HOL - US 62/VAR-05.06/VAR
210061 PID - 105124
Dist 11 1/28/2021

LOCATION MAP

(HOL-62-5.06) - LATITUDE: N 40° 27′ 40″ LONGITUDE: W 82° 6′ 10″
(HOL-179-0.07) - LATITUDE: N 40° 36′ 10″ LONGITUDE: W 82° 7′ 30″
(HOL-514-1.41) - LATITUDE: N 40° 33′ 15″ LONGITUDE: W 82° 10′ 00″

SCALE IN MILES
0 1 2 3 4

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

DESIGN DESIGNATION

	HOL-62-5.06	HOL-179-0.07	HOL-514-1.41
OPENING YEAR ADT (2021)	1,840	910	620
DESIGN YEAR ADT (2041)	1,940	960	660
DESIGN HOURLY VOLUME (2041)	184	91	62
DIRECTIONAL DISTRIBUTION	69%	63%	60%
TRUCKS (24 HOUR B&C)	14%	19%	12%
DESIGN SPEED	55	55	55
LEGAL SPEED	55	55	55
DESIGN FUNCTIONAL CLASSIFICATION:	RURAL MAJOR COLLECTOR	RURAL MINOR COLLECTOR	RURAL MAJOR COLLECTOR
NHS PROJECT	NO	NO	NO

DESIGN EXCEPTIONS

	APPROVAL DATE	SHEET NUMBER
HOL-62-0506		
LANE WIDTH	9/17/19	3
GRADED SHOULDER WIDTH	9/17/19	3
HOL-179-0007		
LANE WIDTH	10/3/19	3
HOL-514-0141		
LANE WIDTH	10/3/19	3
GRADED SHOULDER WIDTH	10/3/19	3

PLAN PREPARED BY:
EMHT
Evans, Mechwart, Hambleton & Tilton, Inc.
Engineers • Surveyors • Planners • Scientists
1500 West Third Avenue Columbus, OH 43212
Phone: 614.775.4500 Fax: 614.775.4800
M C M Z V I

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

HOL 62/VAR
5.06/VAR

KNOX, RICHLAND, AND WASHINGTON TOWNSHIPS
HOLMES COUNTY

INDEX OF SHEETS:

ATTENTION
Contact the Ohio Department of Transportation for current Plans of Record

PROJECT DESCRIPTION

HOL-62-0506, HOL-179-0007 & HOL-514-0141: REPLACE CULVERTS AND HEADWALLS, INSTALL GUARDRAIL WITH REGRADED SLOPES AS NEEDED, MILL AND FILL AND PROVIDE FULL DEPTH PAVEMENT, AND REPLACE PAVEMENT MARKINGS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: *
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: *
NOTICE OF INTENT EARTH DISTURBED AREA: *
* SEE CULVERT PLAN AND DETAIL SHEETS

2019 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF SR 179, SR 514, AND US 62 IN HOLMES COUNTY, AND A DETOUR WILL BE PROVIDED AS INDICATED ON SHEETS 8 , 9 , 11 .

ENGINEERS SEAL:

STATE OF OHIO · ROBERT E. HOOPS · E-76238 · REGISTERED PROFESSIONAL ENGINEER

SIGNED: Robert E. Hoops
DATE: 9/28/20

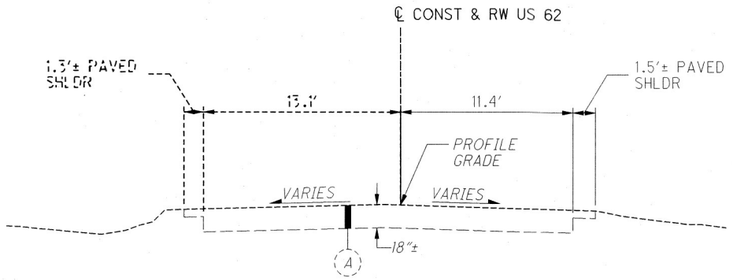
STANDARD CONSTRUCTION DRAWINGS							SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-3.1	01/17/20	MT-97.10	4/19/19				800	10/16/20	WATERWAY PERMIT
BP-4.1	7/19/13	MT-101.60	1/17/20				832	10/19/18	CONDITIONS
DM-1.1	7/17/20	MT-101.90	7/17/20				902	7/19/19	1/14/20
DM-4.3	1/15/16	MT-105.10	1/17/20						
DM-4.4	1/15/16	TC-41.20	10/18/13						
		TC-42.20	10/18/13						
MGS-1.1	1/19/18	TC-52.10	10/18/13						
MGS-2.1	1/19/18	TC-52.20	7/20/18						
MGS-4.2	7/19/13	TC-65.10	1/17/14						
		TC-65.11	7/21/17						
HW-1.1	7/20/18								
HW-2.1	7/20/18								
HW-2.2	7/20/18								

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)

APPROVED Thomas R. Corey
DATE 9-2-2020 DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E170998
PID NO. 105124
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
HOL 62/VAR
5.06/VAR
1
48



US 62 EXISTING SECTION

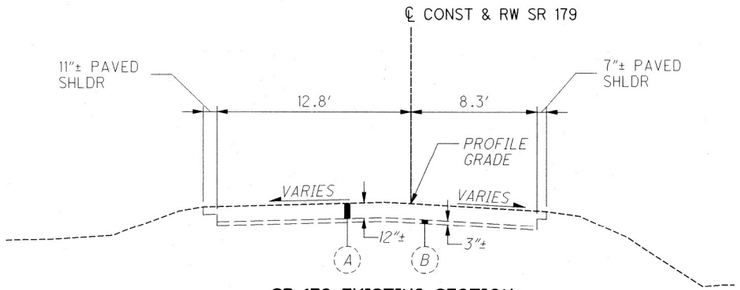
STA 25+70.00 TO STA 26+30.00

PAVEMENT TRANSITION TABLE US-62

LEFT SIDE						PROFILE CONTROL		CROWN POINT		RIGHT SIDE						
EX EDGE ELEVATION	PROP EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION*	CROSS SLOPE*	WIDTH*	STATION	PROFILE GRADE (ALONG CENTERLINE)	OFFSET (FT) FROM CL (+)RT (-)LT	ELEVATION	WIDTH*	CROSS SLOPE*	ELEVATION CORRECTION*	TRANSITION RATE	PROP EDGE ELEVATION	EX EDGE ELEVATION	REMARKS
933.23	933.23		-0.36	0.030	11.99	25+70.00	933.53	-1.60	933.59	12.45	0.035	-0.43		933.16	933.16	MATCH EX. (BEG RESURFACE)
933.23	933.23		-0.38	0.032	12.00	25+75.00	933.56	-1.55	933.61	12.45	0.035	-0.43		933.18	933.18	
933.26	933.26		-0.41	0.034	12.02	25+85.00	933.62	-1.46	933.67	12.45	0.035	-0.43		933.24	933.24	END RESURFACE/BEG. FULL DEPTH
933.28	933.38	590	-0.39	0.032	12.06	25+98.21	933.72	-1.32	933.77	12.44	0.033	-0.41	803	933.36	933.35	CL CULVERT
933.56	933.56		-0.36	0.030	12.05	26+15.00	933.89	-1.14	933.92	12.41	0.031	-0.39		933.53	933.53	END FULL DEPTH/BEGIN RESURFACE
933.77	933.77		-0.30	0.025	12.01	26+25.00	934.04	-1.05	934.07	12.41	0.023	-0.29		933.78	933.78	
933.86	933.86		-0.29	0.024	12.00	26+30.00	934.12	-1.00	934.15	12.42	0.030	-0.37		933.78	933.78	MATCH EX. (END RESURFACE)

* MEASURED TO CROWN POINT

* MEASURED TO CROWN POINT



SR 179 EXISTING SECTION

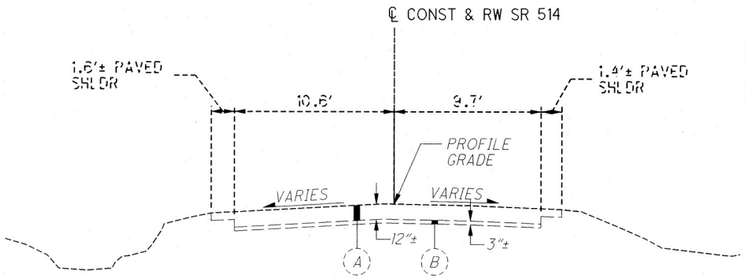
STA 3+65.00 TO STA 4+35.00

PAVEMENT TRANSITION TABLE SR-179

LEFT SIDE						PROFILE CONTROL		CROWN POINT		RIGHT SIDE						
EX EDGE ELEVATION	PROP EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION*	CROSS SLOPE*	WIDTH*	STATION	PROFILE GRADE (ALONG CENTERLINE)	OFFSET (FT) FROM CL (+)RT (-)LT	ELEVATION	WIDTH*	CROSS SLOPE*	ELEVATION CORRECTION*	TRANSITION RATE	PROP EDGE ELEVATION	EX EDGE ELEVATION	REMARKS
1116.25	1116.25		-0.46	0.043	10.71	3+65.00	1116.57	-2.75	1116.71	9.90	0.041	-0.41		1116.3	1116.3	MATCH EX. (BEG RESURFACE)
1116.23	1116.23		-0.45	0.042	10.73	3+75.00	1116.55	-2.66	1116.68	9.95	0.049	-0.49		1116.19	1116.19	
1116.21	1116.21		-0.49	0.046	10.72	3+80.00	1116.57	-2.63	1116.70	10.00	0.055	-0.55		1116.15	1116.15	END RESURFACE/BEG. FULL DEPTH
1116.23	1116.31	397	-0.45	0.042	10.67	3+98.47	1116.58	-2.55	1116.76	10.17	0.062	-0.63	236	1116.13	1116.03	CL CULVERT
1116.79	1116.79		-0.41	0.037	10.99	4+20.00	1117.06	-2.07	1117.20	9.98	0.069	-0.69		1116.51	1116.51	END FULL DEPTH/BEGIN RESURFACE
1116.91	1116.91		-0.40	0.036	11.03	4+25.00	1117.18	-1.99	1117.31	9.97	0.068	-0.68		1116.63	1116.63	
1117.16	1117.16		-0.36	0.033	11.04	4+35.00	1117.41	-1.91	1117.52	10.03	0.063	-0.63		1116.89	1116.89	MATCH EX. (END RESURFACE)

* MEASURED TO CROWN POINT

* MEASURED TO CROWN POINT



SR 514 EXISTING SECTION

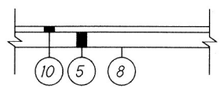
STA 75+00.00 TO STA 75+80.00

PAVEMENT TRANSITION TABLE SR-514

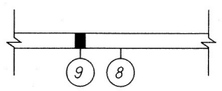
LEFT SIDE						PROFILE CONTROL		CROWN POINT		RIGHT SIDE						
EX EDGE ELEVATION	PROP EDGE ELEVATION	TRANSITION RATE	ELEVATION CORRECTION*	CROSS SLOPE*	WIDTH*	STATION	PROFILE GRADE (ALONG CENTERLINE)	OFFSET (FT) FROM CL (+)RT (-)LT	ELEVATION	WIDTH*	CROSS SLOPE*	ELEVATION CORRECTION*	TRANSITION RATE	PROP EDGE ELEVATION	EX EDGE ELEVATION	REMARKS
1216.30	1216.30		-0.49	0.048	10.26	75+00.00	1216.78	-0.58	1216.79	16.21	0.054	-0.88		1215.91	1215.91	MATCH EX. (BEG RESURFACE)
1216.23	1216.23		-0.58	0.057	10.13	75+15.00	1216.77	-0.62	1216.81	11.91	0.050	-0.59		1216.22	1216.22	END RESURFACE/BEG. FULL DEPTH
1216.18	1216.18		-0.59	0.057	10.05	75+25.00	1216.73	-0.75	1216.77	10.78	0.048	-0.55		1216.22	1216.22	
1216.22	1216.15	15904	-0.57	0.057	9.94	75+39.02	1216.68	-0.83	1216.72	10.65	0.045	-0.48	490	1216.24	1216.27	CL CULVERT
1216.28	1216.28		-0.58	0.057	9.92	75+50.00	1216.82	-0.75	1216.86	10.58	0.043	-0.49		1216.37	1216.37	
1216.49	1216.49		-0.57	0.058	9.91	75+65.00	1217.03	-0.75	1217.06	10.48	0.041	-0.43		1216.63	1216.63	END FULL DEPTH/BEGIN RESURFACE
1216.64	1216.64		-0.54	0.055	9.88	75+75.00	1217.17	-0.62	1217.18	10.40	0.029	-0.30		1216.88	1216.88	
1216.76	1216.76		-0.49	0.050	9.86	75+80.00	1217.23	-0.62	1217.25	10.37	0.024	-0.25		1217.00	1217.00	MATCH EX. (END RESURFACE)

* MEASURED TO CROWN POINT

* MEASURED TO CROWN POINT



RESIDENTIAL DRIVE (ASPHALT) TYPICAL BUILD-UP



RESIDENTIAL DRIVE (AGGREGATE) TYPICAL BUILD-UP

EXISTING LEGEND

(A) EX ASPHALT CONCRETE PAVEMENT

(B) EX AGGREGATE BASE

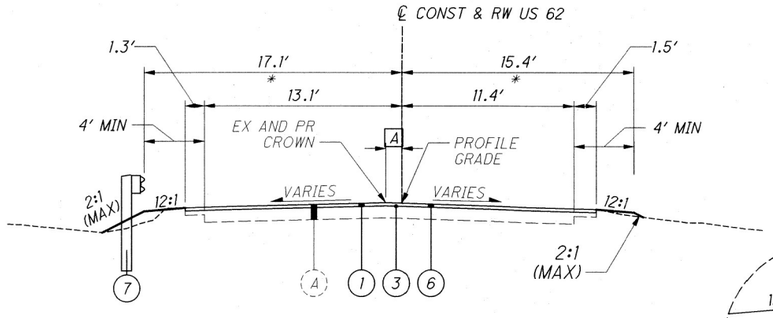
NOTES:

1) EXISTING CROWN OF PAVEMENT VARIES FROM EXISTING ℄ OF RIGHT-OF-WAY AND CONSTRUCTION.

2) FOR PROPOSED LEGEND, SEE SHEET 3

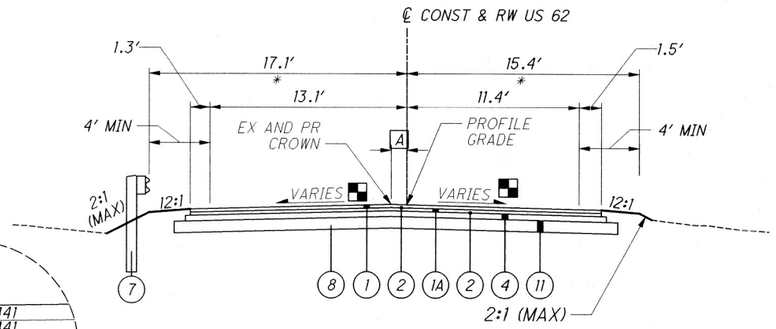
TYPICAL SECTIONS

HOL 62/VAR
5.06/VAR



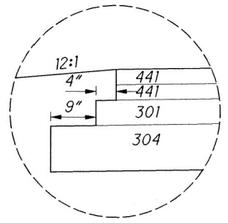
US 62 RESURFACING SECTION

STA 25+70.00 TO STA 25+85.00
STA 26+15.00 TO STA 26+30.00

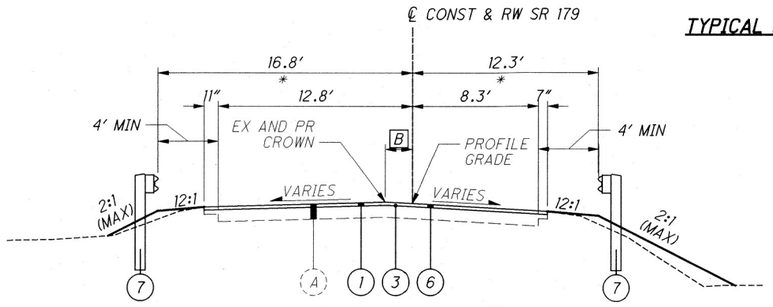


US 62 FULL DEPTH SECTION

STA 25+85.00 TO STA 26+15.00

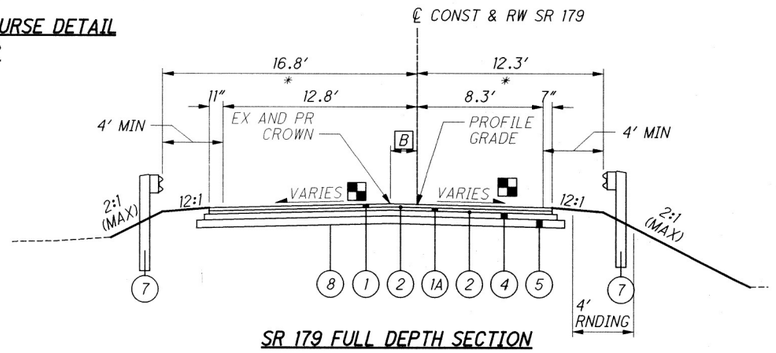


TYPICAL EDGE COURSE DETAIL US 62



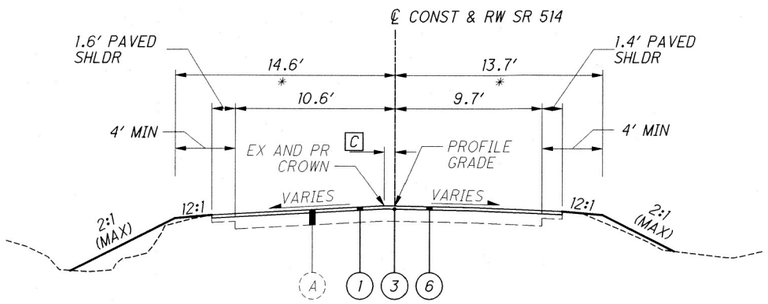
SR 179 RESURFACING SECTION

STA 3+65.00 TO STA 3+80.00
STA 4+20.00 TO STA 4+35.00



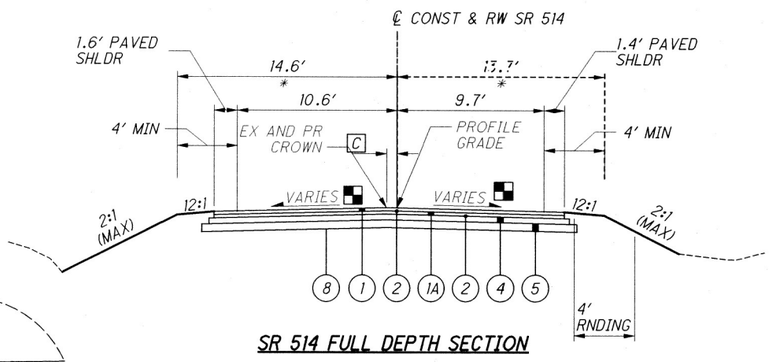
SR 179 FULL DEPTH SECTION

STA 3+80.00 TO STA 4+20.00



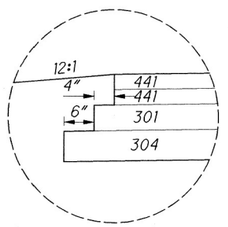
SR 514 RESURFACING SECTION

STA 75+00.00 TO STA 75+15.00
STA 75+65.00 TO STA 75+80.00



SR 514 FULL DEPTH SECTION

STA 75+15.00 TO STA 75+65.00



TYPICAL EDGE COURSE DETAIL SR 179 & SR 514

* SEE PLAN AND PROFILE FOR LIMITS OF GUARDRAIL

** FOR TYPE E END ANCHOR ASSEMBLIES, GRADE BREAK SHALL BE ONE FOOT BEHIND GUARD POST

■ SEE PAVEMENT TRANSITION TABLE ON SHEET 2 .

NOTES:

1) SEE CROSS SECTIONS FOR DITCH GRADING.

DESIGN EXCEPTION - HOL-62-0506
LANE WIDTH: WIDTH 11.52± (NDC=12' MIN) GRADED SHOULDER WIDTH WIDTH=4'± (NDC=8' MIN) (NDC=6' MIN FOR MGS GR WITH LONG POSTS)

[A] VARIES 1'-7" @ STA. 25+70.00
TO 1'-5" @ STA. 25+85.00

VARIES 1'-5" @ STA. 25+85.00
TO 1'-2" @ STA. 26+15.00

VARIES 1'-2" @ STA. 26+15.00
TO 1'-0" @ STA. 26+30.00

DESIGN EXCEPTION - HOL-179-0008
LANE WIDTH: WIDTH=10.55± (NDC=11' MIN)

[B] VARIES 2'-9" @ STA. 3+65.00
TO 2'-7" @ STA. 3+80.00

VARIES 2'-7" @ STA. 3+80.00
TO 2'-0" @ STA. 4+20.00

VARIES 2'-0" @ STA. 4+20.00
TO 1'-11" @ STA. 4+35.00

DESIGN EXCEPTION - HOL-514-0142
LANE WIDTH: WIDTH=10.15'± (NDC=11' MIN) GRADED SHOULDER WIDTH WIDTH=4'± (NDC=6' MIN)

[C] VARIES 0'-5" @ STA. 75+00.00
TO 0'-8" @ STA. 75+15.00

VARIES 0'-8" @ STA. 75+15.00
TO 0'-9" @ STA. 75+65.00

VARIES 0'-9" @ STA. 75+65.00
TO 0'-8" @ STA. 75+80.00

EXISTING LEGEND

(A) EX ASPHALT CONCRETE PAVEMENT (DEPTH UNKNOWN)

PROPOSED LEGEND

(1) ITEM 441 - 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, (PG70-22M)
(1A) ITEM 441 - 1¾" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)
(2) ITEM 407 - TACK COAT (0.06 GAL/SY (FOR QUANTITY PURPOSES))
(3) ITEM 407 - TACK COAT (0.09 GAL/SY (FOR QUANTITY PURPOSES))
(4) ITEM 301 - 6" ASPHALT CONCRETE BASE, PG64-22
(5) ITEM 304 - 6" AGGREGATE BASE
(6) ITEM 254 - PAVEMENT PLANING (1.25")
(7) ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS **
(8) ITEM 204 - SUBGRADE COMPACTION
(9) ITEM 304 - 8" AGGREGATE BASE
(10) ITEM 441 - 2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, (PG70-22M)
(11) ITEM 304 - AGGREGATE BASE, AS PER PLAN, (9" FOR QUANTITY PURPOSES)

TYPICAL SECTIONS

HOL 62/VAR
5.06/VAR

UTILITIES

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

HOL-62-5.06

HOLMES-WAYNE ELECTRIC COOPERATIVE
ATTN: TIM VICKERS
6060 STATE ROUTE 83
MILLERSBURG, OHIO 44654
OFFICE: 330-674-1055

CENTURYLINK CORPORATION
ATTN: JEFFREY SCHOONOVER
2025 AKRON ROAD
WOOSTER, OHIO 44691
OFFICE: 330-262-1128

HOL-179-0.07

AEP OHIO POWER COMPANY
ATTN: KEITH SCHALMO
301 CLEVELAND AVE SW.
CANTON, OHIO 44701
330-438-7720

CENTURYLINK CORPORATION
ATTN: JEFFREY SCHOONOVER
2025 AKRON ROAD
WOOSTER, OHIO 44691
OFFICE: 330-262-1128

HOL-514-1.41

HOLMES-WAYNE ELECTRIC COOPERATIVE
ATTN: TIM VICKERS
6060 STATE ROUTE 83
MILLERSBURG, OHIO 44654
OFFICE: 330-674-1055

CENTURYLINK CORPORATION
ATTN: JEFFREY SCHOONOVER
2025 AKRON ROAD
WOOSTER, OHIO 44691
OFFICE: 330-262-1128

EXISTING PLANS

THE FOLLOWING EXISTING PLANS THAT MAY BE INSPECTED IN THE ODOT DISTRICT 11 OFFICE IN NEW PHILADELPHIA, OHIO:
HOL-62-00.00 (1927)
THE EXISTING PLANS CAN ALSO BE DOWNLOADED FROM THE FOLLOWING FTP SITE:
FTP://FTP.DOT.STATE.OH.US/PUB/CONTRACTS/ATTACH/HOL-62-00.00 (1927)

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 AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING. ALL TREES WITHIN THE CONSTRUCTION LIMITS HAVE BEEN REMOVED.

