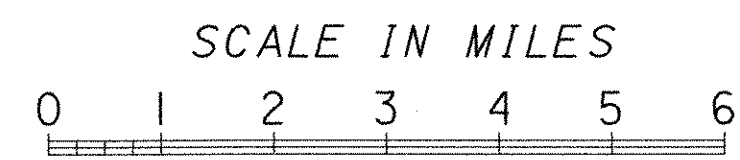


LOCATION MAP

LATITUDE: 41°10'19" LONGITUDE: 80°34'58"



PORTION TO BE IMPROVED.....
 INTERSTATE & DIVIDED HIGHWAY.....
 UNDIVIDED STATE & FEDERAL ROUTES.....
 OTHER ROADS.....

DESIGN DESIGNATION	WEST OF US 62	EAST OF US 62
CURRENT ADT (2001)	39,260	24,420
DESIGN YEAR ADT (2021)	45,920	31,330
DESIGN HOURLY VOLUME	4,362	2,976
DIRECTIONAL DISTRIBUTION	0.55	0.55
TRUCKS (24 HOUR B&C)	39%	57%
DESIGN SPEED	70	70
LEGAL SPEED	65	65

DESIGN FUNCTIONAL CLASSIFICATION -
 RURAL INTERSTATE

DESIGN EXCEPTIONS : NONE

UNDERGROUND UTILITIES
 TWO WORKING DAYS
BEFORE YOU DIG
 CALL 1-800-362-2764 (TOLL FREE)
 OHIO UTILITIES PROTECTION SERVICE
 NON-MEMBERS
 MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

BURGESS & NIPLE
 100 WEST ERIE STREET
 PAINESVILLE, OH 44077

ENGINEERS SEAL:



SIGNED: *Eric N. Forsberg*
 DATE: 8/15/02

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION

TRU-80-9.08
HUBBARD TOWNSHIP
TRUMBULL COUNTY

PROJECT DESCRIPTION

MILLING AND FILLING OF 3.24 MILES OF EXISTING IR 80 AND RAMPS. UPGRADES TO GUARDRAIL AND TERMINAL ASSEMBLIES, AND REHABILITATING SEVEN MAINLINE IR-80 STRUCTURES.

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.

1997 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.

SHEETS WITH "AS BUILT" NOTATIONS

INDEX OF SHEETS:

TITLE SHEET	1	
SCHEMATIC PLAN	2,3	
TYPICAL SECTIONS	4,5	
GENERAL NOTES	6-9	
TRAFFIC MAINTENANCE NOTES	10-16	
TRAFFIC MAINTENANCE DETAILS	17-26	
PLAN SHEETS	27-36	28-33, 35-36
MISCELLANEOUS DETAILS	37-40	37&39
TRAFFIC CONTROL PLANS	41-52	
STRUCTURE PLANS	53-70	54

STANDARD CONSTRUCTION DRAWINGS

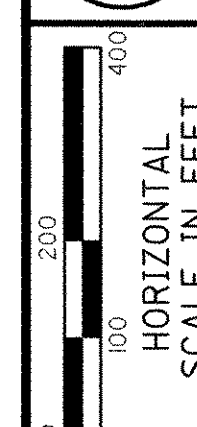
SUPPLEMENTAL SPECIFICATIONS

BP-3.1	07-28-00							806	09-09-97	885	08-10-99
DM-4.4	04-29-99	MT-98.14M	06-24-93	TBR-91M	12-19-94	TC-41.20	01-19-01	842	01-06-99	892	09-14-99
		MT-98.15M	06-24-93	VPF-1-90M	03-20-95	TC-41.50	01-19-01	843	05-05-98	899	10-21-98
GR-1.1M	10-21-97	MT-98.16M	06-24-93	EXJ-4-87	04-20-01	TC-42.20	04-20-01	846	09-09-97	908	11-07-00
GR-1.2M	01-03-96	MT-98.17M	04-25-94			TC-52.10	04-20-01	847	06-30-98	910	07-11-00
GR-2.1M	04-14-98	MT-98.18M	04-25-94			TC-52.20	04-20-01	848	06-30-98	954	09-09-97
GR-3.3M	10-21-97							858	11-07-00		
GR-4.1M	11-30-94	MT-98.19M	03-01-96			TC-65.10M	11-01-95	863	10-12-99		
GR-4.2M	10-21-97	MT-99.20M	01-30-95			TC-65.11M	11-01-95	877	04-13-99		
		MT-101.20M	03-01-96			TC-71.10M	09-01-93				
MT-35.10	04-20-01	MT-101.60M	04-25-94			TC-72.20	01-19-01				
MT-95.30M	04-25-94	MT-102.20M	01-30-95			TC-73.10	01-19-01				
MT-97.10M	04-25-94	MT-105.10M	04-25-94								
MT-98.12M	06-24-93	MT-105.11M	04-25-94								
MT-98.13M	06-24-93	RM-4.2M	10-21-97								

SPECIAL PROVISIONS

U.S. ARMY C.O.E. NATIONWIDE
 PERMIT Nos. 3. MAINTENANCE 4/11/2001
 NORFOLK SOUTHERN RAILWAY AGREEMENT 4/27/2001

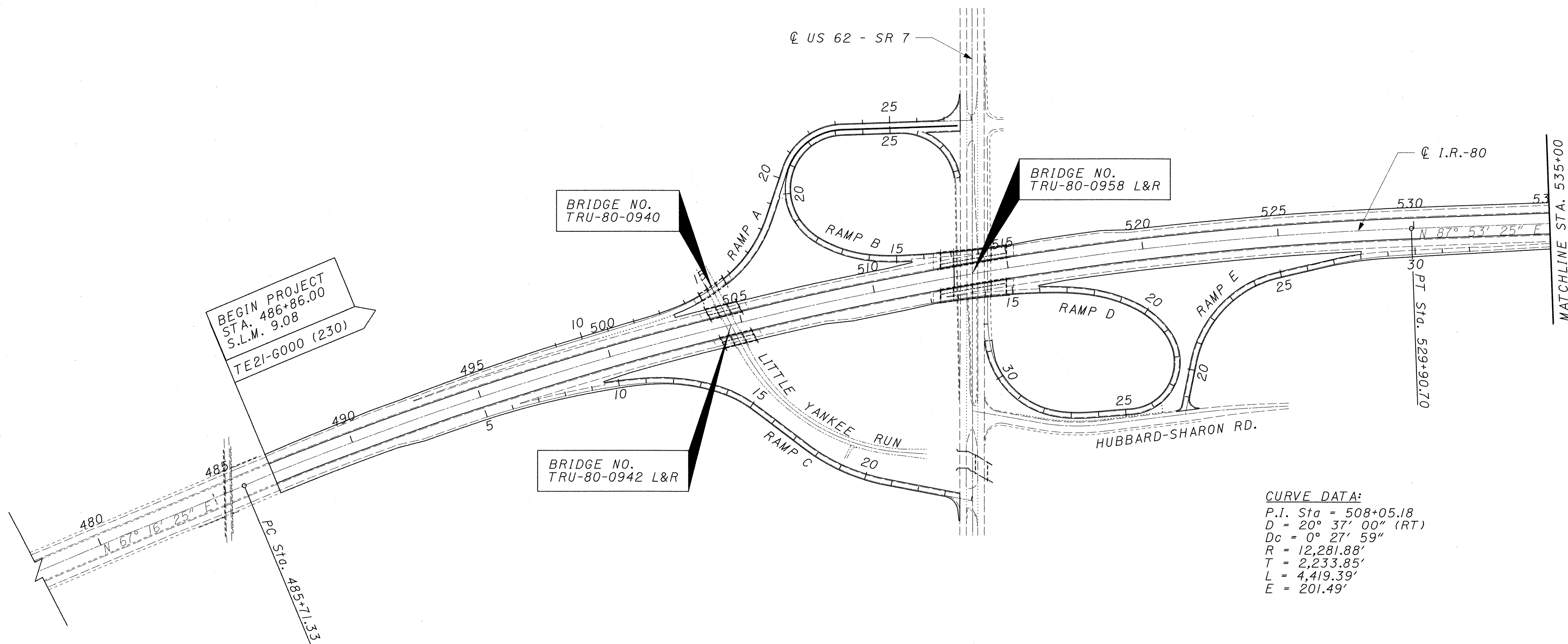
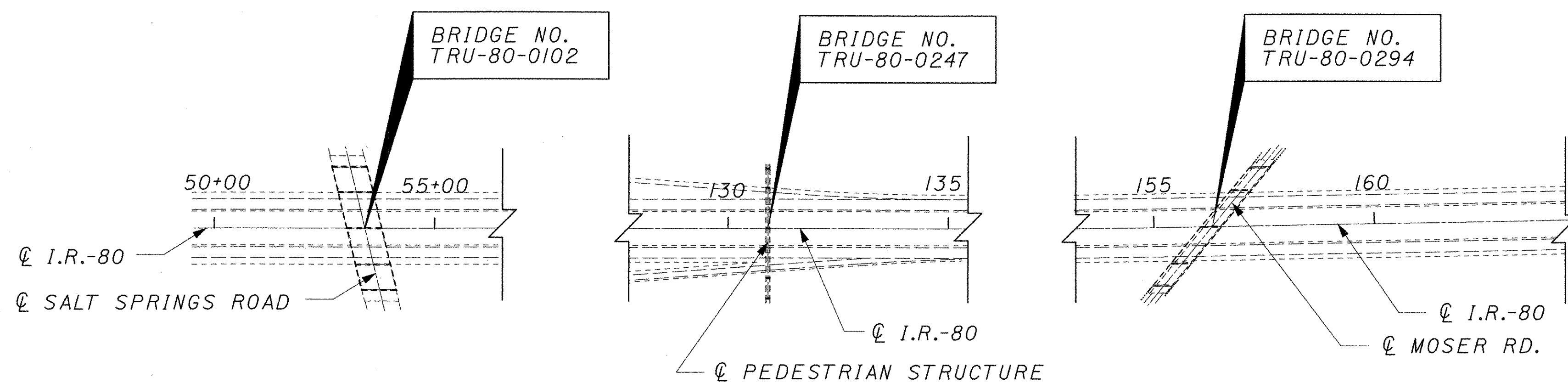
FEDERAL PROJECT NO. **TE21-G000(230)**
 PID NO. **22163**
 CONSTRUCTION PROJECT NO. **3002-01**
 RAILROAD INVOLVEMENT **NORFOLK SOUTHERN R.R.**
TRU-80-9.08
 1/70



STATE PLANE COORDINATE TABLE
 ALL VALUES ARE NAD83(95) STATE PLANE, OHIO NORTH ZONE
 THE PROJECT ADJUSTMENT FACTOR (ENGLISH GROUND TO METRIC GRID) IS 0.304770121341

CURVE	CHORD LENGTH	CHORD BEARING
POINT	NORTH (Y)	EAST (X)
PC 485+71.33	555,132.899	2,497,738.376
POC 525+00.89	556,050.112	2,501,542.143
POT 529+89.08	556,078.077	2,502,029.491
POT 566+00.00	556,211.056	2,505,637.962
PC 592+30.32	556,307.826	2,508,266.499
POT 621+76.67	557,334.684	2,510,972.723
PC 639+79.62	558,479.610	2,512,365.480
POC 645+97.75	558,838.907	2,512,867.914
PT 690+89.37	559,090.958	2,517,172.178

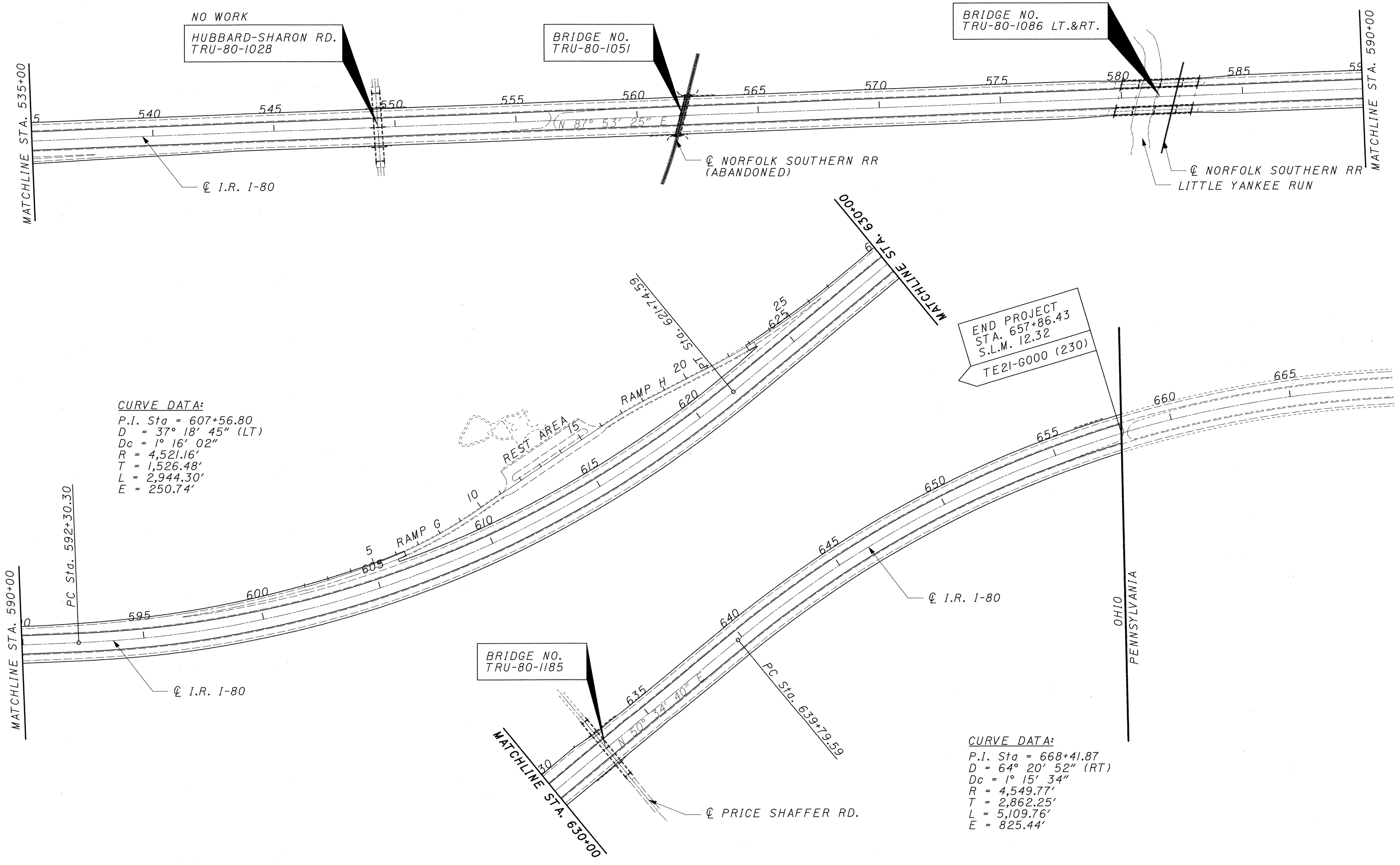
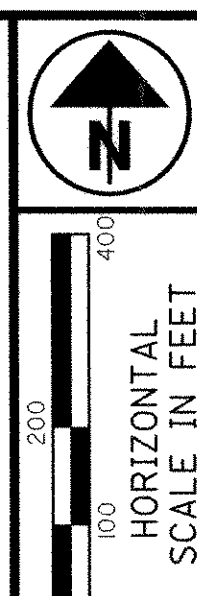
EXISTING MONUMENTATION AND COORDINATES AS ESTABLISHED BY ODOT



CURVE DATA:
 P.I. Sta = 508+05.18
 D = 20° 37' 00" (RT)
 Dc = 0° 27' 59"
 R = 12,281.88'
 T = 2,233.85'
 L = 4,419.39'
 E = 201.49'

