

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

HAM-CULVERTS-FY25

WHITEWATER, GREEN, AND ANDERSON TOWNSHIPS
HAMILTON COUNTY

FEDERAL PROJECT NUMBER

E240182

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REPLACEMENT OF BROKEN BACK PORTIONS OF CULVERTS AT HAM-275-0008 AND HAM-275-3730. PAVING OF INVERT AND REPLACING END SECTION OF HAM-74-1091 AND INSTALLATION OF HEADWALL AND INLET REPLACEMENT AT HAM-74-1095.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: *ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: *ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: *ACRES
*SEE INDIVIDUAL PLAN SHEETS AND DETAILS

LIMITED ACCESS

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

2023 SPECIFICATIONS

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

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

SEE SHEET 2 FOR LOCATION MAPS

LOCATION MAP

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DESIGN EXCEPTIONS

NONE

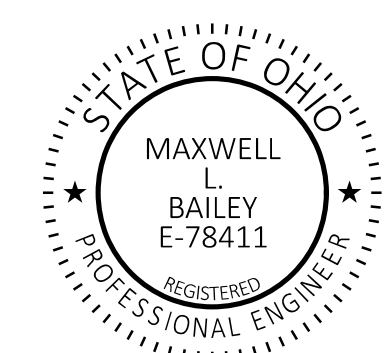
ADA DESIGN WAIVERS

NONE REQUIRED

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

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 8 - ENGINEERING

ENGINEER'S SEAL



STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
CB-5	7/16/21	MT-101.70	1/17/20	800-2023 7/19/24	WATERWAY PERMITS CONDITIONS 10/02/24
		MT-101.75	1/17/20	832 7/21/23	
DM-1.1	7/17/20	MT-101.90	7/17/20	899 1/20/23	
		MT-103.10	1/21/22		
	1/19/24	MT-105.10	1/17/20		
HW-1.1	7/20/18	RM-4.2	4/17/20		
HW-2.1	7/20/18				
MT-95.30	7/19/19				
MT-95.45	1/17/20				
MT-95.50	7/21/17				
MT-98.10	1/17/20				
MT-98.11	1/17/20				
MT-98.20	4/19/19				
MT-98.21	1/17/20				

Tammy K. Campbell, P.E.
District 08 Deputy Director

Jack Marchbanks, PhD
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY
DESIGNER
MLB
REVIEWER
TRB 01-05-24
PROJECT ID
117316
SHEET
01
TOTAL
09

HAM CULVERTS FY25

MODEL: Sheet PAPER: 34x22 (in.) DATE: 11/7/2024 TIME: 10:36:00 AM USER: mbailey5 pvc:\ohio\dot-pw\bailey.com\ohio\dot-pw-02\Documents\01 Active Projects\District 08 Hamilton\117316\400-Engineering\Roadway\Sheets\117316_GT001.dgn

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, AS PER PLAN

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.

CONTRACTOR IS ONLY TO REMOVE WHAT IS NEEDED FOR CONSTRUCTION SITE ACCESS AND THE PROPOSED WORK AS SPECIFIED IN THESE PLAN DOCUMENTS. WHEN ON EXISTING EMBANKMENT AT 3:1 SLOPE OR GREATER, LEAVE 1' STUMP AND ROOTS IN PLACE AS NOT TO DESTABILIZE EMBANKMENT.

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.

ENDANGERED BAT HABITAT REMOVAL

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

SOLE SOURCE AQUIFER

THE HAM-275-0.060 PROJECT LOCATION IS WITHIN THE GREATER MIAMI SOLE SOURCE AQUIFER. USE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. DO NOT STORE FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. MAINTAIN A SPILL KIT ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. IMMEDIATELY MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. REPORT ALL SPILLS OR EVENTS TO THE VILLAGE OF CLEVES WATERWORKS 513-941-3490 OR THE HAMILTON COUNTY EMA 513-263-8200. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), CONTACT WHITEWATER TOWNSHIP FIRE DEPARTMENT STATION 95 513-353-1518 OR THE OHIO EPA'S SPILLS HOTLINE 1-800-282-9378 FOR CLEAN-UP OF THE SPILL.

