MICROFILMED DESIGN DESIGNATION APR 20 994 Current A.D.T. (1990) = 700

Design Year A.D.T. (2010) = 860 D. H. V. = 86 = 60% = 7% = 55 M.P.H. Legal Speed = 55 M.P.H.

Functional Classification

Design Exception

Superelevation

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

SCI-125-6.26

FHWA 5 SCI-125-6.26 RS - 994(3)

RS - 994(3)

TOWNSHIP NILE SCIOTO COUNTY

Portion to be improved__

1-11-85

GR-3 10-25-90 GR-4 2-5-82 GR-4A 1-30-84

MC-9A 1-11-85

GR-2B

CONVENTIONAL SIGNS Limited Access (only) -

Corporation Line or minimum Fence Line (existing) -× -----× (proposed) -× ----× Center Line — 352 Trees (iii), Stumps \wedge , (to be removed) \bowtie

Utility Poles: Telephone $\overline{\phi}$, Power $\overline{\phi}$, Light ϕ .

Right of Way (only) -Limited Access & Right of Way——LA&RW— Existing Right of Way — Property Line — P. (in existing fence)—x—P.—x— Railroad — or + + + + + + Guardrail (existing) - - (proposed) - -

INDEX OF SHEETS

Major Collector (Rural)

Approvat Date

7 - 20 - 89

Title Sheet Typical Sections General Notes Super. Tables, Ref. Points & Details Maintenance of Traffic Pavement Calculations General Summary Plan & Profile Cross Sections 14-16 Structures Over 20' Span 17-28 Pavement Markings 29

LINE DATA

Begin Project Sta. 330 + 82.47 End Project Sta. 331 + 96.60 Length of Project

Add for Work

End Work

Length of Work

, Contract No.__

Begin Work

114.13 Lin. Ft. or 0.022 Miles Sta. 329 + 55

> Plan Prepared By: DISTRICT NO. 9 OHIO DEPARTMENT OF TRANSPORTATION

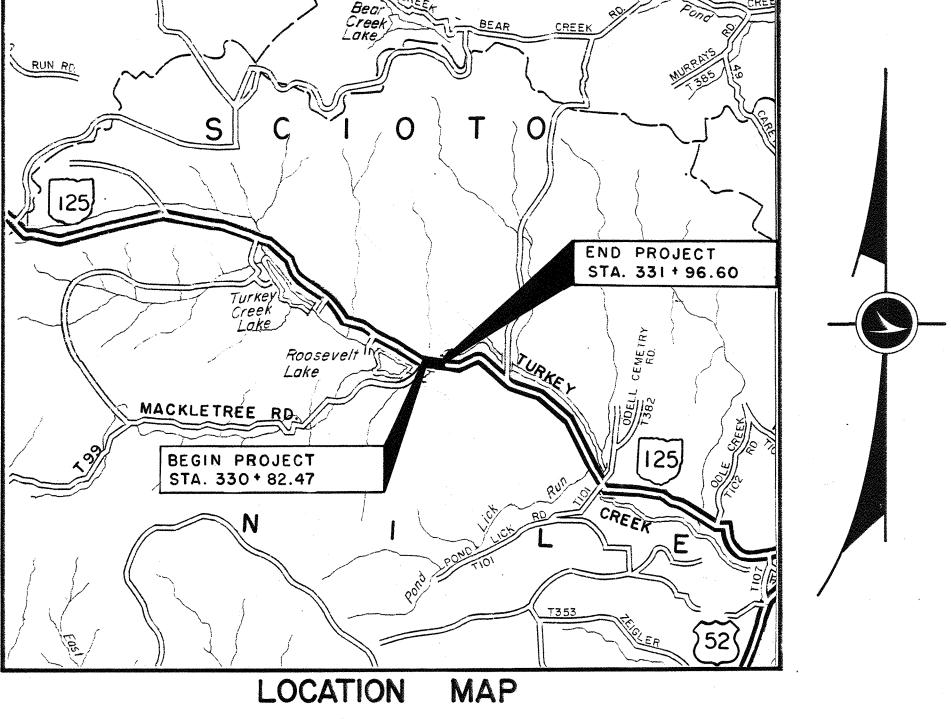
Sta. 332 + 59.10

0.057 Miles

304.10 Lin. Ft. or

UNDERGROUND UTILITIES TWO WORKING DAYS BEFORE YOU DIG Call...800-362-2764 (Toll free) OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECTLY

SEAL



SCALE IN MILES

State & Federal Routes _________________________________

8-1-78

DBR-2-73 4-10-73

10-1-87 AS-1-81 11-27-81

2-5-82 PSBD-1-81 6-20-89

	SCALE	ES			
Plan	3		-6	20	0
Profile:Horizontal ==	20	, Vertic	al E	10	O
Cross Section: Horizontal == O	10	,Vertic	al E	10	0

MT-97.10 4-29-88

MT-99.10 11-14-86

	COLLEGE TAL CLEAN TO THE	
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SCALES		
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orizontal ,Vertical ,Vertical , Vertical , V		
orizontal ,Vertical ,		
SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAW	INGS	

SUPPLEMENTAL SPECIFICATIONS

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.

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 in these plans and estimates.

Date 1-24-91 District Deputy Director of Transportation

Approved B	D. Hankilanini			FFE
* * 🙈	_Engineer, Bureau Structural Desig	of	Bridges	and

Approved Sur Sur Date 3/26/91 Deputy Director, Planning and Design

erry Wray Date 3-27-91 Director, Department of Transportation

> DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

Date of Letting_ LD 0300 Rev. 1-1-81

Project: SCI-125-6.26

DATE

TYPICAL SECTIONS

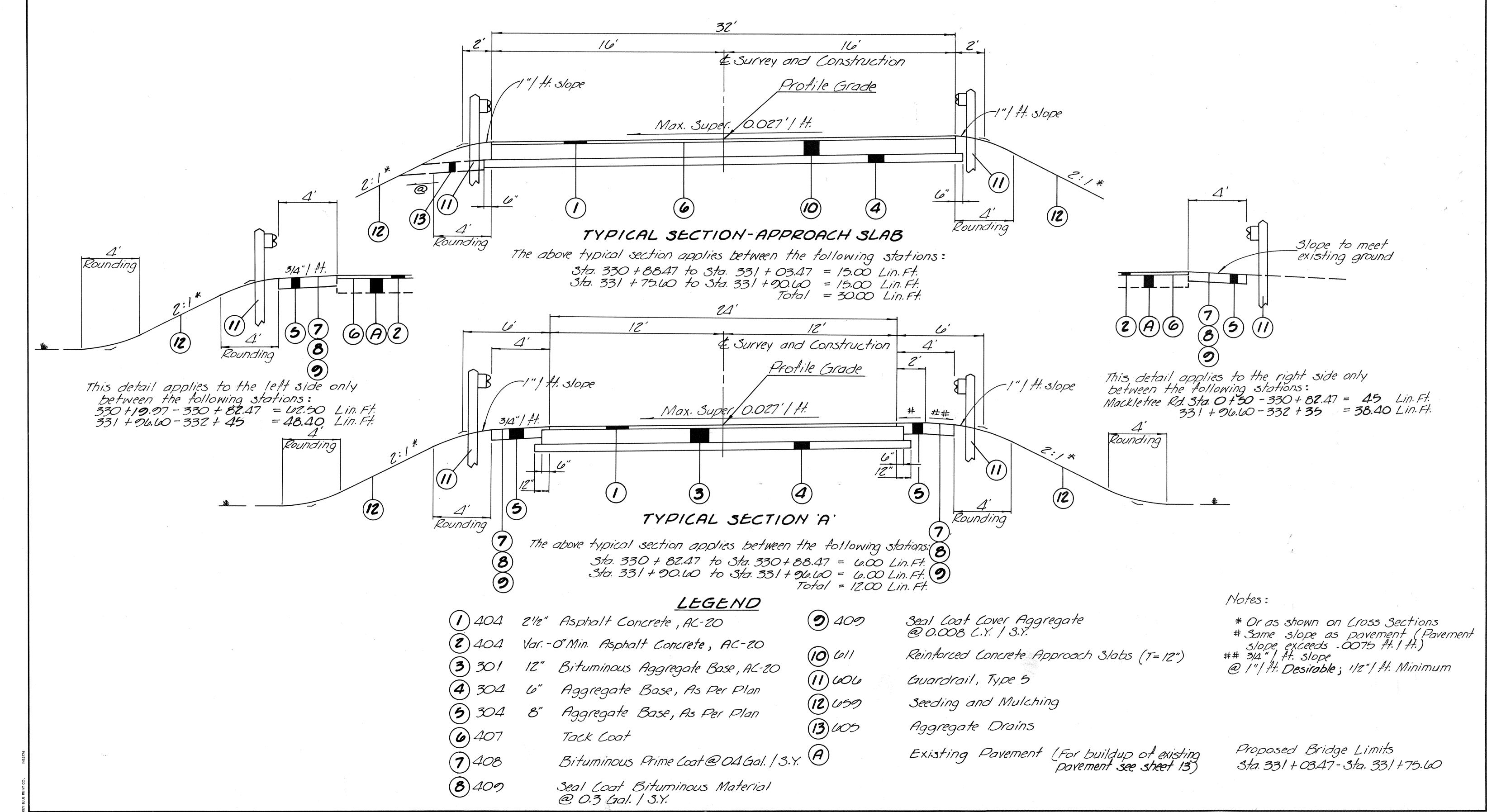
FHWA REGION STATE PROJECT

5 OHIO

(20)

3C10TO COUNTY 3C1-125-6.26

TYPE 404 ON 301



GENERAL NOTES

FHWA REGION STATE PROJECT

5 OHIO

29

SCIOTO COUNTY SCI-125-6.26

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS, EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

CONTINGENCY QUANTITIES

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 ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN 10 FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT—OF—WAY LINE, IF SUCH LINE IS LESS THAN 10 FEET FROM THE WORK LIMITS.

WATERING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED, AS DIRECTED BY THE ENGINEER, TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS IN ACCORDANCE WITH 659.09:

659 WATER $714 \times 9/1000 \times 120/1000 \times 2 = 2 M-GAL$.

WATER FOR DUST CONTROL

MATERIALS FOR DUST CONTROL, TO BE USED AS DIRECTED BY THE ENGINEER, ARE PROVIDED AS FOLLOWS:

616 WATER

50 M-GAL.

ITEM 304 AGGREGATE BASE, AS PER PLAN

MATERIALS FURNISHED FOR THIS ITEM SHALL EXCLUDE ALL SLAG EXCEPT GRANULATED SLAG OR AIR-COOLED BLAST FURNACE SLAG.

LOCATION OF GUARDRAIL

THE LOCATIONS OF GUARDRAIL RUNS, AS SHOWN ON THESE PLANS, ARE SUBJECT TO ADJUSTMENT PRIOR TO FINAL ACCEPTANCE. THE ENGINEER SHALL BE SATISFIED THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED, TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207	STRAW OR HAY BALES	50	EACH
207	TEMPORARY SEEDING AND MULCHING	145	SQ.YD.
659	COMMERCIAL FERTILIZER	.01	TON
659	REPAIR SEEDING AND MULCHING	40	SQ.YD
659	WATER	1	M-GAL.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

FLECTRIC:

OHIO POWER COMPANY
301-315 CLEVELAND AVENUE, S.W.

CANTON, OHIO 44702 (216) 438-7040 (NOT OUPS MEMBER)

TELEPHONE:

GENERAL TELEPHONE COMPANY OF OHIO

1315 ALBERT STREET

P.O. BOX 511
PORTSMOUTH, OHIO 45662

(614) 354-0511 (OUPS MEMBER)

WATER:

SCIOTO WATER, INC. ROUTE NO. 1

P.O. BOX 34

WHEELERSBURG, OHIO 45694

(614) 574-2111 (NOT OUPS MEMBER)

407 TACK COAT

PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

ITEM 202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE

EXISTING RAISED PAVEMENT MARKERS IN THE PROJECT AREA ARE TO BE REMOVED FOR STORAGE AS PER 202.071. AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED AND CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM.

ITEM 605, AGGREGATE DRAINS

THE LOW POINT OF ANY AREA OR AREAS OF THE COURSE BEING DRAINED, WHERE WATER WOULD TEND TO COLLECT IN THE COURSE, SHALL BE PROVIDED WITH AN AGGREGATE DRAIN. EXAMPLES OF SUCH AREAS INCLUDE THE LOW POINTS OF SAG VERTICAL CURVES AND LONGITUDINAL DISCONTINUITIES IN THE SURFACE OF THE SUBGRADE SUCH AS MAY OCCUR AT BUTT JOINTS OR AT PAVEMENT THICKNESS CHANGES.

ITEM 622-PORTABLE CONCRETE BARRIER:

SUPPLEMENTING 622.08. THE METHOD FOR MEASUREMENT FOR PORTABLE CONCRETE BARRIER SHALL INCLUDE THE TOTAL OF EACH INDIVIDUAL PLACEMENT OF PCB REQUIRED BY THE PLANS WITHOUT REGARD TO WHETHER THE SAME SPECIFIC SECTION OF PCB COULD BE RE-USED AGAIN ON THE PROJECT.

COMMERCIAL FERTILIZER

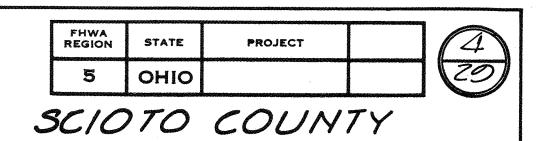
 $714 \times 9 / 1000 \times 20 / 2000 = ...$

.06 TON

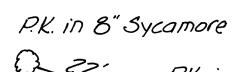
AGRICULTURAL LIMING

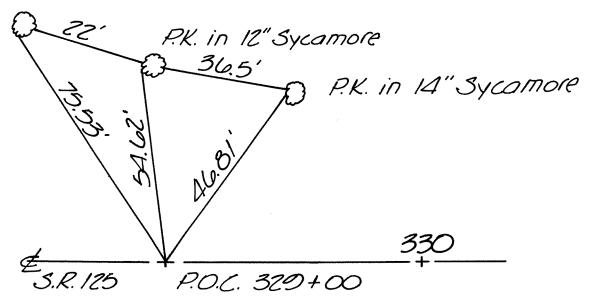
 $714 \times 9 / 1000 \times 100 / 2000 = .32 \text{ TON}$

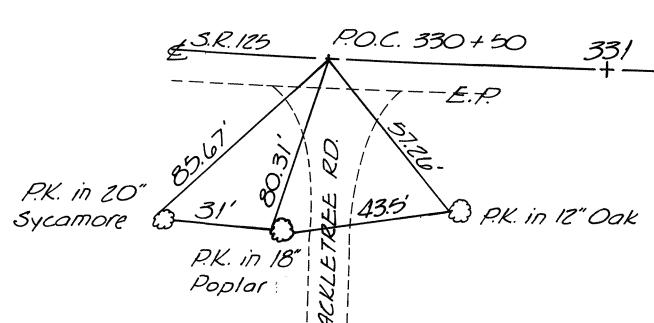
QUANTITIES CARRIED TO GENERAL SUMMARY SHEETS 11 & 12

