

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

# MAD-40-0.86

## SOMERFORD TOWNSHIP

## MADISON COUNTY

**PROJECT DESCRIPTION**

THIS PROJECT CONSISTS OF THE REPAIR OF AN EMBANKMENT SLIP FAILURE ALONG AN EXISTING ROADWAY DRAINAGE DITCH.

MAD-40-0.86  
PROJECT EARTH DISTURBED AREA: 0.84 ACRES  
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.13 ACRES  
NOTICE OF INTENT EARTH DISTURBED AREA: N/A

**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.

**2010 SPECIFICATIONS**

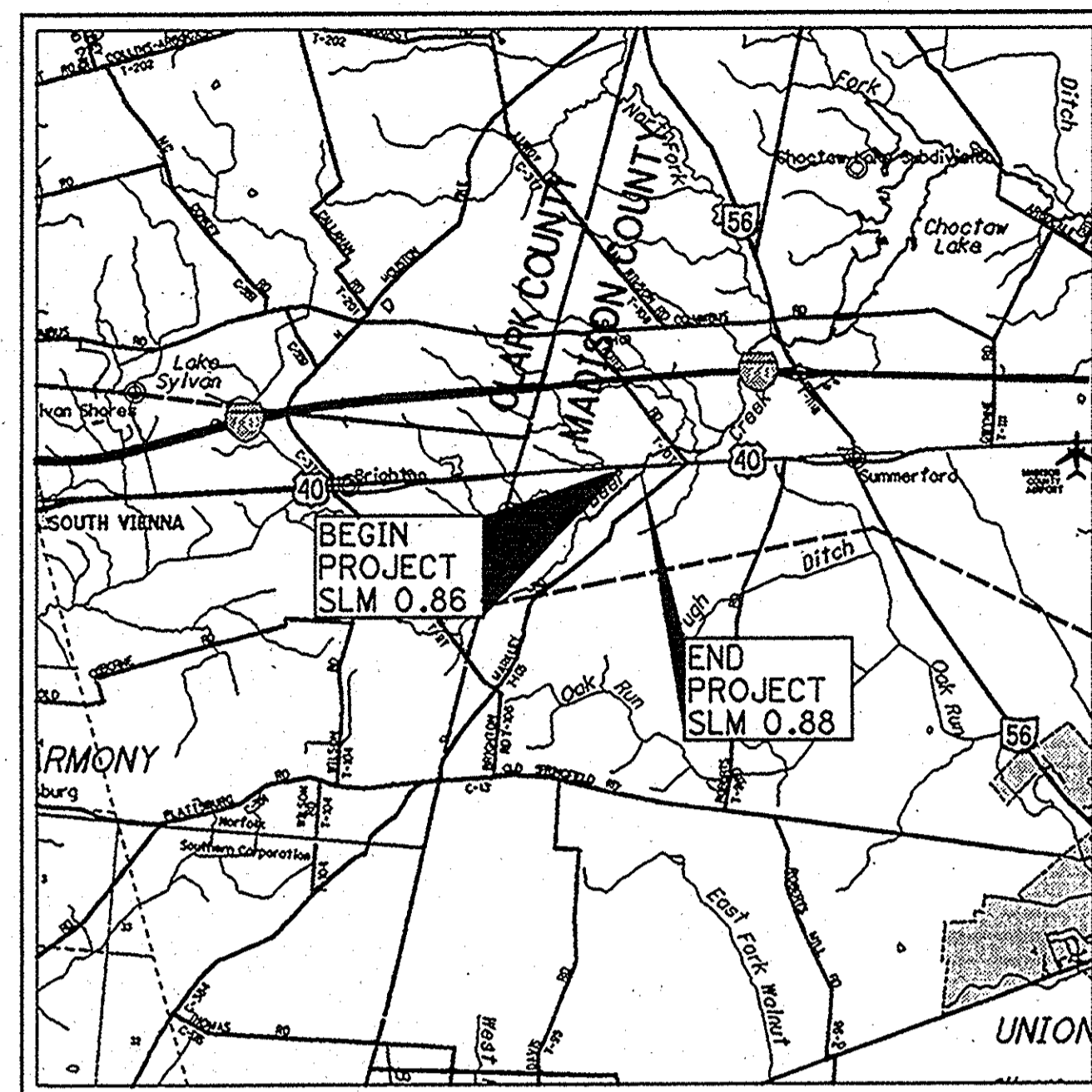
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVED 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.

PLANS CERTIFIED BY:  
NAME gcv DATE 6/18/12  
ANTHONY C. TUROWSKI, DISTRICT 6  
OHIO DEPT. OF TRANSPORTATION

APPROVED [Signature]  
DATE 6-18-12 DISTRICT DEPUTY DIRECTOR

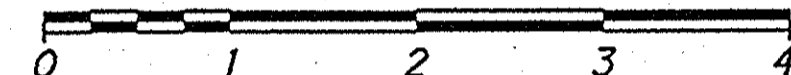
APPROVED [Signature]  
DATE 6-27-12 DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP

LATITUDE: 39°55'56" LONGITUDE: 83°31'20"

SCALE IN MILES



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

DESIGN DESIGNATION	U.S. 40	POTEE RD	MARKLEY RD
CURRENT ADT (2011)	3,000	200	300
DESIGN YEAR ADT (2031)	3,700	200	300
DESIGN HOURLY VOLUME (2031)	370	20	30
DIRECTIONAL DISTRIBUTION	59%	61%	57%
TRUCKS (24 HOUR B&C)	5%	4%	4%
Td	2%	6%	1%
DESIGN SPEED		55	55
LEGAL SPEED	55	55	55

DESIGN FUNCTIONAL CLASSIFICATION:  
MAD-40 : RURAL MAJOR COLLECTOR  
NHS PROJECT ..... YES

DESIGN EXCEPTIONS  
NONE REQUIRED

**UNDERGROUND UTILITIES**  
CONTACT BOTH SERVICES  
CALL TWO WORKING DAYS  
BEFORE YOU DIG  
CALL  
1-800-362-2764  
(TOLL FREE)  
OHIO UTILITIES PROTECTION SERVICE  
NON-MEMBERS  
MUST BE CALLED DIRECTLY  
OIL & GAS PRODUCERS PROTECTIVE  
SERVICE CALL: 1-800-925-0988

PLAN PREPARED BY:  
OHIO DEPARTMENT OF  
TRANSPORTATION  
DISTRICT SIX

ENGINEERS SEAL:		STANDARD DRAWINGS										SUP. SPECS.		
NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	NAME	DATE	
	BP-3.1	04/20/12			TC-41.20	01/19/01						800	05/25/12	
			MT-95.30	07/17/09	TC-42.20	01/21/11						832	05/05/09	
			MT-95.40	07/17/09	TC-65.10	04/20/12								
	DM-4.4	04/17/09	MT-95.50	04/17/09	TC-65.11	04/20/12								
			MT-101.70	04/15/11	TC-73.10	04/20/12								
			MT-101.90	10/21/11										
	GR-1.1	07/16/04	MT-105.10	01/16/09										
	GR-2.1	01/16/04												
			RM-4.2	10/15/10										

SIGNED: Kevin R. Fiant  
DATE: 6-18-12

**SPECIAL PROVISIONS**

WATERWAY PERMIT  
CONDITIONS 5/7/2012

MAD-40 - 0.86  
128022 PID - 89178  
DIST 06 7/26/2012  
Contact Proposal Available  
@www.contracts.dot.  
state.oh.us/home

FEDERAL PROJECT NO.  
**E100 (928)**

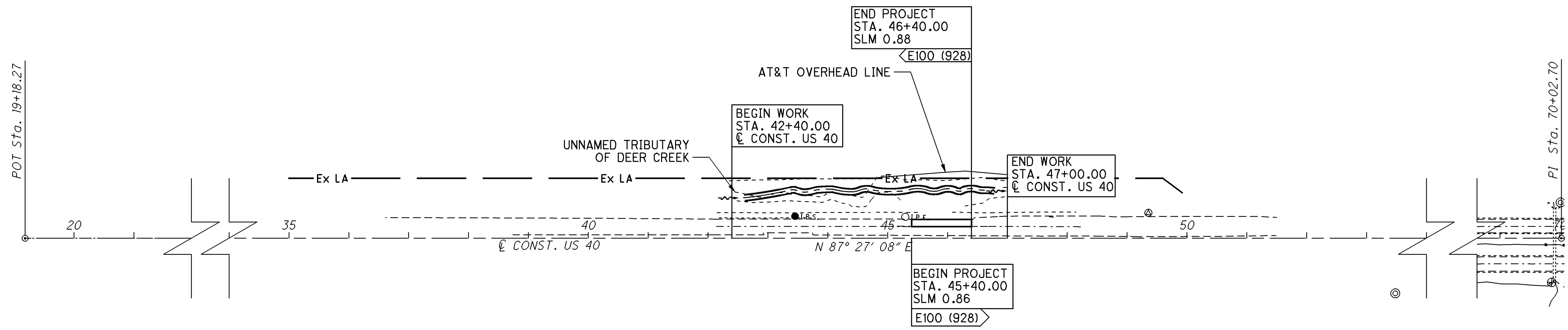
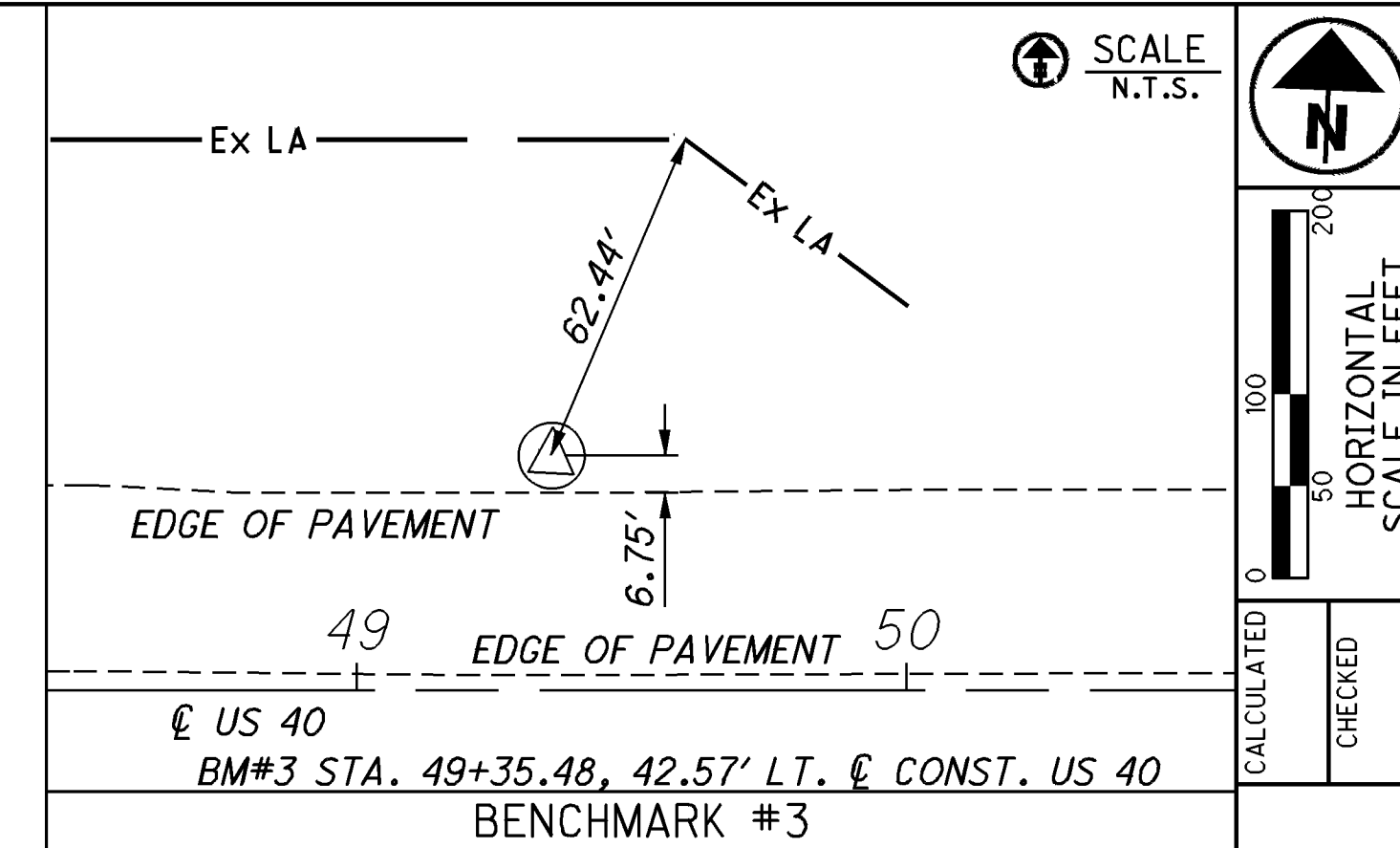
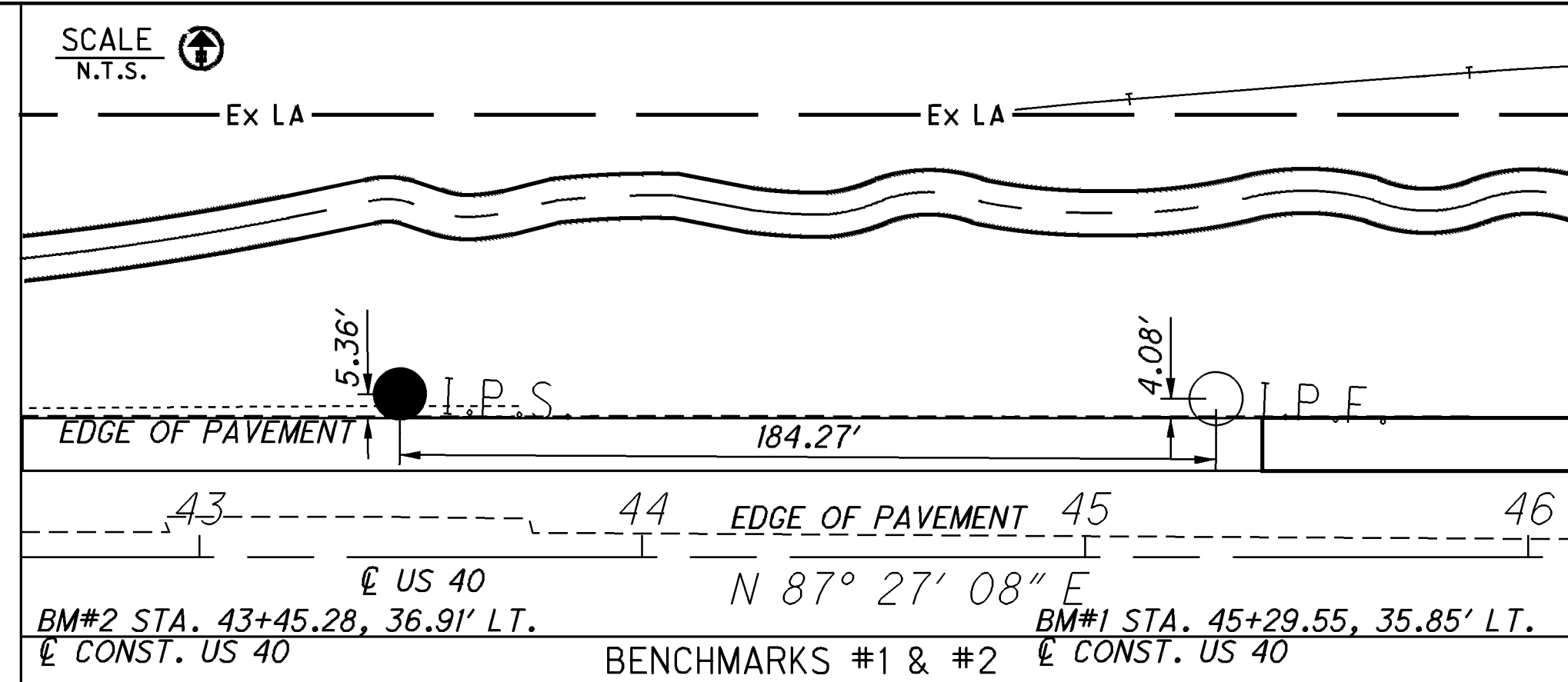
PID NO.  
**89178**