SCHEMATIC PLAN

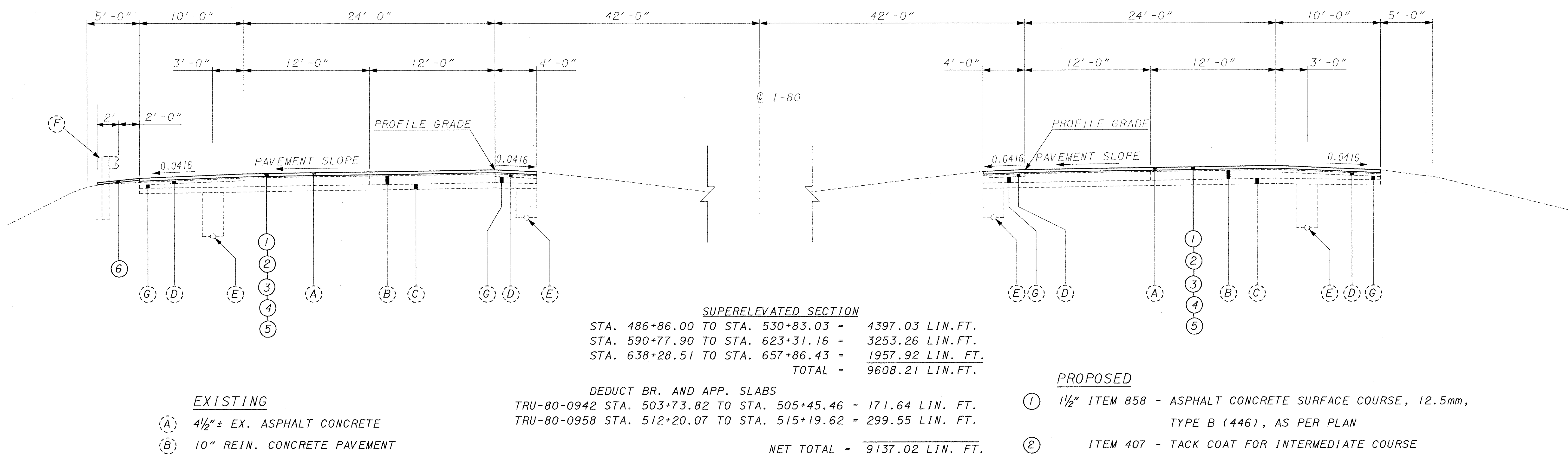
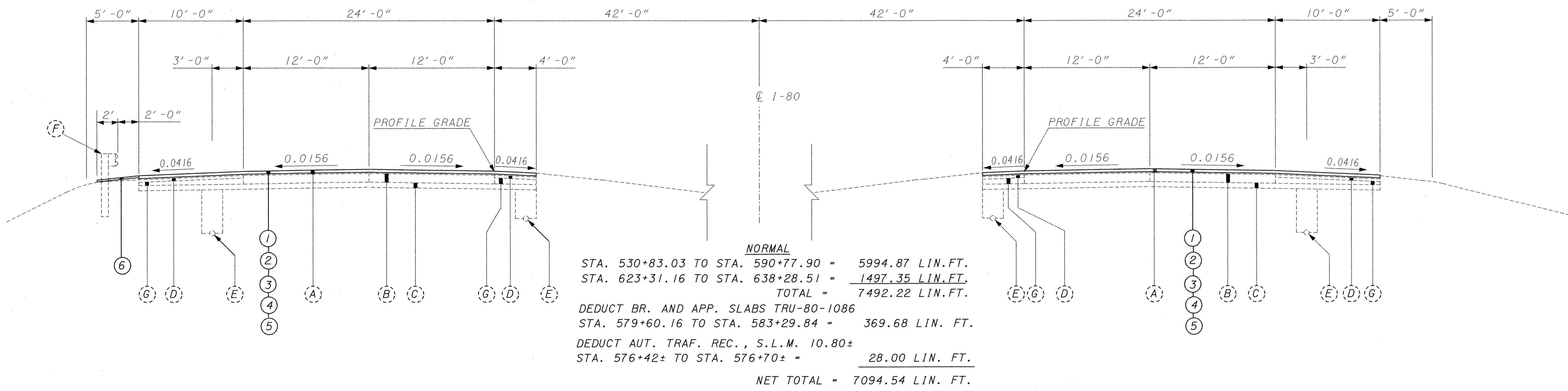
TRU-80-9.08



SCHEMATIC PLAN

TRU-80-9.08

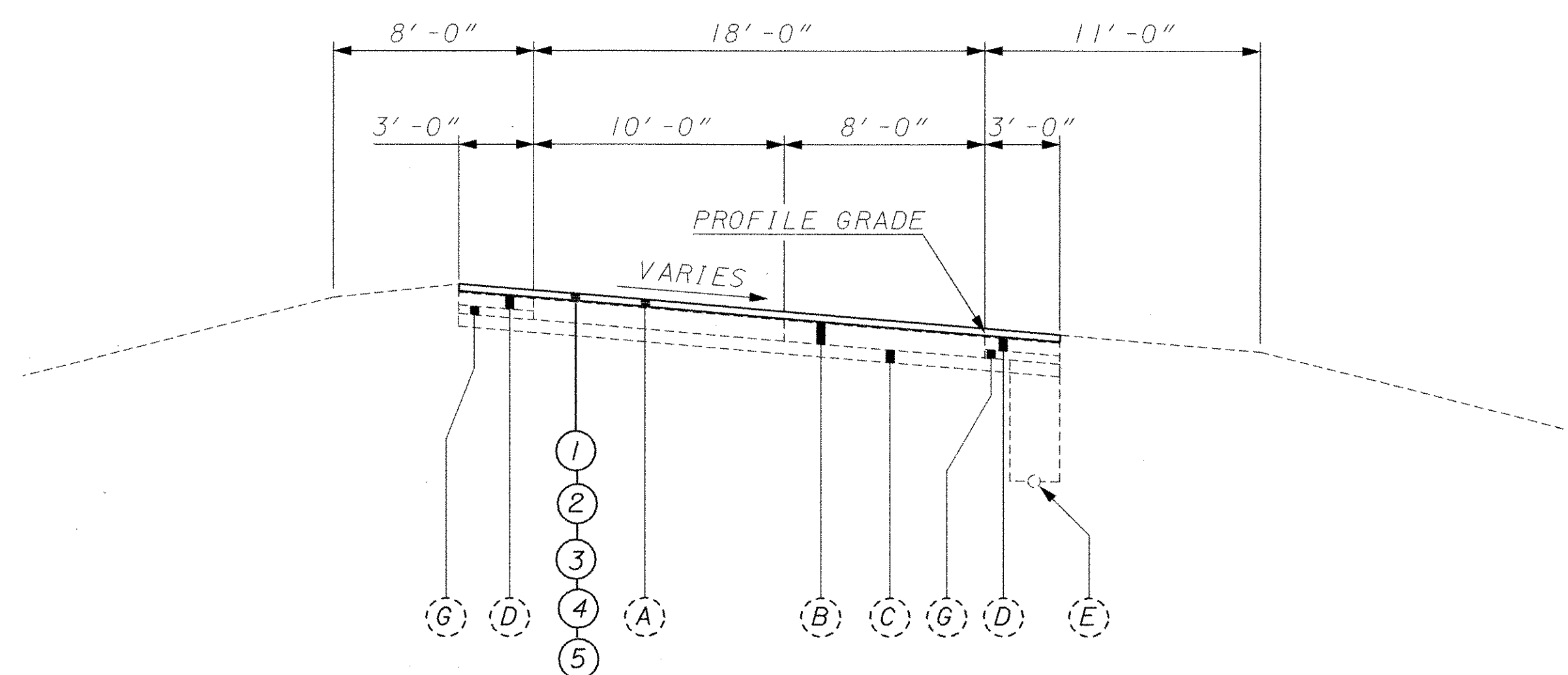
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- EXISTING**
- (A) 4 1/2" ± EX. ASPHALT CONCRETE
 - (B) 10" REIN. CONCRETE PAVEMENT
 - (C) 6" AGGREGATE BASE
 - (D) 3" BITUMINOUS AGGREGATE BASE
 - (E) UNDERDRAIN
 - (F) GUARDRAIL
 - (G) AGGREGATE DRAIN
 - (H) CURB
 - (I) CONCRETE MEDIAN

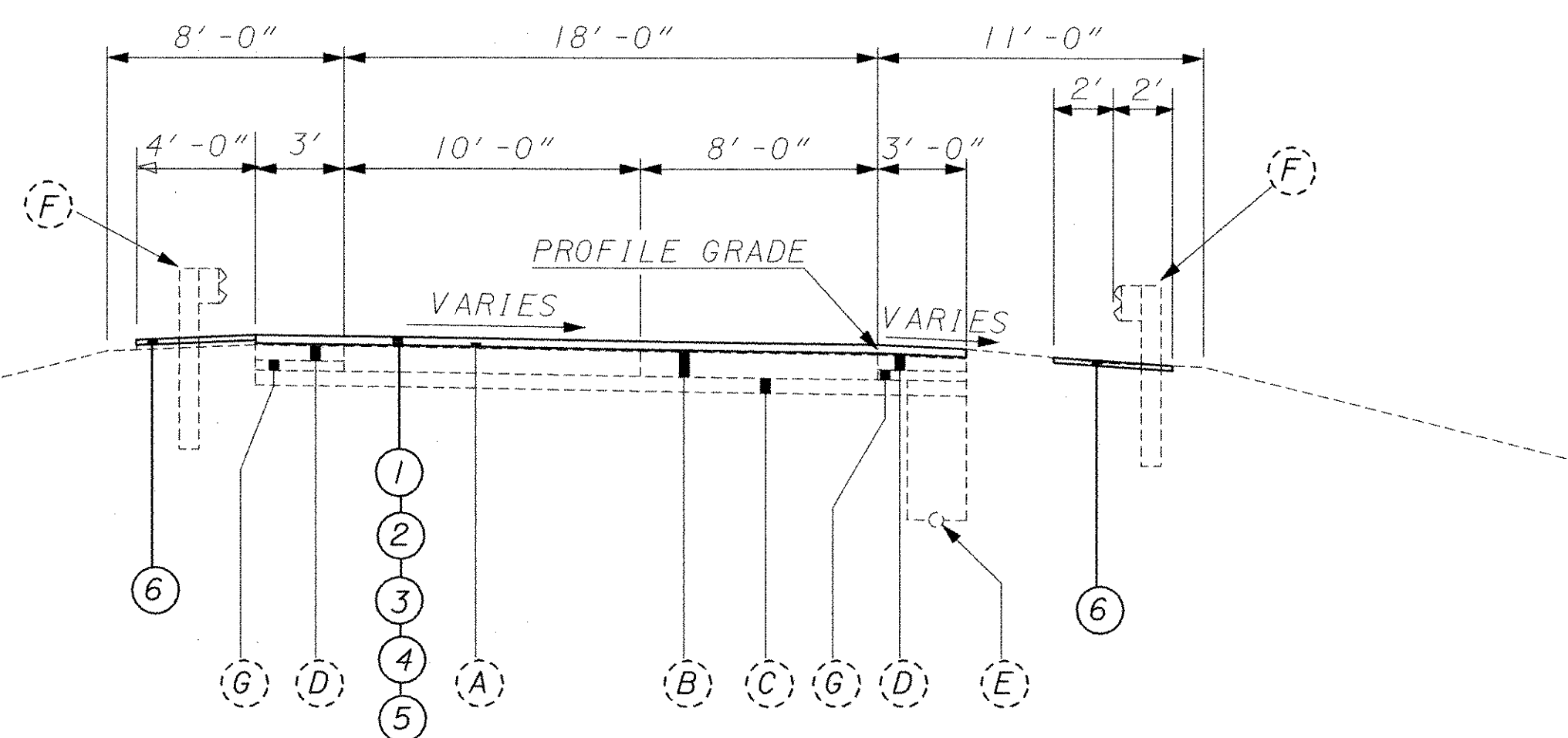
- PROPOSED**
- (1) 1 1/2" ITEM 858 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE B (446), AS PER PLAN
 - (2) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
 - (3) 1 3/4" ITEM 858 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE B (446)
 - (4) ITEM 407 - TACK COAT
 - (5) 3 1/4" ITEM 254 - PAVEMENT PLANING, BITUMINOUS
 - (6) 2" ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I, PG64-22, (UNDER GUARDRAIL) [REMOVE EX. PAVING]

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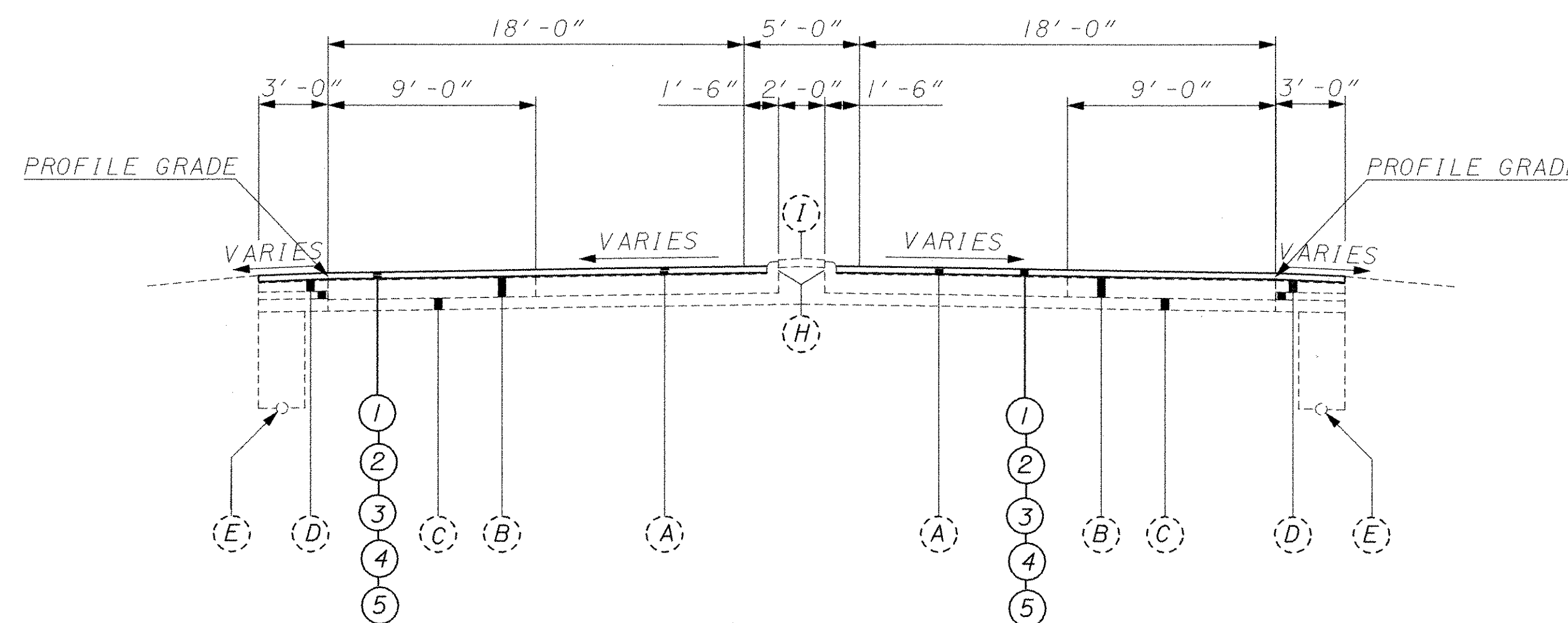
SUPERELEVATED RAMP SECTION

- RAMP "A" STA. 11+69.19 TO STA. 14+35.59
STA. 15+94.24 TO STA. 20+37.60
- RAMP "B" STA. 14+45.78 TO STA. 20+82.45
- RAMP "B1" STA. 26+12.87 TO STA. 28+51.82
- RAMP "C" STA. 9+48.47 TO STA. 22+37.82
- RAMP "D" STA. 15+98.47 TO STA. 31+62.40
- RAMP "E" STA. 19+83.89 TO STA. 24+84.81
STA. 26+76.30 TO STA. 29+28.30



NORMAL RAMP SECTION

- RAMP "A" STA. 8+69.19 TO STA. 11+69.19
- RAMP "C" STA. 22+37.82 TO STA. 23+48.89
- RAMP "E" STA. 19+00.00 TO STA. 19+83.89
STA. 24+84.81 TO STA. 26+76.30
STA. 29+28.30 TO STA. 32+28.30



SECTION THROUGH DOUBLE RAMP SHOWING PAVED DIVIDER

- RAMP "A" STA. 20+37.60 TO STA. 27+48.70
- RAMP "B" STA. 20+82.45 TO STA. 27+48.00

PROPOSED

- (1) 1 1/2" ITEM 858 - ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE B (446), AS PER PLAN
- (2) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
- (3) 1 3/4" ITEM 858 - ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE B (446)
- (4) ITEM 407 - TACK COAT
- (5) 3 1/4" ITEM 254 - PAVEMENT PLANING, BITUMINOUS
- (6) 2" ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, (UNDER GUARDRAIL) [REMOVE EX. PAVING]

EXISTING

- (A) 3 3/4" ± EX. ASPHALT CONCRETE
- (B) 10" REIN. CONCRETE PAVEMENT
- (C) 6" AGGREGATE BASE
- (D) 3" BITUMINOUS AGGREGATE BASE
- (E) UNDERDRAIN
- (F) GUARDRAIL
- (G) AGGREGATE DRAIN
- (H) CURB
- (I) CONCRETE MEDIAN

GENERAL NOTES

GENERAL

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 OF THE OHIO REVISED CODE.

