

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet
A.2	Legends and Symbols
A.3	Project Map
B Sheets	Typical Cross Sections and Details
B.1 - 8	Typical Cross Sections and Details
C Sheets	Quantities and General Information
C.1	Project Description
C.1	Estimate Project Quantities
C.1 - 3	Estimate Reference Information
C.3 - 4	Pollution Prevention Plan
C.5 - 8	Tabulations
D Sheets	Mainline Plan and Profile Sheets
* D.1	Mound St
G Sheets	Survey Sheets
G.1	Reference Ties and Bench Marks
G.2 - 3	Horizontal Control Tabulations
H Sheets	Right-of-Way Sheets
J Sheets	Traffic Control and Staging Sheets
* J.1	Staging Notes
* J.2	Traffic Control Plan
* J.3 - 7	Staging and Traffic Control Sheets
K Sheets	Pavement Marking Sheets
* K.1	E River Dr Pavement Markings
L Sheets	Geometric, Staking and Jointing Sheets
L.1 - 2	Geometric, Staking and Jointing Layout
M Sheets	Storm Sewer Sheets
M.1	Storm Sewer Tabulation
M.2 - 4	Storm Sewer Plan and Profile Sheets
N Sheets	Traffic Signal Sheets
N.1	Traffic Signal Notes
N.2	Traffic Signal Design
Q Sheets	Soils Sheets
Q.1 - 4	Soils Sheets
R Sheets	Erosion Control Plan Sheets
R.1 - 2	Erosion Control Plan
S Sheets	Sidewalk Sheets
S.1 - 2	Sidewalk Sheets
T Sheets	Earthwork Quantity Sheets
T.1 - 2	Earthwork Quantity Sheets
U Sheets	Removals and Special Details Sheets
U.1 - 2	Removal Plan
U.3 - 5	Risk of Flooding
X Sheets	Side Road Cross Sections
X.1 - 5	Mound St
	* Color Plan Sheets



PLANS OF PROPOSED IMPROVEMENT ON THE
URBAN ROAD SYSTEM
SCOTT COUNTY
DAVENPORT, IOWA

IN THE CITY OF DAVENPORT, RECONSTRUCT
MOUND STREET AND STORM SEWER LOCATIONS
ADJACENT TO E RIVER DRIVE
CIP NO. 35067 AND PRJ-4894/5807

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



PROJECT LOCATION MAP
ON SHEET A.03

MILEAGE SUMMARY			
DIV.	LOCATION	LIN. FT.	MILES
	MOUND STREET		
	(STA 102+47.98 - 105+34.11)	286.13	0.05
TOTAL		286.13	0.05

REVISIONS

TOTAL
59
PROJECT IDENTIFICATION NUMBER
PROJECT NUMBER
HDP-1827(704)—71-82
R.O.W. PROJECT NUMBER

STANDARD ROAD PLANS

STANDARD ROAD PLANS ARE
LISTED ON SHEET C.4

NPDES GENERAL PERMIT NO. 2

THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORMWATER POLLUTION PREVENTION PLAN WHICH IS A PART OF THESE CONTRACT DOCUMENTS. REFER TO SECTION 2602 OF THE STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.

IDNR FLOODPLAIN CONSTRUCTION PERMIT

THIS PROJECT IS COVERED BY THE IOWA DNR
FLOODPLAIN CONSTRUCTION PERMIT NO. 2026-0734

MOUND STREET			
DESIGN DATA URBAN			
2022	AADT	3670	V.P.D.
2042	AADT	4000	V.P.D.
2022	DHV		V.P.H.
TRUCKS		2	%
Total			
Design ESALs			

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Parker Just	Primary Signature Block
B.5	Lawrence Sandaas	Gatewell Design
N.1	Casey Dix	Traffic Signal Design

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

7-21-26

PARKER W. JUST, P.E. DATE

License Number: 26405

My license renewal date is December 31, 2027.

Pages or sheets covered by this seal:

A, B.1-B.3, C, D, G, J, K, L, M, Q, R, S, T, U, X

SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	Terrace		
	Earth Dam or Dike (Existing)		
	Tile Outlet		
	Edge of Water		
	Existing Drainage		
	Right of Way Rail or Lot Corner		
	Concrete Monument		
	Well		
	Windmill		
	Beehive Intake		
	Existing Intake		
	Existing Utility Access (Manhole)		
	Fire Hydrant		
	Water Hydrant (Rural)		

UTILITY LEGEND

	CENTURYLINK DESIGN CONTACT: SADIE HULL PHONE: 9185470147 EMAIL: SADIE.HULL@LUMEN.COM
	CITY OF DAVENPORT DESIGN CONTACT: BRYAIN REIST PHONE: 5633275163 EMAIL: GISLOCATE@DAVENPORTIOWA.COM
	IOWA AMERICAN WATER COMPANY DESIGN CONTACT: HEATHER BRUSNAHAN PHONE: 5634689455 EMAIL: HEATHER.BRUSNAHAN@AMWATER.COM
	MEDIACOM BROADBAND, L.L.C. DESIGN CONTACT: CHRIS MINARD PHONE: 8155975103 EMAIL: CMINARD@MEDIACOMCC.COM
	METRO FIBERNET, LLC DESIGN CONTACT: LORI KEMPER PHONE: 8122131050 EMAIL: 811DESIGN@METRONET.COM
	MIDAMER-GAS DESIGN CONTACT: MATT KOVACIC PHONE: 3097933704 EMAIL: QCLOCATES@MIDAMERICAN.COM
	MIDAMER-ELEC DESIGN CONTACT: ERIK RASMUSSEN PHONE: 5633338705 EMAIL: QCLOCATES@MIDAMERICAN.COM
	MEDIACOM COMMUNICATIONS CORPOR DESIGN CONTACT: CHRIS MINARD PHONE: 8155975103 EMAIL: CMINARD@MEDIACOMCC.COM
	GENESEO COMMUNICATIONS DESIGN CONTACT: JAY CHALDER PHONE: 3098452508 EMAIL: ENGINEERING@GENESEO.COM

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING		Design Color No.	Transparency
Lavender	(9)		Temporary Pavement Shading
Grey, Light	(48)		Proposed Pavement Shading
Grey, Dark	(80)		Proposed HMA Shading
Gray, medium	(64)		Proposed Median Shading
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading
Brown, Light	(236)		Proposed Sidewalk (By Others)
Orange, Light	(134)		Proposed Granular Entrance Shading
Grey, Light	(48)		Proposed Paved Entrance Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading
Red	(3)		Proposed Structure Shading
Red	(3)		Delineates Restricted Areas

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(10)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

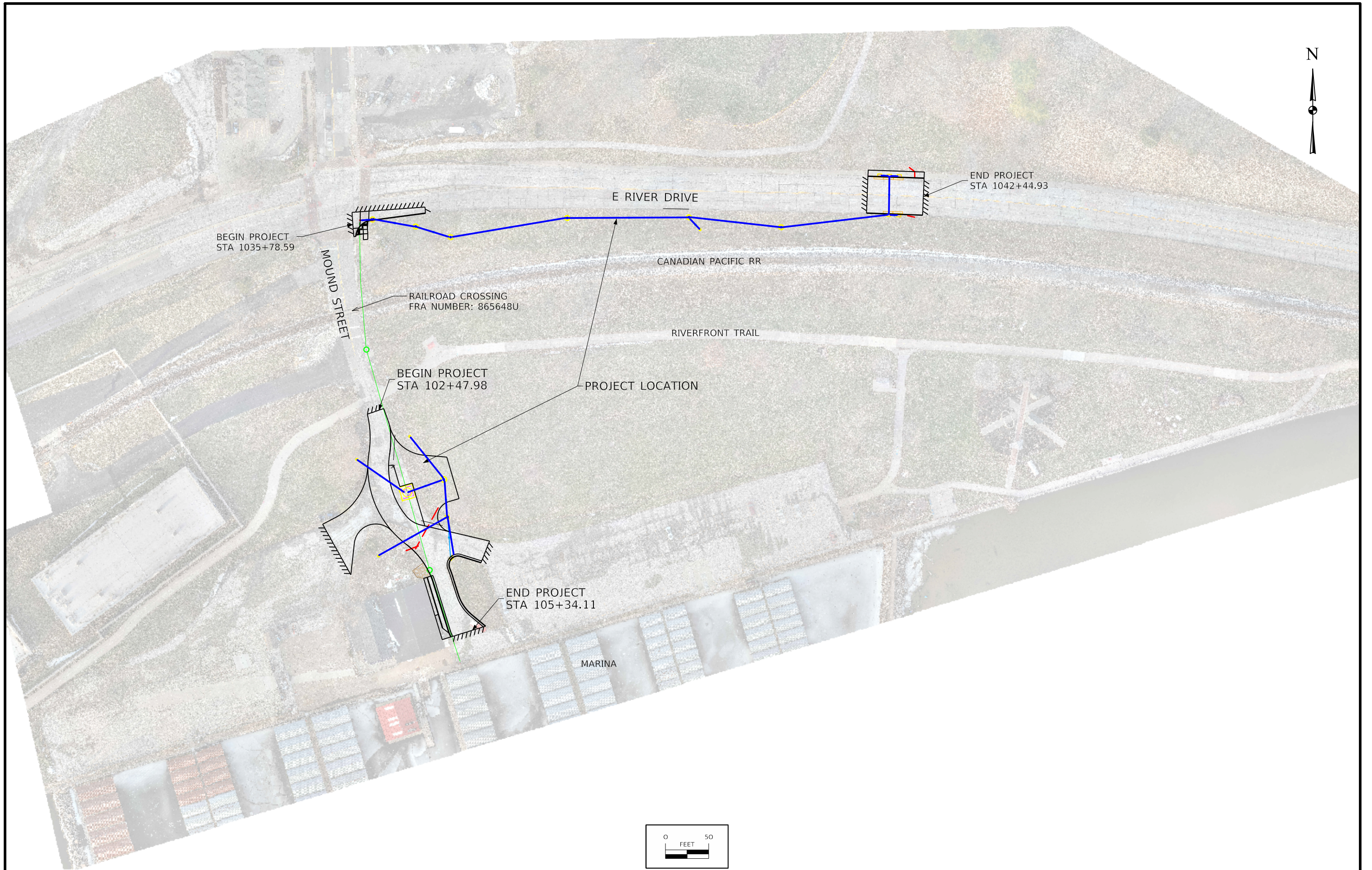
	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Trench Drain
	HighTension Cable Guardrail
	Sheet Pile
	Pavement Removal
	Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

	Proposed Right-of-Way Symbol
	Proposed Right-of-Way Line
	Existing Right of Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Easement (Temporary) Symbol
	Easement (Temporary) Line
	Easement
	C/A Access Control
	Property Line Symbol
	Property Line

PLAN AND PROFILE
LEGEND AND SYMBOL
INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)



SURVEY SYMBOLS

	Interstate Highway Symbol		Septic Tank
	U.S. Highway Symbol		Cistern
	Iowa Highway Symbol		L.P. Gas Tank (No Footing)
	County Road Highway Symbol		Underground Storage Tank
	Evergreen Tree		Latrine
	Deciduous Tree		Satellite TV Dish
	Fruit Tree		Water Hook Up
	Shrub (Bushes)		Radio Tower
	Timber		Tower Anchor
	Hedge		Guardrail (Beam or Cable)
	Stump		Guard Post (one or two)
	Swamp		Guard Post (over two)
	Rock Outcrop		Filler Pipe
	Broken Concrete		Gas Valve
	Revetment (Rip Rap)		Water Valve
	Cemetery		Speed Limit Sign
	Grave		Mile Marker Post
	Cave		Sign
	Sink Hole		Traffic Signal Control Box
	Board Fence		Rail Road Signal Control Box
	Chain Link or Security Fence		Telephone Switch Box
	Wire Fence		Electric Box
	Terrace		
	Earth Dam or Dike (Existing)		
	Tile Outlet		
	Edge of Water		
	Existing Drainage		
	Right of Way Rail or Lot Corner		
	Concrete Monument		
	Well		
	Windmill		
	Beehive Intake		
	Existing Intake		
	Existing Utility Access (Manhole)		
	Fire Hydrant		
	Water Hydrant (Rural)		

UTILITY LEGEND

	CENTURYLINK DESIGN CONTACT: SADIE HULL PHONE: 9185470147 EMAIL: SADIE.HULL@LUMEN.COM
	CITY OF DAVENPORT DESIGN CONTACT: BRYAIN REIST PHONE: 5633275163 EMAIL: GISLOCATE@DAVENPORTIOWA.COM
	IOWA AMERICAN WATER COMPANY DESIGN CONTACT: HEATHER BRUSNAHAN PHONE: 5634689455 EMAIL: HEATHER.BRUSNAHAN@AMWATER.COM
	MEDIACOM BROADBAND, L.L.C. DESIGN CONTACT: CHRIS MINARD PHONE: 8155975103 EMAIL: CMINARD@MEDIACOMCC.COM
	METRO FIBERNET, LLC DESIGN CONTACT: LORI KEMPER PHONE: 8122131050 EMAIL: 811DESIGN@METRONET.COM
	MIDAMER-GAS DESIGN CONTACT: MATT KOVACIC PHONE: 3097933704 EMAIL: QCLOCATES@MIDAMERICAN.COM
	MIDAMER-ELEC DESIGN CONTACT: ERIK RASMUSSEN PHONE: 5633338705 EMAIL: QCLOCATES@MIDAMERICAN.COM
	MEDIACOM COMMUNICATIONS CORPOR DESIGN CONTACT: CHRIS MINARD PHONE: 8155975103 EMAIL: CMINARD@MEDIACOMCC.COM
	GENESEO COMMUNICATIONS DESIGN CONTACT: JAY CHALDER PHONE: 3098452508 EMAIL: ENGINEERING@GENESEO.COM

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design	Color No.		
Green	(2)		Existing Topographic Features and Labels	
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation	
Magenta	(5)		Existing Utilities	
SHADING	Design	Color No.		Transparency
Lavender	(9)		Temporary Pavement Shading	0%
Grey, Light	(48)		Proposed Pavement Shading	0%
Grey, Dark	(80)		Proposed HMA Shading	0%
Gray, medium	(64)		Proposed Median Shading	0%
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading	50%
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading	50%
Brown, Light	(236)		Proposed Sidewalk (By Others)	50%
Orange, Light	(134)		Proposed Granular Entrance Shading	50%
Grey, Light	(48)		Proposed Paved Entrance Shading	0%
Tan	(8)		Proposed Sidewalk Shading	0%
Blue, Light	(230)		Proposed Sidewalk Landing Shading	0%
Pink	(11)		Proposed Sidewalk Ramp Shading	0%
Red	(3)		Proposed Structure Shading	50%
Red	(3)		Delineates Restricted Areas	0%

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

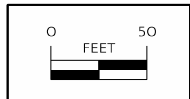
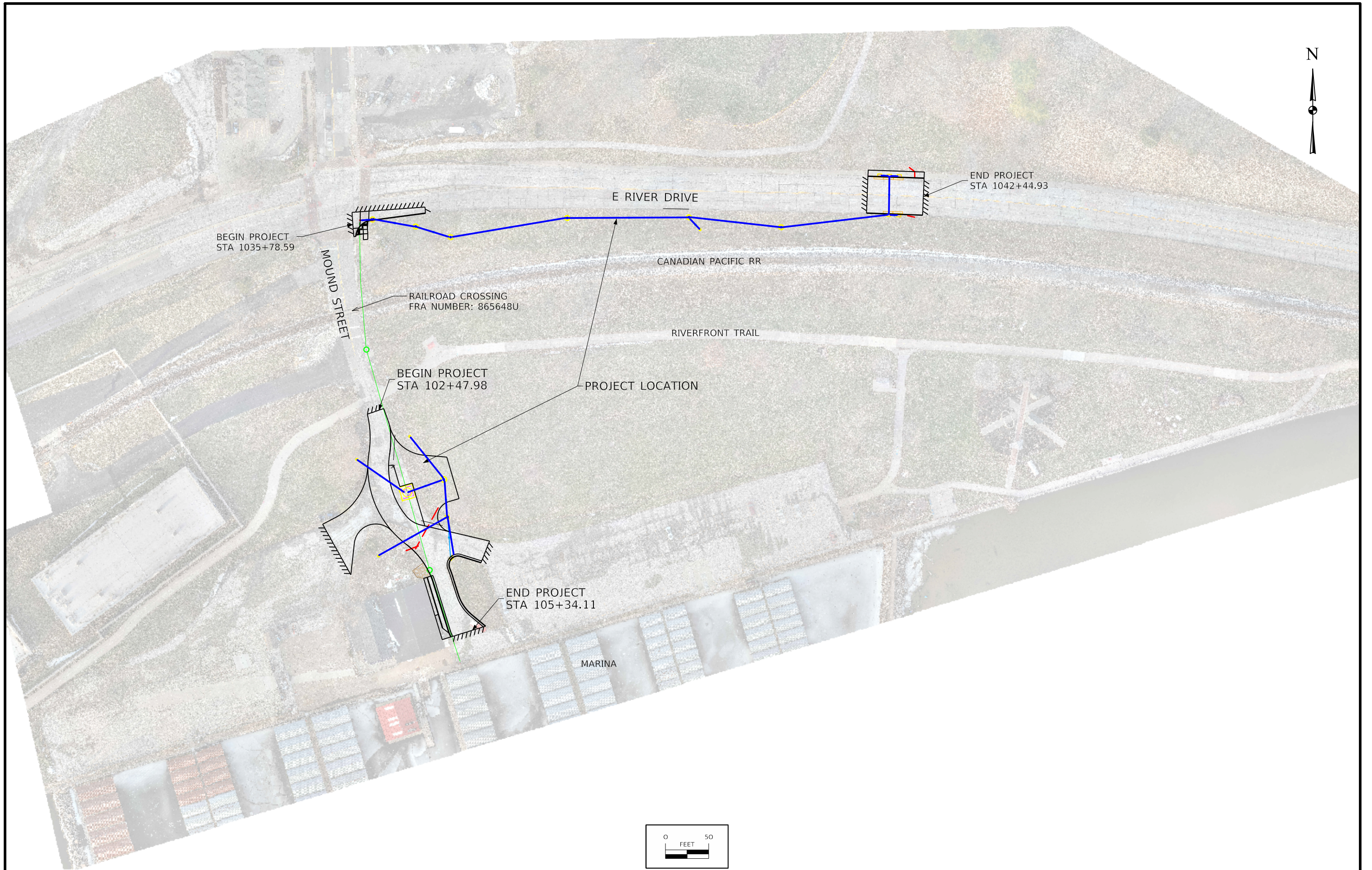
LINEWORK	Design	Color No.		
Green	(10)		Existing Ground Line Profile	
Blue	(1)		Proposed Profile and Annotation	
Magenta	(5)		Existing Utilities	
Blue, Light	(230)		Proposed Ditch Grades, Left	
Black	(0)		Proposed Ditch Grades, Median	
Rust	(14)		Proposed Ditch Grades, Right	

Reference Point			
	Station		Survey Line
	Section Corner		Section Corner
	Ground Line Intercept		Ground Line Intercept
	Saw Cut		Saw Cut
	Guardrail		Guardrail
	Trench Drain		Trench Drain
	HighTension Cable Guardrail		HighTension Cable Guardrail
	Sheet Pile		Sheet Pile
	Pavement Removal		Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND	
	Proposed Right-of-Way Symbol
	Proposed Right-of-Way Line
	Existing Right of Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Easement (Temporary) Symbol
	Easement (Temporary) Line
	Easement
	C/A Access Control
	Property Line Symbol
	Property Line

PLAN AND PROFILE
LEGEND AND SYMBOL
INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)

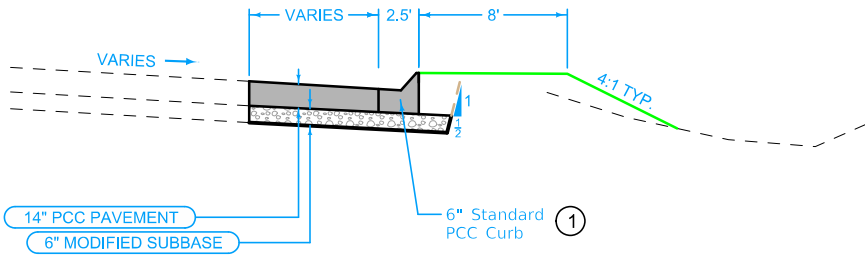


① 6" Standard Curb - Refer to IADOT Standard Road Plan PV-102 for dimensions and details.

Notes:
Sections shown are typical only, refer to cross-section and L sheets for specific transition areas and slope details.

Refer to S sheets for sidewalk staking information.

Typical sections shown may be appropriately modified for areas specifically designed by the engineer.



Typical Section
River Drive

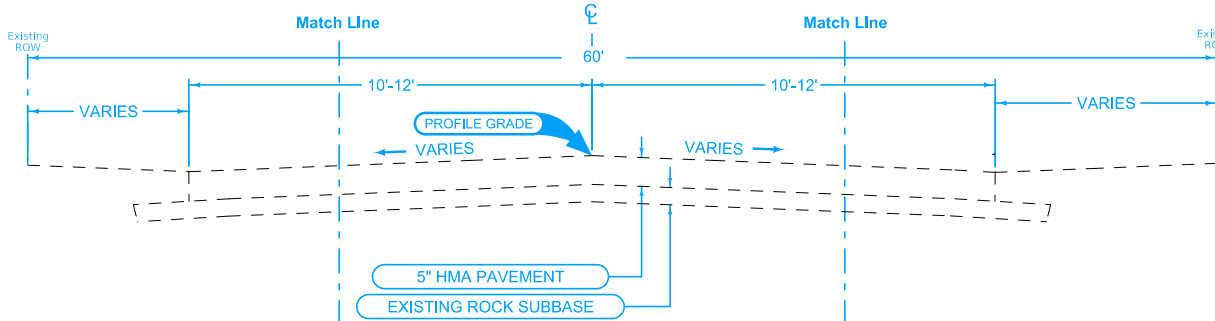
ROAD IDENTIFICATION	BEGIN STATION	END STATION
RIVER DR	1035+81.54	1036+67.60
RIVER DR	1041+81.08	1042+46.01

① 6" Standard Curb - Refer to IADOT Standard Road Plan PV-102 for dimensions and details.

Notes:
Sections shown are typical only, refer to cross-section and L sheets for specific transition areas and slope details.

Refer to S sheets for sidewalk staking information.

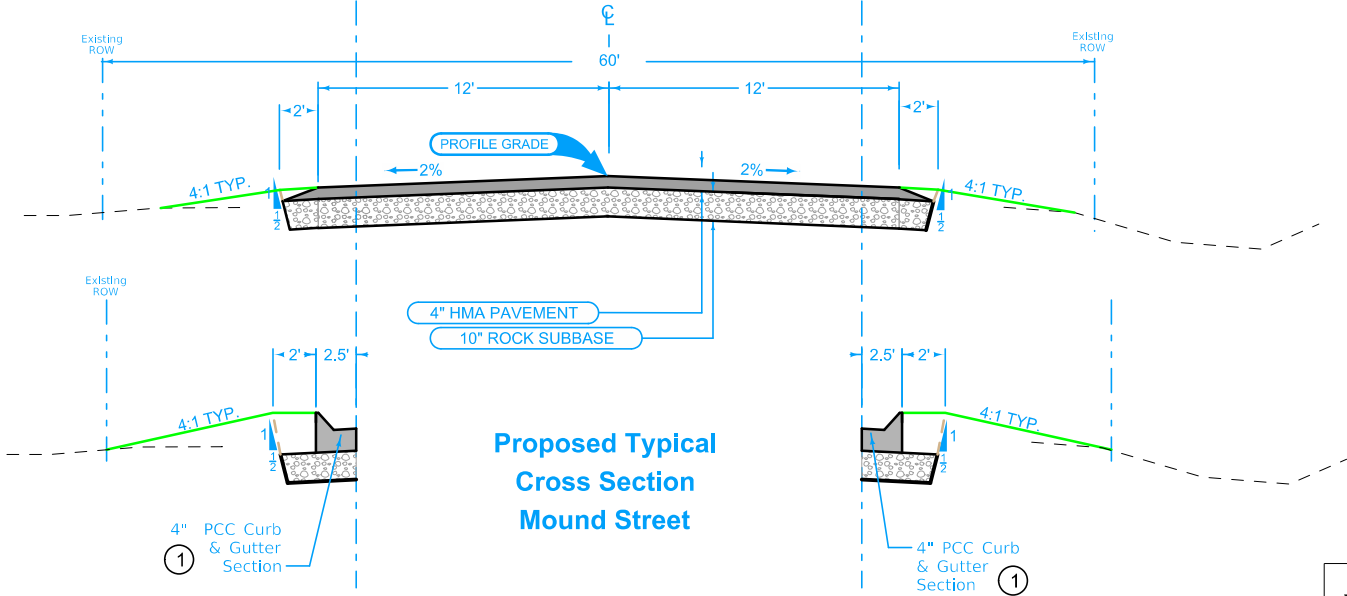
Typical sections shown may be appropriately modified for areas specifically designed by the engineer.



Existing Typical
Cross Section
Mound Street

END CONDITION #1

END CONDITION #1

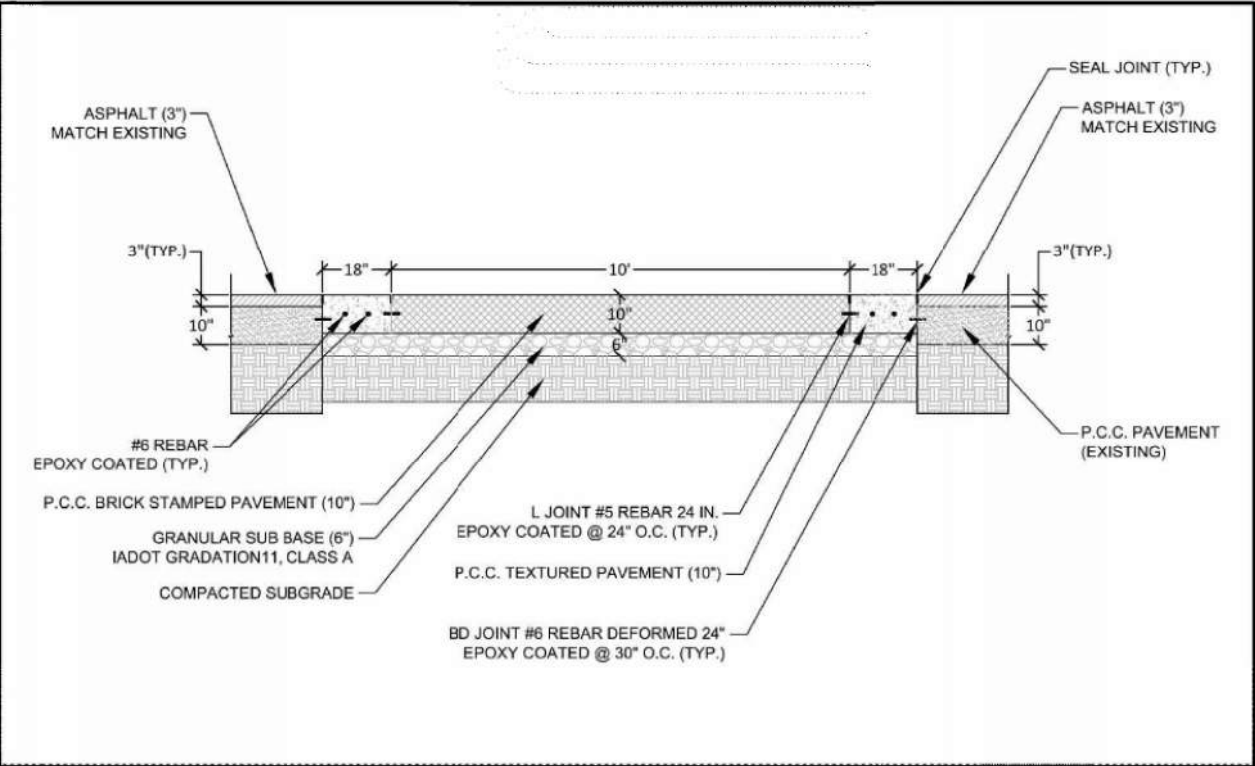


Proposed Typical
Cross Section
Mound Street

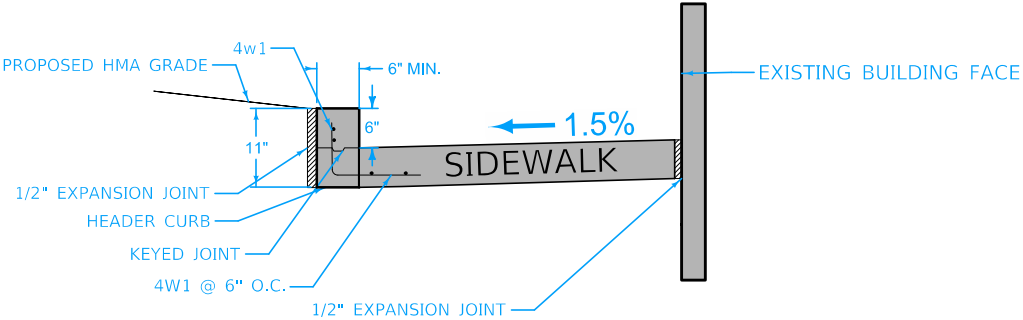
END CONDITION #2

END CONDITION #2

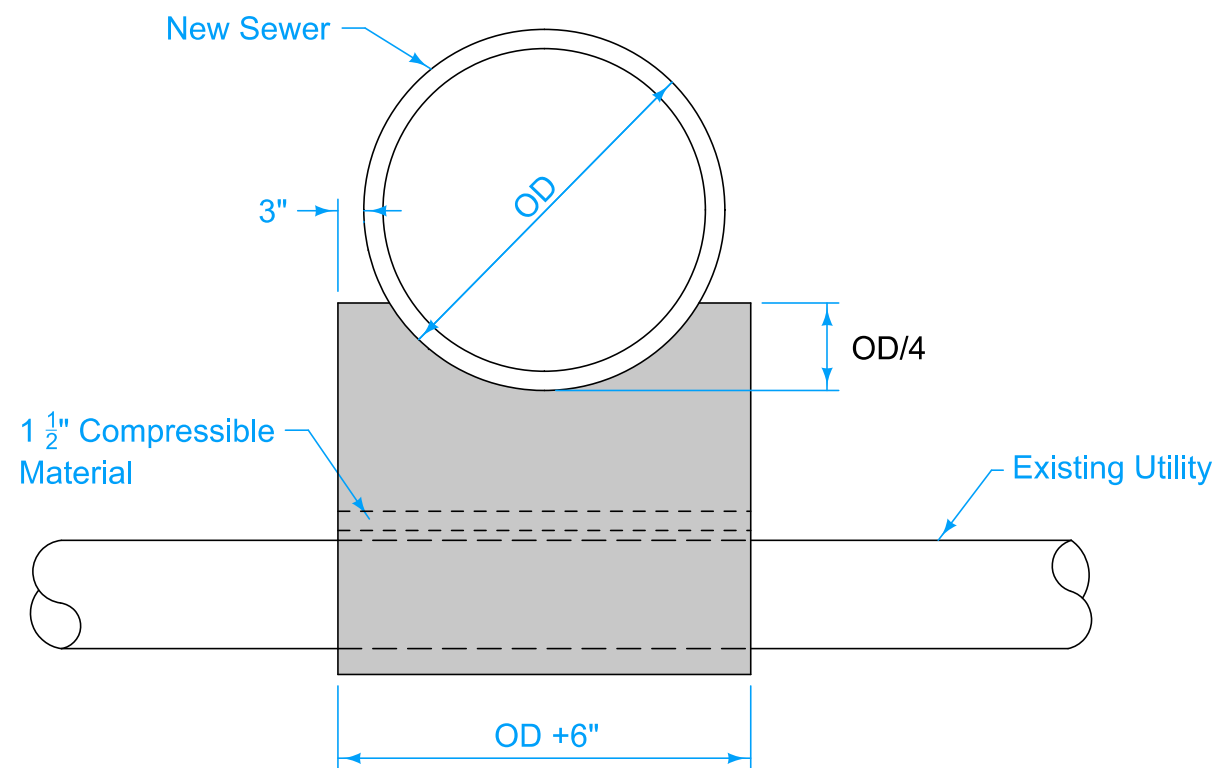
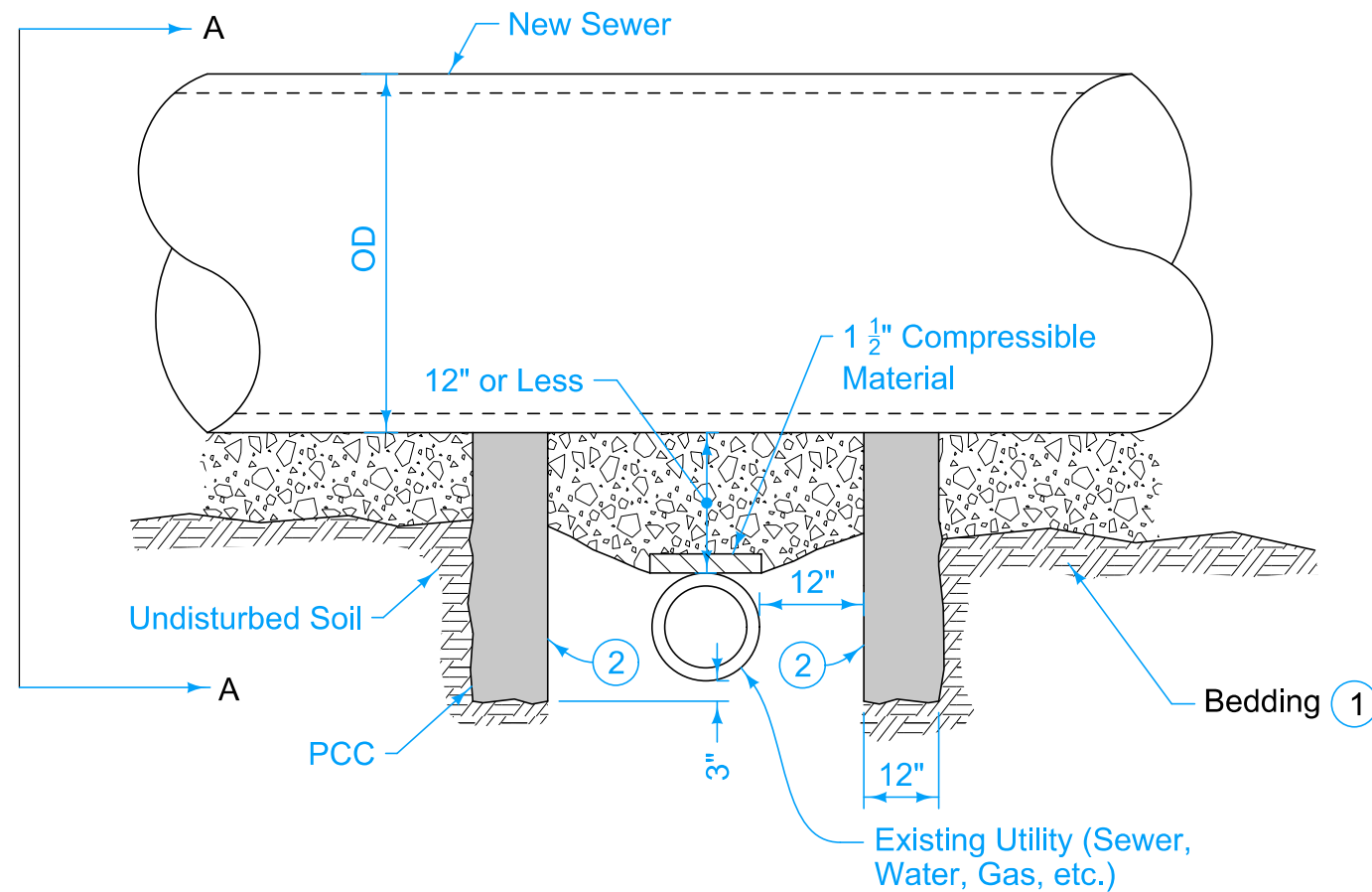
ROAD IDENTIFICATION	END CONDITION		BEGIN STATION	END STATION
	LT	RT		
MOUND ST	1	1	102+47.98	104+59.24
MOUND ST	2	2	104+59.24	104+34.11



Proposed Typical
Cross Section
Stamped Brick Crosswalk



Proposed Typical
Cross Section
Header Curb



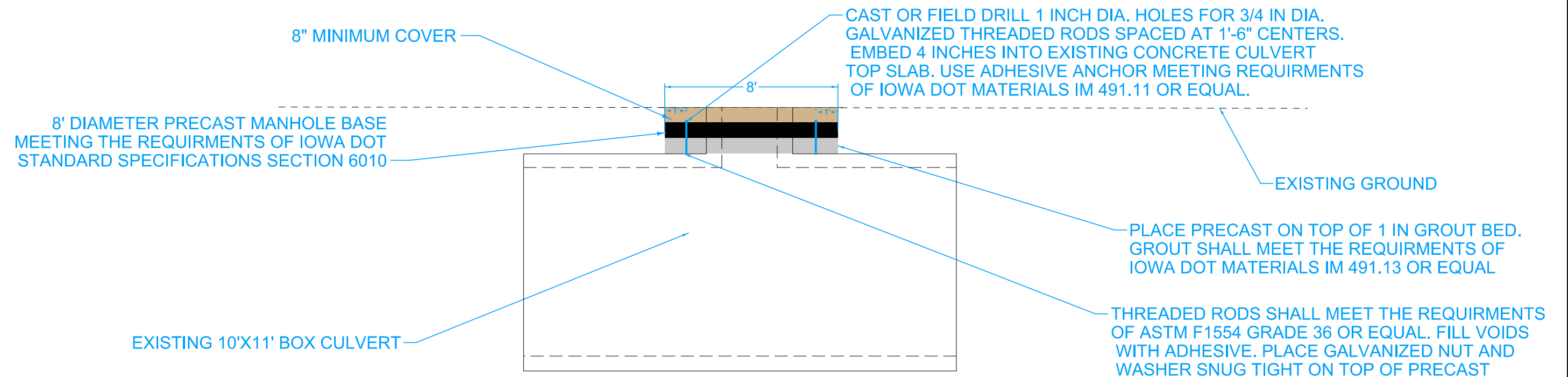
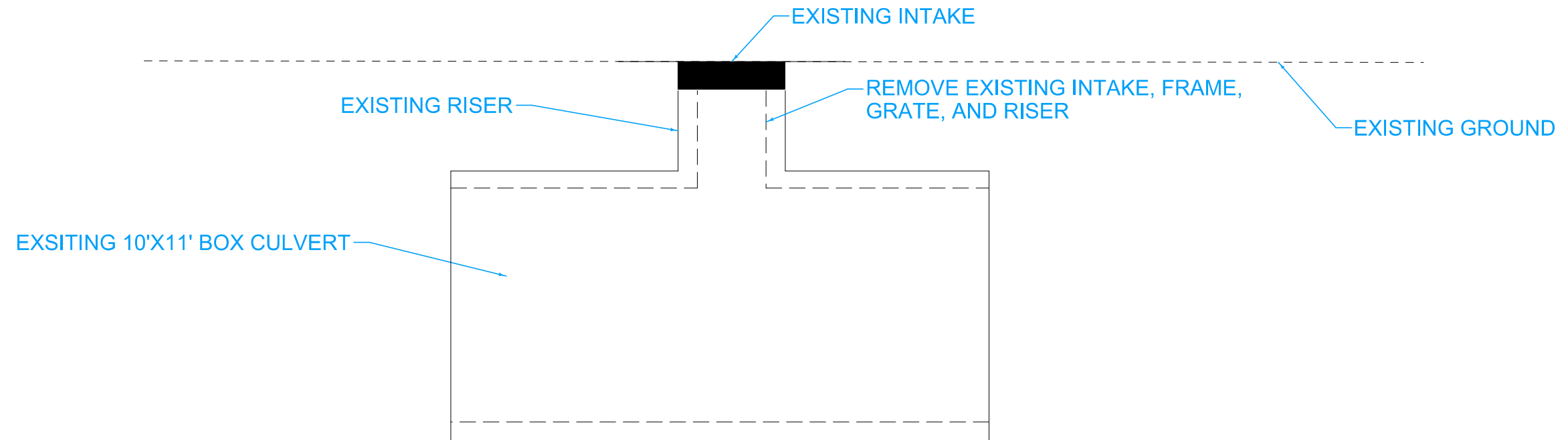
SECTION A-A

Install pipe support for all new sewers 12 inches in diameter or larger when clearance between bottom of new sewer and top of existing line is 12 inches or less.