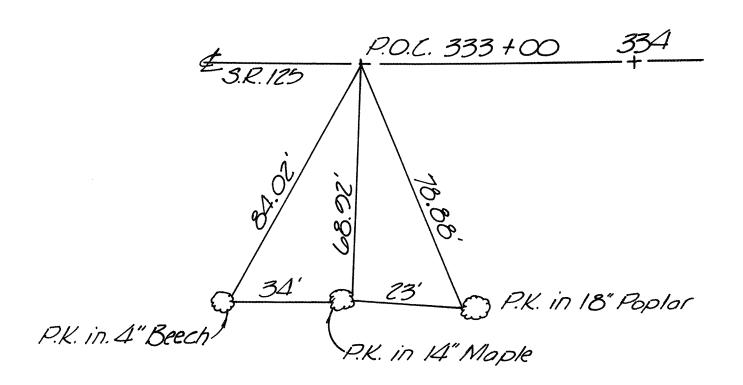


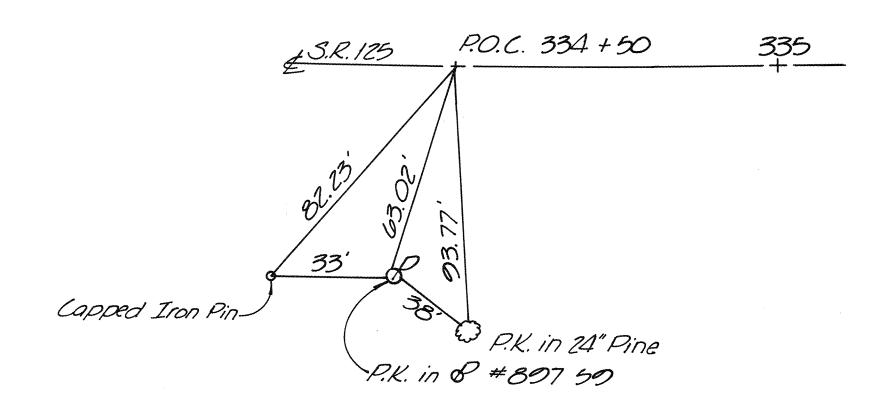
301-125-6.26

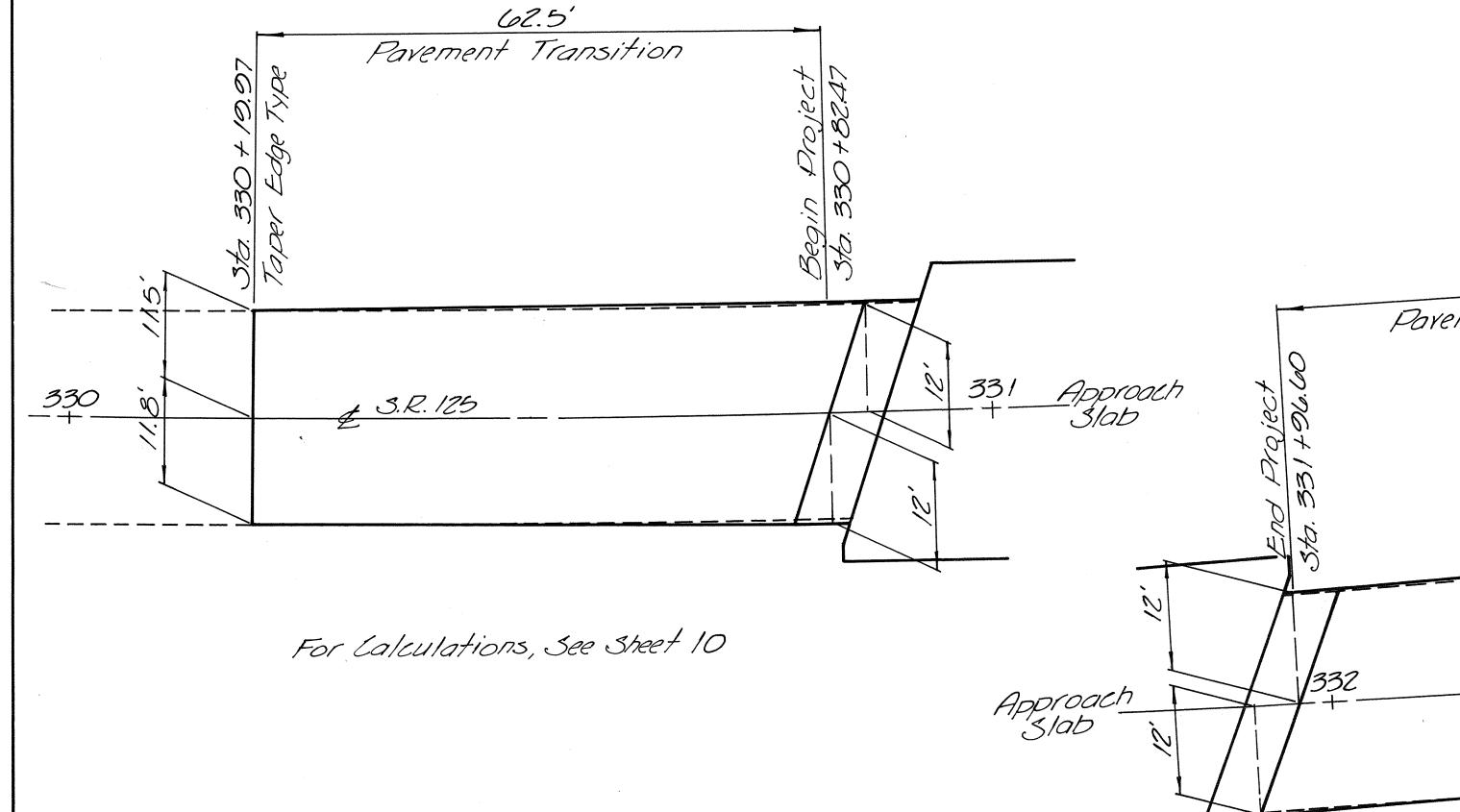


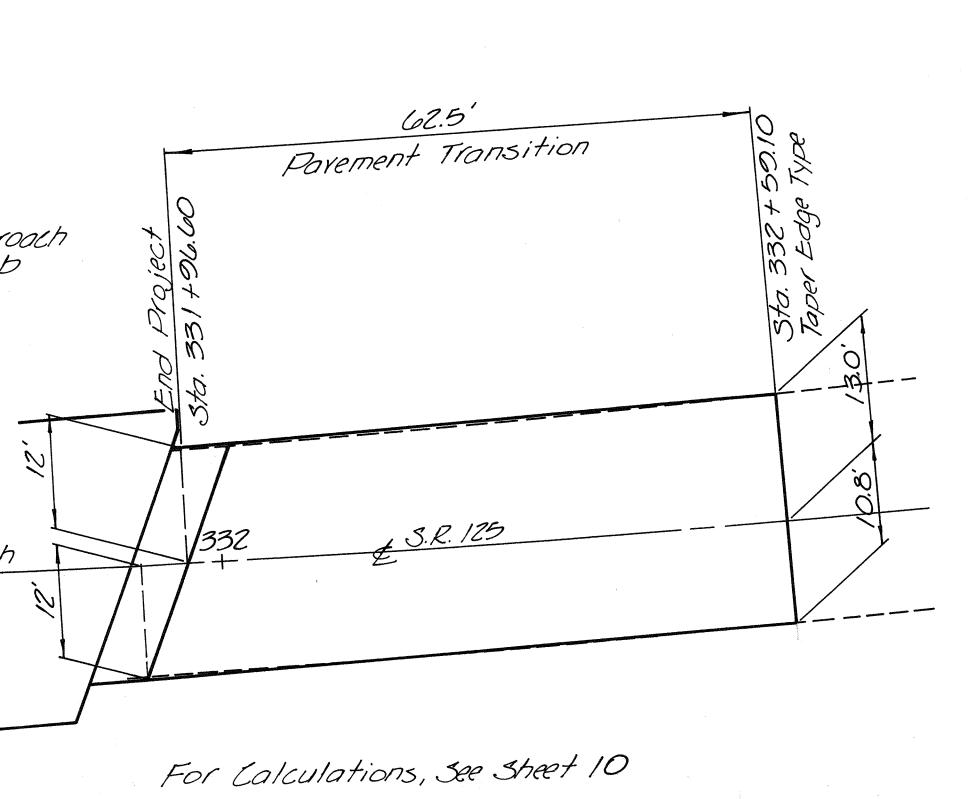












SUPERELEVATION TABLES

Elevation Left Edge	Width	3tation	Elevation Centerline	Width	Elevation Right Edge
***************************************		330 +00			
058.92		+19.97	659.29	11.7'	659.31
Feather A				Feather	
657.70	12.	g	658.02	12'	<i>658.34</i>
057.44		331+00			658.08
657.07			657.39		657.71
056.70			657.02		657.34
656.33			656.65		656.97
456.01	12'		656.33	12'	656.65
Feather I		332+00	1655	Feather	
655.34	12.0'		655.75	11'	655.78
**************************************		333+00			

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FHWA REGION STATE PROJECT 5

3C10TO COUNTY SC1 - 125 - 6.26

MAINTENANCE OF TRAFFIC

ALL SIGNS, DEVICES, PAVEMENT MARKINGS, AND OPERATIONS USED FOR THE TEMPORARY MAINTENANCE AND CONTROL OF TRAFFIC DURING CONSTRUCTION SHALL BE SUBJECT TO THE DIRECTION AND CONTROL OF THE ENGINEER IN RESPECT TO THEIR CONDITIONS, LOCATIONS, AND TIMES OF APPLICATION. VISIBLE SIGNS, DEVICES, AND PAVEMENT MARKINGS SHALL, AT ALL TIMES, REFLECT THE CONDITIONS ACTUALLY EXISTING. INAPPROPRIATE SIGNS OR DEVICES SHALL BE REMOVED OR COVERED; INAPPROPRIATE PAVEMENT MARKINGS SHALL BE REMOVED.

TWO-WAY, TWO-LANE TRAFFIC SHALL BE MAINTAINED ON BOTH SR-125 AND TR-95 (MACKLETREE ROAD) WHENEVER CONSTRUCTION OPERATIONS PERMIT.

SIGNAL-CONTROLLED, ONE-WAY OPERATIONS ON SR-125 AND TRAFFIC-ACTUATED SIGNALS FOR TR-99 SHALL BE USED TO MAINTAIN TRAFFIC DURING CONSTRUCTION OF THE PROPOSED BRIDGE. FLAGGERS MAY ALSO BE USED TO CONTROL TRAFFIC, IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING (SCD) MT-97.10, AS NECESSARY TO THE PROGRESS OF THE WORK.

SEE "BRIDGE CONSTRUCTION SEQUENCE" ON SHEET 26 FOR SEQUENCE OF TRAFFIC MAINTENANCE PHASES. SEE BRIDGE PLANS FOR MINIMUM CLEAR TRAFFIC LANE WIDTHS AND METHOD OF MOUNTING TEMPORARY GUARDRAIL ON BRIDGE. SEE SHEET 5 FOR METHOD OF CONNECTING TEMPORARY BRIDGE MOUNTED RAILING TO THE PORTABLE CONCRETE BARRIER TO BE USED OFF THE BRIDGE. SEE SHEETS 6 THROUGH 8 FOR SIGNALIZED TRAFFIC CONTROL DETAILS. SEE SHEET 9 FOR NOTES AND QUANTITIES FOR TEMPORARY RAISED PAVEMENT MARKERS.

ANY PAVEMENT OPENED TO TWO-WAY TRAFFIC SHALL HAVE CENTER LINES IN PLACE. TEMPORARY CENTER LINES, CLASS II, SHALL BE FURNISHED IF PERMANENT MARKINGS ARE NOT IN PLACE WHEN THE ROAD IS OPENED TO TWO-WAY TRAFFIC. TEMPORARY PAVEMENT MARKINGS AND ANY NECESSARY WARNING SIGNS SHALL BE FURNISHED AND PLACED, AND ALL CONFLICTING MARKINGS SHALL BE REMOVED, IN ACCORDANCE WITH SCD MT-99.10.

QUANTITIES OF ITEM 404 BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC, ITEM 410 TRAFFIC COMPACTED SURFACE, ITEM 616 CALCIUM CHLORIDE, AND ITEM 616 WATER ARE PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER TO MAINTAIN THE TEMPORARY TRAVELED WAY, INCLUDING TEMPORARY WIDENING ON THE BERM FOR PHASE II, AND TO MAINTAIN LOCAL ACCESS.

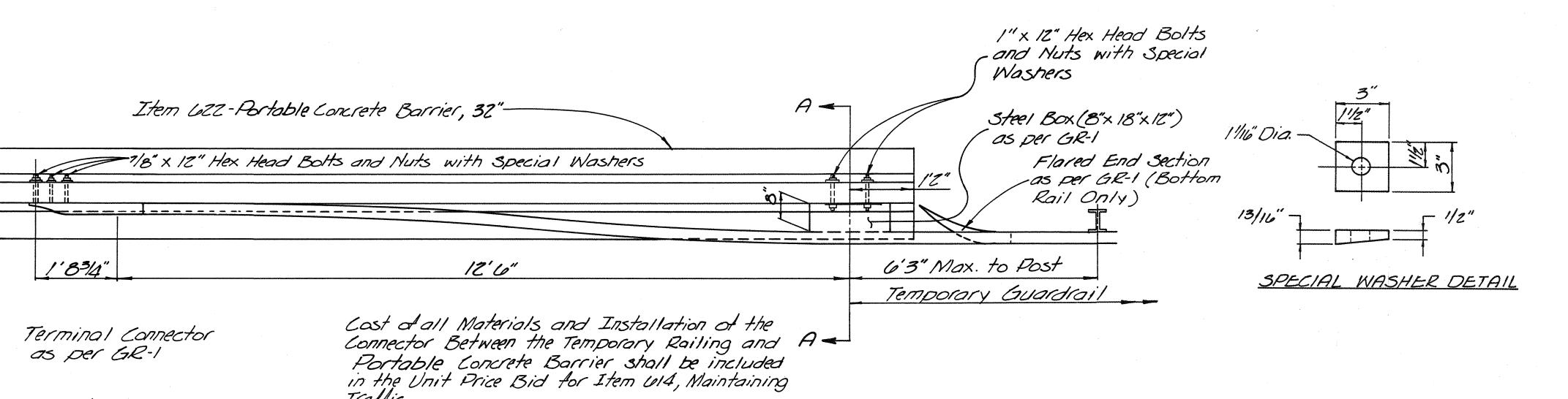
THE CONTRACTOR IS TO PROVIDE PORTABLE CONCRETE BARRIER FOR USE DURING PHASES I AND II OF TRAFFIC MAINTENANCE. IN EACH TRAFFIC MAINTENANCE PHASE EACH EXTREME END OF THE PORTABLE CONCRETE BARRIER SHALL BE PROVIDED WITH A "TEMPORARY END TERMINAL" AS SHOWN ON SCD MC-9A.

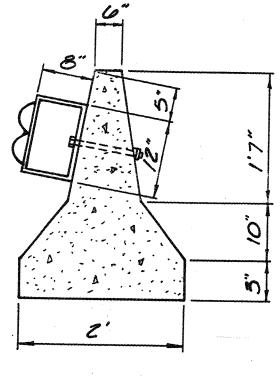
ITEM 614 BARRIER REFLECTORS SHALL BE PROPERLY INSTALLED ON ALL RAILING, GUARDRAIL, AND/OR BARRIER WITHIN THE WORK AREA. ITEM 614 BARRIER REFLECTORS SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 802 EXCEPT THAT THEIR SPACING SHALL BE AS SHOWN IN THE PLANS.

THE CONTRACTOR'S RESPONSIBILITY FOR THE MAINTENANCE OF EXISTING PAVEMENTS UNDER 614 SHALL BE LIMITED TO THOSE AREAS OF EXISTING PAVEMENT WITHIN THE PROPOSED ROADWAY WORK LIMITS, AND SHALL NOT INCLUDE THE WORK LIMITS REQUIRED ONLY FOR TEMPORARY SIGNING AND PAVEMENT MARKING.

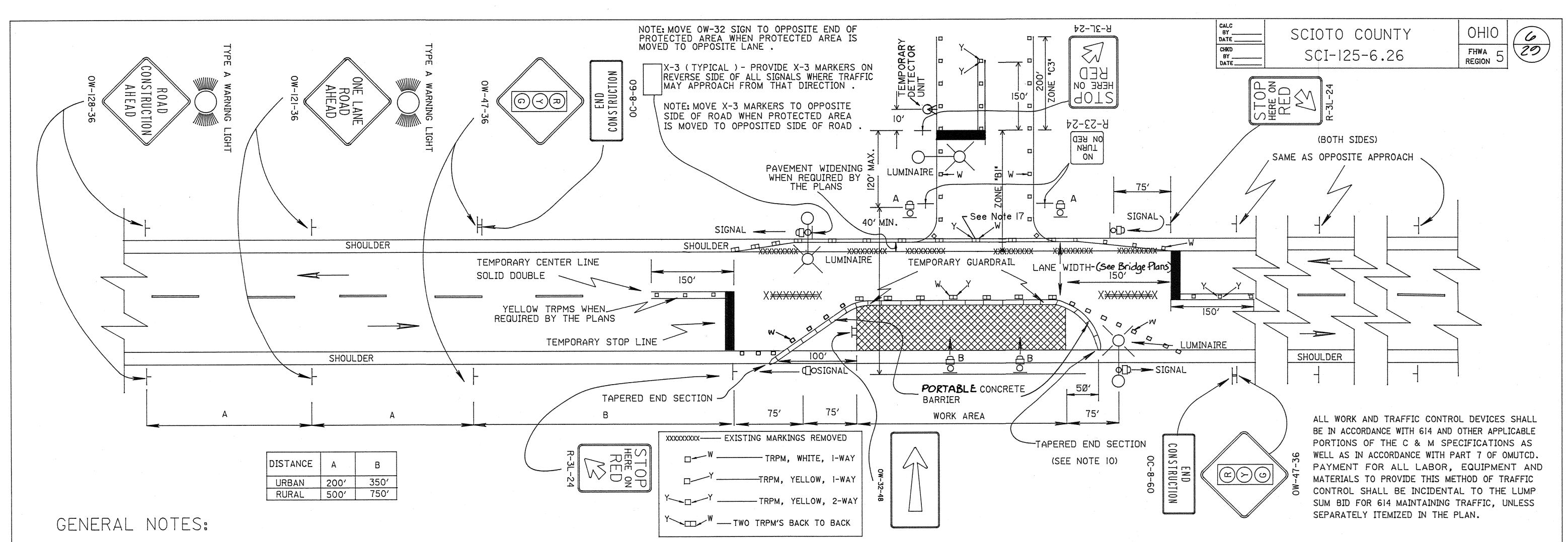
PAYMENT FOR ALL LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO ACCOMPLISH THE TEMPORARY MAINTENANACE AND CONTROL OF TRAFFIC SHALL BE MADE UNDER THE APPROPRIATE LUMP SUM OR UNIT PRICES BID FOR THE ESTIMATED QUANTITIES ENUMERATED BELOW. PAYMENT FOR ANY NECESSARY LABOR, MATERIALS, OR INCIDENTALS NOT SPECIFICALLY INCLUDED IN ANY OTHER ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

404 BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	25 CU.YD.
410 TRAFFIC COMPACTED SURFACE, TYPE A OR B	50 CU.YD.
614 MAINTAINING TRAFFIC	LUMP
614 TEMPORARY CENTER LINE, CLASS I	0.10 MILE
614 TEMPORARY CENTER LINE, CLASS II	0.17 MILE
614 TEMPORARY STOP LINE, CLASS I	36 LIN.FT.
614 TEMPORARY RAISED PAVEMENT MARKER, TYPE A	528 EACH
614 BARRIER REFLECTOR, TYPE A2	6 EACH
614 BARRIER REFLECTOR, TYPE B2	30 EACH
616 WATER	1 M-GAL.
616 CALCIUM CHLORIDE	1 TON
622 PORTABLE CONCRETE BARRIER, 32"	270 LIN.FT.