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

AMERITECH
50 WEST BOWERY STREET
AKRON, OHIO 44308
(330) 384-8057
ATTN: JIM McLAUGHLIN

ATLAS ENERGY GROUP
1823 SR 14, P.O. BOX 160
DEERFIELD, OHIO 44491
(330) 654-4343
ATTN: BASIN KAPTAIN

DOMINION EAST OHIO
21165 WEST RAYON AVE
YOUNGSTOWN, OHIO 44502
(330) 742-8140
ATTN: FRANK MARTIN

CITY OF GIRARD (MOSEY RD. WATER LINE)
100 WEST MAIN STREET
GIRARD, OHIO 44420
(330) 545-3879
ATTN: WILLIAM CONSTANTINO

OHIO EDISON
1910 WEST MARKET STREET
AKRON, OHIO 44313
(330) 384-4750
ATTN: STEVE VANCHOFF

TIME WARNER CABLE
2650 WEIR ROAD
WARREN, OHIO 44483
(330) 372-2522
ATTN: MARK PETERITIS

OHIO DEPARTMENT OF TRANSPORTION
DISTRICT 4
705 OAKWOOD STREET
RAVENNA, OHIO 44266
(330) 297-0801 EXT. 305
ATTN: KEN GREENE

CLASSIC CABLE
4720 MAHONING AVE., P.O. BOX 4898
YOUNGSTOWN, OHIO 44515
(800) 569-0200
ATTN: PAUL RADER

CALL OHIO UTILITIES PROTECTION SERVICE (TOLL FREE TELEPHONE: 800-362-2764) AND THE OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (TOLL FREE TELEPHONE: 800-925-0988) TWO (2) WORKING DAYS BEFORE YOU DIG.

ANY AND ALL WORK REQUIRED FOR REMOVING, RELOCATING AND CONSTRUCTION OF NEW FACILITIES FOR PRIVATE OR PUBLIC UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THE RESPECTIVE OWNERS UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS WITH THE WORK OF THE UTILITY OWNERS OR OTHERS WHO MAY BE MAKING THE RELOCATIONS.

FIELD OFFICE

FIELD OFFICE, TYPE B, AS REQUIRED BY SUPPLEMENTAL SPECIFICATION 806, SHALL BE AVAILABLE AND COMPLETELY FUNCTIONAL NO LATER THAN 1 WEEK PRIOR TO THE START OF CONSTRUCTION WORK.

RIGHT OF WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT OF WAY OR EASEMENTS.

ROUNDING

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

CONTRACTORS EQUIPMENT AND OPERATION

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC. A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY: OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER / SUPERVISOR HAS BEEN GRANTED.

ELEVATION DATUM

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

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.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATION WITH THE CONTRACTOR'S ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATION IS INTENDED.

CONVERSION OF STANDARD DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

GENERAL NOTES

ROADWAY

ITEM 202 - CURB REMOVED, AS PER PLAN

THIS WORK SHALL CONSIST OF REMOVING THE EXISTING CURB AND FILLING THE VOID WITH ITEM 301. THE CURB REMOVAL SHALL BE PERFORMED AS SHOWN ON SHEET 39.

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.

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 203-LINEAR GRADING, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22, UNDER GUARDRAIL.

ITEM 203 - LINEAR GRADING, AS PER PLAN SHALL CONSIST OF EXCAVATING TOPSOIL AND PLACING MATERIAL AS SPECIFIED IN THE PLANS AND IN ACCORDANCE WITH THE FOLLOWING:

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 203.05.

THE REMOVED MATERIAL SHALL BE REPLACED WITH MATERIAL AS DETAILED ON THE TYPICAL SECTIONS OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 203-LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 448 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

- METHOD A:
- 1) SET GUARDRAIL POSTS
 - 2) PLACE ITEM 448

- METHOD B:
- 1) PLACE ITEM 448
 - 2) BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
 - 3) SET GUARDRAIL POSTS
 - 4) PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE A BITUMINOUS CONCRETE APPROVED BY THE ENGINEER. PATCHING AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 446E99000 SPECIAL - FLEXIBLE PAVEMENT.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

- 1) THE ET-2000 (1997) MANUFACTURED BY SYRO, INC., 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF TWO 25'-0" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS265	MET-2000 (1997) PLAN, ELEVATION AND SECTIONS	6/20/97	3/6/98

- 2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, IL 60423 (TELEPHONE: 815-464-5917).

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF FOUR 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. NO.	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SKT-4M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98

THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18".

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE LUMP SUM BID FOR ITEM 606E99000 SPECIAL - GUARDRAIL, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

GENERAL NOTES

PAVEMENT

ALIGNMENT AND PROFILE

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. THE PROPOSED ASPHALT CONCRETE OVERLAY SHALL HAVE A UNIFORM THICKNESS OF 3/4" WHICH SHALL BE APPROXIMATELY 0" ABOVE THAT OF THE EXISTING PAVEMENT OF 1R-80.

ITEM 250 - SPECIAL - PAVEMENT REPAIRS AS PER CONCEPTUAL DOCUMENT

THE CONSTRUCTION ENGINEER SHALL DETERMINE THE NEED FOR ANY FULL DEPTH PAVEMENT REPAIRS THAT MAY BE REQUIRED FOR THE EXISTING PAVEMENT. AN ESTIMATED QUANTITY OF 550 CU. YDS. OF FULL DEPTH PAVEMENT REPAIRS AND 550 CU. YDS. OF PARTIAL DEPTH PAVEMENT REPAIRS, HAVE BEEN PROVIDED FOR ESTIMATING PURPOSES ONLY. PAYMENT FOR ALL REPAIR WORK, REQUIRED UNDER ITEM 250, BOTH PARTIAL AND FULL DEPTH, SHALL BE INCLUDED IN THIS LUMP SUM BID ITEM.

TRAFFIC SHALL BE REQUIRED TO USE THE MILLED SURFACE AT LEAST 3 DAYS PRIOR TO DETERMINING THE EXTENT OF THE PAVEMENT REPAIRS.

ITEM 407 - TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.10 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GALLONS PER SQUARE YARD OF TACK COAT FOR INTERMEDIATE COURSE FOR ESTIMATING PURPOSES ONLY.

ITEM 858 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (446), AS PER PLAN

THE REQUIREMENTS OF 441, 446 AND SUPPLEMENTAL SPECIFICATIONS 908 AND 1056 SHALL APPLY; DEVIATIONS FROM THESE ARE AS FOLLOWS:

THE COMBINATION OF NEW AGGREGATES, NEW ASPHALT BINDER, AND RECLAIMED MATERIAL SHALL BE AS REQUIRED TO PRODUCE A COMPOSITION CONTAINING A MINIMUM OF 6.2% NEW ASPHALT BINDER RESULTING IN A MINIMUM TOTAL BINDER OF 6.9%.

ANY PERCENTAGE OF RECLAIMED MATERIAL PROPOSED FOR USE SHALL BE INCLUDED IN THE MIX DESIGN PROCESS TO ESTABLISH THE JOB MIX FORMULA (JMF) IN ACCORDANCE WITH 858.03.

MATERIALS: THE MATERIALS SHALL BE:

AGGREGATES 703.05*
ASPHALT BINDER SS-908

*THE VIRGIN COARSE AGGREGATE PORTION OF THE MIXTURE SHALL BE AIR COOLED BLAST FURNACE SLAG AND MEET THE REQUIREMENTS OF 703.05.

ONLY RECLAIMED PAVEMENT FROM THIS PROJECT WILL BE PERMITTED FOR USE IN THIS ITEM.

THE SURFACE COURSE ON THE RAMPS SHALL MEET THE ABOVE SPECIFICATION OR ITEM 858 - ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (446)

CALCULATED
CHECKED

GENERAL NOTES

TRU-80-9.08

8
70

GENERAL NOTES

CALCULATED
CHECKED

GENERAL NOTES

TRU-80-9.08

9
70

DRAINAGE

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 APPURTENANCES 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.

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.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT DRAINAGE OR EROSION CONTROL ITEMS.

EROSION CONTROL

EROSION CONTROL

ITEM 601 IS PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE THIS ITEM.

THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES OF THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THESE ITEMS SHALL MEET THE REQUIREMENT OF 108.04.

TEMPORARY EROSION CONTROL

INSTALLATION OF SEDIMENT BASINS/DAMS, PERIMETER FILTER FABRIC FENCE, AND DITCH CHECKS SHALL BE CONCURRENT WITH CLEARING AND GRUBBING AND/OR GRADING OPERATIONS.

ALL REASONABLE ATTEMPTS SHOULD BE MADE TO MINIMIZE THE TOTAL AREA OF DISTURBED LAND.

AREAS TO REMAIN DORMANT FOR MORE THAN 45 DAYS SHOULD BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING, EROSION CONTROL MATTING OR OTHER APPROPRIATE EROSION CONTROL MEASURES.

ITEMS TO BE USED FOR TEMPORARY SOIL EROSION AND SEDIMENT CONTROL ARE LISTED IN THE GENERAL NOTES.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ITEMS ARE TO BE PLACED BY THE CONTRACTOR WITH THE ENGINEER'S CONCURRENCE FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

- 877 TEMPORARY SEEDING AND MULCHING
- 877 TEMPORARY INLET PROTECTION FILTER FABRIC FENCE
- 877 SEDIMENT REMOVAL
- 870 COMMERCIAL FERTILIZER
- 870 REPAIR SEEDING AND MULCHING
- 870 WATER

MAINTENANCE OF TRAFFIC

GENERAL NOTES

GENERAL CONSTRUCTION SEQUENCE

THE CONTRACTOR IS REMINDED THAT, IN THE CONDUCT OF THIS PROJECT, HIS SEQUENCE OF OPERATIONS SHALL BE PLANNED AND EXECUTED IN SUCH A WAY AS TO MINIMIZE THE NUMBER OF LANE REDUCTIONS AND/OR LANE WIDTH RESTRICTIONS REQUIRED TO MAINTAIN TRAFFIC THROUGH THE PROJECT.

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

BOTH SHORT TERM CLOSURES AND LONG TERM TRAFFIC SHIFTS WILL BE UTILIZED TO PERFORM THE WORK. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" TABLE LOCATED ON THIS SHEET. THE EXISTING NUMBER OF LANES EACH DIRECTION ARE TO BE MAINTAINED EXCEPT WHEN AN ADDITIONAL LANE MAY BE CLOSED AS LISTED IN THE TABLE.

THE CONTRACTOR SHALL HAVE ALL NORMAL LANES OF TRAFFIC OPENED BETWEEN NOVEMBER 15 AND APRIL 1. NO TRAFFIC SHIFTS ON MAINLINE OR RAMPS, SHALL BE ALLOWED DURING THIS TIME. THE CONTRACTOR IS CAUTIONED TO SCHEDULE HIS WORK, ESPECIALLY ASPHALT OVERLAYS, TO MEET THIS REQUIREMENT. SHORT TERM LANE CLOSURES MAY BE PERMITTED BETWEEN NOVEMBER 15 AND APRIL 1, AS APPROVED BY THE PROJECT ENGINEER AND ACCORDING TO THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" DESCRIBED ON THIS SHEET.

THE GENERAL CONSTRUCTION SEQUENCE SHALL BE PERFORMED AS INDICATED IN THE TRAFFIC MAINTENANCE PHASING PLANS AS DESCRIBED ON SHEET No. 11 THE SCHEDULED DATE FOR COMPLETION OF ALL PHASES REQUIRING TRAFFIC SHIFTS SHALL BE NO LATER THAN NOVEMBER 14TH. NOVEMBER 14 SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE AND LIQUIDATED DAMAGES AS SPECIFIED IN 108.07 SHALL BE ASSESSED FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT. THE CONTRACTOR MAY CLOSE LANES PRIOR TO APRIL 1 WITH WRITTEN APPROVAL FROM THE DISTRICT CONSTRUCTION ENGINEER.

IMPLEMENTATION OF TRAFFIC CONTROL ZONES

ONLY DURING OFF PEAK PERIODS (ANY PERIOD OTHER THAN 6-8 AM AND 4-6 PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR MAINTAINING TRAFFIC IN EACH STRUCTURE REPAIR WORK ZONE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE WORK ZONES THAT ALTERNATELY CLOSE BOTH THE PASSING LANE AND THE DRIVING LANE UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES, EXCEEDS TWO (2) MILES. ADJACENT LANE CLOSURES IN THE SAME LANE SHALL HAVE A MINIMUM OF ONE (1) MILE BETWEEN THE END OF ONE ZONE AND THE BEGINNING OF THE SECOND ZONE.

SHORT TERM LANE CLOSURES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PLANS ON THIS SHEET.

THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 4 WORK ZONE TRAFFIC CONTROL ENGINEER.

SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED.

SCHEDULE OF THRU LANES TO BE MAINTAINED

ROAD	1 LANE REDUCTION				SHOULDER SHIFT	
	NUMBER OF LANES	SHORT TERM CLOSURE		LONG TERM	WEEKDAYS	WEEKENDS
		WEEKDAYS	WEEKENDS	DURATION		
IR-80 EB&WB UNDER TRU-80-0102 TRU-80-0247 TRU-80-0294 TRU-80-1051 TRU-80-1185	(2 LANES)	8:00 PM-5:00 AM	8:00 PM FRIDAY -5:00 AM MONDAY	N/A	N/A	N/A
IR-80 EB&WB MAINLINE BRIDGES TRU-80-0942 TRU-80-0958 TRU-80-1086	(2 LANES)	8:00 PM-5:00 AM	8:00 PM FRIDAY -5:00 AM MONDAY	2 WEEKS MAXIMUM EACH DIRECTION PER PHASE PER BRIDGE	N/A	N/A
IR-80 EB&WB EAST OF SLM 9.08	(2 LANES)	8:00 PM-5:00 AM	8:00 PM FRIDAY -5:00 AM MONDAY	N/A	N/A	N/A
RAMPS A-E	(1 LANE)	10:00 PM-5:30 AM ⊕	10:00 PM-5:30 AM ⊕	N/A ⊗	9:00 AM-3:00 PM ⊕	9:00 AM-3:00 PM ⊕
RAMPS G-H	(1 LANE)	CLOSE WHEN MAINLINE WB OUTSIDE LANE IS CLOSED		N/A	N/A	N/A
TRU-80-0247 PED. TRAFFIC	(1 LANE)	9:00 AM-3:00 PM	9:00 AM-3:00 PM	2 WEEKS MAXIMUM ⊗	N/A	N/A
MOSSER RD.	(2 LANES)	9:00 AM-3:00 PM	9:00 AM-3:00 PM	N/A	N/A	N/A
SR 62	(4 LANES)	9:00 AM-3:00 PM 8:00 PM-5:00 AM	8:00 PM FRIDAY -5:00 AM MONDAY	N/A	N/A	N/A
PRICE-SHAFFER RD.	(2 LANES)	9:00 AM-3:00 PM	9:00 AM-3:00 PM	N/A	N/A	N/A

⊕ - ..RAMPS ONLY..PERFORM WORK USING FLAGMEN, SHIFTING TRAFFIC ONTO THE SHOULDERS TO PERFORM PARTIAL OR FULL DEPTH PAVEMENT REPAIRS. (SEE SHOULDER SHIFT COLUMN FOR PERMITTED HOURS) TOTAL RAMP CLOSURES AT THE TIMES INDICATED MAY BE IMPLEMENTED AT THE CONTRACTOR'S OPTION IF REPAIR AREAS ARE SIGNIFICANT OR WORKER SAFETY CANNOT BE PROVIDED WITHOUT CLOSURE. RAMPS MAY NOT BE CLOSED CONCURRENTLY WITH OTHER RAMPS. SEE "RAMP CLOSURES FOR RESURFACING" GENERAL NOTE.

⊗ - 2 WEEKS MAXIMUM BETWEEN JUNE 15 & AUGUST 25

⊗ - RAMP A, 2 WEEKS MAXIMUM, PER PHASE PARTIAL CLOSURE FOR BRIDGE REPAIR

LANE CLOSURES

SHORT TERM LANE CLOSURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS MT-95.30M OR MT-95.40M. LONG TERM LANE CLOSURES SHALL BE AS DETAILED ON THE MAINTENANCE OF TRAFFIC SHEETS.

MINIMUM 11 FT. LANE(S) SHALL BE MAINTAINED AT ALL TIMES. A MINIMUM CLEARANCE OF 1 FOOT SHALL BE MAINTAINED BETWEEN TRAFFIC AND CHANNELIZING DEVICES EXCEPT AT BR. NO. TRU-80-0940 WHICH SHALL HAVE A 4" BARRIER OFFSET AND A 10'-0" LANE. DURING ACTUAL PAVING THE DRUMS MAY BE MOVED 1' TOWARDS TRAFFIC AT THE LOCATIONS SPECIFIED IN THE MAINTENANCE OF TRAFFIC PLANS ONLY.

