

SHEET NUM.								PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
OFFICE CALCS							P.249	P.250	01/IMS	02/IMS	03/IMS					
							LS				LS	202	11003	LS		P.245
							634				634	202	22900	634	SY	
							LS				LS	202	30204	LS		
							27			27		203	20001	27	CY	P.245
							864			864		203	35111	864	CY	P.248
							LS			LS		503	11101	LS		P.245
							LS			LS		503	21300	LS		
							LS			LS		505	11100	LS		
							4,680	8		4,680	8	507	00501	4,680	8 FT	P.248A
							4,960			4,960		507	00550	4,960		
							5,500			5,500		507	00601	5,500	FT	P.248A
							5,880			5,880		507	00650	5,880	FT	
							280	8		280	8	507	92201	280	8 FT	P.245
							840			840		507	92201	840		P.248
							502,155			502,155		509	26000	502,155	LB	
							4,000			4,000		509	40000	4,000	LB	P.248A
							313			313		511	34463	313	CY	P.245
							279			279		511	46513	279	CY	P.248A
							510			510		511	51513	510	CY	P.247
							83			83		511	53012	83	CY	P.247
							98			98		511	53012	98	CY	
							1,079			1,079		511	53014	1,079	CY	P.246
							237			237		511	53014	237	CY	P.246
							155			155		511	53014	155	CY	P.246
							48			48		511	81300	48	EACH	P.247
							3,868			3,868		512	10001	3,868	SY	P.245
							2,827			2,827		512	10050	2,827	SY	
							3,868			3,868		512	10100	3,868	SY	P.245
							61			61		512	33000	61	SY	
							844			844		SPECIAL	51267200	844	SY	P.247
							128,300			128,300		513	10261	128,300	LB	P.246
							1,275,300			1,275,300		513	10281	1,275,300	LB	P.246
							9,784			9,784		513	20000	9,784	EACH	
							15,361			15,361		514	00060	15,361	SF	P.245
							15,361			15,361		514	00066	15,361	SF	P.245
							182			182		516	10010	182	FT	
							11			11		516	10011	11	FT	P.248
							258			258		516	11211	258	FT	P.317
							81			81		516	13000	81	SF	
							64			64		516	13200	64	SF	
							356			356		516	13900	356	SF	
							9			9		516	44101	9	EACH	P.287
							9			9		516	44101	9	EACH	P.287
							4			4		516	44201	4	EACH	P.287
							5			5		516	44201	5	EACH	P.287
							4			4		516	44301	4	EACH	P.287
							5			5		516	44301	5	EACH	P.287
							4			4		516	44301	4	EACH	P.287
							5			5		516	44301	5	EACH	
							29			29		517	76300	29	FT	P.287
							276			276		518	20000	276	SY	
							65			65		518	21201	65	CY	P.246
							767			767		518	39800	767	FT	
							89			89		518	62100	89	FT	P.322
							4			4		523	20000	4	EACH	
							4			4		523	20500	4	EACH	
							602			602		526	30011	602	SY	P.245
								180		180		526	90030	180	FT	
							LS			LS		SPECIAL	53000200	LS		P.245
							2			2		SPECIAL	53000400	2	EACH	P.248A

GENERAL SUMMARY

DESIGN AGENCY

AMERICAN
STRUCTUREPOINT
INC.

DESIGNER

LZS

REVIEWER

KAM 03/03/25

PROJECT ID

122048

SHEET

P.64

TOTAL

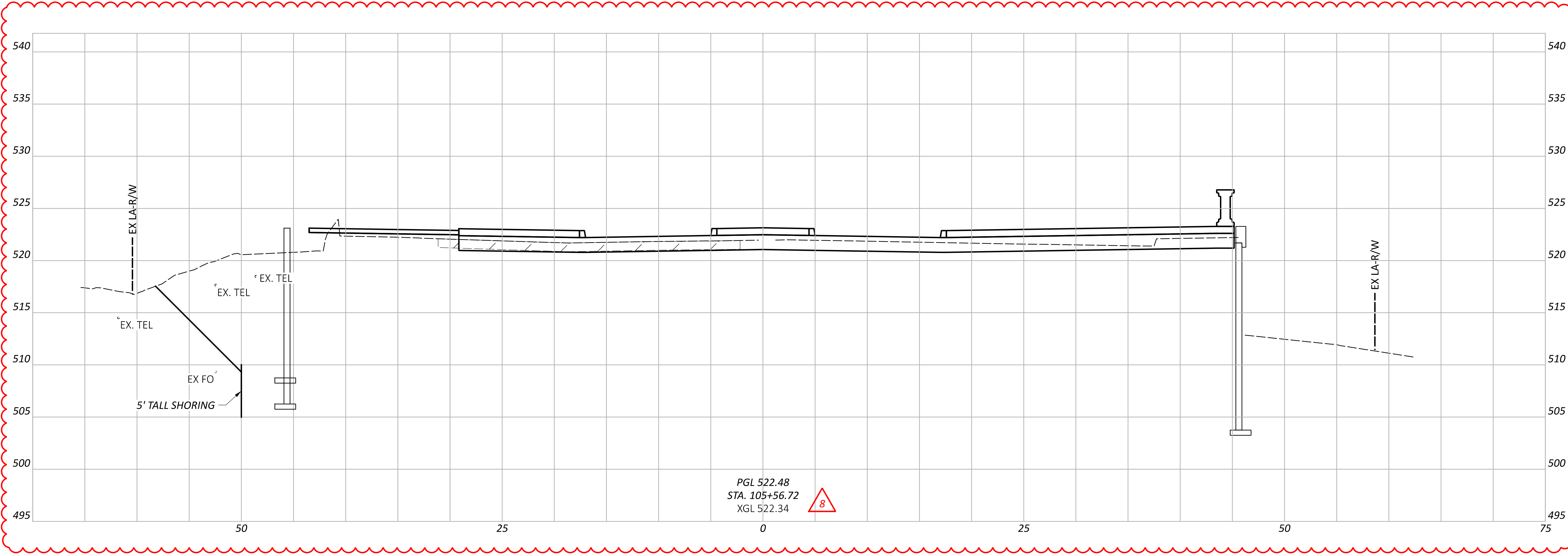
P.421

LEGEND

EXISTING PAVEMENT REMOVED

ITEM 204 - 12" GRANULAR MATERIAL, TYPE C

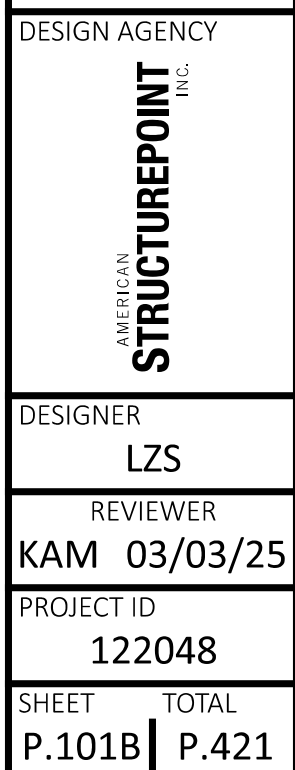
ITEM 206 - 14" CEMENT STABILIZED SUBGRADE