DEMOLITION DEBRIS

THE CONTRACTOR SHALL TAKE PRECAUTIONS AND AVOID AND/OR LIMIT DEMOLITION DEBRIS AND/OR EMBANKMENT SOIL FROM ENTERING THE STREAM. ANY DEBRIS MATERIAL THAT DOES FALL INTO THE STREAM SHALL BE REMOVED AS SOON AS POSSIBLE

SURVEY PARAMETERS

US-62

USE THE FOLLOWING HORIZONTAL AND VERTICAL POSITIONING PARAMETERS FOR ALL SURVEYING

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 1980
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 1.0000444206
ORIGIN OF COORDINATE SYSTEM: N 289512.600, E 2078798.237

SR-179

USE THE FOLLOWING HORIZONTAL AND VERTICAL POSITIONING PARAMETERS FOR ALL SURVEYING

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 1980
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 1.00007638365772
ORIGIN OF COORDINATE SYSTEM: N 341308.501, E 2072494.831

SR-514

USE THE FOLLOWING HORIZONTAL AND VERTICAL POSITIONING PARAMETERS FOR ALL SURVEYING

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE A

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD 83 (2011)
ELLIPSOID: GRS 1980
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE, NORTH ZONE
COMBINED SCALE FACTOR: 1.00007362743746
ORIGIN OF COORDINATE SYTSTEM: N 323213.251, E 2061238.408

SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS WITHIN THE CONSTRUCTION LIMITS. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS AT THE THREE PROJECT LOCATIONS :

HOL-62-5.06 (01/STR/CV)

659, TOPSOIL	43	CU
659, SEEDING AND MULCHING	389	SQ YD
659, REPAIR SEEDING AND MULCHING	19	SQ YD
659, COMMERCIAL FERTILIZER	0.09	TON
659, LIME	0.08	ACRES
659, WATER	2	M GAL

HOL-179-0.07 (02/NFA/CV)

659, TOPSOIL	121	CU
659, SEEDING AND MULCHING	1089	SQ YD
659, REPAIR SEEDING AND MULCHING	54	SQ YD
659, COMMERCIAL FERTILIZER	0.24	TON
659, LIME	0.23	ACRES
659, WATER	6	M GAL

HOL-514-1.41 (01/STR/CV)

659, TOPSOIL	111	CU
659, SEEDING AND MULCHING	997	SQ YD
659, REPAIR SEEDING AND MULCHING	50	SQ YD
659, COMMERCIAL FERTILIZER	0.22	TON
659, LIME	0.21	ACRES
659, WATER	6	M GAL

TOTAL (CARRIED TO GENERAL SUMMARY)

659, TOPSOIL	275	CU
659, SEEDING AND MULCHING	2475	SQ YD
659, REPAIR SEEDING AND MULCHING	123	CU YD
659, COMMERCIAL FERTILIZER	0.55	TON
659, LIME	0.52	ACRES
659, WATER	14	M GAL

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, AS PER PLAN, (PG70-22M)

THE CONTRACTOR SHALL FOLLOW THE SPECIFICATIONS OF CMS 703.05, EXCEPT DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED "SR" OR "SHR" AS DEFINED BY THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM OF WORK

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

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

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

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

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

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

HORIZONTAL AND VERTICAL CONTROL (SEE "SURVEY PARAMETERS" NOTE, THIS SHEET)

HOL-62-5.06 PID 105124

POINT ID	NORTHING	EASTING	ELEVATION	CODE	DESCRIPTION	STATION	OFFSET
S600	289512.600	2078798.237	932.97	IPINS	SIZE: 5/8" NAME:ODOT	26+85.80	21.97
S601	289510.151	2078945.908	931.19	IPINS	SIZE: 5/8" NAME:ODOT	25+38.14	18.76
CL1	289492.112	2079084.147	N/A	CSURV	SURVEY NAIL SET	24+00.00	CL
CL2	289490.153	2078706.292	N/A	CSURV	SURVEY NAIL SET	27+77.86	CL

HOL-179-0.07 PID 105124

POINT ID	NORTHING	EASTING	ELEVATION	CODE	DESCRIPTION	STATION	OFFSET
CL3	341386.673	2072520.332	N/A	CSURV	SURVEY NAIL SET	3+00.00	CL
CL4	341686.663	2072517.780	N/A	CSURV	SURVEY NAIL SET	6+00.00	CL
S600	341308.501	2072494.832	1119.600	IPINS	SIZE:5/8" NAME:ODOT	2+22.05	-26.17
S601	341608.967	2072542.393	1118.31	IPINS	SIZE:5/8" NAME:ODOT	5+22.10	23.95

HOL-541-1.41 PID 105124

POINT ID	NORTHING	EASTING	ELEVATION	CODE	DESCRIPTION	STATION	OFFSET
CL5	323235.488	2061214.072	0.00	CSURV	SURVEY NAIL SET	74+00.00	CL
CL6	323413.477	2061305.286	0.00	CSURV	SURVEY NAIL SET	76+00.00	CL
S600	323213.251	2061238.408	1215.712	IPINS	SIZE:5/8" NAME:ODOT	73+91.31	31.80
S601	323505.879	2061319.854	1221.540	IPINS	SIZE:5/8" NAME:ODOT	76+88.88	-29.18

CALCULATED GGW
CHECKED MPD

GENERAL NOTES

HOL 62/VAR
5.06/VAR

ITEM 670 - SLOPE EROSION PROTECTION

SLOPE EROSION PROTECTION SHALL BE PROVIDED ON ALL PROPOSED 2:1 SLOPES. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR THE FOLLOWING LOCATIONS:

HOL-62-5.06 (01/STR/CV)
79 SY

HOL-179-0.07 (02/NFA/CV)
405 SY

HOL-514-1.41 (01/STR/CV)
279 SY

TOTAL ITEM 670-SLOPE EROSION PROTECTION MAT, TYPE A = 763 SY (CARRIED TO GENERAL SUMMARY)

ITEM 670 - DITCH EROSION PROTECTION

DITCH EROSION PROTECTION SHALL BE PROVIDED ON ALL PROPOSED DITCH BOTTOMS. THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR THE FOLLOWING LOCATIONS:

HOL-179-0.07 (02/NFA/CV)
292 SY

HOL-514-1.41 (01/STR/CV)
163 SY

TOTAL ITEM 670-DITCH EROSION PROTECTION MAT, TYPE A = 455 SY (CARRIED TO GENERAL SUMMARY)

WATERS OF THE US PLAN NOTE:

WATERS OF THE US HAVE BEEN IDENTIFIED WITHIN THE PROJECT AREA. THESE FEATURES ARE SHOWN IN THE CONSTRUCTION PLANS. THE CONTRACTOR SHALL EXERCISE CAUTION TO ENSURE THAT NO IMPACTS OCCUR TO ANY WATERS OF THE US IN EXCESS OF THE IMPACTS DEPICTED BY THE CONSTRUCTION LIMITS IN THE PLANS.

ANY OTHER SITE PROPOSED BY THE CONTRACTOR FOR OFF PROJECT ANCILLARY CONSTRUCTION (STAGING AREAS, WASTE LOCATIONS, AND/OR BORROW LOCATIONS) MUST MEET THE REQUIREMENTS OF CMS 105.16.

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 304 - AGGREGATE BASE, AS PER PLAN

PROVIDE VARIABLE THICKNESS ITEM 304 - AGGREGATE BASE TO FILL THE VOID FROM THE REMOVAL OF THE EXISTING ASPHALT PAVEMENT AND THE PROPOSED PAVEMENT BUILDUP. THE APPROXIMATE THICKNESS IS 9" FOR ESTIMATING PURPOSES.

ITEM SPECIAL - MAILBOX REMOVED AND RESET

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND, AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D., AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03, AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX REMOVED AND RESET.

FOUNDATION BEARING PRESSURE

HOL-62-5.06: BEARING SOILS MEET MINIMUM SOIL STRENGTH CRITERIA AS DETAILED IN SCD HW-1.1.

HOL-179-0.07: WINGWALL AND CULVERT FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM BEARING PRESSURE (USING LRFD FACTORS) OF 1329 PSF. THE ALLOWABLE BEARING PRESSURE IS 1541 PSF.

HOL-514-1.41: BEARING SOILS MEET MINIMUM SOIL STRENGTH CRITERIA AS DETAILED IN SCD HW-1.1.

BENCHING OF FOUNDATION SLOPES

ALTHOUGH CROSS-SECTIONS INDICATE SPECIFIC DIMENSIONS FOR PROPOSED BENCHING OF THE EMBANKMENT FOUNDATIONS IN CERTAIN AREAS, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. BENCH ALL OTHER SLOPED EMBANKMENT AREAS AS SET FORTH IN SECTION 203.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS). NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF SECTION 203.05

ROUNDING

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

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR IS HEREBY ADVISED THAT THE FOLLOWING PROJECTS:

HOL-39-2.40/2.59, PID:105123
HOL-514-0.00, PID: 107511

MAY BE UNDER CONSTRUCTION DURING THE SAME PERIODS THAT THIS PROJECT IS TO BE CONSTRUCTED. UPON AWARD OF THIS CONTRACT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE OTHER CONTRACTORS OF THE EFFECTS OF THIS CONTRACT UPON THE HOL-39-2.40/2.59 & HOL-514-0.00 PROJECTS. THE CONTRACTOR SHALL COOPERATE WITH THE OTHER CONTRACTORS IN ACCORDANCE WITH SEC. 105.08 AND ARRANGE A MUTUALLY ACCEPTABLE WORK SCHEDULE, SUBJECT TO THE APPROVAL OF THE ENGINEER. ANY CONFLICTS BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREAS OR COOPERATION WILL BE RESOLVED BY THE ENGINEER

CALCULATED GGW
CHECKED MPD

GENERAL NOTES

HOL 62/VAR
5.06/VAR

SEQUENCE OF CONSTRUCTION

CULVERT REPLACEMENTS PLANNED FOR THIS PROJECT SHALL BE COMPLETED UNDER FULL CLOSURE AND DETOUR AS DETAILED WITHIN. US-62, SR-179 OR SR 514 SHALL NOT BE CLOSED CONCURRENTLY. SPECIFIC REQUIREMENTS FOR EACH LOCATION ARE AS FOLLOWS:

HOL-62-5.06
THE US-62 DETOUR SHALL BE LIMITED TO 14 DAYS MAXIMUM DURATION. ACCESS SHALL BE MAINTAINED TO THE PROPERTIES ADJACENT TO THE CULVERT AT ALL TIMES.

HOL-179-0.07
THE SR-179 DETOUR SHALL BE LIMITED TO 14 DAYS MAXIMUM DURATION.

HOL-514-1.41
THE SR-514 DETOUR SHALL BE LIMITED TO 14 DAYS MAXIMUM DURATION.

ITEM 614, MAINTAINING TRAFFIC

THE DETOUR FOR HOL-514-1.41 SHALL NOT BEGIN PRIOR TO MAY 1, 2021. THE DETOUR SHALL END, AND SR 514 SHALL BE REOPENED TO TRAFFIC PRIOR TO JUNE 1, 2021.

THE DETOUR FOR HOL-179-0.07 SHALL NOT BEGIN PRIOR TO JUNE 1, 2021. THE DETOUR SHALL END, AND SR 179 SHALL BE REOPENED TO TRAFFIC PRIOR TO JULY 1, 2021.

A MINIMUM OF ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 14 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 8, 9 & 11. THE 14 DAY CLOSURE PERIODS MUST OCCUR DURING THE SUMMER WHEN LOCAL SCHOOLS ARE NOT IN SESSION. DISINCENTIVE SHALL BE ASSESSED FOR EACH CALENDAR DAY THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT AS SHOWN BELOW.

HOL-62-5.06 - $11,492 PER DAY

HOL-179-0.07 - $5,138 PER DAY

HOL-514-1.41 - $9,570 PER DAY

THE ROAD SHALL NOT BE DETOURED UNTIL THE CONTRACTOR IS READY TO REMOVE THE EXISTING STRUCTURE. UNTIL THE DETOUR IS PLACED INTO EFFECT, TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. DETOUR SIGNS AND SUPPORTS WILL BE ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR.

PRIOR TO OPENING THE ROADWAY TO TRAFFIC THE PAVEMENT BUILD-UP THROUGH THE INTERMEDIATE COURSE SHALL BE COMPLETED AND TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE PLACED, THAT MAY INCLUDE TEMPORARY SIGNS, PAVEMENT MARKINGS, AND CHANNELIZING DEVICES. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES WHILE REMAINING WORK IS COMPLETED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DETERMINED BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC.

HOL-62-5.06 (01/STR/CV)
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
10 CU. YD.

HOL-179-0.07 (02/NFA/CV)
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
10 CU. YD.

HOL-514-1.41 (01/STR/CV)
ITEM 614, ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
10 CU. YD.

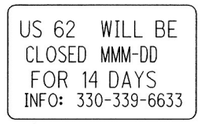
NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE.

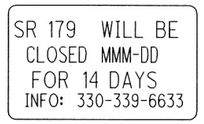
NOTICE OF CLOSURE SIGN TIME TABLE

ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSURE	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	>12 HOURS & <2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	<12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

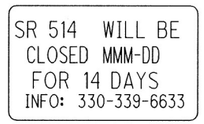
THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION.



W20-H13-60



W20-H13-60



W20-H13-60

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE PROJECT LIMITS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

ACCESS TO LOCAL PROPERTY OWNERS SHALL BE MAINTAINED AT ALL TIMES. AS PER SECTION 107.10 OF THE CMS, ANY DISTURBANCE TO PRIVATE PROPERTY SHALL BE RESTORED TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE DAMAGE OR INJURY.

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.

DESIGNATED LOCAL DETOUR ROUTE

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON SHEET NO. 8, 9 & 11. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

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

HOL-62-5.06 (01/STR/CV)
ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR (441)
200 SQ. YD. (SEE NOTE)
ITEM 617, COMPACTED AGGREGATE
25 CU. YD.

HOL-179-0.07 (02/NFA/CV)
ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR (441)
200 SQ. YD. (SEE NOTE)
ITEM 617, COMPACTED AGGREGATE
25 CU. YD.

HOL-514-1.41 (01/STR/CV)
ITEM 251, PARTIAL DEPTH PAVEMENT REPAIR (441)
200 SQ. YD. (SEE NOTE)
ITEM 617, COMPACTED AGGREGATE
25 CU. YD.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

HOL-62-5.06 (01/STR/CV)
ITEM 616, WATER 5 M. GAL.

HOL-179-0.07 (02/NFA/CV)
ITEM 616, WATER 5 M. GAL.

HOL-514-1.41 (01/STR/CV)
ITEM 616, WATER 5 M. GAL.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS PER THE REQUIREMENTS OF C&MS 614.11.

ITEM 614, WORK ZONE CENTER LINE, CLASS III, 642 PAINT

HOL-62-5.06 (01/STR/CV)	USE 0.01 MILE
HOL-179-0.07 (02/NFA/CV)	USE 0.01 MILE
HOL-514-1.41 (01/STR/CV)	USE 0.02 MILE

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 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 &PIO
ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 12 HOURS	4 BUSINESS 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	NA	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.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

THIS ITEM SHALL CONFORM TO CMS 251 EXCEPT 2 INCHES OF ASPHALT SURFACE COURSE WILL BE REQUIRED, AND WIDTHS AND LENGTHS ARE DETERMINED BY THE ENGINEER.

CALCULATED BER CHECKED SMM

MAINTENANCE OF TRAFFIC GENERAL NOTES

HOL 62/ VAR
5.06/ VAR

6
48

ITEM 614, DETOUR SIGNING

THE FOLLOWING SIGNS SHALL BE ERECTED ALONG THE DESIGNATED OFFICIAL DETOUR ROUTES AND SHALL BE ASSEMBLED AS SHOWN ON THE DETOUR PLANS. ALL DETOUR SIGNING SHALL BE INSTALLED BEFORE COMMENCING WITH THE DETOUR.

EACH SIGN ASSEMBLE SHALL BE PLACED 100 FT. (OR AS DIRECTED) IN ADVANCE OF THE IMPENDING CHANGE OF ROUTE. OFFSET SHALL BE PER STANDARD CONSTRUCTION DRAWING TC-42.20.

M1-4-24-2

M1-5-24-3

M1-5-24-3

M3-1-24

M3-2-24

M3-3-24

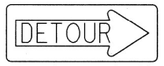
M3-4-24

M4-8-24

M4-8a-24

W20-2-36

M4-10L-48



M4-10R-48


M5-1L-21

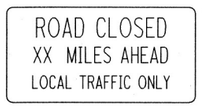

M5-1R-21


M6-1L-21


M6-1R-21


M6-3-21


M6-2-21



R11-3a-60

IN ADDITION TO THE SIGNS LISTED ABOVE AND SHOWN ON THE DETOUR MAPS, PLACE THE FOLLOWING SIGN ASSEMBLY:

AT INTERVALS NOT TO EXCEED 2 MILES IN RURAL AREAS AND AT INTERVALS NOT TO EXCEED 2 BLOCKS WITHIN URBANIZED AREAS. IT IS ANTICIPATED THAT 22 U.S. 62 SIGN ASSEMBLIES, 10 S.R. 179 SIGN ASSEMBLIES AND 22 S.R. 514 SIGN ASSEMBLIES WILL BE REQUIRED TO MEET THIS MAXIMUM SPACING.

ALL ANTICIPATED QUANTITIES ARE SHOWN IN THE TABLE BELOW AND ARE PROVIDED FOR INFORMATION ONLY.

HOL-62-5.06		
SIGN CODE	NO. OF SIGNS	SIZE
M4-8-24	34	24" X 12"
M1-4-24-1	39	24" X 24"
M3-4-24	8	24" X 12"
M3-2-24	9	24" X 12"
M6-3-21	25	21" X 15"
M5-1R-21	2	21" X 15"
M5-1L-21	2	21" X 15"
M6-1R-21	2	21" X 15"
M6-1L-21	3	21" X 15"
W20-2-36	3	36" X 36"
M4-8A-24	2	24" X 18"
R11-3A-60	2	60" X 30"
M4-10L-48	3	48" X 18"
M4-10R-48	2	48" X 18"

HOL-179-0.07		
SIGN CODE	NO. OF SIGNS	SIZE
M4-8-24	31	24" X 12"
M1-5-24-3	37	30" X 24"
M3-1-24	9	24" X 12"
M3-3-24	16	24" X 12"
M6-3-21	18	21" X 15"
M5-1R-21	3	21" X 15"
M5-1L-21	3	21" X 15"
M6-1R-21	3	21" X 15"
M6-1L-21	3	21" X 15"
M6-2-21	1	21" X 15"
W20-2-36	4	36" X 36"
M4-8A-24	2	24" X 18"
R11-3A-60	3	60" X 30"
M4-10L-48	2	48" X 18"
M4-10R-48	4	48" X 18"

HOL-514-1.41		
SIGN CODE	NO. OF SIGNS	SIZE
M4-8-24	43	24" X 12"
M1-5-24-3	47	30" X 24"
M3-1-24	9	24" X 12"
M3-3-24	11	24" X 12"
M6-3-21	27	21" X 15"
M5-1R-21	4	21" X 15"
M5-1L-21	4	21" X 15"
M6-1R-21	4	21" X 15"
M6-1L-21	4	21" X 15"
W20-2-36	3	36" X 36"
M4-8A-24	2	24" X 18"
R11-3A-60	2	60" X 30"
M4-10L-48	2	48" X 18"
M4-10R-48	2	48" X 18"

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, DETOUR SIGNING, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

* DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

* DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

* FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

HOL-62-5.06 (01/STR/CV)
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 8 HOURS

HOL-179-0.07 (02/NFA/CV)
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 8 HOURS

HOL-514-1.41 (01/STR/CV)
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 8 HOURS

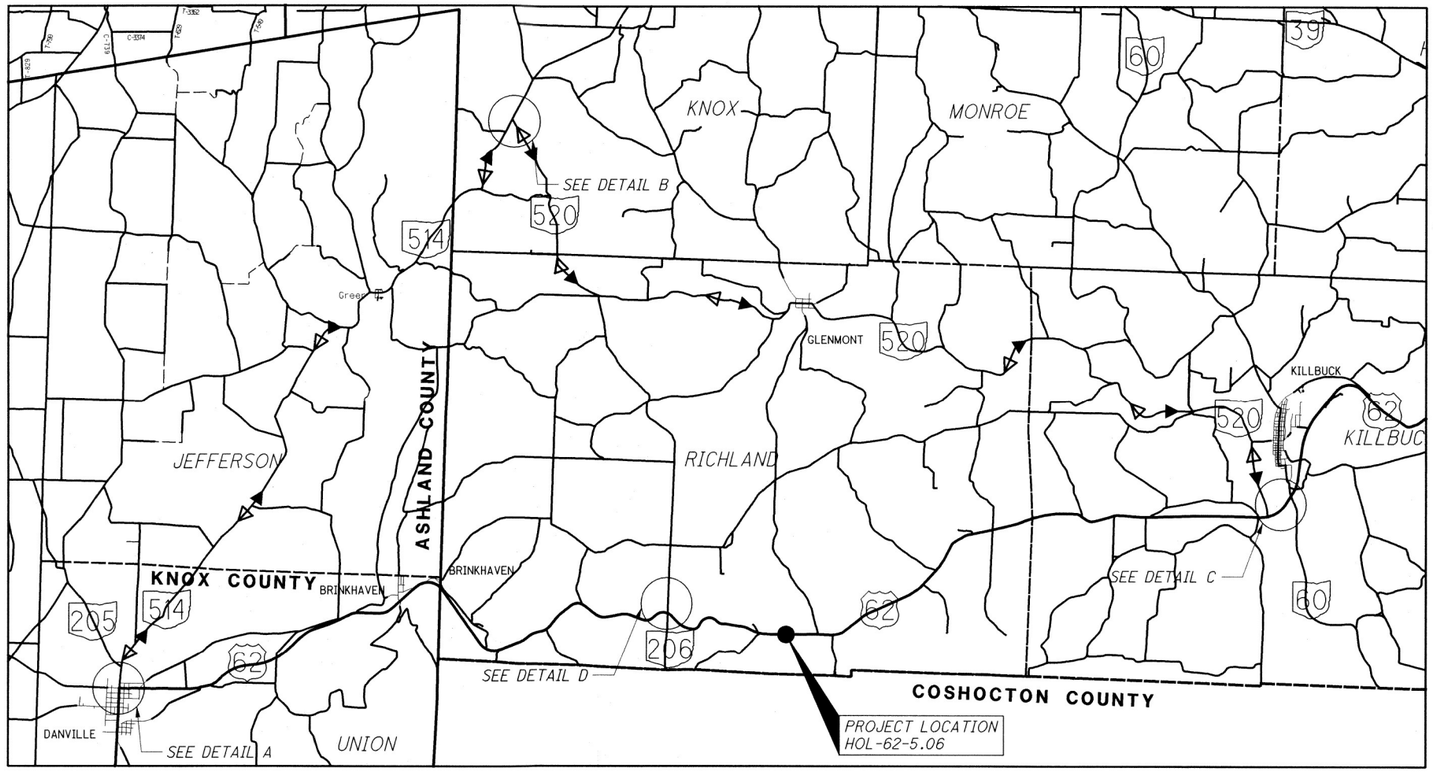
THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