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MAINTENANCE OF TRAFFIC NOTES

TRU-80-9.08

MAINTENANCE OF TRAFFIC

GENERAL NOTES

CONSTRUCTION PHASING

GENERAL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THRU VEHICULAR ACCESS IN BOTH DIRECTIONS AT ALL TIMES THROUGHOUT THE PROJECT AREA. THE PROJECT SHALL BE CONSTRUCTED IN MAJOR PHASES IN ORDER TO MINIMIZE TRAFFIC DISRUPTION AND INCONVENIENCE TO THE GENERAL PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL EQUIPMENT, MATERIALS AND MANPOWER NEEDED TO ADEQUATELY MAINTAIN TRAFFIC AS PROVIDED FOR IN THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR'S EQUIPMENT SHALL BE OPERATED IN THE DIRECTION OF TRAFFIC. A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY; OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE RIGHT OF WAY, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER/SUPERVISOR HAS BEEN GRANTED.

THE CONTRACTOR IS REMINDED THAT, IN THE CONDUCT OF THIS PROJECT, HIS SEQUENCE OF OPERATIONS SHALL BE PLANNED IN SUCH A WAY AS TO MINIMIZE THE NUMBER OF LANE REDUCTIONS AND/OR LANE WIDTH REDUCTIONS REQUIRED TO MAINTAIN TRAFFIC THROUGH THE PROJECT.

IT IS THE INTENT OF THIS PROJECT TO MAINTAIN THE EXISTING NUMBER OF LANES DURING ALL PHASES OF THE PROJECT, EXCEPT FOR CLOSURES AS PERMITTED BY THE "SCHEDULE OF THRU LANES TO BE MAINTAINED NOTE"

NO TRAFFIC SHIFTS WILL BE PERMITTED BETWEEN NOVEMBER 15TH AND APRIL 1 ST. NO LANE RESTRICTIONS, INCLUDING RAMPS, WILL BE ALLOWED DURING THIS TIME. THE CONTRACTOR IS CAUTIONED TO SCHEDULE HIS WORK, ESPECIALLY ASPHALT OVERLAYS, TO MEET THIS REQUIREMENT.

MAJOR WORK ITEMS

THE FOLLOWING MAJOR WORK ITEMS WILL REQUIRE TRAFFIC MAINTENANCE PROCEDURES WHICH SHALL BE INCORPORATED INTO THE CONTRACTOR'S SEQUENCE OF OPERATIONS:

- A. SHOULDER REPLACEMENT AT BRIDGES
- B. BRIDGE DECK OVERLAYS
- C. INSTALLATION AND/OR REPAIR OF GUARDRAIL
- D. ASPHALT SURFACE PLANING AND PAVEMENT REPAIRS
- E. ASPHALT CONCRETE OVERLAYS
- F. PAVEMENT MARKINGS

CONSTRUCTION PHASING 1R-80

THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 297-0801 EXT. 209, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.

THE GENERAL CONSTRUCTION SEQUENCE SHALL BE BRIDGE DECK OVERLAYS PHASE 1 AND PHASE 2. WHEN COMPLETED, THE ROADWAY MILL AND FILL (PHASES 3 AND 4) WILL BE PERFORMED. PAINTING OF BRIDGE No.'s TRU-80-1051 AND TRU-80-1185 SHALL NOT BE PERFORMED DURING THE TIME BETWEEN THE PAVEMENT PLANING AND THE PLACEMENT OF THE FINAL RESURFACING COURSE. PAINTING OF ALL OTHER BRIDGES MAY BE PERFORMED AT ANY TIME, EXCEPT WHEN AN OVERLAY IS BEING CONSTRUCTED ON THE SAME BRIDGE.

PRELIMINARY

- REPLACE SHOULDERS AND PLACE TEMPORARY PAVEMENT AS REQUIRED FOR PHASE 1 MAINTENANCE OF TRAFFIC.

PHASE 1 -

- IMPLEMENT PHASE I MAINTENANCE OF TRAFFIC ZONE
- CONSTRUCT BRIDGE OVERLAYS.
- REPLACE SHOULDERS AS REQUIRED FOR PHASE 2 MAINTENANCE OF TRAFFIC.

PHASE 2

- IMPLEMENT PHASE II MAINTENANCE OF TRAFFIC ZONE
- CONSTRUCT BRIDGE OVERLAYS,

PHASE 3

- MILL EXISTING OVERLAY.
- INSTALL TEMPORARY PAVEMENT MARKINGS

PHASE 4

- CONSTRUCT OVERLAY COURSES.
- INSTALL TEMPORARY PAVEMENT MARKINGS

PHASE 5

- PLACE FINAL PAVEMENT MARKINGS AND SIGNS, UPGRADE OR REPAIR GUARDRAIL, INSTALL 448 UNDER GUARDRAIL.

MAINTENANCE OF TRAFFIC RESPONSIBILITY

THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.

SHOULDER REPLACEMENT

AT THE LOCATIONS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS, THE EXISTING SHOULDER SHALL BE REMOVED AND REPLACED WITH A 7 INCH COURSE OF ITEM 301 - BITUMINOUS AGGREGATE BASE.

ITEM 614 - WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS R-10-48 (55 MPH SPEED LIMIT) AND R-11B-48 WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT OR MINIMUM SPEED SIGNS WITHIN THE REDUCED SPEED ZONE. THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED SIGNS IS INCLUDED IN THE LUMP SUM PAY ITEM FOR MAINTAINING TRAFFIC.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED AND COVERED PRIOR TO STARTING WORK OR MAY BE ERECTED UNCOVERED NO MORE THAN 4 HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN 4 HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS OR SOONER AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF ANY LANE RESTRICTION EXPECTED TO LAST AT LEAST 30 DAYS OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF DIVIDED HIGHWAYS, 500 FEET IN ADVANCE OF THE LANE REDUCTION TAPER. THE SIGN SHALL BE REPEATED, ON THE SIDE NEAREST TRAFFIC, EVERY 1 MILE FOR 55 MPH ZONES AND EVERY 1/2 MILE FOR 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE. THE R-11B-48 SIGNS SHALL BE ERECTED ON BOTH SIDES OF DIVIDED HIGHWAYS 1500 FEET IN ADVANCE OF THE REDUCTION TAPER. THE R-11B-48 SIGNS SHALL BE ERECTED ON THE RIGHT SIDE ON UNDIVIDED HIGHWAYS, 750 FEET IN ADVANCE OF THE REDUCTION TAPER ON UNDIVIDED HIGHWAYS. A R-8A SIGN SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED BUT GOOD CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19 AND U.S. DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION FOR TYPE III-C SHEETING, FP-85. WORK ZONE SPEED LIMIT SIGN SHALL BE MOUNTED ON TWO (2) ITEM 630 - GROUND MOUNTED SUPPORTS, NO. 3 POST.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS.

GENERAL NOTES

MAINTENANCE OF TRAFFIC

RAMP CLOSURES FOR RESURFACING - RAMPS A-E

THE CONTRACTOR MAY CLOSE ONE RAMP AT A TIME FOR PAVEMENT PLANING, PAVEMENT REPAIRS OR RESURFACING. THE CLOSURES SHALL BE LIMITED TO BETWEEN 10:00 P.M. AND 5:30 A.M.. THE MOTORING PUBLIC SHALL BE GIVEN ADVANCE WARNING OF RAMP CLOSURES AT LEAST 72 HOURS IN ADVANCE THROUGH THE USE OF EITHER A GROUND MOUNTED FLAT SHEET SIGN OR A PORTABLE CHANGEABLE MESSAGE SIGN.

FREEWAY ENTRANCE RAMPS SHALL BE CLOSED WITH A PCMS SUGGESTING A RECOMMENDED DETOUR.

FREEWAY EXIT RAMPS SHALL BE CLOSED WITH A PCMS ROUTING TRAFFIC TO THE NEXT EXIT AND A SECOND PCMS INDICATING A U-TURN AT THAT EXIT (UNLESS DIRECTED DIFFERENTLY BY THE ENGINEER).

BRIDGE STAGE CONSTRUCTION

THE CONTRACTOR SHALL REFER TO THE TYPICAL CROSS SECTIONS AND TRANSVERSE SECTIONS IN THE STRUCTURE PLANS FOR DETAILS ON THE STAGE CONSTRUCTION OF EACH BRIDGE.

TRAFFIC CONTROL FOR ASPHALT CONCRETE OPERATIONS (ITEM 858 COURSES)

ALL ASPHALT CONCRETE OPERATIONS SHALL BE CONDUCTED IN A MANNER THAT WILL ASSURE MINIMUM DANGER AND INCONVENIENCE TO THE HIGHWAY USERS. UNLESS WORKING BEHIND PCB, ASPHALT WORK SHALL BE PERFORMED DURING THE TIMES PERMITTED FOR LANE CLOSURES. (SEE NOTE). THE PROCEDURE FOR INSTALLATION OF ANY ASPHALT LAYER SHALL BE SUCH THAT NO DISCONTINUITY IN THE ELEVATION OF THE TRAVELED SURFACE SHALL EXIST AT ANY TIME OTHER THAN DURING THE PERMITTED WORKING HOURS AND THEN ONLY WHEN SUCH PROPER TRAFFIC CONTROL DEVICES ARE IN PLACE AS WILL PREVENT SUCH A DISCONTINUITY BEING A DANGER TO HIGHWAY USERS.

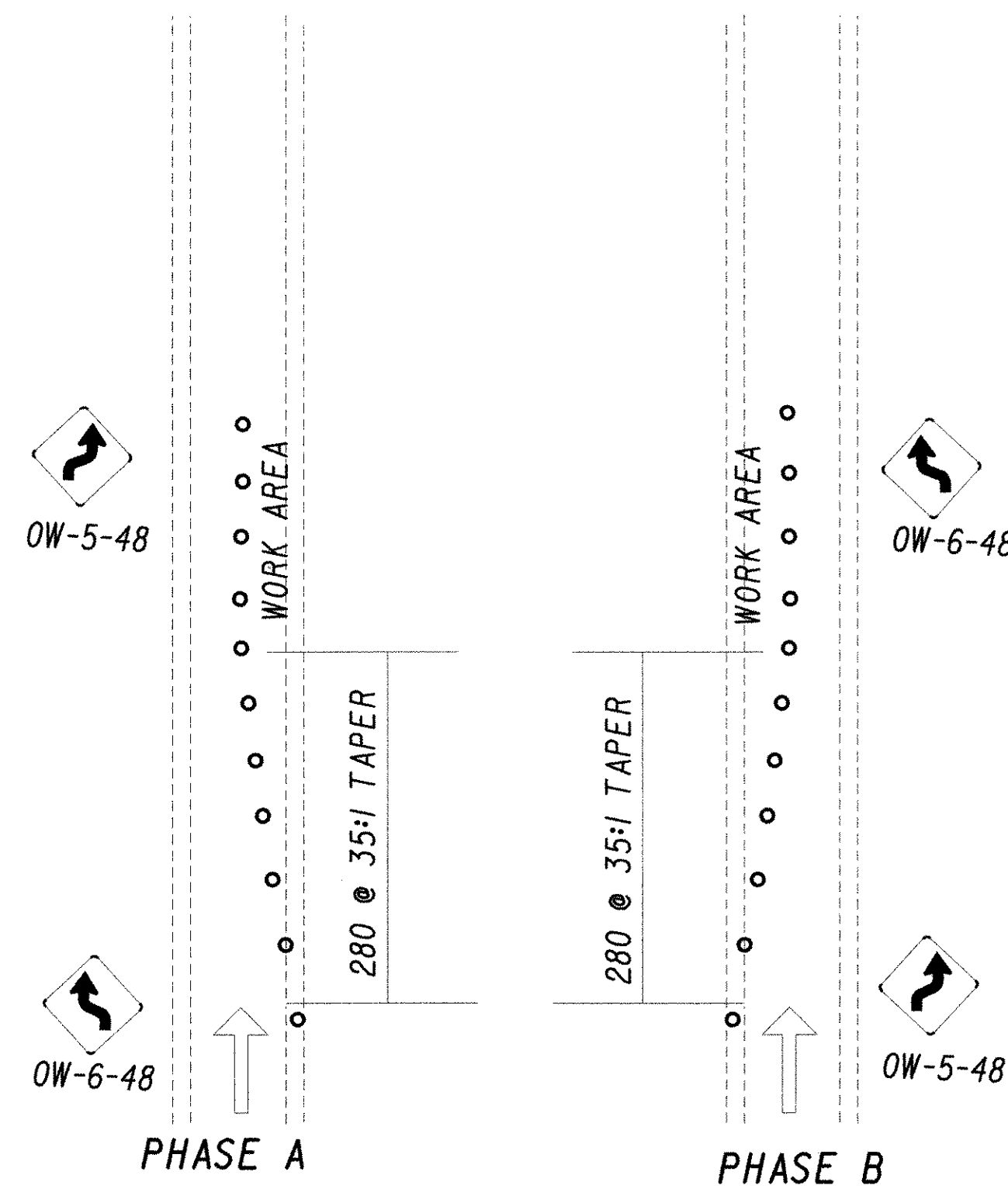
TRAFFIC MUST BE MAINTAINED AT ALL TIMES IN BOTH DIRECTIONS IN ACCORDANCE WITH THE "SCHEDULE OF THRU LANES TO BE MAINTAINED".

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORIST SHALL BE WARNED AND DIVERTED BY THE CONTRACTOR THROUGH THE USE OF A FLASHING ARROW, IN ADDITION TO THOSE PROVISIONS SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

PRIOR TO OPENING THE ROADWAY TO NORMAL TRAFFIC DURING WINTER MONTHS, ANY PAVING WORK MUST BE COMPLETED FULL WIDTH ACROSS THE PAVEMENT.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS ANY PART-WIDTH RESURFACING JOINTS EXCEPT AS IS NECESSARY DURING THE ACTUAL RESURFACING OPERATION. ANY PART WIDTH MILLING OR RESURFACING JOINTS SHALL BE PROTECTED OR TREATED IN ACCORDANCE WITH THE "DROPOFFS IN WORK ZONES" DETAIL SHEET.

TEMPORARY TRANSVERSE RESURFACING JOINTS WHICH MUST BE EXPOSED TO TRAFFIC SHALL BE RAMPED USING ITEM 404 - BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC, AT A RATE NOT TO EXCEED 1 INCH IN 4 FEET.



PARTIAL RAMP CLOSURE

THE CONTRACTOR MAY PARTIALLY CLOSE THE RAMP AS SHOWN ABOVE TO PERFORM PARTIAL OR FULL DEPTH REPAIRS AS NECESSARY. SEE "SCHEDULE OF THRU LANES TO BE MAINTAINED" TABLE FOR PERMITTED HOURS.

WORKSITE TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL, OTHER THAN THE SUPERINTENDENT, AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

PROTECTION OF CONSTRUCTION VEHICLES AND EQUIPMENT

IF BRIDGE PAINTING EQUIPMENT IS TO REMAIN ON THE MAINLINE PAVEMENT BETWEEN 8 PM AND 6 AM ANY DAY OF THE WEEK, IT SHALL BE PROTECTED WITH PORTABLE CONCRETE BARRIER.

ANY EQUIPMENT WHICH IS TO REMAIN ON THE MAINLINE BETWEEN 8 PM AND 6 AM ANY DAY OF THE WEEK SHALL BE PLACED BEHIND EXISTING GUARDRAIL OR BE PROTECTED WITH PORTABLE CONCRETE BARRIER.

FULL DEPTH PAVEMENT REPAIRS

ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED (EXCEPT WITHIN STRUCTURE REPAIR WORK ZONES).

TRU-80-0247, MAINTENANCE OF PEDESTRIAN TRAFFIC

THE BRIDGE SHALL BE CLOSED TO PEDESTRIAN TRAFFIC AT ANY TIME THE EXISTING OR PROPOSED FENCE FABRIC IS DOWN. DURING THAT TIME BARRICADES OR FENCE FABRIC SHALL BE USED TO POSITIVELY PROHIBIT PEDESTRIAN ACCESS TO THE BRIDGE. SEE "SCHEDULE OF THRU LANES TO BE MAINTAINED" TABLE FOR PERMISSIBLE CLOSURE TIMES.

MOSSER ROAD MAINTENANCE OF TRAFFIC

TWO WAY TRAFFIC USING FLAGGERS MAY BE IMPLEMENTED WITHIN THE TIMES SPECIFIED IN THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" TABLE.

ITEM 614 - BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC

THIS ITEM SHALL BE USED TO REPAIR HOLES IN BRIDGE DECKS AND ROADWAY SURFACE. THIS ITEM SHALL ALSO BE USED TO PROVIDE TEMPORARY ASPHALT RAMPS. TEMPORARY ASPHALT RAMPS SHALL BE REMOVED AS PART OF THIS ITEM. THIS ITEM IS TYPICALLY REQUIRED WHERE RAMP TRAFFIC MUST CROSS FROM OLD PAVEMENT TO NEWLY RESURFACED PAVEMENT. ALL COSTS INCLUDED UNDER ITEM 614 - MAINTAINING TRAFFIC.

MAINTENANCE OF TRAFFIC CONTROL ZONES

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SIGNS, DRUMS AND TEMPORARY PAVEMENT MARKINGS AT THE LOCATIONS DETAILED IN THE PLANS OR SPECIFIED IN THE STANDARD DRAWINGS.

