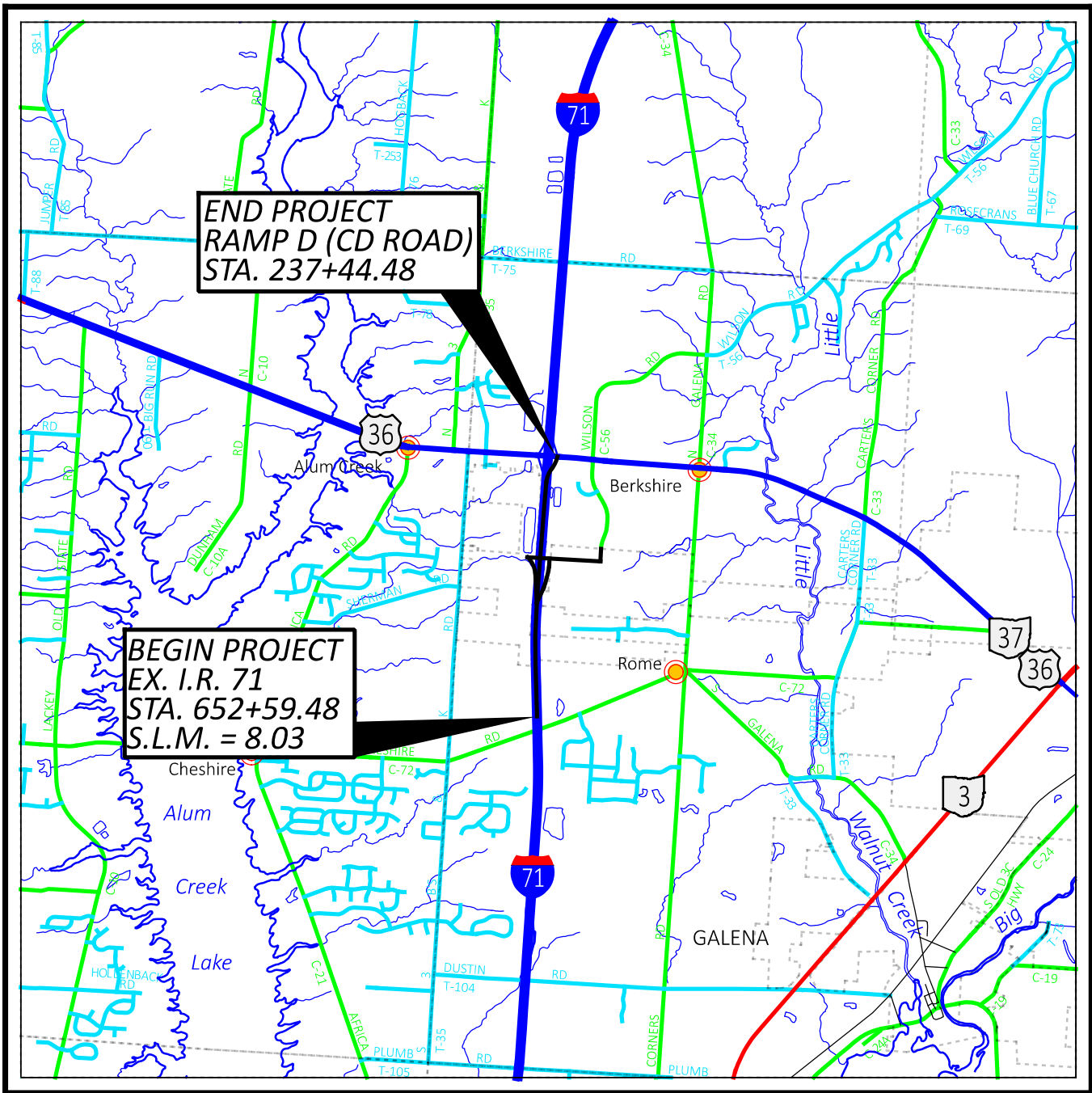
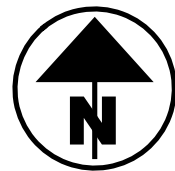




LOCATION MAP

LATITUDE: 40 °15'21" LONGITUDE: 82 °55'41"



PORTION TO BE IMPROVED	-----
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

FOR DESIGN DESIGNATIONS, SEE SHEET 2

ADA DESIGN WAIVERS: NONE REQUIRED

UNDERGROUND UTILITIES

Contact Two Working Days
Before You Dig


Before You Dig

OHIO811. 8-1-1, or 1-800-362-2764
(Non members must be called directly)



PLAN PREPARED BY:
ms consultants, inc.
ENGINEERS, ARCHITECTS & PLANNERS
2321 SCHROCK ROAD
COLUMBUS, OHIO 43229
PHONE (614) 898-7100

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

DEL-71-8.91 (PHASE A)

PART 1

BERKSHIRE TOWNSHIP

DELAWARE COUNTY

FOR PART 2, SEE DEL-71-8.91 (PHASE A)

INDEX OF SHEETS:

TITLE SHEET	P.1	RAMP A EXCEL LANE CROSS SECTIONS	P.316-P.328
DESIGN DESIGNATION INFORMATION	P.2	RAMP A CROSS SECTIONS	P.329-P.337
SCHEMATIC PLAN & CURVE DATA	P.3-P.4	RAMP B CROSS SECTIONS	P.338-P.346
TYPICAL SECTIONS	P.5-P.19	RAMP D CROSS SECTIONS	P.347-P.353
GENERAL NOTES	P.20-P.23	RAMP H CROSS SECTIONS	P.354-P.358
MAINTENANCE OF TRAFFIC	P.24-P.100	I-71 MEDIAN BARRIER CROSS SECTIONS	P.359-P.362
GENERAL SUMMARIES	P.101-P.107, P.107A	SUPERELEVATION TABLES	P.363-P.367
SUBSUMMARIES	P.108-P.117 (P. 114 & 118 NOT USED)	JOINT DETAILS	P.368-P.377
SITE PLAN	P.119-P.120	GRADING DETAILS	P.378-P.387
CD ROAD PLAN/PROFILES	P.121-P.152	GORE DETAILS	P.388-P.409
SUNBURY PARKWAY PLANS	P.153-P.164	INTERSECTION DETAILS	P.410-P.416
SUNBURY PARKWAY PROFILES	P.165-P.170	STORM PROFILES	P.417-P.430
WILSON ROAD PLAN/PROFILES	P.171-P.176	CULVERT DETAILS	P.431-P.437 (P.438 UNUSED)
RAMP A PLANS	P.177-P.188	BMP NOTES & DETAILS	P.439-P.460 (P. 461-464 NOT USED) 4
RAMP A PROFILES	P.189-P.191	TRAFFIC SIGNING & PAVEMENT MARKING	P.465-P.520
RAMP B PLAN/PROFILES	P.192-P.201 (P.193 NOT USED)	TRAFFIC SIGNALS	P.521-P.522 (P.523-NOT USED) 4
RAMP D PLAN/PROFILES	P.202-P.205	TRAFFIC SURVEILLANCE	P.524-P.535, P.523A, P.523B
RAMP H PROFILE	P.206	LIGHTING PLANS & DETAILS	P.536-P.564
CD ROAD CROSS SECTIONS	P.207-P.260	STRUCTURES (OVER 20 FOOT SPAN)	P.565-P.598
SUNBURY PKWY CROSS SECTIONS	P.261-P.308	GEOTECHNICAL PROFILE - ROADWAY	P.599-P.663
WILSON ROAD CROSS SECTIONS	P.309-P.315		

PARTS 1 AND 2

	STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
ENGINEER'S SEAL: ROADWAY	BP-2.1	1/21/22	CB-2-2A, 2B, 2C	7/19/24	ITS-12.10	7/15/22	MT-95.30	7/19/19	TC-41.10	7/19/13	800-2023	7/19/24	408 PERMIT
	BP-2.2	1/15/21	CB-3	7/19/24	ITS-14.10	7/19/24	MT-95.45	7/21/23	TC-41.20	10/18/13	804	7/19/24	01/24/2025
	BP-3.1	1/19/24	CB-3A	7/19/24	ITS-14.11	7/19/24	MT-98.21	7/21/23	TC-41.30	4/21/23	807	1/21/22	
	BP-5.1	7/15/22	CB-8	7/19/24	ITS-14.50	7/19/24	MT-98.28	1/17/20	TC-41.50	10/18/13	808	7/19/24	
	BP-7.1	1/19/24	I-2-6	7/19/24	ITS-14.60	1/19/24	MT-98.29	1/17/20	TC-42.10	10/18/13	809	7/19/24	
	F-2.1	7/20/18	I-3B, 3B1	7/19/24	ITS-15.11	7/19/24	MT-98.30	7/16/21	TC-42.20	10/18/13	813	7/21/23	
	F-3.1	7/19/13	I-3C, 3C1	7/19/24	ITS-18.00	7/16/21	MT-99.20	4/19/19	TC-51.11	1/15/16	821	4/20/12	
	F-3.3	7/19/13	MH-3	7/19/24	ITS-50.11	7/19/24	MT-99.50	7/21/23	TC-52.20	1/15/21	832	7/19/24	
	F-3.4	7/19/13			HL-10.11	7/21/23	MT-101.70	7/19/24	TC-61.10	4/21/23	836	1/19/24	
	MGS-1.1	7/16/21	DM-1.1	7/17/20	HL-10.12	7/21/23	MT-101.75	7/21/23	TC-61.30	7/19/24	840	7/19/24	
	MGS-2.1	1/19/18	DM-1.2	7/16/21	HL-10.13	1/20/23	MT-101.90	7/17/20	TC-65.10	1/17/14	850	7/21/23	
ENGINEER'S SEAL: STRUCTURES	MGS-3.1	1/19/18	DM-4.2	7/20/12	HL-10.31	7/15/22	MT-102.10	7/21/23	TC-65.11	1/19/24	872	1/21/22	
	MGS-4.2	7/19/13			HL-20.11	7/21/23	MT-102.20	4/19/19	TC-71.10	4/21/23	902	7/19/19	
	MGS-5.3	7/15/16	AS-1-15	1/20/23	HL-20.21	1/15/21	MT-102.30	10/16/15	TC-72.20	7/21/23	904	7/15/22	
			AS-2-15	7/21/23	HL-30.11	7/21/23	MT-103.10	1/21/22	TC-73.20	7/19/24	905	4/17/20	
	RM-1.1	1/20/23	BR-2-15	7/19/24	HL-30.21	4/17/20	MT-104.10	1/19/24	TC-74.10	7/21/23	908	10/20/17	
	RM-4.3	1/21/22	PSID-1-13	7/19/24	HL-30.22	1/15/21	MT-105.10	1/17/20			909	7/19/24	
	RM-4.4	7/21/23	SBR-1-20	7/19/24	HL-30.31	7/19/24					913	4/16/21	
	RM-4.5	7/21/17	SICD-1-21	1/21/22	HL-30.41	1/21/22	TC-12.31	4/15/22			921	7/19/24	
	RM-4.6	7/19/13	SICD-2-14	1/19/24	HL-40.10	7/19/24	TC-15.116	1/19/24			992	4/18/14	
	RM-5.2	7/21/23	VPF-1-90	7/21/23	HL-50.21	7/15/22	TC-21.11	7/16/21					
					HL-60.11	7/21/17	TC-21.21	1/20/23					
	HW-2.1	7/15/22	ITS-10.10	7/19/24	HL-60.21	7/20/18	TC-21.50	4/17/20					
	HW-2.2	7/20/18	ITS-10.11	7/19/24	HL-60.31	7/19/24	TC-22.20	1/17/14					

FEDERAL PROJECT NUMBER

E190 (125)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

CONSTRUCT A NEW PARTIAL DIAMOND INTERCHANGE ON I-71 AT SUNBURY PARKWAY. THIS WILL INCLUDE AN ENTRANCE RAMP FROM SUNBURY PARKWAY TO I-71 SB AND AN EXIT RAMP FROM I-71 NB TO SUNBURY PARKWAY. BUILD A I-71 NB CD ROAD BETWEEN SUNBURY PARKWAY AND SR 36/37 COMBINING THE EXITING TRAFFIC TO SUNBURY WITH THE EXITING TRAFFIC TO SR 36/37. CONNECT SUNBURY PARKWAY TO WILSON RD. THE PROJECT WILL ALSO INCLUDE THE SUNBURY PARKWAY TWO SPAN BRIDGE OVER I-71, THE RECONSTRUCTION OF STORM SEWERS AND CULVERTS, AND THE RELOCATION OF SIGNAGE AND LIGHTING. THE FULL PARCLO INTERCHANGE AND THE EXTENSION OF SUNBURY PARKWAY WILL BE BUILT IN FUTURE PHASES.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	53.26 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	42.15 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	95.41 ACRES

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

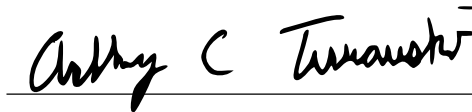
2023 SPECIFICATIONS

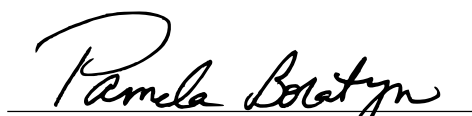
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

TRAFFIC REROUTED FOR BRIEF TIME PERIODS

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS P.35 & P.47, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	ADD SPEC. PROVISION	TAZ	04/10/25
PIR4	.	ADJUSTED SHEET NUMBERS	ACW	04/10/25


Anthony C. Turowski, P.E.
District 06 Deputy Director


Pamela Boratyn
Director, Department of Transportation



DESIGN AGENCY  ms consultants, inc.	
DESIGNER ACW	
REVIEWER TAZ 06/29/23	
PROJECT ID 106959	
SHEET P.12	TOTAL 663

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC

AMERICAN ELECTRIC POWER
AEP OHIO
ATTN: DEAN H HARTZELL/WORK SCHEDULING TEAM
(614) 883-6802
DHHARTZELL@AEP.COM
WORKSCHEDULINGTEAMCOLUMBUS@AEP.COM
850 TECH CENTER DRIVE
GAHANNA, OH 43230

AMERICAN ELECTRIC POWER
(TRANSMISSION)
PUBLIC PROJECTS COORDINATOR
ATTN: MICHAEL CARR
OFFICE (380) 205-5072
8600 SMITHS MILL ROAD
NEW ALBANY, OH 43054
TL_PUBLICPROJECTS@AEP.COM

AMERICAN ELECTRIC POWER
(DISTRIBUTION)
PPR COORDINATOR
ATTN: ROBERT MATTHEWS
700 MORRISON ROAD
GAHANNA, OHIO 43230
CELL: 740.647.2080
AEP SOLUTION CENTER 800-277-2177 (24/7/365)
CENTRALOHPPR@AEP.COM

FIRST ENERGY
MARY WALTON, DESIGNER II
OFFICE: 330-384-4928 (825-4928)
CELL 321-626-1079
MWALTON@FIRSTENERGYCORP.COM
76 SOUTH MAIN, AKRON, OH 44308
MAILSTOP: A-GO-3 / AK-GENERAL OFFICE BLDG

GAS

COLUMBIA GAS OF OHIO
LEADER FIELD ENGINEERING:
ROB CALDWELL
3550 JOHNNY APPLESEED CT.
COLUMBUS, OH 43231
CUST. SERVICE (800) 344-4077
DAMAGE PREVENTION: (866) 632-6243
OFFICE: (614) 818-2104
CELL: (614) 370-1906
COLUMBIAGAS_COLUMBUSENG@NISOURCE.COM
RCALDWELL@NISOURCE.COM

CABLE

CHARTER COMMUNICATIONS/SPECTRUM
(AKA TIME WARNER COMMUNICATIONS)
3760 INTERCHANGE ROAD
COLUMBUS, OHIO 43204
DL-MOH-CONSTRUCTION-FRELO-TEAM@CHARTER.COM

WATER

DEL-CO WATER CO., INC
ENGINEERING SUPERVISOR: DAVE WOLF
6658 OLENTANGY RIVER ROAD
DELAWARE, OHIO 43015 OFFICE: 740-548-7746 EXT. 2403
DWOLF@DELCOWATER.COM

PIPELINE

MARATHON PIPE LINE LLC
LONDON MORRIS
SR. RIGHT-OF-WAY SPECIALIST
MARATHON PIPE LINE LLC
10722 E COUNTY ROAD 300 N
INDIANAPOLIS, IN 46234
317-473-7441
LRMORRIS@MARATHONPETROLEUM.COM

SANITARY SEWER

DELAWARE COUNTY SEWER
KELLY THIEL
50 CHANNING ST.
DELAWARE, OH 43015
(740) 833-2240
KTHIEL@CO.DELAWARE.OH.US

STORM SEWER

DELAWARE COUNTY ENGINEER
50 CHANNING ST.
DELAWARE, OH 43015
(740) 833-2434

ODOT

ODOT CENTRAL OFFICE ITS
1606 W. BROAD ST.
COLUMBUS, OH 43223
614-387-4113
CEN.ITS.LAB@DOT.OHIO.GOV

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 3 OF THE PLANS. FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS DATA COLLECTION PER 502.2.E. OF SURVEY MANUAL
MONUMENT TYPE: PROJECT CONTROL MONUMENT TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GR580
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE (3401)
COMBINED SCALE FACTOR: 1.000039600
ORIGIN OF COORDINATE
SYSTEM: (X,Y) - EASTING (X): 0 NORTHING (Y): 0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITS ARE IN U.S. SURVEY FEET.

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.



ENVIRONMENTAL PLAN NOTES

1. THE CONTRACTOR WILL NOT PROCEED WITH ANY WORK WITHIN WETLANDS OR IN STREAMS BELOW THE ORDINARY HIGH WATER MARK (OHWM) UNTIL ALL NECESSARY WATERWAY PERMITS FROM THE US ARMY CORPS OF ENGINEERS AND/OR THE OHIO EPA HAVE BEEN OBTAINED BY THE OHIO DEPARTMENT OF TRANSPORTATION.

2. THE CONTRACTOR MAY ONLY REMOVE TREES BETWEEN OCTOBER 1ST AND MARCH 31ST. ODOT WILL NOTIFY PRIVATE DEVELOPERS WHO OWN PARCELS IN THE INDIRECT IMPACT AREAS THAT TREES SHOULD BE CUT BETWEEN OCTOBER 1ST AND MARCH 31ST TO AVOID POTENTIAL IMPACTS TO FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT AND THE STATE LISTED AND PROTECTED LITTLE BROWN BAT AND TRICOLORED BAT. DEMARCAT E CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

3. THE PROJECT IS LOCATED WITHIN DRINKING WATER PROTECTION AREAS FOR THREE PUBLIC WATER SYSTEMS. IN ORDER TO MINIMIZE POTENTIAL FOR CONTAMINATION, THE CONTRACTOR SHALL UTILIZE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS SHALL NOT BE STORED NEAR DRAINAGEWAYS, DITCHES, OR STREAMS. A SPILL KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL IMMEDIATELY TAKE STEPS TO MITIGATE ANY SPILL OF FUEL, OILS OR CHEMICALS THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. ANY SUCH SPILL OR EVENT SHALL BE REPORTED IMMEDIATELY TO THE COLUMBUS PUBLIC WATER SYSTEM AT 614-645-7788, THE WESTERVILLE PUBLIC WATER SYSTEM AT 614-901-6740 AND THE DEL-CO WATER COMPANY AT 740-548-7746. IF THE SPILL IS A REPORTABLE AMOUNT, THE CONTRACTOR SHOULD CONTACT THE COLUMBUS STORM WATER POLLUTION HOTLINE AT 614-645-7873 OR THE OHIO EPA'S SPILLS HOTLINE AT 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

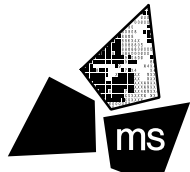


ALTERNATE BID ITEMS

THIS PROJECT HAS ALTERNATE BID ITEMS FOR ESTHETIC ENHANCEMENTS ON THE "PROPOSED STRUCTURE OVER 20 FOOT (DEL-00071-08.910)". THIS PLAN SET IS PART 1 OF A 2 PART CONSTRUCTION PROJECT WHICH THE ALTERNATE BID ITEMS ARE PULLED FROM. THE ALTERNATE BID ITEMS WILL FALL UNDER THE FOLLOWING GENERAL SUMMARY HEADINGS IN PART 1:

STRUCTURE OVER 20 FOOT SPAN (DEL-00071-08.910) ALTERNATES
PART 1 = (ALTERNATE 1)
PART 2 = (ALTERNATE 2)

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ACW

REVIEWER

TAZ 08/01/23

PROJECT ID

106959

SHEET TOTAL

P.20 663

NO.	DESCRIPTION	REV. BY	DATE
PIR1	REMOVE WETLAND NOTE	TAZ	01/22/25
PIR4	REMOVE ENV. NOTE #4	TAZ	04/15/25

LAST REVISED: PIR4 04/15/2025

ITEM SPECIAL - FILL AND PLUG EXISTING CONDUIT

THIS ITEM CONSISTS OF THE CONSTRUCTION OF BULKHEADS IN AN EXISTING 15 INCH DIAMETER CONDUIT AND FILLING THE AREA SEALED OFF WITH ITEM 613, SAND OR OTHER MATERIAL APPROVED BY THE ENGINEER.

LOCATE THE BULKHEADS AT THE LIMITS OF THE AREA TO BE FILLED, AS INDICATED ON THE PLANS. THE BULKHEADS CONSIST OF BRICK OR CONCRETE MASONRY WITH A MINIMUM THICKNESS OF 12 INCHES.

PUMP THE FILL MATERIAL INTO PLACE OR BY OTHER MEANS APPROVED BY THE ENGINEER, SO THAT AFTER SETTLEMENT, AT LEAST 90 PERCENT OF THE CROSS-SECTIONAL AREA OF THE CONDUIT, FOR ITS ENTIRE LENGTH IS FILLED. THE LENGTH OF FILLED AND PLUGGED CONDUIT TO BE PAID FOR IS THE ACTUAL NUMBER OF FEET (MEASURED ALONG THE CENTERLINE OF EACH CONDUIT FROM OUTER FACE TO OUTER FACE OF BULKHEADS) FILLED AND PLUGGED AS DESCRIBED ABOVE.

IN LIEU OF FILLING AND PLUGGING THE EXISTING CONDUIT, THE PIPE MAY BE CRUSHED AND BACKFILLED PER 203, OR IT MAY BE REMOVED. THE LENGTH, MEASURED AS PROVIDED ABOVE, WILL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR, ITEM SPECIAL, FILL AND PLUG EXISTING CONDUIT.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, NOTIFY THE ENGINEER BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM 304 - AGGREGATE BASE, AS PER PLAN, 6" AVG.

THIS ITEM SHALL CONFORM TO ITEM 304 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE QUANTITY PROVIDED IN THE PAVEMENT EDGE REPAIR CALCULATIONS ON THE CALCULATIONS SPREADSHEET HAS BEEN ESTIMATED USING A 6" THICKNESS.

THE CONTRACTOR MUST FIRST FIELD VERIFY THE THICKNESS OF THE EXISTING AGGREGATE BASE AND DETERMINE THE DEPTH OF EXISTING SUBGRADE PRIOR TO THE PLACING OF THIS ITEM. IF THE EXISTING SUBGRADE IS FOUND TO BE AT A DIFFERENT ELEVATION THAN THE PROPOSED SUBGRADE (WHEN ASSUMING A PROPOSED 6" AGGREGATE BASE), THE CONTRACTOR SHALL PROVIDE THE RESULTS OF THE INVESTIGATION TO THE PROJECT ENGINEER. THE ENGINEER SHALL THEN DIRECT THE CONTRACTOR TO ADJUST THE THICKNESS OF THIS ITEM ACCORDINGLY.

THE CONTRACTOR WILL BE COMPENSATED FOR ANY ADDITIONAL QUANTITY OF THIS ITEM AT THE CONTRACT BID PRICE OF THE ITEM. THE CONTRACTOR WILL NOT RECIEVE ANY ADDITIONAL COMPENSATION BEYOND THE ADJUSTED QUANTITY AT THE CONTRACT BID PRICE.

ODOT'S CONCRETE BARRIER INLETS

PER ODOT'S STANDARD CONSTRUCTION DRAWINGS FOR CONCRETE BARRIER INLET DETAILS, THE STATION AND OFFSET IS CALLED OUT TO THE CENTER OF THE GRATE. THE GRATE ELEVATION CALLED OUT IN THE STORM SEWER PROFILES AND CROSS SECTIONS ARE TO THE CENTER EDGE OF THE GRATE WHERE IT ABUTS TO THE FACE OF BARRIER.

ITEM 601 - RIPRAP, TYPE D, AS PER PLAN

THIS IS FOR USE AT THE PROPOSED HEADWALL WHERE THERE IS A SIDE APPROACHING DITCH IN ADDITION TO THE INLET OR OUTLET AT THE FRONT OF THE REINFORCED CONCRETE RIPRAP.

THIS WILL REQUIRE UTILIZING THE STANDARD CUTOFF WALL AS DETAIL IN THE DM-1.1 , ALONG WITH AN ADDITIONAL CUTOFF WALL ON THE SIDE OF THE APPROACHING DITCH TO PREVENT UNDERMINING OF THE RIPRAP.

TYING INTO EXISTING DRAINAGE STRUCTURES

WHEN A PROPOSED CONDUIT IS BEING TIED INTO AN EXISTING STRUCTURE, THE HOLE BEING MADE IN THE EXISTING STRUCTURE TO RECEIVE THE PROPOSED CONDUIT SHALL BE A CORED HOLE. FOR CONDUITS OVER 24", THE HOLE CAN BE NEATLY SAWED INSTEAD OF CORED.

THE COST OF TYING INTO AN EXISTING DRAINAGE STRUCTURE SHALL BE INCLUDED IN THE COST OF INSTALLING ITEM 611 CONDUIT.



ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

FOR THE PROPOSED STORM SEWER BETWEEN STRUCTURE (I1 TO HW) AND STRUCTURE (I2 TO HW), THE COFFERDAMS AND EXCAVATION BRACING SHALL BE A SEPARATE PAY ITEM FROM ITEM 611 CONDUIT MISC.: CONDUIT INSTALLED BY THE TRENCHLESS METHOD, 15". IT IS ANTICIPATED THAT THE APPROXIMATE JACKING PIT DIMENSION FOR THE PROPOSED 15" PIPES AT STRUCTURE (I1 & I2) WILL BE 35'X12' AND AT A APPROXIMATE DEPTH OF 8'. IT IS ANTICIPATED THAT THE APPROXIMATE RECEIVING PIT DIMENSION FOR THE PROPOSED 15" PIPES AT STRUCTURE (I1 & I2) WILL BE 20' IN DIAMETER AND AT A APPROXIMATE DEPTH OF 3'.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 503, COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN.

ITEM 611 - CONDUIT MISC: CONDUIT INSTALLED BY THE TRENCHLESS METHOD, 15"

INSTALL THE CONDUIT WITH A TRENCHLESS METHOD THAT PROVIDES HORIZONTAL AND VERTICAL ALIGNMENT ACCORDING TO THE PLAN THAT CONFORMS TO CMS 611. CONDUIT CAN BE INSTALLED BY TRENCHLESS METHODS SUCH AS: JACK AND BORE, TUNNELING, MICROTUNNELING, OR APPROVED EQUAL.

ALL CONDUIT MATERIALS SHALL FIT THE METHOD SELECTED AND MEET ODOT MATERIAL SPECIFICATIONS. ENSURE ALL MATERIAL PROVIDES A 75 YEAR DESIGN SERVICE LIFE. TUNNEL LINER PLATE WILL REQUIRE CONCRETE FIELD PAVING PER CMS 611.

IF FURNISHING A STEEL CASING PIPE TO CONVEY THE STORM WATER, ENSURE IT CONFORMS TO 748.06 WITH A FULL CIRCUMFERENCIAL PENETRATING B-U4B WELD AT THE JOINTS. ALL WELDING IS PERFORMED BY AN ODOT APPROVED FIELD WELDER. HYDROSTATIC TESTING IS NOT REQUIRED FOR THE CASING PIPE.

IF FURNISHING A TUNNEL LINER PLATE, ENSURE THE BASE METAL COMPOSITION, DEPTH AND SPAN OF THE CORRUGATIONS, AND SIZE AND SPACING OF BOLTS AND BOLT HOLES ARE IN ACCORDANCE WITH DETAILS OF THE MANUFACTURER. INSTALLATION OF THE STRUCTURE IS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ENSURE GALVANIZING IS PROVIDED IN ACCORDANCE WITH 707.03 AFTER CORRUGATING, FORMING, AND PUNCHING OF THE PLATES AND BOLT HOLES.

ALTERNATE MATERIALS MAY BE USED CONTINGENT UPON DEPARTMENT APPROVAL.

NO TRENCH EXCAVATION SHALL BE CLOSER THAN 10 FEET TO THE EXISTING BACK OF CURB. PROVIDE ALL NECESSARY DESIGN CALCULATIONS FOR PIPE MATERIALS AND JACKING FORCES AS PART OF THE INSTALLATION PLAN.

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE BRIDGE ABUTMENT APPROACH EMBANKMENT AT THE FOLLOWING LOCATIONS:

Item 203 Embankment, As Per Plan			
Alignment	Structure	Location	Embankment, as per Plan (CY)
Sunbury Parkway	DEL-00071-08.910	Forward	12526
Sunbury Parkway	DEL-00071-08.910	Rear	11192
TOTAL			23718

ITEM 202 - REMOVAL MISC.: WOOD POLE

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF A EXISTING WOOD POLE PER ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 202. THE WOOD POLE APPEARS TO BE AN OLD AEP DISTRIBUTION POLE, CUT OFF BELOW THE EXISTING POWER LINES. THE CONTRACTOR SHALL CONFIRM WITH AEP THAT THE WOOD POLE HAS BEEN ABANDONED PRIOR TO BEING REMOVED.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE WOOD POLE WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: WOOD POLE

ITEM 202 - REMOVAL MISC.: POLE AND FOUNDATION

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF A EXISTING STEEL POLE AND CONCRETE FOUNDATION PER ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 202. BEFORE REMOVING THE POLE AND FOUNDATION THE CONTRACTOR SHALL CONFIRM WITH ODOT THAT THE POLE HAS BEEN ABANDONED PRIOR TO BEING REMOVED.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE POLE AND FOUNDATION WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: POLE AND FOUNDATION

ITEM 202 - REMOVAL MISC.: REFLECTOR POST

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING FOUR FOOT HIGH REFLECTOR POST PER ODOT'S CONSTRUCTION AND MATERIALS SPECIFICATIONS, ITEM 202.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE REFLECTOR POST WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: REFLECTOR POST

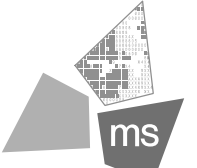
ITEM 202 - REMOVAL MISC.: BUILDING PAD

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF A PORTION OF THE EXISTING WEIGHT STATION BUILDING PAD THAT IS WITHIN THE CONSTRUCTION LIMITS.

ALL WORK ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF THE EXISTING BUILDING PAD WILL BE PAID FOR AS FOLLOWS: ITEM 202 - REMOVAL MISC.: BUILDING PAD

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	ADDED NOTE	ACW	04/10/25
	.	.		.

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ACW

REVIEWER

TAZ 08/01/23

PROJECT ID

106959

SHEET

P.23

TOTAL

663

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 20 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

WORK ZONE SPEED ZONES (WZSZS)

THE FOLLOWING WORK ZONE SPEED ZONE (WZSZ) SPEED LIMIT REVISION(S) HAVE BEEN APPROVED FOR USE ON THIS PROJECT WHEN WORK ZONE CONDITIONS AND FACTORS ARE MET AS DESCRIBED BELOW:

WZSZ REVISION NUMBER	COUNTY-ROUTE-SECTION	DIRECTION
WZ-35806	DEL-71-7.219 - DEL-71-9.807	NB
WZ-35806	DEL-71-8.252 - DEL-71-10.829	SB

POTENTIAL WZSZ LOCATIONS SHALL HAVE AN ORIGINAL (PRE-CONSTRUCTION) POSTED SPEED LIMIT OF 55 MPH OR GREATER, A QUALIFYING WORK ZONE CONDITION OF AT LEAST 0.5 MILE IN LENGTH, AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS, AND A WORK ZONE CONDITION IN PLACE THAT REDUCES THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS (I.E., LANE CLOSURE, LANE SHIFT, CROSSOVER, CONTRAFLOW AND/OR SHOULDER CLOSURE). THE LENGTH OF THE WORK ZONE CONDITION IS MEASURED FROM THE BEGINNING OF THE TAPER FOR THE SUBJECT WORK ZONE CONDITION IMPACTING THE TRAVEL LANES AND/OR SHOULDER TO THE END OF THE DOWNSTREAM TAPER, WHERE DRIVERS ARE RETURNED TO TYPICAL ALIGNMENT. AN EXPECTED WORK DURATION OF AT LEAST THREE HOURS IS REQUIRED TO BALANCE THE ADDITIONAL EXPOSURE CREATED BY INSTALLING AND REMOVING WZSZ SIGNING WITH THE TIME NEEDED TO COMPLETE THE WORK.

IF THE WORK ZONE MEETS THESE MINIMUM CRITERIA, IT SHALL BE ANALYZED FURTHER USING TABLE 1 BELOW TO DETERMINE IF AND WHEN IT QUALIFIES FOR A SPEED LIMIT REDUCTION. DEPENDING ON THE ORIGINAL POSTED SPEED LIMIT, THE TYPE OF TEMPORARY TRAFFIC CONTROL USED, AND WHETHER OR NOT WORKERS ARE PRESENT, A WARRANTED WZSZ WILL VARY IN THE APPROVED SPEED LIMIT TO BE POSTED OVER TIME.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

WORK ZONE SPEED ZONES (WZSZS), CONTINUED

C&MS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED LIMIT REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION. EACH DIRECTION SHALL BE ANALYZED INDEPENDENTLY FROM EACH OTHER.

ALL WZSZS FLUCTUATE BETWEEN TWO APPROVED REDUCED SPEED LIMITS OR BETWEEN AN APPROVED REDUCED SPEED LIMIT AND THE ORIGINAL POSTED SPEED LIMIT. ONLY ONE OF TWO SIGNING STRATEGIES SHALL BE USED TO IMPLEMENT A WZSZ.

WZSZS USING DSL SIGN ASSEMBLIES SHALL BE IN ACCORDANCE WITH THIS NOTE, APPROVED LIST, SUPPLEMENTAL SPECIFICATIONS (SS) 808 AND 908, AND TRAFFIC SCD MT-104.10.

ONLY ONE WARRANTED SPEED LIMIT APPLIES AT ANY ONE TIME; SPEED LIMIT REDUCTIONS ARE NOT CUMULATIVE. WZSZS SHALL NOT BE USED FOR MOVING/MOBILE ACTIVITIES, AS DEFINED IN OMUTCD PART 6.

