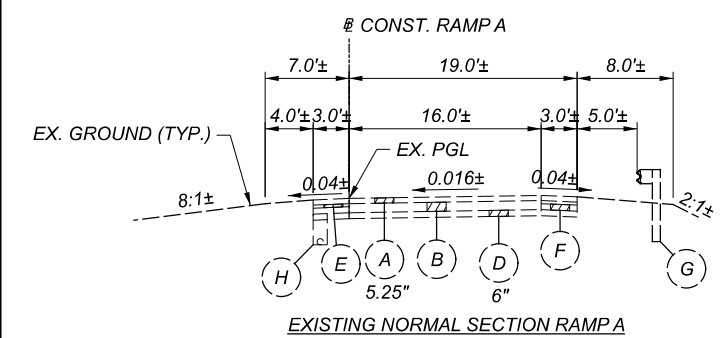
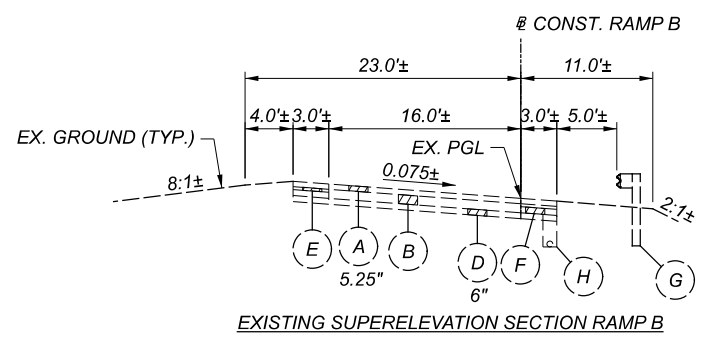


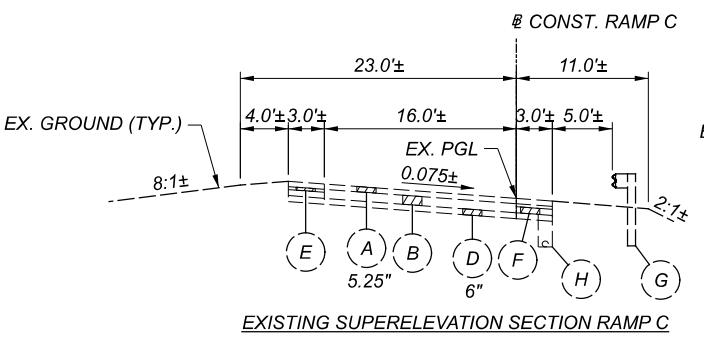
EXISTING NORMAL SECTION - I-71



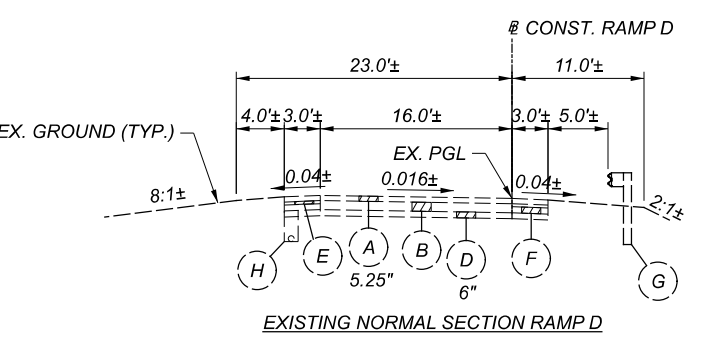
EXISTING NORMAL SECTION RAMP A



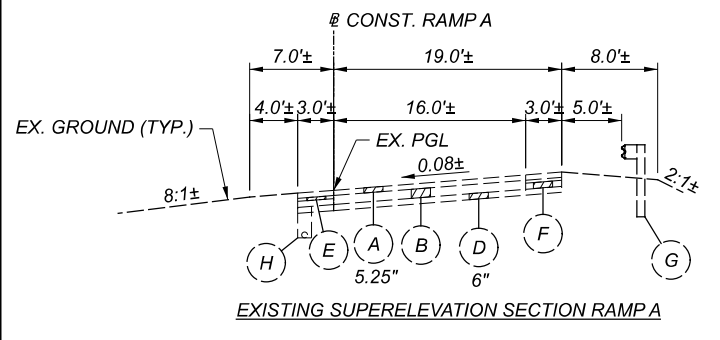
EXISTING SUPERELEVATION SECTION RAMP B



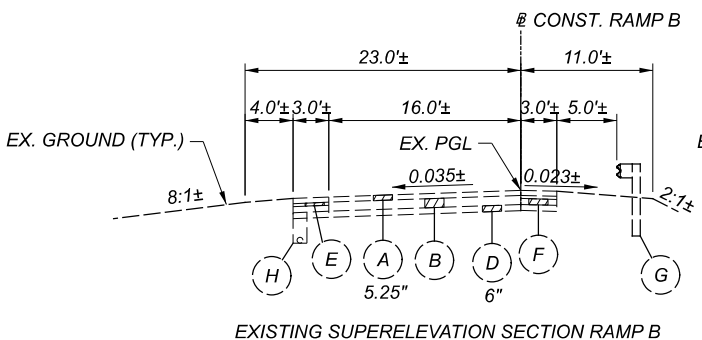
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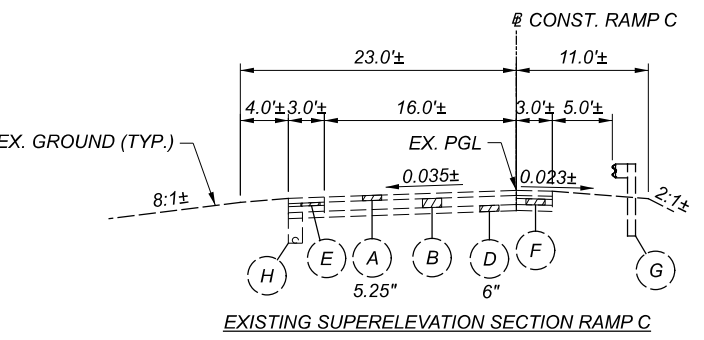
EXISTING NORMAL SECTION RAMP D



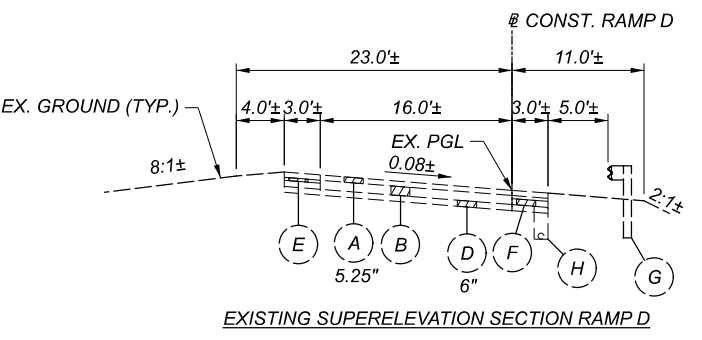
EXISTING SUPERELEVATION SECTION RAMP A



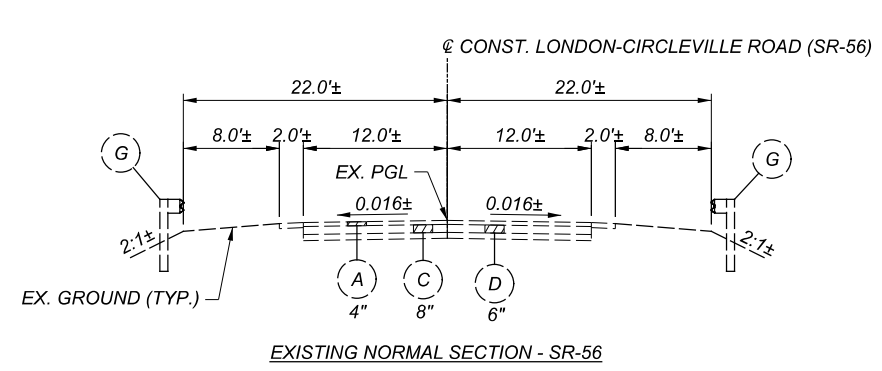
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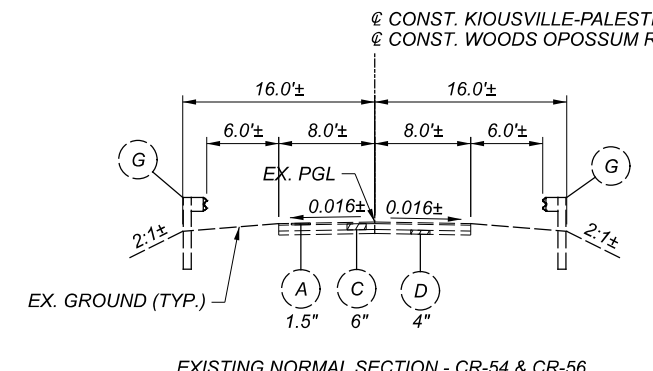
EXISTING SUPERELEVATION SECTION RAMP C



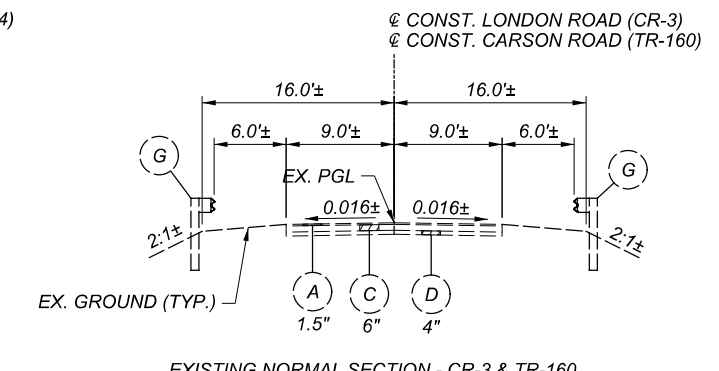
EXISTING SUPERELEVATION SECTION RAMP D



EXISTING NORMAL SECTION - SR-56



EXISTING NORMAL SECTION - CR-54 & CR-56



EXISTING NORMAL SECTION - CR-3 & TR-160

EXISTING LEGEND

- (A) EX. ASPHALT CONCRETE (THICKNESS AS SHOWN)
- (B) EX. 9"± REINFORCED CONCRETE PAVEMENT
- (C) EX. AGGREGATE BASE (THICKNESS AS SHOWN)
- (D) EX. SUBBASE (THICKNESS AS SHOWN)
- (E) EX. 3"± WATERPROOFED AGGREGATE BASE COURSE
- (F) EX. 6"± POROUS BASE COURSE
- (G) EX. GUARDRAIL
- (H) EX. UNDERDRAIN
- (I) EX. 2.25"± COMPACTED AGGREGATE

PROPOSED LEGEND

- (1) ITEM 442 - 1.5" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447)
- (2) ITEM 407 - NON-TRACKING TACK COAT (APPLICATION RATE PER TABLE 407.06-1)
- (3) ITEM 442 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446)
- (4) ITEM 302 - 8.5" ASPHALT CONCRETE BASE, PG64-22 (449) (TWO LIFTS OF 4.5" AND 4"), AS PER PLAN
- (5) ITEM 304 - 6" AGGREGATE BASE
- (6) ITEM 206 - 12" CEMENT STABILIZED SUBGRADE
- (7) ITEM 204 - SUBGRADE COMPACTION
- (8) ITEM 204 - PROOF ROLLING
- (9) ITEM 605 - 6" BASE PIPE UNDERDRAINS
- (10) ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS
- (11) ITEM 659 - SEEDING AND MULCHING
- (12) ITEM 452 - 13" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/OX, AS PER PLAN
- (13) ITEM 606 - CABLE BARRIER
- (14) ITEM 606 - GUARDRAIL, TYPE MGS
- (15) ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D
- (16) ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=15")
- (17) ITEM 442 - ANTI-SEGREGATION EQUIPMENT (TRAVEL LANES ONLY)
- (18) ITEM 609 - CURB, TYPE 4-C

DESIGN AGENCY

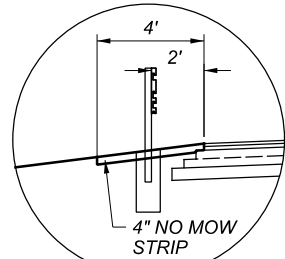
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DESIGNER
 MLL

REVIEWER
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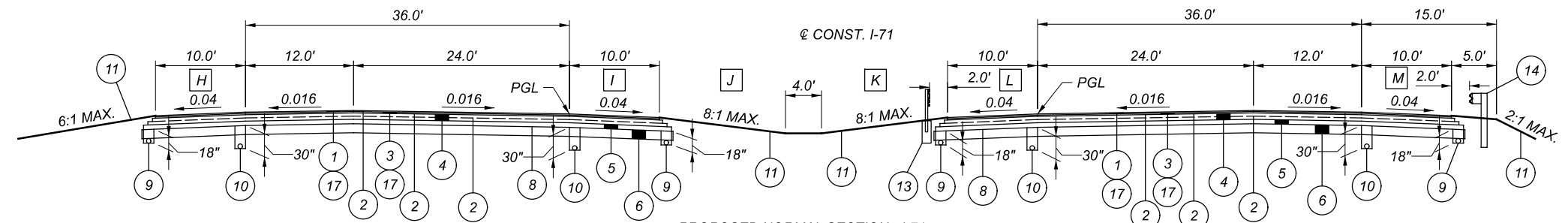
PROJECT ID
 107630

SHEET TOTAL
 P.4 1003



CABLE BARRIER DETAIL

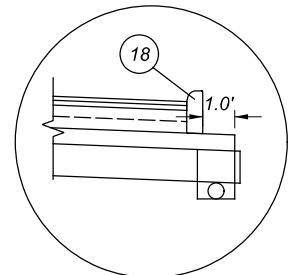
THE CONTRACTOR SHALL PROVIDE A 4 INCH DEEP MOW STRIP WITH MATERIALS CONFORMING TO ITEM 608 - CONCRETE WALK, AS SHOWN IN THE DETAIL. THE MOW STRIP SHALL BE PLACED ON COMPACTED EARTH AND CONSTRUCTED USING CLASS QC1 CONCRETE WITH A CURING COMPOUND MEETING THE SPECIFICATIONS OF 705.07 OF THE CMS. THE MOW STRIP SHALL BE EITHER INTEGRAL TO THE SOCKETED CONCRETE FOUNDATION OR HAVE AN EXPANSION JOINT WITH MATERIALS MEETING THE REQUIREMENTS OF 705.03 OF THE CMS BETWEEN THE SOCKETED CONCRETE FOUNDATION AND THE CONCRETE MOW STRIP. THE MOW STRIP SHALL HAVE A TRANSVERSE JOINT EVERY 100 FEET. THE METHODS AND MATERIALS USED TO CONSTRUCT THE JOINTS SHALL CONFORM TO CMS 608.03(C).



- H** VARIES FROM 10.0 TO 12.0' FROM STA. 840+30.00 TO STA. 841+80.00
- I** VARIES FROM 12.0' TO 10.0' FROM STA. 448+78.97 TO STA. 450+78.97
VARIES FROM 12.0' TO 10.0' FROM STA. 524+29.47 TO STA. 526+29.47
VARIES FROM 12.0' TO 10.0' FROM STA. 688+82.47 TO STA. 690+82.47
VARIES FROM 10.0' TO 12.0' FROM STA. 840+30.00 TO STA. 841+80.00
- J** VARIES FROM 16.0' TO 16.4' FROM STA. 840+30.00 TO STA. 841+80.00

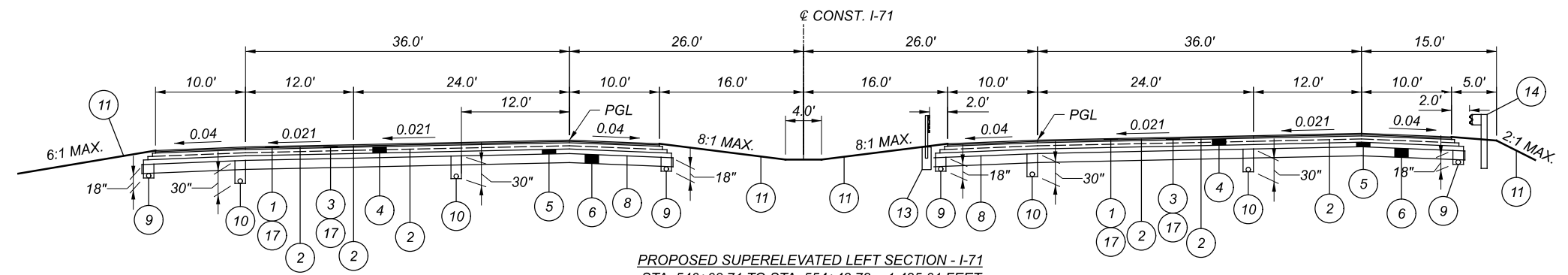
PROPOSED NORMAL SECTION - I-71
 STA. 444+85.00 TO STA. 517+31.32 = 7,246.32 FEET
 STA. 520+47.32 TO STA. 540+08.71 = 1,961.39 FEET
 STA. 554+43.72 TO STA. 608+73.29 = 5,429.57 FEET
 STA. 622+83.31 TO STA. 697+44.05 (RT) = 7,450.35 FEET
 STA. 622+83.31 TO STA. 697+74.07 (LT) = 7,511.15 FEET
 STA. 699+09.57 (RT) TO STA. 841+80.00 = 14,446.34 FEET
 STA. 699+39.59 (LT) TO STA. 841+80.00 = 14,395.54 FEET

- K** VARIES FROM 16.0' TO 15.6' FROM STA. 840+30.00 TO STA. 841+80.00
- L** VARIES FROM 10.0' TO 12.0' FROM STA. 446+16.03 TO STA. 448+16.03
VARIES FROM 10.0' TO 12.0' FROM STA. 521+66.53 TO STA. 523+66.53
VARIES FROM 10.0' TO 12.0' FROM STA. 686+19.53 TO STA. 688+19.53
VARIES FROM 10.0' TO 12.0' FROM STA. 840+30.00 TO STA. 841+80.00
- M** VARIES FROM 10.0' TO 12.0' FROM STA. 840+30.00 TO STA. 841+80.00

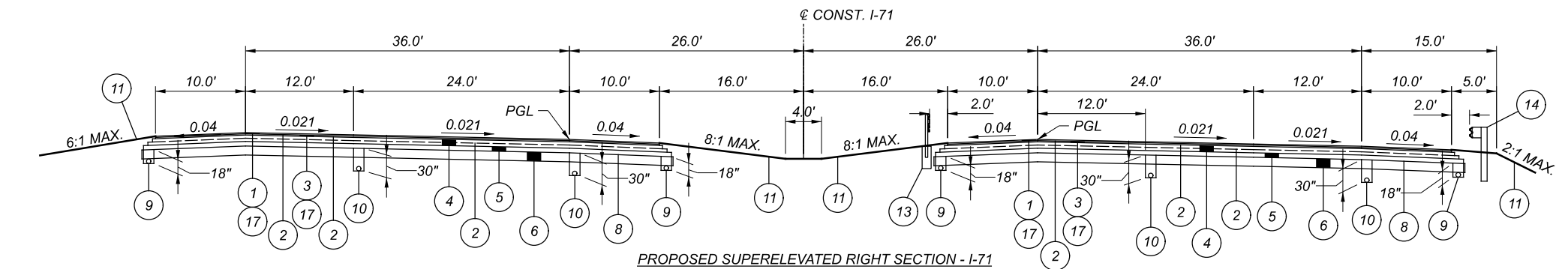


SHOULDER WITH CURB (TYP.)

