STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

GAL-7-19.94

GREEN TOWNSHIP

GALLIA COUNTY

LOCATION MAP

LATITUDE: 82°13'22" LONGITUDE: 38°46'56"

N

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

DESIGN DESIGNATION

CURRENT ADT (2025)	6,600
DESIGN YEAR ADT (2045)	6,800
DESIGN HOURLY VOLUME (2045)	750
DIRECTIONAL DISTRIBUTION	63.4%
TRUCKS (24 HOUR B&C)	7%
DESIGN SPEED	55
LEGAL SPEED	55

DESIGN FUNCTIONAL CLASSIFICATION:
RURAL ARTERIAL

NHS PROJECT YES

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
OHIO DEPARTMENT OF
TRANSPORTATION PLANNING
AND ENGINEERING - DISTRICT 10

INDEX OF SHEETS:

FEDERAL PROJECT NUMBER

E240998

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

A LANDSLIDE REPAIR CONSISTING OF A 446FT DRILLED SHAFT RETAINING WALL AND CULVERT REPLACEMENT.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.32 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.10 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	0.42 ACRES

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THEMAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Rich Oster
District 10 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS							SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-3.1	1/19/24	MT-96.20	7/21/23				800-2023	7/19/24	
		MT-96.26	1/18/19				832	7/21/23	
DM-1.1	7/17/20	MT-97.10	4/19/19				902	7/19/19	
DM-1.2	7/16/21	MT-101.70	4/21/23						
DM-4.3	1/15/16	MT-101.75	7/21/23						
DM-4.4	1/15/16	MT-101.90	7/17/20						
MGS-1.1	7/16/21	TC-65.10	1/17/14						
MGS-2.1	1/19/18	TC-65.11	1/19/24						
MGS-2.3	1/20/23								
MGS-4.2	7/19/13								
MGS-4.3	1/18/13								
RM-4.2	4/17/20								
MT-96.11	7/21/23								

ENGINEER'S SEAL
ROADWAY

STATE OF OHIO
JUSTIN DEAN WISEMAN
E-83990
REGISTERED
PROFESSIONAL ENGINEER

jwiseman
CN=jwiseman, OU=People, OU=D10, OU=Divisions, DC=dot, DC=state, DC=oh, DC=us
2024.10.23 08:08:20-04'00'

TITLE SHEET

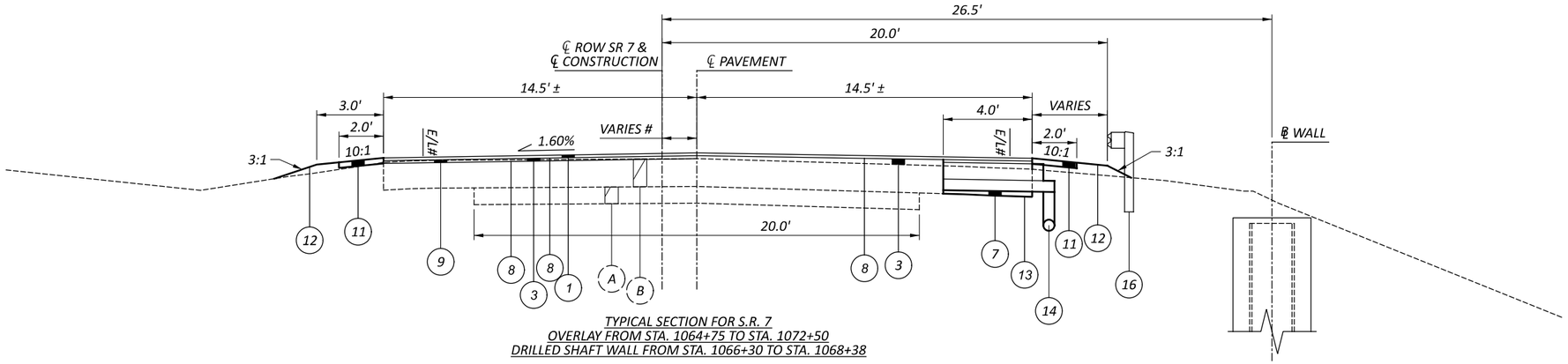
DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.01 TOTAL P.48

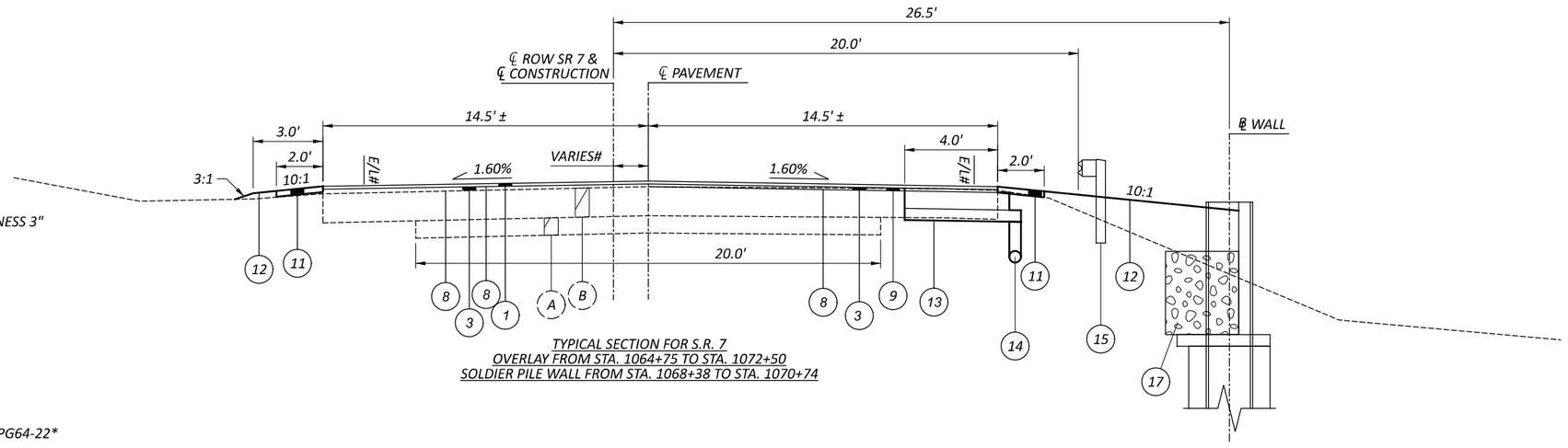
GAL-7-19.94

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:54:31 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Roadway\Sheets\115533_GT001.dgn

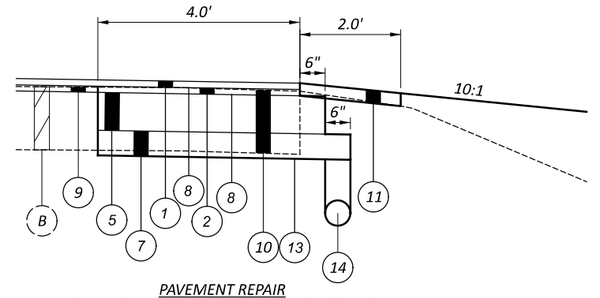
# ℄ PAVEMENT OFFSET FROM ℄ ROW SR 7	
STATION	OFFSET
1066+00.00	0.67' LT
1066+25.00	0.47' LT
1066+50.00	0.29' LT
1066+75.00	0.23' RT
1067+00.00	0.67' RT
1067+25.00	1.03' RT
1067+50.00	1.50' RT
1067+75.00	1.58' RT
1068+00.00	1.70' RT
1068+25.00	1.71' RT
1068+50.00	1.29' RT
1068+75.00	1.55' RT
1069+00.00	1.40' RT
1069+25.00	1.27' RT
1069+50.00	0.78' RT
1069+75.00	1.33' RT
1070+00.00	0.80' RT
1070+25.00	0.90' RT
1070+50.00	0.11' RT
1070+75.00	0.06' LT
1071+00.00	0.20' LT
1071+25.00	0.33' LT
1071+50.00	0.72' LT
1071+75.00	0.56' LT
1072+00.00	0.53' LT



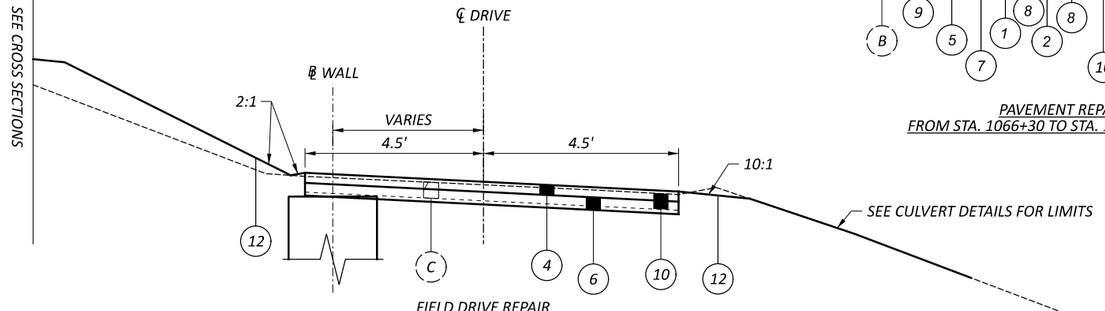
TYPICAL SECTION FOR S.R. 7
OVERLAY FROM STA. 1064+75 TO STA. 1072+50
DRILLED SHAFT WALL FROM STA. 1066+30 TO STA. 1068+38



TYPICAL SECTION FOR S.R. 7
OVERLAY FROM STA. 1064+75 TO STA. 1072+50
SOLDIER PILE WALL FROM STA. 1068+38 TO STA. 1070+74



PAVEMENT REPAIR
FROM STA. 1066+30 TO STA. 1070+74 (℄ SR 7)



FIELD DRIVE REPAIR
STA. 1065+75 TO STA. 1068+38 (℄ SR 7)
STA. 0+15 TO STA. 0+66 (℄ FIELD DRIVE)

NOTES:

\# - STRIPE LANES AT 12.5' WIDTH (MATCH EXISTING)

* - MAXIMUM LIFT THICKNESS 1.5"

** - MAXIMUM LIFT THICKNESS 6"; MINIMUM LIFT THICKNESS 3"

EXISTING LEGEND

(A) 9" EXISTING PORTLAND CONCRETE

(B) 15" EXISTING ASPHALT CONCRETE

(C) EXISTING DRIVEWAY ASPHALT CONCRETE

PROPOSED LEGEND

(1) ITEM 441 - 1.5" ASPHALT CONCRETE SURFACE, TYPE 1, (448), PG64-22*

(2) ITEM 441 - 1.5" ASPHALT CONCRETE INTERMEDITATE COURSE, TYPE 1, (448)*

(3) ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1 (449), (VARIABLE THICKNESS)*

(4) ITEM 441 - 3" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)*

(5) ITEM 301 - 9" ASPHALT CONCRETE BASE, PG64-22**

(6) ITEM 304 - 6" AGGREGATE BASE

(7) ITEM 304 - AGGREGATE BASE (VARIABLE THICKNESS)

(8) ITEM 407 - NON-TRACKING TACK COAT

(9) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

(10) ITEM 202 - PAVEMENT REMOVED

(11) ITEM 617 - 3" COMPACTED AGGREGATE &
ITEM 408 - PRIME COAT (0.4 GAL/SY)

(12) ITEM 659 - SEEDING AND MULCHING

(13) ITEM 204 - SUBGRADE COMPACTION

(14) ITEM 605 - 4" BASE PIPE UNDERDRAIN

(15) ITEM 606 - GUARDRAIL, TYPE MGS

(16) ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS

(17) ITEM 518 - POROUS BACKFILL WITH GEOTEXTILE FABRIC

TYPICAL SECTION

GAL-7-19.94

DESIGN AGENCY

DESIGNER JDW

REVIEWER XXX MM-DD-YY

PROJECT ID 115533

SHEET P.02 TOTAL P.48

UTILITIES

UTILITIES WERE NOT MARKED AT THE TIME OF THE SURVEY. LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

AMERICAN ELECTRIC POWER
38831 SR 7
REEDSVILLE, OH 45769
CLARKE SAUNDERS 614-312-5807

A&T
160 NORTH SIXTH STREET
ZANESVILLE, OH 43701
BARRETT TAMASOVICH 740-454-3552

COLUMBIA GAS OF OHIO
843 PIATT AVENUE
CHILLICOTHE, OH 45601
TIFFANY WOODYARD 740-772-9131

SUDDENLINK
1737 EAST SEVENTH STREET
PARKERSBURG, WV 26101
BILL BROWN 304-865-4067

CITY OF GALLIPOLIS
518 2ND AVENUE
GALLIPOLIS, OH 45631
740-441-6006

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

ITEM 659 - SEEDING AND MULCHING

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.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION TIME TABLE

ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS AND PIO
RAMP & ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 CALENDAR DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

DISTRICT PUBLIC INFORMATION OFFICER (PIO):
ASHLEY RITTENHOUSE
FAX: (740) 373-3953
EMAIL: ASHLEY.RITTENHOUSE@DOT.OHIO.GOV

DISTRICT PERMIT SECTION:
STEPHEN WELLS
FAX: (740) 373-3953
EMAIL: STEPHEN.WELLS@DOT.OHIO.GOV

CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION:
FAX: (614) 728-4099
EMAIL: HAULING.PERMITS@DOT.OHIO.GOV

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF THE ABOVE MENTIONED ITEMS VIA MEDIA SOURCES.

ITEM 524 - DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN
ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN
ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, INTO BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SOLDIER PILE AND LAGGING WALLS. THE DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES INSTEAD OF REINFORCING STEEL CAGES. THE SOLDIER PILES EXTEND ABOVE THE TOP OF THE DRILLED SHAFT. FURNISH AND INSTALL DRILLED SHAFTS IN ACCORDANCE WITH CMS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE DRILLED SHAFTS WITHIN 3 INCHES OF THE PLAN LOCATION IN THE HORIZONTAL PLANE. IF FIELD CONDITIONS INDICATE GREATER DEPTHS, NOTIFY THE ENGINEER FOR FURTHER EVALUATION.

PLACE THE SOLDIER PILE VERTICALLY WITHIN THE HOLE SO IT IS NOT INCLINED MORE THAN 1" BETWEEN THE TOP AND BOTTOM. PLACE THE SOLDIER PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF CONSTRUCTION. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS QC1 CONCRETE ACCORDING TO CMS 511. PLACE CONCRETE TO THE ELEVATION FOR THE BOTTOM OF THE PRECAST LAGGING. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF WATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLDIER PILE IS ACCEPTABLE.

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

PLACE PRECAST LAGGING SO THAT THE SOLDIER PILE FLANGE OVERLAPS THE END OF THE LAGGING BY AT LEAST 3 INCHES AT BOTH ENDS OF THE LAGGING.

SEQUENCE OF INSTALLATION
THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO KING PILE IS INSTALLED ADJACENT TO EITHER AN OPEN KING PILE EXCAVATION OR A KING PILE IN WHICH THE CONCRETE HAS LESS THAN A 48 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THIS CRITERIA IS PERMISSIBLE.

PROTECTION OF UNATTENDED OPEN SHAFTS
CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. NO DRILLED SHAFT EXCAVATION SHALL BE LEFT UN-POURED OVERNIGHT

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE CONCRETE PANELS. ANY TEMPORARY GRADING, EXCAVATION, EMBANKMENT, AGGREGATE, DRAINAGE, SHEETING, ETC. NEEDED TO COMPLETE THE WORK AREA SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. THE COST OF ANY EXCAVATION AND SUBSEQUENT REPLACEMENT OF EMBANKMENT (PER ITEM 203 EMBANKMENT) SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR THE DRILLED SHAFTS AND CONCRETE PANELS. NO SEPARATE PAYMENT WILL BE MADE.

PAYMENT IS FULL COMPENSATION FOR CONSTRUCTING THE DRILLED SHAFTS, INCLUDING FURNISHING AND PLACING CONCRETE AND REMOVAL OF CONCRETE FROM AROUND THE SOLDIER PILE IN ORDER TO PLACE PRECAST LAGGING. PAYMENT FOR SOIL OVERBURDEN DRILLING , WHICH IS GROUND LEVEL TO THE TOP OF THE SHAFT, SHALL BE INCLUSIVE OF ITEM 524 DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK AS PER PLAN AND ITEM 524 DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK AS PER PLAN.

MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS ABOVE BEDROCK, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE TOP OF BEDROCK, AS DETERMINED BY THE ENGINEER. MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS INTO BEDROCK, AS PER PLAN, WILL BE LIMITED TO THE DISTANCE BETWEEN THE TOP OF BEDROCK AND THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER.

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.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

DUE TO THE ACTIVE NATURE OF THE LANDSLIDE, PAVEMENT OVERLAYS HAVE BEEN PLACED AFTER THE SURVEY WAS PERFORMED. IT IS ANTICIPATED THAT PAVEMENT PLANING MAY BE NECESSARY TO OBTAIN THE PROPOSED CROSS-SLOPE.

GENERAL NOTES

DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.03 TOTAL P.48

GAL-7-19.94

ENDANGERED BAT HABITAT REMOVAL

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

ITEM SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING

THIS WORK CONSISTS OF FURNISHING AND PLACING PRECAST REINFORCED CONCRETE PANELS BETWEEN THE SOLDIER PILES TO FUNCTION AS LAGGING FOR THE RETAINING WALL. PROVIDE PRECAST CONCRETE LAGGING FROM A PRECAST CONCRETE MANUFACTURER CERTIFIED UNDER SUPPLEMENT 1073. PROVIDE CONCRETE WITH A 28-DAY DESIGN STRENGTH OF AT LEAST 4000 PSI ACCORDING TO CMS 499. PROVIDE EPOXY COATED REINFORCING STEEL ACCORDING TO CMS 709.00. IN LIEU OF EPOXY COATING, A CORROSION INHIBITING CONCRETE ADMIXTURE MAY BE USED AT THE SPECIFIED DOSAGE RATE. A QUALIFIED PRODUCT LIST OF CORROSION INHIBITING ADMIXTURES IS ON FILE AT THE LABORATORY. MANUFACTURERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR MAY AFFECT THE STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE MANUFACTURER'S CHOICE TO USE ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING ALL DESIGN REQUIREMENTS. DO NOT ALLOW THE DIMENSIONS OF THE REINFORCING STEEL TO VARY BY MORE THAN 1/4 INCH. PERMANENTLY MARK EACH PANEL TO INDICATE THE FACE TO BE PLACED AGAINST THE SOIL. PLACE THE PANEL BETWEEN THE FLANGES OF THE SOLDIER PILES AND BEARING AGAINST THE FLANGES ON THE EXPOSED SIDE OF THE WALL.

THE DEPARTMENT WILL PAY FOR PRECAST LAGGING AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR ITEM SPECIAL, RETAINING WALL, PRECAST CONCRETE LAGGING.

ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES W27X146

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBERS THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50. SOLDIER PILES SHALL HAVE A COAL TAR EPOXY COATING. DO NOT FIELD WELD OR SPLICE STEEL SOLDIER PILES; WITH PANEL SEATS BEING THE EXCEPTION.

MEASUREMENT FOR PAYMENT WILL BE LIMITED TO THE DISTANCE BETWEEN THE TOP OF WALL ELEVATION AND THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR SOLDIER PILES AT THE CONTRACT UNIT PRICE PER FOOT OF ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES - W27X146

CONTROL POINTS

STATION	OFFSET	NORTHING	EASTING	ELEVATION	FEATURE
1063+67.44	16.03' LT	284,546.553	2,047,572.212	555.363	IRON PIN
1067+90.70	16.66' LT	284,967.993	2,047,521.206	556.007	IRON PIN
1073+48.13	15.67' RT	285,524.944	2,047,498.038	564.875	IRON PIN

SURVEYING POSITIONAL PARAMETERS

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

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011) (epoch 2010.0)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, SOUTH ZONE
COMBINED SCALE FACTOR: N/A

UNITS:
FURNISH UNITS IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

STAKEOUT COORDINATES FOR S.R. 7

STATION		NORTHING	EASTING
POT	1054+80.81	283,660.060	2,047,594.629
POT	1073+41.31	285,518.808	2,047,513.985

ITEM 511 CLASS QC1 CONCRETE, FOOTING, AS PER PLAN

ALL REQUIREMENTS OF CMS 511 SHALL BE FOLLOWED, EXCEPT THE CONTRACTOR WILL BE PERMITTED TO LOAD THE CONCRETE PAD ONE DAY AFTER PLACEMENT.

ITEM 524 DRILLED SHAFTS, MISC.: PERMANENT CASING

PERMANENT CASING, PER CMS 524.06, SHALL BE USED, AS DIRECTED BY THE ENGINEER, FOR THE INSTALLATION OF DRILLED SHAFTS. PERMANENT CASING CONSTRUCTION SHALL BE PER CMS 524.04D. THE PERMANENT CASING SHALL BE EXTENDED TO THE TOP OF BEDROCK.

PAYMENT IS FULL COMPENSATION FOR FURNISHING AND PLACING THE PERMANENT CASING.

COORDINATES FOR KING PILES

DRILLED SHAFT NO.	CENTERLINE OF WALL STATION	NORTHING	EASTING
1	11+50.61	284810.73	2047571.23
2	11+56.36	284816.48	2047570.98
3	11+62.11	284822.22	2047570.73
4	11+67.86	284827.97	2047570.48
5	11+73.61	284833.71	2047570.23
6	11+79.36	284839.46	2047569.98
7	11+85.11	284845.20	2047569.74
8	11+90.86	284850.95	2047569.49
9	11+96.61	284856.69	2047569.24
10	12+02.36	284862.43	2047568.99
11	12+08.11	284868.18	2047568.74
12	12+13.86	284873.92	2047568.49
13	12+19.61	284879.67	2047568.24
14	12+25.36	284885.41	2047567.99
15	12+31.11	284891.16	2047567.74
16	12+36.86	284896.90	2047567.49
17	12+42.61	284902.65	2047567.24
18	12+48.36	284908.39	2047566.99
19	12+54.11	284914.14	2047566.74
20	12+59.86	284919.88	2047566.50
21	12+65.61	284925.62	2047566.25
22	12+71.36	284931.37	2047566.00
23	12+77.11	284937.11	2047565.75
24	12+82.86	284942.86	2047565.50
25	12+88.61	284948.60	2047565.25
26	12+94.36	284954.35	2047565.00
27	13+00.11	284960.09	2047564.75
28	13+05.86	284965.84	2047564.50
29	13+11.61	284971.58	2047564.25
30	13+17.36	284977.33	2047564.00
31	13+23.11	284983.07	2047563.75
32	13+28.86	284988.82	2047563.50
33	13+34.61	284994.56	2047563.26
34	13+40.36	285000.30	2047563.01
35	13+46.11	285006.05	2047562.76
36	13+51.86	285011.79	2047562.51
37	13+57.61	285017.54	2047562.26
38	13+63.36	285023.28	2047562.01
39	13+69.11	285029.03	2047561.76

COORDINATES FOR KING PILES (CONT.)

DRILLED SHAFT NO.	CENTERLINE OF WALL STATION	NORTHING	EASTING
40	13+74.86	285034.77	2047561.51
41	13+80.61	285040.52	2047561.26
42	13+86.36	285046.26	2047561.01
43	13+92.11	285052.01	2047560.76
44	13+97.86	285057.75	2047560.51
45	14+03.61	285063.50	2047560.26
46	14+09.36	285069.24	2047560.02
47	14+15.11	285074.98	2047559.77
48	14+20.86	285080.73	2047559.52
49	14+26.61	285086.47	2047559.27
50	14+32.36	285092.22	2047559.02
51	14+38.11	285097.96	2047558.77
52	14+43.86	285103.71	2047558.52
53	14+49.61	285109.45	2047558.27
54	14+55.36	285115.20	2047558.02
55	14+61.11	285120.94	2047557.77
56	14+66.86	285126.69	2047557.52
57	14+72.61	285132.43	2047557.27
58	14+78.36	285138.17	2047557.02
59	14+84.11	285143.92	2047556.78
60	14+89.86	285149.66	2047556.53
61	14+95.61	285155.41	2047556.28
62	15+01.36	285161.15	2047556.03
63	15+07.11	285166.90	2047555.78
64	15+12.86	285172.64	2047555.53
65	15+18.61	285178.39	2047555.28
66	15+24.36	285184.13	2047555.03
67	15+30.11	285189.88	2047554.78
68	15+35.86	285195.62	2047554.53
69	15+41.61	285201.37	2047554.28
70	15+47.36	285207.11	2047554.03
71	15+53.11	285212.85	2047553.78
72	15+58.86	285218.60	2047553.54
73	15+64.61	285224.34	2047553.29
74	15+70.36	285230.09	2047553.04
75	15+76.11	285235.83	2047552.79
76	15+81.86	285241.58	2047552.54
77	15+87.61	285247.32	2047552.29
78	15+93.36	285253.07	2047552.04

SUPERELEVATION TABLE

P.I. STATION N/A | DC = N/A

LEFT SIDE					CENTERLINE CONTROL		RIGHT SIDE					REMARKS
EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	TRANSITION RATE	EDGE ELEVATION	
556.28	-	-0.253	-0.0202	12.5	1066 + 00.00	556.53	12.5	-0.0140	-0.18	-	556.36	MATCH EX.
556.56	952	-0.226	-0.0181	12.5	1066 + 25.00	556.79	12.5	-0.0150	-0.19	-2000	556.60	-
556.79	952	-0.200	-0.0160	12.5	1066 + 50.00	556.99	12.5	-0.0160	-0.20	-2000	556.79	N.C. (RT/LT)
-	-	-	-	-	- + -	-	-	-	-	-	-	N.C. (RT/LT)
671.64	-	-0.200	-0.0160	12.5	1070 + 75.00	671.84	12.5	-0.0160	-0.20	-	671.64	N.C. (RT/LT)
673.08	5000	-0.195	-0.0156	12.5	1071 + 00.00	673.27	12.5	-0.0174	-0.22	-1429	673.05	MATCH EX. (RT)
561.81	5000	-0.190	-0.0152	12.5	1071 + 25.00	562.00	-	-	-	-	-	MATCH EX.

GENERAL NOTES

DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.04 TOTAL P.48

GAL-7-19.94

MODEL: SHEET 2 - SURVEY PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:54:45 AM USER: jwiseman
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ITEM 614, MAINTAINING TRAFFIC

A MINIMUM OF ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT, THE COMPLETED PAVEMENT, ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AND ITEM 615 ROADS FOR MAINTAINING TRAFFIC.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

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

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 614, BARRIER REFLECTORS AND/OR OBJECT MARKERS

BARRIER REFLECTORS AND/OR OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL. BARRIER REFLECTORS, OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO CMS 626, EXCEPT THAT THE SPACING SHALL BE 50 FEET

LIGHTING

LIGHTING SHALL BE PROVIDED AT EACH END OF THE LANE CLOSURE FOR THE CLOSING OF ONE LANE OF A TWO LANE HIGHWAY.

LIGHTING SHALL BE BY CONVENTIONAL METHODS, WITH LUMINAIRE ARMS ATTACHED TO THE SIGNAL SUPPORTS. AREA ILLUMINATION SHALL BE PROVIDED BY USING AN 8000-LUMEN LED, 150 WATT MINIMUM HIGH PRESSURE SODIUM LUMINARIES OR 250 WATT MINIMUM MERCURY LUMINARIES. THE MINIMUM HEIGHT OF THE LUMINAIRE SHALL BE 27 FT FROM THE GROUND SURFACE.

PAYMENT FOR LIGHTING SHALL INCLUDE DELIVERY, ERECTION, MAINTENANCE AND REMOVAL AS CALLED FOR IN THE PLANS. PAYMENT SHALL BE PER EACH.

ITEM 614 - WORK ZONE LIGHTING SYSTEM 1 EACH
QUANTITY CARRIED TO THE GENERAL SUMMARY.

SEQUENCE OF CONSTRUCTION

PHASE 1:

1. WHILE USING FLAGGERS, INSTALL PORTABLE BARRIERS, IMPACT ATTENUATORS, SIGNALS, DELINEATORS, AND SIGNS TO PERFORM PART-WIDTH CONSTRUCTION OF THE PROPOSED CONDUIT AND PAVEMENT FOR MAINTAINING TRAFFIC. WORK PERFORMED SHALL BE IN ACCORDANCE WITH SCD'S MT-96.11, MT-96.20, MT-96.26, MT-97.10, MT-101.70, AND MT-101.75.
2. REMOVE PAVEMENT AND INSTALL PROPOSED CONDUIT, WHILE MAINTAINING DRAINAGE THROUGH THE EXISTING CONDUIT.
3. PLACE LOW STRENGTH MORTAR BACKFILL AND PLACE PROPOSED PAVEMENT TO MATCH EXISTING PROFILE AND INSTALL TEMPORARY PAVEMENT.

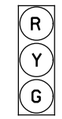
PHASE 2:

1. WHILE USING FLAGGERS, MOVE PORTABLE BARRIERS, IMPACT ATTENUATORS, DELINEATORS, SIGNS, AND PLACE PAVEMENT MARKINGS FOR INSTALLING THE DRILLED SHAFT WALL. WORK PERFORMED SHALL BE IN ACCORDANCE WITH SCD'S MT-96.11, MT-96.20, MT-96.26, MT-97.10, MT-101.70, AND MT-101.75.
2. CONSTRUCT DRILLED SHAFT, SOLDIER PILE WALL.
3. COMPLETE PART-WIDTH CONSTRUCTION OF CULVERT, PERTINENT LOW STRENGTH MORTAR BACKFILL, PLUG AND FILL EXISTING CONDUIT, AND PAVEMENT REPLACEMENT.
4. PERFORM PAVEMENT REPAIR.

PHASE 3:

1. WHILE USING FLAGGERS, REMOVE PORTABLE BARRIERS, INSTALL BARRELS, DELINEATORS, AND SIGNS TO PLACE PAVEMENT OVERLAY, PAVEMENT MARKINGS AND GUARDRAIL. WORK PERFORMED SHALL BE IN ACCORDANCE WITH SCD'S MT-96.11, MT-96.20, MT-96.26, MT-97.10, MT-101.70, AND MT-101.75.
2. COMPLETE PAVEMENT REPLACEMENT, OVERLAY, FINAL MARKINGS, AND INSTALL GUARDRAIL.
3. USING FLAGGERS REMOVE MAINTENANCE OF TRAFFIC DEVICES.

1-2-3-4-
5-6

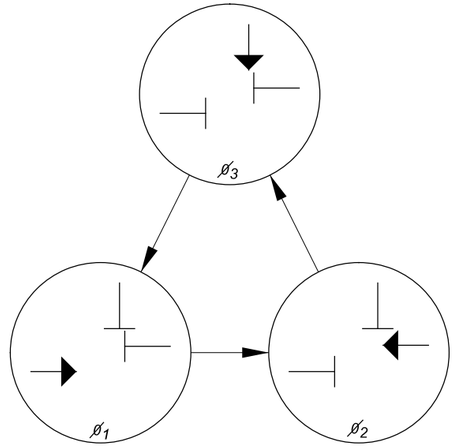


12 INCH

SIGNAL INDICATORS

COLOR SEQUENCE CHART

INDICATORS FACINGS	No	Ø1			Ø2			Ø3		
		1	2	3	1	2	3	1	2	3
NORTH BOUND SR 7	1	G	Y	R	R	R	R	R	R	R
	2	G	Y	R	R	R	R	R	R	R
SOUTH BOUND SR 7	3	R	R	R	G	Y	R	R	R	R
	4	R	R	R	G	Y	R	R	R	R
DRIVEWAY AT STA. 1071+10	5	R	R	R	R	R	R	G	Y	R
	6	R	R	R	R	R	R	G	Y	R



PHASING DIAGRAM

TIMING CHART

INTERVAL	Ø1			Ø2			Ø3		
	1	2	3	1	2	3	1	2	3
GREEN	36			36			3		
YELLOW CHANGE		3			3			3	
ALL RED CLEARANCE			24			24			18
CYCLE LENGTH	150								

GENERAL NOTES

GAL-7-19.94

MODEL: SHEET 4 - MOT PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:49:46 AM USER: jwiseman
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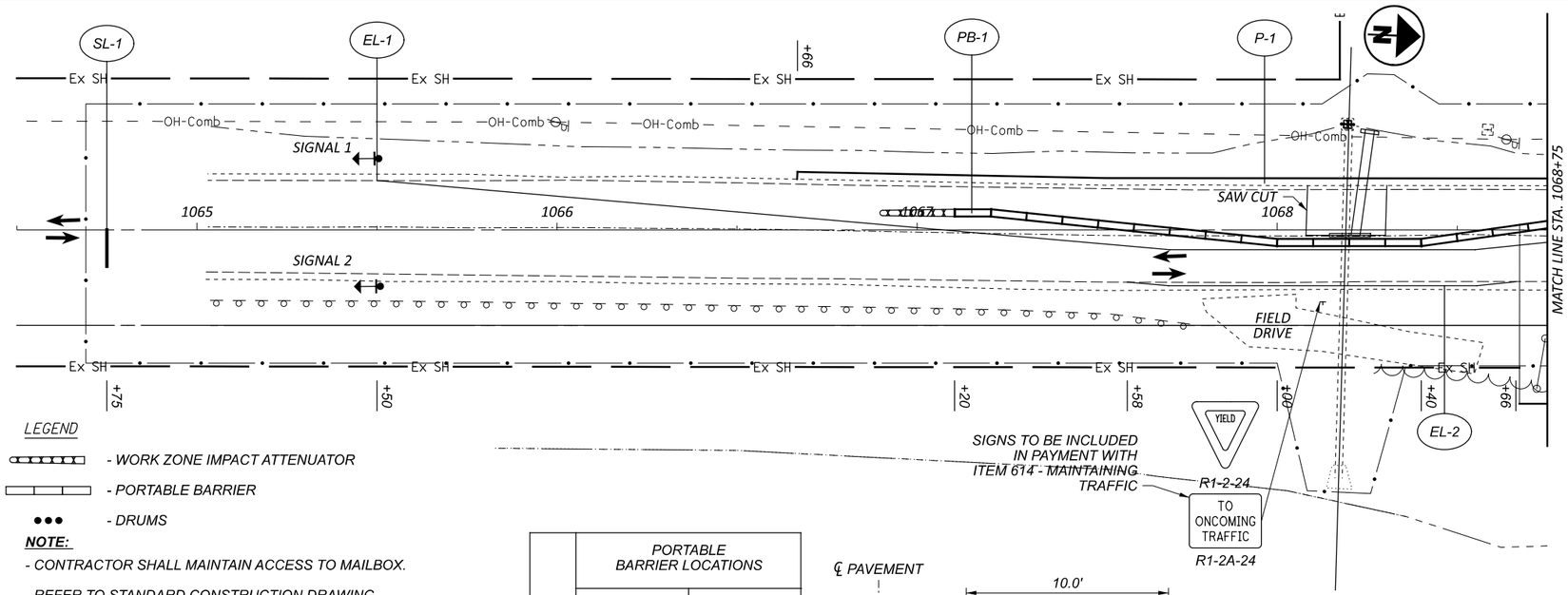
DESIGN AGENCY

DESIGNER JDW

REVIEWER XXX MM-DD-YY

PROJECT ID 115533

SHEET P.05 TOTAL P.48



LEGEND

- WORK ZONE IMPACT ATTENUATOR
- PORTABLE BARRIER
- DRUMS

NOTE:

- CONTRACTOR SHALL MAINTAIN ACCESS TO MAILBOX.