CROSS SECTIONS - LINN ST
STA. 105+56.72

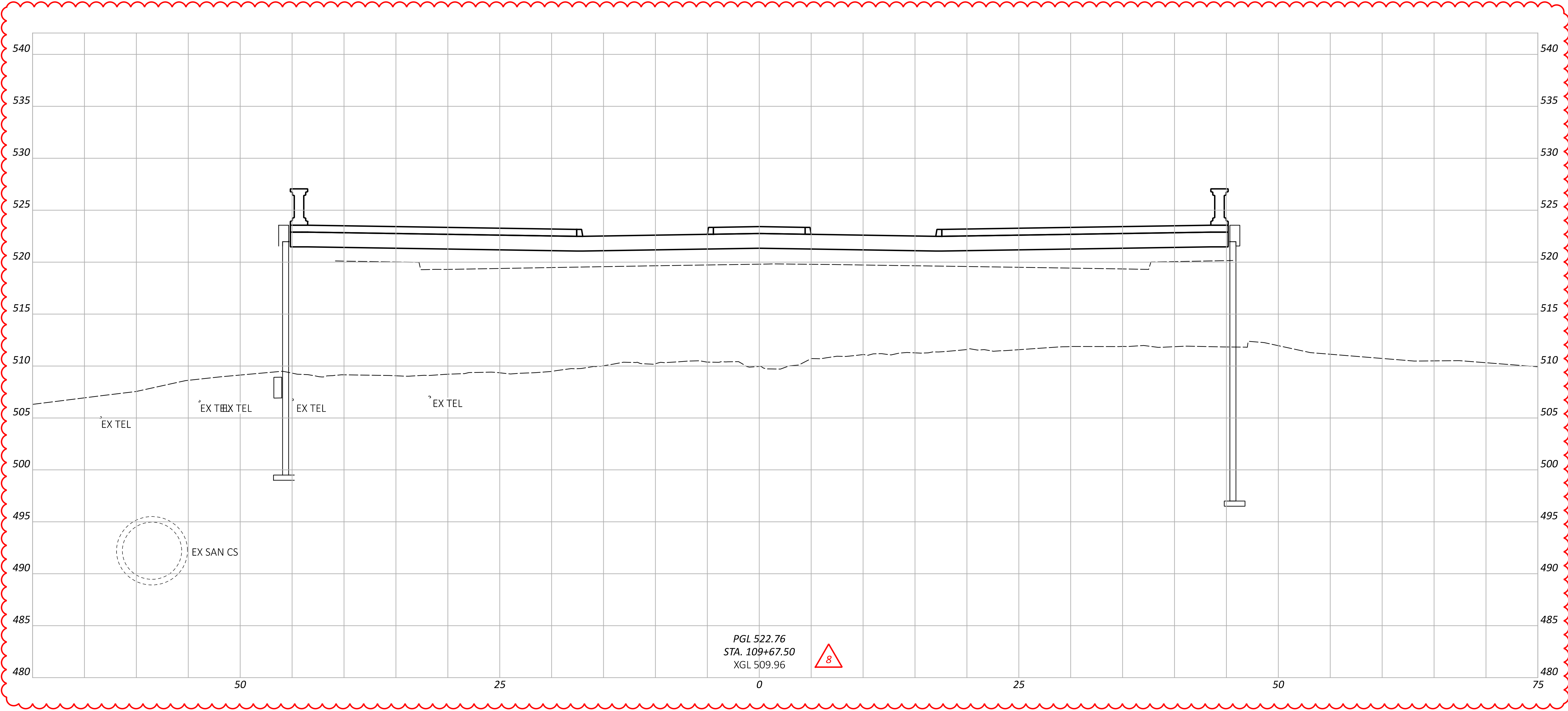
DESIGN AGENCY	
AMERICAN STRUCTUREPOINT INC.	
DESIGNER	LZS
REVIEWER	KAM 03/03/25
PROJECT ID	122048
SHEET	TOTAL
P.101A	P.421

ITEM 206 - 14" CEMENT STABILIZED SUBGRADE



CROSS SECTIONS - LINN ST
STA. 105+66.72

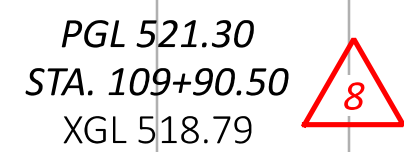
- LEGEND**
- EXISTING PAVEMENT REMOVED
 - ITEM 204 - 12" GRANULAR MATERIAL, TYPE C
 - ITEM 206 - 14" CEMENT STABILIZED SUBGRADE



CROSS SECTIONS - LINN ST
STA. 109+67.50

DESIGN AGENCY	
STRUCTUREPOINT	
DESIGNER	
LZS	
REVIEWER	
KAM 03/03/25	
PROJECT ID	
122048	
SHEET	TOTAL
P.102A	P.421

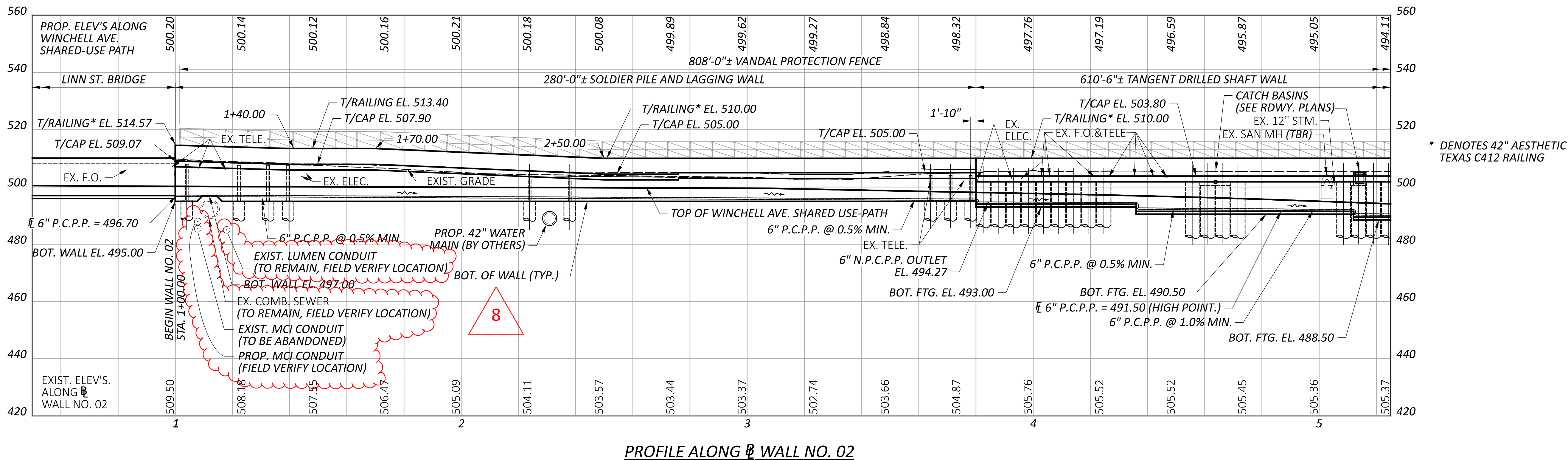
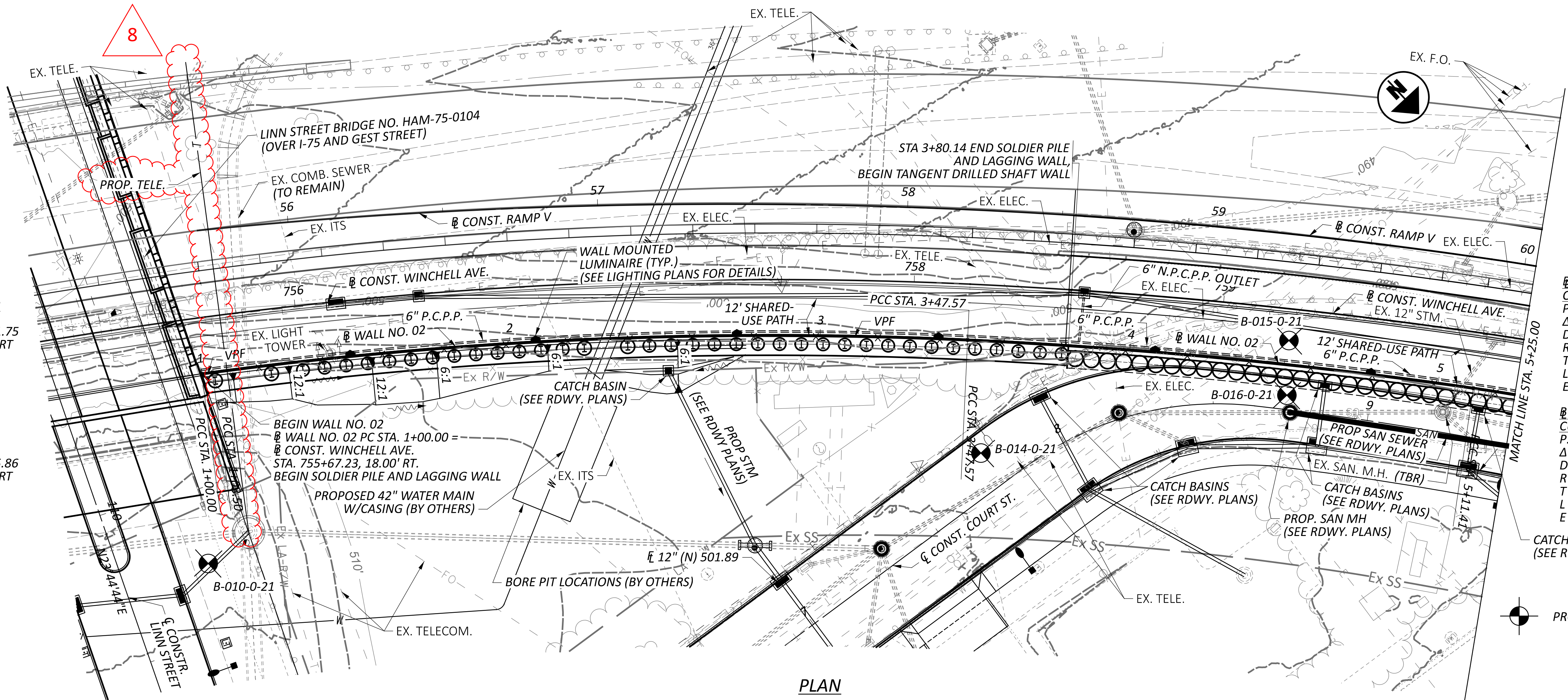
ITEM 206 - 14" CEMENT STABILIZED SUBGRADE