SEEDING AND MULCHING

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

659, TOPSOIL	365 CU. YD.
659, SEEDING AND MULCHING	3291 SQ. YD.
659, COMMERCIAL FERTILIZER	0.44 TON
659, LIME	0.68 ACRES
659, WATER	17.8 M. GAL.

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

COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

COFFERDAMS AND EXCAVATION BRACING INSTALLED FOR THE PROJECT ARE FOR DEWATERING THE WORK AREA AND ARE CONSIDERED FILL. COFFERDAMS AND EXCAVATION BRACING DESIGN, CONSTRUCTION, AND REIMBURSEMENT FOR DAMAGE IS BASED ON CMS 503. THE CONTRACTOR MUST COMPLY WITH ANY IN-STREAM RESTRICTION IN THE SPECIAL PROVISIONS WATERWAY PERMIT. ADDING FILL TO THE STREAM TO DEWATER THE WORK AREA REQUIRES A TEMPORARY ACCESS FILL (TAF) SUBMISSION PER THE SPECIAL PROVISIONS.

IF THE CONTRACTOR CHOOSES TO IMPACT THE STREAM DURING THE MONTHS OF APRIL THROUGH OCTOBER: ALL REQUIREMENTS OF CMS 503 APPLY, UNLESS STIPULATED ELSEWHERE IN THIS NOTE.

IF THE CONTRACTOR CHOOSES TO IMPACT THE STREAM AT ANY TIME IN THE MONTHS OF NOVEMBER THROUGH MARCH: EVEN IF THE ACTUAL WATER ELEVATION EXCEEDS 3 FEET ABOVE THE STATED ORDINARY HIGH WATER MARK, THE DEPARTMENT WILL NOT REIMBURSE THE CONTRACTOR FOR RESULTING DAMAGE TO THE WORK PROTECTED BY THE COFFERDAM. ALL OTHER REQUIREMENTS OF CMS 503 APPLY.