WHEN LOOKING UP THE WARRANTED WORK ZONE SPEED LIMITS, ALWAYS USE THE ORIGINAL, PRECONSTRUCTION, POSTED SPEED LIMIT. DO NOT USE A PRIOR OR CURRENT WORK ZONE SPEED LIMIT AS A LOOK UP VALUE IN THE TABLE. POSITIVE PROTECTION IS GENERALLY REGARDED AS PORTABLE BARRIER OR OTHER RIGID BARRIER IN USE ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WITHOUT POSITIVE PROTECTION IS GENERALLY REGARDED AS USING DRUMS, CONES, SHADOW VEHICLE, ETC., ALONG THE WORK AREA WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WORKERS ARE CONSIDERED AS BEING PRESENT WHEN ON-SITE, WORKING WITHIN THE SUBJECT WARRANTED WORK ZONE CONDITION. WHEN THE WORK ZONE CONDITION REDUCING THE EXISTING FUNCTIONALITY OF THE TRAVEL LANES OR SHOULDERS IS REMOVED, THE SPEED LIMIT DISPLAYED SHALL RETURN TO THE ORIGINAL POSTED SPEED LIMIT.

TABLE 1: WARRANTED WORK ZONE SPEED LIMITS (MPH)
FOR WORK ZONES ON HIGH-SPEED (55 MPH
OR GREATER) MULTI-LANE HIGHWAYS

	WITH POSITIVE PROTECTION		WITHOUT POSITIVE PROTECTION	
ORIGINAL POSTED SPEED LIMIT	WORKERS PRESENT	WORKERS NOT PRESENT	WORKERS PRESENT	WORKERS NOT PRESENT
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 808, DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY
72 SIGN MNTHS
ASSUMING 5 DSL SIGN ASSEMBLIES FOR 6 MONTHS AND
3 DSL SIGN ASSEMBLIES FOR 14 MONTHS

DESIGNATED LOCAL DETOUR ROUTES

THE OFFICIAL SIGNED DETOUR ROUTES HAVE BEEN DETERMINED TO BE "DESIGNATED LOCAL DETOUR ROUTES." THESE ROUTES ARE SHOWN ON SHEETS P.35 AND P.47. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THESE ROUTES IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTES SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHAN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTES.

ITEM 301, ASPHALT CONCRETE BASE, PG 64-22	460 CU. YD.
ITEM 304, AGGREGATE BASE	276 CU. YD.
ITEM 441, ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22	69 CU. YD.
ITEM 407, TACK COAT	149 GAL.
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	667 CU. YD.
ITEM 616, WATER	32 M. GAL.
ITEM 617, COMPACTED AGGREGATE	250 CU. YD.
ITEM 617, WATER	10 M. GAL.
ITEM 642, CENTER LINE	1 MILE

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETRORREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A), CONTINUED

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 12 EACH

EARTHWORK FOR MAINTAINING TRAFFIC

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY.

EXCAVATION FOR MAINTAINING TRAFFIC 692 CU. YD.
EMBANKMENT FOR MAINTAINING TRAFFIC 64 CU. YD.

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

EARTHWORK FOR MAINTAINING TRAFFIC IS INCIDENTAL TO THE LUMP SUM PRICE FOR ITEM 615, ROADS FOR MAINTAINING TRAFFIC.

REMOVAL OF CABLE BARRIER

DURING PHASE 2A OF CONSTRUCTION THE CONTRACTOR SHALL REMOVE THE EXISTING CABLE BARRIER ALONG THE I-71 NORTHBOUND INSIDE SHOULDER WHERE IT CONFLICTS WITH THE PORTABLE BARRIER FROM APPROXIMATELY STA. 689+00 TO STA. 701+22 AS SHOWN ON SHEETS P.82 - P.83. THE CONTRACTOR SHALL PLACE A CABLE BARRIER ANCHOR ASSEMBLY AT THE NORTHERN END OF THE EXISTING CABLE BARRIER TO REMAIN. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE THE TEMPORARY CABLE BARRIER ANCHOR ASSEMBLY. THE PERMANENT CABLE BARRIER SHALL BE INSTALLED PER THE ROADWAY PLANS, PAYMENT FOR THE PERMANENT CABLE BARRIER IS INCLUDED IN THE ROADWAY PLANS.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR INFORMATIONAL PURPOSES:

CABLE BARRIER REMOVED	1,222 FT
CABLE BARRIER ANCHOR ASSEMBLY	1 EACH
REMOVAL OF CABLE BARRIER ANCHOR ASSEMBLY	1 EACH

PAYMENT FOR THE CABLE BARRIER REMOVAL AND INSTALLATION AND REMOVAL OF THE CABLE BARRIER ANCHOR ASSEMBLY SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE NOTE	KJF	04/15/25

DESIGN AGENCY



ms consultants, inc.

DESIGNER

JML

REVIEWER

DRB 06/28/23

PROJECT ID

106959

SHEET

P.25

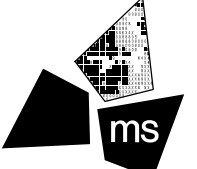
TOTAL

663

SHEET NO.	LOCATION	REFERENCE NO.	STATION TO STATION					411		614		614		614		614		614		614		615		618		622		630		630				
								STABILIZED CRUSHED AGGREGATE	FT	INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, UNIDIRECTIONAL	WORK ZONE IMPACT ATTENUATOR, MISC.: 48" WIDE HAZARDS, UNIDIRECTIONAL	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	OBJECT MARKER, ONE WAY	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, WHITE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, YELLOW	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	WORK ZONE GORE MARKING, CLASS II	WORK ZONE ARROW, CLASS I	WORK ZONE ARROW, CLASS I, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	PORTABLE BARRIER, UNANCHORED	SIGN, TEMPORARY OVERLAY	REMOVAL OF TEMPORARY OVERLAY SIGN AND DISPOSAL						
								CY	FT	EACH	EACH	EACH	EACH	EACH	FT/MILE	FT/MILE	FT/MILE	FT	FT	FT	EACH	EACH	SY	FT	FT	SF	EACH							
PHASE 1																																		
P.65	I-71	PB1	653+35.00	RT	TO	654+15.00	RT			1			2	2											80									
P.66	I-71	PB2	666+70.00	RT		667+50.00	RT			1			2	2											80									
P.69	I-71	PB3	698+40.00	RT		700+00.00	RT			1			3	3											160									
		PB4, PB5	698+80.00	LT		700+00.00	LT						4	4											240									
P.70	I-71	PB6, PB7	700+00.00	LT		703+20.00	LT			2			12	12											640									
		PB8	700+00.00	RT		702+80.00	RT						6	6											280									
PHASE 2A																																		
P.77	I-71	CH1, CH2	637+15.00	RT		640+00.00	RT					56						570																
P.78	I-71	CH3, CH4	640+00.00	RT		647+35.00	RT					74						1470																
		YE1, WE1	640+15.00	RT		650+00.00	RT					74			985	985								420										
		LL1, LL2	647+35.00	RT		650+00.00	RT					4		530																				
P.79	I-71	YE2, LL3, LL4, WE2	650+00.00	RT		660+00.00	RT					16			2000	1000	1000																	
		PB9	651+90.00	RT		658+50.00	RT			1			13	13											660									
			653+96.00	RT																							45	2						
		PB10	658+40.00	RT		660+00.00	RT						3	3											160									
P.80	I-71	YE3, LL5, LL6, WE3	660+00.00	RT		670+00.00	RT					16			2000	1000	1000																	
		PB11	660+00.00	RT		665+00.00	RT						10	10											500									
		PB12	666+20.00	RT		670+00.00	RT			1			8	8											380									
		CH5, CH6	667+30.00	LT		670+00.00	LT					54						540																
			667+31.00	RT																								58	2					
P.81	I-71	CH7, CH8	670+00.00	LT		677+50.00	LT					76						1500																
		YE4, LL8, LL9, WE4, PB13	670+00.00	RT		680+00.00	RT					16	20	20	2000	1000	1000									1000								
		WE5, YE5	670+30.00	LT		680+00.00	LT					76				970	970									420								
		PB14	674+50.00	LT		680+00.00	LT						11	11												550								
		LL10, LL11	677+50.00	LT		680+00.00	LT					4			500																			
P.82	I-71	PB15	680+00.00	LT		687+30.00	LT			1			15	15											730									
		WE6, LL12, LL13, YE6, YE7, WE7, PB16	680+00.00	LT/RT		690+00.00	LT/RT		570			104	9	20	2000	2000	2000									1000								
		LL14, LL15	680+00.00	RT		681+30.00	RT					2			260																			
		CH9, CH10	681+30.00	RT		690+00.00	RT					88							1740															
		PB16A	682+80.00	RT		690+00.00	RT					1		15	15											720								
		PB17	688+50.00	LT		690+00.00	RT						3	3												150								
	CD ROAD		184+22.00	CL																														
TOTALS THIS SHEET														9290	6955	6955																		
TOTALS CARRIED TO SHEET P.34									570	9		660	136	147	1.76	1.32	1.32	5820							840	7330	103	4						

NO.	REF.	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE ITEM TYPE	KJF	04/14/25

DESIGN AGENCY



ms consultants, inc.

DESIGNER

KJF

REVIEWER

JML 09/21/23

PROJECT ID

106959

SHEET

P.31

TOTAL

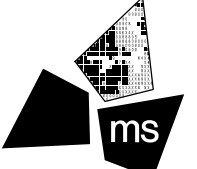
663

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NO.	LOCATION	REFERENCE NO.	STATION TO STATION					411		614		614		614		614		614		614		615		618		622		630		630				
								STABILIZED CRUSHED AGGREGATE	INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, UNIDIRECTIONAL	WORK ZONE IMPACT ATTENUATOR, MISC.: 48" WIDE HAZARDS, UNIDIRECTIONAL	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	OBJECT MARKER, ONE WAY	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, WHITE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, YELLOW	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	WORK ZONE GORE MARKING, CLASS II	WORK ZONE ARROW, CLASS I	WORK ZONE ARROW, CLASS I, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	PORTABLE BARRIER, UNANCHORED	SIGN, TEMPORARY OVERLAY	REMOVAL OF TEMPORARY OVERLAY SIGN AND DISPOSAL							
																												CY	FT	EACH	EACH			
P.90	I-71	CH27, GM3	724+90.00	RT		727+50.00	RT				11					260		141																
		WE18	727+50.00	RT		730+00.00	RT				13			250																				
		PB27	727+60.00	RT		730+00.00	RT		100			1		3	5												240							
		CH28	224+80.00	LT		227+40.00	LT				7						260																	
		WE19	224+80.00	LT		229+90.00	RT										510																	
		PB28	224+80.00	LT		228+50.00	RT		370						7													370						
		YE18	227+40.00	LT		229+90.00	LT				3						250																	
		PB29	227+50.00	LT		229+90.00	LT				5		5														240							
P.91	I-71	WE20	730+00.00	RT		732+62.00	RT				13				262																			
		PB30	730+00.00	RT		733+50.00	RT		350					7															350					
	CD ROAD	PB31	229+90.00	LT		237+60.00	LT		670					15															770					
		YE19, WE21	229+90.00	LT/RT		239+29.00	LT/RT				12				939	939																		
		CH29	235+50.00	RT		239+29.00	BL				9						379																	
		CH30, CH31	238+50.00	LT		239+29.00	LT				6						158																	
P.92	I-71	WD5	652+60.00	RT		660+00.00	RT										740																	
		WE22	652+60.00	RT		653+60.00	RT								100																			
	CD ROAD	WE23	153+60.00	BL		160+00.00	BL								640																			
P.93	I-71	WD6	660+00.00	RT		661+60.00	RT										160																	
		CH32, GM4	667+35.00	RT		670+00.00	RT				7						265		60															
	CD ROAD	WE24	160+00.00	BL		170+00.00	BL								1000																			
		CH33	161+60.00	LT		170+00.00	LT				21						840																	
		CH34	167+34.00	LT		170+00.00	LT				7						266																	
P.94	I-71	CH35, GM5	670+00.00	RT		674+07.00	RT				10						407		209															
		CH36, CH37	170+00.00	LT		174+05.00	LT				20						810																	
	CD ROAD	WE25	170+00.00	BL		179+96.00	BL							996																				
		YE20, LL28	174+05.00	LT		179+96.00	LT				14			591		591																		
P.95	CD ROAD	YE21, LL29, WE25	179+96.00	LT/BL		189+91.00	LT/BL				24				995	995	995																	
P.96	CD ROAD	YE22, LL30, WE26	189+91.00	LT/BL		199+90.00	LT/BL				24				999	999	999																	
		I-71	WE27	696+00.00	RT		700+00.00	RT							400																			
	P.97	CD ROAD	WE28	700+00.00	RT		710+00.00	RT								1000																		
YE23, LL31, WE29			199+90.00	LT/BL		209+90.00	LT/BL				26			1000	1000	1000																		
P.98	I-71	WE30	710+00.00	RT		720+00.00	RT									1000																		
		YE24, WE31	209+90.00	LT/RT		219+90.00	LT/RT				89				1000	1000																		
	CD ROAD	LL32	209+90.00	LT		210+95.00	LT				1			105																				
			213+95.00	LT		214+64.00	LT																											
		CH38	210+95.00	LT		219+90.00	LT		69			44						895																
P.99	I-71	WE32	720+00.00	RT		727+50.00	RT								750																			
		PB32	724+40.00	RT		729+00.00	RT																											
	CD ROAD	PB33	224+30.00	LT		229+10.00	LT																							460				
		YE25, CH39, WE33	219+90.00	LT/RT		229+90.00	LT/RT				38					1000	1000	1000													480			
TOTALS THIS SHEET														3690	12841	6774																		
TOTALS CARRIED TO SHEET P.34									1559	2	1	399	27	58	0.70	2.43	1.28	5540	900	410						2910								

NO.	REF.	DESCRIPTION	REV.	BY	DATE
PIR4	.	REVISE ITEM TYPE	KJF		04/14/25

DESIGN AGENCY


ms consultants, inc.

DESIGNER

KJF

REVIEWER

JML 09/21/23

PROJECT ID

106959

SHEET

P.33

TOTAL

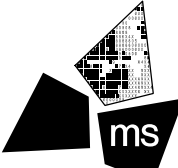
663

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NO.	LOCATION	REFERENCE NO.	STATION TO STATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
								411	614	614	614	614	614	614	614	614	614	614	614	614	614	614	614	615	618	622	630	630																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
								STABILIZED CRUSHED AGGREGATE	INCREASED BARRIER DELINEATION	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, UNIDIRECTIONAL	WORK ZONE IMPACT ATTENUATOR, MISC.: 48" WIDE HAZARDS, UNIDIRECTIONAL	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	OBJECT MARKER, ONE WAY	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, WHITE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT, YELLOW	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	WORK ZONE GORE MARKING, CLASS II	WORK ZONE ARROW, CLASS I	WORK ZONE ARROW, CLASS I, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	PORTABLE BARRIER, UNANCHORED	SIGN, TEMPORARY OVERLAY	REMOVAL OF TEMPORARY OVERLAY SIGN AND DISPOSAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

NO.	REF.	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE ITEM TYPE	KJF	04/14/25

DESIGN AGENCY



ms consultants, inc.

DESIGNER

KJF

REVIEWER

JML 09/21/23

PROJECT ID

106959

SHEET

P.34

TOTAL

663

MAINTENANCE OF TRAFFIC SUBSUMMARY

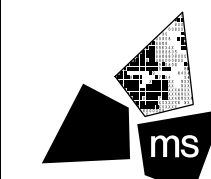
DEL-71-8.91 (PHASE A) PART 1

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 4/15/2025 TIME: 2:08:16 PM USER: tzangmeister
\\msconsultants.com\files\Production\0360106873-00 1-71-91 Phase A\106959400-Engineering\Roadway\Sheets\106959_GG001.dgn

SHEET NUM. 4												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
P.21	P.22	P.108	P.109	P.110	P.113		P.466	OFFICE				01/NHS/01	02/NHS/08							
																	ROADWAY			
LS												LS		201	11000	LS		CLEARING AND GRUBBING	P.21/P.22	
		10										10		202	20010	10	EACH	HEADWALL REMOVED		
		400										400		202	23000	400	SY	PAVEMENT REMOVED		
		259										259		202	30000	259	SF	WALK REMOVED		
		59										59		202	32000	59	FT	CURB REMOVED		
	300	166										466		202	35100	466	FT	PIPE REMOVED, 24" AND UNDER		
		30										30		202	35200	30	FT	PIPE REMOVED, OVER 24"		
		1,965										1,965		202	38000	1,965	FT	GUARDRAIL REMOVED		
							1					1		202	42010	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E		
		839										839		202	48000	839	FT	CABLE BARRIER REMOVED		
		5										5		202	58100	5	EACH	CATCH BASIN REMOVED		
		1										1		202	58200	1	EACH	INLET REMOVED		
		625										625		SPECIAL	20270000	625	FT	FILL AND PLUG EXISTING CONDUIT, 15"	P.23	
	200											200		SPECIAL	20270110	200	FT	PIPE CLEANOUT, 24" AND UNDER	P.22	
	100											100		SPECIAL	20270120	100	FT	PIPE CLEANOUT, 27" TO 48"	P.22	
		4,909										4,909		202	75000	4,909	FT	FENCE REMOVED		
		1										1		202	98100	1	EACH	REMOVAL MISC.: WOOD POLE	P.23	
		1										1		202	98100	1	EACH	REMOVAL MISC.: POLE AND FOUNDATION	P.23	
		14										14		202	98100	14	EACH	REMOVAL MISC.: REFLECTOR POST	P.23	
		140										140		202	98400	140	SF	REMOVAL MISC.: BUILDING PAD	P.23	
											4	72,785		203	10000	72,785	CY	EXCAVATION		
												205,215		203	20000	205,215	CY	EMBANKMENT		
												23,718		203	20001	23,718	CY	EMBANKMENT, AS PER PLAN	P.23	
							4					37,000		203	40001	37,000	CY	BORROW, AS PER PLAN	P.22	
												21,122		204	10000	21,122	SY	SUBGRADE COMPACTION	P.21	
							4					34		204	45000	34	hour	PROOF ROLLING	P.21	
												1,628		206	10500	1,628	TON	CEMENT		
												77,405		206	11000	77,405	SY	CURING COAT		
												72,971		206	15010	72,971	SY	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP		
												4,434		206	15020	4,434	SY	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP		
											4									
							4					LUMP		206	30000	LS		MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS		
		4,953					100					5,053		606	15050	5,053	FT	GUARDRAIL, TYPE MGS		
		14					1					15		606	26150	15	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	P.21	
		10										10		606	26550	10	EACH	ANCHOR ASSEMBLY, MGS TYPE T		
		4										4		606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1		
		1,731										1,731		SPECIAL	60655010	1,731	FT	CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION	P.22	
		3										3		SPECIAL	60655150	3	EACH	CABLE BARRIER, ANCHOR ASSEMBLY	P.22	
		1										1		606	60022	1	EACH	IMPACT ATTENUATOR, TYPE 2 (UNIDIRECTIONAL) 75 mph, 24" WIDTH, (MASH 2016)	P.21	
		2										2		606	60050	2	EACH	IMPACT ATTENUATOR, TYPE 3 (BIDIRECTIONAL) 75 MPH, 24" WIDTH (MASH 2016)	P.21	
		7,868										7,868		607	15000	7,868	FT	FENCE, TYPE 47		
		8,311										8,311		608	10000	8,311	SF	4" CONCRETE WALK		
		1,252										1,252		608	52000	1,252	SF	CURB RAMP		
		160										160		608	53020	160	SF	DETECTABLE WARNING		
				225								225		622	10100	225	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B1		
				4,892								4,892		622	10120	4,892	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE C		
				352								352		622	10160	352	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D		
				1								1		622	24840	1	EACH	CONCRETE BARRIER END SECTION, TYPE B		
				2								2		622	24850	2	EACH	CONCRETE BARRIER END SECTION, TYPE B1		
				4								4		622	25000	4	EACH	CONCRETE BARRIER END SECTION, TYPE D		
				1								1		622	25004	1	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE B		
				30								30		622	25008	30	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE C		
				2								2		622	25050	2	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D		
				2								2		622	25051	2	EACH	CONCRETE BARRIER, END ANCHORAGE, REINFORCED, TYPE D, AS PER PLAN	P.5	
				8								8		623	38500	8	EACH	MONUMENT ASSEMBLY, TYPE C	P.21	
				2								2		625	32000	2	EACH	GROUND ROD		
					118							118		654	10001	118	MSF	RENOVATING EXISTING SOIL, AS PER PLAN	P.439	
LS												LS		SPECIAL	69098400	LS		SURVEY CONTROL VERIFICATION	P.21	
												LS			878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	

NO.	REF	DESCRIPTION	REV.	BY	DATE
PIR4	.	REVISE SUBGRADE QTY'S	TAZ		04/07/25
PIR4	.	REVISE E.W. QUANTITIES	TAZ		04/10/25
PIR4	.	ADD ITEM 206 QUANTITIES	TAZ		04/15/25

DESIGN AGENCY



ms consultants, inc

DESIGNER

ACW

REVIEWER

TAZ 11/22/23

1A2	11/22/23
-----	----------

PROJECT ID
100070

106959

SHEET	TOTAL
-------	-------

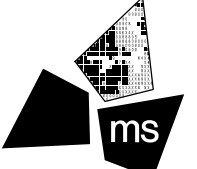
P.101	663
-------	-----

LAST REVISED: PIR4 04/15/2025

SHEET NUM. 4												PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.22	P.24	P.25	P.112	P.113	P.115	P.116	P.117	P.111				01/NHS/01	02/NHS/08		EXT	TOTAL			
																		EROSION CONTROL	
			11									11		601	11000	11	SY	RIPRAP, TYPE D	
			11									11		601	11001	11	SY	RIPRAP, TYPE D, AS PER PLAN	P.23
4			84									88		601	32200	88	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
			6									6		601	32204	6	CY	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	
	1,400	32										1,432		616	10000	1,432	MGAL	WATER	
2												2		659	00100	2	EACH	SOIL ANALYSIS TEST	
11,297				1,774								13,071		659	00300	13,071	CY	TOPSOIL	
				181								181		659	00301	181	CY	TOPSOIL, AS PER PLAN	P.439
15,401				13,015								28,416		659	00500	28,416	SY	SEEDING AND MULCHING, CLASS 1	
86,374												86,374		659	00530	86,374	SY	SEEDING AND MULCHING, CLASS 3B	
5,089												5,089		659	14000	5,089	SY	REPAIR SEEDING AND MULCHING	
5,089												5,089		659	15000	5,089	SY	INTER-SEEDING	
15												15		659	20000	15	TON	COMMERCIAL FERTILIZER	
22												22		659	31000	22	ACRE	LIME	
578												578		659	35000	578	MGAL	WATER	
0.23												0.23		659	40000	0.23	MSF	MOWING	
				15,962								15,962		670	00500	15,962	SY	SLOPE EROSION PROTECTION	
			4,285									4,285		670	00720	4,285	SY	DITCH EROSION PROTECTION MAT, TYPE B	
				13,015								13,015		671	15000	13,015	SY	EROSION CONTROL MAT, TYPE A	
								1,480				1,480		671	15010	1,480	SY	EROSION CONTROL MAT, TYPE B	
												LS		832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
												LS		832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
												LS		832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
												100,000		832	30000	100,000	EACH	EROSION CONTROL	
			70									70		836	10000	70	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	
																		DRAINAGE	
			14		28	8						36		601	21050	36	SY	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	
												14		602	20000	14	CY	CONCRETE MASONRY	
					26,488	14,306	1,550					42,344		605	05110	42,344	FT	4" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
						48	49					97		605	05210	97	FT	4" UNCLASSIFIED PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
					7,380	5,518	2,735					15,633		605	06020	15,633	FT	4" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
100												100		611	00400	100	FT	4" CONDUIT, TYPE E	
200												200		611	00406	200	FT	4" CONDUIT, TYPE F	
					828	758	306					1,892		611	00410	1,892	FT	4" CONDUIT, TYPE F FOR UNDERDRAIN OUTLET	
200												200		611	01500	200	FT	6" CONDUIT, TYPE F	
								524				524		611	04400	524	FT	12" CONDUIT, TYPE B	
								1,808				1,808		611	04600	1,808	FT	12" CONDUIT, TYPE C	
								1,326				1,326		611	05900	1,326	FT	15" CONDUIT, TYPE B	
								426				426		611	06100	426	FT	15" CONDUIT, TYPE C	
300												300		611	06600	300	FT	15" CONDUIT, TYPE E	
												175		611	07400	175	FT	18" CONDUIT, TYPE B	
								291				291		611	07600	291	FT	18" CONDUIT, TYPE C	
								48				48		611	08200	48	FT	18" CONDUIT, TYPE F	
								795				795		611	09100	795	FT	21" CONDUIT, TYPE C	
								49				49		611	10600	49	FT	24" CONDUIT, TYPE C	
								238				238		611	12100	238	FT	27" CONDUIT, TYPE C	
			46									46		611	16200	46	FT	36" CONDUIT, TYPE A, 706.02	
			22									22		611	19200	22	FT	42" CONDUIT, TYPE A, 706.02	
			118									118		611	19200	118	FT	42" CONDUIT, TYPE A, 707.02, ALUMINIZED; OR 42" CONDUIT, 706.02; OR 42" CONDUIT, 707.65; OR 42" CONDUIT, 707.04	
			61									61		611	20700	61	FT	48" CONDUIT, TYPE A, 706.02	
			141									141		611	20700	141	FT	48" CONDUIT, TYPE A, 707.02, ALUMINIZED; OR 48" CONDUIT, 706.02; OR 48" CONDUIT, 707.65; OR 48" CONDUIT, 707.04	
								233				233		611	97400	233	FT	CONDUIT, MISC.: CONDUIT INSTALLED BY THE TRENCHLESS METHOD, 15"	P.23

NO.	REF.	DESCRIPTION	REV.	BY	DATE
PIR4	.	REVISE EC & DRAINAGE QTY'S	TAZ	.	04/10/25
.	.	.	.	.	.
.	.	.	.	.	.

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ACW

REVIEWER

TAZ 11/22/23

PROJECT ID

106959

SHEET

P.102

TOTAL

663

GENERAL SUMMARY

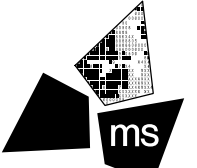
 ms consultants, inc.					GENERAL SUMMARY																			
DESIGN AGENCY		<table border="1"> <tr> <th>NO.</th> <th>RFI</th> <th>DESCRIPTION</th> <th>REV. BY</th> <th>DATE</th> </tr> <tr> <td>PIR4</td> <td>.</td> <td>REVISE DRAINAGE Q'TYS</td> <td>TAZ</td> <td>04/11/25</td> </tr> <tr> <td>PIR4</td> <td>.</td> <td>REVISE PMVT. Q'TYS</td> <td>TAZ</td> <td>04/14/25</td> </tr> </table>								NO.	RFI	DESCRIPTION	REV. BY	DATE	PIR4	.	REVISE DRAINAGE Q'TYS	TAZ	04/11/25	PIR4	.	REVISE PMVT. Q'TYS	TAZ	04/14/25
NO.	RFI	DESCRIPTION	REV. BY	DATE																				
PIR4	.	REVISE DRAINAGE Q'TYS	TAZ	04/11/25																				
PIR4	.	REVISE PMVT. Q'TYS	TAZ	04/14/25																				
DESIGNER					ACW																			
REVIEWER					TAZ 11/22/23																			
PROJECT ID					106959																			
SHEET					TOTAL																			
P.103					663																			

SHEET NUM.						PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.567	P.595					01/NHS/01	02/NHS/08		EXT	TOTAL			
												RETAINING WALLS (MSE-1)	
	142					142		203	20001	142	CY	EMBANKMENT, AS PER PLAN	P.566
	1,178					1,178		203	35110	1,178	CY	GRANULAR MATERIAL, TYPE B	
	269					269		203	35120	269	CY	GRANULAR MATERIAL, TYPE C	
	790					790		512	10100	790	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	152					152		516	13600	152	SF	1" PREFORMED EXPANSION JOINT FILLER	
	6,544					6,544		840	20000	6,544	SF	MECHANICALLY STABILIZED EARTH WALL	
	807					807		840	22000	807	SY	FOUNDATION PREPARATION	
	5,743					5,743		840	23000	5,743	CY	SELECT GRANULAR BACKFILL	
	552					552		840	25010	552	FT	6" DRAINAGE PIPE, PERFORATED	
	72					72		840	25020	72	FT	6" DRAINAGE PIPE, NON-PERFORATED	
	450					450		840	26000	450	FT	CONCRETE COPING	
	6,544					6,544		840	26050	6,544	SF	AESTHETIC SURFACE TREATMENT	
	5					5		840	27000	5	DAY	ON-SITE ASSISTANCE	
	LS					LS		840	28000	LS		SGB INSPECTION AND COMPACTION TESTING	
												RETAINING WALLS (MSE-2)	
	112					112		203	20001	112	CY	EMBANKMENT, AS PER PLAN	P.566
	1,190					1,190		203	35110	1,190	CY	GRANULAR MATERIAL, TYPE B	
	263					263		203	35120	263	CY	GRANULAR MATERIAL, TYPE C	
	694					694		512	10100	694	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	152					152		516	13600	152	SF	1" PREFORMED EXPANSION JOINT FILLER	
	5,831					5,831		840	20000	5,831	SF	MECHANICALLY STABILIZED EARTH WALL	
	787					787		840	22000	787	SY	FOUNDATION PREPARATION	
	4,926					4,926		840	23000	4,926	CY	SELECT GRANULAR BACKFILL	
	450					450		840	25010	450	FT	6" DRAINAGE PIPE, PERFORATED	
	184					184		840	25020	184	FT	6" DRAINAGE PIPE, NON-PERFORATED	
	330					330		840	26000	330	FT	CONCRETE COPING	
	5,831					5,831		840	26050	5,831	SF	AESTHETIC SURFACE TREATMENT	
	5					5		840	27000	5	DAY	ON-SITE ASSISTANCE	
	LS					LS		840	28000	LS		SGB INSPECTION AND COMPACTION TESTING	
												STRUCTURE OVER 20 FOOT SPAN (DEL-00071-08.910)	
3,125						3,125		507	00101	3,125	FT	STEEL PILES HP10X42, FURNISHED, AS PER PLAN	P.566
1,366						1,366		507	92201	1,366	FT	PREBORED HOLES, AS PER PLAN	P.566
404,371						404,371		509	10000	404,371	LB	EPOXY COATED STEEL REINFORCEMENT	
8,822						8,822		509	30020	8,822	FT	NO. 4 DEFORMED GFRP REINFORCEMENT	
315						315		511	33418	315	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE	
4						4		511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	
1,063						1,063		511	34446	1,063	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK	
90						90		511	34450	90	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)	
183						183		511	41012	183	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS	
235						235		511	46512	235	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	P.566
141						141		511	50212	141	CY	CLASS QC1 CONCRETE WITH QC/QA, SUBSTRUCTURE	
355						355		511	51512	355	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK	
9						9		511	53010	9	CY	CLASS QC1 CONCRETE, MISC.:6" CONCRETE SLAB	P.575
2,846						2,846		512	10100	2,846	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
10						10		512	33000	10	SY	TYPE 2 WATERPROOFING	
16						16		515	15120	16	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF66-49(108'-0" LONG)	
16						16		515	15120	16	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF66-49(125'-7" LONG)	
90						90		515	20000	90	EACH	INTERMEDIATE DIAPHRAGMS	
303						303		516	10010	303	FT	ARMORLESS PREFORMED JOINT SEAL	
27						27		516	13600	27	SF	1" PREFORMED EXPANSION JOINT FILLER	
145						145		516	13900	145	SF	2" PREFORMED EXPANSION JOINT FILLER	
910						910		516	25000	910	SF	NYLON REINFORCED NEOPRENE SHEETING	
32						32		516	44200	32	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), (1'-7"x4"x3 1/8" PAD, 3'-3 1/2"x1'-5"x1 1/2" STEEL LOAD PLATE)	

GENERAL SUMMARY

NO.	REF	DESCRIPTION	REV.	BY	DATE
PIR4	.	REVISE BRIDGE QTYS	TAZ	.	04/16/25
.	.	.	.	.	.

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ACW

REVIEWER

TAZ 11/22/23

PROJECT ID

106959

SHEET

P.107

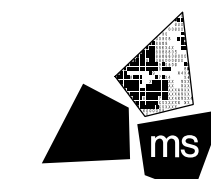
TOTAL

663

SHEET NUM.									PART.		ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
P.24	P.25	P.26	P.28	P.34	P.109	P.113	P.567		01/NHS/01	02/NHS/08	(X)		EXT	TOTAL			
																STRUCTURE OVER 20 FOOT SPAN (DEL-00071-08.910) (CONT.)	
							32			32		516	46900	32	EACH	BEARING DEVICE, MISC.:ELASTOMERIC BEARING ASSEMBLY	P.578
							255			255		518	21200	255	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
							303			303		518	40000	303	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
							43			43		518	40010	43	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
							136			136		524	94904	136	FT	DRILLED SHAFTS, 48" DIAMETER, INTO BEDROCK	
							152			152		524	94906	152	FT	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK	
							1,009			1,009		526	30010	1,009	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")	
							303			303		526	90030	303	FT	TYPE C INSTALLATION	
																STRUCTURE OVER 20 FOOT SPAN (DEL-00071-08.910) ALTERNATES	
							546			546	X	607	39930	546	FT	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC (ALTERNATE 1)	P.20
										565	X	607	98000	565	FT	FENCE, MISC.: DECORATIVE FENCE (ALTERNATE 2)	P.20
							585			585	X	517	75122	585	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING AND VANDAL PROTECTION FENCE) (ALTERNATE 1)	P.20
										565	X	517	76300	565	FT	RAILING, MISC.: CONC. PARAPET W/ TWIN STEEL TUBE RAIL & DECORATIVE PROTECTION FENCE (ALTERNATE 2)	P.20
																MISCELLANEOUS STRUCTURE	
				3		LS			LS			503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	P.23
							7,167		7,167			512	10000	7,167	SY	SEALING OF CONCRETE SURFACES	
																MAINTENANCE OF TRAFFIC	
			472						472			614	11110	472	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			4	3,199 12 1					3,199			614	11630	3,199	FT	INCREASED BARRIER DELINEATION	
									12			614	12380	12	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
									1			614	12400	1	EACH	WORK ZONE IMPACT ATTENUATOR, MISC.:48" WIDE HAZARDS, UNIDIRECTIONAL	P.28
LS								LS				614	12420	LS		DETOUR SIGNING	
	12							12				614	12484	12	EACH	WORK ZONE INCREASED PENALTIES SIGN	
10								10				614	12500	10	EACH	REPLACEMENT SIGN	
	20							20				614	12600	20	EACH	REPLACEMENT DRUM	
				1,850				1,850				614	12801	1,850	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	P.28
	667							667				614	13000	667	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
				283 346					283			614	13310	283	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
									346			614	13350	346	EACH	OBJECT MARKER, ONE WAY	
		80						80				614	18601	80	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.26
8.15								8.15				614	20010	8.15	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
				4.37				4.37				614	20056	4.37	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
9.24								9.24				614	22010	9.24	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
				9.79				9.79				614	22056	9.79	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
3,646								3,646				614	23010	3,646	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	
				20,020				20,020				614	23110	20,020	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
508								508				614	24000	508	FT	WORK ZONE DOTTED LINE, CLASS I, 6"	
				4,200				4,200				614	24102	4,200	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
				537				537				614	28000	537	FT	WORK ZONE GORE MARKING, CLASS II	
20				20				40				614	30000	40	EACH	WORK ZONE ARROW, CLASS I	
4	LS			2				2				614	30001	2	EACH	WORK ZONE ARROW, CLASS I, AS PER PLAN	P.28
								LS				615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
				864 17,340				864 17,340				615	20000	864	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
								622 41100 17,340				622	41100	17,340	FT	PORTABLE BARRIER, UNANCHORED	
	72							72				808	18700	72	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
																INCIDENTALS	
									LS			108	10000	LS		CPM PROGRESS SCHEDULE	
									LS			614	11000	LS		MAINTAINING TRAFFIC	
								24				619	16020	24	MNTH	FIELD OFFICE, TYPE C	
								LS				623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
								LS				624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



ms consultants, inc.