DESIGN AGENCY	
AMERICAN STRUCTUREPOINT INC.	
DESIGNER	
LZS	
REVIEWER	
KAM 03/03/25	
PROJECT ID	
122048	
SHEET	TOTAL
P.102B	P.421

WALL NO. 02
CURVE DATA
P.I. = STA. 1+01.75
 $\Delta = 00^{\circ}07'23''$ RT
Dc = $03^{\circ}30'49''$
R = 1,630.62'
T = 1.75'
L = 3.5'
E = 0'

WALL NO. 02
CURVE DATA
P.I. = STA. 2+25.86
 $\Delta = 10^{\circ}13'47''$ RT
Dc = $04^{\circ}11'29''$
R = 1,367.00'
T = 122.36'
L = 244.07'
E = 5.47'



STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

VPF-1-24 REVISED 7/19/24

REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION:

800 REVISED 7/18/25
894 REVISED 4/16/21

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN ASSUMPTIONS

SOIL UNIT WEIGHT, $\gamma = 120$ pcf
ANGLE OF INTERNAL FRICTION, $\phi = 30^\circ$

DESIGN DATA

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI
(CONCRETE FACING, COPING, WALL CAP AND MOMENT SLAB, CIP WALL AND FOOTING)

CONCRETE CLASS QC SCC - WITH 1" MAX. AGGREGATE SIZE - COMPRESSIVE STRENGTH 4.5 KSI (TEXAS C412 RAILING)

CONCRETE CLASS QC5, WITH 1" MAX. AGGREGATE SIZE - COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFTS)

GALVANIZED STEEL REINFORCEMENT - MIN. YIELD STRENGTH - 60 KSI

GALVANIZED STEEL SOLDIER PILES – ASTM A572 - YIELD STRENGTH 50 KSI

FOUNDATION BEARING RESISTANCE

THE SPREAD FOOTINGS OF THE CAST-IN-PLACE SECTION OF WALL 02, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF (3.7) KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF (5.1) KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS (12.5) KIPS PER SQUARE FOOT.

LATERALLY LOADED DRILLED SHAFTS, 60" TANGENT DRILLED SHAFT WALL - SHAFTS 38-137 AND 142-153

THE MAXIMUM FACTORED LATERAL LOAD AND BENDING MOMENT TO BE SUPPORTED BY EACH DRILLED SHAFT ARE 116 KIPS, AND 989 KIP- FEET, RESPECTIVELY. THESE LOADS PRODUCE A MAXIMUM FACTORED BENDING MOMENT OF 1,573 KIP- FEET, AND A MAXIMUM FACTORED SHEAR OF 120 KIPS, WITHIN THE DRILLED SHAFT.

ITEM 503 - UNCLASSIFIED EXCAVATION, AS PER PLAN

THIS ITEM INCLUDES ANY WALL EXCAVATION OUTSIDE THE EXCAVATION REQUIRED FOR THE ROADWAY FROM THE PROPOSED ROADWAY SURFACE TO THE BOTTOM OF THE WALL FACING.

ITEM SPECIAL - STRUCTURE: PRECONSTRUCTION CONDITION SURVEY

BEFORE PILE DRIVING BEGINS, CONDUCT A CONDITION SURVEY OF ALL EXISTING BUILDINGS, STRUCTURES, SEWERS AND UTILITIES WITHIN 200-FT OF THE PILE DRIVING WORK. THE PURPOSE OF THE SURVEY IS TO DOCUMENT THE CONDITION OF THE BUILDINGS, STRUCTURES, OR UTILITIES PRIOR TO PILE DRIVING, SO THAT CLAIMS OF DAMAGE CAUSED BY THE PILE DRIVING CAN BE VERIFIED.

RETAIN AN EXPERIENCED VIBRATION SPECIALIST TO PERFORM OR SUPERVISE THE CONDITION SURVEY. USE A VIBRATION SPECIALIST THAT MEETS THE QUALIFICATION REQUIREMENTS FOR VIBRATION MONITORING.

RECORD THE CONDITION OF EXISTING STRUCTURES, SEWERS AND BUILDING MATERIALS, USING WRITTEN TEXT, PHOTOGRAPHS, AND VIDEO RECORDINGS. INSPECT INTERIOR WALLS, CEILINGS, AND FLOORS THAT ARE ACCESSIBLE. INSPECT THE EXTERIOR OF THE BUILDING THAT IS VISIBLE FROM GROUND LEVEL. ALSO RECORD THE LOCATION, SIZE, AND TYPE OF ALL CRACKS AND OTHER STRUCTURAL DEFICIENCIES.

IF OWNERS, OR OCCUPANTS, FAIL TO ALLOW ACCESS TO THE PROPERTY FOR THE PRECONSTRUCTION CONDITION SURVEY, SEND A CERTIFIED LETTER TO THE OWNER OR OCCUPANT. DOCUMENT THE NOTIFICATION EFFORT AND THE CERTIFIED LETTER IN THE REPORT.

SUBMIT THREE COPIES OF THE REPORT TO THE ENGINEER THAT SUMMARIZES THE PRECONSTRUCTION CONDITION OF THE BUILDINGS, STRUCTURES, AND UTILITIES, AND THAT IDENTIFIES AREAS OF CONCERN.

THE DEPARTMENT WILL PAY FOR THIS ITEM AT THE CONTRACT LUMP SUM PRICE FOR ITEM SPECIAL - STRUCTURE: PRECONSTRUCTION CONDITION SURVEY.

THE CONTRACTOR IS REQUIRED TO FIELD LOCATE SEVERAL COMBINED AND STORM SEWERS IN THE PLANS (NOISEWALL 5, NOISEWALL 6, WALL 2, LINN STREET STRUCTURE, ETC.) AS WELL AS THE MCI AND LUMEN TELECOMMUNICATION LINE AT WALL 2. THESE ITEMS SHALL BE LOCATED WITHIN 30 DAYS OF THE SIGNED CONTRACT SO THAT THEIR LOCATION CAN BE TAKEN INTO ACCOUNT FOR THE UPCOMING WORK. FAILURE TO FIELD LOCATE THESE ITEMS WITHIN 30 DAYS OF A SIGNED CONTRACT SHALL BE CONSIDERED A NON-EXCUSABLE DELAY (C&MS 108.06.E).