- STA. 481+12.00 TO STA. 481+30.00, 72' RT = 18.00'
- STA. 481+48.00 TO STA. 481+66.00, 72' LT = 18.00'
- STA. 517+43.32 TO STA. 517+61.32, 16' RT = 18.00'
- STA. 517+43.32 TO STA. 517+61.32, 72' RT = 18.00'
- STA. 520+47.32 TO STA. 520+65.32, 16' LT = 18.00'
- STA. 520+47.32 TO STA. 520+65.32, 72' LT = 18.00'
- STA. 520+47.32 TO STA. 520+63.32, 16' RT = 16.00'
- STA. 520+47.32 TO STA. 520+63.32, 72' RT = 16.00'
- STA. 562+78.00 TO STA. 562+96.00, 72' RT = 18.00'
- STA. 563+18.00 TO STA. 563+36.00, 72' LT = 18.00'
- STA. 660+97.00 TO STA. 661+15.00, 72' RT = 18.00'
- STA. 661+85.00 TO STA. 662+03.00, 72' LT = 18.00'
- STA. 696+99.49 TO STA. 697+17.49, 72' RT = 18.00'
- STA. 697+31.82 TO STA. 697+49.82, 16' RT = 18.00'
- STA. 699+33.82 TO STA. 699+51.82, 16' LT = 18.00'
- STA. 699+66.15 TO STA. 699+84.15, 72' LT = 18.00'
- STA. 724+96.00 TO STA. 725+14.00, 72' RT = 18.00'
- STA. 726+17.00 TO STA. 726+35.00, 72' LT = 18.00'
- STA. 819+96.00 TO STA. 820+14.00, 72' RT = 18.00'
- STA. 819+86.00 TO STA. 820+04.00, 72' LT = 18.00'



PROPOSED SUPERELEVATED LEFT SECTION - I-71
 STA. 540+08.71 TO STA. 554+43.72 = 1,435.01 FEET



PROPOSED SUPERELEVATED RIGHT SECTION - I-71
 STA. 608+73.29 TO STA. 622+83.31 = 1,410.02 FEET

*FOR LEGEND, SEE SHEET P.4

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/12/2023 TIME: 10:24:22 PM USER: mcomett P3_OHDOT_Worksets\107630\400-Engineering\Roadway\Sheets\107630_GY\102.dgn

TYPICAL SECTIONS

DESIGN AGENCY



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 950 Goodale Blvd, Suite 100
 Granville Heights, Ohio

DESIGNER
MLL

REVIEWER
MJC 04/26/22

PROJECT ID
107630

SHEET TOTAL
P.5 | 1003

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

COLUMBIA GAS OF OHIO
(DISTRIBUTION)
843 PIATT AVENUE
CHILLICOTHE, OH 45601
O: (740) 774-8231
C: (740)-591-9841
ATTN: TIFFANY WOODYARD
trwoodyward@nisource.com

AMERICAN ELECTRIC POWER
8600 SMITHS MILL ROAD
NEW ALBANY, OH 43054
(380) 205-5072
ATTN: MIKE CARR
TI_PublicProjects@aep.com

AES (FORMERLY DP&L)
DISTRIBUTION
1900 DRYDEN RD
DAYTON, OH 45439
(937) 331-4497
ATTN: BILL WARD
William.ward@aes.com

SOUTH CENTRAL POWER
2780 COONPATH RD
LANCASTER, OH 43130
ATTN: MIKE CHALFAN
(740) 689-6168
chalfan@southcentralpower.com
ATTN: KEVIN CARO
caro@southcentralpower.com

BRIGHTSPEED (FORMERLY LUMEN)
125 N. MAIN ST.
SYDNEY, OH 45365
(937) 498-5105
ATTN: GAGE RYAN & DUSTIN DEBO
Gage.Ryan@brightspeed.com
Dustin.x.Debo@brightspeed.com

TC ENERGY
700 LOUISIANA STREET
SUITE 700
HOUSTON, TX 77002
(800) 562-8931
ATTN: RANDALL MUSIC
randall_music@tcenergy.com
ATTN: CROSSINGS & ENCROACHMENTS
us_crossings@tcenergy.com

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

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 STATIC
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: 18 (ADJUSTED TO PRIOR ODOT CONTROL)

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS-80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE SOUTH ZONE
COMBINED SCALE FACTOR: 1.0000000000
ORIGIN OF COORDINATE
SYSTEM: 0,0,0

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.

UTILITY LINES

EXISTING OVERHEAD ELECTRIC LINES ARE PRESENT FROM APPROXIMATELY STA 700+00 TO 701+00. REFER TO PLAN AND PROFILE SHEETS FOR LOCATION.

THE CONTRACTOR IS REQUIRED TO COORDINATE WITH ODOT AND THE OWNER OF THE OVERHEAD ELECTRIC TRANSMISSION LINES (AEP) THROUGHOUT THE CONSTRUCTION DURATION, WITH THE MOST CRITICAL TIMES BEING PILE OR SHEETING DRIVING OPERATIONS AND CRANE OPERATIONS FOR BEAM PLACEMENT.

THE CONTRACTOR IS ADVISED THAT THE 765KV OVERHEAD ELECTRICAL LINES WILL REMAIN INTACT THROUGHOUT CONSTRUCTION. CURRENTLY, THE TRANSMISSION LINES ARE APPROXIMATELY 50 FEET ABOVE THE ROADWAY SURFACE OF I-71. THE CONTRACTOR WILL BE RESPONSIBLE FOR MEETING ALL OSHA REQUIREMENTS AT ALL TIMES.

THE DE-ENERGIZING OF THESE LINES MAY NOT BE POSSIBLE AND A POTENTIAL LEAD TIME OF 1-YEAR SHOULD BE CONSIDERED FOR ANY OUTAGES.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. LIMITS ARE FROM LA ROW TO LA ROW AND WITHIN CHANNEL EASEMENT REGARDLESS OF CONSTRUCTION LIMITS SHOWN. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

- 659, SOIL ANALYSIS TEST 4 EACH
- 659, TOPSOIL 34,545 CU. YD.
- 659, SEEDING AND MULCHING 311,214 SQ. YD.
- 659, REPAIR SEEDING AND MULCHING 15,561 SQ. YD.
- 659, INTER-SEEDING 15,561 SQ. YD.
- 659, COMMERCIAL FERTILIZER 43.4 TON
- 659, LIME 64.3 ACRES
- 659, WATER 1,723 M. GAL.
- 659, MOWING 701 M. SQ.FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 606 - CABLE GUARDRAIL

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY ONE OF THE HIGH TENSION FOUR CABLE GUARDRAIL SYSTEMS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE. PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION, AND ITEM 606 CABLE BARRIER, ANCHOR ASSEMBLY AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL HIGH TENSION CABLE GUARDRAIL SYSTEM NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. THE LENGTH OF THE TENSIONED CABLE NECESSARY TO INSTALL A FUNCTIONAL ANCHOR SYSTEM SHALL BE INCLUDED IN ITEM 606, CABLE BARRIER WITH CONCRETE LINE POST FOUNDATION.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

SYSTEMS SHALL HAVE A MAXIMUM DEFLECTION OF 8 FEET AND THE MAXIMUM LONGITUDINAL DISTANCE BETWEEN POSTS SHALL BE 15'.

INSTALLATION WILL BE A FOUR CABLE HIGH TENSION SYSTEM INSTALLED IN SOCKETED POSTS FOUNDATION WITH A FOUR FOOT WIDE "NO MOW STRIP" AS SHOWN IN THE TYPICAL SECTION DETAIL. ALL COST TO CONSTRUCT THE NO MOW STRIP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 606 - CABLE BARRIER.

DELINEATE THE CABLE BARRIER USING TYPE 6 BARRIER REFLECTORS PER ITEM 626 OR USING FLEXIBLE POSTS PER ITEM 620 AS CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.

ANCHOR TERMINAL STRUTS SHALL BE COVERED COMPLETELY ON BOTH SIDES WITH YELLOW TYPE J, ASTM D 4956 TYPE XI REFLECTIVE SHEETING, PER CMS 730.193.

TRANSITIONS TO W-BEAM GUARDRAIL ARE NOT ALLOWED.

REFER TO MANUFACTURER FOR MAXIMUM OFFSET FROM BREAK POINT.

TORPEDO OR BULLET SPLICES ARE NOT ALLOWED. ALL CABLE SPLICES SHALL BE A SWAGED OR OPEN BODY DESIGN THAT ALLOWS FOR ANNUAL INSPECTION BETWEEN THE WEDGE AND STRANDS OF CABLE.

POSTS ARE SET IN SOCKETED CONCRETE FOUNDATIONS AND SHALL NOT BE PERMANENTLY INSTALLED UNTIL THEIR RESPECTIVE RUNS OF TENSIONED CABLE GUARDRAIL ARE READY FOR FINAL CONNECTION TO THE END TERMINAL ASSEMBLY. THE CONTRACTOR SHALL REPLACE ANY POSTS DAMAGED DURING INSTALLATION AS DETERMINED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180-12, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

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DESIGNER

MLL

REVIEWER

MJC 04/26/22

PROJECT ID

107630

SHEET

TOTAL

P.8 | 1003

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2" REPAIR

ALL REPAIR AREAS ARE TO BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF THE WORK. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 2 FEET. THE AVERAGE DEPTH OF REPAIRS SHALL BE 2.0 INCHES AS DETAILED ON THIS SHEET.

REPAIR AREAS SHALL BE REFILLED WITH 2.0 INCHES OF ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448). GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES. NO MORE PARTIAL DEPTH PAVEMENT REPAIR SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, TYPE 1 400 SY

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 3" REPAIR

ALL REPAIR AREAS ARE TO BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF THE WORK. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 4 FEET. THE AVERAGE DEPTH OF REPAIRS SHALL BE 3.0 INCHES AS DETAILED ON THIS SHEET.

REPAIR AREAS SHALL BE REFILLED WITH 3.0 INCHES OF ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (448) (2 LIFTS). GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES. NO MORE PARTIAL DEPTH PAVEMENT REPAIR SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, TYPE 2 1600 SY

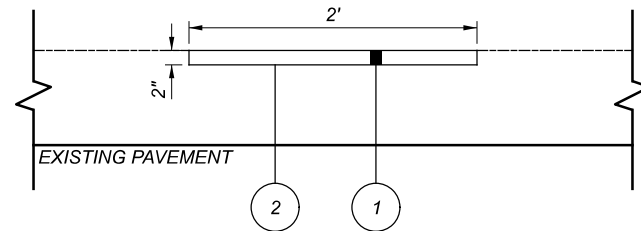
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 6" REPAIR

ALL REPAIR AREAS ARE TO BE DETERMINED BY THE PROJECT ENGINEER BEFORE THE BEGINNING OF THE WORK. THE REPAIR AREAS SHALL BE OF VARYING LENGTH AND HAVE AN AVERAGE WIDTH OF NOT LESS THAN 6 FEET. THE AVERAGE DEPTH OF REPAIRS SHALL BE 6.0 INCHES AS DETAILED ON THIS SHEET.

REPAIR AREAS SHALL BE REFILLED WITH 6.0 INCHES OF ITEM 301 - ASPHALT CONCRETE BASE (449). GREAT CARE SHALL BE TAKEN TO MAINTAIN THE EXISTING PAVEMENT CROSS SLOPE (CROWN) AS WELL AS ALL LONGITUDINAL SLOPES. NO MORE PARTIAL DEPTH PAVEMENT REPAIR SHALL BE STARTED AND PERFORMED THAN CAN BE COMPLETED IN THE SAME WORKING DAY.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

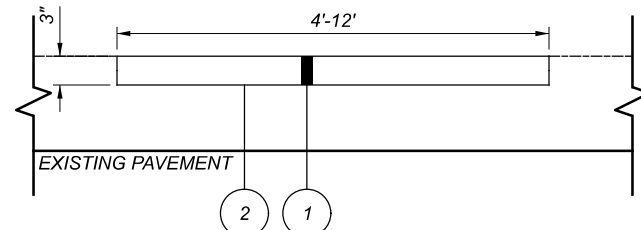
ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, TYPE 3 12000 SY



2" REPAIR DEPTH DETAIL

PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN TYPE 1

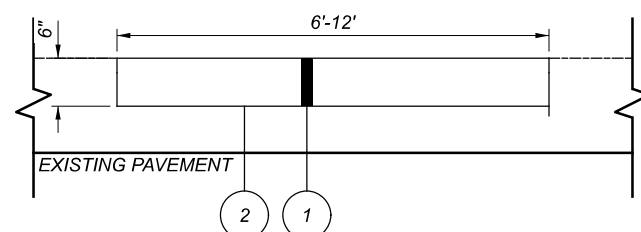
FOR MORE INFORMATION REGARDING ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN TYPE 1, SEE NOTE TO THE LEFT.



3" REPAIR DEPTH DETAIL

PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN TYPE 2

FOR MORE INFORMATION REGARDING ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN TYPE 2, SEE NOTE TO THE LEFT.



6" REPAIR DEPTH DETAIL

PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN TYPE 3

FOR MORE INFORMATION REGARDING ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN TYPE 3, SEE NOTE TO THE LEFT.

LEGEND:

- 1 ITEM 301 - ASPHALT CONCRETE BASE, PG64-22, (449)
- 2 ITEM 407 - NON-TRACKING TACK COAT (RATE PER CMS TABLE 407.06-1)

ITEM 452 - 13" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/QA, AS PER PLAN

ALL PROVISIONS OF ITEM 452 SHALL APPLY EXCEPT HAND FORMING OF CONCRETE PAVEMENT WILL BE PERMITTED ACCORDING TO 451.04C WHEN MOT RESTRICTS SLIP FORM OR FIXED FORM PAVER EQUIPMENT WORKING WIDTH TO LESS THAN 4' BEHIND THE PORTABLE BARRIER.

MONUMENT ASSEMBLIES

CONSTRUCT MONUMENT ASSEMBLIES IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE LOCATIONS SHOWN ON THIS SHEET.

MONUMENT TABLE - I-71

POINT	STATION	OFFSET	NORTHING	EASTING	REFERENCE MONUMENT SET
CMON1	445+00.00	0.00	1739518.88	639437.69	1
CMON2	455+00.00	0.00	1740382.07	639942.57	1
CMON3	465+00.00	0.00	1741245.26	640447.45	1
CMON4	475+00.00	0.00	1742108.45	640952.33	1
CMON5	485+00.00	0.00	1742971.64	641457.20	1
CMON6	495+00.00	0.00	1743834.83	641962.08	1
CMON7	505+00.00	0.00	1744698.02	642466.96	1
CMON8	515+00.00	0.00	1745561.21	642971.84	1
CMON9	525+00.00	0.00	1746424.40	643476.72	1
CMON10	535+00.00	0.00	1747287.59	643981.60	1
CMON11	541+98.70	0.00	1747890.70	644334.36	1
CMON12	545+00.00	0.00	1748149.16	644489.20	1
CMON13	550+00.00	0.00	1748570.70	644758.05	1
CMON14	552+53.73	0.00	1748780.96	644900.06	1
CMON15	560+00.00	0.00	1749395.66	645323.22	1
CMON16	570+00.00	0.00	1750219.35	645890.25	1
CMON17	580+00.00	0.00	1751043.05	646457.28	1
CMON18	590+00.00	0.00	1751866.75	647024.32	1
CMON19	600+00.00	0.00	1752690.44	647591.35	1
CMON20	610+62.38	0.00	1753565.52	648193.75	1
CMON21	615+00.00	0.00	1753929.72	648436.35	1
CMON22	620+00.00	0.00	1754354.68	648699.76	1
CMON23	620+93.32	0.00	1754435.00	648747.27	1
CMON24	630+00.00	0.00	1755216.86	649206.35	1
CMON25	640+00.00	0.00	1756079.20	649712.68	1
CMON26	650+00.00	0.00	1756941.54	650219.01	1
CMON27	660+00.00	0.00	1757803.88	650725.34	1
CMON28	670+00.00	0.00	1758666.22	651231.67	1
CMON29	680+00.00	0.00	1759528.56	651738.00	1
CMON30	690+00.00	0.00	1760390.90	652244.33	1
CMON31	700+00.00	0.00	1761253.24	652750.66	1
CMON32	710+00.00	0.00	1762115.58	653256.99	1
CMON33	720+00.00	0.00	1762977.92	653763.32	1
CMON34	730+00.00	0.00	1763840.26	654269.65	1
CMON35	740+00.00	0.00	1764702.60	654775.98	1
CMON36	750+00.00	0.00	1765564.94	655282.31	1
CMON37	760+00.00	0.00	1766427.28	655788.65	1
CMON38	770+00.00	0.00	1767289.62	656294.98	1
CMON39	780+00.00	0.00	1768151.96	656801.31	1
CMON40	790+47.12	0.00	1769054.93	657331.49	1
CMON41	800+00.00	0.00	1769876.92	657813.48	1
CMON42	810+00.00	0.00	1770739.56	658319.31	1
CMON43	820+00.00	0.00	1771602.20	658825.13	1
CMON44	830+00.00	0.00	1772464.83	659330.96	1
CMON45	840+00.00	0.00	1773327.47	659836.78	1
TOTAL ITEM 623 - REFERENCE MONUMENT CARRIED TO GENERAL SUMMARY					45

302 ASPHALT CONCRETE BASE, AS PER PLAN

MIX DESIGN - FOLLOW THE REQUIREMENTS OF 302.02 EXCEPT AS MODIFIED BELOW:

- USE A MAXIMUM F/A RATIO OF 1.4. IF THE F/A RATIO IS GREATER THAN 1.2, RECALCULATE THE F/A RATIO USING THE EFFECTIVE ASPHALT BINDER CONTENT.
- THE TSR IS REQUIRED AND THE MINIMUM TSR IS 0.70 AS DETERMINED USING SUPPLEMENT 1051. ADD ANTISTRIP ADDITIVE AS SPECIFIED IN 440.06 IF REQUIRED BASED ON TSR AND ENSURE THE MINIMUM IS 0.80 AFTER ANTISTRIP.