SECTION A-A



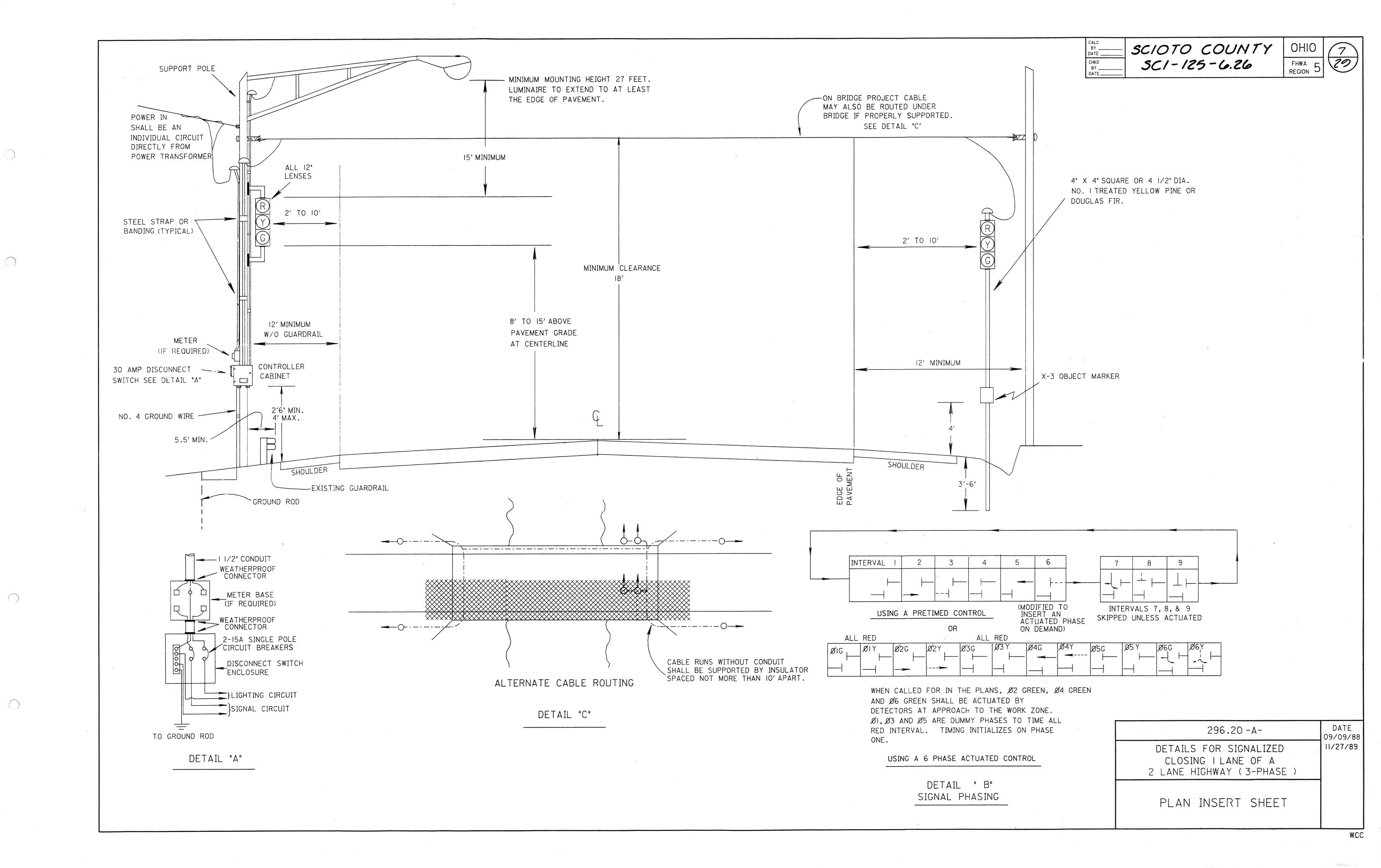
- 1. INITIAL SIGNAL TIMING SHALL BE AS SHOWN IN THE PLANS. TIMING CHANGES SHALL BE APPROVED BY THE ENGINEER
- 2. SIGNALS SHALL BE INSTALLED AND OPERATED IN ACCORDANCE WITH THE REQUIREMENTS OF PART 6 OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 3. ADEQUATE AREA ILLUMINATION TO CLEARLY IDENTIFY ALL ENDS OF THE WORK AREA AT NIGHT SHALL BE PROVIDED BY USING 150 WATT MINIMUM HIGH PRESSURE SODIUM LUMINAIRES OR 250 WATT MINIMUM MERCURY LUMINAIRES. LUMINAIRES SHALL BE LOCATED ADJACENT TO THE SIGNAL LOCATIONS AS SHOWN ABOVE. THE MOUNTING HEIGHT FOR LUMINAIRES SHALL BE A MINIMUM OF 27 FEET ABOVE THE PAVE-MENT BUT IN NO CASE LESS THAN 15 FEET ABOVE THE TOP OF THE SIGNAL AND MOUNTED ON A SUPPORT OF ADEQUATE STRENGTH TO PRO-PROVICE A SATISFACTORY INSTALLATION. THE OVERHEAD CONDUCTOR CLEARANCE SHALL BE A MINIMUM OF 18 FEET ABOVE THE PAVEMENT. THE LUMINAIRE ARM SHALL BE OF SUFFICIENT LENGTH TO EXTEND TO THE EDGE OF THE PAVEMENT. POLES SHALL BE ERECTED A MINIMUM OF 5.5 FEET BEHIND FACE OF GUARDRAIL WHERE EXISTING. OR 12 FEET FROM THE EDGE OF PAVEMENT. WHERE POSSIBLE LOCATE BEHIND DITCH.
- 4 TEMPORARY CENTER LINE: SOLID, DOUBLE, AS SHOWN, SHALL BE INSTALLED AND MAINTAINED WHERE NO PASSING LINES ARE NOT ALREADY IN PLACE. 12" STOP LINES SHALL ALSO BE INSTALLED. TEMPORARY RAISED PAVEMENT MARKERS, (TRPM'S) TO SIMULATE A TWO COLOR EDGE LINE SHALL BE PROVIDED. EXISTING CONFLICTING PAVEMENT MARKINGS OR RAISED PAVEMENT MARKER REFLECTORS BETWEEN THE WORK AREA AND THE STOP LINES OR WITHIN THE ONE WAY LANE WIDTH SHALL BE REMOVED. AFTER COMPLETION OF THE WORK. TEMPORARY MARKINGS AND TRPM'S SHALL BE REMOVED IN ACCORDANCE WITH 621.134 AND THE ORIGINAL MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS SHALL BE RESTORED.

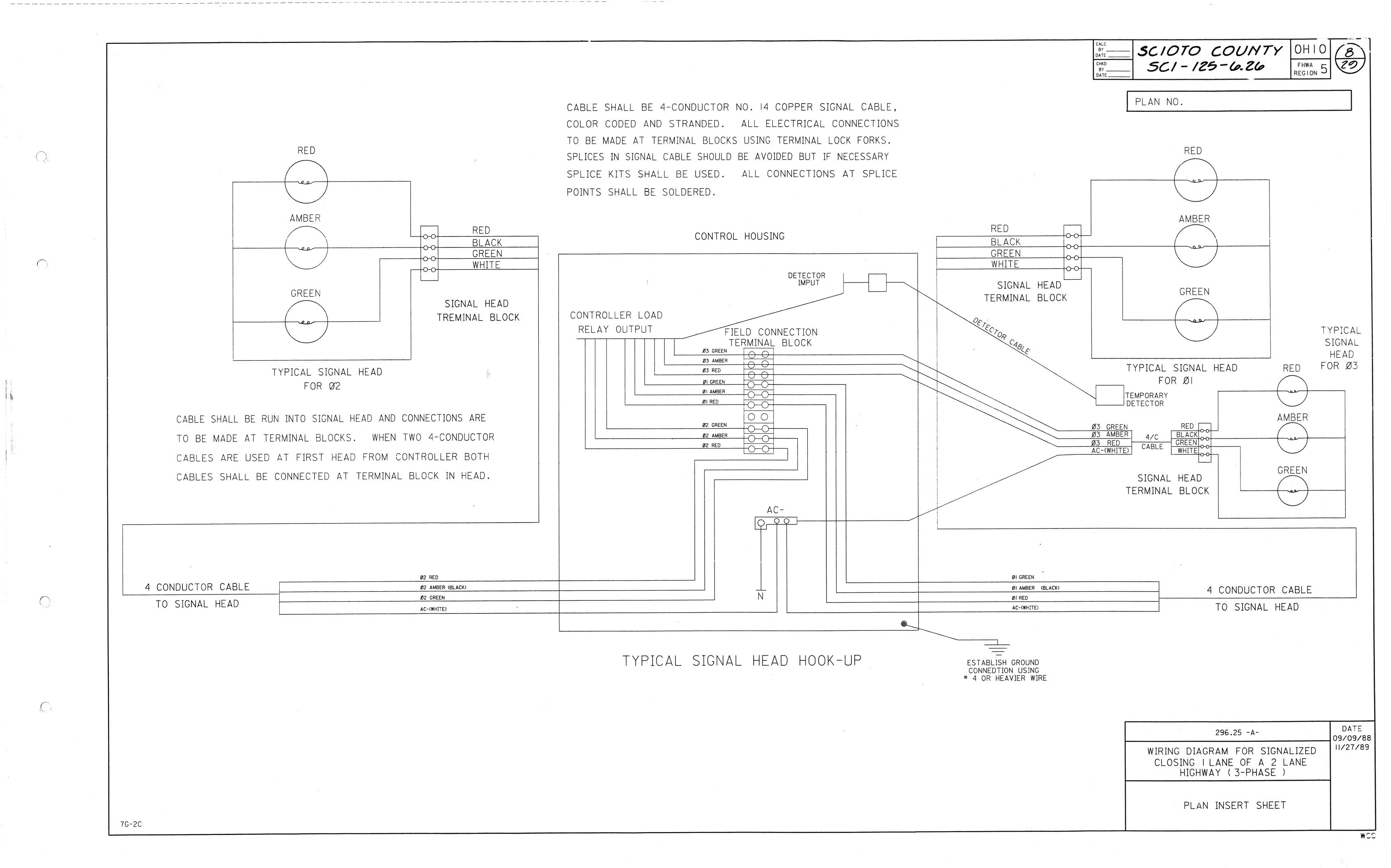
- TYPE C STEADY BURNING WARNING LIGHTS SHALL BE ERECTED ON BARRIER AT 50 FT. SPACING (FTLOSPACING IN TAPERS) FOR NIGHT LANE CLOSURES, BARRIER REFLECTORS (TWO-WAY, WHITE/ YELLOW) SHALL BE PROVIDED AT 50 FT. SPACING (10 FT. SPACING IN TAPERS) ON ALL BARRIERS.
- NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS.
- 7. THE HORIZONTAL OR VERTICAL ALIGNMENT OF THE ROADWAY MAY REQUIRE ADJUSTMENTS IN THE LOCATION OF THE ADVANCE WARNING SIGNS OR THE SIGNAL HEADS. TREE OR BRUSH TRIMMING TO PROVIDE ADEQUATE SIGHT DISTANCE TO SIGN AND SIGNALS SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER. THE DISTANCES SHOWN FOR ADVANCE WARNING SIGN SPACINGS ARE MINIMUM.
- 8. ALL TRAFFIC SIGNAL AND LIGHTING EQUIPMENT USED IN THIS INSTALLATION. SUCH AS SIGNAL OR LIGHTING CABLE. SIGNAL HEADS. LUMINAIRES OR SIGNAL CONTROLLER SHALL BE IN CONFORMANCE WITH SPECIFICATION ITEMS 625, 632, 633, 713, 732 AND 733. HOWEVER. THE PERFORMANCE TESTS OF 625.22E AND 632.27(6). THE WORKING DRAWING REQUIREMENTS OF 625.04, 632.03 AND 633.03. THE WIRING DIAGRAM AND SERVICE MANUAL REQUIREMENT OF 633.04 AND THE TESTING AND PREQUALIFICATION REQUIREMENT OF 633.05 ARE WAIVED. ALSO THE REQUIREMENTS OF 733.01 CONCERNING EXPANSIBLE 3-DIAL UNITS AND TWELVE SIGNAL CIRCUITS ARE WAIVED. USED EQUIPMENT IS ACCEPTABLE. CONFLICT MONITORS SHALL BE USED EXCEPT WITH ELECTROMECHANICAL PRETIMED CONTROLLERS WITH CAM SHAFT.
- 9. IF THE SIGNAL IS CHANGED TO FLASHING OPERATION. RED SHALL BE FLASHED TO ALL APPROACHES ON ALL SIGNAL HEADS.

- DURING WORKING HOURS ONLY A LENGTH OF BARRIER SUFFICIENT TO PROVIDE A 10' ACCESS ON THE SHOULDER AND PART OF ROADWAY, MAY BE REMOVED FOR ACCESS. A SIMILAR BARRIER REMOVAL AT THE OPPOSITE END OF THE WORK AREA MAY ALSO 15. A-A AND B-B ARE ALTERNATE LOCATIONS FOR THE DRIVE OR SIDE-BE PERMITTED ONLY WHEN NECESSARY,
- 6. THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO II. ITEM 614 TEMPORARY BARRIER REFLECTORS SHALL BE FURNISHED FOR ALL TEMPORARY GUARDRAIL OR PORTABLE CONCRETE BAR-RIER USED FOR THE MAINTENANCE OF TRAFFIC. ANY EXISTING CONSTRUCT REQUIRING BARRIER REFLECTORS IN ACCORDANCE WITH CURRENT POLICY, BUT FROM WHICH THEY ARE WHOLLY OR IN PART MISSING, SHALL HAVE BARRIER REFLECTORS FURNISHED AND APPLIED, THE ESTIMATED QUANTITY OF BARRIER REFLECTORS' PROVIDED IN THE MAINTENANCE OF TRAFFIC PLANS IS SUBJECT TO CHANGE, AT THE DIRECTION OF THE ENGINEER, TO FIT FIELD CONDITIONS.
 - 12. 614 TEMPORARY RAISED PAVEMENT MARKERS (TRPM'S) SHALL BE USED TO SIMULATE EDGE LINES AND CENTER LINES THROUGHOUT 17. THE THROUGH TRAFFIC LANES AND APPROACHES, AS SHOWN ABOVE. ALL TRPM'S SHALL BE TYPE A UNITS, SEE SHEET 9 FOR GEN-ERAL NOTES GOVERNING MATERIAL AND APPLICATION REQUIREMENTS OF TEMPORARY RAISED PAVEMENT MARKERS AND A TABULATION OF THE ESTIMATED NUMBER TO BE FURNISHED. TRPM'S IN ZONES "A" AND B1" THROUGH "Bn" SHALL BE REMOVED AND NEW TRPM'S PROVIDED WHENEVER THE LOCATION OF THE ONE-WAY LANE IS RE-VISED. TRPM'S IN ZONES "C1" THROUGH "Cn" SHALL REMAIN IN PLACE THROUGHOUT THE ONE-LANE OPERATIONS. UNITS DAMAGED AS DEFINED IN THE GENERAL NOTE BEING REPLACED, BUT BEING REMOVED AND RESET ONLY AS REQUIRED BY A RELOCATION OF THE STOP LINES.
 - 13. TEMPORARY PAVEMENT MARKINGS AND/OR TEMPORARY RAISED PAVE-MENT MARKERS SHALL BE NON-PERFORMED WHERE THE LACK OF A PAVEMENT SURFACE OR OF SUFFICIENT PAVEMENT WIDTH PRECLUDES THEIR USE.

- 14. THE SIGNAL CONTROLLER SHALL BE ACTUATED FOR PHASE 3; PHASES 1 AND 2 SHALL BE PRETIMED.
- ROAD SIGNALS, IF PLACED AT A-A SIGNALS SHALL BE MOUNTED 8' ABOVE GRADE, IF PLACED AT B-B, SIGNALS SHALL BE MOUNTED 15' ABOVE GRADE.
- 16. THE TEMPORARY DETECTOR UNIT SHALL BE ONE OF THE FOLLOWING: 1) A MAGNETIC SENSOR ATTACHED TO A LIGHTWEIGHT WOOD POST AT ROADSIDE IF THERE IS ONLY A SINGLE APPROACH LANE.
 - 2) LOOPS OR MAGNETOMETERS EMBEDDED IN OR FASTENED TO THE APPROACH PAVEMENT SURFACE, (EMBEDMENT SHALL NOT BE USED FOR ASPHALT OR PORTLAND CEMENT CONCRETE SURFACES UN-LESS THE SURFACE IS TO BE PAVED OVER AS A PART OF THE PRO-
 - 3) SONIC DETECTORS MOUNTED ON A SUITABLE SUPPORT BE-SIDE OR OVER THE ROAD.
- TEMPORARY RAISED PAVEMENT MARKERS SIMULATING EDGE LINES SHALL NOT BE PROVIDED IN THE SIDE ROAD INTERSECTION AREA OF THE THROUGH ROAD IF THE SIDE ROAD IS A PUBLIC ROAD OR

296.11	DATE 08/28/90
SIGNALIZED CLOSING I LANE OF A 2 LANE HIGHWAY WITH TCMB'S	087 287 30
PLAN INSERT SHEET	





ALC:	DATE:	FHWA REGION	STATE	PROJECT	0
HKD:	DATE:	5	OHIO		54)

314 TEMPORARY RAISED PAVEMENT MARKERS

SCIOTO COUNTY SCI-125-6.26

THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING, AND SUBSEQUENTLY REMOVING TEMPORARY RAISED PAVEMENT MARKERS (TRPM'S). THE TRPM'S SHALL BE YELLOW OR WHITE, AS DESCRIBED IN THE PLANS.

MATERIAL

ALL UNITS SHALL BE OF SUFFICIENT STRENGTH AND PROPERLY SHAPED SO AS NOT TO BE DISLODGED OR BROKEN, OR THE REFLECTOR DISLODGED OR DAMAGED, BY IMPACTS FROM VEHICLE TIRES, INCLUDING HIGH-PRESSURE TRUCK TIRES LOADED TO 4500 POUNDS.

RETROREFLECTORS SHALL BE PROVIDED IN ONE OR TWO DIRECTIONS ON EACH UNIT AS REQUIRED BY THE USAGE AND SHALL RETURN WHITE OR YELLOW LIGHT AS IS APPROPRIATE FOR THE APPLICATION.

THE REFLECTOR SHALL HAVE AN EFFECTIVE AREA OF 0.35 SQUARE INCH FOR TYPE A OR 3.0 SQUARE INCH FOR TYPE B. ITS BRIGHTNESS OR SPECIFIC INTENSITY (WHEN TESTED AT 0.2 DEGREE ANGLE OF OBSERVATION AND THE FOLLOWING ANGLES OF INCIDENCE) SHALL MEET OR EXCEED THE FOLLOWING:

	SPECIFIC INTENSITY	
INCIDENCE ANGLE (DEGREES)	TYPE A WHITE	YELLOW
0 20 45	1.0 0.4 —	0.6 0.24 -
0 20 45	TYPE B <u>WHITE</u> 3.0 1.2 0.3	<u>YELLOW</u> 1.8 0.72 0.2

ANGLE OF INCIDENCE IS FORMED BETWEEN A RAY FROM THE LIGHT SOURCE TO THE MARKER, AND THE NORMAL TO THE LEADING EDGE OF THE MARKER FACE (ALSO HORI-ZONTAL ENTRANCE ANGLE).

ANGLE OF OBSERVATION IS FORMED BETWEEN A RAY FROM THE LIGHT SOURCE TO THE MARKER AND THE RETURNED RAY FROM THE MARKER TO THE MEASURING RECEPTOR.

SPECIFIC INTENSITY IS THE MEAN CANDLEPOWER OF THE REFLECTED LIGHT (AT GIVEN INCIDENCE AND DIVERGENCE ANGLES) FOR EACH FOOT—CANDLE AT THE REFLECTOR (ON A PLANE PERPENDICULAR TO THE INCIDENT LIGHT).

