

CR 89-2.14

-LATITUDE: N39.208092 LONGITUDE: W82.071509
-LOCATED ALONG RAINBOW LAKE RD (CR 89)
APPROXIMATELY 0.88 MILES WEST OF THE INTERSECTION WITH GILKEY RIDGE RD (TR 69A)

CR 94-0.29

-LATITUDE: N39.433720 LONGITUDE: W82.069963
-LOCATED ALONG SWETT HOLLOW ROAD (CR 94)
APPROXIMATELY 0.29 MILES EAST OF THE INTERSECTION WITH MILLFIELD RD (CR 27)

CALCULATED
CDK
CHECKED
RDB

LANDSLIDE LOCATIONS MAP

ATH-CR 89/94-2.14/0.29
LANDSLIDE REPAIRS

MEIGSCOUNTY

CONTRACT SPECIFICATIONS

THE JANUARY 1, 2016 VERSION OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AS PUBLISHED BY THE OHIO DEPARTMENT OF TRANSPORTATION SHALL GOVERN ALL ASPECTS OF THE CONTRACT WORK. THE CONTRACTOR SHOULD BE FAMILIAR WITH THESE SPECIFICATIONS AND THEIR PROCEDURAL REQUIREMENTS.

STANDARD DRAWINGS

REFERENCE SHOULD BE MADE TO THE STANDARD DRAWINGS SHOWN IN THE TABLE ON THE COVER SHEET.

O.U.P.S CALL:

THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE OHIO UTILITIES PROTECTION SERVICE AT LEAST TWO DAYS BEFORE DIGGING. THE TOLL-FREE NUMBER IS (800)362-2764.

O.G.P.U.P.S. CALL:

THE CONTRACTOR IS RESPONSIBLE FOR CALLING OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE AT LEAST TWO DAYS BEFORE DIGGING. THE TOLL-FREE NUMBER IS (800)-925-0988.

UTILITIES

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

CR 89-2.14 RAINBOW LAKE RD CR 94-0.29 SWETT HOLLOW RD
OUPS TICKET #:B912300440-00B DATE: 05/03/2019 B912300390-00B DATE:05/03/2019

ELECTRIC	BUCKEYE RURAL ELECTRIC 4848 SR 325 RIO GRANDE, OH 45674 CONTACT: KENNY KREBS PHONE: 740-379-9638	AEP OHIO 9135 SR 682 ATHENS, OH 45701 CONTACT: DAVID ROHRER 740-594-1925
TELEPHONE	FRONTIER COMMUNICATIONS 754 WEST UNION ST ATHENS, OH 45701 CONTACT: KENNY WAGGONER PHONE: 740-592-0544	FRONTIER COMMUNICATIONS 754 WEST UNION ST ATHENS, OH 45701 CONTACT: KENNY WAGGONER PHONE: 740-592-0544
GAS	PETRO QUEST INC. 17159 JOY RD CHESTERHILL, OH 43728 PHONE: 740-554-5888	TENNESSEE GAS/KINDER MORGAN 2335 US 50 ALBANY, OH 45710 PHONE: 740-698-4951
WATER	LE-AX WATER 6000 INDUSTRIAL PARK RD ATHENS, OH 45701 CONTACT: TRAVIS ANDERSON PHONE: 740-594-0123	SUNDAY CREEK VALLEY WATER 15945 2ND ST MILLFIELD, OH 45761 PHONE: 740-797-2566

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

UTILITY LINES

ALL EXPENSES INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY(IES). THE CONTRACTOR AND UTILITY ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

WORK LIMITS

ALL PHYSICAL WORK SHALL BE COMPLETED WITHIN THE COUNTY RIGHT-OF-WAY ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

ELEVATION DATUM

ALL ELEVATIONS ARE ORTHOMETRIC HEIGHTS USING THE NORTH AMERICAN VERTICAL DATUM OF 1988(NAVD 88) AND THE GEOID 12A. HORIZONTAL POSITIONS ARE BASED ON THE OHIO STATE PLANE SOUTH ZONE 3402.

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.

ROAD CLOSED/MAINTENANCE OF TRAFFIC

EACH COUNTY ROAD WILL BE CLOSED FOR A MAXIMUM OF 45 DAYS FOR EACH SITE. LOCAL TRAFFIC WILL BE DETOURED. CONTRACTOR SHALL CLOSE, COMPLETE, AND OPEN ONE SITE AT A TIME. CONTRACTOR SHALL COORDINATE CLOSURE WITH THE COUNTY ENGINEER.

ITEM 201 - CLEARING AND GRUBBING

CONTRACTORS SHOULD INSPECT THE AREAS WHERE THE RETAINING WALLS ARE TO BE CONSTRUCTED TO FIND THE BULK OF THIS WORK. SPECIFIC TREES TO BE REMOVED HAVE NOT BEEN DENOTED ON THESE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE SCOPE OF WORK REQUIRED TO CLEAR THE AREAS NEEDED TO CONSTRUCT THE VARIOUS ELEMENTS OF THIS PROJECT.

ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES HPI0X42

THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLIDER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBER THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50. SOLDIER PILES SHALL HAVE A COAL TAR EPOXY COATING. DO NOT FILED WELD OR SPLICE 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 - HPI0X42 ALL CUT PIECES OF STEEL PILES SHALL BECOME PROPERTY OF THE COUNTY ENGINEER.

ITEM 524 - DRILLED SHAFTS, 24" DIAMETER, KING PILES, 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 FILED 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 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.

SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48 HOUR CURE. INSTALLING THE SHAFTS IN A 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

ACCESS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE CONCRETE PANELS. ANY TEMPORARY GRADING, AGGREGATE, DRAINAGE, SHEETING ETC. NEEDED FOR ACCESS TO 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 SHAFT 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, 24" DIAMETER, KING PILES, AS PER PLAN.

MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE BOTTOM OF SHAFT, AS DETERMINED BY THE ENGINEER.

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN
THESE SHAFTS ARE TO BE UNREINFORCED NON-STRUCTURAL "PLUG PILES".