- ① Comply with Figure 3010.101.
- ② Form interior surface of footings. Keep the 12 inch utility clear zone free of concrete.

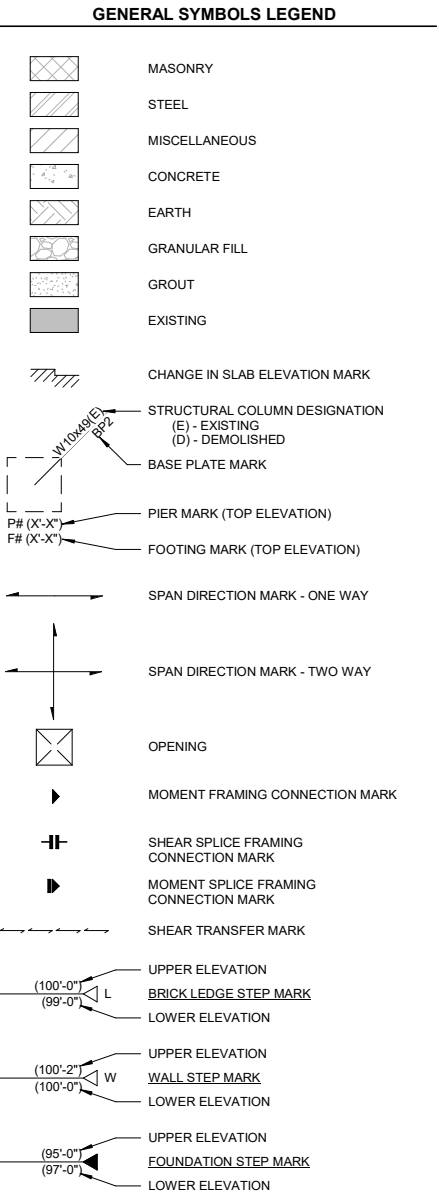
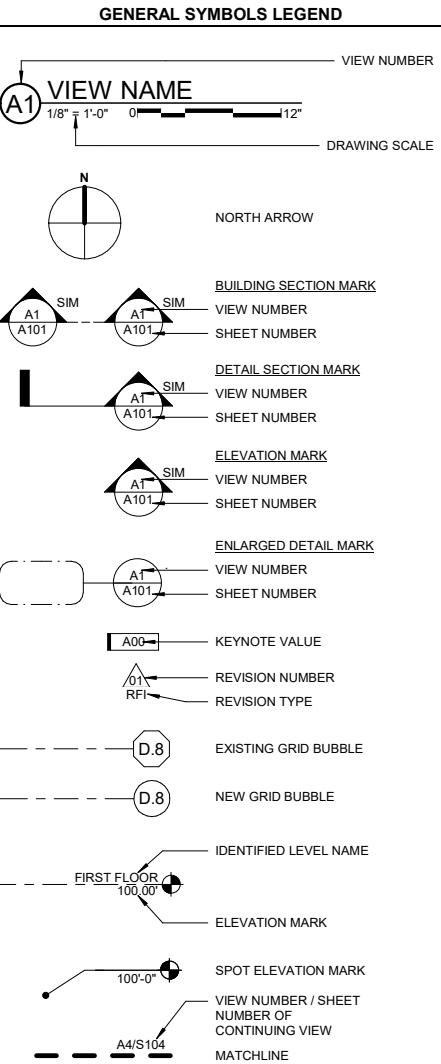
OD = Outside pipe diameter

SEWER PIPE SUPPORT
OVER EXISTING UTILITY LINE



INTAKE REMOVAL DETAIL

ABBREVIATIONS			
@	A		
	ADD	ADDENDUM	
	AHJ	AUTHORITY HAVING JURISDICTION	
	ALT	ALTERNATE	
ARCH	B		
	BLDG	BOTTOM OF BUILDING	
	BOT	BOTTOM	
	BP	BASE PLATE	
BRG	BTWN	BEARING BETWEEN	
	C		
	CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	
	CIP	CAST-IN PLACE	
CJ	CL	CONSTRUCTION/CONTROL JOINT	
	CLR	CENTER LINE	
	CMU	CLEAR (ANCE)	
	COL	CONCRETE MASONRY UNIT	
CONC	CONC	COLUMN	
	CONN	CONCRETE	
	CONT	CONNECT (ION) (ED) (OR)	
	COORD	CONTINUOUS	
CFSF	CFSF	COORDINATE	
		COLD FORMED STEEL FRAMING	
	D		
	DBE	DECK BEARING ELEVATION	
DEG, °	DEMO	DEGREE	
	DIA, Ø	DEMOLITION	
	DIM	DIAMETER	
	DN	DIMENSION DOWN	
DTL	DWG	DETAIL	
		DRAWING	
	E		
	(E)	EXISTING	
EA	EF	EACH FACE	
	EJ	EXPANSION JOINT	
	ELEC	ELECTRIC / ELECTRICAL	
	ELEV or EL	ELEVATION	
EMBED	EOR	EMBEDDED	
	EQ	ENGINEER OR RECORD	
	EQUIP	EQUAL	
	ES	EQUIPMENT	
EW	ES	EACH SIDE	
	EW	EACH WAY	
	F		
	FND	FOUNDATION	
FF	FRP	FINISHED FLOOR	
	FTG	FIBER REINFORCED POLYMER	
	FV	FOOTING	
		FIELD VERIFY	
G	GA	FOUNDATION	
	GALV	GAGE or GAUGE	
	GC	GALVANIZED	
	GL	GENERAL CONTRACTOR	
H		GRID LINE	
	HORIZ	HORIZONTAL	
	HWS	HEADED WELDED STUDS	
ID	I		
	ID	INSIDE DIAMETER	
	J		
	JBE	JOIST BEARING ELEVATION	
L	LF		
	LLBB	LINEAR FOOT	
	LLS	LONG LEG BACK TO BACK	
	LLH	LONG LEG OUTSTANDING	
LLV	LLV	LONG LEG HORIZONTAL	
	LONG	LONG LEG VERTICAL	
	LVL	LONGITUDINAL	
		LAMINATED VENEER LUMBER	
MAX	M		
	MECH	MAXIMUM	
	MEP	MECHANICAL	
		MECHANICAL, ELECTRICAL, PLUMBING	
MEZZ	MFR	MEZZANINE	
	MIN	MANUFACTURER	
	MISC	MINIMUM	
		MISCELLANEOUS	
N/A	N		
	NIC	NOT APPLICABLE	
	NTS	NOT IN CONTRACT	
		NOT TO SCALE	
OC	O		
	OD	ON CENTER	
	OCFI	OUTSIDE DIAMETER	
		OWNER FURNISHED-CONTRACTOR INSTALLED	
OFOI	OPF	OWNER FURNISHED-OWNER INSTALLED	
	OPP	OPPOSITE HAND	
	OH	OVERHEAD	
P	PAF		
	PC	POWDER ACTUATED FASTENER	
	PL	PRECAST CONCRETE	
	PREFAB	PLATE	
PRELIM	PVC	PREFABRICATED	
		PRELIMINARY	
		POLYVINYL CHLORIDE	
	Q		
	QTY	QUANTITY	
R	R		
	REF	RADIUS	
	REIN	REFER (ENCE)	
	REQD	REINFORCE (D) (ING) (MENT)	
REV	RO	REQUIRED	
	RTU	REVISION	
		ROUGH OPENING	
		ROOF TOP UNIT	
S	SCHED		
	SEOR	SCHEDULE	
	SIM	STRUCTURAL ENGINEER OF RECORD	
	SJ	SIMILAR	
SLBB	SLB	SAW CUT JOINT	
	SLOS	SHORT LEG BACK TO BACK	
	SOG	SHORT LEG OUTSTANDING	
	SPEC	SLAB ON GRADE	
SS	STA	SPECIFICATIONS	
	STD	STAINLESS STEEL	
	STL	STATION	
		STANDARD	
T	T&B	STEEL	
	T&G	TOP AND BOTTOM	
	T/	TONGUE AND GROOVE	
	TEMP	TOP OF	
TRANS	TYP	TEMPORARY	
		TRANSVERSE	
		TYPICAL	
	U		
	UNO	UNLESS NOTED OTHERWISE	
V	VERT		
	VIF	VERTICAL	
		VERIFY IN FIELD	
	W		
W/O	WP	WITH	
	WWR	WITHOUT	
		WORKING POINT	
		WELDED WIRE REINFORCEMENT	



DESIGN INFORMATION

- CODES:
 - INTERNATIONAL BUILDING CODE (IBC) 2024
 - AMERICAN CONCRETE INSTITUTE - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360)
 - ALLOWABLE STRENGTH DESIGN (ASD)
 - AMERICAN SOCIETY OF CIVIL ENGINEERS AND STRUCTURAL ENGINEERING INSTITUTE (ASCE/SEI 7) - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
 - AMERICAN WELDING SOCIETY D1.1
 - EM 1110-2-2502, RETAINING AND FLOOD WALLS, US ARMY CORPS OF ENGINEERS 1989
 - EM1110-2-2100, STABILITY ANALYSIS OF CONCRETE STRUCTURES, US ARMY CORPS OF ENGINEERS, 2005
 - EM 1110-2-2104, STRENGTH DESIGN FOR REINFORCED CONCRETE HYDRAULIC STRUCTURES, US ARMY CORPS OF ENGINEERS, 2016
- DESIGN LOADS PER THE 2024 IBC (RISK CATEGORY III)
 - DEAD LOADS
STRUCTURE SELF WEIGHT AS SHOWN
 - LIVE LOADS
STATIC WATER LOAD 62.4 PSF X DEPTH OF WATER
 - LATERAL EARTH PRESSURES
AT-REST PRESSURES
EFFECTIVE UNIT WEIGHT
MOIST UNIT WEIGHT 55 PCF X DEPTH
120 PCF X DEPTH
- SOILS INFORMATION BASED ON GEOTECHNICAL REPORT PREPARED BY TERRACON, REPORT NO. 07255170, DATED 01-26-2026.
NET ALLOWABLE SOIL BEARING PRESSURES:
MAT FOUNDATION 1500 PSF
- MINIMUM FROST PROTECTION DEPTH MEASURED FROM GRADE
EXTERIOR FOOTING AT UNHEATED AREA (-4'-0")

GENERAL NOTES

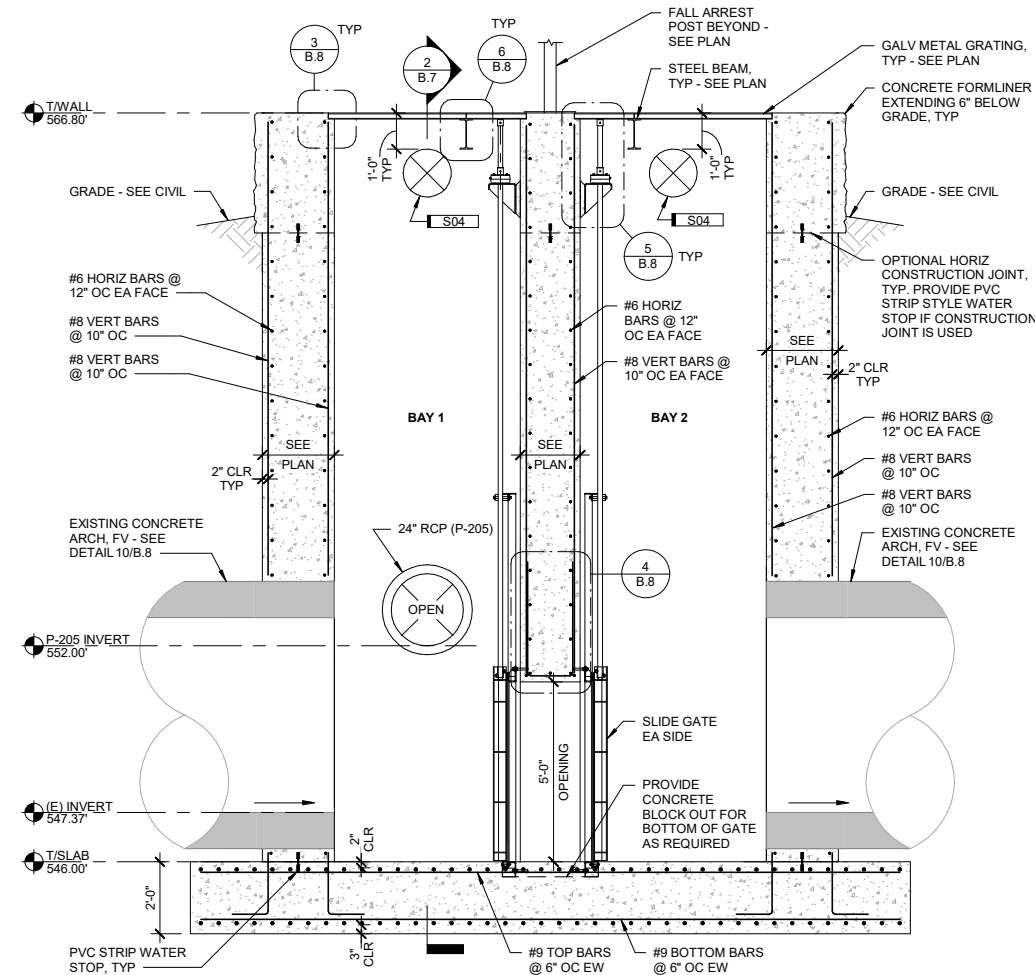
- THE GENERAL STRUCTURAL NOTES ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND SPECIFICATIONS. SHOULD CONFLICTS EXIST BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS, NOTIFY THE ENGINEER OF ANY SUCH CONFLICTS.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL PROJECT DRAWINGS AND SPECIFICATIONS. REFER TO ALL DRAWINGS FOR THE COORDINATION OF THE WORK IN THIS PROJECT.
- THE INTENT OF THESE PLANS AND NOTES IS TO PRESENT THE PROJECT REQUIREMENTS. MAJOR DETAILS HAVE BEEN SHOWN ON THE DRAWINGS. HOWEVER, CERTAIN MINOR DETAILS MUST BE WORKED OUT IN THE FIELD OR SHOP DRAWING PROCESS BY THE CONTRACTOR.
- UNLESS NOTED OTHERWISE, DETAILS SHOWN ON DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
- THE STRUCTURE IS DESIGNED TO BE STABLE AND SELF-SUPPORTING AFTER THE STRUCTURE IS FULLY ERECTED AND ALL CONNECTIONS ARE COMPLETED. UNLESS NOTED OTHERWISE, THE DRAWINGS DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURE AND SEQUENCING TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION TEMPORARY BRACING, GUYS AND TIE-DOWNS NECESSARY FOR THE ERECTION PROCESS.
- IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- CONTRACTOR'S CONSTRUCTION AND ERECTION SEQUENCE SHALL CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF THE STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
- EXISTING CONDITIONS:
 - THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS RELATING TO EXISTING CONSTRUCTION AND EXISTING SERVICES ON SITE. ANY DISCREPANCIES WITH THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
 - DURING CONSTRUCTION THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION (DISCOVERY). SUCH CONDITIONS MAY INTERFERE WITH THE NEW CONSTRUCTION OR REQUIRE PROTECTION AND/OR SUPPORT OF EXISTING WORK DURING CONSTRUCTION. IT MAY ALSO CONSIST OF DAMAGED OR DETERIORATED STRUCTURAL MATERIALS OR COMPONENTS WHICH COULD JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE STRUCTURE(S). THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL DISCOVERIES WHICH MAY INTERFERE WITH THE PROPER EXECUTION OF THE WORK OR JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE STRUCTURE(S) PRIOR TO PROCEEDING WITH THE WORK RELATED TO SUCH DISCOVERIES.
 - DURING THE CONSTRUCTION PROCESS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE AND TO PROTECT IT FROM DAMAGE ANY PORTIONS THAT ARE TO REMAIN.
 - CONTRACTOR SHALL INVESTIGATE THE SITE DURING EARTHWORK OPERATIONS FOR FILL MATERIAL OR BURIED STRUCTURES. IMMEDIATELY NOTIFY THE ENGINEER IF ANY SUCH MATERIALS OR STRUCTURES ARE DISCOVERED.
- STRUCTURAL COORDINATION
 - MECHANICAL, ELECTRICAL OR PLUMBING LOADS, OPENINGS AND SUPPORT FRAMING ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF THE MECHANICAL, ELECTRICAL OR PLUMBING CONTRACTOR BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK.
 - THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, HOLES AND SLEEVES THROUGH FOUNDATIONS AND OTHER STRUCTURAL ELEMENTS WITH THE MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS. NO OPENINGS SHALL PASS THROUGH STRUCTURAL MEMBERS UNLESS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER.
- BEFORE SUBMITTING A BID, EACH BIDDER SHALL VISIT THE SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS, CONSTRUCTION REQUIREMENTS, RESTRICTIONS, QUANTITIES AND EQUIPMENT NECESSARY TO COMPLETE THE WORK. THE BID SHALL INCLUDE ALL ITEMS REQUIRED TO COMPLETE THE WORK WITHIN THE EXISTING CONDITIONS. DISRUPTION OF THE OWNERS NORMAL ACTIVITIES AROUND THE CONSTRUCTION SITE SHALL BE KEPT TO A MINIMUM.
- THE COST OF ADDITIONAL DESIGN WORK DUE TO ERRORS AND OMISSIONS BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE BORNE BY THE RESPONSIBLE CONTRACTOR.
- ANY ENGINEERING DESIGN PROVIDED BY OTHER AND SUBMITTED FOR REVIEW OR RECORD SHALL BEAR THE STAMP AND SIGNATURE OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT EXISTS.
- ALL ELEMENTS AND SURFACES DAMAGED BY DEMOLITION, BUT NOT SCHEDULED FOR REMOVAL SHALL BE REPAIRED AND REFINISHED TO MATCH THE ADJACENT SURFACES AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL REMOVE ALL DEBRIS AND WASTE MATERIALS RESULTING FROM CONSTRUCTION FROM THE SITE, UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL MINIMIZE CREATION OF DUST, DIRT AND WINDBORNE DEBRIS FROM BLOWING ACROSS THE SITE AND ONTO ADJACENT SITES.

BAR GRATING

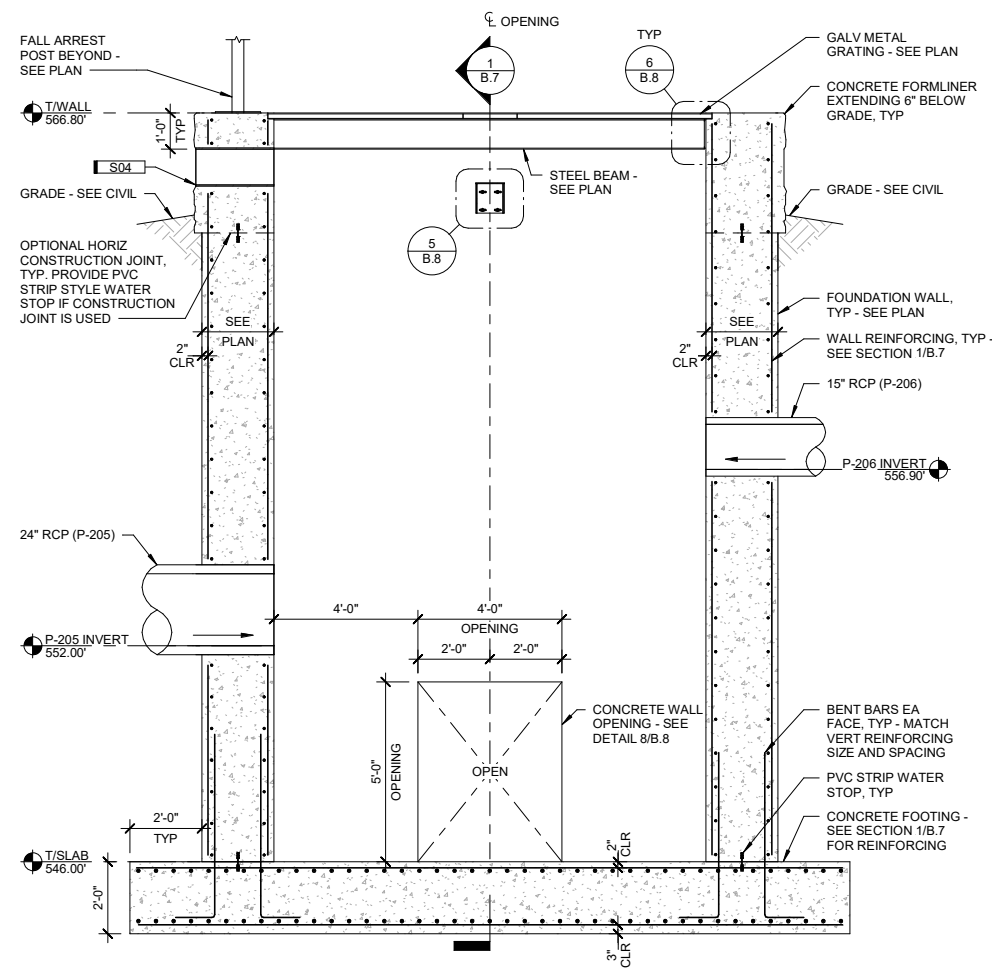
- BASIS OF DESIGN: MCNICHOLS GW-150 19-W-4 GALVANIZED CARBON STEEL SMOOTH SURFACE, OR EQUAL.
- CONTRACTOR TO FIELD MEASURE CONSTRUCTED DIMENSIONS BETWEEN GRATING SUPPORTS PRIOR TO ORDERING METAL GRATING. PROVIDE TEMPORARY SAFETY MEASURES UNTIL METAL GRATING CAN BE INSTALLED.
- 1 1/2" x 3/16" STEEL BAR GRATING SHALL HAVE MAIN BARS SPACED AT 1 3/16" OC AND CROSS BARS SPACED AT 4" OC.
- GRATING MANUFACTURER SHALL COMPLY WITH ANSINAAMM, NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS STANDARD: NAAMM MBG531 METAL BAR GRATING MANUAL.
- STEEL PLATES AND BARS FOR GRATING SHALL BE ASTM A36 OR ASTM A1011 STEEL.
- ALL STEEL GRATING SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.
- GRATING SHALL HAVE FULL BEARING ON STEEL FRAMING, 1 1/2" MINIMUM.
- FASTEN BAR GRATING TO STRUCTURE WITH SADDLE CLIPS, G-CLIPS, OR EQUAL REMOVABLE ATTACHMENTS. WELDING BAR GRATING TO SUPPORTING STEEL IS NOT PERMITTED.
- MECHANICALLY CUT BAR GRATING. DO NOT FLAME CUT.
- FABRICATE PANELS WITH EDGE BANDING FULL HEIGHT OF GRATING.
- MAXIMUM SPACING BETWEEN BAR GRATING PANELS SHALL NOT EXCEED 1/4".
- PROVIDE EDGE BANDING AT ALL OPENINGS THAT INTERRUPT FOUR OR MORE BEARING BARS USING SAME MATERIAL AS BEARING BARS.
- FOR REMOVABLE GRATING SECTIONS, PROVIDE BANDING WELDED TO THE ENTIRE PERIMETER OF EACH SECTION.

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.	
		6/16/2026
	Signature	Date
	Printed or Typed Name	Lawrence W. Sandhaas
	License Number	P14547
	My License Renewal Date is: 12/31/2027	
	Pages, Sheets, or Divisions covered by this Seal: Sheets B.5 through B.8	

CAST-IN-PLACE CONCRETE				FOUNDATIONS				FOUNDATIONS - SLAB ON GRADE				STRUCTURAL STEEL																																				
1. ALL CONCRETE SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTES PUBLICATIONS: ACI 301, ACI 305.1, ACI 306.1, ACI 315, AND ACI 318 UNLESS NOTED OTHERWISE. 2. CONCRETE COMPRESSIVE STRENGTH (28 DAY)(F_c) FOOTINGS4000 PSI FOUNDATION WALLS4000 PSI SLAB ON GRADE4000 PSI ELEVATED BEAMS4000 PSI 3. CONCRETE REINFORCEMENT STANDARDS: DEFORMED BARSASTM A615F_y = 60 KSI WELDED WIRE REINFORCEMENT (WWR)ASTM A1064F_y = 65 KSI 4. ALL CONCRETE SHALL BE STONE AGGREGATE UNLESS NOTED OTHERWISE. SUBMIT MIX DESIGN AND DOCUMENTATION FOR APPROVAL PER ACI 318. 5. REINFORCEMENT PROTECTION: A. CONCRETE PLACED AGAINST EARTH - 3" B. CONCRETE PLACED IN FORMS BUT EXPOSED TO WEATHER OR EARTH - 2" 6. WHERE REQUIRED, DOWELS SHALL MATCH THE SIZE, NUMBER AND SPACING OF THE MAIN REINFORCING UNLESS NOTED OTHERWISE. 7. ALL SPLICES, STANDARD HOOKS, AND DEVELOPMENT LENGTHS TO BE PER THE REFERENCED EDITION OF ACI 318. MAKE BARS CONTINUOUS AROUND CORNERS. ALL SPLICES SHALL BE BY CONTACT LAP. 8. ALL SPLICES SHALL BE A CLASS "B" TENSION SPLICE AS DEFINED IN ACI 318. PROVIDE LAP SPLICES LENGTHS AS FOLLOWS: <table><tr><th></th><th colspan="2">4000 PSI</th></tr><tr><th>BAR SIZE</th><th>TYPICAL</th><th>TOP BARS</th></tr><tr><td>#3</td><td>19"</td><td>25"</td></tr><tr><td>#4</td><td>25"</td><td>33"</td></tr><tr><td>#5</td><td>31"</td><td>41"</td></tr><tr><td>#6</td><td>37"</td><td>49"</td></tr><tr><td>#7</td><td>54"</td><td>71"</td></tr><tr><td>#8</td><td>62"</td><td>81"</td></tr><tr><td>#9</td><td>70"</td><td>91"</td></tr><tr><td>#10</td><td>79"</td><td>102"</td></tr><tr><td>#11</td><td>87"</td><td>114"</td></tr></table> LAP SPLICE LENGTHS GIVEN, ASSUME CLEAR SPACING BETWEEN BARS OF 2 BAR DIAMETERS, AND A MINIMUM CLEAR COVER OF 1 BAR DIAMETER. TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12" ON FRESH CONCRETE BENEATH THE BARS. 9. WALLS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE, UNLESS APPROVED BY THE ENGINEER. 10. THERE SHALL BE NO ADDITIONAL OPENINGS LARGER THAN 10" IN CONCRETE WALLS AND SLABS NOT SHOWN. REFER TO CONCRETE OPENING DETAIL FOR ADDITIONAL REINFORCEMENT AROUND OPENINGS. 11. REINFORCING STEEL SHALL BE SECURELY FASTENED INTO FORMS PRIOR TO POURING CONCRETE. WET SETTING OF REINFORCING STEEL WILL NOT BE ACCEPTED PER ACI. 12. CONCRETE MIX - FOUNDATIONS COARSE AGGREGATE100% PASSING 1" SIEVE FINE AGGREGATE100% PASSING 3/8" SIEVE WATER/CEMENT RATIO0.45 SLUMP (NO WATER REDUCER)4" +/- 1" SLUMP (WITH WATER REDUCER)4" TO 8" AIR CONTENT6% +/- 1.5%					4000 PSI		BAR SIZE	TYPICAL	TOP BARS	#3	19"	25"	#4	25"	33"	#5	31"	41"	#6	37"	49"	#7	54"	71"	#8	62"	81"	#9	70"	91"	#10	79"	102"	#11	87"	114"	1. ALL EXCAVATIONS SHALL BE PROPERLY AND SAFELY BACKFILLED. DO NOT PLACE BACKFILL BEHIND BASEMENT WALLS OR RETAINING WALLS UNTIL CONCRETE HAS ATTAINED THE SPECIFIED COMPRESSIVE STRENGTH. BASEMENT WALLS SHALL NOT BE BACKFILLED UNTIL SUPPORTING FLOOR IS COMPLETED AND ATTAINED FULL STRENGTH. CONTRACTOR SHALL PROTECT ALL BELOW GRADE WALLS FROM LATERAL EARTH PRESSURES UNTIL SUPPORTING FLOOR STRUCTURE IS COMPLETED. CONTRACTOR PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF LATERAL SHORING TO BRACE WALLS IN LIEU OF WAITING FOR FLOOR SLAB COMPLETION. 2. FOOTING SHALL BE CENTERED UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE. 3. CONTRACTOR SHALL ACCOUNT FOR PUMPING OF WATER FROM THE EXCAVATION DUE TO SURFACE WATER, GROUND WATER AND SEEPAGE. 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL SHEETING, SHORING AND CRIBBING REQUIRED TO SAFELY RETAIN THE EARTH BANK AROUND THE EXCAVATIONS. 5. ALL FOOTINGS SHALL BE PLACED ONTO FIRM UNDISTURBED SOIL OR ACCEPTABLE COMPACTED BACKFILL AS OUTLINED IN THE SOIL REPORT AND PROJECT SPECIFICATIONS. 6. FOOTING ELEVATIONS SHOWN DESIGNATE THE MINIMUM DEPTH OF THE FOOTING WHERE THE ALLOWABLE SOIL BEARING IS EXPECTED. LOCALIZED AREAS OF UNACCEPTABLE SOILS OR POOR COMPACTION MAY BE DISCOVERED DURING THE EXCAVATION PROCESS REQUIRING OVEREXCAVATION AND BACKFILL WITH ACCEPTABLE FILL. FOOTING EXCAVATIONS SHALL BE LOWERED TO REACH SOIL MEETS THE DESIGN BEARING PRESSURE AND APPROVED BY THE GEOTECHNICAL SPECIAL INSPECTION AGENCY. 7. ACCEPTABLE BACKFILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT (8) INCHES IN LOOSE THICKNESS. 8. FOR FOOTING AND FOUNDATIONS, THE SUBGRADE OR FILL MATERIAL SHALL BE COMPACTED AND VERIFIED TO MEET 98% STANDARD PROCTOR MAXIMUM DRY DENSITY ACCORDANCE WITH ASTM D698. FOR RELATIVELY COHESIONLESS GRANULAR FILL WHICH HAS A PERCENT PASSING THE #200 SIEVE LESS THAN 10 PERCENT AND HAS ONLY A SLIGHT SENSITIVITY TO MOISTURE CHANGES, COMPACTION SHALL BE 75 PERCENT RELATIVE DENSITY IN ACCORDANCE WITH ASTM D4253 AND D4254. IF COMPACTION DOES NOT COMPLY, CONTRACTOR SHALL RECOMPACT AREA AND UNTIL TEST RESULTS ARE PASSING. AN AREA EXHIBITING WEAKNESS SUCH AS RUTTING OR PUMPING SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR FILL. 9. FOOTING EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL SPECIAL INSPECTION AGENCY BEFORE CONCRETE IS PLACED. CONTRACTOR SHALL NOTIFY INSPECTION AGENCY WHEN EXCAVATION IS READY FOR TESTING. INSPECTION AGENCY SHALL PROVIDE A WRITTEN REPORT OF TEST RESULTS AND COMPLIANCE TO THE OWNER. 10. ACCEPTABLE SOIL SHALL BE DEFINED AS MEETING ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, SM OR A COMBINATION OF THESE TYPES. 11. UNACCEPTABLE SOILS SHALL BE DEFINED AS MEETING ASTM D2487 SOIL CLASSIFICATION GROUPS GC, SC, ML, MH, CL, CH, OL, OH, PT OR A COMBINATION OF THESE TYPES. GROUPS CL AND ML MAY BE ACCEPTABLE IF THE LIQUID LIMIT IS LESS THAN 45 AND THE PLASTICITY INDEX IS LESS THAN 20. 12. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY FROST OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADES BEFORE AND AFTER PLACING THE CONCRETE AND UNTIL SUCH SUBGRADE IS FULLY PROTECTED BY THE PERMANENT BUILDING ENCLOSURE AND THE SPACE IS CONDITIONED TO REMAIN ABOVE FREEZING. 13. CONCRETE FOOTINGS AND SLABS SHALL NOT BE PLACED ON OR AGAINST SUBGRADES CONTAINING FROST, SNOW OR ICE. FROZEN SUBGRADES SHALL BE COMPLETELY THAWED AND RECONDITIONED BEFORE CONCRETE MAY BE PLACED. 14. REPEATED HEAVY CONSTRUCTION TRAFFIC OVER EXPOSED SUBGRADE WILL CAUSE RUTTING AND PUMPING WHEN SOIL IS ABOVE THE OPTIMUM MOISTURE CONTENT. AVOID EXCESS CONSTRUCTION ACTIVITY ON WET SOILS. IF SUBGRADE IS ABOVE THE OPTIMUM MOISTURE CONTENT DURING CONSTRUCTION, THEN DRYING OF THE SOIL SHALL BE CONDUCTED BY DISKING, SCARIFICATION, AND AERATION. 15. SOILS WITH A MOISTURE CONTENT ABOVE THE OPTIMUM LEVEL SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR FILL. 16. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY UNUSUAL SOIL CONDITIONS THAT ARE IN VARIANCE WITH THE SOIL REPORT. 17. CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY IF THE EXISTING FOUNDATIONS VARY FROM THAT SHOWN ON THE DRAWINGS. 18. CONTRACTOR SHALL VERIFY OPENINGS AND SLEEVES THROUGH FOUNDATION WALLS WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL REQUIREMENTS. CHANGES IN SIZE, LOCATION AND NUMBER SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL BY THE ENGINEER.				1. ALL ORGANIC MATERIAL AND UNACCEPTABLE FILL MATERIAL SHALL BE REMOVED FROM BENEATH THE SLAB ON GRADE AS DIRECTED IN THE SOIL REPORT. EXPOSED SUBGRADE SHALL BE PROOF ROLLED WITH A HEAVY WEIGHTED VEHICLE OF ROLLER IN THE PRESENCE OF THE GEOTECHNICAL SPECIAL INSPECTION AGENCY. AREAS EXHIBITING RUTTING, PUMPING OR WEAKNESS SHALL BE REMOVED AND REPLACED WITH COMPACTED ACCEPTABLE FILL MATERIAL. 2. COMPACTION SHALL BE TESTED AND VERIFIED TO MEET 98% STANDARD PROCTOR MAXIMUM DRY DENSITY ACCORDANCE WITH ASTM D698. FOR RELATIVELY COHESIONLESS GRANULAR FILL WHICH HAS A PERCENT PASSING THE #200 SIEVE LESS THAN 10 PERCENT AND HAS ONLY A SLIGHT SENSITIVITY TO MOISTURE CHANGES, COMPACTION SHALL BE 75 PERCENT RELATIVE DENSITY IN ACCORDANCE WITH ASTM D4253 AND D4254. IF COMPACTION DOES NOT COMPLY, CONTRACTOR SHALL RECOMPACT AREA AND UNTIL TEST RESULTS ARE PASSING. AN AREA EXHIBITING WEAKNESS SUCH AS RUTTING OR PUMPING SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR FILL. 3. CONCRETE SLAB ON GRADE SHALL BE PLACED ON A 6" WELL GRADED COMPACTED GRANULAR FILL SUB-BASE. 4. PLACE ALL SLABS ON GRADE WITH AN APPROVED JOINT PATTERN SUBMITTED BY CONTRACTOR AND APPROVED BY ENGINEER OR AS SHOWN ON DRAWINGS. SEQUENCE OF CONSTRUCTION AND CONTROL JOINTS SHALL BE PLACED TO MINIMIZE SHRINKAGE CRACKS. 5. CONCRETE SLAB ON GRADES SHALL HAVE CONTROL JOINTS SAW CUT OR TOOLED. LOCATE JOINT ALONG COLUMN CENTER LINES WITH INTERMEDIATE JOINTS AT A MAXIMUM SPACING OF 36 TIMES THE SLAB THICKNESS, UNLESS NOTED OTHERWISE. SLAB JOINT PANELS SHALL HAVE A MAXIMUM LENGTH TO WIDTH RATIO OF 1.5:1. DO NOT STAGGER OR OFFSET JOINTS. PROVIDE ADDITIONAL JOINTS AT RE-ENTRANT CORNER. IF RE-ENTRANT CORNERS ARE UNAVOIDABLE, THEN ADDITIONAL REINFORCING COMPRISED OF (2) #4 BARS x 3'-0" SHALL BE PLACED IN THE CENTER OF THE SLAB DIAGONAL TO THE RE-ENTRANT CORNER CONDITON. PROVIDE SHOP DRAWING OF CONTROL JOINT PATTERN AND CORNER REINFORCING. 6. SAWCUT JOINTS AS SOON AS SURFACE WILL ALLOW WITHOUT EDGES RAVELING BUT PRIOR TO THE NEXT DAY AFTER THE POUR. 7. FLOOR FINISHES SHALL BE STEEL TROWELED FOR ALL INTERIORS AND BROOM FINISHED FOR ALL EXTERIORS UNLESS NOTED OTHERWISE. 8. UTILITY TRENCH BACKFILL UNDER THE SLAB ON GRADE SHALL MEET THE SAME COMPACTION REQUIREMENTS AS THE ORIGINAL SUBGRADE LISTED ABOVE. 9. SLOPE SLABS TO DRAINS TO CREATE POSITIVE DRAINAGE. PROVIDE DEPRESSIONS WHERE INDICATED ON ARCHITECTURAL DRAWINGS, WHILE MAINTAINING THE THICKNESS OF THE CONCRETE SLAB.				1. STRUCTURAL STEEL SHALL CONFORM TO THE REFERENCED EDITION OF THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS". 2. STRUCTURAL STEEL MATERIAL STANDARDS WIDE FLANGE SECTIONSASTM A992F_y = 50 KSI ANGLES, CHANNELS & PLATESASTM A36F_y = 36 KSI CAP AND BASE PLATEASTM A36F_y = 36 KSI GUSSET PLATESASTM A36F_y = 36 KSI STIFFENER PLATESASTM A36F_y = 36 KSI CONNECTION PLATES AND ANGLESASTM A36F_y = 36 KSI 3. STRUCTURAL STEEL CONNECTION STANDARDS: HIGH STRENGTH BOLTSASTM F3125GRADE A325 HEAVY HEX NUTASTM A563 WASHERSASTM F436 ANCHOR RODSASTM F1554 HEADED WELDED STUDSASTM A108 WELDING ELECTRODES (CARBON STEEL)AWS 5.1, E70XX 4. WELDING SHALL BE IN ACCORDANCE WITH STRUCTURAL WELDING CODE, AWS D1.1, LATEST EDITION, AND SHALL BE PERFORMED BY CERTIFIED WELDERS ONLY USING PROPER ELECTRODES FOR MATERIAL BEING WELDED. PROVIDE WELD SIZE IN ACCORDANCE WITH AISC SPECIFICATIONS, BUT NOT LESS THAN 3/16" FILLET, CONTINUOUS UNLESS OTHERWISE NOTED. 5. ALL HIGH STRENGTH BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH RCSC - "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." SEE DRAWINGS FOR BOLTS SIZES. USE 3/4" DIAMETER, A325 BOLTS UNLESS NOTED OTHERWISE. 6. ALL EXTERIOR EXPOSURE STEEL FRAMING AND CONNECTORS SHALL BE HOT DIPPED GALVANIZED. ITEMS INDICATED TO BE GALVANIZED SHALL BE HOT-DIP GALVANIZED IN COMPLIANCE WITH ASTM A123. DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780. 7. AFTER FABRICATION, ALL STEEL SHALL BE CLEANED OF ALL RUST, LOOSE MILL SCALE AND OTHER FOREIGN MATERIALS. STEEL SHALL BE HAND TOOLED CLEANED (SSPC-SP2) OR POWER TOOL CLEANED (SSPC-SP3). 8. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD. 9. CONTRACTOR SHALL PROVIDE ALL TEMPORARY SHORES, GUYS, BRACES AND OTHER SUPPORTS DURING ERECTION TO KEEP STRUCTURAL STEEL SECURE, PLUMB AND IN ALIGNMENT AGAINST TEMPORARY CONSTRUCTION LOADS AND LOADS EQUAL TO DESIGN LOADS. REMOVE ALL TEMPORARY SUPPORTS WHEN PERMANENT STRUCTURAL STEEL FRAMING AND CONNECTIONS ARE COMPLETED. 10. MAINTAIN ERECTION TOLERANCES OF STRUCTURAL STEEL WITHIN AISC 303, "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES." 11. DO NOT ENLARGE MISALIGNED BOLT HOLES BY BURNING OR THERMAL CUTTING. REAM HOLES THAT MUST BE ENLARGED TO INSTALL BOLTS.			
	4000 PSI																																															
BAR SIZE	TYPICAL	TOP BARS																																														
#3	19"	25"																																														
#4	25"	33"																																														
#5	31"	41"																																														
#6	37"	49"																																														
#7	54"	71"																																														
#8	62"	81"																																														
#9	70"	91"																																														
#10	79"	102"																																														
#11	87"	114"																																														
POST INSTALLED ANCHORS								SUBMITTALS																																								
1. ADHESIVE ANCHOR SYSTEMS USED IN CONCRETE SHALL CONSIST OF ASTM A193 B7 RODS WITH HEAVY DUTY NUTS AND WASHERS. ADHESIVE SHALL BE A TWO COMPONENT STRUCTURAL ADHESIVE INJECTED IN A DUAL CARTRIDGE DISPENSING SYSTEM THAT PROPERLY MIXES THE COMPONENTS AT THE POINT OF APPLICATION. ALL COMPONENTS SHALL BE HOT-DIP GALVANIZED CONFORMING TO ASTM A153. ADHESIVE ANCHORING SYSTEM LISTED AS BASIS OF DESIGN ARE THE SIZE AND QUANTITY SHOWN IN THE DRAWINGS. ACCEPTABLE ALTERNATE ANCHORS SHALL MATCH THE SIZE, QUANTITY AND CONFIGURATION WITH THE SAME CAPACITY OF THE BASIS OF DESIGN ANCHORS. PROVIDE ALTERNATE ANCHOR PRODUCT DATA TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. THE FOLLOWING TABLE SUMMARIZES THE ADHESIVE ANCHORS ALLOWED ON THE PROJECT: <table><tr><th>MATERIAL ANCHORED INTO</th><th>BASIS OF DESIGN ANCHORS</th><th>ACCEPTABLE ALTERNATE ANCHORS</th></tr><tr><td>CRACKED AND UNCRACKED CONCRETE</td><td>HILTI HIT HY 200</td><td>DEWALT: AC200+ ITW/RED HEAD: C6+ SIMPSON SET XP</td></tr></table> 2. ADHESIVE ANCHOR SYSTEMS USED IN HOLLOW MASONRY AND CMU SHALL INCLUDE SCREEN TUBE. 3. INSTALL ANCHOR SYSTEMS IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS. 4. ALL POST INSTALLED ANCHORS SHALL HAVE ICC-ES ESR CERTIFICATION DATA SHEETS FOR ALL MATERIALS ANCHORED INTO. SUBMIT ESR DATA SHEETS TO ENGINEER FOR REVIEW AND APPROVAL.				MATERIAL ANCHORED INTO	BASIS OF DESIGN ANCHORS	ACCEPTABLE ALTERNATE ANCHORS	CRACKED AND UNCRACKED CONCRETE	HILTI HIT HY 200	DEWALT: AC200+ ITW/RED HEAD: C6+ SIMPSON SET XP					1. CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL THE FOLLOWING SUBMITTALS FOR EACH MATERIAL INDICATED BELOW. 2. CONCRETE REINFORCING A. SUBMIT CONCRETE REINFORCEMENT SHOP DRAWINGS IN ACCORDANCE WITH ACI 315 FOR APPROVAL. a. DETAIL BARS IN ACCORDANCE WITH "ACI DETAILING MANUAL", PUBLICATION SP-66 AND THE LATEST EDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". 3. CAST-IN-PLACE CONCRETE A. SUBMIT CONCRETE MIX DESIGNS FOR EACH APPLICATION LOCATION INDICATED IN THE DRAWINGS. B. SUBMIT SHOP DRAWING OF EMBEDDED STEEL ELEMENTS AND CONNECTIONS. 4. STRUCTURAL STEEL A. SUBMIT STRUCTURAL STEEL SHOP DRAWINGS SHOWING COMPLETE DIMENSIONS, DETAILS, SIZES, AND GRADES OF STEEL MEMBERS AND CONNECTIONS, SIZE, TYPE, AND NUMBER OF WELDS SHALL BE PREPARED AND SUBMITTED FOR APPROVAL PRIOR TO FABRICATION OF STEEL COMPONENTS. B. STRUCTURAL STEEL SHOP DRAWINGS SHALL BE DETAILED IN COMPLIANCE WITH THE AISC "DETAILING FOR STEEL CONSTRUCTION". STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN COMPLIANCE WITH AISC 360 - "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS." 5. TEMPORARY RETAINING STRUCTURES A. SUBMIT DETAILS OF TEMPORARY RETAINING STRUCTURES (SHEET PILE, COFFERDAM, OR EQUIVALENT) AT LEAST TWO (2) WEEKS PRIOR TO BEGINNING EXCAVATION. B. DESIGN OF TEMPORARY RETAINING STRUCTURES MORE THAT SIX (6) FEET BELOW EXISTING GRADE SHALL BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT EXISTS. 6. CONCRETE FORMLINER A. SUBMIT PRODUCT DATA SHEETS FOR CURING PRODUCTS AND FORM FACING MATERIALS. B. INSTALLER AND MANUFACTURER SHALL HAVE MINIMUM THREE (3) YEARS EXPERIENCE WITH PROJECTS OF SIMILAR SCOPE. C. FORMLINER SHALL BE REUSABLE, HIGH STRENGTH URETHANE CREATED FROM REAL STONE THAT ATTACHES EASILY TO THE FORMING SYSTEM AND IS CAPABLE OF WITHSTANDING CONCRETE POUR PRESSURES WITHOUT LEAKAGE OR CAUSING PHYSICAL DEFECTS. D. THE FORMLINER PATTERN SHALL RESEMBLE CUT LIMESTONE WITH 12 INCH HIGH COURSES. E. FORMLINER SHALL HAVE 1 1/2 INCH TO 2 INCH MAXIMUM RELIEF DEPTH AND TOTAL THICKNESS OF 3 INCH MAXIMUM. F. PRODUCTS: a. MILESTONES INCORPORATED; HUDSON, WI; PATTERN: MS-1001 b. KARLSON FORMING SPECIALTIES; AMERY, WI; PATTERN: 12 INCH RUNNING BOND c. CUSTOM ROCK FORMLINER; ST. PAUL, MN; PATTERN: 1106-R2 RANDOM CUT STONE, 12 INCH COURSING. d. OR OTHER APPROVED MANUFACTURER. 7. SLIDE GATE A. SUBMIT SLIDE GATE SHOP DRAWINGS. B. DESIGN REQUIREMENTS: a. SEATING/UNSEATING HEAD (AT INVERT): 19FT/19FT b. SERVICE: OPEN/CLOSE, UPWARD OPENING c. NON-RISING STEM d. MOUNTING: NON SELF-CONTAINED, COMMON WALL THIMBLE e. ACTUATOR: VERTICAL PINION GEAR BOX WITH MDPI. MANUAL ACTUATOR LOCATED IMMEDIATELY BELOW GRATING WITH 2 INCH NUT FOR PORTABLE DRILL OPERATOR.																																		
MATERIAL ANCHORED INTO	BASIS OF DESIGN ANCHORS	ACCEPTABLE ALTERNATE ANCHORS																																														
CRACKED AND UNCRACKED CONCRETE	HILTI HIT HY 200	DEWALT: AC200+ ITW/RED HEAD: C6+ SIMPSON SET XP																																														
FILE NO.	ENGLISH	DESIGN TEAM	HR GREEN, INC. / SHIVE-HATTERY	City of Davenport	SCOTT COUNTY	PROJECT NUMBER	HDP-1827(704)--71-82	SHEET NUMBER	B.6																																							