GENERAL NOTES

DESIGN AGENCY



DESIGNER

MLB

REVIEWER

TRB 01-05-24

PROJECT ID


117316

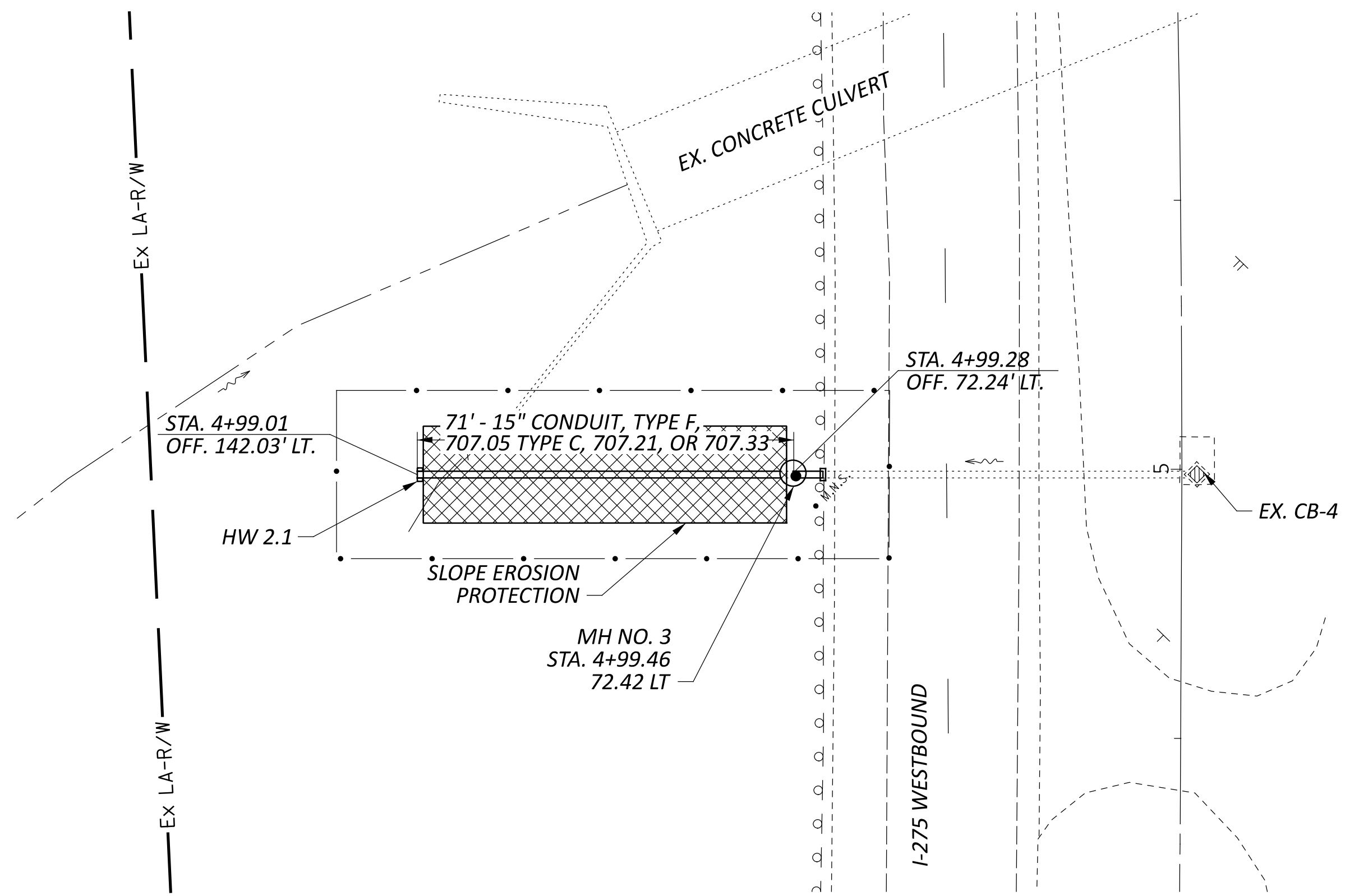
SHEET TOTAL

03 | 09

SHEET NUM.										PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
3	4	6	7	8	9					01/IMS/04	02/NHS/04						
										LS	LS	201	11001	LS		ROADWAY	
		71	25	5						76	25	202	35100	101	FT	CLEARING AND GRUBBING, AS PER PLAN	3
		1	1	1	1					3	1	202	20010	4	EACH	PIPE REMOVED, 24" AND UNDER	
										284		SPECIAL	20270130	284	FT	HEADWALL REMOVED	
		75	250	175						250	250	203	20000	500	CY	PIPE CLEANOUT OVER 48"	7
										1		202	58100	1	EACH	EMBANKMENT	
		LS	LS	LS	1					LS		503	11100	LS		CATCH BASIN REMOVED	
				LS						LS		503	11101	LS		COFFERDAMS AND EXCAVATION BRACING	
																COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	3
																EROSION CONTROL	
		135	112							135	112	670	00500	247	SY	SLOPE EROSION PROTECTION	
				14.5	4.6					19.1		601	32100	19.1	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
365										365		659	00300	365	CY	TOPSOIL	
3,291										3,291		659	10000	3,291	SY	SEEDING AND MULCHING	
0.44										0.44		659	20000	0.44	TON	COMMERCIAL FERTILIZER	
0.68										0.68		659	31000	0.68	ACRE	LIME	
17.8										17.8		659	35000	17.8	MGAL	WATER	
										2,500	2,500	832	30000	5,000	EACH	EROSION CONTROL	
																DRAINAGE	
		0.27		10.8	0.27					11.34		602	20000	11.34	CY	CONCRETE MASONRY	
		1								1	1	611	99574	2	EACH	MANHOLE, NO. 3	
				5						5		611	04600	5	FT	12" CONDUIT, TYPE C, 707.33	
		4								4		611	05900	4	FT	15" CONDUIT, TYPE B, 706.02	
		71								71		611	06700	71	FT	15" CONDUIT, TYPE F, 707.05 TYPE C, 707.21, OR 707.33	
				4							4	611	07400	4	FT	18" CONDUIT, TYPE B, 706.02	
				106							106	611	08200	106	FT	18" CONDUIT, TYPE F, 707.05 TYPE C, 707.21, OR 707.33	
				1							1	611	98644	1	EACH	CATCH BASIN GRATE	
				65							65	899	10000	65	FT	CURED-IN-PLACE PIPE LINER, 18"	
					284					284		611	96550	284	FT	FIELD PAVING OF EXISTING PIPE, 54" CMP	
					25					25		611	22200	25	FT	54" CONDUIT, TYPE A, 706.02, 707.33, 707.65	
					1					1		611	99574	1	EACH	MANHOLE, NO. 3 WITH 84" BASE I.D.	
						1				1		611	98300	1	EACH	CATCH BASIN, NO. 5	
																MAINTENANCE OF TRAFFIC	
	2									1	1	614	12390	2	EACH	WORK ZONE IMPACT ATTENUATOR, 24"-36" WIDE HAZARDS, (UNIDIRECTIONAL)	
	12									6	6	614	13350	12	EACH	OBJECT MARKER, ONE WAY	
	12									6	6	614	13310	12	EACH	BARRIER REFLECTOR, TYPE 1, ONE WAY	
	200									100	100	614	24402	200	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I	
	600									300	300	622	41100	600	FT	PORTABLE BARRIER, UNANCHORED	
																INCIDENTALS	
										LS	LS	614	11000	LS		MAINTAINING TRAFFIC	
										LS		623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
										LS	LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY

 DESIGNER
MLB
 REVIEWER
TRB 01-05-24
 PROJECT ID
117316
 SHEET TOTAL
05 09

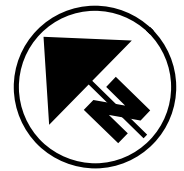


SPIRAL DATA
 P.I. = STA. 6+10.84
 Ls = 400.00'
 θs = 05°00'00"
 LT = 266.77'
 ST = 133.43'
 x = 399.70'
 y = 11.63'
 k = 199.95'
 p = 2.91'
 C = 399.86'
 Start = Sta. 3+44.07
 End = Sta. 7+44.07
 C.B. = N44°45'54"E

REHABILITATE CULVERT HAM-275-0008 BY PERFORMING THE FOLLOWING WORK:

1. REPLACE BROKEN BACK PORTION OF CULVERT GOING DOWN EMBANKMENT.
2. INSTALL MANHOLE AT EXISTING ELBOW OF BROKEN BACK AT TOP OF SLOPE.
3. REPLACE HEADWALL AT OUTLET OF CULVERT.

PROJECT EARTH DISTURBED AREA: 0.1 ACRES
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.1 ACRES
 NOTICE OF INTENT EARTH DISTURBED AREA: NO NOI REQUIRED (ROUTINE MAINTENANCE)