302 ASPHALT CONCRETE BASE, AS PER PLAN (CONTINUED)

QUALITY CONTROL AND ACCEPTANCE - FOLLOW THE REQUIREMENTS AS SPECIFIED IN 403 USING 446 ACCEPTANCE EXCEPT AS MODIFIED BELOW:
- RUN MSG AND AIR VOIDS AND FOLLOW 403.06.G INSTEAD OF 403.06.F.

MIX CHARACTERISTIC	OUT OF SPECIFICATION LIMITS [5]
ASPHALT BINDER CONTENT [1]	-0.5% TO 0.5%
1/2 INCH (12.5MM) SIEVE [1]	-7.0% TO 7.0%
NO. 4 (4.75MM) SIEVE [1]	-6.0% TO 6.0%
NO. 8 (2.36MM) SIEVE [1]	-5.0% TO 5.0%
NO. 200 (75µM) SIEVE [1]	-2.0% TO 2.0%
AIR VOIDS [2]	2.5% TO 5.5%
MSG [3]	-0.015 TO 0.015
F/A [4]	1.4 MAX
VMA	12.0 MIN

- [1] DEVIATION FROM THE JMF.
- [2] FOR DESIGN AIR VOIDS OF 4.0%. COMPACT USING A SIX-INCH MARSHALL HAMMER WITH 70 BLOWS ON BOTH SIDES PER 302.02.
- [3] DEVIATION FROM THE MTD.
- [4] IF THE F/A RATIO IS GREATER THAN 1.2, RECALCULATE THE F/A RATIO USING THE EFFECTIVE ASPHALT BINDER CONTENT.
- [5] DO NOT FOLLOW THE MINIMUM 7% RETAINED DURING PRODUCTION PER 403.06.F.5.

- REPLACE MSG COMPARISON IN TABLE 403.10-1 WITH 0.015.
- NOTIFY ERIC BIEHL - OMM 614-275-1380 AND JULIA MILLER - OCA 614-466-3165 ONE WEEK PRIOR TO PLANNED BEGINNING PRODUCTION AND PLACEMENT. YOU MAY EMAIL THEM AS WELL.

DENSITY ACCEPTANCE - FOLLOW THE REQUIREMENTS OF 446 ASPHALT CONCRETE CORE DENSITY ACCEPTANCE, INCLUDING JOINT CORES, EXCEPT AS MODIFIED BELOW:

- OBTAIN 6-INCH DIAMETER CORES ON EACH LIFT PLACED.
- OBTAIN JOINT CORES AT COLD LONGITUDINAL JOINTS SUCH THAT THE CORE'S CLOSEST EDGE IS 6 INCHES (152 MM) FROM THE EDGE OF THE MAT.
- PAY FACTORS FOR EACH LIFT OF 302 APP WILL BE AS SPECIFIED IN THE FOLLOWING TABLE.

MEAN OF LOT CORE DENSITY [1]	PAY FACTOR
	302, AS PER PLAN
> 98.0%	[2]
> 97.0% TO 98.0%	[3]
92.0% TO 97.0%	1.00
91.0% TO 91.9%	0.90
90.0% TO 90.9%	0.80
89.0% TO 89.9%	0.70
< 89.0%	[4]

- [1] MEAN OF CORES AS PERCENT OF AVERAGE MSG FOR THE PRODUCTION DAY.
 - [2] THE DISTRICT WILL DETERMINE WHETHER THE MATERIAL MAY REMAIN IN PLACE. THE PAY FACTOR FOR MATERIAL ALLOWED TO REMAIN IN PLACE IS 0.50.
 - [3] THE DISTRICT WILL DETERMINE WHETHER THE MATERIAL MAY REMAIN IN PLACE. THE PAY FACTOR FOR THE MATERIAL ALLOWED TO REMAIN IN PLACE IS 0.70.
 - [4] THE DISTRICT WILL DETERMINE WHETHER THE MATERIAL MAY REMAIN IN PLACE. THE PAY FACTOR FOR THE MATERIAL ALLOWED TO REMAIN IN PLACE IS 0.50.
- IF THE MATERIAL IS REMOVED AND REPLACED, REMOVE AND REPLACE THE FULL LIFT AND ALL COURSES ON THE LIFT.

MAD/PIC-71-7.30/0.02

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 1/12/2023 TIME: 10:47:54 PM USER: mcomett P3_OHDOT_Worksets\107630\400-Engineering\Roadway\Sheets\107630_GN1\03.dgn

GENERAL NOTES

DESIGN AGENCY

E.L. ROBINSON ENGINEERING
1466 West 9th St, Suite 800
Cleveland, Ohio 44115
950 Goodale Blvd, Suite 180
Grandview Heights, Ohio

DESIGNER
MLL

REVIEWER
MJC 04/26/22

PROJECT ID
107630

SHEET TOTAL
P.10 1003

LANE VALUE CONTRACT TABLE						
MAD-71						
SECTION	EXISTING NUMBER OF LANES PER DIRECTION	LANE CLOSURES ARE NOT PERMITTED:				DISINCENTIVE AMOUNTS PER MINUTE PER LANE
		LANE REDUCTION	MON TO THUR	FRI	SAT-SUN	
FAYETTE COUNTY LINE (0.00) TO PICKAWAY COUNTY LINE (11.68) NORTHBOUND	2	2 TO 1	7AM-7PM	7AM-7PM	9AM-10PM	\$255
FAYETTE COUNTY LINE (0.00) TO PICKAWAY COUNTY LINE (11.68) SOUTHBOUND	2	2 TO 1	7AM-7PM	7AM-10PM	9AM-7PM	\$255
SHORT TERM SHOULDER CLOSURES ARE PERMITTED ANY TIME EXCEPT 7AM-9AM AND 3PM-6PM MONDAY-FRIDAY						
LANE VALUE CONTRACT TABLE - POST PHASE 3						
SECTION	EXISTING NUMBER OF LANES PER DIRECTION	LANE CLOSURES ARE NOT PERMITTED:				DISINCENTIVE AMOUNTS PER MINUTE PER LANE
		LANE REDUCTION	MON TO THUR	FRI	SAT-SUN	
FAYETTE COUNTY LINE (0.00) TO MUD RUN (4.56) NORTHBOUND	2	2 TO 1	7AM-7PM	7AM-7PM	9AM-10PM	\$255
FAYETTE COUNTY LINE (0.00) TO CR-9 (4.70) SOUTHBOUND	2	2 TO 1	7AM-7PM	7AM-10PM	9AM-7PM	\$255
MUD RUN (4.56) TO PICKAWAY COUNTY LINE (11.68) NORTHBOUND	3	3 TO 2	NO RESTRICTION	NO RESTRICTION	NO RESTRICTION	N/A
		3 TO 1	7AM-7PM	7AM-8PM	9AM-10PM	\$170
CR-9 (4.70) TO PICKAWAY COUNTY LINE (11.68) SOUTHBOUND	3	3 TO 2	NO RESTRICTION	2PM-6PM	NO RESTRICTION	\$170
		3 TO 1	7AM-7PM	7AM-10PM	9AM-7PM	\$170

LANE VALUE CONTRACT TABLE						
PIC-71						
SECTION	EXISTING NUMBER OF LANES PER DIRECTION	LANE CLOSURES ARE NOT PERMITTED:				DISINCENTIVE AMOUNTS PER MINUTE PER LANE
		LANE REDUCTION	MON TO THUR	FRI	SAT-SUN	
MADISON COUNTY LINE (0.00) TO FRANKLIN COUNTY LINE (3.16) NORTHBOUND	2	2 TO 1	6AM-7PM	6AM-8PM	9AM-10PM	\$260
MADISON COUNTY LINE (0.00) TO FRANKLIN COUNTY LINE (3.16) SOUTHBOUND	2	2 TO 1	6AM-7PM	6AM-10PM	9AM-7PM	\$260
SHORT TERM SHOULDER CLOSURES ARE PERMITTED ANY TIME EXCEPT 6AM-9AM AND 3PM-6PM MONDAY-FRIDAY						
LANE VALUE CONTRACT TABLE - POST PHASE 3						
SECTION	EXISTING NUMBER OF LANES PER DIRECTION	LANE CLOSURES ARE NOT PERMITTED:				DISINCENTIVE AMOUNTS PER MINUTE PER LANE
		LANE REDUCTION	MON TO THUR	FRI	SAT-SUN	
MADISON COUNTY LINE (0.00) TO FRANKLIN COUNTY LINE (3.16) NORTHBOUND	3	3 TO 2	NO RESTRICTION	NO RESTRICTION	NO RESTRICTION	N/A
		3 TO 1	6AM-7PM	6AM-8PM	9AM-10PM	\$175
MADISON COUNTY LINE (0.00) TO FRANKLIN COUNTY LINE (3.16) SOUTHBOUND	3	3 TO 2	NO RESTRICTION	2PM-6PM	NO RESTRICTION	\$175
		3 TO 1	6AM-7PM	6AM-10PM	9AM-7PM	\$175

LANE VALUE CONTRACT TABLE						
FRA-71						
SECTION	EXISTING NUMBER OF LANES PER DIRECTION	LANE CLOSURES ARE NOT PERMITTED:				DISINCENTIVE AMOUNTS PER MINUTE PER LANE
		LANE REDUCTION	MON TO THUR	FRI	SAT-SUN	
PICKAWAY COUNTY LINE (0.00) TO US 62 (3.08) NORTHBOUND	3	3 TO 2	NO RESTRICTION	NO RESTRICTION	NO RESTRICTION	N/A
		3 TO 1	6AM-7PM	6AM-8PM	9AM-10PM	\$175
PICKAWAY COUNTY LINE (0.00) TO US 62 (3.08) SOUTHBOUND	3	3 TO 2	7AM-9AM & 2PM-6PM	2PM-6PM	NO RESTRICTION	\$175
		3 TO 1	6AM-7PM	6AM-10PM	9AM-7PM	\$175
SHORT TERM SHOULDER CLOSURES ARE PERMITTED ANY TIME EXCEPT 6AM-9AM AND 3PM-6PM MONDAY-FRIDAY						

Ramp Closure Restrictions Interstate Route 71 in Madison County

Ramp	Movement	Secondary Route: State Route 56		SLM along 71:	
		No Closures Allowed		Detour Routes	
		Mon to Fri	Sat to Sun	Primary Route	Secondary Route
A	SR 56 to I-71 SB	6AM-6PM	8AM-8PM	SR-56 to I-71 NB (Ramp D) to US-62 E (Ramp D) to I-71 S (Ramp C)	SR-56 to I-71 NB (Ramp D) to OH-665 (Ramp AD) to I-71 SB (Ramp CA)
B	I-71 SB to SR 56	5AM-9PM	8AM-8PM	I-71 SB to SR-38 S to I-71 NB (Ramp SE) to SR-56 (Ramp C)	I-71 SB to SR-41 (Ramp EN) to I-71 NB (Ramp SE) to SR-56 (Ramp C)
C	I-71 NB to SR 56	6AM-7PM	8AM-8PM	I-71 NB to US-62 E (Ramp D) to I-71 S (Ramp C) to SR-56 (Ramp B)	I-71 NB (Ramp D) to OH-665 (Ramp AD) to I-71 SB (Ramp CA) to SR-56 (Ramp B)
D	SR 56 to I-71 NB	5AM-7PM	8AM-8PM	SR-56 to I-71 SB to SR-38 S (Ramp EN) to I-71 NB (Ramp SE)	SR-56 to I-71 SB to SR-41 (Ramp EN) to I-71 NB (Ramp SE)

SHEET NUM.														PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.			
9	10	16	17	130	131	132	133	138	154	552	578	647	648	01/IMS/04	02/IMS/03	EXT	TOTAL							
																			DRAINAGE					
															LS	LS	503	11100	LS	COFFERDAMS AND EXCAVATION BRACING, STA. 575+18				
															LS	LS	503	11100	LS	COFFERDAMS AND EXCAVATION BRACING, STA. 667+10				
															LS	LS	503	11100	LS	COFFERDAMS AND EXCAVATION BRACING, STA. 733+00				
					6	6	4								36	16	602	20000	52	CY	CONCRETE MASONRY			
															20	6	605	11000	20	FT	6" CONSTRUCTION UNDERDRAINS			
											166,624						113,305	53,319	605	11100	166,624	FT	6" SHALLOW PIPE UNDERDRAINS	
50											1,880						1,313	617	605	13300	1,930	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
											158,851						108,019	50,832	605	14000	158,851	FT	6" BASE PIPE UNDERDRAINS	
											8,402						5,714	2,688	611	00510	8,402	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
50																	34	16	611	00900	50	FT	6" CONDUIT, TYPE B	
50																	34	16	611	01400	50	FT	6" CONDUIT, TYPE E	
100																	68	32	611	01500	100	FT	6" CONDUIT, TYPE F	
							75										51	24	611	01800	75	FT	8" CONDUIT, TYPE B	
					264	236	267										522	245	611	05900	767	FT	15" CONDUIT, TYPE B	
					633	500	636										1,203	566	611	06100	1,769	FT	15" CONDUIT, TYPE C	
					121												83	38	611	06700	121	FT	15" CONDUIT, TYPE F	
					94	853	459										957	449	611	07400	1,406	FT	18" CONDUIT, TYPE B	
					1,200	2,100	900										2,856	1,344	611	07600	4,200	FT	18" CONDUIT, TYPE C	
							44										30	14	611	08200	44	FT	18" CONDUIT, TYPE F	
							376	280									447	209	611	08900	656	FT	21" CONDUIT, TYPE B	
							86										59	27	611	09100	86	FT	21" CONDUIT, TYPE C	
							895	230	201								902	424	611	10400	1,326	FT	24" CONDUIT, TYPE B	
							1,282	200	334								1,235	581	611	10600	1,816	FT	24" CONDUIT, TYPE C	
							384										262	122	611	13400	384	FT	30" CONDUIT, TYPE B	
																	82	38	611	16200	120	FT	36" CONDUIT, TYPE A, 706.02 OR 707.33	
					245												167	78	611	16400	245	FT	36" CONDUIT, TYPE B	
																	145	68	611	22200	213	FT	54" CONDUIT, TYPE A, 706.02,707.33, 707.65 OR 60" CONDUIT, TYPE A, 707.01(ALUMINIZED), 707.02(ALUMINIZED), 707.04	
																	20	6	611	30000	20	FT	36" CONDUIT, TYPE A, 707.04	
																	210	67	611	52300	210	FT	19" X 30" CONDUIT, TYPE A, 706.04 OR 706.03	
					215												147	68	611	52200	215	FT	19" X 30" CONDUIT, TYPE B, 706.04	
					411												280	131	611	52702	411	FT	28" X 45" CONDUIT, TYPE B, 706.04	
																	191	89	611	53100	280	FT	43" X 68" CONDUIT, TYPE A, 706.04 OR 706.03	
																	216	69	611	53500	216	FT	63" X 98" CONDUIT, TYPE A, 706.04	
																	212	67	611	54300	212	FT	106"X166" CONDUIT, TYPE A, 706.04 OR 706.03 OR 121"X199" CONDUIT, TYPE A, STRUCTURAL PLATE	
																	286	91	611	96550	286	FT	CORRUGATED STEEL PIPE ARCH 707.03 (0.109) METALLIC COATED (GALVANIZED) W/CONCRETE FIELD PAVING	
																	200	64	611	96600	200	FT	FIELD PAVING OF EXISTING PIPE, 96" CMP	
					2												2		611	98180	2	EACH	CONDUIT, BORED OR JACKED, 54", TYPE A	
					5	2	1										6	2	611	98300	8	EACH	CATCH BASIN, NO. 3A	
																							CATCH BASIN, NO. 5	
																	3	1	611	98341	4	EACH	CATCH BASIN, NO. 5A	
																	17	24	611	98410	57	EACH	CATCH BASIN, NO. 8	
																	4	1	611	98434	5	EACH	CATCH BASIN, NO. 8A	
																	1	2	611	99574	4	EACH	MANHOLE, NO. 3	
2																	21	9	611	99710	30	EACH	PRECAST REINFORCED CONCRETE OUTLET	
																							PAVEMENT	
	400																272	128	251	01021	400	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 2"	10
	1,600																1,088	512	251	01021	1,600	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 3"	10
	12,000																8,160	3,840	251	01021	12,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (442), AS PER PLAN, 6"	10
		40,675															27,659	13,016	254	01000	40,675	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.5"	
																	81,948	38,563	302	56001	120,511	CY	ASPHALT CONCRETE BASE, (449), AS PER PLAN, PG64-22	10
																	60,970	28,691	304	20000	89,661	CY	AGGREGATE BASE	
																	61,105	28,707	407	20000	89,812	GAL	NON-TRACKING TACK COAT	
																	19,949	9,387	442	00100	29,336	CY	ANTI-SEGREGATION EQUIPMENT	
																	15,313	7,205	442	10300	22,518	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (447)	
																	16,524	7,775	442	10080	24,299	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (446)	
																	8,090	3,806	452	16021	11,896	SY	13" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P WITH QC/CA, AS PER PLAN	10
																	502	235	609	24510	737	FT	CURB, TYPE 4-C	
					737												2,907	1,368	618	40101	4,275	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE), AS PER PLAN	16
	4,275																						RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
	2.48																23	9.4	618	40600	32.4	MILE		

DESIGN AGENCY



E.L. ROBINSON
ENGINEERING
1488 West 9th St, Suite 800
Cleveland, Ohio 44115
950 Goodale Blvd, Suite 180
Grandview Heights, Ohio

DESIGNER
CJS

REVIEWER
ACF 04/26/22

PROJECT ID
107630

SHEET TOTAL
P.115 1003

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/13/2023 TIME: 3:46:46 PM USER: mcomett
P:\OH\DOT_Worksets\107630\400-Engineering\Roadway\Sheets\107630_GG110.dgn