ITEM SPECIAL - RETAINING WALL: TIMBER LAGGING

THIS WORK CONSISTS OF FURNISHING AND PLACING TIMBER LAGGING BETWEEN THE SOLDIER PILES BELOW THE EXISTING GROUND SURFACE. FURNISH TIMBER LAGGING CONSISTING OF CONSTRUCTION GRADE, UNTREATED HARDWOOD WITH A MAXIMUM THICKNESS OF 6". TO PERMIT DRAINAGE, PROVIDE 1/4 TO 1/2-INCH SPACES BETWEEN LAGGING BOARDS USING 3/8-INCH SPACER BLOCKS OR OTHER MEANS ACCEPTABLE TO THE ENGINEER.



ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES, W27X258
ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES, W27X178

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50 IN ACCORDANCE WITH C&MS 711.01. GALVANIZE SOLDIER PILES AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH C&MS 711.02. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES.

THE DEPARTMENT WILL MEASURE SOLDIER PILES ALONG THE AXIS OF THE SOLDIER PILE FROM THE TOP OF WALL ELEVATION TO THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR SOLDIER PILES AT THE CONTRACT UNIT PRICE PER FOOT FOR ITEM 507, STEEL PILES, MISC.: SOLDIER PILES, W27X258 AND ITEM 507, STEEL PILES, MISC.: SOLDIER PILES, W27X178.

THE CONTRACTOR IS REQUIRED TO CONTACT THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI TO ACCURATELY LOCATE THE EXISTING 66" SANITARY SEWER LINE PRIOR TO INSTALLATION OF SHAFTS AT LOCATIONS 1 AND 2.

THE CONTRACTOR IS REQUIRED TO CONTACT GREATER CINCINNATI WATER WORKS TO ACCURATELY LOCATE THE PROPOSED 42" WATER MAIN PRIOR TO INSTALLATION OF SHAFTS AT LOCATION 16 AND 17.

SHAFTS AT LOCATIONS 1, 2, 16, AND 17 SHALL BE CASED TO AVOID LOSS OF FILL AROUND UTILITY LINES AND THE CASING SHALL BE LEFT IN PLACE.

COSTS ASSOCIATED WITH THE ADDITIONAL REQUIREMENTS STATED IN THIS NOTE (LOCATING SEWER AND FURNISHING AND PLACING CASING) SHALL BE INCLUDED IN THE APPLICABLE ITEM 507 - STEEL PILES, MISC. PAY ITEM.

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION)

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO S1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.

GRAFFITI PROTECTION SHALL BE APPLIED TO ALL SURFACES SEALED WITH EPOXY URETHANE SEALANT. GRAFFITI PROTECTION SHALL HAVE A CLEAR FINISH.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

SEAL SURFACES OF THE CAST-IN-PLACE CONCRETE WALL FACING, PILASTERS, RAILING AND COPING AS SHOWN IN THE PLANS WITH AN EPOXY URETHANE SEALER ACCORDING TO C&MS 512. COLOR SHALL BE LIGHT NEUTRAL (FEDERAL STD. #17778).

ITEM 513 - WELDED STUD SHEAR CONNECTORS, AS PER PLAN

WELD HEADED STEEL STUDS TO THE FLANGES OF THE SOLDIER PILE TO CONNECT THE CAST-IN-PLACE CONCRETE WALL FACING TO THE SOLDIER PILE. ATTACH HEADED STUDS ACCORDING TO C&MS 513.22 AND AS SHOWN IN THE PLANS. THE CONTRACTOR MAY ATTACH THE STUDS EITHER BEFORE PLACING THE SOLDIER PILE IN THE DRILLED HOLE OR AFTER EXCAVATING IN FRONT OF THE WALL. PROTECT THE HEADED STUDS FROM DAMAGE UNTIL THE CONCRETE WALL FACING IS POURED. REPAIR OR REPLACE DAMAGED HEADED STUDS AT NO EXPENSE TO THE DEPARTMENT.

ITEM 517 - RAILING MISC.: TEXAS C412 RAILING

THIS WORK CONSISTS OF FURNISHING AND PLACING TEXAS C412 RAIL CONCRETE RAILING AS SPECIFIED IN THE PLANS.

ARCHITECTURAL FORMLINER IS NOT PERMITTED TO CREATE THE SHAPE OF THE RAILING.

USE CONCRETE CLASS QC SCC CONCRETE.

PAYMENT FOR THIS ITEM WILL BE ON A LINEAR FOOT BASIS. THE APPROXIMATE AVERAGE RAILING AREA PER FOOT OF TEXAS RAILING IS 8.7 SQ FT.

ITEM 524 - DRILLED SHAFTS, 42" DIAMETER ABOVE BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SOLDIER PILE WALLS. THE DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CAGES. THE SOLDIER PILES EXTEND ABOVE THE TOP OF THE DRILLED SHAFT. FURNISH AND INSTALL THE DRILLED SHAFTS ACCORDING TO C&MS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE DRILLED SHAFT WITHIN 3 INCHES OF THE PLAN LOCATION. PLACE THE SOLDIER PILE WITHIN THE HOLE SO IT IS VERTICAL. PLACE THE SOLDIER PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF THE ROW OF DRILLED SHAFTS. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT. VERTICAL ALIGNMENT TOLERANCE SHALL BE $\pm \frac{1}{8}$ " PER FOOT OF DEPTH.


CHECK THE POSITION, THE VERTICAL ALIGNMENT AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES.

FILL THE HOLE ABOVE THE CONCRETE TO THE EXISTING GROUND SURFACE WITH ITEM 613 LOW STRENGTH MORTAR BACKFILL (LSM). LSM BACKFILL SHALL BE INCIDENTAL TO THIS ITEM.

REMOVE CONCRETE AND LSM AS NECESSARY FROM AROUND THE SOLDIER PILE IN ORDER TO PLACE THE LAGGING. WAIT AT LEAST 12 HOURS AFTER PLACING CONCRETE BEFORE PLACING LAGGING.

THE DEPARTMENT WILL MEASURE DRILLED SHAFTS ABOVE BEDROCK, AS PER PLAN, ALONG THE AXIS OF THE DRILLED SHAFT FROM THE GREATER OF THE EXISTING GROUND SURFACE TO THE BOTTOM OF THE DRILLED SHAFT OR THE BOTTOM OF CAP TO THE BOTTOM OF THE DRILLED SHAFT.

PAYMENT IS FULL COMPENSATION FOR CONSTRUCTING THE DRILLED SHAFTS, INCLUDING FURNISHING AND PLACING CONCRETE AND LSM, AND REMOVAL OF CONCRETE OR LSM FROM AROUND THE SOLDIER PILES IN ORDER TO PLACE LAGGING.

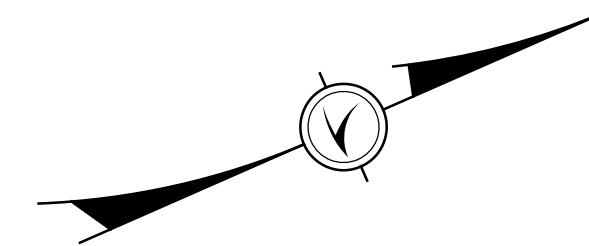
DESIGN AGENCY	
 8350 E. KEMPER ROAD SUITE B CINCINNATI, OH 45249 (513) 469-1600	
DESIGNER	
RJB	
REVIEWER	
BJF 04/10/25	
PROJECT ID	
122048	
SUBSET	TOTAL
4	29
SHEET	TOTAL
P.167	P.421



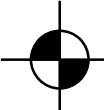


BM #7 STA.	108+79.41,	ELEV.	497.88,	OFFSET	97.13 LT.,	MAG SPIKE
BM #8 STA.	109+44.55,	ELEV.	497.88,	OFFSET	84.83 LT.,	MAG SPIKE
BM #9 STA.	108+69.27,	ELEV.	523.01,	OFFSET	40.43 RT.,	MAG SPIKE
BM #10 STA.	109+11.91	ELEV.	503.00,	OFFSET	100.69 RT.,	MAG SPIKE
BM #11 STA.	110+19.15,	ELEV.	517.61,	OFFSET	43.59 RT.,	MAG SPIKE