DESIGNER

ACW

REVIEWER

TAZ 11/22/23

PROJECT ID

106959

SHEET

P.107A

TOTAL

663

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR3	.	REVISE COFFERDAM ITEM	TAZ	03/17/25
PIR3	.	REVISE PCB, U.A. QTY.	TAZ	03/28/25
PIR4	.	REVISE MOT QTY.	TAZ	04/15/25

DEL-71-8.91 (PHASE A) PART 1

MODEL: Sheet PAPER: 34x22 (in.) DATE: 4/11/2025 TIME: 8:22:09 AM USER: awhite
\\msnconsultants.com\\files\\Production\\03\\06873-00 I-71-7.91 Phase A\\106959400-Engineering\\Roadway\\Sheets\\106959_GS004.dgn

[illegible]

DRAINAGE SUBSUMMARY

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	QUANTITY CHANGES	ACW	04/10/25
	.			

DESIGN AGENCY



DESIGNER
ACW

REVIEWER

TAZ 02/23

PROJECT ID

106959

SHEET	TOTAL
-------	-------

P.111 | 60

LAST REVISED: P1R4 04/10/2025

DEL-71-8.91 (PHASE A) PART 1

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 4/11/2025 TIME: 11:40:59 AM USER: awithe
\\tronsconsultants.com\files\Production\0360\06873-00\7-1-9\Phase A\106959\400-Engineering\Roadway\Sheets\106959_GS005.dgn

[illegible]

NO.	REF	DESCRIPTION	REV. BY	DATE
PIR4	.	QUANTITY CHANGES	ACW	04/10/25

DESIGN A

ms cons

DESIGNED BY

A

REVISED BY

TAZ

PROJECT NO.

10

SHEET

P.112

DESIGN AGENCY	
 ms consultants	
DESIGNER	
ACW	
REVIEWER	
TAZ 02/23	
PROJECT ID	
106959	
SHEET	TOTAL
P.112	6



DESIGNER
ACWA

REVIEWER

TAZ 02/23

PROJECT ID

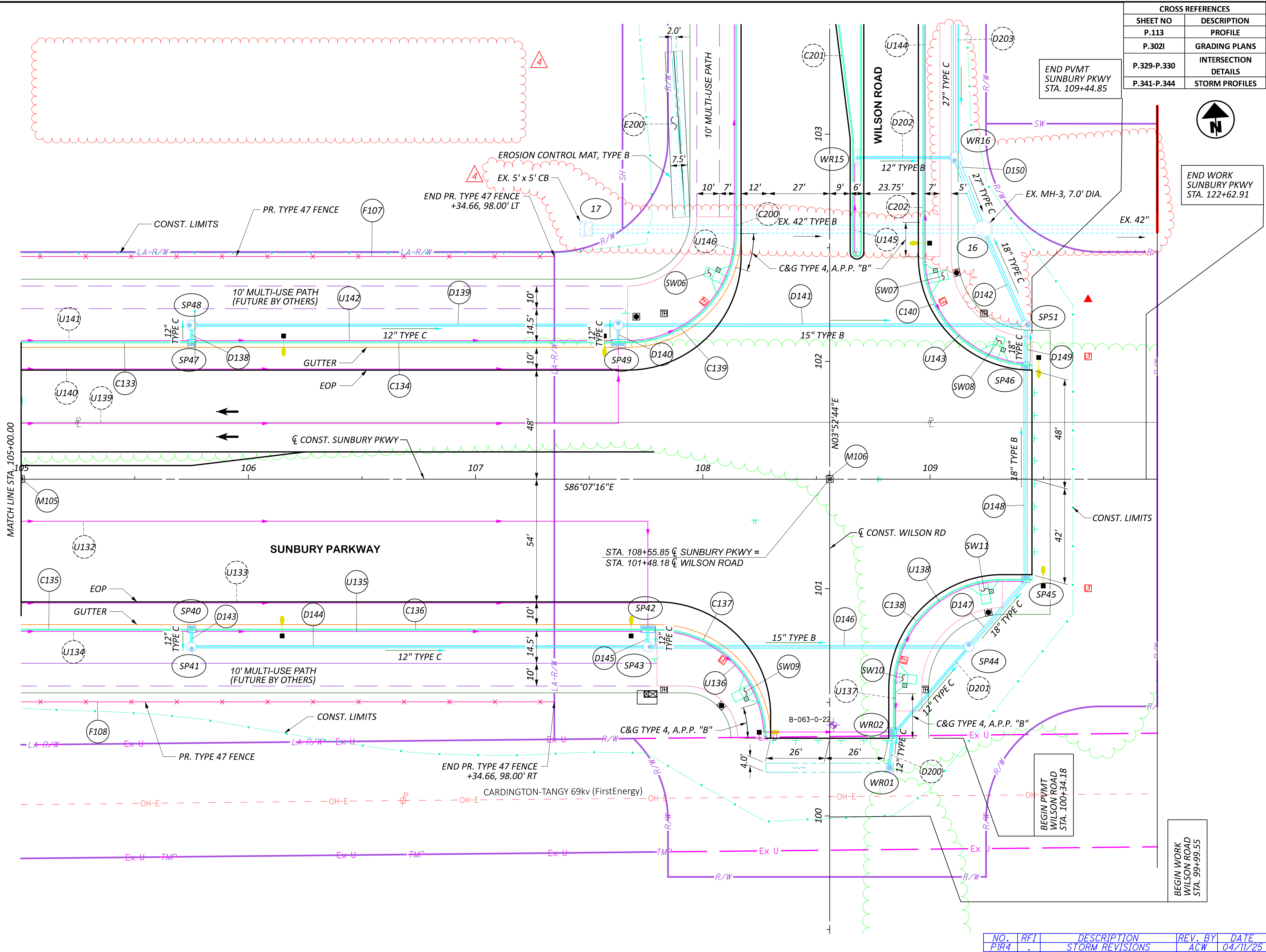
106959

SHEET	TOTAL
-------	-------

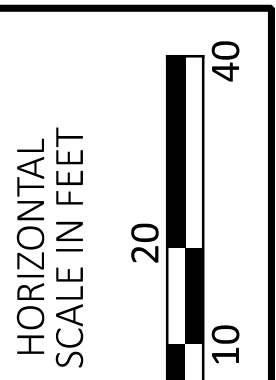
P.112 | 6

PROJECT ID: 02/0697
 REVIEWED BY: ACV
 DATE: 02/06/2017
 PROJECT: 2
 TO: 2
 CONSULTANT: 2
 DRAINAGE SUBSUMMARY

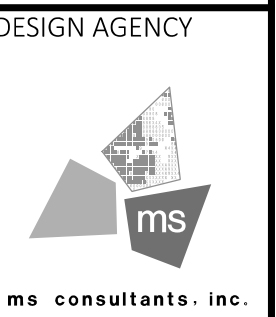
[illegible]



CROSS REFERENCES	
SHEET NO	DESCRIPTION
P.113	PROFILE
P.302I	GRADING PLANS
P.329-P.330	INTERSECTION DETAILS
P.341-P.344	STORM PROFILES



PLAN - SUNBURY PARKWAY
STA. 105+00.00 TO STA. 109+44.85



DESIGNER	ACW
REVIEWER	TAZ
PROJECT ID	106959
SHEET	P.163
TOTAL	663

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	STORM REVISIONS	ACW	04/11/25

DEL-71-8.91 (PHASE A) PART 1

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 4/11/2025 TIME: 2:23:07 PM USER: awhite
\\msconsultants.com\\files\\Production\\03\\60\\06873-00-171-7-91 Phase A\\106959\\400-Engineering\\Roadway\\Sheets\\106959 GQ022.dgn

REF NO.	SHEET NO.	STATION TO STATION					607		609	609		611	611	611	611	611	611				608	608	608		623
							FENCE, TYPE 47		COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN	COMBINATION CURB AND GUTTER, TYPE 4, AS PER PLAN, "B"		12" CONDUIT, TYPE C	15" CONDUIT, TYPE B	18" CONDUIT, TYPE B	18" CONDUIT, TYPE C	27" CONDUIT, TYPE C	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	MANHOLE, NO. 3				CURB RAMP	4" CONCRETE WALK	DETECTABLE WARNING
							FT		FT	FT		FT	FT	FT	FT	FT	EACH	EACH	EACH		SF	SF	SF		EACH
F107	P.163	105+00.00	LT	TO	107+34.66	LT	235																		
F108	P.163	105+00.00	RT	TO	107+34.66	RT	235																		
C133	P.163	105+00.00	LT	TO	105+73.25	LT			73																
C134	P.163	105+76.75	LT	TO	107+59.77	LT			183																
C135	P.163	105+00.00	RT	TO	105+73.25	RT			73																
C136	P.163	105+76.75	RT	TO	107+72.77	RT			196																
C137	P.163	107+78.85	RT	TO	108+29.85	RT			60	16															
C138	P.163	108+81.85	RT	TO	109+44.85	RT			90	20															
C139	P.163	107+65.85	LT	TO	108+16.85	LT			62	14															
C140	P.163	108+94.85	LT	TO	109+44.85	LT			75	15															
D138	P.163	105+75.00	LT	TO	105+75.00	LT											1								
D139	P.163	105+75.00	LT	TO	107+62.81	LT			8																
D140	P.163	107+62.81	LT	TO	107+62.81	LT			188																
D141	P.163	107+62.81	LT	TO	109+42.13	LT			8				179												
D142	P.163	109+42.13	LT	TO	102+58.18	RT								41											
D143	P.163	105+75.00	RT	TO	105+75.00	RT			8								1								
D144	P.163	105+75.00	RT	TO	107+75.81	RT			201																
D145	P.163	107+75.81	RT	TO	107+75.81	RT			8								1								
D146	P.163	107+75.81	RT	TO	109+17.10	RT							141												
D147	P.163	109+17.10	RT	TO	109+42.10	RT																			
D148	P.163	109+42.10	RT	TO	109+42.10	LT								94			1								
D149	P.163	109+42.10	LT	TO	109+42.10	LT									18		1								
D150	P.163	102+58.18	RT	TO	102+89.67	RT																			
SW06	P.163	108+00.22	LT	TO	108+12.70	LT															73	1000	8		
SW07	P.163	108+96.96	LT	TO	109+08.17	LT															73		8		
SW08	P.163	109+21.31	LT	TO	109+39.38	LT															73	674	8		
SW09	P.163	108+12.54	RT	TO	108+25.16	RT															73	1033	8		
SW10	P.163	108+83.85	RT	TO	108+94.27	RT															73		8		
SW11	P.163	109+16.36	RT	TO	109+30.13	RT															73	771	8		
M105	P.163	105+00.00	LT																						1
M106	P.163	108+55.85	LT																						1

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	QUANTITY CHANGES	ACW	04/11/25
	.			

DESIGN AGENCY



DESIGNER

CLH

REVIEWER

TA7 11/01/23

PROJECT ID:

106959

100555

SHEET TOTAL

P.164	60
-------	----

LAST REVISED: PIR4 04/11/2025



HORIZONTAL
SCALE IN FEET



10 20 40

PLAN & PROFILE - WILSON ROAD
STA. 100+34.18 TO STA. 104+00.00

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	EX. STORM CHANGE	ACW	04/11/25



ms consultants, inc.

DESIGNER	
ACW	
REVIEWER	
TAZ	06/29/2
PROJECT ID	
106959	
SHEET	TOTAL
P.171	663

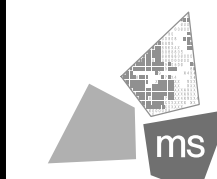
DEL-71-8.91 (PHASE A) PART 1

MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 4/11/2025 TIME: 2:55:30 PM USER: awHITE
\\msconsultants.com\\files\\Production\\03\\60\\06873-00-17-1-7.91 Phase A\\106959\\400-Engineering\\Roadway\\Sheets\\106959_GQ023.dgn

[illegible]

NO.	RFI	DESCRIPTION	REV.	BY	DATE
PIR4	.	CONDUIT SIZE CHANGE	ACW		04/11/25

DESIGN AGENCY



ms consultants, inc

DESIGNER

CLH

REVIEWER
TAZ 11/01/23

PROJECT ID
106959

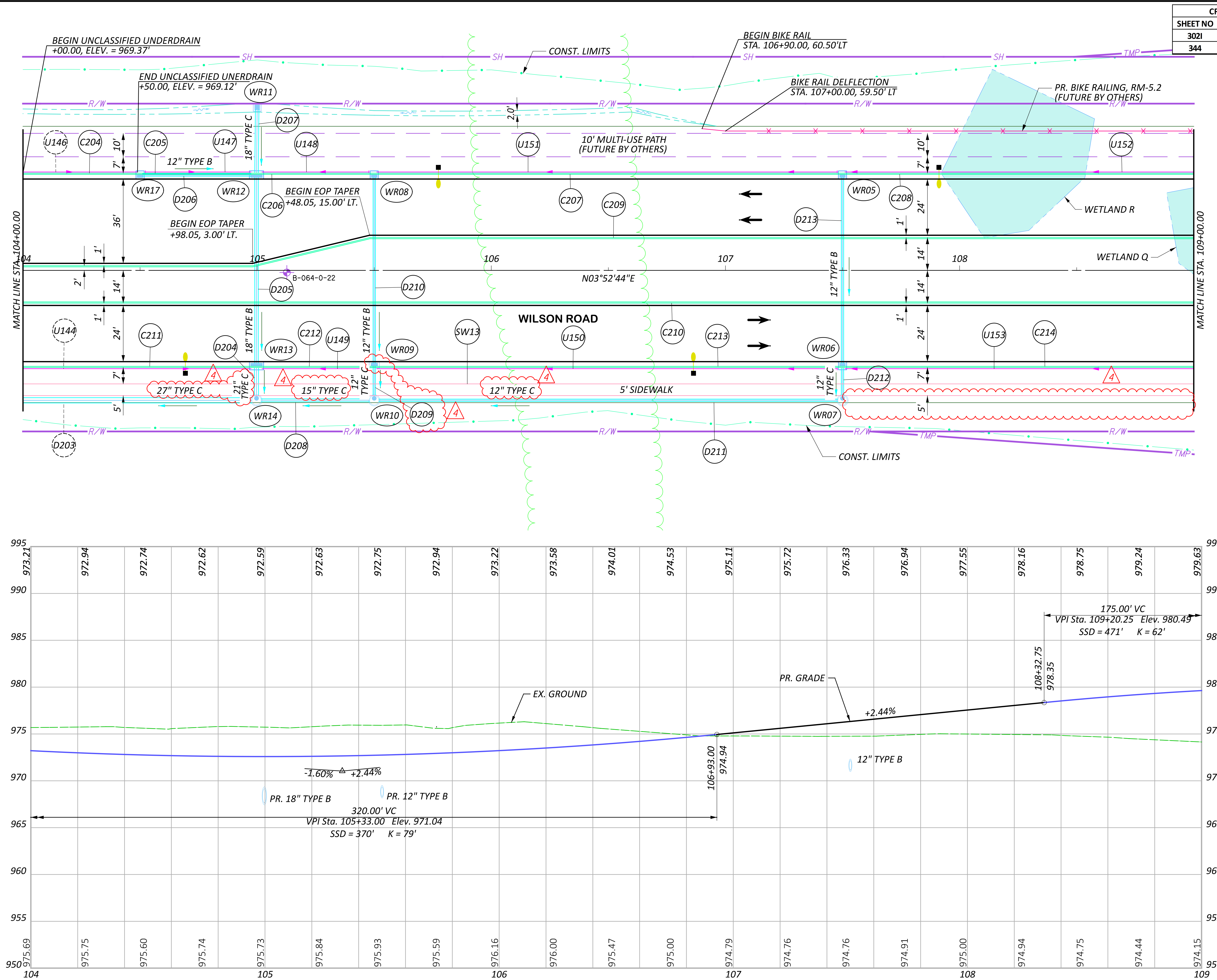
SHEET	TOTAL
P.172	60

ESTIMATED QUANTITIES

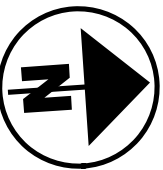
LAST REVISED: P1R4 04/11/2025

DEL-71-8.91 (PHASE A) PART 1

MODEL: CL_WILSON - Wilson Plan 2 [Sheet] PAPER SIZE: 34x22 (in.) DATE: 4/14/2025 TIME: 8:05:08 AM USER: awhite
\\msconsultants.com\files\Production\03\60\06873-00\1-71-7.91 Phase A\106959\400-Engineering\Roadway\Sheets\106959_GP005.dgn



CROSS REFERENCES	
SHEET NO	DESCRIPTION
302I	GRADING
344	STORM PROFILES



HORIZONTAL
SCALE IN FEET

A horizontal scale bar with alternating black and white segments. It is marked with '0' at the left end, '10' at the first major tick, '20' at the second major tick, and '40' at the right end. The segments between 0 and 10, 10 and 20, and 20 and 40 are each composed of four equal sub-segments.

PLAN & PROFILE - WILSON ROAD
STA. 109+00.00 TO STA. 111+12.38

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	CONDUIT CHANGES	ACW	04/14/25



DESIGNER
ACW

REVIEWER
TAZ 06/29PROJECT ID
106959

SHEET	TOTAL
P.173	6

LAST REVISED: PIR4 04/14/2025

DEL-71-8.91 (PHASE A) PART 1

MODEL: SHEET PAPER SIZE: 34x22 (in.) DATE: 4/14/2025 TIME: 7:45:59 AM USER: awhite
\\ms0icons\clients\files\Production\03\60\06873-00\17-1,91 Phase A\106959\400-Engineering\Roadway\Sheets\106959_QC024.dgn

REF NO.	SHEET NO.	STATION TO STATION					609	609		608		611	611	611	611	611	611	611	611	611	611												
							COMBINATION CURB AND GUTTER, TYPE 2	CURB, TYPE 6		4" CONCRETE WALK		12" CONDUIT, TYPE B	12" CONDUIT, TYPE C	18" CONDUIT, TYPE B	18" CONDUIT, TYPE C	21" CONDUIT, TYPE C	15" CONDUIT, TYPE C	CATCH BASIN, NO. 3	CATCH BASIN, NO. 3A	CATCH BASIN, NO. 2-2B	MANHOLE, NO. 3	CATCH BASIN, NO. 6											
							FT	FT		SF		FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH											
C204	P.173	104+00.00	LT	TO	104+48.25	LT	48																										
C205	P.173	104+51.75	LT	TO	104+96.68	LT	45																										
C206	P.173	105+02.77	LT	TO	105+48.25	LT	45																										
C207	P.173	105+51.75	LT	TO	107+48.25	LT	197																										
C208	P.173	107+51.75	LT	TO	109+00.00	LT	148																										
C209	P.173	104+00.00	LT	TO	109+00.00	LT		503																									
C210	P.173	104+00.00	RT	TO	109+00.00	RT		500																									
C211	P.173	104+00.00	RT	TO	104+96.68	RT	97																										
C212	P.173	105+02.77	RT	TO	105+48.25	RT	45																										
C213	P.173	105+51.75	RT	TO	107+48.25	RT	197																										
C214	P.173	107+51.75	RT	TO	109+00.00	RT	148																										
D204	P.173	104+99.73	RT	TO	104+99.73	RT								15		1																	
D205	P.173	104+99.73	LT	TO	104+99.73	RT						81				1																	
D206	P.173	104+50.00	LT	TO	104+99.73	LT				50							1																
D207	P.173	105+00.00	LT	TO	105+00.00	LT							29					1		1													
D208	P.173	105+50.00	RT	TO	104+99.73	RT									50						1												
D209	P.173	105+50.00	RT	TO	105+50.00	RT						15																					
D210	P.173	105+50.00	LT	TO	105+50.00	RT				81								1															
D211	P.173	107+50.00	RT	TO	105+50.00	RT					200										1												
D212	P.173	107+50.00	RT	TO	107+50.00	RT					15									1													
D213	P.173	107+50.00	LT	TO	107+50.00	RT				81										1													
SW13	P.173	104+00.00	RT	TO	109+00.00	RT				2500																							

NO.	REF	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25



DESIGN

DESIGN

TAZ

PROJECT

1

SHEET

P.17

DESIGN AGENCY  ms consultants	
DESIGNER	CLH
REVIEWER	TAZ 11/03
PROJECT ID	106959
SHEET	TOTAL
P.174	6



DESIGNER
CLH

REVIEWER
TAZ 11/01

PROJECT ID	106959
------------	--------

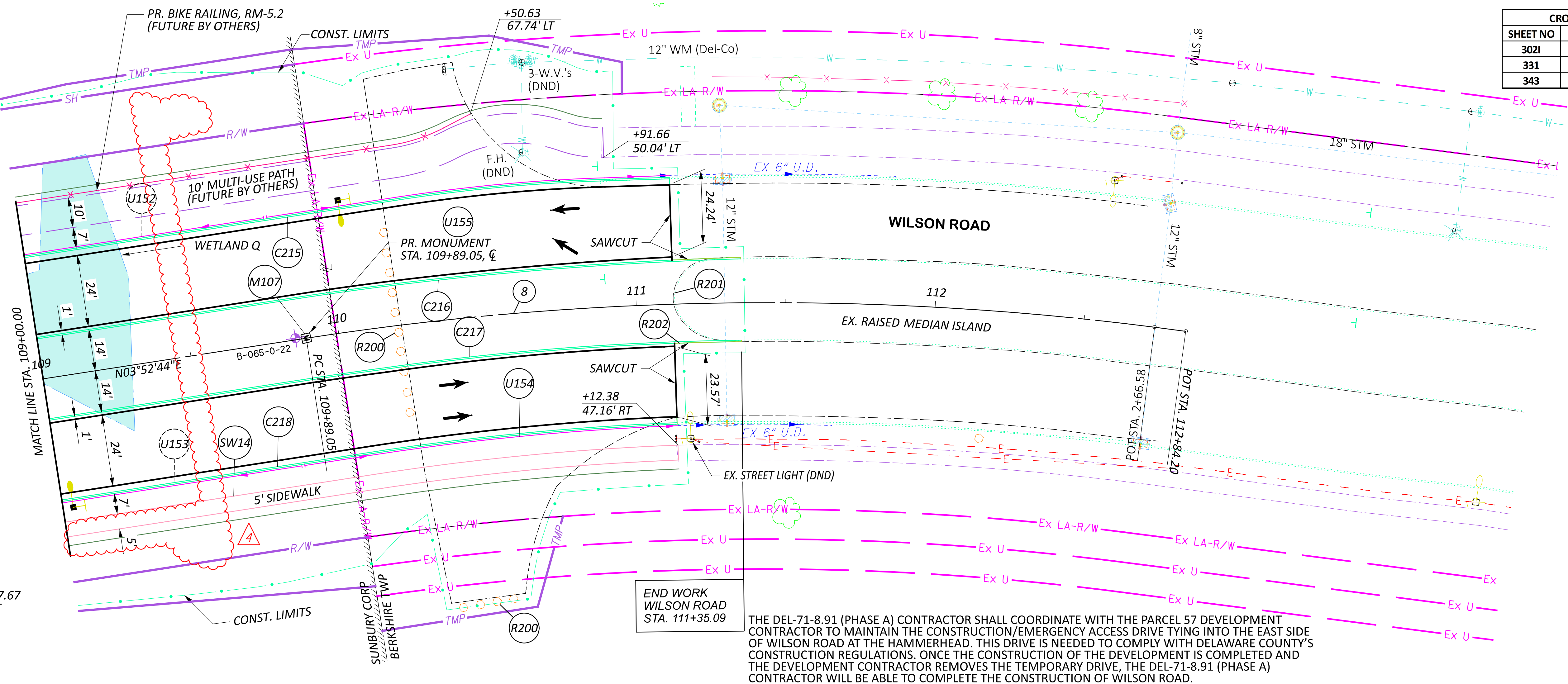
SHEET	TOTAL
P.174	6

LAST REVISED: P1R4 04/14/2025

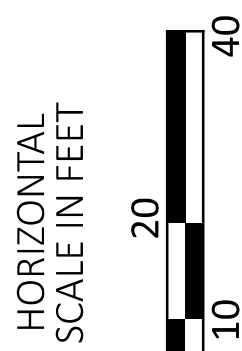
DEL-71-8.91 (PHASE A) PART 1

MODEL: CL WILSON - Wilson Plan 3 [Sheet] PAPER SIZE: 34x22 (in.) DATE: 4/14/2025 TIME: 10:17:25 AM USER: awhite
\\msconsultants.com\files\Production\03\60\06873-00\71-7.91 Phase A\106959\400-Engineering\Roadway\Sheets\106959_GPO05.dgn

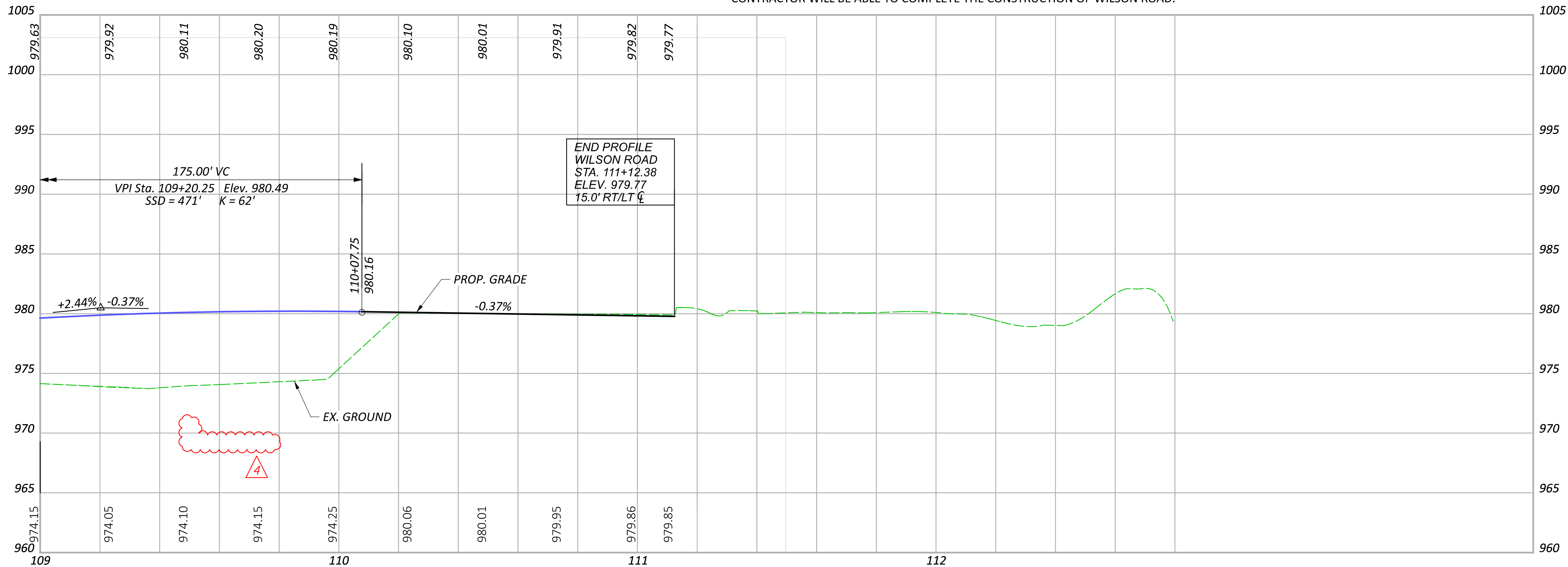
8 CURVE DATA
P.I. = STA. 111+37.67
 $\Delta = 16^{\circ}39'41''$ RT
 $D_c = 05^{\circ}38'42''$
 $R = 1,015.00'$
 $T = 148.63'$
 $L = 295.16'$
 $E = 10.82'$



CROSS REFERENCES	
SHEET NO	DESCRIPTION
3021	GRADING
331	INTERSECTION DETAILS
343	STORM PROFILES



PLAN & PROFILE - WILSON ROAD
STA. 109+00.00 TO STA. 111+12.38



THE DEL-71-8.91 (PHASE A) CONTRACTOR SHALL COORDINATE WITH THE PARCEL 57 DEVELOPMENT CONTRACTOR TO MAINTAIN THE CONSTRUCTION/EMERGENCY ACCESS DRIVE TYING INTO THE EAST SIDE OF WILSON ROAD AT THE HAMMERHEAD. THIS DRIVE IS NEEDED TO COMPLY WITH DELAWARE COUNTY'S CONSTRUCTION REGULATIONS. ONCE THE CONSTRUCTION OF THE DEVELOPMENT IS COMPLETED AND THE DEVELOPMENT CONTRACTOR REMOVES THE TEMPORARY DRIVE, THE DEL-71-8.91 (PHASE A) CONTRACTOR WILL BE ABLE TO COMPLETE THE CONSTRUCTION OF WILSON ROAD.