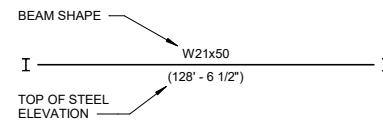
1 GATEWELL (S-206) SECTION
3/8" = 1'-0" 0' 4'



2 GATEWELL (S-206) SECTION - BAY 1
3/8" = 1'-0" 0' 4'

PLAN NOTES

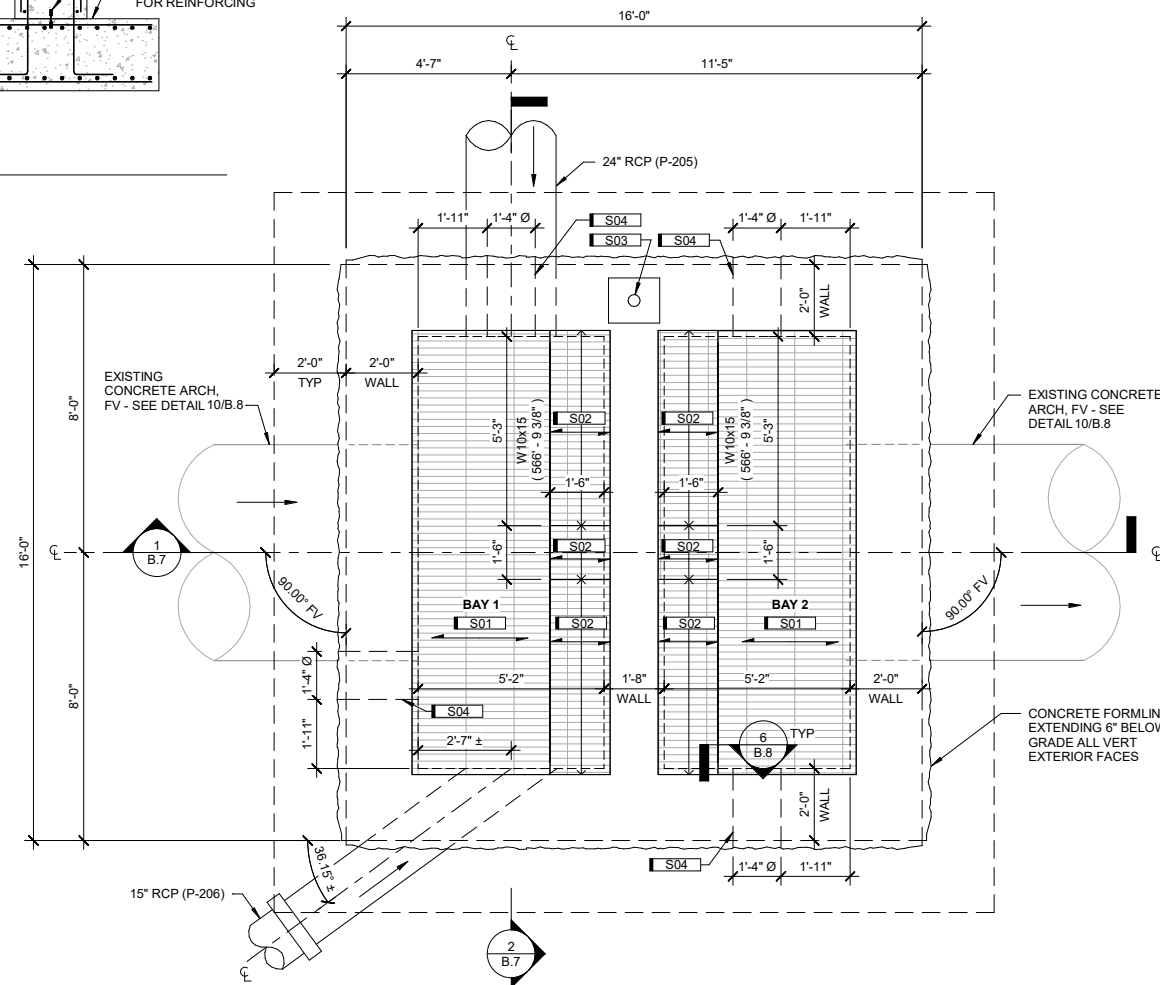
- SEE SHEETS B.5 AND B.6 FOR GENERAL NOTES.
- SEE CIVIL DRAWINGS FOR PLANS AND PROFILES OF STORM SEWERS.
- NORTH ARROW SHOWN IS FOR STRUCTURAL REFERENCE ONLY. SEE CIVIL DRAWINGS FOR ACTUAL STRUCTURE ORIENTATION.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS INDICATED INCLUDING GRADE ELEVATIONS, DIMENSIONS, ETC.
- PROVIDE CORNER BARS AT FOUNDATION CORNERS AND T-INTERSECTIONS PER DETAIL 2/B.8.
- CONTRACTOR SHALL COORDINATE ALL FOUNDATION WALL OPENING REQUIREMENTS WITH MEP AND CIVIL CONTRACTORS.



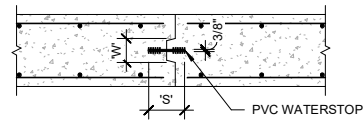
BEAM LEGEND

KEYNOTES

KEY	NOTE
S01	1 1/2" GALVANIZED METAL GRATING - SEE BAR GRATING NOTES ON SHEET B.5.
S02	1 1/2" GALVANIZED REMOVABLE BANDED METAL GRATING - SEE BAR GRATING NOTES ON SHEET B.5. PROVIDE FOUR (4) WELD-ON HINGED D-RINGS. PROVIDE HILTI X-GR GRATING CLIPS OR EQUAL.
S03	3M DBI SALA PORTABLE FALL ARREST POST W/ UNI ANCHOR PLATE WITH TIE DOWN - SEE DETAIL 7/B.8 FOR BASE PLATE.
S04	1-1/2" PIPE SLEEVE THROUGH FOUNDATION WALL FOR DUCTILE IRON PIPE USED IN PLUMBING. PROVIDE ADDITIONAL WALL OPENING REINFORCING PER DETAIL 8/B.8. COORDINATE SIZE AND LOCATION OF PIPE SLEEVE WITH CIVIL AND PLUMBING CONTRACTORS (TYP 4 LOCATIONS).

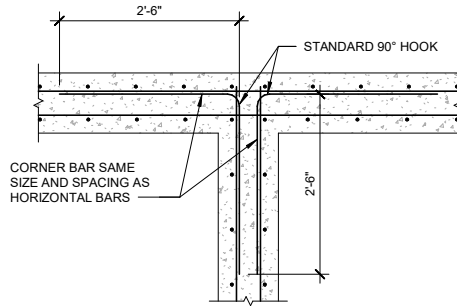


3 GATEWELL (S-206) PLAN
3/8" = 1'-0" 0' 4'

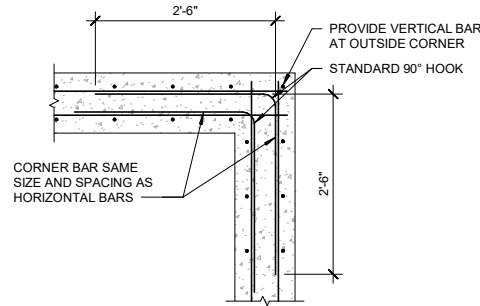


- NOTES:**
1. RUN REINFORCING CONTINUOUS THROUGH JOINT.
 2. STOP KEYWAY AND WATERSTOPS IN VERTICAL JOINTS 6" BELOW EXPOSED TOP OF WALL.
 3. 'S' = 6", 'W' = 5 1/2" FOR WALLS AND SLABS 18" THICK OR MORE.

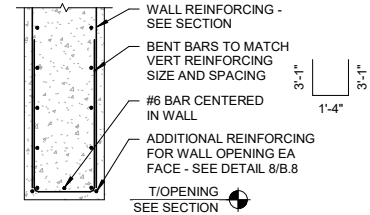
1 TYPICAL WALL CONSTRUCTION JOINT
3/4" = 1'-0" 0' 2'



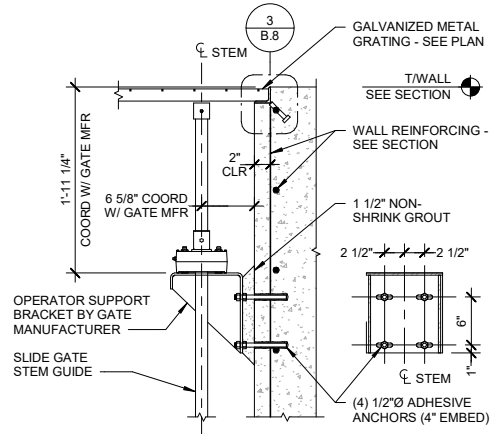
2 TYPICAL WALL CORNER DETAIL
3/4" = 1'-0" 0' 2'



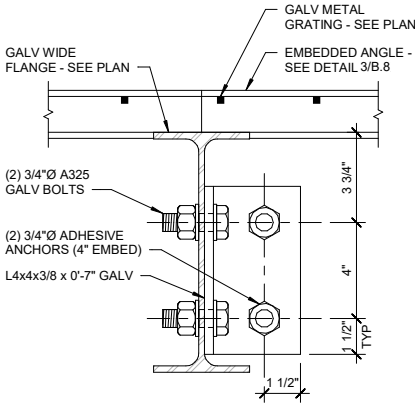
3 BAR GRATING SUPPORT DETAIL
3" = 1'-0" 0' 6"



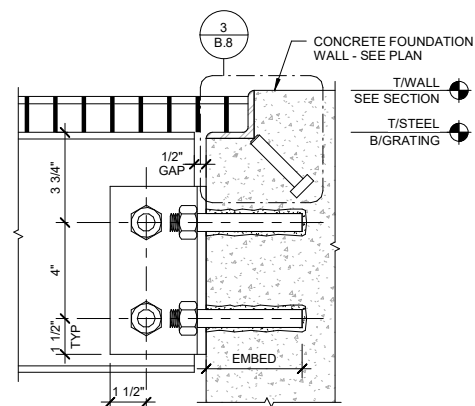
4 BOTTOM OF WALL DETAIL
1/2" = 1'-0" 0' 3'



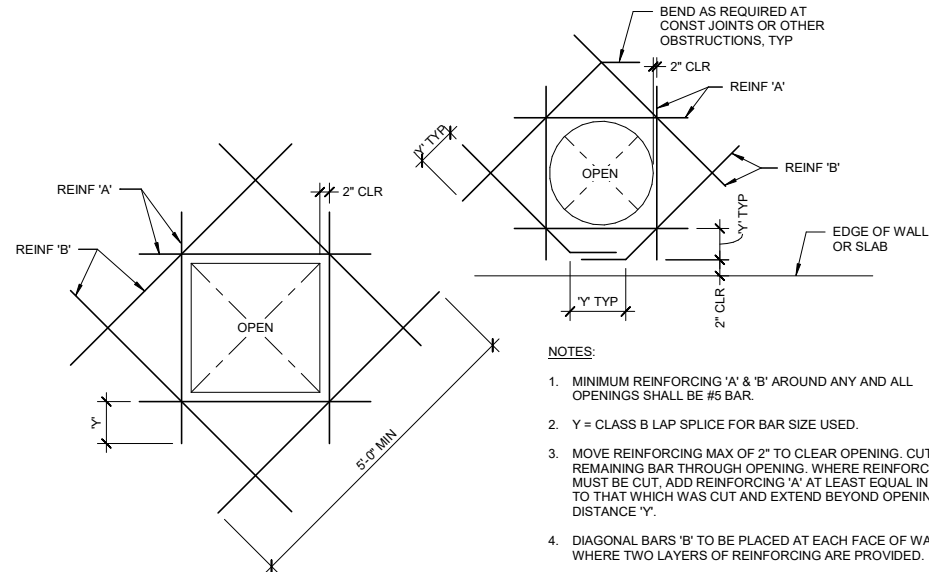
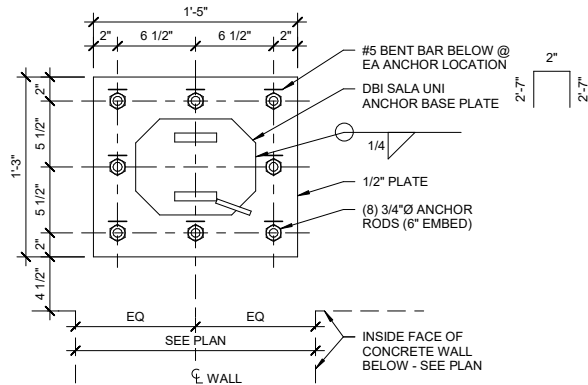
5 SUPPORT BRACKET DETAIL
1" = 1'-0" 0' 1'-6"



6 WIDE FLANGE CONNECTION DETAIL
3" = 1'-0" 0' 6"

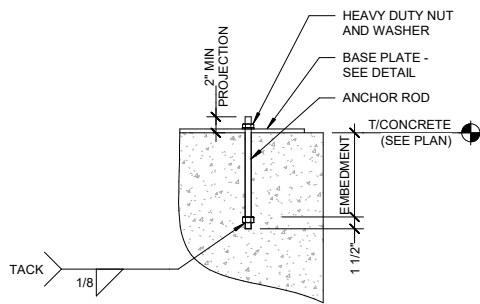


7 FALL ARREST POST BASE PLATE
1 1/2" = 1'-0" 0' 1'



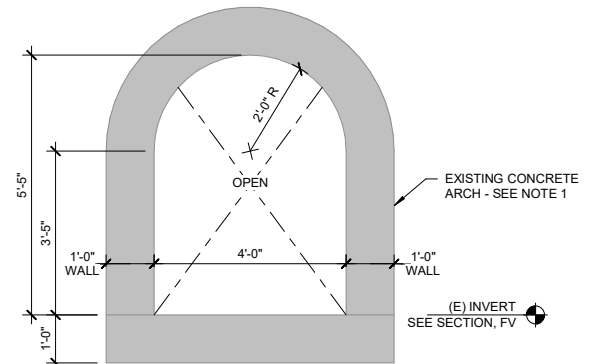
8 TYPICAL WALL OPENING REINFORCING DETAIL
1" = 1'-0" 0' 1'-6"

- NOTES:**
1. MINIMUM REINFORCING 'A' & 'B' AROUND ANY AND ALL OPENINGS SHALL BE #5 BAR.
 2. Y = CLASS B LAP SPLICE FOR BAR SIZE USED.
 3. MOVE REINFORCING MAX OF 2" TO CLEAR OPENING. CUT REMAINING BAR THROUGH OPENING. WHERE REINFORCING MUST BE CUT, ADD REINFORCING 'A' AT LEAST EQUAL IN AREA TO THAT WHICH WAS CUT AND EXTEND BEYOND OPENING DISTANCE 'Y'.
 4. DIAGONAL BARS 'B' TO BE PLACED AT EACH FACE OF WALL WHERE TWO LAYERS OF REINFORCING ARE PROVIDED.



9 ANCHOR ROD DETAIL
1" = 1'-0" 0' 1'-6"

- NOTES:**
1. REFER TO BASE PLATE DETAILS FOR ANCHOR ROD DIAMETER AND EMBEDMENT.
 2. ALL ANCHOR RODS MATERIAL SHALL BE ASTM F1554, GRADE 36, UNLESS OTHERWISE NOTED.
 3. SET ANCHOR RODS PRIOR TO CONCRETE PLACEMENT.
 4. PROTECT ANCHOR RODS FROM DAMAGE.
 5. SET ANCHOR RODS PERPENDICULAR TO BEARING SURFACE, UNLESS NOTED OTHERWISE.
 6. VERIFY ANCHOR ROD PROJECTION TO ALL FOR PROPER FASTENING.
 7. PLACEMENT OF ANCHOR RODS SHALL BE WITHIN TOLERANCE DESCRIBED IN AISC CODE OF STANDARD PRACTICE AS FOLLOWS:
 - A. VARIATION IN DIMENSION BETWEEN THE CENTERS OF ANY TWO ANCHOR RODS WITHIN A GROUP SHALL BE EQUAL TO OR LESS THAN 1/8".
 - B. VARIATION IN ELEVATION OF THE TOPS OF ANCHOR RODS SHALL BE EQUAL TO OR LESS THAN ± 3/16".



- NOTES:**
1. FIELD VERIFY EXISTING CONCRETE ARCH DIMENSIONS AND INVERT ELEVATION. NOTIFY THE ENGINEER OF RECORD IF EXISTING CONDITIONS VARY FROM THE CONDITIONS SHOWN.

10 EXISTING CONCRETE ARCH SECTION
1/2" = 1'-0" 0' 3'

100-1D 10-18-05 PROJECT DESCRIPTION IN THE CITY OF DAVENPORT, RECONSTRUCT MOUND STREET AND STORM SEWER LOCATIONS ADJACENT TO E RIVER DRIVE						100-4A 10-29-02 ESTIMATE REFERENCE INFORMATION <table><tr><th>Item No.</th><th>Item Code</th><th>Description</th></tr><tr><td>1</td><td>2101-0850001</td><td>CLEARING AND GRUBBING A. REFER TO TABULATION 110-17 IN THE C SHEETS FOR LOCATION AND TREE INFORMATION</td></tr><tr><td>2</td><td>2102-2625000</td><td>EMBANKMENT-IN-PLACE</td></tr><tr><td>3</td><td>2102-2710070</td><td>EXCAVATION, CLASS 10, ROADWAY AND BORROW A. REFER TO T SHEETS FOR TABULATIONS. B. REFER TO W SHEETS FOR CROSS SECTIONS. C. BID ITEM INCLUDES THE FOLLOWING QUANTITIES: 417 CY OF CLASS 10 SUITABLE CUT MATERIAL FROM CROSS SECTIONS. 568 CY OF FILL MATERIAL (INCLUDES + 30% SHRINKAGE) 151 CY OF CLASS 10 IMPORT MATERIAL TO BE PROVIDED BY THE CONTRACTOR D. QUANTITY WAS CALCULATED TO ACCOUNT FOR REQUIRED CUT AND BACKFILL ASSOCIATED WITH PAVING OPERATIONS AND RETAINING WALL CONSTRUCTION. THIS DOES NOT INCLUDE EXCAVATION ASSOCIATED WITH SEWER/ WATER MAIN REMOVAL AND/ OR CONSTRUCTION. E. EXCESS MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR. OVERHAUL WILL NOT BE MEASURED OR PAID FOR, BUT SHALL BE CONSIDERED INCIDENTAL TO ROADWAY EXCAVATION.</td></tr><tr><td>4</td><td>2105-8425005</td><td>TOPSOIL, FURNISH AND SPREAD, 4" A. REFER TO TABULATION 103-07 IN THE C SHEETS FOR SHRINKAGE AND TOPSOIL INFORMATION. B. QUANTITY ASSUMES NO RE-USE OF EXISTING TOPSOIL WITHIN TH RIGHT-OF-WAY. SUITABLE TOPSOIL MAY BE USED. C. TOPSOIL PLACED WITHIN CITY OR IADOT ROW SHALL BE 4", ALL OTHER SHALL BE 8" D. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE MADE, WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS. E. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIALS NECESSARY TO INSTALL TOPSOIL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.</td></tr><tr><td>5</td><td>2109-8225100</td><td>SPECIAL COMPACTION OF SUBGRADE A. ITEM INCLUDES THE SCARIFICATION, MIXING, AND RECOMPACTION OF THE TOP 12" BELOW SUBBASE. B. SEE TYPICAL DETAILS IN THE B SHEETS. C. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING PER IADOT SPECIFICATIONS. D. WHEN PLACING FILL, NO LAYER SHALL E PLACED IN EXCESS OF 9 INCHES OR LESS THAN 2 INCHES IN COMPACTED THICKNESS.</td></tr><tr><td>6</td><td>2111-8174100</td><td>GRANULAR SUBBASE, 10"</td></tr><tr><td>7</td><td>2115-0100000</td><td>MODIFIED SUBBASE, 6" A. REFER TO TABULATION 100-24 AND 100-25 IN THE C SHEETS B. SEE TYPICAL DETAILS IN THE B SHEETS.</td></tr><tr><td>8</td><td>2301-1033140</td><td>STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 14 IN.</td></tr><tr><td>9</td><td>2301-1033140</td><td>STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 14 IN., COLORED STAMPED CROSSWALK A. REFER TO THE TYPICAL SECTIONS IN THE B SHEETS. B. REFER TO TABULATION 100-24 IN THE C SHEETS. C. SURFACE FINISH TEXTURE TO BE BURLAP DRAG TEXTURING. PAVEMENT TEXTURING IS INCIDENTAL TO THIS ITEM. D. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS. E. ALL CURBS ADJACENT TO PCC PAVING, INTEGRAL 6" STANDARD CURB, ARE CONSIDERED INCIDENTAL TO THIS ITEM. SEE B SHEETS FOR DETAILS. F. MATURITY TESTING SHALL BE REQUIRED AND PERFORMED IN ACCORDANCE WITH IADOT SPECIFICATIONS</td></tr><tr><td>10</td><td>2301-4875006</td><td>MEDIAN, P.C. CONCRETE, 6 IN. A. REFER TO TABULATION 112-4 IN THE C SHEETS. B. CONTRACTOR SHALL PROVIDE CERTIFIED PLAN INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS. C. ADDITIONAL MODIFIED SUBBASE MATERIAL BENEATH THE MEDIAN PAVING SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. D. 6" INTEGRAL CURB SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.</td></tr><tr><td>11</td><td>2301-6911722</td><td>PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PCC SAMPLES IN ACCORDANCE WITH IADOT STANDARD SPECIFICATIONS.</td></tr><tr><td>12</td><td>2303-0000100</td><td>HOT MIX ASPHALT MIXTURE, COMMERCIAL MIX</td></tr><tr><td>13</td><td>2303-6911000</td><td>HOT MIX ASPHALT PAVEMENT SAMPLES A. REFER TO TYPICAL SECTIONS IN THE B SHEETS B. REFER TO TABULATION 100-25 IN THE C SHEETS. C. QUANTITY ASSUMES A UNIT WEIGHT OF 145 LBS/ CF. D. CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW AND APPROVAL BY ENGINEER. E. CONTRACTOR SHALL CONTAIN PAVING OPERATIONS TO THE TOP WIDTH DIMENSIONS SPECIFIED IN THE PLAN. PAYMENT FOR MATERIAL AND OPERATIONS BEYOND THESE DIMENSIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.</td></tr><tr><td>14</td><td>2303-9093010</td><td>HOT MIX ASPHALT, DRIVEWAY A. REFER TO TYPICAL SECTIONS IN THE B SHEETS B. REFER TO TABULATION 102-3 IN THE C SHEETS. C. QUANTITY ASSUMES A UNIT WEIGHT OF 145 LBS/ CF. D. CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW AND APPROVAL BY ENGINEER. E. CONTRACTOR SHALL CONTAIN PAVING OPERATIONS TO THE TOP WIDTH DIMENSIONS SPECIFIED IN THE PLAN. PAYMENT FOR MATERIAL AND OPERATIONS BEYOND THESE DIMENSIONS SHALL BE AT THE CONTRACTOR'S EXPENSE. F. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE PER SQUARE YARD OF HMA DRIVEWAY INSTALLED G. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER SQUARE YARD OF THE HMA DRIVEWAY INSTALLED. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIAL NECESSARY FOR INSTALLING DRIVEWAY IN ACCORDANCE WITH CONTRACT DOCUMENTS.</td></tr><tr><td>15</td><td>2312-8260050</td><td>GRANULAR SURFACING ON ROAD, CLASS A CRUSHED ROAD STONE A. THIS ITEM INCLUDES THE TEMPORARY ROADWAYS/ DRIVEWAYS. ASSUME 8 INCH THICKNESS UNLESS OTHERWISE SPECIFIED. ASSUME 8 INCH THICKNESS FOR ALL DRIVEWAYS UNLESS OTHERWISE SPECIFIED. B. REFER TO J SHEETS FOR LOCATIONS</td></tr><tr><td>16</td><td>2405-2705000</td><td>EXCAVATE AND DEWATER A. THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN IN ACCORDANCE WITH IADOT SPECIFICATIONS SECTION 2552.03-D FOR APPROVAL BY THE ENGINEER. THE DEWATERING PLAN SHALL SHOW: THE</td></tr></table>												Item No.	Item Code	Description	1	2101-0850001	CLEARING AND GRUBBING A. REFER TO TABULATION 110-17 IN THE C SHEETS FOR LOCATION AND TREE INFORMATION	2	2102-2625000	EMBANKMENT-IN-PLACE	3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW A. REFER TO T SHEETS FOR TABULATIONS. B. REFER TO W SHEETS FOR CROSS SECTIONS. C. BID ITEM INCLUDES THE FOLLOWING QUANTITIES: 417 CY OF CLASS 10 SUITABLE CUT MATERIAL FROM CROSS SECTIONS. 568 CY OF FILL MATERIAL (INCLUDES + 30% SHRINKAGE) 151 CY OF CLASS 10 IMPORT MATERIAL TO BE PROVIDED BY THE CONTRACTOR D. QUANTITY WAS CALCULATED TO ACCOUNT FOR REQUIRED CUT AND BACKFILL ASSOCIATED WITH PAVING OPERATIONS AND RETAINING WALL CONSTRUCTION. THIS DOES NOT INCLUDE EXCAVATION ASSOCIATED WITH SEWER/ WATER MAIN REMOVAL AND/ OR CONSTRUCTION. E. EXCESS MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR. OVERHAUL WILL NOT BE MEASURED OR PAID FOR, BUT SHALL BE CONSIDERED INCIDENTAL TO ROADWAY EXCAVATION.	4	2105-8425005	TOPSOIL, FURNISH AND SPREAD, 4" A. REFER TO TABULATION 103-07 IN THE C SHEETS FOR SHRINKAGE AND TOPSOIL INFORMATION. B. QUANTITY ASSUMES NO RE-USE OF EXISTING TOPSOIL WITHIN TH RIGHT-OF-WAY. SUITABLE TOPSOIL MAY BE USED. C. TOPSOIL PLACED WITHIN CITY OR IADOT ROW SHALL BE 4", ALL OTHER SHALL BE 8" D. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE MADE, WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS. E. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIALS NECESSARY TO INSTALL TOPSOIL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	5	2109-8225100	SPECIAL COMPACTION OF SUBGRADE A. ITEM INCLUDES THE SCARIFICATION, MIXING, AND RECOMPACTION OF THE TOP 12" BELOW SUBBASE. B. SEE TYPICAL DETAILS IN THE B SHEETS. C. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING PER IADOT SPECIFICATIONS. D. WHEN PLACING FILL, NO LAYER SHALL E PLACED IN EXCESS OF 9 INCHES OR LESS THAN 2 INCHES IN COMPACTED THICKNESS.	6	2111-8174100	GRANULAR SUBBASE, 10"	7	2115-0100000	MODIFIED SUBBASE, 6" A. REFER TO TABULATION 100-24 AND 100-25 IN THE C SHEETS B. SEE TYPICAL DETAILS IN THE B SHEETS.	8	2301-1033140	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 14 IN.	9	2301-1033140	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 14 IN., COLORED STAMPED CROSSWALK A. REFER TO THE TYPICAL SECTIONS IN THE B SHEETS. B. REFER TO TABULATION 100-24 IN THE C SHEETS. C. SURFACE FINISH TEXTURE TO BE BURLAP DRAG TEXTURING. PAVEMENT TEXTURING IS INCIDENTAL TO THIS ITEM. D. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS. E. ALL CURBS ADJACENT TO PCC PAVING, INTEGRAL 6" STANDARD CURB, ARE CONSIDERED INCIDENTAL TO THIS ITEM. SEE B SHEETS FOR DETAILS. F. MATURITY TESTING SHALL BE REQUIRED AND PERFORMED IN ACCORDANCE WITH IADOT SPECIFICATIONS	10	2301-4875006	MEDIAN, P.C. CONCRETE, 6 IN. A. REFER TO TABULATION 112-4 IN THE C SHEETS. B. CONTRACTOR SHALL PROVIDE CERTIFIED PLAN INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS. C. ADDITIONAL MODIFIED SUBBASE MATERIAL BENEATH THE MEDIAN PAVING SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. D. 6" INTEGRAL CURB SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.	11	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PCC SAMPLES IN ACCORDANCE WITH IADOT STANDARD SPECIFICATIONS.	12	2303-0000100	HOT MIX ASPHALT MIXTURE, COMMERCIAL MIX	13	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES A. REFER TO TYPICAL SECTIONS IN THE B SHEETS B. REFER TO TABULATION 100-25 IN THE C SHEETS. C. QUANTITY ASSUMES A UNIT WEIGHT OF 145 LBS/ CF. D. CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW AND APPROVAL BY ENGINEER. E. CONTRACTOR SHALL CONTAIN PAVING OPERATIONS TO THE TOP WIDTH DIMENSIONS SPECIFIED IN THE PLAN. PAYMENT FOR MATERIAL AND OPERATIONS BEYOND THESE DIMENSIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.	14	2303-9093010	HOT MIX ASPHALT, DRIVEWAY A. REFER TO TYPICAL SECTIONS IN THE B SHEETS B. REFER TO TABULATION 102-3 IN THE C SHEETS. C. QUANTITY ASSUMES A UNIT WEIGHT OF 145 LBS/ CF. D. CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW AND APPROVAL BY ENGINEER. E. CONTRACTOR SHALL CONTAIN PAVING OPERATIONS TO THE TOP WIDTH DIMENSIONS SPECIFIED IN THE PLAN. PAYMENT FOR MATERIAL AND OPERATIONS BEYOND THESE DIMENSIONS SHALL BE AT THE CONTRACTOR'S EXPENSE. F. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE PER SQUARE YARD OF HMA DRIVEWAY INSTALLED G. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER SQUARE YARD OF THE HMA DRIVEWAY INSTALLED. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIAL NECESSARY FOR INSTALLING DRIVEWAY IN ACCORDANCE WITH CONTRACT DOCUMENTS.	15	2312-8260050	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED ROAD STONE A. THIS ITEM INCLUDES THE TEMPORARY ROADWAYS/ DRIVEWAYS. ASSUME 8 INCH THICKNESS UNLESS OTHERWISE SPECIFIED. ASSUME 8 INCH THICKNESS FOR ALL DRIVEWAYS UNLESS OTHERWISE SPECIFIED. B. REFER TO J SHEETS FOR LOCATIONS	16	2405-2705000	EXCAVATE AND DEWATER A. THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN IN ACCORDANCE WITH IADOT SPECIFICATIONS SECTION 2552.03-D FOR APPROVAL BY THE ENGINEER. THE DEWATERING PLAN SHALL SHOW: THE
Item No.	Item Code	Description																																																																		
1	2101-0850001	CLEARING AND GRUBBING A. REFER TO TABULATION 110-17 IN THE C SHEETS FOR LOCATION AND TREE INFORMATION																																																																		
2	2102-2625000	EMBANKMENT-IN-PLACE																																																																		
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW A. REFER TO T SHEETS FOR TABULATIONS. B. REFER TO W SHEETS FOR CROSS SECTIONS. C. BID ITEM INCLUDES THE FOLLOWING QUANTITIES: 417 CY OF CLASS 10 SUITABLE CUT MATERIAL FROM CROSS SECTIONS. 568 CY OF FILL MATERIAL (INCLUDES + 30% SHRINKAGE) 151 CY OF CLASS 10 IMPORT MATERIAL TO BE PROVIDED BY THE CONTRACTOR D. QUANTITY WAS CALCULATED TO ACCOUNT FOR REQUIRED CUT AND BACKFILL ASSOCIATED WITH PAVING OPERATIONS AND RETAINING WALL CONSTRUCTION. THIS DOES NOT INCLUDE EXCAVATION ASSOCIATED WITH SEWER/ WATER MAIN REMOVAL AND/ OR CONSTRUCTION. E. EXCESS MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR. OVERHAUL WILL NOT BE MEASURED OR PAID FOR, BUT SHALL BE CONSIDERED INCIDENTAL TO ROADWAY EXCAVATION.																																																																		
4	2105-8425005	TOPSOIL, FURNISH AND SPREAD, 4" A. REFER TO TABULATION 103-07 IN THE C SHEETS FOR SHRINKAGE AND TOPSOIL INFORMATION. B. QUANTITY ASSUMES NO RE-USE OF EXISTING TOPSOIL WITHIN TH RIGHT-OF-WAY. SUITABLE TOPSOIL MAY BE USED. C. TOPSOIL PLACED WITHIN CITY OR IADOT ROW SHALL BE 4", ALL OTHER SHALL BE 8" D. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE MADE, WILL BE THE QUANTITY SHOWN IN THE CONTRACT DOCUMENTS. E. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER CUBIC YARD OF TOPSOIL. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIALS NECESSARY TO INSTALL TOPSOIL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.																																																																		
5	2109-8225100	SPECIAL COMPACTION OF SUBGRADE A. ITEM INCLUDES THE SCARIFICATION, MIXING, AND RECOMPACTION OF THE TOP 12" BELOW SUBBASE. B. SEE TYPICAL DETAILS IN THE B SHEETS. C. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING PER IADOT SPECIFICATIONS. D. WHEN PLACING FILL, NO LAYER SHALL E PLACED IN EXCESS OF 9 INCHES OR LESS THAN 2 INCHES IN COMPACTED THICKNESS.																																																																		
6	2111-8174100	GRANULAR SUBBASE, 10"																																																																		
7	2115-0100000	MODIFIED SUBBASE, 6" A. REFER TO TABULATION 100-24 AND 100-25 IN THE C SHEETS B. SEE TYPICAL DETAILS IN THE B SHEETS.																																																																		
8	2301-1033140	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 14 IN.																																																																		
9	2301-1033140	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 14 IN., COLORED STAMPED CROSSWALK A. REFER TO THE TYPICAL SECTIONS IN THE B SHEETS. B. REFER TO TABULATION 100-24 IN THE C SHEETS. C. SURFACE FINISH TEXTURE TO BE BURLAP DRAG TEXTURING. PAVEMENT TEXTURING IS INCIDENTAL TO THIS ITEM. D. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS. E. ALL CURBS ADJACENT TO PCC PAVING, INTEGRAL 6" STANDARD CURB, ARE CONSIDERED INCIDENTAL TO THIS ITEM. SEE B SHEETS FOR DETAILS. F. MATURITY TESTING SHALL BE REQUIRED AND PERFORMED IN ACCORDANCE WITH IADOT SPECIFICATIONS																																																																		
10	2301-4875006	MEDIAN, P.C. CONCRETE, 6 IN. A. REFER TO TABULATION 112-4 IN THE C SHEETS. B. CONTRACTOR SHALL PROVIDE CERTIFIED PLAN INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS. C. ADDITIONAL MODIFIED SUBBASE MATERIAL BENEATH THE MEDIAN PAVING SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. D. 6" INTEGRAL CURB SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.																																																																		
11	2301-6911722	PORTLAND CEMENT CONCRETE PAVEMENT SAMPLES A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PCC SAMPLES IN ACCORDANCE WITH IADOT STANDARD SPECIFICATIONS.																																																																		
12	2303-0000100	HOT MIX ASPHALT MIXTURE, COMMERCIAL MIX																																																																		
13	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES A. REFER TO TYPICAL SECTIONS IN THE B SHEETS B. REFER TO TABULATION 100-25 IN THE C SHEETS. C. QUANTITY ASSUMES A UNIT WEIGHT OF 145 LBS/ CF. D. CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW AND APPROVAL BY ENGINEER. E. CONTRACTOR SHALL CONTAIN PAVING OPERATIONS TO THE TOP WIDTH DIMENSIONS SPECIFIED IN THE PLAN. PAYMENT FOR MATERIAL AND OPERATIONS BEYOND THESE DIMENSIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.																																																																		
14	2303-9093010	HOT MIX ASPHALT, DRIVEWAY A. REFER TO TYPICAL SECTIONS IN THE B SHEETS B. REFER TO TABULATION 102-3 IN THE C SHEETS. C. QUANTITY ASSUMES A UNIT WEIGHT OF 145 LBS/ CF. D. CONTRACTOR SHALL SUBMIT A MIX DESIGN FOR REVIEW AND APPROVAL BY ENGINEER. E. CONTRACTOR SHALL CONTAIN PAVING OPERATIONS TO THE TOP WIDTH DIMENSIONS SPECIFIED IN THE PLAN. PAYMENT FOR MATERIAL AND OPERATIONS BEYOND THESE DIMENSIONS SHALL BE AT THE CONTRACTOR'S EXPENSE. F. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE PER SQUARE YARD OF HMA DRIVEWAY INSTALLED G. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER SQUARE YARD OF THE HMA DRIVEWAY INSTALLED. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIAL NECESSARY FOR INSTALLING DRIVEWAY IN ACCORDANCE WITH CONTRACT DOCUMENTS.																																																																		
15	2312-8260050	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED ROAD STONE A. THIS ITEM INCLUDES THE TEMPORARY ROADWAYS/ DRIVEWAYS. ASSUME 8 INCH THICKNESS UNLESS OTHERWISE SPECIFIED. ASSUME 8 INCH THICKNESS FOR ALL DRIVEWAYS UNLESS OTHERWISE SPECIFIED. B. REFER TO J SHEETS FOR LOCATIONS																																																																		
16	2405-2705000	EXCAVATE AND DEWATER A. THE CONTRACTOR SHALL PREPARE A DEWATERING PLAN IN ACCORDANCE WITH IADOT SPECIFICATIONS SECTION 2552.03-D FOR APPROVAL BY THE ENGINEER. THE DEWATERING PLAN SHALL SHOW: THE																																																																		
FILE NO.		ENGLISH	DESIGN TEAM	HR Green Inc.		City of Davenport		SCOTT	COUNTY	PROJECT NUMBER		HDP-1827(704)—71-82		SHEET NUMBER		C.1																																																				