THIS WORK SHALL BE PER ITEM 524 EXCEPT REINFORCING WILL NOT BE USED IN THE SHAFT. EACH PLUG PILE SHALL BE CENTERED BETWEEN EACH REINFORCED 24" DIAMETER DRILLED SHAFT AND SHALL BE DRILLED TO TOP OF ROCK PER THE PLUG PILE DRILLED SHAFT SUMMARY ON SHEETS 7&9 AND DETAILS ON SHEET 6&8, AND BACKFILLED WITH UNREINFORCED CLASS QC1 CONCRETE.
EXCAVATE THE HOLE FOR THE DRILLED SHAFTS WITHIN 3 INCHES OF THE PLAN LOCATION IN THE HORIZONTAL PLANE. IF FILED CONDITIONS INDICATE GREATER DEPTHS, NOTIFY THE ENGINEER FOR FURTHER EVALUATION.

SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN A 48 HOUR CURE. INSTALLING THE SHAFTS IN A 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

ACCESS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS AND PLACE CONCRETE PANELS. ANY TEMPORARY GRADING, AGGREGATE, DRAINAGE, SHEETING ETC. NEEDED FOR ACCESS TO 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 SHAFT 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, 30" DIAMETER,, PLUG PILES, AS PER PLAN.

MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS,AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE BOTTOM OF SHAFT, AS DETERMINED BY THE ENGINEER.

ITEM 422 - DOUBLE CHIP SEAL

THIS ITEM INCLUDES THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS TO FURNISH AND PLACE TWO LAYERS OF CHIP SEAL. THE FIRST LAYER SHALL CONSIST OF SPRAYING THE FINISHED 304 SURFACE WITH MWS150 AT A RATE OF 0.6 GAL/SY AND PLACING #67 AGGREGATE AT A RATE OF 25#/SY. THE SECOND LAYER SHALL CONSIST OF SPRAYING THE #67 CHIP SEAL SURFACE WITH MWS90 AT A RATE OF 0.4 GAL/SY AND PLACING #8 AGGREGATE AT A RATE OF 23#/SY. ALL LAYERS OF CHIP SEAL SHALL BE ROLLED WITH A RUBBER TIERED ROLLER AFTER SPREADING THE AGGREGATE.

ITEM 614 - MAINTAINING TRAFFIC

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48" X 30" - "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES, GATES, AND LIGHTS, AS DETAILED IN STANDARD CONSTRUCTION DRAWING MT-101.60 AT LOCATIONS NEAR THE SLIPS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH 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 614, MAINTAINING TRAFFIC.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

CONTRACTOR MAY USE ITEM 617 COMPACTED AGGREGATE OR 304 AGGREGATE BASE FOR SHOULDER.

ITEM 659 - SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE EASEMENT LINES. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