NO.	REF.	DESCRIPTION	REV. BY	DATE
1	PIR4	DRAINAGE CHANGES	ACW	04/14/25

DESIGN AGENCY



DESIGNER

ACW

REVIEWER

TAZ 06/29/23

PROJECT ID

106959

SHEET

P.175

TOTAL

663

LAST REVISED: PIR4 04/14/2025

DEL-71-8.91 (PHASE A) PART 1

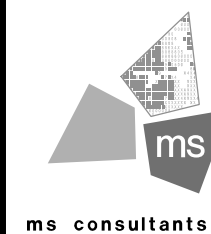
MODEL: Sheet PAPERSIZE: 34x22 (in.) DATE: 4/14/2025 TIME: 8:45:09 AM USER: awhite
\\ms0icons\clients\files\Production\03\600\06873-00\1-7-91 Paper A\106959\400-Engineering\Roadway\Sheets\106959_QQ025.dgn

[illegible]

LAST REVISED: P1R4 04/14/2025

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25

DESIGN AGENCY



DESIGNER

CLH

REVIEWER

TAZ 11/01/23

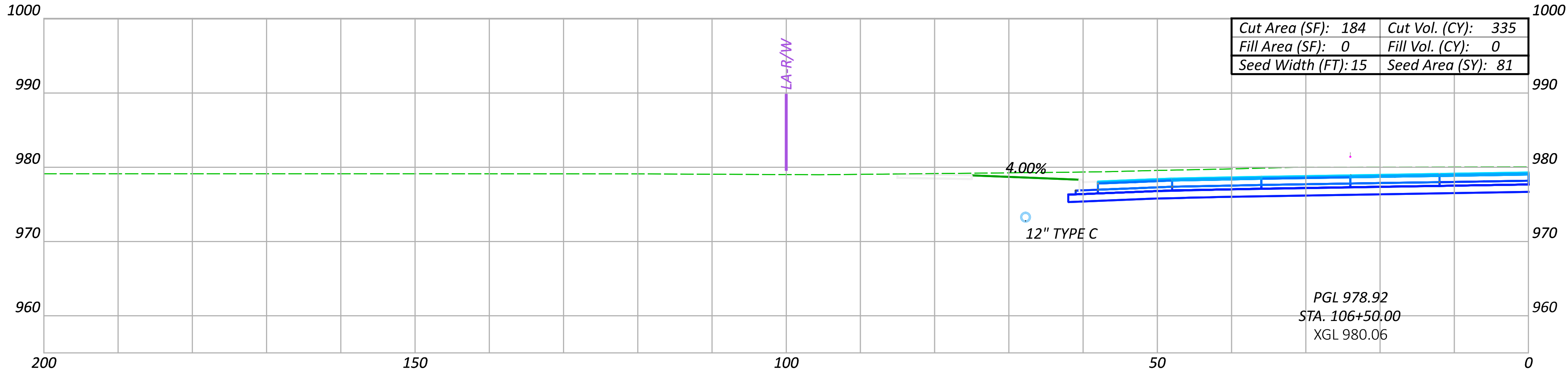
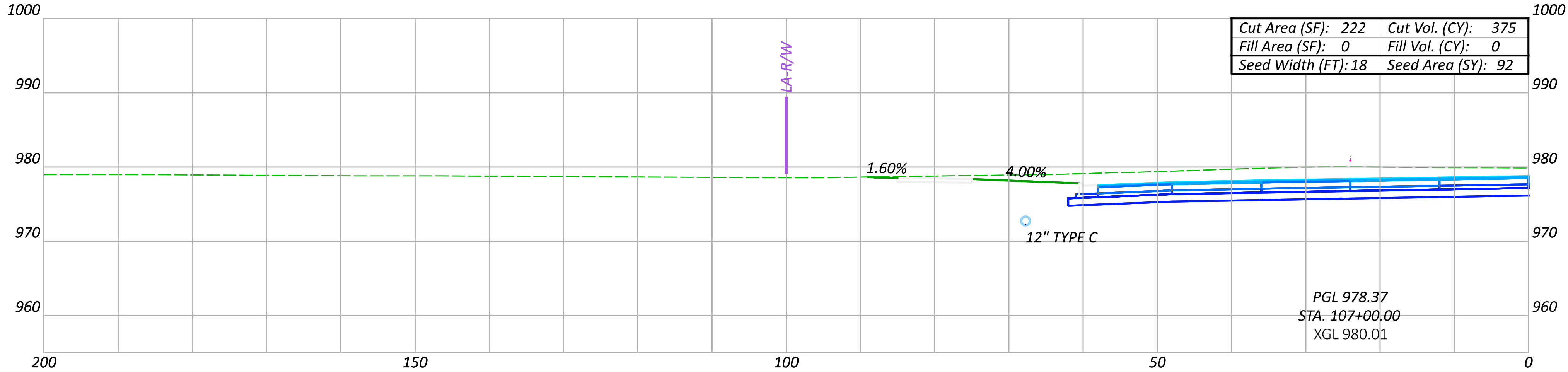
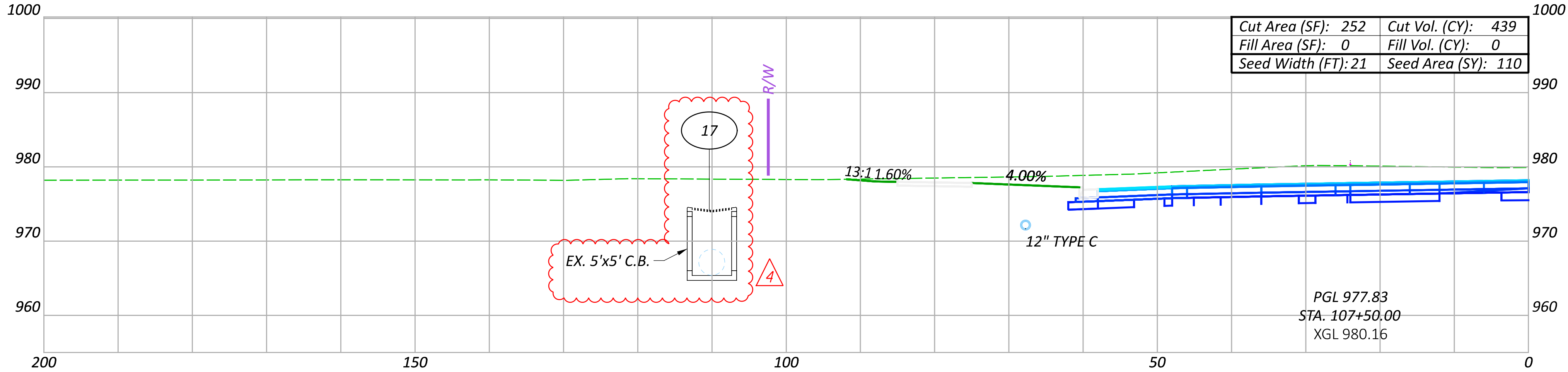
PROJECT ID

106959

SHEET	TOTAL
-------	-------

P 176 | 6

12025



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25

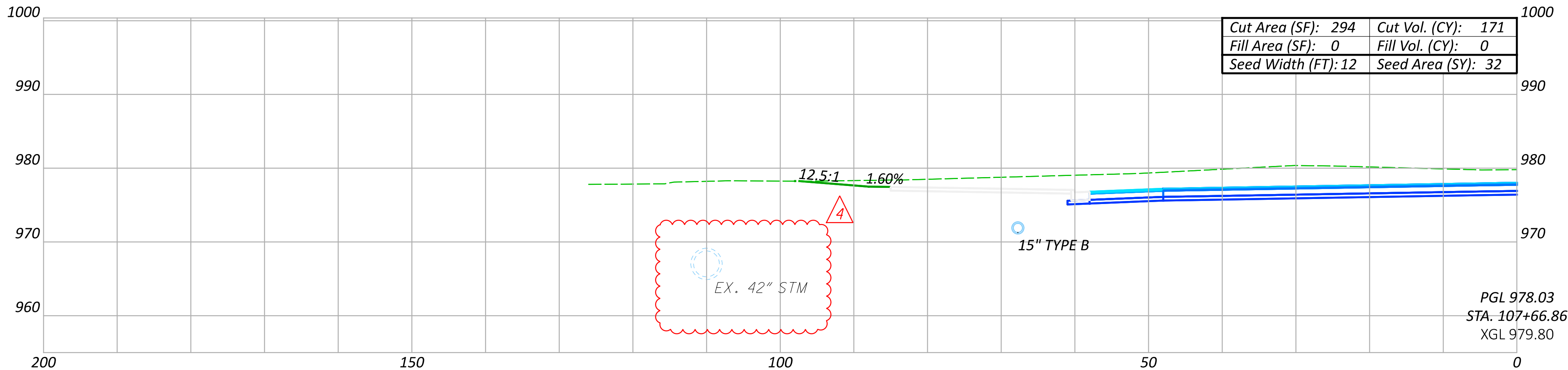
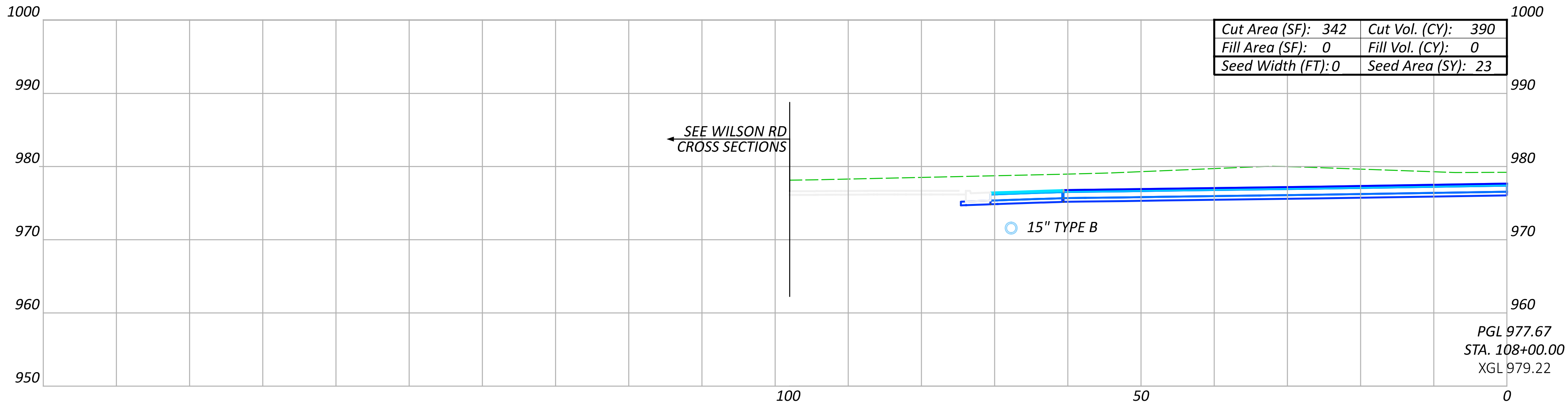
Sheet Totals			SHEET TOTAL	
Seeding	Cut	Fill	P.304	663
283	1149	0		



DESIGNER
CLH

REVIEWER
TAZ 05/15/23

PROJECT ID
106959



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25

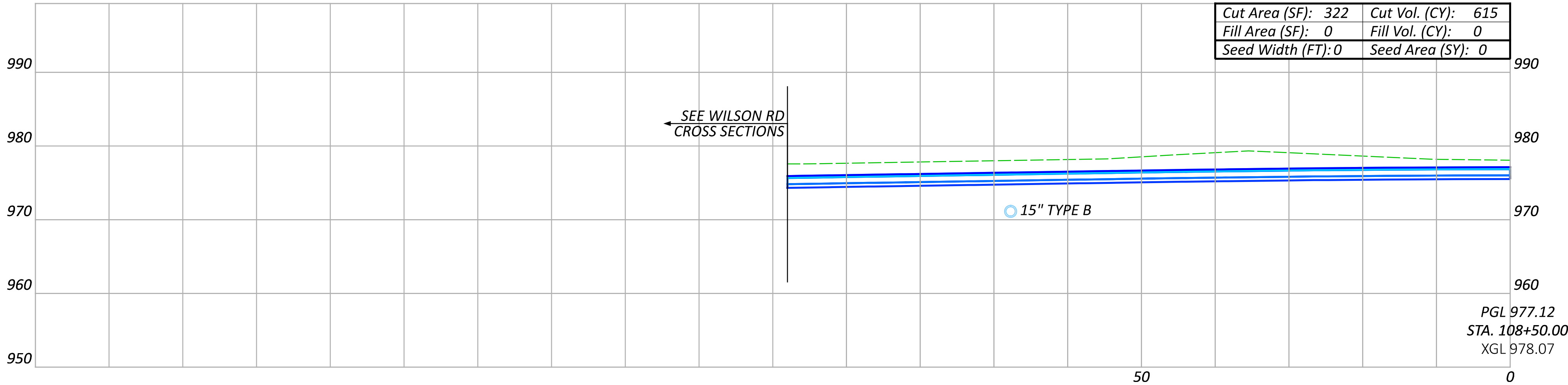
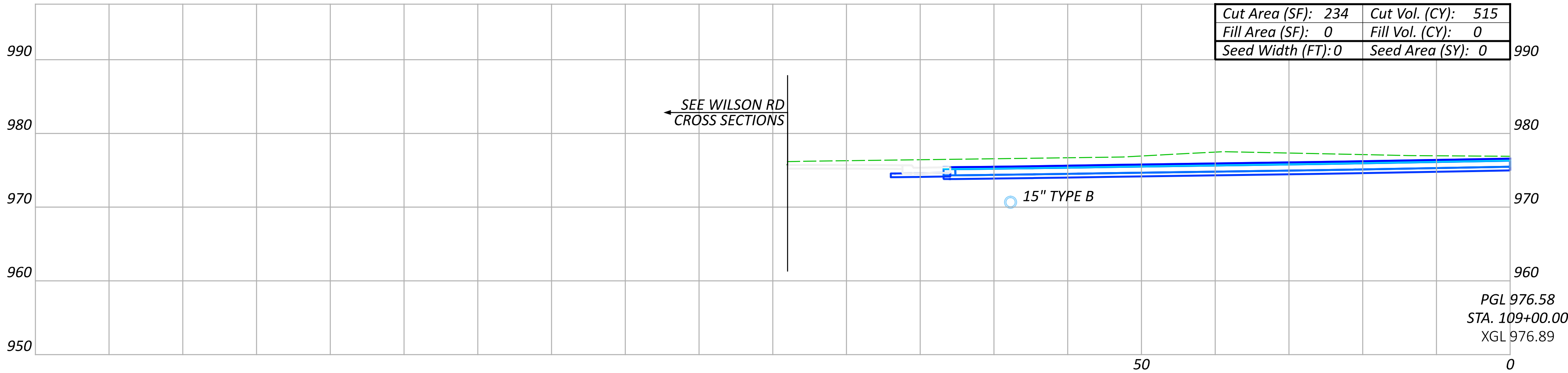
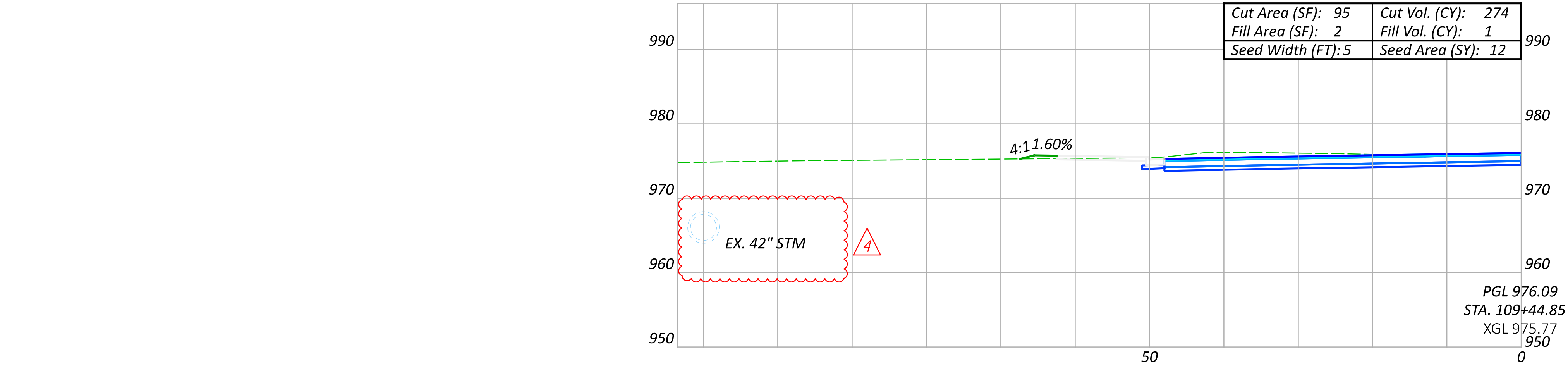
Sheet Totals			SHEET		TOTAL
Seeding	Cut	Fill	P.306		663
55	561	0			



DESIGNER
CLH

REVIEWER
TAZ 05/15/23

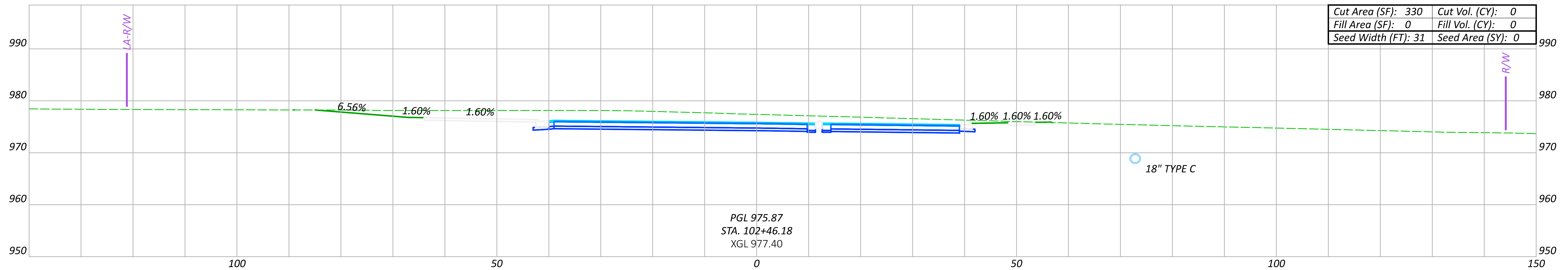
PROJECT ID
106959



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25

Sheet Totals			PROJECT ID	
Seeding	Cut	Fill	SHEET	TOTAL
12	1404	1	P.308	663

MODEL: CL_WILSON - 102x46.18 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 4/14/2025 TIME: 11:45:09 AM USER: awhite

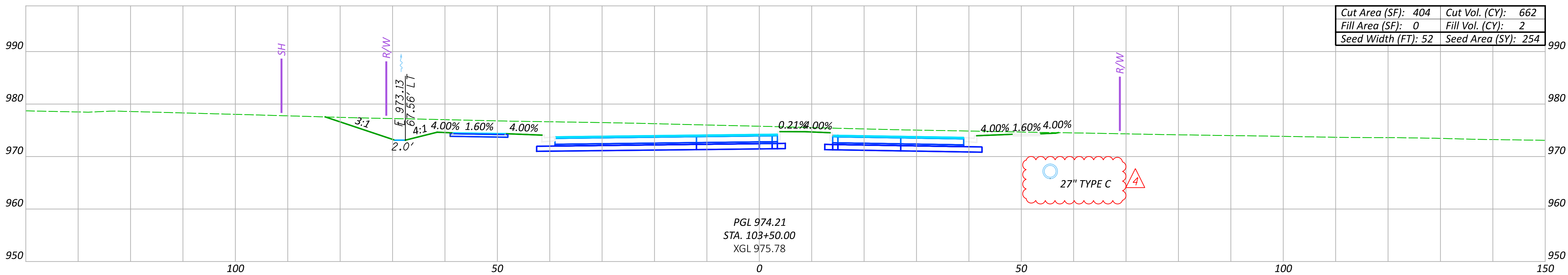
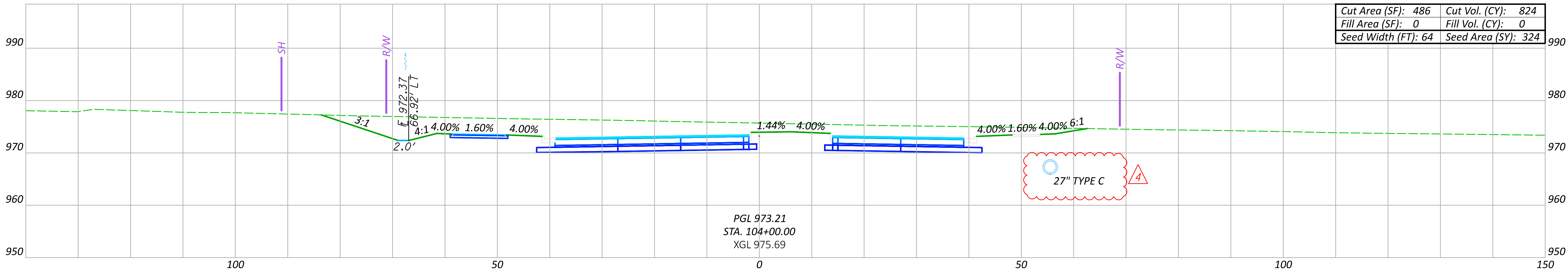
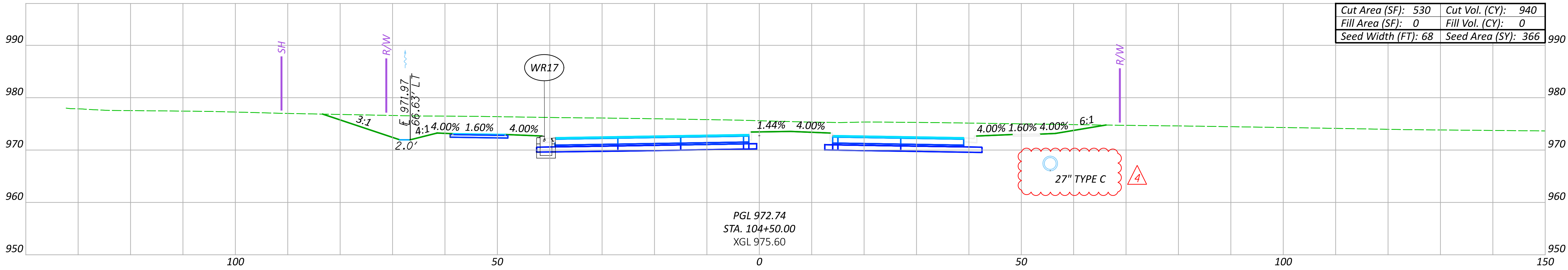


Cut Area (SF): 330	Cut Vol. (CY): 0
Fill Area (SF): 0	Fill Vol. (CY): 0
Seed Width (FT): 31	Seed Area (SY): 0

Seeding	Cut	F
213	633	3

SHEET	TOTAL
P.309	663

LAST REVISED: PIR4 04/14/2025



CROSS SECTIONS WILSON ROAD
STA. 103+50.00 TO STA. 104+50.00

DESIGN AGENCY



DESIGNER

CLH

REVIEWER

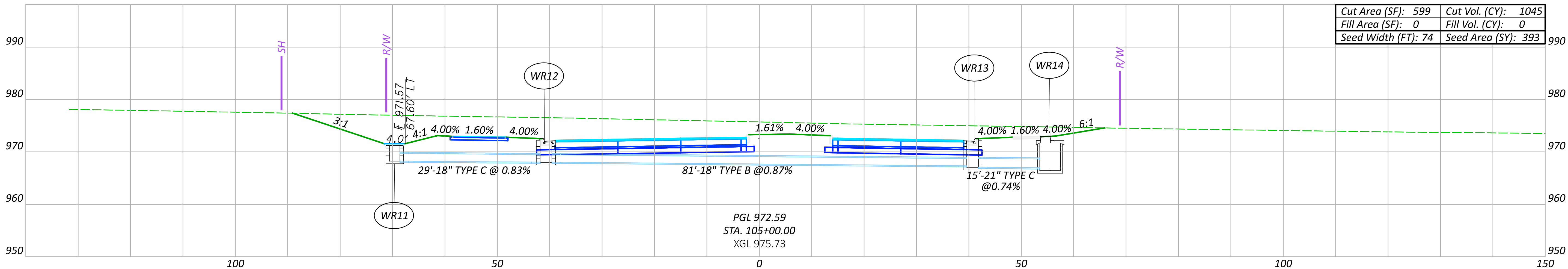
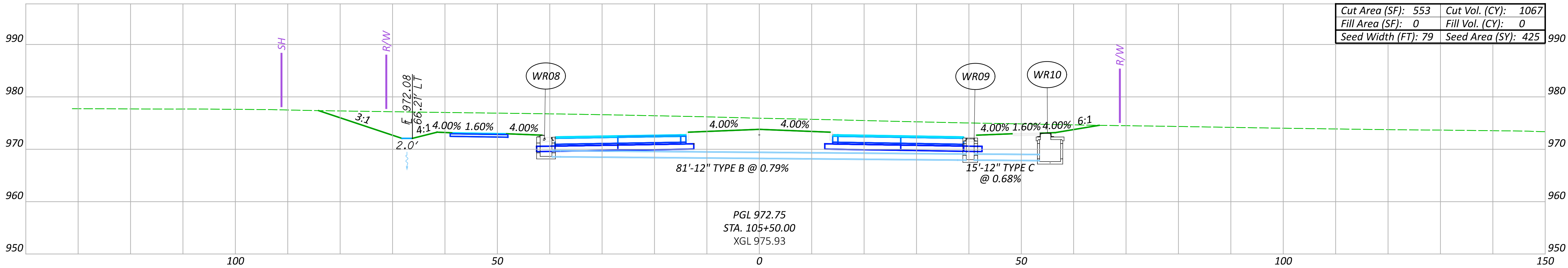
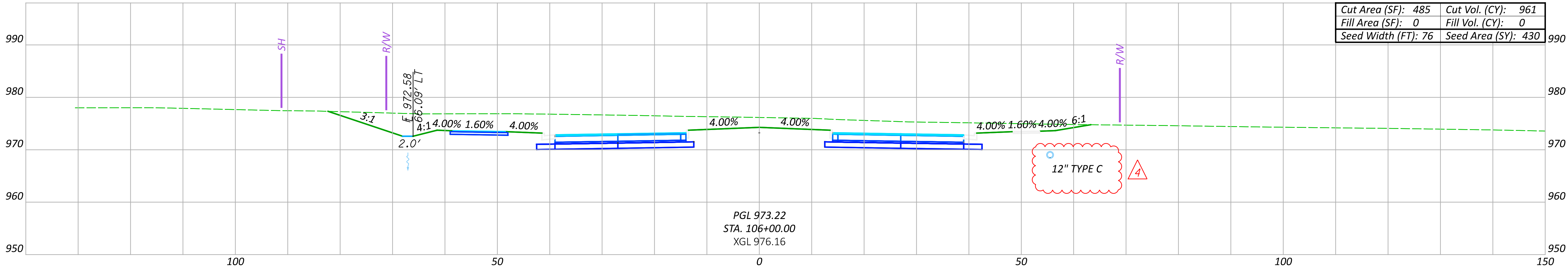
TAZ 06/05/23

PROJECT ID

106959

Sheet Totals		
Seeding	Cut	Fill
944	2426	2

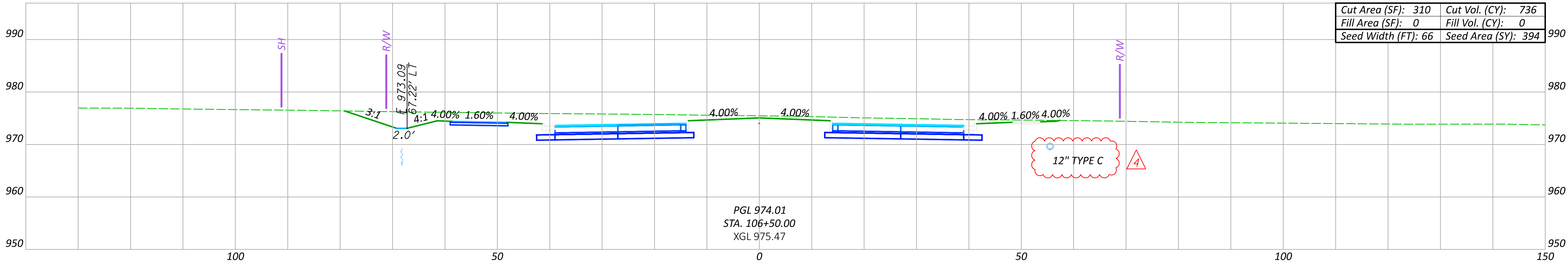
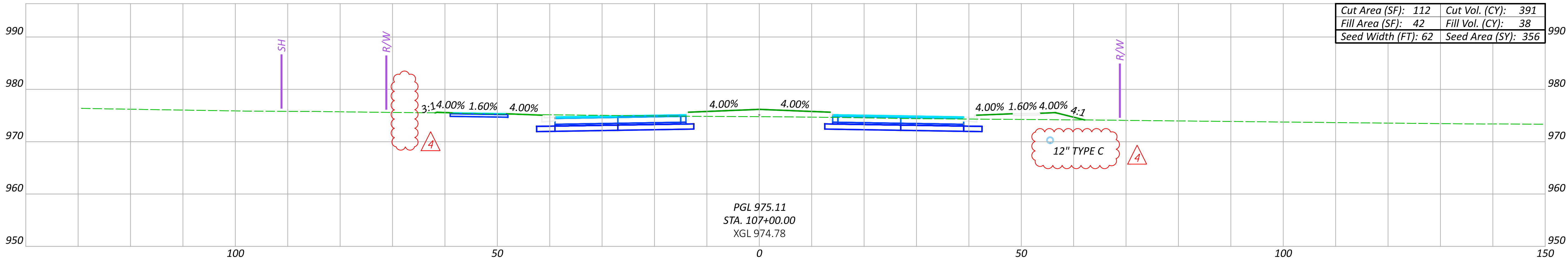
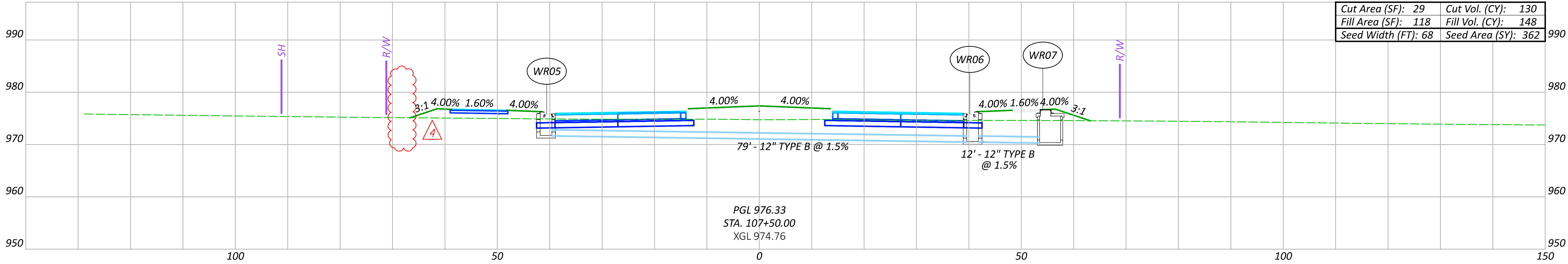
SHEET	TOTAL
P.310	663



NO.	REF	DESCRIPTION	REV. BY	DATE
PIR4	.	CONDUIT CHANGE	ACW	04/14/25

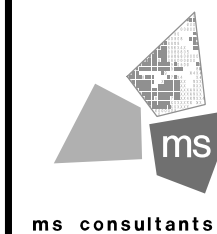
Sheet Totals		
Seeding	Cut	Fill
1248	3073	0

SHEET	TOTAL
P.311	663



CROSS SECTIONS WILSON ROAD
STA. 106+50.00 TO STA. 107+50.00

DESIGN AGENCY



DESIGNER

CLH

REVIEWER

TAZ 06/05/23

PROJECT ID

106959

Sheet Totals

Seeding Cut Fill

11:12 1257 186

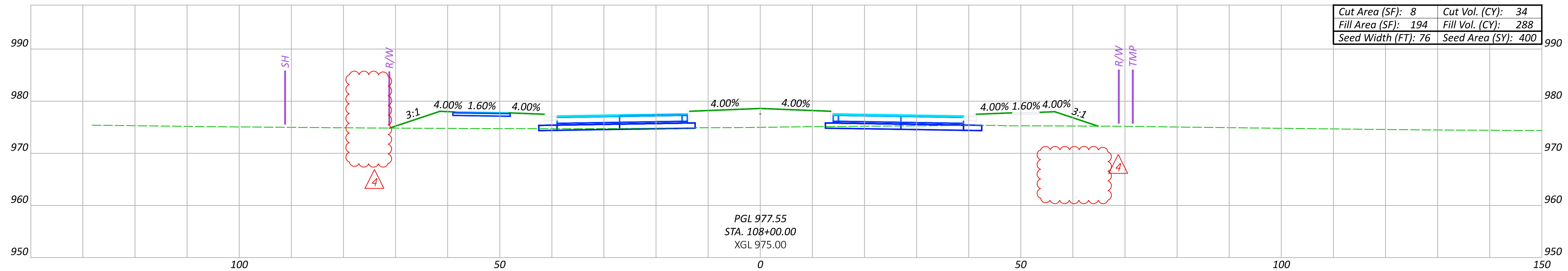
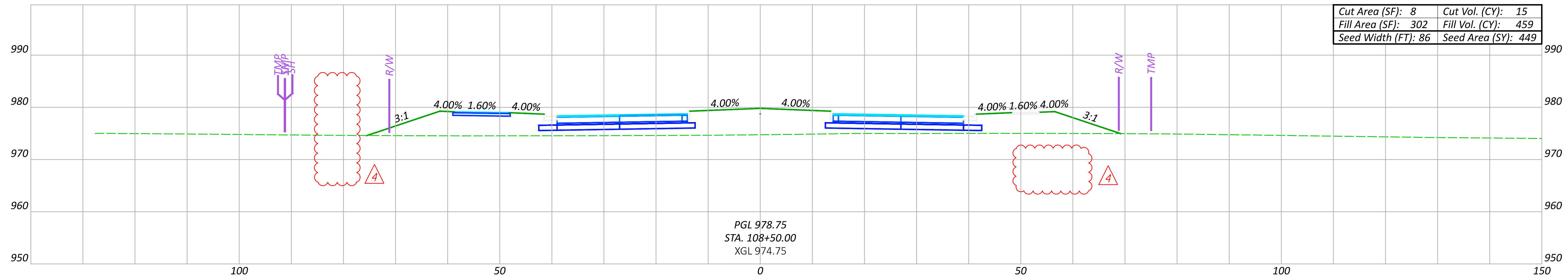
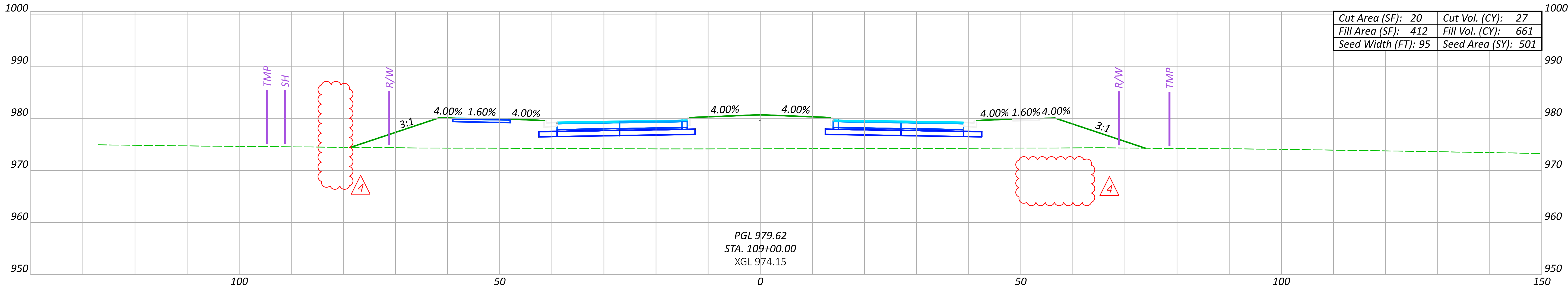
SHEET

P.312

TOTAL

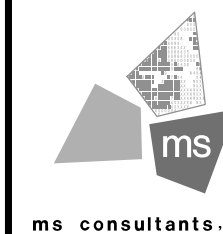
663

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25



CROSS SECTIONS WILSON ROAD
STA. 108+00.00 TO STA. 109+00.00

DESIGN AGENCY



DESIGNER

CLH

REVIEWER

TAZ 06/05/23

PROJECT ID

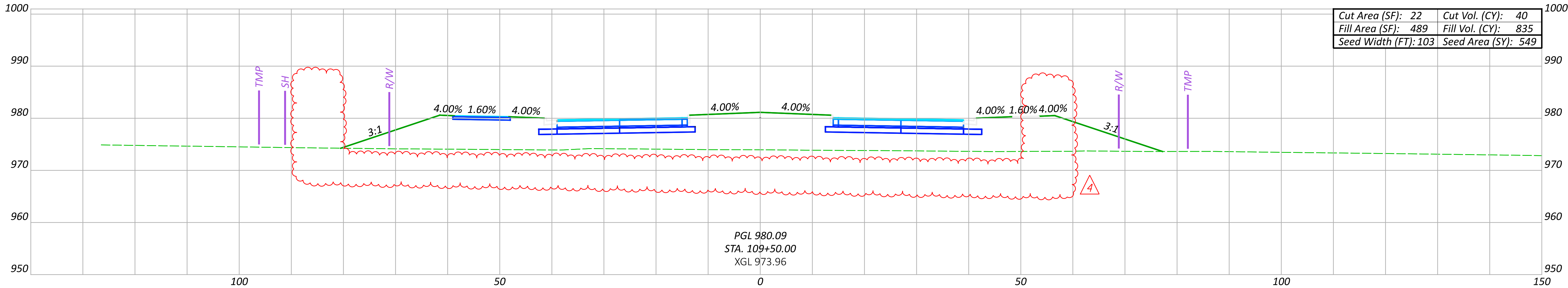
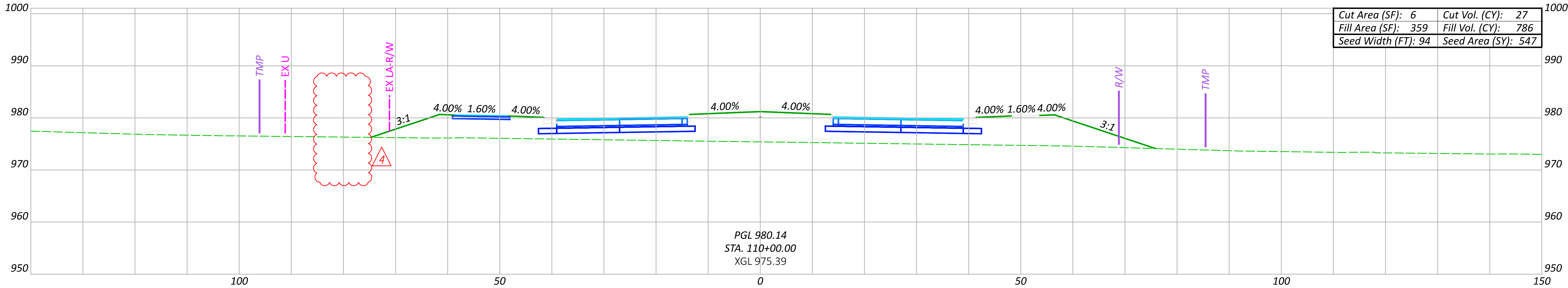
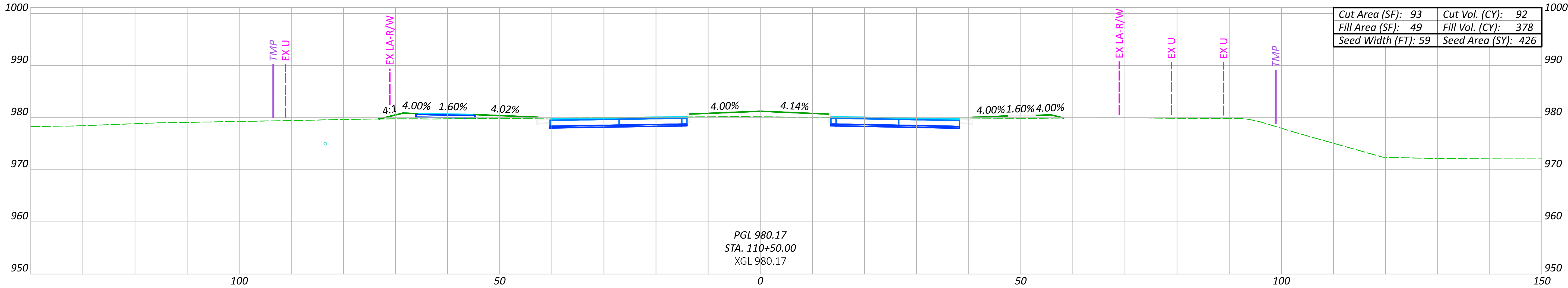
106959

Sheet Totals

Seeding	Cut	Fill
1350	76	1408

SHEET	TOTAL
P.313	663

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	DRAINAGE CHANGES	ACW	04/14/25

Sheet Totals		
Seeding	Cut	Fill
1522	159	1999

DESIGN AGENCY

ms consultants, inc.