ESTIMATE REFERENCE INFORMATION				100-4A 10-29-02
Item No.	Item Code	Description		
		ARRANGEMENT, LOCATIONS, AND DETAILS OF WELLS AND WELL POINTS; LOCATIONS OF RISERS, HEADERS, FILTERS, PUMPS, POWER UNITS, AND DISCHARGE LINES; AND MEANS OF DISCHARGE, CONTROL OF SEDIMENT, AND DISPOSAL OF WATER. PREPARATION OF THIS PLAN, AND UPDATING THE PLAN AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. B. THE CONTRACTOR WILL BE PAID THE LUMP SUM PRICE FOR DEWATERING. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR, AND MATERIALS NECESSARY FOR DEWATERING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.		
17	2435-0140160	MANHOLE, STORM SEWER, SW-401, 60 IN.		
18	2435-0140172	MANHOLE, STORM SEWER, SW-401, 72 IN.		
19	2435-0250100	INTAKE, SW-501		
20	2435-0250260	INTAKE, SW-502 (60")		
21	2435-0250700	INTAKE, SW-507		
23	2435-0251224	INTAKE, SW-512, 24 IN.		
		A. REFER TO M SHEETS FOR PLAN AND PROFILES		
		B. REFER TO TABULATION 104-5B ON SHEET M.01		
		C. THIS ITEM INCLUDES CUTTING STORM SEWER PIPES ENTERING THE PROPOSED STRUCTURE AT A SKEWED ANGLE SUCH THAT THE PIPE PROJECTION INTO THE MANHOLE DOES NOT EXCEED 6 INCHES.		
		D. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE OF ALL EXISTING STORM SEWERS THAT ARE TO REMAIN BEFORE ORDERING STRUCTURES		
		E. TRENCH SHORING AND DEWATERING SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.		
24	2435-0600010	MANHOLE ADJUSTMENT, MINOR		
		A. REFER TO U SHEETS AND TABULATION 104-10 IN THE C SHEETS FOR LOCATION		
25	2435-0700010	CONNECTION TO EXISTING MANHOLE		
		A. REFER TO M SHEETS FOR LOCATIONS		
26	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 15 IN.		
27	2503-0114218	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN.		
28	2503-0114224	STORM SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 24 IN.		
		A. REFER TO M SHEETS FOR PLAN AND PROFILES.		
		B. REFER TO TABULATION 104-5B ON SHEET M.01		
		C. REFER TO RISK OF FLOODING SHEETS U.3-U.5. ANY MEASURES NECESSARY TO PROTECT TRENCHES AND OTHER WORK AREAS FROM FLOODING DURING CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO SEWER CONSTRUCTION ON THIS PROJECT.		
		D. EACH TYPE AND SIZE OF PIPE INSTALLED WILL BE MEASURE IN LINEAR FEET ALONG THE CENTERLINE OF THE PIPE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE OF INTAKE OR MANHOLE. IF PIPE ENDS OUTSIDE OF AN INTAKE OR MANHOLE, MEASUREMENT WILL BE TO THE END OF THE PIPE.		
		E. TRENCH SHORING AND DEWATERING SHALL BE CONSIDERED INCIDENTAL TO SEWER CONSTRUCTION ON THIS PROJECT.		
		F. FOR PIPE INSTALLED BENEATH PAVEMENT, BACKFILL WITH GRANULAR BEDDING AND BACKFILL MATERIAL TO BOTTOM OF SUBBASE MATERIAL. GRANULAR BACKFILL IS INCIDENTAL. FOR ALL OTHER STORM SEWER PIPE BACKFILL WITH GRANULAR BEDDING AND BACKFILL MATERIAL TO A MINIMUM 0.5' FROM THE TOP OF PIPE.		
		G. ALL PIPE SHALL BE CONSTRUCTED WITH WATER-TIGHT JOINTS COMPLYING WITH ASTM C 443. JOINTS COMPLYING WITH ASTM C 443 ARE INCIDENTAL TO THESE BID ITEMS.		
		H. SUPPORT SEWER PIPE OVER EXISTING UTILITIES ACCORDING TO DETAIL ON SHEET B.3. PLACE FLOWABLE MORTAR TO SUPPORT EXISTING UTILITIES. SEWER PIPE SUPPORT AND UTILITY SUPPORT ARE INCIDENTAL TO THESE BID ITEMS.		
29	2503-0200036	REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.		
		A. REFER TO U SHEETS AND TABULATION 110-14 IN THE C SHEETS.		
		B. THE EXCAVATED TRENCH SHALL BE BACKFILLED WITH GRANULAR BACKFILL UNDERNEATH ALL PAVEMENT AND DRIVEWAY AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. BACKFILL IS INCIDENTAL TO THESE BID ITEMS.		
		C. THIS ITEM INCLUDES CUTTING EXISTING STORM SEWER PIPE AS NECESSARY FOR REMOVAL.		
30	2507-3250005	ENGINEERING FABRIC		
31	2507-6800061	REVETMENT, CLASS E		
		A. REFER TO M SHEETS AND R SHEETS FOR LOCATION		
		B. REFER TO TABULATION 100-23 I IN THE C SHEETS.		
		C. INSTALLATION SHALL BE PER IADOT STANDARD DETAIL EC-301, TYPE 5		
32	2510-6745850	REMOVAL OF PAVEMENT		
		A. REFER TO U SHEETS AND TABULATION 110-1 IN THE C SHEETS.		
		B. INCLUDES FULL-DEPTH SAW CUTTING NECESSARY TO CREATE A CLEAN EDGE BETWEEN EXISTING AND PROPOSED PAVEMENTS.		
33	2510-6750600	REMOVAL OF EXISTING INTAKE AND UTILITY ACCESSES		
34	2510-6750600	REMOVAL OF EXISTING INTAKE AND UTILITY ACCESSES, TOP ONLY		
		A. REFER TO U SHEETS AND TABULATION 110-15 IN THE C SHEETS		
		B. THIS ITEM INCLUDES REMOVAL AND DISPOSAL OF EXISTING GATES AND APPURTENANT EQUIPMENT WITHIN INTAKES AND UTILITY ACCESSES DESIGNATED FOR REMOVAL.		
35	2511-6745900	REMOVAL OF SIDEWALK		
		A. REFER TO U SHEETS AND TABULATION 110-5 IN THE C SHEETS		
36	2511-7526005	SIDEWALK, P.C. CONCRETE, 5 IN.		
37	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.		
		A. REFER TO D, L AND S SHEETS FOR PCC SIDEWALK LOCATIONS AND TABULATION 113-1A IN THE C SHEETS.		
		B. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR PORTLAND CEMENT CONCRETE PER SPECIFICATIONS.		
		C. 3 IN. MODIFIED SUBBASE BENEATH ALL SIDEWALK SHALL BE CONSIDERED INCIDENTAL TO SIDEWALK		
38	2511-7528101	DETECTABLE WARNINGS		
		A. DETECTABLE WARNINGS SHALL BE MANUFACTURED, WET-SET PANELS WITH NON-SLIP SURFACE AND RAISED TRUNCATED DOMES. SURFACE MOUNT OR RETRO-FIT PANELS WILL NOT BE ALLOWED. COMPLY WITH PROWAG FOR CONTRAST AND DIMENSION REQUIREMENTS. ACCEPTABLE COLOR IS SAFETY RED - FEDERAL STANDARD #31350, OR APPROVED EQUAL.		
		B. REFER TO S SHEETS FOR LOCATIONS AND TABULATIONS 113-1A IN THE C SHEETS.		
39	2512-1725256	CURB AND GUTTER, P.C. CONCRETE, 2.5 FT.		
40	2512-1859000	CURB, SPECIAL, AS PER PLAN		
		A. SEE D SHEETS FOR LOCATIONS AND L SHEETS FOR STAKING INFORMATION.		
FILE NO.		ENGLISH	DESIGN TEAM HR Green Inc.	City of Davenport
9:35:37 AM 7/22/2026 hmanter \\hrgreen.com\HRG\Data\2025\2503594\CAD\Design\CADD_Files\Sheet_Files\SHT_C01_2503594.dgn		SCOTT COUNTY		PROJECT NUMBER HDP-1827(704)—71-82

ESTIMATE REFERENCE INFORMATION				100-4A 10-29-02
Item No.	Item Code	Description		
		B. REFER TO TABULATION 112-4 IN THE C SHEETS.		
		C. REFER TO SHEET B.02 FOR HEADER CURB DETAIL.		
		D. CONTRACTOR SHALL PROVIDE CERTIFIED PLANT INSPECTION FOR PORTLAND CEMENT CONCRETE PER IADOT SPECIFICATIONS.		
41	2515-6745600	REMOVAL OF PAVED DRIVEWAY		
		A. REFER TO TABULATION 110-8 IN THE C SHEETS.		
		B. FULL DEPTH SAW CUT EXISTING PAVEMENT PRIOR TO REMOVALS. THIS IS INCIDENTAL TO THIS BID ITEM.		
		C. REMOVE EXISTING PAVEMENT TO THE NEAREST JOINT OR AS DIRECTED BY THE ENGINEER.		
42	2519-3300600	FENCE, SAFETY		
		A. REFER TO R SHEETS FOR LOCATIONS		
		B. FENCE SHALL BE STANDARD ORANGE MESH SAFETY FENCE INSTALLED FOR TREE PROTECTION		
		C. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE MADE WILL BE PER LINEAR FOOT OF FENCE.		
		D. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER LINEAR FOOT INSTALLED. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIAL NECESSARY FOR INSTALLING FENCE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.		
43	2519-3700001	GATE, AS PER PLAN		
		A. REFER TO DETAIL IN THE B SHEETS AND D SHEETS FOR LOCATION.		
		B. GATES SHALL BE SINGLE ARM SWING GATES.		
		C. INSTALLATION SHALL BE PER MANUFACTURER'S RECOMMENDATION.		
44	2523-0000200	ELECTRICAL CIRCUITS		
		A. REFER TO THE M SHEETS FOR LOCATIONS AND TABULATION 108-2A IN THE C SHEETS.		
		B. THIS ITEM INCLUDES TH PROVISION AND INSTALLATION OF ELECTRICAL CIRCUITS. MATERIALS AND INSTALLATION SHALL BE AS PER STANDARD ROAD PLANS AND SPECIFICATIONS.		
		C. THE FOLLOWING NOTES APPLY TO THE CONDUIT INSTALLED FOR GATEWELL PUMPS:		
		1. CONDUIT SHALL BE LEFT EMPTY.		
		2. CONDUIT SHALL BE INSTALLED AT 36" DEPTH UNLESS THIS CONFLICTS WITH SURROUNDING UTILITIES. IF SUCH CONFLICTS ARISE, NOTIFY ENGINEER.		
		3. TRACER WIRE SHALL BE INSTALLED WITH THIS CONDUIT AND CONSIDERED INCIDENTAL TO THIS BID ITEM. TRACER WIRE SHALL TERMINATE IN HANDHOLES WHERE POSSIBLE, BUT IF TRACER WIRE TERMINAL STATIONS ARE REQUIRED, THEY SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. TRACER WIRE AND TERMINAL BOXES SHALL BE INSTALLED PER IADOT STANDARD WM-102.		
		4. "CAUTION" TAPE SHALL BE INSTALLED ABOVE THE CONDUIT AND SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.		
		5. CAPPED ENDS (NON-WELDED) SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM.		
45	2523-0000310	HANDHOLES AND JUNCTION BOXES		
		A. REFER TO THE M SHEETS FOR LOCATIONS AND TABULATION 108-2A IN THE C SHEETS.		
		B. HANDHOLES SHALL BE TYPE I PER IADOT STANDARD ROAD PLAN LI-103 UNLESS NOTED OTHERWISE.		
46	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN		
		A. REFER TO TABULATION 190-61 IN THE C SHEETS.		
		B. REFER TO LOCATIONS IN THE K AND U SHEETS.		
		C. STOCKPILING OF EXISTING SIGNS IS CONSIDERED INCIDENTAL TO THIS ITEM. COORDINATE STOCKPILE LOCATION WITH CITY.		
		D. MEASUREMENT: THE QUANTITY FOR WHICH PAYMENT WILL BE MADE, WILL BE COUNTED PER EACH REINSTALL.		
		E. PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE PER EACH REINSTALL. THIS SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL TOOLS, EQUIPMENT, LABOR AND MATERIALS NECESSARY TO REINSTALL SALVAGED EXISTING SIGNING UNITS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.		
47	2525-0000100	TRAFFIC SIGNALIZATION		
		A. BID ITEM INCLUDES ALL MATERIAL, EQUIPMENT, AND LABOR REQUIRED TO INSTALL VEHICLE DETECTION FOR ALL APPROACHES.		
		B. REFER TO N SHEETS FOR LOCATION AND DETAILS.		
48	2526-8285010	CONSTRUCTION SURVEY, MONUMENT PRESERVATION		
49	2526-8285020	CONSTRUCTION SURVEY, CONTROL POINT SURVEY		
50	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY		
		A. REFER TO G SHEETS FOR ALIGNMENT INFORMATION.		
		B. REFER TO L SHEETS FOR STAKING INFORMATION.		
		C THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROL WITHIN THE PROJECT LIMITS FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITIES.		
		D. CONTRACTOR TO VERIFY ALL EXISTING BENCHMARKS IN THE WORK AREA PRIOR TO CONSTRUCTION ACTIVITIES AND RE-ESTABLISH ALL DISTURBED BENCHMARKS.		
51	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE		
		A. REFER TO TABULATION 108-22 IN THE C SHEETS.		
		B. REFER TO K SHEETS FOR LOCATIONS.		
52	2528-8445110	TEMPORARY TRAFFIC CONTROL		
		A. REFER TO J SHEETS FOR STAGING AND TRAFFIC CONTROL DETAILS.		
		B. INCLUDES ALL TRAFFIC CONTROL DEVICES NECESSARY TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC), CHAPTER 130.		
		C. TEMPORARY ROADWAY/ DRIVEWAYS PAID FOR SEPARATELY UNDER "GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE" ITEM.		
53	2533-4980005	MOBILIZATION		
54	2552-0000300	TRENCH COMPACTION TESTING		
		A. THIS ITEM IS FOR COMPACTION TESTING OF BACKFILL FOR TRENCHED STORM SEWER INSTALLATION.		
		B. REFER TO PLAN LOCATIONS AND PROFILES IN THE M SHEETS.		
55	2595-0005100	RAILROAD PROTECTIVE LIABILITY INSURANCE FOR CPKC		
		A. THE CONTRACTOR MUST PROVIDE EVIDENCE THAT THE CONTRACTOR'S INSURANCE MEETS THE REQUIREMENTS OF CPKC RAILWAY'S RIGHT OF ENTRY LICENSE AGREEMENT		
		B. REFER TO DEVELOPMENTAL SPECIFICATIONS FOR WORK IN RAILROAD RIGHT-OF-WAY (CPCK RAILROAD) FOR REQUIREMENTS WHEN WORKING WITHIN THE RAILROAD RIGHT-OF-WAY. ALL COSTS ASSOCIATED WITH THIS REQUIREMENT, INCLUDING BUT NOT LIMITED TO ADMINISTRATIVE FEES, FLAGGERS, SIGNAL REPRESENTATIVE, INSURANCE, ETC., SHALL BE ASSIGNED TO THE CONTRACTOR UNDER THIS BID ITEM.		

111-25 10-18-11		
INDEX OF TABULATIONS		
Tabulation	Tabulation Title	Sheet No.
100-1A	Estimated Project Quantities (1 Division Project)	C.1
100-1D	Project Description	C.1
100-4A	Estimate Reference Information	C.1
100-7	Fencing	C.8
100-17	Tabulation of Silt Fence	C.6
100-19	Perimeter and Slope Sediment Control Device	C.6
100-23	Rock Erosion Control	C.6
100-24	PCC Pavement	C.8
100-25	HMA Pavement	C.8
100-36	Open-Throat Curb Intake Sediment Filter	C.6
100-37	Grate Intake Sediment Filter Bag	C.6
102-3	Access Points and Safety Ramps	C.6
102-5	Existing Pavement	C.5
103-7	Shrinkage Data	C.5
105-4	Standard Road Plans	C.4
104-10	Adjustment of Fixtures	C.5
108-13A	Safety Closures	C.6
108-22	Pavement Marking Line Types	C.7
110-1	Removal of Pavement	C.7
110-5	Sidewalk Removal	C.7
110-8	Removal of Concrete Drives	C.7
110-12L	Pollution Prevention Plan	C.3
110-14	Sanitary or Storm Sewer Abandonment or Removal	C.5
110-15	Removal of Intakes and Utility Accesses	C.5
110-17	Clearing and Grubbing	C.5
111-25	Index of Tabulations	C.3
112-4	Curbs and Raised Islands	C.6
113-1A	Sidewalks	C.7
190-61	Existing Signs to be Reinstalled	C.6
190-62	Existing Signs to be Removed	C.6
HRG-1	Removals, As Per Plan	C.5

103-7 08-01-08		
SHRINKAGE DATA		
Material	%	Remarks
EXCAVATION, CLASS 10, ROADWAY AND BORROW	30%	QUANTIIES IN T SHEETS
TOPSOIL, FURNISH AND SPREAD, 6"	40%	

104-10 08-01-08			
ADJUSTMENT OF FIXTURES			
No.	Location Station	Type of Fixture	Adjustment
Mound Street			
	Sta 103+71.41, 39.30' LT	Utility Pole	
	Sta 104+69.64, 17.08' RT	Fire Hydrant	
	Sta 105+18.33, 0.00' RT	Valve Adjustment	

110-14 04-16-13						
SANITARY OR STORM SEWER ABANDONMENT OR REMOVAL						
* Not a bid item						
Location/Description	Sanitary or Storm Sewer	Abandonment, Plug Only or Abandonment, Plug and Fill or Removal	Length of Pipe		Fill Material*	Remarks
			≤ 36 inch diameter	> 36 inch diameter	Flowable Mortar or CLSM	
			LF	LF	CY	
Mound Street						
STA 104+08.39 to STA 104+18.50	Storm	Removal	54.1			
STA 104+10.81 To STA 104+20.28	Storm	Removal	20.8			
E River Drive						
STA 1035+88.21 TO STA 1036+04.17	Storm	Removal	15.8			
STA 1042+28.74 TO STA 1042+36.64	Storm	Removal	8.3			
STA 1042+28.76 TO STA 1042+35.15	Storm	Removal	16.4			
		Total	115			

110-17 04-18-17																					
CLEARING AND GRUBBING																					
Location		Work and Material Type	Trees, Stumps, and Logs and Down Timber Material Diameters													All Other Materials		Estimated Quantities			Remarks
Station to Station or Ref. Loc. Sign to Ref. Loc. Sign or Description	Direction of Travel		3"-6"	>6"-9"	>9"-12"	>12"-15"	>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	Length	Width	Units	Area	Herbicide Application	
																FT	FT	Units	Acres	Each	
E River Drive																					
Sta 1036+69.58, 54.78' RT	EB	Deciduous Tree - Clearing and Grubbing				1												9.4			
Sta 1037+17.62, 44.14' RT	EB	Deciduous Tree - Clearing and Grubbing							1									29			
																	Total	38.4			

32 04-18-17																					
EXISTING PAVEMENT																					
No.	Location					Year	Type	Project Number	Surface		Base		Subbase		Removal		Coarse Aggregate			Reinforcement	Remarks
	County	Route	Dir. of Travel	Begin Ref. Loc. Sign	End Ref. Loc. Sign				Type	Depth	Type	Depth	Type	Depth	Type	Depth	Source	Type	Durability Class	Type	
1	Scott	Mound Street	BOTH	South of East River Drive					HMA	5.25			Aggregate								
2	Scott	E River Drive	BOTH	East of Mound Street					HMA	4 PCC		7.75	Dirt								

110-15 04-16-13			
REMOVAL OF INTAKES AND UTILITY ACCESSES			
No.	Location/Description	Type	Remarks
Mound Street			
	Sta 104+51.22, 10.27' RT	Manhole	Top Only
E River Drive			
	Sta 1042+34.41, 25.45' RT	Intake	
	Sta 1042+38.79, 25.16' RT	Intake	
	Sta 1042+32.32, 20.87' LT	Intake	
	Sta 1042+36.47, 20.81' LT	Intake	
	Sta 1042+38.89, 21.17' LT	Intake	
	Sta 1042+34.80, 30.61' LT	Manhole	
	Sta 1042+27.32, 33.74' LT	Intake	Top Only
	Sta 1042+29.38, 54.32' RT	Intake	Top Only

HRG-1 MODIFIED			
REMOVALS, AS PER PLAN			
No.	Location	Disposal	Remarks
Mound Street			
1	Sta 104+42.75		Retaining Wall Removal

100-36 10-16-18 OPEN-THROAT CURB INTAKE SEDIMENT FILTER Possible Standard: EC-602					
Location Station	Side	Installation	Maintenance	Removal	Remarks
		LF	EACH	EACH	
E River Drive					
1042+06.78, 21.25'	RT	34.1	1	1	
1042+06.71, 20.53'	LT	25.6	1	1	
	Total	60		2	

								100-19
								10-19-21
PERIMETER, SLOPE AND DITCH CHECK SEDIMENT CONTROL DEVICES								
Possible Standards: EC-204								
Location			Perimeter and Slope			Ditch Check		Remarks
Begin Station	End Station	Side	Length of Installation			Length of Installation		
			9 inch Dia	12 inch Dia	20 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	LF	LF	
Mound Street								
102+75.53	102+75.54	LT		25.3				
103+01.51	103+08.22	RT		22.8				
104+15.64	104+22.32	LT		25.7				
103+90.35	103+96.33	RT		21.9				
E River Drive								
1036+67.50	1042+50.74	RT	579.9					
1039+86.17	1039+92.45	RT		19.3				
1041+76.44	1042+48.35	LT	72.4					
1042+26.04	1042+32.22	RT		19.2				
Total:			652	134				

SAFETY CLOSURES			108-13A 10-18-22
Refer to Section 2528 of the Standard Specifications			
Station	Closure Type		Remarks
	Road Qty.	Hazard Qty.	
E River Drive 1035+79.63	1		Stage 1
Mound Street 102+92.01	1		Stage 3A
103+01.03	1		Stage 3A
104+19.32	2		Stage 3A
104+55.32	1		Stage 3A
104+60.70	1		Stage 3A
102+47.98	1		Stage 3B
103+65.73	1		Stage 3B
104+19.32	2		Stage 3B
108+34.11	1		Stage 3B

							112-4 10-21-14
CURBS AND RAISED ISLANDS Refer to PV-20, PV-102, and 6000s Detail Series.							
Bid Item							
Point No.	Station	Offset	Island Interior Area SY	Curb and Gutter			Remarks
				Curb Type	Gutter Width FT	Length LF	
Mound Street							
	100+35.33	30.37' LT		PCC	2.0	12.5	Median Curb
	104+58.84	9.50' LT		PCC	2.5	134.0	
	104+90.58	16.74' RT		PCC		61.0	Header Curb
	104+98.44	9.50' RT		PCC	2.5	74.3	
				Total: Curb and Gutter, 2.5 ft		208	
				Total: Special Curb		74	

EXISTING SIGNS TO BE REINSTALLED									190-61 10-15-13
SIGN DESCRIPTION	DIRECTION OF TRAVEL	LOCATION STATION	NUMBER OF POSTS	SQUARE TUBE STEEL POSTS	WOOD POSTS		INSTALLATION		SEE SIGNING NOTES
					4" x 4" LF	4" x 6" LF	TYPE	DIM 'X'	
Mound Street									
Free Parking Sign	SB	104+61.15	1.0	1.0			A		
E River Drive									
M1-4 and M3-1P	EB	1036+49.27	1.0	1.0			A		
W6-1	WB	1042+47.76	1.0	1.0			A		
		Total:	3.0						

100-17 04-20-10			
TABULATION OF SILT FENCES Refer to EC-201			
Location			Remarks
Begin Station	End Station	Side	
		Length LF	
E River Drive 1035+94.89	1042+33.50	RT	638.8
Total:			638.8

					100-37 04-18-17
GRATE INTAKE SEDIMENT FILTER BAG					
Possible Detail: 570-7					
Location Station	Side	Installation	Maintenance	Removal	Remarks
		EACH	EACH	EACH	
E River Dr					
1036+04.51, 22.85'	RT	1	1	1	
Mound Street					
104+46.24, 17.32'	LT	1	1	1	
			Total	2	

100-23													04-17-18	
ROCK EROSION CONTROL														
Refer to EC-301 and Detail 570-8														
Location						Rock Erosion Control (REC)					Material Bid Quantities			Remarks
Road Identification	Begin Station	End Station	Side			Type 1	Type 2	Type 3	Type 4	Type 5	Eng. Fabric	Class E Revetment	Erosion Stone	
						Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection				
						Lt./Rt.	FT	FT						
Mound Street	104+39.05	104+58.84	RT	16	17					1	39.4	13.3		
										TOTAL		13.3		

102-3

10-16-18

ACCESS POINTS AND SAFETY RAMPS

Refer to Cross-Sections

Length of Unclassified Pipe calculated is based on using Corrugated Metal Pipe.

Refer to MI-210

Refer to EW-501.

Refer to EW-501 or EW-502.

*Predetermined for access point not constructed with this project.

Location		Type	Length of Opening						Pipe Culvert					Aprons	Driveway Surface Area		Driveway Surfacing Material	Remarks
Station	Side	A, B, C, Safety Ramp, or	Case	1½" Dropped Curb	3" Dropped Curb					Size	Pipe Length	Lt.	Rt.		HMA	PCC		
			1 or 2	LF	LF	FT	FT	FT	FT	IN	LF	LF	LF	No.	SY	SY	TON	
Mound Street																		
102+97.28	LT	A		49.0		26.0									275.0			
103+51.48	RT	A		77.0		30.0									302.7			
104+15.17	LT	A		30.0		16.9									185.3			
104+95.37	RT	A				5.5									323.8			
														Total	1086.8			

[illegible]

FILE NO.	ENGLISH	DESIGN TEAM HR Green Inc.	City of Davenport	SCOTT COUNTY	PROJECT NUMBER HDP-1827(704)—71-82	SHEET NUMBER C.6	
9:35:41 AM	7/22/2026	hmanter	\\hrgreen.com\HRG\Data\2025\2503594\CAD\Design\CADD Files\Sheet Files\SHT_C01_2503594.dgn				

113-1A
MODIFIED

SIDEWALKS

See MI-220 and S Sheets

110-08 04-17-18 REMOVAL OF CONCRETE DRIVES				
* Not a Bid Item				
Location		Area	Saw Cut*	Remarks
Station	Side	SY	LF	
Mound St	RT	334.0	67.0	
103+51.48				
	Total	334.0		

110-5
10-20-15

SIDEWALK REMOVAL				
* Not a bid item				
Begin Station	End Station	Area	Saw Cut*	Remarks
		SY	LF	
E River Drive				
1035+81.60	1035+97.84	19	5.3	
1041+87.67	1042+44.75	50	14	
	Total:	69	19	

108-22

04-16-13

PAVEMENT MARKING LINE TYPES

See PM-110

***MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

*BCY4 - Place on the same side of the roadway to match existing markings near the project.

**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

BCY4: Broken Centerline (Yellow) @ 0.25

DCY4: Double Centerline (Yellow) @ 2.00

NPY4: No Passing Zone Line (Yellow) @ 1.25

BLW6: Broken Lane Line (White) @ 0.25

ELW4: Edge Line Right (White) @ 1.00

ELY4: Edge Line Left (Yellow) @ 1.00

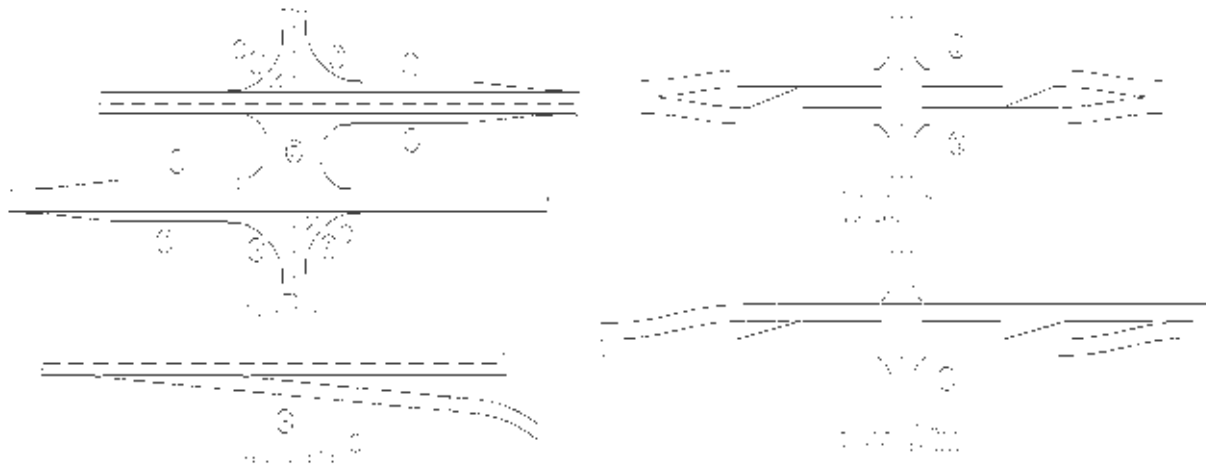
Location			Length by Line Type (Unfactored)																	Remarks		
Road ID	Station to Station		Dir. of Travel	Marking Type	Side			BCY4*	DLW6	NPY4**	BLW6	ELW4	ELY4									
					L	C	R															
E River Dr	1041+81.08	1042+46.01	BOTH	Waterborne/ Solvent	X	X	X				1.34											
				Factored Total: Waterborne/ Solvent Paint							0.34											
				Bid Quantity: Painted Pavement Markings, Waterborne				0.34														

110-1 04-16-13 REMOVAL OF PAVEMENT Refer to Tabulation 102-5						
* Not a Bid Item						
Begin Station	End Station	Side	Pavement Type	Area	Saw Cut*	Remarks
				SY	LF	
Mound Street	102+47.98	105+34.10	BOTH	HMA	1186	89.8
E River Drive	1035+78.65	1036+69.36	RT	PCC	104	112.5
	1041+81.08	1042+46.01	BOTH	PCC	312	86.9
			Total:	1601	289	

100-7 MODIFIED											
FENCING											
* Bid Item											
Refer to MI-101, MI-102, MI-103, MI-104, 510-3, and 510-5											
Location				Side	Protection Fencing				Channel Crossing		Remarks
From		To			Fence		Gate				
Station	Offset	Station	Offset		Length*	Type	No.*	Type	Length*	Type	
Mound St											
102+76.53	36.0	103+14.00	37.0	RT	90.2	Tree Protection Fence					
103+77.00	36.0	104+00.00	97.5	RT	170.6	Tree Protection Fence					
			Total		260.8						

HMA PAVEMENT

100-25
MODIFIED



Does not include raised island area or curb.
Refer to tabulation 112-4 for quantities.