TYPE A UNITS ARE INTENDED TO PROVIDE HIGH VISIBILITY BOTH AT NIGHT AND DURING DAYLIGHT. THEIR DAYTIME VISIBILITY SHALL BE ASSURED BY SIZE, SHAPE, AND COLOR AS FOLLOWS:

- 1) THE UNITS SHALL BE A HIGH VISIBILITY YELLOW OR WHITE COLOR WHICH WILL NOT DEGRADE SUBSTANTIALLY DUE TO TRAFFIC WEAR AND WHICH WILL MATCH THE COLOR OF THE REFLECTOR.
- 2) WHEN VIEWED FROM ABOVE, THE UNITS SHALL HAVE A VISIBLE AREA OF NOT LESS THAN 14 SQUARE INCHES.
- 3) WHEN VIEWED FROM THE FRONT, PARALLEL TO THE PAVEMENT, AS FROM APPROACHING TRAFFIC, THE UNIT SHALL HAVE A WIDTH OF APPROXIMATELY 4 INCHES AND A VISIBLE AREA OF NOT LESS THAN 1.5 SQUARE INCHES.

TYPE B UNITS ARE INTENDED TO PROVIDE HIGH VISIBILITY AT NIGHT BY RETROREFLECTING A VEHICLE'S HEADLIGHTS BACK TO ITS DRIVER.

INSTALLATION EACH UNIT SHALL BE ATTACHED TO CLEAN, DRY PAVEMENT BY A BUTYL ADHESIVE PAD, A BITUMINOUS ADHESIVE, OR OTHER CONSTRUCTION GRADE ADHESIVE (SUCH AS FRANKLIN PANEL AND METAL ADHESIVE) SUITABLE FOR ANCHORING THE UNIT. WHEN IT IS NECESSARY TO ATTACH UNITS TO NEW CONCRETE HAVING CURING COMPOUNDS REMAINING ON IT, THE CURING COMPOUND MEMBRANE SHALL BE REMOVED BY SANDBLASTING OR OTHER MECHANICAL CLEANING METHOD ACCEPTABLE TO THE ENGINEER. ALL UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

THE CONTRACTOR SHALL IMMEDIATELY REPLACE, AT HIS COST, ANY UNITS WHICH FAIL DUE TO: BROKEN HOUSING; HOUSING WORN TO THE EXTENT THAT DAYTIME VISIBILITY IS SIGNIFICANTLY DIMINISHED OR THE HOUSING IS OF AN UNACCEPTABLE COLOR; DETACHED OR BROKEN REFLECTOR; HOUSING DETACHED FROM ADHESIVE; ETC.

TRPM'S ARE LIKELY TO BE REMOVED BY SNOW PLOWING OPERATIONS; THEREFORE, THEY ARE NOT CONSIDERED SUITABLE FOR USE DURING THE PERIOD FROM OCTOBER 15 TO APRIL 30. THE CONTRACTOR IS ADVISED TO SCHEDULE HIS WORK TO AVOID THE NEED TO USE THESE DEVICES DURING THAT PERIOD. SHOULD THE CONTRACTOR CHOOSE TO USE TRPM'S DURING THE TIME SPECIFIED AS INAPPROPRIATE FOR THEIR USE AND THEY ARE REMOVED BY SNOW AND ICE CONTROL ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY, AT HIS COST, PROVIDE A SUBSTITUTE TRAFFIC GUIDANCE SYSTEM WHICH IS EFFECTIVE DURING LIGHT AND DARK AND WHICH IS ACCEPTABLE TO THE ENGINEER.

THE UNITS SHALL BE ACCURATELY PLACED TO FOLLOW LINES BEING SUPPLEMENTED OR TO DEFINE THE INTENDED LOCATIONS OF LINES BEING SIMULATED. UNITS USED TO SUPPLEMENT PAVEMENT MARKINGS MAY BE PLACED ON OR IMMEDIATELY ADJACENT TO THE MARKINGS BEING SUPPLEMENTED; HOWEVER, THEY SHALL NOT BE PLACED DIRECTLY ON PAVEMENT MARKINGS IF THAT PLACEMENT WOULD PREVENT ADEQUATE ADHESION OF THE MARKER TO THE PAVEMENT. MARKER LOCATIONS SHALL BE ADJUSTED UP TO ONE FOOT LONGITUDINALLY AND/OR SIX INCHES LATERALLY TO AVOID PLACEMENT ON JOINTS OR ON CRACKED OR OTHERWISE DETERIORATED PAVEMENT.

APPLICATION

1) WHEN USED TO SUPPLEMENT PAVEMENT MARKINGS, TRPM'S SHALL BE PLACED AS FOLLOWS:

LINE	TYPE	<u>SPACING</u>
EDGE LINE	A OR B	20' C/C
LANE LINE	A OR B	40' C/C*
CENTER LINE (SINGLE/BROKEN)	A OR B	40' C/C*
CENTER LINE (DOUBLE SOLID)	A OR B	2 UNITS SIDE BY SIDE 4 INCHES APART 20' C/C
CHANNELIZING LINE (INCLUDES EXIT GORE NOSE)	A OR B	10, C\C

* CENTERED IN GAP

2) WHEN USED TO SIMULATE (REPLACE) PAVEMENT MARKINGS, TRPM'S SHALL BE PLACED AS FOLLOWS:

		· · · · · · · · · · · · · · · · · · ·
LINE	TYPE	<u>SPACING</u>
EDGE LINE	Α	5' C/C
LANE LINE	Α	4 @ 3.33' C/C 30' GAP (40' CYCLE)
CENTER LINE (DOUBLE SOLID)	A	2 UNITS SIDE BY SIDE 5' C/C
CENTER LINE (SINGLE BROKEN)	Α	4 @ 3.33' C/C 30' GAP (40' CYCLE)
CHANNELIZING LINE (INCLUDES EXIT GORE NOSE)	A	5' C/C
EDGE LINE (TWO COLOR) (WHITE/YELLOW)	Α	BACK TO BACK 5' C/C

YELLOW TRPM'S USED TO SEPARATE OPPOSITE FLOWS OF TRAFFIC (CENTER LINES) SHALL PROVIDE RETROREFLECTION IN BOTH DIRECTIONS; ANY OTHER TRPM SHALL PROVIDE RETROREFLECTION IN ONLY ONE DIRECTION.

REMOVAL

REMOVAL SHALL BE ACCOMPLISHED IN A MANNER SUCH THAT LITTLE OR NONE OF THE ADHESIVE REMAINS ON THE PAVEMENT AND PERMANENT PAVEMENT SURFACES SHALL NOT BE SCARRED, BROKEN, OR SIGNIFICANTLY ROUGHENED.

PAYMENT
BASIS OF PAYMENT SHALL BE THE CONTRACT UNIT PRICE BID FOR EACH TRPM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, HARDWARE, AND INCIDENTALS REQUIRED TO PERFORM THE WORK. THE CONTRACT UNIT PRICE BID SHALL ALSO INCLUDE REPLACEMENT, WITHOUT COST TO THE STATE OF OHIO, OF ALL TRPM'S WHICH, IN THE JUDGEMENT OF THE ENGINEER, FAIL FOR ANY REASON OTHER THAN THE FAILURE OF THE PAVEMENT TO WHICH THEY ARE ATTACHED.

					den kalanda ya kalanda wa kalanda ka		<u> piriumatus sautuun muus</u>		
STATIONING	T	YPE	A	Τ	YPE	В	SUPPL	SIMUL	LINE TYPE
(FROM-TO)/(SIDE)	W	Υ	Y/Y	W	Υ	Y/Y	ns	S	ton 11 V ton 1 1 1 ton
STAGE I									
320+40-320+82(4)	9							✓	Edge
330+84-331+00(Rt)	23	23			·			√	//
331+00-333+50(Rt.)	33			,				\checkmark	<i>"</i>
327+90-329+40(£)			18				/		Center
333+40-334+90(E)			18				\checkmark		//
329+40-330+90(Lt.)	31							1	Edge
330 + 90 - 331 + 95 (Lt.)	22	22						/	11
331+95-333+50 (4.)	32							/	//
	,				,				
Mackletree Road									
0+24-2+50 (Pt.)	47							√	Edge
0+50-2+00 (£)			18				1		Center
0+07-2+50 (Lt)	50							1	Edge
STAGE II									
330+84-331+00(Pt.)	23	23						1	Edge
331+90-333+40 (RH)	31							√	"
320+40-330+90(4)	3/							1	"
330+90-331+95 (Lt.)	22	22						1	, 11
331+05-333+40 (4.)								1	"

				Marija poveznosti i dina programi amengo amenda					
				:					

SUB-TOTALS	384	20	54	***************************************				hannannish	
TOTALS		528				dana anna anna anna			
	. The second sec			andrewinendertweetenmonende	templogisches Globby bedoeinste heby		Burner		

PAVEMENT CALCULATIONS

FHWA REGION STATE PROJECT

5 OHIO

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3C10TO COUNTY 3C1-125-6.26

			404	,	301		304		407	408	40		203	611	617	605
LOCATION AND DESCRIPTION	Side	ASP.	holt Conc AC-20	VarO"Min.	Bituminous Aggregate Base AC-20	6"	Aggregate 1 As Per Dia	Base In	Tack Loot @ 0.075 Gal. per Sq. Yd.	Bituminous Prime Loot @ 0.4 Gal. per Sq.Yd.	Seal Loat Bituminous Material @ 0.3 Gal. per Sq.Yd.	Seal Loat Lover Aggregate @ 0.008 Lu. Yd. per 3g. Yd.	3ubgrade Compaction	Reinforced Concrete Approach 3labs T = 12"	Compacted Aggregate Type A	Aggregat Drain:
		30. Yd.	39. Yd.		3q. Yd.	3g. Yd.	3g. Yd.		3g. Yd.	3g. Yd.	Sg. Yd.			Sq. Yd.		Lin. Ft.
TYPICAL SECTION A'	É						<u> </u>	-								
12' x 24' x 1/9		32	*.		· · · ·				<i>y</i>				32			
12' × 25' × 1/9					33.33	2117										
12' × 26' × 1/9						34.67										
Treated Berms	Lt., Rt.					:										
12'x4'x2x1/9							10.67			10.67	10.67	10.67				
			`													
		· · · · · · · · · · · · · · · · · · ·														
FEATHER AREAS 330 + 10.07-330+82	17 E		,						/							
330 + 10.07 - 330 + 82 (23.3' + 24' ÷ 2) × 62.5' ×	4/	×	164.24						164.24							
			104.04						104.64							
Treated Berms																
V2.5' x 4' x 1/9 Mackletree Road Sta. 0: - Sta. 330 + 82.47	Lt.						27.78			27.78	27.78	27.78				
Mackletree Road Sta. O:	50															
45' x 4' x 1/9	Rt.						20			20	20	20				
47 X4 X19							20			20	20	20				
331+06.60-332+50	10 4						·					-				
(23.8'+24'+2) x 62.5' x	110		165.07						165.07	:						
														:		
Treated Berms																
331+06.60-332+45 48.40' × 4' × 1/9	Lt.						2161			7151	2151	21.51	***************************************	***************************************		
331+06.60-332+35	Rt.		3,5				21.51			21.51	21.51	21.71				
38.40' × 4' × 110		``					17.07			17.07	17.07	17.07				

APPROACH SLABS	£					***************************************										
15' × 32' × 2 × 1/0	. 7	106.67						dennende over the second of the second over th	106.67				106.67	106.67		
15' x 33' x 2 x 1/0						110										
								i								
FEATHER FOR MACKLET	REE							***************************************								
ROAD RT. STA. 330 + 50) ,		- disconnection of the second	1.50					60							

											······································					
FEATHER FOR PARKIN	1/2						·			***************************************	***************************************	***************************************	· · · · · · · · · · · · · · · · · · ·			
LOT LEFT STA. 332 +4	5			.05					7			,		7 T T T T T T T T T T T T T T T T T T T		***************************************
,									-						· /	
FEATHER FOR DRIVE	K7.	,														
STA 332+55										***************************************			**************************************		/	
AGGREGATE DRAIL	<u> </u>															
Sta. 330+94	Lt.	ŕ											***************************************	19 State 19		5
Sta. 332 + 00	Lt.		· .			,										10
·			·													<u> </u>
3ub-Total		138.67		1.55	33.33	144.67			503.88	97.03	97.03	97.03		106.67		15
Conv. to Cu.Yd., Gal., Ton.	5, <i>etc</i>	9.6	11.4 22.55	1.55	11.11	24.11	21.56		37.79	38.81 38.81	20.11	.78 .78		106.67	/	15
	1	I	((,77	i i		1 /15	1101		37.70	2401	1011	· /×	138.67	106.67	/	1 15

PAVEMENT CALCULATIONS

GENERAL SUMMARY

FHWA REGION STATE PROJECT

5 OHIO

3C1070 COUNTY

301-125-6.26

TEM 3	SHEET NUMBER	ITEM GRA	UNIT DESCRIPTION
	10 13 14	ITEM EXT. TO	
			ROADWAY
01		201 11000 LUI	np Clearing and Grubbing
02	493	202 38000 49	3 Lin. Ft. Guardrail Removed
702 5		202 54100 5	Each Raised Parement Marker Removed for Storage
		202 34700 3	Zaci, Rajoco Parement marie, Requesta jui circiage
03	72	203 12000 7	2 Culd Exception Not Including Embankment Construction
03	110	203 20000 11	2 Cu.Yd. Excavation Not Including Embankment Construction Cu.Yd. Embankment
23	139		9 3g.Yd. Subgrade Compaction
		205 200 75	J. 10. Suglace compaction
2/4	256.25	101. 1200 261	25 Lin Et Gundail Tunes
06	2	606 7500 2500	25 Lin.Ft. Guardrail, Type 5 Each Anchor Assembly, Type A
		606 26500	
06	4	606 20500	Each Anchor Assembly, Type T L Each Bridge Terminal Assembly, Type B
			DRAINAGE
05	15	005 31100 15	Lin. Ft. Aggregate Drains
			EROSION CONTROL
27 145		207 10000 14	
07 145 07 50		207 10000 14 207 70000 5	EROSION CONTROL 5
	714		5 3g.Yd. Temporary seeding and Mulching D Each Straw or Hay Bales
	714		5 3g.Yd. Temporary seeding and Mulching D Each Straw or Hay Bales
50	714	159 10000 71 659 14000 4	39.Yd. Temporary Seeding and Mulching Each Straw or Hay Bales 4
50 40	714	159 10000 71 659 14000 4	39.Yd. Temporary Seeding and Mulching Each Straw or Hay Bales 4
50 40	714	159 10000 71 659 14000 4	5 3g.Yd. Temporary seeding and Mulching D Each Straw or Hay Bales
90 40 90 90 90 90 90 90 90 90 90 90 90 90 90	714	159 10000 71 659 14000 4	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching Ton Commercial Fertilizer Ton Agricultural Liming
90 40 100 100 100 100 100 100 100 100 100	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
90 40 100 100 100 100 100 100 100 100 100	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
50 50 40 50 .07 50 .32	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
50 40 50 50 50 50 50 50 50 50 50 50 50 50 50	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
50 40 50 50 .07 50 .32	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
50 50 40 50 .07 50 .32	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
90 40 90 90 90 90 90 90 90 90 90 90 90 90 90	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming
90 40 100 100 100 100 100 100 100 100 100	714	159 10000 71 659 14000 4 159 20000 .C 159 3000 .3	5 3g.Yd. Temporary Seeding and Mulching D Each Straw or Hay Bales 4 3g.Yd. Seeding and Mulching D 3g.Yd. Repair Seeding and Mulching 17 Ton Commercial Fertilizer 2 Ton Agricultural Liming