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT  
**NONE**

**MAD-40-0.86**

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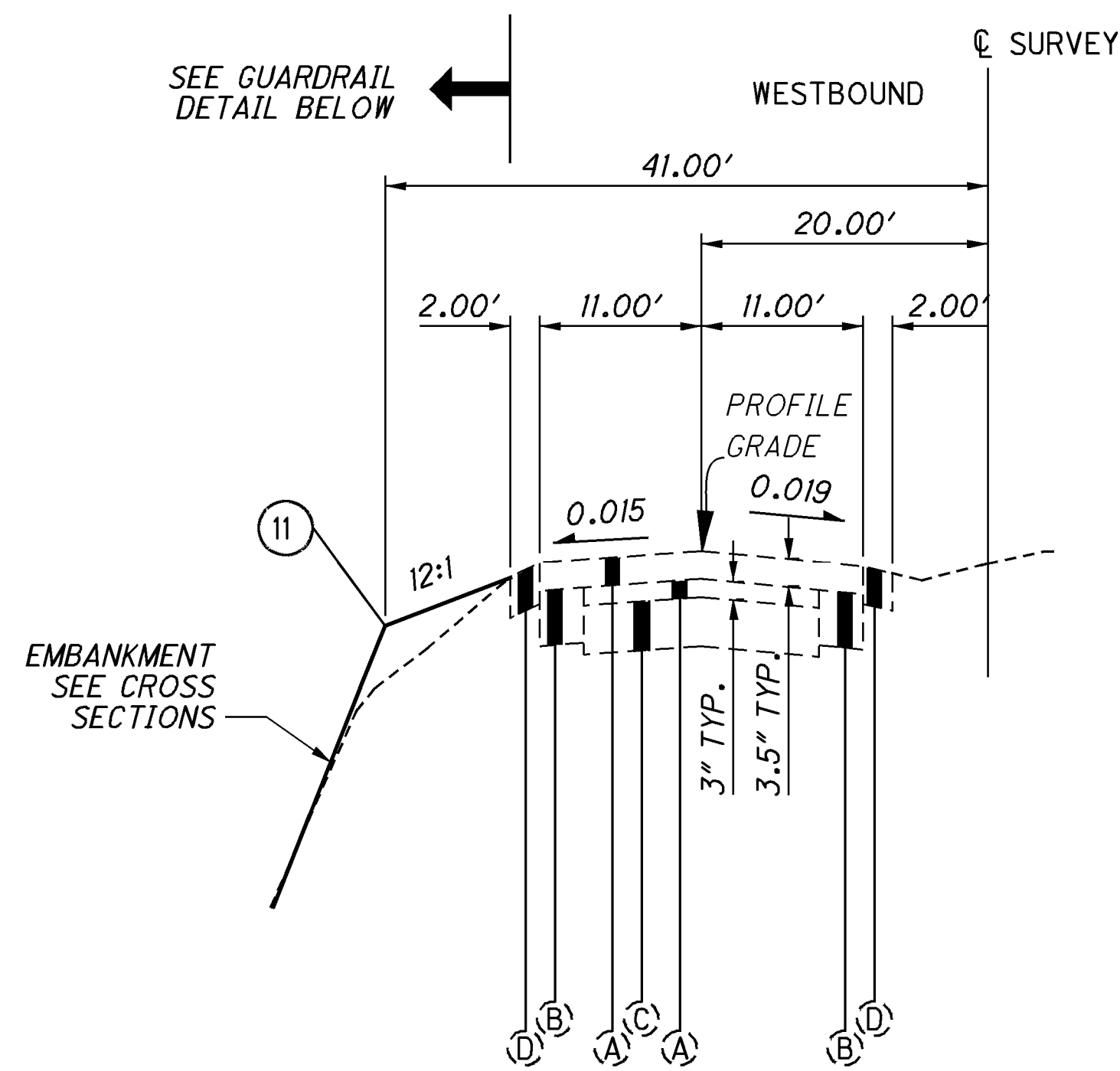


VERTICAL & HORIZONTAL CONTROL						
BENCHMARK #	STATION	OFFSET	ELEVATION	FEATURE	NORTHING	EASTING
1	45+29.55	-35.85	1094.94	IPIN	705464.63	1681849.02
2	43+45.28	-36.91	1094.52	IPINS	705457.49	1681664.88
3	49+35.48	-42.57	1095.70	GOVCON	705489.39	1682254.25

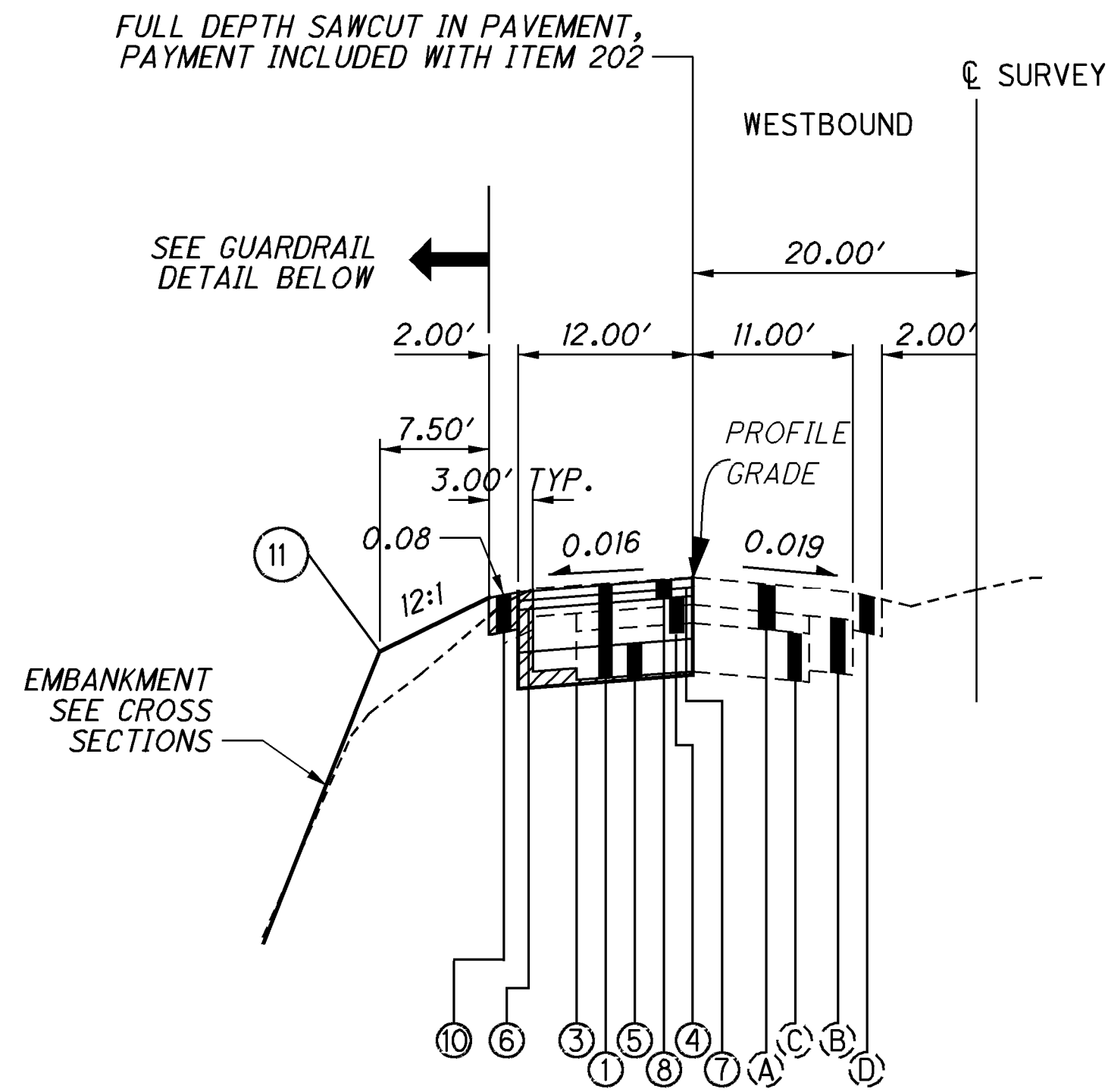
SCHEMATIC PLAN

MAD-40-0.86

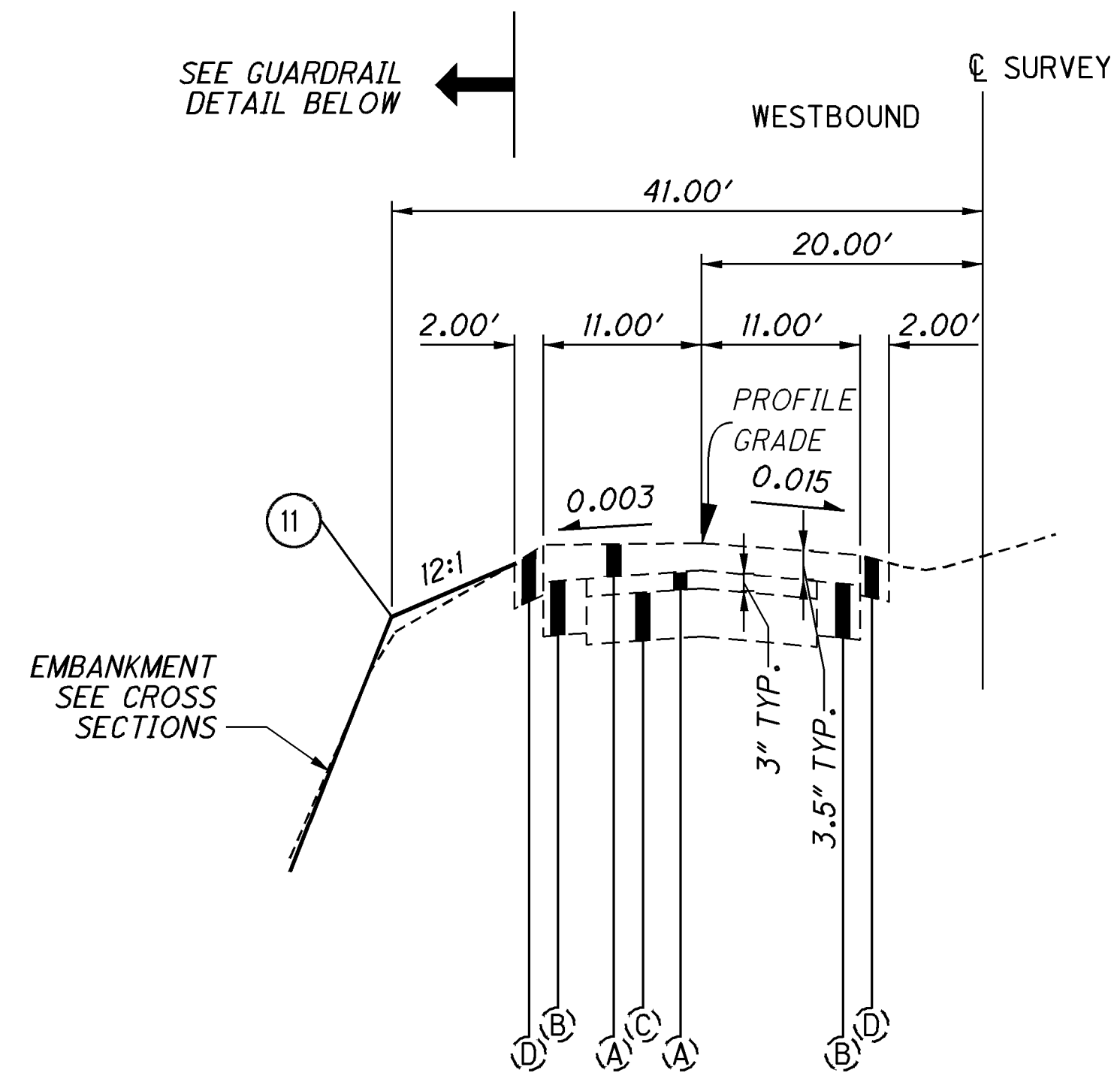
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**ADJOINING TYPICAL - US 40**  
STA. 45+40.00