CALCULATED
CDK
CHECKED
RDB

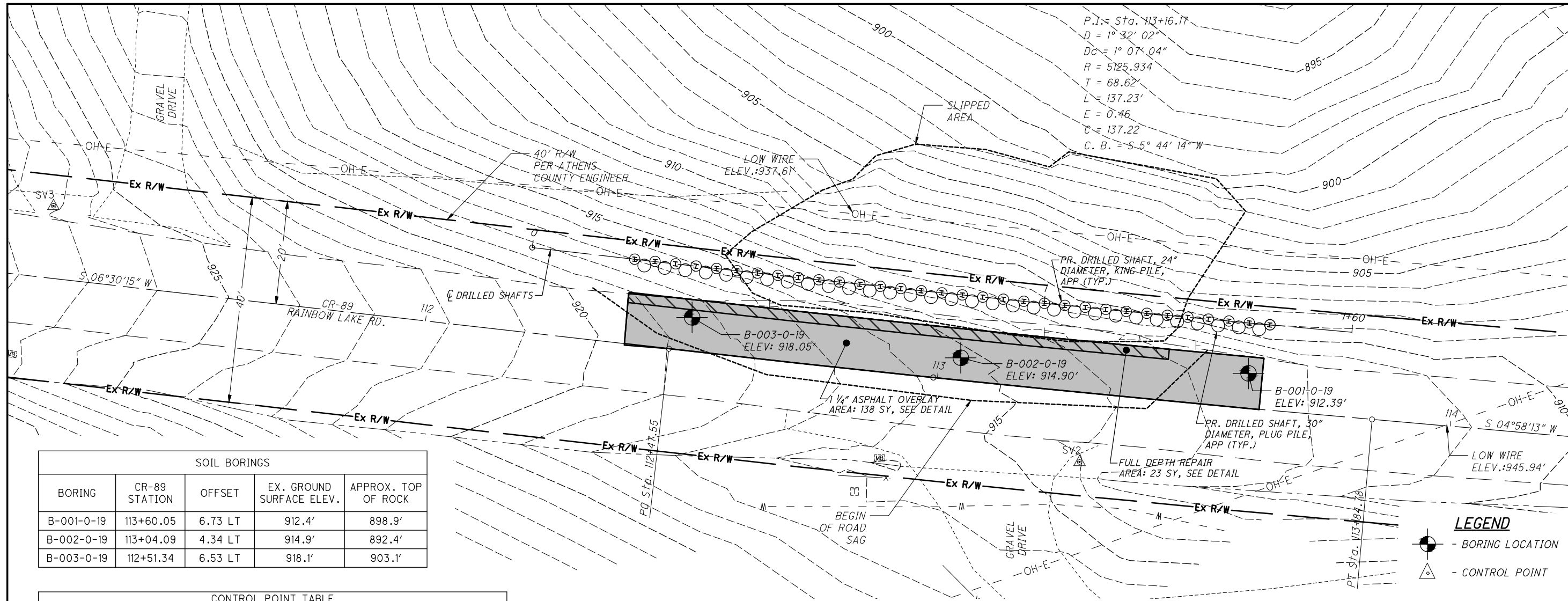
GENERAL NOTES

ATH-CR 89/94-2.14/0.29
LANDSLIDE REPAIRS

B:\2018 Projects\18192\AUTOCAD\18192_02_MAP.dwg 7/19/2019 8:07 AM

PART 1: CR89-2.14 - GENERAL SUMMARY				
REF NO.	ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
1	201	CLEARING AND GRUBBING	1	LS
2	202	PAVEMENT REMOVED	23	SY
3	203	EMBANKMENT	78	CY
4	254	SUBGRADE COMPACTION	23	SY
5	301	ASPHALT CONCRETE BASE	4	CY
6	304	AGGREGATE BASE	6	CY
7	441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22	5	CY
8	507	STEEL PILES, MISC.:SOLDIER PILE HP10x42	960	FT
9	524	DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN	546	FT
10	524	DRILLED SHAFTS, 24" DIAMETER, KING PILES, AS PER PLAN	960	FT
11	617	COMPACTED AGGREGATE, AS PER PLAN	7	CY
12	659	SEEDING AND MULCHING	337	SY
13	832	EROSION CONTROL	3000	EA
14	614	MAINTAINING TRAFFIC	1	LS
15	623	CONSTRUCTION LAYOUT STAKES AND SURVEYING	1	LS
16	624	MOBILIZATION	1	LS
17	103	PREMIUM FOR PERFORMANCE BOND AND FOR PAYMENT BOND	1	LS

PART 2: CR94-0.29 - GENERAL SUMMARY				
REF NO.	ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
18	201	CLEARING AND GRUBBING	1	LS
19	202	PAVEMENT REMOVED	71	SY
20	203	EMBANKMENT	11	CY
21	254	SUBGRADE COMPACTION	71	SY
22	304	AGGREGATE BASE	12	CY
23	422	DOUBLE CHIP SEAL	71	SY
24	507	STEEL PILES, MISC.:SOLDIER PILE HP10x42	289	FT
25	524	DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN	138	FT
26	524	DRILLED SHAFTS, 24" DIAMETER, KING PILES, AS PER PLAN	289	FT
27	617	COMPACTED AGGREGATE, AS PER PLAN	4	CY
28	659	SEEDING AND MULCHING	159	SY
29	832	EROSION CONTROL	3000	EA
30	614	MAINTAINING TRAFFIC	1	LS
31	623	CONSTRUCTION LAYOUT STAKES AND SURVEYING	1	LS
32	624	MOBILIZATION	1	LS
33	103	PREMIUM FOR PERFORMANCE BOND AND FOR PAYMENT BOND	1	LS



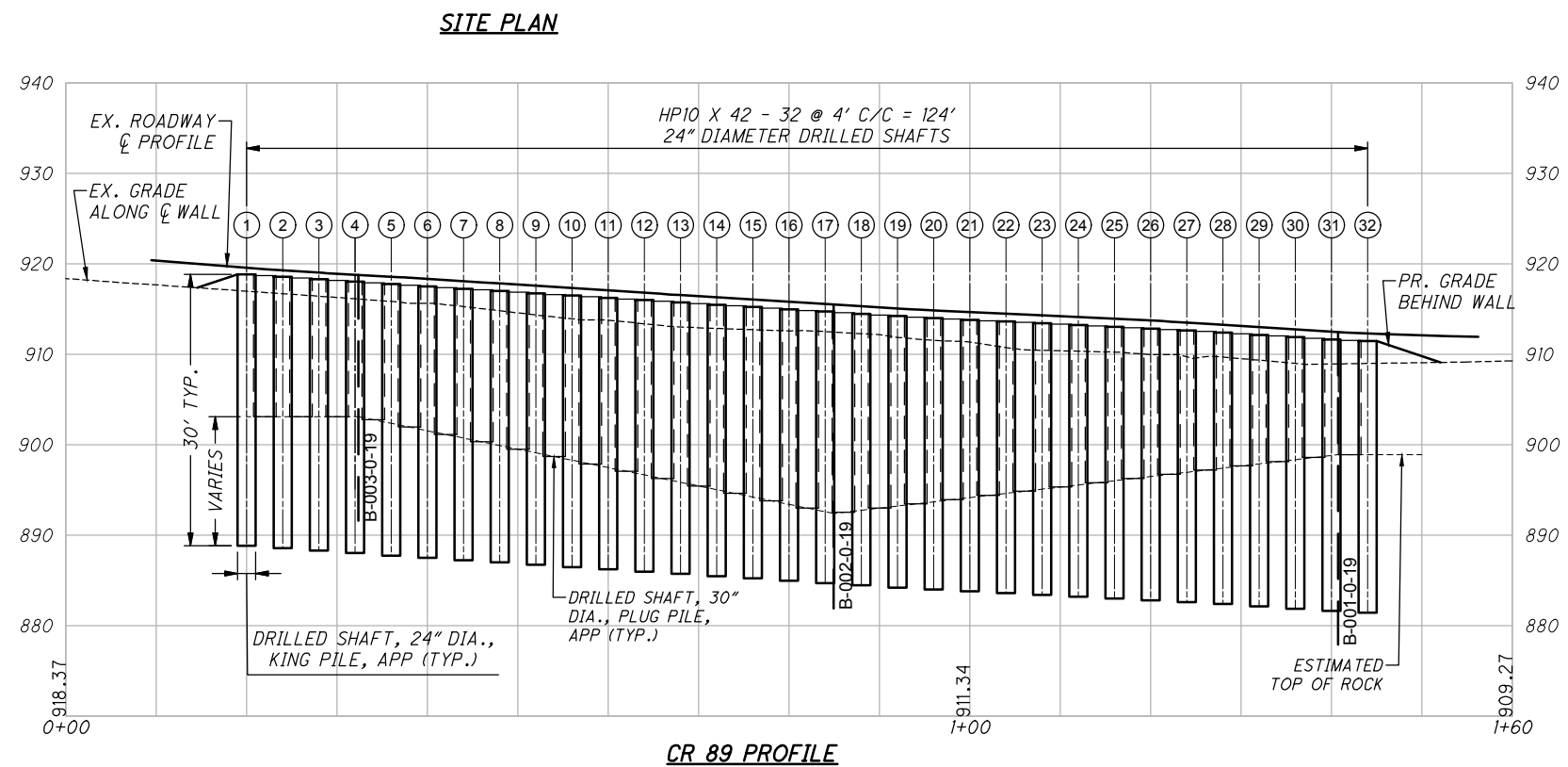
SOIL BORINGS				
BORING	CR-89 STATION	OFFSET	EX. GROUND SURFACE ELEV.	APPROX. TOP OF ROCK
B-001-0-19	113+60.05	6.73 LT	912.4'	898.9'
B-002-0-19	113+04.09	4.34 LT	914.9'	892.4'
B-003-0-19	112+51.34	6.53 LT	918.1'	903.1'