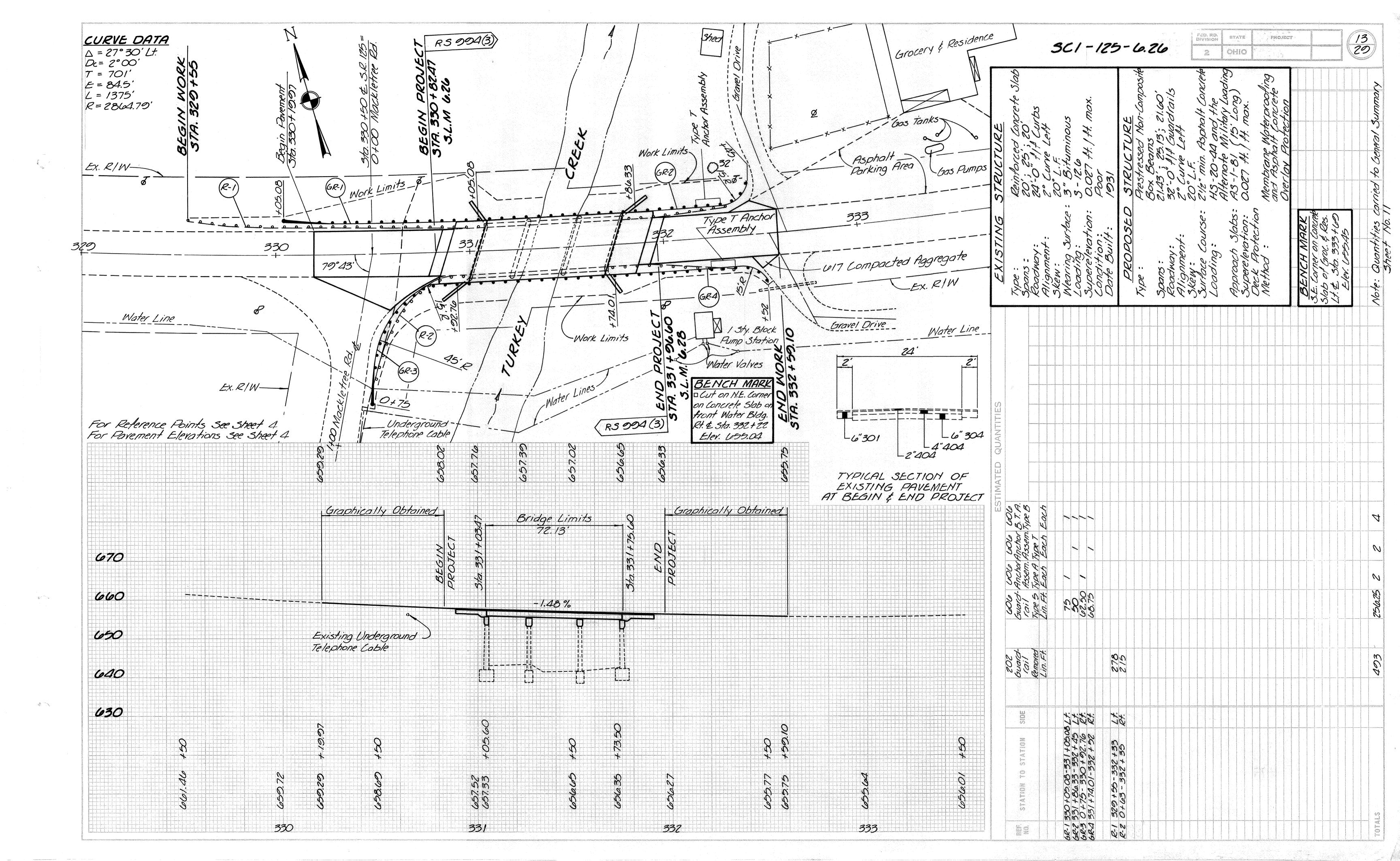
GENERAL SUMMARY

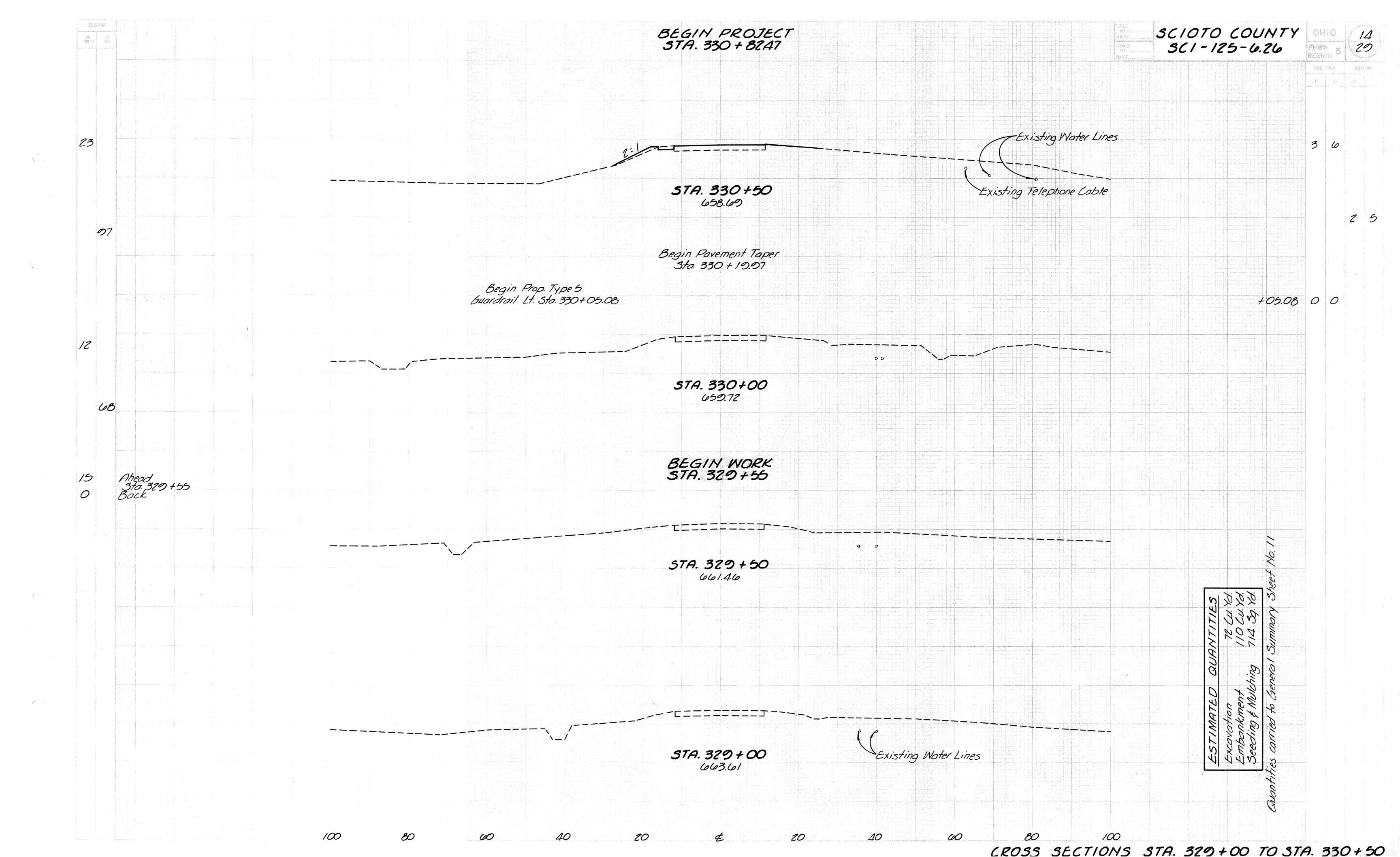
FHWA REGION STATE PROJECT

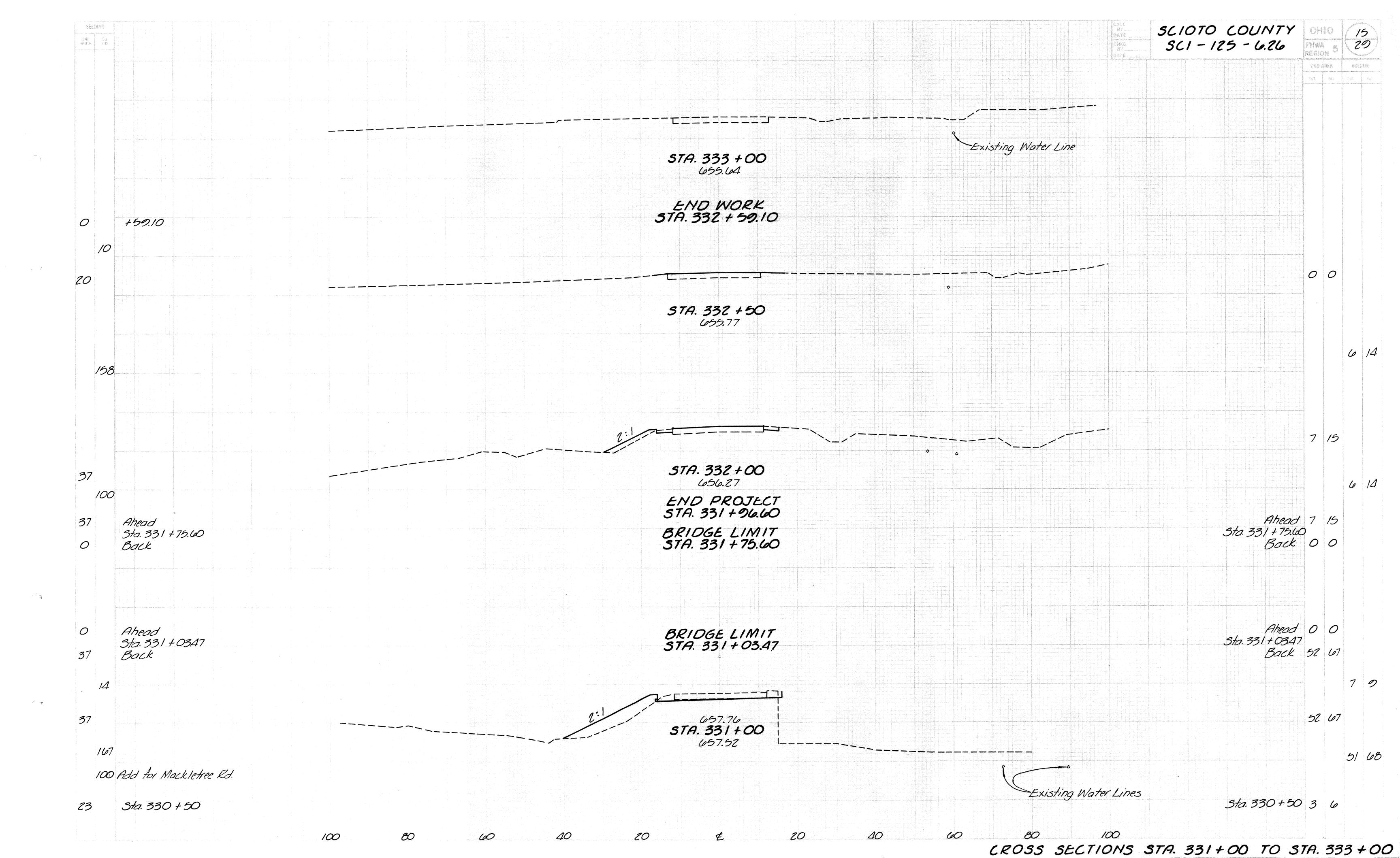
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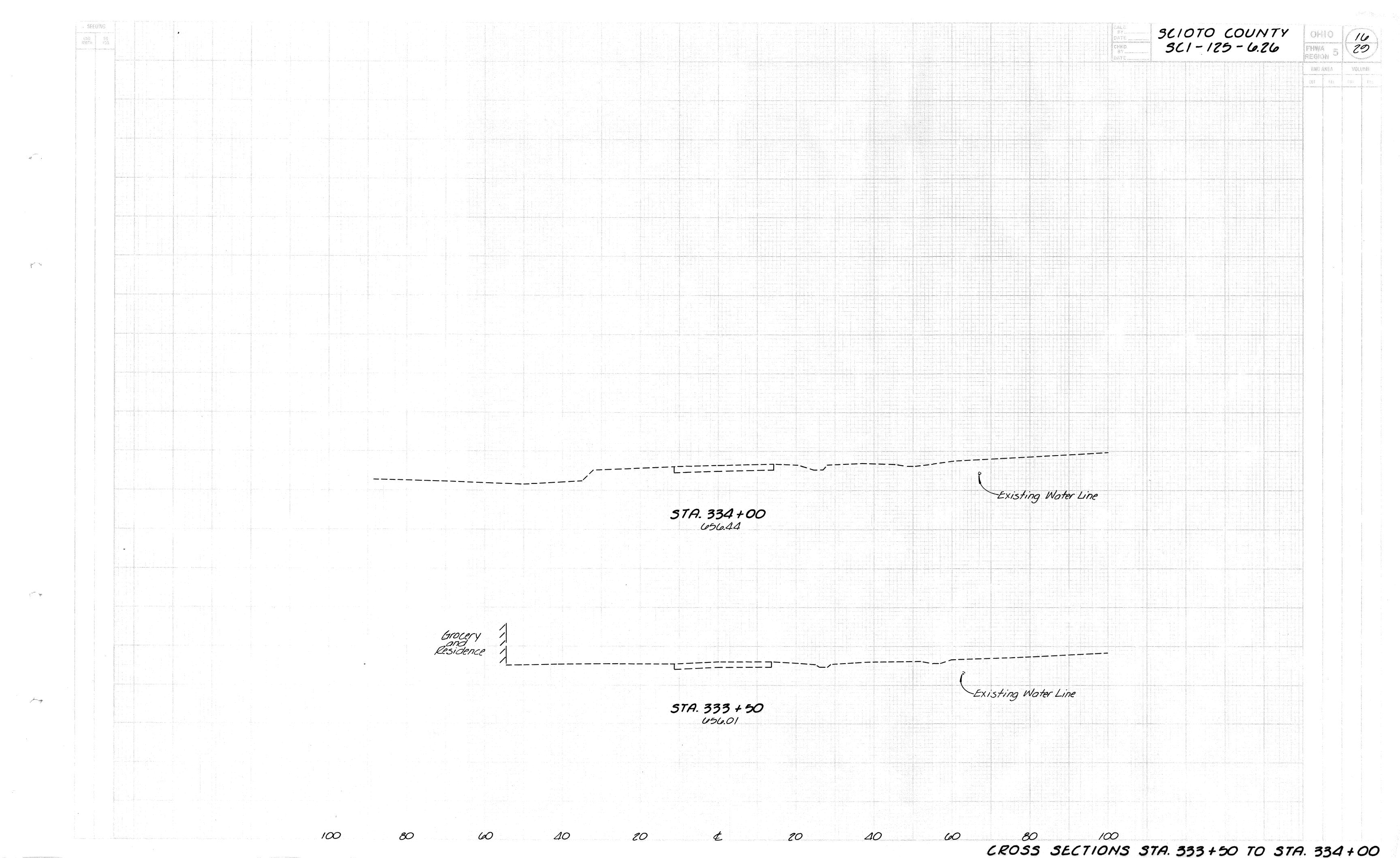
3C10TO COUNTY 3C1-125-6.26

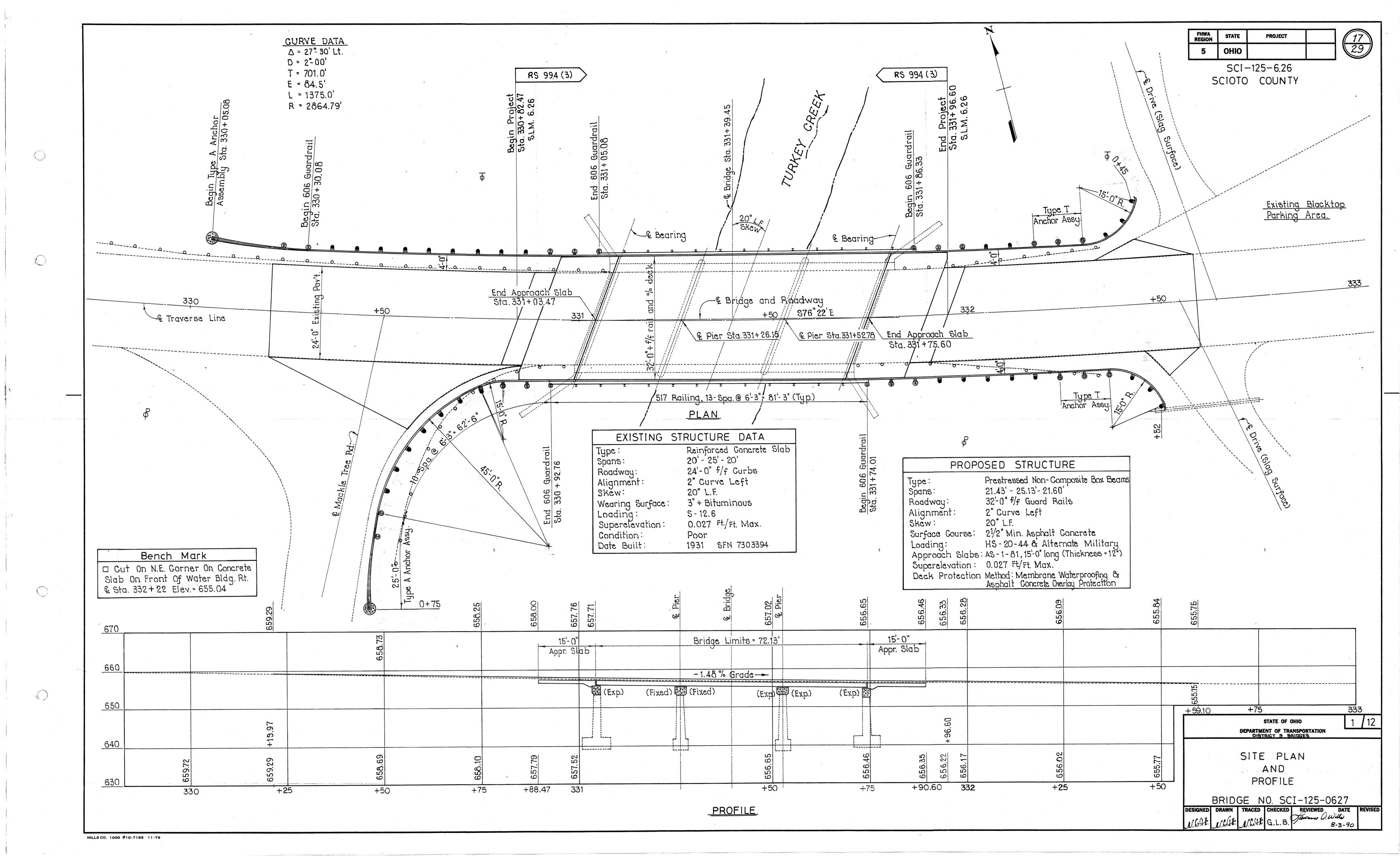
гем —	SHEET NUMBER								ITEM ITEM		UNIT	DESCRIPTION			
1 171/1	3	5	9	10					3	29		EXT.	TOTAL		
										·					PAVEMENT
α											30110	ma	11	11111	Rituminaus Pancanta Basa 01-20
01				46							304 20	2001	46	CU.Yd.	Bituminous Aggregate Base, AC-20 Aggregate Base, As Per Plan
04				23							404 20		23	CUYd	Asphalt Concrete, AC-20
												Same and the second		3.	
07	`			38							407 10	000	<u> 38</u>	Gal.	Tack Coat
													2.0		
08		· ·		30							408 10		30	Cal.	Bituminous Prime Coat
											400	2000			
00				30		,			·		409 12	200	30	(701.	Seal Coat Cover Aggregate, No. 8 Seal Coat Bituminous Material
7//	`			107							(011 11	a	107	30. Yd.	Keinforced Concrete Approach Slab (T=12")
17				/					1 α		617 10	1100		CU.YO.	Compacted Aggregate, Type A
											5:				TRAFFIC CONTROL
				<u> </u>					·						
料										.23	642 0	0090	.23 .17	Mile	Edge Line
な '2'										18	642 0 642 0	0240	. 17 18	INITE.	Edge Line Center Line 3top Line
			2872.8												
502									-	8	802 a	2100	රි	Each	Borrier Reflector, Type A
														` ::	
		25-									101 25	000	26-		MAINTENANCE OF TRAFFIC
04		25 50			4						404 35	200	50	CU.Yd.	MAINTENANCE OF TRAFFIC Bituminous Concrete for Maintaining Traffic Traffic Compacted Surface, Type A or B
14			528	i							614 12	200	528	Each	Temporary Raised Pavement Warker, Type A
14		30						- 3.			014 13	202	6	Each	Borrier Reflector, Type AZ Barrier Reflector, Type BZ
14		30										<i>'</i>			
14		.10									014 21	1000	.10	Mile	Temporary Center Line, Class I
14 14 14		.17									1014 21	400	.17	Mile	Temporary Center Line, Class I Temporary Center Line, Class II Temporary Stop Line, Class I
											CPIC CC			<i></i>	ICHIPCIOI Y CIUP LINE, CIUSS L
110	50								r		10112 11	200	61	M-G01	Water
16		/									010 20	200	7	Ton	Water Calcium Chloride Portable Concrete Barrier, 32"
EE .		270									622 40	020	270	LIN. Ft.	Hortable Concrete Borrier, 32"
						· · · · · · · · · · · · · · · · · · ·									
															For Bridge Quantities See Sheet 19
															1. Singe Quarifines de Offer 19
11		1,,,,,,									10111	1000	1,,,,,,		Maintaining Teathic
14	Lump	Lump		with the second							019 10	200	Lump		Maintaining Troffic Field Office, Type A
ムフ				,							023 10	222	Lump		Construction Layout Stakes Mobilization
23			1	1	1 1.	1	į i	1 1	1	, , , , , , , , , , , , , , , , , , ,	1/1/21 1//			1	1/Y/ODI112011011











GENERAL NOTES

REFERENCE Shall be made to Standard Drawing:

AS-1-81	Dated	11- 27-81
BP-5	Dated	10-1-87
DBR-2-73	Dated	4 - 10 - 73
GR-1	Dated	1-11-85
GR-2B	Dated	2-5-82
GR-3		2-22-90
GR - 4	Dated	2 - 5 -
GR-4A		1-30-84
PSBD-1-81	Dated	6-20-89

<u>DESIGN SPECIFICATIONS:</u> This structure "Modification" conforms to "Standard Specifications for Highway Bridges" adopted by the American Association Of State Highway and Transportation Officals, 1989 and the Ohio Supplement to these Specifications.