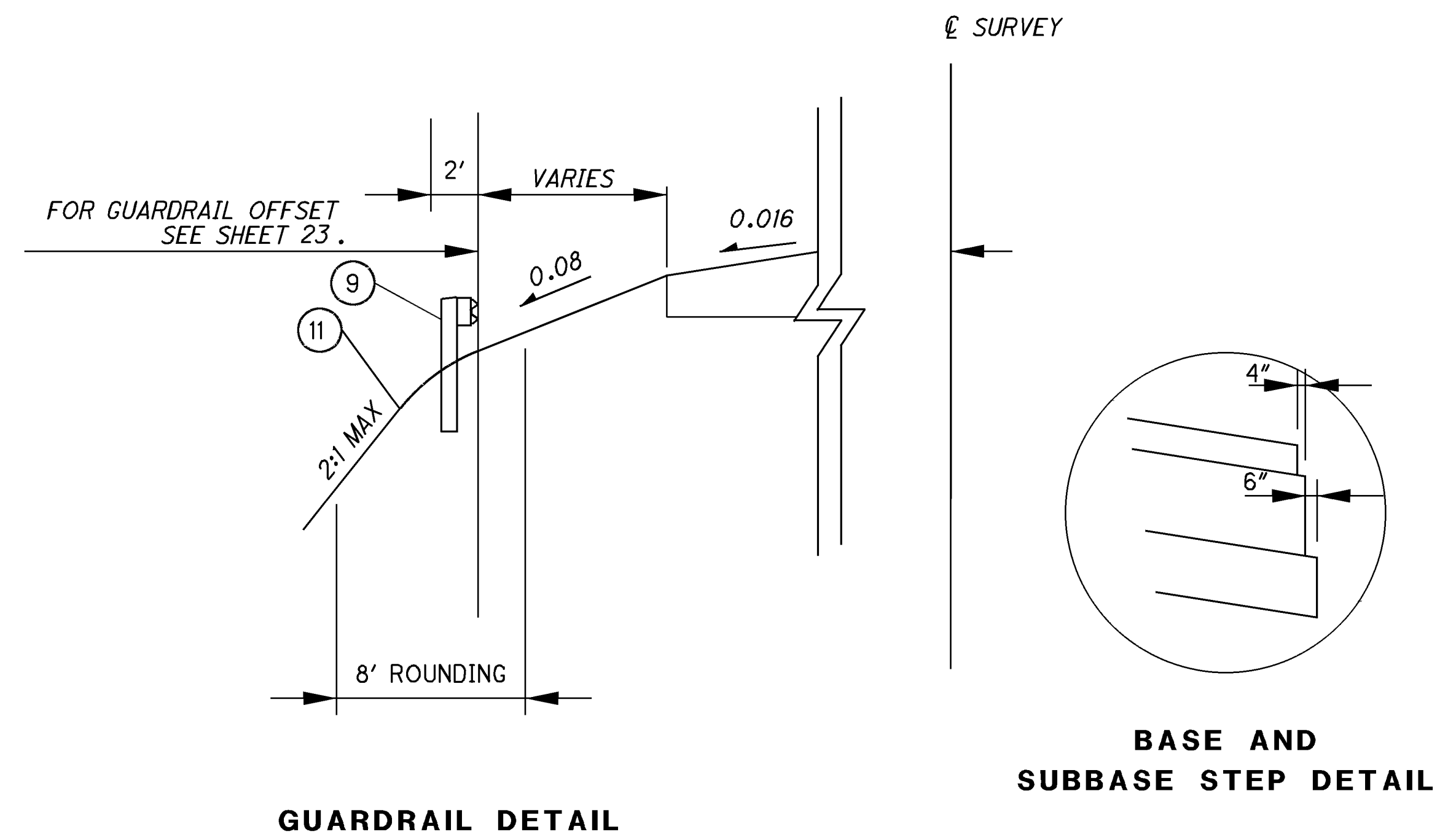
**TYPICAL SECTION - US 40**  
STA. 45+40.00 TO 46+40.00



**ADJOINING TYPICAL US 40**  
STA. 46+40.00

**LEGEND**

- ① ITEM 202 - PAVEMENT REMOVED
- ② ITEM 203 - EXCAVATION, 16"
- ③ ITEM 204 - SUBGRADE COMPACTION
- ④ ITEM 301 - 7" ASPHALT CONCRETE BASE, PG 64-22
- ⑤ ITEM 304 - 6" AGGREGATE BASE
- ⑥ ITEM 407 - TACK COAT @ 0.075 GAL. PER SQ. YD.
- ⑦ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE @ 0.040 GAL. PER SQ. YD.
- ⑧ ITEM 448 - 3.0" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (2 LIFTS)
- ⑨ ITEM 606 - GUARDRAIL
- ⑩ ITEM 617 - 6" COMPACTED AGGREGATE
- ⑪ ITEM 659 - SEEDING AND MULCHING
- (A) EXISTING ASPHALT CONCRETE
- (B) 9" ± REINFORCED CONCRETE PAVEMENT
- (C) 8" ± MACADAM PAVEMENT
- (D) 6" ± EXISTING COMPACTED AGGREGATE



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**PUBLIC OUTREACH AND NOTIFICATION**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE DISTRICT 6 PUBLIC INFORMATION OFFICE AT (740) 833-8260 TO COORDINATE EFFORTS TO NOTIFY ALL LOCAL COUNTY, STATE AND FEDERAL EMERGENCY SERVICES, SCHOOL DISTRICTS AND ADJACENT RESIDENTS AND BUSINESSES OF THE UPCOMING CLOSURE. ADVANCE NOTIFICATION SHALL OCCUR NO LATER THAN FOURTEEN (14) DAYS PRIOR TO CLOSING THE ROAD. IF, SUBSEQUENT TO THE ADVANCE NOTIFICATION, THE START DATE IS CHANGED, THEN A NEW SEVEN (7) DAY NOTIFICATION WILL BE REQUIRED. THE ROAD CANNOT BE CLOSED UNLESS PRIOR NOTIFICATION HAS BEEN ACCOMPLISHED. THE SAME PARTIES SHALL BE NOTIFIED WHEN THE CLOSURE HAS CONCLUDED AND THE ROAD IS BACK OPEN TO TRAFFIC.

**GENERAL:**

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**CONTINGENCY QUANTITIES:**

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

**INDIANA BAT HABITAT:**

ANY UNAVOIDABLE CUTTING OF TREES WITH SUITABLE ROOSTING AND BROOD-REARING HABITAT FOR THE INDIANA BAT (LIVING OR STANDING DEAD TREES OR SNAGS WITH EXFOLIATING, PEELING OR LOOSE BARK, SPLIT TRUNKS AND/OR BRANCHES, OR CAVITIES) WILL BE PERFORMED ONLY BEFORE APRIL 1 OR AFTER SEPTEMBER 30 WHEN THE SPECIES WOULD NOT BE USING SUCH HABITAT.

ODOT HAS CUT DOWN ALL BAT TREES PRIOR TO CONSTRUCTION. THIS IS TO BE VERIFIED AT THE PRE-CONSTRUCTION MEETING. THESE TREES WERE ONLY CUT DOWN, REMOVAL OF THE DOWNED TREES AND THEIR STUMPS IS STILL THE RESPONSIBILITY OF THE CONTRACTOR.

**UTILITIES OWNERSHIP:**

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

AT&T 3233 WOODMAN DRIVE RM 225 KETTERING, OH 45420 1-937-296-3650	MARATHON PIPELINE, LLC 539 S. MAIN ST RM 7642 FINDLAY, OH 45840-3295 1-419-421-2211
--	--

FIRST ENERGY CORP.  
420 SOUTH YORK STREET  
SPRINGFIELD, OH 45505  
1-937-327-1283

**WORK LIMITS:**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**ELEVATION DATUM:**

ALL ELEVATIONS ARE BASED ON THE U.S.G.S. DATUM (NAVD 1988)

**CLEARING AND GRUBBING:**

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZE	NO. OF TREES
LESS THAN 12"	1
18"	20
30"	0

**CONTRACTORS EQUIPMENT - OPERATION AND STORAGE:**

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC WHERE PRACTICAL. EQUIPMENT SHALL HAVE AT LEAST ONE AMBER FLASHING LIGHT. WHEN PARKED ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE LOCATED EITHER A MINIMUM OF THIRTY FEET FROM THE EDGE OF PAVEMENT OR SIX FEET BEHIND GUARDRAIL WITH A MINIMUM OF 125 FEET OF GUARDRAIL PRECEDING THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT AN APPROVED CONTRACTOR'S STORAGE AREA.

**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 203.05. NO ADDITIONAL PAYMENT WILL BE MADE FOR BENCHING REQUIRED UNDER THE PROVISIONS OF 203.05.

**REVIEW OF DRAINAGE FACILITIES:**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED, AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

**REVIEW OF DRAINAGE FACILITIES: (CONT.)**

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

**ITEM 407 - TACK COAT:**

THE RATE OF APPLICATION OF ITEM 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. FOR ESTIMATING PURPOSES ONLY, THE PLAN INDICATES AN AVERAGE APPLICATION RATE OF TACK COAT AT 0.075 GALLON PER SQUARE YARD. THE APPLICATION RATE OF TACK COAT FOR INTERMEDIATE COURSE IS 0.04 GALLON PER SQUARE YARD. THIS ITEM IS FOR USE WITH ITEM 448 AS DIRECTED BY THE ENGINEER. A COVER AGGREGATE SHALL BE USED IF HEAVY TRACKING OF THE TACK COAT ON TO THE EXISTING PAVEMENT SHOULD OCCUR DURING THE PAVING OPERATIONS. THE COST OF THE COVER AGGREGATE SHALL BE INCLUDED IN THE COST OF THIS ITEM.

**ENVIRONMENTAL AGREEMENT WITH ODNR:**

NO TOXIC OR HAZARDOUS MATERIALS SUCH AS SEALANTS, PAINT, SOLVENTS, CLEANING AGENTS, EARTHEN MATERIALS, WASTE-WATER FUELS OR DEBRIS OF ANY KIND SHALL BE DISCHARGED TO ANY STREAMS, DRAINAGE COURSES OR BODIES OF WATER. ALL ASPHALT OR CONCRETE GRINDINGS, EXCESS ASPHALTIC OR CONCRETE MATERIALS OR ANY OTHER DEBRIS GENERATED DURING RESURFACING OR OTHER SIMILAR ACTIVITIES SHALL NOT BE DISPOSED OF WITHIN A FLOODPLAIN BELOW THE 100-YEAR FLOOD ELEVATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT LIQUIDS USED TO REPAIR, CLEAN, SEAL, OR TREAT ANY BRIDGE STRUCTURE (E.G. PAINT, SEALER, SOLVENT) FROM ENTERING STREAMS, WETLANDS OR OTHER "WATERS OF THE UNITED STATES" AND TAKE THE APPROPRIATE ACTIONS IN THE EVENT OF A RELEASE.

**FARM DRAINS**

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE (RIGHT OF WAY) (CONSTRUCTION) LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILES WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY 603, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

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**FARM DRAINS (CONTINUED)**

THE LOCATION, TYPE, SIZE AND GRADE OF REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS AS PER STANDARD CONSTRUCTION DRAWING DM-1.1, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE. PAYMENT FOR THE EROSION CONTROL PADS AND ANIMAL GUARDS AND ANY NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

603 4" CONDUIT, TYPE C 20 FT.

603 6" CONDUIT, TYPE C 20 FT.

603 8" CONDUIT, TYPE C 20 FT.

601 ROCK CHANNEL PROTECTION TYPE C WITH FILTER  
1 CU. YD.

**ITEM 606 - GUARDRAIL, TYPE 5:**

THE LOCATION OF GUARDRAIL RUNS AS SHOWN IN THESE PLANS, ARE SUBJECT TO ADJUSTMENT TO ASSURE THAT THE PLANNED INSTALLATION WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC.

**GUARDRAIL POST HOLES:**

ALL HOLES REMAINING AFTER REMOVAL OF GUARDRAIL POSTS SHALL BE FILLED WITH GRANULAR MATERIAL, EXCESS MATERIAL RESULTING FROM GUARDRAIL RECONSTRUCTION, OR EXCESS MATERIAL FROM BERM RESHAPING. FILL MATERIAL CONTAINING SOD SHALL NOT BE USED. ALL FILL MATERIAL SHALL BE APPROVED BY THE ENGINEER. MATERIAL PLACED IN HOLES SHALL BE THOROUGHLY COMPACTED AND LEVELED OFF AS DIRECTED BY THE ENGINEER. PAVEMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE FROM ITEM 202, GUARDRAIL REMOVED.

**CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL:**

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN IN AASHTO M 180. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

**ITEM 623 - CONSTRUCTION LAYOUT STAKES:**

THIS ITEM SHALL CONSIST OF STATIONING USING 3 FT LATH STAKES OR PAINT MARKINGS. THE STAKES OR PAINT MARKINGS SHALL BE SPACED AT 50 FT INTERVALS AND EXTEND THROUGHOUT THE LENGTH OF THE PROJECT. PLACEMENT OF THE STAKES OR PAINT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY DAMAGED, MISSING STAKES, OR PAINT MARKINGS. PAINT MARKINGS SHALL BE PLACED ON CURBS AND USED IN AREAS WHERE THE PLACEMENT OF STAKES IS NOT POSSIBLE AND APPROVED BY THE PROJECT ENGINEER.

CONSTRUCTION LAYOUT STAKES WILL BE PAID FOR AT THE CONTRACT LUMP SUM BID, WHICH PRICE SHALL BE FULL COMPENSATION FOR ALL SERVICES, MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS, INCLUDING THE REMOVAL, NECESSARY TO COMPLETE THIS ITEM.