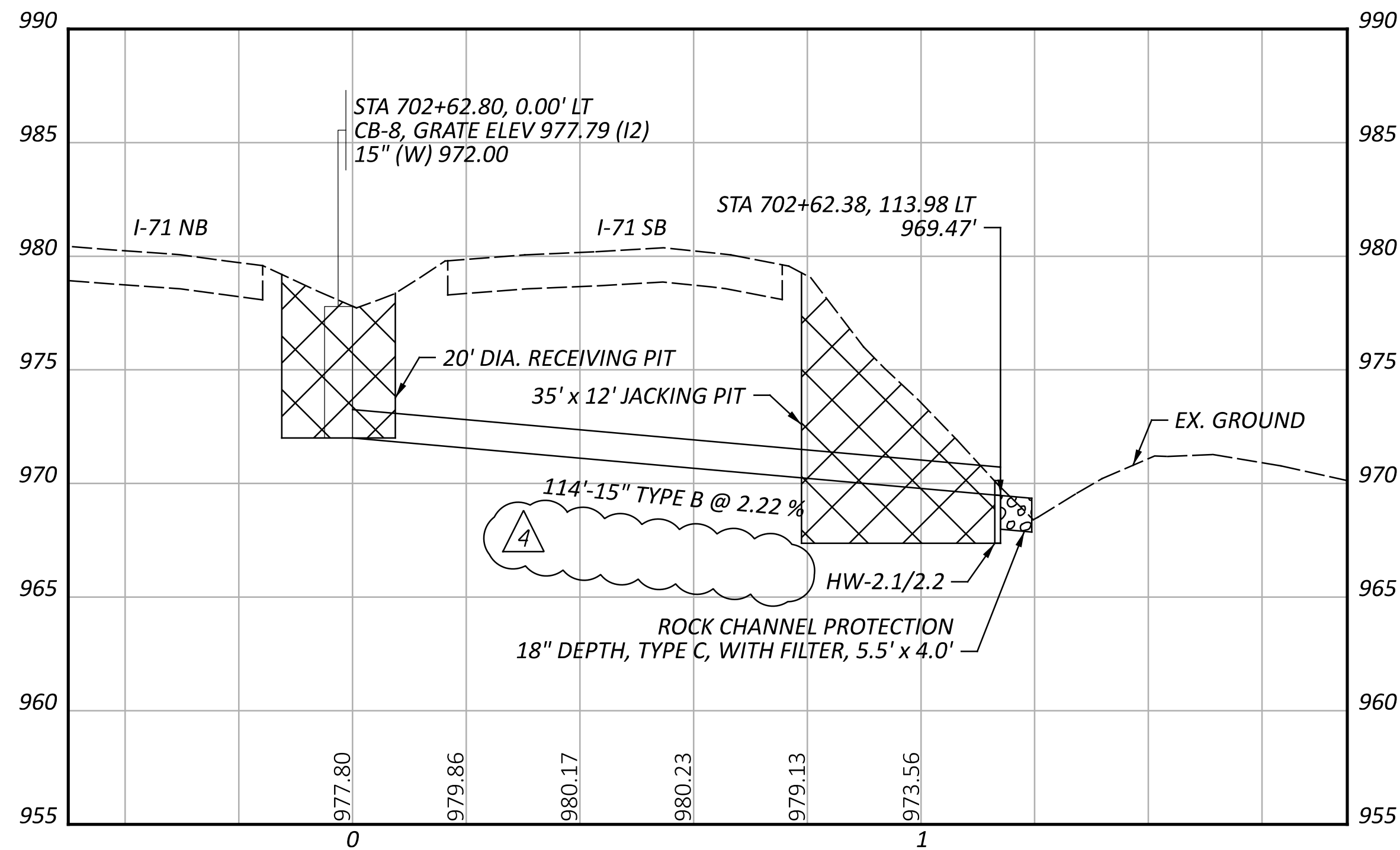
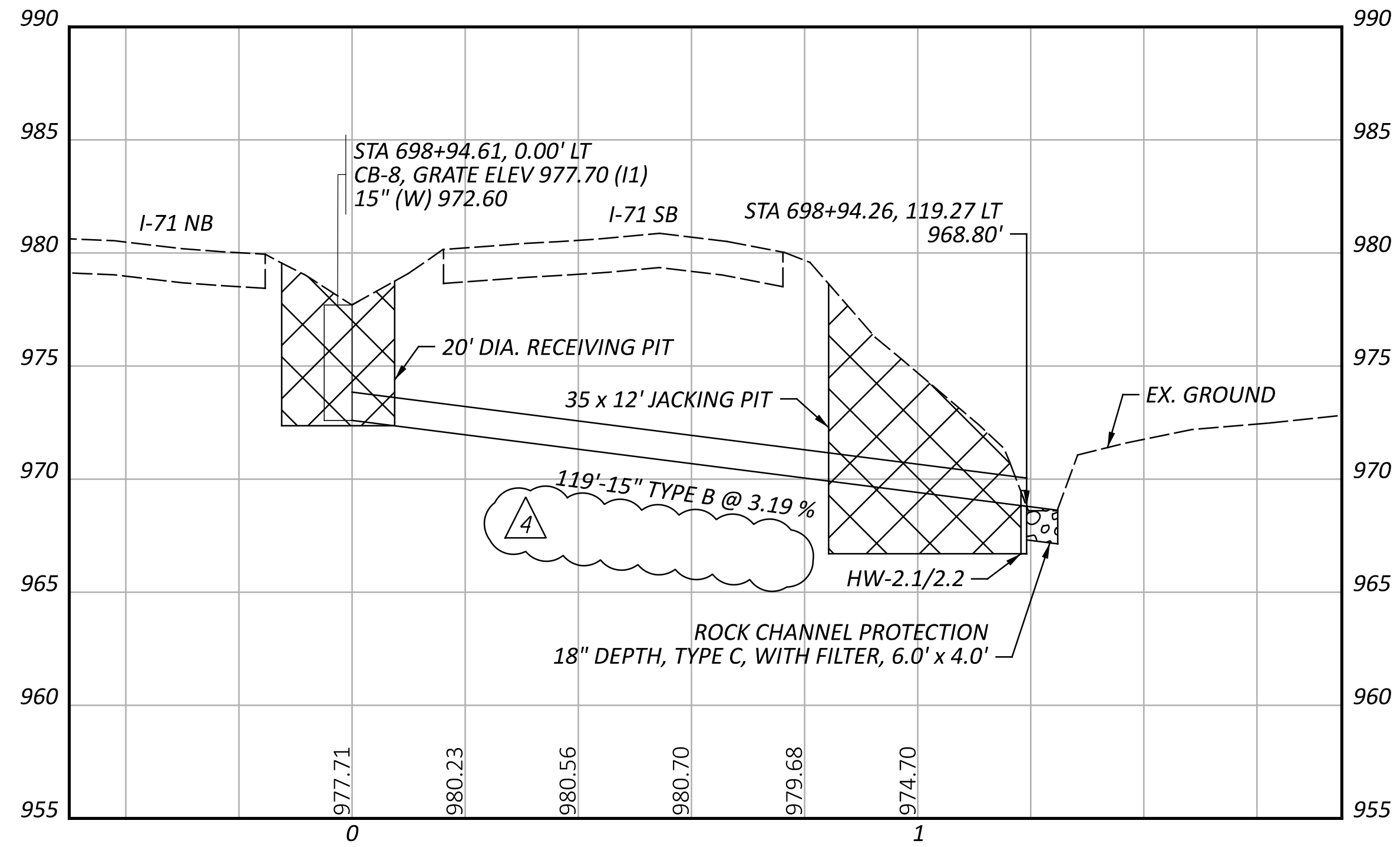
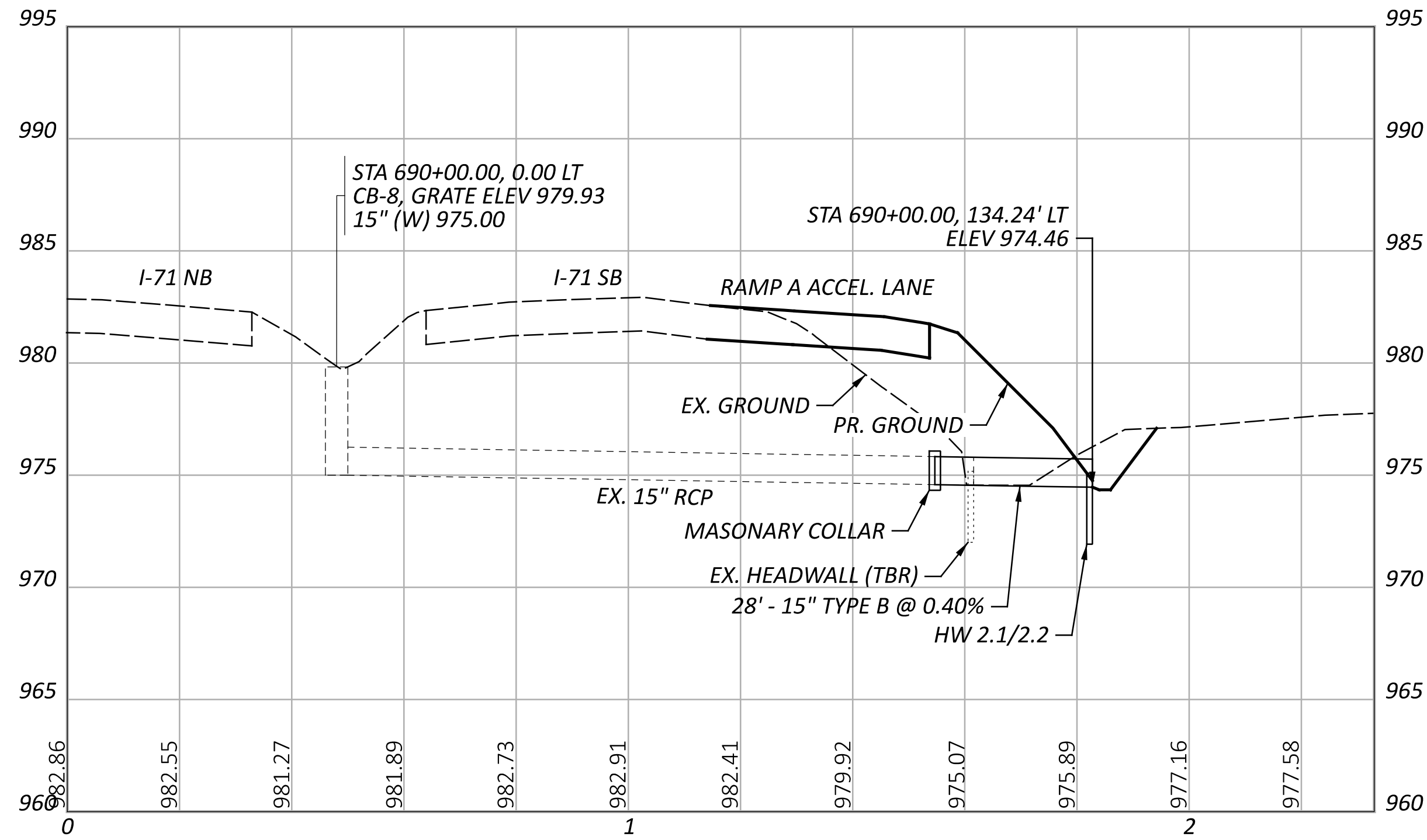
DESIGNER
CLH

REVIEWER
TAZ 06/05/23

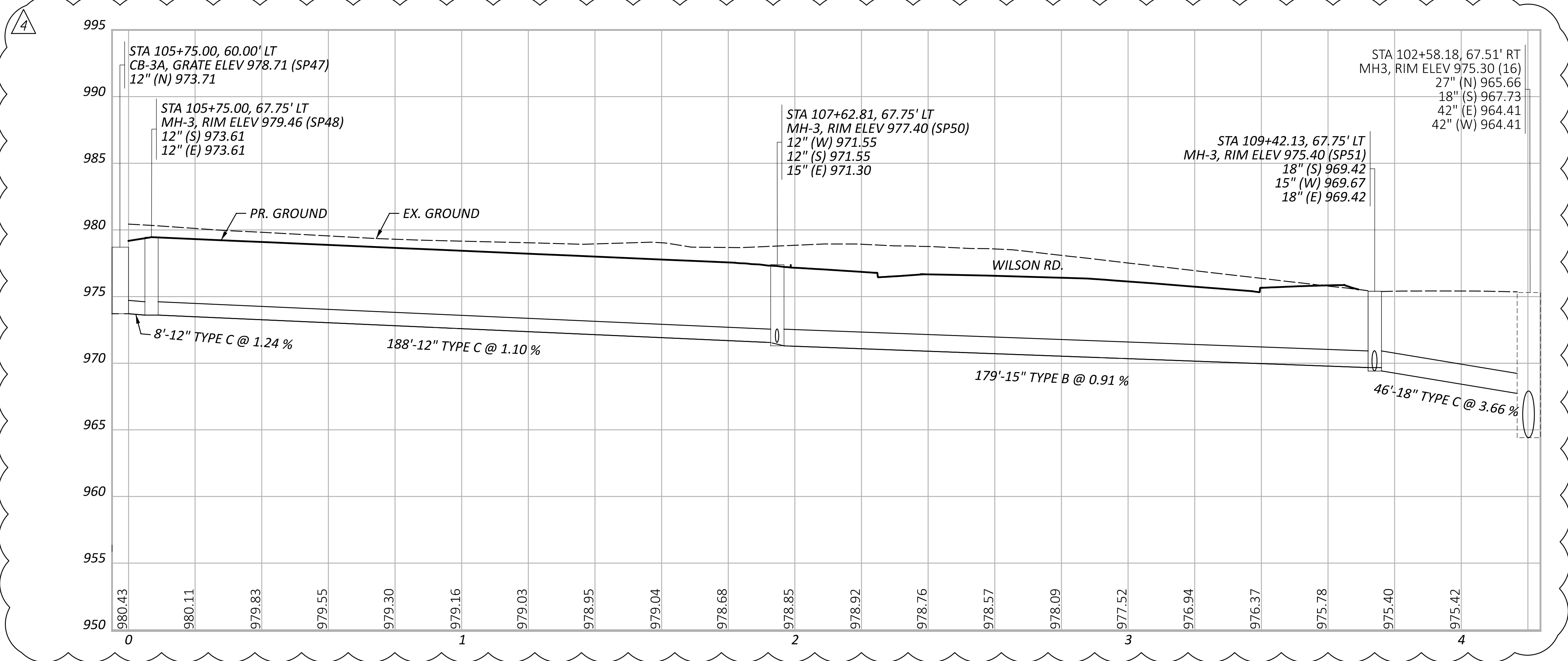
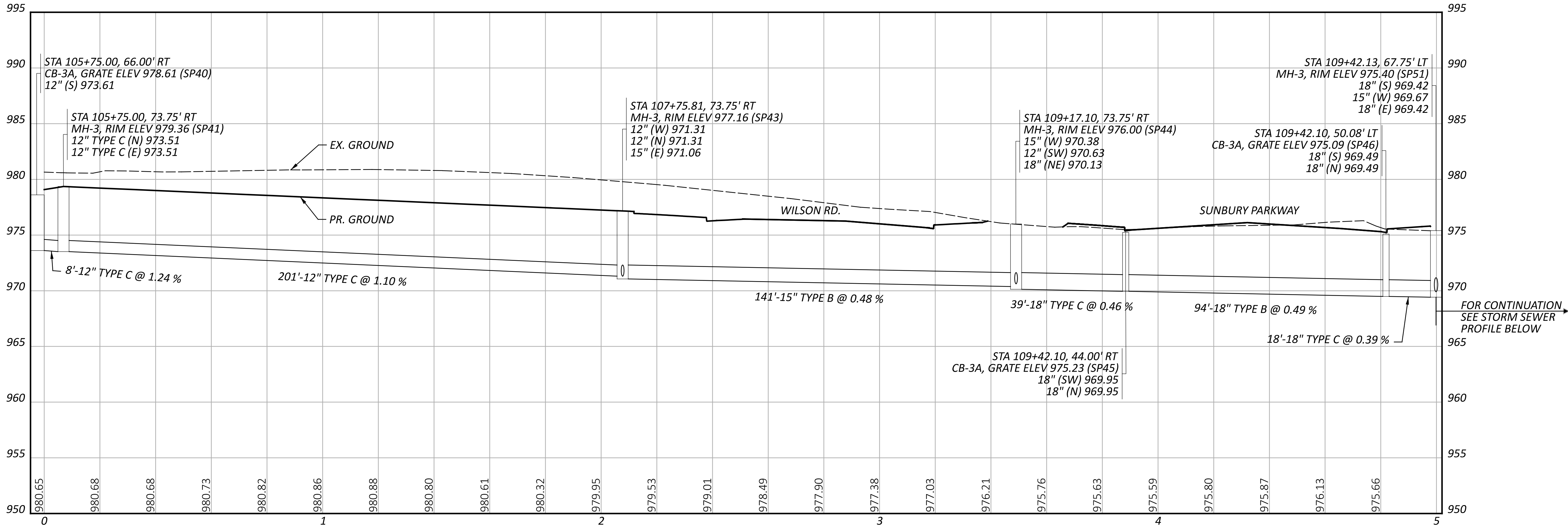
PROJECT ID
106959

SHEET TOTAL
P.314 663

CROSS SECTIONS WILSON ROAD
STA. 109+50.00 TO STA. 110+50.00



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE DRAINAGE PROF	CLH	4/09/25
.	.	.	.	.



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE DRAINAGE PROF	CLH	4/09/25
.	.	.	.	.

STORM PROFILES
SUNBURY PARKWAY

DESIGN AGENCY



DESIGNER

CLH

REVIEWER

TAZ 06/06/23

PROJECT ID

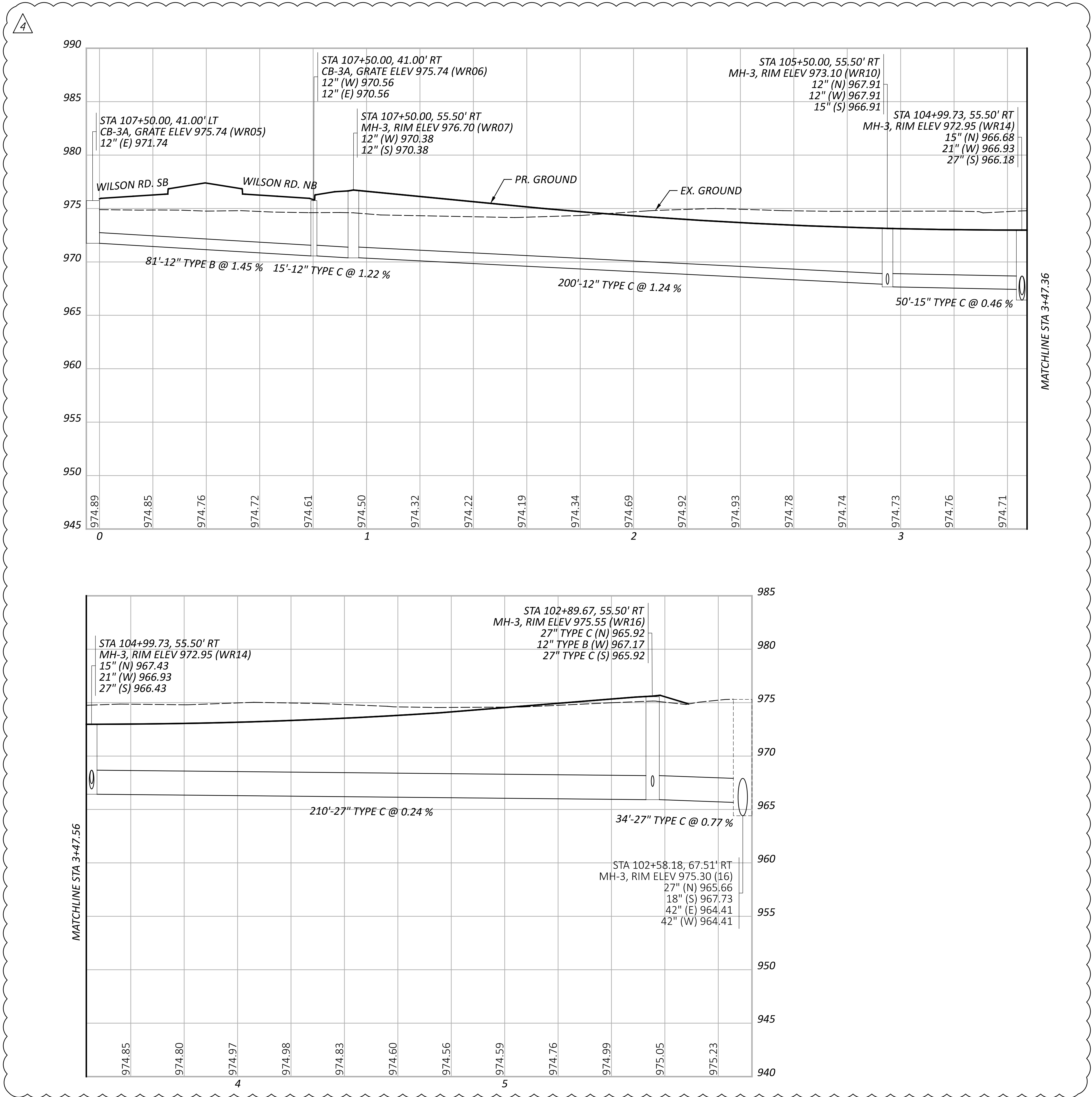
106959

SHEET

P.426

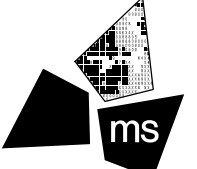
TOTAL

663



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE DRAINAGE PROF	CLH	4/09/25
.	.	.	.	.

DESIGN AGENCY



ms consultants, inc.

DESIGNER

CLH

REVIEWER

TAZ 06/06/23

PROJECT ID

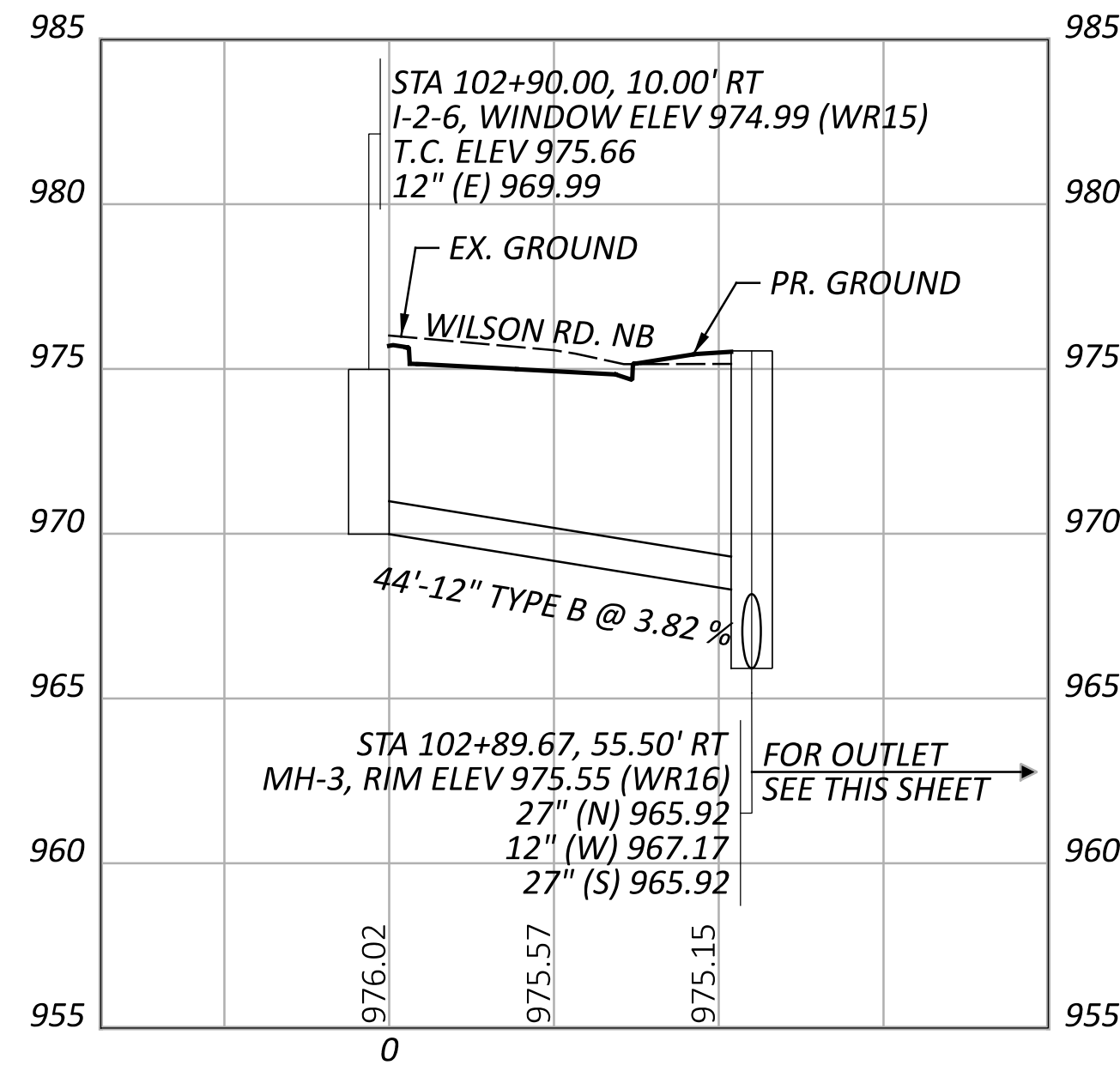
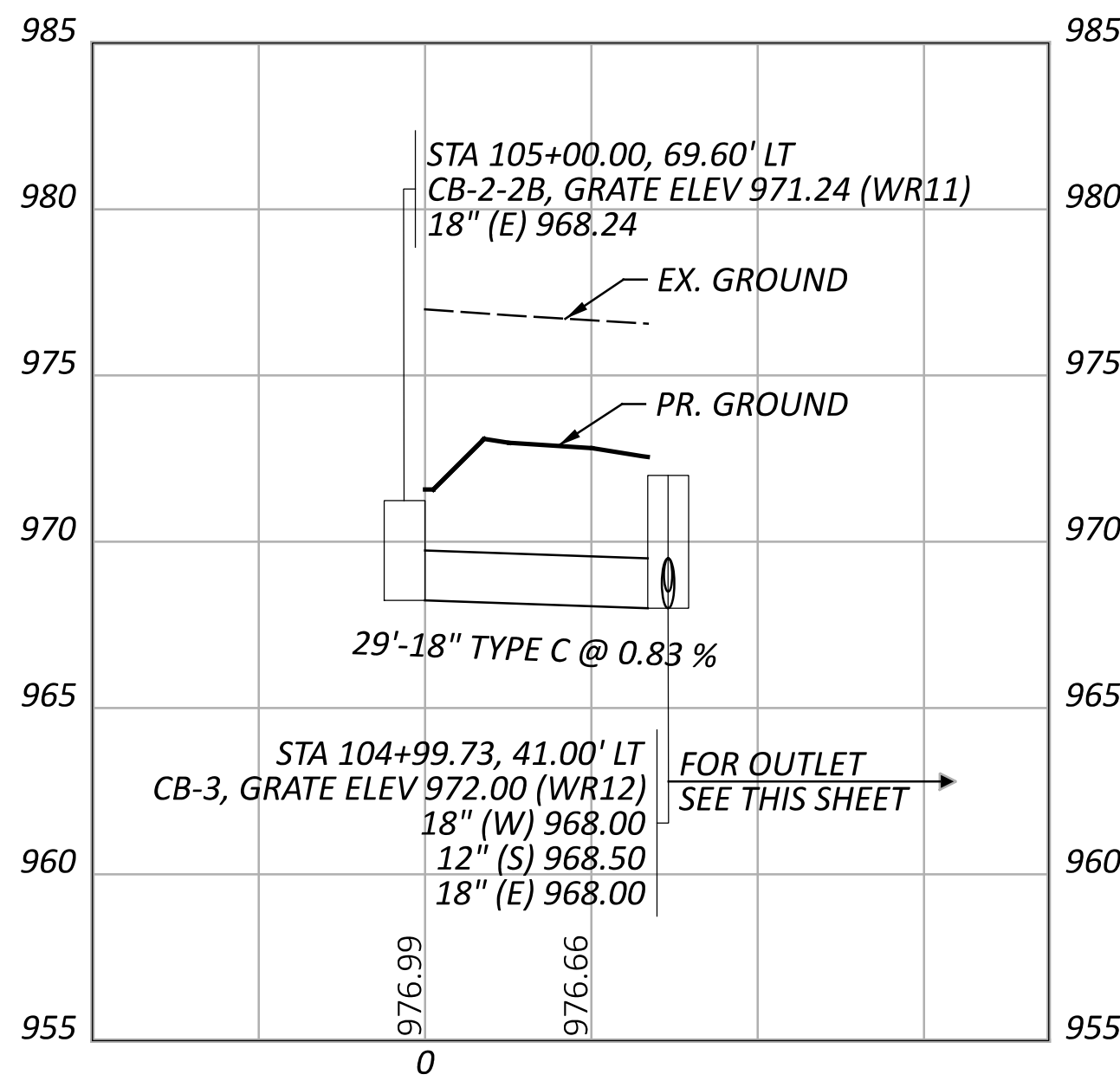
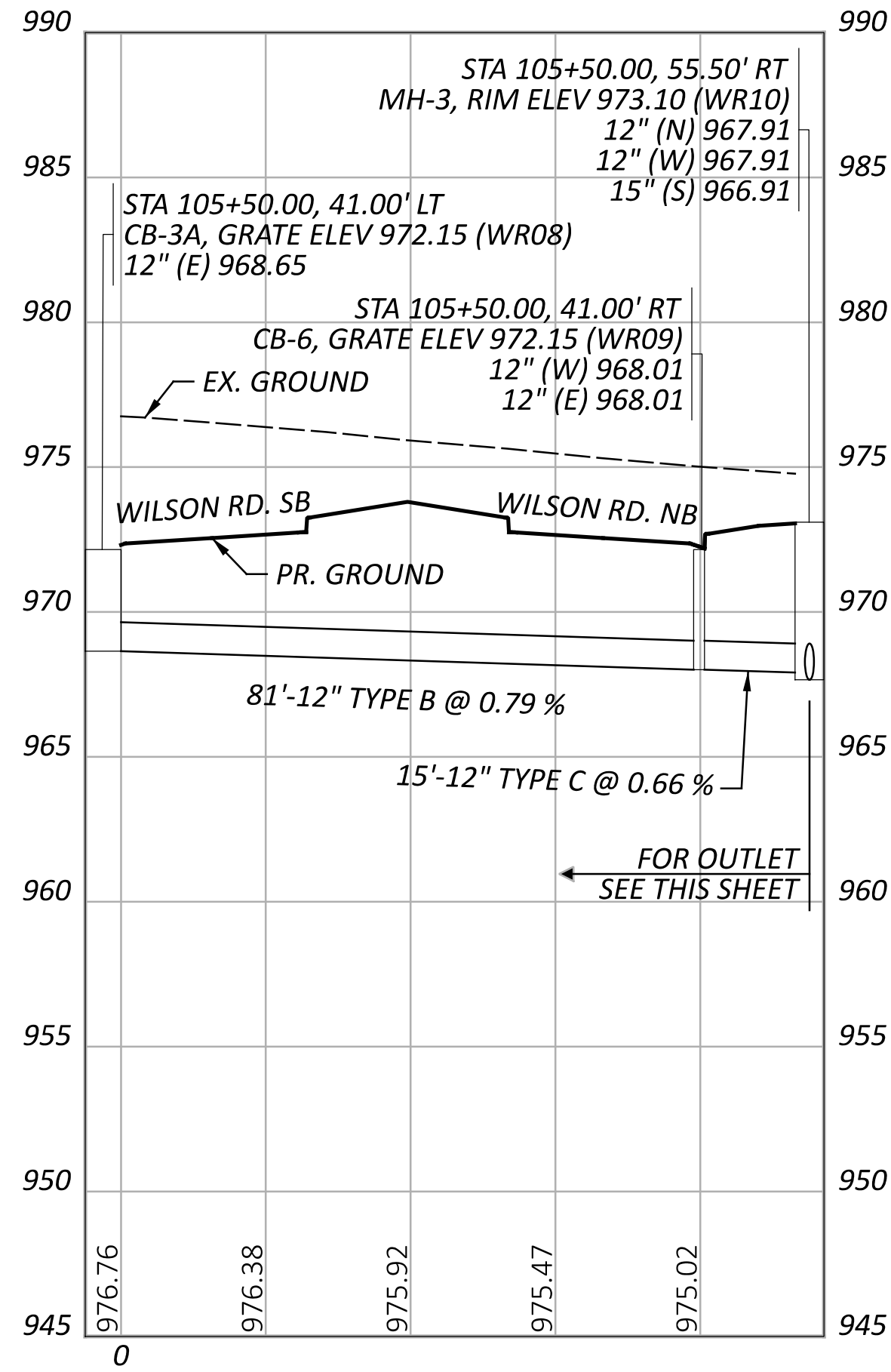
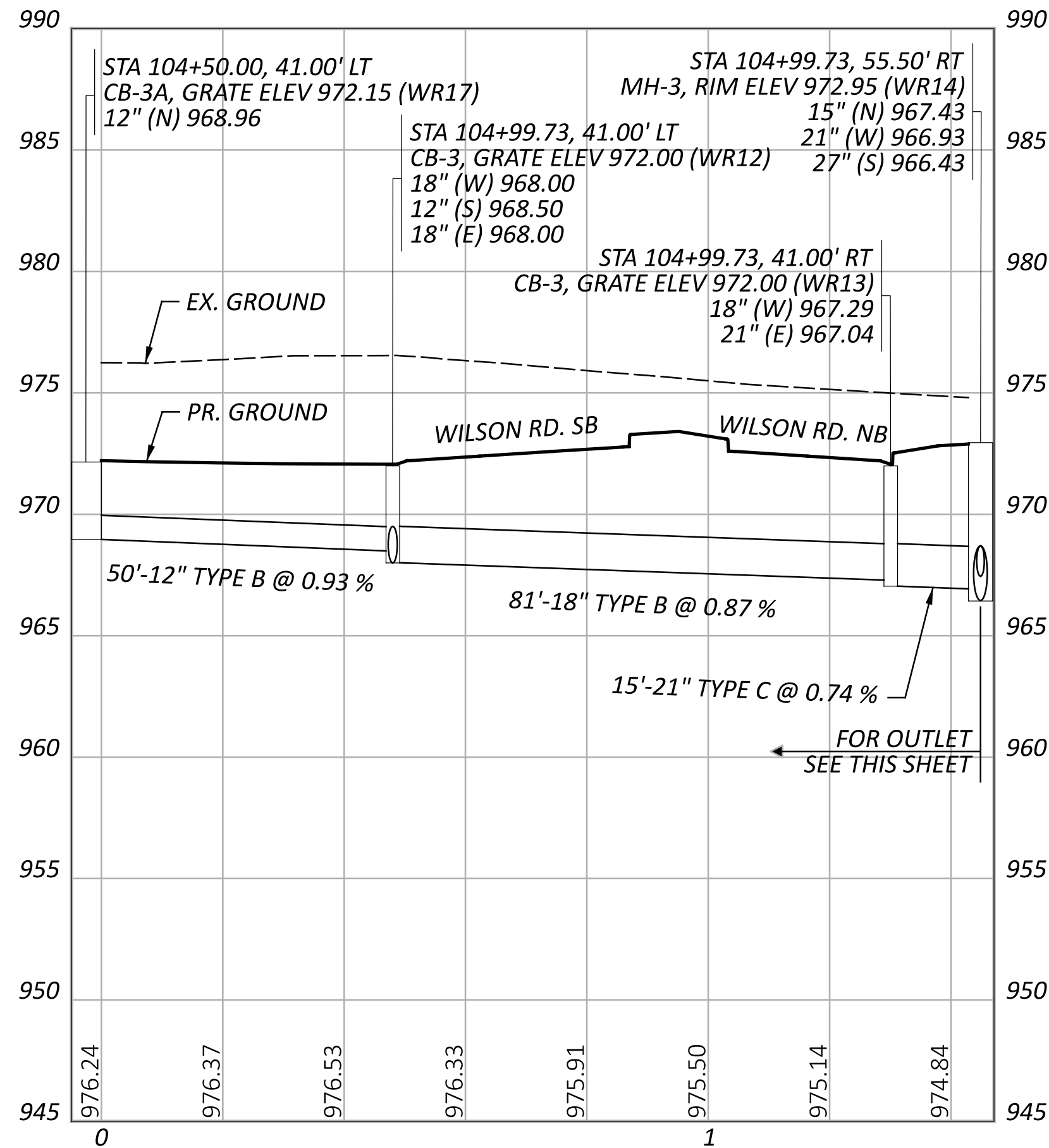
106959

SHEET

P.428

TOTAL

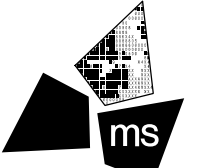
663



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE DRAINAGE PROF	CLH	4/09/25
.	.	.	.	.