CONTROL POINT TABLE NAD 83 (2011) OHIO STATE PLANE SOUTH ZONE, GRID NAVD88, GEOID (12A)				
Point #	Description	Elevation	Northing	Easting
SV1	5/8" REBAR SET, BUCKLEY GROUP CAP	906.140	440074.8270	2089884.9200
SV2	5/8" REBAR SET, BUCKLEY GROUP CAP	914.211	440264.6870	2089897.8170
SV3	5/8" REBAR SET, BUCKLEY GROUP CAP	927.405	440463.9130	2089947.5150

ESTIMATED QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
202	PAVEMENT REMOVED	23	SY
254	SUBGRADE COMPACTION	23	SY
304	AGGREGATE BASE	6	CY
441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22	5	CY
301	ASPHALT CONCRETE BASE	4	CY

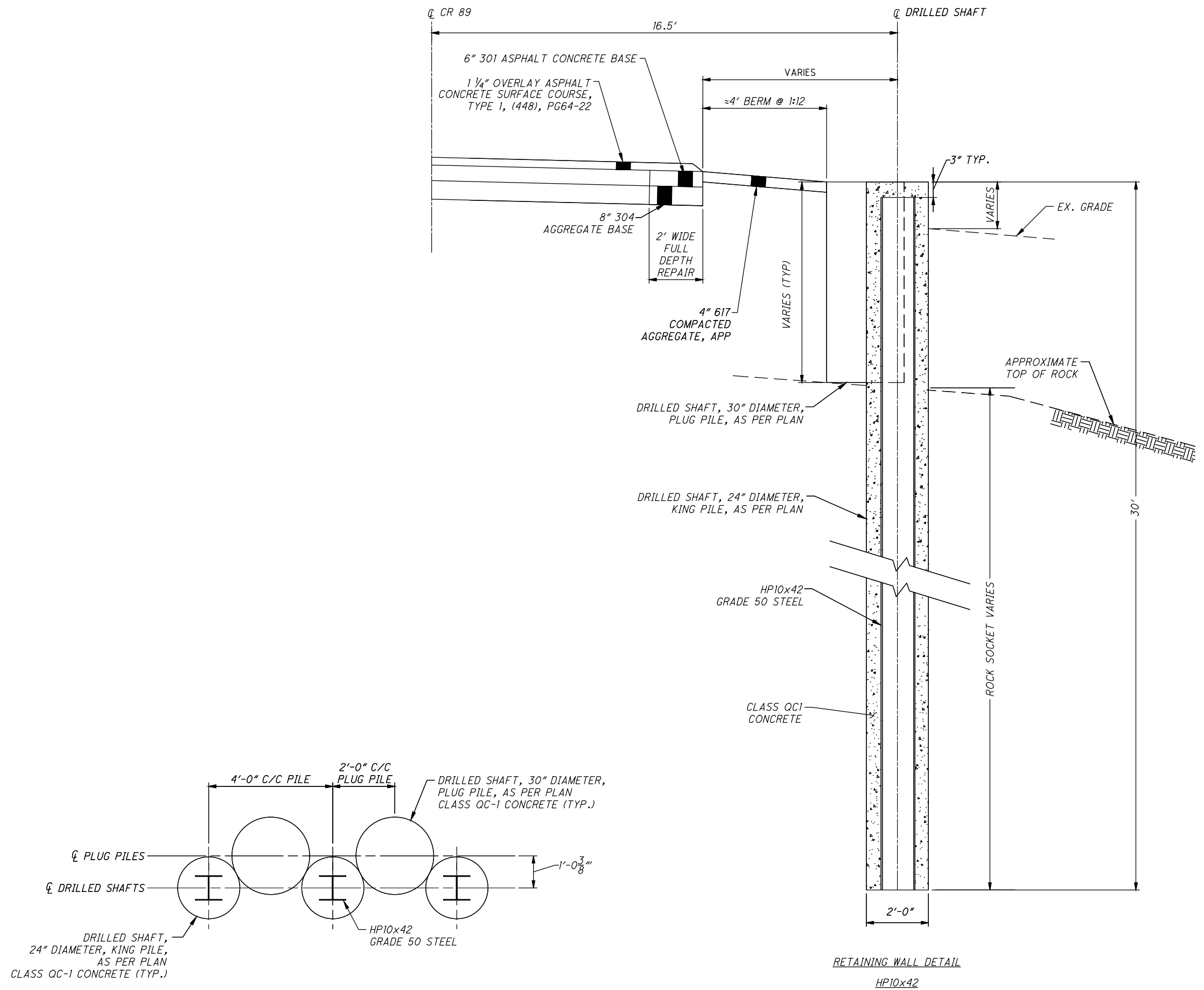
2016 SPECIFICATIONS
 THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

NOTES
 1. THE ROAD WILL BE CLOSED FOR A MAXIMUM OF 45 DAYS DURING CONSTRUCTION. CONTRACTOR SHALL SET UP AND MAINTAIN ROAD CLOSURE TRAFFIC CONTROL THROUGHOUT CONSTRUCTION.