**ITEM 659 - SEEDING AND MULCHING:**

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS, FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES THAT ARE COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS. THE QUANTITIES LISTED IN THE PLANS ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS.

**EXISTING PLANS:**

EXISTING PLANS ENTITLED MAD-40-(0.00-2.47) MAY BE INSPECTED IN THE ODOT DISTRICT SIX OFFICE IN DELAWARE.

**STREAM CHANNEL EXCAVATION:**

STREAM CHANNEL EXCAVATION WITHIN "WATERS OF THE US" IS SUBJECT TO US ARMY CORPS OF ENGINEERS (USACE) REGULATORY JURISDICTION.

NO WORK BELOW THE ORDINARY HIGH WATER MARK SHALL BE PERFORMED BETWEEN APRIL 15 AND JUNE 30.

TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL FROM THE STREAM CHANNEL. THIS PERTAINS TO ANY EXCAVATION OPERATIONS SUCH AS, FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEANOUT, EXCAVATION FOR ROCK CHANNEL PROTECTION AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS.

IN ORDER TO CONTROL DUST NEAR THE WATERWAY, THE FOLLOWING ITEM HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 616 - WATER = 10 M GAL

**AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS**

THIS PROJECT HAS BEEN IDENTIFIED AS BEING WITHIN THE INFLUENCE AREA OF A PUBLIC USE AIRPORT OR HELIPORT. NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT AT MAXIMUM OPERATING HEIGHT SHALL EXCEED A HEIGHT OF 100 FT. IF ANY TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT WILL EXCEED THIS HEIGHT, FURTHER COORDINATION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA), AND ODOT OFFICE OF AVIATION, WILL BE NECESSARY PRIOR TO ERECTING SUCH TEMPORARY STRUCTURES OR OPERATING SUCH EQUIPMENT ON THE PROJECT. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT FORM 7460-1 TO THE FAA. A COPY OF THE SUBMISSION AND TWO COPIES OF FORM 7460-1 SHALL BE FORWARDED TO THE ODOT OFFICE OF AVIATION.

NO TEMPORARY STRUCTURES OR CONSTRUCTION EQUIPMENT SHALL EXCEED THE PERMISSIBLE HEIGHT, UNTIL A COPY OF THE FAA APPROVAL AND ODOT OFFICE OF AVIATION PERMIT HAS BEEN FURNISHED TO THE PROJECT ENGINEER.

EXPRESS PROCESSING CENTER  
THE FEDERAL AVIATION ADMINISTRATION  
SOUTHWEST REGIONAL OFFICE  
AIR TRAFFIC AIRSPACE BRANCH ASW-520  
2601 MEACHAN BLVD.  
FORT WORTH, TX 76137-4298

OHIO DEPARTMENT OF TRANSPORTATION  
OFFICE OF AVIATION  
2829 WEST DUBLIN-GRANVILLE ROAD  
COLUMBUS, OHIO 43235  
614-387-2346

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**ITEM 614 MAINTAINING TRAFFIC:**

BELOW IS A SUMMARY OF THE MOT REQUIREMENTS FOR THIS PROJECT:

- LONG TERM LANE CLOSURE OF THE TRAVEL LANE OF US 40 IS PERMITTED FOR THE REPAIR OF THE SLIP FAILURE AT SLM 0.86. THE LANE CLOSURE SHALL BE SETUP IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, TYPICAL APPLICATION 34 "LANE CLOSURE WITH TEMPORARY TRAFFIC BARRIER."

ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION). COPIES ARE AVAILABLE FROM:

THE OHIO DEPARTMENT OF TRANSPORTATION  
BUREAU OF TRAFFIC,  
1980 WEST BROAD STREET  
COLUMBUS, OHIO 43223.

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

THE CONTRACTOR SHALL SUBMIT IN WRITING A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL IN WRITING BEFORE WORK IS STARTED ON THIS PROJECT. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**MAINTENANCE OF TRAFFIC - SEQUENCE OF OPERATIONS:**

PHASE 1 - WORK IN THIS PHASE SHALL INCLUDE THE WATERWAY REALIGNMENT, SLOPE REPAIR AND GUARDRAIL REPAIR. THE MOT WILL CONSIST OF THE CLOSURE OF THE RIGHT WESTBOUND LANE PER STANDARD DRAWING MT-95.40. PLACEMENT OF THE PORTABLE CONCRETE BARRIER SHALL NOT IMPINGE UPON THE LEFT LANE. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AN IMPACT ATTENUATOR AT THE UPSTREAM END OF THE PCB.

PHASE 2 - WORK IN THIS PHASE SHALL INCLUDE THE REPLACEMENT OF THE PAVEMENT DISTURBED BY PHASE 1 WORK. THE MOT WILL CONSIST OF THE CLOSURE OF THE RIGHT WESTBOUND LANE PER STANDARD DRAWING MT-95.30. DURATION OF THIS PHASE IS LIMITED TO SEVEN (7) DAYS.

**ITEM 614 - MAINTAINING TRAFFIC:**

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

**ACCESS TO PRIVATE PROPERTY:**

MAINTAIN ACCESS TO COMMERCIAL PROPERTY WITH ONLY ONE DRIVEWAY AT ALL TIMES BY USE OF PART WIDTH CONSTRUCTION.

MAINTAIN ACCESS TO RESIDENTIAL PROPERTIES AT ALL TIMES. WHEN A RESIDENTIAL DRIVE IS CLOSED FOR CONSTRUCTION, MAINTAIN ALTERNATE ACCESS TO THE PROPERTY.

**ITEM 614- MAINTENANCE OF TRAFFIC:**

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

- ITEM 410 - TRAFFIC COMPACTED SURFACE, TYPE A OR B  
= 10 CU YD
- ITEM 616 - WATER = 1 M GAL

**ITEM 614 - MAINTENANCE OF TRAFFIC: MOT DEVICES**

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR MAINTENANCE OF TRAFFIC:

- ITEM 614 - WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL) = 1 EACH
- ITEM 614 - FLASHING ARROW PANEL = 1 EACH
- ITEM 614 - LINEAR DELINEATION = 1020 FT
- ITEM 614 - WORK ZONE EDGE LINE = 0.27 MILE
- ITEM 614 - WORK ZONE DOTTED LINE = 898 FT
- ITEM 622 - PORTABLE CONCRETE BARRIER, 32" = 1020 LF

NO ADDITIONAL COMPENSATION SHALL BE MADE BEYOND THE QUANTITIES LISTED ABOVE, ANY OTHER WORK SHALL BE PAID UNDER THE LUMP SUM PAY ITEM FOR ITEM 614 - MAINTAINING TRAFFIC.

**DROPOFFS IN WORK ZONES:**

THE DROPOFF ADJACENT TO THE TRAVELED LANE SHALL MEE THE CRITERIA OUTLINED IN STANDARD DRAWING MT-101.90. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR MATERIALS, LABOR OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS OF MT-101.90.

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**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 IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOs SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CMS 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 CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

- 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. IN GENERAL, LEOs SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH 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 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. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF THE APPROPRIATE LAW ENFORCEMENT AGENCY(S), INCLUDING ADDRESS AND TELEPHONE NUMBER.

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF THE SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHOULD 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 THE SHIFT.

LAW ENFORCEMENT OFFICERS (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). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

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

**ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS: (CONTINUED)**

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.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN PROVIDED:  
ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR, FOR ASSISTANCE:

= 10 HOUR

SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	CALCULATED	CHECKED			
4-5	6-7	10	11	21	22	23																		
LUMP		33												201	11000	LUMP			CLEARING AND GRUBBING					
						475								202	23000	33	SQ YD		PAVEMENT REMOVED					
														202	38000	475	FT		GUARDRAIL REMOVED					
					662									203	10000	662	CU YD		EXCAVATION					
					610									203	20000	610	CU YD		EMBANKMENT					
		156												204	10000	156	SQ YD		SUBGRADE COMPACTION					
						475								606	13000	475	FT		GUARDRAIL, TYPE 5					
														651	10001	333	CU YD		TOPSOIL STOCKPILED, AS PER PLAN				20/24	
														652	10001	333	CU YD		PLACING STOCKPILED TOPSOIL, AS PER PLAN				20/24	
1														601	21070	373	SQ YD		TIED CONCRETE BLOCK MAT, TYPE 3					
														601	32200	1	CU YD		ROCK CHANNEL PROTECTION, TYPE C WITH FILTER					
10																								
														616	10000	10	M GAL		WATER					
														659	10000	3,019	SQ YD		SEEDING AND MULCHING					
														659	14000	151	SQ YD		REPAIR SEEDING AND MULCHING					
														659	15000	151	SQ YD		INTER-SEEDING					
														659	20000	0.41	TON		COMMERCIAL FERTILIZER					
														659	31000	0.62	ACRE		LIME					
														659	35000	16	M GAL		WATER					
														670	00720	683	SQ YD		DITCH EROSION PROTECTION MAT, TYPE B					
														832	30000	15,000	EACH		EROSION CONTROL					
20																								
20														603	00200	20	FT		4" CONDUIT, TYPE C					
20														603	01100	20	FT		6" CONDUIT, TYPE C					
														603	02000	20	FT		8" CONDUIT, TYPE C					
					</																			





REFERENCE SHEET	STATION		SIDE	LENGTH FT	202		204		301		304		407		407		448		617		REMARKS
					PAVEMENT REMOVED		SUBGRADE COMPACTION		7" ASPHALT CONCRETE BASE, PG 64-22		6" AGGREGATE BASE		TACK COAT (0.075 GAL/SQ. YD.)		TACK COAT FOR INTERMEDIATE COURSE (0.040 GAL/SQ. YD.)		3.0" ASPHALT CONCRETE SURFACE COURSE, TYPE I, PG64-22		6" COMPACTED AGGREGATE		
	(L * W)/9				(L * W)/9		(L*W) * (7.0/12)/27		(L*W) * (6.0/12)/27		(L * W)/9 * 0.075		(L * W)/9 * 0.040		(L*W) * (3.0/12)/27		(L*W) * (6.0/12)/27				
	AVG. WIDTH	AREA			AVG. WIDTH	AREA	AVG. WIDTH	VOLUME	AVG. WIDTH	VOLUME	AVG. WIDTH		AVG. WIDTH		AVG. WIDTH	VOLUME	AVG. WIDTH	VOLUME			
FROM	TO	FT	SQ YD	FT	SQ YD	FT	CU YD	FT	CU YD	FT	GALLON	FT	GALLON	FT	CU YD	FT	CU YD				
12	45+40.00	46+40.00	LT	100.0	3.00	33.3	14.0	155.6	12.3	26.6	12.5	23.1	12.3	10	12.0	5.3	12.0	11.1	2.0	3.7	
TOTALS CARRIED TO GENERAL SUMMARY						33		156		27		23		10		5		11		4	

CALCULATED  
CHECKED

**PAVEMENT SUBSUMMARY**

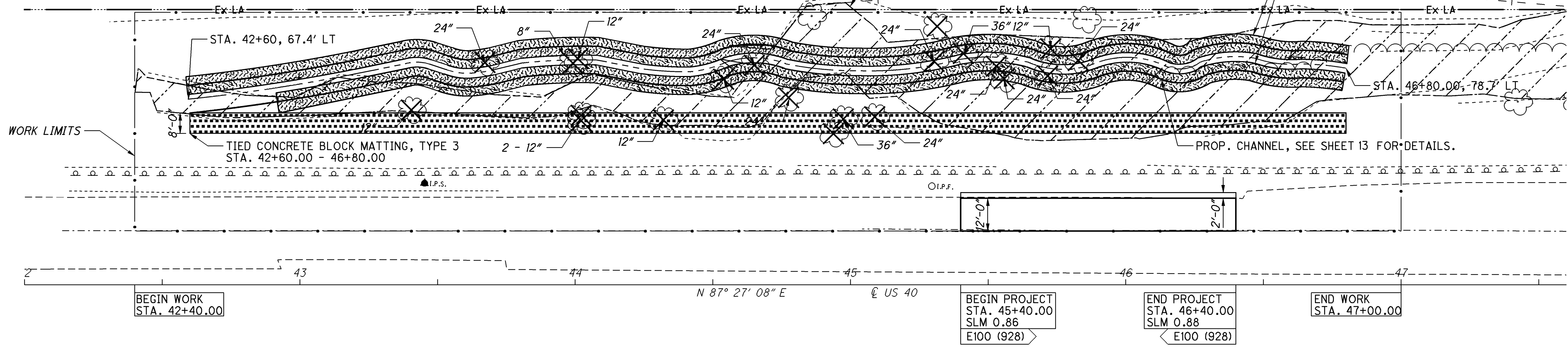
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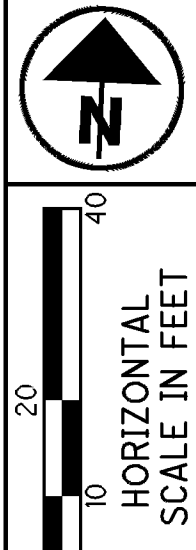
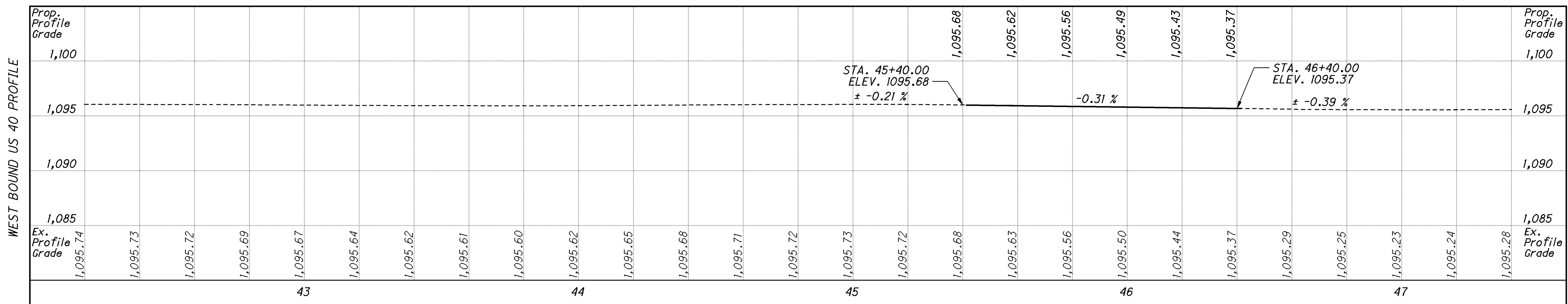
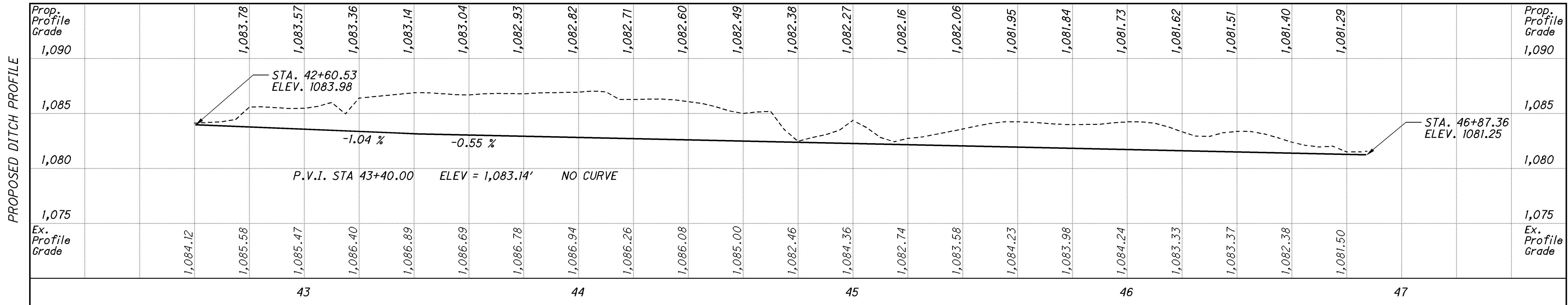
GARY D & MARY P PEART  
4995 ROBERTS MILL RD  
LONDON, OH 43140  
24-01089.001