SHEET NUM.									PART.					ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
11	12	13	14	15	16	17	33	869	01/IMS/04	02/IMS/03	03/IMS/11	04/IMS/10	05/IMS/14	(X)	EXT	TOTAL				
STRUCTURE OVER 20 FOOT SPAN (PIC-71-0278) - CONT.																				
								55					55		601	20001	55	SY	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	868
								642					642		607	39900	642	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	
								1					1		625	33000	1	EACH	STRUCTURE GROUNDING SYSTEM	
								320					320		840	23000	320	CY	SELECT GRANULAR BACKFILL	
								14					14		843	50000	14	SF	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR	
								1,568					1,568		863	00100	1,568	SY	GEOGRID, TYPE P1	
STRUCTURE OVER 20 FOOT SPAN (PIC-71-0278) ALTERNATES																				
								122,095					122,095	X	509	10000	122,095	LB	EPOXY COATED STEEL REINFORCEMENT (ALTERNATE 1)	
								11,484					11,484	X	509	30020	11,484	FT	NO. 4 DEFORMED GFRP REINFORCEMENT (ALTERNATE 1)	
								29,781					29,781	X	509	10000	29,781	LB	EPOXY COATED STEEL REINFORCEMENT (ALTERNATE 2)	
								33,180					33,180	X	509	30020	33,180	FT	NO. 4 DEFORMED GFRP REINFORCEMENT (ALTERNATE 2)	
								54,085					54,085	X	509	30030	54,085	FT	NO. 5 DEFORMED GFRP REINFORCEMENT (ALTERNATE 2)	
								26,855					26,855	X	509	30040	26,855	FT	NO. 6 DEFORMED GFRP REINFORCEMENT (ALTERNATE 2)	
MAINTENANCE OF TRAFFIC																				
								3,390	2,306	1,084					411	10000	3,390	CY	STABILIZED CRUSHED AGGREGATE	
					1,500				1,020	480					614	11110	1,500	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
				2					2						SPECIAL	61411300	2	EACH	WORK ZONE TRAFFIC SIGNAL	15
			10,378						7,058	3,320					614	11630	10,378	FT	INCREASED BARRIER DELINEATION	
									281	131.5					SPECIAL	61412200	412.5	FT	WORK ZONE GUARDRAIL	14
									17	8					614	12380	25	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	
							3	22	LS	LS					614	12420	LS	EACH	DETOUR SIGNING	
									27	12					614	12484	39	EACH	WORK ZONE INCREASED PENALTIES SIGN	
									7	3					614	12500	10	EACH	REPLACEMENT SIGN	
									204	96					614	12600	300	EACH	REPLACEMENT DRUM	
									3						614	12756	3	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
									2,879	1,354					614	12801	4,233	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	13
									2,236	1,052					614	13310	3,288	EACH	BARRIER REFLECTOR, TYPE 1 (ONE-WAY)	
									66	31					614	13312	97	EACH	BARRIER REFLECTOR, TYPE 2 (ONE-WAY)	
									1,315	618					614	13350	1,933	EACH	OBJECT MARKER, ONE WAY	
									585	275					614	13360	860	EACH	OBJECT MARKER, TWO WAY	
									49	23					614	18601	72	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	13
									22	8.91					614	20056	30.91	MILE	WORK ZONE LANE LINE, CLASS I, 6", 807 PAINT	
									0.44	0.14					614	21100	0.44	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
									89.09	28.09					614	22056	89.09	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 807 PAINT	
									1.63	0.52					614	22100	1.63	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 642 PAINT	
									6,573	2,103					614	23110	6,573	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 807 PAINT	
									10,016	3,205					614	24102	10,016	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 807 PAINT	
									28	12					614	26200	40	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
									31	14					614	32658	45	EACH	WORK ZONE SPEED MEASUREMENT MARKING, CLASS I, 642 PAINT	
									15,083	4,826					615	20000	15,083	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
									44,333	14,186					615	20001	44,333	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	16
									898	422					616	10000	1,320	MGAL	WATER	
									35.44	10.44					618	41000	35.44	MILE	RUMBLE STRIPES, EDGE LINE (ASPHALT CONCRETE)	
									1						622	41050	1	EACH	PORTABLE BARRIER, "Y" CONNECTOR	
									132,117	89,840	42,277				622	41011	132,117	FT	PORTABLE BARRIER, 50", AS PER PLAN	16
									1,992	637					622	41110	1,992	FT	PORTABLE BARRIER, ANCHORED	
									267	125					808	18700	392	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	
									41	19					829	00100	60	SNMT	WORK ZONE EGRESS WARNING SYSTEM	
INCIDENTALS																				
									LS	LS	LS	LS	LS		108	10000	LS		CPM PROGRESS SCHEDULE	
									LS	LS	LS	LS	LS		614	11000	LS		MAINTAINING TRAFFIC	
									12	6	12	6	4		619	16020	40	MNTH	FIELD OFFICE, TYPE C	
									LS	LS	LS	LS	LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
									LS	LS	LS	LS	LS		624	10000	LS		MOBILIZATION	
									LS	LS	LS	LS	LS		878	25000	LS		INSPECTION AND COMPACTION TESTING OF UNBOUND MATERIALS	
									39,000	19,500	39,000	19,500	13,000		100	51100	130,000	EACH	DEPARTMENT'S SHARE OF THE DISPUTE RESOLUTION BOARD	
									3,675	1,838	3,675	1,837	1,225		SPECIAL	11110100	12,250	EACH	DEPARTMENTS SHARE FACILITATED PARTNERING COSTS	

GENERAL SUMMARY

DESIGN AGENCY



E.L. ROBINSON
ENGINEERING
1466 West 9th St, Suite 800
Cleveland, Ohio
950 Goodale Blvd, Suite 180
Grandview Heights, Ohio

DESIGNER
CJS

REVIEWER
ACF 04/26/22

PROJECT ID
107630

SHEET TOTAL
P.123 1003

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/10/2023 TIME: 7:25:32 AM USER: cwest
P:\CHDOT_Worksets\107630\00-Admin\PlanReviews\Pre-Bid Questions\CADD\107630_DS151.dgn

REF.	SHEET	STATION		SIDE	601	602	611	611	611	611	611	611	611	611	611	611	611	611	611								
		FROM	TO		ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CONCRETE MASONRY	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	18" CONDUIT, TYPE B	18" CONDUIT, TYPE C	21" CONDUIT, TYPE B	21" CONDUIT, TYPE C	24" CONDUIT, TYPE B	24" CONDUIT, TYPE C	24" X 38" CONDUIT, TYPE C, 706.04	29" X 45" CONDUIT, TYPE B, 706.04	CATCH BASIN, NO. 5	CATCH BASIN, NO. 5A	CATCH BASIN, NO. 8	CATCH BASIN, NO. 8A	MANHOLE, NO. 3						
					CY	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH	EACH						
D25A	169	564+50	562+50	CL											200												
D25B	169	562+50	562+50	CL																							
D25C	169	562+50	562+50	LT																							
D25D	169	562+50	562+50	RT	2	0.44																					
D26B	169	573+00	573+00	CL																							
D26C	169	573+00	573+00	RT	1.10	0.46									108												
D26A	170	575+00	573+00	CL																	1						
D27B	170	584+00	584+00	CL						136											1						
D27C	170	584+00	584+00	RT	1.1	0.33																					
D27A	171	587+00	584+00	CL																							
D28B	171	595+00	595+00	CL						140											1						
D28C	171	595+00	595+00	RT	1.1	0.33																					
D28A	171	598+00	595+00	CL																	1						
D29A	172	606+00	606+00	LT																							
D29B	172	606+00	606+00	CL		0.49															105						
D29C	172	609+00	606+00	CL																	108						
D29D	172	606+00	606+00	RT		0.49																					
D30A	173	625+00	628+00	CL						300											1						
D30B	173	628+00	628+00	CL							111										1						
D30C	173	628+00	628+00	RT	1.1	0.33																					
D31A	174	638+00	638+00	CL							95										1						
D31B	174	638+00	638+00	LT																							
D31C	174	638+00	638+00	LT	1.1	0.39									41						1						
D32A	174	648+00	648+00	CL							136										1						
D32B	174	648+00	648+00	LT	1.1	0.33																					
D33A	175	660+00	658+00	CL						200											1						
D33B	175	658+00	658+00	CL							139										1						
D33C	175	658+00	658+00	LT	1.1	0.33																					
D34A	176	668+50	668+50	CL							96										1						
D34B	176	668+50	668+50	RT	1.1	0.33																					
D35A	177	676+50	679+50	CL							300										1						
D35B	177	679+50	679+50	CL											96						1						
D35C	177	679+50	679+50	RT																							
D35D	177	679+50	679+50	RT	1.1	0.39															1						
D36A	178	688+00	688+00	CL																	136						
D36B	178	688+00	688+00	RT	1.1	0.27																					
D37A	178	695+70	695+70	CL																	100						
D37B	178	695+70	695+70	RT	1.3	0.27																					
D38A	179	703+00	700+00	CL																	300						
D38B	179	700+00	699+30	CL																							
D38C	179	699+30	699+30	RT	1.1	0.46															122						
D39A	180	713+00	713+00	CL																	140						
D39B	180	713+00	713+00	LT	1.1	0.39																					
D40C	180	723+00	723+00	CL																	140						
D40D	180	723+00	723+00	LT	1.1	0.39																					
D40A	181	727+00	725+71	CL																	129						
D40B	181	725+71	723+00	RT																	271						
TOTALS CARRIED TO GENERAL SUMMARY					18	6.0	236	500	853	2,100	376	86	230	200								411	2	1	24	1	2

DRAINAGE SUBSUMMARY

DESIGN AGENCY



E.L. ROBINSON
ENGINEERING
1466 West 9th St, Suite 800
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950 Goodale Blvd, Suite 180
Grandview Heights, Ohio

DESIGNER

JOF

REVIEWER

ENB 04/26/22

PROJECT ID

107630

SHEET

P.132

TOTAL

1003

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/16/2023 TIME: 10:38:12 AM USER: mcomett
P:\OHDOT_Worksets\107630400-Engineering\Roadway\Sheets\107630_GS108.dgn

STATION TO STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=L*W SQ FT	PLANIMETER AREAS SQ FT	204	202	204	206	206	206	206	302	304	407	442	442	452	442	
FROM	TO						SUBGRADE COMPACTION SQ YD	PAVEMENT REMOVED SQ YD	PROOF ROLLING HOUR	CEMENT STABILIZED SUBGRADE 12.00" SQ YD	CEMENT TON	CURING COAT SQ YD	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOIL LUMP	ASPHALT CONCRETE BASE, AS PER PLAN 8.50" CU YD	6" AGGREGATE BASE 6.00" CU YD	NON-TRACKING TACK COAT 0.060 G/SY GALLON	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447) 1.50" CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446) 1.75" CU YD	13" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/OA SQ YD	ANTI-SEGREGATION EQUIPMENT CY	
IR-71																					
444+85.00	448+25.60	LT	341	56	19074			2233	2233	58	2233		511	370	383	88	103				
444+85.00	446+16.03	RT	131	56	7338			859	859	22	859		197	142	147	34	40				
446+16.03	448+69.40	RT	253			14833		1733	1733	45	1733		397	287	298	69	80				
448+25.60	450+78.97	LT	253			14833		1733	1733	45	1733		397	287	298	69	80				
448+69.40	465+04.73	RT	1635	56	91578			10720	10720	277	10720		2454	1777	1839	424	495				
450+78.97	456+05.25	LT	526	56	29472			3450	3450	89	3450		790	572	592	136	159				
456+05.25	471+56.95	LT	1552			108000		12517	12517	324	12517		2882	2077	2167	500	583				
465+04.73	473+32.76	RT	828			58669		6795	6795	176	6795		1565	1127	1177	272	317				
471+56.95	480+99.00	LT	942	56	52755			6176	6176	160	6176		1414	1023	1059	244	285				
480+99.00	481+48.00	LT	49	56	2744			330	330	9	330		76	55	56	13	15				
481+48.00	489+26.40	LT	778	56	43590			5103	5103	132	5103		1168	846	875	202	235				
473+32.76	481+30.00	RT	797	56	44645			5226	5226	135	5226		1196	866	896	207	241				
481+30.00	481+79.00	RT	49	56	2744			330	330	9	330		76	55	56	13	15				
481+79.00	491+26.55	RT	948	56	53063			6212	6212	161	6212		1422	1029	1065	246	287				
489+26.40	497+81.12	LT	855			60430		6999	6999	181	6999		1612	1161	1212	280	326				
491+26.55	505+78.25	RT	1452			102400		11862	11862	307	11862		2732	1968	2054	474	553				
497+81.12	517+61.32	LT	1980	56	110891			12981	12981	336	12981		2971	2151	2227	513	599				
505+78.25	517+61.32	RT	1183	56	66252			7756	7756	201	7756		1775	1285	1330	307	358				
517+61.32	517+86.32	LT/RT	25	112	2800			328	328	8	328			54							
520+22.32	520+47.32	LT/RT	25	112	2800			328	328	8	328			54							
520+47.32	523+76.87	LT	330	56	18455			2160	2160	56	2160		494	358	371	85	100				
520+47.32	521+66.53	RT	119	56	6676			781	781	20	781		179	130	134	31	36				
521+66.53	524+19.90	RT	253			14833		1733	1733	45	1733		397	287	298	69	80				
523+76.87	526+29.47	LT	253			14790		1728	1728	45	1728		396	286	297	68	80				
524+19.90	540+08.71	RT	1589	56	88973			10416	10416	270	10416		2384	1726	1787	412	481				
526+29.47	540+08.71	LT	1379	56	77237			9042	9042	234	9042		2070	1498	1551	358	417				
540+08.71	554+43.72	LT/RT	1435	112	160721			18815	18815	487	18815		4307	3118	2156	744	868				
554+43.72	562+69.00	LT/RT	825	112	92431			10820	10820	280	10820		2477	1793	1240	428	499				
562+69.00	563+18.00	LT	49	56	2744			330	330	9	330		76	55	56	13	15				
562+69.00	562+96.00	RT	27	56	1512			177	177	5	177		41	29	30	7	8				
562+96.00	563+45.00	RT	49	56	2744			330	330	9	330		76	55	56	13	15				
563+18.00	608+73.29	LT	4555	56	255096			29862	29862	773	29862		6835	4949	5122	1181	1378				
563+45.00	608+73.29	RT	4528	56	253584			29685	29685	768	29685		6795	4920	5092	1174	1370				
608+73.29	622+83.31	LT/RT	1410	112	157922			18487	18487	478	18487		4232	3064	2118	731	853				
622+83.31	661+15.00	LT/RT	3832	112	429149			50238	50238	1300	50238		11499	8326	8600	1987	2318				
661+15.00	661+36.00	LT	21	56	1176			138	138	4	138		32	23	24	5	6				
661+15.00	661+64.00	RT	49	56	2744			321	321	8	321		76	55	56	13	15				
661+36.00	661+85.00	LT	49	56	2744			321	321	8	321		76	55	56	13	15				
661+64.00	686+19.53	RT	2456	56	137510			16097	16097	417	16097		3685	2668	2761	637	743				
661+85.00	688+29.10	LT	2644	56	148070			17334	17334	449	17334		3968	2873	2973	686	800				
686+19.53	688+72.90	RT	253			14833		1733	1733	45	1733		397	287	298	69	80				
688+29.10	690+82.47	LT	253			14833		1733	1733	45	1733		397	287	298	69	80				
688+72.90	697+44.05	RT	871	56	48784			5711	5711	148	5711		1307	946	980	226	263				
690+82.47	697+74.07	LT	692	56	38730			4534	4534	117	4534		1038	751	778	179	209				
697+44.05	697+69.05	RT	25	56	1400			164	164	4	164			27							
697+74.07	697+99.07	LT	25	56	1400			164	164	4	164			27							
698+84.57	699+09.57	RT	25	56	1400			164	164	4	164			27							
TOTALS CARRIED TO SHEET 138									336688	336688	8712	336688	LUMP	76868	55810	54861	13286	15503			

PAVEMENT SUBSUMMARY

DESIGN AGENCY

E.L. ROBINSON
ENGINEERING
1486 West 9th St, Suite 800
Cleveland, Ohio
950 Goodale Blvd, Suite 160
Grandview Heights, Ohio
DESIGNER
CJS
REVIEWER
ACF 07/26/22
PROJECT ID
107630
SHEET TOTAL
P.136 1003

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/16/2023 TIME: 10:40:26 AM USER: mcomett P3_OHDOT_Worksets\107630\400-Engineering\Roadway\Sheets\107630_GS109.dgn

STATION TO STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=L*W SQ FT	PLANIMETER AREAS SQ FT	204	202	204	206	206	206	206	302	304	407	442	442	452	442	
FROM	TO						SUBGRADE COMPACTION SQ YD	PAVEMENT REMOVED SQ YD	PROOF ROLLING HOUR	CEMENT STABILIZED SUBGRADE 12.00" SQ YD	CEMENT TON	CURING COAT SQ YD	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOIL LUMP	ASPHALT CONCRETE BASE, AS PER PLAN CU YD	6" AGGREGATE BASE CU YD	NON-TRACKING TACK COAT GALLON	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447) CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446) CU YD	13" NON-REINFORCED CONCRETE PAVEMENT, CLASS OC1 WITH QC/OA SQ YD	ANTI-SEGREGATION EQUIPMENT CY	
IR-71																					
699+14.59	699+39.59	LT	25	56	1400			164	164	4	164										
699+09.57	725+14.00	RT	2604	56	145848			17073	17073	442	17073			3908	2830	2929	675	788			
699+39.59	725+68.00	LT	2628	56	147191			17231	17231	446	17231			3944	2856	2956	681	795			
725+14.00	725+63.00	RT	49	56	2744			321	321	8	321			76	55	56	13	15			
725+68.00	726+17.00	LT	49	56	2744			321	321	8	321			76	55	56	13	15			
725+63.00	820+14.00	RT	9451	56	529256			61957	61957	1603	61957			14181	10268	10627	2450	2859			
726+17.00	819+37.00	LT	9320	56	521920			61098	61098	1581	61098			13985	10125	10480	2416	2819			
819+37.00	819+86.00	LT	49	56	2744			321	321	8	321			76	55	56	13	15			
819+86.00	840+30.00	LT	2044	56	114464			13400	13400	347	13400			3067	2221	2298	530	618			
820+14.00	820+63.00	RT	49	56	2744			321	321	8	321			76	55	56	13	15			
820+63.00	840+30.00	RT	1967	56	110152			12895	12895	334	12895			2952	2137	2212	510	595			
840+30.00	841+80.00	LT/RT	150			17400		2033	2033	53	2033			466	337	349	81	94			
ALL I-71 CURB AREAS		LT/RT	356					7	7	0	7			-6	1						
444+85.00	517+61.32	LT/RT	7276			619885														6242	
520+47.32	697+59.06	LT/RT	17712			1275245														12792	
699+24.58	841+80.00	LT/RT	14255			1026390														10296	
BARRIER AC INTERMEDIATE STEP		LT/RT				1062														6	
IR-71 PAVEMENT REMOVALS																					
444+85.00	470+50.85	LT/RT				265375		30753													
470+50.85	517+85.83	LT				199505		22167													
472+85.72	517+85.83	RT				204116		22680													
520+22.92	575+00.00	LT/RT				438366		48707													
575+00.00	665+00.00	LT/RT				710002		78889													
665+00.00	698+00.00	LT/RT				262682		29187													
699+00.00	780+00.00	LT/RT				638915		70991													
780+00.00	841+80.00	LT/RT				488045		54227													
RAMP A																					
471+55.48	478+85.61	LT/RT	730	25	18253			2272	2272	59	2272									2028	
478+85.61	479+72.34	LT/RT	87	25	2168			270	270	7	270									241	
479+72.34	480+40.37	LT/RT	68			6173		709	709	18	709									686	
3+75.00	14+00.00	LT/RT				26319		2924													
RAMP B																					
480+23.73	480+67.48	LT/RT	44			5109		582	582	15	582									568	
480+67.48	483+51.26	LT/RT	284	25	7094			883	883	23	883									788	
483+51.26	488+77.39	LT/RT	526	25	13153			1637	1637	42	1637									1461	
488+77.39	489+27.43		50	25	1251			156	156	4	156									139	
14+50.00	25+00.00	LT/RT				27188		3021													
Ramp C																					
473+31.69	473+81.82	LT/RT	50			1307		162	162	4	162									145	
473+81.82	479+29.29	LT/RT	547	25	13687			1703	1703	44	1703									1521	
479+29.29	482+09.23	LT/RT	280	25	6999			871	871	23	871									778	
482+09.23	482+53.29	LT/RT	44			5160		588	588	15	588									573	
4+50.00	15+00.00	LT/RT				27272		3030													
Ramp D																					
482+36.45	483+08.90	LT/RT	72			6227		716	716	19	716									692	
483+08.90	483+97.89	LT/RT	89	25	2225			277	277	7	277									247	
483+97.89	491+28.02	LT/RT	730	25	18253			2272	2272	59	2272									2028	
15+50.00	25+50.00	LT/RT				24741		2749													
TOTALS CARRIED TO SHEET 138								369326	200238	200238	5182	200238		42803	33072	32074	7395	8630	11896	29336	