STORM PROFILES
WILSON ROAD

DESIGN AGENCY


ms consultants, inc.

DESIGNER
CLH

REVIEWER
TAZ 06/06/23

PROJECT ID
106959

SHEET
P.429

TOTAL
663



P.439	6
-------	---

COMMUNICATION CABLE MARKER

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATIONS 809/909.

ITS JUNCTION BOX

THE CONTRACTOR SHALL SUPPLY THE MEDIAN BARRIER WALL JUNCTION PULL BOXES THAT MEET THE FOLLOWING SPECIFICATIONS:

SHALL BE OF TYPE POLYMER-CONCRETE

SIZE: 17 INCHES (HEIGHT) X 30 INCHES (LENGTH) X 18 INCHES (DEPTH)

MINIMUM WALL THICKNESS: 0.5 INCH

MINIMUM LID THICKNESS: 2 INCHES

ANSI TIER 22 RATING

LID SHALL BE MARKED "TRAFFIC."

BOXES SHALL HAVE A SOLID BOTTOM. USE HORIZONTAL REINFORCING STEEL MEMBERS UNDERNEATH AND ABOVE THE JUNCTION BOX TO SECURE IN PLACE AND TIE IN TO THE REST OF THE WALL REINFORCING STEEL. THE JUNCTION BOX SHALL BE ATTACHED TO THE FORM WORK TO SECURE IT IN THE APPROPRIATE POSITION IN THE WALL DURING CONCRETE PLACEMENT. SLIP FORMING IS NOT PERMITTED IN SECTIONS OF CONCRETE WALL CONTAINING JUNCTION BOXES.

MAINTAINING ITS DURING CONSTRUCTION

THE CONTRACTOR SHALL MAINTAIN ALL PREEXISTING OR NEWLY INSTALLED PERMANENT ITS/TRAFFIC DEVICES AND INFRASTRUCTURE DURING CONSTRUCTION ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809.

ITEM 625, POWER SERVICE, AS PER PLAN A

IN ADDITION TO THE REQUIREMENTS OF C&MS 625, THIS ITEM OF WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING ITS-15.11.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN A" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

CCTV CONCRETE POLE, 70 FEET

THE CONTRACTOR SHALL FURNISH AND INSTALL THIS ITEM ACCORDING TO ODOT SUPPLEMENTAL SPECIFICATION 809, AS WELL AS ANY STANDARD CONSTRUCTION DRAWINGS NOTED ON THE PLANS. IN ADDITION, THE CONTRACTOR SHALL INCLUDE A 1/2" ISOLATION JOINT MATERIAL BETWEEN THE CONCRETE POLE AND CONCRETE WORK PAD.

ODOT AND THE OFFICE OF GEOTECHNICAL ENGINEERING HAVE OBTAINED AND ANALYZED THE SOIL BORING DATA FOR THIS SITE, LOCATED AT SUNBURY PARKWAY STATION 89+37.12, 75.8' LEFT, AND DETERMINED THAT THE POLE HEIGHT SHALL BE 70 FT ABOVE GROUND AND THE EMBEDMENT DEPTH SHALL BE 12 FT. THE CONTRACTOR SHALL FURNISH/INSTALL POLES WITH THE CORRECT LENGTH/EMBEDMENT AND ALL COUPLINGS, HANDHOLES, ETC., IN THE APPROPRIATE LOCATION ABOVE GROUND ACCORDING TO SCD ITS-12.10. THE CONTRACTOR MAY FURNISH/INSTALL LONGER OVERALL LENGTH POLES AT A DEEPER EMBEDMENT DEPTH IF IT IS MORE BENEFICIAL FOR MANUFACTURING, SHIPPING, ETC., AS LONG AS ALL ABOVE GROUND COMPONENTS MAINTAIN APPROPRIATE HEIGHT LEVEL. IF NEEDED DUE TO UNFORESEEN CIRCUMSTANCES ARISING WITH BEDROCK, ETC., AND WITH APPROVAL FROM THE ODOT PROJECT ENGINEER, THE CONTRACTOR MAY FIELD CUT AN APPROPRIATE AMOUNT FROM THE BASE OF THE CONCRETE POLE WHICH WOULD REQUIRE LESS EMBEDMENT DEPTH IN ORDER TO MAINTAIN APPROPRIATE LEVELS ABOVE GROUND. IF A POLE IS CUT, THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO NOT DAMAGE THE INTEGRITY OF THE POLE PER MANUFACTURER RECOMMENDATIONS AND ANY EXPOSED STEEL STRANDS SHALL BE COATED WITH EPOXY.

CCTV CONCRETE POLE, 70 FEET, CONTINUED

THE CONTRACTOR SHALL SUBMIT ALL POLE MANUFACTURER FABRICATION DRAWING SUBMITTALS, AS WELL AS INSTALLATION PROCEDURES AND BACKFILL MATERIAL, TO THE ODOT PROJECT ENGINEER FOR ACCEPTANCE BEFORE ORDERING.

PAYMENT FOR EACH POLE COMPLETE, INSTALLED, AND ACCEPTED CONCRETE POLE, SHALL BE MADE AT THE UNIT BID PRICE FOR ITEM 809, CCTV CONCRETE POLE, 70 FEET.

ITEM 630, REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DELIVERY, AS PER PLAN

THIS ITEM OF WORK SHALL BE IN ACCORDANCE WITH CMS 630 AND SHALL INCLUDE REMOVAL OF ALL ELECTRICAL DIGITAL MESSAGE BOARDS, COMPONENTS, COMMUNICATION EQUIPMENT, CABINET, AND POWER CABLES AND COMPONENTS BETWEEN THE POWER SERVICE AND THE SIGN. COORDINATE WITH THE ENGINEER REGARDING ITEMS TO BE SALVAGED AND DELIVERED TO ODOT. AT A MINIMUM, THE CONTRACTOR SHALL BE REQUIRED TO CAREFULLY REMOVE, STORE, AND DELIVER THE DIGITAL MESSAGE BOARDS, CONTROLLER, AND COMMUNICATION EQUIPMENT TO THE FOLLOWING LOCATION:

ODOT ITS LAB
1606 W. BROAD ST.
COLUMBUS, OH 43223

COORDINATE WITH THE ENGINEER THE DATE AND TIME FOR EQUIPMENT DELIVERY TO THE ITS LAB WITH A MINIMUM OF 7 CALENDAR DAYS OF NOTICE.

ALL REMAINING SIGN COMPONENTS, INCLUDING BUT NOT LIMITED TO, SIGN SUPPORTS, SIGNS, AND POWER SERVICE CABLES SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH C&MS 630.

THIS ITEM OF WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH SIGN REMOVED, WITH SALVAGED ITS COMPONENTS DELIVERED, AND ACCEPTED.

ITS MEDIAN WALL RACEWAY AND CONDUIT SYSTEM

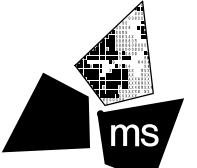
1-4" HDPE CONDUIT SHALL BE INSTALLED IN MEDIAN BARRIER WALL PER ODOT STANDARD CONSTRUCTION DRAWING ITS-14.50 AND ITS-14.60. 1-3" HDPE CONDUIT TO BE INSTALLED FOR LATERAL CROSSINGS FROM MEDIAN JUNCTION BOXES TO 32" PULL BOXES ON THE SHOULDERS.

THE 3" AND 4" HDPE CONDUITS SHALL CONFORM TO ODOT SPECIFICATION 725.052 WITH THE FOLLOWING EXCEPTIONS: THE CONDUIT SHALL BE MICRO-RIBBED ON THE INTERIOR AND SHALL HAVE A COEXTRUDED PERMANENT FRICTION REDUCING LINING.

INSTALL 7-14 MM/10 MM (OD/ID) MICRODUCTS PER ODOT SUPPLEMENTAL SPECIFICATION 909.14B IN THE MEDIAN 4" HDPE CONDUITS. THE MICRODUCTS SHALL BE CONTINUOUS FROM THE 32" PULL BOX ON THE SHOULDER THROUGH LATERALS, MEDIAN WALL RACEWAY, AND MEDIAN JUNCTION BOXES TO THE NEXT 32" PULL BOX ON THE SHOULDER. MICRODUCTS SHALL BE 3 FEET LONGER THAN THE 3" CONDUIT IN THE 32" PULL BOXES TO FACILITATE CONNECTION TO FIBER OPTIC CABLE JETTING MACHINE. MICRODUCTS SHALL BE CAPPED WITH A PULLING EYE FOR INSTALLATION AND BY MANUFACTURER APPROVED PUSH ON CAPS IMMEDIATELY FOLLOWING INSTALLATION TO PREVENT ANY DIRT AND WATER CONTAMINATION THAT WILL IMPEDE FIBER OPTIC CABLE INSTALLATION.

NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE NOTE	KJF	04/15/25

DESIGN AGENCY



ms consultants, inc.

DESIGNER

KJF

REVIEWER

JML 10/24/23

PROJECT ID

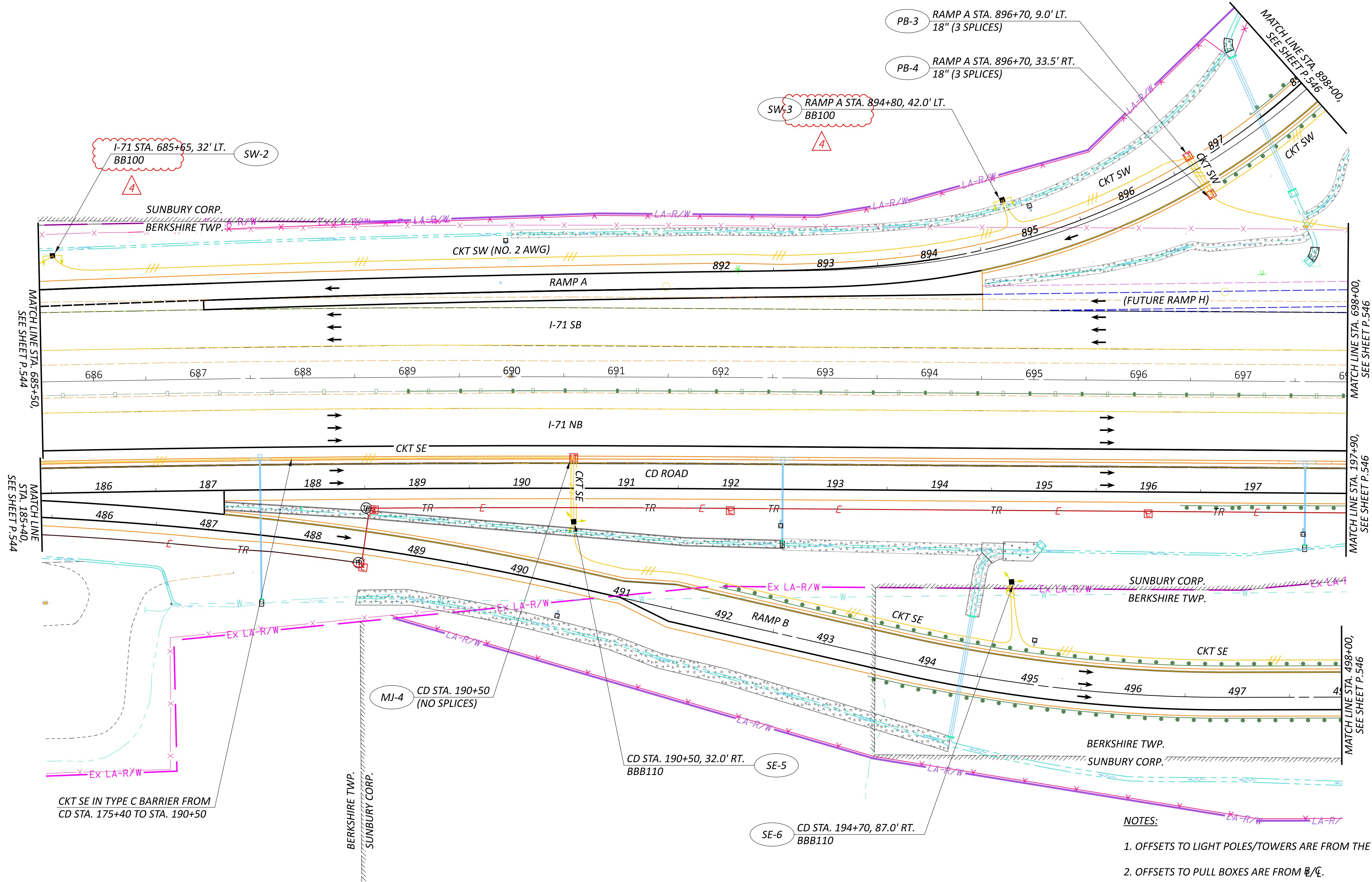
106959

SHEET

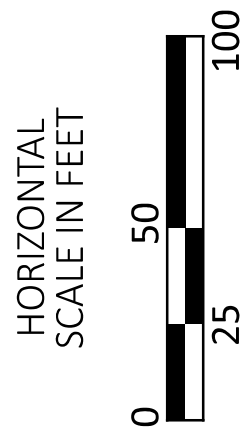
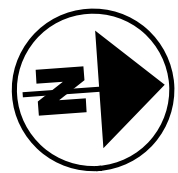
P.523A

TOTAL

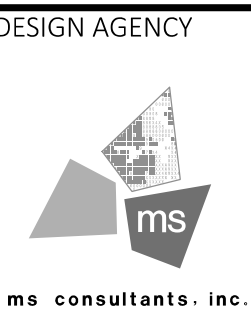
663



NO.	RFI	DESCRIPTION	REV. BY	DATE
PIR4	.	REVISE TOWER DESCRIPTION	KWR	04/11/25
.	.	.	.	.



LIGHTING PLAN (ODOT)
I-71 STA. 685+50 TO STA. 698+00
CD ROAD STA. 185+40 TO STA. 197+90



DESIGN AGENCY	ms consultants, inc.
DESIGNER	KWR
REVIEWER	DRB
PROJECT ID	106959
SHEET	P.545
TOTAL	663

- NOTES:
1. OFFSETS TO LIGHT POLES/TOWERS ARE FROM THE NEAREST EOP.
 2. OFFSETS TO PULL BOXES ARE FROM E/C.
 3. SEE SHEET P.541 FOR LIGHTING LEGEND.

4

ESTIMATED QUANTITIES									
ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUT.	PIERS	SUPER.	GENERAL	SHEET REF.
507	00101	3,125	FT	STEEL PILES HP10X42, FURNISHED, AS PER PLAN	3,125				2 / 34
507	92201	1,366	FT	PREBORED HOLES, AS PER PLAN	1,366				2 / 34
509	10000	404,371	LB	EPOXY COATED STEEL REINFORCEMENT	33,415	41,075	329,881		
509	30020	8,822	FT	NO. 4 GFRP DEFORMED BARS			8,822		
511	33418	293	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			293		
511	33500	4	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	4				
511	34446	1,063	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			1,063		
511	34450	90	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			90		
511	41012	183	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		183			
511	46512	235	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	235				
511	50212	141	CY	CLASS QC1 CONCRETE WITH QC/QA, SUBSTRUCTURE	141				
511	51512	355	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK			355		
511	53010	8	CY	CLASS QC1 CONCRETE, MISC.: 6" CONCRETE SLAB				8	11 / 34
512	10100	2,846	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	142	395	2,309		
512	33000	9	SY	TYPE 2 WATERPROOFING			9		
515	15120	16	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF66-49 (108'-0" LONG)			16		
515	15120	16	EACH	DRAPED STRAND PRESTRESSED CONCRETE BRIDGE I-BEAM MEMBERS, LEVEL 3, TYPE WF66-49 (125'-7" LONG)			16		
515	20000	90	EACH	INTERMEDIATE DIAPHRAGMS			90		
516	10010	303	FT	ARMORLESS PREFORMED JOINT SEAL			303		
516	13600	27	SF	1" PREFORMED EXPANSION JOINT FILLER			27		
516	13900	145	SF	2" PREFORMED EXPANSION JOINT FILLER	145				
516	25000	1,025	SF	NYLON REINFORCED NEOPRENE SHEETING	1,025				
516	44200	32	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (1'-7" x 1'-4" x 3 ⅝" PAD, 3'-3 ½" x 1'-5" x 1 ½" STEEL LOAD PLATE)		32			
516	46900	32	EACH	BEARING DEVICE MISC.: ELASTOMERIC BEARING ASSEMBLY	32				14 / 34
517	75122	585	FT	RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING AND VANDAL PROTECTION FENCE) (ALTERNATE 1) *			585		
518	21200	255	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	255				
518	40000	303	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	303				
518	40010	43	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	43				
524	94904	144	FT	DRILLED SHAFTS, 48" DIAMETER, INTO BEDROCK		144			
524	94906	152	FT	DRILLED SHAFTS, 54" DIAMETER, ABOVE BEDROCK		152			
526	30010	1,009	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")			1,009		
526	90030	303	FT	TYPE C INSTALLATION			303		
607	39930	559	FT	VANDAL PROTECTION FENCE, 12' CURVED, COATED FABRIC (ALTERNATE 1) **			559		
613	41250	70	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 1)				70	

* CARRIED TO GENERAL SUMMARY UNDER STRUCTURE ALTERNATES (SEE NOTE 2)
** CARRIED TO GENERAL SUMMARY UNDER ROADWAY ALTERNATES (SEE NOTE 2)

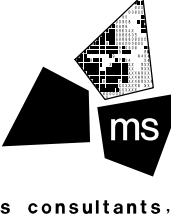
NOTES:

1. FOR MSE WALL 1 AND MSE WALL 2 QUANTITIES, SEE SHEET 31/34.
2. FOR ALTERNATE AESTHETIC FENCE NOTES AND DETAILS, SEE PART 2.

NO.	DESCRIPTION	REV.	BY	DATE
PIR4	UPDATED REBAR QTY	ATM		04/14/25

SFN
2102440

DESIGN AGENCY


ms consultants, inc.

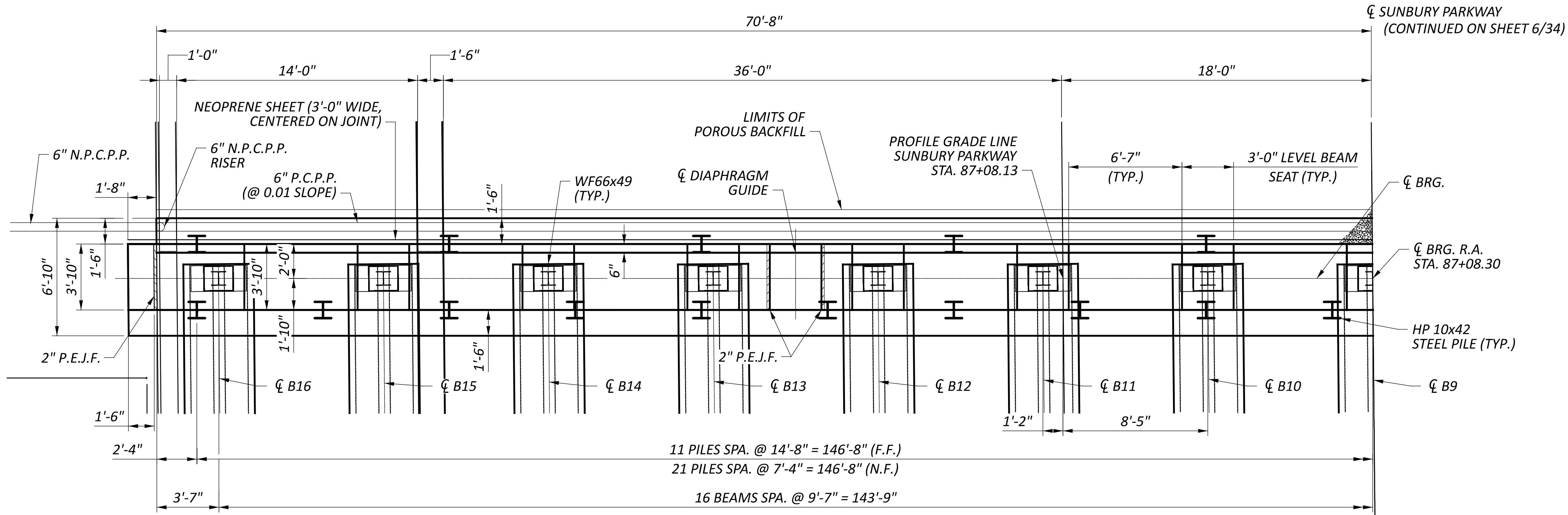
DESIGNER DBL CHECKER ATM

REVIEWER YSJ 11/30/23

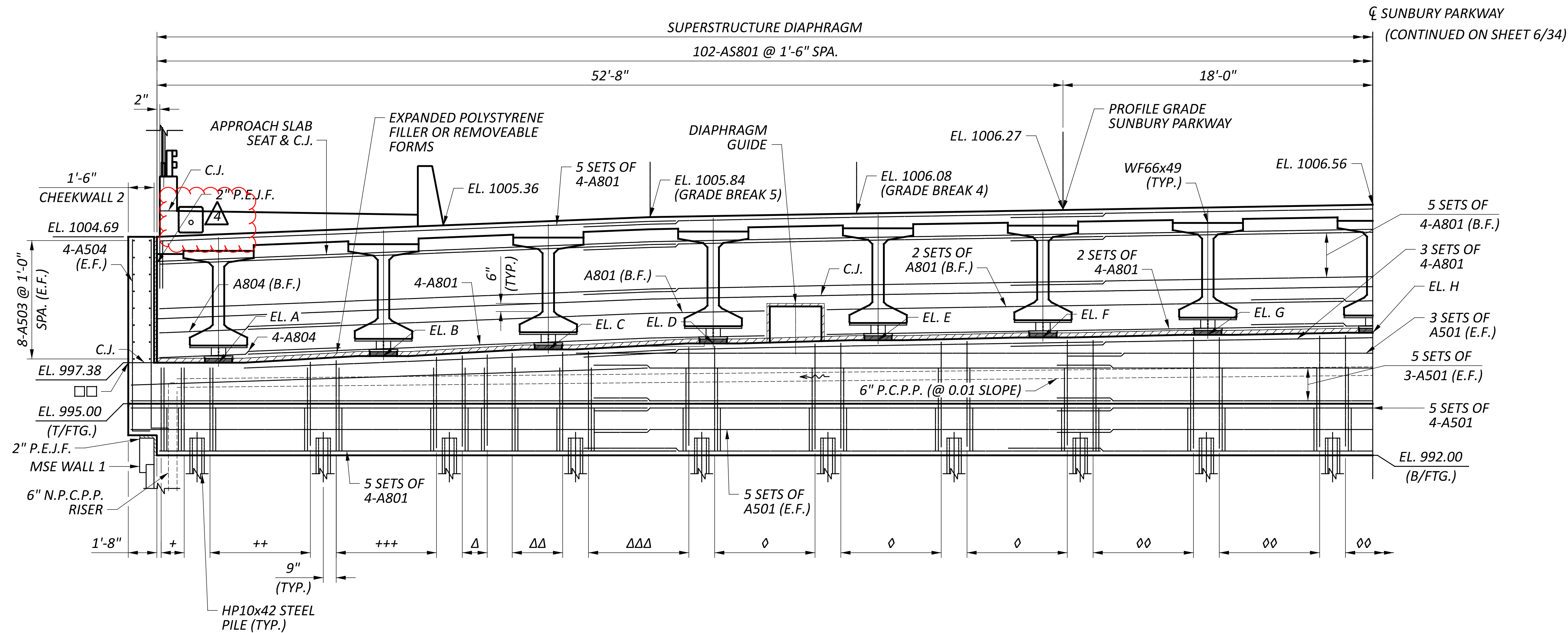
PROJECT ID 106959

SUBSET 3 TOTAL 34

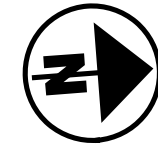
SHEET P.567 TOTAL 663



REAR ABUTMENT PARTIAL PLAN (1 OF 2)
(MSE WALL NOT SHOWN)



REAR ABUTMENT PARTIAL ELEVATION (1 OF 2)
(DIAPHRAGM AND DIAPHRAGM GUIDE REINFORCING NOT SHOWN)



REAR ABUTMENT SEAT ELEVATIONS		
ELEV.	BEAM	SEAT ELEV.
A	B16	997.38
B	B15	997.77
C	B14	998.15
D	B13	998.49
E	B12	998.68
F	B11	998.84
G	B10	999.00
H	B9	999.15

MINIMUM BAR LAP LENGTHS:

NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"
NO. 8 BAR = 4'-9"

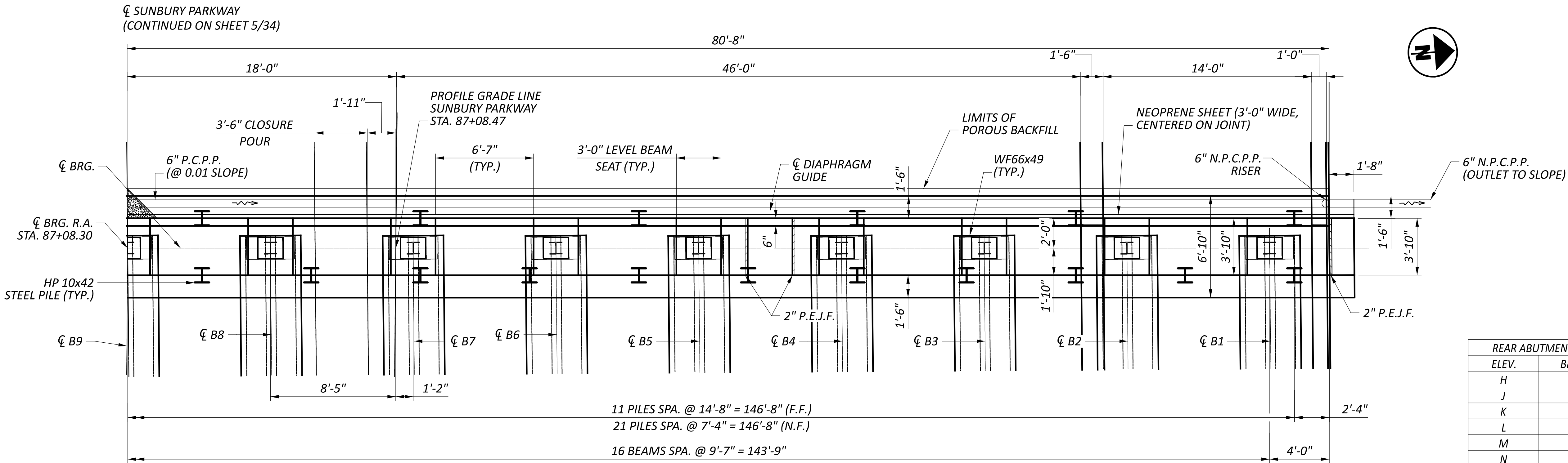
LEGEND:

- + 2 SETS OF 1-A506, 2-A507 @ 1'-6" SPA. (BTWN. PILES)
- ++ 5 SETS OF 1-A506, 2-A507 @ 1'-6" SPA. (BTWN. PILES)
- +++ 5 SETS OF 1-A506, 1-A507 & 1-A508 @ 1'-6" SPA. (BTWN. PILES)
- Δ 2 SETS OF 1-A506, 1-A507 & 1-A508 @ 1'-6" SPA. (BTWN. PILES)
- ΔΔ 3 SETS OF 1-A506, 1-A507 & 1-A509 @ 1'-6" SPA. (BTWN. PILES)
- ΔΔΔ 5 SETS OF 1-A506, 1-A507 & 1-A509 @ 1'-6" SPA. (BTWN. PILES)
- ◇ 5 SETS OF 1-A506, 1-A507 & 1-A510 @ 1'-6" SPA. (BTWN. PILES)
- ◇◇ 5 SETS OF 1-A506, 1-A507 & 1-A511 @ 1'-6" SPA. (BTWN. PILES)
- 3'-0" WIDE NEOPRENE SHEETING CENTERED ON C.J.

NOTES:

- FOR ADDITIONAL TYPICAL ABUTMENT DETAILS AND REINFORCING SEE SHEETS 9/34 AND 10/34.
- DIMENSIONS ARE GIVEN AT CENTERLINE OF BEARINGS, UNLESS NOTED OTHERWISE.