- REFER TO STANDARD CONSTRUCTION DRAWING MT-96.11 FOR SIGN PLACEMENT AND FURTHER DETAILS.

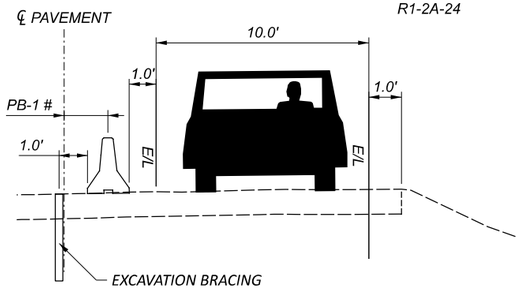
CONSTRUCTION SEQUENCE

- WHILE USING FLAGGERS, INSTALL THE PORTABLE BARRIER (PB), WORK ZONE IMPACT ATTENUATORS, TEMPORARY PAVEMENT MARKINGS, AND TRAFFIC SIGNALS AS SHOWN ON THIS SHEET.
- USING SIGNALS, MAINTAIN TWO WAY, ONE LANE TRAFFIC IN THE NORTH BOUND LANE OF S.R. 7.
- CONSTRUCT PARTIAL WIDTH OF PROPOSED CONDUIT, WHILE USING THE EXISTING CONDUIT TO MAINTAIN DRAINAGE DURING PHASE 1.
- PLACE PROPOSED PAVEMENT AND TEMPORARY PAVEMENT FOR PHASE 2.

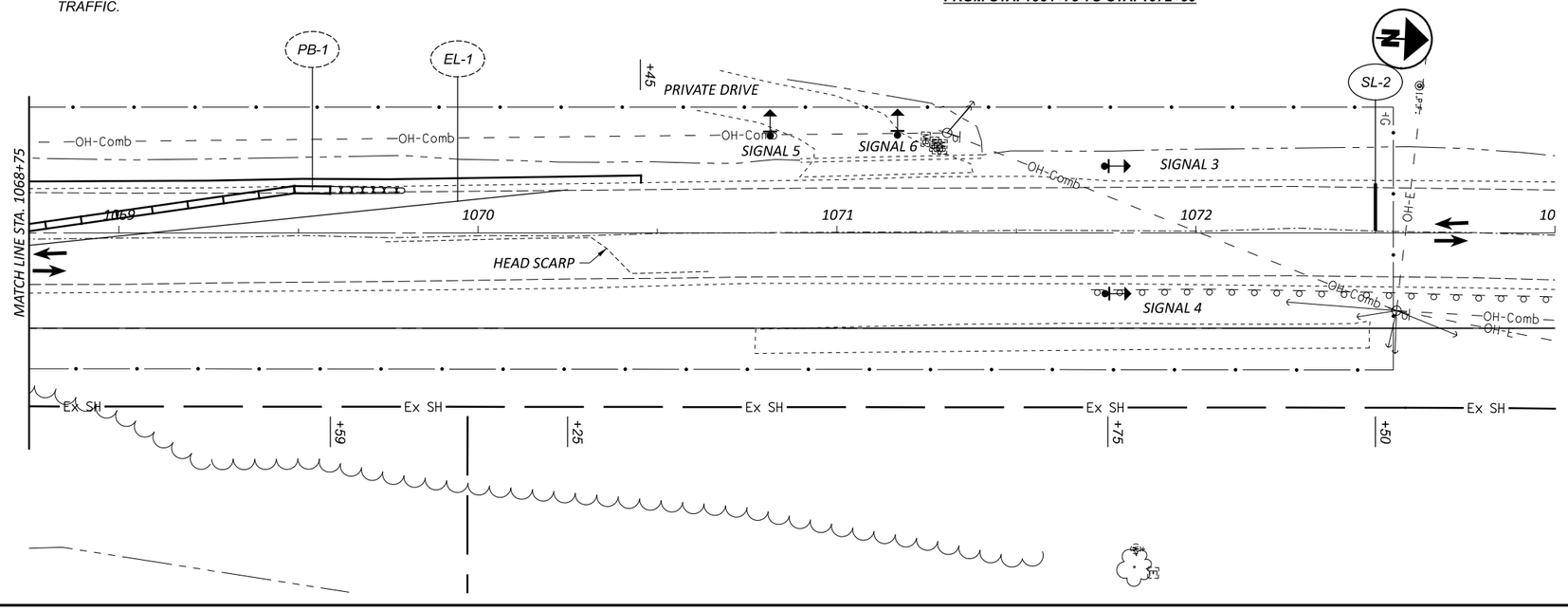
* - CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING SHOULDER ACCESS. LABOR AND MATERIAL WILL BE INCLUDED WITH PAYMENT IN ITEM 614 - MAINTAINING TRAFFIC.

	PORTABLE BARRIER LOCATIONS	
	STATION	OFFSET
PB-1 #	1067+10	5.6' LT
	1067+20	5.6' LT
	1068+00	1.8' RT
	1068+40	2.0' RT
	1069+49	12.8' LT
	1069+59	12.8' LT

THE PB OFFSETS ARE FROM THE ℄ OF PAVEMENT TO THE CENTER OF THE PB



TYPICAL SECTION FOR MAINTAINING TRAFFIC FROM STA. 1064+75 TO STA. 1072+50



REF NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE EDGE LINE, CLASS I	614 WORK ZONE STOP LINE	614 OBJECT MARKER, TWO WAY	614 BARRIER REFLECTOR, TYPE 1	614 WORK ZONE IMPACT ATTEN.	622 PORTABLE BARRIER	615 PAVEMENT FOR MAINT. TRAFFIC, TYPE B	615 ROADS FOR MAINT. TRAFFIC
				MILE	FEET	EACH	EACH	EACH	FEET	SY	LUMP
EL-1	1065+50	1070+25	LT/RT	0.09							
EL-2	1067+58	1068+66	RT	0.02							
SL-1	1064+75	1072+50	RT		12						
SL-2			LT		12						
PB-1	1067+10	1069+59	LT/RT			5	5	2	250	85	LUMP
P-1	1066+66	1070+45	RT			5	5				
TOTALS CARRIED TO GENERAL SUMMARY				0.11	24	5	5	2	250	85	LUMP

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC PHASE 1

DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.06 TOTAL P.48

GAL-7-19.94

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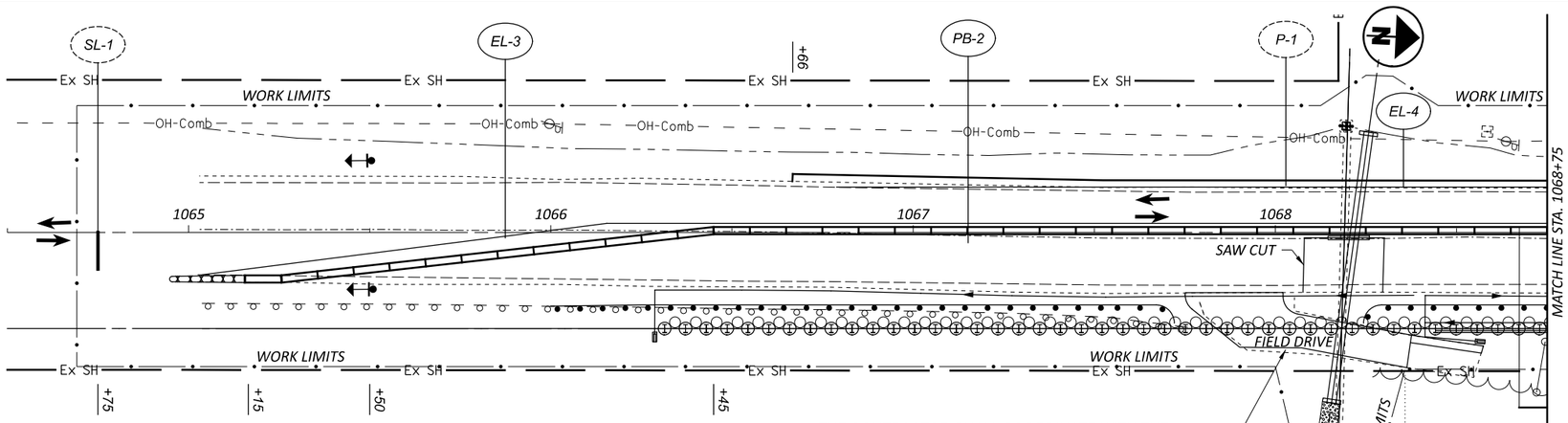


LEGEND

- WORK ZONE IMPACT ATTENUATOR
- PORTABLE BARRIER
- DRUMS

NOTE:

- CONTRACTOR SHALL MAINTAIN ACCESS TO MAILBOX.
- REFER TO STANDARD CONSTRUCTION DRAWING MT-96.11 FOR SIGN PLACEMENT AND FURTHER DETAILS.

CONSTRUCTION SEQUENCE

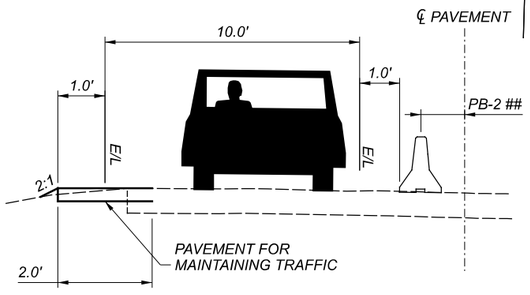
- WHILE USING FLAGGERS, INSTALL THE PORTABLE BARRIER (PB), WORK ZONE IMPACT ATTENUATORS, TEMPORARY PAVEMENT MARKINGS, AND TRAFFIC SIGNALS AS SHOWN ON THIS SHEET.
- USING SIGNALS, MAINTAIN TWO WAY, ONE LANE TRAFFIC IN THE SOUTH BOUND LANE OF S.R. 7.
- CONSTRUCT DRILLED SHAFT RETAINING WALL.
- REMOVE PORTION OF EXISTING CONDUIT NECESSARY TO INSTALL DRILLED SHAFT.
- COMPLETE INSTALLATION OF PROPOSED CONDUIT AND PLUG AND FILL REMAINING EXISTING CONDUIT.

* - CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING SHOULDER ACCESS. LABOR AND MATERIAL WILL BE INCLUDED WITH PAYMENT IN ITEM 614 - MAINTAINING TRAFFIC.

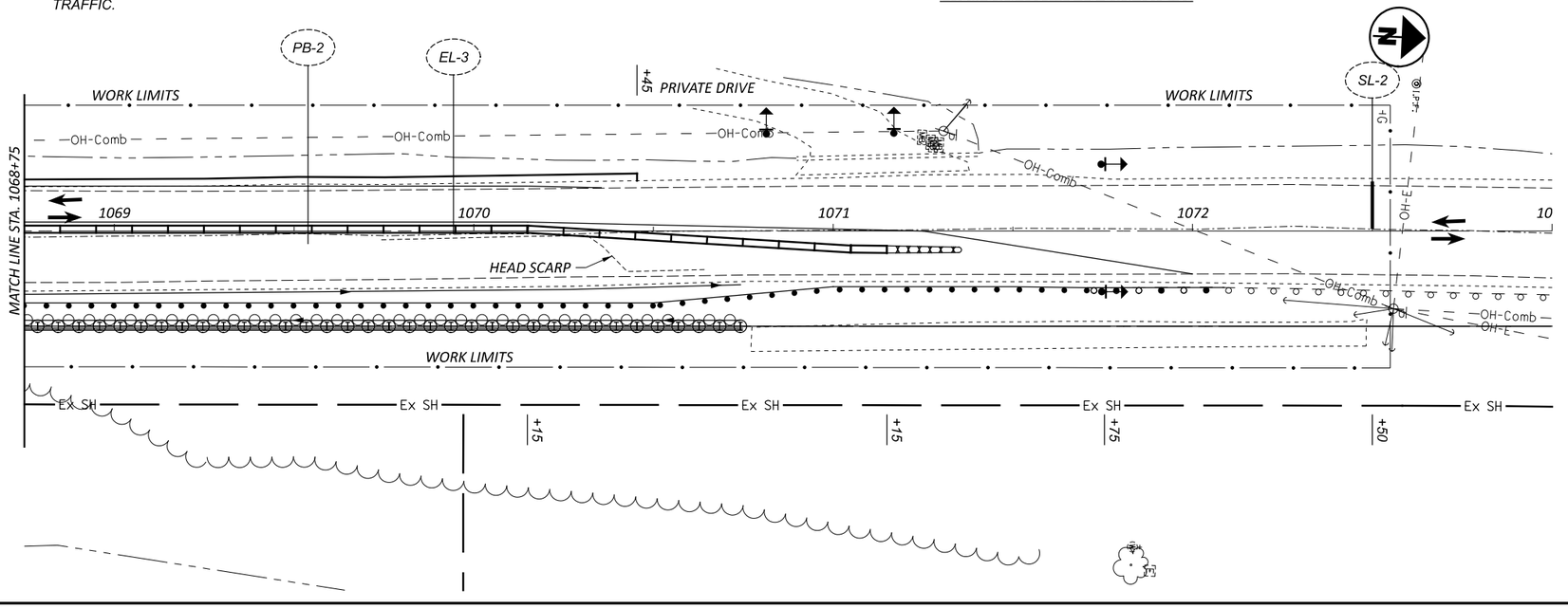
	PORTABLE BARRIER LOCATIONS	
	STATION	OFFSET
PB-2 ##	1065+15	12.8' RT
	1065+25	12.8' RT
	1066+45	0.5' LT
	1070+15	0.5' LT
	1071+05	5.0' RT
	1071+15	5.0' RT

THE PB OFFSETS ARE FROM THE ℄ OF CONSTRUCTION TO THE CENTER OF THE PB

THE CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNER(S) TO PROVIDE INGRESS AND EGRESS TO ALLOW PROPERTY OWNER(S) ACCESS TO PROPERTY ALONG THE RIVER, EXCEPT FOR THE TIME REQUIRED TO DRILL KING PILES No. 27 THROUGH No. 37 AND PLUG PILES No. 26 THROUGH No. 36. ACCESS SHALL BE A MINIMUM OF 6FT WIDE DURING PHASE 2 OF CONSTRUCTION.



TYPICAL SECTION FOR MAINTAINING TRAFFIC FROM STA. 1064+75 TO STA. 1072+50



REF NO.	STATION FROM	STATION TO	SIDE	614 WORK ZONE IMPACT ATTEN. EACH	614 BARRIER REFLECTOR, TYPE 1 EACH	614 OBJECT MARKER, TWO WAY EACH	615 ROADS FOR MAINT. TRAFFIC LUMP	614 WORK ZONE EDGE LINE, CLASS I MILE	622 PORTABLE BARRIER FEET
EL-3	1065+50	1070+25	LT/RT					0.13	
EL-4	1066+78	1070+35	RT					0.07	
PB-2	1067+10	1069+59	LT/RT	2	12	12	LUMP		600
P-1	1067+81	1068+57	RT						
TOTALS CARRIED TO GENERAL SUMMARY				2	12	12	LUMP	0.20	600

HORIZONTAL SCALE IN FEET
0 10 20 40

MAINTENANCE OF TRAFFIC PHASE 2

DESIGN AGENCY

DESIGNER JDW

REVIEWER XXX MM-DD-YY

PROJECT ID 115533

SHEET P.07 TOTAL P.48

GAL-7-19.94

MODEL: CLX_RW_SR9 - Plan 1 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:50:17 AM USER: jwiseman
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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
10	12	13	25	30							01/NHS/06	02/NHS/17							
																		ROADWAY	
											LUMP	LUMP		201	11000	LS		CLEARING AND GRUBBING	3
		76	62								76	62		202	23001	138	SY	PAVEMENT REMOVED, AS PER PLAN	13, 25
			5									5		202	35100	5	FT	PIPE REMOVED, 24" DIAMETER AND UNDER	
	214										214			202	38000	214	FT	GUARDRAIL REMOVED	
	2										2			202	42206	2	EACH	ANCHOR ASSEMBLY REMOVED	
			1									1		202	58100	1	EACH	CATCH BASIN REMOVED	
			93									93		SPECIAL	20270000	93	FT	FILL AND PLUG EXISTING CONDUIT24"	25
	1										1			202	98100	1	EACH	REMOVAL MISC.:STAND PIPE	12
			1									1		202	98100	1	EACH	REMOVAL MISC.:CONCRETE OUTLET APRON	25
156											156			203	10000	156	CY	EXCAVATION	
236											236			203	20000	236	CY	EMBANKMENT	
273		76									349			204	10000	349	SY	SUBGRADE COMPACTION	
254											254			254	01001	254	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLANVARIABLE DEPTH	3
	200										200			606	15050	200	FT	GUARDRAIL, TYPE MGS	
	337.5										337.5			606	15100	337.5	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
	2										2			606	20050	2	EACH	ROUNDED END SECTION	
	2										2			606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
																		EROSION CONTROL	
			3									3		601	32100	3	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
1,544											1,544			659	10000	1,544	SY	SEEDING AND MULCHING	
0.21											0.21			659	20000	0.21	TON	COMMERCIAL FERTILIZER	
0.32											0.32			659	31000	0.32	ACRE	LIME	
4.17											4.17			659	35000	4.17	MGAL	WATER	
											3,000	2,000		832	30000	5,000	EACH	EROSION CONTROL	
																		DRAINAGE	
			56									56		511	52110	56	CY	CLASS QC MS CONCRETE	
			1.2									1.2		602	20000	1.2	CY	CONCRETE MASONRY	
	443										443			605	06000	443	FT	4" BASE PIPE UNDERDRAINS	
			75									75		611	13200	75	FT	30" CONDUIT, TYPE A	
	2										2			611	99710	2	EACH	PRECAST REINFORCED CONCRETE OUTLET	
																		PAVEMENT	
56			16								56	16		301	56000	72	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
56		26	11								82	11		304	20000	93	CY	AGGREGATE BASE	
207			4								207	4		407	20000	211	GAL	NON-TRACKING TACK COAT	
138											138			408	10000	138	GAL	PRIME COAT	
106											106			441	50000	106	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
9			3								9	3		441	50200	12	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
68											68			441	70200	68	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449)	
		7									7			441	70500	7	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
29											29			617	10100	29	CY	COMPACTED AGGREGATE	
																		TRAFFIC CONTROL	
20											20			621	00100	20	EACH	RPM	
20											20			621	54000	20	EACH	RAISED PAVEMENT MARKER REMOVED	
	12										12			626	00110	12	EACH	BARRIER REFLECTOR, TYPE 2(BIDIRECTIONAL)	
0.3											0.3			642	00104	0.3	MILE	EDGE LINE, 6", TYPE 1	
0.15											0.15			642	00300	0.15	MILE	CENTER LINE, TYPE 1	
																		RETAINING WALLS	
				3,706							3,706			507	00400	3,706	FT	STEEL PILES, MISC.:SOLDIER PILES, W27X146	3,4,26-31
20											20			511	46511	20	CY	CLASS QC1 CONCRETE, FOOTING, AS PER PLAN	4
137											137			518	21200	137	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
	233										233			518	40000	233	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
	38										38			518	40012	38	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE	

GENERAL SUMMARY

DESIGN AGENCY

DESIGNER JDW

REVIEWER XXX MM-DD-YY

PROJECT ID 115533

SHEET P.08 TOTAL P.48

GAL-7-19.94

MODEL: SHEET 1 PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:50:24 AM USER: jwiseman
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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	7	25	27	30	31					01/NHS/06	02/NHS/17							
																		RETAINING WALLS (CONTINUED)	
						950					950			524	94703	950	FT	DRILLED SHAFTS, 36" DIAMETER, ABOVE BEDROCK, AS PER PLAN	3,4,26-31
					2,664						2,664			524	94803	2,664	FT	DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN	3,4,26-31
					780						780			524	94805	780	FT	DRILLED SHAFTS, 42" DIAMETER, INTO BEDROCK, AS PER PLAN	3,4,26-31
					3						3			524	95000	3	FT	DRILLED SHAFTS, MISC.:EXTENSION	3,4,26-31
						950					950			524	95000	950	FT	DRILLED SHAFTS, MISC.:36" PERMANENT CASING	3,4,26-31
					2,664						2,664			524	95000	2,664	FT	DRILLED SHAFTS, MISC.:42" PERMANENT CASING	3,4,26-31
				1,320							1,320			SPECIAL	53051010	1,320	SF	RETAINING WALL, PRECAST CONCRETE LAGGING	3,4,26-31
																		MISCELLANEOUS STRUCTURE	
			LUMP									LUMP		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
																		MAINTENANCE OF TRAFFIC	
	2	2									4			614	12384	4	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
1											1			614	12740	1	EACH	WORK ZONE LIGHTING SYSTEM	
	5	12									17			614	13310	17	EACH	BARRIER REFLECTOR, TYPE 1(BIDIRECTIONAL)	
	5	12									17			614	13360	17	EACH	OBJECT MARKER, TWO WAY	
	0.11	0.2									0.31			614	22010	0.31	MILE	WORK ZONE EDGE LINE, CLASS I, 6"	
	24										24			614	26000	24	FT	WORK ZONE STOP LINE, CLASS I	
	LUMP	LUMP									LUMP	LUMP		615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
	85										85			615	25000	85	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	
	250	600									850			622	41100	850	FT	PORTABLE BARRIER, UNANCHORED	
																		INCIDENTALS	
											LUMP	LUMP		614	11000	LS		MAINTAINING TRAFFIC	
											LUMP	LUMP		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LUMP	LUMP		624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

GAL-7-19.94

MODEL: SHEET 2 PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:50:24 AM USER: jwiseman
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DESIGN AGENCY

DESIGNER JDW

REVIEWER XXX MM-DD-YY

PROJECT ID 115533

SHEET P.09 | TOTAL P.48

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22

(OVERLAY)
STA. 1064+75 TO STA. 1072+50
775 FT x AVG. 29.5 FT x (1.5 IN/12)/27 = 105.8 CY

A TOTAL OF 106 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)

(PAVEMENT REPAIR)
STA. 1066+28 TO STA. 1070+74
446 FT x 4.0 FT x (1.5 IN/12)/27 = 8.3 CY

A TOTAL OF 9 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449)

(LEVELING COURSE - LEFT LANE)
STA. 1066+25 TO STA. 1067+00
75 FT x AVG. 14.1 FT x (AVG. 1.9 IN/12)/27 = 6.2 CY
STA. 1067+00 TO STA. 1068+08
108 FT x AVG.12.5 FT x (1.5 IN/12)/27 = 6.3 CY
STA. 1068+08 TO STA. 1068+30
SEE CULVERT DETAILS
STA. 1068+30 TO STA. 1069+00
70 FT x AVG. 12.4 FT x (AVG. 2.6 IN/12)/27 = 7.0 CY
STA. 1069+00 TO STA. 1070+00
100 FT x AVG. 13.0 FT x (1.5 IN/12)/27 = 6.0 CY
STA. 1070+00 TO STA. 1070+50
50 FT x AVG. 13.9 FT x (AVG. 2.1 IN/12)/27 = 4.5 CY

(LEVELING COURSE - RIGHT LANE)
STA. 1066+25 TO STA. 1068+08
183 FT x AVG. 12.4 FT x (AVG. 2.6 IN/12)/27 = 18.2 CY
STA. 1068+08 TO STA. 1068+30
SEE CULVERT DETAILS
STA. 1068+30 TO STA. 1068+75
45 FT x AVG. 12.5 FT x (AVG. 1.9 IN/12)/27 = 3.3 CY
STA. 1068+75 TO STA. 1069+50
75 FT x AVG. 12.5 FT x (1.5 IN/12)/27 = 4.3 CY
STA. 1069+50 TO STA. 1070+75
125 FT x AVG. 11.3 FT x (AVG. 2.6 IN/12)/27 = 11.3 CY

A TOTAL OF 68 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 304 - AGGREGATE BASE

(PAVEMENT REPAIR)
STA. 1066+28 TO STA. 1070+74
446 FT x 5.0 FT x (6 IN/12)/27 = 41.3 CY

(VARIABLE THICKNESS)
STA. 1066+28 TO STA. 1068+75
247 FT x 4.0 FT x (AVG. 3.0 IN/12)/27 = 9.1 CY
STA. 1069+50 TO STA. 1070+74
124 FT x 4.0 FT x (AVG. 3.0 IN/12)/27 = 4.6 CY

A TOTAL OF 56 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22

(PAVEMENT REPAIR)
STA. 1066+28 TO STA. 1070+74
446 FT x 4.5 FT x (9 IN/12)/27 = 55.8 CY

A TOTAL OF 56 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 407 - NON-TRACKING TACK COAT

RATE = 0.08 GAL/SY (APPLIED ONTO EXISTING PAVEMENT)

(OVERLAY - APPLIED TO EXISTING PAVEMENT)
STA. 1064+75 TO STA. 1066+28
153 FT x 29.5 FT / 9 x 0.08 = 40.1 GAL.
STA. 1066+28 TO STA. 1068+08
180 FT x 25.5 FT / 9 x 0.08 = 40.8 GAL.
STA. 1068+30 TO STA. 1070+74
244 FT x 25.5 FT / 9 x 0.08 = 55.3 GAL.
STA. 1070+74 TO STA. 1072+50
176 FT x 29.5 FT / 9 x 0.08 = 46.2 GAL.

RATE = 0.05 GAL/SY (APPLIED ONTO LEVELING COURSES)

(APPLIED TO PAVEMENT REPAIR, ASPHALT CONC. BASE)
STA. 1066+28 TO STA. 1070+74
446 FT x 4.5 FT / 9 x 0.05 = 11.2 GAL.

(OVERLAY - APPLIED TO PAVEMENT REPAIR, INTERMEDIATE)
STA. 1066+28 TO STA. 1070+74
446 FT x 4.0 FT / 9 x 0.05 = 9.9 GAL.

(OVERLAY - APPLIED TO PAVEMENT FOR CULVERT REPLACEMENT)
STA. 1068+08 TO STA. 1068+30
22 FT x 25.5 FT / 9 x 0.05 = 3.1 GAL.

A TOTAL OF 207 GAL TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 204 - SUBGRADE COMPACTION

(PAVEMENT REPAIR)
STA. 1066+28 TO STA. 1070+74
446 FT x 5.5 FT / (9 SY/SF) = 272.6 SY

A TOTAL OF 273 SY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 642 - EDGE LINE

STA. 1064+75 TO STA. 1072+50
2 X 775 FT / 5280 FT = 0.30 MILE

A TOTAL OF 0.30 MILE TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 642 - CENTERLINE

STA. 1064+75 TO STA. 1072+50
775 FT / 5280 FT = 0.15 MILE

A TOTAL OF 0.15 MILE TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 511 - CLASS QC1 CONCRETE, FOOTING, AS PER PLAN

STA. 1068+44 TO STA. 1070+74
230 FT x 4.0 FT x (6 IN / (12 IN/FT) / (27 CF/CY) = 19.2 CY

A TOTAL OF 20 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

(VARIABLE THICKNESS)
STA. 1064+75 TO STA. 1072+50
775 FT x AVG. 29.5 FT x 10% / 9 = 254.0 SY

A TOTAL OF 254 SY TO BE CARRIED TO THE GENERAL SUMMARY.

EARTHWORK, SEEDING AND MULCHING			
SHEET NO.	ITEM 203 EXCAVATION	ITEM 203 EMBANKMENT	ITEM 659 SEEDING AND MULCHING
	CY	CY	SY
14	3	5	77
15	12	14	163
16	14	6	151
17	17	11	135
18	49	23	262
19	14	27	144
20	14	27	130
21	18	65	224
22	12	47	161
23	3	11	97
24	0	0	0
TOTALS	156	236	1544

SEEDING AND MULCHING

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

659 - SEEDING AND MULCHING = 1544 SQ. YD.

659 - COMMERCIAL FERTILIZER 1544 SY x 1 TON/7410 SY = 0.209 TON

659 - LIME 1544 SQ. YD. x 9 / 43,560 = 0.32 ACRES

659 - WATER 1544 SY x 0.0027M. GAL/SY = 4.17 M. GAL.