Refer to PV-410, PV-411, PV-412, and PV-414.

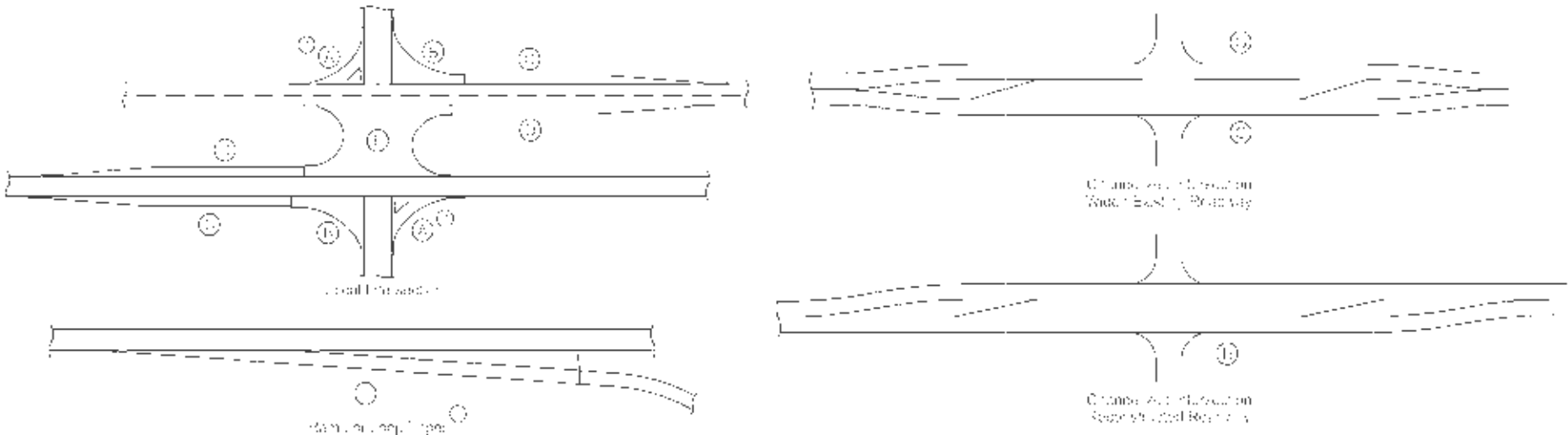
Quantity includes Pavement Header.

Calculations assume a surface course unit weight (lbs/cf) of 0, an intermediate course unit weight (lbs/cf) of 0, a base course unit weight (lbs/cf) of 0, and a special backfill unit weight (lbs/cf) of 140.

Location				Mainline			Area ☼								Bid Items									Remarks
Road Identification	Direction of Travel	Station to Station		Width	Length	Area									Hot Mix Asphalt Pavement		Binder			Special Backfill	Modified Subbase	Granular Subbase	Pavement Scarification	
							Surface	Intermediate	Base															
		FT	FT	SY	SY	SY	SY	SY	SY	SY	SY	SY	SY	SY	TONS	SY	TONS	TONS	TONS	CY	CY	SY		
Mound St	BOTH	102+47.98	105+34.11	24.0	286	933.9									202.9							305.5		
														Total:	202.9							305.5		

PCC PAVEMENT

100-24
04-21-15

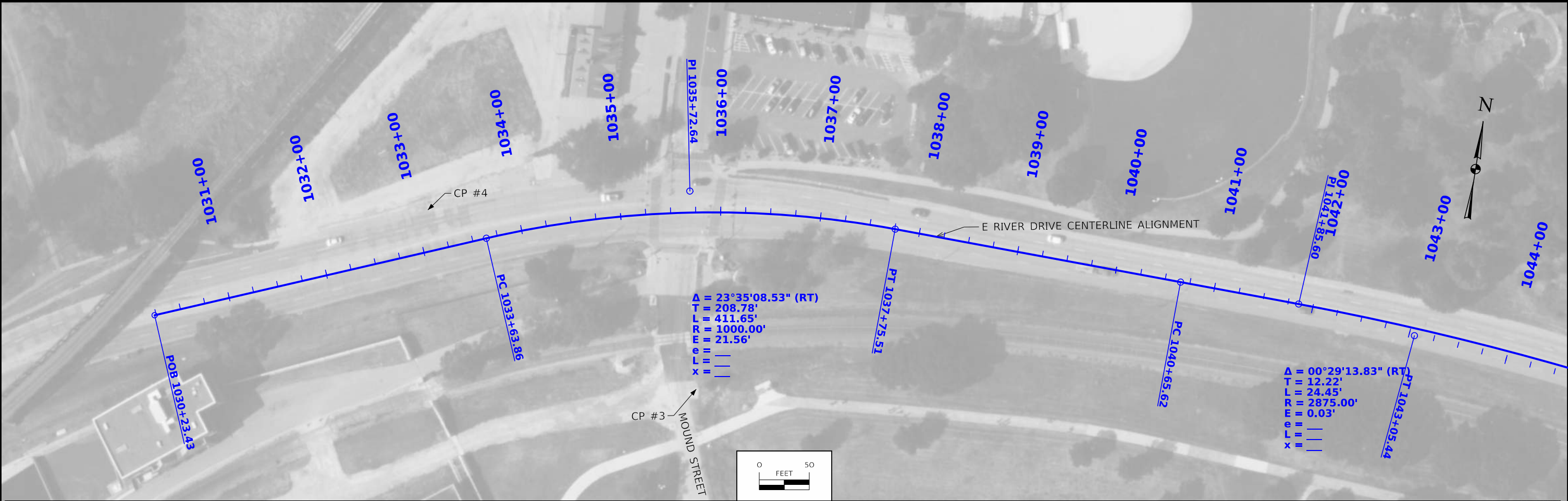


Does not include raised island area or curb. Refer to tabulation 112-4 for quantities.

Refer to PV-410, PV-411, PV-412, and PV-414.

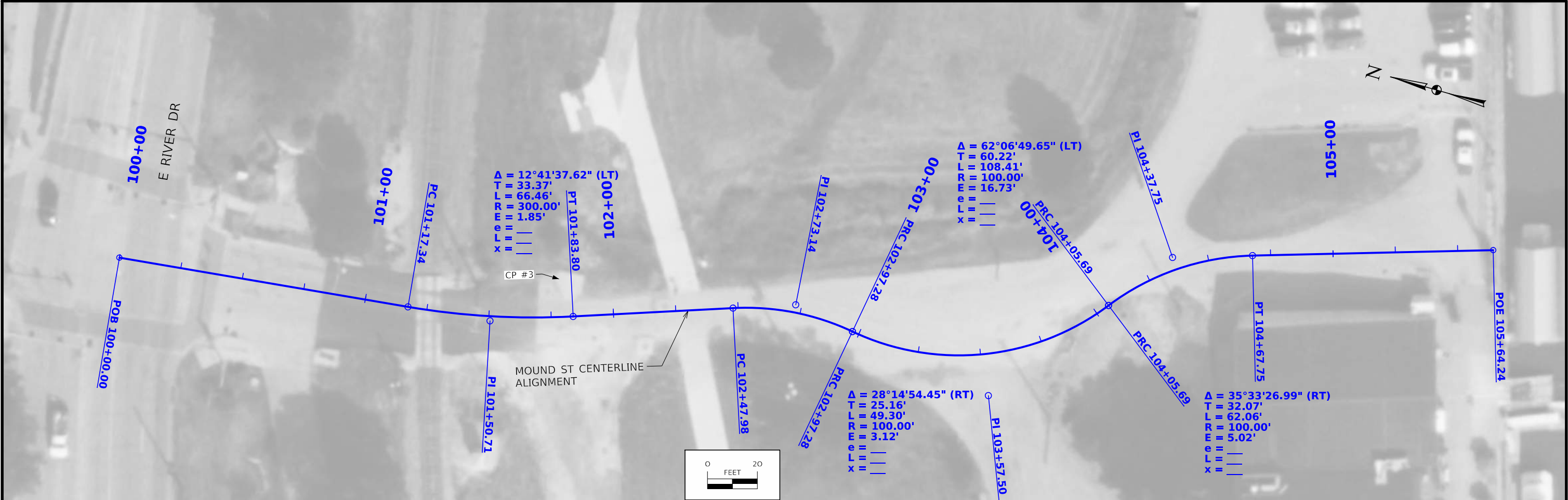
Quantity includes Pavement Header.

Location				Mainline			Area 								Total Area By Pavement Thickness		Special Backfill	Modified Subbase	Granular Subbase	Remarks
Road Identification	Direction of Travel	Station to Station		Width	Length	Area														
				FT	FT	SY	SY	SY	SY	SY	SY	SY	SY	SY	SY	SY	10 IN	10% IN	TONS	
E River Drive	EB	1035+78.65	1036+66.96	VARIES	85			85.3							85.3			20.6		
	EB	1035+88.01	1035+99.57	10.0	VARIES			19.4							19.4			5.0		
	BOTH	1041+81.08	1042+46.01	42.6	64.9	311.8									311.8			25.7		COLORED STAMPED CROSSWALK
							Total: STANDARD SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT								397.1			51.4		
							TOTAL: STANDARD SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT COLORED STAMPED CROSSWALK								19.4					



ALIGNMENT COORDINATES

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
ML River001	River Drive	1030+23.41	570991.21	2448429.20															
ML River002	River Drive							1033+63.86	571119.29	2448744.64	1035+72.64	571197.83	2448938.08	1037+75.53	571192.41	2449146.79			
ML River003	River Drive	1037+75.51	571192.41	2449146.79															
ML River004	River Drive							1041+73.38	571181.77	2449556.73	1044+85.60	571175.53	2449797.03	1041+97.83	571181.35	2449568.95			
ML River005	River Drive	1041+97.83	571181.35	2449568.95															



101-16
10-20-09

ALIGNMENT COORDINATES

Name	Location	Point on Tangent		Begin Spiral		Begin Curve		Simple Curve PI or Master PI of SCS		End Curve		End Spiral	
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
SR M001	Mound Street	100+00.00	571175.33	2448935.00									
SR M002	Mound Street							101+17.34	571058.67	2448947.62	101+50.71	571025.50	2448951.20
SR M003	Mound Street	101+83.80	570993.92	2448962.00							101+83.80	570993.92	2448962.00
SR M004	Mound Street							102+47.98	570933.19	2448982.75	102+73.14	570909.38	2448990.89
SR M005	Mound Street							102+97.28	570884.56	2448986.78	103+57.50	570825.14	2448976.97
SR M006	Mound Street							104+05.69	570788.68	2449024.89	104+37.75	570769.26	2449050.41
SR M007	Mound Street	105+64.25	570646.43	2449088.38							104+67.75	570738.62	2449059.88

		108-23A 08-01-08
TRAFFIC CONTROL PLAN		
TRAFFIC CONTROL ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE SUDAS STANDARD SPECIFICATIONS SECTION 8030 FIGURES AND THE SPECIFIC LAYOUTS SHOWN ON THESE PLANS. TRAFFIC SHALL BE MAINTAINED VIA DETOURS DURING CONSTRUCTION. TRAFFIC CONTROL ON THIS PROJECT SHALL BE IN ACCORDANCE WITH PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), AS ADOPTED BY THE IOWA DEPARTMENT OF TRANSPORATION, AND THE CURRENT SUDAS STANDARD SPECIFICATIONS AND ANKENY SUPPLEMENTAL SPECIFICATIONS.		
THE CONTRACTOR SHALL EMPLOY SOUND PRACTICES OF SAFETY AND TRAFFIC CONTROL. THESE METHODS AND PRACTICES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:		
1. WRITTEN NOTICE SHALL BE PROVIDED TO THE CITY AT LEAST SEVEN (7) DAYS PRIOR TO TEMPORARY ROAD CLOSURES AND CHANGES IN TRAFFIC PATTERNS DURING CONSTRUCTION.		
2. THE CONTRACTOR SHALL COORDINATE TEMPORARY TRAFFIC CONTROL WITH ANY OTHER PROJECTS IN THE AREA.		
3. THE CONTRACTOR SHALL PROVIDE A 24-HOUR PHONE NUMBER FOR THE RESPONSIBLE PARTY TO BE CONTACTED REGARDING THE TEMPORARY TRAFFIC CONTROL IN THE EVENT ANY CHANGES NEED TO OCCUR.		
4. TEMPORARY ROAD CLOSURES WILL BE USED DURING CONSTRUCTION. SIGNED DETOUR ROUTES SHALL BE MAINTAINED DURING THE TEMPORARY ROAD CLOSURES AND REMOVED ONCE THE ROADWAY AND SIGNALS ARE FULLY OPEN AND OPERATIONAL.		
5. PLACE PORTABLE DYNAMIC MESSAGE SIGNS (PDMS) A MINIMUM OF FIVE (5) DAYS IN ADVANCE OF COMMENCEMENT OF WORK. THE CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING THE MESSAGES.		
6. LONG TERM OR PERMANENT TRAFFIC CONTROL SIGNS THAT CONFLICT WITH LAYOUTS SHOWN IN THE J SHEETS SHALL BE COVERED AS DIRECTED BY THE ENGINEER.		
7. THE SPACING OF ALL SIGNS AND THE DISTANCES BETWEEN SIGNS SHOWN IN THE PLANS SHALL MEET THE REQUIREMENTS OF THE LATEST VERSION OF THE MUTCD. IF THE MINIMUM SPACING BETWEEN SIGNS CANNOT BE MAINTAINED, THE SIGN LOCATIONS SHALL BE ADJUSTED TO PROVIDE THE LARGEST SPACING AVAILABLE. ALL WARNING SIGNS SHALL BE ERECTED ON STEEL OR WOODEN POSTS. PORTABLE MOUNTINGS FOR WARNING SIGNS MAY BE USED FOR TEMPORARY INSTALLATIONS FOR LESS THAN THREE (3) DAYS. PLACEMENT OF SIGNS ON EXISTING POSTS OR STRUCTURES WILL NOT BE ALLOWED. WHERE POSSIBLE, ALL TRAFFIC CONTROL SIGNS SHALL BE PLACED A MINIMUM OF TWO (2) FEET CLEAR OF THE BACK OF CURB OR EDGE OF SHOULDER.		
8. THE LOCATION FOR STORAGE OF EQUIPMENT AND MATERIALS BY THE CONTRACTOR DURING NONWORKING HOURS SHALL BE AS APPROVED BY THE CITY AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL PROVIDE A WRITTEN AGREEMENT WITH THE PROPERTY OWNER(S) IF PRIVATE PROPERTY IS USED TO STORE EQUIPMENT AND/OR MATERIALS.		
9. THE CONTRACTOR SHALL MAINTAIN CLEAN PAVEMENT IN AND OUT OF THE WORK AREA AT ALL TIMES.		
10. ORANGE MESH SAFETY FENCE SHALL BE PLACED ENTIRELY ACROSS THE TRAVELED PORTION OF THE ROADWAY AT ALL LOCATIONS WHERE TYPE III BARRICADES AND "ROAD CLOSED" SIGNS ARE USED AND IS CONSIDERED INCIDENTAL TO THE TEMPORARY TRAFFIC CONTROL BID ITEM.		
11. THE CONTRACTOR SHALL PROVIDE APPROPRIATE SIGNAGE FOR SIDEWALK CLOSURES AND SHALL INCLUDE TYPE II OR TYPE III BARRICADES AS NEEDED BASED ON WIDTH ALONG THE ENTIRE WIDTH OF THE PATH.		
12. ALL DETOUR SIGNS THAT ARE ANTICIPATED TO BE IN PLACE FOR LONGER THAN 21 DAYS SHALL BE INSTALLED ON POSTS RATHER THAN TEMPORARY BARRICADES.		
13. THE TEMPORARY TRAFFIC CONTROL BID ITEM SHALL INCLUDE THE COST OF ALL TRAFFIC CONTROL MEASURES REQUIRED OF THE CONTRACTOR, INCLUDING FURNISHING, INSTALLING, MAINTAINING, AND REMOVING SIGNAGE AND BARRICADES.		
14. WHEN EXCAVATION IS OCCURRING WITHIN 3 X THE HEIGHT OF A TREE, CONTRACTOR SHALL ARRANGE TO HAVE CITY FORESTER ON SITE. SNOW FENCE SHALL BE PLACED AROUND THE DRIPLINE OF ALL TREES WITHIN THE PROJECT LIMITS.		
15. THE CONTRACTOR MAY USE THE AREA BETWEEN THE EAST PARKING LOT AND BIKE TRAIL FOR STAGING SO LONG AS ALL DISTURBED LANDSCAPING IS RESTORED AT THE END OF THE PROJECT.		
16. RIVERFRONT TRAIL SHALL REMAIN OPEN AND FREE OF DEBRIS AT ALL TIMES, INCLUDING THE CROSSING AT MOUND STREET.		
17. ACCESS TO BOTH EAST AND WEST PARKING LOTS FOR THE YACHT CLUB SHALL BE MAINTAINED AT ALL TIMES IN ORDER TO ACCOMMODATE FUEL AND FOOD DELIVERIES. CONTRACTOR SHALL COORDINATE WITH OWNERS AND INCLUDE EXTRA SIGNAGE AS NECESSARY.		
18. NORMAL ALLOWABLE WORKING HOURS AR ENON-HOLIDAY WEEK DAYS BETWEEN 7:00 A.M AND 7:00 P.M. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH PROPOSED DAYS OF WORK AND AILY WORKING HOURS FOR REVIEW AND APPROVAL AT THE PRECONSTRUCTION MEETING OR PRIOR TO COMMENCING WORK. WORK OUTSIDE NORMAL DAYS/ TIMES WILL REQUIRE APPROVAL BY ENGINEER. IF APPROVED, CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A PUBLIC INFORMATION NOTIFICATION PROGRAM, INCIDENTAL TO THE CONTRACT.		

		108-26A 08-01-08
STAGING NOTES		
THE CONTRACTOR SHALL STORE ALL EQUIPMENT AND MATERIALS WITHIN THE LIMITS OF THE PROJECT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.		
THE CONTRACTOR SHALL ADHERE TO THE CONSTRUCTION SEQUENCE PROVIDED HEREIN. SHOULD THE CONTRACTOR DESIRE TO DEVIATE FROM THE ORIGINAL PLAN, A WRITTEN PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.		
COORDINATE WITH ALL PUBLIC AND PRIVATE PROJECTS IN THE AREA AT ALL TIMES.		
COORDINATE WITH THE CITY OF DAVENPORT A MINIMUM OF TWO (2) WEEKS PRIOR TO CHANGES IN THE PROPOSED TRAFFIC PATTERNS.		
COORDINATE WITH UTILITY COMPANIES TO RELOCATE OR ADJUST EXISTING UTILITY LINES WHERE CONFLICTS EXIST BEFORE THE START OF EACH STAGE.		
STAGE 1		
TRAFFIC:		
1. INSTALL TRAFFIC CONTROL PER STAGE 1 TRAFFIC CONTROL AND STAGING ON SHEET J.3		
2. CLOSE THE OUTERMOST EASTBOUND LANE ON RIVER DRIVE NEAR THE MOUND STREET INTERSECTION.		
3. DETOUR PEDESTRIAN TRAFFIC TO THE WEST SIDE OF THE RIVER AND MOUND STREET INTERSECTION.		
4. ONE MINIMUM 11' WIDE LANE OF EASTBOUND TRAFFIC ALONG RIVER DRIVE SHALL BE MAINTAINED AT ALL TIMES. MOUND STREET TRAFFIC SHALL NOT BE IMPACTED DURING THIS STAGE		

		108-26A 08-01-08
STAGING NOTES		
CONSTRUCTION:		
1. CONSTRUCT PROPOSED STORM SEWER PIPE AND STRUCTURES FROM S-102A TO S-108		
2. REPLACE SIDEWALK RAMPS AND ROADWAY PAVEMENT IN THE SE QUADRANT OF THE MOUND STREET AND RIVER DRIVE INTERSECTION.		
3. RE-OPEN ALL LANES OF TRAFFIC ON RIVER DRIVE AS SOON AS PAVING OPERATIONS ARE COMPLETE.		
4. INSTALL GRADING PER PLANS THROUGHOUT PHASE 1. NO EXCAVATION ACTIVITIES SHALL EXTEND INTO THE RAILROAD ZONE OF INFLUENCE.		
STAGE 2A		
TRAFFIC:		
1. INSTALL TRAFFIC CONTROL PER STAGE 2A TRAFFIC CONTROL AND STAGING ON SHEET J.4		
2. CLOSE THE SOUTHERN HALF OF RIVER DRIVE IN THE AREA OF STAGE 2A STORM SEWER CONSTRUCTION.		
3. SHIFT EASTBOUND TRAFFIC TO THE NORTH SIDE OF THE ROADWAY MAINTAINING ONE MINIMUM 11' WIDE LANE OF EASTBOUND AND WESTBOUND TRAFFIC ALONG RIVER DRIVE AT ALL TIMES.		
CONSTRUCTION:		
1. CONSTRUCT PROPOSED STORM SEWER FROM STRUCTURE S-102 TO HALF-WAY THROUGH RIVER DRIVE AND PERFORM STORM SEWER REMOVALS IDENTIFIED WITHIN THE STAGE 2A LIMITS.		
2. INSTALL A TEMPORARY CAP ON THE NORTH SIDE OF PIPE P-101		
3. REPLACE ROADWAY PAVEMENT ON THE SOUTH SIDE OF RIVER DRIVE.		
4. COMPLETE ANY REMAINING GRADING PER PLANS THROUGHOUT STAGE 2A AND STAGE 2B. NO EXCAVATION ACTIVITIES SHALL EXTEND INTO THE RAILROAD ZONE OF INFLUENCE.		
STAGE 2B		
TRAFFIC:		
1. AS SOON AS PHASE 2A PAVING IS COMPLETE, OPEN THE SOUTH HALF OF RIVER DRIVE AND CLOSE THE NORTH HALF OF THE ROADWAY IN THE AREA OF STAGE 2B STORM SEWER CONSTRUCTION.		
2. INSTALL TRAFFIC CONTROL PER STAGE 2B TRAFFIC CONTROL AND STAGING ON SHEET J.5		
2. MAINTAIN ONE MINIMUM 11' WIDE LANE OF EASTBOUND AND WESTBOUND TRAFFIC ALONG RIVER DRIVE AT ALL TIMES.		
CONSTRUCTION:		
1. REMOVE THE TEMPORARY CAP ON PIPE P-101 AND INSTALL STORM SEWER FROM THAT POINT THROUGH STRUCTURE S-101A AND S-101B		
2. PERFORM STORM SEWER REMOVALS IDENTIFIED WITHIN THE STAGE 2B LIMITS.		
3. REPLACE ROADWAY AND SIDEWALK PAVEMENT ON THE NORTH SIDE OF RIVER DRIVE.		
4. RE-OPEN ALL LANES OF TRAFFIC ON RIVER DRIVE AS SOON AS PAVING OPERATIONS ARE COMPLETE.		
STAGE 3A		
CONTRACTOR MAY BEGIN WORK ON STAGE 3A WHILE STAGE 1 AND 2 ACTIVITIES ARE STILL ONGOING SO LONG AS STAGE 3A ACTIVITIES DO NOT PROLONG LANE CLOSURES ALONG RIVER DRIVE THAT ARE NECESSARY DURING STAGES 1 AND 2.		
TRAFFIC:		
1. PLACE TEMPORARY GRANULAR SURFACING AS SHOWN ON J.6.		
2. INSTALL TRAFFIC CONTROL PER STAGE 3A TRAFFIC CONTROL AND STAGING ON SHEET J.6.		
3. MAINTAIN TWO MINIMUM 10' WIDE LANES ALONG MOUND STREET AT ALL TIMES.		
CONSTRUCTION:		
1. INSTALL STORM SEWER FROM S-201 THROUGH S-204 AND THE GATEWELL STRUCTURE (S-206)		
2. PERFORM GRADING AND INSTALL 10" ROCK SUBBASE WITHIN THE LIMITS OF STAGE 3A.		
STAGE 3B		
TRAFFIC:		
1. INSTALL TEMPORARY GRANULAR SURFACING AS SHOWN ON J.7.		
2. INSTALL TRAFFIC CONTROL PER STAGE 3B TRAFFIC CONTROL AND STAGING ON J.7.		
CONSTRUCTION:		
1. INSTALL REMAINING STORM SEWER		
2. PERFORM REAMING STORM SEWER REMOVALS, GRADING AND PAVING WITHIN THE LIMITS OF STAGE 3B		
3. REMOVE THE TEMPORARY GRANULAR SURFACING AND OPEN MOUND STREET TO TRAFFIC.		
4. CLOSE OFF THE AREA OF STAGE 3A TO TRAFFIC AND PERFORM FINAL PAVING AND GRADING OPERATIONS.		
5. COMPLETE ANY REMAINING GRADING PER PLANS THROUGHOUT STAGE 3A AND 3B AND INSTALL FINAL SEEDING.		
6. FULLY OPEN ALL ROADWAY AREAS TO TRAFFIC.		

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White
Violet	(15)	Temporary barrier rail, Unpinned
Flush Orange	(228)	Temporary barrier rail, Pinned
SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(6)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Pink, Dark	(9)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Cyan	(7)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

PLAN VIEW PATTERN AND SYMBOL LEGEND
OF TRAFFIC CONTROL AND STAGING SHEETS

●	Channelizing Device	▬▬▬▬▬▬	Crash Cushion (Temp or Perm)
✕	Drum	○→	Traffic Signal
■	Temporary Lane Separator	♪	Flagger
◆	Tubular Marker	○●	Temporary Floodlighting
◆	Channelizer Marker	⚡	Traffic Sign
△	Concrete Barrier Marker	⚡	Type III Barricade
↵	Delineator	☀	Type A Warning Light
▬▬▬▬	Temporary Barrier Rail	←	Direction of Traffic
▨▨▨▨	Pavement Removal	⏏	Safety Closure
●●●●●●	Sand Barrel Layout	◀1▶	Lane Identification

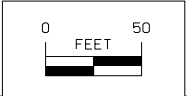
TRAFFIC CONTROL
AND
STAGING
LEGEND AND SYMBOL
INFORMATION SHEET

(COVERS SHEET SERIES J)

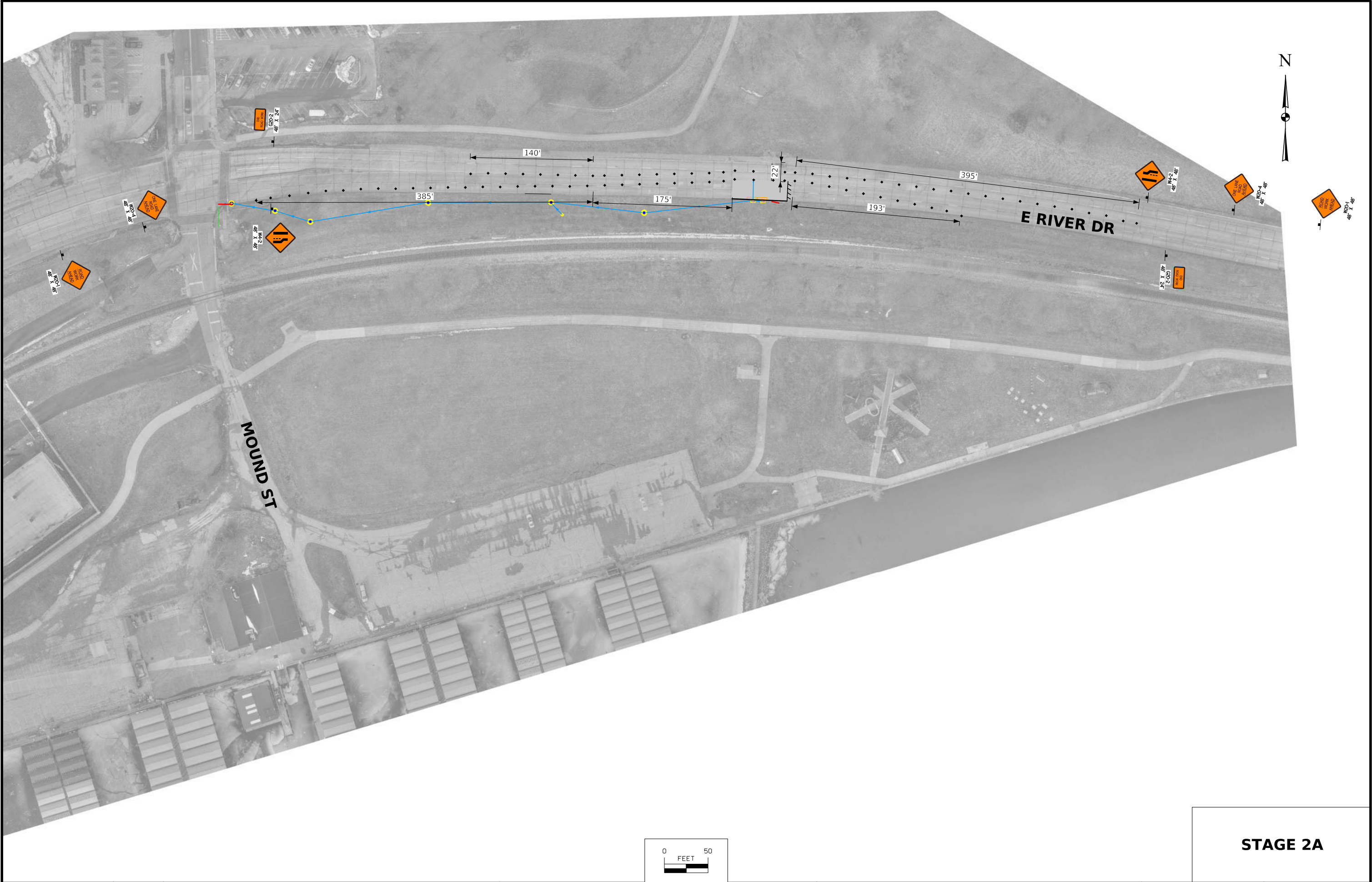
Blue	Stage 1
Green	Stage 2A
Red	Stage 2B
Magenta	Stage 3A
Orange	Stage 3B

NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.