DESIGN DATA:

HILLS CO. 1000 #10-7155 11-79

Design Loading - HS 20-44 and Alternate Military Loading.

Gonerete Class C - Fig = 4,000 p.s.i. for substructure.

Reinforcing Steel - ASTM A615, A616 or A617 Fy = 60,000 p.s.i. for substructure (Grade 40 for Prestressed Beams).

Concrete for Prestressed Concrete Beams - Fc = 5,500 p.s.i. at 28 days (Min.)

Unit Stress - 2,200 p.s.i. Compression, 444 p.s.i. Tension.

Prestressing Strand - ASTM A416 - Fis = 270,000 p.s.i. Initial Stress 0.70 Fis. Concrete Class S - Fr = 4,500 p.s.i.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic, the existing structure shall be removed. See sheet No. 10 of 12 for Staged Construction.

EXISTING STRUCTURE VERIFICATION: Details and dimensions shown on these plans pertaining to the existing structure have been obtained from plans of the existing structure and or from field observations and measurements. Consequently, they are indicative of the existing structure and the proposed work but they shall be considered tentative and approximate. The Contractor is referred to CMS sections 102.05, 105.02 and 513.02

ITEM SPECIAL, SEALING OF CONCRETE SURFACES (EPOXY) + 2 - 10 Ft.) A epoxy scaler, (tinted white) shall be applied to the concrete surfaces as shown on sheet No. 7 and 10 of 12. See Proposal Note for surface preparation requirements, application rates, materials requirements and application procedures.

BRIDGE SEAT REINFORCING: Reinforcing steel in the vicinity of the bridge seat shall be accurately placed to avoid interference with the drilling of anchor bar holes.

POROUS BACKFILL shall extend upward to the approach slab and laterally to the surface of the embankment slopes.

LAMINATED ELASTOMERIC BEARINS: The laminated clastomeric bearing manufacturer shall proof load each laminated clastomeric bearing with a compressive load equal to 1.5 times the maximum design load as per Article 25.7, Bearing Tests and Acceptance Criteria, Division II, Construction of the "Standard Specifications for Highway Bridges" adopted by the American Association of State Highway and Transportation Officals,
Thirteenth Edition, 1989. The testing shall be included in the price bid for the bearings.
Acceptance of the bearing shall be according to Level I acceptance criteria of Article 25.7
and 711.23 of the Construction and Material Specifications. The manufacture shall furnish certified test data.

The maximum design load is 20,000 Lbs.

FHWA REGION (18) 29) OHIO

> SCI-125-6.26 SCIOTO COUNTY

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 9 BRIDGES

GENERAL NOTES

BRIDGE No. SCI-125-0627

FHWA REGION	STATE	PROJECT	
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SCI-125-6.26 SCIOTO COUNTY

			E	STIMATED QUANTITIES (STRUCTURE OVER 20 FT. SPAN)
ITEM		TOTAL	UNIT	DESCRIPTION
202	11202	Lump		Portions of structure removed, over 20 foot span
403	20000	12	Cu. Yd.	Asphalt concrete, AC-20
404	20000	9	Cu.Yd.	Asphalt concrete, AC-20
Special	450 14000	69	Lin. Ft.	Sawing and sealing asphalt concrete pavement joint.
<i>5</i> 03	11100,	Lump		Cofferdams, cribs and sheeting
509	15800	5104	Pound	Epoxy coated reinforcing steel, grade 60
510	11100	204	Each.	Dowel hole
511	34002	4	Cu. Yd.	Class S concrete, high early strength
511	42500	15	Cu. Yd.	Class C concrete, pier cap
511	45700	16	Cu. Yd.	Class C concrete, abutment
511	46000	8	Cu. Yd.	Class C concrete, retaining wall or wingwall
512	44400	42	Sq. Yd.	Type B waterproofing
512	55800	257	Sq. Yd.	Type D waterproofing
Special	51267502	158	Sq. Yd.	Sealing of concrete surfaces (epoxy) #
515	53500	24	Each	Prestressed concrete box beam (16'-30' Length) B17 x 48
516	13600	183	Sq.Ft.	1" Preformed expansion joint filler
516	31011	69	Lin. Ft.	2" Deep joint sealer, as per plan
516°.	41200	17	Sq. F1.	1/8" Preformed bearing pad ,711.21
516	43100	96	Each	Elastomeric bearing with internal laminates only (neoprene) 1" x 5" x 10"
517	72300	162.50	Lin.Ft.	Railing (Deep beam rail with steel tubular backup and type 2 steel posts and anchor bolts)
518	21200	54	Cu. Yd.	Porous backfill with Filter FABRIC
Special	51822300	145	Lin. Ft.	Steel drip strip
			·	

HILLS CO. 1000 #10-7155 11-79

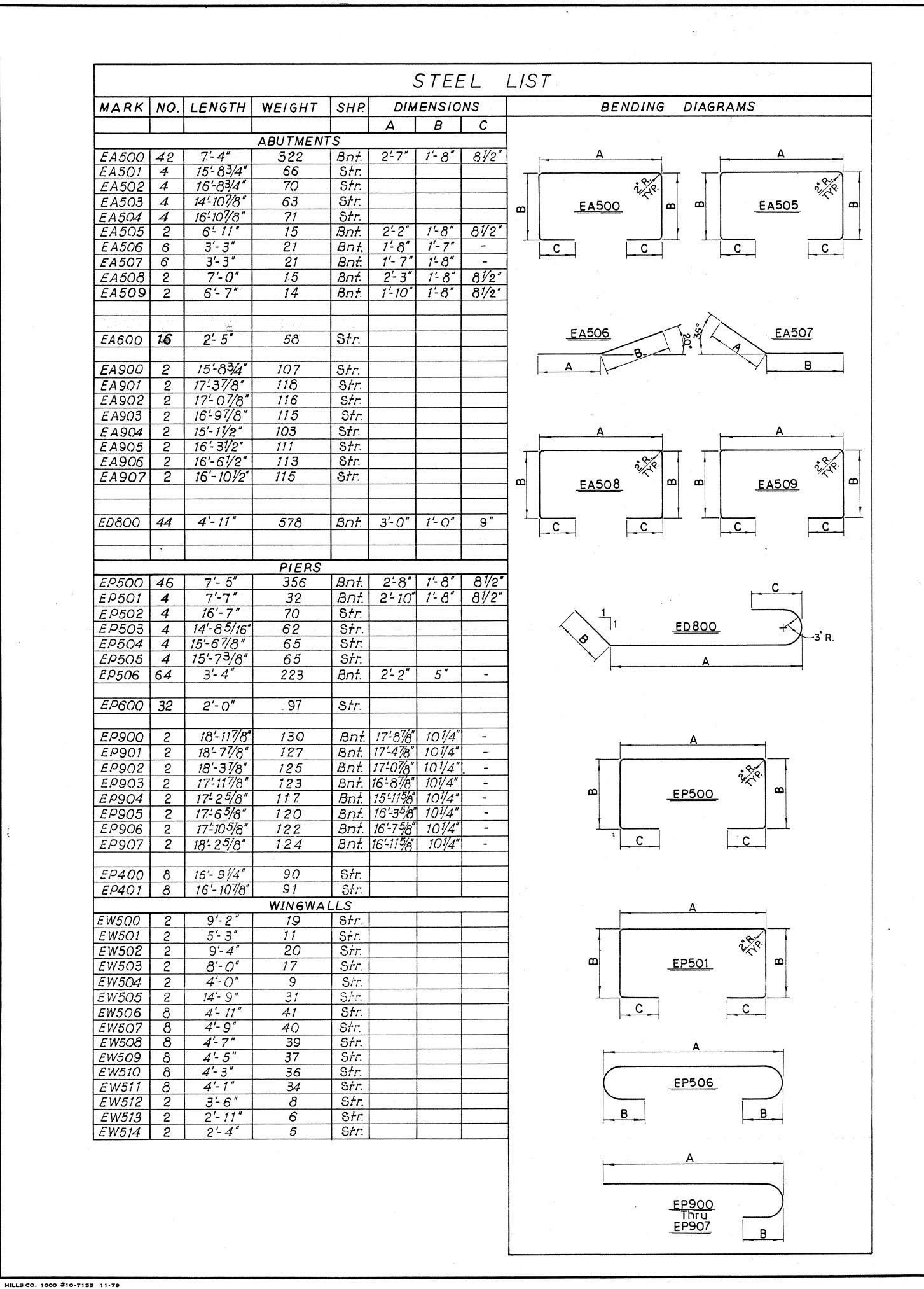
<u>NOTES:</u>
See Proposal Note

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 9 BRIDGES

ESTIMATED QUANTITIES

3 / 12

BRIDGE NO. SCI-125-0627



FHWA REGION	STATE	PROJECT	
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SCI-125-6.26 SCIOTO COUNTY

MARK	NO.	LENGTH	WEIGHT	SHP.	DIM	1ENS10	NS		BENDING	DIAGRAMS	
-					A	В	С				
			WINGWAL	LS (C	ONT.)						
EW515	2	1'- 11"	4	Str.							
EW516	4	3'- 5"	15	Str.							
EW517	4	2'- 9"	12	Str.							
EW518	4	2'- 2"	9	Str.							
EW519	4	3'-2"	14	Str.							
EW520	2	5'-7"	12	Str.							
EW521	2	6'-7"	14	Str.							
EW522	2	4'-10"	10	Str.			·	•			
EW523	2	2'- 2"	5	Str.							
EW524	2	13'-0"	27	Str.							
EW525	2	9'-2"	19	Str.							
EW526	2	11'-8"	25	Str.							
EW527	2	4'-10"	10	Str.							
EW528	2	9'-0"	19	Str.	-						
EW529	2	10'-2"	22	Str.							
EW530	2	6'-2"	13	Str.							
EW531	2	2'-1"	<i>- 5</i>	Str.							
EW532	2	17'- 1"	36	Str.							
EW533	2	3'- 11"	රි	Str.							
EW534	2	3'-9"	රි	Str.		,					
EW535	2	3'- 5"	7	Str.			•				
EW536	2	2'-10"	6	Str.							
EW537	2	2'-4"	5	Str.							
EW538	2	2'-0"	4	Str.							
EW <i>5</i> 39	2	6'-0"	13	Str.							
EW540	2	7'-4"	16	Str.							
EW541	2	4'-7"	10	Str.					•		
EW542	2	13'- 2"	28	Str.							
EW543	2	1'-9"	4	Str.							
EW544	2	9'-4"	20	Str.							
									\		

Prefix "E" in the bar mark denotes an epoxy coated reinforcing bar.

angan supurtu sunggen kada sada penduan mengan sunggen berain di diberain di dipertuan sada di diberain di dibe Kanangan penduan kanangan berain di diberain kanangan penduan kanangan kanangan kanangan berain di diberain be Kanangan berain di dipertuan kanangan berain di diberain berain di dipertuan kanangan kanangan berain berain b