APPROXIMATE LIMITS OF OHWM  
OHWM ELEVATION = 1085.00

DITCH EROSION PROTECTION MAT, TYPE B  
7.5' WIDE, STA. 42+60.00 TO 46+80.00 LEFT BANK,  
STA. 42+80.00 TO 46+80.00 RIGHT BANK



FOR GUARDRAIL DETAILS AND QUANTITIES SEE SHEET 23.  
FOR PAVEMENT QUANTITIES SEE SHEET 10.  
FOR TRAFFIC CONTROL QUANTITIES SEE SHEET 11.  
FOR TRAFFIC CONTROL PLAN SEE SHEET 24.  
FOR LANDSCAPING DETAILS SEE SHEET 13.



CALCULATED  
CHECKED

**PLAN AND PROFILE**  
**STA. 42+00.00 - 47+50.00**

**MAD - 40-0.86**

12  
24

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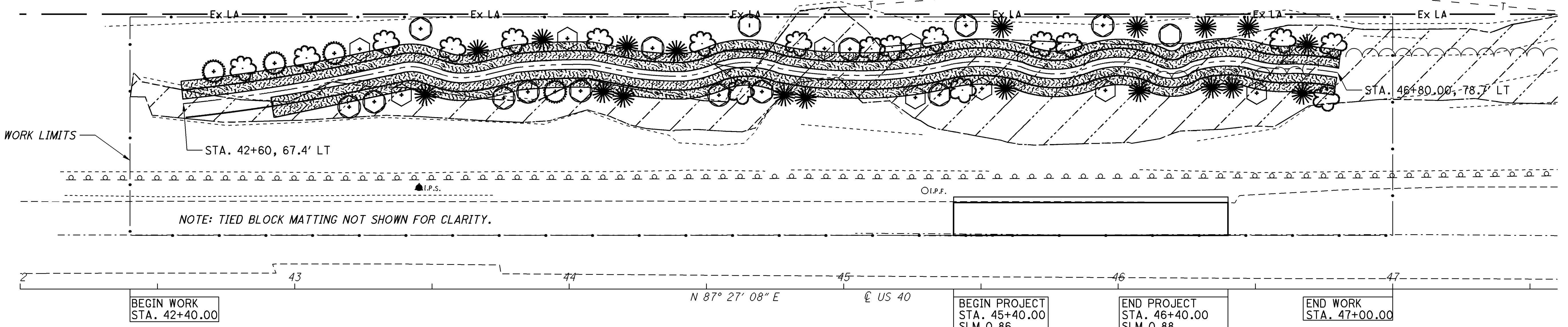
0 10 20 40  
HORIZONTAL SCALE IN FEET

CALCULATED  
CHECKED

CHANNEL DETAILS  
LANDSCAPING

MAD - 40 - 0.86

13  
24



STREAM MITIGATION WOODY PLANTING SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	QUANTITY
SALIX NIGRA	BLACK WILLOW	1" CALIPER	BALLED & BURLAPPED	9
POPULUS DELTOIDES	COTTONWOOD	1" CALIPER	BALLED & BURLAPPED	18
PLATANUS OCCIDENTALIS	SYCAMORE	1" CALIPER	BALLED & BURLAPPED	15
JUGLANS NIGRA	BLACK WALNUT	1" CALIPER	BALLED & BURLAPPED	19
ACER SACCAHRUM	SILVER MAPLE	1" CALIPER	BALLED & BURLAPPED	4

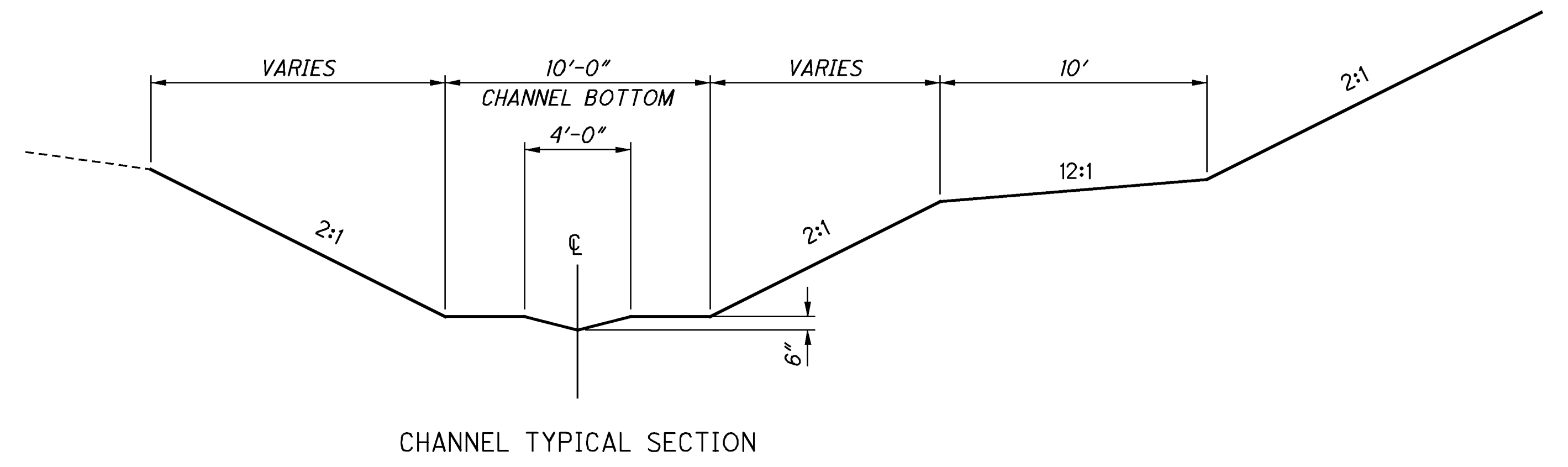
PLANTING SCHEMATIC LEGEND

- ACER SACCHARIUM - AS - SILVER MAPLE
- POPULUS DELTOIDES - PD - COTTONWOOD
- SALIX NIGRA - SN - BLACK WILLOW
- PLATANUS OCCIDENTALIS - PO - SYCAMORE
- JUGLANS NIGRA - JN - BLACK WALNUT

CHANNEL C DATA

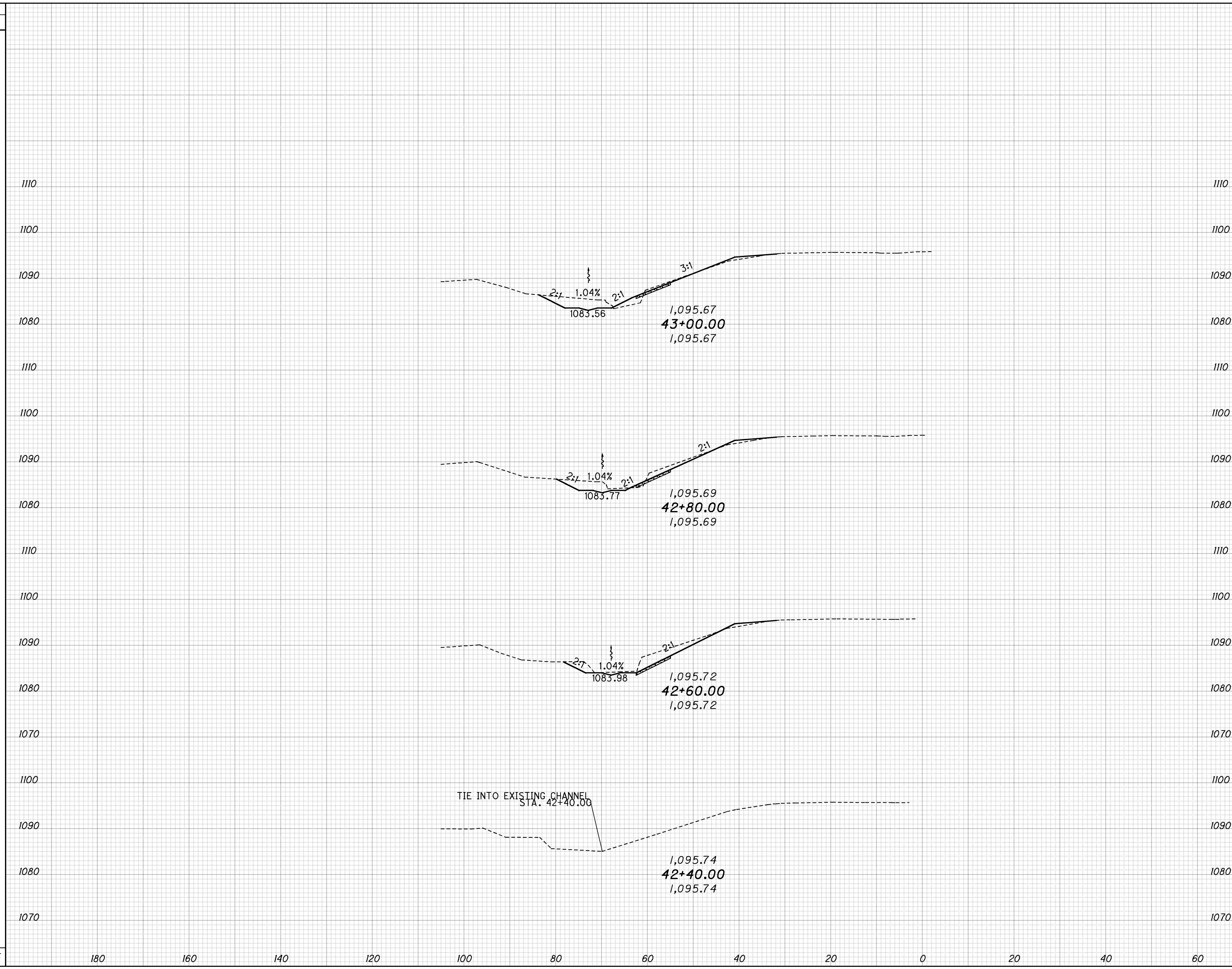
US 40 STATION	DITCH CL OFFSET	SIDE
42+60	67.40'	LEFT
42+80	69.90'	LEFT
43+00	72.94'	LEFT
43+20	76.59'	LEFT
43+40	80.70'	LEFT
43+60	78.85'	LEFT
43+80	80.46'	LEFT
44+00	81.70'	LEFT
44+20	79.30'	LEFT
44+40	77.39'	LEFT
44+60	82.11'	LEFT
44+80	79.62'	LEFT
45+00	77.77'	LEFT
45+20	78.36'	LEFT
45+40	81.92'	LEFT
45+60	81.88'	LEFT
45+80	78.39'	LEFT
46+00	82.63'	LEFT
46+20	78.41'	LEFT
46+40	82.92'	LEFT
46+60	80.08'	LEFT
46+80	78.70'	LEFT

SEE SHEET 21 FOR STREAM MITIGATION SUBSUMMARY.