B:\2018 Projects\18192\AUTOCAD\18192_IB.dwg 7/19/2019 1:23 PM

B:\2018 Projects\18192\AUTOCAD\18192_IB.dwg 7/19/2019 1:25 PM

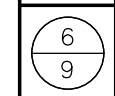


RETAINING WALL DETAIL
HP10x42

CALCULATED
CDK
CHECKED
RDB

CR 89-2.14 - RAINBOW LAKE RD SLIP
RETAINING WALL DETAILS

ATH-CR 89/94-2.14/0.29
LANDSLIDE REPAIRS



B:\2018 Projects\18192\AUTOCAD\18192_IB.dwg 7/19/2019 1:27 PM

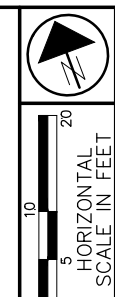
DRILLED SHAFT SUMMARY (KING PILE)							
SHAFT NO.	☉ DRILLED SHAFT STATION	☉ CR89 OFFSET	BOTTOM ELEV. OF SHAFT	TOP ELEV. OF SHAFT	ESTIMATED TOP ELEV. OF ROCK	ITEM 524 DRILLED SHAFTS, 24" DIA. KING PILES, APP	ITEM 507 STEEL PILES, MISC.: SOLDIER PILES HP10x42
						(FT)	(FT)
1	0+20	112+38.97, 16.50' Lt	888.83	918.83	903.10	30.0	30.0
2	0+24	112+42.97, 16.50' Lt	888.56	918.56	903.10	30.0	30.0
3	0+28	112+46.97, 16.50' Lt	888.29	918.29	903.10	30.0	30.0
4	0+32	112+50.98, 16.50' Lt	888.02	918.02	903.10	30.0	30.0
5	0+36	112+54.99, 16.50' Lt	887.75	917.75	902.36	30.0	30.0
6	0+40	112+59.01, 16.50' Lt	887.49	917.49	901.55	30.0	30.0
7	0+44	112+63.02, 16.50' Lt	887.24	917.24	900.73	30.0	30.0
8	0+48	112+67.03, 16.50' Lt	886.99	916.99	899.92	30.0	30.0
9	0+52	112+71.05, 16.50' Lt	886.74	916.74	899.10	30.0	30.0
10	0+56	112+75.06, 16.50' Lt	886.48	916.48	898.29	30.0	30.0
11	0+60	112+79.07, 16.50' Lt	886.23	916.23	897.48	30.0	30.0
12	0+64	112+83.09, 16.50' Lt	885.98	915.98	896.66	30.0	30.0
13	0+68	112+87.10, 16.50' Lt	885.73	915.73	895.85	30.0	30.0
14	0+72	112+91.11, 16.50' Lt	885.47	915.47	895.03	30.0	30.0
15	0+76	112+95.12, 16.50' Lt	885.22	915.22	894.22	30.0	30.0
16	0+80	112+99.14, 16.50' Lt	884.97	914.97	893.41	30.0	30.0
17	0+84	113+03.15, 16.50' Lt	884.72	914.72	892.59	30.0	30.0
18	0+88	113+07.16, 16.50' Lt	884.47	914.47	892.76	30.0	30.0
19	0+92	113+11.18, 16.50' Lt	884.21	914.21	893.22	30.0	30.0
20	0+96	113+15.19, 16.50' Lt	884.01	914.01	893.69	30.0	30.0
21	1+00	113+19.20, 16.50' Lt	883.89	913.89	894.15	30.0	30.0
22	1+04	113+23.21, 16.50' Lt	883.61	913.61	894.62	30.0	30.0
23	1+08	113+27.23, 16.50' Lt	883.41	913.41	895.09	30.0	30.0
24	1+12	113+31.24, 16.50' Lt	883.21	913.21	895.55	30.0	30.0
25	1+16	113+35.25, 16.50' Lt	883.01	913.01	896.02	30.0	30.0
26	1+20	113+39.27, 16.50' Lt	882.82	912.82	896.49	30.0	30.0
27	1+24	113+43.28, 16.50' Lt	882.62	912.62	896.95	30.0	30.0
28	1+28	113+47.29, 16.50' Lt	882.39	912.39	897.42	30.0	30.0
29	1+32	113+51.30, 16.50' Lt	882.14	912.14	897.88	30.0	30.0
30	1+36	113+55.32, 16.50' Lt	881.89	911.89	898.35	30.0	30.0
31	1+40	113+59.33, 16.50' Lt	881.63	911.63	898.82	30.0	30.0
32	1+44	113+63.34, 16.50' Lt	881.45	911.45	898.90	30.0	30.0
TOTALS CARRIED TO GENERAL SUMMARY						960	960

DRILLED SHAFT SUMMARY (PLUG PILE)					
SHAFT NO.	☉ DRILLED SHAFT STATION	☉ CR89 OFFSET	BOTTOM ELEV. OF SHAFT	TOP ELEV. OF SHAFT	ITEM 524 DRILLED SHAFTS, 30" DIA. PLUG PILES, APP
					(FT)
1	0+22	112+40.97, 15.47' Lt	903.10	918.69	15.6
2	0+26	112+44.97, 15.47' Lt	903.10	918.42	15.3
3	0+30	112+48.98, 15.47' Lt	903.10	918.15	15.1
4	0+34	112+52.99, 15.47' Lt	902.77	917.88	15.1
5	0+38	112+57.00, 15.47' Lt	901.95	917.62	15.7
6	0+42	112+61.01, 15.47' Lt	901.14	917.37	16.2
7	0+46	112+65.03, 15.47' Lt	900.32	917.11	16.8
8	0+50	112+69.04, 15.47' Lt	899.51	916.86	17.4
9	0+54	112+73.05, 15.47' Lt	898.70	916.61	17.9
10	0+58	112+77.07, 15.47' Lt	897.88	916.36	18.5
11	0+62	112+81.08, 15.47' Lt	897.07	916.10	19.0
12	0+66	112+85.09, 15.47' Lt	896.25	915.85	19.6
13	0+70	112+89.10, 15.47' Lt	895.44	915.60	20.2
14	0+74	112+93.12, 15.47' Lt	894.63	915.35	20.7
15	0+78	112+97.13, 15.47' Lt	893.81	915.10	21.3
16	0+82	113+01.14, 15.47' Lt	893.00	914.84	21.8
17	0+86	113+05.16, 15.47' Lt	892.52	914.59	22.1
18	0+90	113+09.17, 15.47' Lt	892.99	914.34	21.4
19	0+94	113+13.18, 15.47' Lt	893.46	914.11	20.7
20	0+98	113+17.19, 15.47' Lt	893.92	913.91	20.0
21	1+02	113+21.21, 15.47' Lt	894.39	913.71	19.3
22	1+06	113+25.22, 15.47' Lt	894.85	913.51	18.7
23	1+10	113+29.23, 15.47' Lt	895.32	913.31	18.0
24	1+14	113+33.25, 15.47' Lt	895.79	913.11	17.3
25	1+18	113+37.26, 15.47' Lt	896.25	912.91	16.7
26	1+22	113+41.27, 15.47' Lt	896.72	912.72	16.0
27	1+26	113+45.29, 15.47' Lt	897.18	912.52	15.3
28	1+30	113+49.30, 15.47' Lt	897.65	912.27	14.6
29	1+34	113+53.31, 15.47' Lt	898.12	912.01	13.9
30	1+38	113+57.32, 15.47' Lt	898.58	911.76	13.2
31	1+42	113+61.34, 15.47' Lt	898.90	911.52	12.6
TOTALS CARRIED TO GENERAL SUMMARY					546