TOTALS TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 621 - RPM / RPM REMOVED

STA. 1064+75 TO STA. 1072+50
775 FT / 40 FT SPACING = 20 EA

A TOTAL OF 20 EA TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 408 - PRIME COAT

STA. 1064+75 TO STA. 1072+50
2 x 775 FT x 2 FT / (9 SY/SF) X (0.4 GAL/SY) = 137.8 GAL

A TOTAL OF 138 GAL TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 617 - COMPACTED AGGREGATE

STA. 1064+75 TO STA. 1072+50
2 x 775 FT x 2 FT x (3 IN / 12) / 27 = 228.7 CY

A TOTAL OF 29 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 518 - POROUS BACKFILL W/ FABRIC				
STATION BASELINE OF WALL	HEIGHT	DEPTH	AREA	VOLUME
	FEET	FEET	SQ. FT.	CU. FT.
13+63.36				
	1.07	3.5	3.745	
	4.53	3.5	15.855	56.35
13+69.11				
	4.53	3.5	15.855	
	4.53	3.5	15.855	3464.32
15+87.61				
	4.53	3.5	15.855	
	1.13	3.5	42.9	168.92
15+93.36				
TOTAL (CY) CARRIED TO GENERAL SUMMARY				137

CALCULATIONS

GAL-7-19.94

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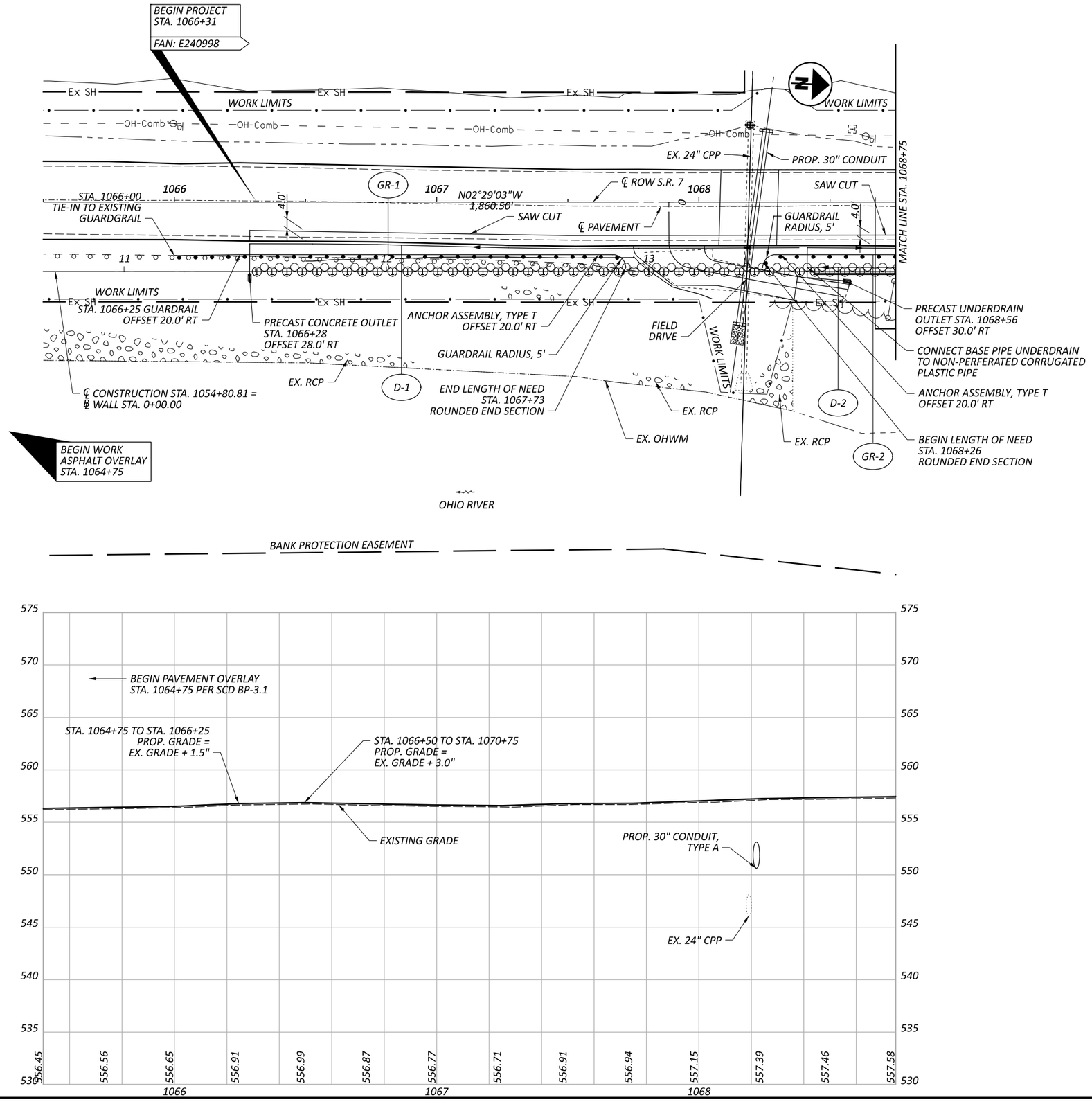
DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.10 TOTAL P.48



NOTE:

USE GUARDRAIL, TYPE MGS WITH LONG POSTS FROM STA. 1066+00 TO STA. 1067+73 AND FROM STA. 1068+26 TO STA. 1068+50

HORIZONTAL SCALE IN FEET
0 10 20 40

PLAN AND PROFILE
STA 1065+50 TO STA 1068+75

DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.11 TOTAL P.48

GAL-7-19.94

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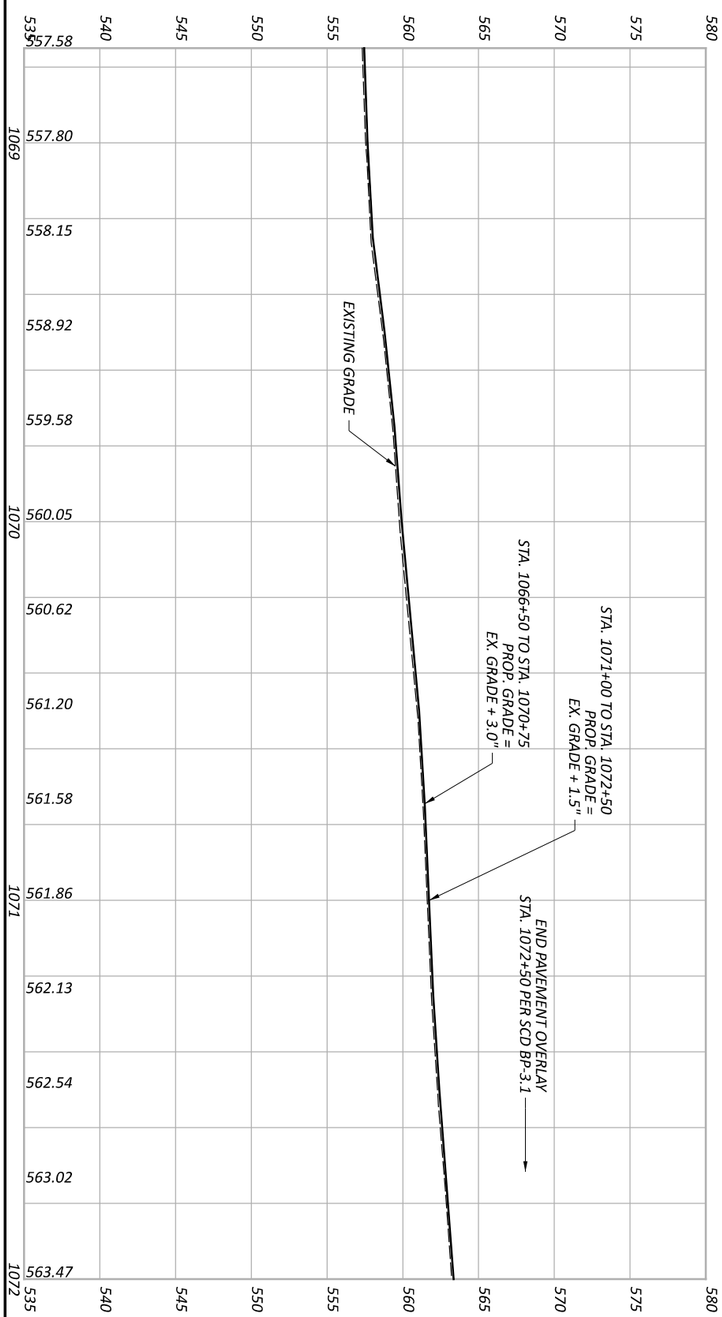
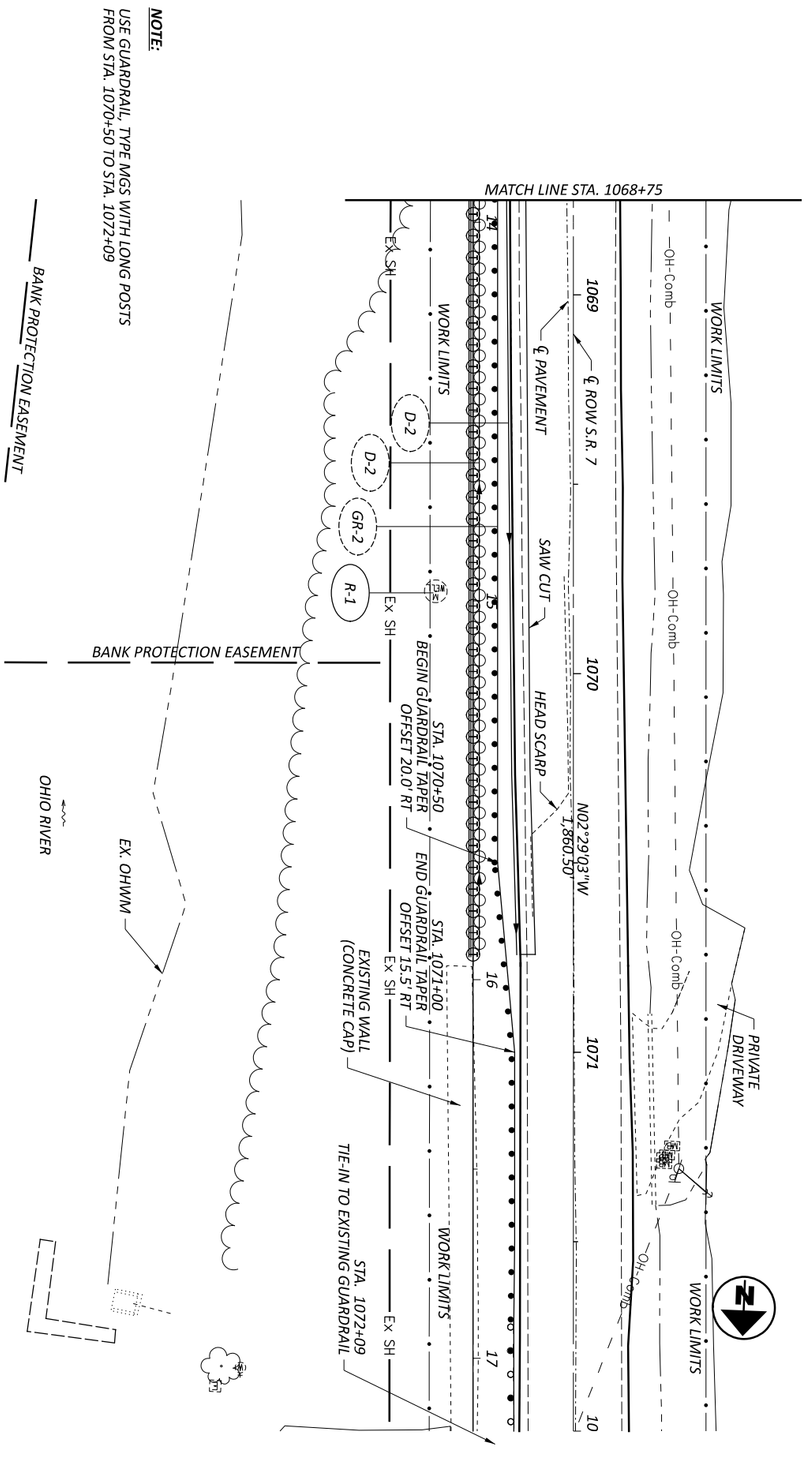


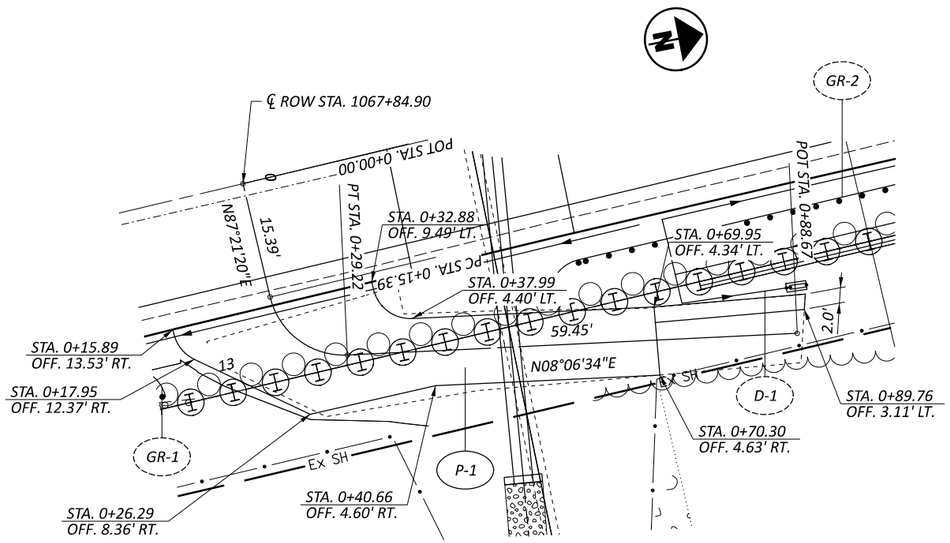


REF NO.	STATION FROM	STATION TO	SIDE	202 REMOVAL, MISC.: STAND PIPE	202 GUARDRAIL REMOVED	202 ANCHOR ASSEMBLY REMOVED	518 6" PERF. CORR. PLASTIC PIPE	518 6" NON-PERF. CORR. PLASTIC PIPE	605 4" BASEPIPE UNDERDRAIN	606 GUARDRAIL, TYPE MGS	606 GUARDRAIL, TYPE MGS W/ LONG POSTS	606 ANCHOR ASSEMBLY, TYPE T	606 ROUNDED END SECTION	611 PRECAST RE-INFORCED CONC. OUTLET	626 BARRIER REFLECTOR, TYPE 2
	FROM	TO		EACH	FT	EACH	FT	FT	FT	FT	FT	EACH	EACH	EACH	EACH
D-1	1066+28	1068+38	RT					12	210					1	
D-2	1068+41	1070+74	RT				233	26	233					1	
GR-1	1066+00	1067+73	RT		176	1					162.5	1	1		4
GR-2	1068+24	1072+09	RT		38	1				200	175	1	1		8
R-1	1069+78		RT	1											
TOTALS CARRIED TO GENERAL SUMMARY				1	214	2	233	38	443	200	337.5	2	2	2	12

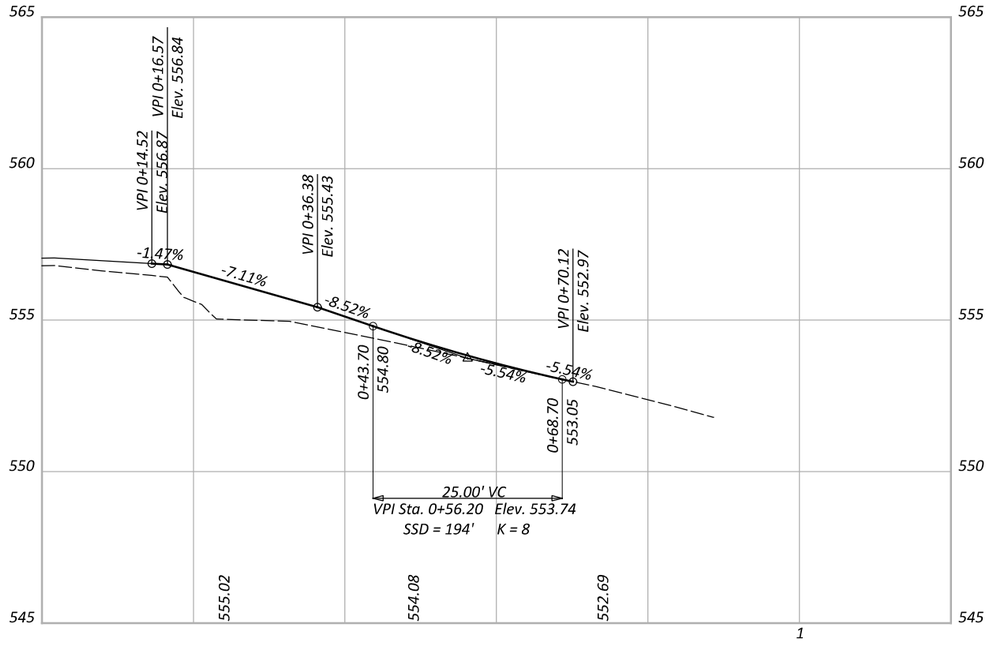
SHEET	PROJECT ID	DESIGNER	REVIEWER	DESIGN AGENCY
P.12 / TOTAL P.48	115533	JDW	XXX MM-DD-YY	

PLAN AND PROFILE
STA 1068+75 TO STA 1072+00

HORIZONTAL SCALE IN FEET
0 20
10 40



DRIVEWAY CURVE DATA
P.I. = STA. 0+23.67
Δ = 79°14'47" LT
Dc = 212°57'28"
R = 10.00'
T = 8.28'
L = 13.83'
E = 2.98'



ITEM 202 - PAVEMENT REMOVED, AS PER PLAN
THIS ITEM CONSISTS OF REMOVING THE EXISTING ASPHALT PAVEMENT FROM STA. 0+15 TO STA. 0+86. THE DEPTH OF THE PAVEMENT IS UNKNOWN. THE DRIVE PAVEMENT IS ESTIMATED TO BE LESS THAN 10" THICK. THE CONTRACTOR SHALL REMOVE PAVEMENT AS SHOWN, REGARDLESS OF THE DEPTH ENCOUNTERED IN THE FIELD.

ALL EQUIPMENT, MATERIALS, INCIDENTALS, PAVEMENT SAWING, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER:

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN - SY

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22, (DRIVEWAYS)
(DRIVEWAY STA. 1067+89)
STA. 0+15 TO STA. 0+66
637 SF (AREA FROM CADD) x (3.0 IN/12)/27 = 5.9 CY
STA. 0+66 TO STA. 0+86
2.0 FT x 20.0 FT x (3.0 IN/12)/27 = 0.4 CY

A TOTAL OF 7 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 304 - AGGREGATE BASE
(DRIVEWAY STA. 1067+89)
STA. 0+15 TO STA. 0+66
637 SF (AREA FROM CADD) x (12.0 IN/12)/27 = 23.6 CY
STA. 0+66 TO STA. 0+86
2.0 FT x 20.0 FT x (12.0 IN/12)/27 = 1.5 CY

A TOTAL OF 26 CY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 204 - SUBGRADE COMPACTION
(DRIVEWAY STA. 1067+89)
STA. 0+15 TO STA. 0+66
637 SF (AREA FROM CADD) / (9 SY/SF) = 70.8 SY
STA. 0+66 TO STA. 0+86
2.0 FT x 20.0 FT / (9 SF/SY) = 4.4 SY

A TOTAL OF 76 SY TO BE CARRIED TO THE GENERAL SUMMARY.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN
(DRIVEWAY STA. 1067+89)
STA. 0+15 TO STA. 0+66
621 SF (AREA FROM CADD) / (9 SY/SF) = 70.8 SY
STA. 0+66 TO STA. 0+86
2.0 FT x 20.0 FT / (9 SF/SY) = 4.4 SY

A TOTAL OF 76 SY TO BE CARRIED TO THE GENERAL SUMMARY.

TIEM 407 - NON-TRACKING TACK COAT
(DRIVEWAY STA. 1067+89)
STA. 0+15 TO STA. 0+66
637 SF (AREA FROM CADD) / 9 x (0.05 GAL/SY) = 3.5 GAL
STA. 0+66 TO STA. 0+86
2.0 FT x 20.0 FT / 9 x (0.05 GAL/SY) = 0.2 GAL

A TOTAL OF 4 GAL TO BE CARRIED TO THE GENERAL SUMMARY.

REF NO.	STATION FROM	STATION TO	SIDE	202 PAVEMENT REMOVED, APP EACH	204 SUBGRADE COMPACTION FT	304 AGGREGATE BASE EACH	441 ASPHALT CONC. SURF. COURSE, TYPE 1 FT
P-1	0+14	0+86	RT/LT	76	76	26	7
TOTALS CARRIED TO GENERAL SUMMARY				76	76	26	7

HORIZONTAL SCALE IN FEET
0 5 10 20

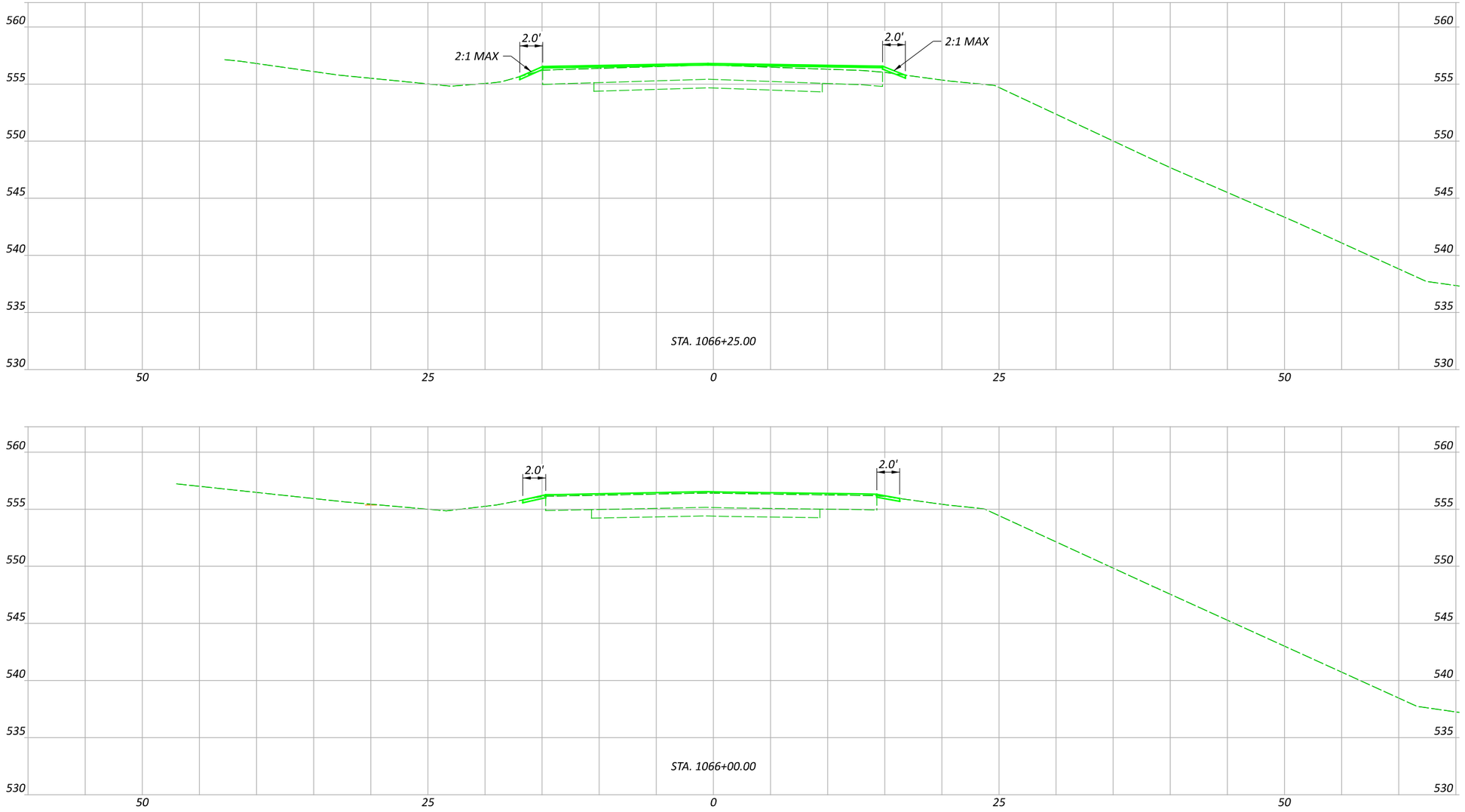
PLAN AND PROFILE: FIELD DRIVE STA. 1067+84.90

DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SHEET P.13 TOTAL P.48

GAL-7-19.94

SEEDING	
END WIDTH	SQ. YDS.
	49
	10
	28
	10
	77



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		3	5
0	0		
		0	0
0	0		
		3	5

CROSS SECTIONS
FROM STA. 1066+00 TO STA. 1066+25

GAL-7-19.94

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DESIGN AGENCY

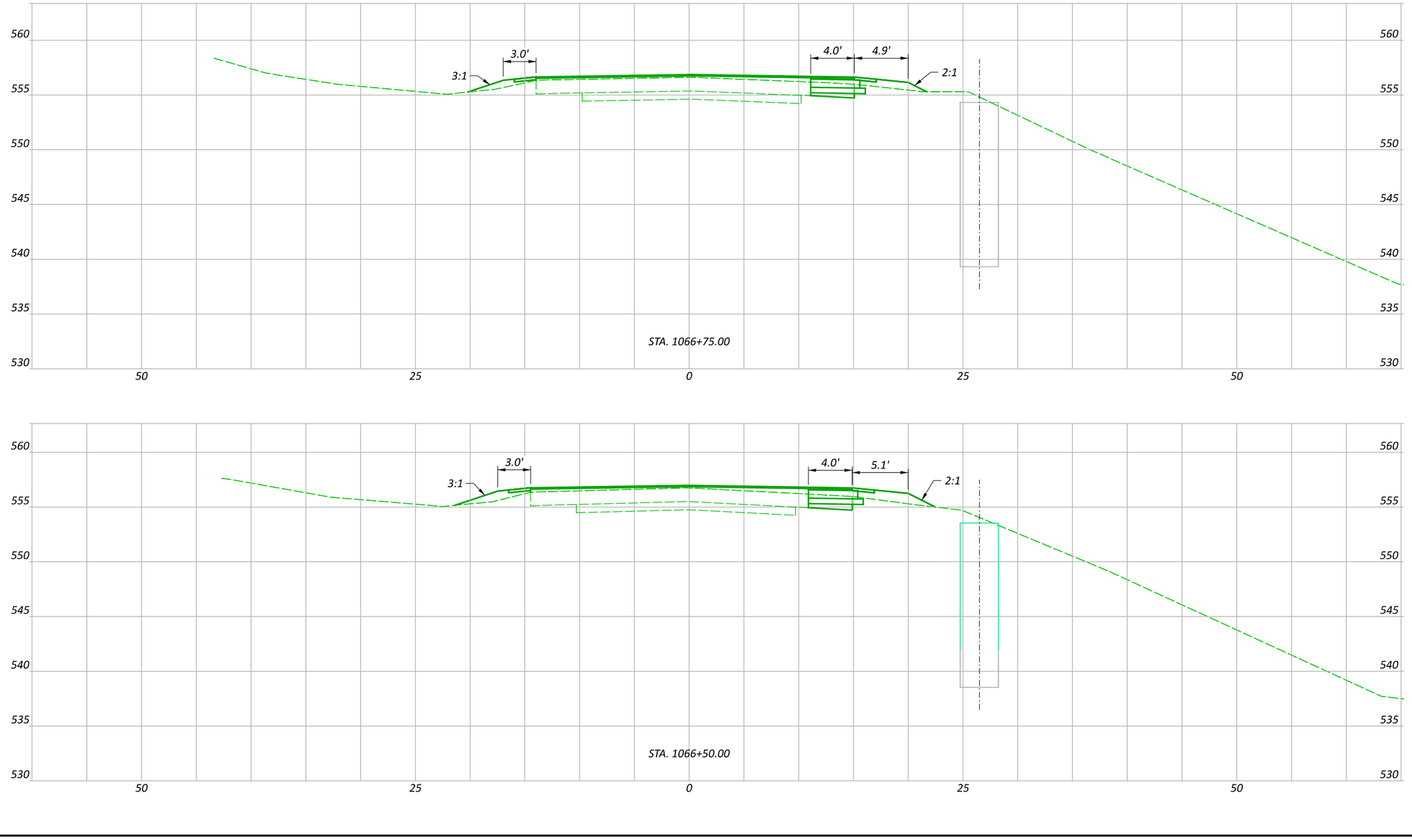
DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.14 | TOTAL P.48

SEEDING	
END WIDTH	SQ. YDS.
	85
	31
	78
	25
	163



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		6	6
6	7		
		6	8
6	10		
		12	14

CROSS SECTIONS
FROM STA. 1066+50 TO STA. 1066+75

DESIGN AGENCY

DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

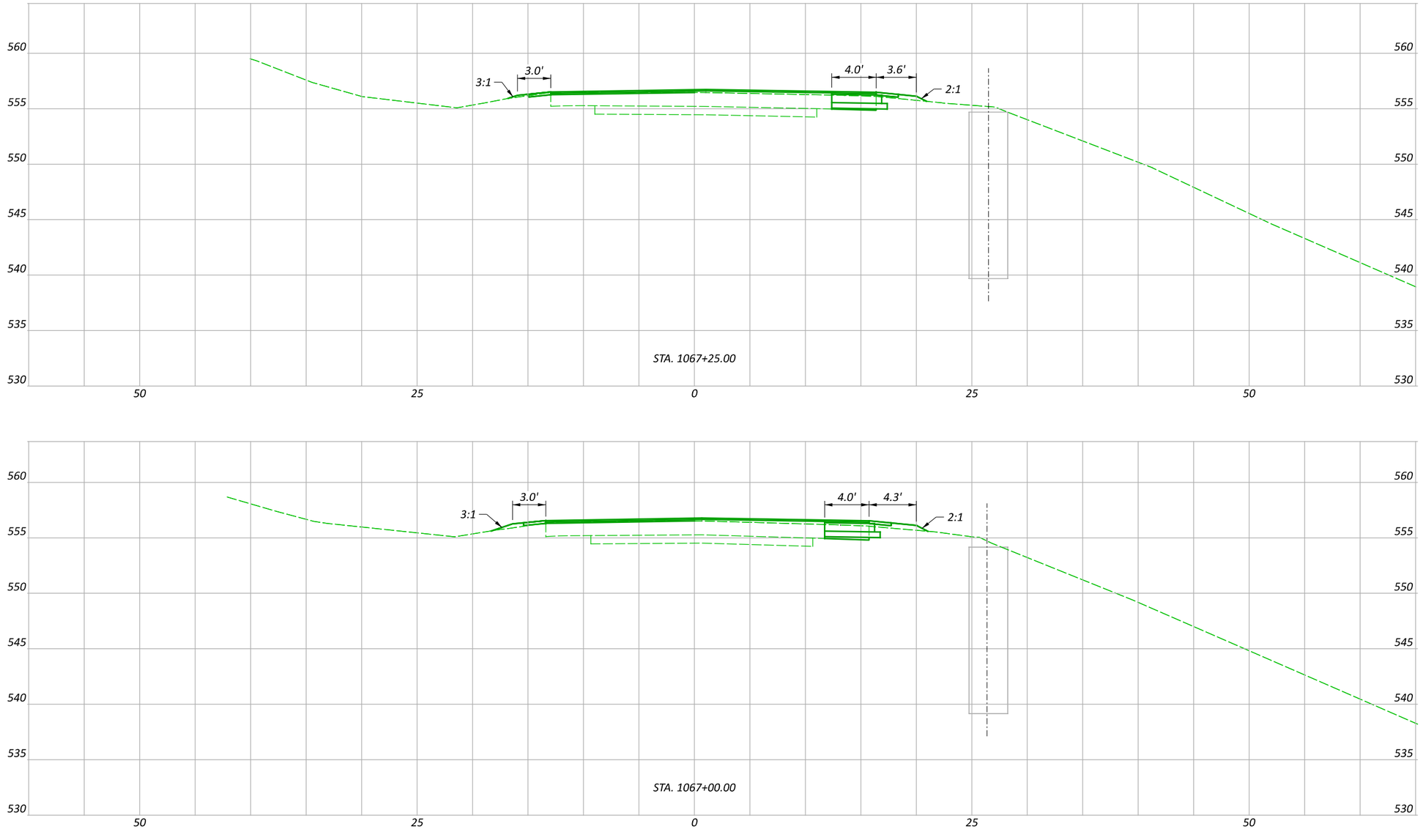
PROJECT ID
115533

SHEET P.15 | TOTAL P.48

GAL-7-19.94

MODEL: CLX_RW_SR9 - 1066+50.00 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:50:56 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Roadway\Sheets\115533_XS001.dgn

SEEDING	
END WIDTH	SQ. YDS.
	73
26	
	78
30	
	151



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		7	3
7	2		
		7	3
6	4		
		14	6

CROSS SECTIONS
FROM STA. 1067+00 TO STA. 1067+25

DESIGN AGENCY

DESIGNER
JDW

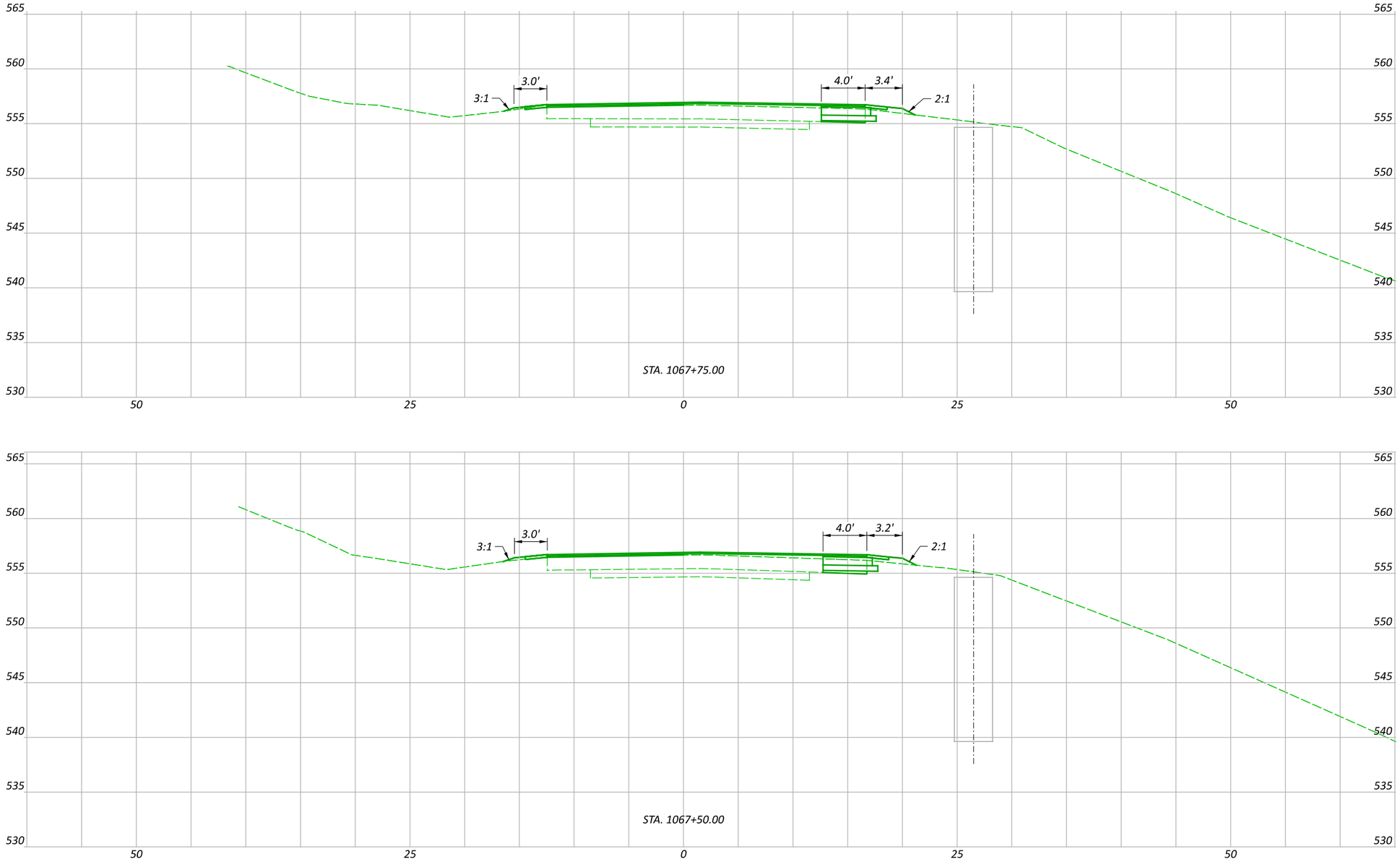
REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.16 | TOTAL P.48

GAL-7-19.94

SEEDING	
END WIDTH	SQ. YDS.
	62
26	
	73
26	
	135



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		10	8
7	3		
		7	3
6	3		
		17	11