GENERAL NOTES

MAINTAINING TRAFFIC

GUARDRAIL REPLACEMENT

NO HAZARD SHALL BE LEFT UNPROTECTED EXCEPT FOR THE ACTUAL TIME NECESSARY TO REMOVE THE EXISTING GUARDRAIL, PREPARE THE SITE, AND INSTALL NEW GUARDRAIL IN A CONTINUOUS OPERATION. THE REMOVAL OF ALL GUARDRAIL SHALL AT ALL TIMES BE AS DIRECTED BY THE ENGINEER. NO GUARDRAIL SHALL BE REMOVED UNTIL THE REPLACEMENT MATERIAL IS ON THE SITE, READY FOR INSTALLATION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE DEEMED SUFFICIENT CAUSE TO ORDER WORK SUSPENDED UNTIL SUCH TIME AS THE ENGINEER IS ASSURED OF COMPLIANCE.

MAINTAINING VEHICULAR TRAFFIC

GENERAL PROVISIONS

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" DESCRIBED ON SHEET NO. 10/70. THE CONTRACTOR SHALL SET UP AND OPERATE HIS EQUIPMENT IN SUCH A MANNER AS TO MINIMIZE ENCROACHMENT UPON THE TRAVELED WIDTH OF PAVEMENT.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE RESPONSIBLE LAW ENFORCEMENT AGENCY AND THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 4 PUBLIC INFORMATION OFFICER ((330) 297-0801, X209) NOT LESS THAN FORTY-EIGHT (48) HOURS PRIOR TO A SCHEDULED DISRUPTION OF TRAFFIC.
3. DURING OVERHEAD CONSTRUCTION THE CONTRACTOR SHALL PROVIDE, IF DEEMED NECESSARY BY THE ENGINEER, SAFETY NETS AND OR OTHER SAFETY DEVICES UNDER THE STRUCTURES TO PROTECT TRAFFIC IN THE AREA OF CONSTRUCTION.
4. DURING NON-WORKING PERIODS, OPEN EXCAVATIONS SHALL BE DELINEATED WITH WARNING FLASHERS AND/OR OTHER APPROVED DEVICES AS DEEMED APPROPRIATE BY THE ENGINEER.
5. EXISTING SIGNS LOCATED WITHIN THE ROAD WORK AREAS WHICH ARE NECESSARY FOR INTERIM OR PERMANENT TRAFFIC CONTROL SHALL BE REMOVED AND REERECTED IN LOCATIONS AS APPROVED BY THE ENGINEER.
6. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NEW WARNING AND INFORMATION SIGNS NECESSARY FOR MAINTAINING TRAFFIC. THE CONTRACTOR SHALL DETERMINE WHAT SIGNS ARE NEEDED AND ADVISE THE ENGINEER TWO (2) WEEKS IN ADVANCE OF HIS DETAILED PLANS. SEE THE TRAFFIC MAINTENANCE DETAILS FOR THE MINIMUM SIGNAGE REQUIRED.
7. TRAFFIC CONTROL DEVICES SHALL BE SET UP PRIOR TO THE START OF CONSTRUCTION, AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SPECIAL CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED AND SHALL BE IMMEDIATELY REMOVED THEREAFTER.

WHERE OPERATIONS ARE PERFORMED IN STAGES, THERE SHALL BE IN PLACE ONLY THOSE DEVICES THAT APPLY TO THE CONDITION PRESENT DURING STAGE IN PROGRESS. ALL SIGNS WITH MESSAGES WHICH DO NOT APPLY DURING A CERTAIN PERIOD SHALL BE COVERED OR SET ASIDE OUT OF THE VIEW OF TRAFFIC.

8. PLACEMENT OF FINAL ROADWAY PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" DESCRIBED ON SHEET NO. 10.

THE CONTRACTOR SHALL PROVIDE TWO (2) TRAILING VEHICLES AS PER MT-99.20M FOLLOWING THE PAVEMENT MARKING EQUIPMENT. THE TWO (2) TRAILING VEHICLES SHALL TRAVEL 500 FEET APART WITH THE REMOTE VEHICLE TRAVELING ON THE SHOULDER (LEFT OR RIGHT AS APPLICABLE) WHERE USABLE SHOULDER IS AVAILABLE. THE FIRST TRAIL VEHICLE IN A TRAFFIC LANE SHALL BE EQUIPPED WITH A TRUCK MOUNTED ATTENUATOR MEETING NCHRP 350 REQUIREMENTS. THE INTERMEDIATE TRAILING VEHICLE SHALL TRAVEL IN THE CLOSED LANE 500 FEET BEHIND THE PAVEMENT MARKING EQUIPMENT. EACH TRAILING VEHICLE SHALL HAVE A YELLOW FLASHING BEACON PLUS 48" MIN. ORANGE AND BLACK CONSTRUCTION WARNING SIGNS MOUNTED ON THE BACK FACING TRAFFIC WITH STANDARD TYPE MESSAGES ADVISING MOTORISTS OF THE WORK AHEAD, ADVISORY WARNING SPEED AND WHICH LANE IS CLOSED.

9. CONTRACTOR SHALL BE REQUIRED TO PROVIDE SUFFICIENT CREWS TO IMPLEMENT ALL OR A SUB-PHASE OF THE TRAFFIC CONTROL IN THE MAINTENANCE OF TRAFFIC PLANS WITHIN THE SAME WORK DAY. THIS WILL PREVENT ANY CONFUSION BETWEEN THE CONSTRUCTION PHASE TRAFFIC PATTERN AND THE EXISTING TRAFFIC PATTERN. THE MAINTENANCE OF TRAFFIC PLANS CAN BE SUB-PHASED BY CONCENTRATING ON ONE DIRECTION OR A LENGTH WITHIN THAT DIRECTION. HOWEVER, IN EACH SUB-PHASE THE MAINTENANCE OF TRAFFIC PLAN SHALL BE COMPLETELY IMPLEMENTED WITHIN THE SAME WORK DAY.
10. FOR ANY OPERATION NOT SPECIFICALLY MENTIONED IN THESE PLANS, THE TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", ALSO REFERED TO AS THE "MANUAL" OR "OMUTCD".
11. ALL LABOR, MATERIALS, EQUIPMENT AND ANY INCIDENTALS REQUIRED TO COMPLETE THE WORK AS DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.
12. ALL TEMPORARY MAINTENANCE OF TRAFFIC (MOT) DEVICES SHALL COMPLY WITH THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) 350 HARDWARE REPORT AND THE OMUTCD, LATEST REVISION, NEWEST EDITION.

DOUBLE FINES IN WORK ZONES SIGN

R-180-48 SIGNS SHALL BE FURNISHED, ERECTED AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR.

SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED IN THE OMUTCD. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY STANDARDS.

THE SIGNS SHALL BE COVERED OR REMOVED WHEN THE CONSTRUCTION ZONE IS DISCONTINUED FOR 30 DAYS OR MORE.

THE SIGNS SHALL BE DUAL MOUNTED. THE FIRST SIGN SHALL BE PLACED BETWEEN THE "ROAD CONSTRUCTION AHEAD" (OW-128) SIGN AND THE NEXT SIGN IN SEQUENCE.

THE SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY TWO MILES THROUGH THE CONSTRUCTION WORK LIMITS.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED BUT GOOD CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19 AND U.S. DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL SPECIFICATION FOR TYPE III-C SHEETING, FP-85.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE, WILL BE MADE AT THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS, AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS.

GENERAL NOTES

MAINTAINING TRAFFIC

ITEM 614 - BARRIER REFLECTOR, TYPE A
ITEM 614 - BARRIER REFLECTOR, TYPE B

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL NEW GUARDRAIL INSTALLATIONS IN ACCORDANCE WITH ITEM 626 SPACING REQUIREMENTS. BARRIER REFLECTORS SHALL ALSO BE PLACED ON EXISTING GUARDRAIL AND BRIDGE PARAPETS ADJACENT TO TRAFFIC LANES WHICH HAVE BEEN SHIFTED GREATER THAN 2 FEET FROM THE NORMAL DRIVING LANE. THEIR MOUNTINGS SHALL CONFORM TO ITEM 626 EXCEPT THAT SPACING OF THE REFLECTORS SHALL BE HALF THE DISTANCE SPECIFIED IN ITEM 626. THE REFLECTOR COLOR SHALL MATCH THE COLOR OF THE EDGE LINE.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE WHEN NO LONGER NEEDED 2 DIESEL POWERED CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. EACH SIGN SHALL BE EITHER A WINK-O-MATIC GENERATION 3, 4, 6, 10 OR 12, AMERICAN SIGNAL CO. CMS-T3000 OR AN ADDCO DIGI-DOT SIGN OR A TELE-SPOT SENTINAL SIGN OR AN APPROVED EQUAL.

EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE PCMS SHOULD NOT BE LOCATED IN THE MEDIAN OF THE HIGHWAY UNLESS IT IS PROTECTED FROM BOTH DIRECTIONS OF TRAFFIC. THE PCMS SHOULD BE LOCATED BEHIND GUARDRAIL WHENEVER POSSIBLE. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE THE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF, FACING AWAY FROM ALL TRAFFIC AND SHALL DISPLAY ONE OR MORE HIGH INTENSITY YELLOW REFLECTIVE SHEETING SURFACES OF 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE DBT TO THE ENGINEER FOR APPROVAL. A LIST OF ALL PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. THE SIGN SHALL HAVE TWO DIFFERENT MEMORIES (PROM AND RAM) AND CAPABILITY TO STORE UP TO 99 MESSAGES IN EACH MEMORY. SIGN MESSAGES SHALL BE LEGIBLE FROM 650 FEET MINIMUM. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. IN ORDER TO CONVEY A MAXIMUM OF INFORMATION AT A SINGLE GLANCE, ONLY THREE LINE PRESENTATION FORMATS WITH A MAXIMUM OF SIX MESSAGE PHASES WILL BE PERMITTED. NORMALLY, ONLY A MAXIMUM OF THREE MESSAGE PHASES SHOULD BE EMPLOYED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DE-ACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNITS SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.03(C). THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

THE REQUIREMENT TO FURNISH, INSTALL, MAINTAIN AND REMOVE A PCMS UNIT ON THIS PROJECT SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES AS OUTLINED IN 104.04.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUEL, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ADVANCE WARNING SIGNS

	DISTANCE	SIGN	SIZE	DESCRIPTION
LEFT LANE CLOSED	500'	OW-60D	48"X48"	WIDTH TRANSITION (SYMBOLIC)
	1000'	OW-143	24"X24"	55 MPH
		OW-123 MOD	48"X48"	LEFT LANE CLOSED 1000 FT.
	2000'	OW-123 MOD	48"X48"	LEFT LANE CLOSED 2000 FT.
	3000'	OW-128	48"X48"	ROAD CONSTRUCTION AHEAD
RIGHT LANE CLOSED	500'	OW-60C	48"X48"	WIDTH TRANSITION (SYMBOLIC)
	1000'	OW-143	24"X24"	55 MPH
		OW-122 MOD	48"X48"	RIGHT LANE CLOSED 1000 FT.
	2000'	OW-122 MOD	48"X48"	RIGHT LANE CLOSED 2000 FT.
	3000'	OW-128	48"X48"	ROAD CONSTRUCTION AHEAD
EXIT RAMP ACROSS CLOSED LANE	60RE	OW-SPEC	48"X48"	EXIT RAMP ↗
	500'	OW-SPEC	48"X48"	EXIT RAMP 500 FT.
	1000'	OW-SPEC	48"X48"	EXIT RAMP 1000 FT.

DUAL SIGN INSTALLATION

SINGLE INSTALLATION

① DISTANCES ARE MEASURED FROM BEGINNING OF LANE CLOSURE, LANE SHIFT OR PAINTED GORE.

ADDITIONAL SIGNAGE

EXTRA ADVANCE WARNING SIGN GROUPS AS PER STANDARD DRAWINGS MT-95.30M, MT-97.10M, MT-98.12M, MT-98.15M, MT-98.16M, MT-98.17M, MT-98.18M AND MT-102.20M SHALL ALSO BE INSTALLED, PAYMENT FOR THESE SIGNS SHALL BE UNDER ITEM 614 - MAINTAINING TRAFFIC.

WORK ZONE MARKING SIGNS

ITEM 614 WORK ZONE MARKING SIGNS SHALL BE INSTALLED WHENEVER APPROPRIATE. THESE SIGNS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING SIGNS: OW-62 (BUMP), OW-71 (TWO WAY TRAFFIC), OW-167 (NO EDGE LINES), OW-171 (UNEVEN LANES SYMBOL).

MAINTAINING TRAFFIC

GENERAL NOTES

TRAFFIC CONTROL MATERIALS

A. SIGNS

SIGN DIMENSIONS AND SPECIFICATIONS, INCLUDING LETTER SIZES, SHALL BE AS PROVIDED IN THE "MANUAL", OR IN SIGN DESIGN DRAWINGS PROVIDED BY THE DEPARTMENT OF TRANSPORTATION. THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THE PROJECT.

ALL SIGNS SHALL HAVE A REFLECTORIZED BACKGROUND OF REFLECTIVE MATERIALS AS DESCRIBED IN THE "MANUAL".

B. SIGN SUPPORTS

TEMPORARY SIGN SUPPORTS SHALL BE AS SHOWN ON MT-105.10M AND MT-105.11M

C. DRUMS

DRUMS SHALL BE IN ACCORDANCE WITH PERTINENT SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL LONG TERM LANE CLOSURES SHALL BE DELINEATED WITH DRUMS SPACED AT 50 FEET CENTER TO CENTER. ALL COSTS FOR INSTALLING, MAINTAINING AND SUBSEQUENT REMOVAL OF SAID DRUMS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

D. LIGHTING DEVICES

FLASHERS SHALL BE 12 VOLT BATTERY OPERATED MODELS WITH 7 INCH DIAMETER YELLOW LENSES ILLUMINATED BY RAPID INTERMITTENT FLASHES OF SHORT DURATION AND SHALL BE PLACED ON ALL SIGNS AT ALL TIMES.

CONTINUOUS BURN LIGHTS SHALL BE 12 VOLT BATTERY OPERATED MODELS WITH MINIMUM 7 INCH DIAMETER YELLOW LENSES.

E. FLASHING ARROW PANEL

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED. THE MOTORIST SHALL BE WARNED AND DIVERTED BY THE CONTRACTOR THROUGH THE USE OF ONE FLASHING ARROW PANEL FOR EACH LANE CLOSED. THE CONTRACTOR SHALL REFER TO STD. DRWG. MT-35.10 AND THE PROVISION SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR ALL INFORMATION REGARDING FURNISHING, MAINTAINING, AND USE OF FLASHING ARROW PANELS. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

NIGHT VESTS

ALL OF THE CONTRACTORS AND SUB CONTRACTORS PERSONNEL WORKING DURING THE HOURS OF DARKNESS SHALL WEAR A 100% SILVER REFLECTIVE SAFETY VEST. THE SAFETY VEST SHALL BE PROVIDED BY THE CONTRACTOR. THE VEST MAY HAVE SEVERAL LIME OR ORANGE STRIPES ON IT.

FLASHING LIGHTS

ALL WORK VEHICLES AND EQUIPMENT THAT ENTER THE WORK ZONE MORE THAN ONCE A DAY MUST BE EQUIPPED WITH AT LEAST ONE FLASHING, ROTATING, OR OSCILLATING AMBER LIGHT THAT IS VISIBLE IN ALL DIRECTIONS OF TRAFFIC FOR AT LEAST ONE QUARTER OF A MILE, DAY OR NIGHT.

TRAFFIC CONES

CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE-HALF HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET.

PORTABLE CONCRETE BARRIER

THE BARRIER SECTIONS SHALL BE BOLTED TOGETHER WITH STEEL CONNECTIONS AS PER STANDARD CONSTRUCTION DRAWING RM-4.2M.

ITEM 614 - TEMPORARY MARKINGS (INITIAL SHIFTS, RESURFACING OR LANE SHIFT REMOVALS)

IN ADDITION TO THE REQUIREMENTS OF 614 WORK ZONE PAVEMENT MARKINGS (614.10) AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH TEMPORARY MARKINGS) ALL LANE, STOP CENTER OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PAVEMENT PLACEMENT OPERATIONS.

TEMPORARY MARKINGS SHALL BE PLACED AT THE LOCATIONS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS OR THEIR ORIGINAL LOCATION, AS APPROPRIATE.

AT THE COMPLETION OF PHASE 2, TEMPORARY MARKINGS SHALL BE PLACED AT THE LOCATIONS OF THE ORIGINAL PAVEMENT MARKINGS.

ITEM 614 - TEMPORARY PAVEMENT MARKINGS (TRAFFIC SHIFTS)

LANE SHIFTS OR LANE CLOSURES SHALL BE IMPLEMENTED USING 65:1 MAXIMUM TAPER RATES ON MAINLINE PAVEMENT AND DIRECTIONAL ROADWAYS AND 35:1 MAXIMUM TAPER RATES ON RAMPS. (SEE TRAFFIC MAINTENANCE DETAIL SHEETS)

TYPICAL LOCATIONS INCLUDE:

- A) LANE CLOSURES
- B) LANE SHIFTS
- C) ENTRANCE/EXIT RAMP EXTENSIONS ACROSS CLOSED OUTSIDE LANES.