CALCULATED
CDK
CHECKED
RDB

CR 89-2.14 - RAINBOW LAKE RD SLIP
DRILLED SHAFT SUMMARY

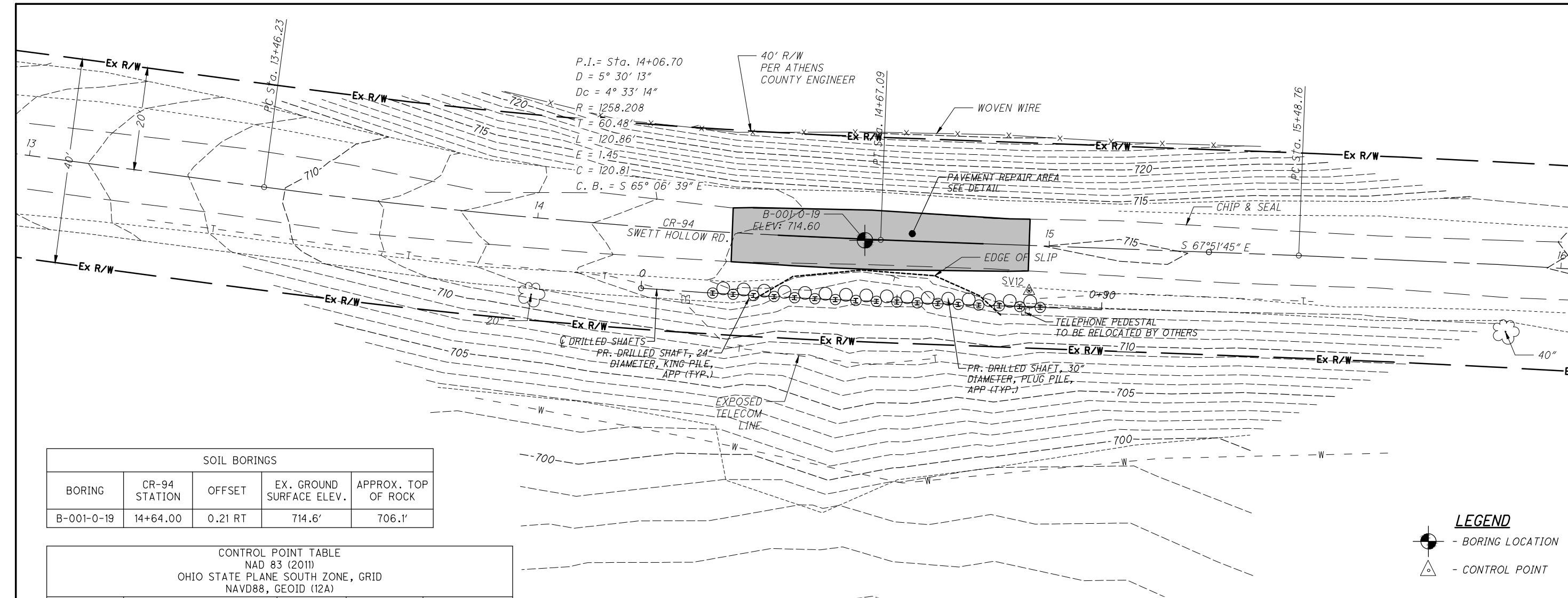
ATH-CR 89/94-2.14/0.29
LANDSLIDE REPAIRS



CALCULATED
CDK
CHECKED
RDB

CR 94-0.29 - SWETT HOLLOW RD SLIP
RETAINING WALL PLAN AND PROFILE

ATH-CR 89/94-2.14/0.29
LANDSLIDE REPAIRS



SITE PLAN

LEGEND

- BORING LOCATION
- CONTROL POINT

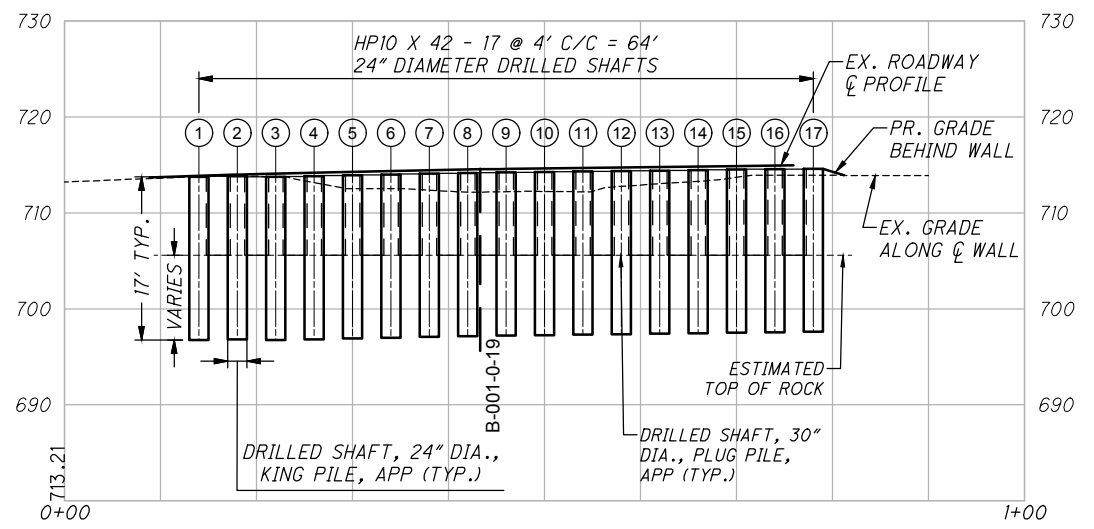
2016 SPECIFICATIONS
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