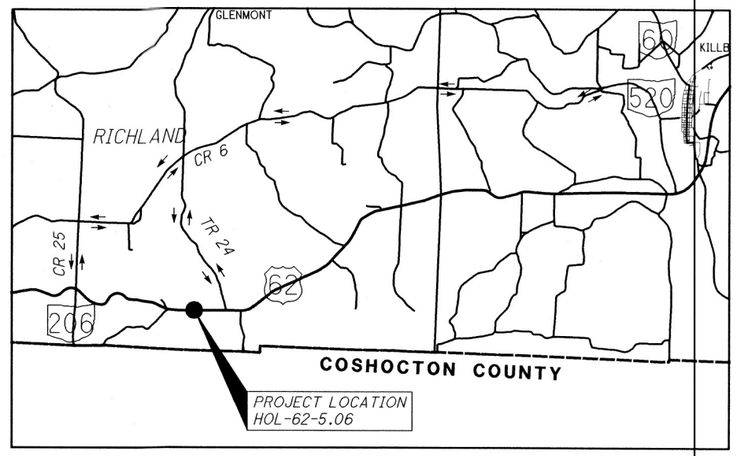
CALCULATED BER
CHECKED SMM

MAINTENANCE OF TRAFFIC GENERAL NOTES

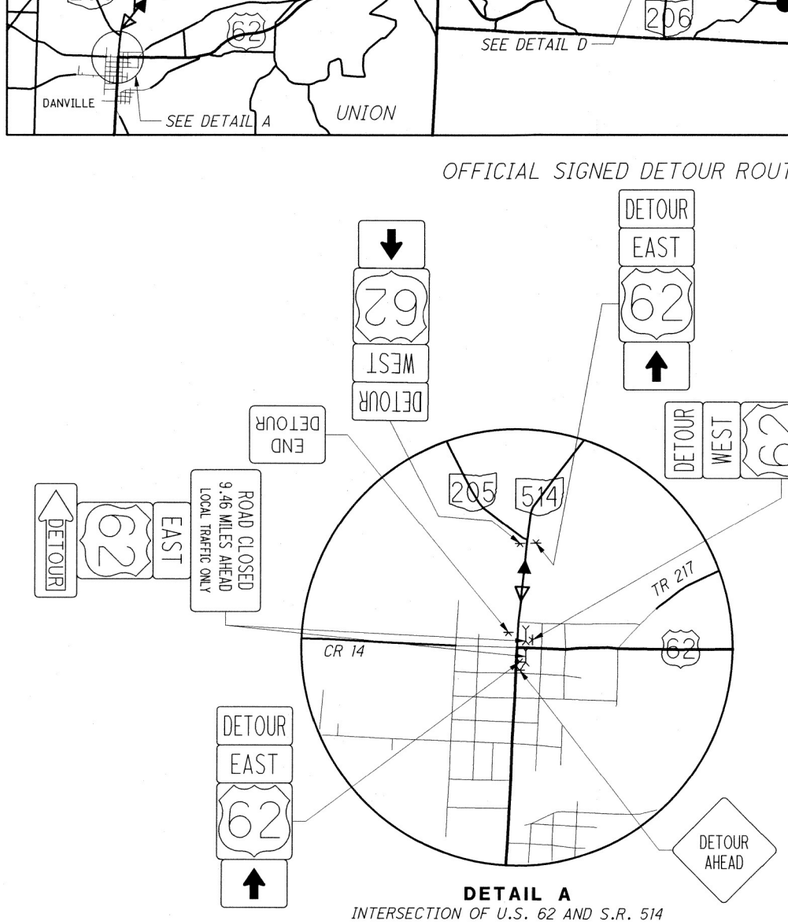
HOL 62/VAR
5.06/VAR



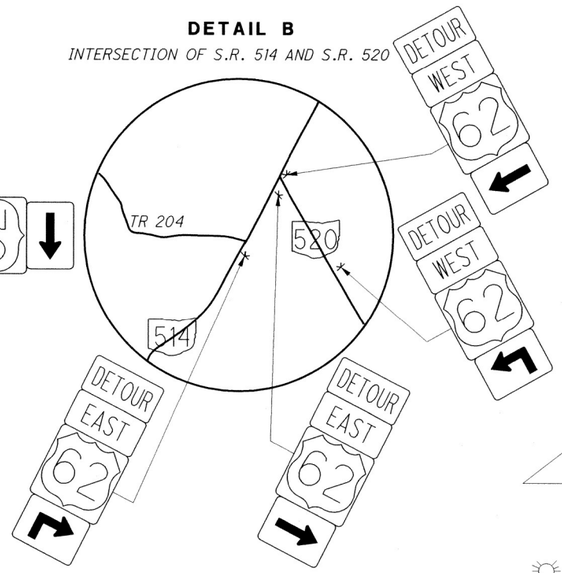
OFFICIAL SIGNED DETOUR ROUTE



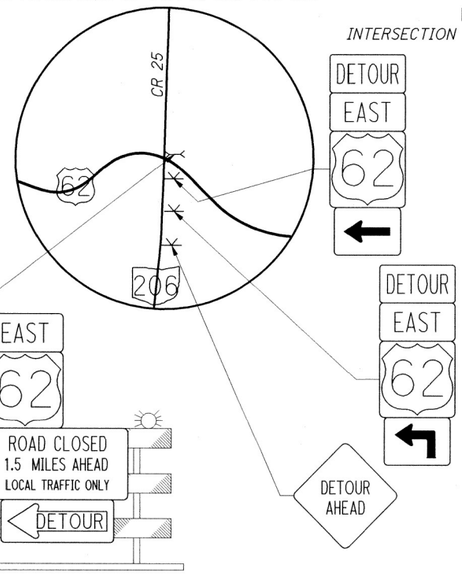
LOCAL DETOUR ROUTE



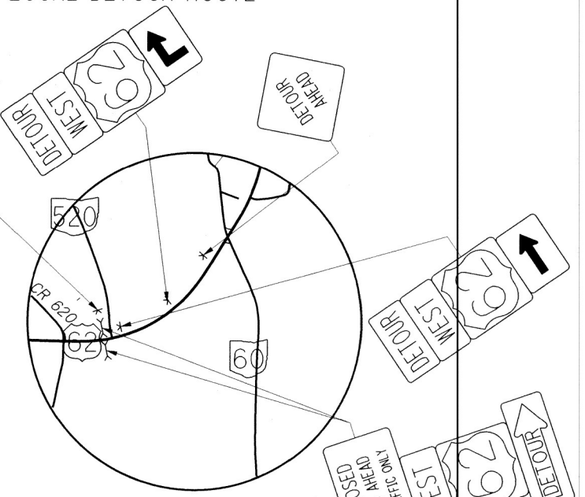
DETAIL A
INTERSECTION OF U.S. 62 AND S.R. 514



DETAIL B
INTERSECTION OF S.R. 514 AND S.R. 520



DETAIL D
INTERSECTION OF U.S. 62 AND S.R. 206



DETAIL C
INTERSECTION OF U.S. 62 AND S.R. 520

NOTES:

1. *THE US-62 DETOUR MAY ONLY BE IN PLACE FOR A MAXIMUM OF 14 DAYS.*
2. *FOR CLOSURE DETAILS SEE MT-101.60.*

LEGEND

- *DETOUR ROUTE - US 62 EASTBOUND*
- *DETOUR ROUTE - US 62 WESTBOUND*
- *LOCAL DETOUR ROUTE*
- *TEMPORARY SIGN SUPPORT*
- *TYPE III BARRICADE*

CALCULATED BER
CHECKED SMM

TRAFFIC - DETOUR PLAN - HOL-62-5.06

MAINTENANCE OF TRAFFIC

HOL 62/VAR
5.06/VAR

8
48

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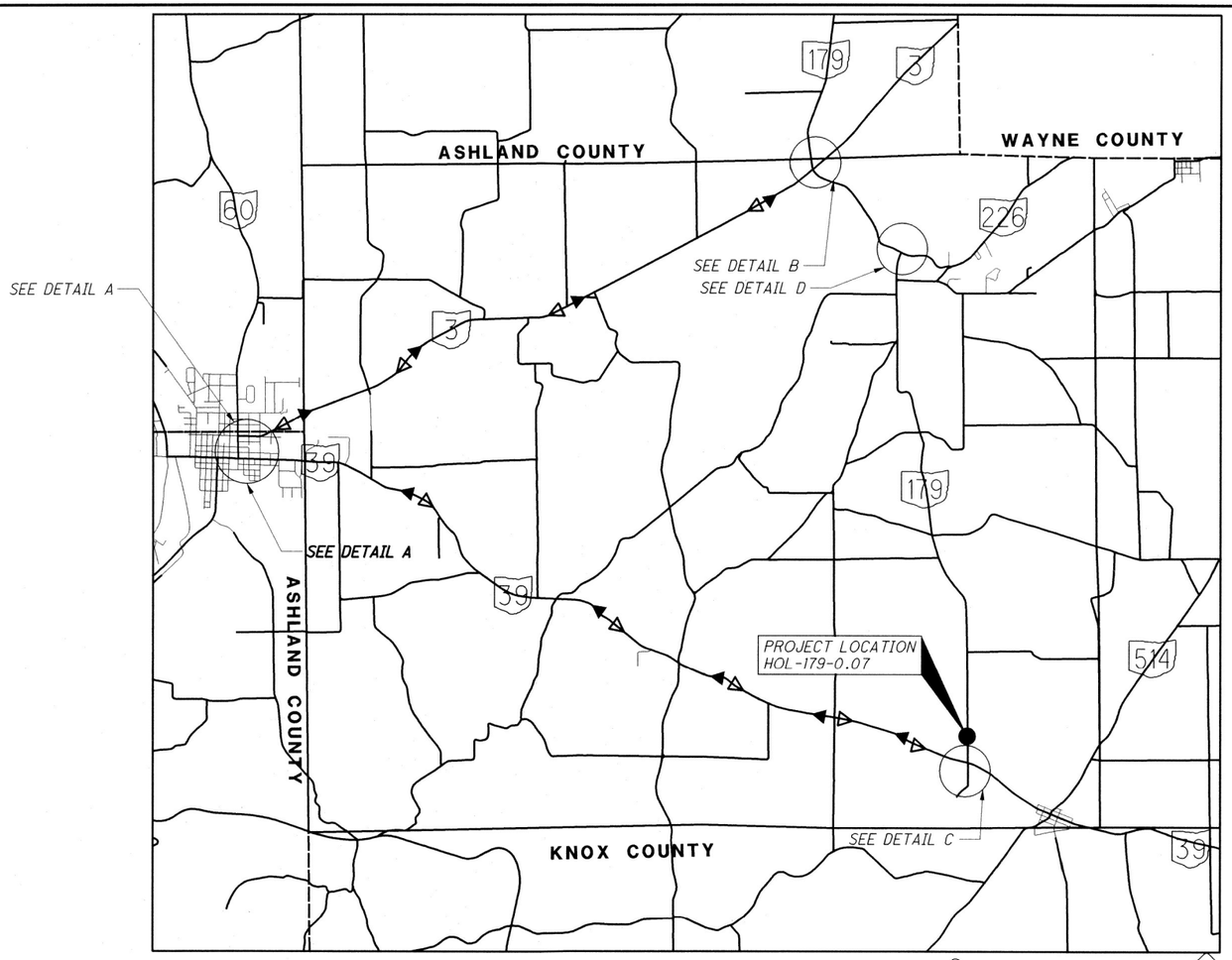
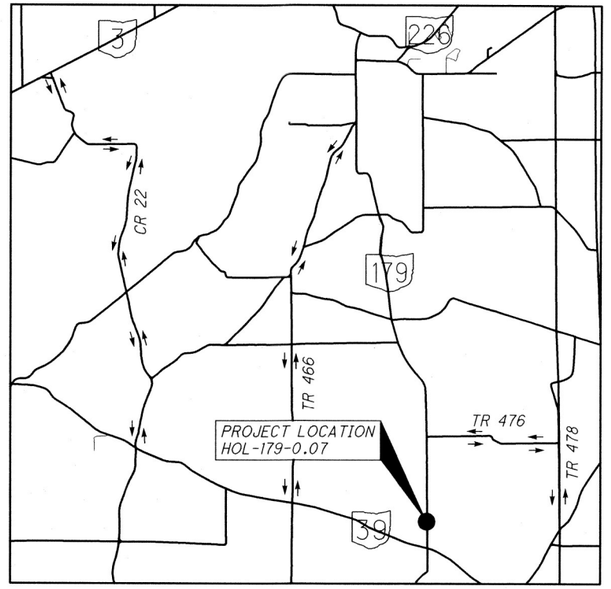
TRAFFIC - DETOUR PLAN - HOL-179-0.07

CALCULATED BER
CHECKED SMM



LOCAL DETOUR ROUTE



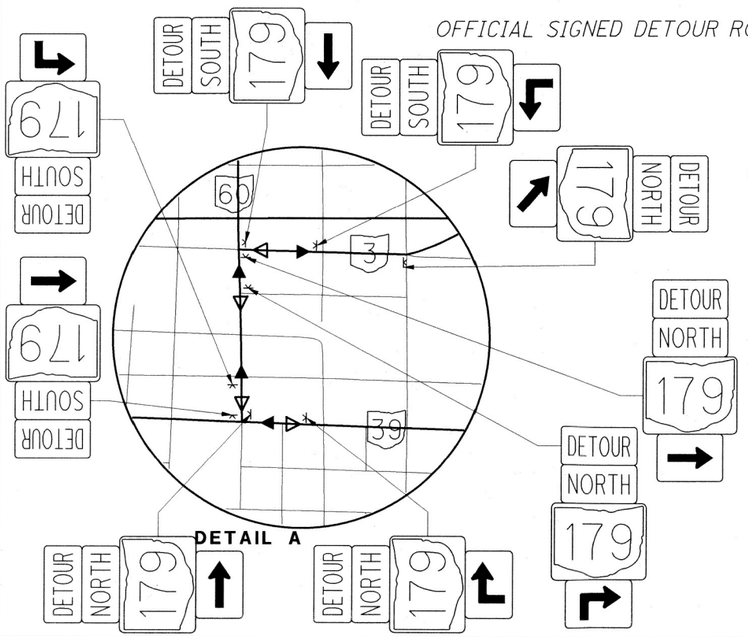
LEGEND

- DETOUR ROUTE - SR 179 NORTHBOUND
- DETOUR ROUTE - SR 179 SOUTHBOUND
- LOCAL DETOUR ROUTE
- TEMPORARY SIGN SUPPORT
- TYPE III BARRICADE

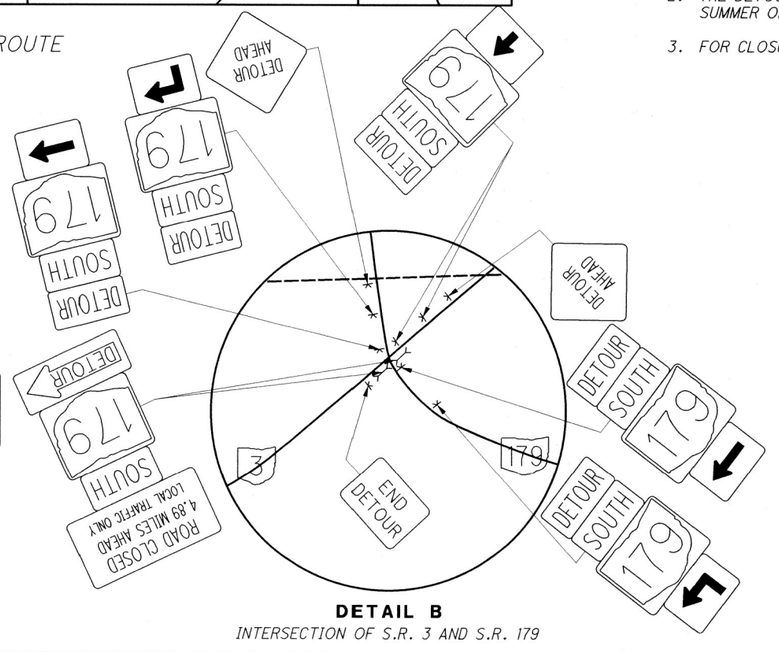
NOTES:

1. THE SR-179 CLOSURE MAY ONLY BE IN PLACE FOR A MAXIMUM OF 14 DAYS.
2. THE DETOUR SHALL BE IMPLEMENTED IN THE SUMMER ONLY.
3. FOR CLOSURE DETAILS SEE MT-101.60.

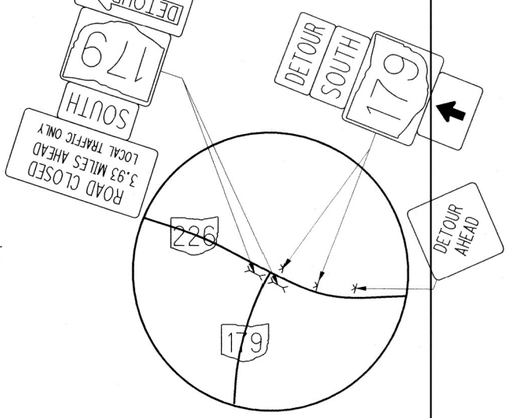
OFFICIAL SIGNED DETOUR ROUTE



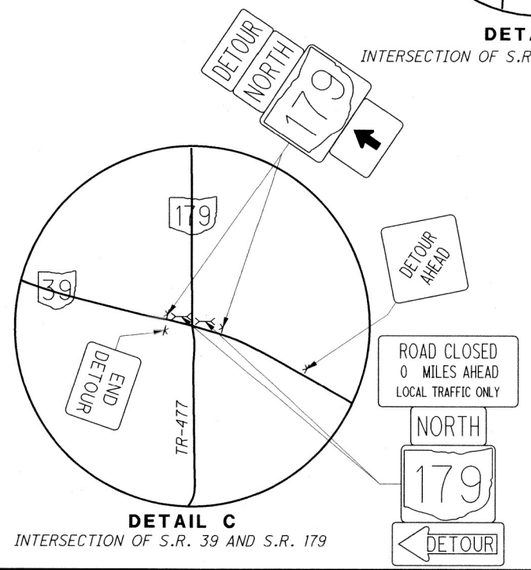
DETAIL A



DETAIL B
INTERSECTION OF S.R. 3 AND S.R. 179



DETAIL D
INTERSECTION OF S.R. 226 AND S.R. 179



DETAIL C
INTERSECTION OF S.R. 39 AND S.R. 179

HOL 62/VAR
5.06/VAR

MAINTENANCE OF TRAFFIC

9
48

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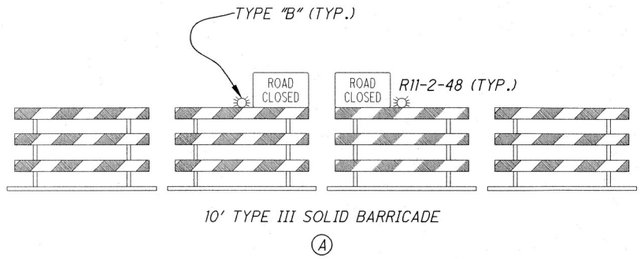
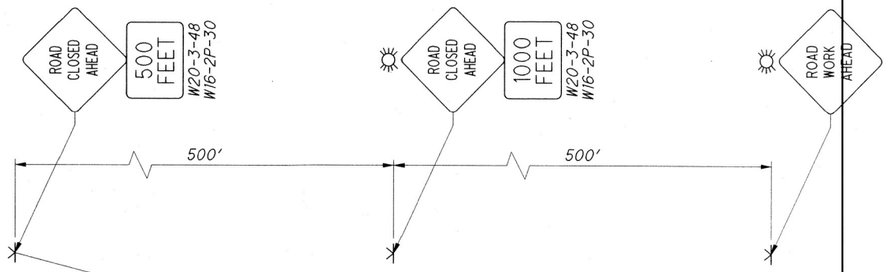
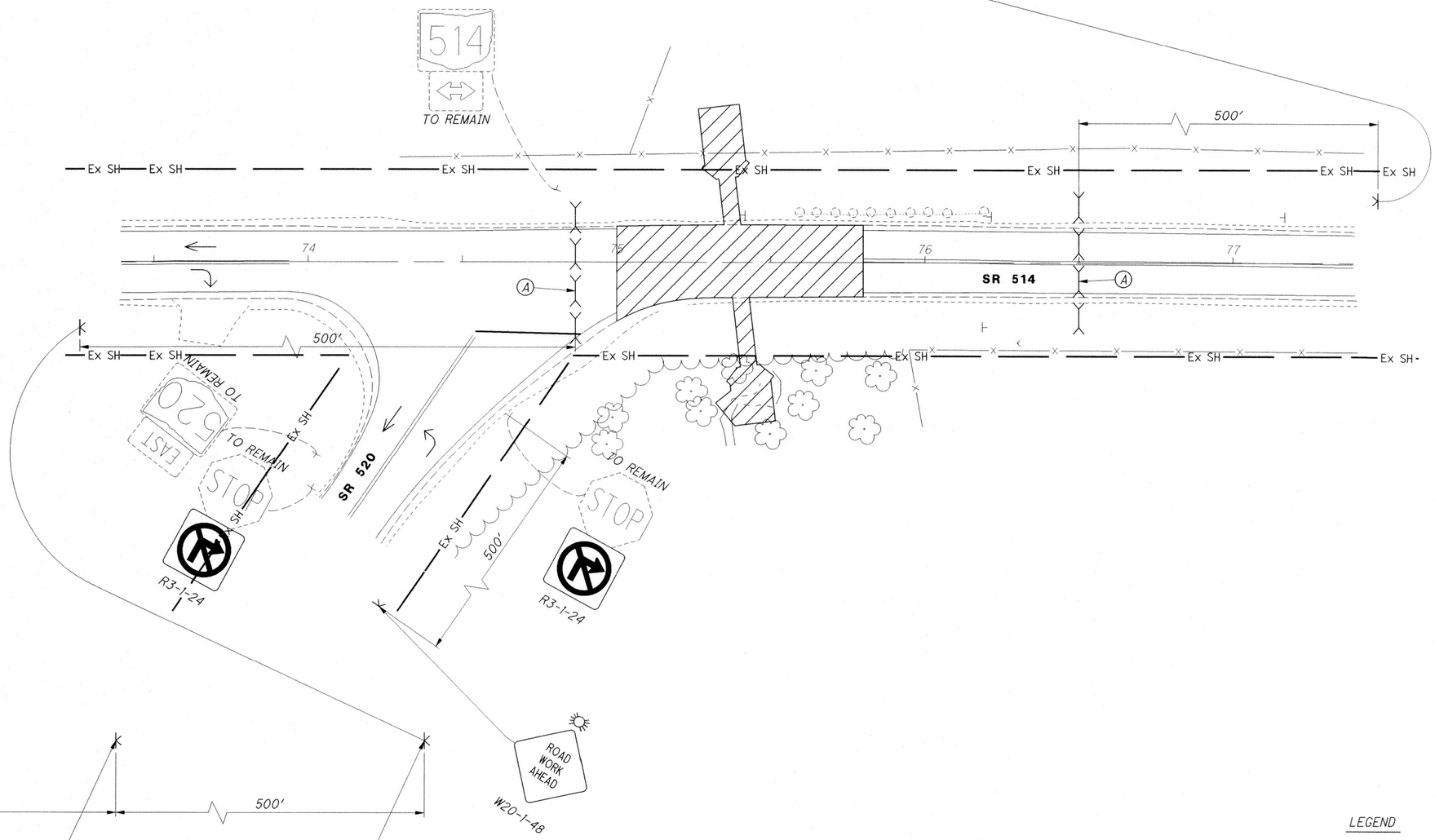
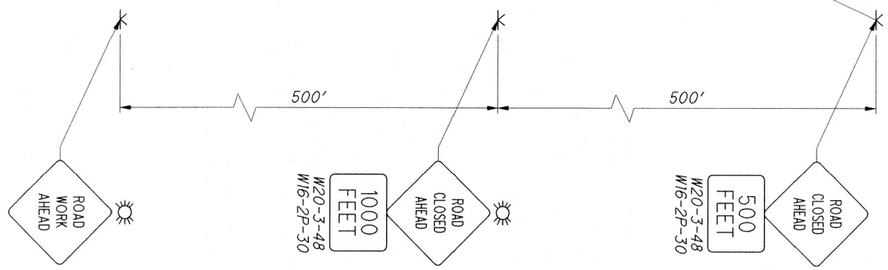


10' TYPE III SOLID BARRICADE

Ⓐ







LEGEND

- WORK ZONE
- TEMPORARY SIGN SUPPORT
- TYPE III BARRICADE
- OPEN TRAVEL LANE

HORIZONTAL SCALE IN FEET

CALCULATED BER

CHECKED SMM

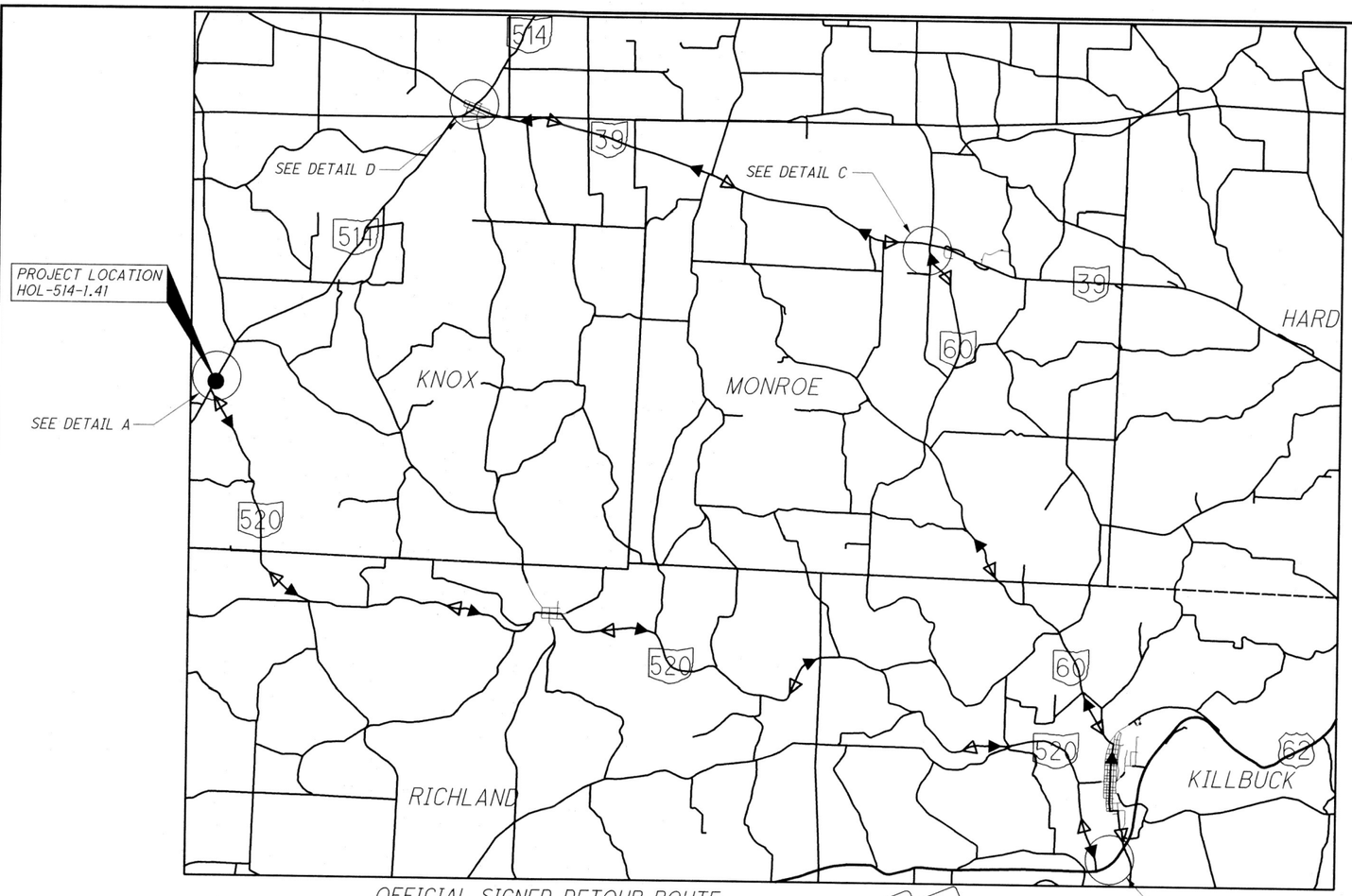
MAINTENANCE OF TRAFFIC PLAN - SR 514

STA. 73+50 TO STA. 77+50

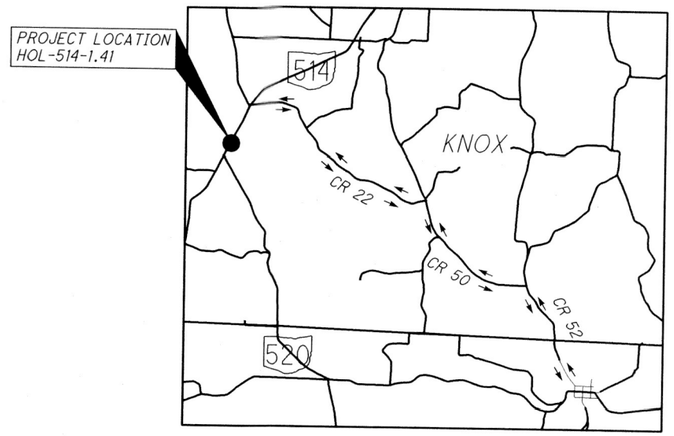
HOL 62/VAR

5.06/VAR

10
48



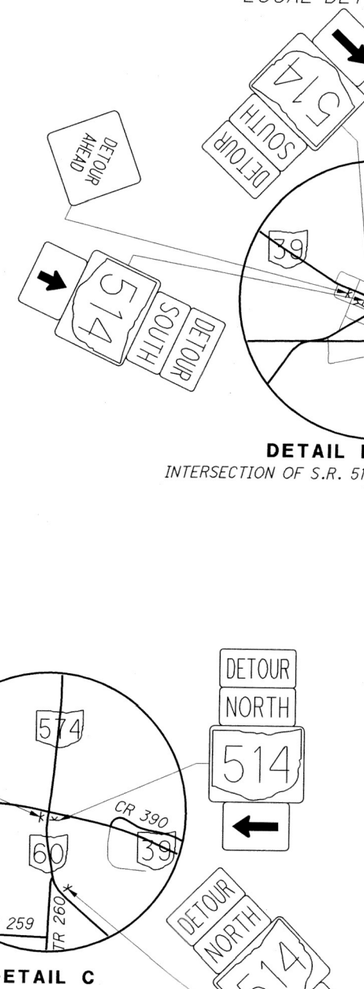
OFFICIAL SIGNED DETOUR ROUTE



LOCAL DETOUR ROUTE

DETAIL A
INTERSECTION OF S.R. 514 AND S.R. 520

DETAIL B
INTERSECTION OF U.S. 62 AND S.R. 520



DETAIL C
INTERSECTION OF S.R. 60 AND S.R. 39

DETAIL D
INTERSECTION OF S.R. 514 AND S.R. 39

NOTES:

1. *THE SR-514 CLOSURE MAY ONLY BE IN PLACE FOR A MAXIMUM OF 14 DAYS.*
2. *THIS DETOUR SHALL NOT BE IMPLEMENTED CONCURRENTLY WITH THE SR-179 OR US-62 DETOURS.*
3. *FOR CLOSURE DETAILS INCLUDING BARRICADE LOCATIONS, SEE SHEET 10 .*

LEGEND

- *DETOUR ROUTE - SR 514 NORTHBOUND*
- *DETOUR ROUTE - SR 514 SOUTHBOUND*
- *LOCAL DETOUR ROUTE*
- *TEMPORARY SIGN SUPPORT*
- *TYPE III BARRICADE*

CALCULATED BER
CHECKED SMM

MAINTENANCE OF TRAFFIC - DETOUR PLAN - HOL-514-1.41

HOL 62/VAR
5.06/VAR

SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
4	5	6	14	16	20	22	27	29	33	40		01/STR/CV	02/NFA/CV						
																		ROADWAY	
LS												LS	LS	201	11000	LS		CLEARING AND GRUBBING	
				2		2		2				4	2	202	20010	6	EACH	HEADWALL REMOVED	
			427									311	116	202	23000	427	SY	PAVEMENT REMOVED, (ASPHALT)	
				81				25				106		202	35100	106	FT	PIPE REMOVED, 24" AND UNDER	
				37		50		52				89	50	202	35200	139	FT	PIPE REMOVED, OVER 24"	
						281							281	202	38000	281	FT	GUARDRAIL REMOVED	
								183				183		202	75000	183	FT	FENCE REMOVED	
			475									352	123	204	10000	475	SY	SUBGRADE COMPACTION	
					101		348		343			444	348	203	10000	792	CY	EXCAVATION	
					100		321		141			241	321	203	20000	562	CY	EMBANKMENT	
				62.5		237.5						62.5	237.5	606	15100	300	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
						2							2	606	26150	2	EACH	ANCHOR ASSEMBLY, MGS TYPE E (NCHRP 350 OR MASH 2016)	
				2		2						2	2	606	26500	4	EACH	ANCHOR ASSEMBLY, TYPE T	
				1								1		SPECIAL	69050350	1	EACH	MAILBOX REMOVED AND RESET	5
																		EROSION CONTROL	
				32		16		38				70	16	601	11000	86	SY	RIPRAP, TYPE D	
								25				25		601	32000	25	CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER	
				14		16						14	16	601	32100	30	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
				6								6		601	32200	6	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
275												154	121	659	00300	275	CY	TOPSOIL	
2,475												1,386	1,089	659	10000	2,475	SY	SEEDING AND MULCHING	
123												69	54	659	14000	123	SY	REPAIR SEEDING AND MULCHING	
0.55												0.31	0.24	659	20000	0.55	TON	COMMERCIAL FERTILIZER	
0.52												0.29	0.23	659	31000	0.52	ACRE	LIME	
14												8	6	659	35000	14	MGAL	WATER	
	763											358	405	670	00510	763	SY	SLOPE EROSION PROTECTION MAT, TYPE A	
	455											163	292	670	00710	455	SY	DITCH EROSION PROTECTION MAT, TYPE A	
												19,865	8,097	832	30000	27,962	EACH	EROSION CONTROL	
																		DRAINAGE	
				21.8		17.2		21				42.8	17.2	602	20000	60	CY	CONCRETE MASONRY	
				98								98		611	06400	98	FT	15" CONDUIT, TYPE D	
						54							54	611	20700	54	FT	48" CONDUIT, TYPE A, 707.02 (0.249), 706.02, 707.33	
				62								62		611	22200	62	FT	54" CONDUIT, TYPE A, 707.02 (0.188) WITH CONCRETE INVERT PAVING, 706.02, 707.33	
								64				64		611	22200	64	FT	54" CONDUIT, TYPE A, 707.02 (0.28), 706.02, 707.33	
																		PAVEMENT	
	600											400	200	251	01000	600	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
			286									199	87	254	01000	286	SY	PAVEMENT PLANING, ASPHALT CONCRETE, 1.25"	
			62									42	20	301	46000	62	CY	ASPHALT CONCRETE BASE, PG64-22	
			62									42	20	304	20000	62	CY	AGGREGATE BASE	
			27									27		304	20001	27	CY	AGGREGATE BASE, AS PER PLAN	5
			70									48	22	407	10000	70	GAL	TACK COAT	
			26									19	7	441	50101	26	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, (PG70-22M)	4
			18									12	6	441	50200	18	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
																		TRAFFIC CONTROL	
										4		2	2	621	00100	4	EACH	RPM	
										4		2	2	621	54000	4	EACH	RAISED PAVEMENT MARKER REMOVED	
				2		6						2	6	626	00110	8	EACH	BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	
										42		14	28	630	03100	42	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
										4		4		630	84900	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
										4		2	2	630	85100	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
										8		6	2	630	86002	8	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
										0.08		0.05	0.03	646	10010	0.08	MILE	EDGE LINE, 6"	
										0.04		0.03	0.01	646	10200	0.04	MILE	CENTER LINE	

CALCULATED RSH
CHECKED MJR

GENERAL SUMMARY

HOL 62/VAR
5.06/VAR

SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
6	7											01/STR/CV	02/NFA/CV						
																		MAINTENANCE OF TRAFFIC	
	24											16	8	614	11110	24	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	LS											LS	LS	614	12420	LS		DETOUR SIGNING	
30												20	10	614	13000	30	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
0.04												0.03	0.01	614	21550	0.04	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
15												10	5	616	10000	15	MGAL	WATER	
75												50	25	617	10100	75	CY	COMPACTED AGGREGATE	
																		INCIDENTALS	
LS												LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
												LS	LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS	LS	624	10000	LS		MOBILIZATION	

CALCULATED RSH
CHECKED MJR

GENERAL SUMMARY

HOL 62/VAR
5.06/VAR

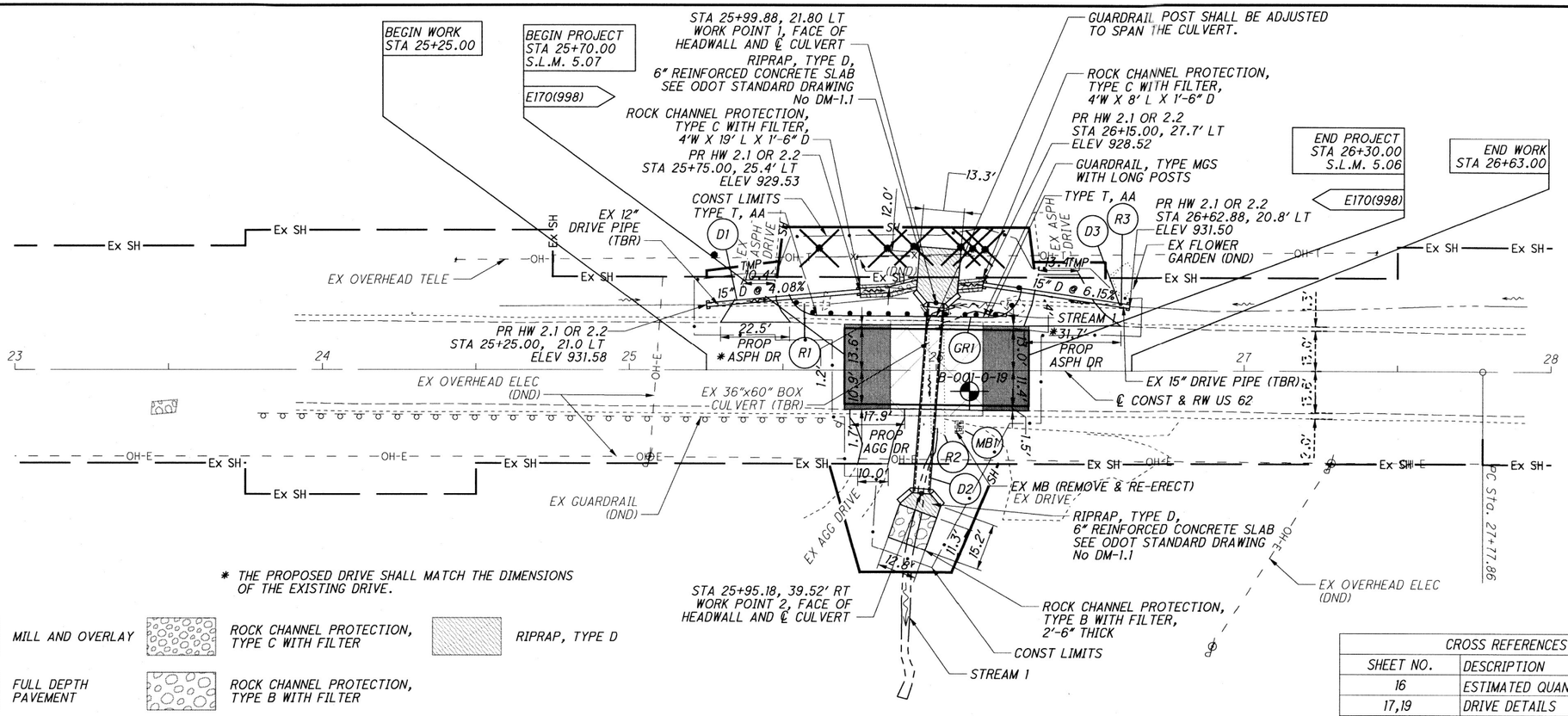
13
48

DESCRIPTION	STATION RANGE			TYPICAL SECTION	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	202 PAVEMENT REMOVED, (ASPHALT)	204 SUBGRADE COMPACTION	254 PAVEMENT PLANING, ASPHALT CONCRETE (1.25")	301 ASPHALT CONCRETE BASE, PG64-22 (MAX 6" LIFT)	304 AGGREGATE BASE, 6"	304 AGGREGATE BASE, 8"	304 AGGREGATE BASE, AS PER PLAN	407 TACK COAT (0.06 GAL/SY)	407 TACK COAT (0.09 GAL/SY)	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, (PG70-22M)	441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, (PG70-22M)	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448)	
						FT	FT	SY	SY	SY	SY	SY	CY	CY	CY	CY	GAL	GAL	CY	CY	CY	
HOL-62-05.12 (01/STR/CV)																						
PLANING AND RESURFACING																						
PLANING/SURFACE COURSE/TACK	25+70.00	TO	25+85.00		LT/RT	15.00	CAD AREA		50.3			50.3						4.5	1.7			
FULL DEPTH																						
REMOVAL	25+85.00	TO	26+15.00		LT/RT	30.00	CAD AREA		101.8	101.8												
SURFACE	25+85.00	TO	26+15.00		LT/RT	30.00	CAD AREA		101.4								6.1		3.5		4.9	
BASE	25+85.00	TO	26+15.00		LT/RT	30.00	CAD AREA		103.7				17.3				6.2					
SUB BASE COURSE	25+85.00	TO	26+15.00		LT/RT	30.00	CAD AREA		109.0		109.0					27.3						
PLANING AND RESURFACING																						
PLANING/SURFACE COURSE/TACK	26+15.00	TO	26+30.00		LT/RT	15.00	CAD AREA		50.9			50.9						4.6	1.8			
DRIVE (ASPHALT)	25+30.00	TO	25+52.00		LT	22.00	CAD AREA		22.9	22.9	22.9			3.8						1.3		
DRIVE (GRAVEL)	25+72.00	TO	25+90.00		RT	18.00	CAD AREA		25.0		25.0				5.6							
DRIVE (ASPHALT)	25+30.00	TO	25+52.00		LT	22.00	CAD AREA		38.0	38.0	38.0			6.3						2.1		
SUBTOTAL (01/STR/CV)										163	195	101	17	10	6	27	12	9	7	3	5	
HOL-179-00.08 (02/NFA/CV)																						
PLANING AND RESURFACING																						
PLANING/SURFACE COURSE/TACK	3+65.00	TO	3+80.00		LT/RT	15.00	CAD AREA		43.1			43.1						3.9	1.5			
FULL DEPTH																						
REMOVAL	3+80.00	TO	4+20.00		LT/RT	40.00	CAD AREA		115.5	115.5												
SURFACE	3+80.00	TO	4+20.00		LT/RT	40.00	CAD AREA		115.5								6.9		4.0		5.6	
BASE	3+80.00	TO	4+20.00		LT/RT	40.00	CAD AREA		118.4				19.7				7.1					
SUB BASE COURSE	3+80.00	TO	4+20.00		LT/RT	40.00	CAD AREA		122.9		123.0			20.5								
PLANING AND RESURFACING																						
PLANING/SURFACE COURSE/TACK	4+20.00	TO	4+35.00		LT/RT	15.00	CAD AREA		43.5			43.5						3.9	1.5			
SUBTOTAL (02/NFA/CV)										116	123	87	20	20			14	8	7		6	
HOL-514-01.42 (01/STR/CV)																						
PLANING AND RESURFACING																						
PLANING/SURFACE COURSE/TACK	75+00.00	TO	75+15.00		LT/RT	15.00	CAD AREA		54.8			54.8						4.9	1.9			
FULL DEPTH																						
REMOVAL	75+15.00	TO	75+65.00		LT/RT	50.00	CAD AREA		147.7	147.7												
SURFACE	75+15.00	TO	75+65.00		LT/RT	50.00	CAD AREA		147.7								8.9		5.1		7.2	
BASE	75+15.00	TO	75+65.00		LT/RT	50.00	CAD AREA		151.4				25.2				9.1					
SUB BASE COURSE	75+15.00	TO	75+65.00		LT/RT	50.00	CAD AREA		157.0		157.0			26.2								
PLANING AND RESURFACING																						
PLANING/SURFACE COURSE/TACK	75+65.00	TO	75+80.00		LT/RT	15.00	CAD AREA		43.2			43.2						3.9	1.5			
SUBTOTAL (01/STR/CV)										148	157	98	25	26			18	9	9		7	
SUBTOTAL (01/STR/CV)										311	352	199	42	42		27	48		19		12	
SUBTOTAL (02/NFA/CV)										116	123	87	20	20			22		7		6	
TOTALS CARRIED TO GENERAL SUMMARY										427	475	286	62	62		27	70		26		18	

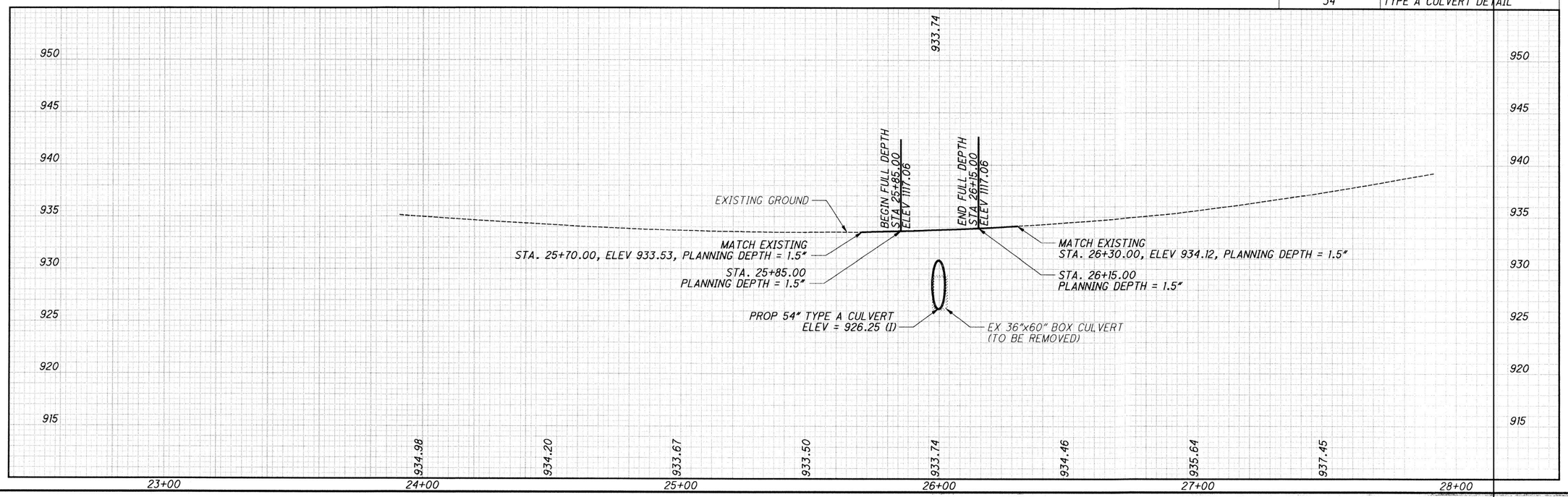
CALCULATED RSH
CHECKED MJR

PAVEMENT CALCULATIONS

HOL 62/ VAR
5.06/ VAR



CROSS REFERENCES	
SHEET NO.	DESCRIPTION
16	ESTIMATED QUANTITIES - US 62
17,19	DRIVE DETAILS
34	TYPE A CULVERT DETAIL



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HORIZONTAL SCALE IN FEET
0 10 20 40
CALCULATED JTS
CHECKED MPD

PLAN AND PROFILE - US 62
STA. 23+00 TO STA. 28+00
HOL 62/VAR
5.06/VAR

ROADWAY

SHEET NO.	REF. NO.	STATION FROM	STATION TO	SIDE	CENTERLINE ROADWAY REFERENCE	202 HEADWALL REMOVED	202 PIPE REMOVED, 24" AND UNDER	202 PIPE REMOVED, OVER 24"	606 GUARDRAIL, TYPE MGS WITH LONG POSTS	606 ANCHOR ASSEMBLY, TYPE T	626 BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)	690 SPECIAL - MAILBOX REMOVED AND RESET
						EACH	FT	FT	FT	EACH	EACH	EACH
15	R1	25+25	25+65	LT	US 62		40					
15	R2	26+00	26+01	LT/RT	US 62	2		37				
15	R3	26+63	26+22	LT	US 62		41					
15	GR1	25+51	26+28	LT	US 62				62.50	2	2	
15	MB1	26+07		LT	US 62							1
TOTALS CARRIED TO GENERAL SUMMARY (01/STR/CV)						2	81	37	62.50	2	2	1

DRAINAGE

SHEET NO.	REF. NO.	STATION FROM	STATION TO	SIDE	CENTERLINE ROADWAY REFERENCE	601 RIPRAP, TYPE D	601 ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	601 ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	602 CONCRETE MASONRY	611 15" CONDUIT, TYPE D	611 54" CONDUIT, TYPE A, 707.02 (0.188) WITH CONCRETE INVERT PAVING, 706.02, 707.33
						SY	CY	CY	CY	FT	FT
15	D1	25+25	25+75	LT	US 62			4.20	0.42	50	
15	D2	25+95	26+00	LT/RT	US 62	32	13.4		21		62
15	D3	26+15	26+63	LT	US 62			1.80	0.42	48	
TOTALS CARRIED TO GENERAL SUMMARY (01/STR/CV)						32	13.40	6	21.84	98	62

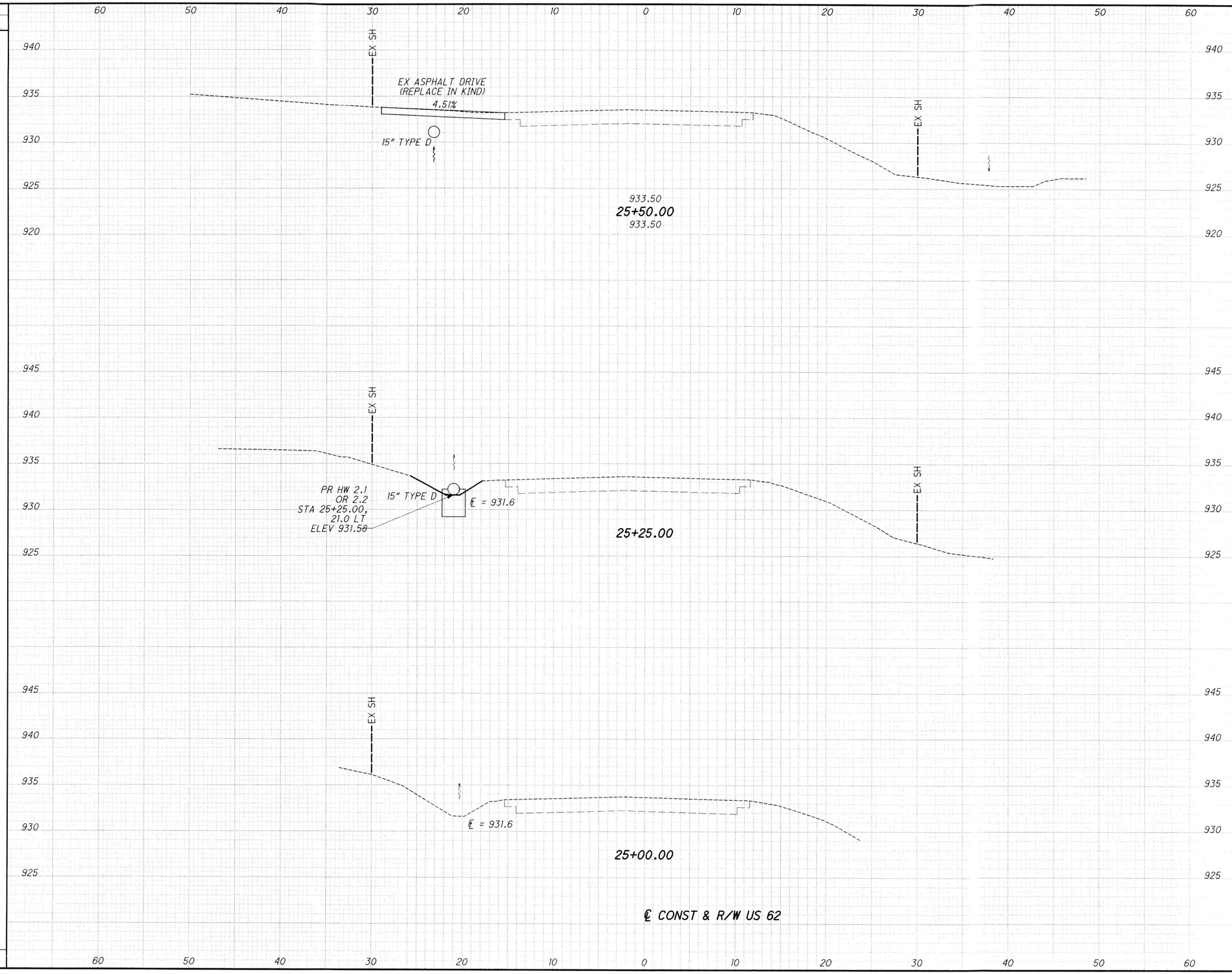
CALCULATED RSH
CHECKED MJR

ESTIMATED QUANTITIES
CULVERT - HOL-62-5.06

HOL 62/VAR
5.06/VAR

16
48

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
9	0		
		4	0
0	0		
0	0		
		4	0