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SEEDING  
 END SO.  
 WIDTH YDS.  
 156 285  
 180 160 140 120 100 80 60 40 20 0 20 40 60  
 1110 1100 1090 1080 1070 1060 1050 1040 1030 1020 1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780 770 760 750 740 730 720 710 700 690 680 670 660 650 640 630 620 610 600 590 580 570 560 550 540 530 520 510 500 490 480 470 460 450 440 430 420 410 400 390 380 370 360 350 340 330 320 310 300 290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0  
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 SHEET\_XS001  
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END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
29.1	12.7				
		22	7		
29.5	5.6				
		24	4		
35.6	3.9				
		13	1		
0	0				
94.2	22.2	59	12		

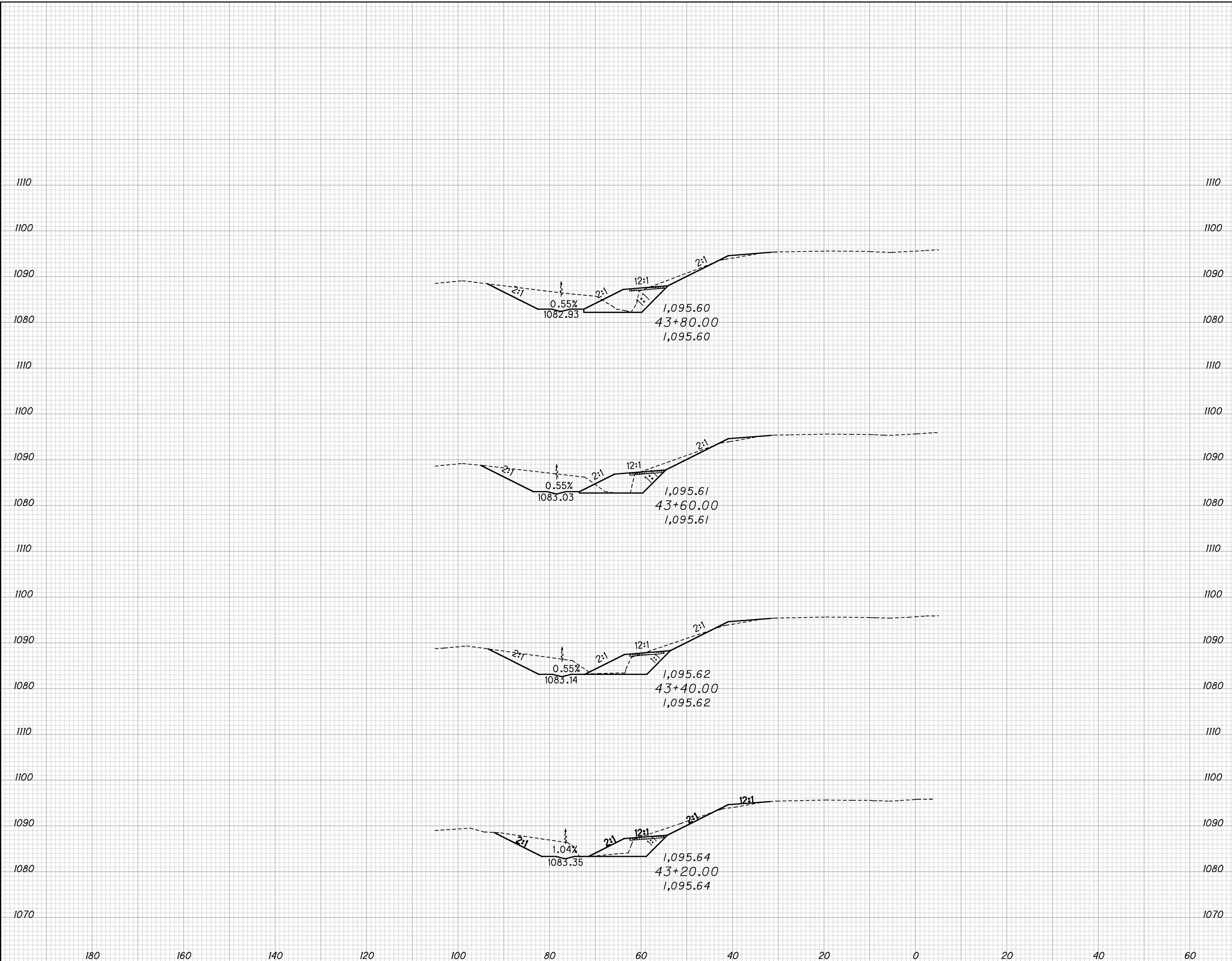
**CROSS SECTIONS  
 US 40 STA. 42+40.00 - 43+00.00**

**MAD - 40 - 0.86**

14  
 24

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SEEDING	
END WIDTH	SO. YDS.
263	562



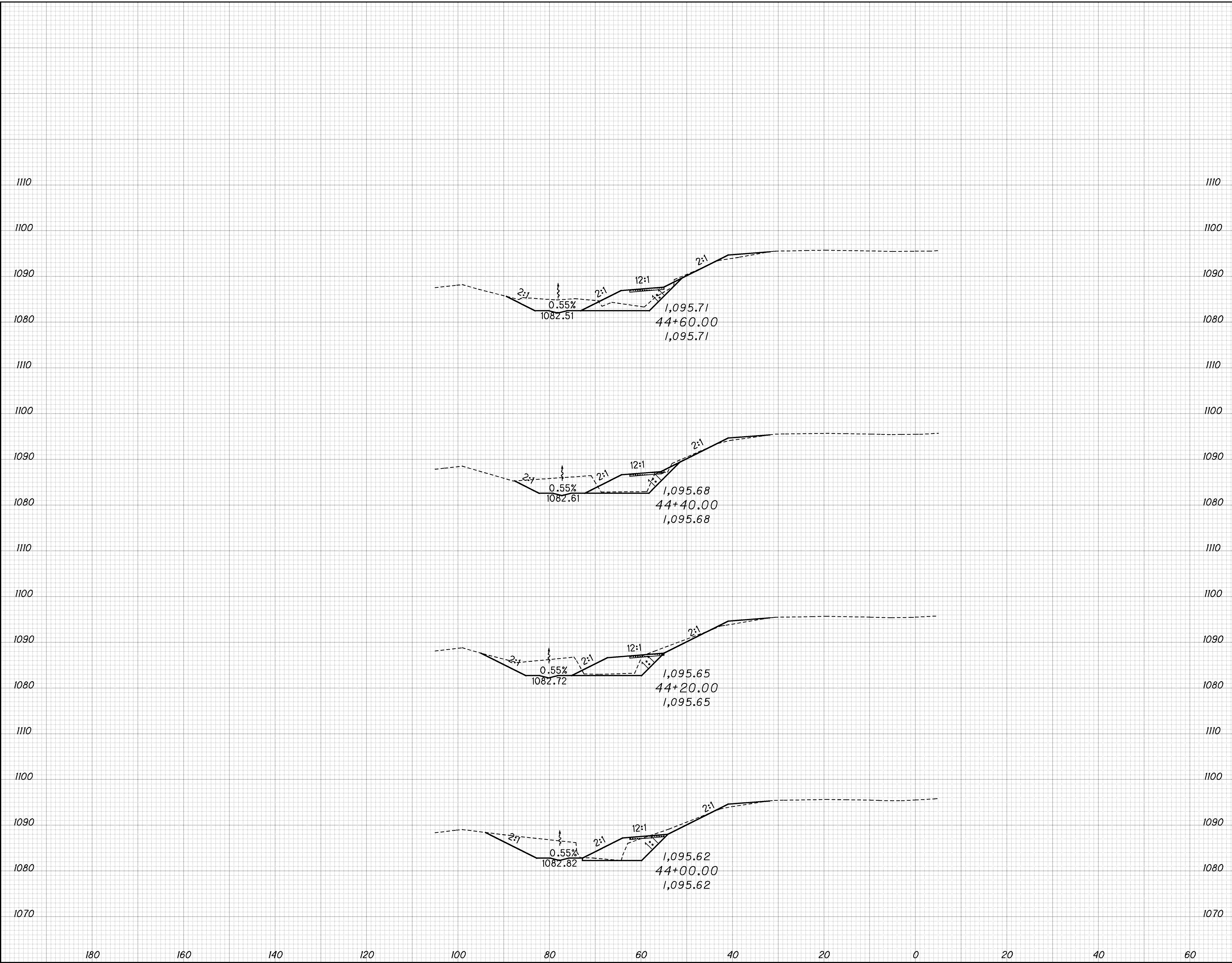
END AREA		VOLUME	
CUT	FILL	CUT	FILL
75.3	30.5	59	23
83.8	31.4	55	21
65.5	25.7	46	18
57.7	21.9	32	13
282.3	109.5	192	75

**CROSS SECTIONS**  
**US 40 STA. 43+20.00 - 43+80.00**  
**MAD-40-0.86**

15  
24

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SEEDING	
END WIDTH	SO. YDS.
253	569



END CUT	AREA FILL	VOLUME	
		CUT	FILL
219.3	161.8	175	115
65.5	31.3	52	23
61.1	43.2	47	28
52.5	43.5	42	32
40.2	43.8	34	32

**CROSS SECTIONS**  
**US 40 STA. 44+00.00 - 44+60.00**

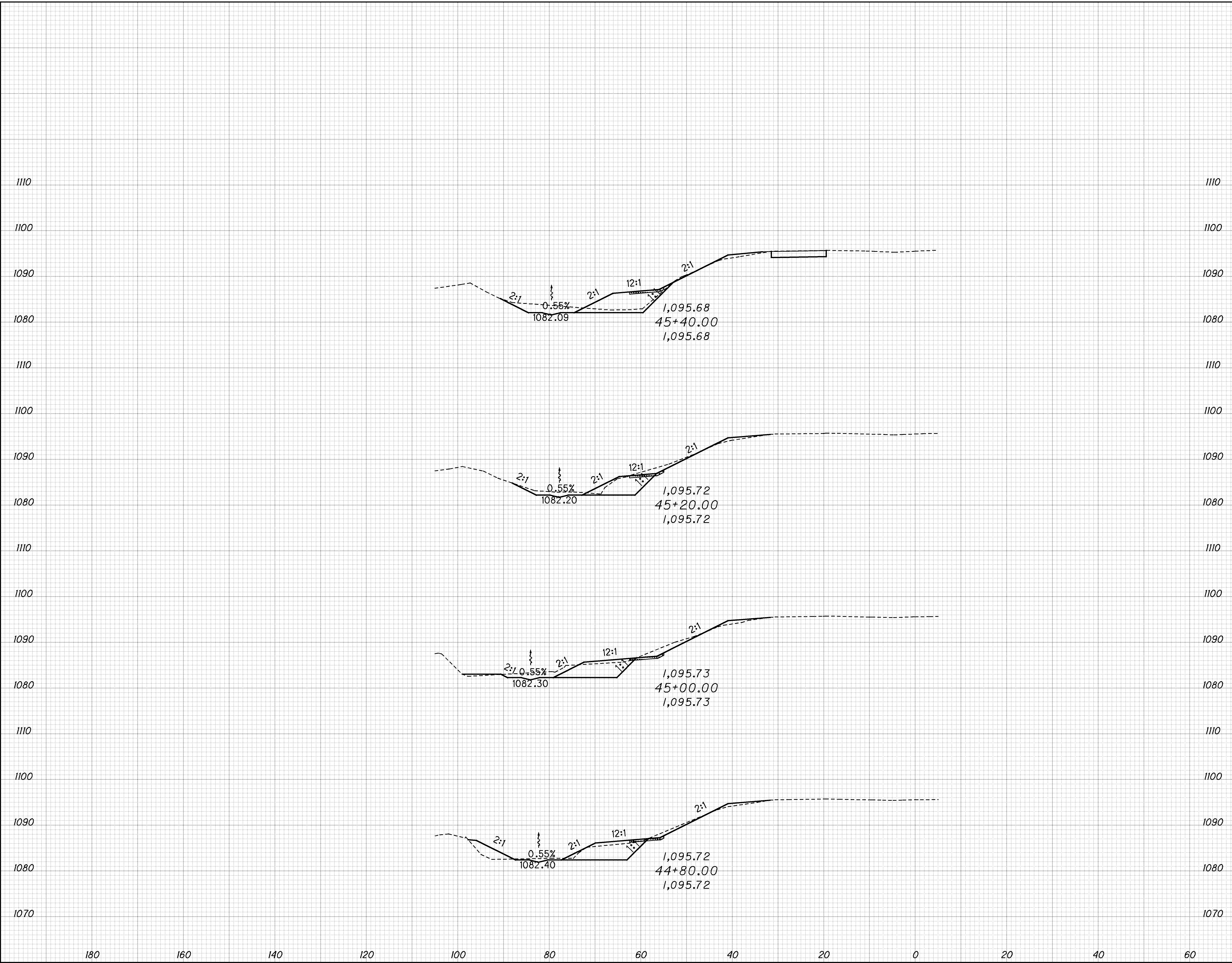
**MAD - 40 - 0.86**

16  
24



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SEEDING	
END WIDTH	SO. YDS.
261	581



END AREA		VOLUME		CALCULATED	CHECKED
CUT	FILL	CUT	FILL		
23.3	53.0	16	24		
19.0	11.1	17	9		
27.3	14.0	14	17		
9.3	30.9	18	28		
78.9	109	65	78		