NOTES
1. THE ROAD WILL BE CLOSED FOR A MAXIMUM OF 45 DAYS DURING CONSTRUCTION. CONTRACTOR SHALL SET UP AND MAINTAIN ROAD CLOSURE TRAFFIC CONTROL THROUGHOUT CONSTRUCTION.

SOIL BORINGS				
BORING	CR-94 STATION	OFFSET	EX. GROUND SURFACE ELEV.	APPROX. TOP OF ROCK
B-001-0-19	14+64.00	0.21 RT	714.6'	706.1'

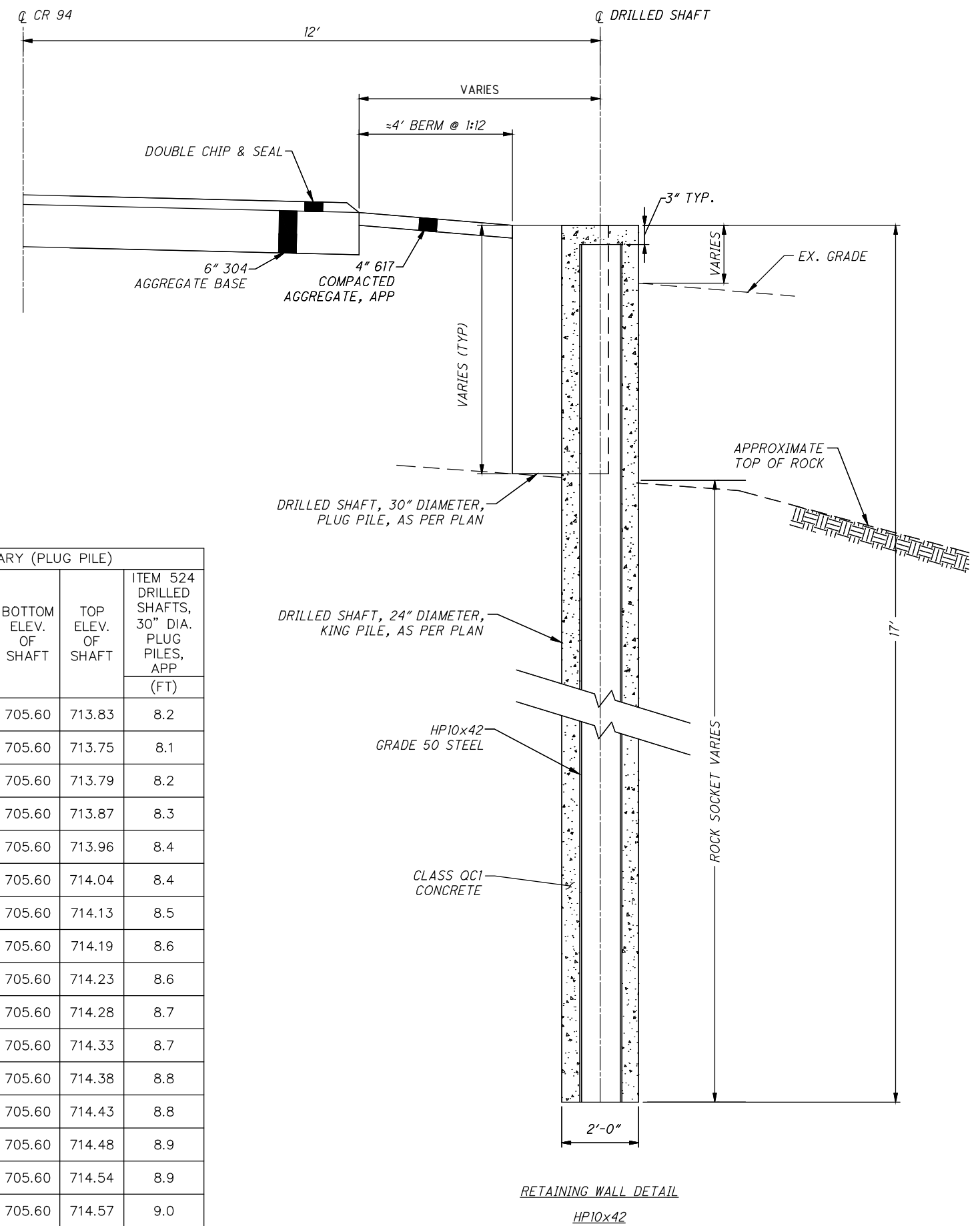
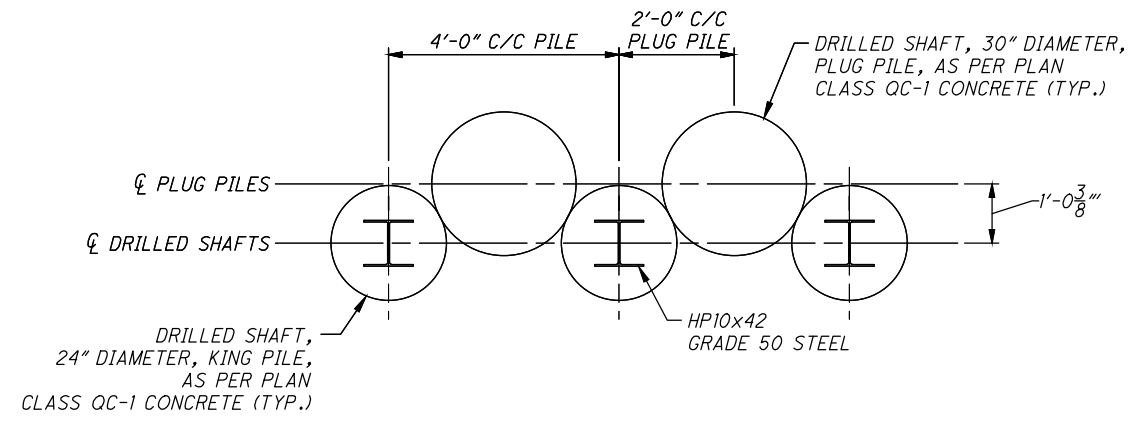
CONTROL POINT TABLE NAD 83 (2011) OHIO STATE PLANE SOUTH ZONE, GRID NAVD88, GEOID (12A)				
Point #	Description	Elevation	Northing	Easting
SV11	5/8" REBAR SET, BUCKLEY GROUP CAP	705.372	522561.9222	2089801.0970
SV12	5/8" REBAR SET, BUCKLEY GROUP CAP	714.559	522442.0930	2089995.5040
SV13	5/8" REBAR SET, BUCKLEY GROUP CAP	715.560	522368.5969	2090166.9430