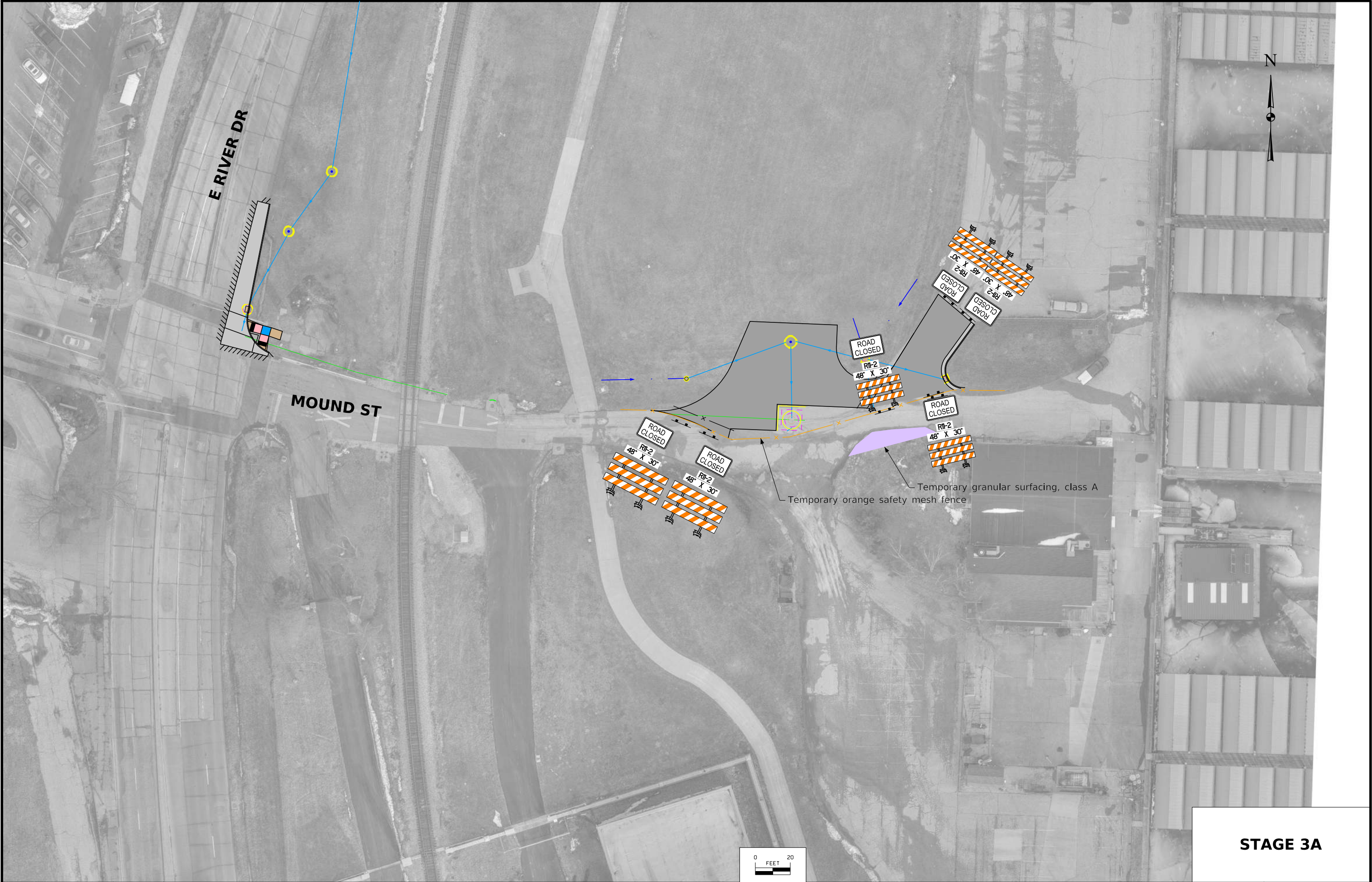


STAGE 1

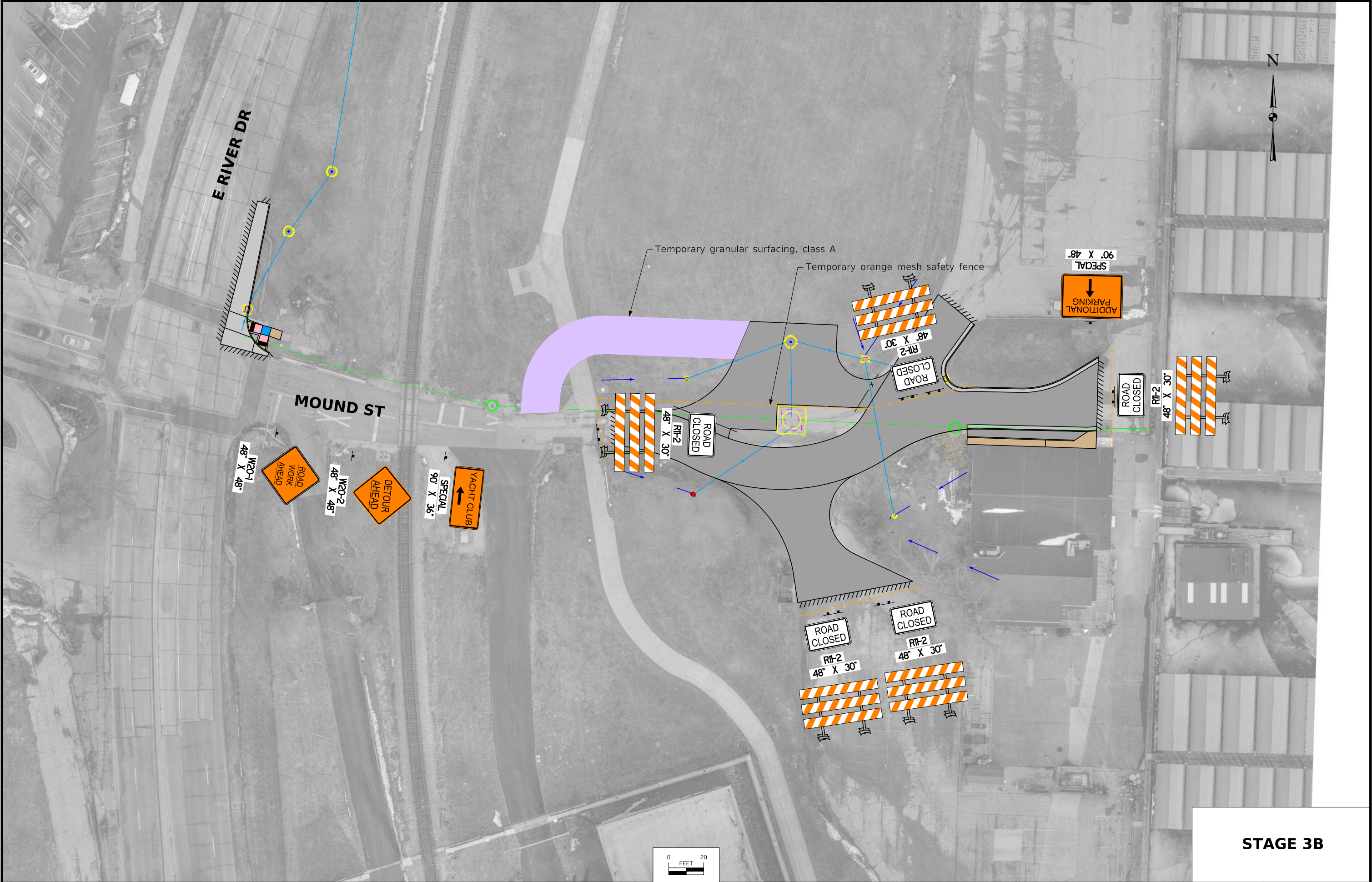


STAGE 2A



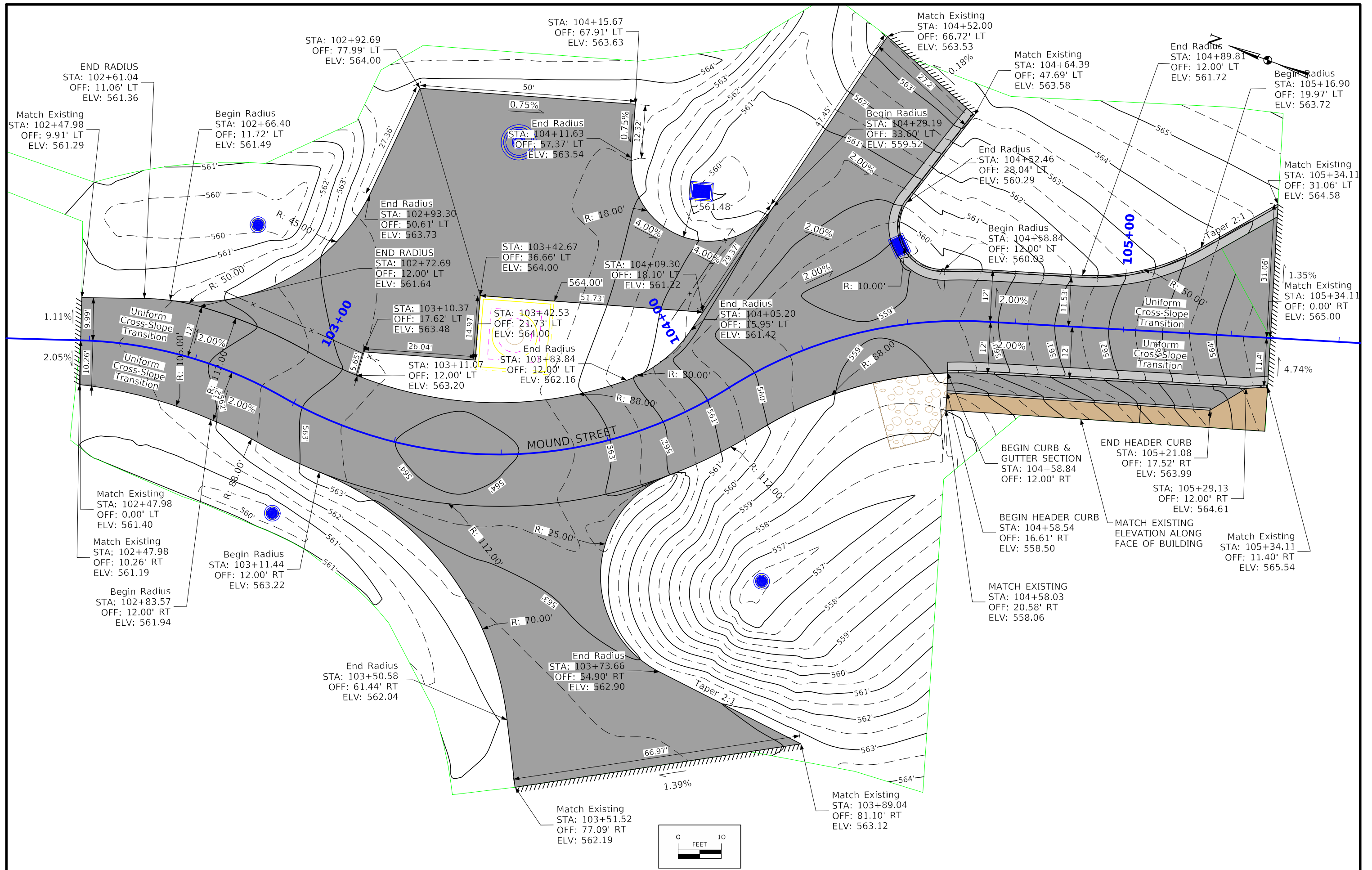


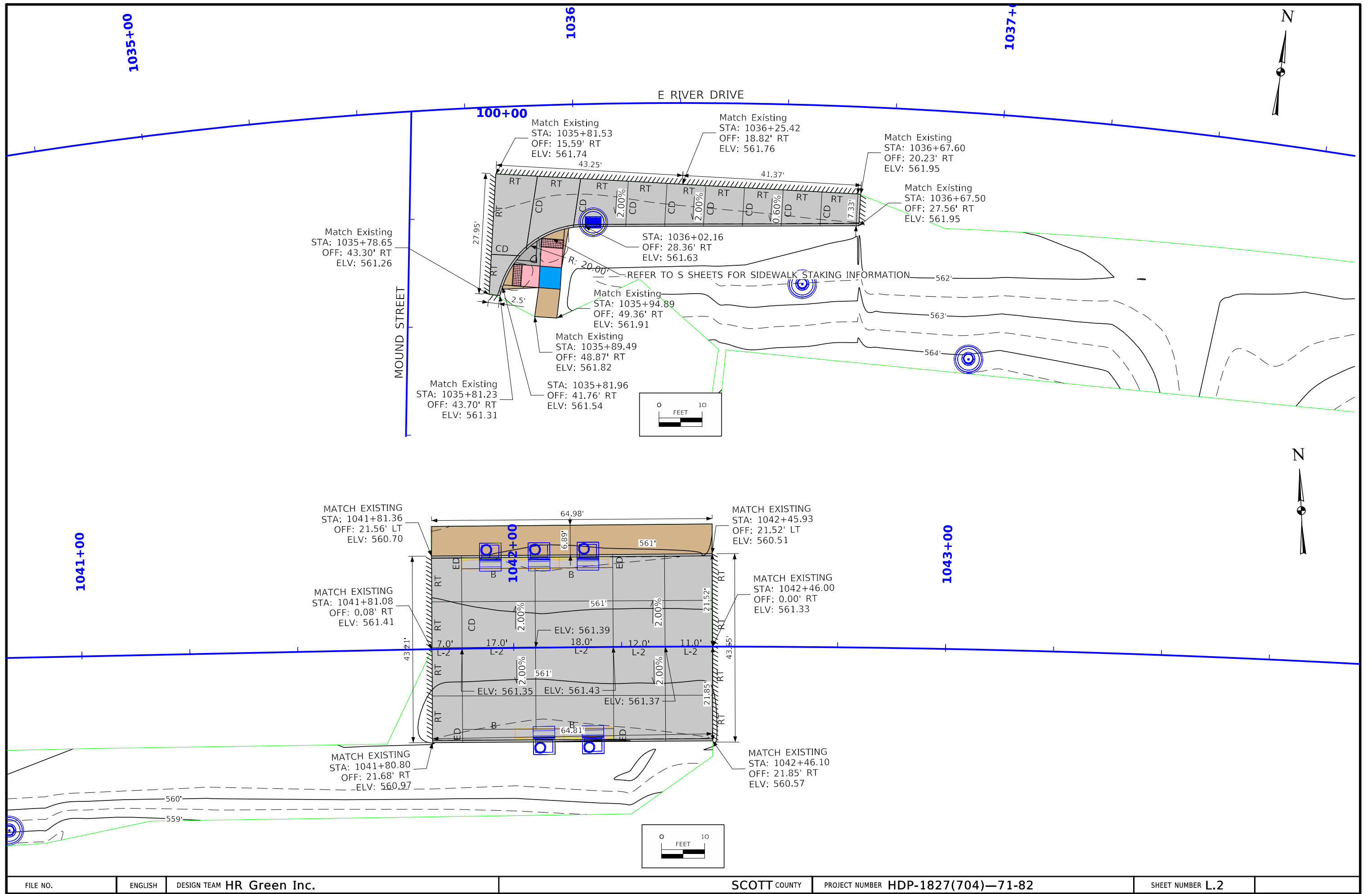
STAGE 3A



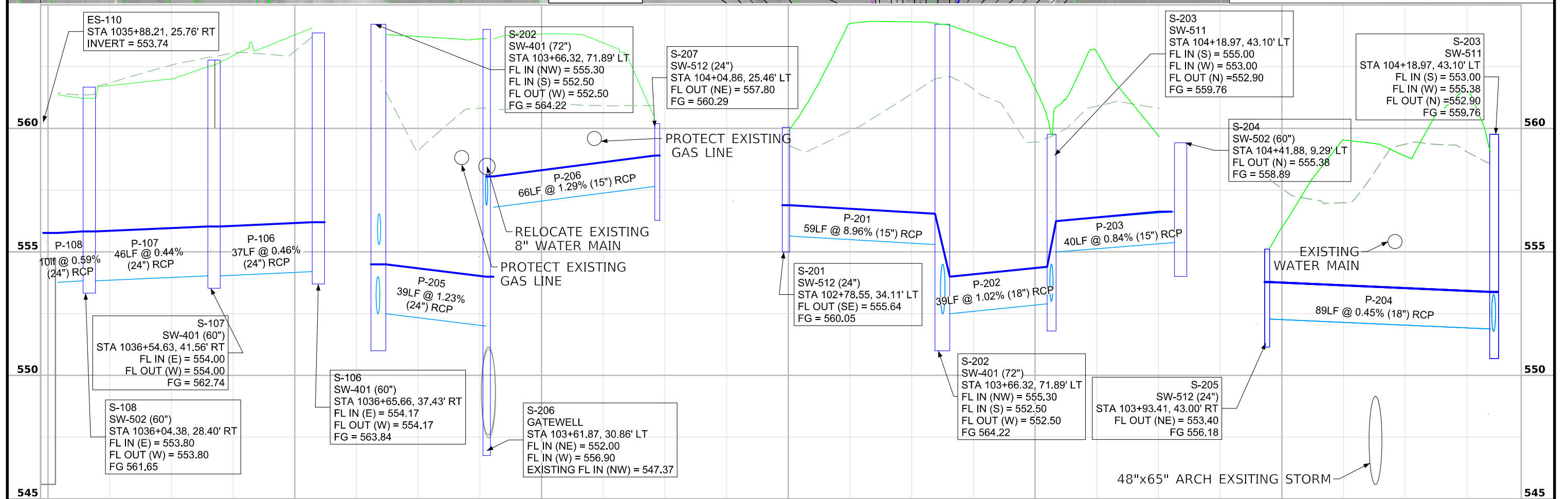
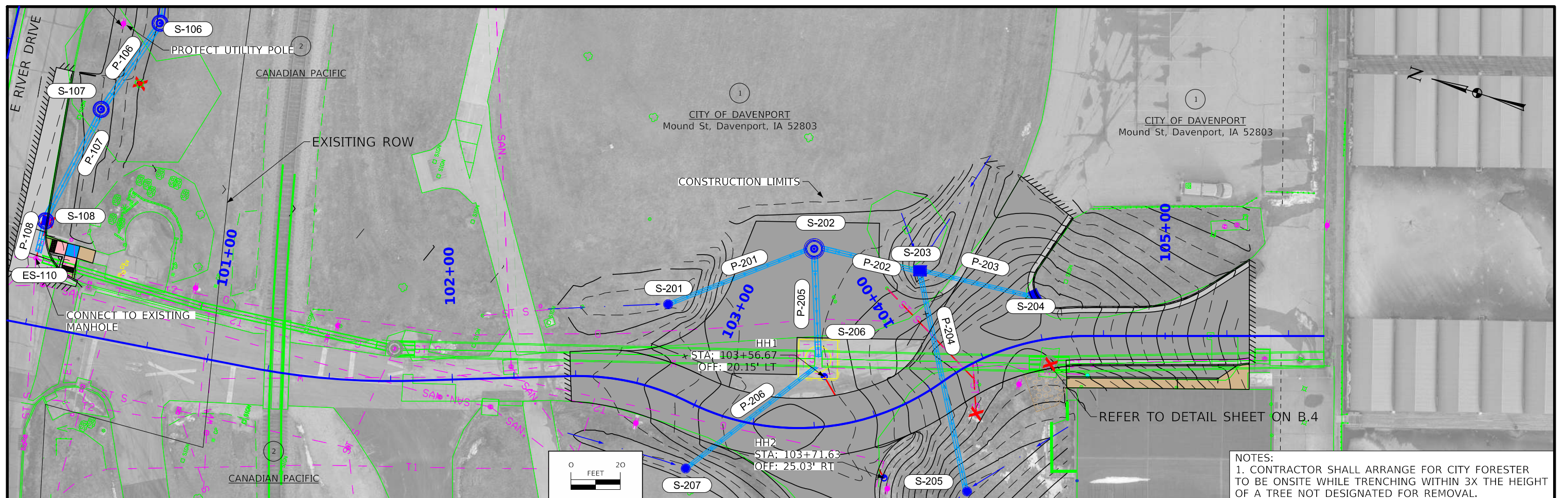
STAGE 3B

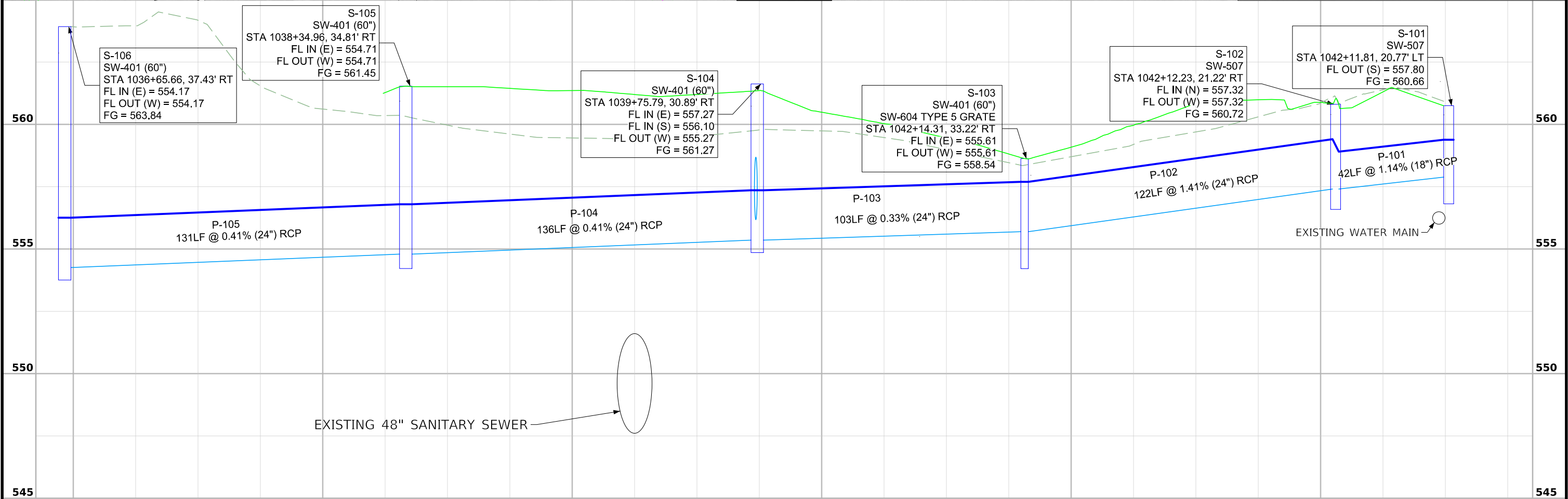
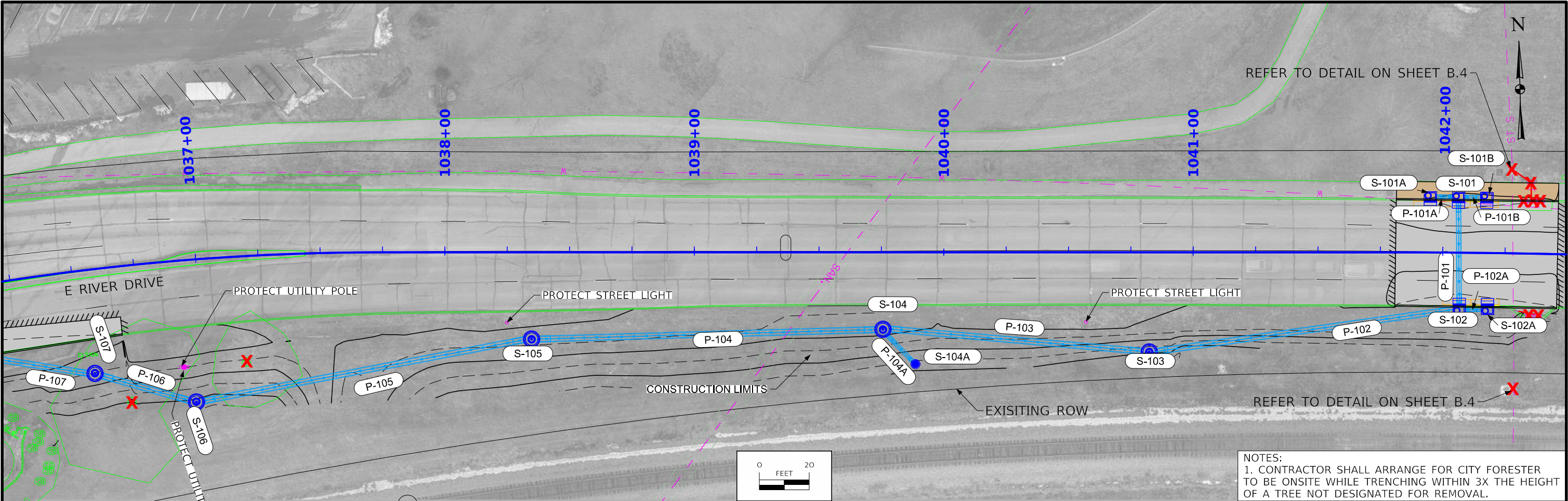


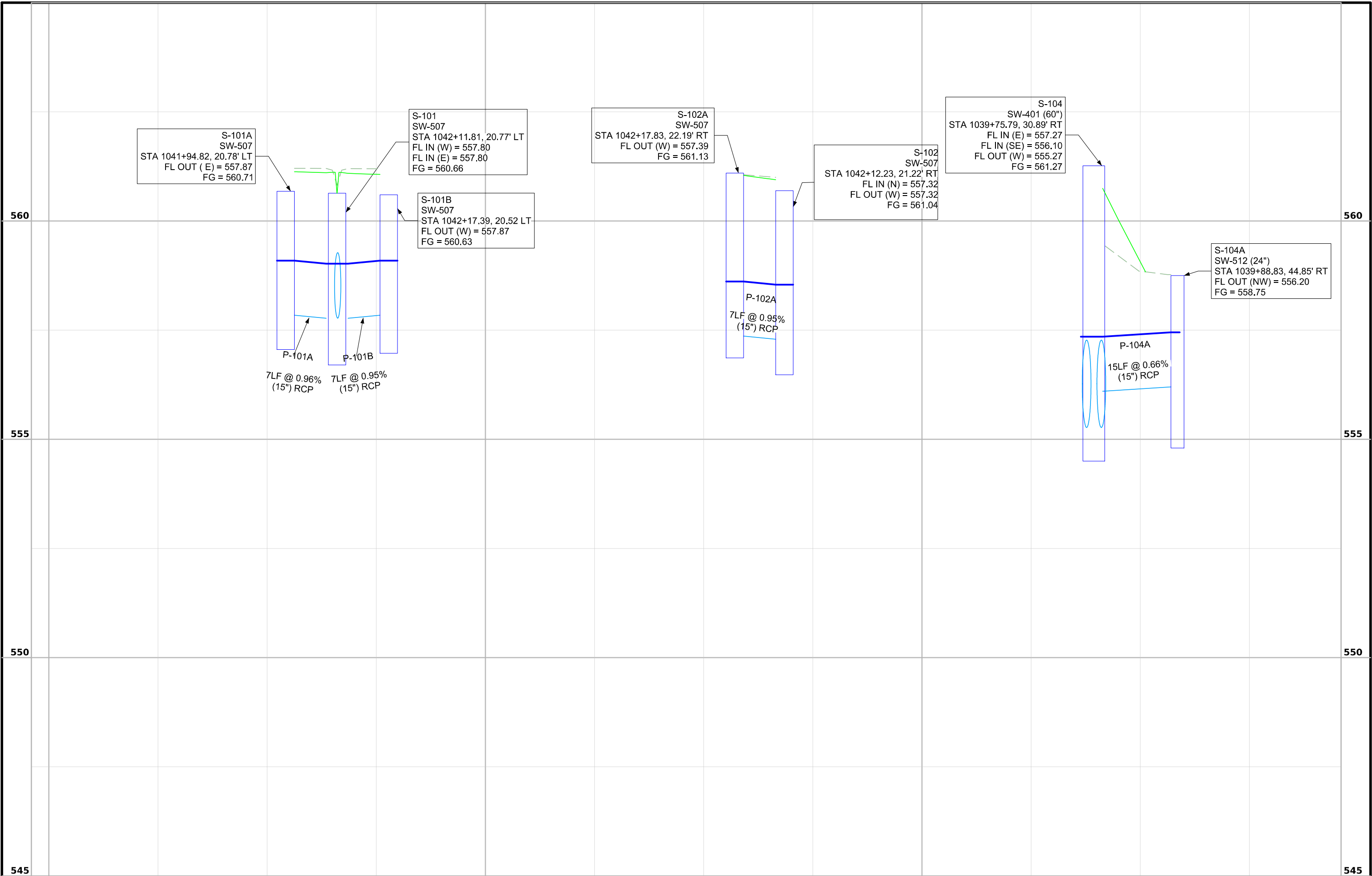




Diameter or equivalent diameter																		104-5B
STORM SEWER																		4/21/2015
* Bid Item																		
** for SW-545																		
INTAKES AND UTILITY ACCESSES										PIPES								
										Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 3 ft length is added to each end of the Design Length to account for estimated length to center of structures.								
No.	Location Station	Type or Standard Road Plan*	Form Grade	Bottom Well	Extension Length**	Notes	Line Number	Intake/Utility Access No.		Class 'D'	Pipe Diameter	Bid* Length	Design Length	Slope %	Flow Lines		Pipe Profile Sheet No.	Notes
			Elev.	Elev.	FT			From	To		IN	FT	FT		Inlet Elevation	Outlet Elevation		
															FT	FT		
S-101	STA 1042+11.81, 20.77' LT	SW-507	560.66	556.73			P-101	S-101	S-102	2000	18	46	42	1.14	557.80	557.32		
S-101A	STA 1041+94.82, 20.78' LT	SW-507	560.71	557.08			P-101A	S-101A	S-101	2000	15	11	7	0.96	557.87	557.80		
S-101B	STA 1042+17.39, 20.52 LT	SW-507	560.63	557.00			P-101B	S-101B	S-101	2000	15	11	7	0.95	557.87	557.80		
S-102	STA 1042+12.23, 21.22' RT	SW-507	560.72	556.50			P-102	S-102	S-103	2000	24	126	122	1.40	557.32	555.61		
S-102A	STA 1042+17.83, 22.19' RT	SW-507	561.13	556.89			P-102A	S-102A	S-102	2000	15	11	7	0.95	557.39	557.32		
S-103	STA 1042+14.31, 33.22' RT	SW-401 (60")	558.54	554.60		SW-604 TYPE 5 GRATE	P-103	S-103	S-104	2000	24	107	103	0.33	555.61	555.27		
S-104	STA 1039+75.79, 30.89' RT	SW-401 (60")	561.27	554.50			P-104	S-104	S-105	2000	24	140	136	0.41	555.27	554.71		
S-104A	STA 1039+88.83, 44.85' RT	SW-512 (24")	558.75	554.80		SW-604 TYPE 4 CASTING	P-104A	S-104A	S-104	2000	15	19	15	0.66	556.20	556.10		
S-105	STA 1038+34.96, 34.81' RT	SW-401 (60")	561.45	554.13			P-105	S-105	S-106	2000	24	136	132	0.41	554.71	554.17		
S-106	STA 1036+65.66, 37.43' RT	SW-401 (60")	563.84	553.67			P-106	S-106	S-107	2000	24	41	37	0.46	554.17	554.00		
S-107	STA 1036+54.63, 41.56' RT	SW-401 (60")	562.74	553.50			P-107	S-107	S-108	2000	24	50	46	0.44	554.00	553.80		
S-108	STA 1036+04.38, 28.40' RT	SW-502 (60")	561.65	553.30			P-108	S-108	ES-110	2000	24	14	10	0.59	553.80	553.74		
S-201	STA 102+78.55, 34.11' LT	SW-512 (24")	560.05	555.00		SW-604 TYPE 4 CASTING	P-201	S-201	S-202	2000	15	63	59	0.58	555.64	555.30		
S-202	STA 103+66.32, 71.89' LT	SW-401 (72")	564.22	552.50			P-202	S-203	S-202	2000	18	43	39	1.02	552.90	552.50		
S-203	STA 104+18.97, 43.10' LT	SW-511	559.78	553.01		CAST-IN-PLACE	P-203	S-204	S-203	2000	15	44	40	0.95	555.38	555.00		
S-204	STA 104+50.65, 18.35' LT	SW-501	558.80	554.01			P-204	S-205	S-203	2000	18	93	89	0.45	553.40	553.00		
S-205	STA 103+93.41, 43.00' RT	SW-512 (24")	556.18	552.27		SW-604 TYPE 4 CASTING	P-205	S-202	S-206	2000	24	43	39	1.27	552.50	552.00		
S-206	STA 103+61.87, 30.86' LT	GATEWELL	564.21	546.50			P-206	S-207	S-206	2000	15	71	67	1.35	557.80	556.90		
S-207	STA 104+04.86, 25.46' LT	SW-512 (24")	560.29	556.38		SW-604 TYPE 4 CASTING												
TOTAL:																		
	SW-401 (60")	5																
	SW-401 (72")	1																
	GATEWELL	1																
	SW-501	1																
	SW-502 (60")	1																
	SW-507	5																
	SW-511	1																
	SW-512 (24")	4																





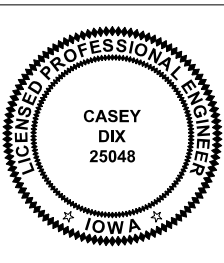
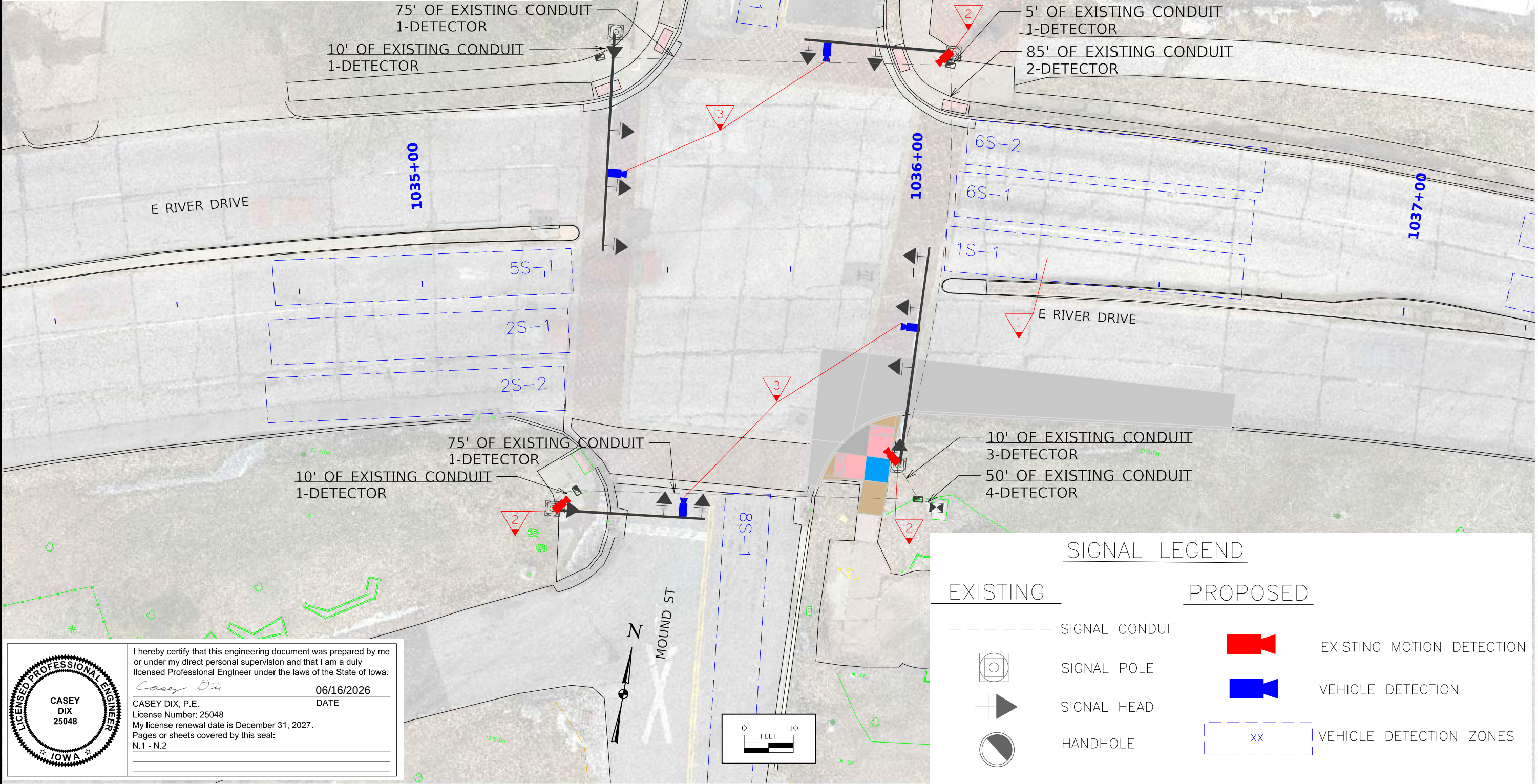


TRAFFIC SIGNAL GENERAL NOTESINSTALLATION NOTES:

1. ALL TRAFFIC SIGNAL WORK WILL BE CONSTRUCTION IN ACCORDANCE WITH LATEST VERSION OF IOWA DOT STANDARDS.
2. THE EXISTING CONDUIT, LINEWORK, AND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY BEFORE WORK IN CONDUCTED.
3. CONTACTOR SHALL RETURN ANY REMOVED TRAFFIC SIGNAL EQUIPMENT NOT REINSTALLED AS PART OF THIS PROJECT TO PUBLIC WORK BUILDING AT 1200 E 46TH ST DAVENPORT IA. CONTRACTOR WILL NOT BE PAID EXTRA FOR HAULING COSTS.
4. VEHICLE DETECTION CABLE USED SHALL BE PER MANUFACTURERS GUIDANCE AND SPECIFICATIONS.
5. VEHICLE DETECTION CABLE WILL BE INCIDENTAL TO PROJECT.

TRAFFIC INSTALLATION NOTES:

- 1 EXISTING VEHICLE DETECTION LOOPS WILL BE ABANDONED AND LEFT IN PLACE
- 2 REMOVE EXISTING MOTION DETECTION DEVICES, ABANDON EXISTING CABLING IN SIGNAL POLES AND CONDUITS UNLESS DEEMED NECESSARY TO INSTALL NEW CABLING.
- 3 INSTALL ITERIS VANTAGE VECTOR DETECTION CAMERAS AND NECESSARY HARDWARE IN CABINET PER MANUFACTURERS GUIDANCE AND SPECIFICATIONS.



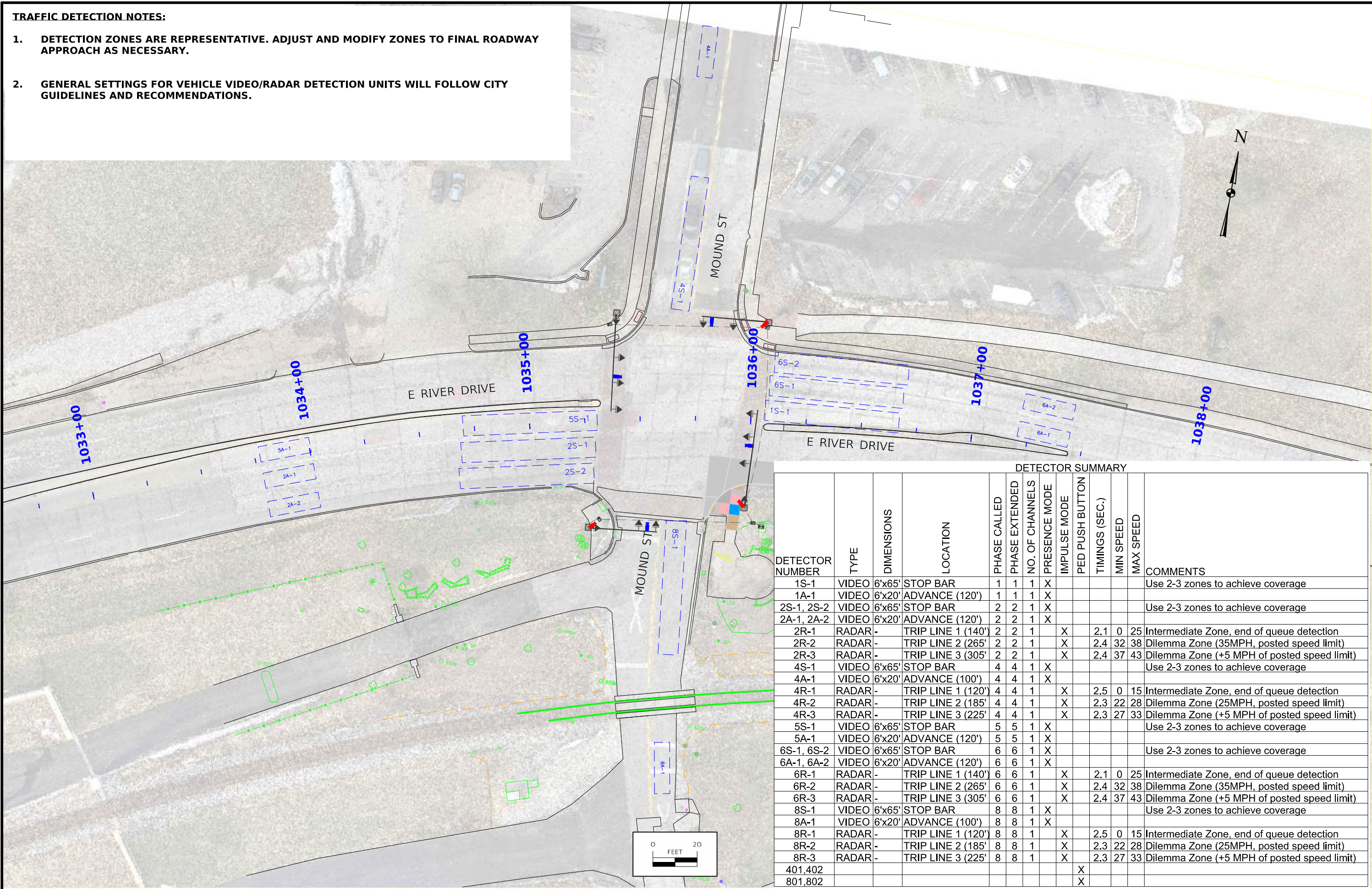
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Casey Dix
06/16/2026
DATE

CASEY DIX, P.E.
License Number: 25048
My license renewal date is December 31, 2027.
Pages or sheets covered by this seal:
N.1 - N.2

TRAFFIC DETECTION NOTES:

1. DETECTION ZONES ARE REPRESENTATIVE. ADJUST AND MODIFY ZONES TO FINAL ROADWAY APPROACH AS NECESSARY.
2. GENERAL SETTINGS FOR VEHICLE VIDEO/RADAR DETECTION UNITS WILL FOLLOW CITY GUIDELINES AND RECOMMENDATIONS.



DETECTOR SUMMARY													
DETECTOR NUMBER	TYPE	DIMENSIONS	LOCATION	PHASE CALLED	PHASE EXTENDED	NO. OF CHANNELS	PRESENCE MODE	IMPULSE MODE	PED PUSH BUTTON	TIMINGS (SEC.)	MIN SPEED	MAX SPEED	COMMENTS
1S-1	VIDEO	6'x65'	STOP BAR	1	1	1	X						Use 2-3 zones to achieve coverage
1A-1	VIDEO	6'x20'	ADVANCE (120')	1	1	1	X						
2S-1, 2S-2	VIDEO	6'x65'	STOP BAR	2	2	1	X						Use 2-3 zones to achieve coverage
2A-1, 2A-2	VIDEO	6'x20'	ADVANCE (120')	2	2	1	X						
2R-1	RADAR	-	TRIP LINE 1 (140')	2	2	1		X		2.1	0	25	Intermediate Zone, end of queue detection
2R-2	RADAR	-	TRIP LINE 2 (265')	2	2	1		X		2.4	32	38	Dilemma Zone (35MPH, posted speed limit)
2R-3	RADAR	-	TRIP LINE 3 (305')	2	2	1		X		2.4	37	43	Dilemma Zone (+5 MPH of posted speed limit)
4S-1	VIDEO	6'x65'	STOP BAR	4	4	1	X						Use 2-3 zones to achieve coverage
4A-1	VIDEO	6'x20'	ADVANCE (100')	4	4	1	X						
4R-1	RADAR	-	TRIP LINE 1 (120')	4	4	1		X		2.5	0	15	Intermediate Zone, end of queue detection
4R-2	RADAR	-	TRIP LINE 2 (185')	4	4	1		X		2.3	22	28	Dilemma Zone (25MPH, posted speed limit)
4R-3	RADAR	-	TRIP LINE 3 (225')	4	4	1		X		2.3	27	33	Dilemma Zone (+5 MPH of posted speed limit)
5S-1	VIDEO	6'x65'	STOP BAR	5	5	1	X						Use 2-3 zones to achieve coverage
5A-1	VIDEO	6'x20'	ADVANCE (120')	5	5	1	X						
6S-1, 6S-2	VIDEO	6'x65'	STOP BAR	6	6	1	X						Use 2-3 zones to achieve coverage
6A-1, 6A-2	VIDEO	6'x20'	ADVANCE (120')	6	6	1	X						
6R-1	RADAR	-	TRIP LINE 1 (140')	6	6	1		X		2.1	0	25	Intermediate Zone, end of queue detection
6R-2	RADAR	-	TRIP LINE 2 (265')	6	6	1		X		2.4	32	38	Dilemma Zone (35MPH, posted speed limit)
6R-3	RADAR	-	TRIP LINE 3 (305')	6	6	1		X		2.4	37	43	Dilemma Zone (+5 MPH of posted speed limit)
8S-1	VIDEO	6'x65'	STOP BAR	8	8	1	X						Use 2-3 zones to achieve coverage
8A-1	VIDEO	6'x20'	ADVANCE (100')	8	8	1	X						
8R-1	RADAR	-	TRIP LINE 1 (120')	8	8	1		X		2.5	0	15	Intermediate Zone, end of queue detection
8R-2	RADAR	-	TRIP LINE 2 (185')	8	8	1		X		2.3	22	28	Dilemma Zone (25MPH, posted speed limit)
8R-3	RADAR	-	TRIP LINE 3 (225')	8	8	1		X		2.3	27	33	Dilemma Zone (+5 MPH of posted speed limit)
401,402									X				
801,802									X				



Exploration Plan



Boring Log No. 1

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5300° Longitude: -90.5450°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Percent Fines	Water Content (%)	Atterberg Limits	
											LL-PL-PI	Organic Content (%)
1		Depth (Ft.) Approximate Elevation: 560.5 (Ft.) ROOT ZONE , approx. 2"	0.2									
2		FILL - SANDY LEAN CLAY , trace brick fragments and coal, very dark brown	2.0									
		FILL - SANDY LEAN CLAY , with wood fragments, brown	558.5									
3			5.0			6	4-4-3 N=7	1	27.3			
		SANDY LEAN CLAY (CL) , brown, soft to medium stiff	555.5			8	3-2-2 N=4	2	19.0			
						11	1-1-3 N=4	3	23.6			
			10			10	2-1-1 N=2	4	28.9			
		SANDY LEAN CLAY (CL) , trace organics, dark gray, very soft to soft	549.5			13	1-1-1 N=2	5	25.5			
			15			12	1-0-1 N=1	6	24.6			
		Boring Terminated at 15.5 Feet	545									
Notes		See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were obtained from the USGS Topographic Survey Tool.		Water Level Observations ▽ 10½' while drilling ▽ 11' after drilling		Drill Rig 416 Hammer Type Automatic Driller CN		Logged by AS Boring Started 01-07-2026 Boring Completed 01-07-2026				
				Advancement Method Continuous-Flight Solid-Stem Auger								
				Abandonment Method Boring backfilled with auger cuttings upon completion.								