ALL CONFLICTING PAVEMENT MARKINGS AND RAISED PAVEMENT MARKER REFLECTORS, (INCLUDING THE LANE LINE ADJACENT TO THE LANE CLOSURE TAPER) SHALL BE REMOVED PRIOR TO PLACING THESE PAVEMENT MARKINGS.

PERMANENT PAVEMENT MARKINGS

AFTER PLACING THE SURFACE COURSE, THE CONTRACTOR MAY PLACE PERMANENT PAVEMENT MARKINGS AT LOCATIONS SHOWN IN THE TYPICALS AND THE TRAFFIC CONTROL SHEETS INSTEAD OF PLACING TEMPORARY PAVEMENT MARKINGS, WHICH SHALL BE NON-PERFORMED AT THESE LOCATIONS.

CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC NOTES

TRU-80-9.08

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GENERAL NOTES

1. It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified herein, they shall be included for payment in the lump sum bid for Item 614 - Maintaining Traffic.

2. While the need for certain advisory signing is noted herein, it is not intended that this be indicative of all signing that may be required to advise or warn motorist, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.

3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown herein may be required.

4. The drop-off treatment selected for use at any given location shall be appropriate for the prevailing conditions at the site.

5. Where concrete barrier is specified, it shall be in accordance with Item 622.

6. When drums are specified for a drop-off condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.

7. When OW-151 (Low Shoulder) signs or OW-171 (Uneven Lanes symbol), OWP-171 (uneven lane plaque), and OC-53 (Maintain Present Lane) signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the drop-off condition extends more than one-half mile, additional signs shall be erected at intervals of a maximum of one mile.

8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, the Optional Wedge Treatment shall be provided.

9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the drop-off depth does not exceed 5" and approval is granted by the Project Engineer.

10. Pavement Repairs (or similar work):

a. Lengths greater than 60 feet - utilize appropriate treatment from Condition I.

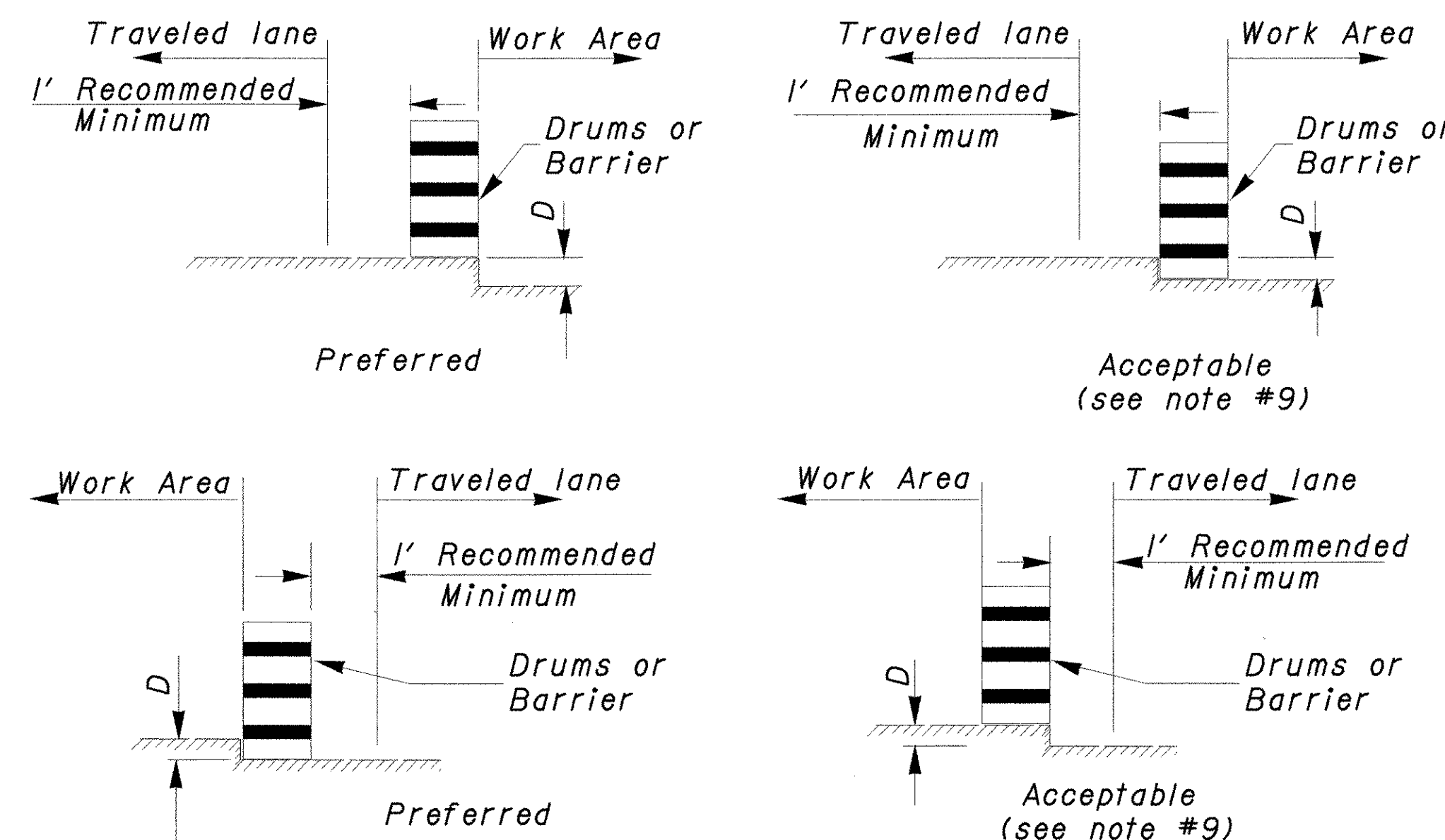
b. Lengths of 60 feet or less - repairs shall be affected in accordance with Item 255.08. Drums may be used as a separator adjacent to the traveled lane.

CONDITION I

1. These treatments are to be used for resurfacing, pavement planing excavation, etc., between, beside or within traveled lanes.

Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	< 1 1/2	Erect OW-171, AND OWP-171.
1FT-12FT	1 1/2-3	1. Lane closure utilizing drums* as shown below. (use only on 3 or more lanes) - or - 2. Optional Wedge Treatment.
1FT-12FT	3 - 5	Lane closure utilizing drums as shown below
1FT-12FT	5 - 12	Lane closure utilizing portable concrete barrier as shown below.
>12FT-20FT	12 - 24	Lane closure utilizing drums as shown below
>12FT-20FT	>24	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.

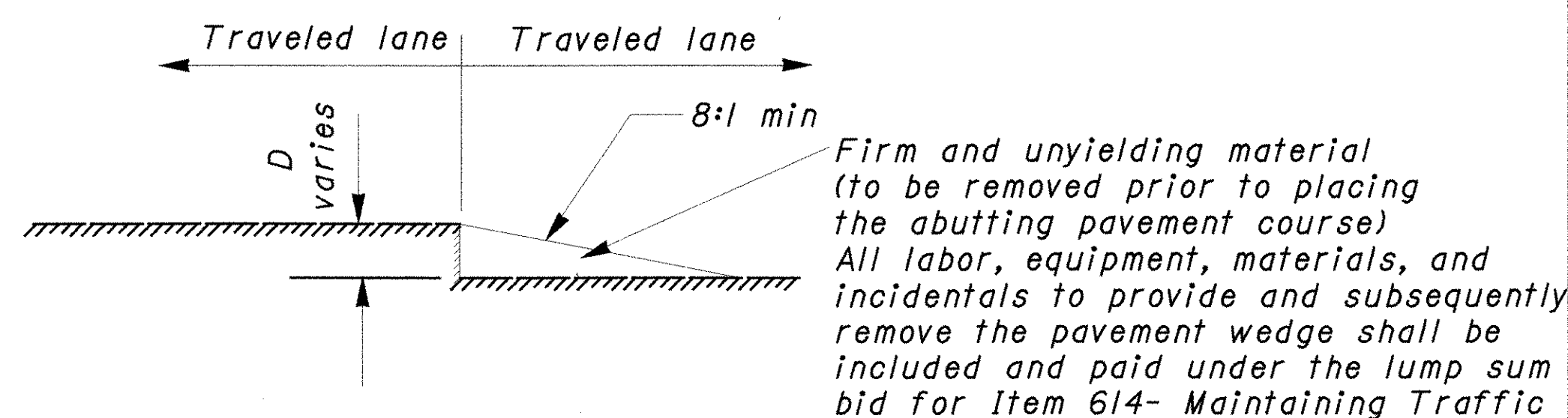


OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.

2. OW-171, OWP-171, and OC-53 signs required.



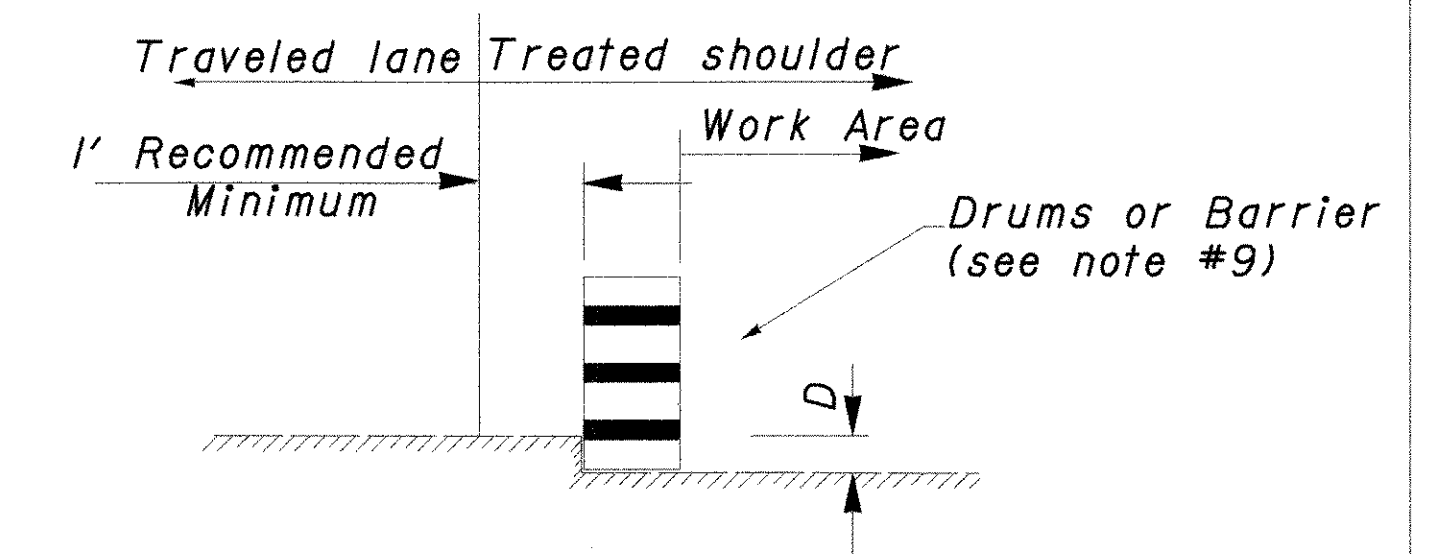
CONDITION II

DROPOFFS WITHIN GRADED SHOULDER AREA
[except for linear grading areas]

The treatments indicated below are for use in conjunction with resurfacing, planing, or excavation within the graded shoulder area.

Distance From Traveled Lane	D (in)	Treatment
1FT-12FT	< 1 1/2	1.) If edgelines are present, no treatment necessary. or 2.) Erect OW-171, OWP-171, and OC-53 signs
1FT-12FT	1 1/2- 5	1) If min. lane widths* requirements can be met, maintain lanes utilizing drums as shown below. - or - 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums. (use only on 3 or more lanes) - or - 3) Optional shoulder treatment
>12FT-30FT	<= 24	Shoulder closure utilizing drums as shown below
>12FT-30FT	>24	Shoulder closure utilizing portable concrete barrier as shown below.

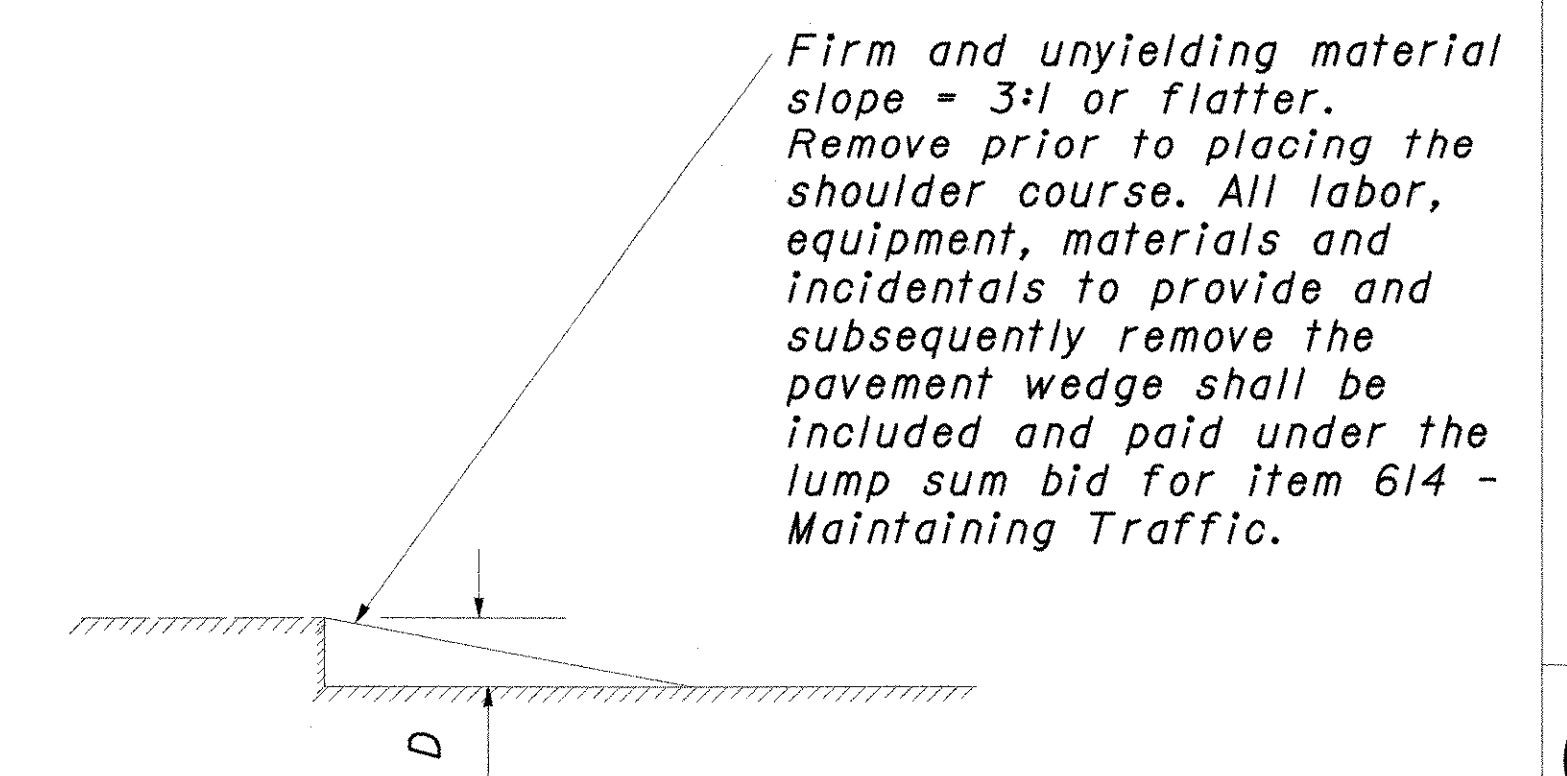
*Minimum lane widths shall be 10' unless otherwise specified in the plans.