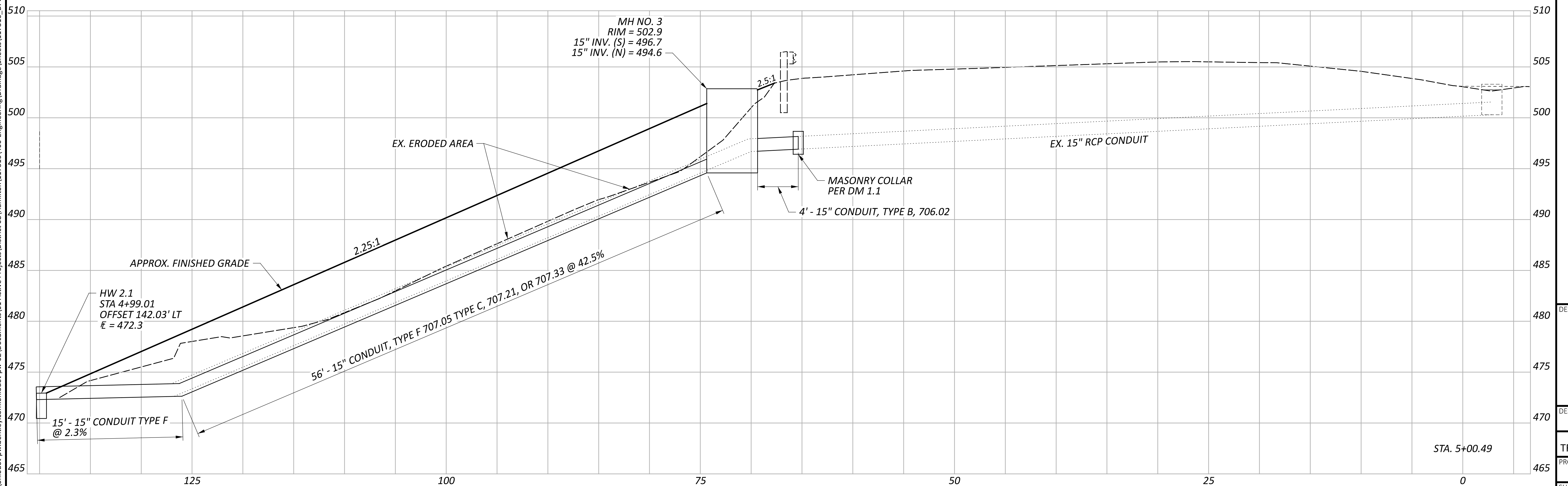


ESTIMATED QUANTITIES

ITEM	QUANTITY	UNIT	DESCRIPTION
202	71	FT	PIPE REMOVED, 24" AND UNDER
202	1	EA	HEADWALL REMOVED
203	75	CY	EMBANKMENT
503	LS	LS	COFFERDAMS AND EXCAVATION BRACING
602	0.27	CY	CONCRETE MASONRY
611	4	FT	15" CONDUIT, TYPE B, 706.02
611	71	FT	15" CONDUIT, TYPE F 707.05 TYPE C, 707.21, OR 707.33
611	1	EA	MANHOLE NO. 3
670	135	SY	SLOPE EROSION PROTECTION

EXISTING STRUCTURE

TYPE: ROUND CMP (BROKEN BACK PORTION) & RCP (UNDER PAVEMENT)
 SIZE: 15"
 SKEW: 0°
 ALIGNMENT: BROKEN BACK
 DATE BUILT: 1971
 CONDITION: POOR
 CFN: 1839674



HAM-275-0008
 CULVERT PLAN & DETAIL

DESIGN AGENCY



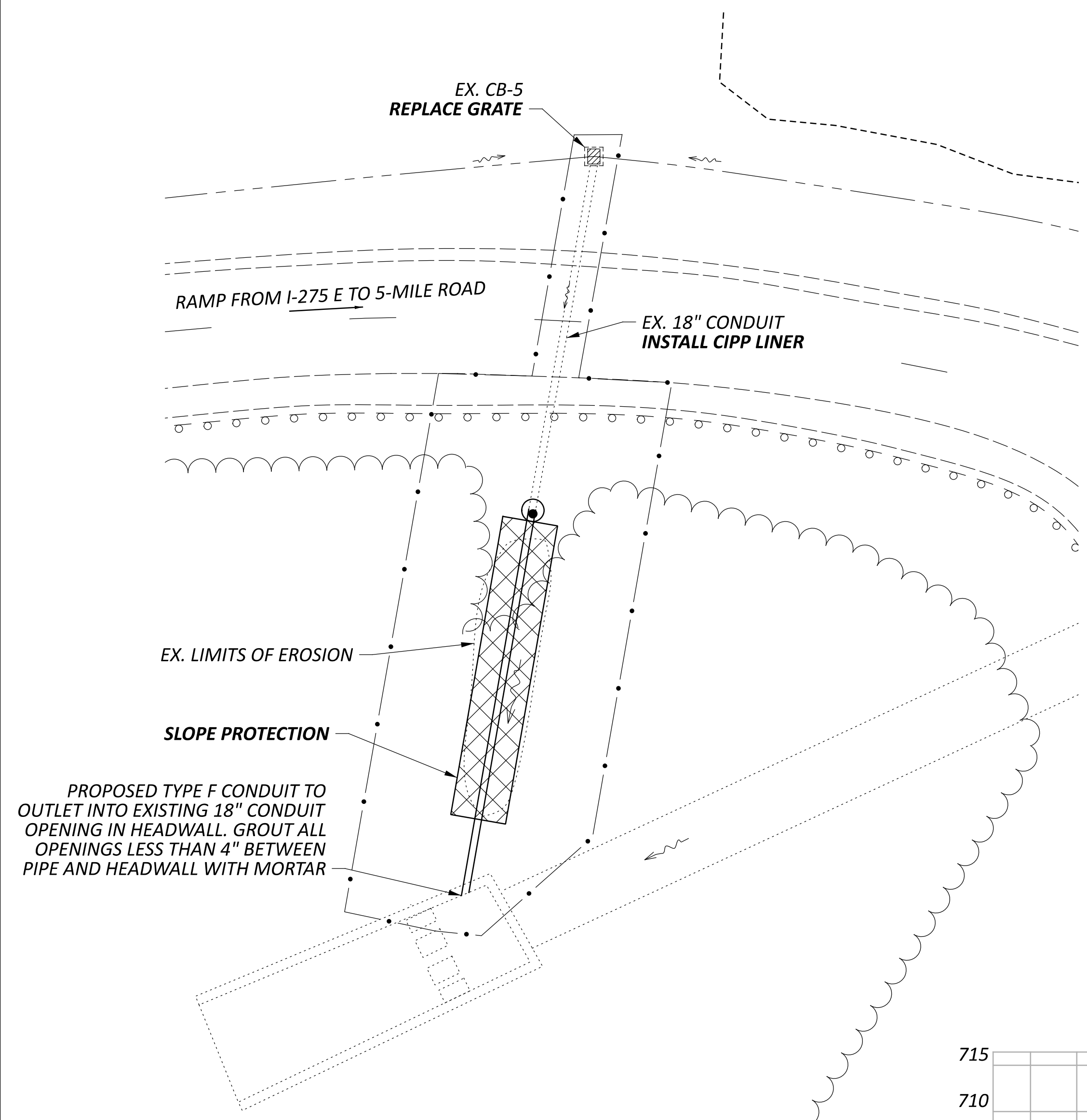
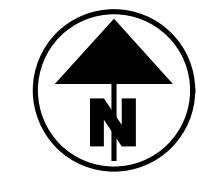
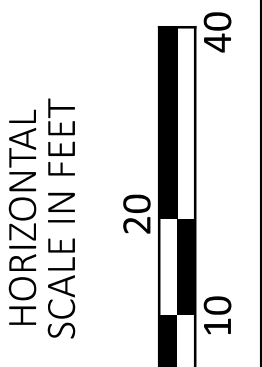
DESIGNER
 MLB