PAVEMENT SUBSUMMARY

DESIGN AGENCY

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DESIGNER
CJS

REVIEWER
ACF 07/26/22

PROJECT ID
107630

SHEET TOTAL
P.137 1003

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/16/2023 TIME: 10:41:12 AM USER: mcomett
 P:\OH\DOT_Worksets\107630400-Engineering\Roadway\Sheets\107630_GS110.dgn

STATION TO STATION		SIDE	LENGTH (L) FT	AVERAGE WIDTH (W) FT	SURFACE AREA (A) A=L*W SQ FT	PLANIMETER AREAS SQ FT	204	202	204	206	206	206	206	302	304	407	442	442	452	442
FROM	TO						SUBGRADE COMPACTION SQ YD	PAVEMENT REMOVED SQ YD	PROOF ROLLING HOUR	CEMENT STABILIZED SUBGRADE 12.00" SQ YD	CEMENT TON	CURING COAT SQ YD	MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOIL LUMP	ASPHALT CONCRETE BASE, AS PER PLAN CU YD	6" AGGREGATE BASE CU YD	NON-TRACKING TACK COAT GALLON	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (447) CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446) CU YD	13" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC1 WITH QC/OA SQ YD	ANTI-SEGREGATION EQUIPMENT CY
SR-56																				
226+51.50	227+50.55	LT/RT	99			3089	373		373					84	62	62	14	17		
227+50.55	227+75.55	LT/RT	25	32	800		96		96						17					
230+66.25	230+91.25	LT/RT	25	32	800		96		96						17					
230+91.25	231+90.50	LT/RT	99			3138	378		378					85	63	63	15	17		
CR-54																				
22+04.00	23+28.16	LT/RT	124			3019	372		372					83	62	61	14	16		
23+28.16	23+53.16	LT/RT	25	28	700		85		85						15					
26+46.84	26+71.84	LT/RT	25	28	700		85		85						15					
26+71.84	27+96.00	LT/RT	124			3114	383		383					86	64	63	14	17		
CR-56																				
22+08.00	23+34.25	LT/RT	126			2980	369		369					82	61	60	14	16		
23+34.25	23+59.25	LT/RT	25	28	700		85		85						15					
26+40.75	26+65.75	LT/RT	25	28	700		85		85						15					
26+65.75	27+92.00	LT/RT	126			2932	363		363					81	61	59	14	16		
CR-3																				
22+07.00	23+31.20	LT/RT	124			3128	384		384					86	64	63	14	17		
23+31.20	23+56.20	LT/RT	25	28	700		85		85						15					
26+43.80	26+68.80	LT/RT	25	28	700		85		85						15					
26+68.80	27+93.00	LT/RT	124			3160	388		388					87	65	64	15	17		
TR-160																				
31+88.00	33+12.15	LT/RT	124			3014	372		372					83	62	61	14	16		
33+12.15	33+37.15	LT/RT	25	28	700		85		85						15					
36+62.85	36+87.85	LT/RT	25	28	700		85		85						15					
36+87.85	38+12.00	LT/RT	124			2985	369		369					82	61	60	14	16		
TOTALS FROM THIS SHEET							4625		4625					840	779	617	142	166		
TOTALS FROM SHEET 136									336688	336688	8712	336688	LUMP	76868	55810	54861	13286	15503		
TOTALS FROM SHEET 137								369326	200238	200238	5182	200238		42803	33072	32074	7395	8630	11896	29336
TOTALS CARRIED TO GENERAL SUMMARY							4625	369326	271	536926	13894	536926	LUMP	120511	89661	87552	20823	24299	11896	29336

PAVEMENT SUBSUMMARY

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 ACF 07/26/22
 PROJECT ID
 107630
 SHEET TOTAL
 P.138 1003

EROSION AND SEDIMENT CONTROL WITHIN THE BIG DARBY CREEK WATERSHED

THE PROJECT INCLUDES CONSTRUCTION ACTIVITIES WITHIN THE BIG DARBY CREEK WATERSHED AS DEFINED IN APPENDIX A OF OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) GENERAL PERMIT NO. OHC000005. THE CONTRACTOR NEEDS TO FULLY UNDERSTAND ALL REQUIREMENTS ASSOCIATED WITH CONSTRUCTION WITHIN THE BIG DARBY CREEK WATERSHED BEFORE BEGINNING ANY WORK.

THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 832 ARE REQUIRED TO BE MET, INCLUDING THE WATERSHED SPECIFIC REQUIREMENTS IDENTIFIED IN OEPA GENERAL PERMIT NO. OHC000005. THE CONTRACTOR SHOULD NOTE THE FOLLOWING UNIQUE REQUIREMENTS:

DO NOT UTILIZE AREAS WITHIN THE RIPARIAN ZONES AND OUTSIDE THE PROJECT CONSTRUCTION LIMITS FOR ANY CONTRACTOR ACTIVITIES. PROVIDE NOTIFICATION TO THE ENGINEER IF CONSTRUCTION LIMITS CANNOT BE MET PRIOR TO SWPPP DEVELOPMENT. THE CONTRACTOR MAY BE SUBJECT TO ADDITIONAL MITIGATION, RESTORATION OR PERMIT REQUIREMENTS. ALL ADDITIONAL MITIGATION, RESTORATION OR PERMIT REQUIREMENT COSTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE LOCATION OF THE RIPARIAN SETBACKS AS SHOWN IN THE PLANS MUST BE INCORPORATED INTO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR CANNOT AMEND THE LOCATIONS OF THE RIPARIAN SETBACKS.

PROVIDE TEMPORARY SEDIMENT TRAPS OR DETENTION BASINS AT ALL DISCHARGE LOCATIONS WHERE CONCENTRATED RUNOFF LEAVES THE PROJECT PERMITTED COVERAGE LIMITS. IDENTIFY EACH DISCHARGE LOCATION ON THE SWPPP WITH A UNIQUE NUMERIC IDENTIFICATION. PRELIMINARY LOCATIONS OF SEDIMENT TRAPS AND BASINS ARE SHOWN IN THE PLANS. IDENTIFY THE TIMING FOR INSTALLATION OF THE TEMPORARY SEDIMENT TRAP/BASINS IN THE SWPPP. INSTALL TEMPORARY SEDIMENT TRAPS AND BASINS PRIOR TO MAJOR DISTURBING ACTIVITIES AS DESCRIBED IN SS832. THE CONTRACTOR MAY MODIFY THE LOCATION AND TYPE OF THE TEMPORARY SEDIMENT TRAPS/BASINS AS NECESSARY TO FACILITATE CONSTRUCTION SEQUENCING. NOTIFY THE PROJECT ENGINEER OF ANY MODIFICATIONS TO THE TEMPORARY SEDIMENT TRAPS AND BASINS IN WRITING PRIOR TO CONSTRUCTION. DO NOT ALLOW UNTREATED SURFACE STORMWATER RUNOFF TO LEAVE THE PERMITTED COVERAGE LIMITS AT ANY TIME DURING CONSTRUCTION.

DESIGN TEMPORARY SEDIMENT TRAPS/BASINS WITH A MINIMUM SEDIMENT STORAGE ZONE VOLUME OF 37 CUBIC YARDS (28 CUBIC METERS) PER ACRE (0.4 ha) OF DISTURBED AREA WITHIN THE TRIBUTARY AREA AND A MINIMUM DEWATERING ZONE VOLUME OF 134 CUBIC YARDS (102 CUBIC METERS) PER ACRE (0.4 ha) OF TOTAL TRIBUTARY AREA. PROVIDE A SURFACE DEWATERING DEVICE FOR ALL TEMPORARY SEDIMENT BASINS.

PROVIDE SAMPLING AT EACH SEDIMENT BASIN OR TRAP AS DESCRIBED IN APPENDIX A OF OEPA GENERAL PERMIT NO. OHC000005 TO ENSURE THE CONCENTRATION OF TOTAL SUSPENDED SOLIDS (TSS) DOES NOT EXCEED 45 MG/L. PROVIDE A GRAB SAMPLING PROCEDURE IN THE SWPPP AND IDENTIFY THE INDIVIDUALS RESPONSIBLE FOR PERFORMING EACH TEST. IF SAMPLING INDICATES DISCHARGE CONCENTRATIONS FROM SEDIMENT BASINS EXCEED 45 MG/L TSS, THE CONTRACTOR MUST MODIFY THE SWPPP AND FURNISH NEW EROSION AND SEDIMENT CONTROLS IN ORDER FOR SEDIMENT BASIN DISCHARGES TO MEET THE TSS CONCENTRATION LIMIT.

ALL WORK CONSISTING OF SAMPLING, TESTING, AND REPORTING SEDIMENT BASIN DISCHARGES SHALL BE INCLUDED IN ITEM 832 STORM WATER POLLUTION PREVENTION INSPECTIONS. RECORD ALL TESTING RESULTS UTILIZING THE SWPPPTRACK APPLICATION.

ANY WORK CONSISTING OF SWPPP MODIFICATIONS SHALL BE INCLUDED IN ITEM 832 STORM WATER POLLUTION PREVENTION PLAN.

ALL WORK ASSOCIATED WITH SEDIMENT BASIN CONSTRUCTION AND FURNISHING ADDITIONAL CONTROLS TO MEET SEDIMENT BASIN CONCENTRATION LIMITS SHALL BE INCLUDED IN ITEM 832 EROSION CONTROL.

ENVIRONMENTAL COMMITMENTS:

1. ODOT WILL OBTAIN AND ADHERE TO ALL APPROPRIATE WATERWAY PERMITS PRIOR TO ANY WORK BELOW THE ORDINARY HIGH WATER MARK OF ANY WATERWAY AND ALL SPECIAL PROVISIONS FOR WATERWAY PERMITS WILL BE INCLUDED IN THE PLANS.
2. THE CONTRACTOR SHALL NOT REMOVE ANY TREES UNDER THIS PROJECT FROM APRIL 1 TO SEPTEMBER 30. THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF FEDERALLY LISTED AND PROTECTED BATS. 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. THE 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. ODOT SHALL ENSURE THAT A MUSSEL SURVEY AND, IF NECESSARY, RELOCATION SHALL OCCUR AT THE PROJECT SITE IN ACCORDANCE WITH ODNR AND USFWS PROTOCOLS. NO IN-STREAM WORK SHALL OCCUR PRIOR TO THE MUSSEL SURVEY/RELOCATION.

DESIGN AGENCY



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DESIGNER

CJS

REVIEWER

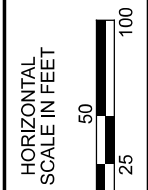
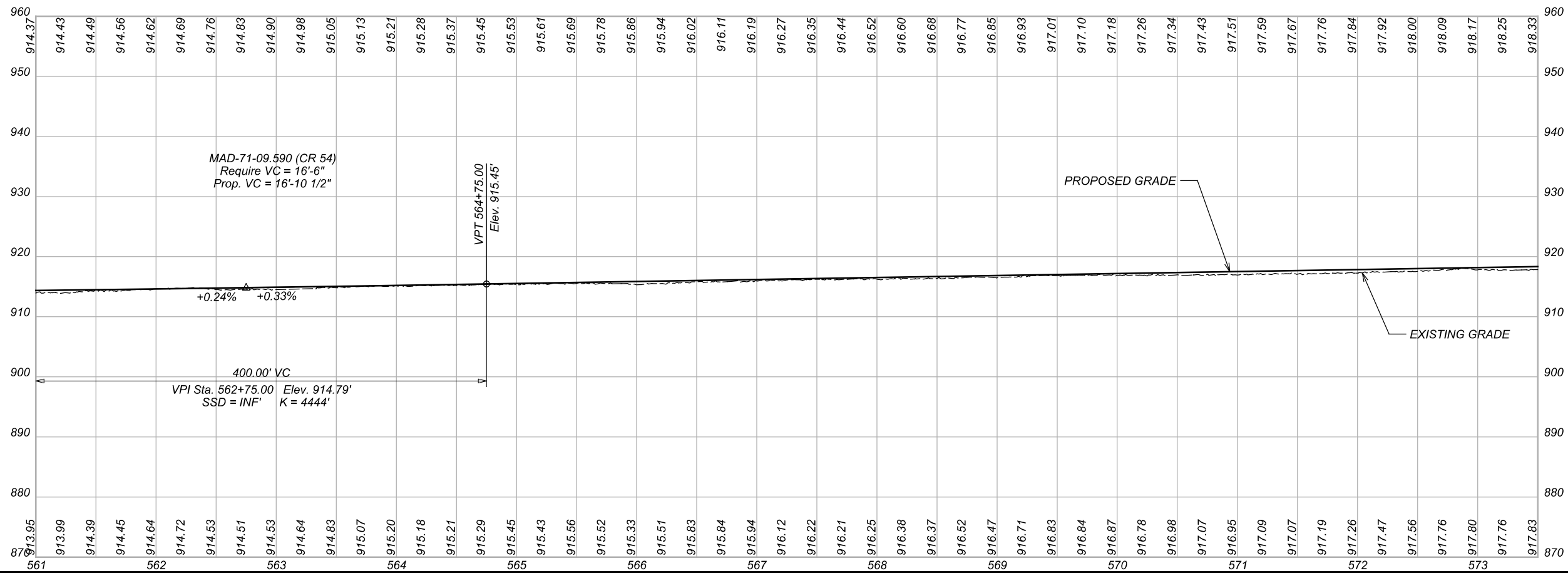
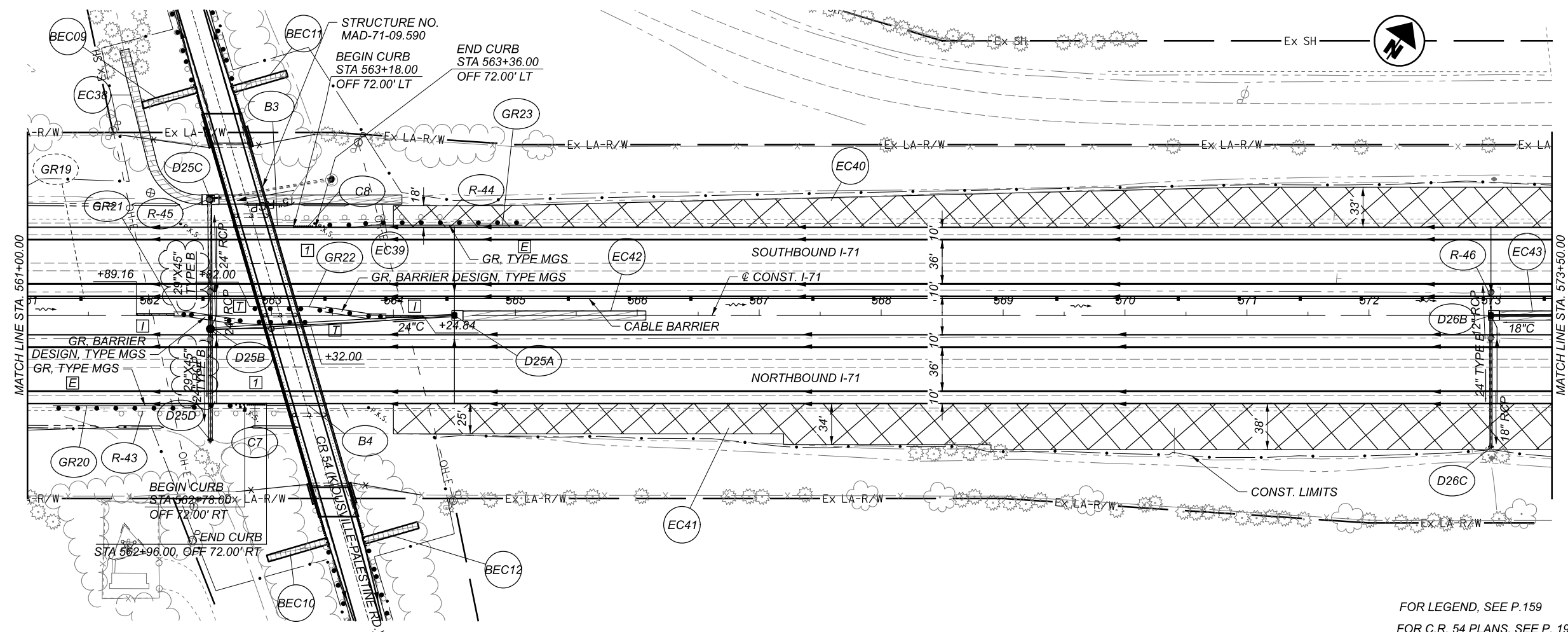
MJC 08/09/22