CALCULATED: GGW
CHECKED: MPD

CROSS SECTIONS - US 62
STA. 25+00.00 TO STA. 25+50.00

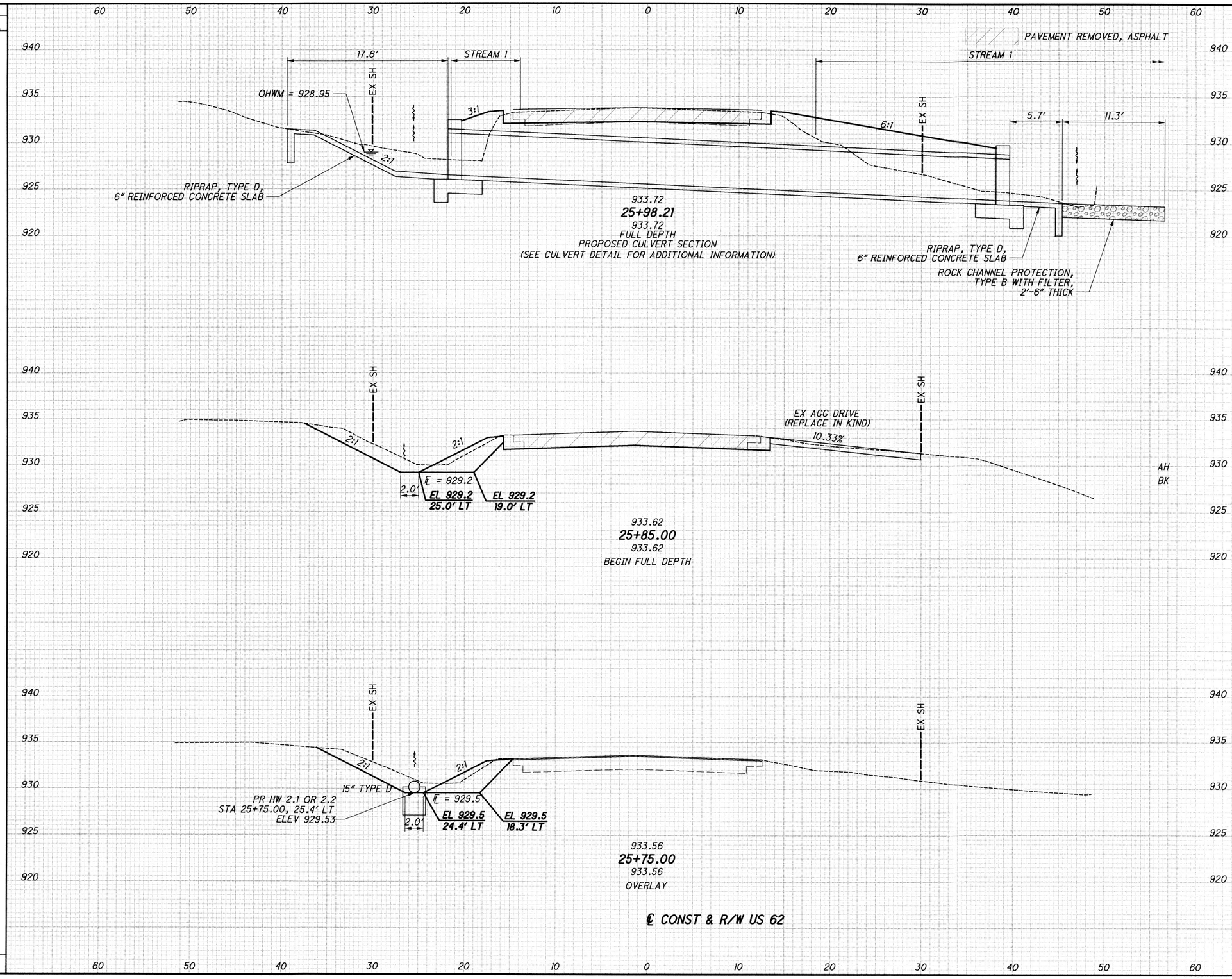
HOL 62/VAR
5.06/VAR

17
48

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

SEEDING	
END WIDTH	SQ. YDS.

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES



END AREA		VOLUME		
CUT	FILL	CUT	FILL	
64	98			
		26	29	
				AH
42	22			BK
37	15			
		12	6	
29	15			
		18	7	
		56	42	

CALCULATED GGW
CHECKED MPD

CROSS SECTIONS - US 62
STA. 25+75.00 TO STA. 25+98.21

HOL 62/VAR
5.06/VAR

18
48

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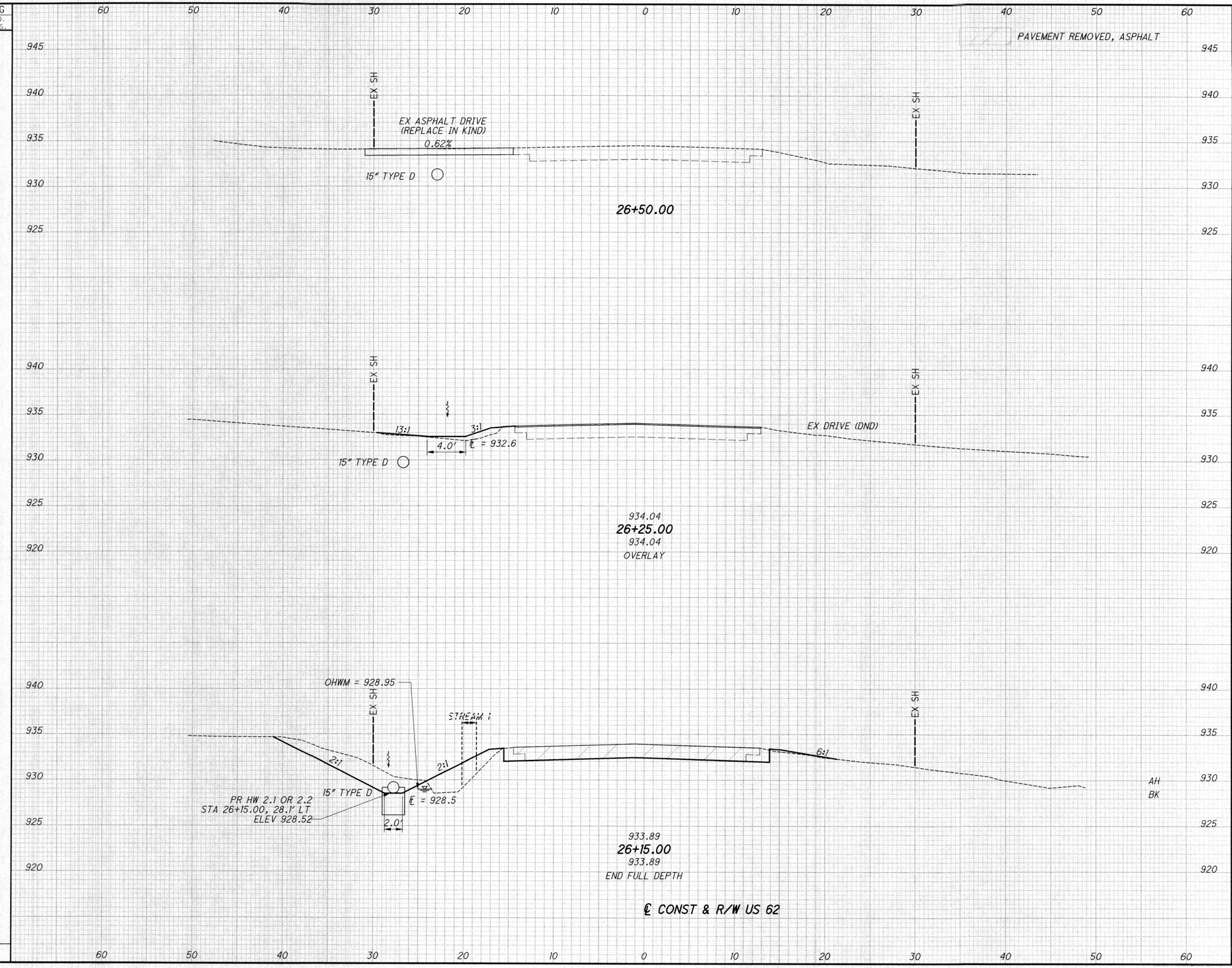
SEEDING	
END WIDTH	SQ. YDS.

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES



END AREA		VOLUME		
CUT	FILL	CUT	FILL	
12	0			
		6	14	
0	4			
		5	9	
26	16			AH
31	16			BK
		30	35	
		41	58	

CALCULATED GGW
CHECKED MPD

CROSS SECTIONS - US 62
STA. 26+15.00 TO STA. 26+50.00

HOL 62/VAR
5.06/VAR

19
48

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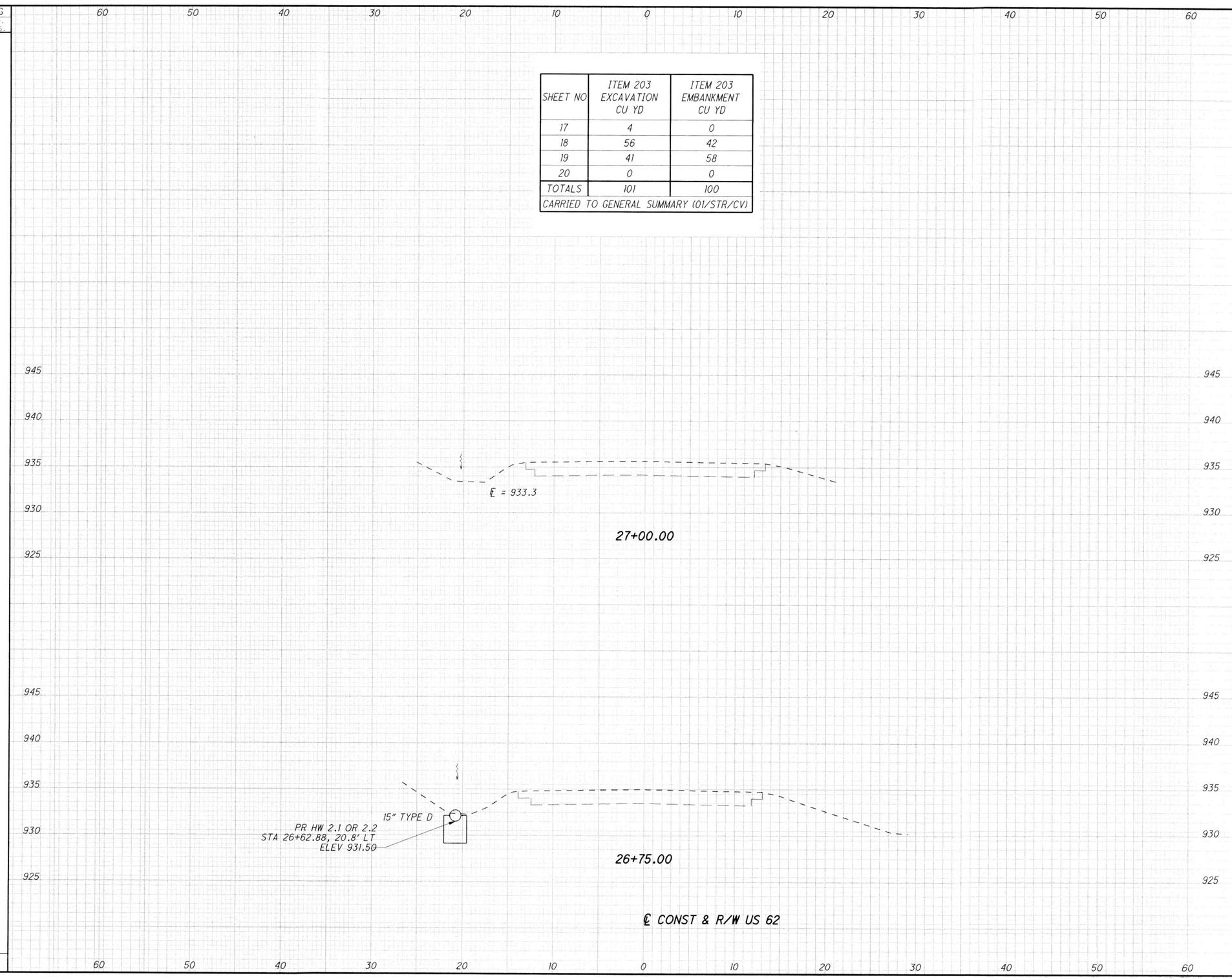
SEEDING	
END WIDTH	SQ. YDS.

SHEET NO	ITEM 203 EXCAVATION CU YD	ITEM 203 EMBANKMENT CU YD
17	4	0
18	56	42
19	41	58
20	0	0
TOTALS	101	100
CARRIED TO GENERAL SUMMARY (01/STR/CV)		



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED GGW
CHECKED RSH

CROSS SECTIONS - US 62
STA. 26+75.00 TO STA. 27+00.00

HOL 62/VAR
5.06/VAR

20
48

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

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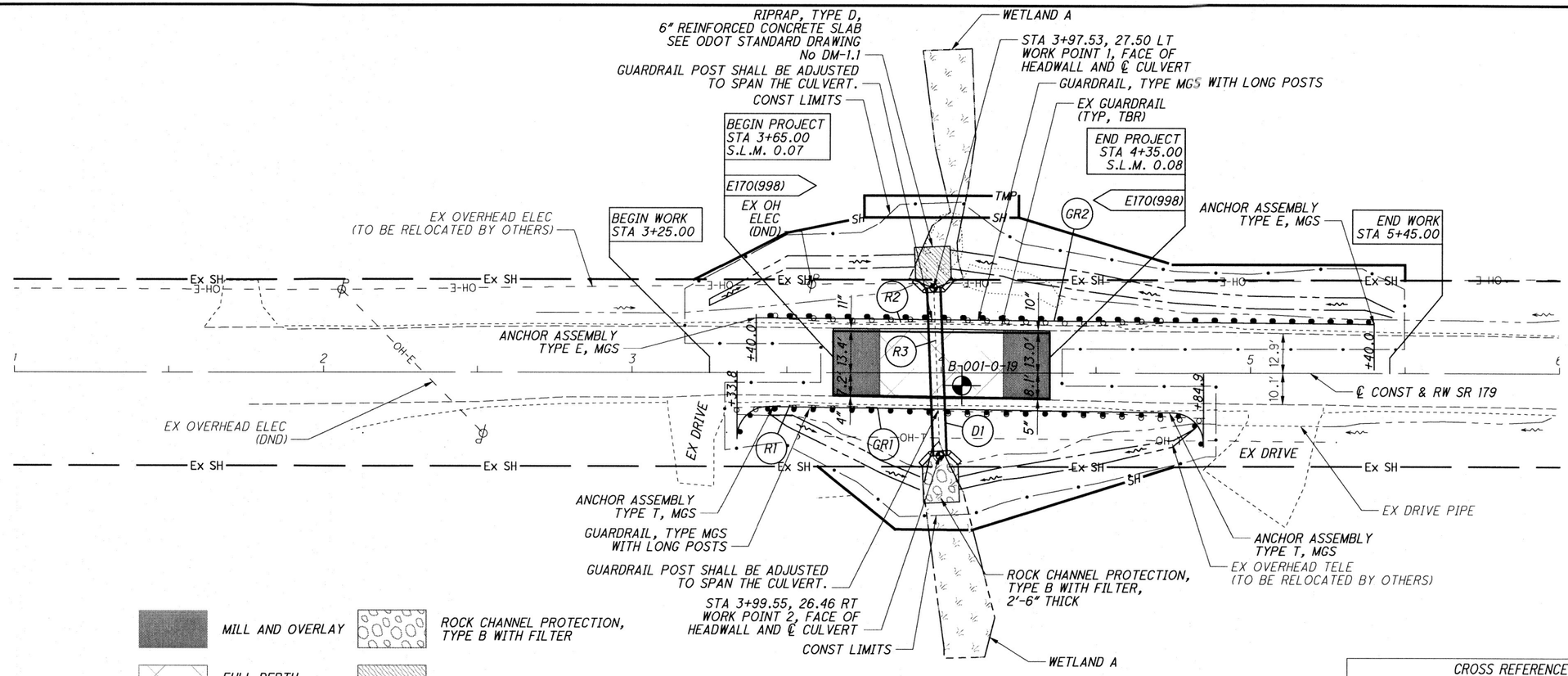
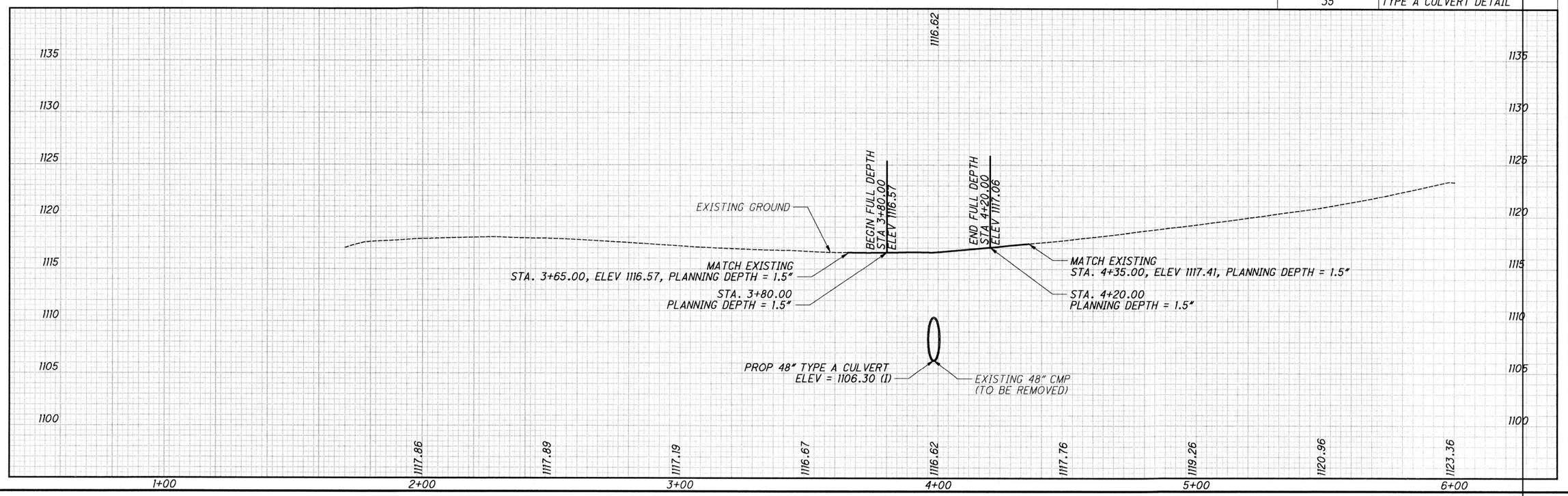


CROSS REFERENCES	
SHEET NO.	DESCRIPTION
22	ESTIMATED QUANTITIES - SR 179
35	TYPE A CULVERT DETAIL



N

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JTS
CHECKED MPD

PLAN AND PROFILE - 179
STA. 1+00 TO STA. 6+00

HOL 62/VAR
5.06/VAR

21
48

ROADWAY

SHEET NO.	REF. NO.	STATION FROM	STATION TO	SIDE	CENTERLINE ROADWAY REFERENCE	202 HEADWALL REMOVED	202 PIPE REMOVED, OVER 24"	202 GUARDRAIL REMOVED	606 GUARDRAIL, TYPE MGS WITH LONG POSTS	606 ANCHOR ASSEMBLY, MGS TYPE E (NCHRP 350 OR MASH 2016)	606 ANCHOR ASSEMBLY, TYPE T	626 BARRIER REFLECTOR, TYPE 2 (BI-DIRECTIONAL)
						EACH	FT	FT	FT	EACH	EACH	EACH
21	R1	03+33	04+85	RT	SR 179			153				
21	R2	03+44	04+72	LT	SR 179			128				
21	R3	03+98	03+99	LT/RT	SR 179	2	50					
21	GR1	03+34	04+85	RT	SR 179				137.50		2	3
21	GR2	03+40	05+40	LT	SR 179				100	2		3
TOTALS CARRIED TO GENERAL SUMMARY (02/NFA/CV)						2	50	281	237.50	2	2	6

DRAINAGE

SHEET NO.	REF. NO.	STATION FROM	STATION TO	SIDE	CENTERLINE ROADWAY REFERENCE	601 RIPRAP, TYPE D	601 ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	602 CONCRETE MASONRY	611 48" CONDUIT, TYPE A; 707.02 (0.249), 706.02, 707.33
						SY	CY	CY	FT
21	D1	03+98	04+00	LT/RT	SR 179	15.80	15.30	17.20	54
TOTALS CARRIED TO GENERAL SUMMARY (02/NFA/CV)						15.80	15.30	17.20	54

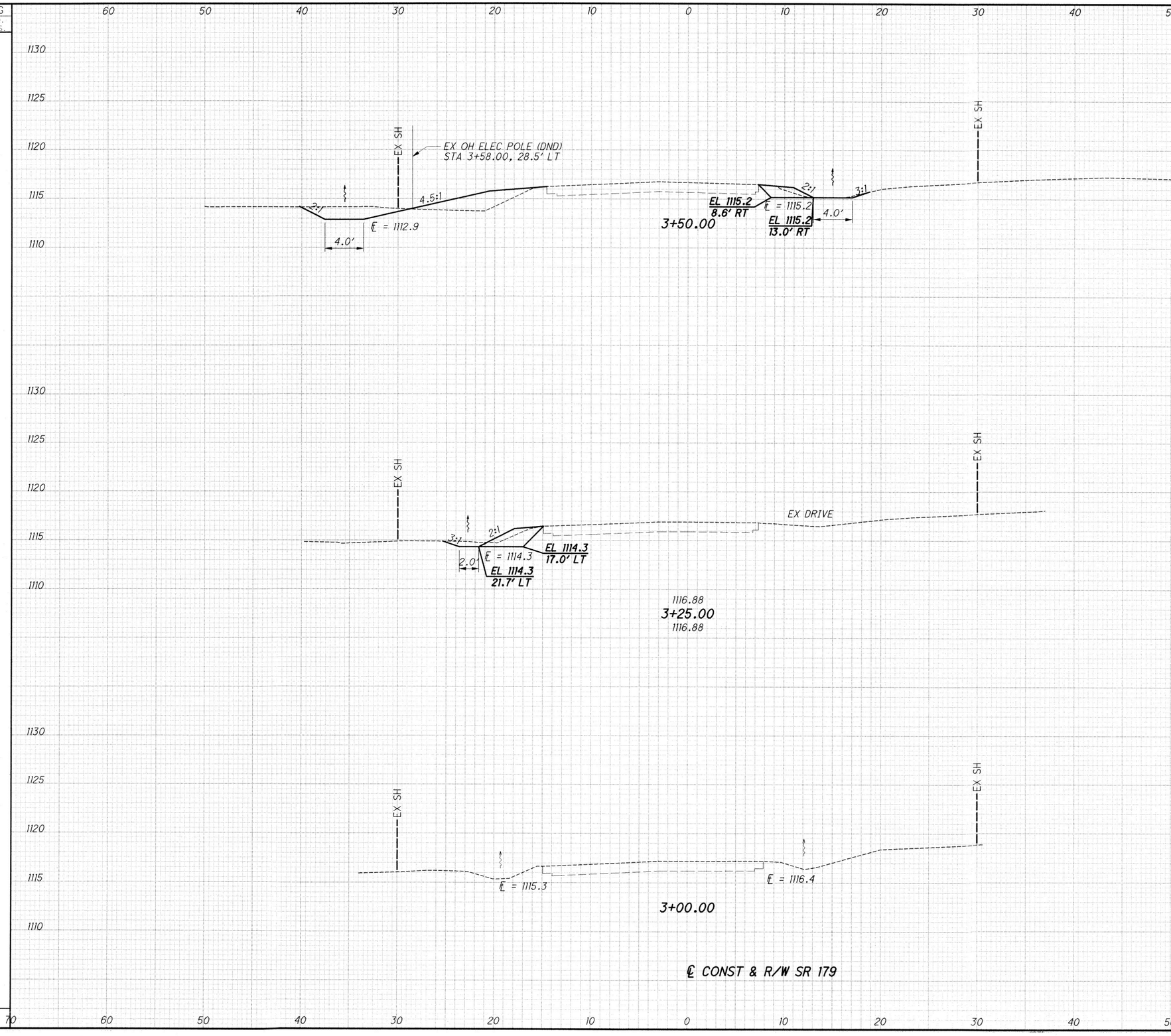
CALCULATED RSH
CHECKED MJR

ESTIMATED QUANTITIES
CULVERT - HOL-179-0.08

HOL 62/VAR
5.06/VAR

22
48

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
13	17		
		9	11
7	7		
		0	0
		9	11