REVIEWER
 TRB 01-05-24

PROJECT ID
 117316

SHEET TOTAL
 06 09

PROJECT EARTH DISTURBED AREA: 0.25 ACRES
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.1 ACRES
 NOTICE OF INTENT EARTH DISTURBED AREA: NO NOI REQUIRED (ROUTINE MAINTENANCE)



ESTIMATED QUANTITIES			
ITEM	QUANTITY	UNIT	DESCRIPTION
202	25	FT	PIPE REMOVED, 24" AND UNDER
202	1	EA	HEADWALL REMOVED
203	250	CY	EMBANKMENT
503	LS	LS	COFFERDAMS AND EXCAVATION BRACING
611	1	EA	CATCH BASIN GRATE
611	4	FT	18" CONDUIT, TYPE B
611	106	FT	18" CONDUIT, TYPE F, 707.05 TYPE C, 707.21, OR 707.33
611	1	EA	MANHOLE NO. 3
670	112	SY	SLOPE EROSION PROTECTION
899	65	FT	CURED-IN-PLACE PIPE LINER, 18"

- REHABILITATE CULVERT HAM-275-3730 BY PERFORMING THE FOLLOWING WORK:**
1. REPLACE BROKEN BACK PORTION OF CULVERT GOING DOWN EMBANKMENT.
 2. INSTALL MANHOLE AT ELBOW OF BROKEN BACK AT TOP OF SLOPE.
 3. INSTALL CURED-IN-PLACE PIPE LINER IN EXISTING 18" CONDUIT UNDER ROADWAY.
 4. INSTALL EROSION CONTROL BLANKET DOWN ERODED SLOPE.
 5. REPLACE CB-5 GRATE.

EXISTING STRUCTURE	
TYPE:	ROUND CMP (BROKEN BACK PORTION), RCP & HDPE (UNDER PAVEMENT)
SIZE:	18"
SKEW:	0°
ALIGNMENT:	BROKEN BACK
DATE BUILT:	1969
CONDITION:	FAIR (OVERALL), POOR (EMBANKMENT)
CFN:	1987474