PROJECT ID

107630

SHEET TOTAL

P.153 1003



PLAN AND PROFILE - I-71
 STA. 561+00 TO STA. 573+50

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 MLL

REVIEWER
 MJC 04/26/22

PROJECT ID
 107630

SHEET TOTAL
 P.169 1003

SHEET	STATION		SIDE	202					209	503	601	601	601	601	602	605	601	601	601	611	611	611	611	
	FROM	TO		STRUCTURE REMOVED	HEADWALL REMOVED	PIPE REMOVED, OVER 24"	SPECIAL - FILL AND PLUG EXISTING CONDUIT, 42" TYPE A	DITCH CLEANOUT	COFFERDAMS AND EXCAVATION BRACING	RIPRAP	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CONCRETE MASONRY	6" CONSTRUCTION UNDERDRAINS	CONDUIT, TYPE A, 706.02, 707.33, 707.65 OR 60" CONDUIT, TYPE A, 707.01 (ALUMINIZED), 707.02 (ALUMINIZED), 707.04	19" X 30" CONDUIT, TYPE A, 706.04 OR 706.03	43" X 68" CONDUIT, TYPE A, 706.04 OR 706.03	36" CONDUIT, TYPE A 706.02 OR 707.33	63" X 98" CONDUIT, TYPE A, 706.04	SEE DESCRIPTION BELOW NOTED WITH *	CONDUIT, BORED OR JACKED, 54" TYPE A	96" CONDUIT, TYPE A, 707.04	FIELD PAVING OF EXISTING PIPE, 96" CMP
			LS	EACH	FT	FT	FT	LS	SY	CY	CY	CY	CY	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	
553	471+00	471+00	LT/RT	2	280			100									280							
555	48199 RAMP C	48199 RAMP C	LT/RT	2	120													120						
557	575+18	575+18	LT/RT	2	212			100												216.00				
558	667+10	667+10	LT/RT	1	2			100													212			
559	733+00	733+00	LT/RT					100																
559	759+00	759+00	LT/RT	2	204			100																
560	833+35	833+35	LT/RT	2	16	187		100													200			
561	839+75	839+75	LT/RT	2	20			100														20	286	
TOTALS CARRIED TO GENERAL SUMMARY				1	14	852	187	600	LS	44	171	54	9	49	20	213	210	280	120	216	212	200	20	286

64" CONDUIT, TYPE A, 706.02, 707.33, 707.65 OR 60" CONDUIT, TYPE A, 707.01 (ALUMINIZED), 707.02 (ALUMINIZED), 707.04

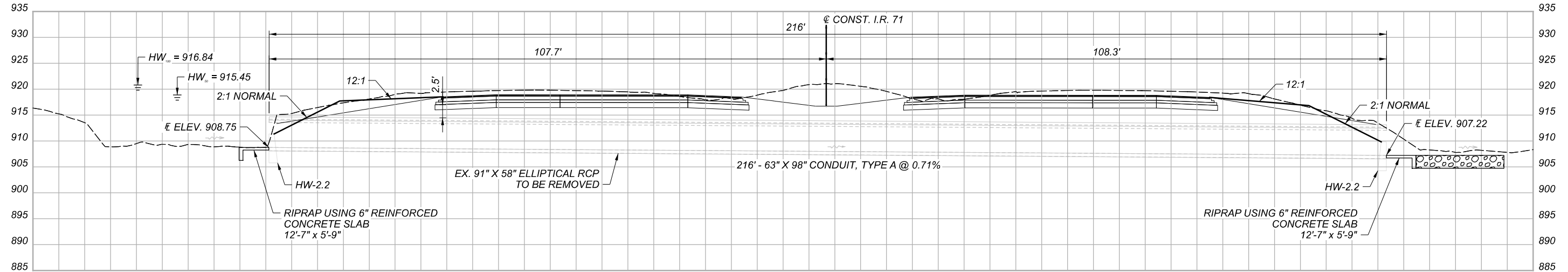
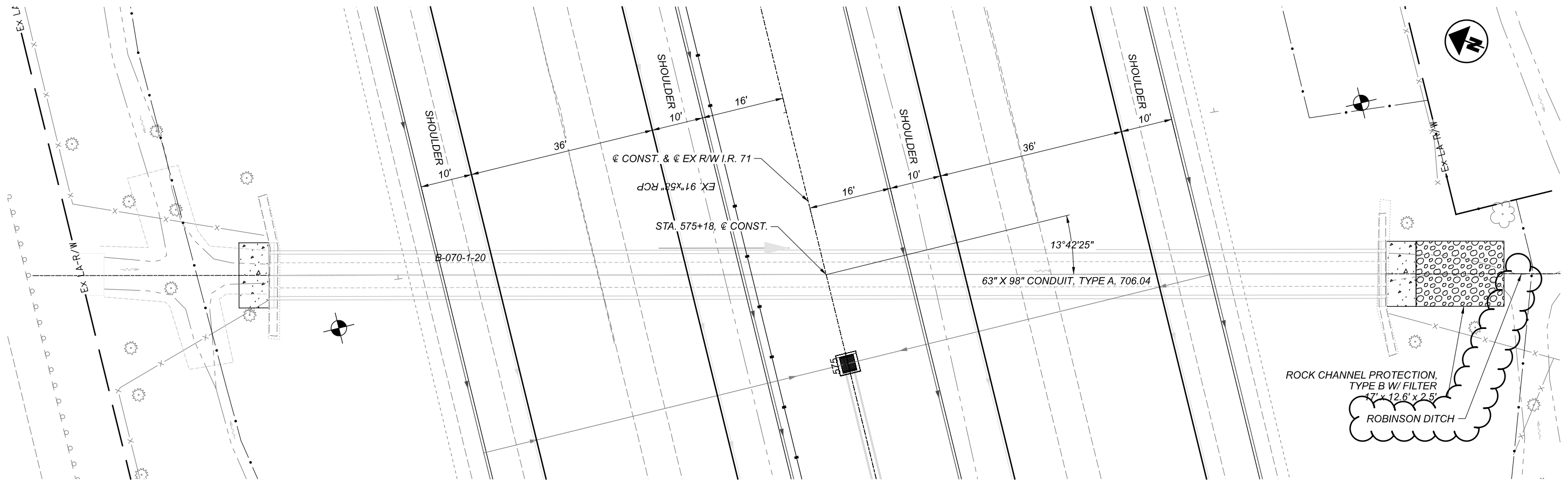
SEE DESCRIPTION BELOW NOTED WITH *

*106" X 166" CONDUIT, TYPE A, 706.04 OR 706.03 OR 121" X 199" CONDUIT, TYPE A, STRUCTURAL PLATE CORRUGATED STEEL PIPE ARCH 707.03 (0.109) METALLIC COATED (GALVANIZED) w/CONCRETE FIELD PAVING

CULVERT SUBSUMMARY

DESIGN AGENCY

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 Grandview Heights, Ohio
 DESIGNER
 JOF
 REVIEWER
 ENB 04/26/22
 PROJECT ID
 107630
 SHEET TOTAL
 P.552 1003



EXISTING STRUCTURE	
TYPE:	91" X 58" ELLIPTICAL RCP
LENGTH:	212' +/-
SKEW:	13° 42' 25" L.F.
WEARING SURFACE:	ASPHALT CONCRETE
YEAR BUILT:	
CONDITION:	POOR
CFN:	1885189

HYDRAULIC DESIGN DATA	
DRAINAGE AREA:	= 493 AC
Q50	= 312 CFS
Q100	= 375 CFS
HW50	= 915.45
HW100	= 916.84
V50	= 12.50 FPS
V100	= 10.75 FPS
ORDINARY HIGH WATER MARK	= 911.35 FT
SERVICE LIFE	= 75 YR
pH	= 7.2
ABRASION LEVEL	= 1
CFN	=

I.R. 71 STA. 575+18 - ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	2	EACH	HEADWALL REMOVED
202	212	FT	PIPE REMOVED, OVER 24"
209	108	FT	DITCH CLEANOUT
503		LS	COFFERDAMS AND EXCAVATION BRACING
601	16	SY	RIPRAP
601	19.8	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER
602	4.8	CY	CONCRETE MASONRY
611	216	FT	63" X 98" CONDUIT, TYPE A, 706.04 OR 706.03

QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY, SHEET 552



CULVERT DETAILS
 I.R. 71 STA. 575+18

DESIGN AGENCY



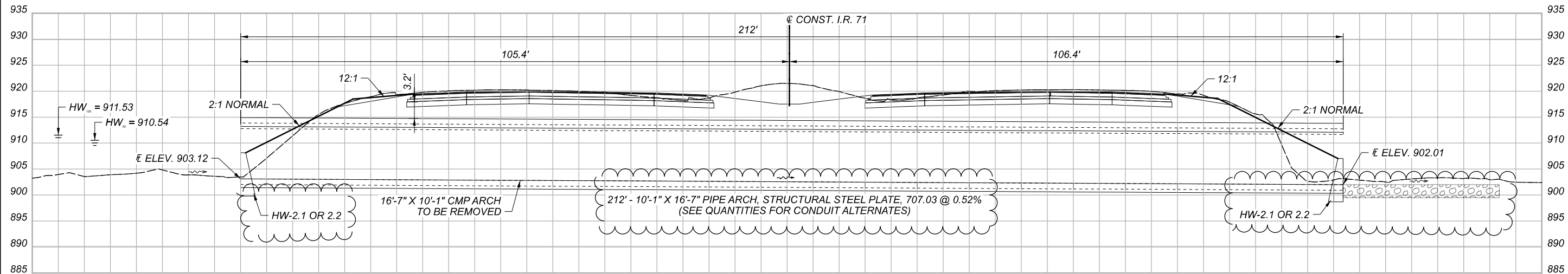
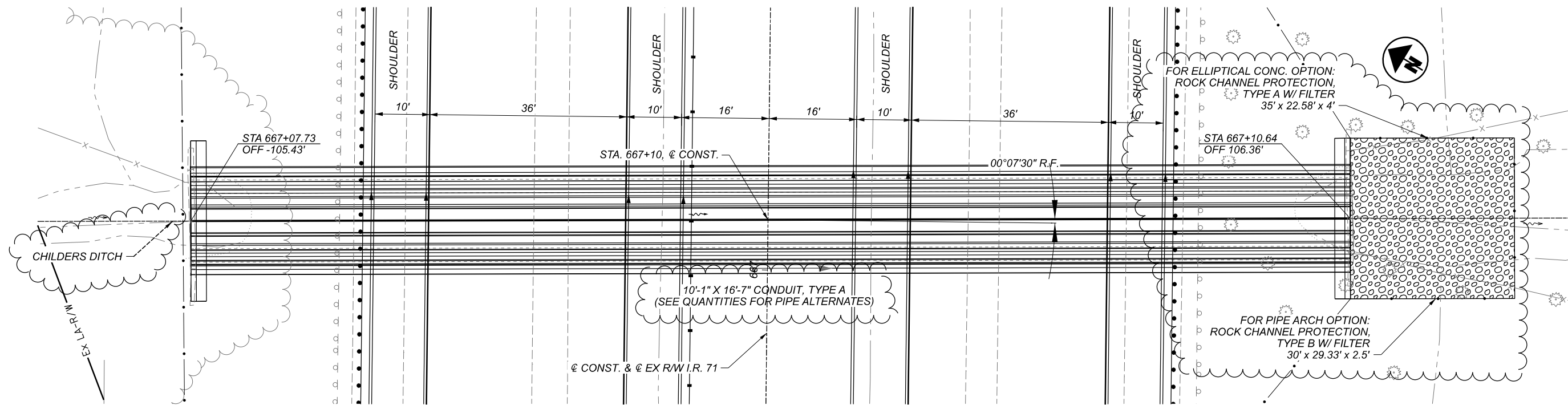
E.L. ROBINSON
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JAB

REVIEWER
ENB 04/26/22

PROJECT ID
107630

SHEET TOTAL
P.557 | 1003

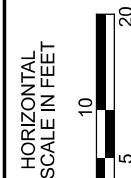


EXISTING STRUCTURE	
TYPE:	16'-7" X 10'-1" CMP ARCH
LENGTH:	212' +/-
SKEW:	1° R.F.
WEARING SURFACE:	ASPHALT CONCRETE
YEAR BUILT:	
CONDITION:	SATISFACTORY
SFN:	1977446

HYDRAULIC DESIGN DATA	
DRAINAGE AREA:	= 1357 AC
Q50:	= 671 CFS
Q100:	= 804 CFS
HW ₁₀₀ :	= 910.54
HW ₅₀ :	= 911.53
V ₁₀₀ :	= 14.8 FPS
V ₅₀ :	= 15.5 FPS
ORDINARY HIGH WATER MARK:	= 905.19 FT
SERVICE LIFE:	= 75 YR
pH:	= 7.2
ABRASION LEVEL:	= 2
SFN:	= 4903580

I.R. 71 STA. 667+10 - ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	1	LS	STRUCTURE REMOVED
202	2	EACH	HEADWALL REMOVED
209	160	FT	DITCH CLEANOUT
503		LS	COFFERDAMS AND EXCAVATION BRACING
601	117.1	CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER
602	25.3	CY	CONCRETE MASONRY
611	212	FT	106" X 166" CONDUIT, TYPE A, 706.04 OR 706.03 OR 121" x 199" CONDUIT, TYPE A, STRUCTURAL PLATE CORRUGATED STEEL PIPE ARCH 707.03 (0.109) METALLIC COATED (GALVANIZED) w/CONCRETE FIELD PAVING

QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY SHEET 592



CULVERT DETAILS
 I.R. 71 STA. 667+10

DESIGN AGENCY



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PROJECT ID

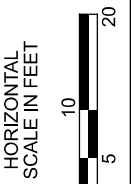
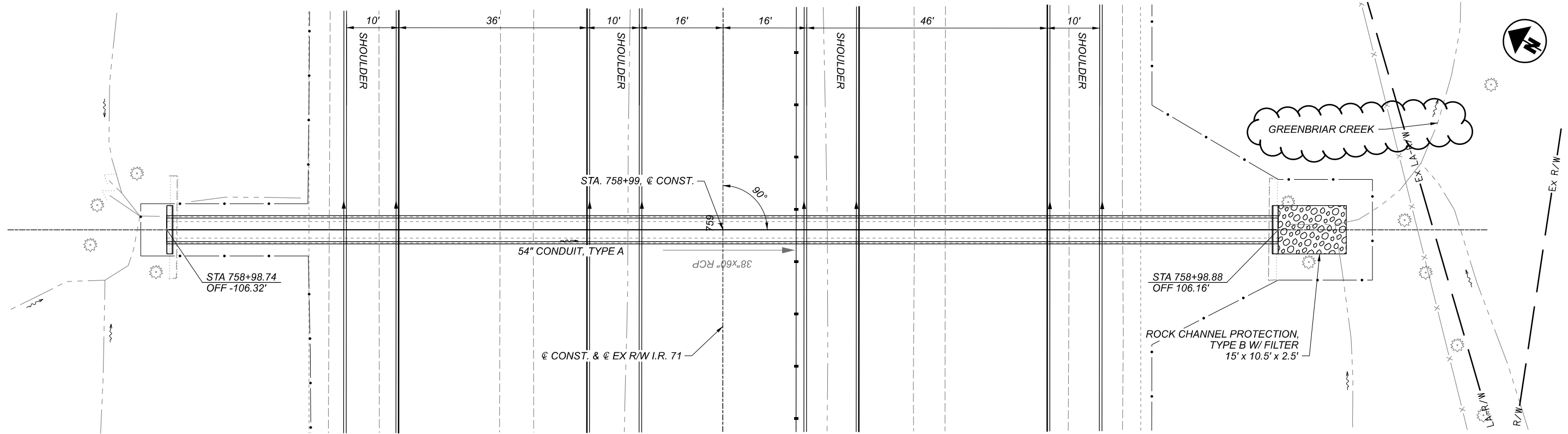
107630

SHEET

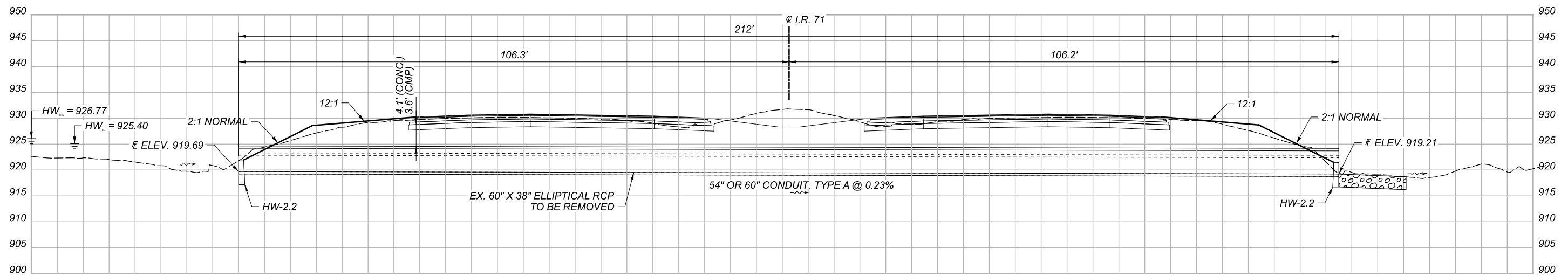
P.558

TOTAL

1003



CULVERT DETAILS
 I.R. 71 STA. 759+00



EXISTING STRUCTURE	
TYPE:	60" X 38" ELLIPTICAL RCP
LENGTH:	204' +/-
SKEW:	0°
WEARING SURFACE:	ASPHALT CONCRETE
YEAR BUILT:	
CONDITION:	FAIR
CFN:	1842882

HYDRAULIC DESIGN DATA	
DRAINAGE AREA:	= 118 AC
Q50	= 118 CFS
Q100	= 144 CFS
HW50	= 925.40
HW100	= 926.77
V50	= 9.78 FPS
V100	= 10.79 FPS
ORDINARY HIGH WATER MARK	= 920.61 FT
SERVICE LIFE	= 75 YR
pH	= 7.2
ABRASION LEVEL	= 1
CFN	=