Facilities | Environmental | Geotechnical | Materials

Boring Log No. 2

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5300° Longitude: -90.5462°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Percent Fines	Water Content (%)	Atterberg Limits	
											LL-PL-PI	Organic Content (%)
1		Depth (Ft.) Approximate Elevation: 562.5 (Ft.) ROOT ZONE , approx. 2"	0.2									
		FILL - SANDY LEAN CLAY , trace gravel and coal, gray and very dark brown	562.3									
2			5			6	2-2-2 N=4	1				
						7	2-3-3 N=6	2				
		FILL - LEAN CLAY , with sand and wood fragments, brown and very dark brown	556.5									
						4	1-1-2 N=3	3	90.3			24.0
		trace gravel at Sample 4										
			10			7	2-2-2 N=4	4	53.0			
		FILL - CLAYEY SAND , with gravel, trace wood fragments, fine grained, dark gray	551			10	3-6-5 N=11	5	30.3			
3		SANDY LEAN CLAY (CL) , trace organics, dark gray, very soft	548.5									
			547			13	1-0-0 N=0	6	26.7			
		Boring Terminated at 15.5 Feet	547									
Notes		See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were obtained from the USGS Topographic Survey Tool.		Water Level Observations ▽ 14' while drilling ▽ 13' after drilling		Drill Rig 416 Hammer Type Automatic Driller CN		Logged by AS Boring Started 01-07-2026 Boring Completed 01-07-2026				
				Advancement Method Continuous-Flight Solid-Stem Auger								
				Abandonment Method Boring backfilled with auger cuttings upon completion.								

Facilities | Environmental | Geotechnical | Materials

Boring Log No. 3

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5292° Longitude: -90.5462°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Percent Fines	Water Content (%)	Atterberg Limits	Organic Content (%)	
											LL-PL-PI		
1		Depth (Ft.) Approximate Elevation: 559.0 (Ft.)	0.2										
		ROOT ZONE , approx. 2"	0.2										
		FILL - LEAN CLAY* , dark brown	1.5										
2		FILL - CLAYEY GRAVEL , trace fine roots, wood fragments, and coal, fine grained, gray	1.5			5	3-3-4 N=7	1		45.0			
			6.5										
		FILL - LEAN CLAY , with gravel, trace fine roots, brown and brownish gray	8.5			2	3-4-5 N=9	2		25.3			
3		SANDY LEAN CLAY , brown and gray, soft to medium stiff	8.5										
			10			9	2-2-2 N=4	3		21.6			
						11	1-1-2 N=3	4		19.5			
						5	2-2-3 N=5	5		19.5			
			15			14	1-1-1 N=2	6		22.8			
		trace gravel at Sample 7				13	2-3-3 N=6	7		25.9			
		CLAYEY SAND (SC) , trace gravel, fine to medium grained, dark gray, loose	16.5			7	4-2-2 N=4	8		19.4			
						6	2-3-3 N=6	9		15.9			
			20			5	2-2-2 N=4	10		13.0			
	25			8	1-2-2 N=4	11		37.3					
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were obtained from the USGS Topographic Survey Tool. *Soil description is based on the driller's field classification of disturbed samples and on drilling characteristics.												Water Level Observations 11' while drilling Not recorded due to the introduction of water during drilling	Drill Rig 416 Hammer Type Automatic Driller CN
Notes												Advancement Method Continuous-Flight Hollow-Stem Auger	Logged by AS
												Abandonment Method Boring backfilled with auger cuttings upon completion.	Boring Started 01-07-2026 Boring Completed 01-07-2026

Boring Log No. 3

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5292° Longitude: -90.5462°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Percent Fines	Water Content (%)	Atterberg Limits LL-PL-PI	Organic Content (%)
3		Depth (Ft.) _____ Approximate Elevation: 559.0 (Ft.) CLAYEY SAND (SC) , trace gravel, fine to medium grained, dark gray, loose <i>(continued)</i> 29.6 _____ 529.4										
		Sampler Refusal on Apparent Limestone at 29.6 Feet										

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Elevation Reference: Elevations were obtained from the USGS Topographic Survey Tool.

*Soil description is based on the driller's field classification of disturbed samples and on drilling characteristics.

Water Level Observations

11' while drilling

Not recorded due to the introduction of water during drilling

Drill Rig
416

Hammer Type
Automatic

Driller
CN

Notes

Advancement Method
Continuous-Flight Hollow-Stem Auger

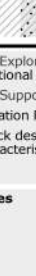
Abandonment Method
Boring backfilled with auger cuttings upon completion.

Logged by
AS

Boring Started
01-07-2026

Boring Completed
01-07-2026

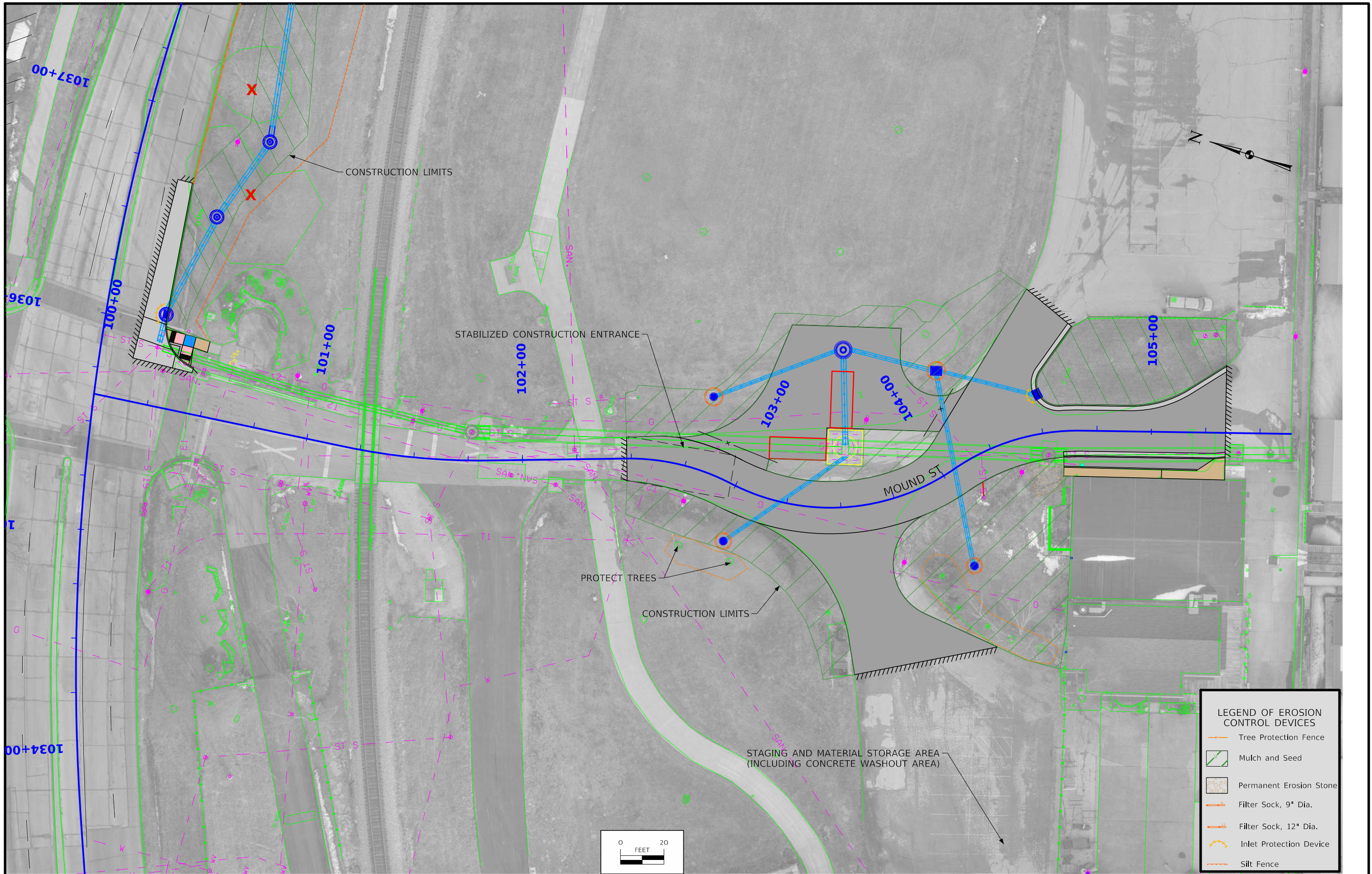
Boring Log No. 4

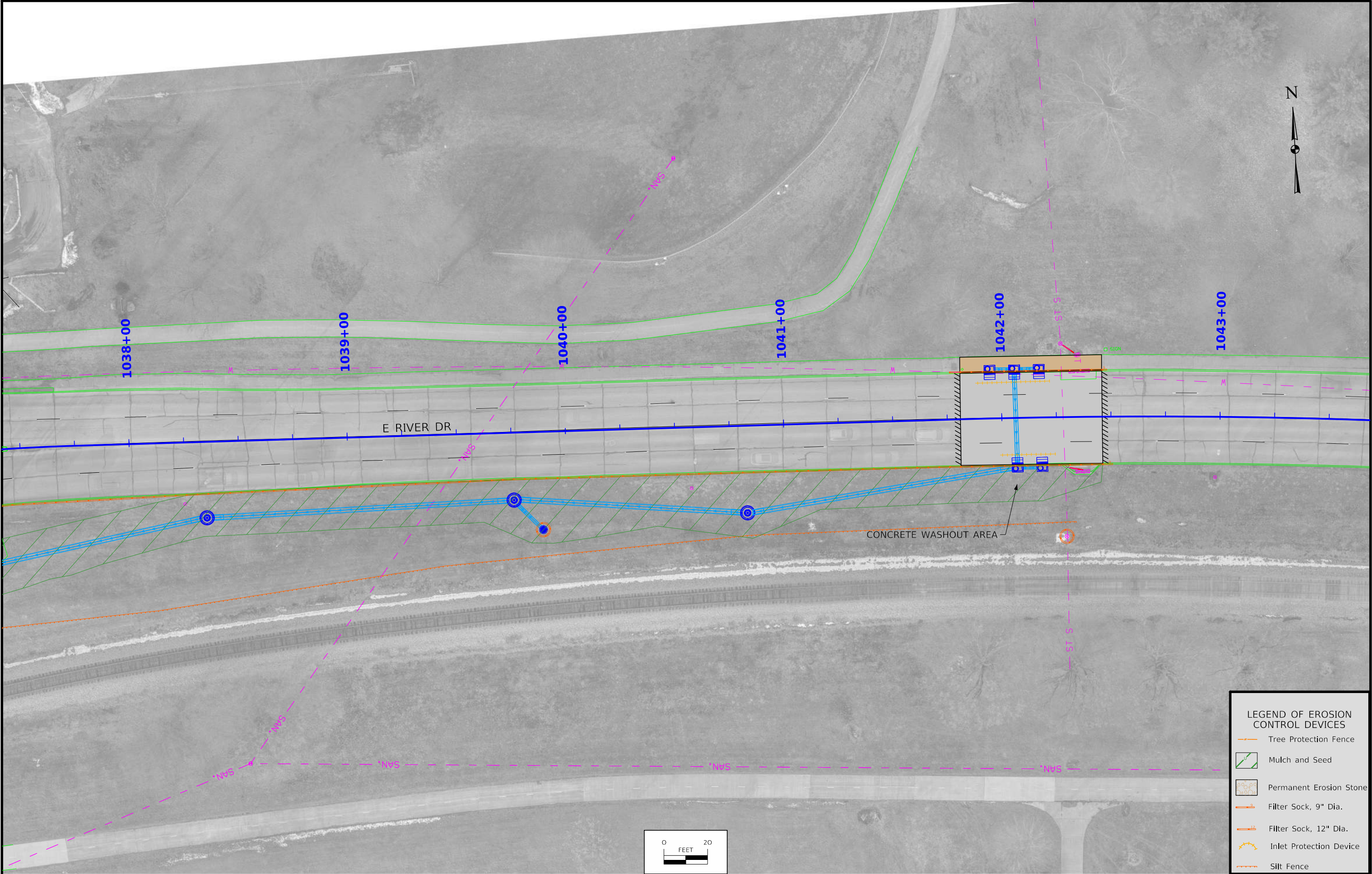
Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5288° Longitude: -90.5460°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Percent Fines	Water Content (%)	Atterberg Limits	
											LL-PL-PI	Organic Content (%)
1		Depth (Ft.) Approximate Elevation: 562.0 (Ft.) 0.2' ROOT ZONE , approx. 2" 561.8 FILL - SANDY LEAN CLAY , trace wood fragments and coal, dark brown and brown	5							17.1		
2		6.0 556 FILL - LEAN CLAY , with sand, trace brick and concrete fragments and coal, dark brown wood fragment at Sample 3	10							29.3		
3		13.0 549 LEAN CLAY (CL) , gray, soft	15							31.0		
3		15.0 547 SANDY LEAN CLAY (CL) , brownish gray, medium stiff	20							27.0		
3		18.0 544 FAT CLAY (CH) , trace sand, gray and yellowish brown, soft to medium stiff	25							21.1		
3		24.5 537.5 LEAN CLAY (CL) , with sand, trace coal and gravel, dark gray, medium stiff								24.6		
3										23.5		
3										19.9		

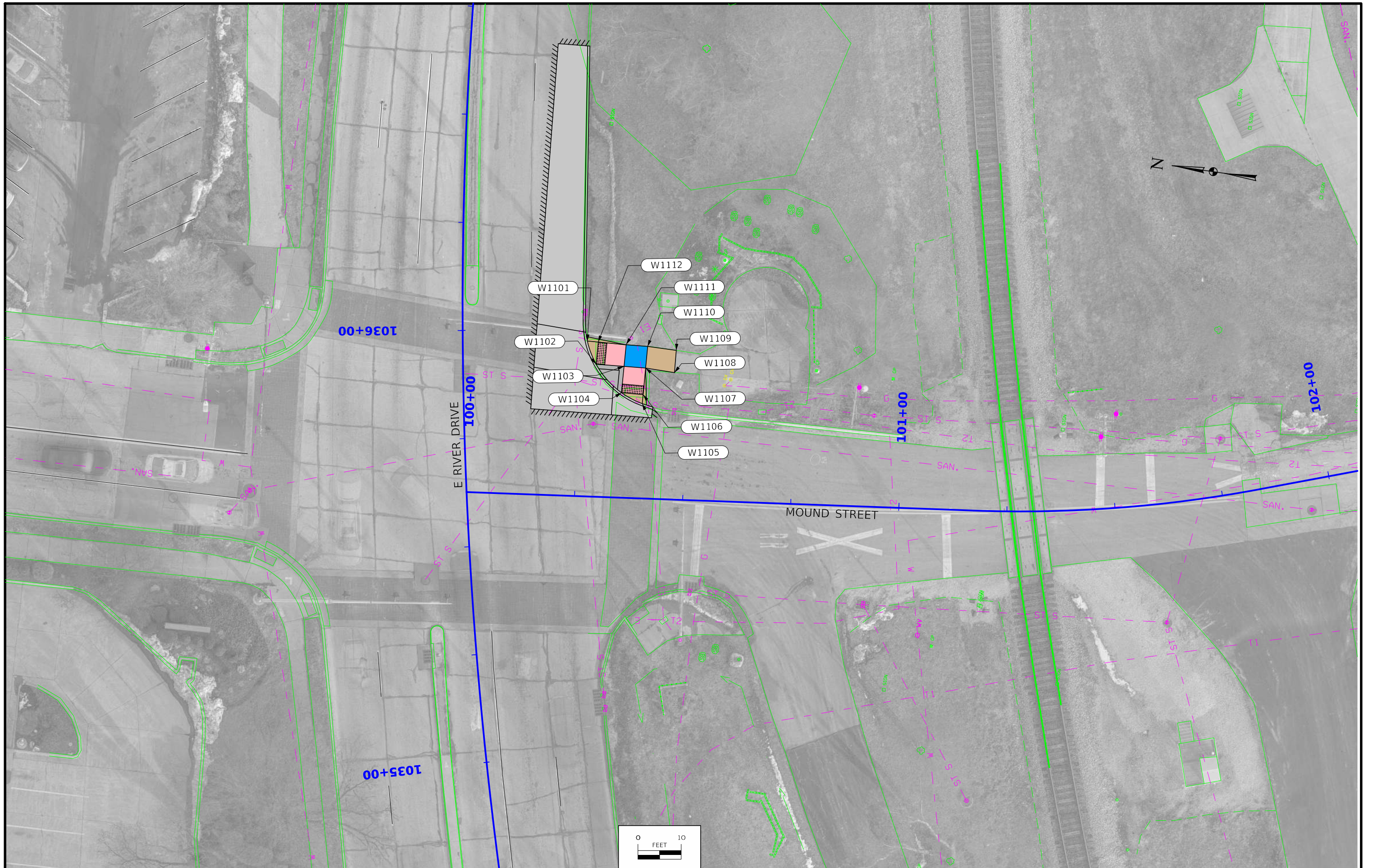
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were obtained from the USGS Topographic Survey Tool. *Rock description is based on the driller's field classification of disturbed samples and on drilling characteristics.	Water Level Observations ▽ 30½' while drilling ▽ 28' after drilling	Drill Rig 416 Hammer Type Automatic Driller CN
	Advancement Method Continuous-Flight Hollow-Stem Auger Abandonment Method Boring backfilled with auger cuttings upon completion.	Logged by AS Boring Started 01-07-2026 Boring Completed 01-07-2026

Boring Log No. 4

Model Layer	Graphic Log	Location: See Exploration Plan Latitude: 41.5288° Longitude: -90.5460°	Depth (Ft.)	Water Level Observations	Sample Type	Recovery (In.)	Field Test Results	Sample ID	Percent Fines	Water Content (%)	Atterberg Limits LL-PL-PI	Organic Content (%)
		Depth (Ft.) Approximate Elevation: 562.0 (Ft.)										
3		28.0 534 LEAN CLAY (CL) , with sand, trace gravel, dark gray										
4		30.2 531.8 30.5 531.5 CLAYEY GRAVEL* , with sand, fine grained, yellowish brown (residual soil) Boring Terminated at 30.5 Feet	30			10	4-4-9 N=13	12		23.9		
See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). See Supporting Information for explanation of symbols and abbreviations. Elevation Reference: Elevations were obtained from the USGS Topographic Survey Tool. *Rock description is based on the driller's field classification of disturbed samples and on drilling characteristics.												
Notes				Water Level Observations  30½' while drilling  28' after drilling				Drill Rig 416 Hammer Type Automatic Driller CN				
				Advancement Method Continuous-Flight Hollow-Stem Auger				Logged by AS Boring Started 01-07-2026 Boring Completed 01-07-2026				
				Abandonment Method Boring backfilled with auger cuttings upon completion.								







113-10

04-18-17

SIDEWALK COMPLIANCE

See S Sheets

* Does not include curb

Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.

Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	" PCC Sidewalk	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant?	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES				
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation	
W1101	W1102	Crosswalk Cross Slope - Yield Condition	6	5.80	-0.03	-0.5%	0.0% to 2.0%						W1101	100+26.64	56.98 LT	561.21
W1102	W1103	Ramp Running Slope	6	6.47	-0.36	-5.6%	0.5% to 8.3%						W1102	100+28.86	30.63 LT	561.24
W1101	W1112	Ramp Running Slope	6	2.55	-0.04	-1.6%	0.5% to 8.3%						W1103	100+35.33	30.37 LT	561.60
W1112	W1111	Ramp Running Slope	6	6.45	-0.42	-6.5%	0.5% to 8.3%						W1104	100+34.97	24.27 LT	561.30
W1112	W1102	Ramp Cross Slope	6	5.00	0.01	0.2%	0.1% to 2.0%						W1105	100+39.87	21.93 LT	561.33
W1111	W1103	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%						W1106	100+39.96	23.99 LT	561.35
W1111	W1110	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes					W1107	100+40.33	30.17 LT	561.67
W1110	W1107	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes					W1108	100+47.04	29.35 LT	561.72
W1103	W1107	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%						W1109	100+47.28	34.49 LT	561.85
W1110	W1109	Sidewalk Running Slope	4	6.69	-0.10	-1.5%	0.5% to 5.0%						W1110	100+40.62	35.16 LT	561.75
W1107	W1108	Sidewalk Running Slope	4	6.76	-0.05	-0.7%	0.5% to 5.0%						W1111	100+35.63	35.36 LT	561.67
W1108	W1109	Match Existing Cross Slope	4	5.15	-0.13	-2.5%	Match Existing						W1112	100+29.19	35.76 LT	561.25
W1104	W1106	Ramp Cross Slope	6	5.00	-0.05	-1.0%	0.1% to 2.0%									
W1104	W1103	Ramp Running Slope	6	6.11	-0.30	-4.9%	0.5% to 8.3%									
W1105	W1106	Ramp Running Slope	6	2.07	-0.02	-1.0%	0.5% to 8.3%									
W1106	W1107	Ramp Running Slope	6	6.18	-0.32	-5.2%	0.5% to 8.3%									
W1104	W1105	Crosswalk Cross Slope - No Yield Condition	6	5.40	-0.03	-0.6%	0.0% to 5.0%									

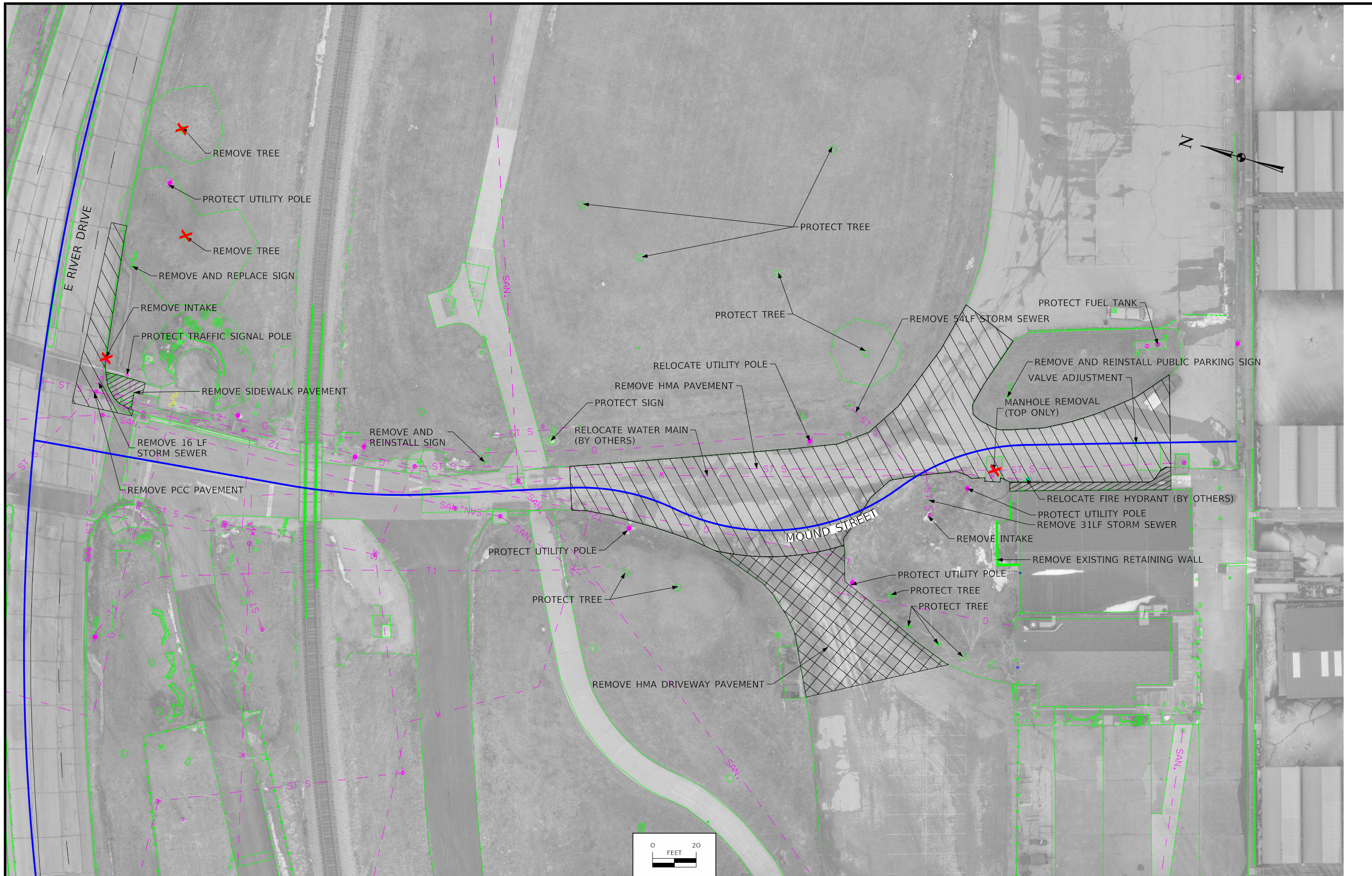
Refer to Standard Road Plans EW-101 and EW-102.

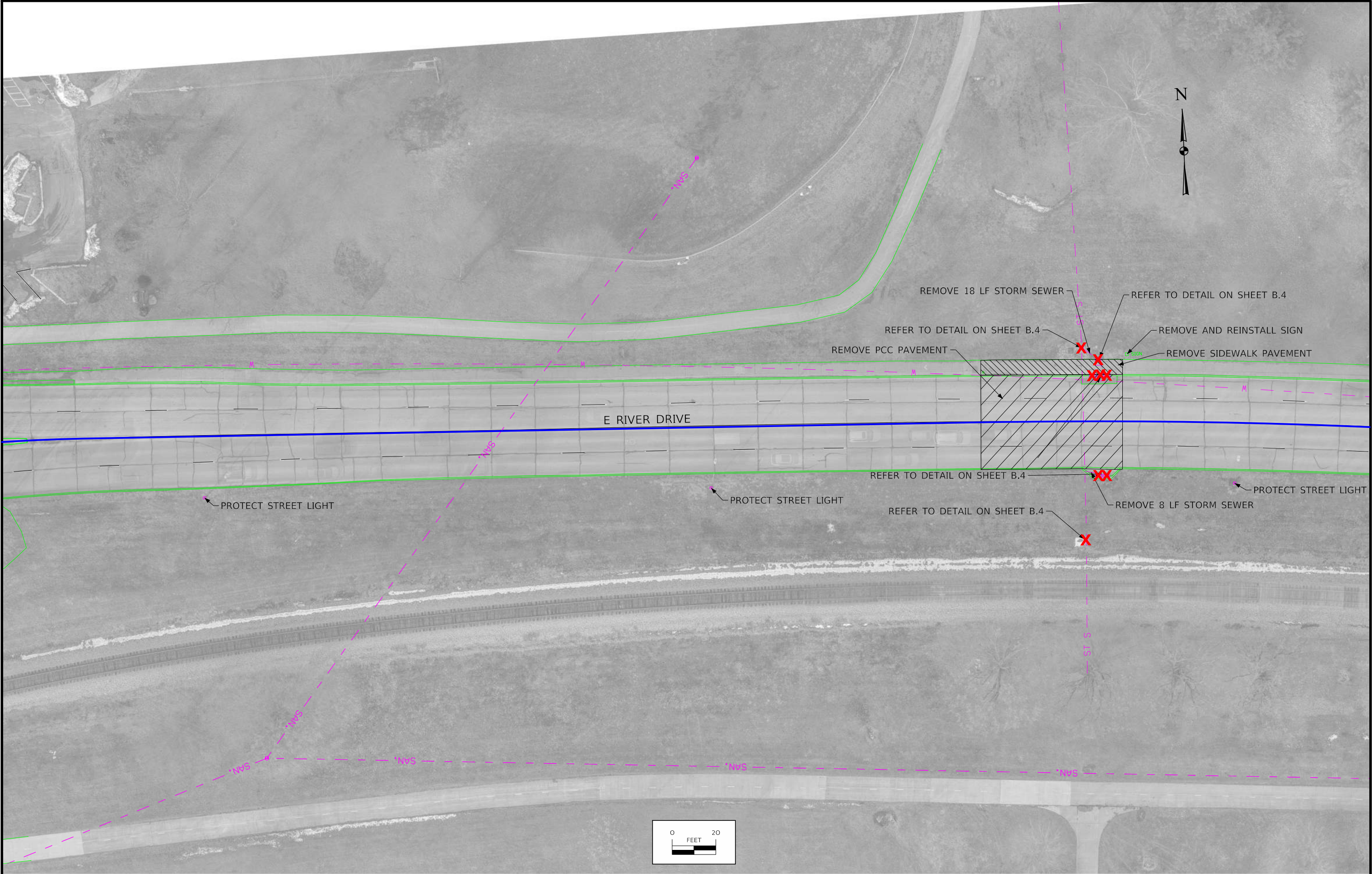
TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

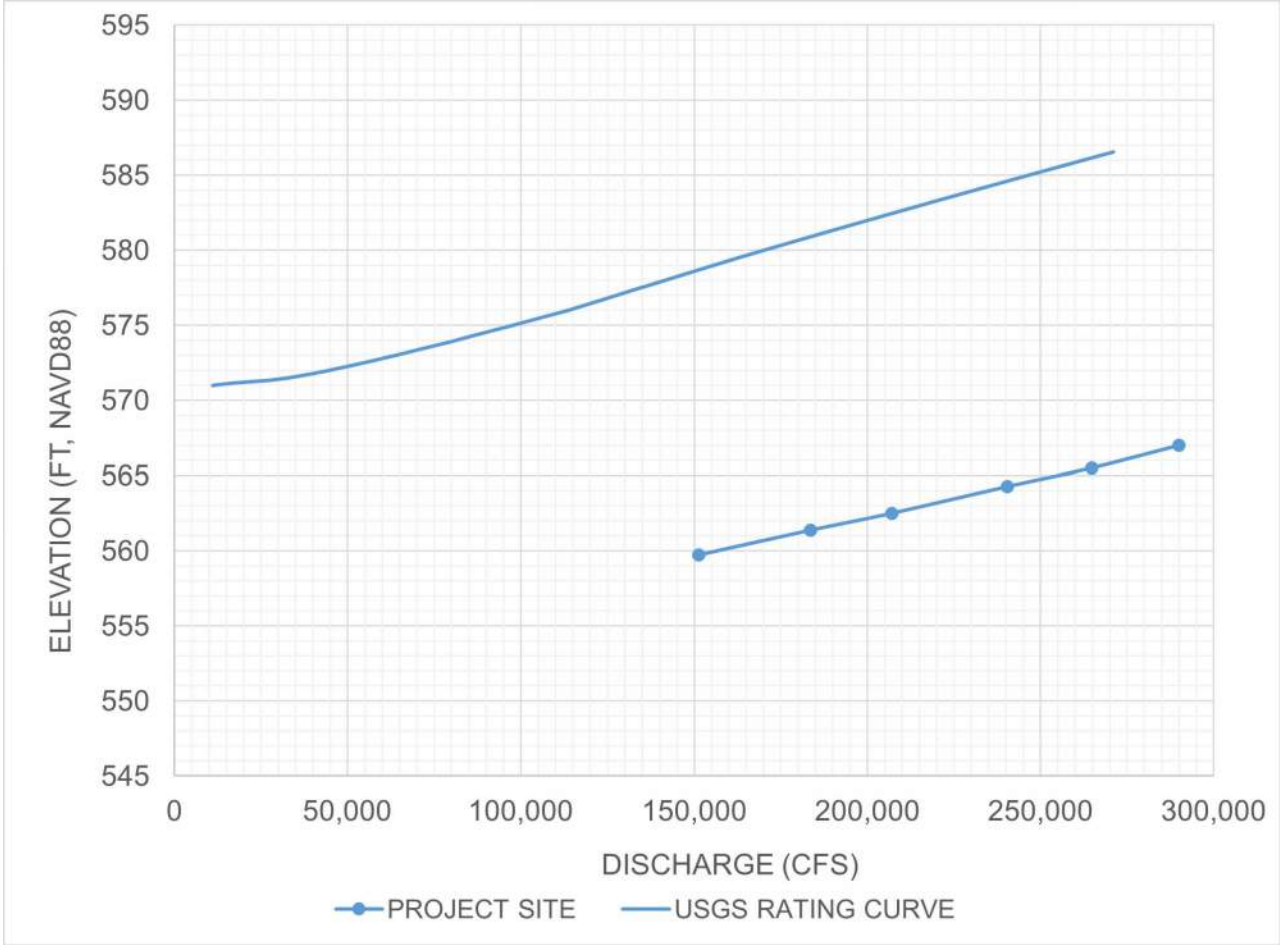
107-28
04-21-15

[illegible]

Station	Cut				Fill				Checks (EW-102)		Topsoil											
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]
	Total Cut Unadjusted Volume	Total Class 10 Unadjusted Volume	Template Pavement Removal Volume	Total Cut Adjusted	Total Fill Unadjusted Volume	Total Fill Adjusted	Total Fill Adjusted w/ Weighted Average 1.3 Shrink Factor	Total Cut Adjusted Minus Fill w/ Shrink	Approx. Fill Vol. Below 5' & Above 20' w/ Shrink	Approx. Fill Volume Below 3' w/ Shrink	Topsoil Stripping Undercut Volume	Topsoil Placement Undercut Volume	Topsoil Placement With 1.4 Shrink Factor	Topsoil Stripping Minus Topsoil Placement w/Shrink								
1035+78.73																						
1036+00.00	18	10	8	10	0	0	0	10	0	0	0	0	0	0								
1036+25.00	17	10	7	10	0	0	0	10	0	0	0	0	0	0								
1036+50.00	12	9	3	9	0	0	0	9	0	0	0	0	0	0								
1036+75.00	7	7	0	7	0	0	0	7	0	0	0	0	0	0								
1037+00.00	4	4	0	4	0	0	0	4	0	0	0	0	0	0								
1037+25.00	5	5	0	5	0	0	0	5	0	0	0	0	0	0								
1037+50.00	8	8	0	8	0	0	0	8	0	0	0	0	0	0								
1037+75.00	5	5	0	5	1	1	2	4	0	0	0	0	0	0								
1038+00.00	0	0	0	0	7	7	9	-9	0	0	0	0	0	0								
1038+25.00	0	0	0	0	14	14	18	-18	0	0	0	0	0	0								
1038+50.00	0	0	0	0	17	17	22	-22	0	0	0	0	0	0								
1038+75.00	0	0	0	0	18	18	24	-24	0	0	0	0	0	0								
1039+00.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
1039+08.49	0	0	0	0	17	17	22	-22	0	0	0	0	0	0								
1039+25.00	0	0	0	0	15	15	20	-20	0	0	0	0	0	0								
1039+50.00	0	0	0	0	16	16	20	-20	0	0	0	0	0	0								
1039+75.00	0	0	0	0	12	12	16	-16	0	0	0	0	0	0								
1040+00.00	0	0	0	0	9	9	12	-12	0	0	0	0	0	0								
1040+25.00	0	0	0	0	9	9	12	-12	0	0	0	0	0	0								
1040+50.00	0	0	0	0	11	11	14	-14	0	0	0	0	0	0								
1040+75.00	0	0	0	0	11	11	14	-14	0	0	0	0	0	0								
1041+00.00	0	0	0	0	8	8	10	-10	0	0	0	0	0	0								
1041+25.00	0	0	0	0	8	8	10	-10	0	0	0	0	0	0								
1041+50.00	0	0	0	0	10	10	13	-13	0	0	0	0	0	0								
1041+75.00	36	17	19	17	10	10	13	4	0	0	0	0	0	0								
1042+00.00	63	25	38	25	7	7	10	15	0	0	0	0	0	0								
1042+25.00	29	6	23	6	3	3	4	3	0	0	0	0	0	0								
1042+46.03																						
1035+78.73																						
Totals:	206	108	99	108	203	203	264	-157	0	0	0	0	0	0								







1 MISSISSIPPI RIVER ELEVATION - DISCHARGE CURVE
NO SCALE

NOTES:

1. WATER SURFACE ELEVATIONS AT PROJECT SITE ARE APPROXIMATELY 20 FT BELOW THE WATER SURFACE ELEVATIONS AT THE GAGE FOR FLOWS BETWEEN 151,300 CFS (2-YEAR) AND 290,000 CFS (100-YEAR).
2. THE USGS RATING CURVE (ELEVATION-DISCHARGE CURVE) IS BASED ON US GEOLOGICAL SURVEY FOR THE MISSISSIPPI RIVER AT CLINTON. GAGE IS LOCATED ON RIGHT BANK OF MISSISSIPPI RIVER 179,500 FT UPSTREAM FROM DAM. GAGE ZERO: 562.54 FT 1988 NORTH AMERICAN VERTICAL DATUM (NAVD). THE PROJECT ELEVATION-DISCHARGE CURVE LOCATION IS JUST UPSTREAM OF CROSS SECTION 484.00, APPROXIMATELY 6,600 FEET UPSTREAM OF THE LOCK & DAM NUMBER 15. ELEVATIONS ARE BASED ON HYDRAULIC MODEL RESULTS.
3. THE ELEVATION-DISCHARGE CURVES ARE BASED ON THE BEST INFORMATION AVAILABLE AND DO NOT NECESSARILY REPRESENT ALL POSSIBLE FUTURE CONDITIONS.
4. THE DISCHARGE-FREQUENCY VALUES ARE FOR THE MISSISSIPPI RIVER AT STREAM GAGE 5420500. DATA ORIGINATE FROM US GEOLOGICAL SURVEY (USGS).