STATE OF OHIO

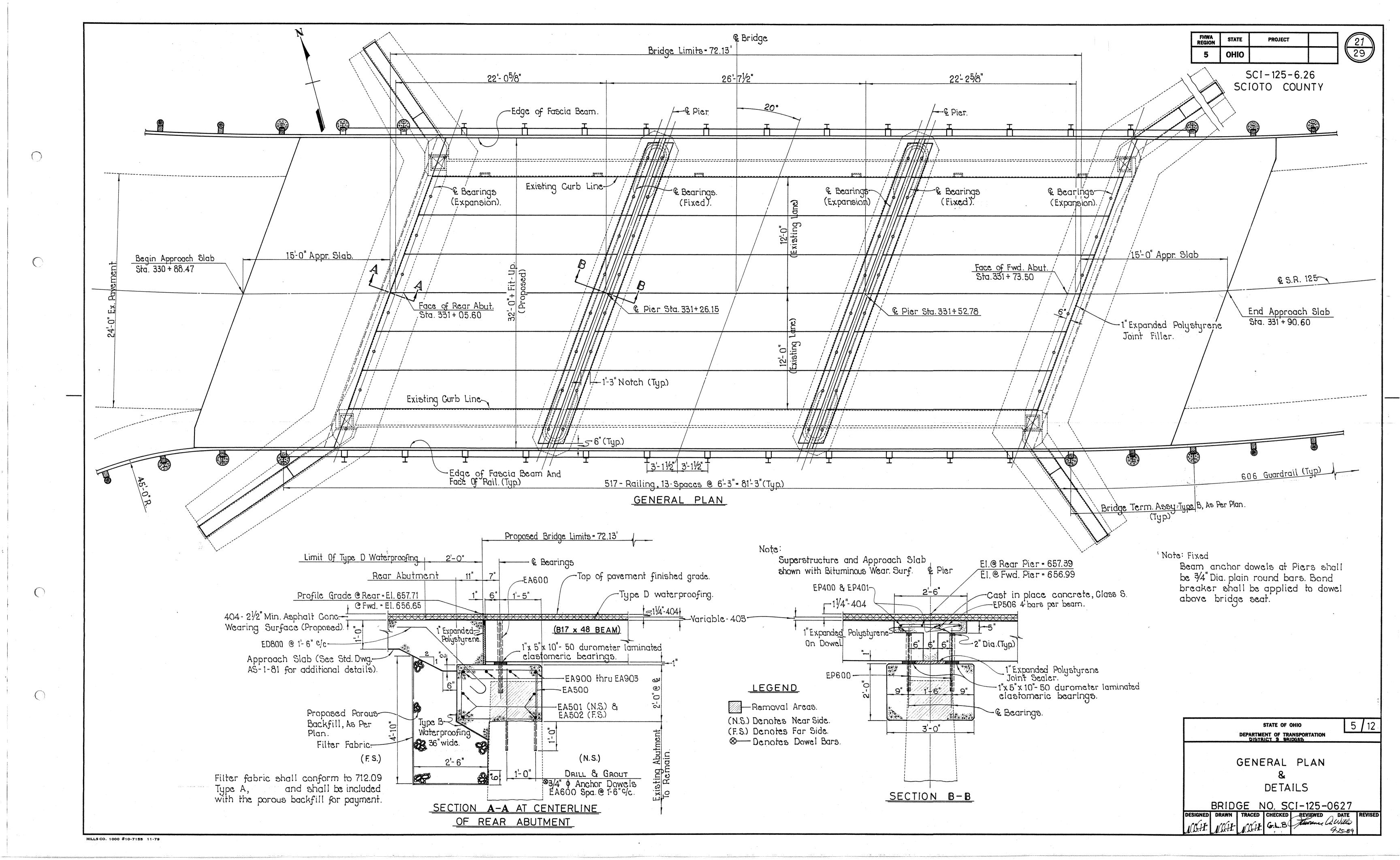
DEPARTMENT OF TRANSPORTATION

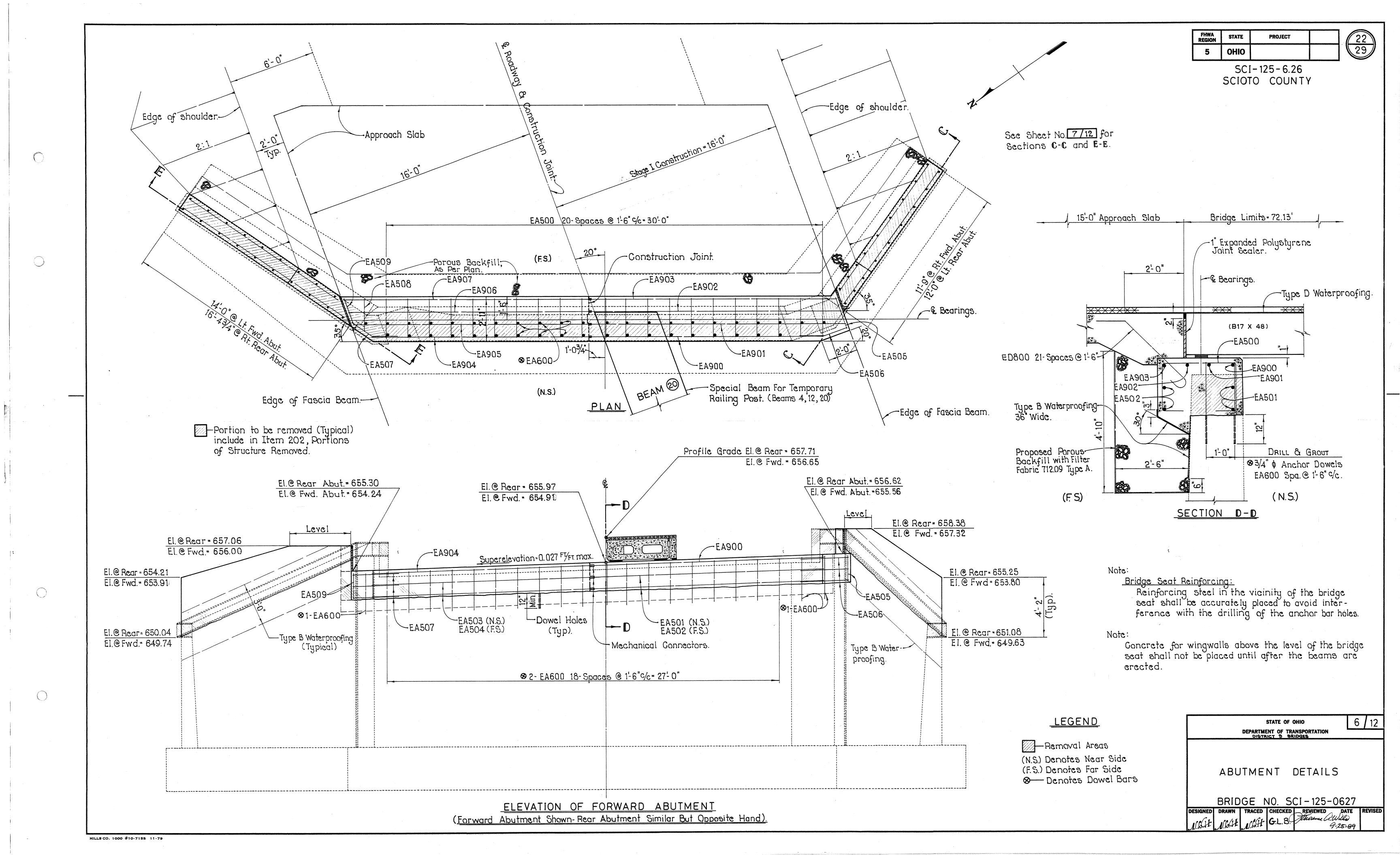
DISTRICT 9 BRIDGES

STEEL LIST

BRIDGE No. SCI-125-0627

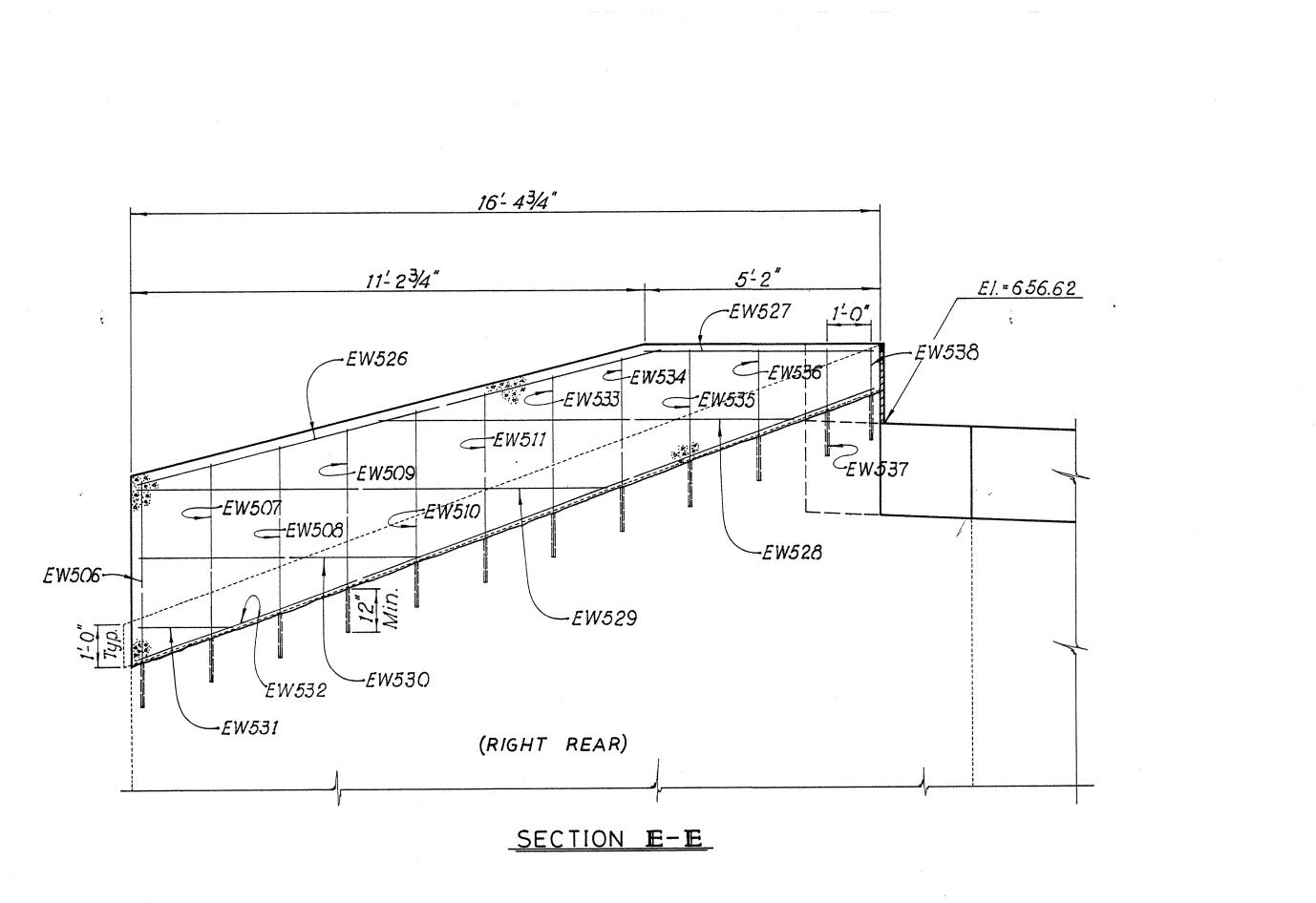
SIGNED DRAWN TRACED CHECKED REVIEWED DATE REVIEWED GLUEBY 9-25-89



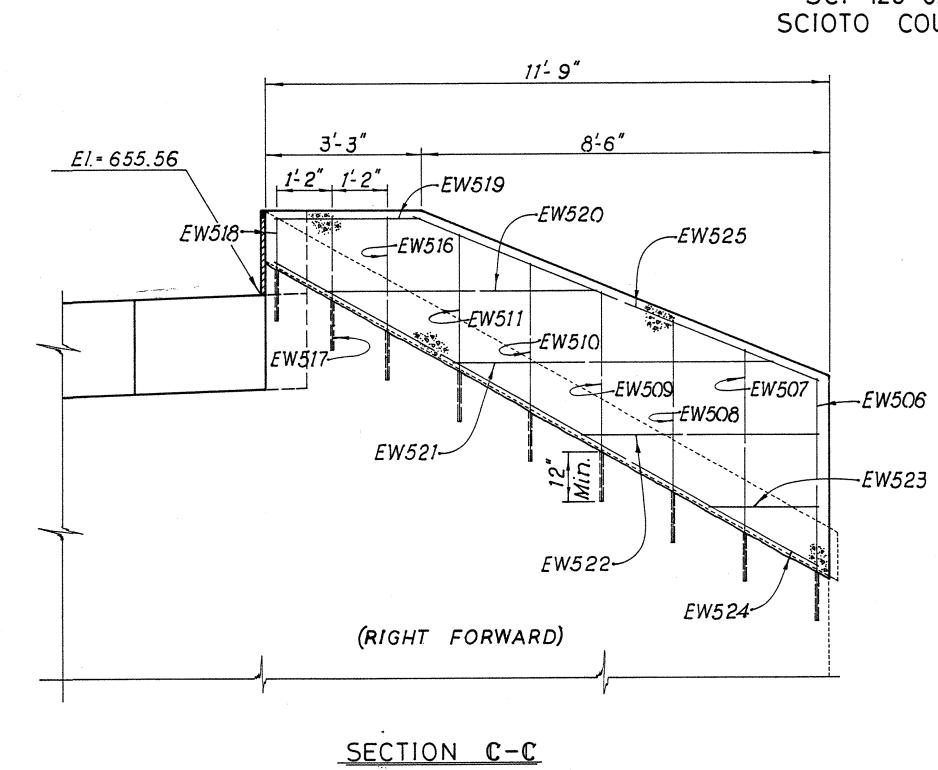


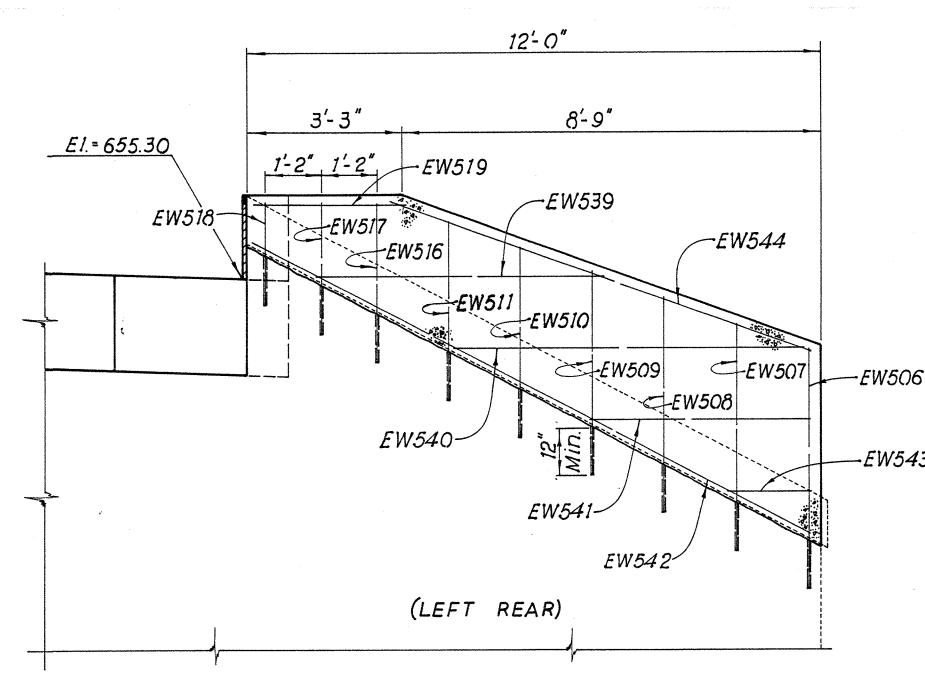
23 29 FHWA REGION STATE **PROJECT** OHIO SCI-125-6.26 SCIOTO COUNTY _EW525 EW509 EW508 EW507 —EW506 12" Min. -EW523 EW524 SEE PLAN VIEW, SHEET NO. 6/12 8-9" ~EW539 ~EW544 EW509 -EW507 —EW506 12" Min. -EW543 EW541-EW542 SECTION C-C 7 | 12 STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 9 BRIDGES ABUTMENT WINGWALL DETAILS BRIDGE NO. SCI-125-0627

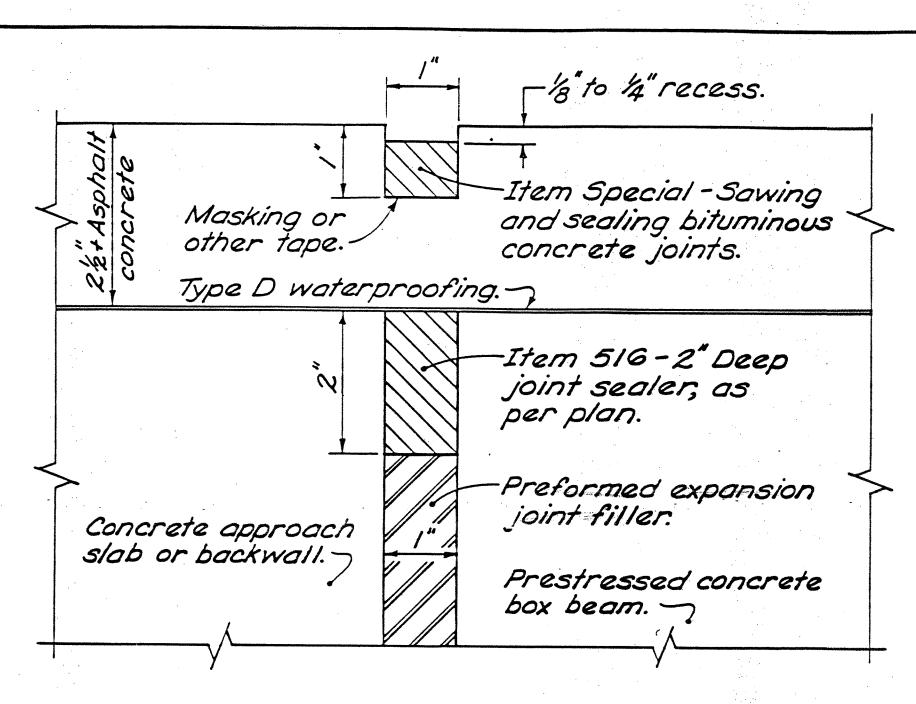
14-0" __1"Expanded Polystyrene Joint Filler (Typ). X-Surfaces to be sealed (Epoxy) Typical. 8'-10" 5'-2" ~EW501 1'-3" El.= 654.24 _EW500 EW512 EW513 EW515 EW509 EW514 -EW507 -EW508 EW506-----ÉW510 EW504-EW505--Remove top of wingwall. (Typical). -EW503 Type B Waterproofing -Dowel Holes (Typ). EW505 - EW504 3" (Typ). (LEFT FORWARD) SECTION F-F SECTION E-E SEE PLAN VIEW, SHEET NO. 6/12



HILLS CO. 1000 #10-7155 11-79







SEALING OF JOINTS AT ABUTMENTS

ITEM SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE
JOINTS

1) Description:

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This work shall consist of cutting and sealing transverse joints on the new bituminous concrete overlay of box beam bridges. Bituminous concrete joints shall be constructed directly over, and in line with, the existing underlying transverse abutment joint of the box beams.

2) <u>Materials</u>:

KEY BLUE PRIME CO. NJBANA

The joint sealant shall meet the requirements of ASTM Specification D3405, Joint sealants, Hot-poured, for Concrete and Asphalt Pavements. Acceptable alternate materials are:

Roof-Flex 176, polyurethane, as produced by the Carboline Company, 350 Hanley Industrial Court, St. Louis, Missouri 63144 (Roger Zubal, 614-877-3406); a silicone sealant meeting Federal Specifications TT-S-001543A Class A (one-part silicone sealants) and TT-S-00230C Class A (one-component sealants), such as those manufactured by General Electric, Silicone Products Division, 6155 Rockside Rd., Rockside Square I, Independence, Ohio 44131 (John Fromholtz, 216-447-1750) or Dow Corning, 3737 Park East, Beachwood, Ohio 44122 (Robert Ruppel, 216-464-2330); or Sof-Seal, a cold-applied, low-modulus, twocomponent polymeric compound horizontal sealant as manufactured by W. R. Meadows, Inc., P.O. Box 543, Elgin, Illinois 60121 (Robert Cameron, 312-683-4500). Sealant will be accepted on the basis of the manufacturer's certification that it conforms to the requirements of these specifications.

3) Construction Details:

A) General: The contractor shall conduct his operation so that the cutting, cleaning and sealing of transverse joints is a continuous operation that will be performed as soon as practical after the paving, but no later than four (4) days after placement of the asphalt concrete surface course. Traffic shall not be allowed to knead together or damage the joint cut prior to sealing.

B) Cutting of Transverse Joints: The contractor shall saw or rout transverse joints to the dimensions shown in the details on this sheet. The cut joints shall lie directly above each box beam abutment joint. The joint location shall be marked on the new asphalt surface with a chalk line, or by some other acceptable method, before cutting. Details of the method for locating and accurately marking the proposed cuts shall be subject to the approval of the Engineer prior to starting any surfacing or paving operations.

The blade or blades shall be of such size that the full width and depth of the cut can be made with one pass. Dry or wet cutting will be allowed. Joints shall extend the full width of the bridge.

C) Cleaning Joints: Dry sawed joints shall be thoroughly cleaned with a sufficient amount of compressed air to remove any dirt, dust, or deleterious matter. Wet sawed joints shall be washed clean of all cuttings by flushing with a jet of water and with other tools as necessary. After flushing, the joint shall be blown out with compressed air. When the surfaces are thoroughly clean and dry, and just prior to placing the joint sealer, compressed air having a pressure of at least 90 p.s.i. shall be used to blow out the joint and remove all traces of dust.

In the event freshly cut joints become contaminated before they are sealed, they shall be recleaned of all foreign material by high pressure water jet.

D) Sealing Joints: The joint shall be thoroughly dried before the sealant is placed. After cleaning and drying, a bond-breaker (tape) shall be applied to the bottom of the groove.

Hot-poured joint sealant material shall be heated in a kettle or melter constructed as a double boiler, with the space between the inner and outer shells filled with oil or other heat transfer medium. Positive temperature control and mechanical agitation shall be provided. Heating must be in strict accordance with the manufacturer's recommendation. Joint sealer material shall never be kept heated at the pouring temperature for more than four (4) hours and shall never be reheated. Sealer left in the applicator at the end of a day's work shall be removed and discarded.

Hot-poured sealant shall be applied immediately through a nozzle, which must project into the sawed joint, filling from the bottom up. The seal shall completely fill the joint in such a manner that, after cooling, the level of the sealer will not be higher than 1/8" below the pavement surface. Any depression in the cooled seal greater than 3/16" shall be brought up to the specified limit by further addition of hot-poured sealant. Care shall be taken in the sealing of the joints so that the final appearance will present a neat, fine line.

The PLANT CANTO

FHWA REGION STATE PROJECT 24

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SCI-125-626 SCIOTO COUNTY

The cold applied sealant materials (polyurethane, silicone, and polymeric compounds) shall be installed as per manufacturers' recommendations, or as directed by the Engineer. The sealant shall be installed when the ambient temperature is 40 degrees F or higher. Traffic shall not be allowed on the joint for one hour after application of the sealant.

4) Method of Measurement:

The quantity to be paid for under this item will be the number of linear feet of joints sawed and sealed as per the above requirements.

5) Basis of Payment:

The unit price per linear foot for Item Special - "Sawing and sealing bituminous concrete joints" shall include the cost of all labor, materials, and equipment necessary to complete the work, including the furnishing and placing of the joint sealer material.

ITEM 516 - 2" DEEP JOINT SEALER, AS PER PLAN

This item shall meet the material (para. 2) and sealing (para. 3D) specifications of Item Special - Sawing and sealing bituminous concrete joints.