CALCULATED GGW
CHECKED MPD

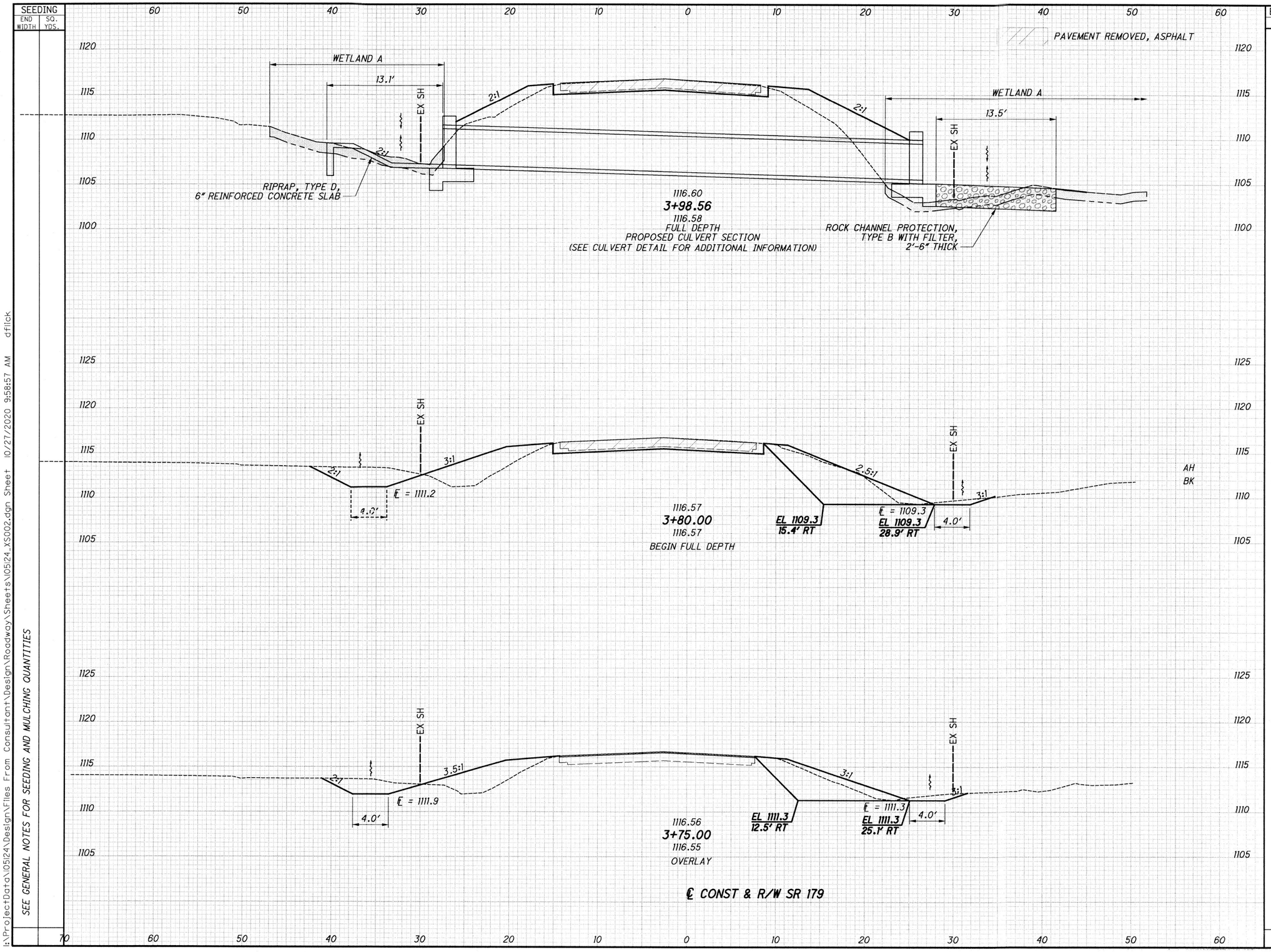
CROSS SECTIONS - SR 179
STA. 3+00.00 TO STA. 3+50.00

HOL 62/ VAR
5.06/ VAR

23
48

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

SEEDING	
END WIDTH	SQ. YDS.



SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

END AREA		VOLUME		
CUT	FILL	CUT	FILL	
				AH
116	70			BK
		64	50	
71	34			
63	34			
		10	9	
43	60			
		26	36	
		100	95	

CALCULATED CGW
CHECKED MPD

CROSS SECTIONS - SR 179
STA. 3+75.00 TO STA. 3+98.56

HOL 62/VAR
5.06/VAR

24
48

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SEEDING	
END WIDTH	SQ. YDS.

60 50 40 30 20 10 0 10 20 30 40 50 60

EX SH

PAVEMENT REMOVED, ASPHALT

3:1 2:1 6.0′ ℄ = 1114.2 EL 1114.2 26.0′ LT EL 1114.2 17.1′ LT

4+50.00

2:1 ℄ = 1110.5 EL 1110.5 15.7′ RT EL 1110.5 25.4′ RT 4.0′ 2:1

3:1 2:1 6.0′ ℄ = 1112.4 EL 1112.4 29.7′ LT EL 1112.4 18.3′ LT

1117.18
4+25.00
1117.18
OVERLAY

2:1 ℄ = 1107.5 EL 1107.5 17.4′ RT EL 1107.5 29.5′ RT 4.0′ 2:1

3:1 2:1 6.0′ ℄ = 1111.8 EL 1111.8 31.2′ LT EL 1111.8 19.5′ LT

1117.06
4+20.00
1117.06
END FULL DEPTH

2:1 ℄ = 1107.1 EL 1107.1 18.3′ RT EL 1107.1 30.1′ RT 4.0′ 2:1

℄ CONST & R/W SR 179

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

	END AREA		VOLUME		
	CUT	FILL	CUT	FILL	
	69	60			
			73	74	
	88	100			
			15	18	
AH	77	99			
BK	85	99			
			80	67	
			168	159	

CALCULATED GGW
CHECKED MPD

CROSS SECTIONS - SR 179
STA. 4+20.00 TO STA. 4+50.00

HOL 62/VAR
5.06/VAR

25
48

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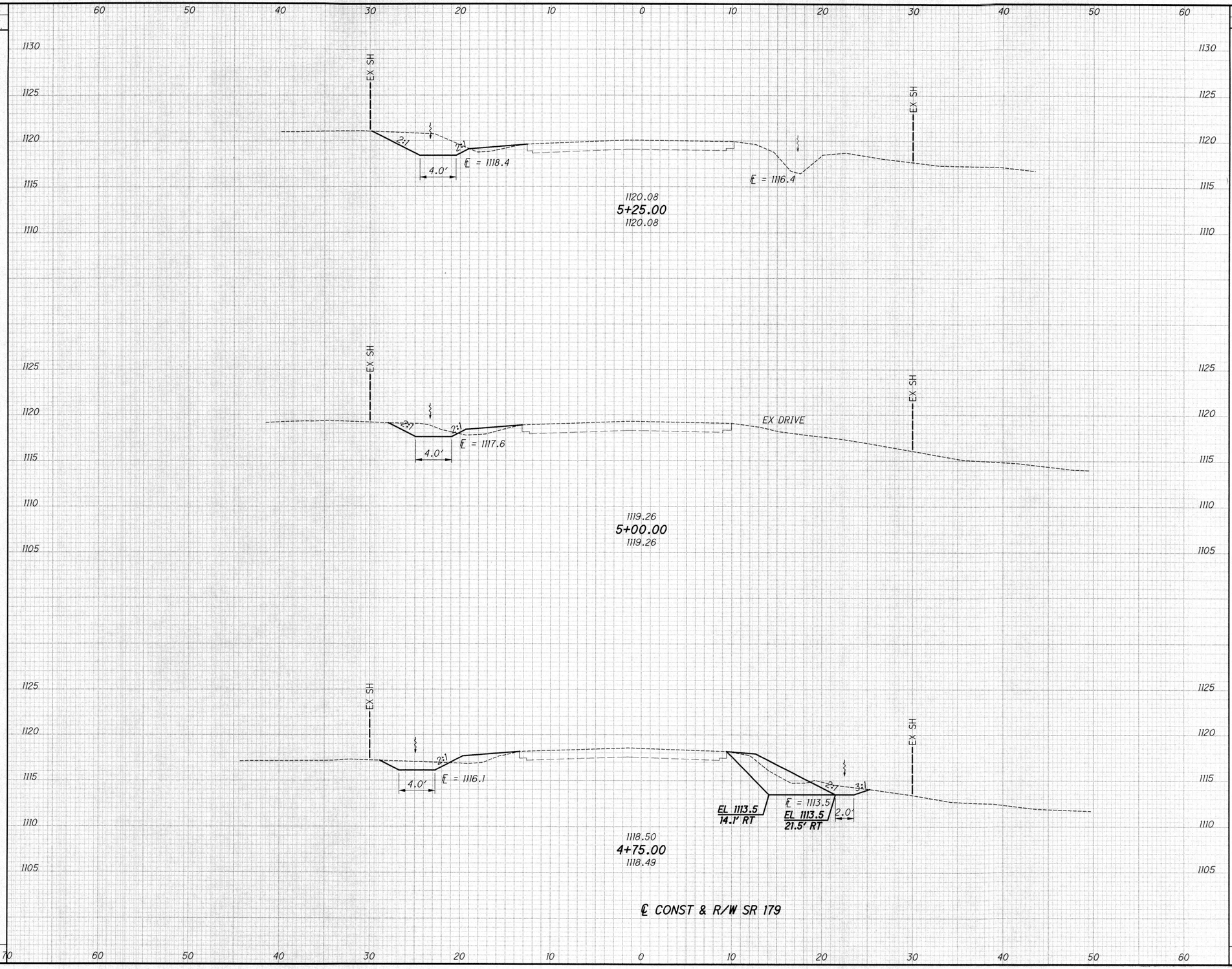
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
16	24		
		11	2
7	3		
		16	14
27	27		
		44	40
		71	56

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

CALCULATED GGW
CHECKED MPD

CROSS SECTIONS - SR 179
STA. 4+75.00 TO STA. 5+25.00

HOL 62/ VAR
5.06/ VAR

26
48

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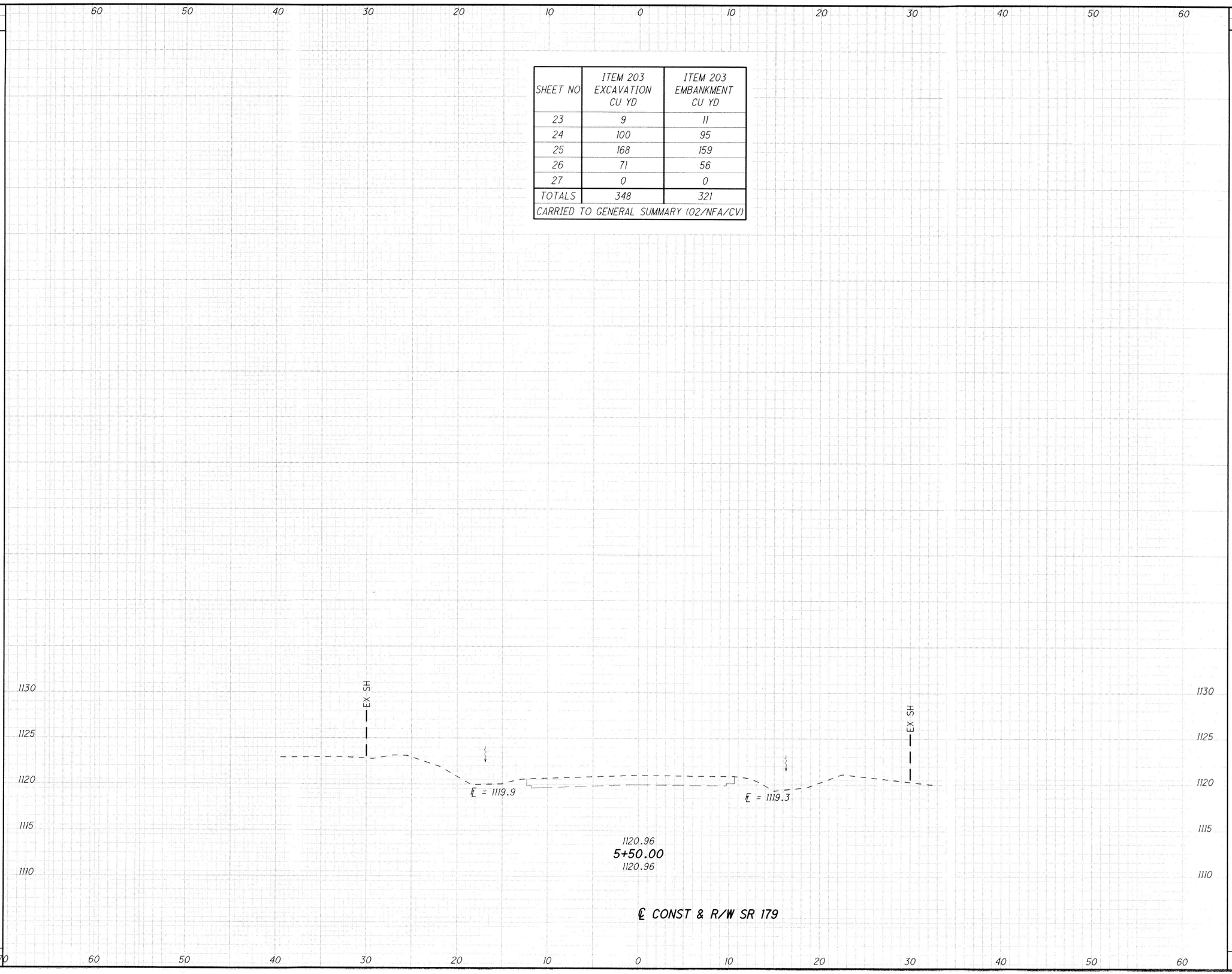
SEEDING	
END WIDTH	SQ. YDS.

SHEET NO	ITEM 203 EXCAVATION CU YD	ITEM 203 EMBANKMENT CU YD
23	9	11
24	100	95
25	168	159
26	71	56
27	0	0
TOTALS	348	321
CARRIED TO GENERAL SUMMARY (02/NFA/CV)		



SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED GGW
CHECKED RSH

CROSS SECTIONS - SR 179
STA. 5+50.00

HOL 62/VAR
5.06/VAR

27
48

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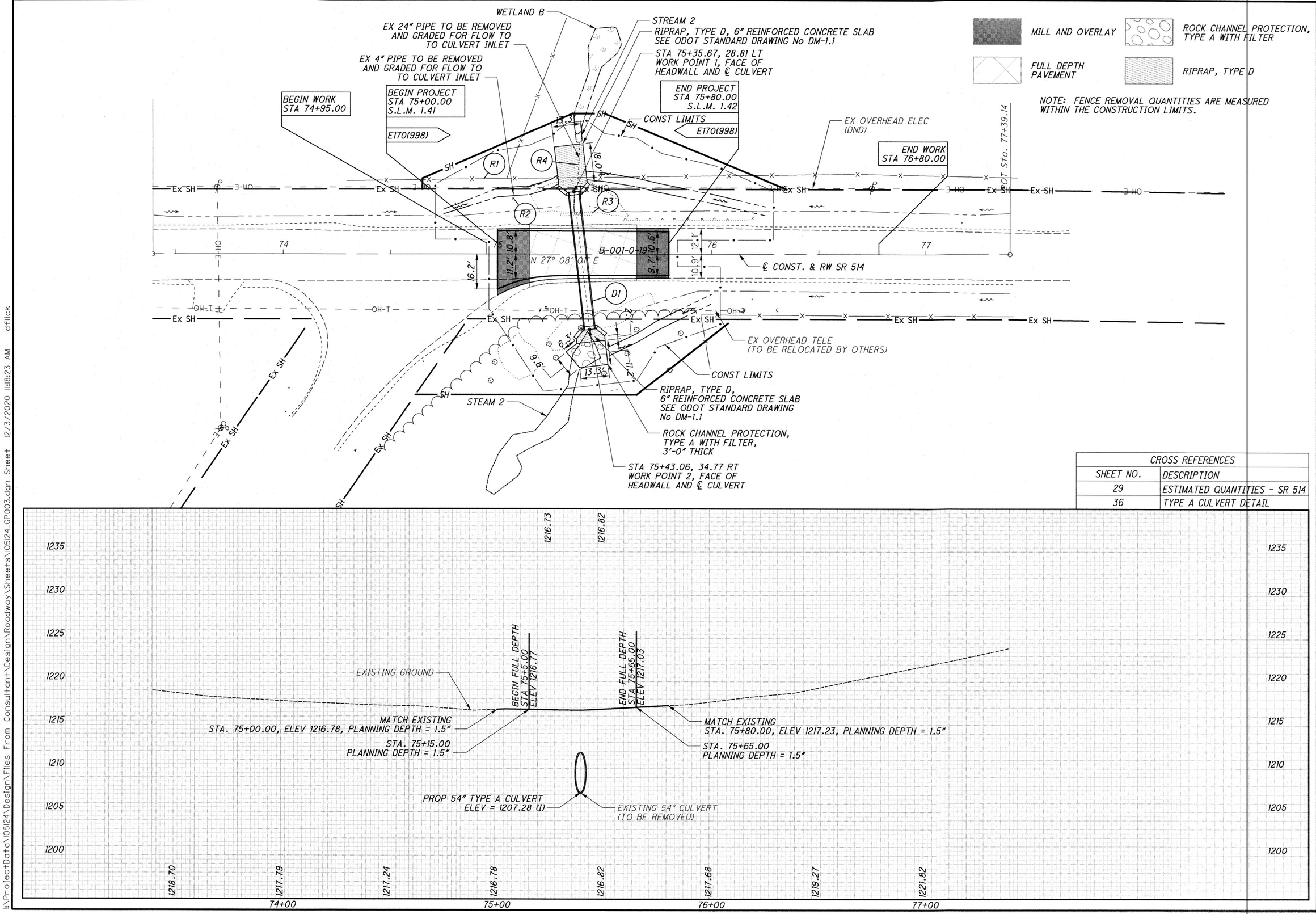

CROSS REFERENCES	
SHEET NO.	DESCRIPTION
29	ESTIMATED QUANTITIES - SR 514
36	TYPE A CULVERT DETAIL

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED JTS
CHECKED MPD

PLAN AND PROFILE - 514
STA.73+39 TO 77+39
HOL 62/VAR 5.06/VAR

28
48

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ROADWAY

SHEET NO.	REF. NO.	STATION FROM	STATION TO	SIDE	CENTERLINE ROADWAY REFERENCE	202 HEADWALL REMOVED EACH	202 PIPE REMOVED, 24" AND UNDER FT	202 PIPE REMOVED, OVER 24" FT	202 FENCE REMOVED FT
28	R1	74+75	76+12	LT/RT	SR 514				183
28	R2	75+07	75+08	LT	SR 514		5		
28	R3	75+37	75+43	LT/RT	SR 514	2		52	
28	R4	75+37	75+38	LT	SR 514		20		
TOTALS CARRIED TO GENERAL SUMMARY (01/STR/CV)						2	25	52	183

DRAINAGE

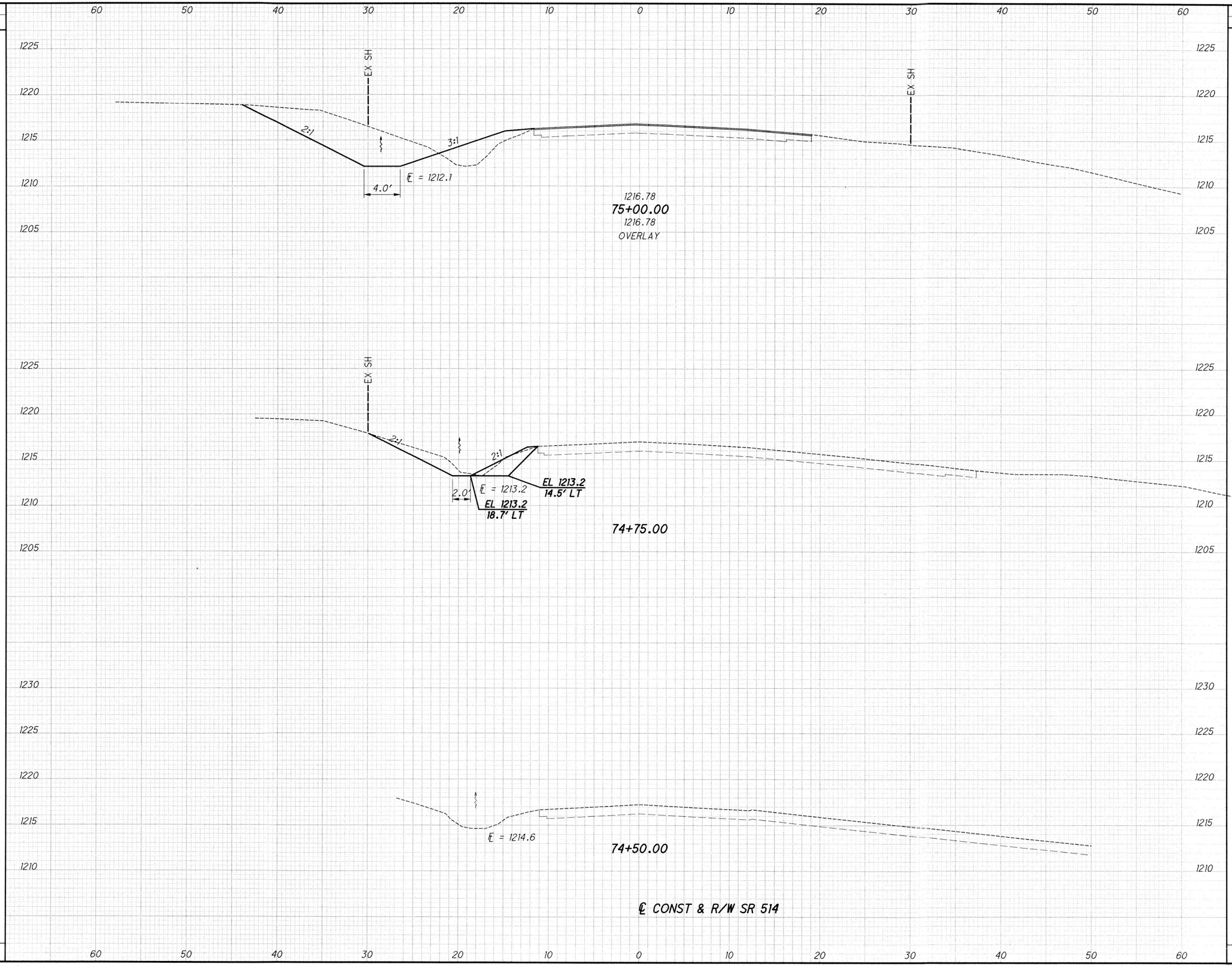
SHEET NO.	REF. NO.	STATION FROM	STATION TO	SIDE	CENTERLINE ROADWAY REFERENCE	601 RIPRAP, TYPE D SY	601 ROCK CHANNEL PROTECTION, TYPE A WITH FILTER CY	602 CONCRETE MASONRY CY	611 54" CONDUIT, TYPE A; 707.02 (0.28), 706.02, 707.33 FT
28	D1	75+36	75+43	LT/RT	SR 514	38	24.40	21	64
TOTALS CARRIED TO GENERAL SUMMARY (01/STR/CV)						38	24.40	21	64

CALCULATED RSH
CHECKED MJR

ESTIMATED QUANTITIES
CULVERT - HOL-514-1.42

HOL 62/VAR
5.06/VAR

SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME	
CUT	FILL	CUT	FILL
58	15		
		34	11
16	8		
0	0		
		34	11

CALCULATED GGW
CHECKED MPD

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

CROSS SECTIONS - SR 514
STA. 74+50.00 TO STA. 75+00.00

HOL 62/VAR
5.06/VAR

30
48

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SEEDING	
END WIDTH	SQ. YDS.