EXCEEDANCE PROBABILITY	RETURN PERIOD (YEARS)	DISCHARGE (CFS)
0.5000	2	151300
0.2000	5	183600
0.1000	10	207000
0.0400	25	240300
0.0200	50	264800
0.0100	100	290000
0.0050	200	313700
0.0020	500	345000
0.0010	1000	370400
0.0005	2000	394800

5. THE 2019 EVENT IS THE FLOOD OF RECORD WITH AN INSTANTANEOUS PEAK FLOW OF 235,000 CFS.

THE ELEVATION-DISCHARGE CURVE (U.3) AND FLOW DURATION CURVES (U.04,U.05) ARE INCLUDED TO PROVIDE INFORMATION FOR THE CONTRACTOR. ONE EXAMPLE OF HOW TO USE THE DATA AND READ THE CHARTS IS INCLUDED SUBSEQUENTLY. THE EXAMPLE DOES NOT REPRESENT ALL SCENARIOS OR POTENTIAL WAYS TO USE THE DATA, AND THERE IS NO SIGNIFICANCE TO THE ELEVATION SELECTED FOR THE EXAMPLE.

QUESTION

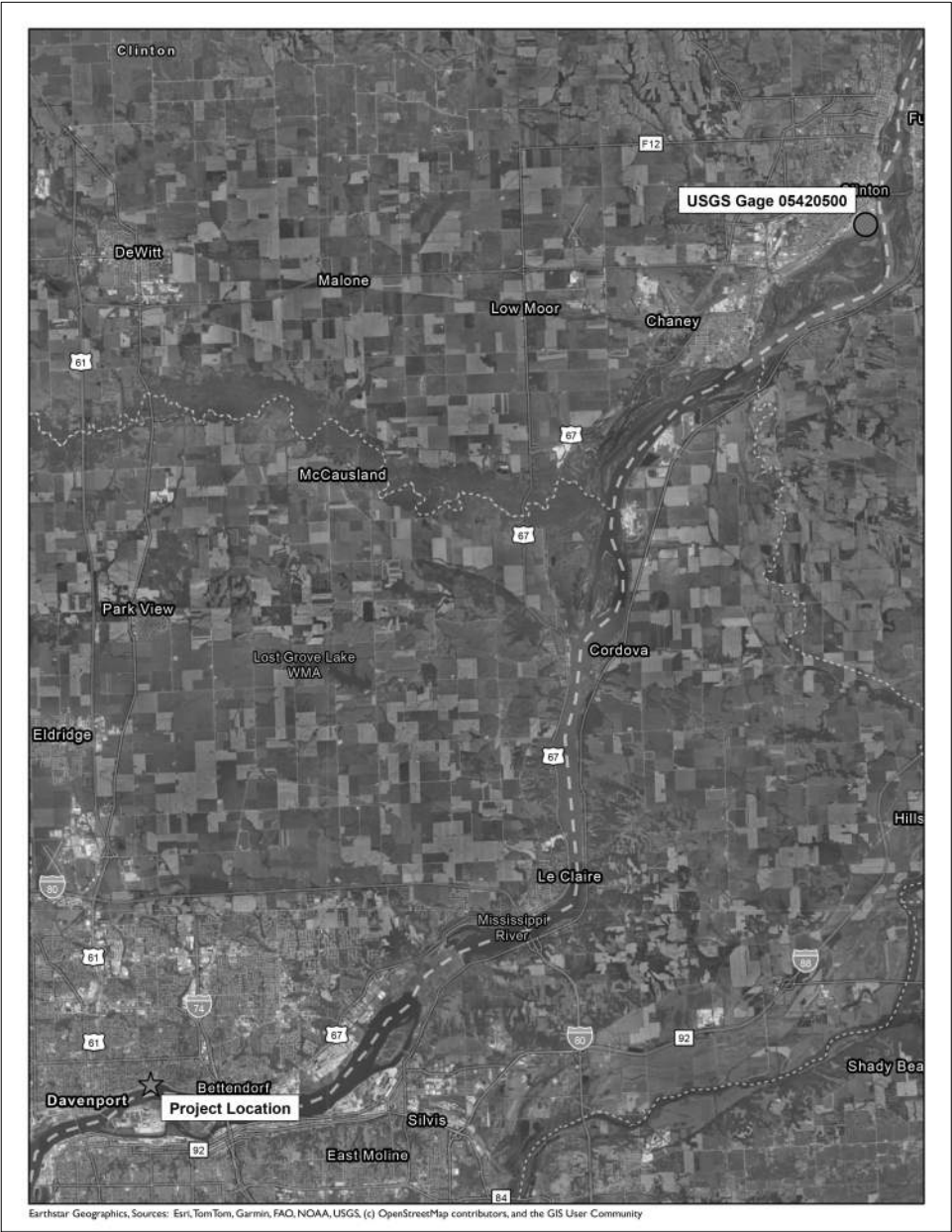
WHAT'S THE LIKELIHOOD THAT THE MISSISSIPPI RIVER WILL BE ABOVE ELEVATION 561.00 AT THE PROJECT SITE SOMETIME DURING THE MONTH OF JUNE?

ANSWER

USE THE RATING TABLE (U.03) TO FOLLOW THE HORIZONTAL LINE FOR ELEVATION 561.00 ACROSS UNTIL IT INTERSECTS THE LINE LABELED 'PROJECT SITE'. THE FLOW CORRESPONDING TO THAT INTERSECTION IS APPROXIMATELY 175,000 CFS.

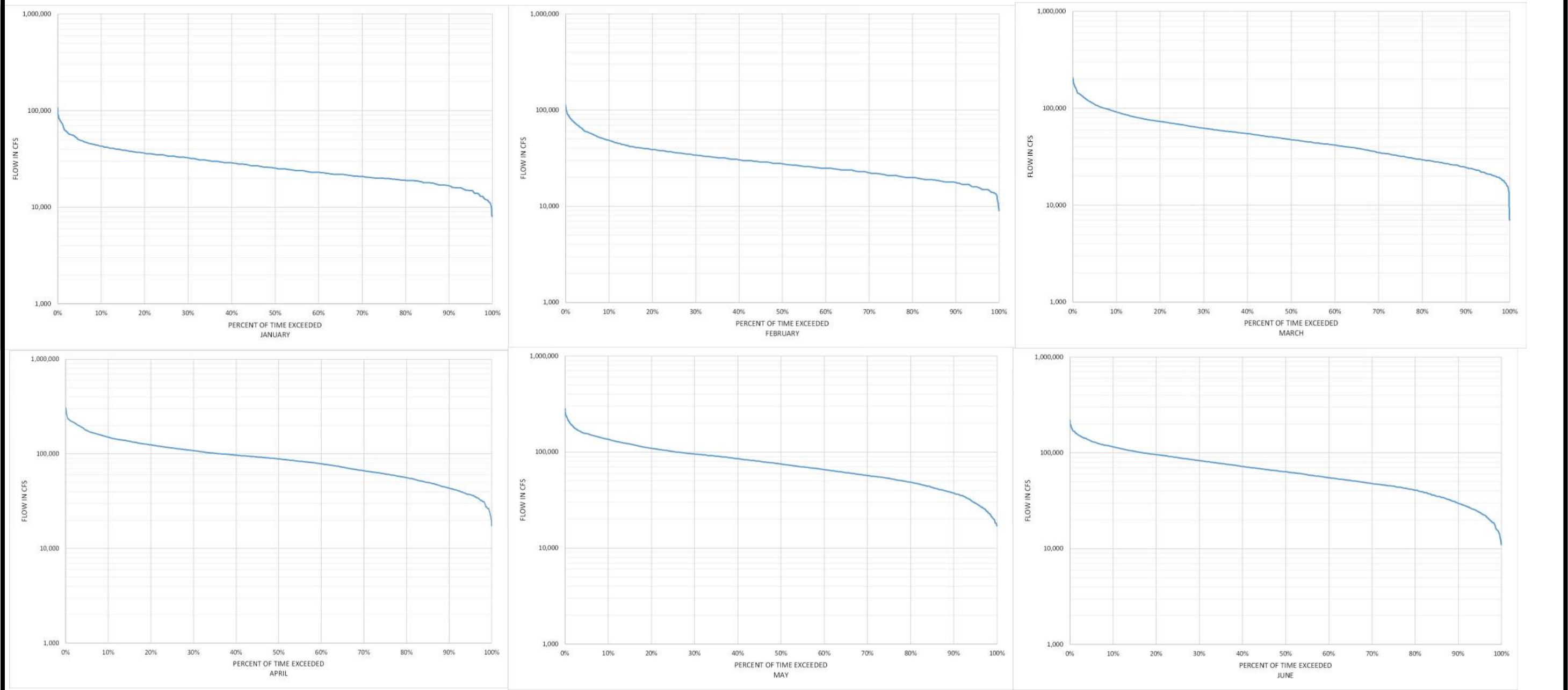
USE THE PERCENT OF TIME EXCEEDED CURVE FOR JUNE (U.04). FIND THE HORIZONTAL LINE FOR 175,000 CFS, AND FOLLOW ACROSS UNTIL IT INTERSECTS THE CURVE. FROM THE INTERSECTION, FOLLOW A VERTICAL LINE DOWN TO THE PERCENT OF TIME EXCEEDED AXIS. THE VERTICAL LINE INTERSECTS THE PERCENT OF TIME EXCEEDED AXIS BELOW 1%.

THUS, BASED ON HISTORICAL RECORDS, THERE IS LESS THAN A 1% CHANCE THAT THE MISSISSIPPI RIVER WILL HAVE A WATER SURFACE ELEVATION ABOVE 561.00 SOMETIME DURING THE MONTH OF JUNE.

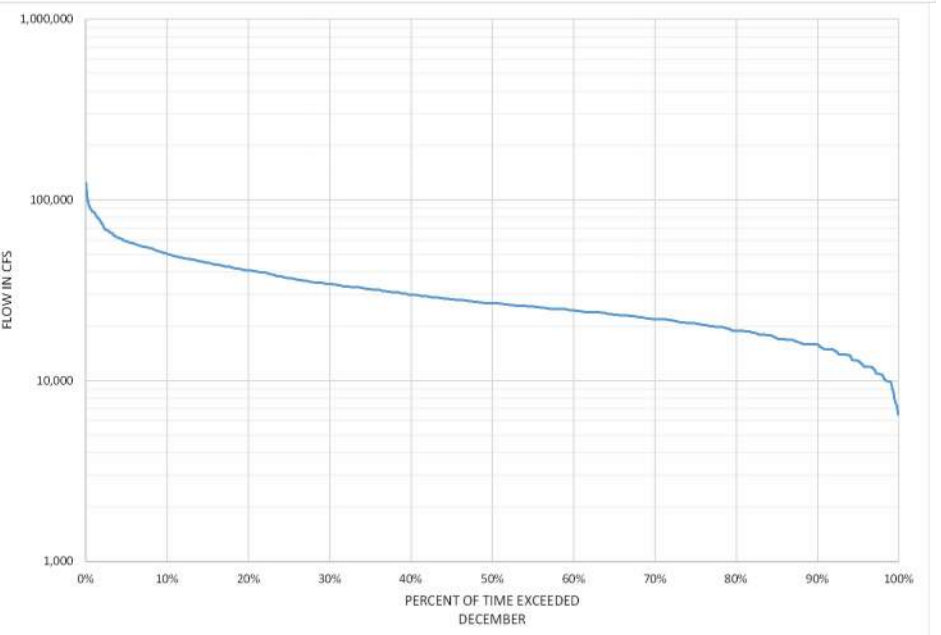
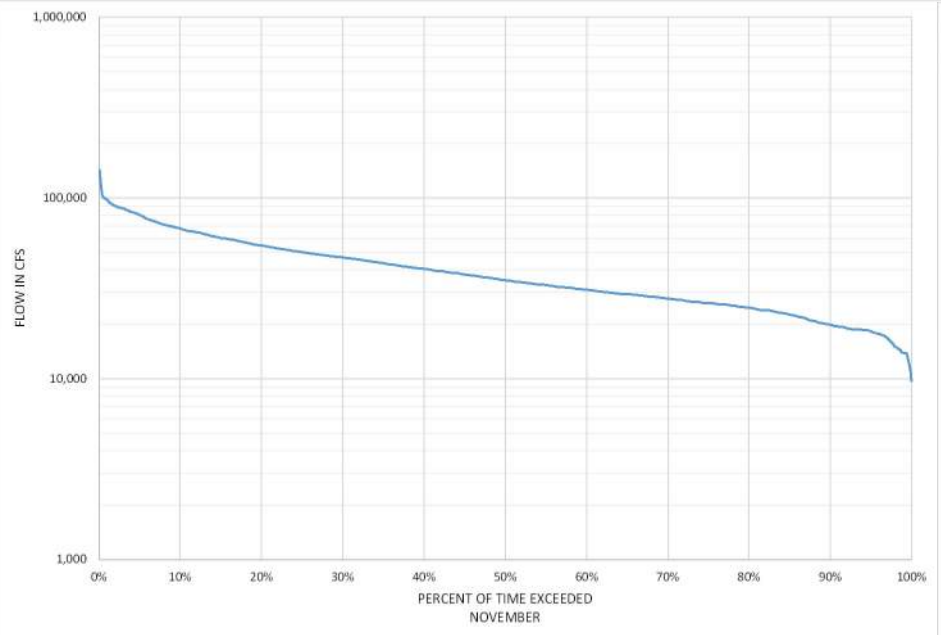
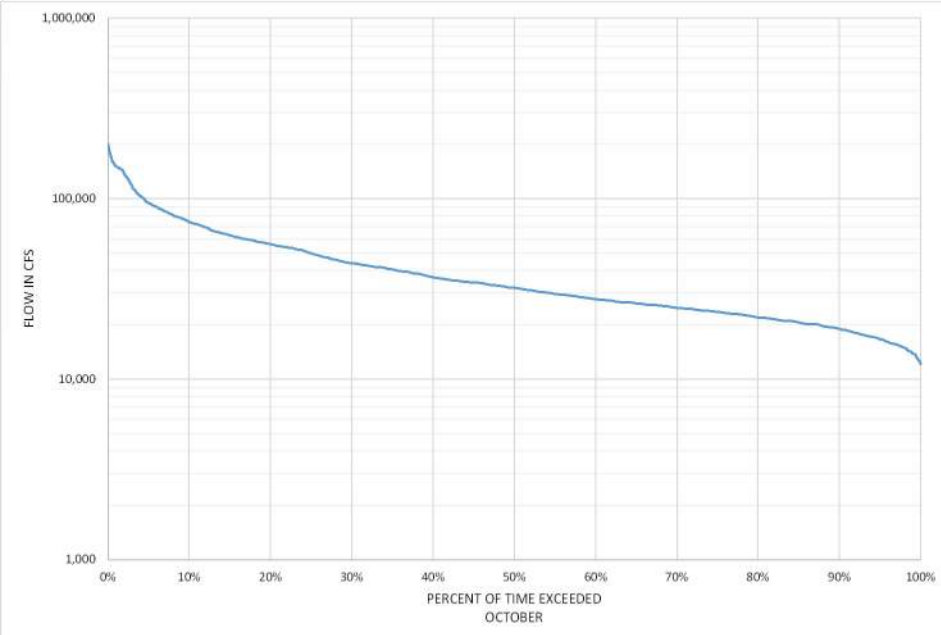
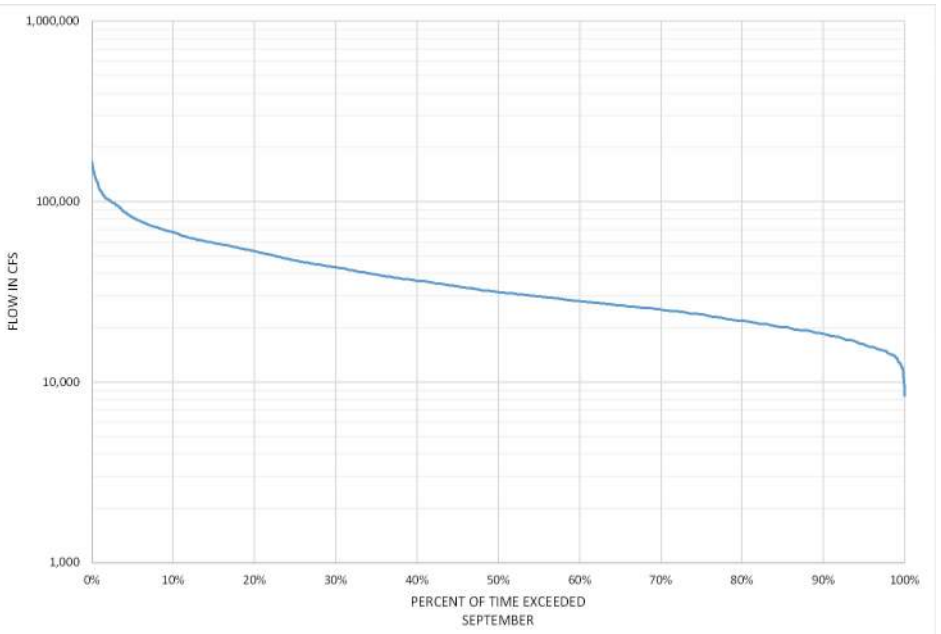
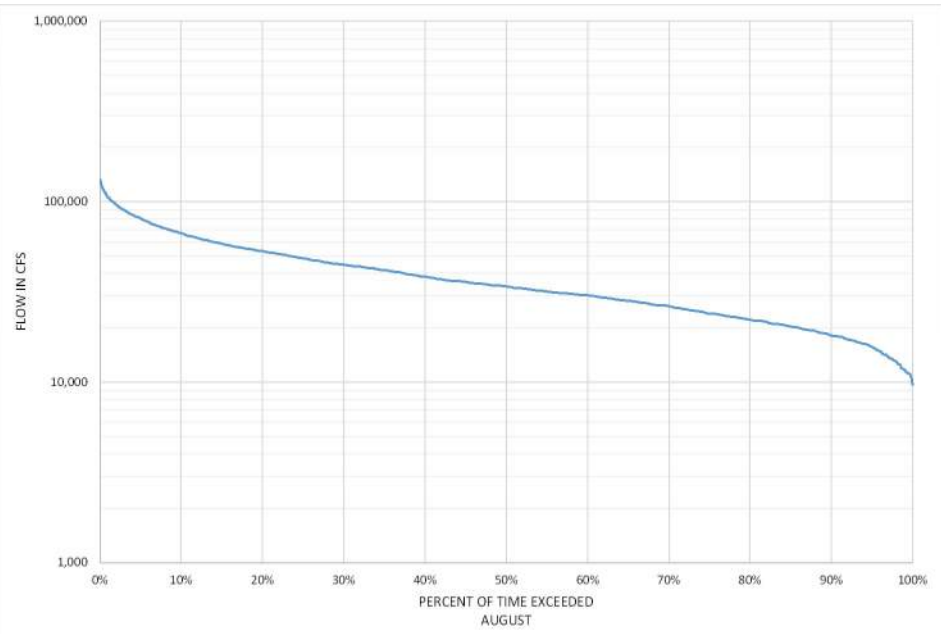
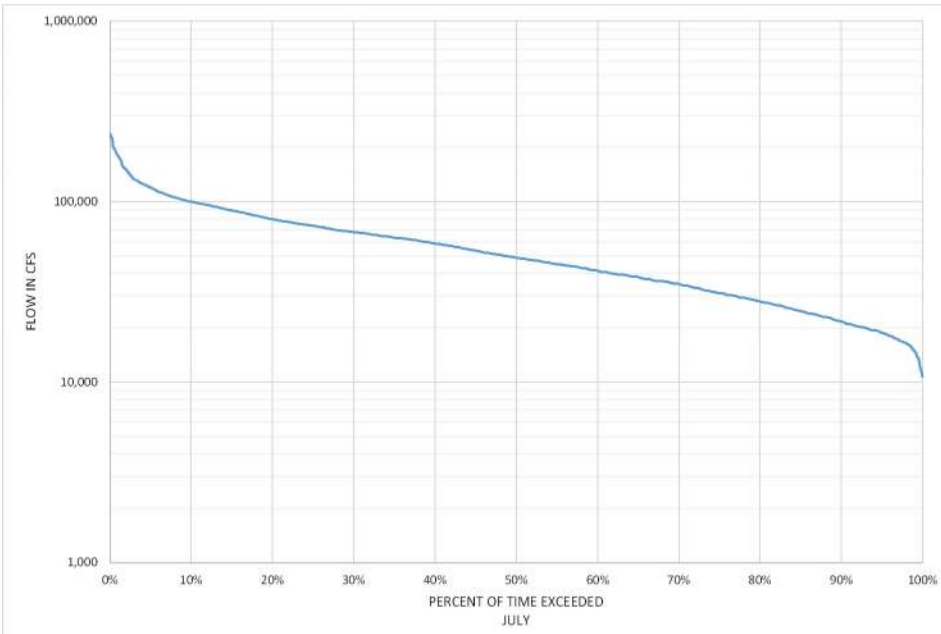


1 PROJECT LOCATION
NO SCALE



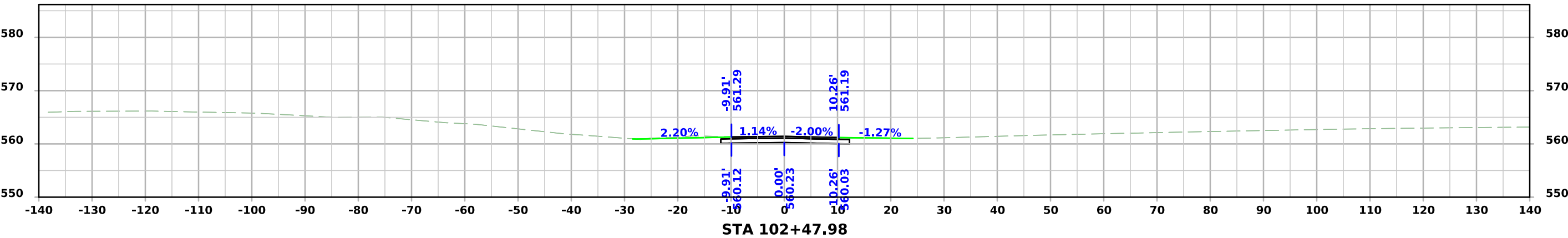
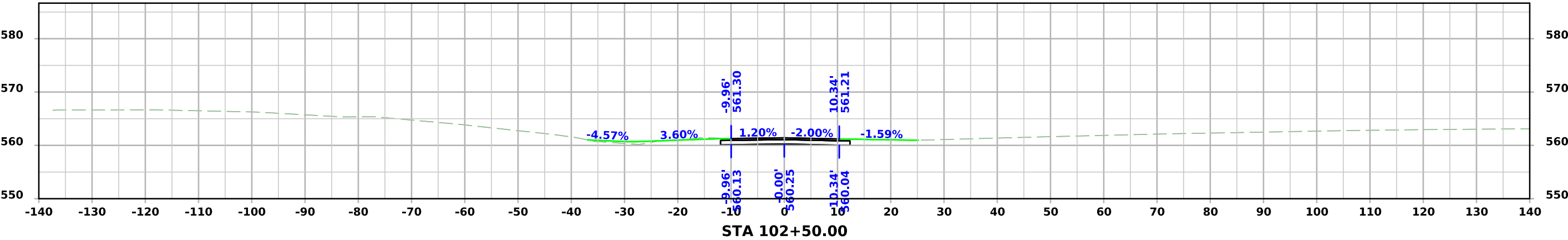
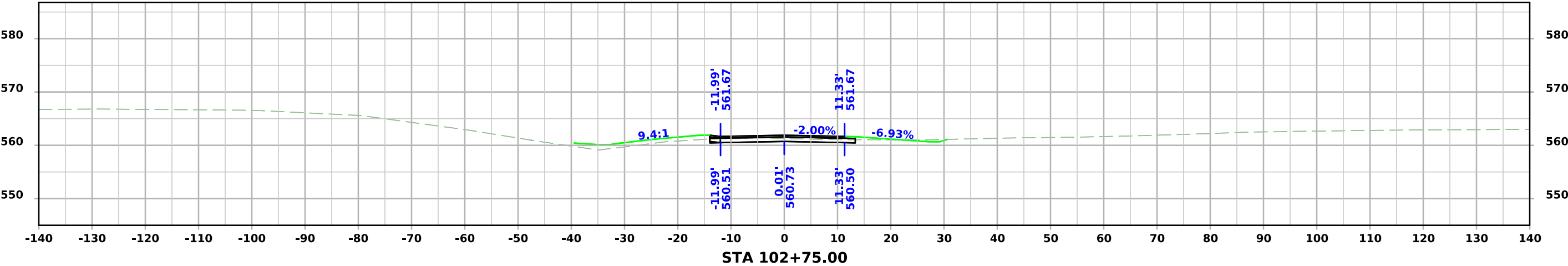


- NOTES:
1. THE FLOW DURATION CURVES ARE BASED ON OBSERVED MEAN DAILY FLOW AS RECORDED BY THE US GEOLOGICAL SURVEY STATION FOR THE MISSISSIPPI RIVER AT CLINTON, IOWA GAGE NUMBER 5420500, WITH APPROXIMATELY 112 YEARS OF RECORD (NOVEMBER 1903 - NOVEMBER 2025). THE DRAINAGE AREA OF THE MISSISSIPPI RIVER IS ABOUT 85,600 SQUARE MILES AT THE GAGE SITE.
 2. THESE FLOW DURATION CURVES ARE BASED ON THE BEST INFORMATION AVAILABLE. THE FLOW DURATION CURVES REPRESENT THE PERIOD SHOWN, AND DO NOT NECESSARILY REPRESENT ALL POSSIBLE FUTURE CONDITIONS.

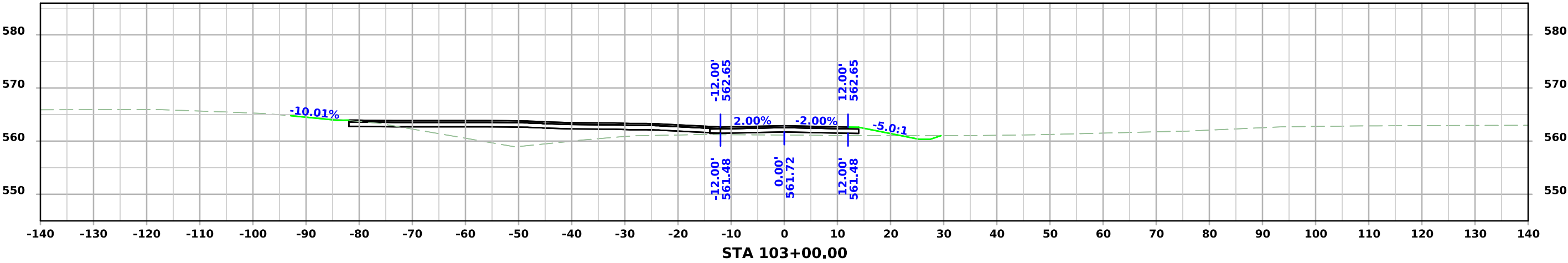
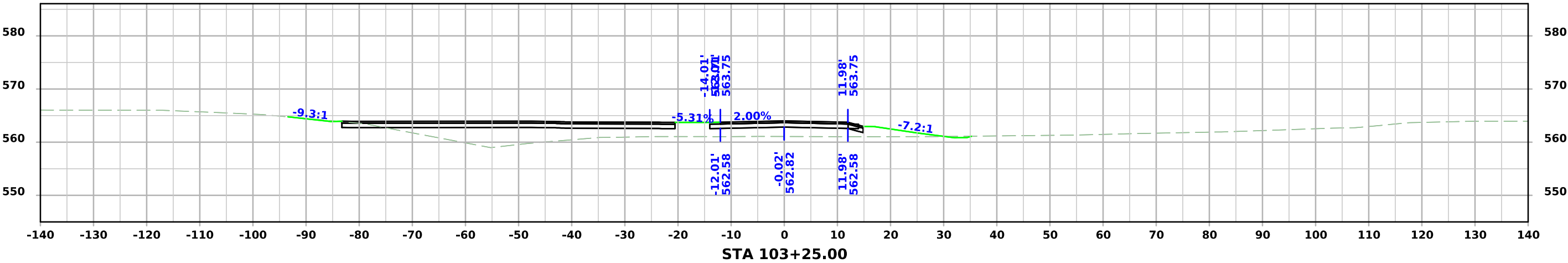
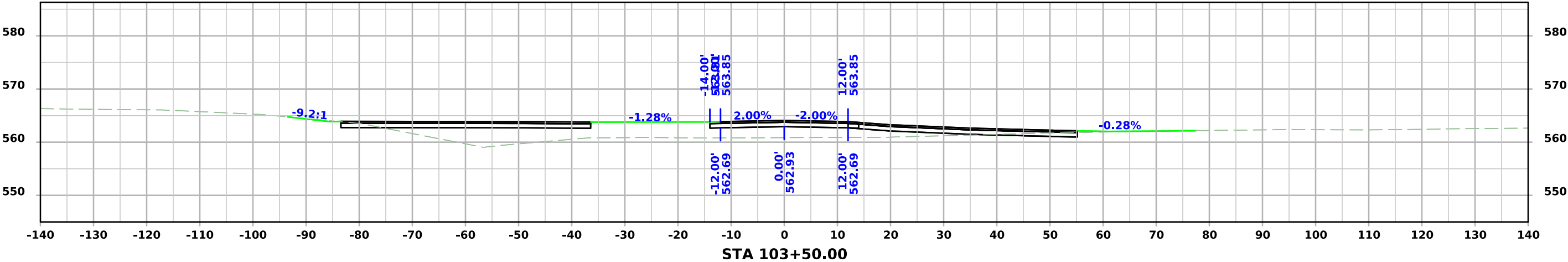


- NOTES:
- 1. THE FLOW DURATION CURVES ARE BASED ON OBSERVED MEAN DAILY FLOW AS RECORDED BY THE US GEOLOGICAL SURVEY STATION FOR THE MISSISSIPPI RIVER AT CLINTON, IOWA GAGE NUMBER 5420500, WITH APPROXIMATELY 112 YEARS OF RECORD (NOVEMBER 1903 - NOVEMBER 2025). THE DRAINAGE AREA OF THE MISSISSIPPI RIVER IS ABOUT 85,600 SQUARE MILES AT THE GAGE SITE.
 - 2. THESE FLOW DURATION CURVES ARE BASED ON THE BEST INFORMATION AVAILABLE. THE FLOW DURATION CURVES REPRESENT THE PERIOD SHOWN, AND DO NOT NECESSARILY REPRESENT ALL POSSIBLE FUTURE CONDITIONS.

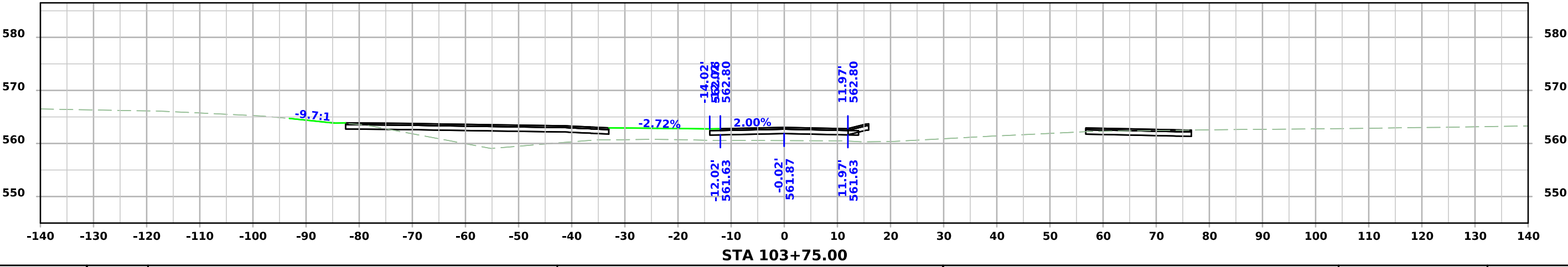
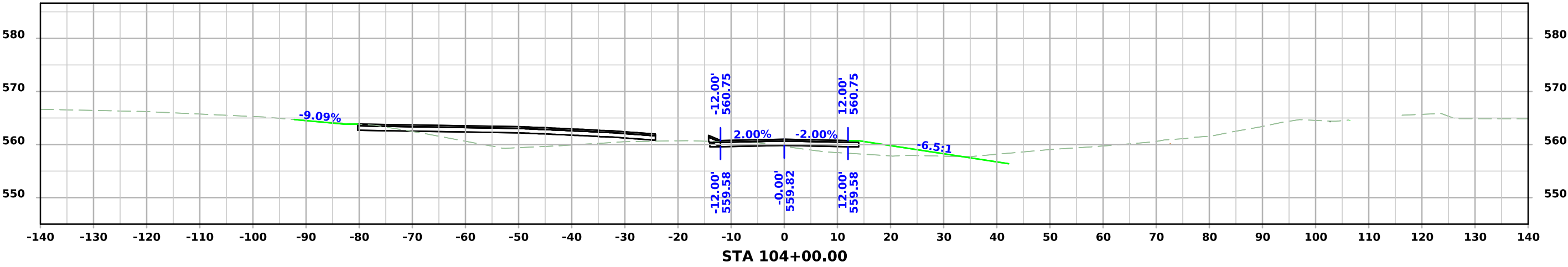
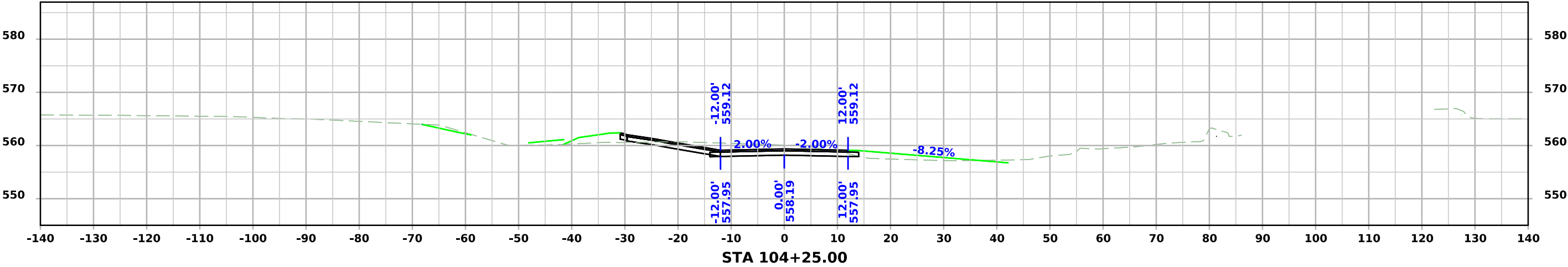
ML - MOUND ST



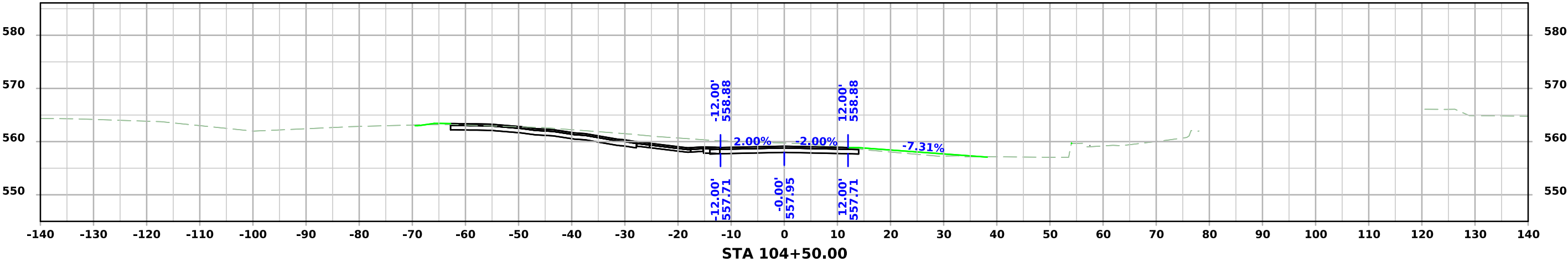
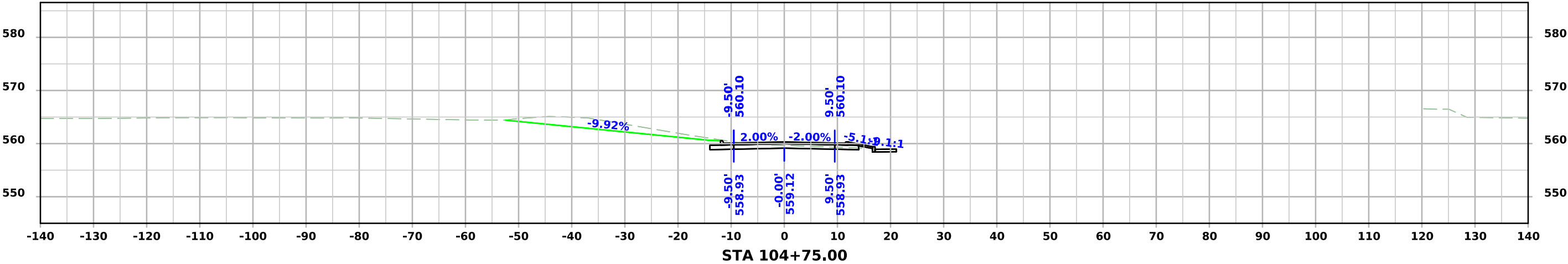
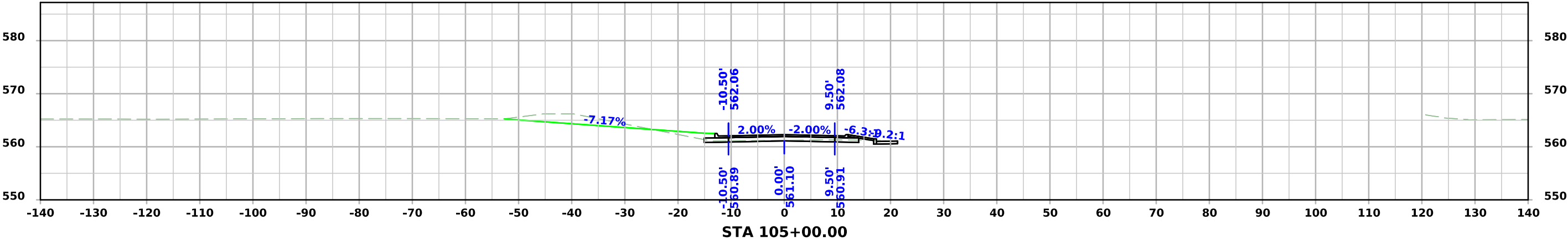
ML - MOUND ST



ML - MOUND ST



ML - MOUND ST



ML - MOUND ST