FOR ADDITIONAL BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEET 3/421



LEGEND


- 16'-6" REQUIRED MIN. VERTICAL CLEARANCE
16'-10" ACTUAL MIN. VERTICAL CLEARANCE
 - 16'-6" REQUIRED MIN. VERTICAL CLEARANCE
18'-4³/₄" ACTUAL MIN. VERTICAL CLEARANCE
 - 16'-6" REQUIRED MIN. VERTICAL CLEARANCE
17'-6³/₈" ACTUAL MIN. VERTICAL CLEARANCE
 - ▲ 11'-4" (LT. END) REQUIRED MIN. HORIZONTAL CLEARANCE
9'-5" (RT. END) REQUIRED MIN. HORIZONTAL CLEARANCE
11'-6" (LT. END) ACTUAL MIN. HORIZONTAL CLEARANCE
11'-5" (RT. END) ACTUAL MIN. HORIZONTAL CLEARANCE
 - ▲▲ 11'-8" REQUIRED MIN. HORIZONTAL CLEARANCE
11'-9¹/₂" ACTUAL MIN. HORIZONTAL CLEARANCE
 - ▲▲▲ 13'-0" REQUIRED MIN. HORIZONTAL CLEARANCE
18'-0" ACTUAL MIN. HORIZONTAL CLEARANCE
-  PROJECT BORING LOCATION
- * = PLANTERS, 5'-0" SIDEWALK, 5'-0" BIKE LANE,
AND BUFFERS (SEE TRANSVERSE SECTION FOR DETAILS)
 - ◆ = HALFTONED LINEWORK REPRESENTS FUTURE PROJECT
 - 16'-6" REQUIRED MIN. VERTICAL CLEARANCE
18'-9³/₈" INTERIM MINIMUM VERTICAL CLEARANCE
(PROPOSED OVER EXISTING)
 - ◻ = BENCHMARK LOCATION
 - ◻ = CONTACT GCWW PRIOR TO PERFORMING ANY WORK
IN THE AREA OF THE PROPOSED WATER MAIN

NOTES:

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. ALL EXISTING UTILITIES AND STORM SEWERS SHALL REMAIN UNLESS NOTED OTHERWISE.



NOTE: ROCK WAS NOT ENCOUNTERED IN ANY OF THE BORINGS

 10-6-25

SITE PLAN - 2
BRIDGE NO. HAM-75-0104
LINN STREET OVER IR-75 AND GEST STREET

HORIZONTAL
SCALE IN FEET

A horizontal scale bar with alternating black and white segments. The segments are labeled 0, 10, 20, and 40. The bar is oriented vertically in the image.

SFN	3109098
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DESIGN AGENCY

B&N
burgessniple.com

DESIGNER	CHECKER
BES	MAB

REVIEWER
JCS 12/15/24

PROJECT ID	122048
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SUBSET	TOTAL
2	88

SHEET	TOTAL
P.244	P.421

GENERAL NOTES:

REFER TO THE FOLLOWING STANDARD BRIDGE AND ROADWAY DRAWINGS:

AS-1-15 REVISED 1-20-23 RM-2.1 REVISED 7-19-13
AS-2-15 REVISED 7-21-23 26999 DATED 01-03 (CITY OF CINCINNATI)
EXJ-4-87 REVISED 1-19-24
GSD-1-19 REVISED 7-19-24

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATIONS:

800 DATED 07-18-25
840 DATED 07-19-24
851 DATED 07-19-24

DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE 9TH EDITION OF THE “LRFD BRIDGE DESIGN SPECIFICATIONS” ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2020 AND THE ODOT BRIDGE DESIGN MANUAL, 2020 EDITION WITH REVISIONS THROUGH JULY 2024, EXCEPT AS NOTED ELSEWHERE IN THE PLANS.

SPECIAL DESIGN SPECIFICATIONS:

THIS BRIDGE REQUIRED THE USE OF A THREE-DIMENSIONAL MODEL USING THE FINITE ELEMENT DESIGN METHOD TO ANALYZE THE STRUCTURE. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS MDX VERSION 2023.11.21. THIS PROGRAM WAS USED FOR THE DESIGN OF THE STEEL GIRDERS AND CROSSFRAMES AND TO CALCULATE REACTIONS FOR THE DESIGN OF THE BEARINGS AND SUBSTRUCTURES.

DEAD LOAD DISTRIBUTIONS: THE WEIGHT OF THE STEEL SUPERSTRUCTURE AND CONCRETE DECK WAS APPLIED TO EACH ELEMENT IN THE MODEL BASED ON LOCAL SECTION PROPERTIES. THE WEIGHT OF THE FUTURE WEARING SURFACE, SIDEWALK, RAISED MEDIAN, LIGHT POLES AND PLANTER POTS WAS APPLIED TO EACH GIRDER BASED ON TRIBUTARY AREA. PARAPET, SCREEN WALL, PILASTERS AND PLANTER WEIGHT WAS APPLIED TO THE EXTERIOR GIRDERS.

UNIT LOADS USED IN THE ANALYSIS ARE LISTED BELOW:

FUTURE WEARING SURFACE 60 LB/SF
PARAPET/PILASTERS + PLANTERS + SCREEN WALL + SIDEWALK + LIGHT POLES + RAISED MEDIAN:
GIRDER/BEAM LINES 1 & 9 (UNIT 1) - 4.268 KIPS/FT
GIRDER/BEAM LINES 1 & 9 (UNIT 2) - 3.640 KIPS/FT
GIRDER/BEAM LINES 2 & 8 (UNITS 1 & 2) - 1.448 KIPS/FT
GIRDER/BEAM LINES 3 & 7 (UNITS 1 & 2) - 0.880 KIPS/FT
GIRDER/BEAM LINE 5 (UNITS 1 & 2) - 0.750 KIPS/FT

LIVE LOAD DISTRIBUTION: THE DESIGN AND LOAD RATING ANALYSES WERE CARRIED OUT BY APPLYING TRUCK AND LANE LOADS DIRECTLY TO THE FINITE ELEMENT MODELS, RATHER THAN BY USING CALCULATED DISTRIBUTION FACTORS.

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.0 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

DESIGN LOADING:

HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF
SATURATED SOIL UNIT WEIGHT OF 0.115 KCF
PLANTER WALL CONCRETE UNIT WEIGHT OF 0.150 KCF
SIDEWALK LIVE LOAD OF 0.075 KSF

DESIGN DATA:

CONCRETE CLASS QC3 COMPRESSIVE STRENGTH 4.5 KSI (DECK AND APPROACH SLABS)
CONCRETE CLASS QC2 COMPRESSIVE STRENGTH 4.5 KSI (SIDEWALKS, RAISED MEDIAN, AND PLANTER WALLS)
CONCRETE CLASS QC SCC COMPRESSIVE STRENGTH 4.5 KSI (PARAPETS)
CONCRETE CLASS QC3 COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE EXCLUDING FOOTINGS)
CONCRETE CLASS QC1 COMPRESSIVE STRENGTH 4.0 KSI (FOOTINGS)
GALVANIZED STEEL REINFORCEMENT MINIMUM YIELD STRENGTH 60 KSI
STRUCTURAL STEEL ASTM A709 GRADE 50W YIELD STRENGTH 50 KSI
STEEL CIP PILES ASTM A252 GRADE 3 YIELD STRENGTH 45 KSI
STEEL SHEET PILING ASTM A572 GRADE 50 YIELD STRENGTH 50 KSI

DECK PROTECTION METHODOD:

GALVANIZED REINFORCING STEEL
2½” CONCRETE COVER
CLASS QC3 CONCRETE

MONOLITHIC WEARING SURFACE:

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1 INCH THICK.

EXISTING STRUCTURE PLANS:

THE EXISTING STRUCTURE PLANS ARE AVAILABLE ONLINE THROUGH THE FOLLOWING WEBSITE:ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/D08-113361/Reference%20Files/

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH ALL PERTINENT EXISTING DRAWINGS AND DETAILS RELEVANT TO THIS PROJECT.

ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:

IN ADDITION TO THE REQUIREMENTS OF CMS 202, THIS ITEM INCLUDES THE FOLLOWING WORK:

1. REMOVE THE EXISTING RAMP BRIDGE SUPERSTRUCTURES AND PIERS FROM GEST STREET TO LINN STREET. FOR EXISTING RAMP R (EAST OF LINN ST.), REMOVE EXISTING PIERS 1-3 DOWN TO THE BOTTOM OF FOOTING. FOR EXISTING RAMP S (WEST OF LINN ST.), REMOVE EXISTING PIER 1 DOWN TO THE BOTTOM OF FOOTING AND REMOVE EXISTING PIERS 2 & 3 DOWN TO THE TOP OF FOOTING. DO NOT REMOVE THE EXISTING ABUTMENTS, RETAINING WALLS AND EMBANKMENTS SUPPORTING THE GEST ST. RAMPS.

2. REMOVE EXISTING PIERS 1, 2, 3, 4, AND 6 DOWN TO THE BOTTOM OF FOOTING. REMOVE EXISTING PIER 5 DOWN TO TOP OF FOOTING. REMOVAL OF PORTIONS OF EXISTING PAVEMENT AND BARRIERS AS NEEDED TO REMOVE EXISTING PIERS IS INCIDENTAL TO THIS ITEM OF WORK.

3. CUT OFF EXISTING PILES AT EXISTING PIER 1 AND EXISTING FORWARD ABUTMENT AS NOTED ON THE FOUNDATION PLANS.

MOT AND PHASE CONSTRUCTION:

THE EXISTING LINN ST. BRIDGE WILL BE CLOSED WITH A DETOUR OF TRAFFIC . REMOVE THE EXISTING SUPERSTRUCTURE AND THE EXISTING SUBSTRUCTURE DURING MOT PHASE 1. CONSTRUCT THE PROPOSED STRUCTURE DURING MOT PHASES 1 AND 2. SHORT TERM CLOSURES OF I-75 AND WINCHELL AVE. WILL BE REQUIRED FOR DEMOLITION AND ERECTION OF THE NEW SUPERSTRUCTURE.

SEE MAINTANENCE OF TRAFFIC PLANS FOR ADDITIONAL DETAILS AND NOTES.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 251 KIPS PER PILE FOR THE REAR ABUTMENT PILES AND 316 KIPS PER PILE FOR THE FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 383 KIPS PER PILE FOR THE PIER 1 PILES AND 377 KIPS PER PILE FOR THE PIER 2 PILES.

REAR ABUTMENT PILES:

12" DIA. CIP PILES 80 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

FORWARD ABUTMENT PILES:

12" DIA. CIP PILES 95 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 1 PILES:

14" DIA. CIP PILES 65 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PIER 2 PILES:

14" DIA. CIP PILES 85 FEET LONG, ORDER LENGTH
1 DYNAMIC LOAD TESTING ITEM

PROVIDE PLAIN CYLINDRICAL CASINGS WITH A MINIMUM PILE WALL THICKNESS OF 0.25 INCH AT ABUTMENTS AND AT PIERS FOR THE CAST-IN-PLACE REINFORCED CONCRETE PILES.

PILE DRIVING:

USE A PILE DRIVING HAMMER WITH A MINIMUM RATED ENERGY OF 42,000 FOOT-POUNDS TO INSTALL THE PILES. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 40,500 POUNDS PER SQUARE INCH.

PLEASE SEE THE PROPOSAL FOR DUKE ENERGY DISTRIBUTION AND CHARTER COMMUNICATIONS. THE CONTRACTOR IS REMINDED OF C&MS 102.05, AND OTHER CONTRACT REQUIREMENTS, AS THE LOCATION OF THE NOTED ELECTRIC LINES AND COMMUNICATION LINES IN RELATION TO THE PROPOSED WORK MAY NECESSITATE ALTERNATE MEANS AND METHODS OF CONSTRUCTION. ONE POTENTIAL EXAMPLE IS LOW OVERHEAD DRIVING CONDITIONS, ALONG WITH SPLICING, FOR THE NEW PROPOSED PILING NEAR THIS LOCATION.

PILE DRIVING CONSTRAINTS:

PRIOR TO DRIVING ABUTMENT PILES TO THE ULTIMATE BEARING VALUE (UBV), CONSTRUCT THE MSE WALL AND THE BRIDGE APPROACH EMBANKMENT BEHIND THE ABUTMENT UP TO THE BOTTOM OF THE FOOTING FOR A MINIMUM DISTANCE OF 200-FT BEHIND EACH ABUTMENT. THE CONTRACTOR SHALL PRE-DRIVE ABUTMENT PILES BEFORE CONSTRUCTING MSE WALLS. PRE-DRIVING CONSISTS OF INSTALLING THE ABUTMENT PILES INTO THE SOIL ONLY AS FAR AS NECESSARY SO THAT THE PILE WILL REMAIN VERTICAL DURING MSE WALL CONSTRUCTION. INSTALL PILE SLEEVES AROUND PILES BEFORE CONSTRUCTING THE MSE WALL. PROVIDE AT LEAST THREE FEET OF PILE ABOVE THE TOP OF THE PILE SLEEVE TO MEET THE REQUIREMENTS OF C&MS 507.09 REGARDING SPLICES. DO NOT DRIVE ABUTMENT PILES TO THE UBV UNTIL AFTER THE ABOVE REQUIRED MSE WALL AND EMBANKMENT HAVE BEEN CONSTRUCTED AND A 60 CALENDAR DAY WAITING PERIOD HAS ELAPSED (REAR ABUTMENT ONLY).

NO WAITING PERIOD IS REQUIRED AT THE FORWARD ABUTMENT. THE ENGINEER MAY ADJUST THE LENGTH OF THE WAITING PERIOD BASED ON SETTLEMENT PLATFORM READINGS. AFTER THE SPECIFIED WAITING PERIOD HAS ELAPSED, DRIVE ABUTMENT PILES TO THE UBV. IN ORDER TO REMOVE ANY NEGATIVE SKIN FRICTION THAT HAS DEVELOPED DURING THE WAITING PERIOD, DRIVE EACH ABUTMENT PILE A DISTANCE OF AT LEAST 0.5 INCH.

ITEM 507 - PREBORED HOLES, AS PER PLAN:

USE PREBORED HOLES, 20' DEEP, AT SPECIFIED LOCATIONS AT PIER 2 AS SHOWN ON THE FOUNDATION PLAN, TO VERIFY THAT EXISTING BATTERED PILES WILL NOT INTERFERE WITH PROPOSED PILES. NOTIFY THE ENGINEER IF PROPOSED PILES CANNOT BE DRIVEN AT THE PLAN LOCATIONS, SO THAT ALTERNATE LOCATIONS CAN BE APPROVED PRIOR TO DRIVING PILES.

PRIOR TO DRIVING PILES, BACKFILL THE PREBORED HOLES WITH DRY SAND.

PROPRIETARY RETAINING WALL DATA:

THE PROPRIETARY WALL SUPPLIER SHALL DESIGN THE INTERNAL STABILITY OF A MECHANICALLY STABILIZED EARTH (MSE) WALL IN ACCORDANCE WITH SS840 TO SUPPORT THE ABUTMENT. THE DESIGN FOR INTERNAL STABILITY SHALL INCLUDE A NOMINAL (I.E. UNFACTORED) HORIZONTAL STRIP LOAD DUE TO FRICTION (FR) FROM THE SUPERSTRUCTURE OF 1.15 K/FT AT THE REAR ABUTMENT AND 2.76 K/FT AT THE FORWARD ABUTMENT APPLIED PERPENDICULAR TO THE FACE OF WALL AT THE BASE OF THE CONCRETE FOOTING. THIS STRIP LOAD DOES NOT INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL. HOWEVER, THE PROPRIETARY WALL SUPPLIER SHALL INCLUDE EARTH PRESSURE LOADS FROM THE ABUTMENT BACKFILL IN THE DESIGN CALCULATIONS.

FOUNDATION BEARING RESISTANCE:

THE REAR ABUTMENT REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 3.7 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 5.2 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 5.9 KIPS PER SQUARE FOOT.

THE FORWARD ABUTMENT REINFORCED SOIL MASS, AS DESIGNED, PRODUCES A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 4.6 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 6.7 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 14.6 KIPS PER SQUARE FOOT.

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE):

TINT SO THE FINAL COLOR IS FEDERAL COLOR STANDARD NO. 17778, LIGHT NEUTRAL.