CROSS SECTIONS
FROM STA. 1067+50 TO STA. 1067+75

DESIGN AGENCY

DESIGNER: JDW

REVIEWER: XXX MM-DD-YY

PROJECT ID: 115533

SHEET: P.17 | TOTAL: P.48

GAL-7-19.94

MODEL: CLX_RW_SR9 - 1067+50.00 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:50:58 AM USER: jwiseman
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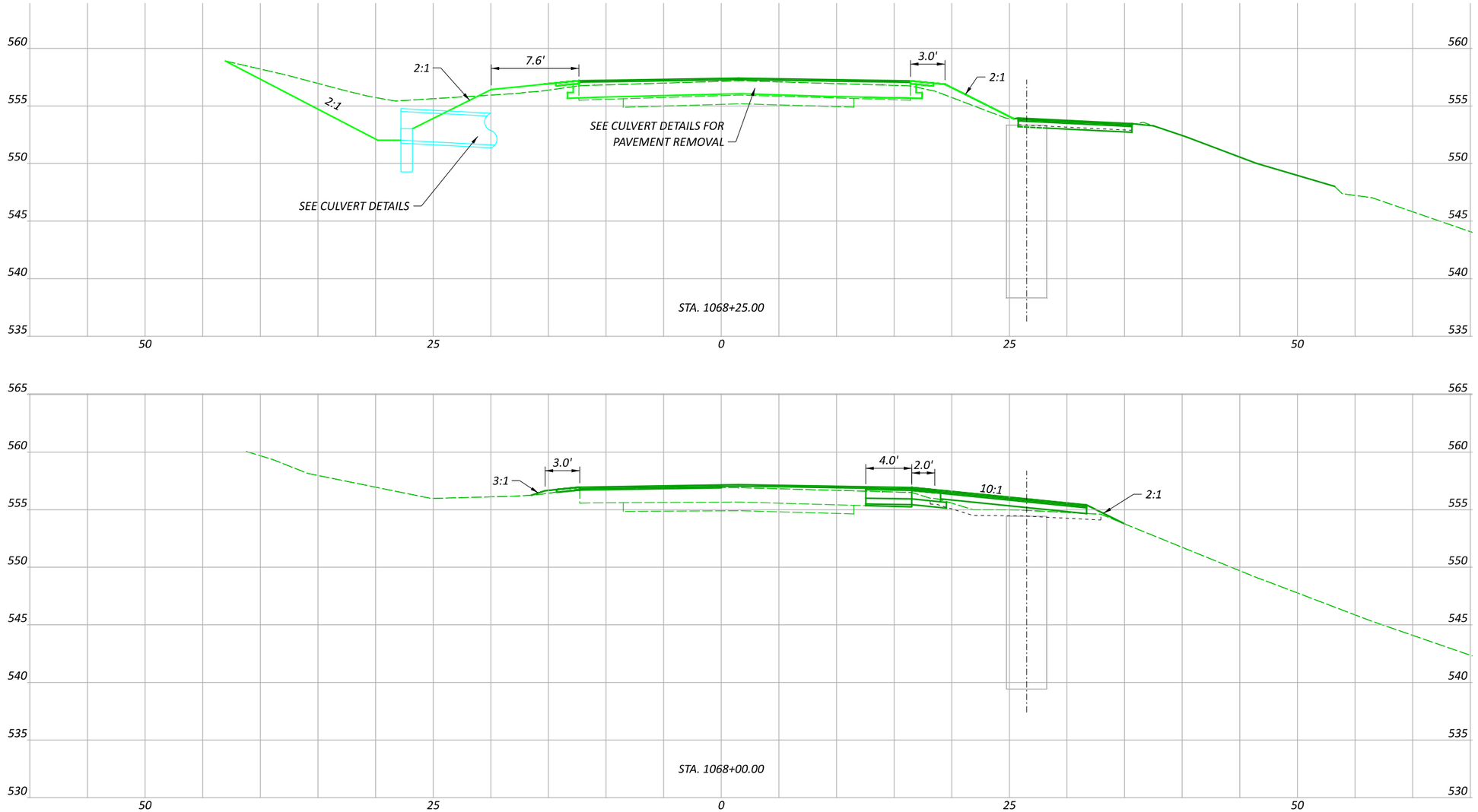
SEEDING	
END WIDTH	SQ. YDS.
	138
71	
	124
18	
	262



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		23	12
41	10		
		26	11
14	13		
		49	23

CROSS SECTIONS
FROM STA. 1068+00 TO STA. 1068+25

DESIGN AGENCY

DESIGNER
JDW

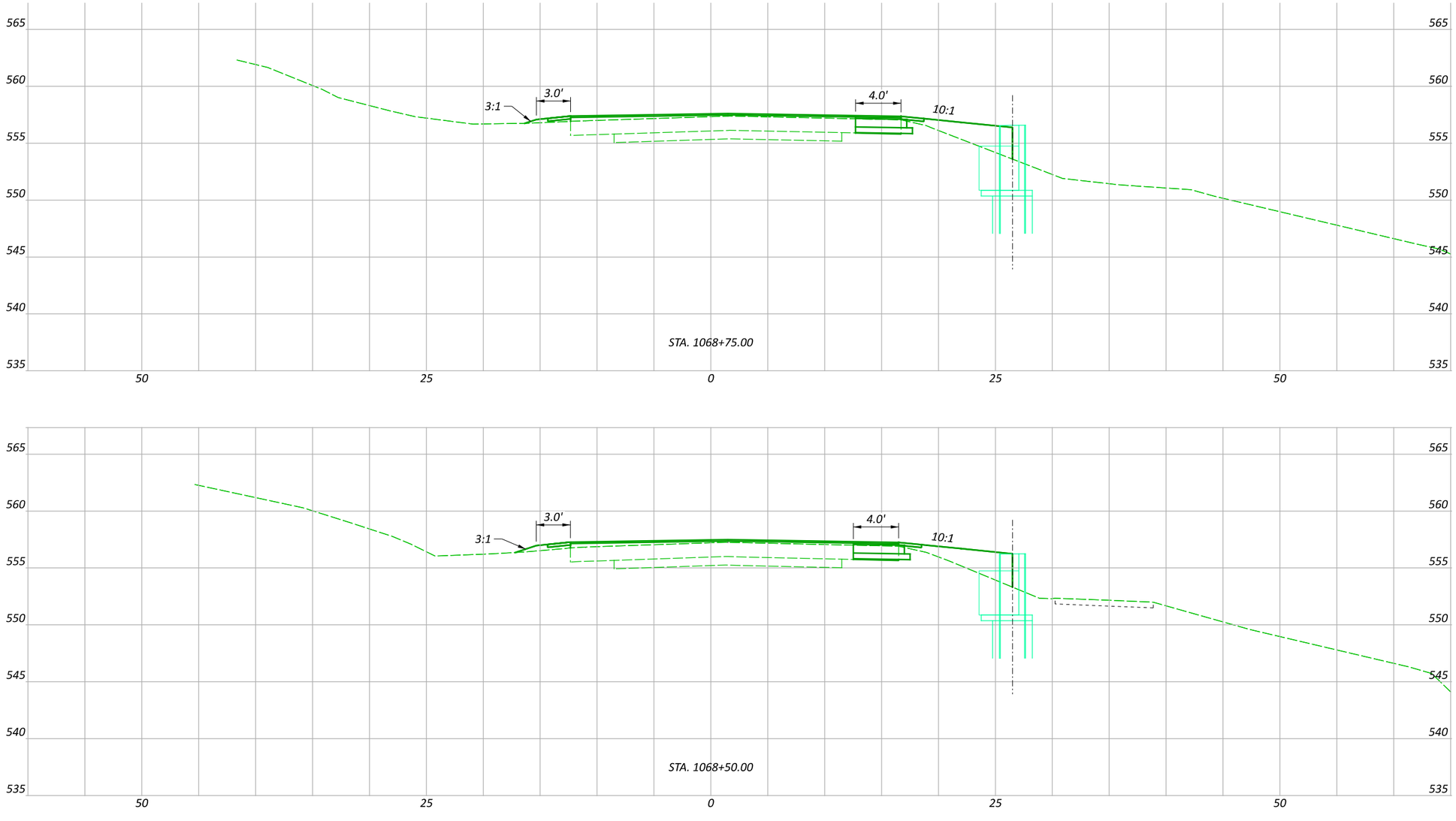
REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.18 | TOTAL P.48

GAL-7-19.94

SEEDING	
END WIDTH	SQ. YDS.
	70
25	
	74
28	
	144



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		7	13
7	15		
		7	14
7	15		
		14	27

CROSS SECTIONS
FROM STA. 1068+50 TO STA. 1068+75

GAL-7-19.94

MODEL: CLX_RW_SR9 - 1068+50.00 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:00 AM USER: jwiseman
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DESIGN AGENCY

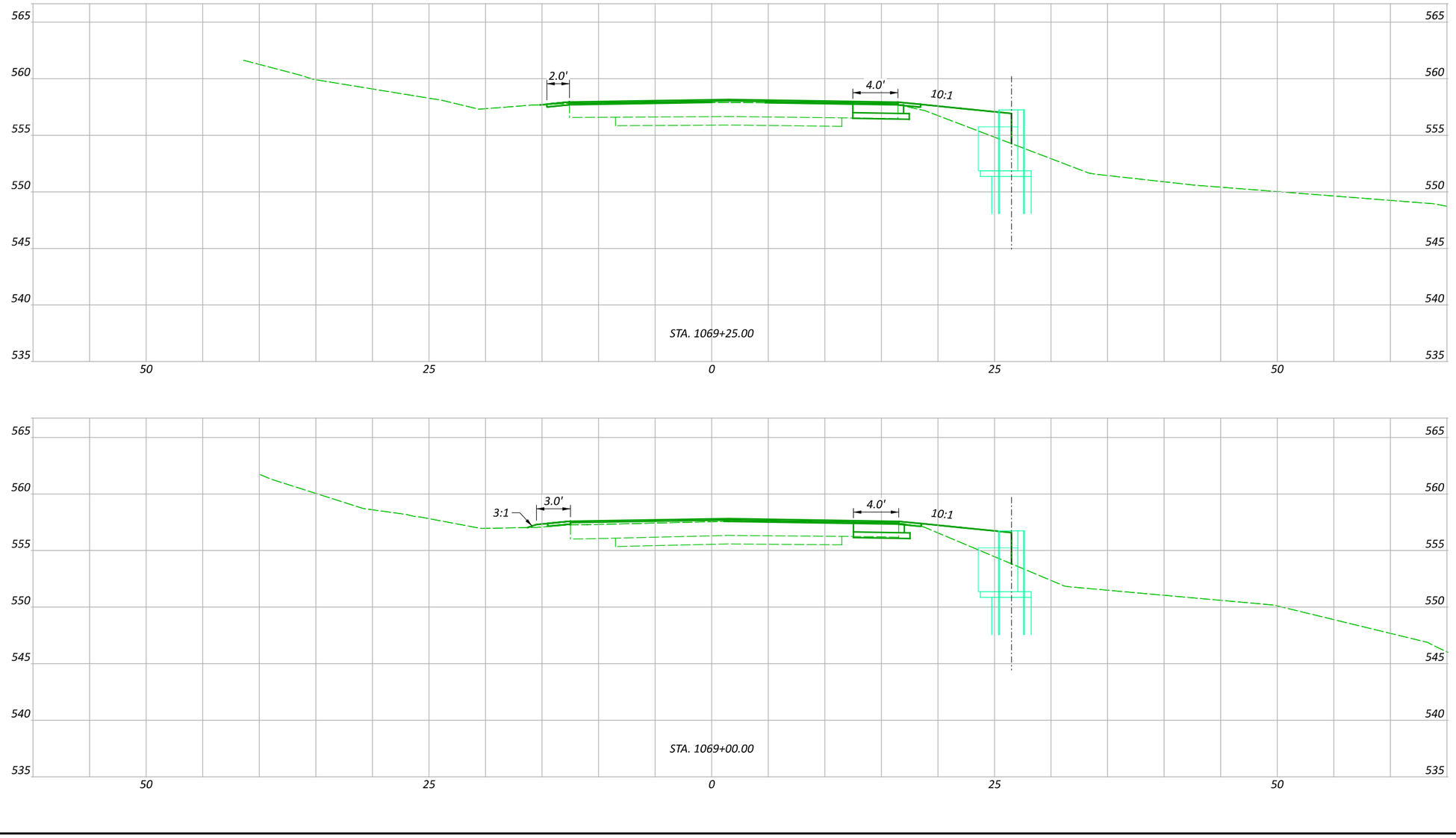
DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.19 | TOTAL P.48

SEEDING	
END WIDTH	SQ. YDS.
	66
21	
	64
25	
	130



END AREA	
CUT	FILL
7	12
7	12
7	12

VOLUME	
CUT	FILL
7	15
7	12
14	27

CROSS SECTIONS
FROM STA. 1069+00 TO STA. 1069+25

DESIGN AGENCY

DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.20 | TOTAL P.48

GAL-7-19.94

MODEL: CLX_RW_SR9 - 1069+00.00 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:01 AM USER: jwiseman
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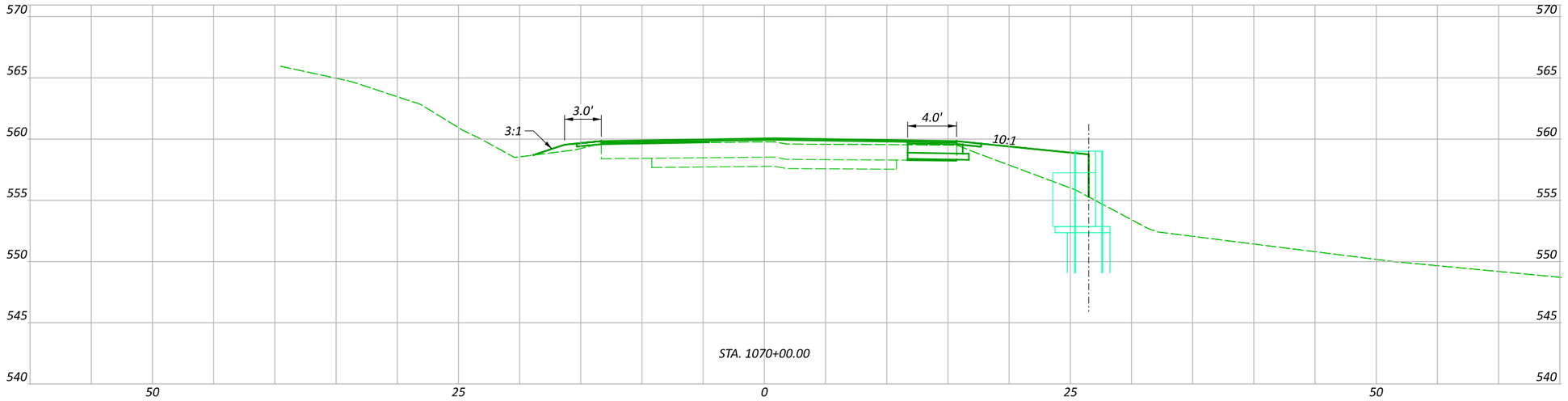
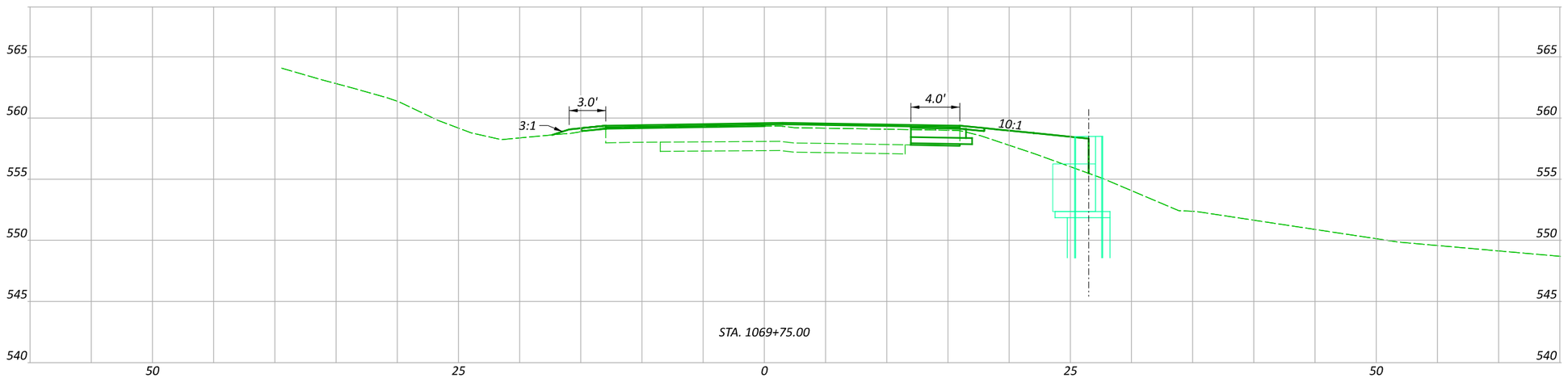
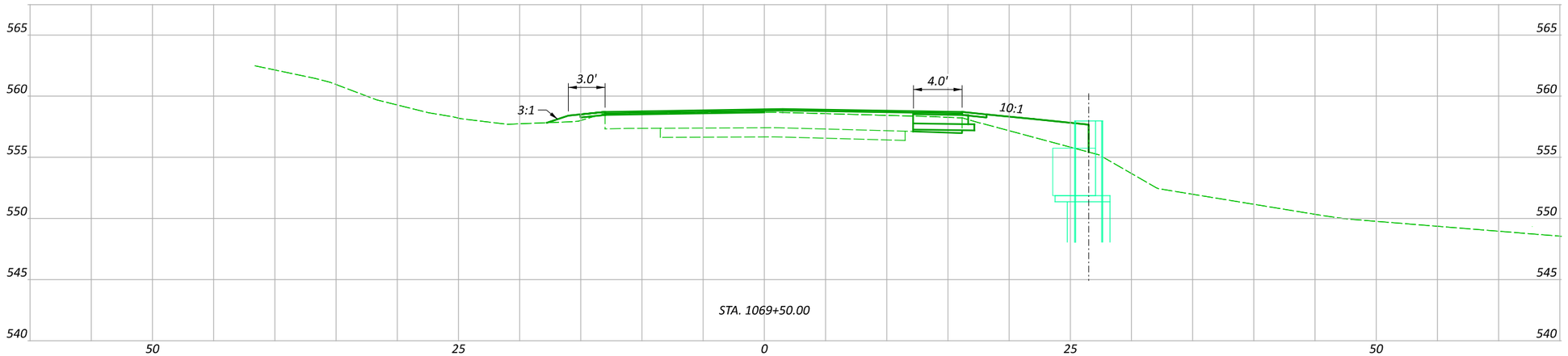
SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
	77			6	25
27		6	29		
	74			6	22
26		6	18		
	73			6	18
26		6	19		
	224			18	65







CROSS SECTIONS
FROM STA. 1069+50 TO STA. 1070+00

DESIGN AGENCY

DESIGNER JDW

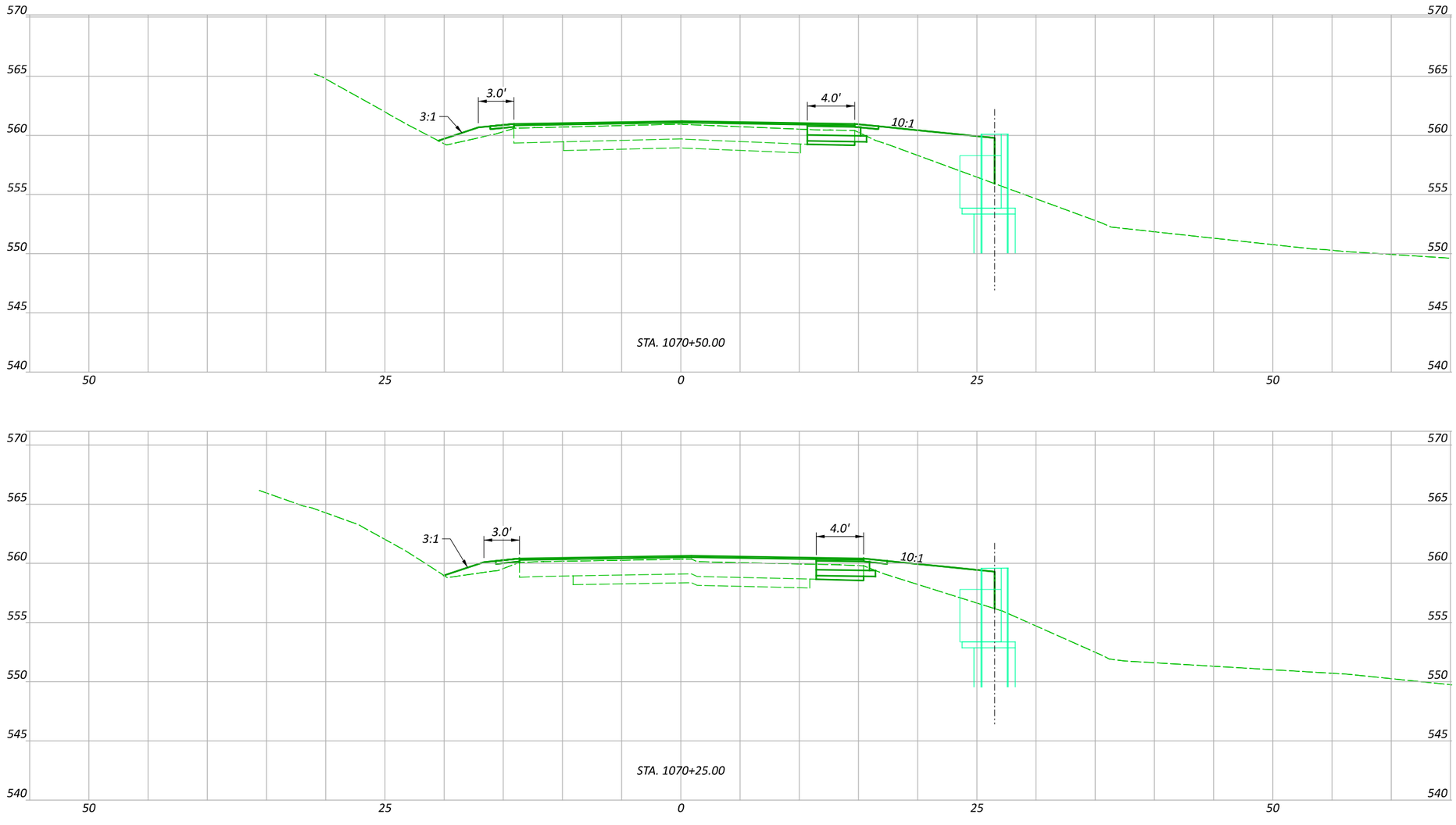
REVIEWER XXX MM-DD-YY

PROJECT ID 115533

SHEET P.21 TOTAL P.48

GAL-7-19.94

SEEDING	
END WIDTH	SQ. YDS.
	81
29	
	80
28	
	161



END AREA		VOLUME	
CUT	FILL	CUT	FILL
		6	23
6	27		
		6	24
6	23		
		12	47

CROSS SECTIONS
FROM STA. 1070+25 TO STA. 1070+50

DESIGN AGENCY

DESIGNER: JDW

REVIEWER: XXX MM-DD-YY

PROJECT ID: 115533

SHEET: P.22 | TOTAL: P.48

GAL-7-19.94

MODEL: CLX_RW_SR9 - 1070+25.00 [Sheet] PAPERSIZE: 17X11 (in.) DATE: 10/23/2024 TIME: 7:51:03 AM USER: jwiseman
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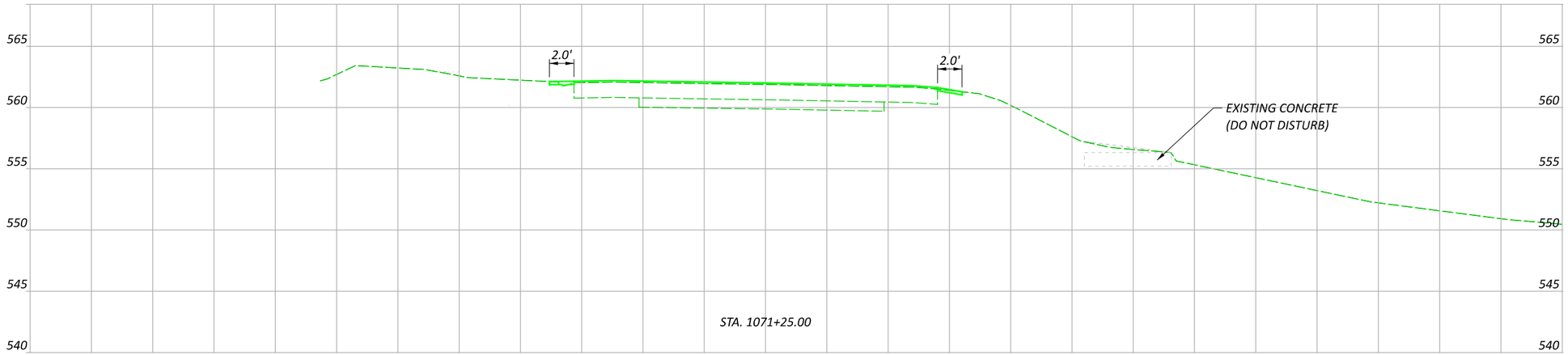
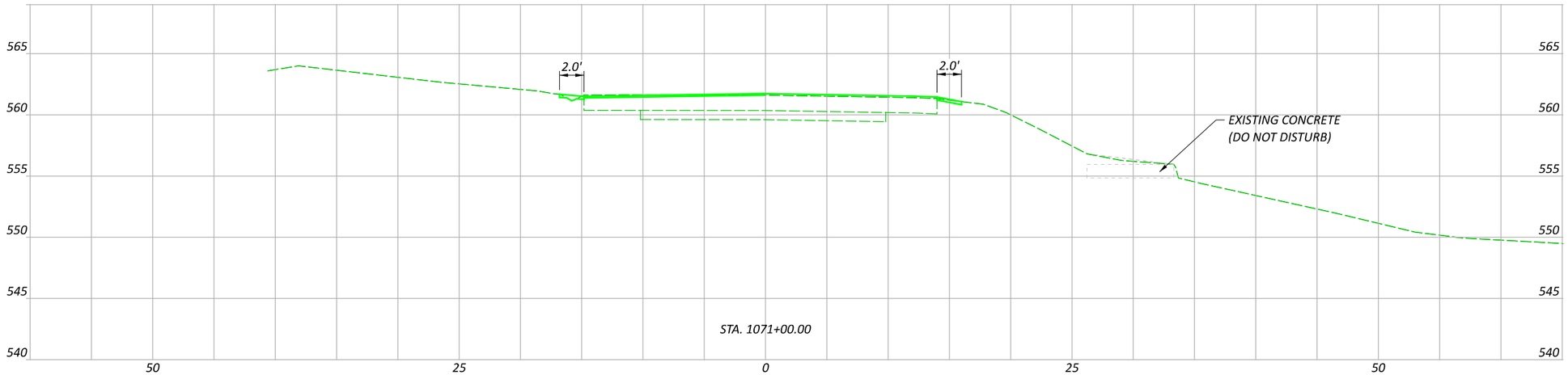
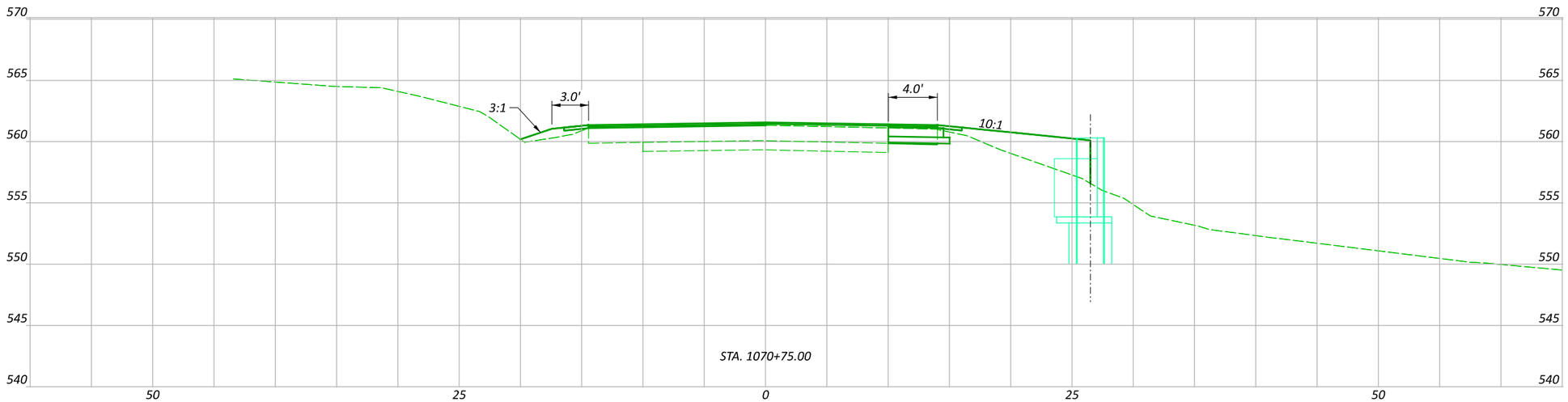
SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
	14			0	0
10		0	0		
	28			0	0
10		0	0		
	55			3	11
29		6	22		
	97			3	11







CROSS SECTIONS
FROM STA. 1070+75 TO STA. 1071+25

DESIGN AGENCY

DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

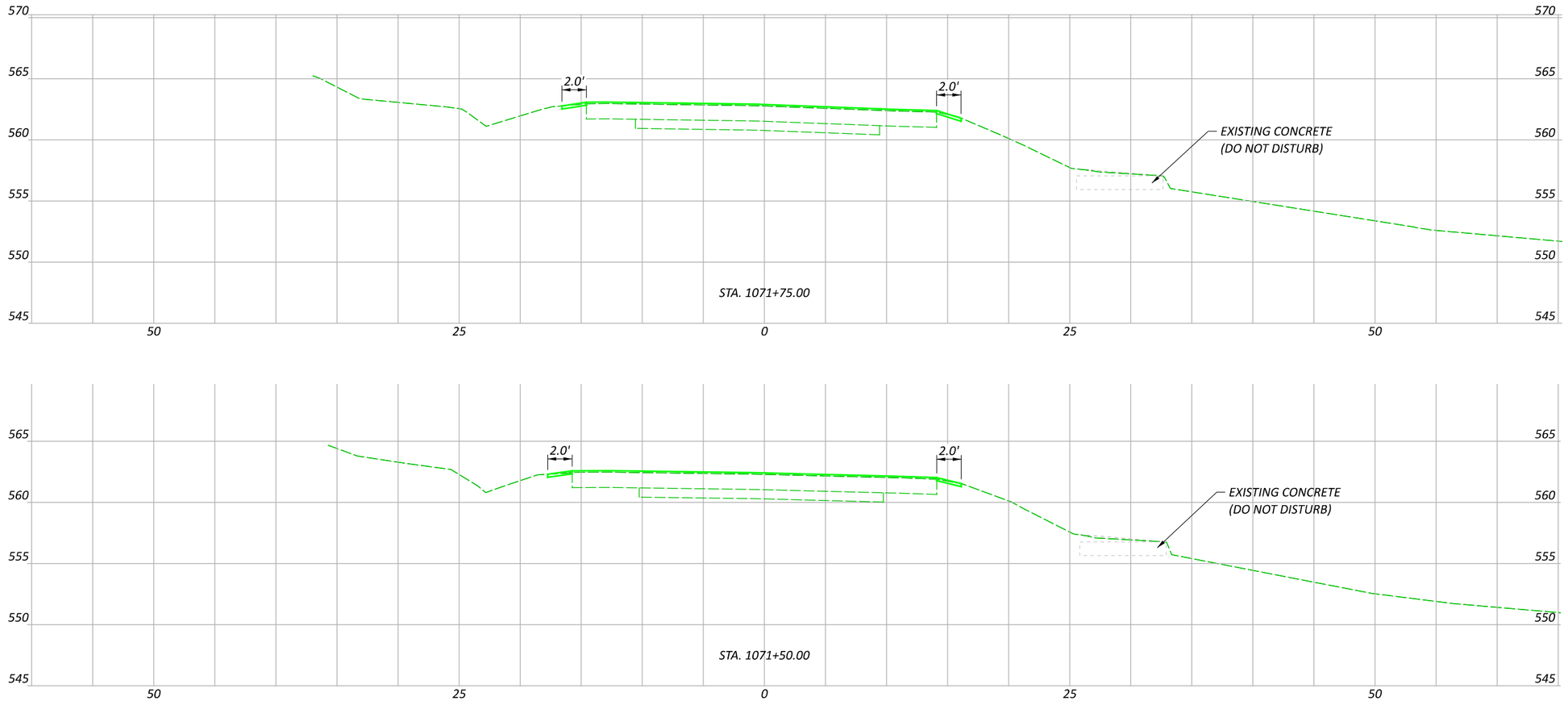
PROJECT ID
115533

SHEET P.23 | TOTAL P.48

GAL-7-19.94

SEEDING	
END WIDTH	SQ. YDS.
0	0
0	0
	0

END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	0	0
0	0		
		0	0



CROSS SECTIONS
FROM STA. 1071+50 TO STA. 1071+75

DESIGN AGENCY

DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.24 | TOTAL P.48

GAL-7-19.94

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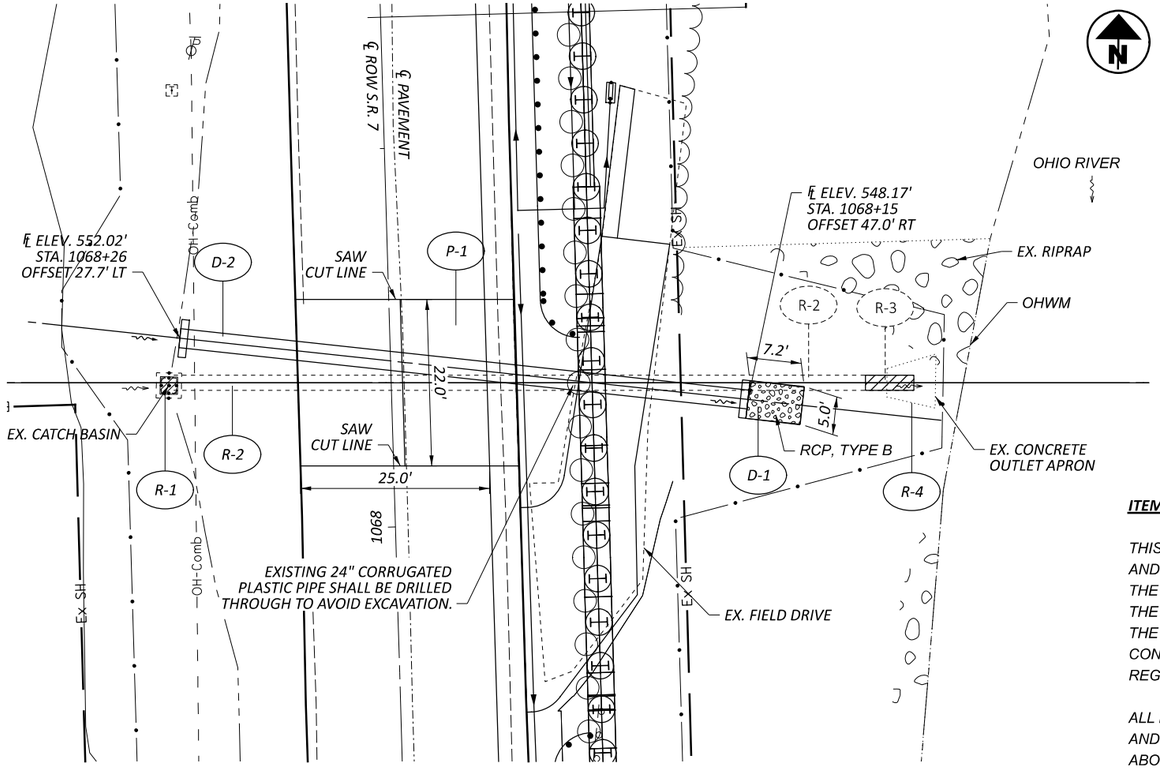

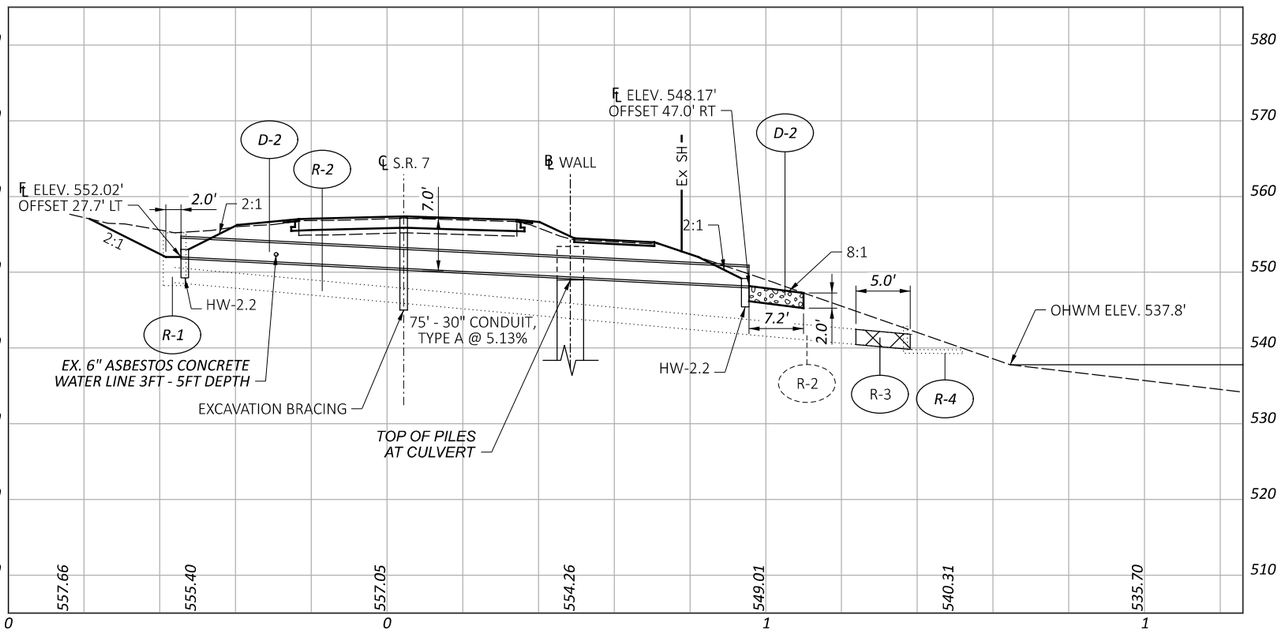

ITEM 601 - RCP, TYPE B WITH FILTER, AS PER PLAN

WORK SHALL BE DONE IN ACCORDANCE WITH CMS 601 FOR ITEM 601 - RCP, TYPE B WITH FILTER, APP. EXCEPT THE MATERIAL SHALL BE OBTAINED FROM THE EXISTING RIPRAP THAT IS EXCAVATED TO INSTALL THE PROPOSED CONDUIT AND OR THE EXISTING CONCRETE APRON.