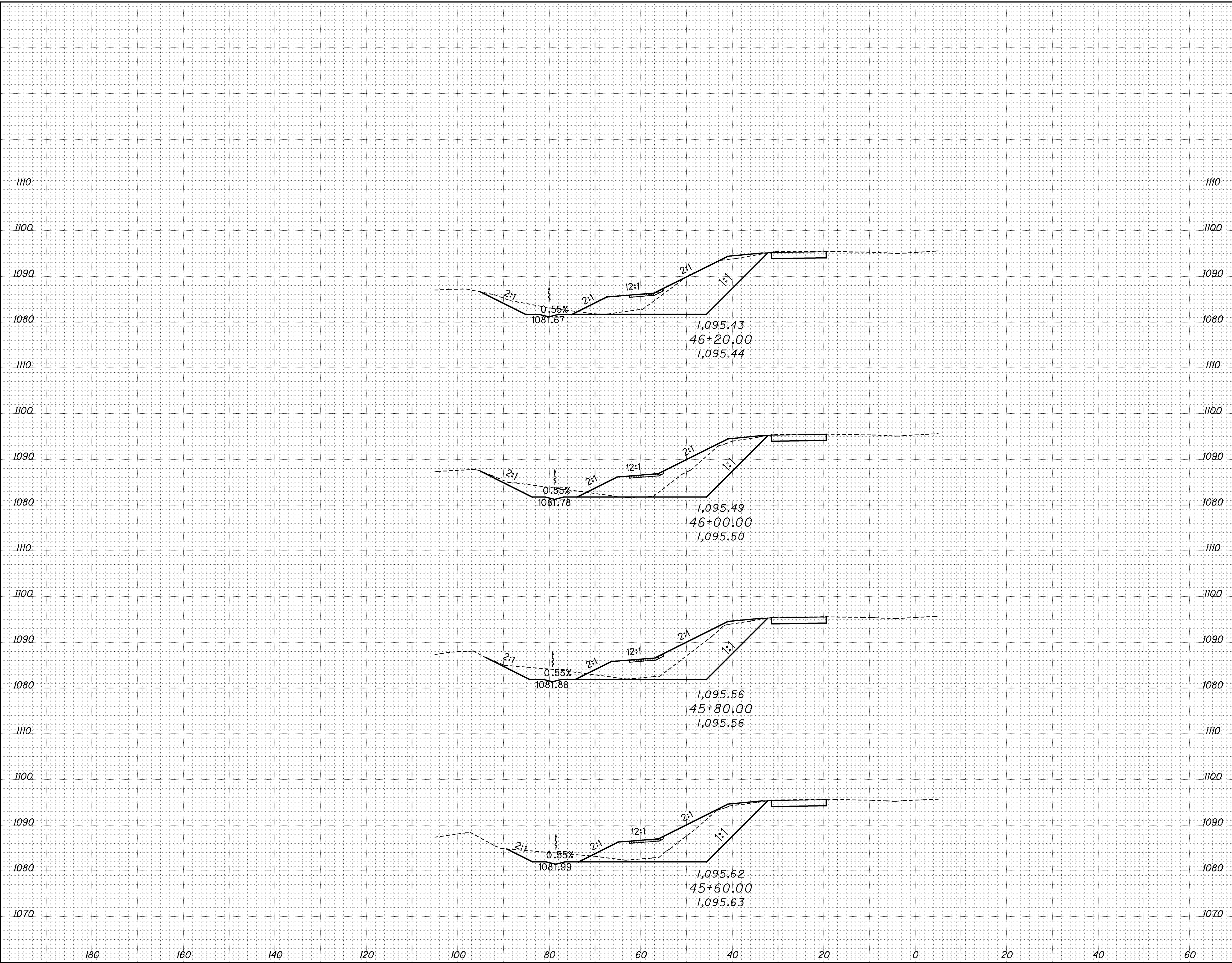
**CROSS SECTIONS**  
**US 40 STA. 44+80.00 - 45+40.00**

**MAD - 40-0.86**

17  
24

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SEEDING	
END WIDTH	SO. YDS.
255	563



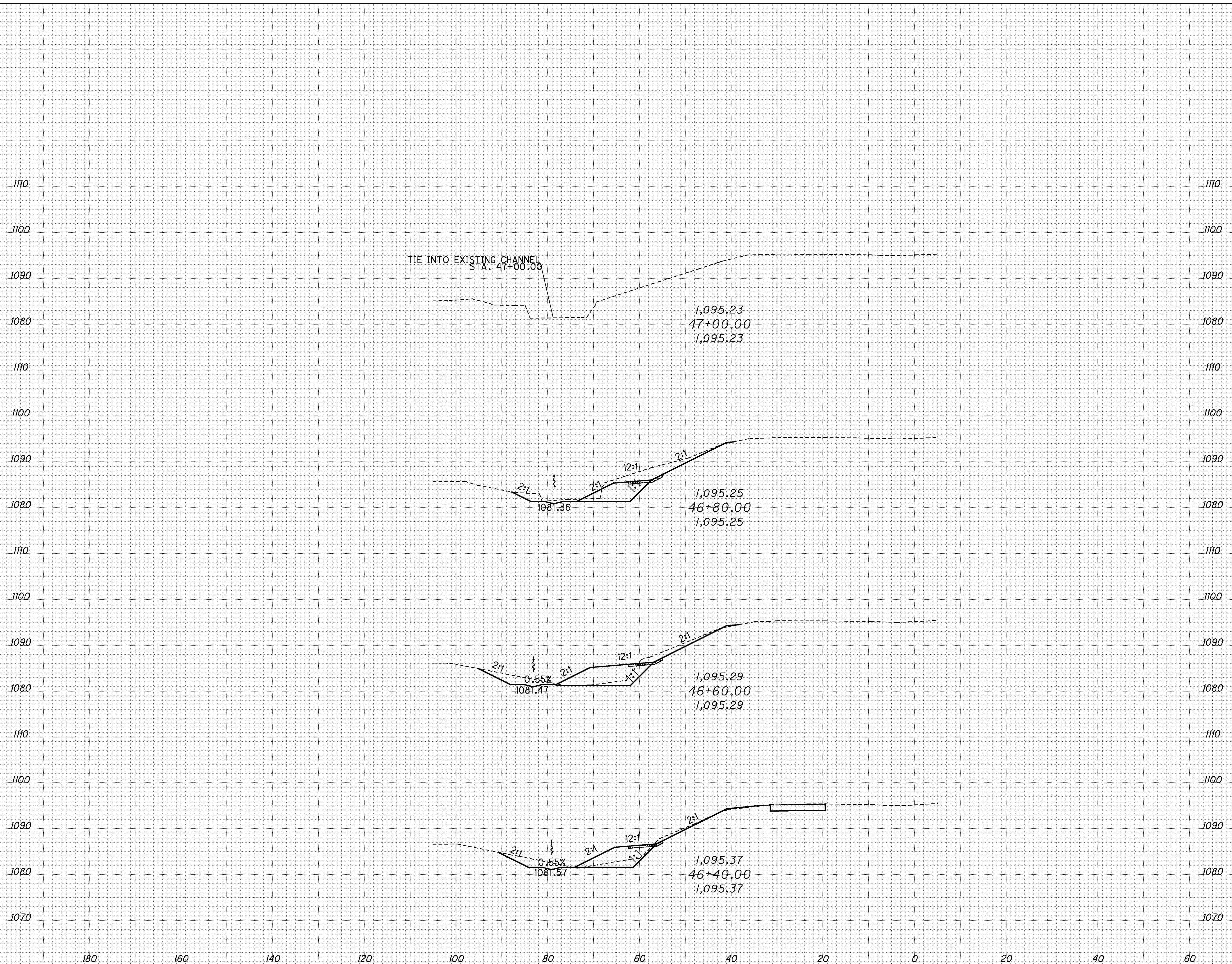
END CUT	AREA FILL	VOLUME	
		CUT	FILL
28.4	57.6	22	57
31.6	95.3	24	70
33.2	93.5	23	64
29.2	80.5	19	49
122.4	326.9	88	240

**CROSS SECTIONS**  
**US 40 STA. 45+60.00 - 46+20.00**  
**MAD-40-0.86**

18  
24

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SEEDING	
END WIDTH	SO. YDS.
174	459



END AREA		VOLUME	
CUT	FILL	CUT	FILL
0	0	16	2
43.1	4.5	28	20
33.2	49.3	20	32
21.6	38.3	19	36
97.9	92.1	83	90

**CROSS SECTIONS**  
**US 40 STA. 46+40.00 - 47+00.00**  
**MAD-40-0.86**

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**CONSTRUCTION SEQUENCE:**

THE CONTRACTOR SHALL PERFORM THE STREAM MITIGATION IN A DRY CONDITION, MEANING THAT THE WATER FLOW SHALL BE ROUTED THROUGH BYPASS PUMPING TO ALLOW THE EXISTING CHANNEL TO BE MODIFIED INTO THE PROPOSED CHANNEL.

**ITEM SPECIAL - STREAM CHANNEL ROCK STOCKPILED AND PLACED**  
CONTRACTOR SHALL FURNISH LABOR, MATERIALS AND EQUIPMENT TO STRIP THE EXISTING STREAMBOTTOM TO A DEPTH OF 12 INCHES WITHIN THE LIMITS OF THE PROPOSED STREAMBOTTOM SHOWN ON THE PLANS. THE PROJECT ENGINEER WILL MARK ANY LARGE PIECES OF TOPSOIL AND ORGANIC MATERIAL THAT MAY BE PRESENT IN THE EXISTING STREAMBED. THIS ORGANIC MATERIAL SHALL BE DISPOSED OF OFF SITE, AND NOT STORED WITH THE STREAM CHANNEL ROCK.

THE CHANNEL ROCK SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER SHALL ENSURE THAT THE PLACEMENT OF THE CHANNEL ROCK STOCKPILE WILL NOT INTERFERE WITH OTHER ROADWAY RELATED WORK.

AFTER EXCAVATION, EMBANKMENT CONSTRUCTION AND SUBGRADE COMPACTION IS COMPLETE, THE STOCKPILED CHANNEL ROCK SHALL BE SPREAD OVER THE PROPOSED CHANNEL BED TO A DEPTH OF 12 INCHES.

PAYMENT FOR THIS ITEM SHALL BE MADE UNDER THE UNIT PRICE BID FOR ITEM SEPCIAL STREAM CHANNEL ROCK STOCKPILED AND PLACED = 158 CY.

**ITEM 651 - TOPSOIL STOCKPILED, AS PER PLAN**

CONTRACTOR SHALL FURNISH LABOR, MATERIALS, AND EQUIPMENT TO STRIP TOPSOIL TO A DEPTH OF 12 INCHES WITHIN THE LIMITS OF THE GRADES SHOWN ON THE PLANS. TOPSOIL SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE PROJECT ENGINEER. THE PROJECT ENGINEER SHALL ENSURE THAT THE PLACEMENT OF THE TOPSOIL STOCKPILE WILL NOT INTERFERE WITH OTHER ROADWAY RELATED WORK.

PAYMENT FOR THIS ITEM SHALL BE MADE UNDER THE UNIT PRICE BID FOR ITEM 651 TOPSOIL STOCKPILED, AS PER PLAN. = 333 CY

**ITEM 652 - PLACING STOCKPILED TOPSOIL, AS PER PLAN**

CONTRACTOR SHALL FURNISH LABOR, MATERIALS, AND EQUIPMENT TO PLACE STOCKPILED TOPSOIL IN ACCORDANCE WITH ODOT CMS 652. AFTER EXCAVATION, EMBANKMENT CONSTRUCTION AND SUBGRADE COMPACTION IS COMPLETE, THE STOCKPILED TOPSOIL SHALL BE SPREAD OVER THE STRIPPED AREA TO A DEPTH OF 12 INCHES.

PAYMENT FOR THIS ITEM SHALL BE MADE UNDER THE UNIT PRICE BID FOR ITEM 652, PLACING STOCKPILED TOPSOIL, AS PER PLAN. = 333 CY

**ITEM 659 - SEEDING AND MULCHING**

SCHEDULING FOR THE VEGETATIVE PLANTING FOR THE STREAM MITIGATION AREA WILL BE CONDUCTED IN 2 PHASES. THE SEEDING AND MULCHING FOR THE STREAMBANKS SHALL BE CONDUCTED BETWEEN APRIL 1 AND SEPTEMBER 1. THE UPLAND SEEDING AND MULCHING AND PLANTING OF WOODY VEGETATION (ITEM 661, DECIDUOUS TREES AND SHRUBS) SHALL BE CONDUCTED BETWEEN SEPTEMBER 1 AND NOVEMBER 1 THE FALL FOLLOWING THE PLACEMENT OF THE OF THE STREAMBANK SEEDING. THE CONTRACTOR AND THE PROJECT ENGINEER SHALL COORDINATE THE CONSTRUCTION SCHEDULE OF THIS PROJECT IN ORDER TO COMPLY WITH THIS SEEDING SCHEDULE.

**STREAM SEEDING PERIOD**

WITHIN 72 HOURS OF COMPLETION OF STREAM AREA GRADING OPERATIONS, STREAM SEEDING IN THOSE AREAS SHALL COMMENCE. ALL STREAM SEEDING SHALL BE DONE "IN THE DRY." SEEDING SHALL NOT TAKE PLACE WHEN THE GROUND OR OVERLYING WATER IS FROZEN OR WHEN CONDITIONS ARE OTHERWISE UNSATISFACTORY TO PLANTING. INUNDATED AREAS SHALL NOT BE SEEDED.

AREAS ERODED BY STORM EVENTS DURING THE ESTABLISHMENT PERIOD SHALL BE REPAIRED AND RESEDED WITH THE APPROPRIATE SEED MIX AS DIRECTED BY THE PROJECT ENGINEER AND STREAM SPECIALIST. THE ESTABLISHMENT PERIOD BEGINS AT THE FIRST DATE OF SEED APPLICATION, AND CONTINUES UNTIL 1 YEAR AFTER THE FIRST DATE OF SEED APPLICATION.

STREAM MIX SHALL BE SOWN IN ACCORDANCE WITH CMS 659.12.

**SEEDING APPLICATION**

SEED MIX SHALL BE APPLIED ON THE CHANNEL BANKS AREA BETWEEN APRIL 1 AND SEPTEMBER 1 IN ACCORDANCE WITH THE FOLLOWING:

-DRY SOIL APPLICATION: SEED STREAM MIX WITH A NATIVE GRASS SEED DRILL. SEED STREAM MIX WITH NO LESS THAN TWO PASSES IN DIFFERENT DIRECTIONS AND BY SPLITTING THE SEED APP;ICATION RATE FOR EACH PASS.

IMMEDIATELY AFTER SOWING THE SEED LIGHTLY RAKE THEN ROLL THE ENTIRE CHANNEL BANKS TO PROVIDE GOOD SEED TO SOIL CONTACT. SEED GERMINATION IS REQUIRED PRIOR TO CONNECTING THE STREAM MITIGATION CHANNEL TO THE HEADWATERS. NO STANDING WATER WILL BE PRESENT IN CHANNEL UNTIL SEED HAS GERMINATED AND PLANTS HAVE REACHED A HEIGHT OF 2 INCHES.

MULCHING AND WATERING OF THE CHANNEL IS AS PER ITEM 659. MAINTENANCE REPAIR SEEDING AND MULCHING, PERFORMANCE, AND METHOD OF MEASUREMENT SHALL BE AS PER ITEM 659.

**PLANTING PROCEDURES**

PLANTING OF DECIDUOUS TREES & SHRUBS SHALL OCCUR DURING THE FALL (SEPTEMBER 1 THROUGH NOVEMBER 15) FOLLOWING THE SUMMER PLANTING OF THE GRASS SEED MIX ALONG THE STREAM CHANNEL BANKS. GENERAL PLANTING PROCEDURES FOR PLANTING OF DECIDUOUS TREES SHALL BE AS PER ITEM 661.