ITEM 512 - SEALING OF CONCRETE SURFACES, AS PER PLAN, (PERMANENT GRAFFITI PROTECTION):

APPLY A PERMANENT GRAFFITI COATING QUALIFIED ACCORDING TO S1083 THAT IS COMPATIBLE WITH THE CONCRETE SEALER OVER WHICH IT IS APPLIED. THE GRAFFITI COATING SHALL BE CLEAR. APPLY THE GRAFFITI COATING IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. APPLY THE GRAFFITI COATING TO ALL EXPOSED CONCRETE SURFACES OF THE MSE WALLS, ABUTMENTS, PIERS, PARAPETS, AND PLANTER WALLS.

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT:
ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT:

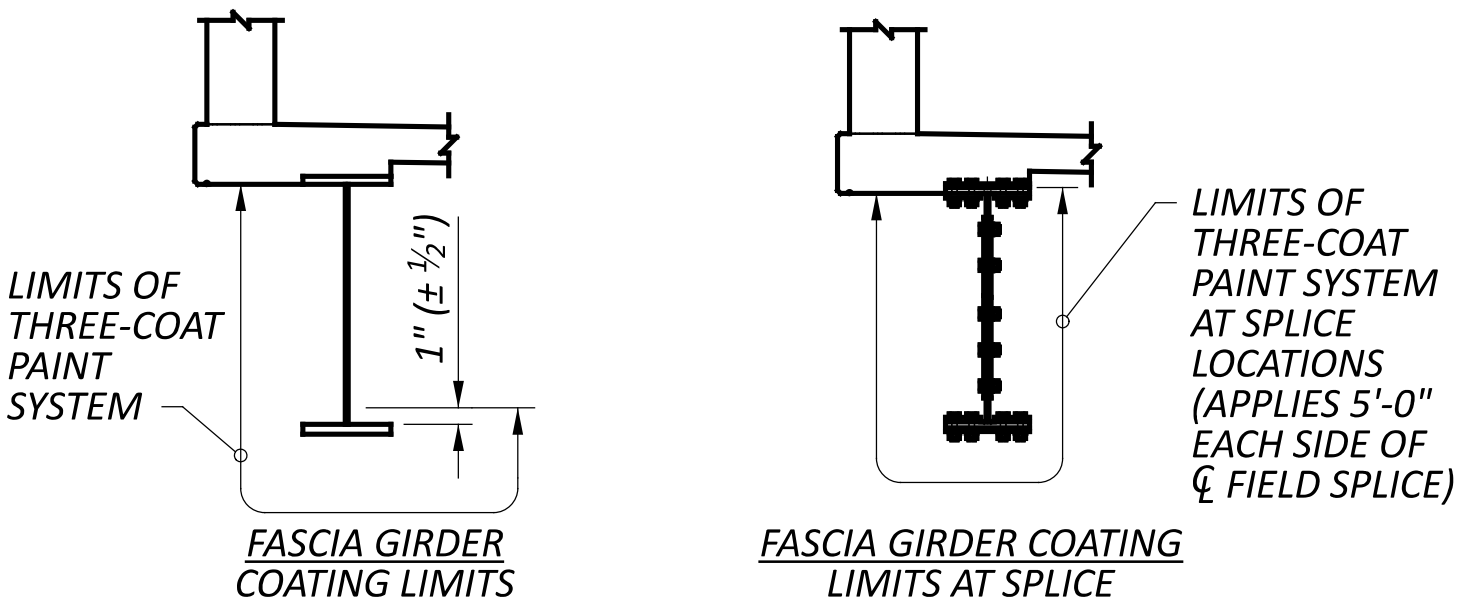
APPLY INTERMEDIATE AND FINISH COATS IN THE FIELD PER CMS 514 TO THE SURFACES NOTED IN THE FOLLOWING DIAGRAMS (APPLIES TO BOTH FASCIA GIRDERS AND INCLUDES STIFFENERS AND SPlice PLATES/BOLTS ON THE OUTBOARD (FASCIA) SIDE AND BOTTOM OF FASCIA GIRDERS).

ADDITIONALLY, PAINT THE LAST 10 FT OF EACH GIRDER END ADJACENT TO THE ABUTMENTS AND PIER 1 INCLUDING ALL CROSS-FRAMES AND OTHER STEEL WITHIN THESE LIMITS.

THE PRIME COAT SHALL BE 708.01. FOR THE ENDS OF INTERIOR GIRDERS, THE TOP COAT COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595B - 20045 OR 20059 (THE COLOR OF WEATHERING STEEL). FOR THE FASCIA GIRDERS, THE TOP COAT COLOR SHALL CLOSELY APPROACH FEDERAL STANDARD NO. 595B - 34058 (DARK GREEN).

USE TYPE I BOLTS FOR PAINTED WEATHERING STEEL LOCATIONS WITH COATING SYSTEMS THAT ARE ZINC BASED, SUCH AS OZEU, IZEU, GALVANIZING OR METALLIZING.

USE GRADE A325, TYPE III BOLTS FOR UN-COATED WEATHERING STEEL BOLT LOCATIONS. IF THE FAYING SURFACES UNDER BOTH THE HEAD AND NUT OF A WEATHERING STEEL MEMBER ARE COATED, SPECIFY GALVANIZED GRADE A325 TYPE I BOLTS. OTHERWISE, SPECIFY GRADE A325, TYPE III BOLTS.



ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17”), AS PER PLAN:

THE REQUIREMENTS OF 511.03 AND 511.04 SHALL APPLY TO THIS ITEM OF WORK. THIS ITEM SHALL INCLUDE BUT IS NOT LIMITED TO THE CONCRETE AND STEEL REINFORCEMENT NECESSARY TO FORM AND PLACE THE APPROACH SLABS AS SHOWN IN THE PLANS. PAYMENT FOR THIS ITEM SHALL ALSO INCLUDE THE ITEMS LISTED ON STANDARD DRAWING AS-1-15 AND ALL OTHER NECESSARY MATERIALS, LABOR, AND EQUIPMENT AND SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17”), AS PER PLAN.

THE REQUIREMENTS IN THE GENERAL NOTES FOR ITEM 511 - CLASS QC3 CONCRETE, MISC.: BRIDGE DECK, WITH QC/QA SHALL APPLY TO THIS ITEM OF WORK.

DECK PLACEMENT DESIGN ASSUMPTIONS:

THE FOLLOWING ASSUMPTIONS OF CONSTRUCTION MEANS AND METHODS WERE MADE FOR THE ANALYSIS AND DESIGN OF THE SUPERSTRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF THE FALSEWORK SUPPORT SYSTEM WITHIN THESE PARAMATERS AND WILL ASSUME RESPONSIBILITY FOR SUPERSTRUCTURE ANALYSIS FOR DEVIATION FROM THESE DESIGN ASSUMPTIONS.

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.86 KIPS.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103 INCHES.

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65 INCHES.

FOR UNIT 1 DECK ONLY, ALL SCREED RAILS SHALL BE SUPPORTED ON THE GIRDERS. HAND WELDING OF RAIL SUPPORTS TO COMPRESSION REGIONS OF THE TOP FLANGE IS PERMITTED. ALTERNATE MEANS OF ATTACHMENT OF RAIL SUPPORTS TO TENSION REGIONS OF TOP FLANGES WILL BE REQUIRED. METHODS WHICH USE AUTOMATIC END-WELDED STUDS TO ATTACH RAIL SUPPORT BASE PLATES TO THE TENSION REGIONS ARE PERMITTED. ANY SUPPORT HARDWARE WHICH WILL REMAIN IN THE CONCRETE SHALL BE GALVANIZED. FOR TOP FLANGE STRESS CONDITIONS, SEE SHEET 35/88.

ITEM 511 - CLASS QC SCC CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN:

SEE SHEETS 58/88 TO 65/88 FOR PARAPET DETAILS, INCLUDING JOINT TREATMENTS. THIS ITEM INCLUDES PARAPETS ON BRIDGE AND APPROACH SLABS.

ITEM SPECIAL - STRUCTURES: TEMPORARY SUPPORTS FOR GIRDERS:

PROVIDE TEMPORARY SUPPORTS FOR THE UNIT 2 GIRDER ERECTION AS SHOWN ON SHEET 32/88.