ITEM 202 - REMOVAL, MISC.: CONCRETE OUTLET APRON

EXISTING CONCRETE OUTLET APRON SHALL BE BROKEN AND LEFT IN PLACE UNLESS IT IS NEEDED FOR ITEM 601 - ROCK CHANNEL PROTECTION TYPE B WITH FILTER, AS PER PLAN. EACH BROKEN PIECE SHALL NOT EXCEED 2 FOOT IN SIZE. EXPOSED CONCRETE REINFORCING IN THE CONCRETE SHALL BE REMOVED, SUCH THAT NO PIECE OF REINFORCING EXTENDS BEYOND 2 INCHES FROM THE CONCRETE SURFACE.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN

THIS ITEM CONSISTS OF REMOVING THE EXISTING ASPHALT AND CONCRETE PAVEMENT FROM STA. 1068+08 TO STA. 1068+30. THE DEPTH OF THE PAVEMENT MAY VARY. SOIL BORINGS INDICATE THE ASPHALT PAVEMENT TO BE APPROXIMATELY 15" THICK AND THE CONCRETE PAVEMENT TO BE APPROXIMATELY 10". THE CONTRACTOR SHALL REMOVE PAVEMENT AS SHOWN, REGARDLESS OF THE DEPTH ENCOUNTERED IN THE FIELD.

ALL EQUIPMENT, MATERIALS, INCIDENTALS, PAVEMENT SAWING, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER:

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN - SY

CALCULATIONS:

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448) PG64-22, 1.5"

25.0 FT x 22.0FT x (T=1.5IN)/12/27 = 2.5 CU. YDS.

ITEM 301 - ASPHALT CONCRETE BASE PG64-22, (449) 9"

25.5 FT x 22.0FT x (T=9IN)/12/27 = 15.6 CU. YDS.

ITEM 304 - AGGREGATE BASE, 6"

26.0 FT x 22.0 FT x (T=6 IN)/12/27 = 10.6CU. YDS.

ITEM 511 - CLASS QC MS CONCRETE (12.3 FT LT TO 16.4 FT RT)

(A=51.8 SQ. FT.) x (L=12.3'+16.4')/27 = 55.1 CU. YDS.

ITEM 407 - NON-TRACKING TACK COAT

25.0 FT x 22.0 FT / 9 x 0.05 = 3.1 GAL

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE B, W/ FILTER

7.2 FT x 5.0 FT x 2.0 FT / 27 = 2.7 CY

ITEM 202 - PAVEMENT REMOVED, APP

25.0 FT x 22.0 FT / (9 SF/SY) = 61.1 SY

ESTIMATED QUANTITIES

REF.	ITEM	QUANTITY	UNIT	DESCRIPTION
R-1	202	1	EACH	CATCH BASIN REMOVED
R-4	202	1	EACH	REMOVAL, MISC.: CONC. OUTLET APRON
R-2	202	93	FT	FILL AND PLUG EXISTING CONDUIT, 24"
R-3	202	5	FT	PIPE REMOVED, 24" DIAMETER AND UNDER
P-1	202	62	SY	PAVMENT REMOVED, APP
P-1	301	16	CY	9" ASPHALT CONC. BASE PG64-22
P-1	304	11	CY	6" AGGREGATE BASE
P-1	407	4	GAL	NON-TRACKING TACK
P-1	441	3	CY	1.5" ASPHALT CONC. INT. COURSE (448)
D-1	601	3	CY	RCP, TYPE B WITH FILTER, APP
D-2	602	1.2	CY	CONCRETE MASONRY
D-2	611	75	FT	30" CONDUIT, TYPE A
D-2	503	LUMP	LS	COFFERDAMS AND EXCAVATION BRACING
P-1	511	56	CY	CLASS QC MS CONCRETE

HYDRAULIC DATA

DRAINAGE AREA = 12.2 ACRES

Q (4%) = 20.7 CFS V (4%) = 13.1 FT/S HW (4%) = 554.3 FT

Q (10%) = 17.7 CFS V (10%) = 12.6 FT/S HW (10%) = 554.1 FT

ORDINARY HIGH WATER MARK: N/A

DESIGN SERVICE LIFE: 20 YEARS

ABRASION LEVEL: N/A

pH: 7

EXISTING STRUCTURE

TYPE: CORRUGATED PLASTIC PIPE

SIZE: 24"

SKEW: 01° 39' 59" L.F.

ALIGNMENT: TANGENT

DATE BUILT: UNKNOWN

CONDITION: POOR

CFN: 1981270

PROPOSED STRUCTURE

TYPE: 75' - 30" CONDUIT, TYPE A

SKEW: 07° 49' 34" L.F.

ALIGNMENT: TANGENT

CFN: 1996556

HORIZONTAL SCALE IN FEET
0 5 10 20

CULVERT DETAILS STA. 1068+21

DESIGN AGENCY

DESIGNER JDW
REVIEWER XXX MM-DD-YY
PROJECT ID 115533
SUBSET 0 TOTAL 0
SHEET P.25 TOTAL P.48

GAL-7-19.97

MODEL: CLP_1 - Plan 1 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:21 AM USER: jwiseman
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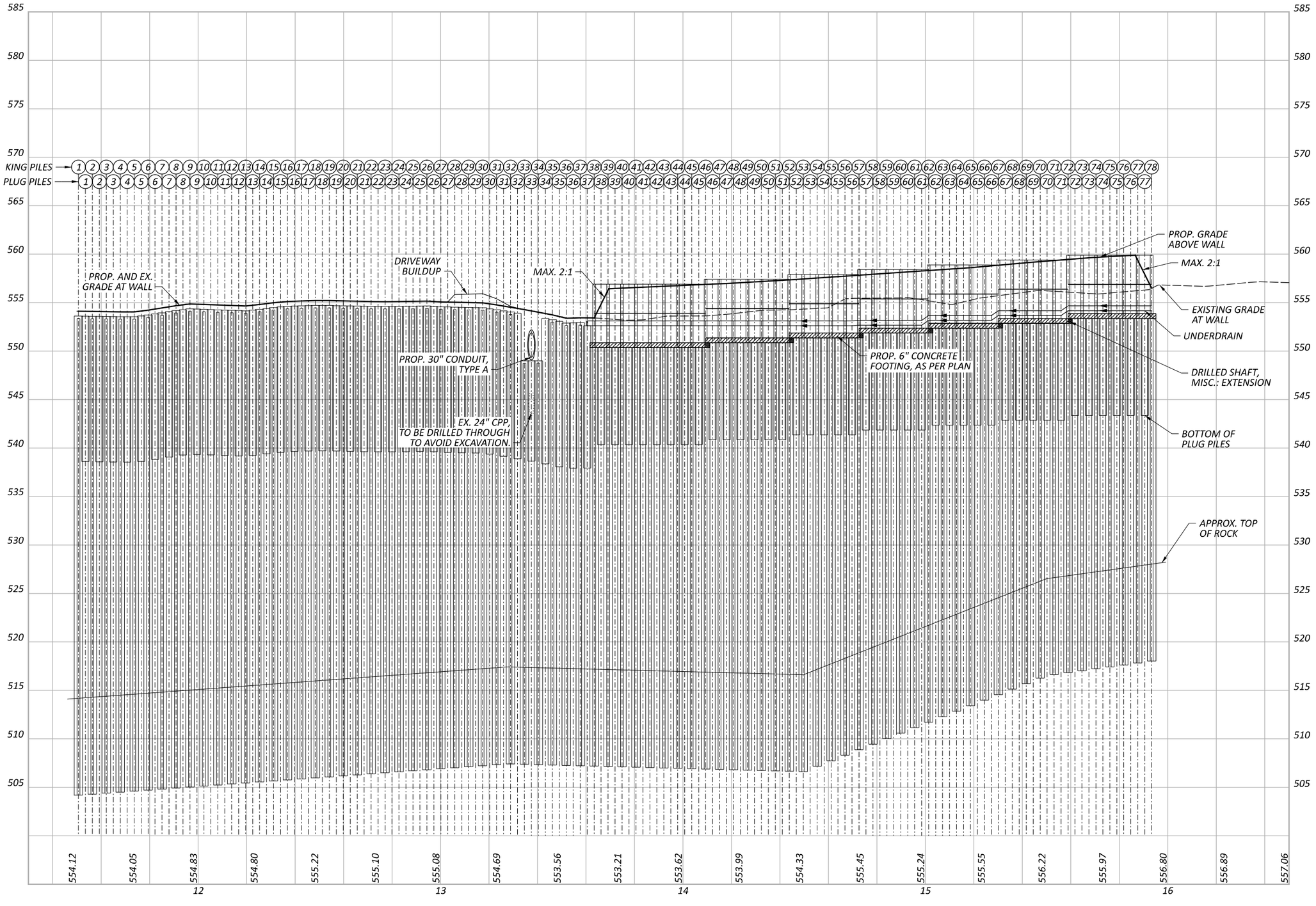

DRILLED SHAFT DETAILS
WALL PROFILE

GAL-7-19.94

MODEL: BL_WALL3 - Profile 1 [Sheet] PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:28 AM USER: jwiseman
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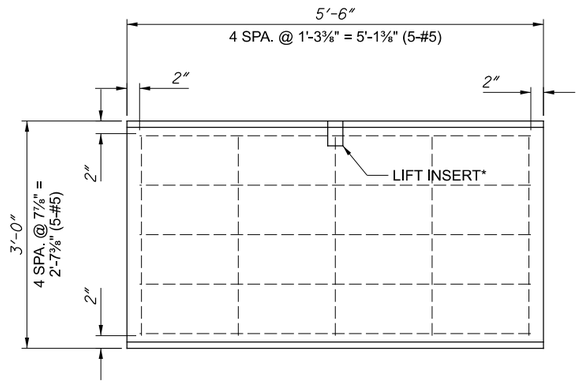
DESIGN AGENCY

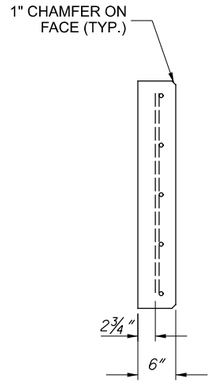
DESIGNER JDW

REVIEWER XXX MM-DD-YY

PROJECT ID 115533

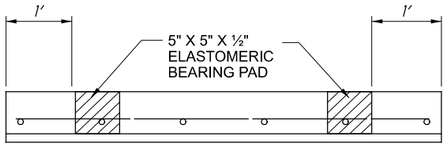
SHEET P.26 TOTAL P.48





PRE-CAST CONCRETE PANEL A

TOTAL REQUIRED = 80, QUANTITY CARRIED TO GENERAL SUMMARY



ELASTOMERIC BEARING PAD TYPICAL DETAIL.**

NOTES:

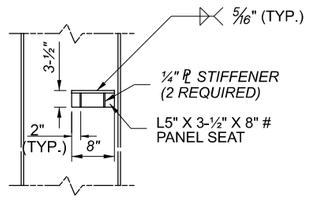
* PRECAST PANEL MANUFACTURER TO DESIGN LIFT INSERT. MANUFACTURER TO DETERMINE NUMBER OF INSERTS FOR EACH PANEL.

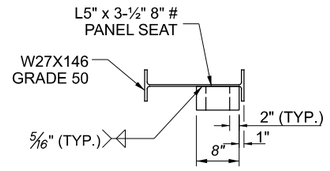
** PRICE OF ELASTOMERIC BEARING PADS SHALL BE INCLUDED IN THE UNIT PRICE OF THE PRECAST CONCRETE PANELS.

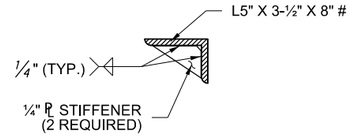
CALCULATIONS

ITEM 530 - SPECIAL - RETAINING WALL, PRECAST CONCRETE LAGGING
A = 80 EACH X (3.0 FT X 5.5 FT) = 1,320 SF

A TOTAL OF 1,320 SF TO BE CARRIED TO THE GENERAL SUMMARY.







PANEL SEAT DETAIL.

\# PANEL SEAT, STIFFENERS FOR PANEL SEAT STEEL IS INCLUDED IN PAYMENT FOR ITEM 507 - SOLDIER PILE, MISC.: SOLDIER PILES W27X146.

NOTE:
THE PANEL SEAT MAY BE NON-PERFORMED IF THE CONCRETE FOOTING IS PLACED PRIOR TO THE PRECAST CONCRETE LAGGING.

IF THE PRECAST CONCRETE LAGGING IS TO BE PLACED PRIOR TO THE CONCRETE FOOTING THEN THE PANELS SEATS SHALL BE PLACED ON EACH BEAM, FOR EITHER SIDE OF THE PRECAST CONCRETE LAGGING.

DRILLED SHAFT DETAILS

GAL-7-19.94

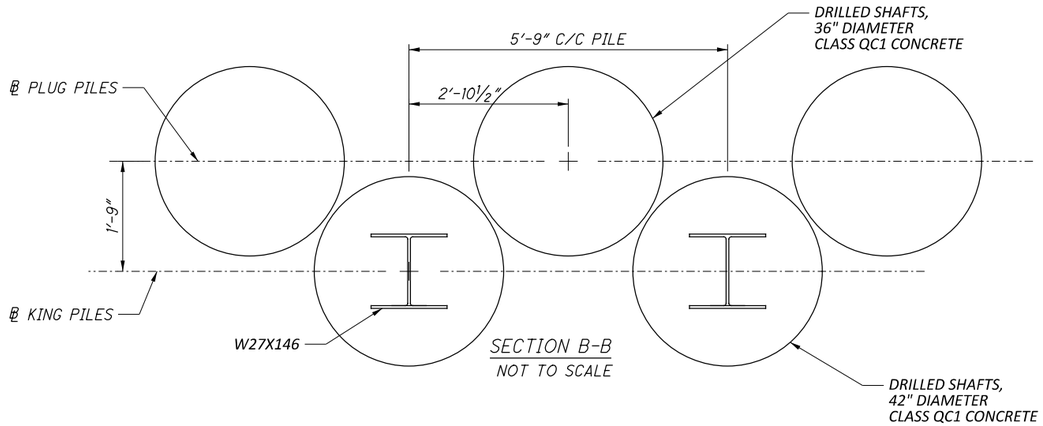
MODEL: SHEET 1 PRECAST LAGGING PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:34 AM USER: jwiseman
pw:\\ohdot-pw.bentley.com:ohdot-pw-02\Documents\01 Active Projects\District 10\Galla\115533\400-Engineering\Roadway\Sheets\115533_WD001.dgn

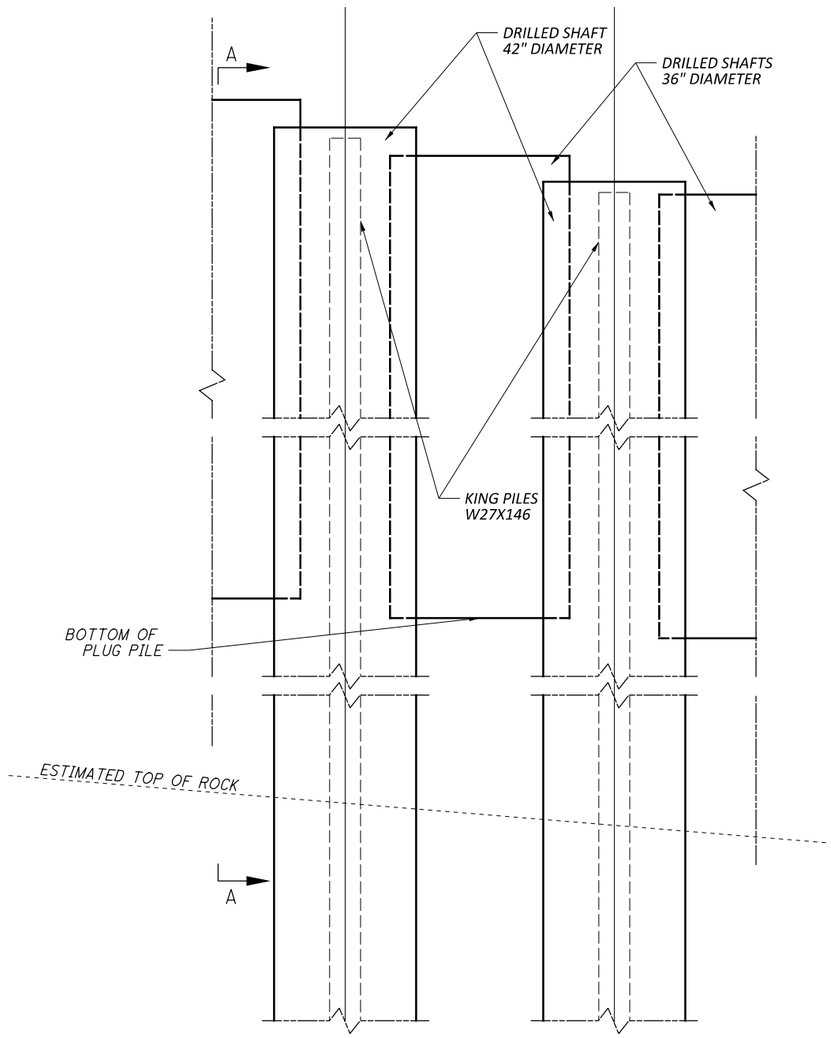
DESIGN AGENCY

DESIGNER JDW

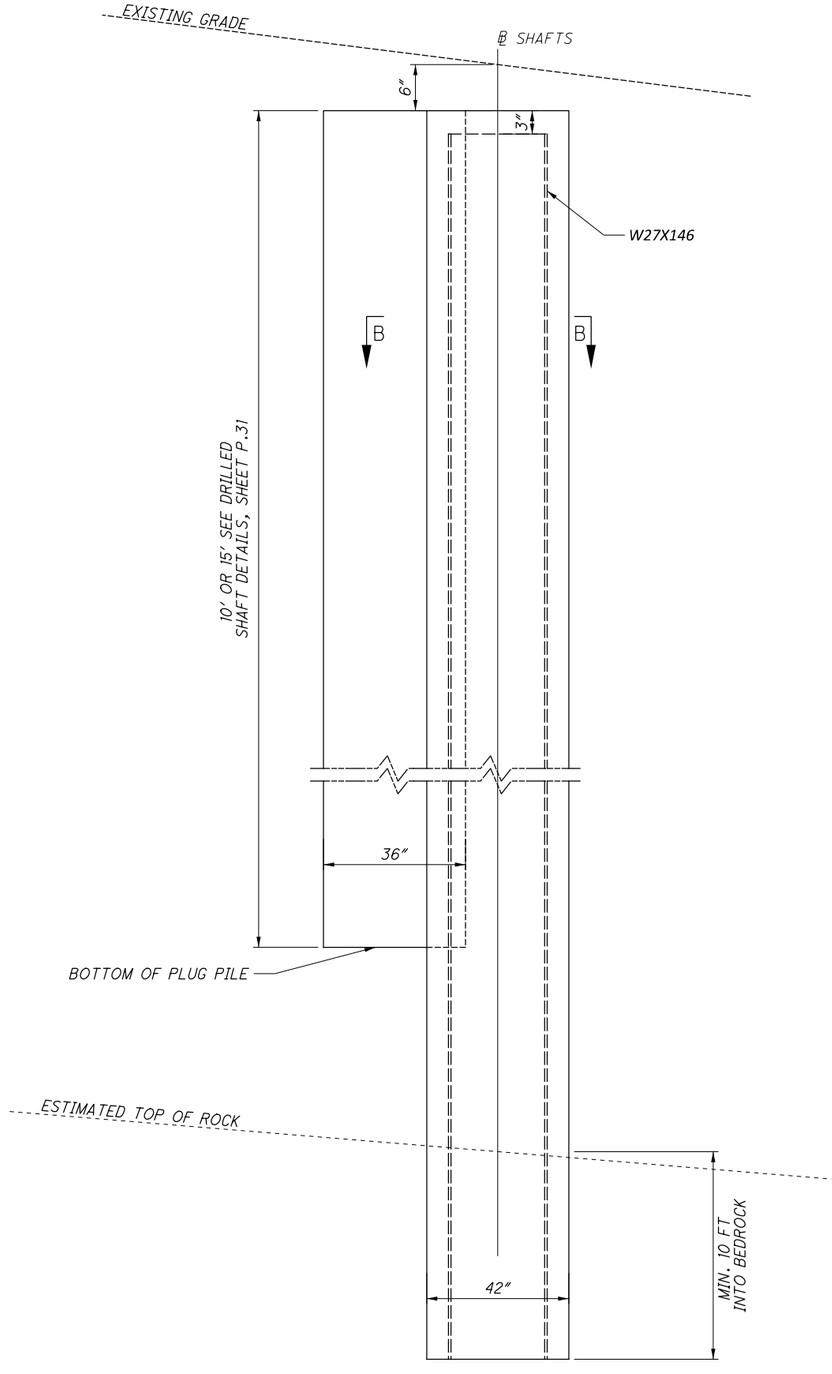
REVIEWER XXX MM-DD-YY

PROJECT ID 115533





PROFILE
NOT TO SCALE



SECTION A-A
NOT TO SCALE

DRILLED SHAFT DETAILS

GAL-7-19.94

MODEL: SHEET 2 TYPICAL PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:35 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Roadway\Sheets\115533_WD001.dgn

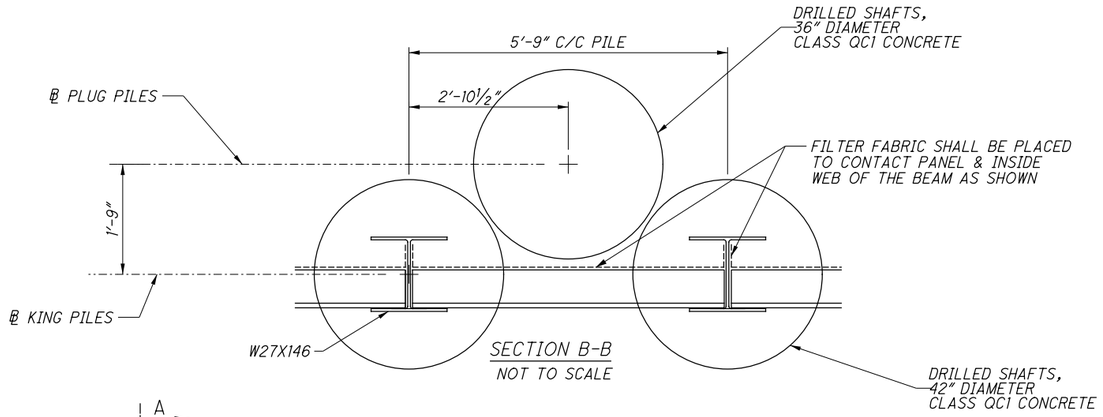
DESIGN AGENCY

DESIGNER
JDW

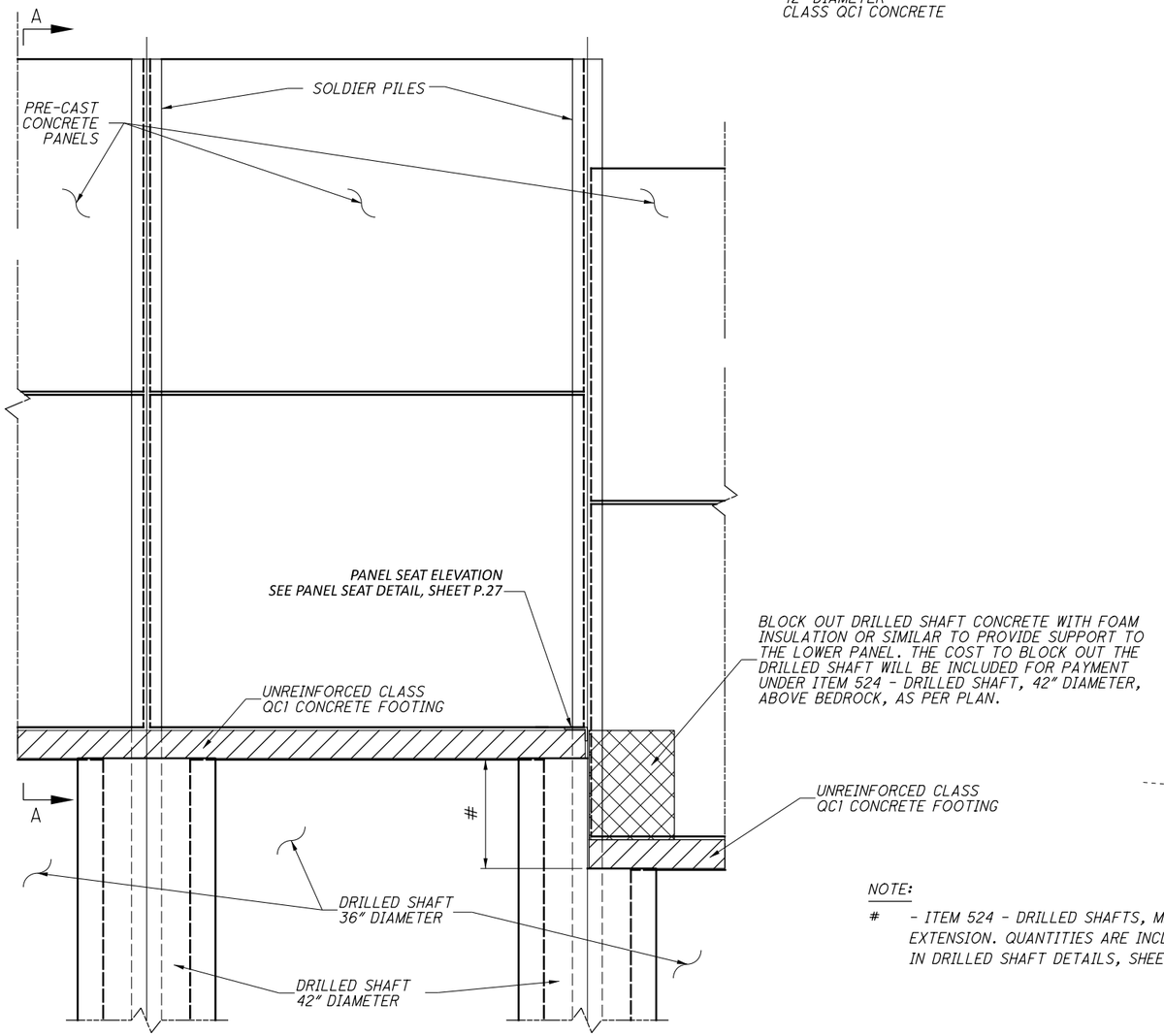
REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.28 | TOTAL P.48



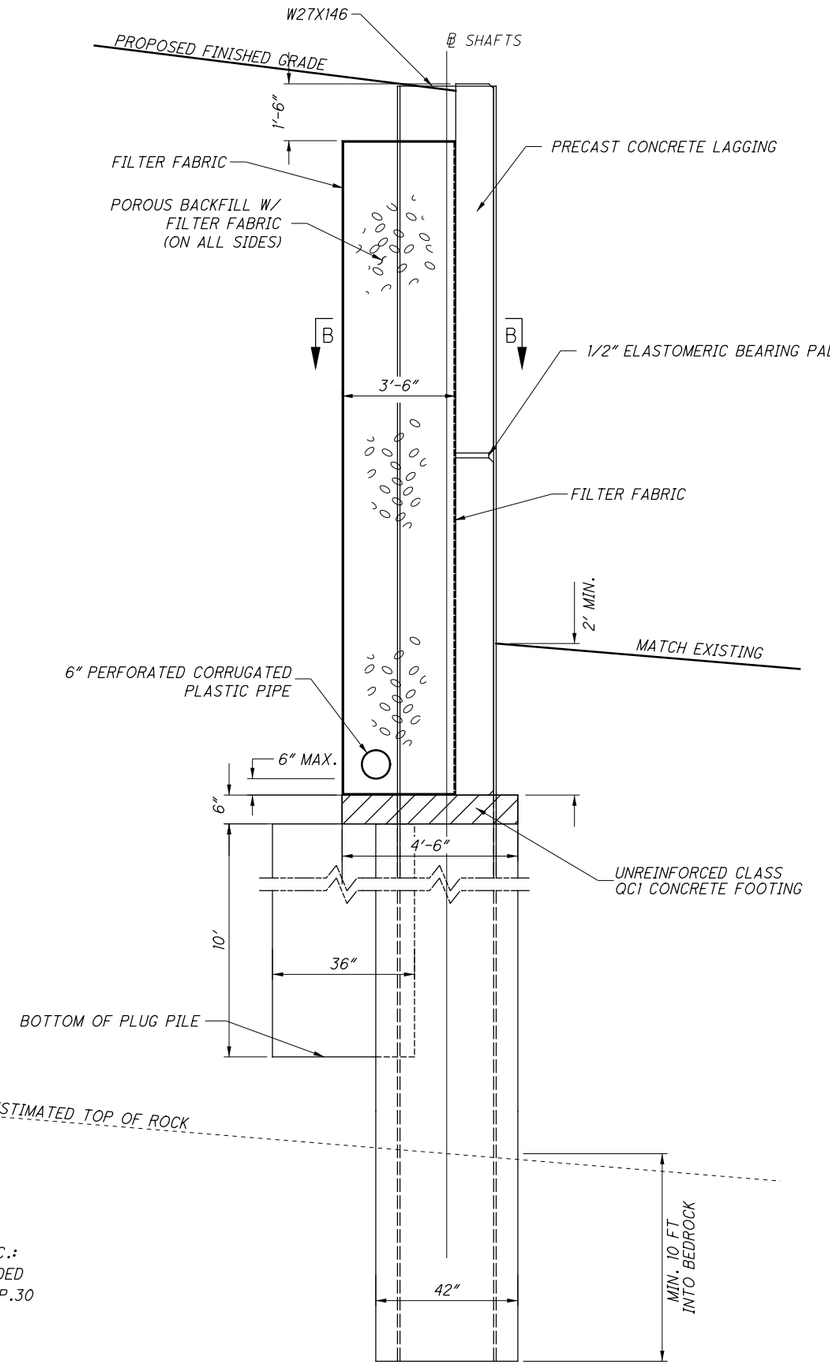
SECTION B-B
NOT TO SCALE



PROFILE
NOT TO SCALE

NOTE:

\# - ITEM 524 - DRILLED SHAFTS, MISC.: EXTENSION. QUANTITIES ARE INCLUDED IN DRILLED SHAFT DETAILS, SHEET P.30



SECTION A-A
NOT TO SCALE

DRILLED SHAFT DETAILS

DESIGN AGENCY

DESIGNER
JDW

REVIEWER
XXX MM-DD-YY

PROJECT ID
115533

SHEET P.29 | TOTAL P.48

GAL-7-19.94

MODEL: SHEET 3 TYPICAL 2 PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:35 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Roadway\Sheets\115533_WD001.dgn

MODEL: SHEET 4 DRILLED SHAFT SUMMARY PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:35 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Roadway\Sheets\115533_WD001.dgn

DRILLED SHAFT SUMMARY (KING PILE)

SHAFT No.	CENTERLINE DRILLED SHAFT (KING PILE) STA.	CENTERLINE OFFSET	BOTTOM ELEVATION OF SHAFT	TOP ELEVATION OF SHAFT	TOP OF BEAM	TOP ELEVATION OF LAGGING	ESTIMATED TOP OF ROCK ELEVATION	ITEM 524: 42" DIA. DRILLED SHAFTS INTO BEDROCK	ITEM 524: 42" DIA. DRILLED SHAFTS ABOVE BEDROCK	ITEM 524: DRILLED SHAFTS, MISC.: EXTENSION	ITEM 524: DRILLED SHAFTS, MISC.: 42" STEEL CASING	ITEM 507: STEEL PILES, MISC.: SOLDIER PILES W27X146
								FEET	FEET	FEET	FEET	FEET
1	11+50.61	26.50 RT	504.19	553.60	553.35	-	514.19	10.00	39.41	-	39.41	49.16
2	11+56.36	26.50 RT	504.29	553.60	553.35	-	514.29	10.00	39.31	-	39.31	49.06
3	11+62.11	26.50 RT	504.40	553.60	553.35	-	514.40	10.00	39.20	-	39.20	48.95
4	11+67.86	26.50 RT	504.50	553.50	553.25	-	514.50	10.00	39.00	-	39.00	48.75
5	11+73.61	26.50 RT	504.61	553.50	553.25	-	514.61	10.00	38.89	-	38.89	48.64
6	11+79.36	26.50 RT	504.71	553.70	553.45	-	514.71	10.00	38.99	-	38.99	48.74
7	11+85.11	26.50 RT	504.82	554.00	553.75	-	514.82	10.00	39.18	-	39.18	48.93
8	11+90.86	26.50 RT	504.92	553.20	552.95	-	514.92	10.00	38.28	-	38.28	48.03
9	11+96.61	26.50 RT	505.03	554.40	554.15	-	515.03	10.00	39.37	-	39.37	49.12
10	12+02.36	26.50 RT	505.13	554.30	554.05	-	515.13	10.00	39.17	-	39.17	48.92
11	12+08.11	26.50 RT	505.24	554.30	554.05	-	515.24	10.00	39.06	-	39.06	48.81
12	12+13.86	26.50 RT	505.34	554.20	553.95	-	515.34	10.00	38.86	-	38.86	48.61
13	12+19.61	26.50 RT	505.45	554.20	553.95	-	515.45	10.00	38.75	-	38.75	48.50
14	12+25.36	26.50 RT	505.55	554.30	554.05	-	515.55	10.00	38.75	-	38.75	48.50
15	12+31.11	26.50 RT	505.66	554.50	554.25	-	515.66	10.00	38.84	-	38.84	48.59
16	12+36.86	26.50 RT	505.76	554.60	554.35	-	515.76	10.00	38.84	-	38.84	48.59
17	12+42.61	26.50 RT	505.87	554.70	554.45	-	515.87	10.00	38.83	-	38.83	48.58
18	12+48.36	26.50 RT	505.97	554.70	554.45	-	515.97	10.00	38.73	-	38.73	48.48
19	12+54.11	26.50 RT	506.08	554.70	554.45	-	516.08	10.00	38.62	-	38.62	48.37
20	12+59.86	26.50 RT	506.18	554.70	554.45	-	516.18	10.00	38.52	-	38.52	48.27
21	12+65.61	26.50 RT	506.29	554.60	554.35	-	516.29	10.00	38.31	-	38.31	48.06
22	12+71.36	26.50 RT	506.39	554.60	554.35	-	516.39	10.00	38.21	-	38.21	47.96
23	12+77.11	26.50 RT	506.50	554.60	554.35	-	516.50	10.00	38.10	-	38.10	47.85
24	12+82.86	26.50 RT	506.60	554.60	554.35	-	516.60	10.00	38.00	-	38.00	47.75
25	12+88.61	26.50 RT	506.71	554.60	554.35	-	516.71	10.00	37.89	-	37.89	47.64
26	12+94.36	26.50 RT	506.81	554.70	554.45	-	516.81	10.00	37.89	-	37.89	47.64
27	13+00.11	26.50 RT	506.92	554.60	554.35	-	516.92	10.00	37.68	-	37.68	47.43
28	13+05.86	26.50 RT	507.02	554.50	554.25	-	517.02	10.00	37.48	-	37.48	47.23
29	13+11.61	26.50 RT	507.13	554.50	554.25	-	517.13	10.00	37.37	-	37.37	47.12
30	13+17.36	26.50 RT	507.23	554.50	554.25	-	517.23	10.00	37.27	-	37.27	47.02
31	13+23.11	26.50 RT	507.33	554.30	554.05	-	517.33	10.00	36.97	-	36.97	46.72
32	13+28.86	26.50 RT	507.41	554.00	553.75	-	517.41	10.00	36.59	-	36.59	46.34
33	13+34.61	26.50 RT	507.37	549.00	548.75	-	517.37	10.00	31.63	-	31.63	41.38
34	13+40.36	26.50 RT	507.33	549.00	548.75	-	517.33	10.00	31.67	-	31.67	41.42
35	13+46.11	26.50 RT	507.30	553.20	552.95	-	517.30	10.00	35.90	-	35.90	45.65
36	13+51.86	26.50 RT	507.26	552.90	552.65	-	517.26	10.00	35.64	-	35.64	45.39
37	13+57.61	26.50 RT	507.22	552.90	552.65	-	517.22	10.00	35.68	-	35.68	45.43
38	13+63.36	26.50 RT	507.18	550.36	-	556.90	517.18	10.00	33.18	-	33.18	49.72
39	13+69.11	26.50 RT	507.15	550.36	-	556.90	517.15	10.00	33.21	-	33.21	49.75
40	13+74.86	26.50 RT	507.11	550.36	-	556.90	517.11	10.00	33.25	-	33.25	49.79
41	13+80.61	26.50 RT	507.07	550.36	-	556.90	517.07	10.00	33.29	-	33.29	49.83
42	13+86.36	26.50 RT	507.03	550.36	-	556.90	517.03	10.00	33.33	-	33.33	49.87
43	13+92.11	26.50 RT	506.99	550.36	-	556.90	516.99	10.00	33.37	-	33.37	49.91
44	13+97.86	26.50 RT	506.96	550.36	-	556.90	516.96	10.00	33.40	-	33.40	49.94
45	14+03.61	26.50 RT	506.92	550.36	-	556.90	516.92	10.00	33.44	-	33.44	49.98
46	14+09.36	26.50 RT	506.88	550.36	-	557.40	516.88	10.00	33.48	0.50	33.48	50.52
47	14+15.11	26.50 RT	506.84	550.86	-	557.40	516.84	10.00	34.02	-	34.02	50.56
48	14+20.86	26.50 RT	506.81	550.86	-	557.40	516.81	10.00	34.05	-	34.05	50.59
49	14+26.61	26.50 RT	506.77	550.86	-	557.40	516.77	10.00	34.09	-	34.09	50.63
50	14+32.36	26.50 RT	506.73	550.86	-	557.40	516.73	10.00	34.13	-	34.13	50.67
51	14+38.11	26.50 RT	506.69	550.86	-	557.40	516.69	10.00	34.17	-	34.17	50.71
52	14+43.86	26.50 RT	506.66	550.86	-	557.90	516.66	10.00	34.20	0.50	34.20	51.24
53	14+49.61	26.50 RT	506.62	551.36	-	557.90	516.62	10.00	34.74	-	34.74	51.28
54	14+55.36	26.50 RT	507.17	551.36	-	557.90	517.17	10.00	34.19	-	34.19	50.73
55	14+61.11	26.50 RT	507.74	551.36	-	557.90	517.74	10.00	33.62	-	33.62	50.16
56	14+66.86	26.50 RT	508.31	551.36	-	557.90	518.31	10.00	33.05	-	33.05	49.59
57	14+72.61	26.50 RT	508.88	551.36	-	558.40	518.88	10.00	32.48	0.50	32.48	49.52
58	14+78.36	26.50 RT	509.45	551.86	-	558.40	519.45	10.00	32.41	-	32.41	48.95
59	14+84.11	26.50 RT	510.01	551.86	-	558.40	520.01	10.00	31.85	-	31.85	48.39
60	14+89.86	26.50 RT	510.58	551.86	-	558.40	520.58	10.00	31.28	-	31.28	47.82
61	14+95.61	26.50 RT	511.15	551.86	-	558.40	521.15	10.00	30.71	-	30.71	47.25
62	15+01.36	26.50 RT	511.72	551.86	-	558.90	521.72	10.00	30.14	0.50	30.14	47.18
63	15+07.11	26.50 RT	512.28	552.36	-	558.90	522.28	10.00	30.08	-	30.08	46.62
64	15+12.86	26.50 RT	512.85	552.36	-	558.90	522.85	10.00	29.51	-	29.51	46.05
65	15+18.61	26.50 RT	513.42	552.36	-	558.90	523.42	10.00	28.94	-	28.94	45.48
66	15+24.36	26.50 RT	513.99	552.36	-	558.90	523.99	10.00	28.37	-	28.37	44.91
67	15+30.11	26.50 RT	514.56	552.36	-	559.40	524.56	10.00	27.80	0.50	27.80	44.84
68	15+35.86	26.50 RT	515.12	552.86	-	559.40	525.12	10.00	27.74	-	27.74	44.28
69	15+41.61	26.50 RT	515.69	552.86	-	559.40	525.69	10.00	27.17	-	27.17	43.71
70	15+47.36	26.50 RT	516.26	552.86	-	559.40	526.26	10.00	26.60	-	26.60	43.14
71	15+53.11	26.50 RT	516.63	552.86	-	559.40	526.63	10.00	26.23	-	26.23	42.77
72	15+58.86	26.50 RT	516.82	552.86	-	559.90	526.82	10.00	26.04	0.50	26.04	43.08
73	15+64.61	26.50 RT	517.02	553.36	-	559.90	527.02	10.00	26.34	-	26.34	42.88
74	15+70.36	26.50 RT	517.22	553.36	-	559.90	527.22	10.00	26.14	-	26.14	42.68
75	15+76.11	26.50 RT	517.42	553.36	-	559.90	527.42	10.00	25.94	-	25.94	42.48
76	15+81.86	26.50 RT	517.62	553.36	-	559.90	527.62	10.00	25.74	-	25.74	42.28
77	15+87.61	26.50 RT	517.82	553.36	-	559.90	527.82	10.00	25.54	-	25.54	42.08
78	15+93.36	26.50 RT	518.02	553.36	-	559.90	528.02	10.00	25.34	-	25.34	41.88
			TOTALS CARRIED TO GENERAL SUMMARY					780.00	2663.46	3.00	2663.46	3705.35

DRILLED SHAFT DETAILS

MODEL: SHEET 5 DRILLED SHAFT SUMMARY 2 PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:51:36 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Roadway\Sheets\115533_WD001.dgn

DRILLED SHAFT SUMMARY (PLUG PILE)

SHAFT No.	CENTERLINE DRILLED SHAFT (PLUG PILE) STA.	CENTERLINE OFFSET		BOTTOM ELEVATION OF SHAFT	TOP ELEVATION OF SHAFT	ITEM 524: 36" DIA. DRILLED SHAFTS ABOVE BEDROCK	ITEM 524; DRILLED SHAFTS, MISC.: 36" STEEL CASING
						FEET	FEET
1	11+53.48	24.75	RT	538.60	553.60	15.00	15.00
2	11+59.23	24.75	RT	538.60	553.60	15.00	15.00
3	11+64.98	24.75	RT	538.60	553.60	15.00	15.00
4	11+70.73	24.75	RT	538.50	553.50	15.00	15.00
5	11+76.48	24.75	RT	538.60	553.60	15.00	15.00
6	11+82.23	24.75	RT	538.80	553.80	15.00	15.00
7	11+87.98	24.75	RT	539.10	554.10	15.00	15.00
8	11+93.73	24.75	RT	539.30	554.30	15.00	15.00
9	11+99.48	24.75	RT	539.30	554.30	15.00	15.00
10	12+05.23	24.75	RT	539.30	554.30	15.00	15.00
11	12+10.98	24.75	RT	539.20	554.20	15.00	15.00
12	12+16.73	24.75	RT	539.20	554.20	15.00	15.00
13	12+22.48	24.75	RT	539.20	554.20	15.00	15.00
14	12+28.23	24.75	RT	539.40	554.40	15.00	15.00
15	12+33.98	24.75	RT	539.60	554.60	15.00	15.00
16	12+39.73	24.75	RT	539.60	554.60	15.00	15.00
17	12+45.48	24.75	RT	539.70	554.70	15.00	15.00
18	12+51.23	24.75	RT	539.70	554.70	15.00	15.00
19	12+56.98	24.75	RT	539.70	554.70	15.00	15.00
20	12+62.73	24.75	RT	539.70	554.70	15.00	15.00
21	12+68.48	24.75	RT	539.60	554.60	15.00	15.00
22	12+74.23	24.75	RT	539.60	554.60	15.00	15.00
23	12+79.98	24.75	RT	539.60	554.60	15.00	15.00
24	12+85.73	24.75	RT	539.60	554.60	15.00	15.00
25	12+91.48	24.75	RT	539.60	554.60	15.00	15.00
26	12+97.23	24.75	RT	539.60	554.60	15.00	15.00
27	13+02.98	24.75	RT	539.60	554.60	15.00	15.00
28	13+08.73	24.75	RT	539.50	554.50	15.00	15.00
29	13+14.48	24.75	RT	539.50	554.50	15.00	15.00
30	13+20.23	24.75	RT	539.40	554.40	15.00	15.00
31	13+25.98	24.75	RT	539.10	554.10	15.00	15.00
32	13+31.73	24.75	RT	538.90	553.90	15.00	15.00
33	13+37.48	24.75	RT	539.00	549.00	10.00	10.00
34	13+43.23	24.75	RT	538.40	553.40	15.00	15.00
35	13+48.98	24.75	RT	538.10	553.10	15.00	15.00
36	13+54.73	24.75	RT	537.90	552.90	15.00	15.00
37	13+60.48	24.75	RT	537.61	552.61	15.00	15.00
38	13+66.23	24.75	RT	540.36	550.36	10.00	10.00
39	13+71.98	24.75	RT	540.36	550.36	10.00	10.00
40	13+77.73	24.75	RT	540.36	550.36	10.00	10.00
41	13+83.48	24.75	RT	540.36	550.36	10.00	10.00
42	13+89.23	24.75	RT	540.36	550.36	10.00	10.00
43	13+94.98	24.75	RT	540.36	550.36	10.00	10.00
44	14+00.73	24.75	RT	540.36	550.36	10.00	10.00
45	14+06.48	24.75	RT	540.36	550.36	10.00	10.00
46	14+12.23	24.75	RT	540.86	550.86	10.00	10.00
47	14+17.98	24.75	RT	540.86	550.86	10.00	10.00
48	14+23.73	24.75	RT	540.86	550.86	10.00	10.00
49	14+29.48	24.75	RT	540.86	550.86	10.00	10.00
50	14+35.23	24.75	RT	540.86	550.86	10.00	10.00
51	14+40.98	24.75	RT	540.86	550.86	10.00	10.00
52	14+46.73	24.75	RT	541.36	551.36	10.00	10.00
53	14+52.48	24.75	RT	541.36	551.36	10.00	10.00
54	14+58.23	24.75	RT	541.36	551.36	10.00	10.00
55	14+63.98	24.75	RT	541.36	551.36	10.00	10.00
56	14+69.73	24.75	RT	541.36	551.36	10.00	10.00
57	14+75.48	24.75	RT	541.86	551.86	10.00	10.00
58	14+81.23	24.75	RT	541.86	551.86	10.00	10.00
59	14+86.98	24.75	RT	541.86	551.86	10.00	10.00
60	14+92.73	24.75	RT	541.86	551.86	10.00	10.00
61	14+98.48	24.75	RT	541.86	551.86	10.00	10.00
62	15+04.23	24.75	RT	542.36	552.36	10.00	10.00
63	15+09.98	24.75	RT	542.36	552.36	10.00	10.00
64	15+15.73	24.75	RT	542.36	552.36	10.00	10.00
65	15+21.48	24.75	RT	542.36	552.36	10.00	10.00
66	15+27.23	24.75	RT	542.36	552.36	10.00	10.00
67	15+32.98	24.75	RT	542.86	552.86	10.00	10.00
68	15+38.73	24.75	RT	542.86	552.86	10.00	10.00
69	15+44.48	24.75	RT	542.86	552.86	10.00	10.00
70	15+50.23	24.75	RT	542.86	552.86	10.00	10.00
71	15+55.98	24.75	RT	542.86	552.86	10.00	10.00
72	15+61.73	24.75	RT	543.36	553.36	10.00	10.00
73	15+67.48	24.75	RT	543.36	553.36	10.00	10.00
74	15+73.23	24.75	RT	543.36	553.36	10.00	10.00
75	15+78.98	24.75	RT	543.36	553.36	10.00	10.00
76	15+84.73	24.75	RT	543.36	553.36	10.00	10.00
77	15+90.48	24.75	RT	543.36	553.36	10.00	10.00
					TOTAL	950.00	950.00

DRILLED SHAFT DETAILS

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF REPAIRING A LANDSLIDE UTILIZING A 446 FT DRILLED SHAFT RETAINING WALL AND DUMPED ROCK FILL.

HISTORIC RECORDS

NO HISTORICAL GEOTECHNICAL RECORDS WERE FOUND FOR THIS PROJECT. HISTORICAL DOCUMENTATION FOR SR7 INDICATES THAT ACTIVE SLOPE INSTABILITY HAS BEEN PRESENT THROUGHOUT THE AREA PRIOR TO THE 1930'S.

GEOLOGY

THE PROJECT IS LOCATED WITHIN THE NON-GLACIATED MARIETTA PLATEAU PHYSIOGRAPHIC REGION WHICH IS CHARACTERIZED AS A HIGH RELIEF DISSECTED PLATEAU. THIN RESIDUAL SOILS ARE LOCATED ALONG THE RIDGE TOPS AND HILLSIDES, AND THIN TO THICK COLLUVIAL SOILS ARE LOCATED AT THE BASE OF THE HILLS. ALONG MAJOR STREAM VALLEYS LACUSTRINE DEPOSITS WITH OUTWASH SOILS ARE PRESENT. THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) INTERACTIVE GEOLOGIC MAP INDICATES THAT THE MAJORITY OF THE PROJECT AREA IS COMPRISED OF ALLUVIAL SOILS, ASSOCIATED WITH THE OHIO RIVER VALLEY, AT THE GROUND SURFACE. THE OVERBURDEN SOILS ARE UNDERLAIN BY PENNSYLVANIAN-AGED SHALE, SILTSTONE, SANDSTONE, CONGLOMERATE, AND SUBORDINATE AMOUNTS OF LIMESTONE, CLAY, FLINT, AND COAL FROM THE CONEMAUGH GROUP.

RECONNAISSANCE

INITIAL FIELD RECONNAISSANCE WAS COMPLETED BY DISTRICT PERSONNEL ON JULY 12, 2021. THE ROADWAY WAS NOTED AS BEING PATCHED AND WAVY. CRACKING WAS NOTED WITHIN THE PAVEMENT INDICATING A HEAD SCARP DUE TO SLOPE INSTABILITY BELOW THE ROADWAY. AT THE WEST END OF THE PAVEMENT PATCH AND EXTENDING FURTHER WEST DUMP ROCK PLACED FOR RIVERBANK STABILIZATION IS PRESENT. AT THE EAST END OF THE PAVEMENT PATCH, A CONCRETE CAP IS PRESENT BEING SUPPORTED BY STEEL PILES. THE BASE OF THE CAP HAS BEEN EXPOSED AT THE WESTERN END ALLOWING FOR THE PILES TO BE VISIBLE. A PAVED DRIVEWAY IS PRESENT WITHIN THE AREA OF THE PAVEMENT PATCH LEADING TO A GRASSY FIELD BELOW THE ROADWAY. THE EASTERN END OF THE PROJECT HAS A STEEP, SHORT EMBANKMENT SUPPORTING THE ROADWAY. ABOVE THE ROADWAY IS A GENTLY RISING GRASSY HILLSIDE TRANSITIONING INTO A STEEPER WOODED SLOPE. THE RIPARIAN CORRIDOR AT THE EDGE OF THE OHIO RIVER IS WOODED. GENERALLY, THE SURROUNDING LAND USE IS FALLOW, GRASSY, AGRICULTURAL LAND.

SUBSURFACE EXPLORATION

MULTIPLE PHASES WERE PERFORMED FOR THE GEOTECHNICAL EXPLORATION. INITIALLY FOUR (4) BORINGS, B-001-0-21 THROUGH B-004-0-21, WERE COMPLETED BETWEEN AUGUST 3 AND 19, 2021, UTILIZING A TRUCK MOUNTED CME 55 ROTARY DRILL, USING 3 ¼-INCH I.D. HOLLOW STEM AUGERS. AN ADDITIONAL BORING, B-003-1-22, WAS COMPLETED BETWEEN MAY 31 AND JUNE 7, 2022, UTILIZING A TRACK MOUNTED CME 850R, USING 3 ¾-INCH I.D. HOLLOW STEM AUGERS. AUGERS WERE ADVANCED THROUGH THE OVERBURDEN SOILS INTO WEATHERED BEDROCK WITH DISTURBED SAMPLES COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT CONTINUOUS AND 2.5-FOOT INTERVALS. THE HAMMER SYSTEMS USED WERE CALIBRATED ON APRIL 15, 2020, WITH AN AVERAGE DRILL ROD ENERGY RATIO (ER) OF 84% FOR THE CME 55 AND ON APRIL 19, 2021, WITH THE ER CAPPED AT 90% FOR THE CME 850 AS PER SGE 404.3. THE BORINGS WERE ADVANCED INTO BEDROCK AND SAMPLED (AASHTO T225) USING AN N SERIES WIRELINE CORE BARREL, WATER METHOD.

AN ELECTRICAL RESISTIVITY IMAGING (ER) SURVEY WAS COMPLETED WITHIN THE VICINITY OF THE CONCRETE CAP AS AN ATTEMPT TO DELINEATE THE EXTENT OF THE CAP. A SECOND ER SURVEY WAS CONDUCTED TO HELP DETERMINE THE LOCATION OF A CULVERT AND THE CULVERT OUTLET WITHIN THE PROJECT AREA. THE ER DATA WAS COLLECTED WITH AN ADVANCED GEOSCIENCES INC. (AGI) SUPERSTING R8 CONTROL UNIT. FOR THE FIRST ER SURVEY, 34 ELECTRODES WERE SPACED APPROXIMATELY 5 FEET APART, WHILE THE SECOND SURVEY UTILIZED 24 ELECTRODES SPACED APPROXIMATELY 5 FEET APART. THE ELECTRODES WERE USED TO MEASURE THE POTENTIAL FIELD WITH DIPOLE-DIPOLE AND STRONG GRADIENT ARRAYS. THE DATA WAS PROCESSED, AND SURFACE ELEVATION CORRECTED USING AGI'S EARTHIMAGER 2D SOFTWARE.

EXPLORATION FINDINGS

BORINGS B-001-0-21 THROUGH B-004-0-21 WERE COMPLETED WITHIN THE EXISTING ROADWAY ENCOUNTERING 12 TO 18-INCHES OF ASPHALT UNDERLAIN BY 8 TO 10-INCHES OF CONCRETE. BENEATH THE SURFACE MATERIALS THE BORINGS ENCOUNTERED PREDOMINANTLY COHESIVE SOILS CONSISTING OF SANDY SILT (A-4a), SILT (A-4b), SILT AND CLAY (A-6a), SILTY CLAY (A-6b), AND CLAY (A-7-6) RANGING FROM VERY SOFT TO HARD IN CONSISTENCY AND DAMP TO WET IN CONDITION. MODERATELY ORGANIC SOILS WERE ENCOUNTERED IN B-001-0-21 BETWEEN ELEVATIONS (EL.) 547.8 AND 542.8 FEET (FT) AND WITHIN B-003-0-21 BETWEEN EL. 546.0 AND 544.5 FT. ADDITIONALLY, NON-COHESIVE SOILS WERE ENCOUNTERED WITHIN ISOLATED AREAS WITHIN THESE BORINGS. MEDIUM DENSE SILT (A-4b) WAS ENCOUNTERED BETWEEN EL. 529.1 AND 522.8 FT IN WET CONDITION WITHIN B-001-0-21. WITHIN B-002-0-21 VERY DENSE STONE FRAGMENTS WITH SAND AND SILT (A-2-4) AND LOOSE COARSE AND FINE SAND (A-3a) WERE ENCOUNTERED BETWEEN EL. 533.1 AND 531.3 FT AND 525.3 AND 523.8 FT, RESPECTIVELY. BEDROCK WAS ENCOUNTERED IN ALL FOUR BORINGS BETWEEN EL. 517.8 AND 529.5 FT WHICH WAS SLIGHTLY VARIABLE, BUT, GENERALLY, RAISED TO THE EAST. THE FIRST ENCOUNTERED BEDROCK CONSISTED OF SANDSTONE WHICH WAS TYPICALLY HIGHLY TO MODERATELY WEATHERED AND WEAK TO SLIGHTLY STRONG. B-003-0-21 FIRST ENCOUNTERED A MODERATELY WEATHERED, VERY WEAK SHALE INSTEAD OF SANDSTONE. B-004-0-21 ENCOUNTERED A SILTSTONE LAYER BENEATH THE SANDSTONE, WHICH WAS MODERATELY WEATHERED, SLIGHTLY STRONG, AND CONTAINED CLAY SEAMS. CLAYSTONE WAS ENCOUNTERED IN ALL FOUR BORINGS BETWEEN EL. 515.3 AND 520.4 FT WITH A SLIGHTLY VARIABLE SURFACE. THIS STRATUM WAS TYPICALLY MODERATELY WEATHERED AND VERY WEAK. UNCONFINED COMPRESSIVE STRENGTH TESTING RESULTS RANGED FROM 27 TO 33 AND FROM 88 TO 338 PSI WITH CONFINING PRESSURE ADDED. ALL BORINGS WERE TERMINATED WITHIN CLAYSTONE. B-001-0-21 AND B-004-0-21 WERE REPORTED AS BEING DRY PRIOR TO INTRODUCTION OF CORE WATER. B-002-0-21 AND B-003-0-21 ENCOUNTERED FREE WATER WHILE DRILLING AT EL. 525.3 AND 527.0 FT., RESPECTIVELY WITH B-002-0-21 HAVING A WATER LEVEL AT COMPLETION, INCLUDING CORE WATER, AT EL. 538.6 FT.

LEGEND

DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
STONE FRAGMENTS WITH SAND AND SILT	A-2-4	1	1
COARSE AND FINE SAND	A-3a	3	3
SANDY SILT	A-4a	8	2
SILT	A-4b	5	6
SILT AND CLAY	A-6a	10	15
SILTY CLAY	A-6b	9	18
CLAY	A-7-6	5	11
	TOTAL	41	56
BOULDERS	VISUAL		
CLAYSTONE	VISUAL		
SANDSTONE	VISUAL		
SHALE	VISUAL		
SILTSTONE	VISUAL		
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		

BORING LOCATION - PLAN VIEW.

DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.

WC — INDICATES WATER CONTENT IN PERCENT.

N_{60} — INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.

X/D" — NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X/D" = NUMBER OF BLOWS (UNCORRECTED) FOR D" OF PENETRATION AT REFUSAL.

INDICATES WATER AT COMPLETION.

W — INDICATES FREE WATER ELEVATION.

● — INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.

⊖ — INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.

γ — INDICATES UNIT WEIGHT OF ROCK.

LOI — INDICATES ORGANIC CONTENT BY LOSS ON IGNITION, AASHTO T267.

QU — INDICATES UNCONFINED COMPRESSION TEST, ASTM D7012. (ROCK)

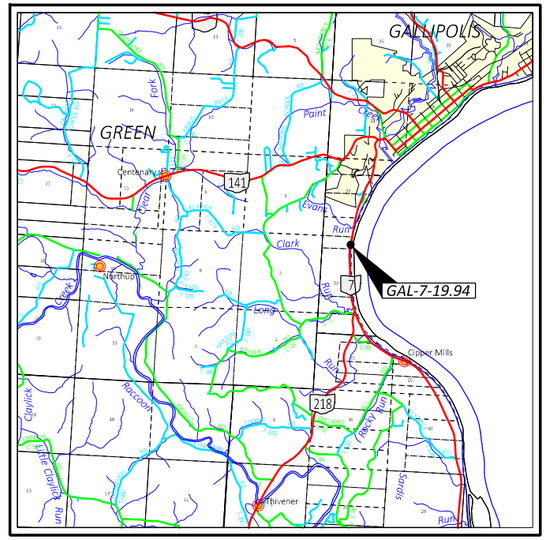
SS — INDICATES A SPLIT SPOON SAMPLE.

NQ — "N" SERIES ROCK CORE BARREL OF "Q" WIRELINE BIT SIZE.

NP — INDICATES A NON-PLASTIC SAMPLE.

TR — INDICATES TOP OF ROCK ELEVATION.

EXPLORATION FINDINGS CONTINUED, SEE SHEET 2.



LOCATION MAP

SCALE IN MILES

0 1 2 3 4

PARTICLE SIZE DEFINITIONS

12"	3"	2.0 mm	0.42 mm	0.074 mm	0.005 mm
BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT	CLAY
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE		

INDEX OF SHEETS

RECON. -	AM	07/12/21
DRILLING -	KAM	08/03/21 - 08/11/21
	AMJ	08/11/21 - 08/19/21
	DML	05/31/22 - 06/07/22
DRAWN -	AJC	08/23/24
REVIEWED -	SAT	08/23/24

GEOTECHNICAL PROFILE - LANDSLIDE

DESIGN AGENCY

DESIGNER AJC

REVIEWER SAT 08/23/24

PROJECT ID 115533

SUBSET 1 TOTAL 17

SHEET P.32 TOTAL P.48

GAL-7-19.94

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:41:29 AM USER: jwiseman
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EXPLORATION FINDINGS (CONT.)