I.R. 71 STA. 759+00 - ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	2	EACH	HEADWALL REMOVED
202	204	FT	PIPE REMOVED, OVER 24"
209	100	FT	DITCH CLEANOUT
503		LS	COFFERDAMS AND EXCAVATION BRACING
601	14.6	SY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER
602	3.9	CY	CONCRETE MASONRY
611	213	FT	54" CONDUIT, TYPE A, 706.02, 707.33, 707.65 OR 60" CONDUIT, TYPE A, 707.01 (ALUMINIZED), 707.02 (ALUMINIZED), 707.04

QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY, SHEET 552

DESIGN AGENCY



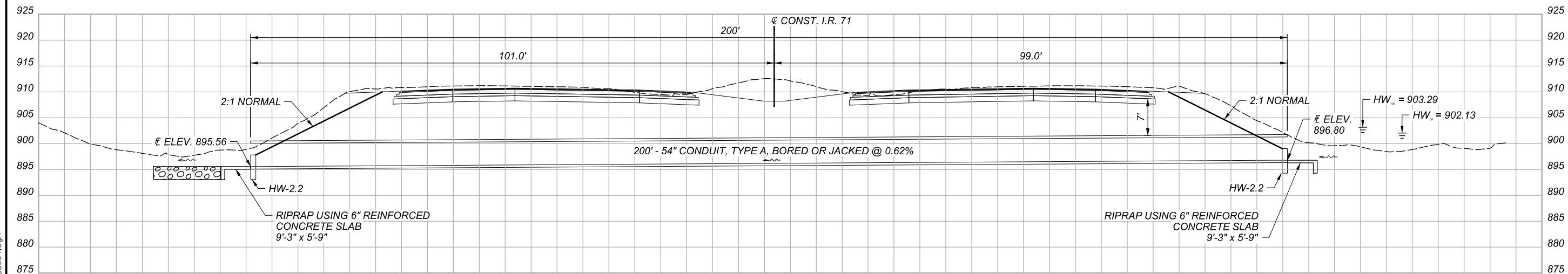
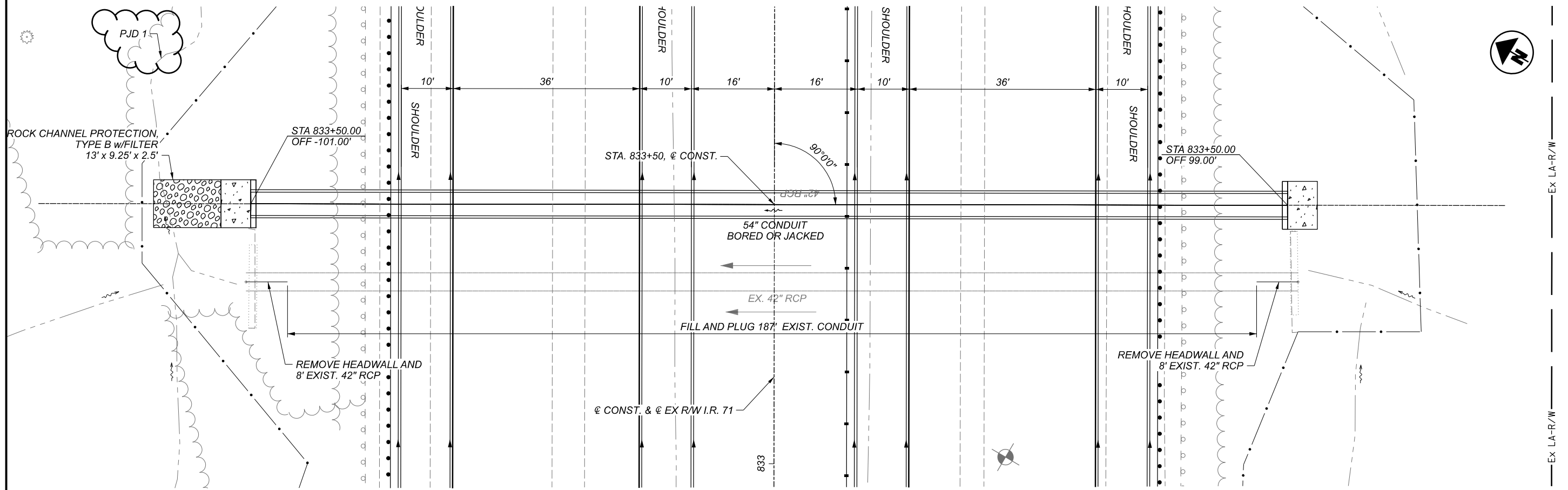
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DESIGNER
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REVIEWER
 ENB 04/26/22

PROJECT ID
 107630

SHEET TOTAL
 P.559 1003



EXISTING STRUCTURE	
TYPE:	42" RCP
LENGTH:	200' +/-
SKEW:	0°
WEARING SURFACE:	ASPHALT CONCRETE
YEAR BUILT:	_____
CONDITION:	_____
CFN:	1842893

HYDRAULIC DESIGN DATA		
DRAINAGE AREA:	=	77 AC
Q50	=	119 CFS
Q100	=	146 CFS
HW50	=	902.13
HW100	=	903.29
V50	=	9.96 FPS
V100	=	9.53 FPS
ORDINARY HIGH WATER		
MARK	=	896.72 FT
SERVICE LIFE	=	75 YR
pH	=	7.2
ABRASION LEVEL	=	1
CFN	=	_____

I.R. 71 STA. 833+50 - ESTIMATED QUANTITIES				
ITEM	QUANTITY	UNIT	DESCRIPTION	
202	2	EACH	HEADWALL REMOVED	
202	16	FT	PIPE REMOVED, OVER 24"	
202	187	FT	SPECIAL - FILL AND PLUG EXISTING CONDUIT	
209	100	FT	DITCH CLEANOUT	
601	12	SY	RIPRAP	
601	11	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
602	2.6	CY	CONCRETE MASONRY	
611	200	FT	CONDUIT, BORED OR JACKED, 54", TYPE A	

QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY, SHEET 552

NOTE: CONSTRUCTION UNDERDRAIN

AN ESTIMATED QUANTITY OF 20' OF ITEM 605 - 6" CONSTRUCTION UNDERDRAIN HAS BEEN CARRIED TO THE CULVERT SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO FACILITATE POSITIVE DRAINAGE DURING CONSTRUCTION OF THE CULVERT.

CULVERT DETAILS
I.R. 71 STA. 833+35



DESIGN AGENCY



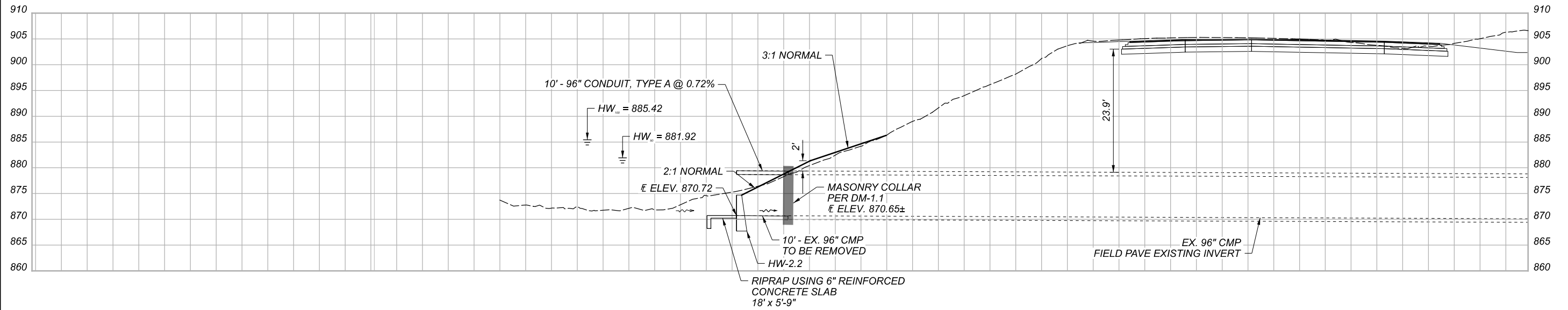
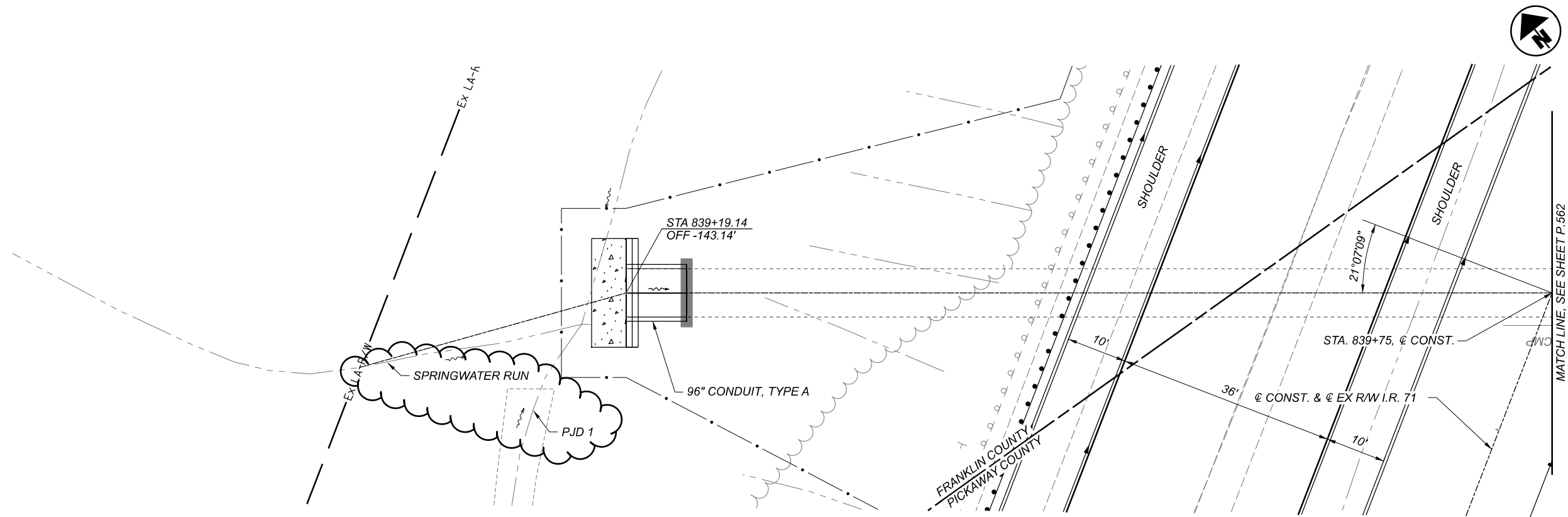
E.L. ROBINSON
 ENGINEERING
 1466 West 9th St, Suite 800
 Cleveland, Ohio
 950 Goodale Blvd, Suite 160
 Grandview Heights, Ohio

DESIGNER
JAB

REVIEWER
ENB 04/26/22

PROJECT ID
107630

SHEET TOTAL
P.560 1003



EXISTING STRUCTURE	
TYPE:	96" CMP
LENGTH:	306' +/-
SKEW:	21° L.F.
WEARING SURFACE:	ASPHALT CONCRETE
YEAR BUILT:	
CONDITION:	SATISFACTORY
CFN:	1842895

HYDRAULIC DESIGN DATA	
DRAINAGE AREA:	= 973 AC
Q50	= 591 CFS
Q100	= 712 CFS
HW50	= 881.92
HW100	= 885.42
V50	= 14.17 FPS
V100	= 15.77 FPS
ORDINARY HIGH WATER MARK	= 871.51 FT
SERVICE LIFE	= 75 YR
pH	= 7.2
ABRASION LEVEL	= 1
CFN	=

I.R. 71 STA. 839+75 - ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	2	EACH	HEADWALL REMOVED
202	20	FT	PIPE REMOVED, OVER 24"
209	100	FT	DITCH CLEANOUT
601	11	SY	RIPRAP
601	52	CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER
602	10.6	CY	CONCRETE MASONRY
611	20	FT	96" CONDUIT, TYPE A, 707.02 (0.0109) GALVANIZED - MATCH EX. CONDUIT MATERIAL
611	286	FT	FIELD PAVING OF EXISTING PIPE, 96" CMP

QUANTITIES CARRIED TO DRAINAGE SUBSUMMARY, SHEET 552



CULVERT DETAILS
 I.R. 71 STA. 839+75

DESIGN AGENCY



E.L. ROBINSON
 ENGINEERING
 1468 West 9th St, Suite 800
 Cleveland, Ohio
 950 Goodale Blvd, Suite 160
 Grandview Heights, Ohio

DESIGNER

JAB

REVIEWER

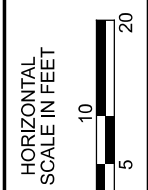
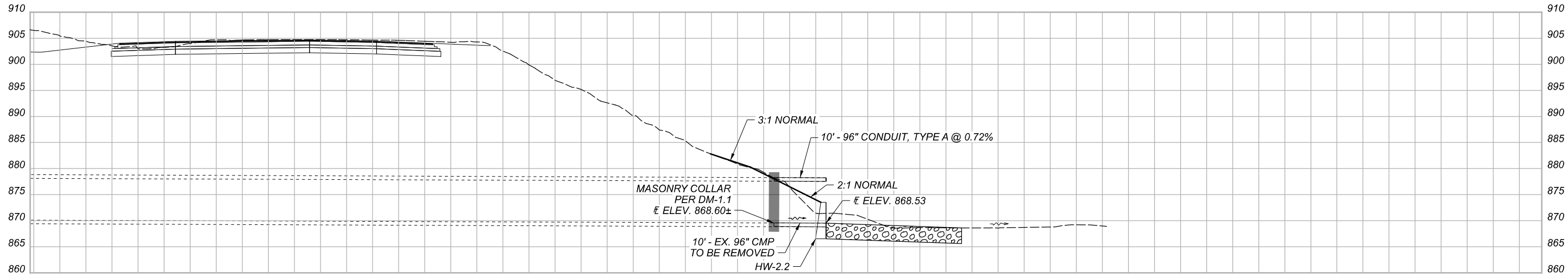
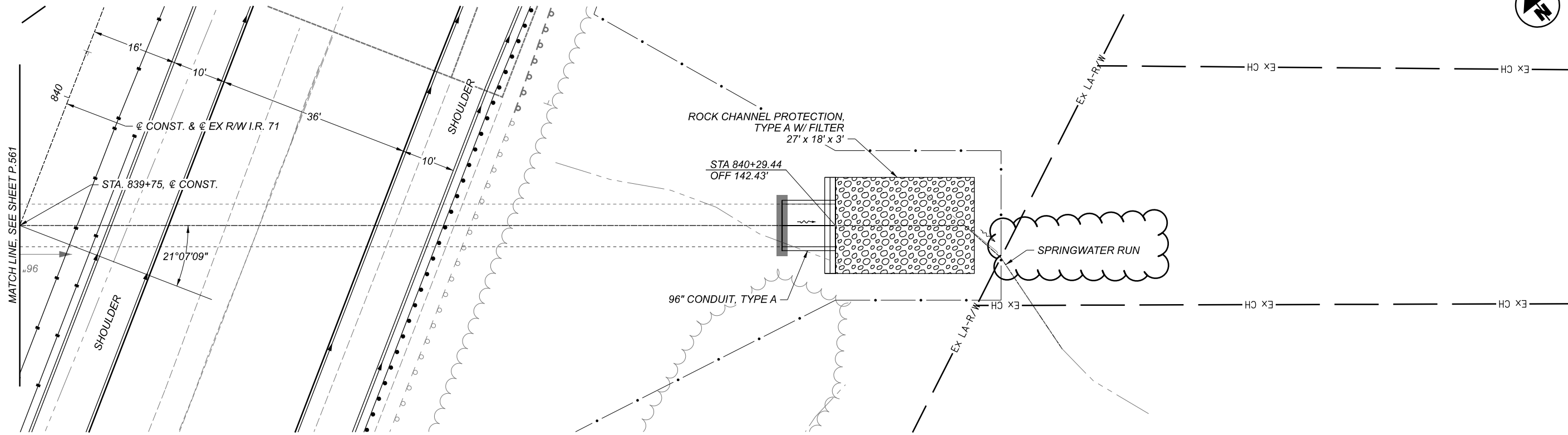
ENB 04/26/22

PROJECT ID

107630

SHEET TOTAL

P.561 1003



CULVERT DETAILS
 I.R. 71 STA. 839+75

DESIGN AGENCY	
 E.L. ROBINSON ENGINEERING 1468 West 9th St, Suite 800 Cleveland, Ohio 950 Goodale Blvd, Suite 180 Grandview Heights, Ohio	
DESIGNER	JAB
REVIEWER	ENB 04/26/22
PROJECT ID	107630
SHEET	TOTAL
P.562	1003

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	7/17/2015
AS-2-15	REVISED	1/18/2019
BP-5.1	REVISED	1/18/2019
DM-1.1	REVISED	7/17/2020
GSD-1-19	DATED	1/15/2021
MGS-3.1	REVISED	1/19/2018
MGS-3.2	REVISED	1/18/2013
PCB-91	REVISED	7/17/2020
RM-4.2	REVISED	4/17/2020
SBR-1-20	REVISED	7/17/2020

AND THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800	DATED	10/21/2022
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DESIGN SPECIFICATIONS:

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

OPERATIONAL IMPORTANCE:

A LOAD MODIFIER OF 1.00 HAS BEEN ASSUMED FOR THE DESIGN OF THIS STRUCTURE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, ARTICLE 1.3.5 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN STRESSES:

DESIGN DATA:
CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
STRUCTURAL STEEL - ASTM A709 GRADE 50W - YIELD STRENGTH 50 KSI
STEEL H-PILES - ASTM A572 - YIELD STRENGTH 50 KSI

MONOLITHIC WEARING SURFACE:

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

EXISTING BRIDGE PLANS:

FOR INFORMATION NOT SHOWN, EXISTING BRIDGE PLANS MAY BE INSPECTED IN THE OFFICE OF STRUCTURAL ENGINEERING IN COLUMBUS, OHIO OR AT THE DISTRICT 6 OFFICE, 400 EAST WILLIAM STREET, DELAWARE, OHIO, 43015.

MAINTENANCE OF TRAFFIC:

FOR MAINTENANCE OF TRAFFIC PLANS, SEE ROADWAY SHEETS.

UTILITIES:

FOR UTILITY NOTES, SEE ROADWAY SHEETS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.02 AND 513.04 FOR FURTHER INFORMATION.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 210 KIPS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 180 KIPS PER PILE FOR THE PIER PILES. THE UBV FOR THE PIER PILES INCLUDES AN ADDITIONAL 11 KIPS FOR PIERS 1 AND 2 DUE TO THE POSSIBILITY OF LOSINGS 6.38 FEET AND 5.67 FEET OF FRICTIONAL RESISTANCE AT PIER 1 AND 2 DUE TO SCOUR, RESPECTIVELY. DRIVE PIER PILES TO THE UBV OR A TIP ELEVATION OF 843.7 FEET FOR PIERS 1 AND 2, WHICHEVER IS DEEPER.