NO.	DESCRIPTION	REV. BY	DATE
PIR4	ADDED LIGHTING CONDUIT	ATM	04/14/25



REAR ABUTMENT PARTIAL PLAN (2 OF 2)
(MSE WALL NOT SHOWN)

REAR ABUTMENT SEAT ELEVATIONS		
ELEV.	BEAM	SEAT ELEV.
H	B9	999.15
J	B8	999.00
K	B7	998.84
L	B6	998.68
M	B5	998.49
N	B4	998.30
O	B3	998.00
P	B2	997.62
Q	B1	997.23

MINIMUM BAR LAP LENGTHS:

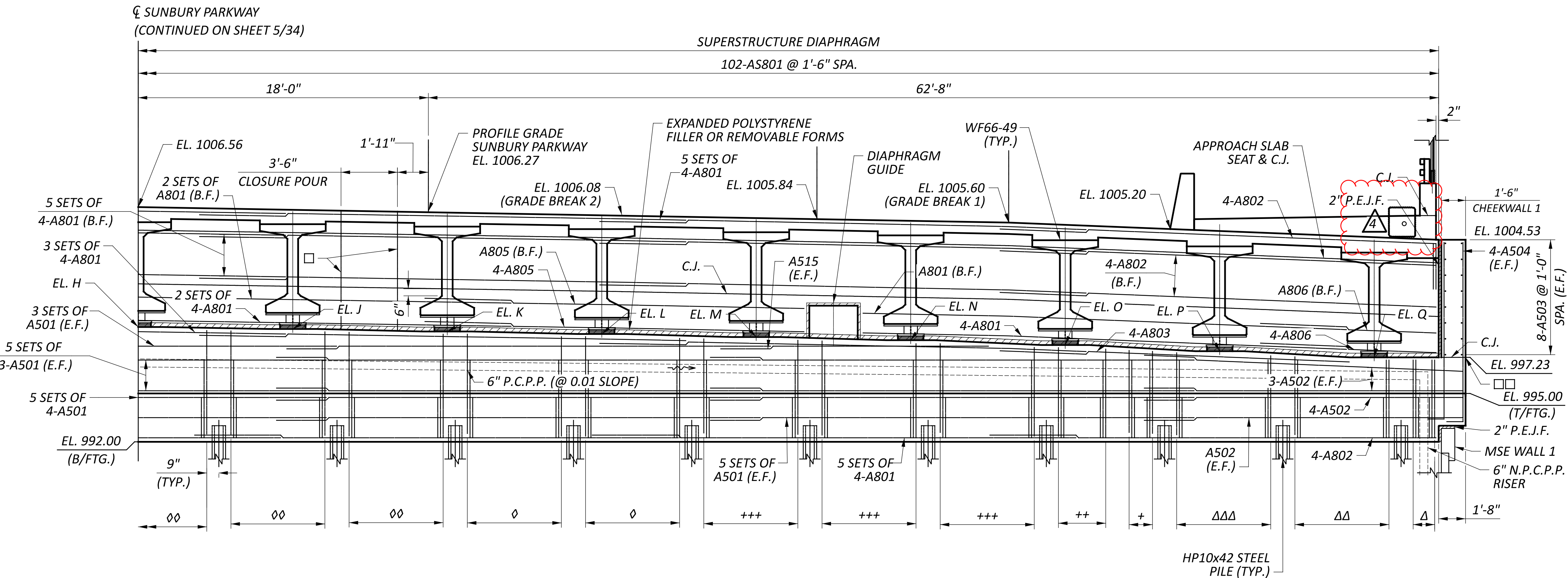
NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"
NO. 8 BAR = 4'-9"

LEGEND:

- Δ 2 SETS OF 1-A506, 2-A507 @ 1'-6" SPA. (BTWN. PILES)
- ΔΔ 5 SETS OF 1-A506, 2-A507 @ 1'-6" SPA. (BTWN. PILES)
- ΔΔΔ 5 SETS OF 1-A506, 1-A507 & 1-A512 @ 1'-6" SPA. (BTWN. PILES)
- + 2 SETS OF 1-A506, 1-A507 & 1-A512 @ 1'-6" SPA. (BTWN. PILES)
- ++ 3 SETS OF 1-A506, 1-A507 & 1-A513 @ 1'-6" SPA. (BTWN. PILES)
- +++ 5 SETS OF 1-A506, 1-A507 & 1-A513 @ 1'-6" SPA. (BTWN. PILES)
- ◇ 5 SETS OF 1-A506, 1-A507 & 1-A514 @ 1'-6" SPA. (BTWN. PILES)
- ◇◇ 5 SETS OF 1-A506, 1-A507 & 1-A511 @ 1'-6" SPA. (BTWN. PILES)
- SEAL CLOSURE POUR C.J. WITH TYPE 2 WATERPROOFING
- 3'-0" WIDE NEOPRENE SHEETING CENTERED ON C.J.

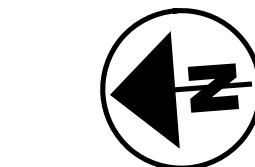
NOTES:

- FOR ADDITIONAL TYPICAL ABUTMENT DETAILS AND REINFORCING SEE SHEETS 9/34 AND 10/34.
- DIMENSIONS ARE GIVEN AT CENTERLINE OF BEARINGS, UNLESS NOTED OTHERWISE.



REAR ABUTMENT PARTIAL ELEVATION (2 OF 2)
(DIAPHRAGM AND DIAPHRAGM GUIDE REINFORCING NOT SHOWN)

NO.	DESCRIPTION	REV.	BY	DATE
PIR4	ADDED LIGHTING CONDUIT		ATM	04/14/25



FORWARD ABUTMENT SEAT ELEVATIONS		
ELEV.	BEAM	SEAT ELEV
A	B17	996.07
B	B18	996.45
C	B19	996.84
D	B20	997.14
E	B21	997.33
F	B22	997.52
G	B23	997.68
H	B24	997.83
J	B25	997.99

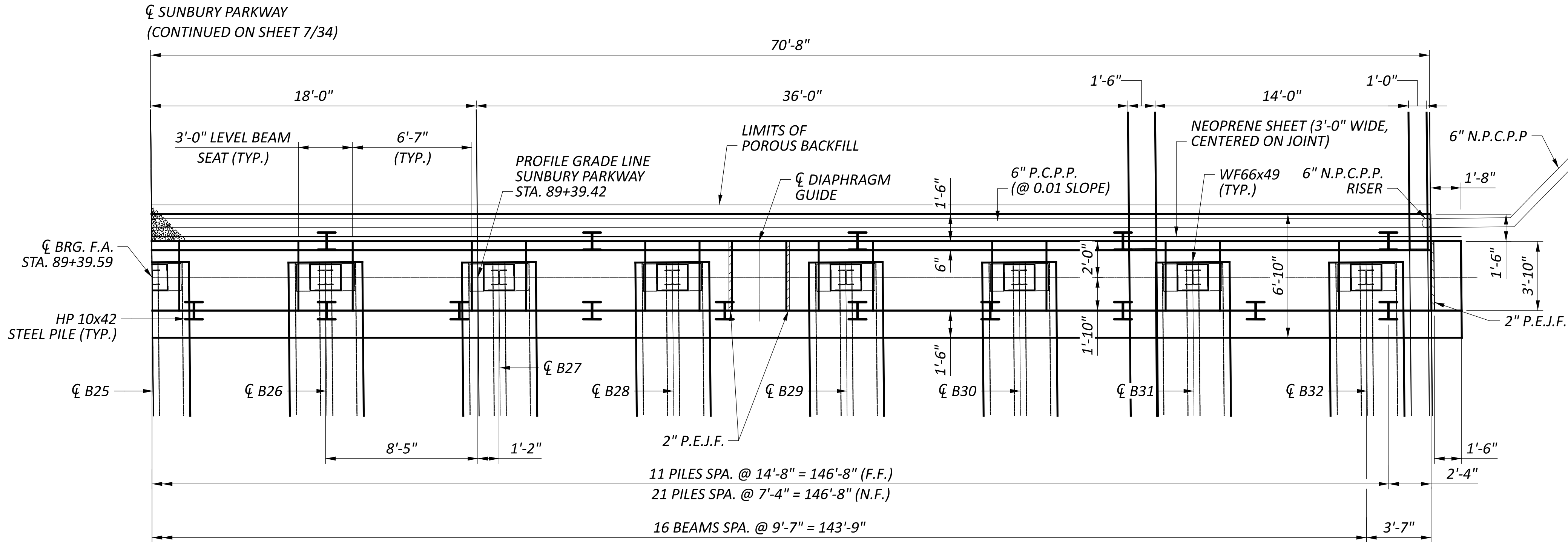
NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"
NO. 8 BAR = 4'-9"

Δ	2 SETS OF 1-A506, 2-A517 @ 1'-6" SPA. (BTWN. PILES)
ΔΔ	5 SETS OF 1-A506, 2-A517 @ 1'-6" SPA. (BTWN. PILES)
ΔΔΔ	5 SETS OF 1-A506, 1-A517 & 1-A518 @ 1'-6" SPA. (BTWN. PILES)
+	2 SETS OF 1-A506, 1-A517 & 1-A518 @ 1'-6" SPA. (BTWN. PILES)
++	3 SETS OF 1-A506, 1-A517 & 1-A508 @ 1'-6" SPA. (BTWN. PILES)
+++	5 SETS OF 1-A506, 1-A517 & 1-A508 @ 1'-6" SPA. (BTWN. PILES)
◇	5 SETS OF 1-A506, 1-A517 & 1-A509 @ 1'-6" SPA. (BTWN. PILES)
◇◇	5 SETS OF 1-A506, 1-A517 & 1-A510 @ 1'-6" SPA. (BTWN. PILES)
◇◇◇	5 SETS OF 1-A506, 1-A517 & 1-A511 @ 1'-6" SPA. (BTWN. PILES)
□	SEAL CLOSURE POUR C.J. WITH TYPE 2 WATERPROOFING
□□	3'-0" WIDE NEOPRENE SHEETING CENTERED ON C.J.

1. FOR ADDITIONAL TYPICAL ABUTMENT DETAILS AND REINFORCING SEE SHEETS 9/34 AND 10/34.
2. DIMENSIONS ARE GIVEN AT CENTERLINE OF BEARINGS, UNLESS NOTED OTHERWISE.

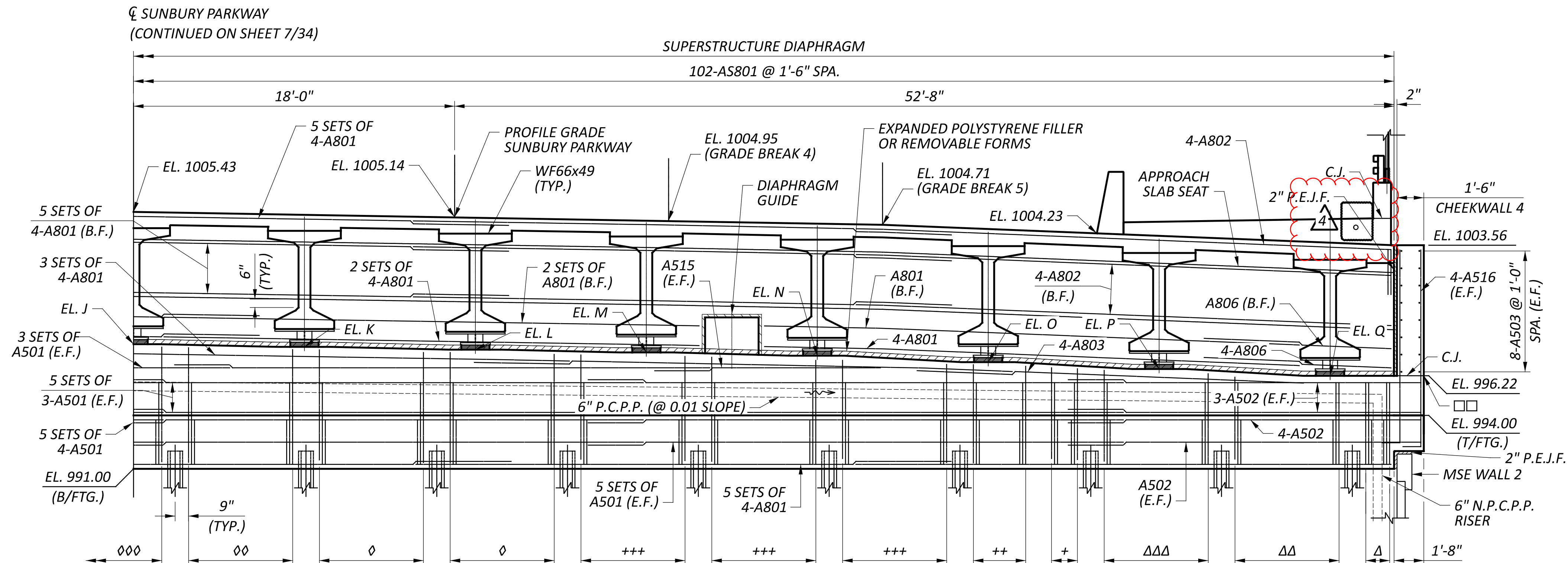


FORWARD ABUTMENT PLAN AND ELEVATION (1 OF 2)
BRIDGE NO. DEL-00071-08.910
OVER I-71



FORWARD ABUTMENT PARTIAL PLAN (2 OF 2)
(MSE WALL NOT SHOWN)

FORWARD ABUTMENT SEAT ELEVATIONS		
ELEV.	BEAM	SEAT ELEV.
J	B25	997.99
K	B26	997.83
L	B27	997.68
M	B28	997.52
N	B29	997.33
O	B30	996.99
P	B31	996.60
Q	B32	996.22



FORWARD ABUTMENT PARTIAL ELEVATION (2 OF 2)
(DIAPHRAGM AND DIAPHRAGM GUIDE REINFORCING NOT SHOWN)

MINIMUM BAR LAP LENGTHS:

NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"
NO. 8 BAR = 4'-9"

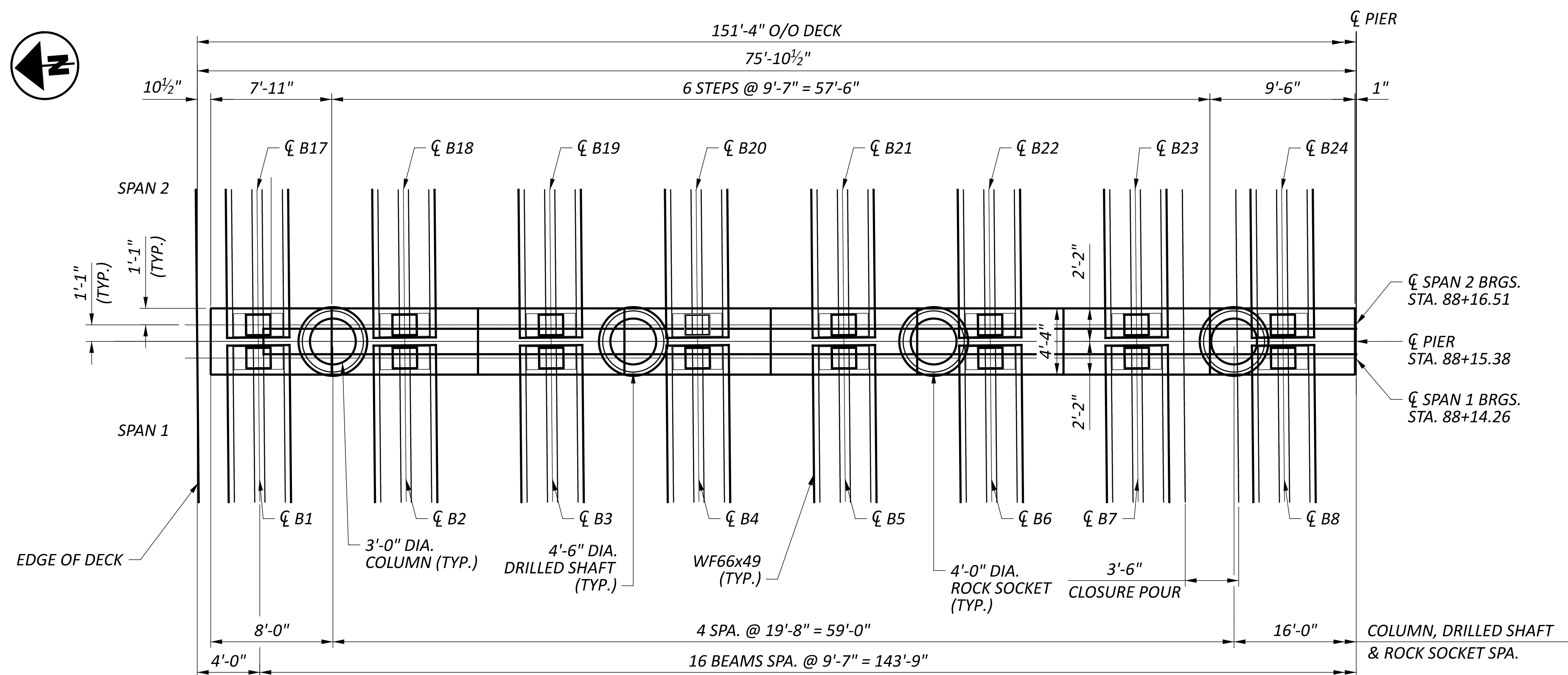
LEGEND:

- Δ 2 SETS OF 1-A506, 2-A517 @ 1'-6" SPA. (BTWN. PILES)
- ΔΔ 5 SETS OF 1-A506, 2-A517 @ 1'-6" SPA. (BTWN. PILES)
- ΔΔΔ 5 SETS OF 1-A506, 1-A517 & 1-A512 @ 1'-6" SPA. (BTWN. PILES)
- + 2 SETS OF 1-A506, 1-A517 & 1-A512 @ 1'-6" SPA. (BTWN. PILES)
- ++ 3 SETS OF 1-A506, 1-A507 & 1-A513 @ 1'-6" SPA. (BTWN. PILES)
- +++ 5 SETS OF 1-A506, 1-A507 & 1-A513 @ 1'-6" SPA. (BTWN. PILES)
- ◇ 5 SETS OF 1-A506, 1-A507 & 1-A514 @ 1'-6" SPA. (BTWN. PILES)
- ◇◇ 5 SETS OF 1-A506, 1-A507 & 1-A511 @ 1'-6" SPA. (BTWN. PILES)
- ◇◇◇ 5 SETS OF 1-A506, 1-A517 & 1-A511 @ 1'-6" SPA. (BTWN. PILES)
- 3'-0" WIDE NEOPRENE SHEETING CENTERED ON C.J.

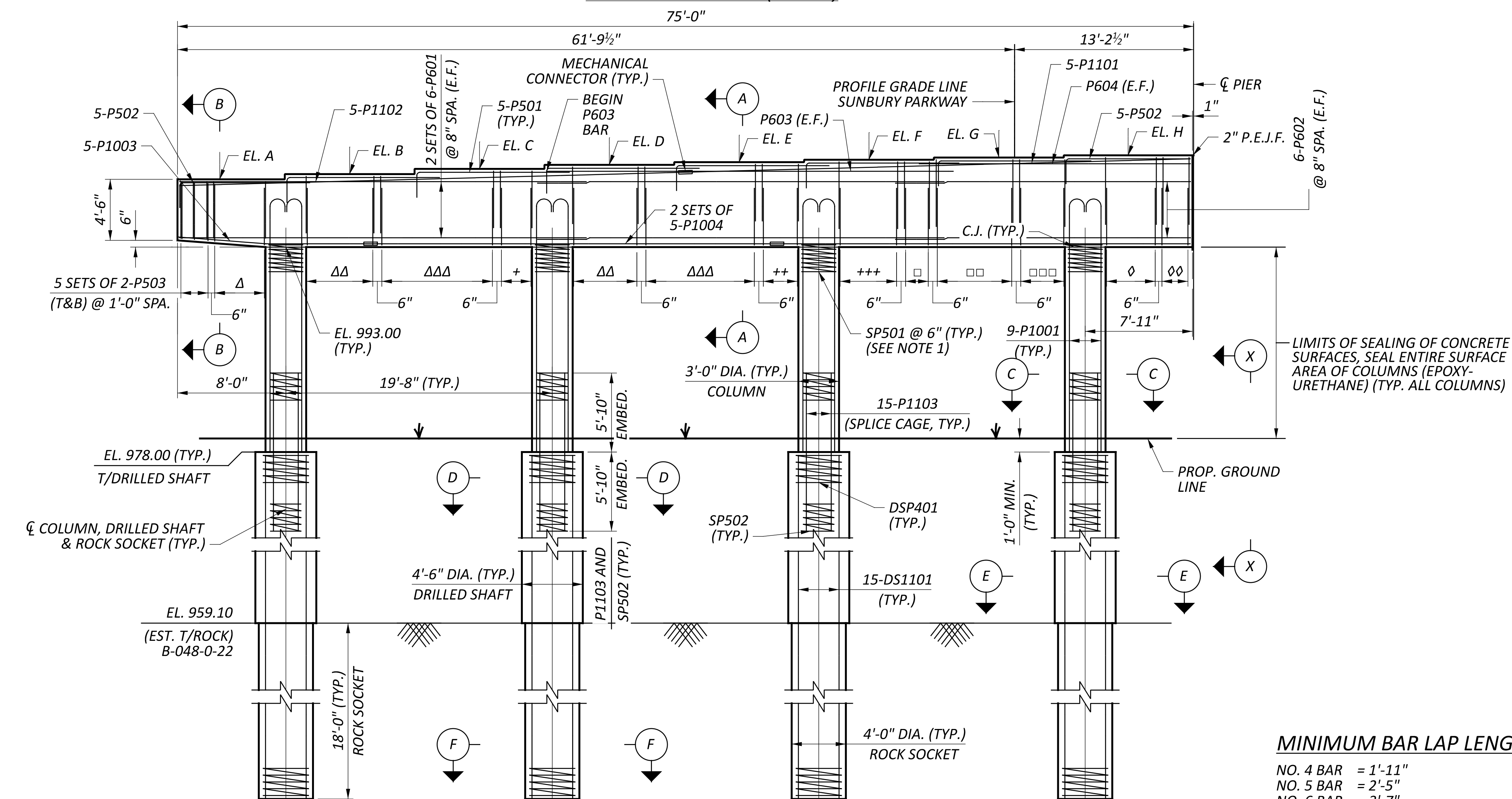
NOTES:

- FOR ADDITIONAL TYPICAL ABUTMENT DETAILS AND REINFORCING SEE SHEETS 9/34 AND 10/34.
- DIMENSIONS ARE GIVEN AT CENTERLINE OF BEARINGS, UNLESS NOTED OTHERWISE.

NO.	DESCRIPTION	REV. BY	DATE
PIR4	ADDED LIGHTING CONDUIT	ATM	04/14/25

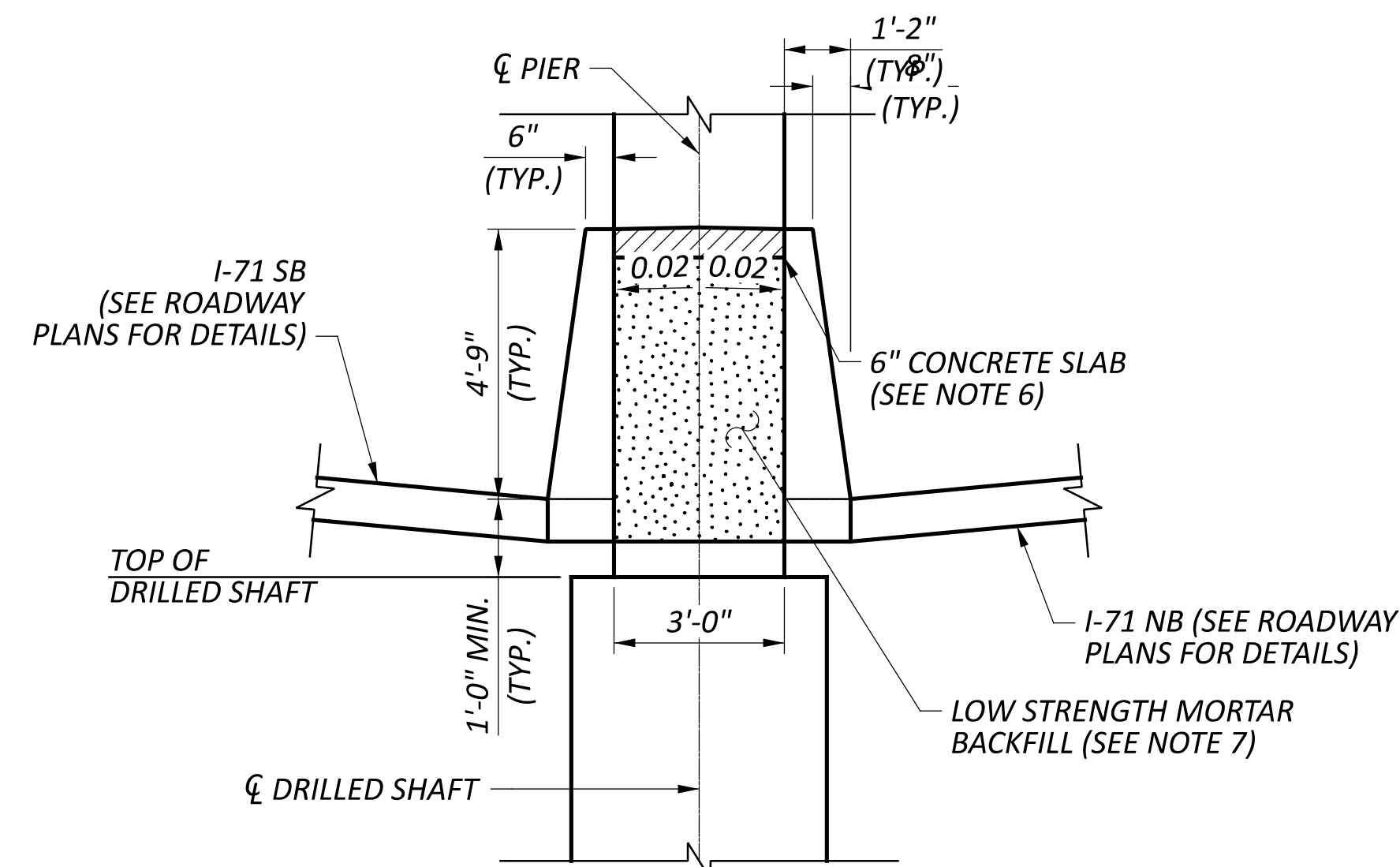


PARTIAL PIER PLAN (1 OF 2)



PARTIAL PIER ELEVATION (1 OF 2)

(ROADWAY BARRIERS NOT SHOWN, SEE VIEW X-X THIS SHEET)
(LIGHTING DETAILS NOT SHOWN, SEE LIGHTING PLANS)



VIEW X-X

(NOT TO SCALE)

PIER BEAM SEAT ELEVATIONS		
ELEV.	BEAM	SEAT ELEV.
A	B1/B17	998.00
B	B2/B18	998.39
C	B3/B19	998.77
D	B4/B20	999.07
E	B5/B21	999.27
F	B6/B22	999.45
G	B7/B23	999.61
H	B8/B24	999.77

LEGEND:

T&B - TOP AND BOTTOM

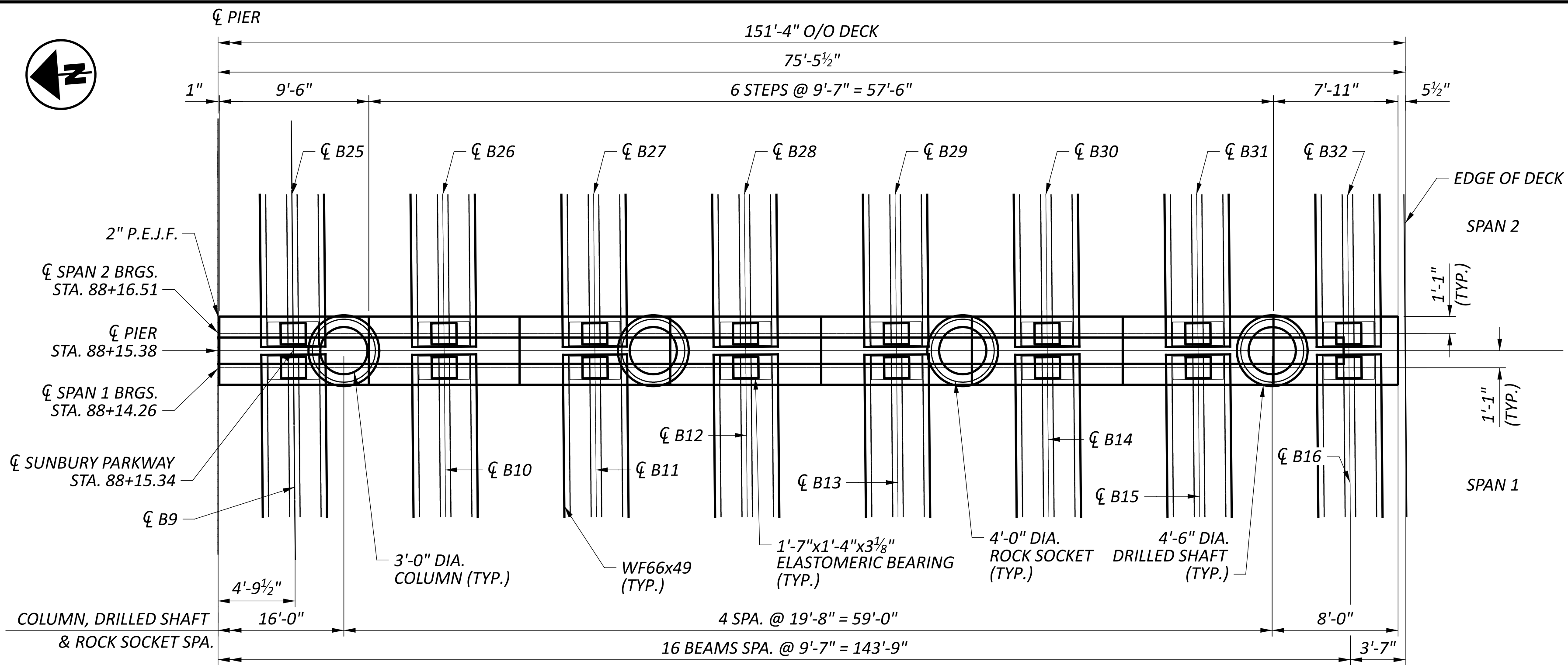
- Δ - 9 SETS OF 2-P503 (T&B) @ 6" SPA.
- $\Delta\Delta$ - 11 SETS OF 2-P503 (T&B) @ 6" SPA.
- $\Delta\Delta\Delta$ - 9 SETS OF 2-P503 (T&B) @ 1'-0" SPA.
- $+$ - 6 SETS OF 2-P503 (T&B) @ 6" SPA.
- $++$ - 7 SETS OF 2-P503 (T&B) @ 6" SPA.
- $+++$ - 10 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- $\square$ - 3 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 1'-0" SPA.
- $\square\square$ - 6 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 1'-0" SPA.
- $\square\square\square$ - 8 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- $\diamond$ - 9 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- $\diamond\diamond$ - 3 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 1'-0" SPA.

NOTES:

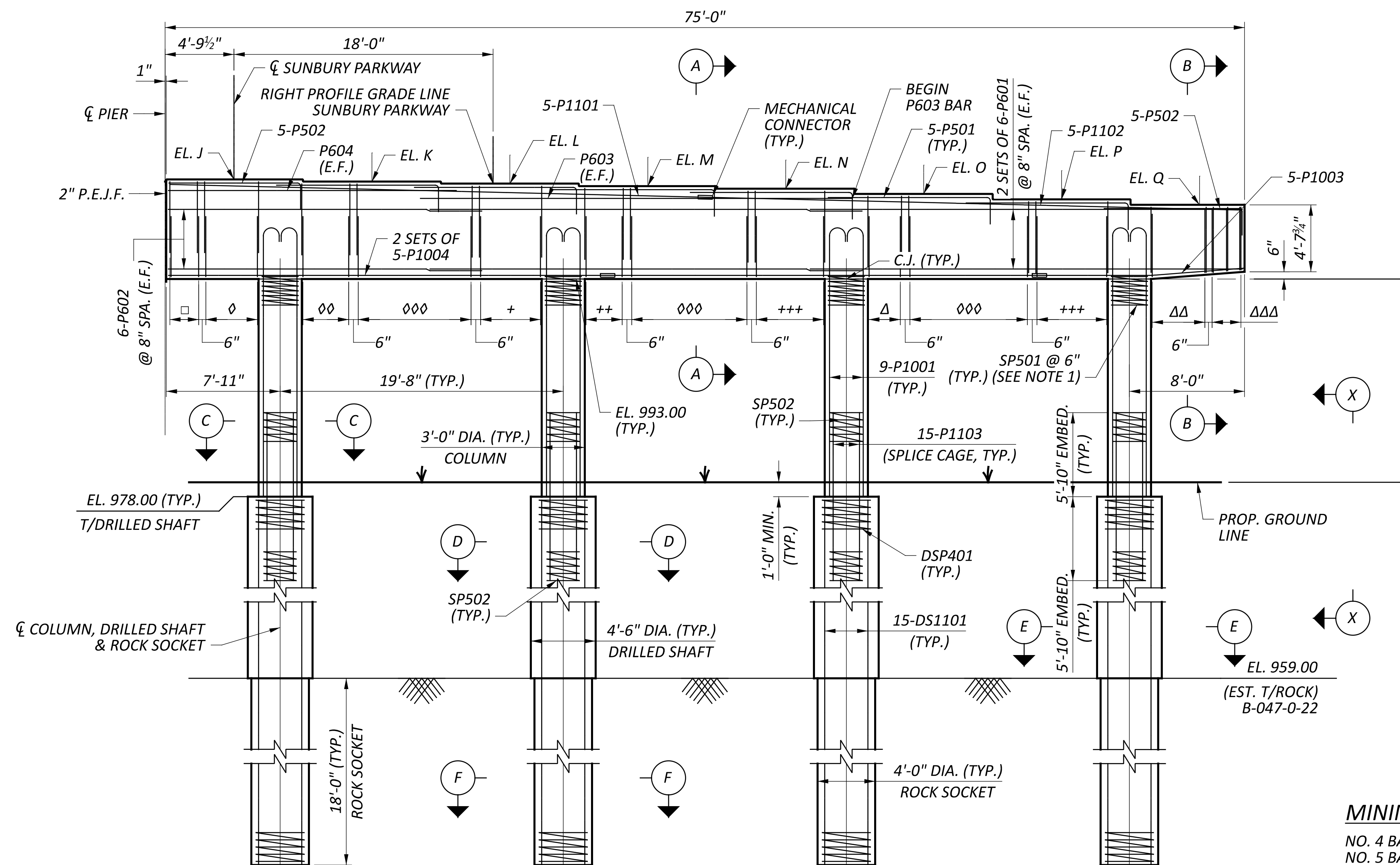
1. SPIRAL REINFORCEMENT AT THE TOP OF THE COLUMN SHALL BE EMBEDDED A MINIMUM OF 2" INTO THE PIER CAP.
2. FOR SECTIONS A-A THRU F-F, SEE SHEET 13/34.
3. FOR BEARING DETAILS, SEE SHEET 14/34.
4. MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509 - EPOXY COATED STEEL REINFORCEMENT. THE CONTRACTOR MAY LAP BARS INSTEAD OF USING MECHANICAL CONNECTORS.
5. FOR ADDITIONAL BARRIER DETAILS AT PIER INTERFACE, SEE ROADWAY PLANS AND ODOT STD. DWG. RM-4.5.
6. THE 6" CONCRETE SLAB SHALL BE CLASS QC1 CONCRETE, INCLUDED WITH ITEM 511, CLASS QC1 CONCRETE, MISC.: 6" CONCRETE SLAB FOR PAYMENT.
7. PLACE LOW STRENGTH MORTAR BACKFILL TO BOTTOM OF CONCRETE PARAPET. LOW STRENGTH MORTAR SHALL BE TYPE 1, INCLUDED WITH ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1), FOR PAYMENT

MINIMUM BAR LAP LENGTHS:

NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"
NO. 8 BAR = 4'-9"
NO. 10 BAR = 7'-2"
NO. 11 BAR = 8'-8"



PARTIAL PIER PLAN (2 OF 2)



PARTIAL PIER ELEVATION (2 OF 2)

(ROADWAY BARRIERS NOT SHOWN. FOR DETAILS SEE VIEW X-X ON SHEET 11/34)
(LIGHTING DETAILS NOT SHOWN, SEE LIGHTING PLANS)

PIER BEAM SEAT ELEVATIONS		
ELEV.	BEAM	SEAT ELEV.
J	B9/B25	999.92
K	B10/B26	999.77
L	B11/B27	999.63
M	B12/B28	999.45
N	B13/B29	999.27
O	B14/B30	998.91
P	B15/B31	998.53
Q	B16/B32	998.15

LEGEND:

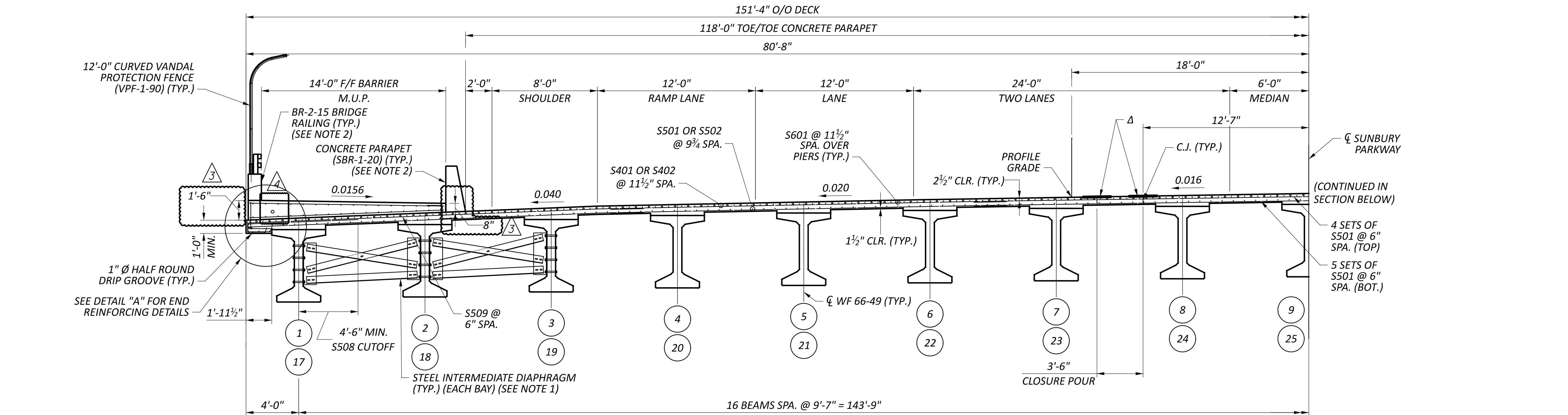
- - 3 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 1'-0" SPA.
- ◇ - 9 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- ◇◇ - 8 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- ◇◇◇ - 9 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 1'-0" SPA.
- +
- ++ - 7 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- +++ - 11 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- Δ - 6 SETS OF 2-P503 (BOTTOM) AND 2-P504 (TOP) @ 6" SPA.
- ΔΔ - 9 SETS OF 2-P503 (T&B) @ 6" SPA.
- ΔΔΔ - 3 SETS OF 2-P503 (T&B) @ 1'-0" SPA.

