHOLE. HANDHOLE SHALL BE UPSIZED AS REQUIRED TO ACCOMMODATE THE QUANTITY AND SIZE OF CONDUITS ENTERING HANDHOLE.
15. THE CONTRACTOR SHALL COAT ALL THREADED HARDWARE WITH AN APPROVED ZINC-BASED ANTI-SEIZE COMPOUND PRIOR TO ASSEMBLY.
16. FOLLOWING THE INSTALLATION OF CABLES AND CONDUCTORS, SEAL THE OPEN ENDS OF CONDUIT ENTERING CABINETS, POLE FOUNDATIONS, AND HANDHOLES, USING A DUCT SEAL COMPOUND NRTL CLASSIFIED UNDER GENERAL USE TAPES.
17. EXACT LOCATION OF NEW LIGHTING UNITS, HANDHOLES AND SERVICE CABINET TO BE DETERMINED IN THE FIELD BY THE CITY AND ENGINEER.
18. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAKE OPERATIONAL SERVICE EQUIPMENT AS SPECIFIED HEREIN AT THE LOCATION INDICATED. VERIFY EXACT LOCATION FOR SERVICE EQUIPMENT WITH THE UTILITY. SERVICE EQUIPMENT INCLUDES THE FOLLOWING: METER SOCKET AND MOUNTING BRACKETS, ALL CONDUIT AND POWER CONDUCTORS TO OVERHEAD TRANSFORMER OR POLE MOUNTED SECONDARY CONDUCTORS, WIRING CONNECTIONS, GROUND ROD ELECTRODE, BONDING AND GROUNDING MATERIALS AND CONNECTIONS, OTHER ITEMS INCIDENTAL TO A COMPLETE METER SOCKET AND SERVICE INSTALLATION.



LEGEND

LIGHTING UNIT TYPE SPECIAL

LIGHTING UNIT TYPE SPECIAL 1

UNDERGROUND WIRING IN CONDUIT

PAD MOUNTED SERVICE CABINET

25 OHM GROUND

10' GROUND ROD

CONDUIT STUB

LIGHTING UNIT NUMBER

HANDHOLE

S.O.P. SOURCE OF POWER

DRAWN BY:	AKF				
DESIGNER:	AKF				
CHECKED BY:	JPC				
DESIGN TEAM					
NO.	BY	DATE	REVISIONS		

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: JOHN P. CARLSON Date: 6/11/2019

PRINTED NAME: Lic. No. 24001

PHONE: 952.912.2600
10901 RED CIRCLE DRIVE #300
MINNETONKA, MN 55343-9302
www.sehinc.com

City Of

Northfield

Minnesota

HISTORIC DEPOT
AND TRANSIT HUB
NORTHFIELD, MN

LIGHTING PLAN

FILE NO. NFIEL 140077	11
DATE: 6/11/2019	13

EQUIPMENT SCHEDULE					
SYMBOL	DESCRIPTION	LAMP SOURCE	MOUNTING	OPTICS	MANUFACTURER & SERIES #
☼	LIGHTING UNIT TYPE SPECIAL LED LANTERN LUMINAIRE ON FLUTED FIBERGLASS POLE W/ 20A WR-RATED GFI RECEPTACLE AND METALLIC IN-USE COVER	92 WATT LED 3000K	14' POLE ON LIGHT FOUNDATION DESIGN SPECIAL	TYPE III	STERNBERG - LUMINAIRE: PT-MS805BLED-BD4-4A1R30T3-MDL03-CSA-BKT WHATLEY - POLE: XF45-D6M-14-AB-BLK-40-40-RC
☼	LIGHTING UNIT TYPE SPECIAL 1 LED SHOEBOX LUMINAIRE ON SQUARE TAPERED STEEL POLE W/ 20A WR-RATED GFI RECEPTACLE AND METALLIC IN-USE COVER	80 WATT LED 3000K	30' POLE ON LIGHT FOUNDATION DESIGN SPECIAL	TYPE III	DECO LIGHTING - LUMINAIRE: D816-LED-80-30-UNV-T3-PM-BL UNITED LIGHTING STANDARDS - POLE: STP-30-6211-D1-VD-GFCI-GALV-BLACK