THE PLANTING PERIOD OF ESTABLISHMENT FOR THE DECIDUOUS TREES & SHRUBS SHALL BE AS PER ITEM 661.17.

PAYMENT WILL BE MADE UNDER THE PRICE BID FOR ITEM 661, DECIDUOUS TREES AND SHRUBS.

**REMOVAL OF STAKES AND WRAPPING**

BEFORE FINAL INSPECTION THE CONTRACTOR SHALL REMOVE AND DISPOSE OF STAKES, GUY WIRES AND WRAPPING MATERIAL FROM ALL PLANTS WITH THE EXCEPTION OF THE REPLACEMENT PLANTINGS THAT HAVE NOT BEEN IN PLACE FOR A FULL GROWING SEASON, IN ACCORDANCE WITH ODOT CMS 661.18.

**ITEM 662 LANDSCAPE WATERING**

UNPREDICTABLE WATER DEFICIT CONDITIONS MAY REQUIRE WATER APPLICATION TO PRESERVE STREAM PLANTINGS DURING THE CRITICAL ESTABLISHMENT PERIOD. THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE PROJECT ENGINEER.

ITEM 662 LANDSCAPE WATERING 1 M GAL PER WATERING EVENT.

PAYMENT WILL BE MADE UNDER THE UNIT PRICE BID FOR ITEM 662 LANDSCAPE WATERING. = 1 M GAL.

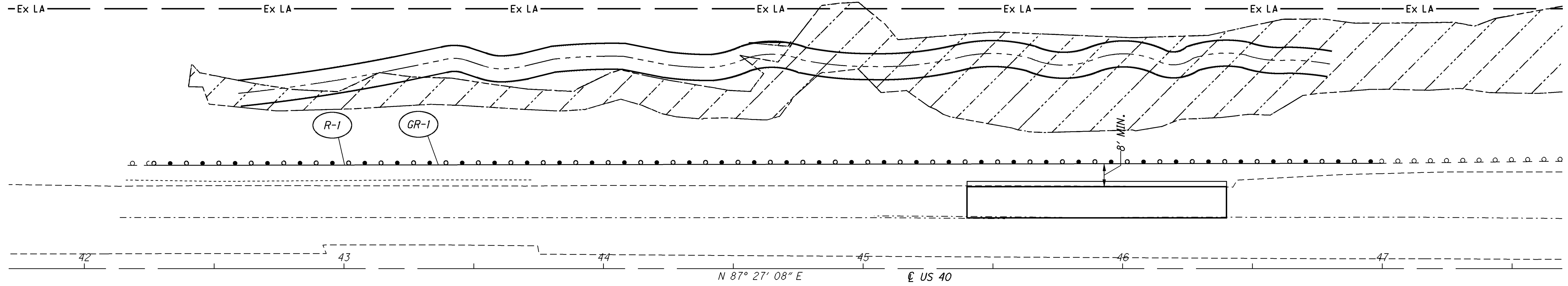
CALCULATED	CHECKED
<b>STREAM MITIGATION NOTES</b>	
<b>MAD - 40 - 0.86</b>	
20	24

SHEET NUMBER					ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
12	13	20								
									<b>STREAM CHANNEL</b>	
		333			651	10001	333	CU YD	TOPSOIL STOCKPILED, AS PER PLAN	
		333			652	10001	333	CU YD	PLACING STOCKPILED TOPSOIL, AS PER PLAN	
									<b>EROSION CONTROL</b>	
373					601	21070	373	SQ YD	TIED CONCRETE BLOCK MAT, TYPE 3	
		158			SPECIAL	60134500	158	CU YD	STREAM CHANNEL ROCK STOCKED PILED AND PLACED	
683					670	00720	683	SQ YD	DITCH EROSION PROTECTION MAT, TYPE B	
									<b>LANDSCAPING</b>	
					661	40040	9	EACH	DECIDUOUS TREE, 1" CALIPER, SALIX NIGRA, BLACK WILLOW	
					661	40040	18	EACH	DECIDUOUS TREE, 1" CALIPER, POPULUS DELTOIDES, COTTONWOOD	
					661	40040	15	EACH	DECIDUOUS TREE, 1" CALIPER, PLATANUS OCCIDENTALIS, SYCAMORE	
					661	40040	19	EACH	DECIDUOUS TREE, 1" CALIPER, JUGLANS NIGRA, BLACK WALNUT	
					661	40040	4	EACH	DECIDUOUS TREE, 1" CALIPER, ACER SACCAHRUM, SILVER MAPLE	
		1			662	30000	1	M GAL	LANDSCAPE WATERING	

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REF NO.	STATION		SIDE	202	606	626	REMARKS
	FROM	TO		GUARDRAIL REMOVED	GUARDRAIL, TYPE 5	BARRIER REFLECTOR, TYPE A	
				FT	FT	EACH	
R-1	42+25.00	47+00.00	LT	475			
GR-1	42+25.00	47+00.00	LT		475	5	
TOTALS CARRIED TO GENERAL SUMMARY				475	475	5	

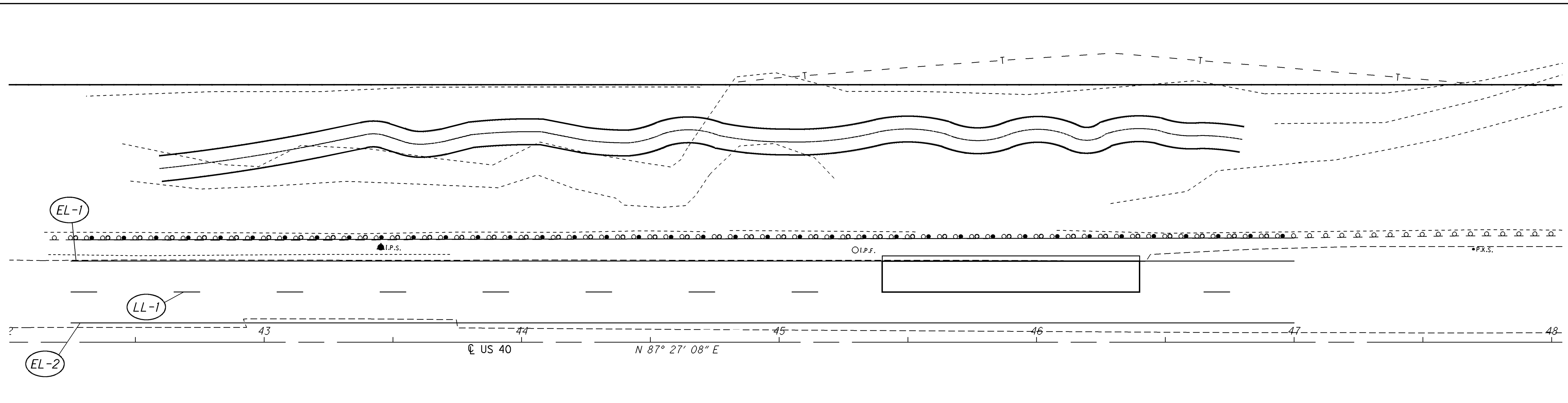
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HORIZONTAL SCALE IN FEET

GUARDRAIL PLAN

MAD - 40 - 0.86

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FOR TRAFFIC CONTROL QUANTITIES SEE SHEET 11 .  
 FOR GUARDRAIL QUANTITIES AND DETAILS SEE SHEET 23.  
 FOR PLAN AND PROFILE SEE SHEET 12.

**LEGEND**

- (EL-#) EDGE LINE
- (LL-#) LANE LINE

 HORIZONTAL SCALE IN FEET 0 20 40	
CALCULATED	CHECKED

**TRAFFIC CONTROL PLAN**

**MAD - 40 - 0.86**



# SPECIAL PROVISIONS

# WATERWAY PERMITS CONDITIONS

C-R-S: MAD-40-0.86

PID: 89178

Date: 5-7-2012

## 1. Waterway Permit Time Restrictions:

Complete all work in streams depicted in the plans and/or Special Provisions by 10-23-14.

For work on streams, the Department will consider the Contractor's submission of an extension to the waterway permit end date based on project constraints. In order to be considered, the Contractor must submit a justification to the Engineer at least two months prior to the waterway permit end date.

The Engineer will submit the request for a time extension to ODOT- Office of Environmental Services- Waterway Permits Unit (614-466-7100) for consideration and coordination with the USACE and/or Ohio EPA.

## 2. Deviations from Permitted Construction Activities

No deviation from the requirements for work in streams and wetlands depicted in the plans, Special Provisions, and/or working drawings may be made unless a modification has been submitted to ODOT and approved by the appropriate agencies (i.e., USACE, Ohio EPA, USCG, ODNR, and USFWS).

For emergency situations resulting in unanticipated impacts to streams or wetlands, provide notification (verbal or written) to the Engineer as soon as possible following discovery of the situation. Written notification to the Engineer and notification to the ODOT- Office of Environmental Services- Waterway Permits Unit must be made within 24 hours.

For non-emergency situations, notify the Engineer in writing for submission to the ODOT- Office of Environmental Services- Waterway Permits Unit (614-466-7100) for consideration and coordination with the appropriate agencies. Notification must be made at least two months prior to planned non-permitted activities. Consideration of the requested deviation is at the discretion of the Director and must be coordinated with the appropriate regulatory agencies.

## 3. In-Stream Work Restrictions

Work in the following sensitive streams is further restricted as follows:

Stream Name /Description	Location	Work restriction dates (No in-stream work permitted)
Unnamed tributary to Deer Creek	STA 42+40.00 to STA 47+00.00	None

Examples of "fill materials" include (but are not limited to) bridge piers, abutments, bridge demolition debris, culverts, rock channel protection, scour protection, and temporary work pads. Temporary work pads can be constructed of rock or include any structures (e.g., scaffolds, ladders, barges that touch the bottom of the stream, etc). *Temporary fill is not permitted for this project.*

Fills placed within a stream identified in the above table outside of the work restriction dates can continue to be worked from during the work restriction dates, but cannot be expanded, removed, or otherwise modified (below ordinary high water) until once again outside of the work restriction dates.

The Engineer will submit the request for a time extension to ODOT- Office of Environmental Services- Waterway Permits Unit (614-466-7100) for consideration and coordination with the USACE and/or Ohio EPA.

Special Provisions for MAD-40-0.86, PID 89178

4. Materials:

Materials utilized in or adjacent to streams and wetlands on this project for temporary or permanent fill or bank protection shall consist of suitable material free from toxic contaminants in other than trace quantities. Broken asphalt is specifically excluded.

Cadmium, chromium, arsenate (CCA), creosote, and other pressure treated lumber shall not be used in structures that are placed in wetlands and streams.

5. Cultural Resources

If archeological sites or human remains are discovered, cease all work in the immediate area and notify the Engineer who will immediately contact the Office of Environmental Services – Cultural Resource Section (614-466-7100) and the Ohio Historic Preservation Office.

In the event of human remains are discovered the Engineer shall also contact the Madison County Sherriff's Office (740) 852-1332.

6. Water Resource Demarcation:

All streams, wetlands, lakes, and ponds indicated on the plans shall be demarcated in the field as per SS 832 prior to site disturbance. The fence shall remain in place and be maintained throughout the construction process. Following the completion of the project, the fence and posts shall be removed.

7. Spill containment:

Provide and Maintain an Oil Spill Kit with a minimum capacity of 65 gallons. The Spill Kit shall contain:

- 6 - 3 in. X 8 ft. Oil only socks
- 4 - 18 in. X18 in. Oil only pillows
- 2 - 5 in. X 10ft. Booms
- 50 - 16in. X 20 in. Oil only pads
- 10- Disposable Bags
- 1- 65 Gallon drum with lid
- 25 pounds of Granular Oil Absorbent

The Oil Spill Kit shall be located within 150 feet of any equipment working in a stream or wetland. The oil Spill Kit shall be maintained for the life of the contract. Any materials utilized during the project will be replaced within 48 hours.

All costs associated with furnishing and maintaining the above referenced spill containment kit is incidental to work.

8. Blasting:

State law requires notification to the Ohio Department of Natural Resources should blasting be required within or near stream channels (See ORC 1533.58 & CMS 107.09).

Notify Engineer, in writing, for submission to ODOT Office of Environmental Services – Waterway

Special Provisions for MAD-40-0.86, PID 89178

Permits Unit (614-466-7100) for coordination with the Ohio Department of Natural Resources.

9. Waterway Permits:

Regional General Permit (RGP) Section B is authorized for MAD-40-0.86, PID 89178. A copy of the RGP shall be kept at the work site at all times and made available to all contractors and subcontractors. The Permit is effective starting: 5-7-2012 . The Permit expires: 10-23-2014 .

10. Bridge Inspection:

Prior to the removal of bridge structures, the underside must be carefully examined for the presence of birds and bats. Should any birds or bats be found roosting on the underside of the bridge, the Contractor is required to notify the Engineer for coordination with ODOT- Office of Environmental Services (614-466-7100).

11. Project Inspection:

Inspection of Work may include inspection by representatives of other government agencies or railroad corporations that pay a portion of the cost of the Work or regulate the Work through State and Federal law. Comments from the representatives of these agencies shall be directed to the Engineer. Please forward a copy to ODOT Office of Environmental Services. Waterway Permits Unit (614-466-7100).

12. Impacts and Temporary Fill:

A total of 460 linear feet of unnamed tributary to Deer Creek is authorized for relocation to address the slip repair. No impacts to wetlands are authorized.

No temporary impacts to the stream are authorized to complete the proposed work, which includes access fills, causeways, work pads, dewatering, sheet piling, discharges, cofferdams, and construction equipment. If any temporary fill and/or impacts are deemed necessary, please coordinate with Office of Environmental Services at 614-466-7100.

13. Excavation Activities:

Excavated material will be placed at an upland location and disposed of in such a manner that sediment and runoff to streams is controlled and minimized. If any changes to the proposed work are deemed necessary, you must notify and coordinate with the Office of Environmental Services - Waterway Permits Unit (614-466-7100).