BORINGS B-001-0-21 THROUGH B-004-0-21 WERE COMPLETED WITHIN THE EXISTING ROADWAY ENCOUNTERING 12 TO 18-INCHES OF ASPHALT UNDERLAIN BY 8 TO 10-INCHES OF CONCRETE. BENEATH THE SURFACE MATERIALS THE BORINGS ENCOUNTERED PREDOMINANTLY COHESIVE SOILS CONSISTING OF SANDY SILT (A-4a), SILT (A-4b), SILT AND CLAY (A-6a), SILTY CLAY (A-6b), AND CLAY (A-7-6) RANGING FROM VERY SOFT TO HARD IN CONSISTENCY AND DAMP TO WET IN CONDITION. MODERATELY ORGANIC SOILS WERE ENCOUNTERED IN B-001-0-21 BETWEEN ELEVATIONS (EL.) 547.8 AND 542.8 FEET (FT) AND WITHIN B-003-0-21 BETWEEN EL. 546.0 AND 544.5 FT. ADDITIONALLY, NON-COHESIVE SOILS WERE ENCOUNTERED WITHIN ISOLATED AREAS WITHIN THESE BORINGS. MEDIUM DENSE SILT (A-4b) WAS ENCOUNTERED BETWEEN EL. 529.1 AND 522.8 FT IN WET CONDITION WITHIN B-001-0-21. WITHIN B-002-0-21 VERY DENSE STONE FRAGMENTS WITH SAND AND SILT (A-2-4) AND LOOSE COARSE AND FINE SAND (A-3a) WERE ENCOUNTERED BETWEEN EL. 533.1 AND 531.3 FT AND 525.3 AND 523.8 FT, RESPECTIVELY. BEDROCK WAS ENCOUNTERED IN ALL FOUR BORINGS BETWEEN EL. 517.8 AND 529.5 FT WHICH WAS SLIGHTLY VARIABLE, BUT, GENERALLY, RAISED TO THE EAST. THE FIRST ENCOUNTERED BEDROCK CONSISTED OF SANDSTONE WHICH WAS TYPICALLY HIGHLY TO MODERATELY WEATHERED AND WEAK TO SLIGHTLY STRONG. B-003-0-21 FIRST ENCOUNTERED A MODERATELY WEATHERED, VERY WEAK SHALE INSTEAD OF SANDSTONE. B-004-0-21 ENCOUNTERED A SILTSTONE LAYER BENEATH THE SANDSTONE, WHICH WAS MODERATELY WEATHERED, SLIGHTLY STRONG, AND CONTAINED CLAY SEAMS. CLAYSTONE WAS ENCOUNTERED IN ALL FOUR BORINGS BETWEEN EL. 515.3 AND 520.4 FT WITH A SLIGHTLY VARIABLE SURFACE. THIS STRATUM WAS TYPICALLY MODERATELY WEATHERED AND VERY WEAK. UNCONFINED COMPRESSIVE STRENGTH TESTING RESULTS RANGED FROM 27 TO 33 AND FROM 88 TO 338 PSI WITH CONFINING PRESSURE ADDED. ALL BORINGS WERE TERMINATED WITHIN CLAYSTONE. B-001-0-21 AND B-004-0-21 WERE REPORTED AS BEING DRY PRIOR TO INTRODUCTION OF CORE WATER. B-002-0-21 AND B-003-0-21 ENCOUNTERED FREE WATER WHILE DRILLING AT EL. 525.3 AND 527.0 FT., RESPECTIVELY WITH B-002-0-21 HAVING A WATER LEVEL AT COMPLETION, INCLUDING CORE WATER, AT EL. 538.6 FT.

BORING B-003-1-22 WAS COMPLETED BELOW THE ROADWAY, TOWARD THE RIVER, WITHIN THE GRASSY FIELD ENCOUNTERING 12-INCHES OF TOPSOIL UNDERLAIN BY COHESIVE SOILS CONSISTING OF SANDY SILT (A-4a) AND SILTY CLAY (A-6b) IN STIFF TO VERY STIFF CONSISTENCY AND DAMP CONDITION. MEDIUM DENSE SILT (A-4b) WAS ENCOUNTERED AT EL. 529.3 FT. UNDERLAIN BY VERY LOOSE COARSE AND FINE SAND (A-3a) WHICH CONTAINED ELEVATED HYDROSTATIC HEAD CONDITIONS RESULTING IN HEAVING SANDS THAT EXTENDED TO EL. 518.3 FT. SEVERELY WEATHERED CLAYSTONE BEDROCK WHICH WAS VERY WEAK TO WEAK WAS FIRST ENCOUNTERED AT EL. 514.8 FT. AND WAS SPLIT SPOON SAMPLED TO EL. 505.8 FT WHERE IT BECAME HIGHLY TO MODERATELY WEATHERED AND WAS CORED. COMPRESSIVE STRENGTH TEST RESULTS OF 14 AND 48 PSI WERE OBTAINED FROM REPRESENTATIVE SAMPLES. SANDSTONE WAS ENCOUNTERED AT EL. 489.3 FT. IN MODERATELY WEATHERED CONDITION AND STRONG WITH AN UNCONFINED COMPRESSIVE STRENGTH TEST RESULT OF 8,255 PSI INTO WHICH THE BORING WAS TERMINATED. UPON COMPLETION OF SAMPLING ACTIVITIES AN INCLINOMETER CASING WAS INSTALLED WITHIN THE BOREHOLE. READING OF THE INCLINOMETER INDICATES A FAILURE ZONE AROUND EL. 526 FT.

THE ER SURVEYS WERE COMPLETED BELOW THE ROADWAY IN AN ATTEMPT TO LOCATE THE EXTENT OF THE PREVIOUSLY INSTALLED STRUCTURE LOCATED AT THE EAST END OF THE PROJECT AND A CULVERT OUTLET WITHIN THE PROJECT AREA. BASED ON THE RESULTS OF THE FIRST ER LINE, IT DOES NOT APPEAR THAT THE CAP AND PILES EXTEND SOUTH BEYOND WHAT IS EXPOSED AT THE SURFACE. THE RESULTS OF THE SECOND ER LINE WERE ABLE TO DELINEATE THE OUTLET OF THE EXISTING CULVERT TO BE ROUGHLY 83.09 FT EAST OF STA.1071+05 S.R. 7 AT EL 424 FT.

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2021.

AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE GEOTECHNICAL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE.

BEDROCK TEST SUMMARY

EXPLOR. ID	SAMPLE DEPTH	SAMPLE ELEVATION	LITHOLOGY	QU (psi)
B-001-0-21	41.6' - 42.0'	514.7' - 514.3'	CLAYSTONE	27
B-001-0-21	45.3' - 45.7'	511.0' - 510.6'	CLAYSTONE	185
B-001-0-21	55.0' - 55.4'	501.3' - 500.9'	CLAYSTONE	88
B-003-0-21	44.4' - 44.8'	513.6' - 513.2'	CLAYSTONE	33
B-003-0-21	45.0' - 45.4'	513.0' - 512.6'	CLAYSTONE	338
B-003-1-22	54.6' - 55.0'	497.7' - 497.3'	CLAYSTONE	48
B-003-1-22	57.4' - 57.8'	494.9' - 494.5'	CLAYSTONE	14
B-003-1-22	63.9' - 64.3'	488.4' - 488.0'	SANDSTONE	8,255

ORGANIC CONTENT BY LOSS ON IGNITION TEST

EXPLOR. ID	SAMPLE ID	SAMPLE DEPTH	SAMPLE ELEVATION	LOI (%)
B-001-0-21	SS-4	8.50' - 10.00'	547.8' - 546.3'	4.2
B-001-0-21	SS-5	11.00' - 12.50'	545.3' - 543.8'	4.2
B-003-0-21	SS-7	12.00' - 13.50'	546.0' - 544.5'	6.2

GEOTECHNICAL PROFILE - LANDSLIDE
EXPLORATION NOTES (CONT.)

DESIGN AGENCY

DESIGNER AJC

REVIEWER SAT 08/23/24

PROJECT ID 115533

SUBSET 2 | TOTAL 17

SHEET P.33 | TOTAL P.48

GAL-7-19.94

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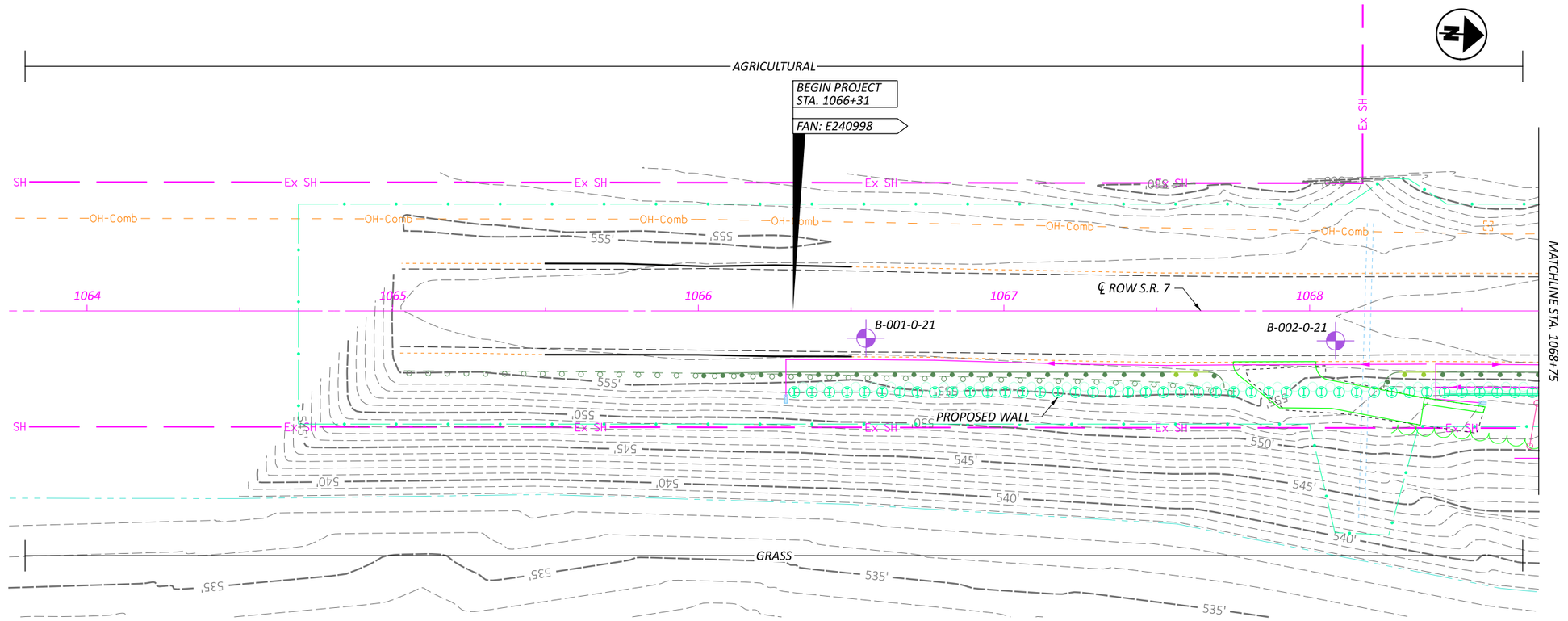

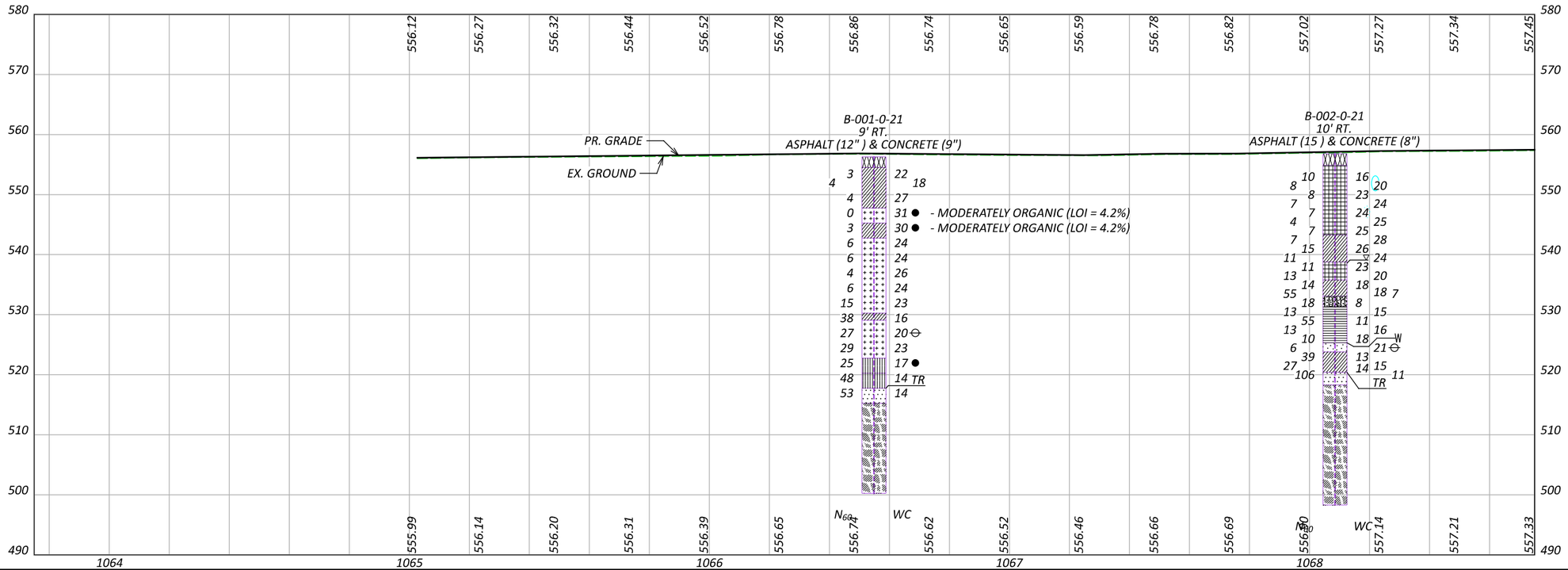

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - LANDSLIDE
STA. 1063+75 TO STA. 1068+75 - S.R. 7

DESIGN AGENCY

DESIGNER AJC
REVIEWER SAT 08/23/24
PROJECT ID 115533
SUBSET 3 TOTAL 17
SHEET P.34 TOTAL P.48

GAL-7-19.94

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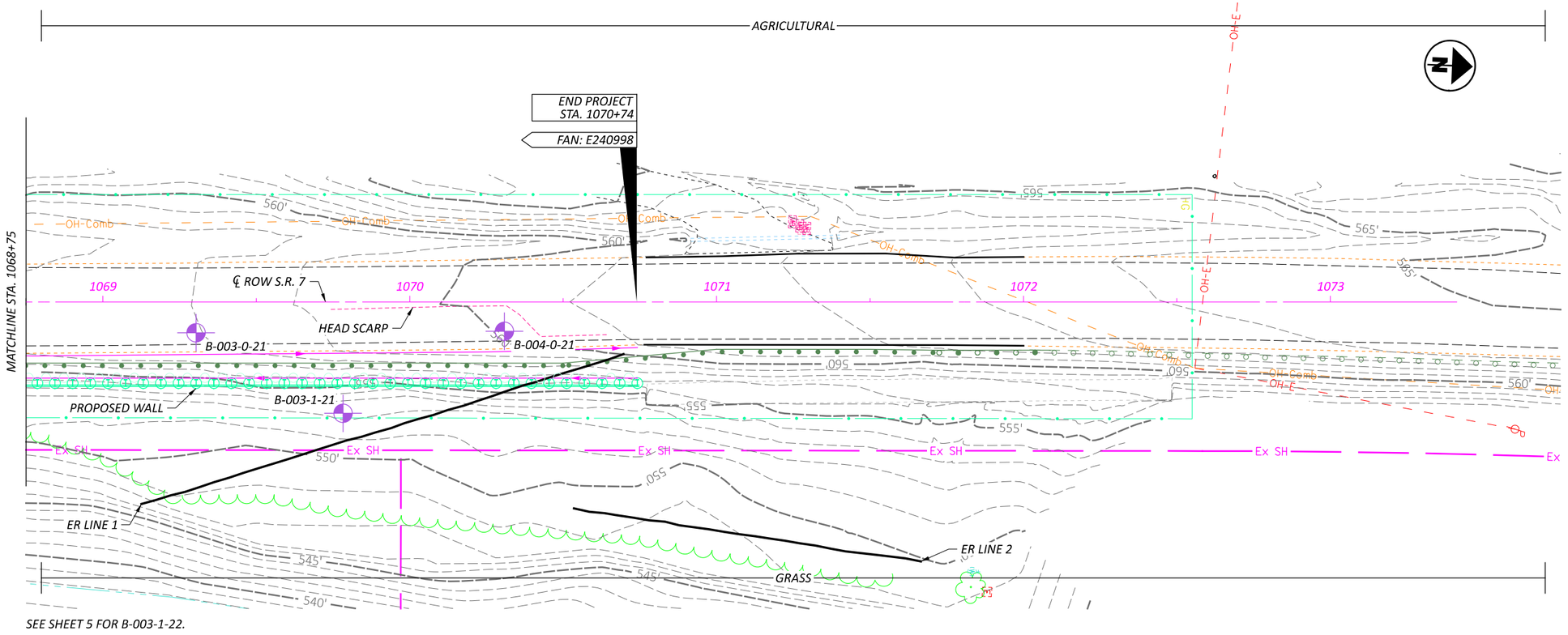

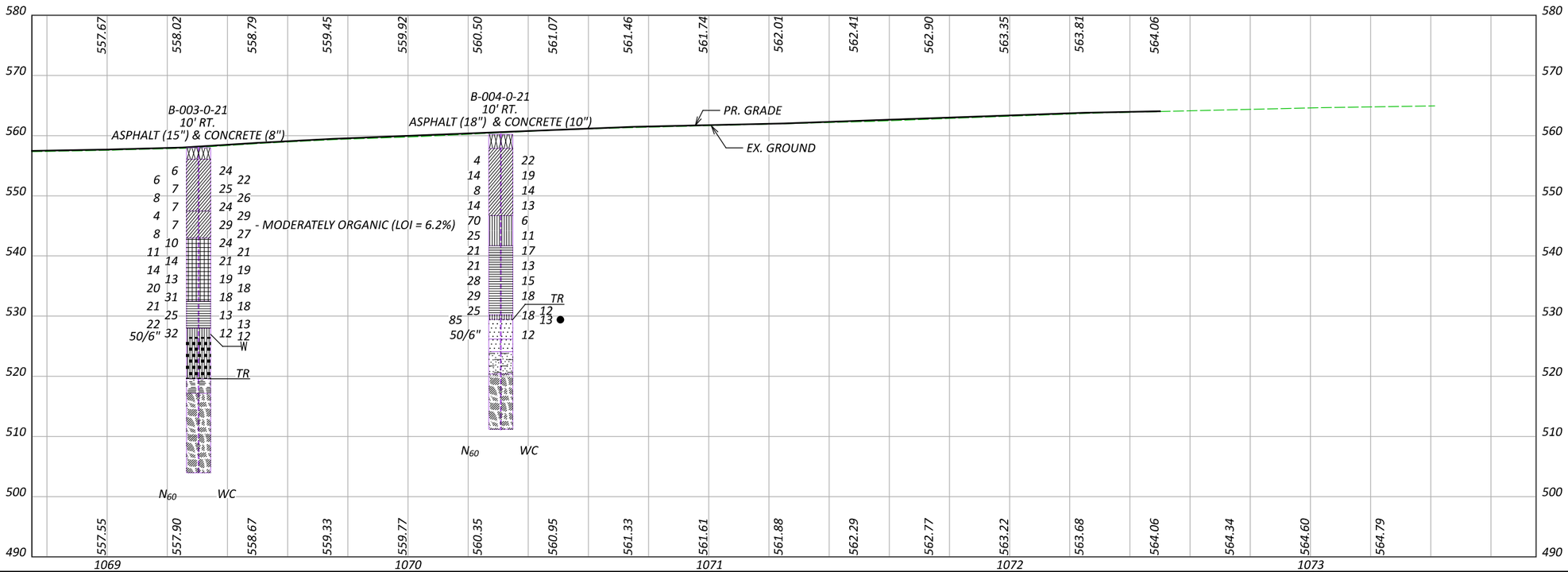

HORIZONTAL SCALE IN FEET
0 10 20 40

GEOTECHNICAL PROFILE - LANDSLIDE
STA. 1068+75 TO STA. 1073+75 - S.R. 7

GAL-7-19.94

DESIGN AGENCY

DESIGNER	AJC
REVIEWER	SAT 08/23/24
PROJECT ID	115533
SUBSET	4
TOTAL	17
SHEET	P.35
TOTAL	P.48

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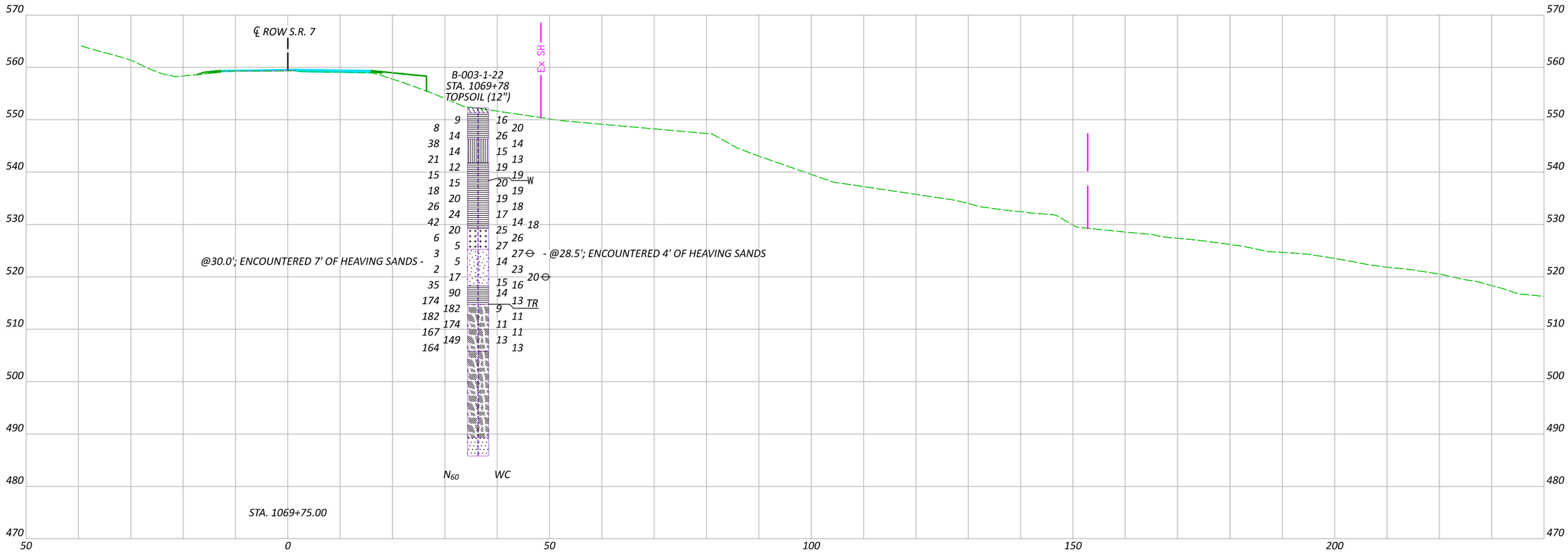

GEOTECHNICAL PROFILE - LANDSLIDE
CROSS SECTION STA. 1069+75 - S.R. 7

DESIGN AGENCY

DESIGNER
AJC

REVIEWER
SAT 08/23/24

PROJECT ID
115533

SUBSET 5 | TOTAL 17

SHEET P.36 | TOTAL P.48

GAL-7-19.94

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GAL-7-19.94

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PROJECT: GAL-7-19.94	DRILLING FIRM / OPERATOR: ODOT / CAREY	DRILL RIG: CME 55 TRUCK	STATION / OFFSET: 1066+55, 9' RT.	EXPLORATION ID B-001-0-21
TYPE: LANDSLIDE	SAMPLING FIRM / LOGGER: ODOT / AJ	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 7	
PID: 115533 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 4/15/20	ELEVATION: 556.3 (ft) EOB: 56.0 ft.	PAGE 1 OF 1
START: 8/11/21 END: 8/19/21	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 84	LAT / LONG: 38.781706, -82.222695	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (12") & CONCRETE (9")	556.3																	
	554.5																	
SOFT, RED AND BROWN, **SILT AND CLAY**, LITTLE GRAVEL, LITTLE SAND, MOIST			0 1 1	3	44	SS-1	0.50	15	3	8	31	43	37	22	15	22	A-6a (10)	
@3.5'; DAMP			1 1 2	4	50	SS-2	0.50	-	-	-	-	-	-	-	-	18	A-6a (V)	
@6.0'; MOIST			0 1 2	4	50	SS-3	0.50	-	-	-	-	-	-	-	-	27	A-6a (V)	
	547.8																	
VERY SOFT, GRAY OXIDIZING TO BROWN, **SILT**, SOME CLAY, LITTLE SAND, MODERATELY ORGANIC (LOI = 4.2%), WET			0 0 0	0	94	SS-4	0.25	0	1	13	61	25	27	18	9	31	A-4b (8)	
	545.3																	
SOFT, GRAY OXIDIZING TO BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE GRAVEL, MODERATELY ORGANIC (LOI = 4.2%), MOIST			0 0 2	3	78	SS-5	0.50	7	2	8	48	35	33	20	13	30	A-6a (9)	
	542.8																	
MEDIUM STIFF, BROWN, **SILT**, SOME CLAY, TRACE SAND, MOIST			0 2 2	6	67	SS-6	0.50	-	-	-	-	-	-	-	-	24	A-4b (V)	
			0 2 2	6	100	SS-7	0.50	0	0	2	70	28	29	21	8	24	A-4b (8)	
@18.5'; SOFT			1 1 2	4	100	SS-8	0.50	-	-	-	-	-	-	-	-	26	A-4b (V)	
@21.0'; VERY STIFF			1 2 2	6	100	SS-9	2.50	0	0	5	71	24	28	19	9	24	A-4b (8)	
			2 5 6	15	100	SS-10	3.00	-	-	-	-	-	-	-	-	23	A-4b (V)	
	530.3																	
HARD, RED AND GRAY, **SILT AND CLAY**, TRACE SAND, TRACE GRAVEL, DAMP	529.1		6 13 14	38	83	SS-11	4.50	3	0	3	38	56	37	23	14	16	A-6a (10)	
MEDIUM DENSE, GRAY, **SILT**, "AND" SAND, LITTLE CLAY, WET			9 10 9	27	56	SS-12	-	0	10	29	50	11	NP	NP	NP	20	A-4b (5)	
			5 9 12	29	50	SS-13	-	-	-	-	-	-	-	-	-	23	A-4b (V)	
	522.8																	
VERY STIFF, GRAY AND RED, **SANDY SILT**, LITTLE CLAY, TRACE GRAVEL, WET			4 7 11	25	78	SS-14	-	8	16	39	21	16	18	13	5	17	A-4a (0)	
	520.3																	
VERY STIFF, BROWN AND GRAY, **SANDY SILT**, "AND" STONE FRAGMENTS, LITTLE CLAY, DAMP			8 17 17	48	89	SS-15	3.00	36	2	14	32	16	23	15	8	14	A-4a (3)	
	517.8	TR																
SANDSTONE, BROWN AND GRAY, MODERATELY WEATHERED, WEAK, LAMINATED TO VERY THIN BEDDED, SLIGHTLY ARENACEOUS.	515.3		12 15 23	53	100	SS-16	4.50	-	-	-	-	-	-	-	-	14	Rock (V)	
CLAYSTONE, RED WITH GRAY, MODERATELY WEATHERED, VERY WEAK, MEDIUM BEDDED, BLOCKY, GOOD; RQD 63%, REC 88%. @ 41.6' - 42.0'; γ = 135 pcf; Qu = 27 psi			77		97	NQ2-1											CORE	
@ 45.3' - 45.7'; γ = 144 pcf; Qu = 185 psi, (ASTM 7012 METHOD C WITH CONFINING PRESSURE) @46.0'; GRAY. @46.7'; RED WITH GRAY.			57		67	NQ2-2											CORE	
@48.2'; HIGH ANGLE FRACTURE - SLICKENSIDED.			55		100	NQ2-3											CORE	
@53.9'; HIGH ANGLE FRACTURE - SLICKENSIDED.																		
@ 55.0' - 55.4'; γ = 143 pcf; Qu = 88 psi, (ASTM 7012 METHOD C WITH CONFINING PRESSURE)	500.3	EOB																

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 8/20/24 11:34 - X:\GINT\PROJECTS\2021 COMPLETE\600888.GPJ

NOTES: LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS. HOLE DRY BEFORE CORING.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 25 LB. BENTONITE CHIPS

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.37 / P.48	6 / 17 TOTAL	115533	SAT 08/23/24	AJC	

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-001-0-21

GAL-7-19.94

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:42:10 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Geotechnical\Sheets\115533_YL002.dgn

PROJECT: GAL-7-19.94	DRILLING FIRM / OPERATOR: ODOT / CAREY	DRILL RIG: CME 55 TRUCK	STATION / OFFSET: 1068+09, 10' RT.	EXPLORATION ID B-002-0-21
TYPE: LANDSLIDE	SAMPLING FIRM / LOGGER: ODOT / MCLEISH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 7	
PID: 115533 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 4/15/20	ELEVATION: 556.8 (ft) EOB: 58.5 ft.	PAGE 1 OF 1
START: 8/9/21 END: 8/11/21	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 84	LAT / LONG: 38.782127, -82.222714	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15) & CONCRETE (8")	556.8																	
MEDIUM STIFF, REDDISH BROWN, **CLAY**, "AND" GRAVEL AND STONE FRAGMENTS, SOME SILT, LITTLE SAND, (NOT ENOUGH MATERIAL TO TEST), DAMP	554.9		2 3 4	10	28	SS-1	0.50	-	-	-	-	-	-	-	-	16	A-7-6 (V)	
@4.5'; NOT ENOUGH MATERIAL TO TEST			1 3 3	8	33	SS-2	0.50	-	-	-	-	-	-	-	-	20	A-7-6 (V)	
@6.0'; LITTLE GRAVEL AND STONE FRAGMENTS, MOIST			1 3 3	8	100	SS-3	0.50	10	8	11	28	43	42	21	21	23	A-7-6 (12)	
			1 2 3	7	100	SS-4	0.50	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
			2 3 2	7	56	SS-5	0.50	-	-	-	-	-	-	-	-	24	A-7-6 (V)	
@10.5'; SOFT			0 1 2	4	78	SS-6	0.50	13	6	8	29	44	41	22	19	25	A-7-6 (11)	
@12.0'; MEDIUM STIFF, REDDISH BROWN AND GRAYISH BROWN	543.3		1 2 3	7	100	SS-7	0.50	-	-	-	-	-	-	-	-	25	A-7-6 (V)	
MEDIUM STIFF, GRAYISH BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, MOIST			1 2 3	7	100	SS-8	0.50	3	3	11	43	40	36	21	15	28	A-6a (10)	
@15.0'; STIFF			1 4 7	15	100	SS-9	2.00	-	-	-	-	-	-	-	-	26	A-6a (V)	
	538.8	▼ 0.1 days	2 3 5	11	100	SS-10	1.00	-	-	-	-	-	-	-	-	24	A-6a (V)	
STIFF, BROWN, **CLAY**, SOME SILT, LITTLE SAND, DAMP			2 3 5	11	100	SS-11	2.00	0	5	6	35	54	46	24	22	23	A-7-6 (14)	
	535.8		2 3 6	13	100	SS-12	2.00	-	-	-	-	-	-	-	-	20	A-7-6 (V)	
STIFF, BROWN, **SILT AND CLAY**, SOME SAND, TRACE STONE FRAGMENTS, DAMP			2 4 6	14	100	SS-13	2.00	-	-	-	-	-	-	-	-	18	A-6a (V)	
	533.1		9 18 21	55	100	SS-14A	2.00	8	10	11	34	37	36	23	13	18	A-6a (8)	
VERY DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, DAMP			~~SS-14B~~	~~-~~	~~47~~	~~9~~	~~13~~	~~20~~	~~11~~	~~25~~	~~21~~	~~4~~	~~7~~	~~A-2-4 (0)~~				
	531.3		12 6 7	18	28	SS-15	-	-	-	-	-	-	-	-	-	8	A-2-4 (V)	
VERY STIFF, BROWN, **SILTY CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP			3 4 5	13	33	SS-16	2.50	9	8	10	35	38	40	22	18	15	A-6b (11)	
@27.0'; SOME STONE FRAGMENTS			9 15 24	55	50	SS-17	3.00	-	-	-	-	-	-	-	-	11	A-6b (V)	
@28.5' - 30.0'; STIFF			10 5 4	13	22	SS-18	1.00	-	-	-	-	-	-	-	-	16	A-6b (V)	
	525.3	W 525.3	2 3 4	10	6	SS-19	3.50	-	-	-	-	-	-	-	-	18	A-6b (V)	
LOOSE, BROWN, **COARSE AND FINE SAND**, LITTLE STONE FRAGMENTS, LITTLE SILT, TRACE CLAY, WET	523.8		0 0 4	6	100	SS-20	-	11	26	47	10	6	NP	NP	NP	21	A-3a (0)	
VERY STIFF, REDDISH BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP			9 14 14	39	44	SS-21	3.00	-	-	-	-	-	-	-	-	13	A-6a (V)	
	520.4	TR	3 7 12	27	56	SS-22	3.00	8	4	7	36	45	33	21	12	15	A-6a (9)	
			~~19~~			~~SS-23A~~	~~2.75~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~-~~	~~14~~	~~A-6a (V)~~	
SANDSTONE, GRAY, MODERATELY WEATHERED, WEAK, VERY FINE GRAINED.	518.3		27 49	106	100	SS-23B	-	-	-	-	-	-	-	-	-	11	Rock (V)	
CLAYSTONE, GRAY, MODERATELY WEATHERED, VERY WEAK, MEDIUM, BLOCKY, GOOD; RQD 52%, REC 86%.			77		97	NQ2-1											CORE	
@40.4'; VARIEGATED RED, GRAY AND YELLOWISH BROWN.			39		39	NQ2-2											CORE	
@44.8'; GRAY, CONTAINS LITHIC FRAGMENTS.			57		83	NQ2-3											CORE	
@46.7'; RED WITH GRAY.			58		100	NQ2-4											CORE	
			0		100	NQ2-5											CORE	
			29		100	NQ2-6											CORE	
			75		96	NQ2-7											CORE	
	498.3	EOB	71		92	NQ2-8											CORE	

NOTES: LAT/LONG/ELEV FROM OGE HANDHELD GPS UNIT. HOLE COLLAPSED AT 30.9'FT AFTER PULLING AUGERS

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 8/20/24 11:34 - X:\GINT\PROJECTS\2021 COMPLETE\600888.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.38	P.48	7	17	115533	SAT 08/23/24	AJC	

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-002-0-21

GAL-7-19.94

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:42:22 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Geotechnical\Sheets\115533_YL003.dgn