WETLAND B 60 STREAM 2 50 40 30 STREAM 2 20 10 0 10 20 30 40 STREAM 2 50 60

21.6′

OHWM = 1212.93

EX SH

5:1

2:1

6:1

4:1

EX 24″ CPP (TBR)

RIPRAP, TYPE D, 6″ REINFORCED CONCRETE SLAB

PAVEMENT REMOVED, ASPHALT

5.8′ 11.2′

1220 1215 1210 1205 1200

1216.68
75+39.02
1216.68
FULL DEPTH
PROPOSED CULVERT SECTION
(SEE CULVERT DETAIL FOR ADDITIONAL INFORMATION)

RIPRAP, TYPE D, 6″ REINFORCED CONCRETE SLAB

ROCK CHANNEL PROTECTION, TYPE A WITH FILTER, 3′-0″ THICK

1225 1220 1215 1210 1205

EX SH EX SH

2:1 3:1 8:1

4.0′

℄ = 1210.6

1216.73
75+25.00
1216.73
FULL DEPTH

1225 1220 1215 1210 1205

EX SH EX SH

2:1 3:1 10:1

4.0′

℄ = 1211.7

1216.77
75+15.00
1216.77
BEGIN FULL DEPTH

℄ CONST & R/W SR 514

60 50 40 30 20 10 0 10 20 30 40 50 60

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

END AREA		VOLUME		
CUT	FILL	CUT	FILL	
191	49			
		70	18	
77	22			
		25	7	
AH 57	18			
BK 48	18			
		29	9	
		124	34	

CALCULATED GGW
CHECKED MPD

CROSS SECTIONS - SR 514
STA. 75+15.00 TO STA. 75+39.02

HOL 62/VAR
5.06/VAR

31
48

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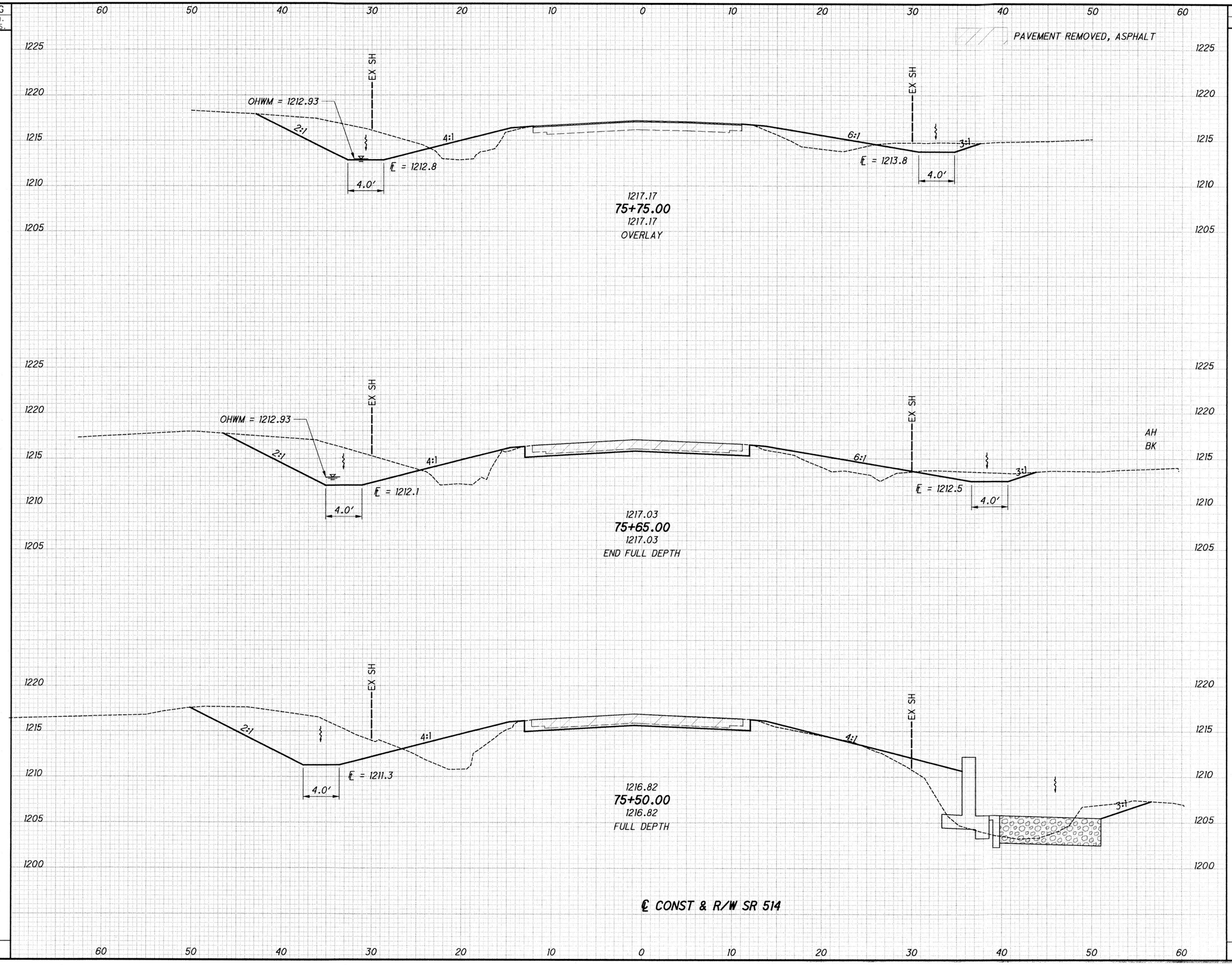
SEEDING	
END WIDTH	SQ. YDS.



END AREA		VOLUME		
CUT	FILL	CUT	FILL	
				AH
50	50			BK
65	33			
73	33			
		21	15	
		50	24	
107	52			
		61	21	
		132	60	

CALCULATED GGW
CHECKED MPD

CROSS SECTIONS - SR 514
STA. 75+50.00 TO STA. 75+75.00

HOL 62/VAR
5.06/VAR

32
48

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

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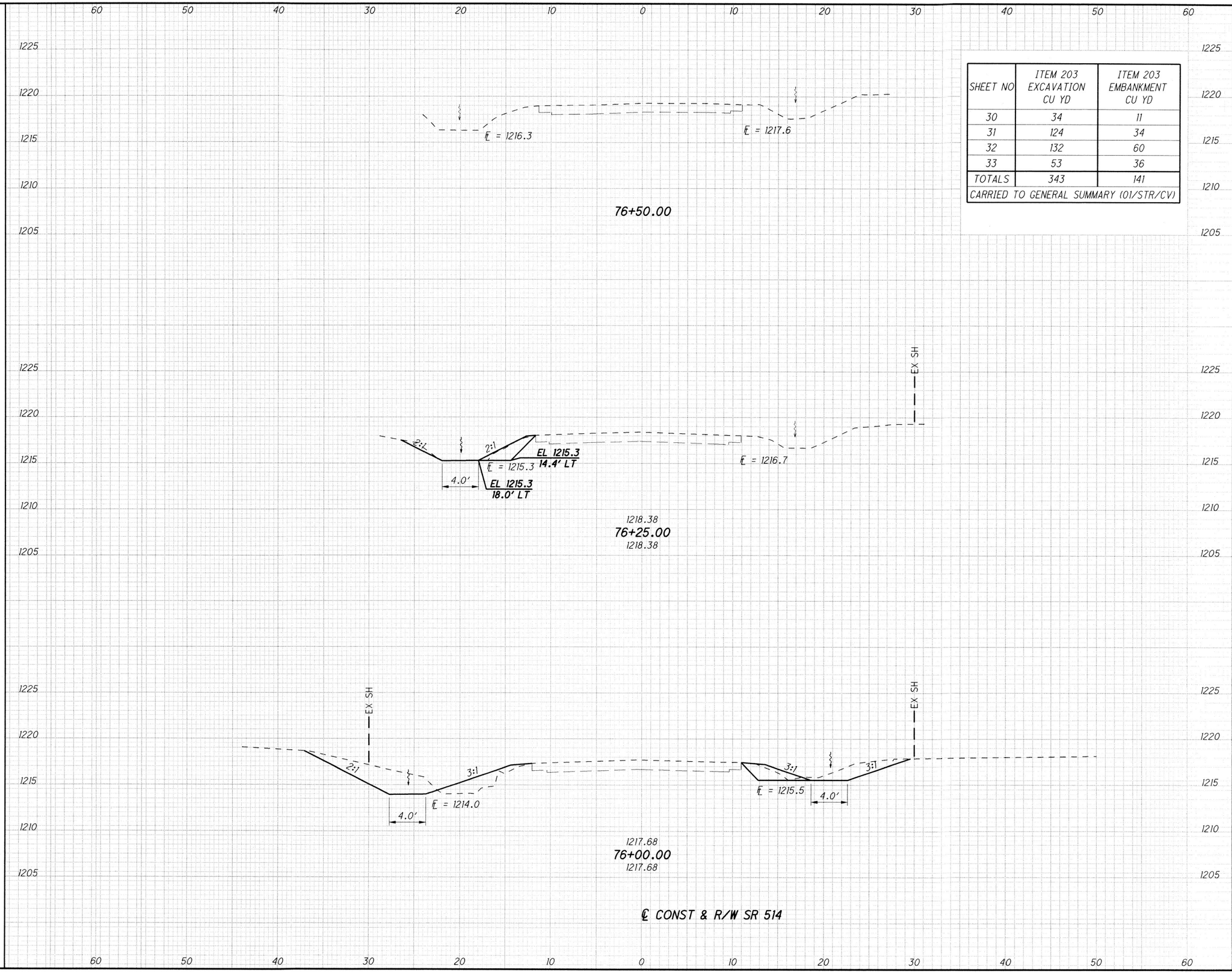
SEEDING END WIDTH	SEEDING SQ. YDS.



SHEET NO	ITEM 203 EXCAVATION CU YD	ITEM 203 EMBANKMENT CU YD
30	34	11
31	124	34
32	132	60
33	53	36
TOTALS	343	141
CARRIED TO GENERAL SUMMARY (01/STR/CV)		

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
1	6		
		15	8
32	11		
		38	28
		53	36

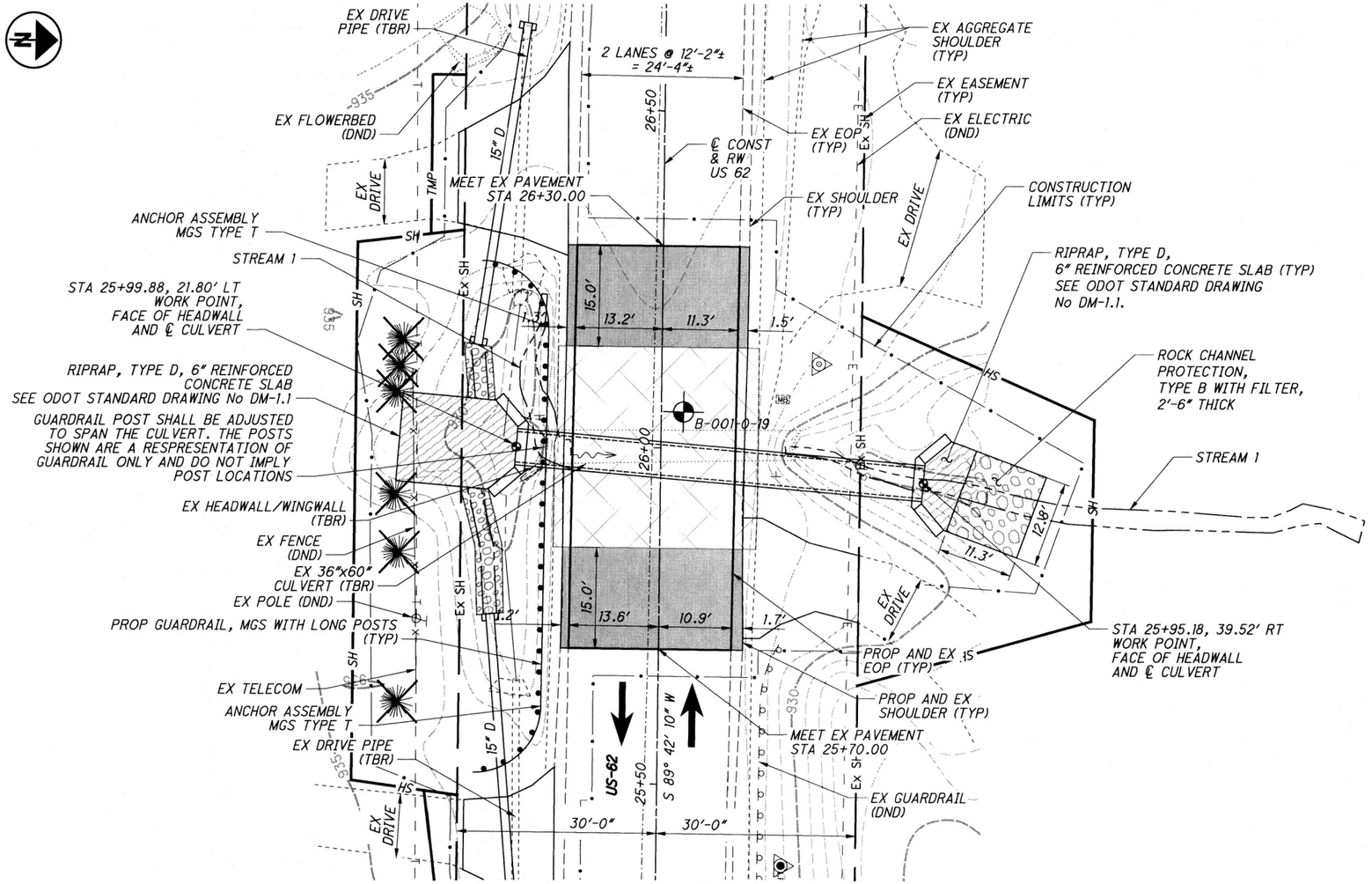
CALCULATED GGW
CHECKED RSH

SEE GENERAL NOTES FOR SEEDING AND MULCHING QUANTITIES

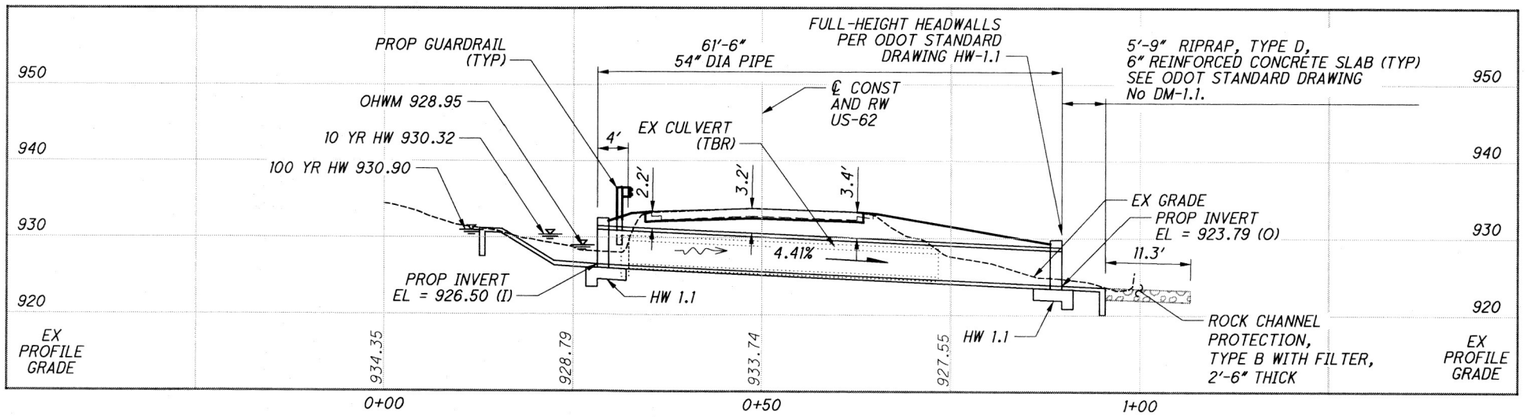
CROSS SECTIONS - SR 514
STA. 76+00.00 TO STA. 76+50.00

HOL 62/VAR
5.06/VAR

33
48



PLAN



PROFILE ALONG CENTERLINE CULVERT

PROPOSED CONDUIT: 61'-6" - 54" CONDUIT, TYPE A, 707.02 (0.188) WITH CONCRETE INVERT PAVING, 706.02, 707.33

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR DESIGN TRAFFIC INFORMATION SEE SHEET 1/48
3. FOR BENCHMARK INFORMATION SEE SHEET 4/48

LEGEND

- ⊕ - WORKPOINT
- RIPRAP, TYPE D
- MILL AND FILL
- RCP, TYPE B
- FULL DEPTH PAVEMENT OVER PROP CULVERT
- RCP, TYPE C

DESIGN TRAFFIC

CURRENT ADT (2021)	= 1840
DESIGN YEAR ADT (2041)	= 1940
DESIGN HOURLY VOLUME (2041)	= 184
TRUCKS (24 HOUR B&C)	= 14%

FOR ADDITIONAL DESIGN TRAFFIC INFORMATION SEE ROADWAY PLAN SHEET 1/48

EXISTING STRUCTURE

TYPE: 60" X 36" CONCRETE BOX CULVERT (41' LONG)
SPAN: 5'-0"± MEASURED NORMAL TO ℄ CULVERT
SKEW: 0°37'01"± RF
ALIGNMENT: TANGENT
DATE BUILT: 1917
CULVERT FILE NUMBER: 1805764
COORDINATES: LATITUDE: N 40°27'38"
LONGITUDE: W 82°06'12"
DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: 54" DIAMETER TYPE A 61'-6" LONG PIPE WITH FULL-HEIGHT HEADWALLS. SEE ODOT STANDARD DRAWING No HW-1.1 DATED 07-20-2018.
SPAN: 4'-6" CLEAR SPAN MEASURED NORMAL TO ℄ CULVERT
LOADING: HL-93 WITH 60 PSF FWS
SKEW: 0°37'01" RF
ALIGNMENT: TANGENT
CROWN: NORMAL
CFN: 1977133

HYDRAULIC DATA

DRAINAGE AREA = 0.06 SQ. MILES
Q (10) = 43 CFS V (10) = 13.9 FT/S EL (10) = 930.32 FT
Q (100) = 59 CFS V (100) = 14.7 FT/S EL (100) = 930.90 FT
SERVICE LIFE = 135 YEARS
STREAM PH = 7.5 ABRASION LEVEL 4

PROJECT EARTH DISTURBED AREA:	0.15 AC
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.10 AC

NOTICE OF INTENT EARTH DISTURBED AREA: NO NOI REQUIRED

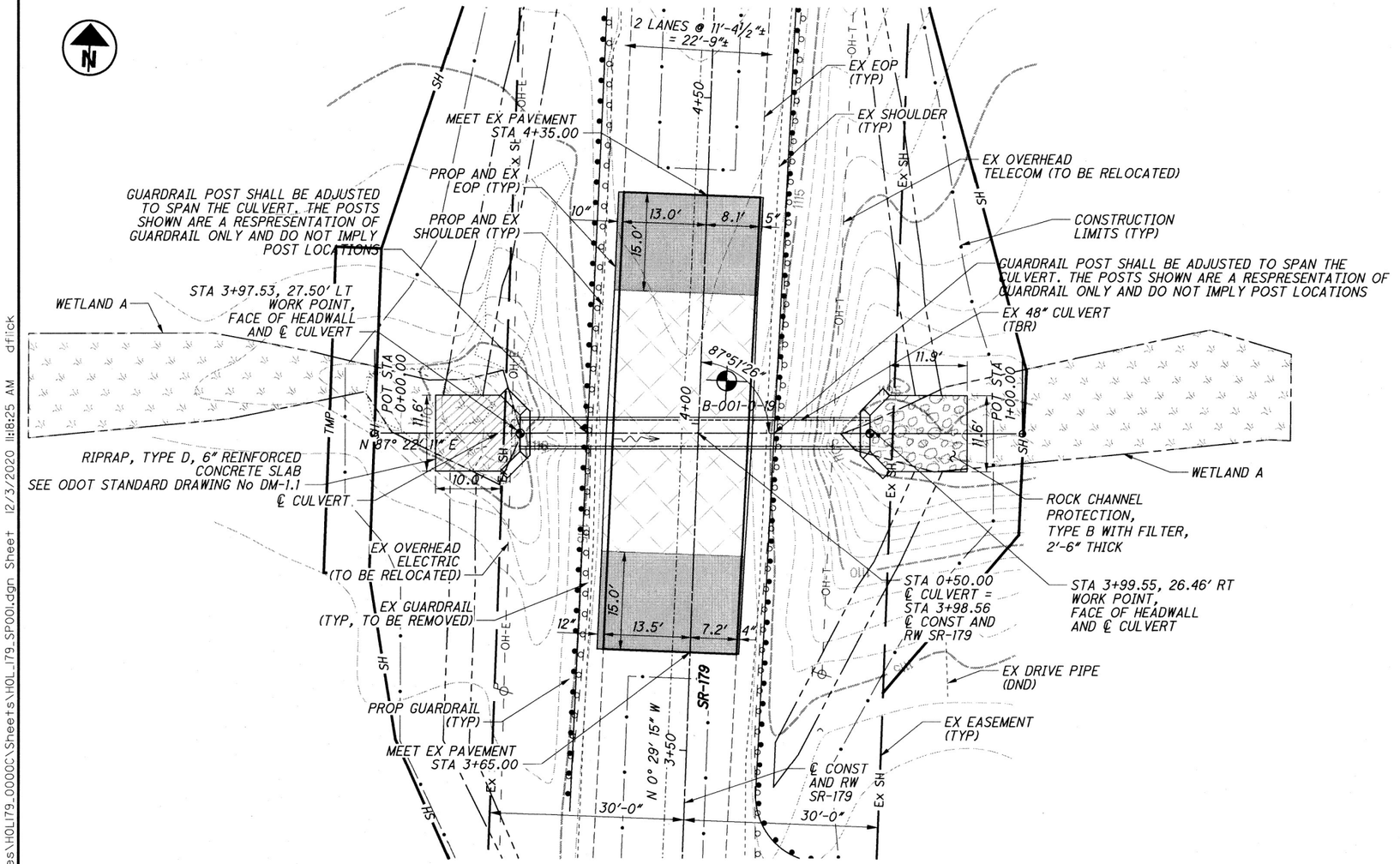
DESIGN AGENCY EMHT
DESIGNED RJE | DRAWN GB | REVIEWED CAS | DATE 09/28/20
CHECKED TDA | REVISED - | CULVERT FILE NUMBER 1977133

CULVERT DETAIL SHEET

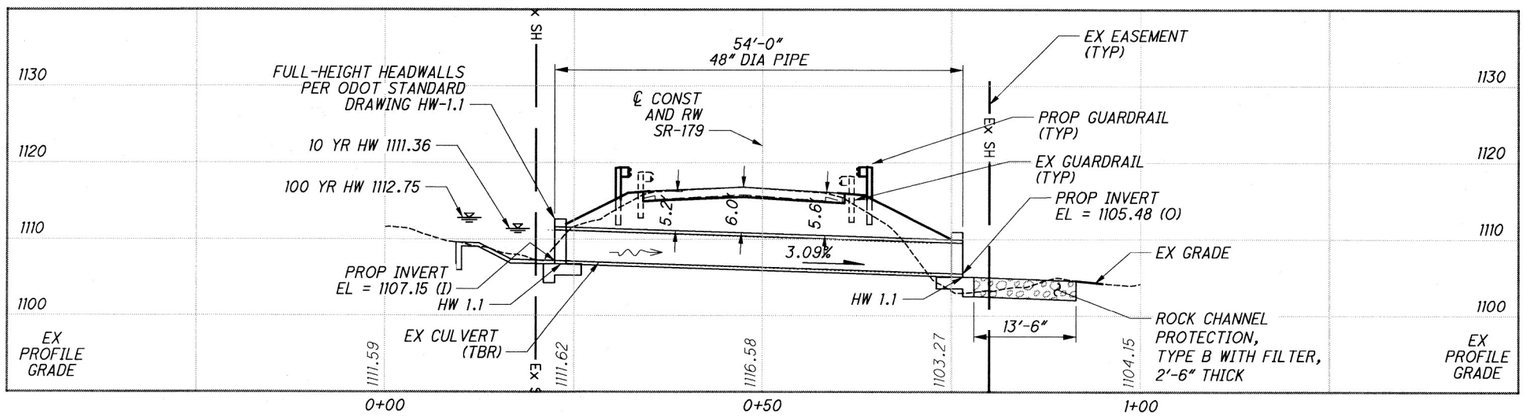
HOL-62-5.06
CULVERT REPLACEMENT

HOL 62/VAR
5.06/VAR
PID No. 105124

34/48



PLAN



PROFILE ALONG CENTERLINE CULVERT

PROPOSED CONDUIT: 54' - 48" CONDUIT, TYPE A, 707.02 (0.249), 706.02, 707.33

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR DESIGN TRAFFIC INFORMATION SEE SHEET 1/48
3. FOR BENCHMARK INFORMATION SEE SHEET 4/48

LEGEND

- ℄ - WORKPOINT
- - RIPRAP, TYPE D
- - MILL AND FILL
- - RCP, TYPE B
- - FULL DEPTH PAVEMENT OVER PROP CULVERT

DESIGN TRAFFIC

CURRENT ADT (2021) = 910
DESIGN YEAR ADT (2041) = 960
DESIGN HOURLY VOLUME (2041) = 91
TRUCKS (24 HOUR B&C) = 19%
FOR ADDITIONAL DESIGN TRAFFIC INFORMATION SEE ROADWAY PLAN SHEET 1/48