ESTIMATED QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
202	PAVEMENT REMOVED	71	SY
254	SUBGRADE COMPACTION	71	SY
304	AGGREGATE BASE	12	CY
422	DOUBLE CHIP SEAL	71	SY



CR 94 PROFILE

B:\2018 Projects\18193\AUTOCAD\18193_IB_recover.dwg 7/19/2019 1:29 PM



DRILLED SHAFT SUMMARY (KING PILE)							
SHAFT NO.	CL DRILLED SHAFT STATION	CL CR94 OFFSET	BOTTOM ELEV. OF SHAFT	TOP ELEV. OF SHAFT	ESTIMATED TOP ELEV. OF ROCK	ITEM 524	ITEM 507
						DRILLED SHAFTS, 24" DIA. KING PILES, APP (FT)	STEEL PILES, MISC.: SOLDIER PILES HP10x42 (FT)
1	0+14	14+34.98, 12.00' Rt	696.76	713.76	705.60	17.0	17.0
2	0+18	14+38.94, 12.00' Rt	696.82	713.82	705.60	17.0	17.0
3	0+22	14+42.91, 12.00' Rt	696.74	713.74	705.60	17.0	17.0
4	0+26	14+46.87, 12.00' Rt	696.83	713.83	705.60	17.0	17.0
5	0+30	14+50.83, 12.00' Rt	696.92	713.92	705.60	17.0	17.0
6	0+34	14+54.79, 12.00' Rt	697.00	714.00	705.60	17.0	17.0
7	0+38	14+58.76, 12.00' Rt	697.08	714.08	705.60	17.0	17.0
8	0+42	14+62.72, 12.00' Rt	697.16	714.16	705.60	17.0	17.0
9	0+46	14+66.68, 12.00' Rt	697.21	714.21	705.60	17.0	17.0
10	0+50	14+70.68, 12.00' Rt	697.26	714.26	705.60	17.0	17.0
11	0+54	14+74.68, 12.00' Rt	697.31	714.31	705.60	17.0	17.0
12	0+58	14+78.68, 12.00' Rt	697.35	714.35	705.60	17.0	17.0
13	0+62	14+82.68, 12.00' Rt	697.40	714.40	705.60	17.0	17.0
14	0+66	14+86.68, 12.00' Rt	697.45	714.45	705.60	17.0	17.0
15	0+70	14+90.68, 12.00' Rt	697.51	714.51	705.60	17.0	17.0
16	0+74	14+94.68, 12.00' Rt	697.54	714.54	705.60	17.0	17.0
17	0+78	14+98.68, 12.00' Rt	697.60	714.60	705.60	17.0	17.0
TOTALS CARRIED TO GENERAL SUMMARY						289	289

DRILLED SHAFT SUMMARY (PLUG PILE)						
SHAFT NO.	CL DRILLED SHAFT STATION	CL CR94 OFFSET	BOTTOM ELEV. OF SHAFT	TOP ELEV. OF SHAFT	ITEM 524	
					DRILLED SHAFTS, 30" DIA. PLUG PILES, APP (FT)	
1	0+16	14+36.96, 10.97' Rt	705.60	713.83	8.2	
2	0+18	14+40.93, 10.97' Rt	705.60	713.75	8.1	
3	0+20	14+44.89, 10.97' Rt	705.60	713.79	8.2	
4	0+22	14+48.85, 10.97' Rt	705.60	713.87	8.3	
5	0+24	14+52.81, 10.97' Rt	705.60	713.96	8.4	
6	0+26	14+56.77, 10.97' Rt	705.60	714.04	8.4	
7	0+28	14+60.74, 10.97' Rt	705.60	714.13	8.5	
8	0+30	14+64.70, 10.97' Rt	705.60	714.19	8.6	
9	0+32	14+68.68, 10.97' Rt	705.60	714.23	8.6	
10	0+34	14+72.68, 10.97' Rt	705.60	714.28	8.7	
11	0+36	14+76.68, 10.97' Rt	705.60	714.33	8.7	
12	0+38	14+80.68, 10.97' Rt	705.60	714.38	8.8	
13	0+40	14+84.68, 10.97' Rt	705.60	714.43	8.8	
14	0+42	14+88.68, 10.97' Rt	705.60	714.48	8.9	
15	0+44	14+92.68, 10.97' Rt	705.60	714.54	8.9	
16	0+46	14+96.68, 10.97' Rt	705.60	714.57	9.0	
TOTALS CARRIED TO GENERAL SUMMARY					138	

B:\2018 Projects\18193\AUTOCAD\18193_IB_recover.dwg 7/19/2019 1:31 PM

RETAINING WALL DETAIL
HP10x42