ABUTMENT PILES:

11 - HP12x53 PILES 40 FEET LONG, ORDER LENGTH (REAR ABUTMENT, EACH BRIDGE)
11 - HP12x53 PILES 50 FEET LONG, ORDER LENGTH (FORWARD ABUTMENT, EACH BRIDGE)
1 DYNAMIC LOAD TESTING ITEM

PIER PILES:

35 - HP12x53 PILES 45 FEET LONG, ORDER LENGTH (PIER 1, EACH BRIDGE)
35 - HP12x53 PILES 35 FEET LONG, ORDER LENGTH (PIER 2, EACH BRIDGE)
1 DYNAMIC LOAD TESTING ITEM

PILE DRIVING:

THE MINIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES SHALL BE 42,500 FT/LBS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 45,000 PSI.

PILE SPLICES:

IN LIEU OF USING THE FULL PENETRATION BUTT WELDS SPECIFIED IN C&MS 507.09 TO SPLICE STEEL H-PILES, THE CONTRACTOR MAY USE A MANUFACTURED H-PILE SPLICER. FURNISH SPLICERS FROM THE FOLLOWING MANUFACTURER:

ASSOCIATED PILE AND FITTING CORPORATION

8 WOOD HOLLOW RD. PLAZA 1
PARSIPPANY, NEW JERSEY 07054

INSTALL AND WELD THE SPLICER TO THE PILE SECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN ASSEMBLY PROCEDURE SUPPLIED TO THE ENGINEER BEFORE THE WELDING IS PERFORMED.

DECK PLACEMENT ASSUMPTIONS:

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.2 K FOR STRUCTURE 4903391 DURING PHASE 1 AND PHASE 2. AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.5 K FOR STRUCTURE 4903421 DURING PHASE 3.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48".

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

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

THIS ITEM IS TO INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES AND/OR HEADACHE BALLS WILL NOT BE PERMITTED. HOE-RAMS ARE PERMITTED FOR USE TO REMOVE ALL ELEMENTS ON THE STRUCTURES EXCEPT THE EXISTING PIERS AND WITHIN 5'-0" OF THE PORTIONS OF THE LEFT STRUCTURE ABUTMENTS TO REMAIN IN SERVICE DURING PHASE I REMOVAL. IF HOE-RAMS ARE USED, THE STRUCTURAL ELEMENTS ARE TO BE SAW CUT FIRST TO DISCONNECT THE ELEMENTS. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER IS TO BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING STEEL PILING TO BE PRESERVED. CHIPPING HAMMERS ARE NOT TO BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS ARE NOT TO BE PLACED IN DIRECT CONTACT WITH STEEL PILING THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

SUBSTRUCTURE (PIER AND PORTIONS OF LEFT BRIDGE ABUTMENTS DURING PHASE I REMOVAL) CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER IS NOT TO BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH PILING THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

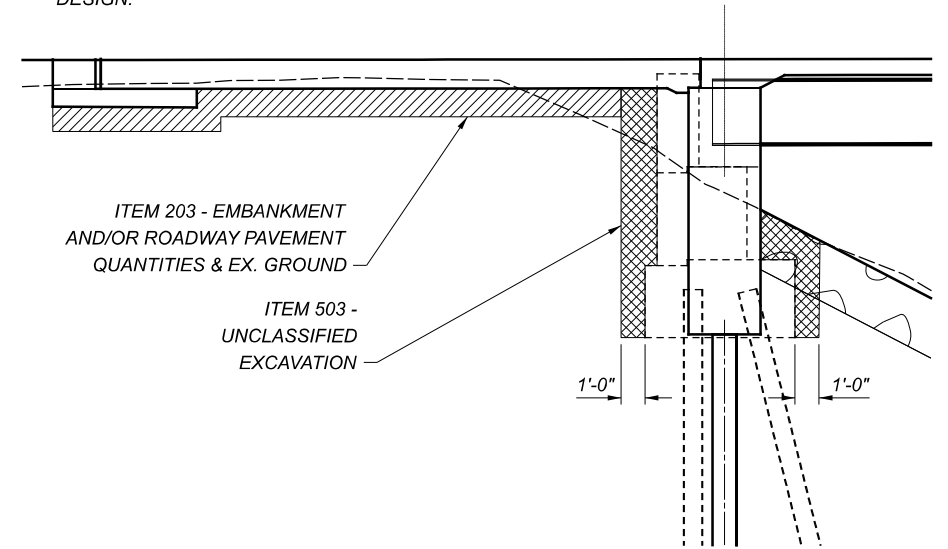
REMOVE REAR ABUTMENTS TO ELEV. 885.00.
REMOVE FORWARD ABUTMENTS TO ELEV. 883.00.

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 516+50.00 TO 517+86.32 AND BETWEEN STATIONS 520+22.32 TO 521+50.00. QUANTITY PAID FOR WITH ROADWAY ITEMS. SEE SHEETS 136/989 THRU 153/989 FOR MORE INFORMATION.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN:

THE DESIGN SHOWN ON THE PLANS FOR TEMPORARY SUPPORT OF EXCAVATION IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN ON THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE CONTRACT LUMP SUM PRICE FOR COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN. THE DEPARTMENT WILL NOT MAKE ADDITIONAL PAYMENT FOR PROVIDING AN ALTERNATE DESIGN.



ITEM 503 PAY LIMITS DIAGRAM

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 1/11/2023 TIME: 12:59:24 PM USER: mvogt P3_OHDOT_Worksets\107630\400-Engineering\Structures\4903391\Sheets\107630_4903391_SN001.dgn

GENERAL NOTES (1 OF 2)
BRIDGE NO. MAD-00071-08.740L&R
IR 71 OVER DEER CREEK

SFN	4903391
SFN	4903421
DESIGNER AGENCY	
DESIGNER CHECKER	TAS MRV
REVIEWER	DFT
PROJECT ID	107630
SUBSET	TOTAL
4	55
SHEET	TOTAL
P.653	1003

MAD/PIC-71-7.30/0.00

MODEL: Sheet PAPER: 17x11 (in.) DATE: 1/11/2023 TIME: 11:16:27 AM USER: jleary P3_OHDOT_Worksets\107630\400-Engineering\Structures\6501746_Sheets\107630_6501746_S\0001.dgn

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	REVISED	7/17/2015	RM-4.2	REVISED	4/17/2020
AS-2-15	REVISED	1/18/2019	SBR-1-20	REVISED	7/17/2020
DM-1.1	REVISED	7/17/2020			
PCB-91	REVISED	7/17/2020			
PSID-1-13	REVISED	1/15/2021			

AND THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800 DATED 10/21/2022

DESIGN SPECIFICATIONS:

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

OPERATIONAL IMPORTANCE:

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

DESIGN LOADING:

VEHICULAR LIVE LOAD: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KSF

DESIGN STRESSES:

DESIGN DATA :
CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
GFRP - C&MS 705.28 (MODULUS 8,700 KSI)
WELDED WIRE FABRIC - 70 KSI

STEEL CIP PILES - ASTM A252 GRADE 3 - YIELD STRENGTH 45 KSI

CONCRETE FOR PRESTRESSED BEAMS: COMPRESSIVE STRENGTH (RELEASE) - 5.5 KSI
COMPRESSIVE STRENGTH (FINAL) - 7.0 KSI

PRESTRESSING STRAND: AREA - 0.217 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

MONOLITHIC WEARING SURFACE:

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

EXISTING BRIDGE PLANS:

FOR INFORMATION NOT SHOWN, EXISTING BRIDGE PLANS MAY BE INSPECTED IN THE OFFICE OF STRUCTURAL ENGINEERING IN COLUMBUS, OHIO OR AT THE DISTRICT 6 OFFICE, 400 EAST WILLIAM STREET, DELAWARE, OHIO, 43015.

MAINTENANCE OF TRAFFIC:

FOR MAINTENANCE OF TRAFFIC PLANS, SEE ROADWAY SHEETS.

UTILITIES:

FOR UTILITY NOTES, SEE ROADWAY SHEETS.

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05, 105.022 AND 513.04 FOR FURTHER INFORMATION.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

PILE DRIVING:

THE MINIMUM RATED ENERGY OF THE HAMMER USED TO INSTALL THE PILES SHALL BE 42,500 FT/LBS. ENSURE THAT STRESSES IN THE PILES DURING DRIVING DO NOT EXCEED 40.5 KSI.

PILE DESIGN LOADS (ULTIMATE BEARING VALUE):

THE ULTIMATE BEARING VALUE IS 367 KIPS PER PILE FOR THE REAR ABUTMENT PILES AND IS 358 KIPS FOR THE FORWARD ABUTMENT PILES. THE UBV FOR THE REAR ABUTMENT PILES INCLUDES AN ADDITIONAL 9 KIPS FOR THE PILES DUE TO THE POSSIBILITY OF LOSING 0.55 FEET OF FRICTIONAL RESISTANCE DUE TO SCOUR. THE UBV FOR THE FORWARD ABUTMENT PILES INCLUDES NO ADDITIONAL LOADING ON THE PILES FROM THE POSSIBILITY OF LOSING 0.55 FEET OF FRICTIONAL RESISTANCE DUE TO SCOUR. DRIVE ABUTMENT PILES TO THE UBV OR A TIP ELEVATION OF 884.7, WHICHEVER IS DEEPER. PERFORM ONE DYNAMIC LOAD TEST AT EACH ABUTMENT FOR THE LEFT BRIDGE. USE THE PILE DRIVING CRITERIA DETERMINED FROM THE LEFT BRIDGE TO DRIVE THE PILES FOR THE CORRESPONDING ABUTMENT ON THE RIGHT BRIDGE.

ABUTMENT PILES:

24 - 14"Ø CIP PILES 60' LONG, ORDER LENGTH 65' - REAR ABUTMENT
24 - 14"Ø CIP PILES 75' LONG, ORDER LENGTH 80' - FORWARD ABUTMENT
2 DYNAMIC LOAD TESTING ITEMS (ONE FOR EACH ABUTMENT)

PROVIDE PLAIN CYLINDRICAL CASINGS WITH A MINIMUM PILE WALL THICKNESS OF 0.312 INCHES FOR THE CAST-IN-PLACE REINFORCED CONCRETE PILES.

ITEM 202. PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES AND/OR HEADACHE BALLS WILL NOT BE PERMITTED. HOE-RAMS ARE PERMITTED FOR USE TO REMOVE ALL ELEMENTS ON THE STRUCTURES EXCEPT THE EXISTING LEFT PIERS AND WITHIN 5'-0" OF THE PORTIONS OF THE LEFT STRUCTURE TO REMAIN IN SERVICE DURING PHASE I REMOVAL. IF HOE-RAMS ARE USED, THE STRUCTURAL ELEMENTS ARE TO BE SAW CUT FIRST TO DISCONNECT THE ELEMENTS. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. SUBMIT CONSTRUCTION PLANS ACCORDING TO C&MS 501.05.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL BE PERMITTED SUBJECT TO THE LIMITATIONS ABOVE. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER.

REMOVE REAR ABUTMENTS TO ELEV. 899.29 LEFT, 899.25 RIGHT.
REMOVE FORWARD ABUTMENTS TO ELEV. 899.59 LEFT, 899.53 RIGHT.

ITEM 203 - EMBANKMENT, AS PER PLAN

PLACE AND COMPACT EMBANKMENT MATERIAL IN 6 INCH LIFTS FOR THE CONSTRUCTION OF THE APPROACH EMBANKMENT BETWEEN STATIONS 697+00.00 TO 697+99.07 AND BETWEEN STATIONS 699+14.59 TO 700+50.00. QUANTITY PAID FOR WITH ROADWAY ITEMS.

ITEM 504 - STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN:

THE DESIGN SHOWN IN THE TABLE BELOW FOR TEMPORARY SUPPORT OF EXCAVATION AT THE ABUTMENTS IS ONE REPRESENTATIVE DESIGN THAT MAY BE USED TO CONSTRUCT THE PROJECT. THE CONTRACTOR MAY CONSTRUCT THE DESIGN SHOWN IN THE PLANS OR PREPARE AN ALTERNATE DESIGN TO SUPPORT THE SIDES OF EXCAVATIONS. IF CONSTRUCTING AN ALTERNATE DESIGN FOR TEMPORARY SUPPORT OF EXCAVATION, PREPARE AND PROVIDE PLANS IN ACCORDANCE WITH C&MS 501.05. THE DEPARTMENT WILL PAY FOR THE TEMPORARY SUPPORT OF EXCAVATION AT THE ABUTMENTS AT THE SQUARE FOOT PRICE FOR STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROVIDING AN ALTERNATE DESIGN.

THE STEEL SHEET PILING SHALL CONFORM TO ASTM A328 AND SHALL HAVE THE FOLLOWING:

LOCATION	REAR & FORWARD ABUTMENTS
ELASTIC SECTION MODULUS REQUIRED (CU. IN/FT.) (MIN.)	18.4
MINIMUM YIELD STRESS, Fy (KSI)	39
DESIGN EXCAVATION DEPTH (FT.)	12.0
DESIGN EMBEDMENT DEPTH (FT.)	12.0
DESIGN TOTAL DEPTH (FT.)	24.0

ITEM 622 - PORTABLE BARRIER ANCHORED, AS PER PLAN

DURING PHASE 1, PROVIDE ANCHORED BARRIER AS PER STANDARD DRAWING PCB-91 OR EASI-SET WORLDWIDE BARRIER AS PER THE FOLLOWING WEBSITE:

HTTPS://WWW.TRANSPORTATION.OHIO.GOV/STATIC/WORKING/ENGINEERING/ROADWAY/APPROVED-PRODUCTS/JJHOOK-ANCHORED.PDF
QUANTITIES TO BE CARRIED IN ROADWAY PLANS.

STEEL PILE POINTS:

USE CONICAL STEEL PILE POINTS TO PROTECT THE TIPS OF THE PROPOSED STEEL CIP REINFORCED CONCRETE PIPE PILES AT BOTH ABUTMENTS.

DECK PLACEMENT ASSUMPTIONS:

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

AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.3 K FOR STRUCTURE 6501746 DURING PHASE 1 AND 2.2 K DURING PHASE 2. AN EIGHT WHEEL FINISHING MACHINE WITH A MAXIMUM WHEEL LOAD OF 2.7 K FOR STRUCTURE 6501835 DURING PHASE 3.

A MINIMUM OUT-TO-OUT WHEEL SPACING AT EACH END OF THE MACHINE OF 103". A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 IN. A MAXIMUM DISTANCE FROM THE CENTERLINE OF THE FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 65"

ABBREVIATIONS:

ABUT. - ABUTMENT	MSE - MECHANICALLY STABILIZED EARTH
ADT - AVERAGE DAILY TRAFFIC	N - NORTH
ADTT - AVERAGE DAILY TRUCK TRAFFIC	NB - NORTHBOUND
APPR. - APPROACH	NO. - NUMBER
B - BOTTOM	N.P.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE
# - BASELINE	OHWM - ORDINARY HIGH WATER MARK
B.F. - BACK FACE	O/O - OUT TO OUT
BM - BENCHMARK	P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
BOT. OR BTM. - BOTTOM	P.E.J.F. - PREFORMED EXPANSION JOINT FILLER
BRG. - BEARING	PG - PROFILE GRADE
Ⓞ - CENTERLINE	PROP. - PROPOSED
C/C - CENTER TO CENTER	PSF - POUNDS PER SQUARE FOOT
C.I.P. - CAST-IN-PLACE	P.V.I. - POINT OF VERTICAL INTERSECTION
C.J. - CONSTRUCTION JOINT	Q - FLOW RATE
CLR. - CLEAR	R - RADIUS
C&MS - CONSTRUCTION AND MATERIAL SPECIFICATIONS	R.A. - REAR ABUTMENT
CONC. - CONCRETE	RB - RIGHT BRIDGE
CONST./CONSTR. - CONSTRUCTION	RCP - ROCK CHANNEL PROTECTION
CVN - CHARPY V-NOTCH	REOD - RIGHT EDGE OF DECK
DIA. - DIAMETER	REQD. - REQUIRED
DIM. - DIMENSION	R.F. - RIGHT FORWARD
DWG. - DRAWING	R.R. - RAILROAD
E - EAST	RT. - RIGHT
EB - EASTBOUND	RTBR - RIGHT TOE BRIDGE RAILING
E.F. - EACH FACE	R/W - RIGHT OF WAY
EL. OR ELEV. - ELEVATION	S - SOUTH
EOP - EDGE OF PAVEMENT	SB - SOUTHBOUND
EQ. - EQUAL	SDC - SUPERPLASTICIZED DENSE CONCRETE
EST. - ESTIMATED	SER. - SERIES
EX. - EXISTING	SHLDR - SHOULDER
EXP. - EXPANSION	SLPR. - SLEEPER
F.A. - FORWARD ABUTMENT	SPA. - SPACE OR SPACES
F/F - FACE TO FACE	STA. - STATION
F.F. - FRONT FACE	STD. - STANDARD
F.S. - FIELD SPLICE	STR - STRAIGHT
FT. - FOOT OR FEET	T - TOP
FWD. - FORWARD	T&B - TOP & BOTTOM
HMWM - HIGH MOLECULAR WEIGHT METHACRYLATE	TBR - TO BE REMOVED
HW - HIGH WATER	TEMP. - TEMPORARY
IN. - INCH	T.O.S. OR T/S - TOP OF SLOPE
JT. - JOINT	T/T - TOE TO TOE
LB - LEFT BRIDGE	TYP. - TYPICAL
LEOD - LEFT EDGE OF DECK	U.N.O. - UNLESS NOTED OTHERWISE
L.F. - LEFT FORWARD	VAR. - VARIES
LT. - LEFT	V - VELOCITY
LTBR - LEFT TOE BRIDGE RAILING	W - WEST
MAX. - MAXIMUM	WB - WESTBOUND
MIN. - MINIMUM	WWR - WELDED WIRE REINFORCEMENT
MISC. - MISCELLANEOUS	

GENERAL NOTES
BRIDGE NO. PIC-00071-00.460L&R
IR 71 OVER OPOSSUM RUN

SFN	6501746
SFN	6501835
DESIGN AGENCY	
DESIGNER/CHECKER	JOL MMD
REVIEWER	DFT 03/25/22
PROJECT ID	107630
SUBSET	4 41
SHEET	P.708 1003