EXISTING STRUCTURE

TYPE: 48" CMP CULVERT (50' LONG)
SPAN: 4'-0"± MEASURED NORMAL TO ℄ CULVERT
SKEW: 2°08'34"± RF
ALIGNMENT: TANGENT
DATE BUILT: 1960
CULVERT FILE NUMBER: 1847635
COORDINATES: LATITUDE: N 40°36'12"
LONGITUDE: W 82°07'31"
DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: 48" DIAMETER TYPE A 54'-0" LONG PIPE WITH FULL-HEIGHT HEADWALLS. SEE ODOT STANDARD DRAWING No HW-1.1 DATED 07-20-2018.
SPAN: 4'-0" CLEAR SPAN MEASURED NORMAL TO ℄ CULVERT
LOADING: HL-93 WITH 60 PSF FWS
SKEW: 2°08'34" RF
ALIGNMENT: TANGENT
CROWN: NORMAL
CNF: 1977120

HYDRAULIC DATA

DRAINAGE AREA = 0.07 SQ. MILES
Q (10) = 79 CFS V (10) = 13.8 FT/S EL (10) = 1111.36 FT
Q (100) = 109 CFS V (100) = 14.9 FT/S EL (100) = 1112.75 FT
SERVICE LIFE = 165 YEARS
STREAM PH = 7.5 ABRASION LEVEL 2

PROJECT EARTH DISTURBED AREA:	0.30 AC
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.10 AC
NOTICE OF INTENT EARTH DISTURBED AREA:	NO NOI REQUIRED

DESIGN AGENCY EMHT
DESIGNED RJE | DRAWN GB | REVIEWED CAS | DATE 09/28/20
CHECKED TDA | REVISED - | CULVERT FILE NUMBER 1977120

CULVERT DETAIL SHEET
HOL-179-0.08
CULVERT REPLACEMENT

HOL 62/VAR
5.06/VAR
PID No. 105124

35/48

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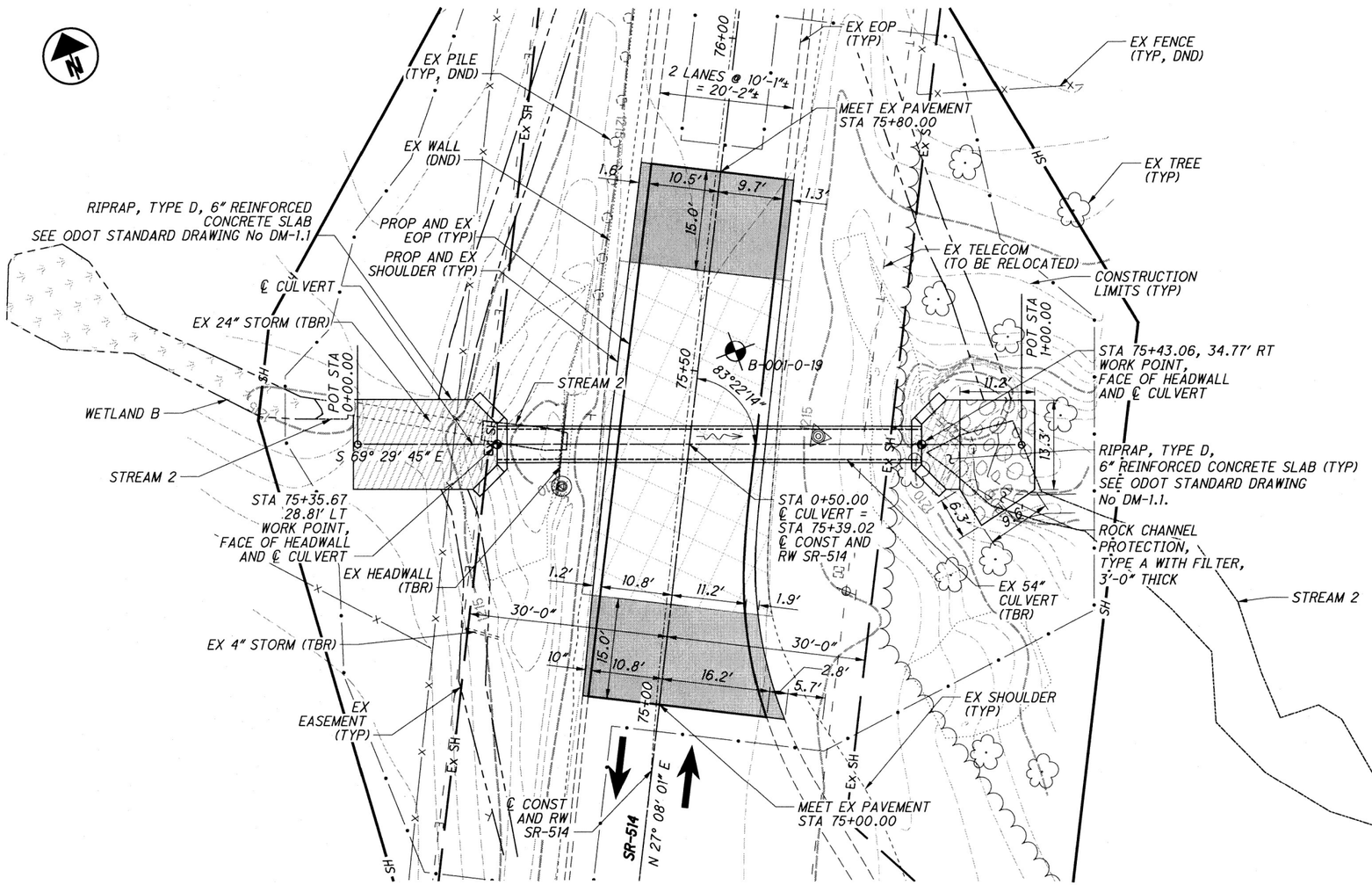
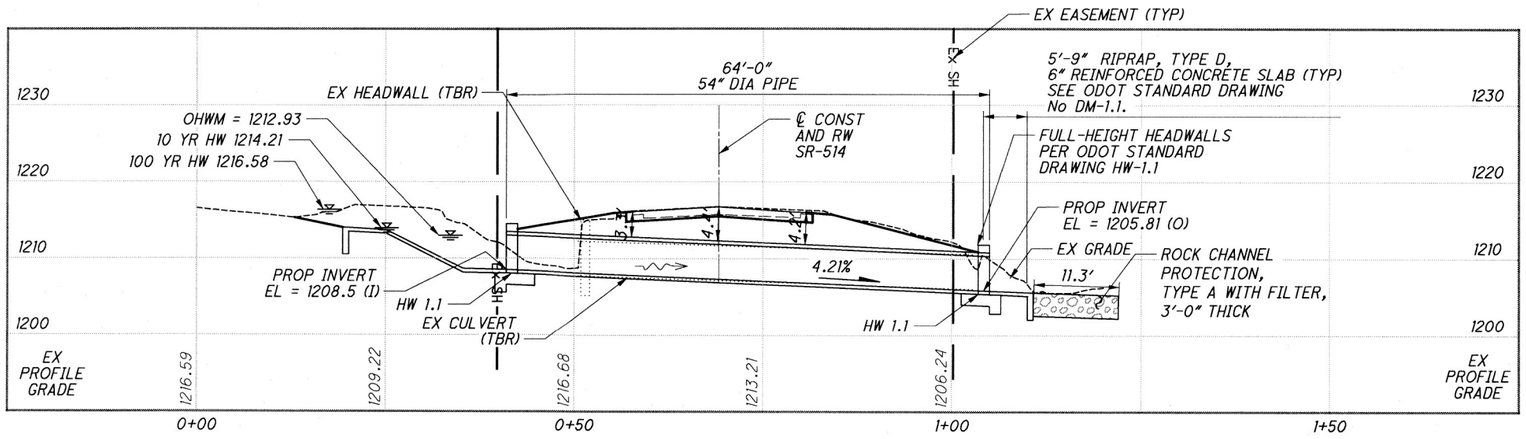


PLAN



PROFILE ALONG CENTERLINE CULVERT

PROPOSED CONDUIT: 64' - 54" CONDUIT, TYPE A, 707.02 (0.28), 706.02, 707.33

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.
2. FOR DESIGN TRAFFIC INFORMATION SEE SHEET 1/48
3. FOR BENCHMARK INFORMATION SEE SHEET 4/48

LEGEND

- WORKPOINT
- RIPRAP, TYPE D
- MILL AND FILL
- RCP, TYPE A
- FULL DEPTH PAVEMENT OVER PROP CULVERT

DESIGN TRAFFIC

CURRENT ADT (2021)	= 620
DESIGN YEAR ADT (2041)	= 660
DESIGN HOURLY VOLUME (2041)	= 62
TRUCKS (24 HOUR B&C)	= 12%

FOR ADDITIONAL DESIGN TRAFFIC INFORMATION SEE ROADWAY PLAN SHEET 1/48

EXISTING STRUCTURE

TYPE: 54" CMP CULVERT (50' LONG)
SPAN: 4'-6"± MEASURED NORMAL TO ℄ CULVERT
SKEW: 6°37'46"± RF
ALIGNMENT: TANGENT
DATE BUILT: UNKNOWN
CULVERT FILE NUMBER: 1835956
COORDINATES: LATITUDE: N 40°33'13"
LONGITUDE: W 82°09'58"
DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: 54" DIAMETER TYPE A 64'-0" LONG PIPE WITH FULL-HEIGHT HEADWALLS. SEE ODOT STANDARD DRAWING No HW-1.1 DATED 07-20-2018.
SPAN: 4'-6" CLEAR SPAN MEASURED NORMAL TO ℄ CULVERT
LOADING: HL-93 WITH 60 PSF FWS
SKEW: 6°37'46" RF
ALIGNMENT: TANGENT
CROWN: NORMAL
CFN: 1977121

HYDRAULIC DATA

DRAINAGE AREA = 0.11 SQ. MILES
Q (10) = 133 CFS V (10) = 17.0 FT/S EL (10) = 1214.21 FT
Q (100) = 182 CFS V (100) = 18.3 FT/S EL (100) = 1216.58 FT
SERVICE LIFE = 162 YEARS
STREAM PH = 8.0 ABRASION LEVEL 3

PROJECT EARTH DISTURBED AREA:	0.25 AC
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.10 AC
NOTICE OF INTENT EARTH DISTURBED AREA:	NO NOI REQUIRED

DESIGN AGENCY: EMHT
DESIGNED: RJE
DRAWN: GB
CHECKED: TDA
REVIEWED: CAS
DATE: 09/28/20
REVISED: -
CULVERT FILE NUMBER:

CULVERT DETAIL SHEET
HOL-514-1.42
CULVERT REPLACEMENT

HOL 62/VAR
5.04/VAR
PID No. 105124

36/48

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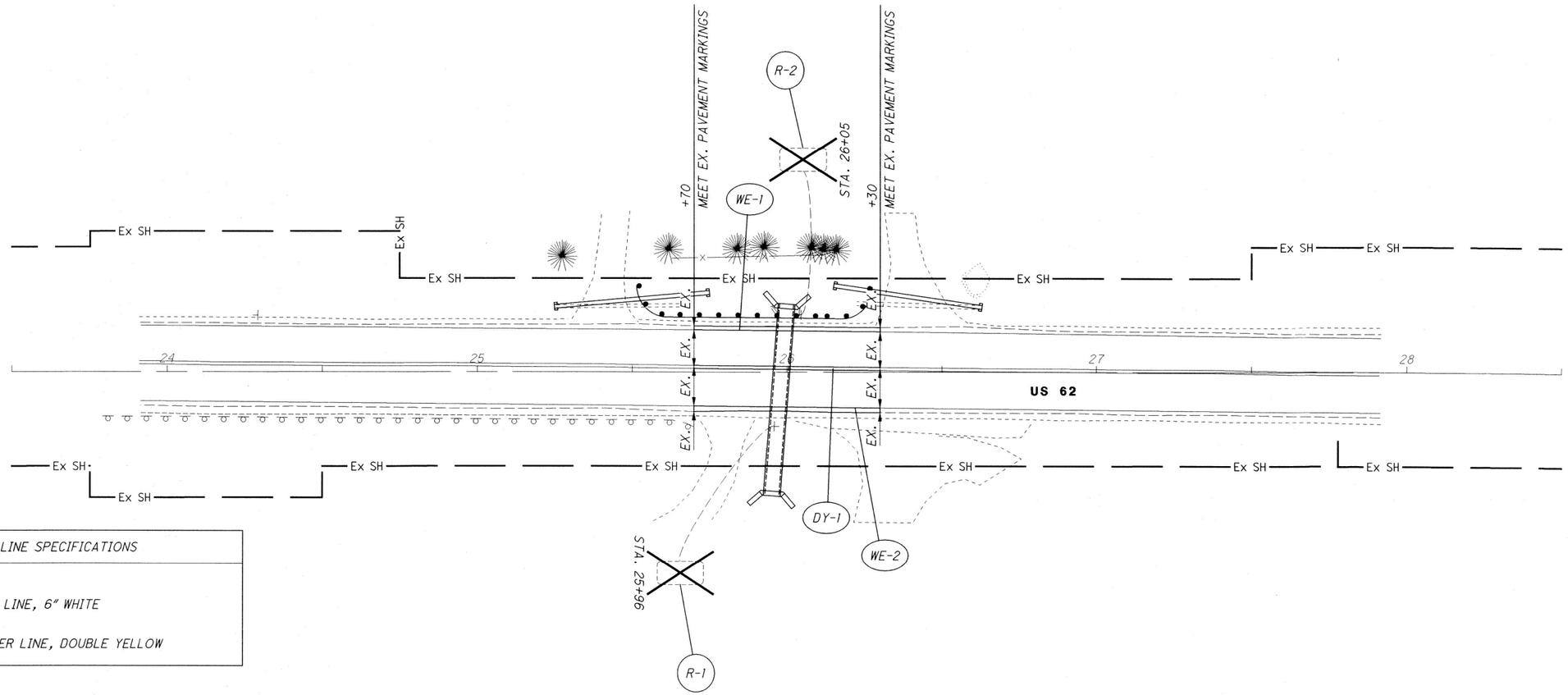


LINE SPECIFICATIONS	
ITEM 646	
WE	EDGE LINE, 6" WHITE
DY	CENTER LINE, DOUBLE YELLOW

PAVEMENT MARKING LEGEND	
XX	= PROPOSED PAVEMENT MARKINGS (ITEM 646)
XX	= EXISTING PAVEMENT MARKINGS

SIGNING LEGEND	
	= EXISTING SIGN
	= EXISTING SIGN REMOVED
	= PROPOSED SIGN

NOTES:
1. FOR CLARITY, UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN ON THIS SHEET. THE CONTRACTOR SHALL REFERENCE THE APPROPRIATE PLAN AND PROFILE SHEET FOR UTILITY LOCATIONS PRIOR TO PLACING SIGN POSTS.

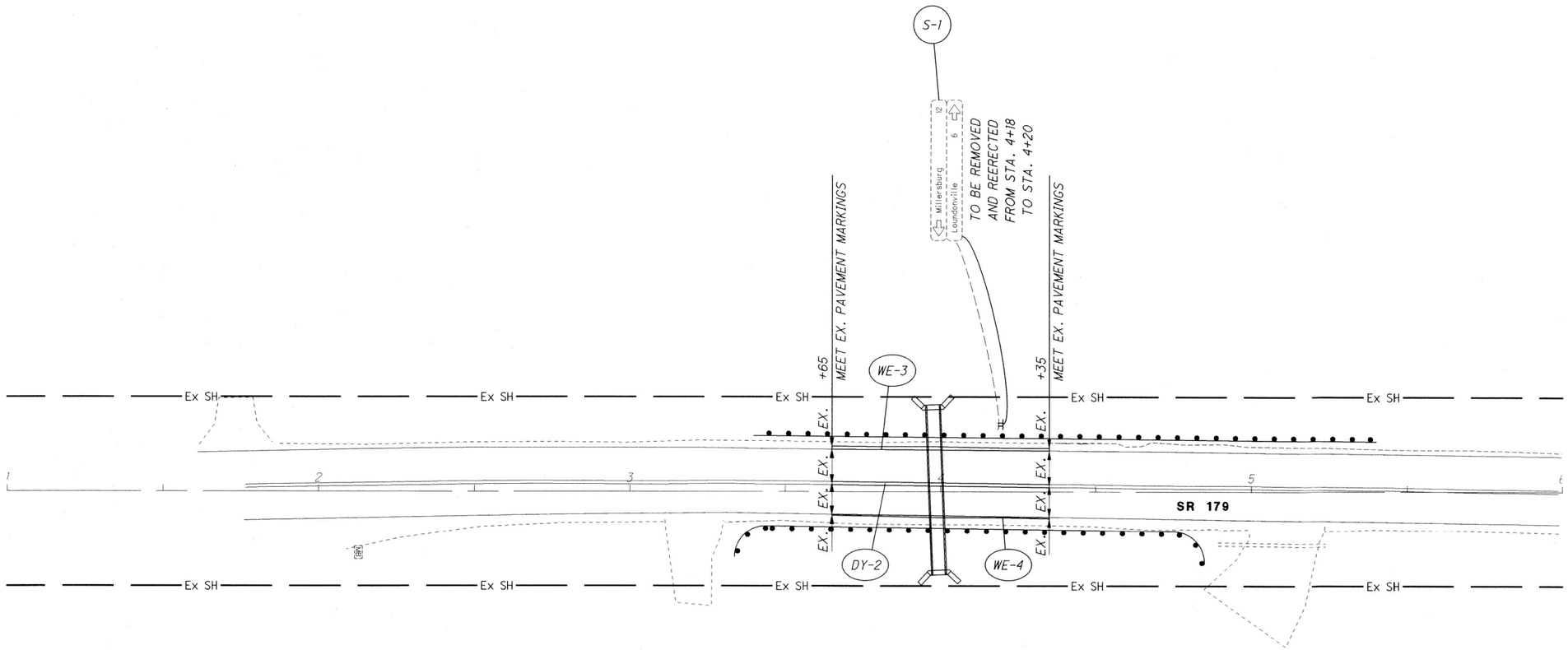
HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED BER
CHECKED SMM

TRAFFIC CONTROL PLAN - US 62
STA. 23+50 TO STA. 28+50

HOL 62/VAR
5.06/VAR

37
48



NOTES:

1. FOR CLARITY, UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN ON THIS SHEET. THE CONTRACTOR SHALL REFERENCE THE APPROPRIATE PLAN AND PROFILE SHEET FOR UTILITY LOCATIONS PRIOR TO PLACING SIGN POSTS.

2. FOR SIGNING AND PAVEMENT MARKING LEGEND, SEE SHEET 37

CALCULATED BER
CHECKED SMM

HORIZONTAL SCALE IN FEET
0 10 20 40

TRAFFIC CONTROL PLAN - SR 179
STA. 1+00 TO STA. 6+00

HOL 62/VAR
5.06/VAR

38
48

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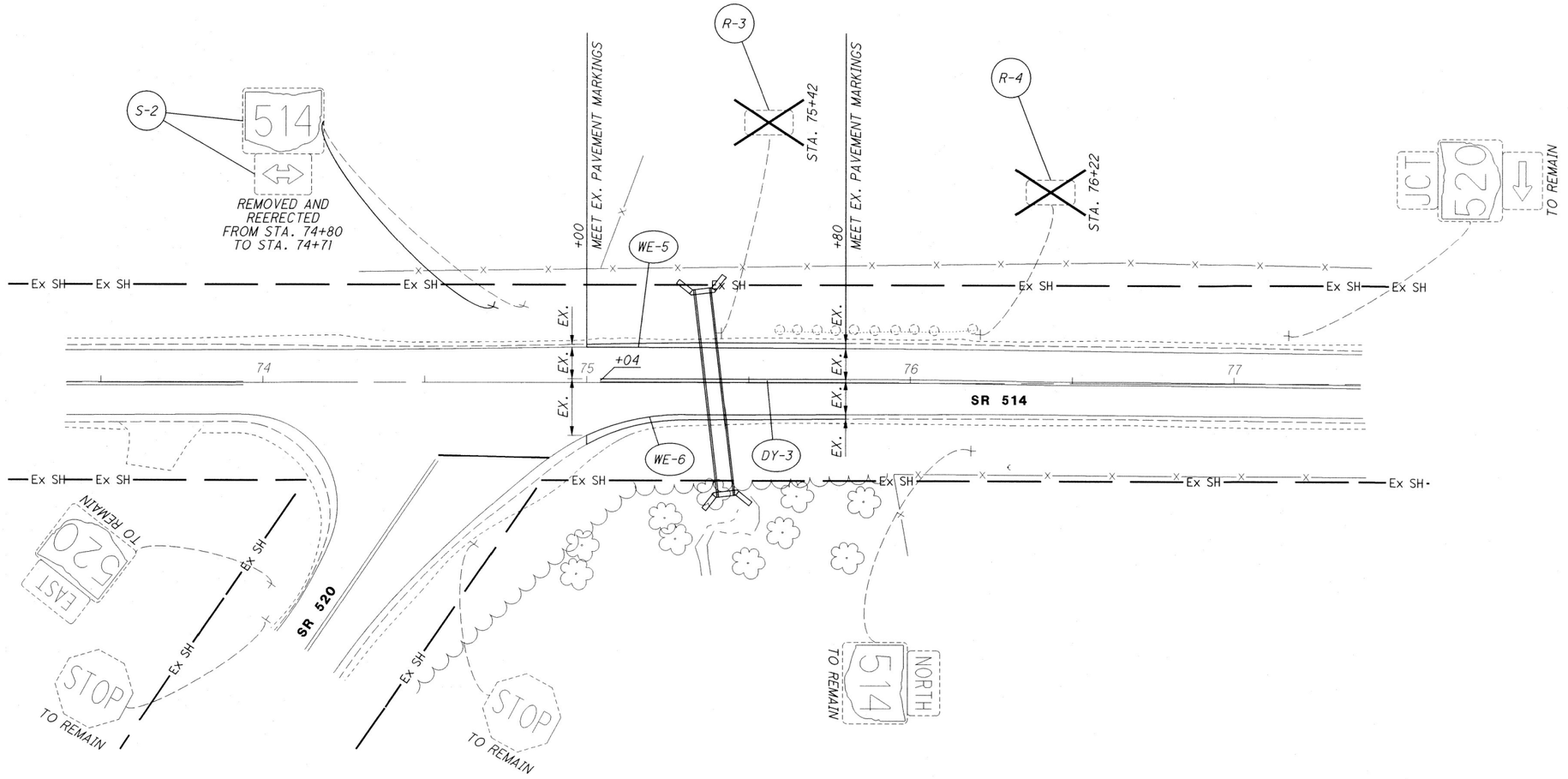

NOTES:

1. FOR CLARITY, UNDERGROUND UTILITIES HAVE NOT BEEN SHOWN ON THIS SHEET. THE CONTRACTOR SHALL REFERENCE THE APPROPRIATE PLAN AND PROFILE SHEET FOR UTILITY LOCATIONS PRIOR TO PLACING SIGN POSTS.

2. FOR SIGNING AND PAVEMENT MARKING LEGEND, SEE SHEET 37

CALCULATED BER
CHECKED SMM

0 10 20 40
HORIZONTAL SCALE IN FEET

TRAFFIC CONTROL PLAN – SR 514
STA. 73+50 TO STA. 77+50

HOL 62/VAR
5.06/VAR

39
48

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SHEET NO.	REF NO.	LOCATION	STATION TO STATION			SIDE	621 RPM	621 RAISED PAVEMENT MARKER REMOVED		646 EDGE LINE, 6"	646 CENTER LINE										
				TO			EACH	EACH		FT	FT										FUNDING
37	WE-1	US 62	25+70.00		26+30.00	LT				60											
37	WE-2	US 62	25+70.00		26+30.00	RT				60											01/STR/CV
38	WE-3	SR 179	3+65.00		4+35.00	LT				70											01/STR/CV
38	WE-4	SR 179	3+65.00		4+35.00	RT				70											02/NFA/CV
39	WE-5	SR 514	75+00.00		75+80.00	LT				80											02/NFA/CV
																					01/STR/CV
39	WE-6	SR 514	75+00.00		75+80.00	RT				80											
																					01/STR/CV
37	DY-1	US 62	25+70.00		26+30.00	℄	1	1			60										
38	DY-2	SR 179	3+65.00		4+35.00	℄	2	2			70										01/STR/CV
39	DY-3	SR 514	75+04.00		75+80.00	℄	1	1			76										02/NFA/CV
																					01/STR/CV
						SUB-TOTALS				420 FT	206 FT										
		TOTALS CARRIED TO GENERAL SUMMARY					4	4		0.08 MI	0.04 MI										

SHEET NO.	REF. NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630 GROUND MOUNTED SUPPORT, NO. 3 POST	630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	630 REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL											
							FT	EACH	EACH	EACH											FUNDING
38	S-1	SR 179	4+20.00	LT			14-14		2	2											
39	S-2	SR 514	74+71.00	LT			14		2	2											02/NFA/CV
																					01/STR/CV
37	R-1	US 62	25+96.00	RT				1		1											
37	R-2	US 62	26+05.00	LT				1		1											01/STR/CV
39	R-3	SR 514	75+42.00	LT				1		1											01/STR/CV
39	R-4	SR 514	76+22.00	LT				1		1											01/STR/CV
																					01/STR/CV
		TOTALS CARRIED TO GENERAL SUMMARY					42	4	4	8											

CALCULATED BER
CHECKED SMM

TRAFFIC CONTROL SUBSUMMARY

HOL-62/VAR
5.06/VAR

40
48