ITEM 840 - AESTHETIC SURFACE TREATMENT:

USE CONCRETE FORM LINERS TO CREATE AESTHETIC SURFACE TREATMENT ON THE MSE WALL FACING PANELS. THE FORM LINER SHALL BE PATTERN 1107, MISSION FLUTE FROM SPEC FORMLINERS, INC., OR APPROVED EQUAL. THE FORM LINER RELIEF DEPTH SHALL BE 1.5 INCHES. FABRICATE AND INSTALL THE MSE WALL PANELS SUCH THAT THE VERTICAL FINS AND VALLEYS IN THE FRACTURE FIN AESTHETIC TREATMENT ALIGN VERTICALLY ACROSS ADJACENT PANELS FROM THE TOP OF THE WALL TO THE BOTTOM OF THE WALL. USE THE SAME FRACTURED FIN PATTERN ON ALL WALLS ON THE PROJECT.

FORM LINERS SHALL BE CAPABLE OF WITHSTANDING ANTICIPATED CONCRETE POUR PRESSURES WITHOUT LEAKAGE OR CAUSING PHYSICAL DEFECTS. FORM LINERS SHALL BE REMOVABLE WITHOUT CAUSING CONCRETE SURFACE DAMAGE. USE A FORM RELEASE PRODUCT AS RECOMMENDED BY THE FORM LINER MANUFACTURER. USE MANUFACTURER'S APPLICATION RATES AND ALL OTHER MANUFACTURER'S INSTRUCTIONS. FORM RELEASE PRODUCTS SHALL BE FULLY COMPATIBLE WITH THE FORM LINER MATERIAL AND THE EPOXY-URETHANE SEALER TO BE APPLIED TO THE FINISHED SURFACES.

ALIGN THE FORM LINER PATTERNS ACROSS ALL JOINTS BETWEEN MSE WALL PANELS.

FORM LINERS SHALL EXTEND A MINIMUM OF 1'-0" BELOW THE PROPOSED GROUND OR SIDEWALK SURFACE AT THE FRONT FACE OF THE WALL. FORM LINERS MAY EXTEND LOWER BUT THE PAY LIMITS SHALL BE 1'-0" BELOW THE PROPOSED GROUND OR SIDEWALK SURFACE.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR ITEM 840 - AESTHETIC SURFACE TREATMENT, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM AS SPECIFIED ABOVE AND IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 203 - EMBANKMENT AS PER PLAN:

PLACE AND COMPACT EMBANKMENT IN 6-INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 104+50 TO 111+00.

10-6-25

SFN	3109098
DESIGN AGENCY	B&N burgessniple.com
DESIGNER	CHECKER
MAB	BES
REVIEWER	JCS 12/15/24
PROJECT ID	122048
SUBSET	TOTAL
3	88
SHEET	TOTAL
P.245	P.421

FURNISH NON-PERFORATED PVC PIPES PER CMS 707.41.

SHEET	TOTAL
P.248	P.421

ESTIMATED QUANTITIES						CALC.	DATE	CHK'D	DATE
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	XAC/BES PIERS	4/9/2025 SUPER.	JDG/MAB GENERAL	4/9/2025 SHT. REF.
202	11003		LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	3/88
202	22900	634	SY	APPROACH SLAB REMOVED				634	
202	30204		LS	STEPS REMOVED				LS	
203	20001	27	CY	EMBANKMENT, AS PER PLAN	27				3/88
203	35111	864	CY	GRANULAR MATERIAL, TYPE B, AS PER PLAN	864				6/88
503	11101		LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS	4/88
503	21300	<div>8</div>	LS	UNCLASSIFIED EXCAVATION		LS			
505	11100		LS	PILE DRIVING EQUIPMENT MOBILIZATION				LS	
507	00501	4680	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN	<div>8</div> 4680				6A/88
507	00550	4960	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	<div>8</div> 4960				
507	00601	5500	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN		5500			6A/88
507	00650	5880	FT	14" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED		5880			
507	92201	280	FT	PREBORED HOLES, AS PER PLAN		280			3/88
507	92201	<div>8</div> 840	FT	PREBORED HOLES, AS PER PLAN	<div>8</div> 840				6/88
509	26001	502155	LB	GALVANIZED STEEL REINFORCEMENT, AS PER PLAN	<div>8</div> 27993	77520	396642		70/88
509	40000	4000	LB	CONCRETE REINFORCEMENT, MISC.: ADDITIONAL GALVANIZED STEEL REINFORCEMENT FOR FOOTINGS	2000	2000			6A/88
511	34463	313	CY	CLASS QC SCC CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN			313		3/88
511	46513	307	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING, AS PER PLAN	146	161			6A/88
511	51513	510	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK, AS PER PLAN			510		5/88
511	53012	83	CY	CLASS QC2 CONCRETE, MISC.: RAISED MEDIAN, WITH QC/QA			83		5/88
511	53012	98	CY	CLASS QC2 CONCRETE, MISC.: PLANTER WALLS, WITH QC/QA			98		
511	53014	1079	CY	CLASS QC3 CONCRETE, MISC.: BRIDGE DECK, WITH QC/QA			1079		4/88
511	53014	237	CY	CLASS QC3 CONCRETE, MISC.: PIER ABOVE FOOTINGS, WITH QC/QA		237			4/88
511	53014	155	CY	CLASS QC3 CONCRETE, MISC.: ABUTMENT NOT INCLUDING FOOTING, WITH QC/QA	155				4/88
511	81300	48	EACH	CONCRETE, MISC.: PRECAST CONCRETE PLINTHS			48		5/88
512	10001	3868	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN	740	1316	1812		3/88
512	10050	2827	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			2827		
512	10100	3868	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	740	1316	1812		3/88
512	33000	61	SY	TYPE 2 WATERPROOFING	61				
SPECIAL	51267200	844	SY	WATERPROOFING FOR PLANTERS AREAS			844		5/88
513	10261	128300	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, AS PER PLAN			128300		4/88
513	10281	1275300	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4, AS PER PLAN			1275300		4/88
513	20000	9784	EACH	WELDED STUD SHEAR CONNECTORS			9784		
514	00060	15361	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			15361		3/88
514	00066	15361	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			15361		3/88
516	10010	182	FT	ARMORLESS PREFORMED JOINT SEAL			182		
516	10011	11	FT	ARMORLESS PREFORMED JOINT SEAL, AS PER PLAN			11		6/88
516	11211	258	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			258		75-79/88
516	13000	81	SF	1/4" PREFORMED EXPANSION JOINT FILLER			81		
516	13200	64	SF	1/2" PREFORMED EXPANSION JOINT FILLER			64		
516	13900	356	SF	2" PREFORMED EXPANSION JOINT FILLER			356		
516	44101	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (13"x12"x2.358" EXP. BEARING)			9		45/88
516	44101	9	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (13"x12"x2.358" FIXED BEARING)			9		45/88
516	44201	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (23"x18"x3.448" FIXED BEARING)			4		45/88
516	44201	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (20"x15"x3.448" FIXED BEARING)			5		45/88
516	44301	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (18"x14"x4.068" EXP. BEARING)			4		45/88
516	44301	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (16"x13"x4.068" EXP. BEARING)			5		45/88
516	44301	4	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (19"x16"x4.068" EXP. BEARING)			4		45/88
516	44301	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (17"x13"x4.068" EXP. BEARING)			5		45/88
517	76300	29	FT	RAILING, MISC.: SIDEWALK RAILING AT REAR ABUTMENT MSE WALLS				29	6/88
518	20000	276	SY	PREFABRICATED GEOCOMPOSITE DRAIN			276		
518	21201	65	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC, AS PER PLAN			65		4/88
518	39800	767	FT	4" PERFORATED CORRUGATED PLASTIC PIPE			767		
518	62100	89	FT	STRUCTURE DRAINAGE, MISC.: NEOPRENE TROUGH AND DRAINAGE OUTLETS			89		80/88
523	20000	4	EACH	DYNAMIC LOAD TESTING	2	2			
523	20500	4	EACH	RESTRIKE	2	2			
526	30011	602	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN				602	3/88