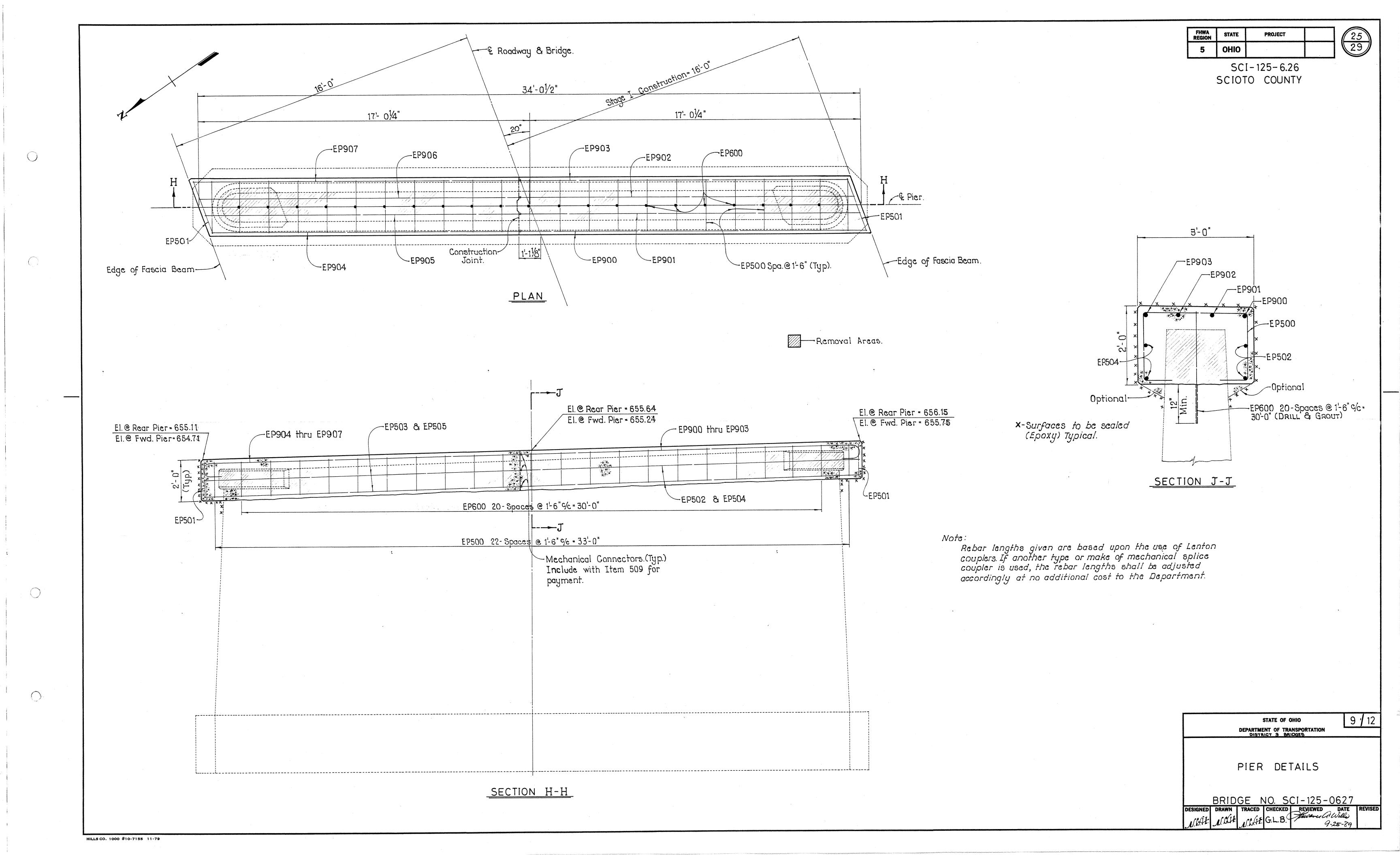
REVISIONS
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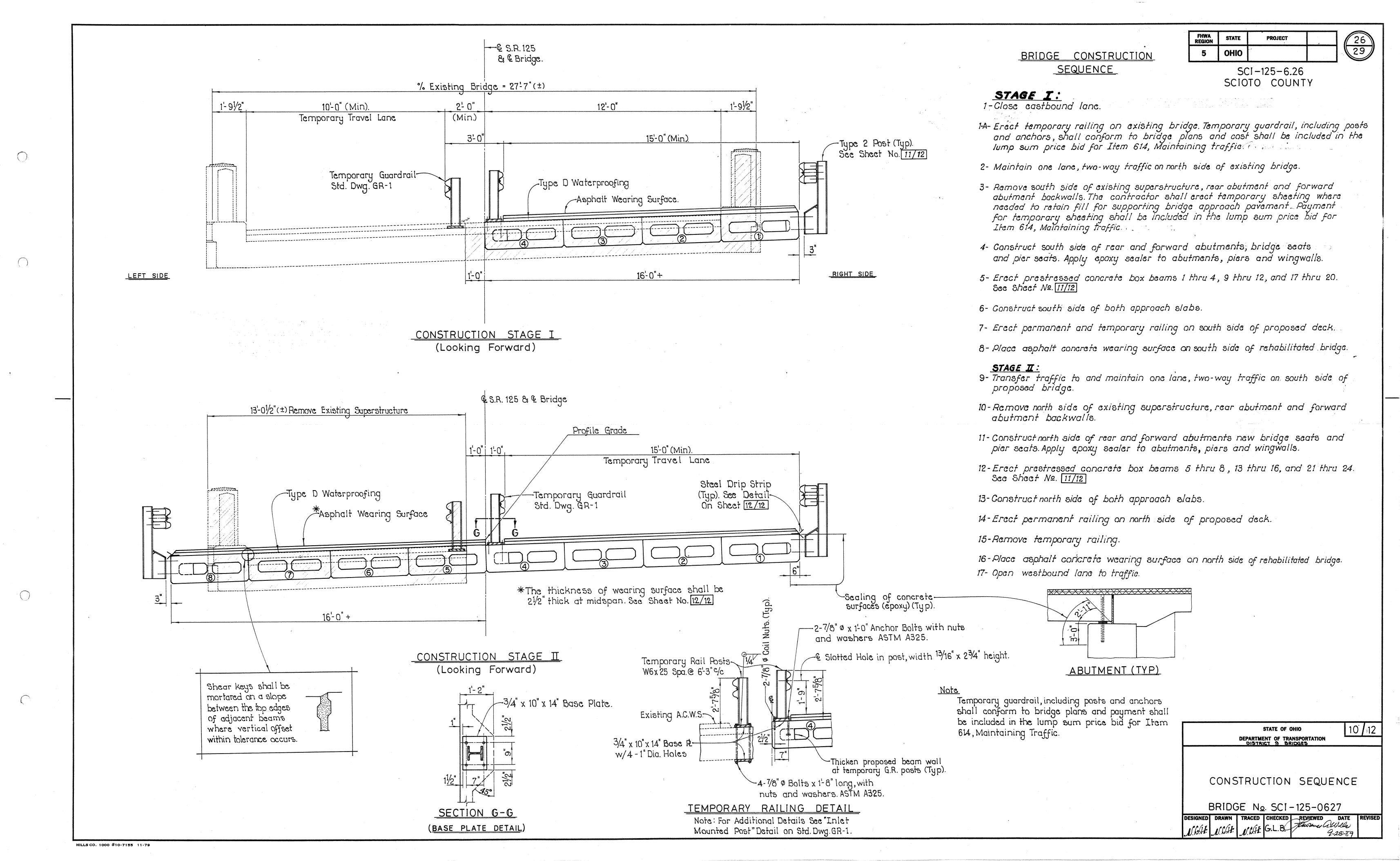
ABUTMENT JOINTS IN
BITUMINOUS CONCRETE,
BOX BEAM BRIDGES

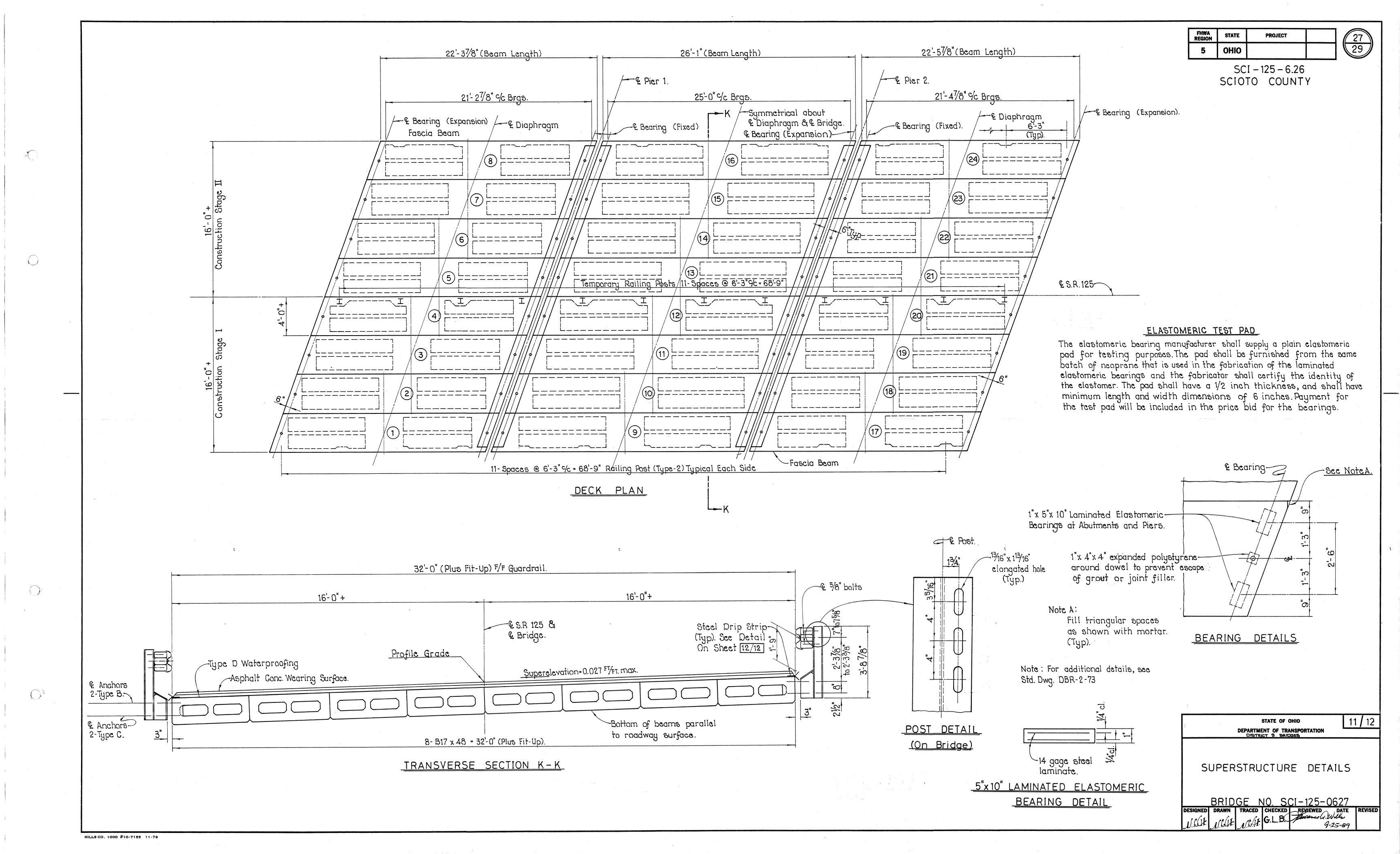
BRIDGE NO. SCI-125-0627

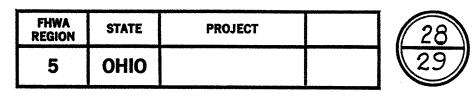
JEB MJB TRACED CHECKED REVIEWED DATE

WTF WJJ 2-2-84









SCI-125-6.26 SCIOTO COUNTY

Additional drip strip 12"

long, centered at all guardrail posts. (Typ).

Asphatt concrete surface
course, 2½" Min.

Fastener.

Type D Waterproofing

Edge of deck.

DRIP STRIP

Drip Strip: Prior to applying deck membrane waterproofing, a bent drip strip shall be installed along the edges of the deck as shown. The strips shall be fastened at 1'-6" C/c maximum with 11/4" x 5/32" x 1/4" flat head drive pin and washer. (Length x Shank Dia. x Head Dia.) or #10 galvanized screws and expansion anchors, subject to the approval of the Engineer. The strips shall be placed the full length of the deck, ending at the face of the abutment wingwall. Where splices are required a 3" (Min.) lap shall be used with a fastener through the lap. Stainless steel shall be 20 gauge ASTM A167, type 304 mill finish. Payment shall be at the contract price bid for Item Special, Lin. Ft., Steel Drip Strip, which shall include all materials, labor, tools and incidentals necessary to complete the Item. The final pay quantity shall be the actual overall length of the drip strip. Laps and additional strips at posts shall not be measured for payment.

Additional Details: See Standard Drawing PSBD-1-81, sheets 1, 2, 3, 4 of 4 for beam lifting inserts, end details of transverse tie rod anchorage, normal crown treatment at centerline of roadway, beam dimensional tolerances, anchor dowels, details and reinforcement of beam ends and transverse tie rods.

Asphalt Concrete Surface Course: Shall consist of a variable thickness of 403 and 11/4" thickness of 404. The 403 shall be placed in two operations. The first course shall be of 11/4" uniform thickness. The second course shall be feathered to place the surface parallel to and 11/4" below final pavement surface elevation.

Calculated Camber at time of paving, including allowance for camber growth due to creep, is 9/16" for center span and 7/16" for end spans. Net final camber of beams is 9/16" for center span and 7/16" for end spans. This is in excess of the amount required to place the top of the beam parallel to profile grade. This excess amount shall be compensated for by thickening the 403 leveling course from 11/4" at center of span to 113/16" at piers and 111/16" at Abuts. See Schematic Diagram.

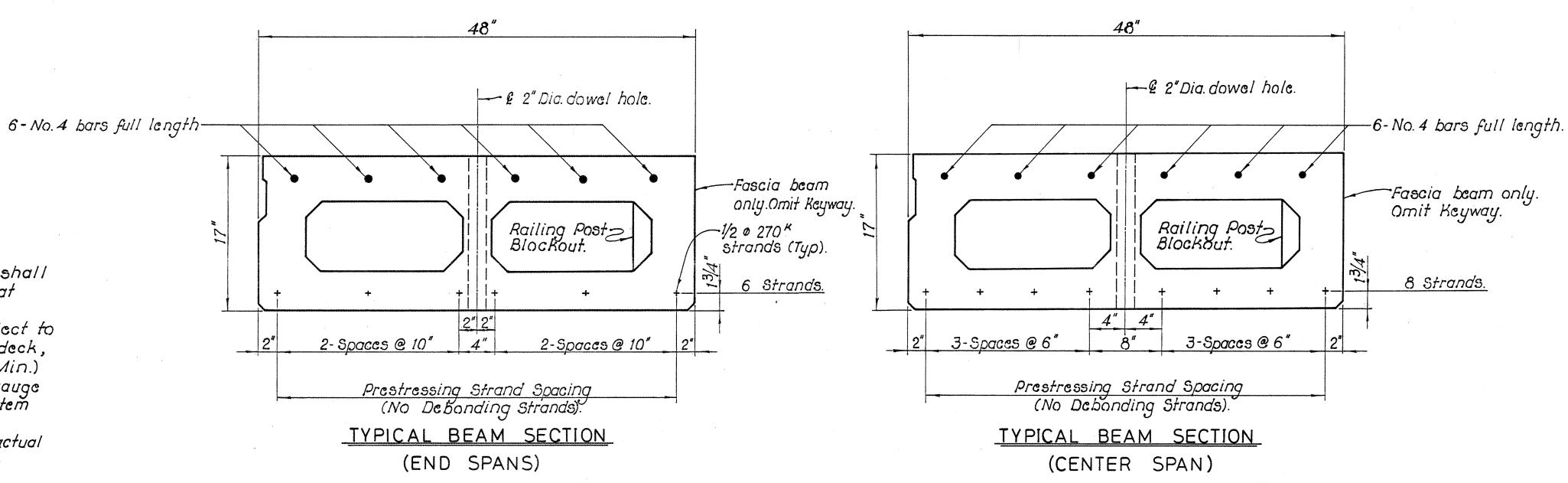
Non-Shrinking Mortar: Mortar or grout for keyways between prestressed concrete box beams, for tie rod recesses and for anchor dowel holes shall be a non-shrinking, non-metallic mortar having a minimum compressive strength at 28 days of 5,000 p.s.i. according to the Gorps of Engineers Specification CRD-C621-83 when prepared to a moderate fluidity (124-145%) The mortar or grout shall also meet all other requirements of Specification CRD-C621-83. The mortar shall be prepared, placed and cured in accordance with the manufacturer's recommendations, against surfaces as specified below.

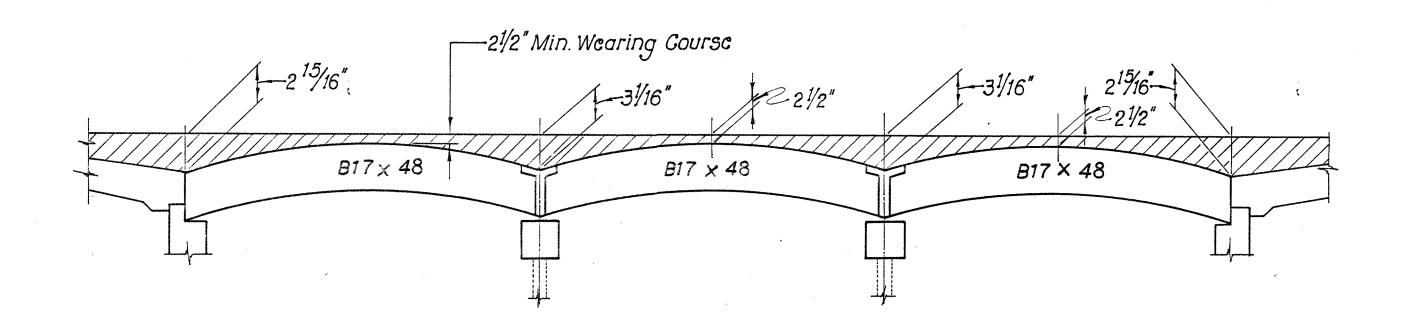
Preparation Of Concrete Surfaces In Contact With Non-Shrinking Mortar: The keyway surfaces shall be given a medium sandblast at the plant within four days before the beams leave the plant. Before mortaring, the keyways shall be thoroughly clean of all dirt, dust and other foreign matter. The keyway surfaces shall be wetted, but no free water shall be allowed to remain in the keyways.

Bearing Pad Shims: Two (2) 1/8" thick preformed bearing pads per beam shall be used as shims to accomodate any non-parallelism between bottom of concrete beams and bridge abutment seats. 48 pads required (per CMS 711.21) Shims shall have same plan dimensions as Elastomeric Bearings.

Concrete For Prestressed Concrete Beams: Minimum concrete strength at time of initial prestress f'ci = 4000 p.s.i.

Sings francisc<u>i, a naskisi (f</u>f. 1856. – 1866. navens váro opravlos), pro a tem felato přem 1. 1880 navenská





SCHEMATIC DIAGRAM

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION
DISTRICT 9 BRIDGES.

SUPERSTRUCTURE DETAILS

BRIDGE NO. SCI-125-0627

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE

WHILL WAR GLANGE G.L.B. THENEWED Q-25-89

HILLS CO. 1000 #10-7155 11-79