PROJECT: GAL-7-19.94	DRILLING FIRM / OPERATOR: ODOT / CAREY	DRILL RIG: CME 55 TRUCK	STATION / OFFSET: 1069+30, 10' RT.	EXPLORATION ID B-003-0-21
TYPE: LANDSLIDE	SAMPLING FIRM / LOGGER: ODOT / MCLEISH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 7	
PID: 115533 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 4/15/20	ELEVATION: 558.0 (ft) EOB: 54.0 ft.	PAGE 1 OF 1
START: 8/4/21 END: 8/9/21	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 84	LAT / LONG: 38.782462, -82.222730	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15") & CONCRETE (8")	558.0																	
	556.1																	
MEDIUM STIFF, REDDISH BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE GRAVEL AND STONE FRAGMENTS, MOIST			1 2 2	6	28	SS-1	0.50	6	3	12	31	48	35	20	15	24	A-6a (10)	
			1 2 2	6	44	SS-2	0.50	-	-	-	-	-	-	-	-	22	A-6a (V)	
			1 2 3	7	50	SS-3	0.50	-	-	-	-	-	-	-	-	25	A-6a (V)	
@7.5'; STIFF, REDDISH BROWN AND GRAYISH BROWN, TRACE SAND			1 2 4	8	56	SS-4	1.50	2	2	6	45	45	33	19	14	26	A-6a (10)	
	547.5		1 2 3	7	100	SS-5	1.50	-	-	-	-	-	-	-	-	24	A-6a (V)	
SOFT, GRAYISH BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, MOIST			0 1 2	4	100	SS-6	0.25	-	-	-	-	-	-	-	-	29	A-6a (V)	
@12.0' - 13.5'; MODERATELY ORGANIC (LOI = 6.2%)			0 2 3	7	89	SS-7	0.25	1	3	11	43	42	36	21	15	29	A-6a (10)	
	543.0		2 2 4	8	22	SS-8	0.25	-	-	-	-	-	-	-	-	27	A-6a (V)	
MEDIUM STIFF, RED, **CLAY**, SOME SILT, TRACE SAND, TRACE STONE FRAGMENTS, MOIST			0 3 4	10	89	SS-9	0.50	3	1	2	21	73	58	20	38	24	A-7-6 (20)	
			3 4 4	11	100	SS-10	1.50	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
			2 4 6	14	89	SS-11	1.00	-	-	-	-	-	-	-	-	21	A-7-6 (V)	
@19.5'; DAMP			2 4 6	14	56	SS-12	1.50	1	1	3	32	63	43	21	22	19	A-7-6 (13)	
			2 3 6	13	100	SS-13	1.50	-	-	-	-	-	-	-	-	19	A-7-6 (V)	
@22.5'; VERY STIFF			2 5 9	20	83	SS-14	2.00	-	-	-	-	-	-	-	-	18	A-7-6 (V)	
	532.5		3 8 14	31	56	SS-15	2.50	-	-	-	-	-	-	-	-	18	A-7-6 (V)	
VERY STIFF, RED, **SILTY CLAY**, TRACE SAND, TRACE STONE FRAGMENTS, DAMP			3 6 9	21	78	SS-16	2.00	2	1	2	33	62	37	21	16	18	A-6b (10)	
			4 8 10	25	94	SS-17	2.00	-	-	-	-	-	-	-	-	13	A-6b (V)	
			5 8 8	22	100	SS-18	2.50	-	-	-	-	-	-	-	-	13	A-6b (V)	
	528.0																	
VERY STIFF, BROWN AND GRAY, **SANDY SILT**, SOME STONE FRAGMENTS, SOME CLAY, DAMP		W 527.0	15 11 12	32	78	SS-19	2.00	25	8	25	21	21	19	14	5	12	A-4a (1)	
@31.5' - 38.4'; ENCOUNTERED BOULDERS/COBBLES			50	-	100	SS-20	-	-	-	-	-	-	-	-	-	12	A-4a (V)	
	519.6	TR																
SHALE, GRAY, MODERATELY WEATHERED, VERY WEAK, LAMINATED TO VERY THIN BEDDED, POORLY FISSLE, BLOCKY, GOOD; RQD 0%, REC 100%.	517.2		0		50	NQ2-1											CORE	
CLAYSTONE, VARIEGATED YELLOWISH BROWN, GRAY AND RED, MODERATELY WEATHERED, VERY WEAK, MEDIUM BEDDED, BLOCKY, GOOD; RQD 44%, REC 85%.			23		100	NQ2-2											CORE	
@ 44.4' - 44.8'; γ = 146 pcf; Qu = 33 psi @ 45.0' - 45.4'; γ = 148 pcf; Qu = 338 psi, (ASTM 7012 METHOD C WITH CONFINING PRESSURE) @45.3'; GRAY, CONTAINS LITHIC FRAGMENTS.			53		92	NQ2-3											CORE	
@47.6'; VARIEGATED YELLOWISH BROWN, GRAY AND RED.			38		68	NQ2-4											CORE	
	504.0	EOB																

NOTES: LAT/LONG/ELEV FROM OGE HANDHELD GPS UNIT.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 8/20/24 11:34 - X:\GINT\PROJECTS\2021 COMPLETE\600888.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.39 / TOTAL P.48	8 / TOTAL 17	115533	SAT 08/23/24	AJC	

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-003-0-21

GAL-7-19.94

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:42:34 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Geotechnical\Sheets\115533_YL004.dgn

PROJECT: GAL-7-19.94	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 850R TRACKED	STATION / OFFSET: 1069+78, 36' RT.
TYPE: LANDSLIDE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 7
PID: 115533 SFN:	DRILLING METHOD: 3.75" HSA / NQ2	CALIBRATION DATE: 4/19/21	ELEVATION: 552.3 (ft) EOB: 66.5 ft.
START: 5/31/22 END: 6/7/22	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 90*	LAT / LONG: 38.782596, -82.222645

EXPLORATION ID B-003-1-22 — PAGE 1 OF 2

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	INCL.
TOPSOIL (12")	552.3																	
	551.3	1																
VERY STIFF, RED, **SILTY CLAY**, LITTLE STONE FRAGMENTS, LITTLE SAND, DAMP		2	2 3 3	9	56	SS-1	2.50	19	4	8	32	37	35	17	18	16	A-6b (10)	
@3.0'; STIFF, MOIST		3	3 2 3	8	78	SS-2	2.00	-	-	-	-	-	-	-	-	20	A-6b (V)	
		4	3 4 5	14	56	SS-3	2.00	-	-	-	-	-	-	-	-	26	A-6b (V)	
	546.3	5																
VERY STIFF, RED AND BROWN, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP		6	5 12 13	38	67	SS-4	2.00	31	1	32	22	14	24	18	6	14	A-4a (0)	
@7.5'; STIFF, RED		7	6 4 5	14	44	SS-5	2.00	26	1	26	27	20	24	16	8	15	A-4a (2)	
		8	7 9 5	21	33	SS-6	1.50	-	-	-	-	-	-	-	-	13	A-4a (V)	
	541.8	9																
STIFF, BROWN AND GRAY, **SILTY CLAY**, LITTLE STONE FRAGMENTS, TRACE SAND, DAMP		10	2 3 5	12	39	SS-7	1.50	-	-	-	-	-	-	-	-	19	A-6b (V)	
		11	2 4 6	15	72	SS-8	2.00	14	2	4	24	56	40	20	20	19	A-6b (12)	
@13.5'; RED	W 538.4	12	3 4 6	15	39	SS-9	2.00	-	-	-	-	-	-	-	-	20	A-6b (V)	
@15.0'; VERY STIFF		13	2 5 7	18	61	SS-10	2.00	-	-	-	-	-	-	-	-	19	A-6b (V)	
		14	3 6 7	20	39	SS-11	2.00	-	-	-	-	-	-	-	-	19	A-6b (V)	
@18.0'; TRACE STONE FRAGMENTS		15	4 8 9	26	44	SS-12	2.00	2	0	1	36	61	39	19	20	18	A-6b (12)	
		16	4 7 9	24	50	SS-13	3.00	-	-	-	-	-	-	-	-	17	A-6b (V)	
		17	7 12 16	42	72	SS-14	3.50	-	-	-	-	-	-	-	-	14	A-6b (V)	
	529.3	18				SS-15A	-	-	-	-	-	-	-	-	-	18	A-6b (V)	
MEDIUM DENSE, BROWN, **SILT**, SOME SAND, TRACE CLAY, WET		19	6 4 9	20	83	SS-15B	-	0	0	33	63	4	NP	NP	NP	25	A-4b (6)	
@24.0'; LOOSE, GRAY		20	0 1 3	6	56	SS-16	-	-	-	-	-	-	-	-	-	26	A-4b (V)	
		21	0 1 2	5	33	SS-17	-	-	-	-	-	-	-	-	-	27	A-4b (V)	
	525.3	22																
VERY LOOSE, BROWN, **COARSE AND FINE SAND**, LITTLE SILT, TRACE CLAY, WET		23	0 0 2	3	67	SS-18	-	0	2	80	14	4	NP	NP	NP	27	A-3a (0)	
@28.5'; LOOSE; 4' OF HEAVING SAND ENCOUNTERED		24	0 1 2	5	6	SS-19	-	-	-	-	-	-	-	-	-	14	A-3a (V)	
@30.0'; VERY LOOSE, 7' OF HEAVING SAND ENCOUNTERED		25	0 0 1	2	28	SS-20	-	-	-	-	-	-	-	-	-	23	A-3a (V)	
@31.5'; MEDIUM DENSE, TRACE STONE FRAGMENTS		26	3 5 6	17	67	SS-21	-	3	28	52	14	3	NP	NP	NP	20	A-3a (0)	
		27	6 10 13	35	83	SS-22A	-	-	-	-	-	-	-	-	-	15	A-3a (V)	
	518.3					SS-22B	4.5+	-	-	-	-	-	-	-	-	16	A-6b (V)	
HARD, GRAY AND BLACK, **SILTY CLAY**, TRACE SAND, TRACE STONE FRAGMENTS, RESIDUAL SOIL, DAMP		28	15 26 34	90	78	SS-23	4.5+	2	3	4	39	52	39	18	21	14	A-6b (12)	
@34.5'; BROWN AND GRAY		29	27 43 73	174	78	SS-24	4.5+	-	-	-	-	-	-	-	-	13	A-6b (V)	
@36.0'; RED AND GRAY	514.8	TR																
CLAYSTONE, RED AND GRAY, SEVERELY WEATHERED, VERY WEAK TO WEAK.		30	41 54 67	182	56	SS-25	-	-	-	-	-	-	-	-	-	9	Rock (V)	
		31	22 44 77	182	78	SS-26	-	-	-	-	-	-	-	-	-	11	Rock (V)	
		32	20 47 69	174	61	SS-27	-	-	-	-	-	-	-	-	-	11	Rock (V)	
		33	28 52 59	167	89	SS-28	-	-	-	-	-	-	-	-	-	11	Rock (V)	
		34	21 39 60	149	89	SS-29	-	-	-	-	-	-	-	-	-	13	Rock (V)	
		35	25 41 68	164	78	SS-30	-	-	-	-	-	-	-	-	-	13	Rock (V)	
	505.8	36																
CLAYSTONE, REDDISH BROWN, HIGHLY TO MODERATELY WEATHERED, VERY WEAK TO WEAK, THIN BEDDED; RQD 20%, REC 94%.		37	0		100	NQ2-1											CORE	
@48.5' - 48.6'; HIGH ANGLE FRACTURE		38	0		100	NQ2-2											CORE	
@51.1'; VARIEGATED RED AND GRAY.		39	0		96	NQ2-3											CORE	
		40	25		63	NQ2-4											CORE	
@ 54.6' - 55.0'; γ = 148 pcf; Qu = 48 psi		41	42		100	NQ2-5											CORE	
@ 57.4' - 57.8'; γ = 151 pcf; Qu = 14 psi		42	75		96	NQ2-6											CORE	
@58.9'; SLIGHTLY STRONG.		43	0		96	NQ2-7											CORE	

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 8/21/24 07:49 - X:\GINT\PROJECTS\2022 COMPLETE\600971.GPJ

SHEET	TOTAL	SUBSET	TOTAL	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.40	P.48	9	17	115533	SAT 08/23/24	AJC	

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-003-1-22

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:42:44 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Geotechnical\Sheets\115533_YL005.dgn

PID: 115533 | SFN: | PROJECT: GAL-7-19.94 | STATION / OFFSET: 1069+78, 36' RT. | START: 5/31/22 | END: 6/7/22 | PG 2 OF 2 | B-003-1-22

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	INCL.
CLAYSTONE, REDDISH BROWN, HIGHLY TO MODERATELY WEATHERED, VERY WEAK TO WEAK, THIN BEDDED; RQD 20%, REC 94%. *(continued)* @60.1' - 60.2'; SLICKENSIDED HIGH ANGLE FRACTURE @61.0'; BROWNISH BLACK. @61.7'; LIGHT GRAY, WEAK.	492.3	61	21		100	NQ2-8											CORE	
SANDSTONE, GRAYISH BLACK, MODERATELY WEATHERED, STRONG, VERY FINE GRAINED, ARGILLACEOUS; RQD 56%, REC 100%. @ 63.9' - 64.3'; γ = 166 pcf; Qu = 8,255 psi	489.3	62 63 64	81		100	NQ2-9											CORE	
	485.8	65 66 EOB	17		100	NQ2-10											CORE	

NOTES: LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED 120 GAL. BENTONITE CEMENT GROUT

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT GDT - 8/21/24 07:49 - X:\GINT\PROJECTS\2022 COMPLETE\600971.GPJ

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P 41 / TOTAL P 48	10 / TOTAL 17	115533	SAT 08/23/24	AJC	

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-003-1-22 (CONT.)

GAL-7-19.94

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:42:52 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Geotechnical\Sheets\115533_YL006.dgn

PROJECT: GAL-7-19.94	DRILLING FIRM / OPERATOR: ODOT / CAREY	DRILL RIG: CME 55 TRUCK	STATION / OFFSET: 1070+31, 10' RT.	EXPLORATION ID B-004-0-21
TYPE: LANDSLIDE	SAMPLING FIRM / LOGGER: ODOT / MCLEISH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 7	
PID: 115533 SFN:	DRILLING METHOD: 3.25" HSA / NQ2	CALIBRATION DATE: 4/15/20	ELEVATION: 560.2 (ft) EOB: 49.0 ft.	PAGE 1 OF 1
START: 8/3/21 END: 8/4/21	SAMPLING METHOD: SPT / NQ2	ENERGY RATIO (%): 84	LAT / LONG: 38.782737, -82.222746	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (18") & CONCRETE (10")	560.2																	
	557.9																	
SOFT, REDDISH BROWN, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, MOIST			4 1 2	4	28	SS-1	0.25	3	2	12	44	39	29	18	11	22	A-6a (8)	
@6.0'; STIFF			5 5 5	14	6	SS-2	2.00	-	-	-	-	-	-	-	-	19	A-6a (V)	
@8.5'; MEDIUM STIFF, DAMP			4 2 4	8	33	SS-3	1.00	-	-	-	-	-	-	-	-	14	A-6a (V)	
@11.0'; STIFF			4 5 5	14	44	SS-4	1.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
	546.7																	
HARD, BROWN, **SANDY SILT**, SOME CLAY, DRY			31 29 21	70	100	SS-5	-	0	12	21	43	24	27	18	9	6	A-4a (6)	
@16.0'; VERY STIFF, TRACE STONE FRAGMENTS, DAMP			5 7 11	25	100	SS-6	-	2	17	14	39	28	30	20	10	11	A-4a (6)	
	541.7																	
VERY STIFF, BROWN AND GRAY, **SILTY CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP			3 6 9	21	83	SS-7	2.00	3	5	6	30	56	40	23	17	17	A-6b (11)	
@21.0'; MOTTLED RED, PURPLE AND BROWN, TRACE SAND			5 6 9	21	100	SS-8	2.50	1	0	2	31	66	35	18	17	13	A-6b (11)	
			3 8 12	28	94	SS-9	2.50	-	-	-	-	-	-	-	-	15	A-6b (V)	
			5 9 12	29	100	SS-10	2.50	2	0	2	30	66	39	21	18	18	A-6b (11)	
	530.2																	
MEDIUM STIFF TO STIFF, RED AND BROWN, **SANDY SILT**, SOME CLAY, TRACE STONE FRAGMENTS, MOIST	529.5	TR	3 7 11	25	28	SS-11	-	-	-	-	-	-	-	-	-	12	A-6b (V)	
SANDSTONE, GRAYISH BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE TO MEDIUM GRAINED.			3 19 42	85	100	SS-12A	1.00	8	3	26	41	22	21	14	7	18	A-4a (6)	
						SS-12B	-	-	-	-	-	-	-	-	-	13	Rock (V)	
	526.2		50	-	100	SS-13	-	-	-	-	-	-	-	-	-	12	Rock (V)	
SANDSTONE, BROWN AND GRAY, MODERATELY WEATHERED, SLIGHTLY STRONG, FINE TO MEDIUM GRAINED, THIN TO MEDIUM BEDDED, MICACEOUS, BLOCKY, GOOD; RQD 0%, REC 100%.	524.1		0		100	NQ2-1											CORE	
SILTSTONE, BLUISH GRAY, MODERATELY WEATHERED, SLIGHTLY STRONG, THIN BEDDED, BLOCKY, GOOD; RQD 0%, REC 100%. @37.1' - 38.5'; SEVERELY TO HIGHLY WEATHERED, CONTAINS CLAY SEAMS																		
@39.0' - 39.8'; CLAY SEAM, H.P. = 0.25 TSF.	520.4																	
CLAYSTONE, VARIEGATED RED, YELLOWISH BROWN AND GRAY, MODERATELY WEATHERED, VERY WEAK, MEDIUM BEDDED, BLOCKY, GOOD; RQD 39%, REC 100%.			40		100	NQ2-2											CORE	
			32		100	NQ2-3											CORE	
	511.2	EOB																

NOTES: LAT/LONG/ELEV FROM OGE HANDHELD GPS UNIT. HOLE DRY BEFORE CORING.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 50 LB. BENTONITE CHIPS

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.42 TOTAL P.48	11 TOTAL 17	115533	SAT 08/23/24	AJC	

GEOTECHNICAL PROFILE - LANDSLIDE
BORING LOG FOR B-004-0-21

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:43:03 AM USER: jwiseman
pw:\\ohiodot-pw.bentley.com:ohiodot-pw-02\Documents\01 Active Projects\District 10\Gallia\115533\400-Engineering\Geotechnical\Sheets\115533_YD001.dgn

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-001-0-21

Run #:	Depth		Recovery		RQD	
NQ2-1	41.0'	46.0'	58/60	97%	46/60	77%
NQ2-2	46.0'	51.0'	40/60	67%	34/60	57%

GAL-7-19.94 PID 115533

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-001-0-21

Run #:	Depth		Recovery		RQD	
NQ2-3	51.0'	56.0'	60/60	100%	33/60	55%

GAL-7-19.94 PID 115533

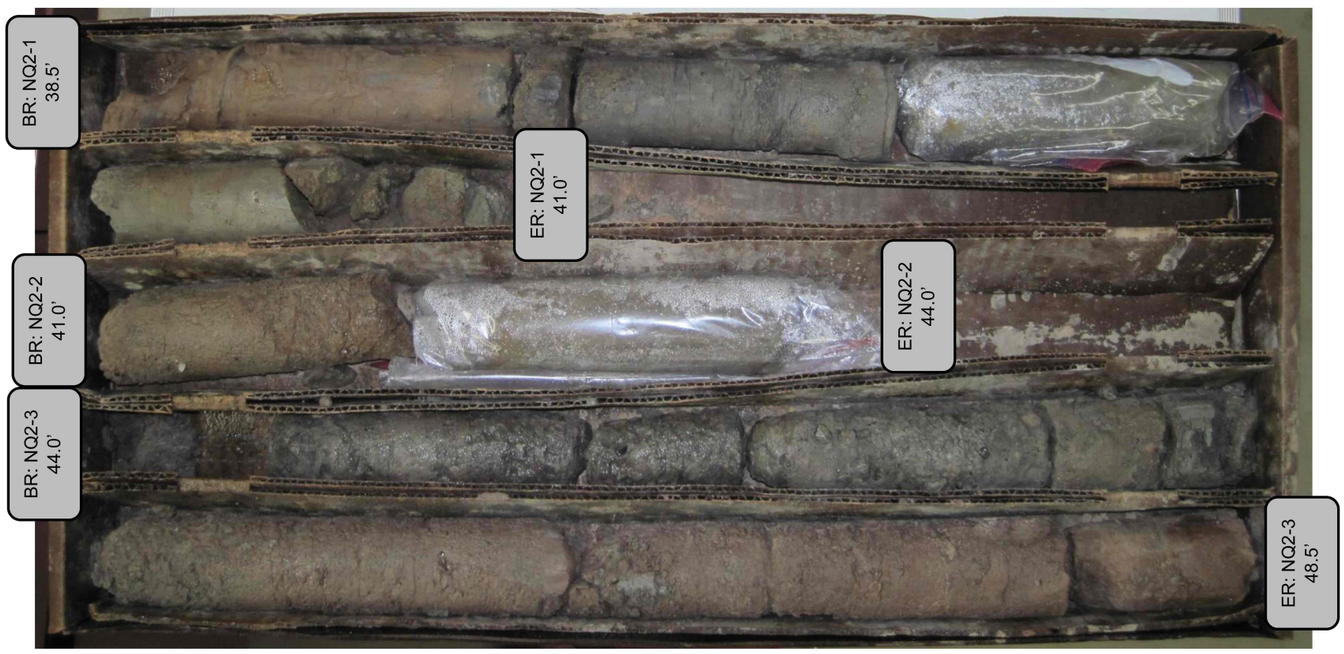
SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.43	12	115533	SAT 08/23/24	AJC	
TOTAL P.48	TOTAL 17				

GEOTECHNICAL PROFILE - LANDSLIDE
ROCK CORE PHOTOS FOR B-001-0-21

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-002-0-21



Run #:	Depth		Recovery		RQD	
NQ2-1	38.5’	41.0’	29/30	97%	23/30	77%
NQ2-2	41.0’	44.0’	14/36	39%	14/36	39%
NQ2-3	44.0’	48.5’	45/54	83%	31/54	57%

GAL-7-19.94 PID 115533

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-002-0-21

Run #:	Depth		Recovery		RQD	
NQ2-4	48.5’	50.5’	24/24	100%	14/24	58%
NQ2-5	50.5’	52.5’	24/24	100%	0/24	0%
NQ2-6	52.5’	54.5’	24/24	100%	7/24	29%
NQ2-7	54.5’	56.5’	23/24	96%	18/24	75%
NQ2-8	56.5’	58.5’	22/24	92%	17/24	71%

GAL-7-19.94 PID 115533

GEOTECHNICAL PROFILE - LANDSLIDE
ROCK CORE PHOTOS FOR B-002-0-21

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-003-0-21

Run #:	Depth		Recovery		RQD	
NQ2-1	34.0’	39.0’	30/60	50%	0/60	0%
NQ2-2	39.0’	44.0’	60/60	100%	14/60	23%

GAL-7-19.94 PID 115533

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-003-0-21

Run #:	Depth		Recovery		RQD	
NQ2-3	44.0’	49.0’	55/60	92%	32/60	53%
NQ2-4	49.0’	59.0’	41/60	68%	23/60	38%

GAL-7-19.94 PID 115533

GEOTECHNICAL PROFILE - LANDSLIDE
ROCK CORE PHOTOS FOR B-003-0-21

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-003-1-22

Run #:	Depth		Recovery		RQD	
NQ2-1	46.5'	48.5'	24/24	100%	0/24	0%
NQ2-2	48.5'	50.5'	24/24	100%	0/24	0%
NQ2-3	50.5'	52.5'	23/24	96%	0/24	0%
NQ2-4	52.5'	54.5'	15/24	63%	64/24	25%
NQ2-5	54.5'	56.5'	24/24	100%	10/24	42%

GAL-7-19.94 PID 115533

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-003-1-22

Run #:	Depth		Recovery		RQD	
NQ2-6	56.5'	58.5'	23/24	96%	18/24	75%
NQ2-7	58.5'	60.5'	23/24	96%	0/24	0%
NQ2-8	60.5'	62.5'	24/24	100%	5/24	21%
NQ2-9	62.5'	64.5'	24/24	100%	19.5/24	81%
NQ2-10	64.5'	66.5'	24/24	100%	4/24	17%

GAL-7-19.94 PID 115533

MODEL: Sheet PAPERSIZE: 17x11 (in.) DATE: 10/23/2024 TIME: 7:43:34 AM USER: jwiseman
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OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-004-0-21

Run #:	Depth		Recovery		RQD	
NQ2-1	34.0'	39.0'	60/60	100%	0/60	0%
NQ2-2	39.0'	44.0'	60/60	100%	24/60	40%

GAL-7-19.94 PID 115533

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Office of Geotechnical Engineering

B-004-0-21

Run #:	Depth		Recovery		RQD	
NQ2-3	44.0'	49.0'	60/60	100%	19/60	32%

GAL-7-19.94 PID 115533

SHEET	SUBSET	PROJECT ID	REVIEWER	DESIGNER	DESIGN AGENCY
P.47	16	115533	SAT 08/23/24	AJC	
TOTAL P.48	TOTAL 17				

GEOTECHNICAL PROFILE - LANDSLIDE
ROCK CORE PHOTOS FOR B-004-0-21

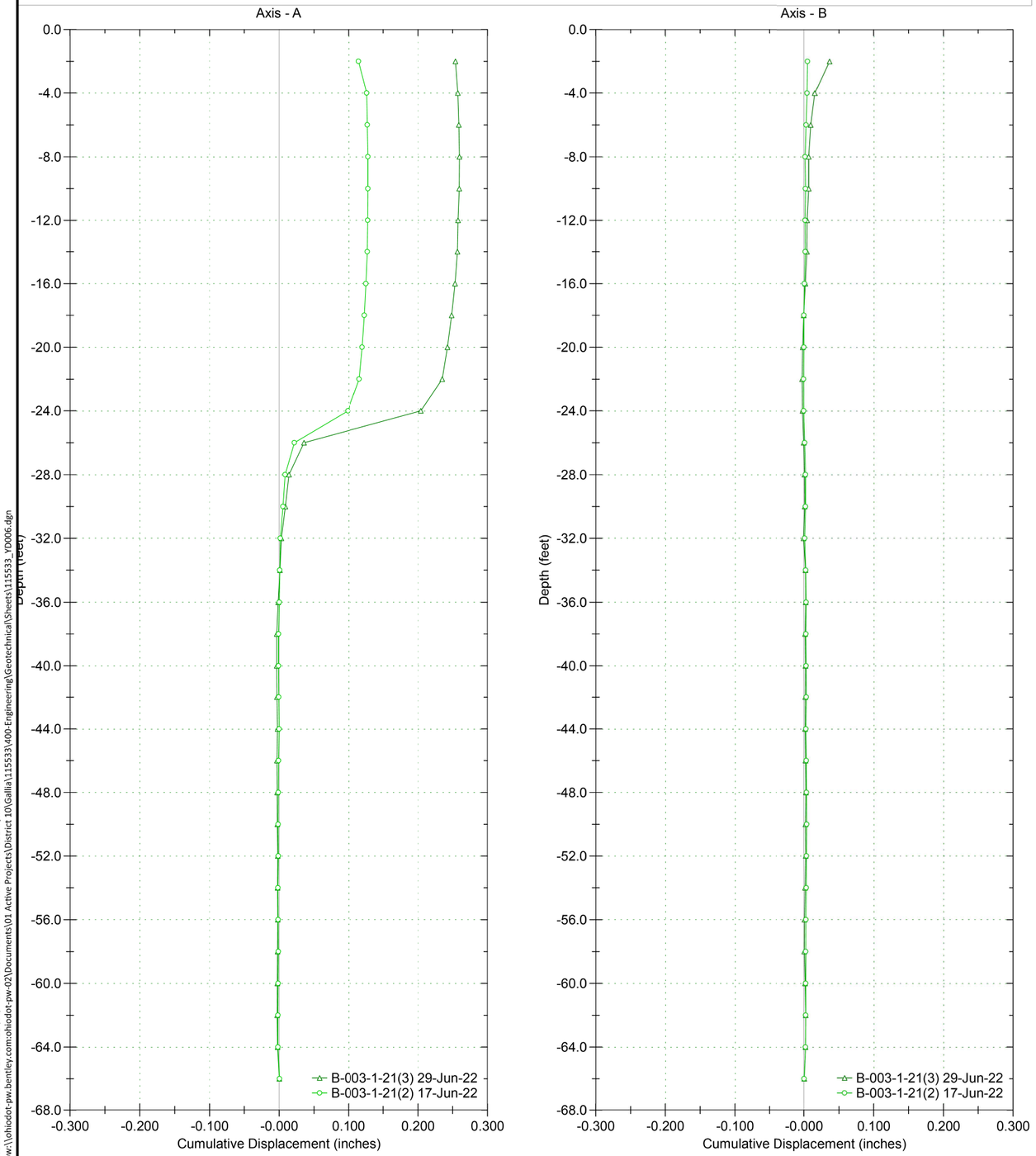
RST Instruments Ltd.

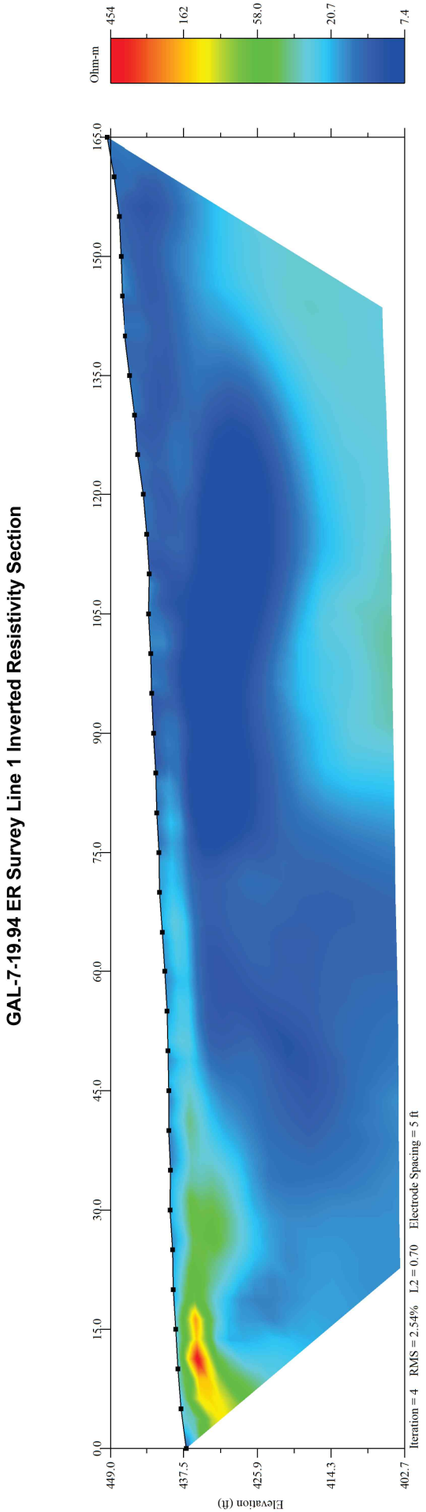
CUMULATIVE DISPLACEMENT

Inclinalysis v. 2.47.5

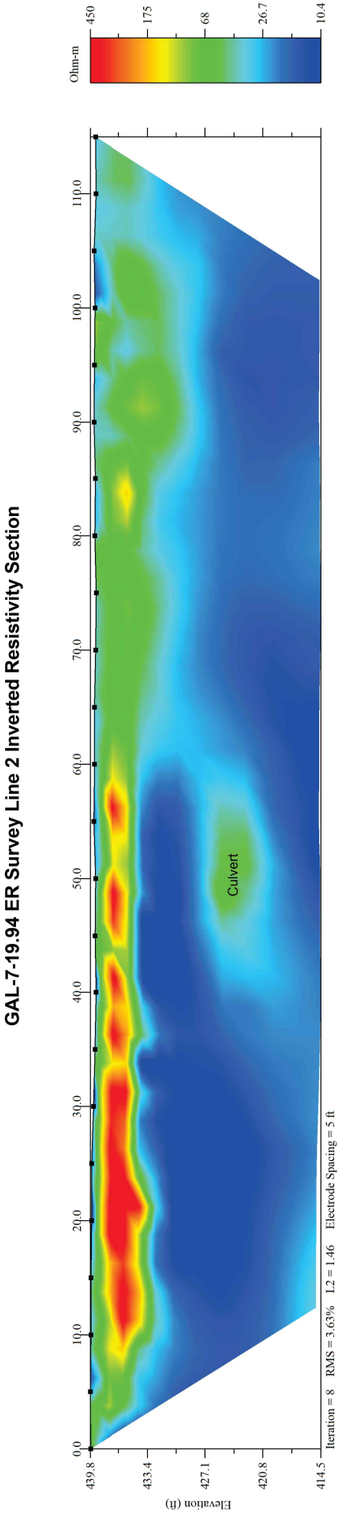
Borehole : B-003-1-22
Project : Inclinometer
Location : GAL-7-19.94
Northing :
Easting :
Collar :

Spiral Correction : N/A
Collar Elevation : 0.0 feet
Borehole Total Depth : 66.0 feet
A+ Groove Azimuth :
Base Reading : 2022 Jun 10 06:13
Applied Azimuth : -5.0 degrees





GAL-7-19.94 ER Survey Line 1 Inverted Resistivity Section



GAL-7-19.94 ER Survey Line 2 Inverted Resistivity Section

GAL-7-19.94

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GEOTECHNICAL PROFILE - LANDSLIDE
B-003-1-22 INLCINOMETER DATA AND ER LINE EXHIBITS

DESIGN AGENCY

DESIGNER AJC
REVIEWER SAT 08/23/24
PROJECT ID 115533
SUBSET 17 TOTAL 17
SHEET P.48 TOTAL P.48