NOTES:

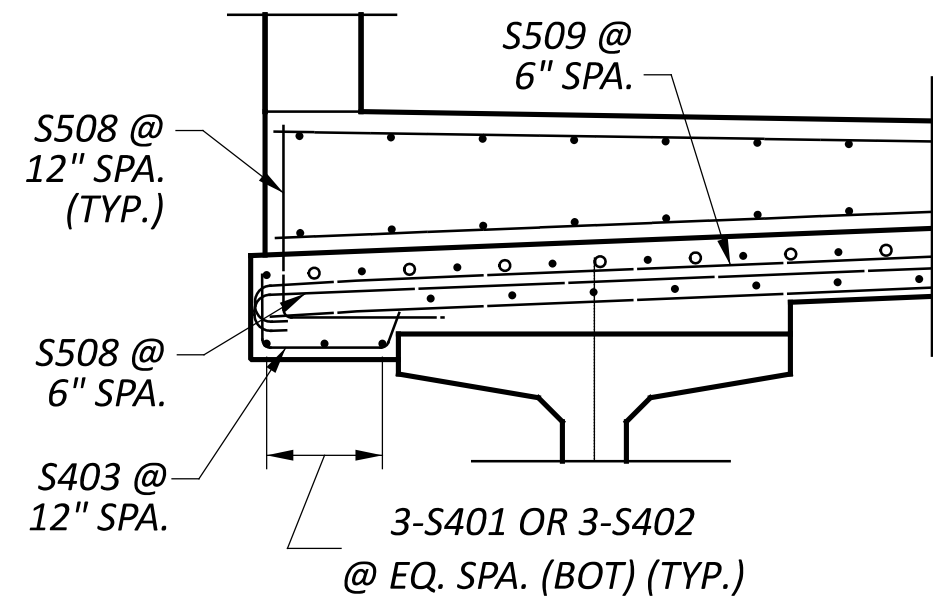
- SPIRAL REINFORCEMENT AT THE TOP OF THE COLUMN SHALL BE EMBEDDED A MINIMUM OF 2" INTO THE PIER CAP.
- FOR SECTIONS A-A THRU F-F SEE SHEET 13/34.
- FOR BEARING DETAILS, SEE SHEET 14/34.
- MECHANICAL CONNECTORS SHALL FOLLOW SPECIFICATIONS IN ACCORDANCE WITH CMS 509.07. MECHANICAL CONNECTORS SHALL BE INCIDENTAL TO ITEM 509 - EPOXY COATED STEEL REINFORCEMENT. THE CONTRACTOR MAY LAP BARS INSTEAD OF USING MECHANICAL CONNECTORS.
- DRILLED SHAFT BAR CALLOUTS AND DETAILS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE TO BE INCLUDED WITH FOR ITEM 524 - DRILLED SHAFTS FOR PAYMENT PER CMS 524.17.

MINIMUM BAR LAP LENGTHS:

NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"
NO. 8 BAR = 4'-9"
NO. 10 BAR = 7'-2"
NO. 11 BAR = 8'-8"



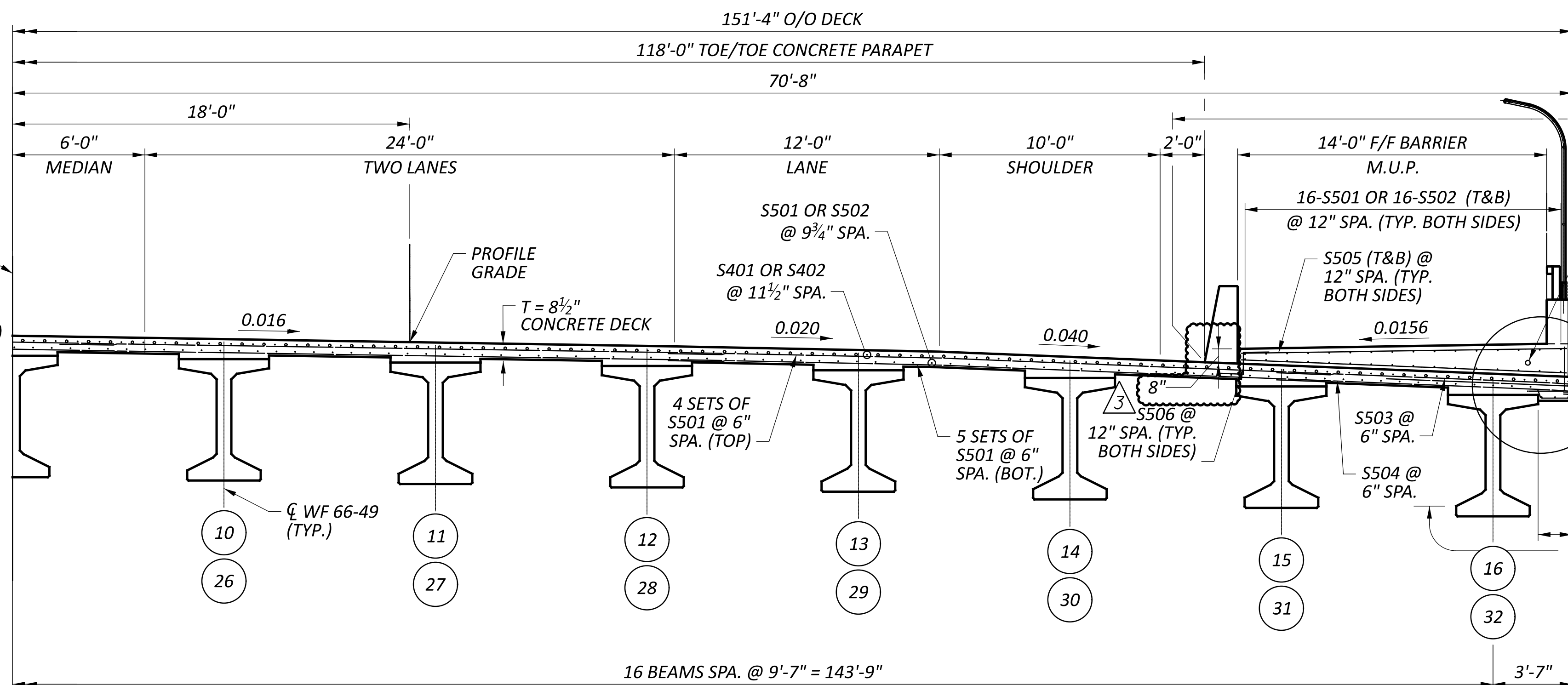
TYPICAL TRANSVERSE SECTION (1 OF 2)



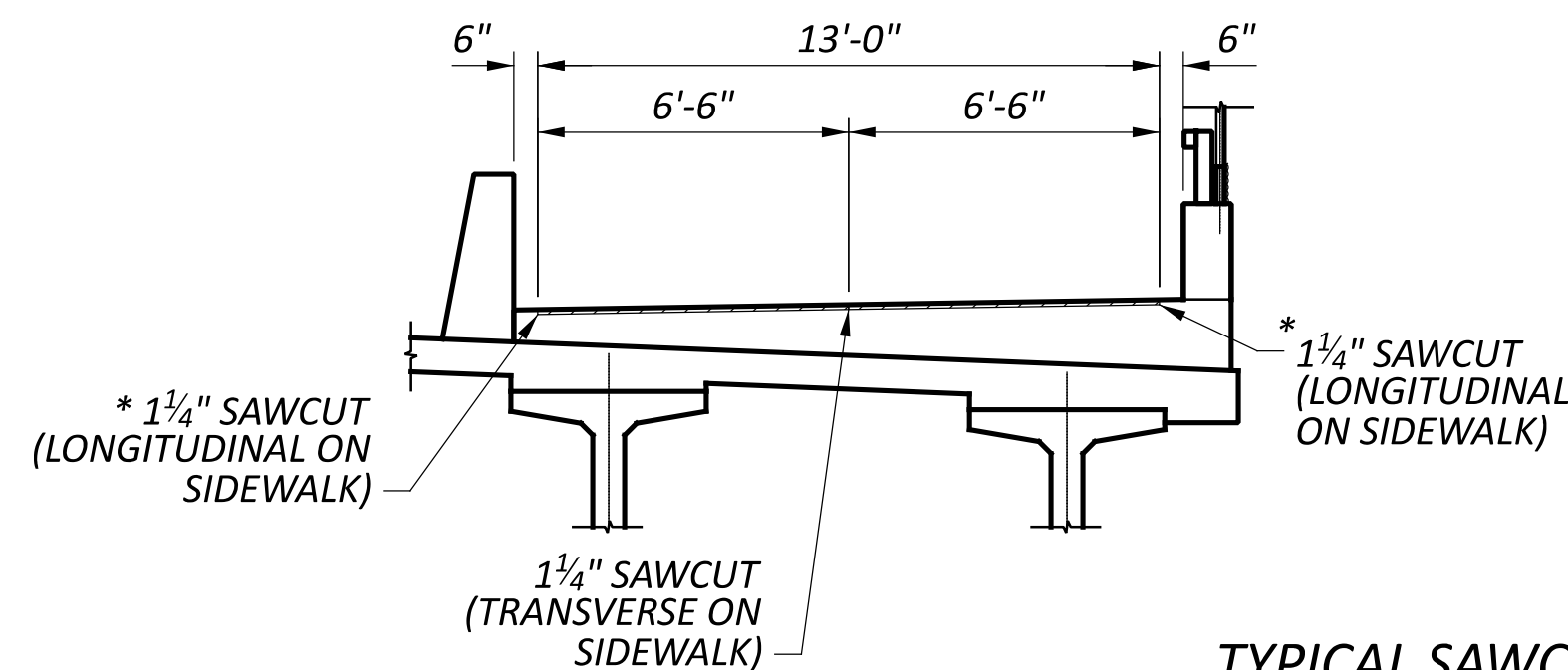
DETAIL "A"

CL SUNBURY PARKWAY

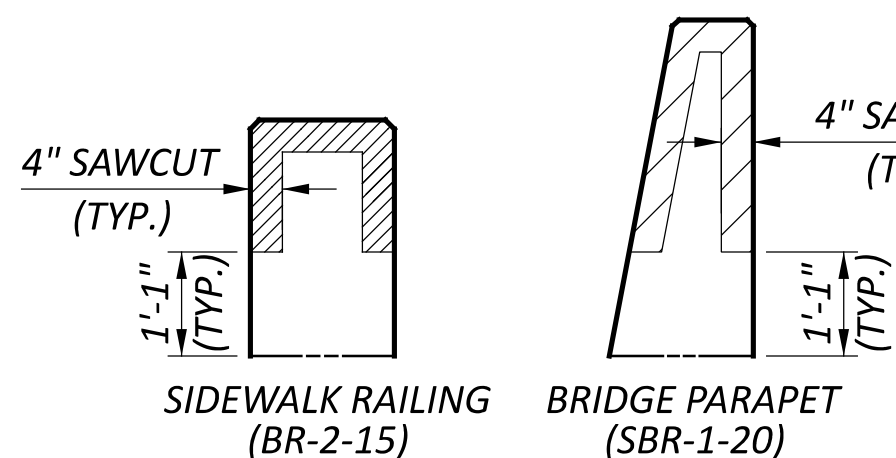
(CONTINUED IN SECTION ABOVE)



TYPICAL TRANSVERSE SECTION (2 OF 2)



TYPICAL SAWCUT DETAILS



LEGEND:

- # BEAM NUMBER
- Δ 2'-0" WIDE H.M.W.M. CENTERED ON C.J.
- * M.U.P. SAWCUT JOINT SPACING SHALL MATCH THE DEFLECTION JOINT SPACING FOR BR-2-15 BRIDGE RAILING.
- T&B TOP AND BOTTOM

NO.	DESCRIPTION	REV.	BY	DATE
PIR3	ADDED SUP DIMENSIONS	ATM	03/14/25	
PIR4	ADDED LIGHTING CONDUIT	ATM	04/14/25	

NOTES:

- FOR STEEL INTERMEDIATE DIAPHRAGM DETAILS, SEE STANDARD CONSTRUCTION DRAWING PSIB-1-13.
- FOR BR-2-15 BRIDGE RAILING AND SBR-1-20 CONCRETE PARAPET DETAILS AND REINFORCING, SEE SHEETS 26/34 AND 27/34.
- SEALING OF LONGITUDINAL DECK JOINTS WITH HIGH MOLECULAR WEIGHT METHACRYLATE (H.M.W.M.) IS INCIDENTAL TO COST OF ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK.
- DECK SLAB THICKNESS FOR CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK CONCRETE IS MEASURED ACCORDING TO C&MS 511. IN ADDITION TO THE DESIGN SLAB THICKNESS, THE QUANTITY INCLUDES A VARIABLE HAUNCH THICKNESS THAT PROVIDES AN ALLOWANCE FOR: VERTICAL GRADE ADJUSTMENT, BEAM CAMBER, AND ADDITIONAL SACRIFICIAL HAUNCH THICKNESS.
- SEE LIGHTING PLAN FOR LIGHTING CONDUIT DETAILS AND PAYMENT.

TYPICAL TRANSVERSE SECTION
BRIDGE NO. DEL-00071-08.910
OVER I-71

SFN
2102440

DESIGN AGENCY

ms
ms consultants, inc.

DESIGNER
ATM

CHECKER
SJR

REVIEWER

YSJ 11/30/23

PROJECT ID

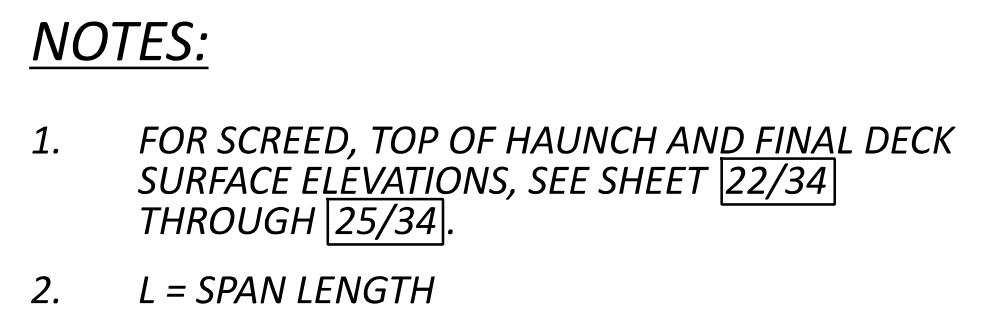
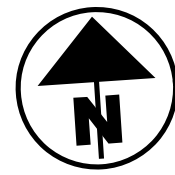
106959

SUBSET

19 34

SHEET

P.583 663



NO.	DESCRIPTION	REV. BY	DATE
PIR4	ADDED LIGHTING CONDUIT	ATM	04/14/25

SCREED LINES LAYOUT
BRIDGE NO. DEL-00071-08.910
OVER I-71

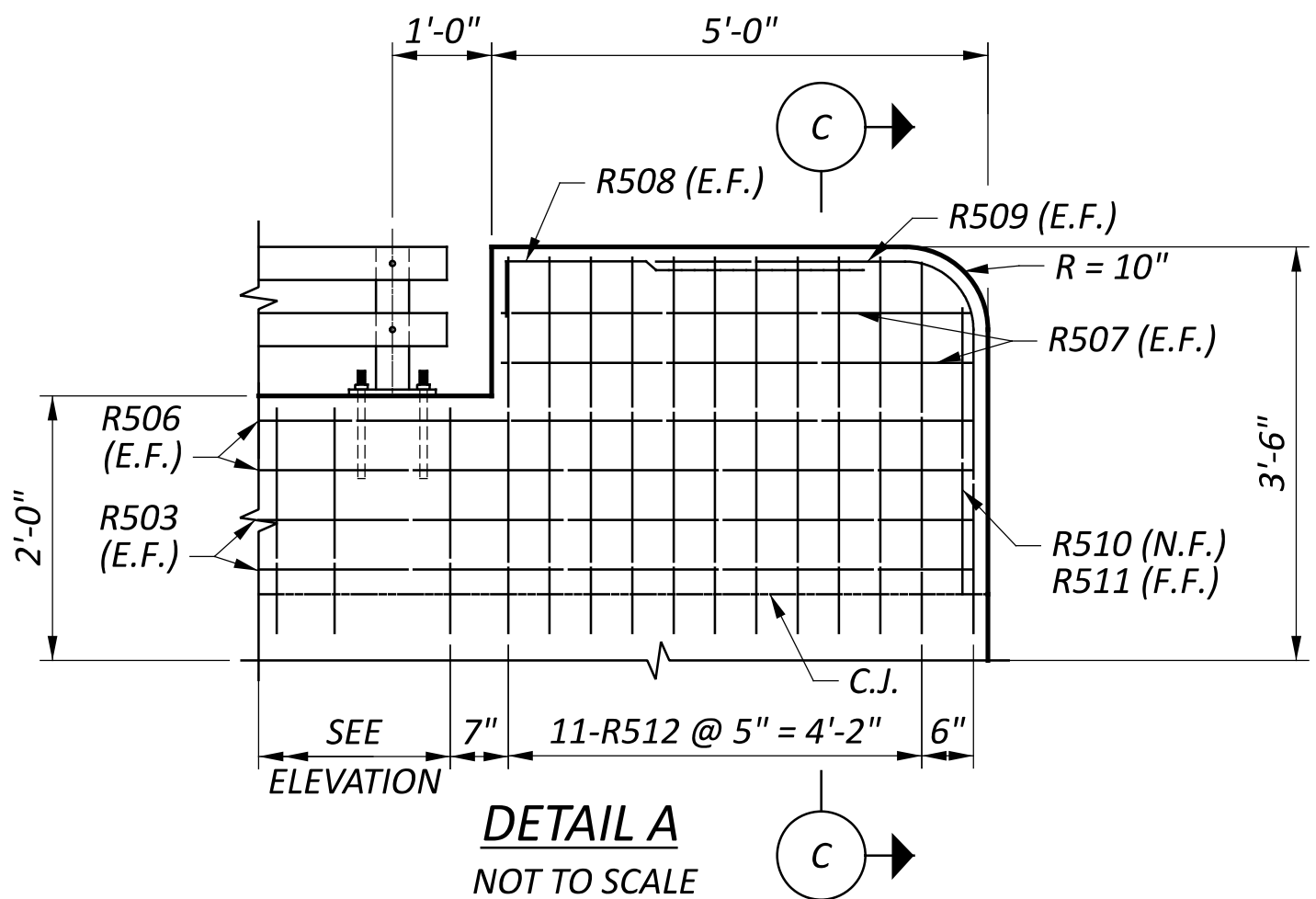


PARAPET STIFFENING GFRP REINFORCEMENT			
BAR MARK	TOTAL NUMBER	LENGTH	TYPE
R401	8	14'-2"	ST
R402	176	10'-1"	ST
R403	176	30'-0"	ST
R404	12	9'-9"	ST
R405	36	29'-7"	ST
R406	16	14'-10"	ST
R407	16	14'-8"	ST

NO. 4 BAR = 1'-11"
NO. 5 BAR = 2'-5"
NO. 6 BAR = 3'-7"

USE NO. 4 GLASS FIBER REINFORCING POLYMER (GFRP) BARS FOR HORIZONTAL BARS R403 THROUGH R405 AND DIAGONAL STIFFENING BARS R401, R403, R406 AND R407.

1. FOR MODIFIED BASE PLATE AND 12'-0" CURVED FENCE DETAILS, SEE SHEET 26/34.
2. FOR ADDITIONAL CONCRETE PARAPET AND CONCRETE BARRIER DETAILS, SEE STD. DWGS. SBR-1-20 AND BR-2-15.
3. FOR TYPICAL SAWCUT JOINT DETAILS, SEE SHEET 19/34.
4. GFRP STIFFENING REINFORCEMENT SHALL BE PAID FOR UNDER ITEM 509 - NO. 4 GFRP DEFORMED BARS.
5. TUBE SPLICES ARE TO BE LOCATED SO THAT EACH TUBE SEGMENT BE CONNECTED TO NOT LESS THAN TWO POSTS AND NOT MORE THAN SEVEN POSTS. SEE STD. DWG. BR-2-15 FOR ADDITIONAL DETAILS.
6. FOR TYPICAL APPROACH SLAB PARAPET DETAILS, SEE SHEET 28/34.
7. CONTRACTOR TO FIELD ADJUST BARS TO AVOID WINDOW DRAINS. SEE SHEET 26/34 FOR WINDOW DRAIN LOCATIONS

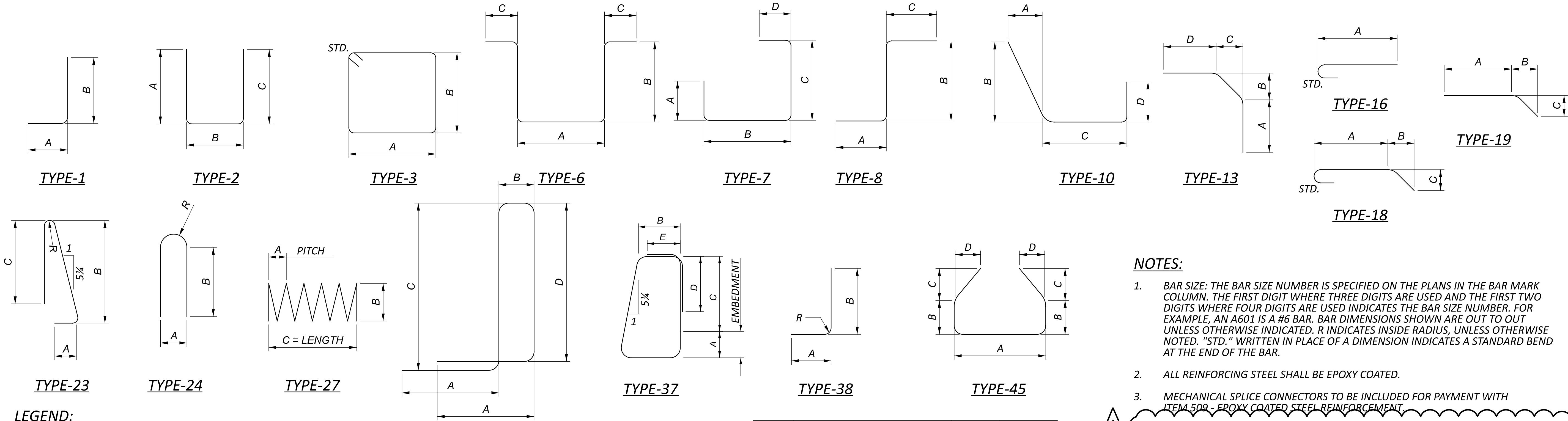


	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
DECK AND MULTIUSE PATH REINFORCING STEEL BARS											
S301	16	6'-3"	38	45	3'-1½"	0'-3½"	0'-7½"	1'-3"			
S401	1328	30'-0"	26613	STR	30'-0"						
S402	166	9'-4"	1035	STR	9'-4"						
S403	235	2'-1"	327	10	0'-3"	0'-3"	1'-4"	0'-6"			
S404	235	1'-8"	262	10	0'-3"	0'-3"	0'-11"	0'-6"			
S405	16	12'-6"	134	24	0'-4"	6'-0"				2-1/4"	
S406	105	13'-11"	976	6	1'-4"	6'-0"	0'-6"				
S501	6205	30'-0"	194154	STR	30'-0"						
S502	248	18'-8"	4828	STR	18'-8"						
S503	469	13'-11"	6808	16	13'-4"						
S504	469	13'-4"	6522	STR	13'-4"						
S505	940	14'-8"	14379	STR	14'-8"						
S506	470	2'-4"	1144	8	0'-10"	0'-11"	0'-10"				
S507	470	2'-5"	1185	1	1'-9"	0'-10"					
S508	938	9'-1"	8887	16	8'-6"						
S509	469	30'-0"	14675	16	29'-5"						
S601	477	23'-3"	16658	STR	23'-3"						
S602	90	8'-7"	1160	STR	8'-7"						
S603	30	5'-11"	267	STR	5'-11"						
S604	60	5'-1"	458	2	1'-0"	3'-5"	1'-0"				
S801	120	6'-7"	2109	1	1'-6"	5'-4"					
TOTAL			302,617								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
APPROACH SLAB REINFORCING STEEL BARS											
AS801	204	5'-7"	3041	18	4'-3"	1'-0"	1'-0"				
TOTAL			3,041								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
PIER REINFORCING STEEL BARS											
SP501	8	265'-4"	2214	27	0'-6"	2'-6"	15'-2"				
SP502	8	162'-4"	1355	27	0'-6"	2'-0"	11'-8"				
P501	70	12'-11"	943	1	11'-3"	1'-10"					
P502	10	10'-10"	113	1	9'-2"	1'-10"					
P503	578	10'-9"	6481	2	4'-2"	2'-8"	4'-2"				
P504	262	12'-3"	3348	2	4'-11"	2'-8"	4'-11"				
P601	48	30'-0"	2163	STR	30'-0"						
P602	24	21'-10"	787	STR	21'-10"						
P603	4	30'-0"	180	STR	30'-0"						
P604	4	20'-0"	120	STR	20'-0"						
P1001	72	19'-5"	6016	16	18'-0"						
* P1003	10	14'-2"	610	19	8'-1"	6'-4"	0'-6"				
* P1004	40	30'-0"	5164	STR	30'-0"						
* P1101	10	41'-8"	2214	1	40'-0"	2'-0"					
* P1102	10	36'-4"	1930	1	34'-8"	2'-0"					
P1103	120	11'-8"	7438	STR	11'-8"						
TOTAL			41,075								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
PARAPET REINFORCING STEEL BARS											
R601	514	6'-9"	5195	37	0'-7"	0'-10"	1'-5"	1'-0"	0'-7"		
R602	642	7'-0"	6750	23	0'-6"	3'-3"	3'-3"			2"	
R603	128	7'-1"	1366	37	0'-9"	0'-10"	1'-5"	1'-0"	0'-7"		
TOTAL			13,311								



- NOTES:**
- BAR SIZE: THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, AN A601 IS A #6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.
 - ALL REINFORCING STEEL SHALL BE EPOXY COATED.
 - MECHANICAL SPLICE CONNECTORS TO BE INCLUDED FOR PAYMENT WITH ITEM 509 - EPOXY COATED STEEL REINFORCEMENT.

NO.	DESCRIPTION	REV. BY	DATE
PIR4	REMOVED NOTE	ATM	04/14/25



MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
REAR ABUTMENT REINFORCING STEEL BARS											
A501	66	30'-0"	2065	STR							
A502	12	19'-9"	247	STR							
A503	32	3'-6"	117	STR							
A504	16	12'-1"	202	1	0'-10"	11'-5"					
A505	8	4'-0"	33	1	1'-0"	3'-2"					
A506	104	18'-10"	2043	3	6'-6"	2'-7"					
A507	118	12'-9"	1569	2	4'-9"	3'-6"	4'-9"				
A508	7	13'-11"	102	2	5'-4"	3'-6"	5'-4"				
A509	8	14'-7"	122	2	5'-8"	3'-6"	5'-8"				
A510	15	15'-3"	239	2	6'-0"	3'-6"	6'-0"				
A511	25	16'-1"	419	2	6'-5"	3'-6"	6'-5"				
A512	7	13'-7"	99	2	5'-2"	3'-6"	5'-2"				
A513	18	14'-5"	271	2	5'-7"	3'-6"	5'-7"				
A514	10	15'-7"	163	2	6'-2"	3'-6"	6'-2"				
A515	2	18'-0"	38	STR							
A801	92	30'-0"	7369	STR							
A802	12	27'-2"	870	STR							
A803	4	21'-10"	233	STR							
A804	5	10'-6"	140	STR							
A805	5	23'-6"	314	STR							
A806	5	10'-11"	146	STR							
TOTAL			16,800								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
REAR ABUTMENT DIAPHRAGM REINFORCING STEEL BARS											
D401	48	4'-0"	128	24	0'-5"	1'-8"				0'-2"	
D402	48	3'-0"	96	STR							
D403	32	5'-1"	109	2	1'-0"	3'-4"	1'-0"				
D501	109	14'-5"	1639	2	5'-10"	3'-0"	5'-10"				
D502	109	17'-4"	1971	3	3'-6"	4'-10"					
D801	4	1'-8"	18	STR							
D802	3	2'-11"	23	STR							
D803	3	3'-4"	27	STR							
D804	30	5'-2"	414	STR							
D805	45	8'-7"	1031	STR							
TOTAL			5,456								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
RAILING REINFORCING STEEL BARS (FOR INFORMATION ONLY)											
R501	774	7'-10"	6324	30	1'-6"	0'-8"	2'-5"	2'-3"			
R502	80	30'-0"	2503	STR							
R503	8	18'-2"	152	STR							
R504	328	6'-0"	2053	STR							
R505	8	3'-7"	30	STR							
R506	16	6'-6"	108	STR							
R507	16	4'-7"	76	STR							
R508	8	4'-2"	35	1	3'-5"	0'-10"					
R509	8	6'-1"	51	38	3'-5"	2'-11"				0'-7-3/8"	
R510	4	4'-5"	18	1	1'-6"	3'-1"					
R511	4	4'-3"	18	1	1'-6"	2'-11"					
R512	44	10'-10"	497	30	1'-6"	0'-8"	3'-11"	3'-9"			
TOTAL			11,865								

NO.	DESCRIPTION	REV. BY	DATE
P1R4	ADDED NOTE	ATM	04/14/25

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
FORWARD ABUTMENT REINFORCING STEEL BARS											
A501	66	30'-0"	2065	STR							
A502	12	19'-9"	247	STR							
A503	32	3'-6"	117	STR							
A505	8	4'-0"	33	1	1'-0"	3'-2"					
A506	104	18'-10"	2043	3	6'-6"	2'-7"					
A508	8	12'-1"	101	2	4'-5"	3'-6"	4'-5"				
A509	10	12'-7"	131	2	4'-8"	3'-6"	4'-8"				
A510	15	12'-11"	202	2	4'-10"	3'-6"	4'-10"				
A511	15	13'-11"	218	2	5'-4"	3'-6"	5'-4"				
A512	7	13'-7"	99	2	5'-2"	3'-6"	5'-2"				
A513	18	14'-5"	271	2	5'-7"	3'-6"	5'-7"				
A514	10	15'-7"	163	2	6'-2"	3'-6"	6'-2"				
A515	2	18'-0"	38	STR							
A516	16	11'-7"	193	1	0'-10"	10'-11"					
A517	118	12'-5"	1528	2	4'-7"	3'-6"	4'-7"				
A518	7	13'-1"	96	2	4'-11"	3'-6"	4'-11"				
A801	92	30'-0"	7369	STR							
A802	12	27'-2"	870	STR							
A803	4	21'-8"	231	STR							
A804	5	10'-6"	140	STR							
A805	5	23'-6"	314	STR							
A806	5	10'-11"	146	STR							
TOTAL			16,615								

MARK	NUMBER	LENGTH	WEIGHT	TYPE	DIMENSIONS						
	TOTAL				A	B	C	D	E	RADIUS (I.R.)	INC.
FORWARD ABUTMENT DIAPHRAGM REINFORCING STEEL BARS											
D401	48	4'-0"	128	24	0'-5"	1'-8"				1 3/4"	
D402	48	3'-0"	96	STR							
D403	32	5'-1"	109	2	1'-0"	3'-4"	1'-0"				
D501	109	14'-5"	1639	2	5'-10"	3'-0"	5'-10"				
D502	109	17'-4"	1971	3	3'-6"	4'-10"					
D801	4	1'-8"	18	STR							
D802	3	2'-11"	23	STR							
D803	3	3'-4"	27	STR							
D804	30	5'-2"	414	STR							
D805	45	8'-7"	1031	STR							
TOTAL			5,456								

NOTES:

1. BAR SIZE: THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, AN A601 IS A #6 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE INDICATED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED. "STD." WRITTEN IN PLACE OF A DIMENSION INDICATES A STANDARD BEND AT THE END OF THE BAR.

4

2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

3. RAILING REINFORCING STEEL BARS TO BE INCLUDED FOR PAYMENT WITH ITEM 517 - RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING AND VANDAL PROTECTION FENCE).

SFN	
2102440	
DESIGN AGENCY	
	
DESIGNER	CHECKER
DBL	ATM
REVIEWER	
YSJ 11/30/23	
PROJECT ID	
106959	
SUBSET	TOTAL
34	34
SHEET	TOTAL
P.598	663