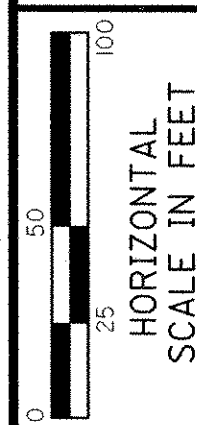
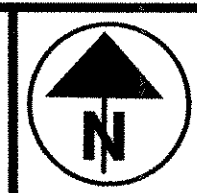


OPTIONAL SHOULDER TREATMENT

1. This treatment shall not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.

2. OW-151 signs required.

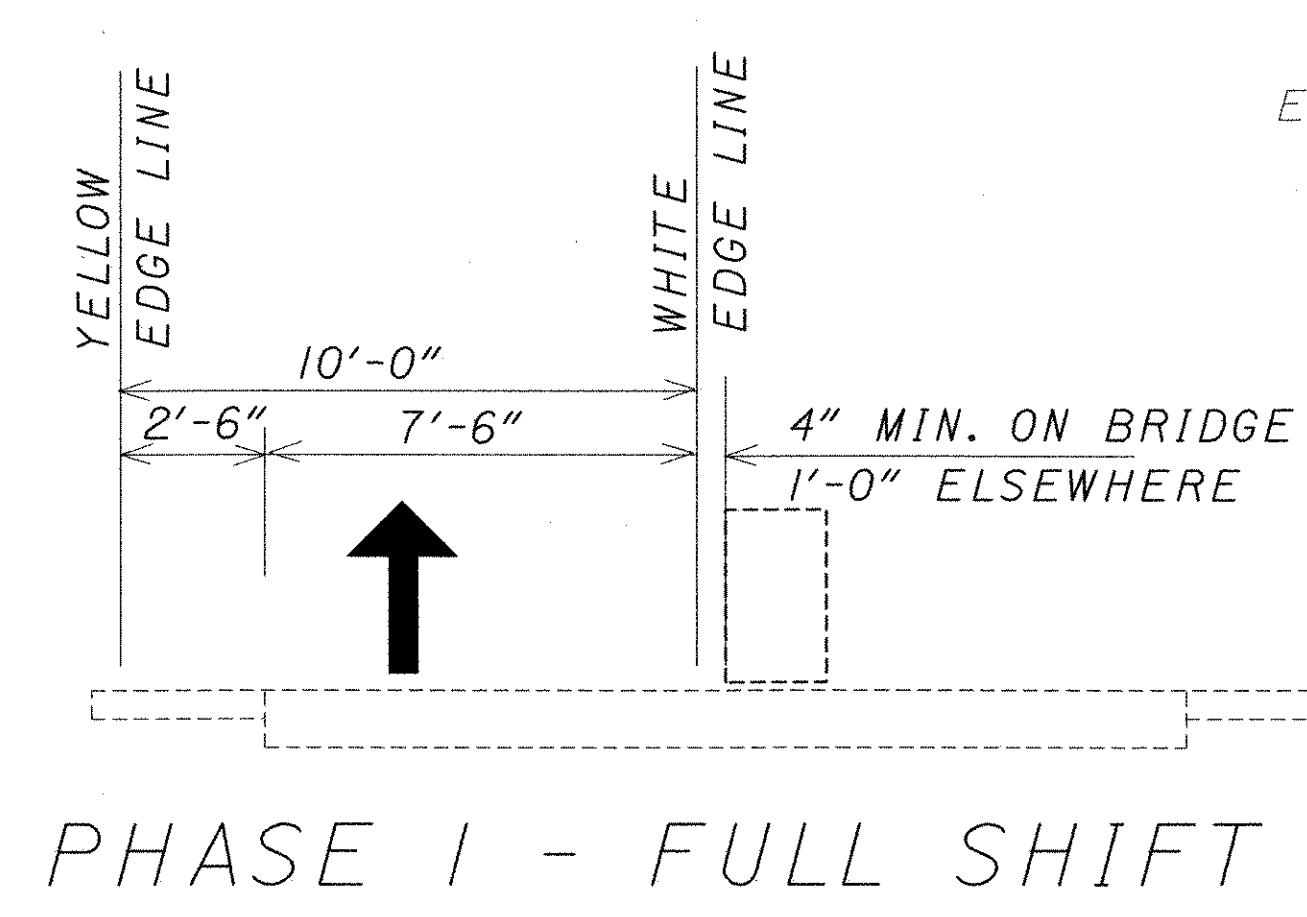




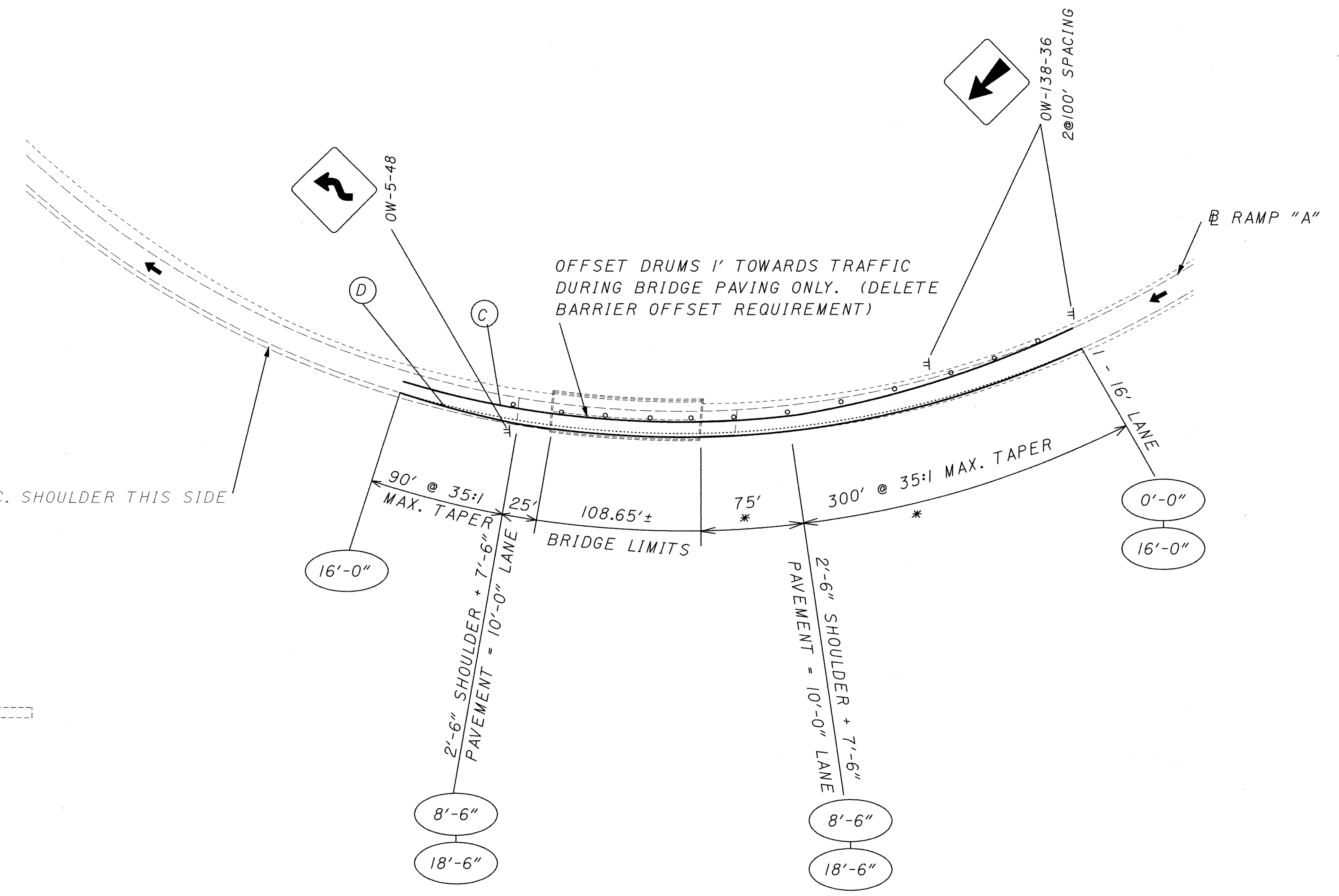
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MAINTENANCE OF TRAFFIC - PHASE I
BR. NO. TRU-80-0940

TRU-80-9.08



EX. CONC. SHOULDER THIS SIDE



TRU-80-0940

PROVIDE PROTECTION VEHICLE AS PER MT-102.20M

NOTES:

1. ALL DIMENSIONS ARE TO @ UNLESS NOTED OTHERWISE.

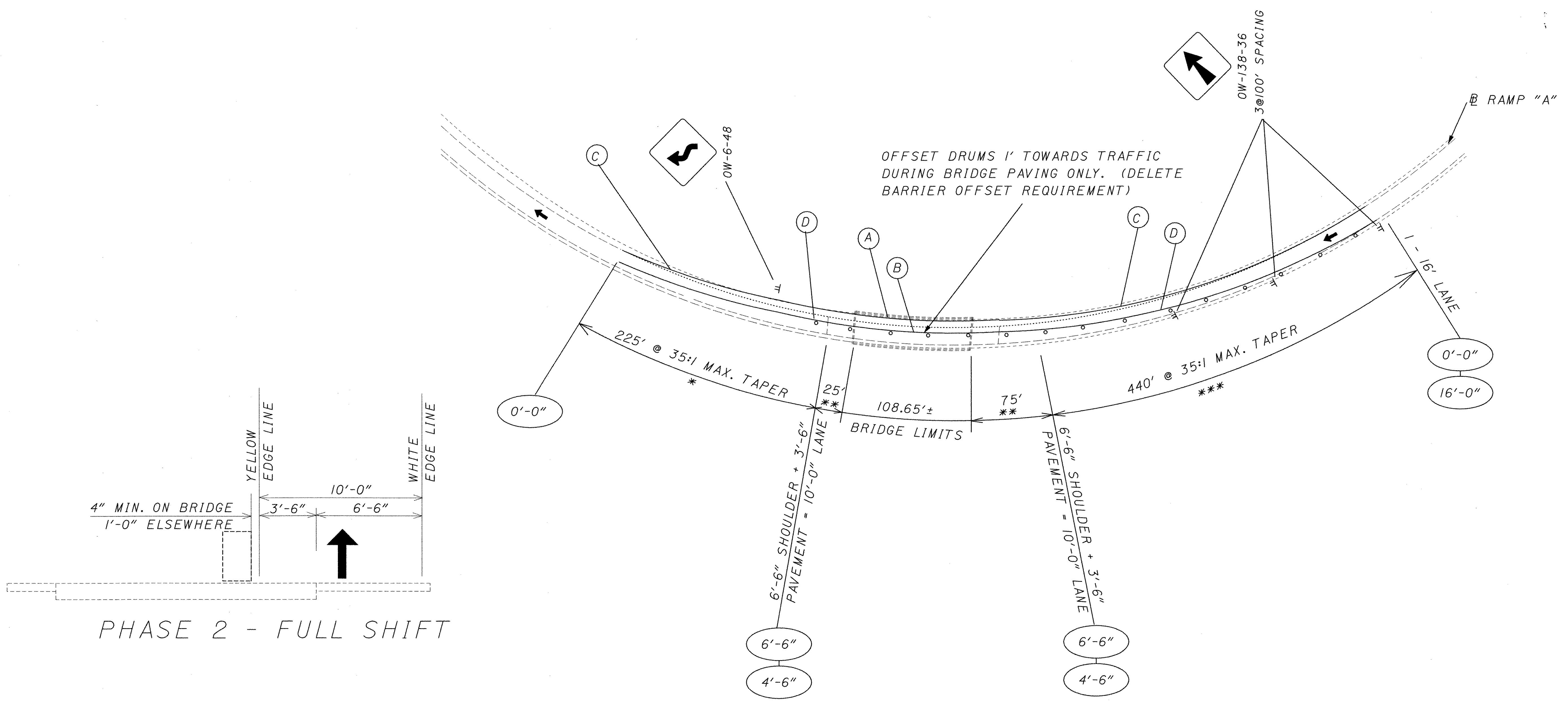
* - REPLACE SHOULDER 3 FT. WIDE USING 7" - ITEM 301

..... EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED

- (A) TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS I, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS I, 642 PAINT (YELLOW)

• • • TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 40' C/C TYP.

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PHASE 2 - FULL SHIFT

TRU-80-0940

PROVIDE PROTECTION VEHICLE AS PER MT-102.20M

NOTES:

- 1. ALL DIMENSIONS ARE TO @ UNLESS NOTED OTHERWISE.
- * - REPLACE SHOULDER 8 FT. TO 7 FT. WIDE USING 7" - ITEM 301
- ** - REPLACE SHOULDER 7 FT. WIDE USING 7" - ITEM 301
- *** - REPLACE SHOULDER 7 FT. TO 3 FT. WIDE USING 7" - ITEM 301
- EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED

- (A) TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS I, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS I, 642 PAINT (YELLOW)
- • • TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 40' C/C TYP.

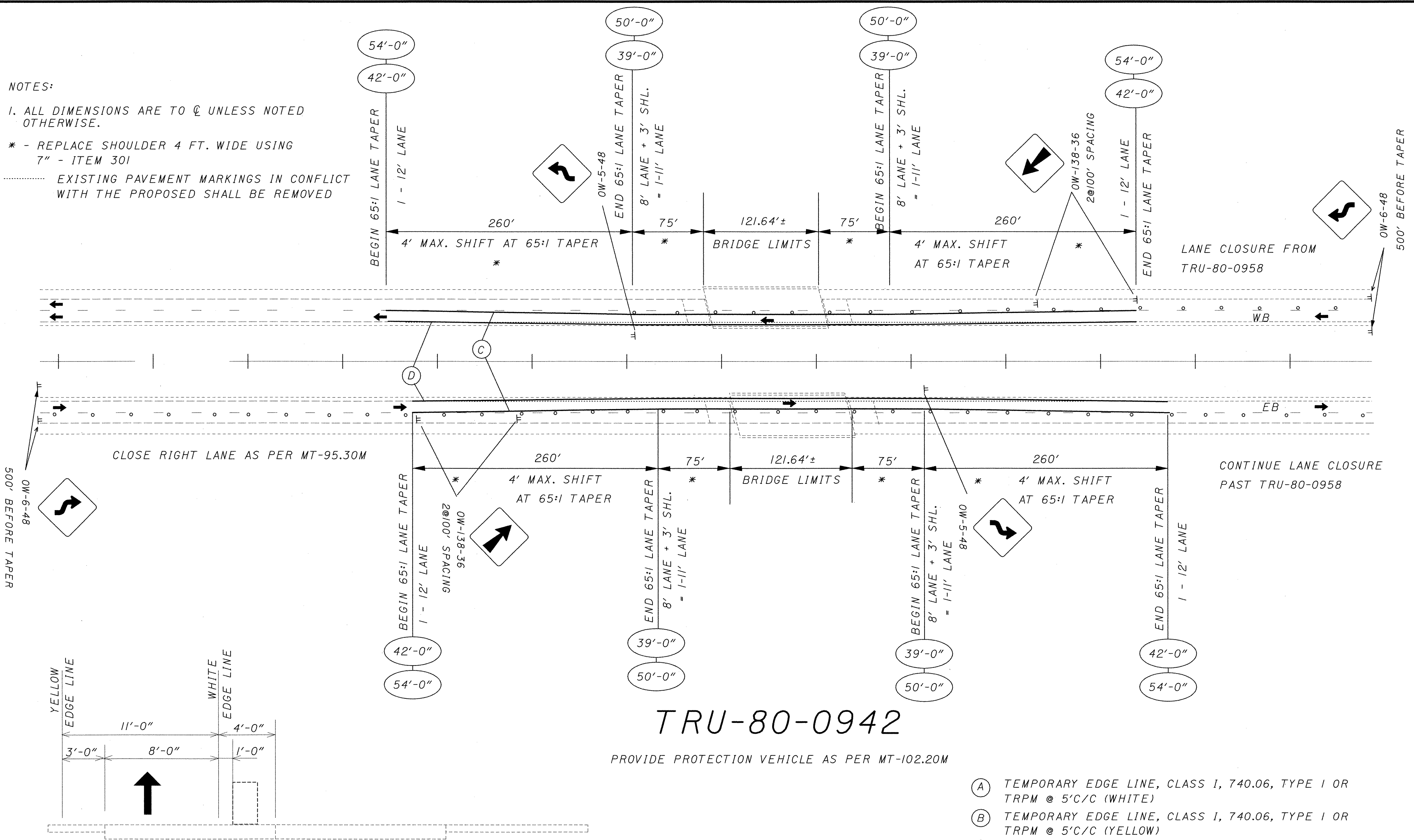
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NOTES:

1. ALL DIMENSIONS ARE TO \odot UNLESS NOTED OTHERWISE.

* - REPLACE SHOULDER 4 FT. WIDE USING 7" - ITEM 301

----- EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED



500' BEFORE TAPER

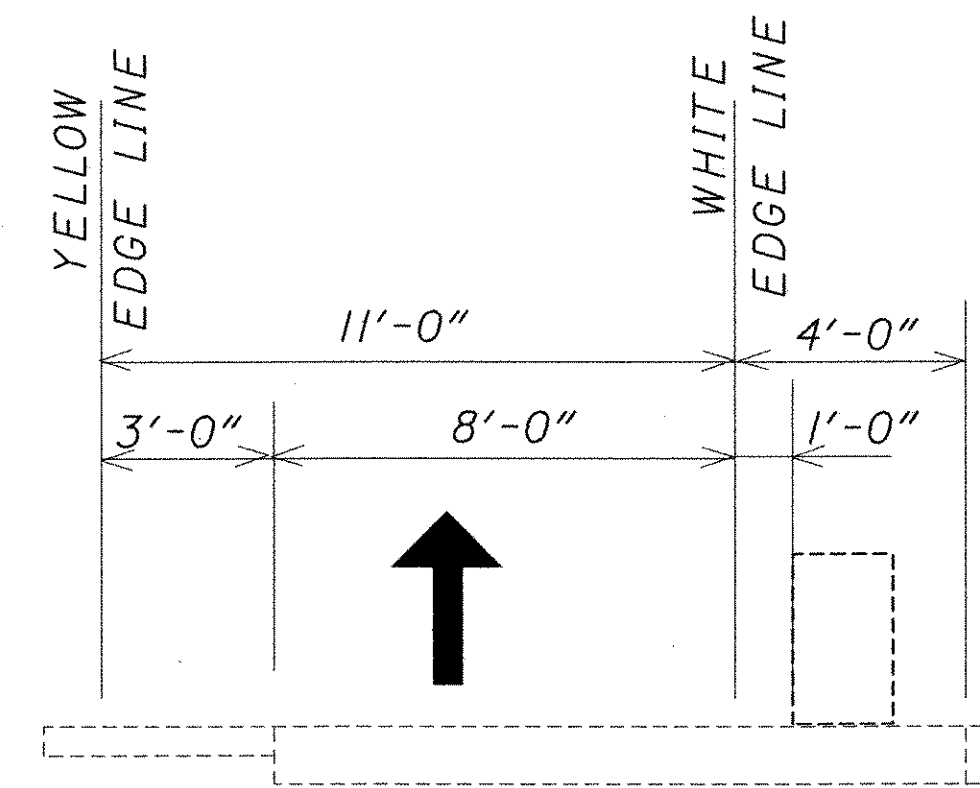
500' BEFORE TAPER

CLOSE RIGHT LANE AS PER MT-95.30M

CONTINUE LANE CLOSURE PAST TRU-80-0958

TRU-80-0942

PROVIDE PROTECTION VEHICLE AS PER MT-102.20M



PHASE I - FULL SHIFT

- (A) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (YELLOW)

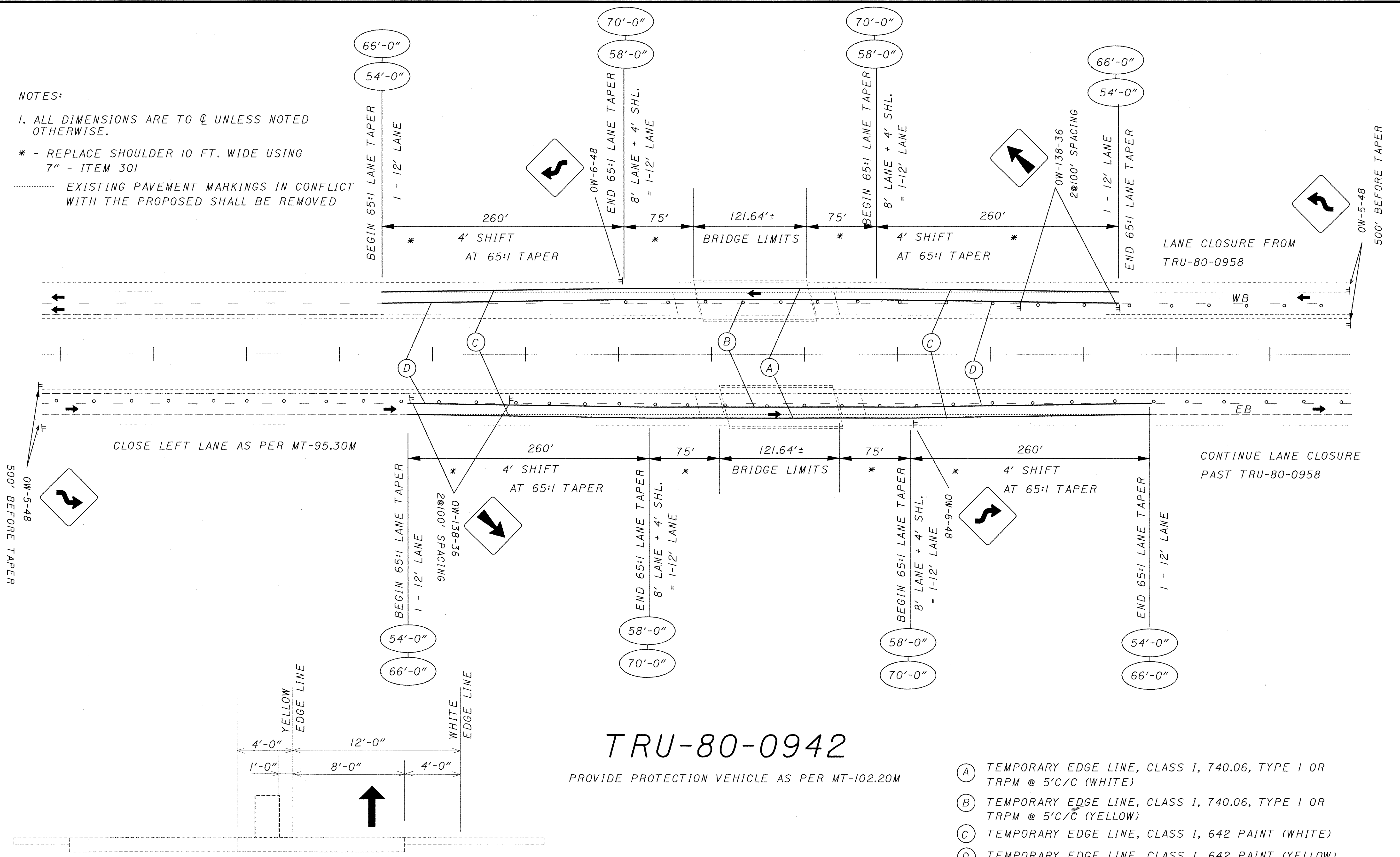
• • • TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 50' C/C TYP.

NOTES:

1. ALL DIMENSIONS ARE TO ϕ UNLESS NOTED OTHERWISE.

* - REPLACE SHOULDER 10 FT. WIDE USING 7" - ITEM 301

..... EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED



CLOSE LEFT LANE AS PER MT-95.30M

LANE CLOSURE FROM TRU-80-0958

CONTINUE LANE CLOSURE PAST TRU-80-0958

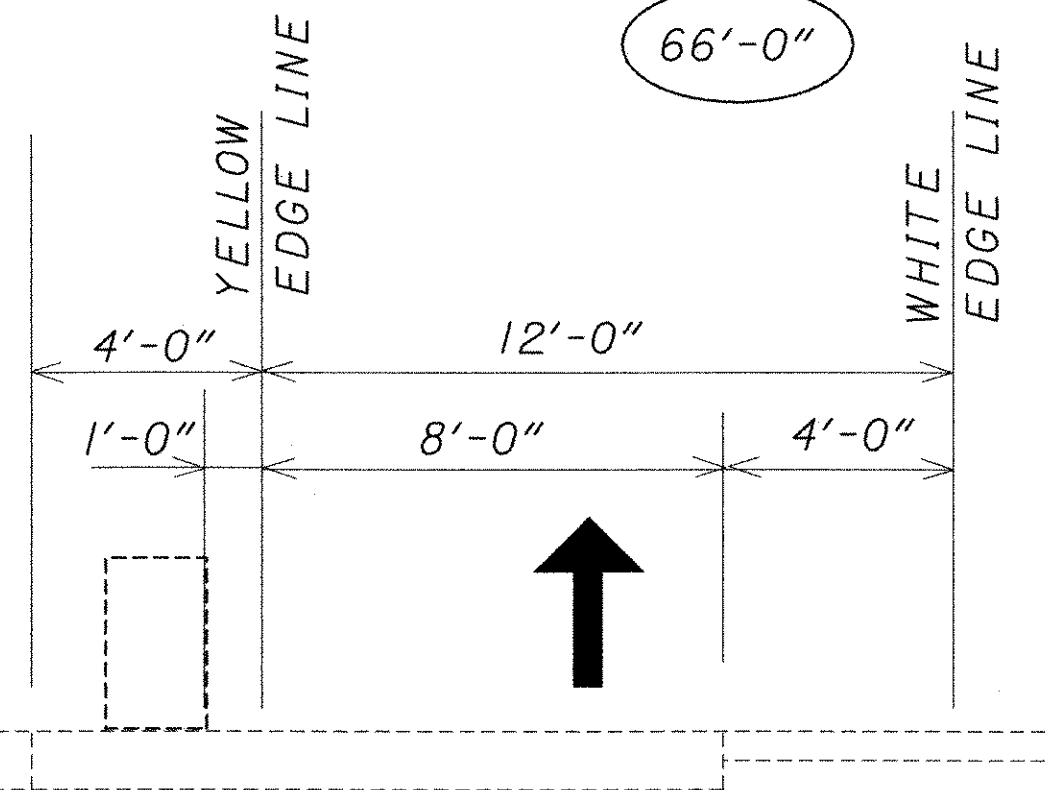
TRU-80-0942

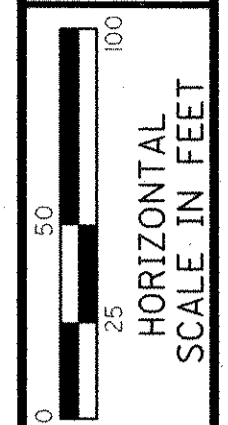
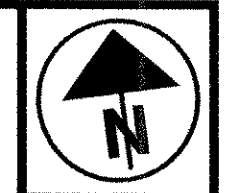
PROVIDE PROTECTION VEHICLE AS PER MT-102.20M

PHASE 2 - FULL SHIFT

- (A) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (YELLOW)

• • • TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 50' C/C TYP.





CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC - PHASE I
BR. NO. TRU-80-0958

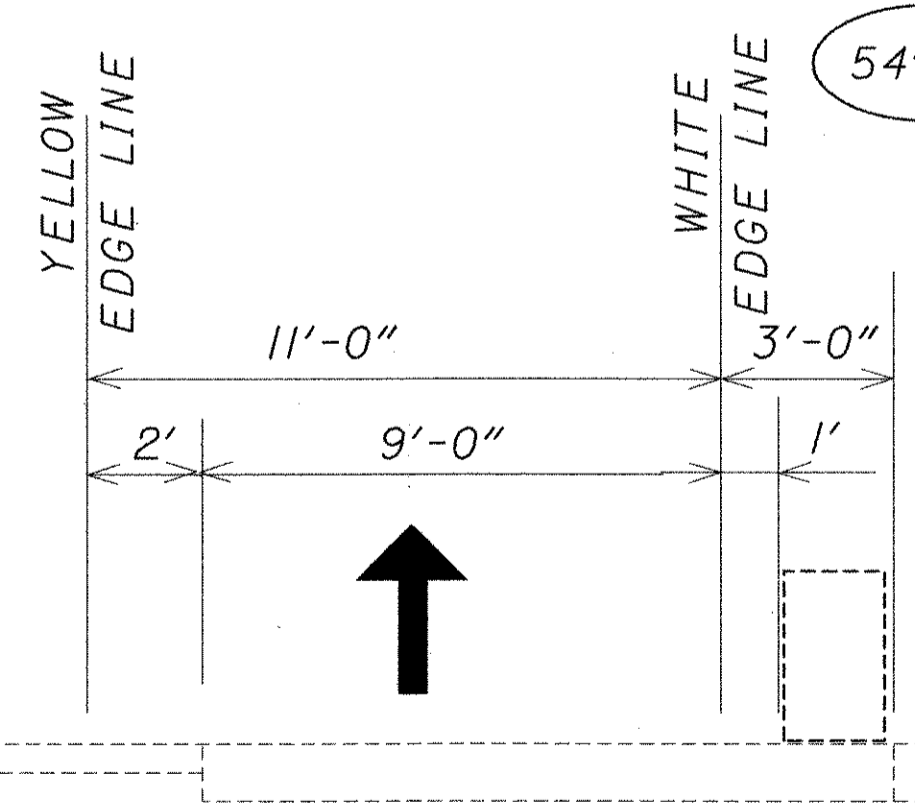
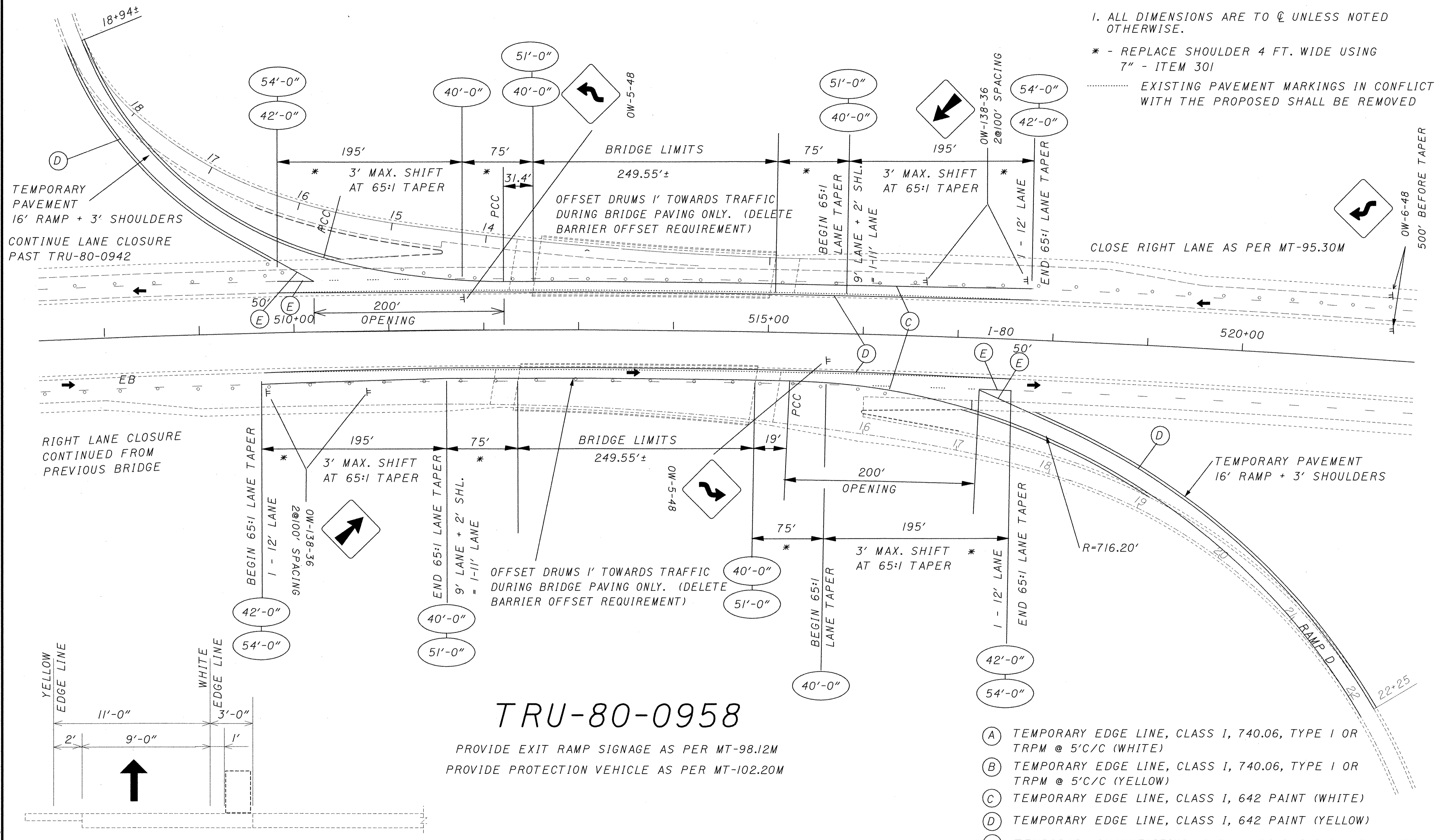
TRU-80-9.08

NOTES:

1. ALL DIMENSIONS ARE TO \varnothing UNLESS NOTED OTHERWISE.

* - REPLACE SHOULDER 4 FT. WIDE USING 7" - ITEM 301

..... EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED



TRU-80-0958

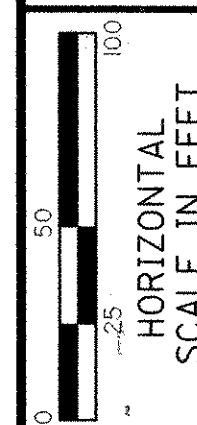
PROVIDE EXIT RAMP SIGNAGE AS PER MT-98.12M
PROVIDE PROTECTION VEHICLE AS PER MT-102.20M

- (A) TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS I, 740.06, TYPE I OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS I, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS I, 642 PAINT (YELLOW)
- (E) TEMPORARY CHANNELIZING LINE, CLASS I, 642 PAINT (WHITE)

• • • TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 50' C/C TYP.

PHASE I - FULL SHIFT

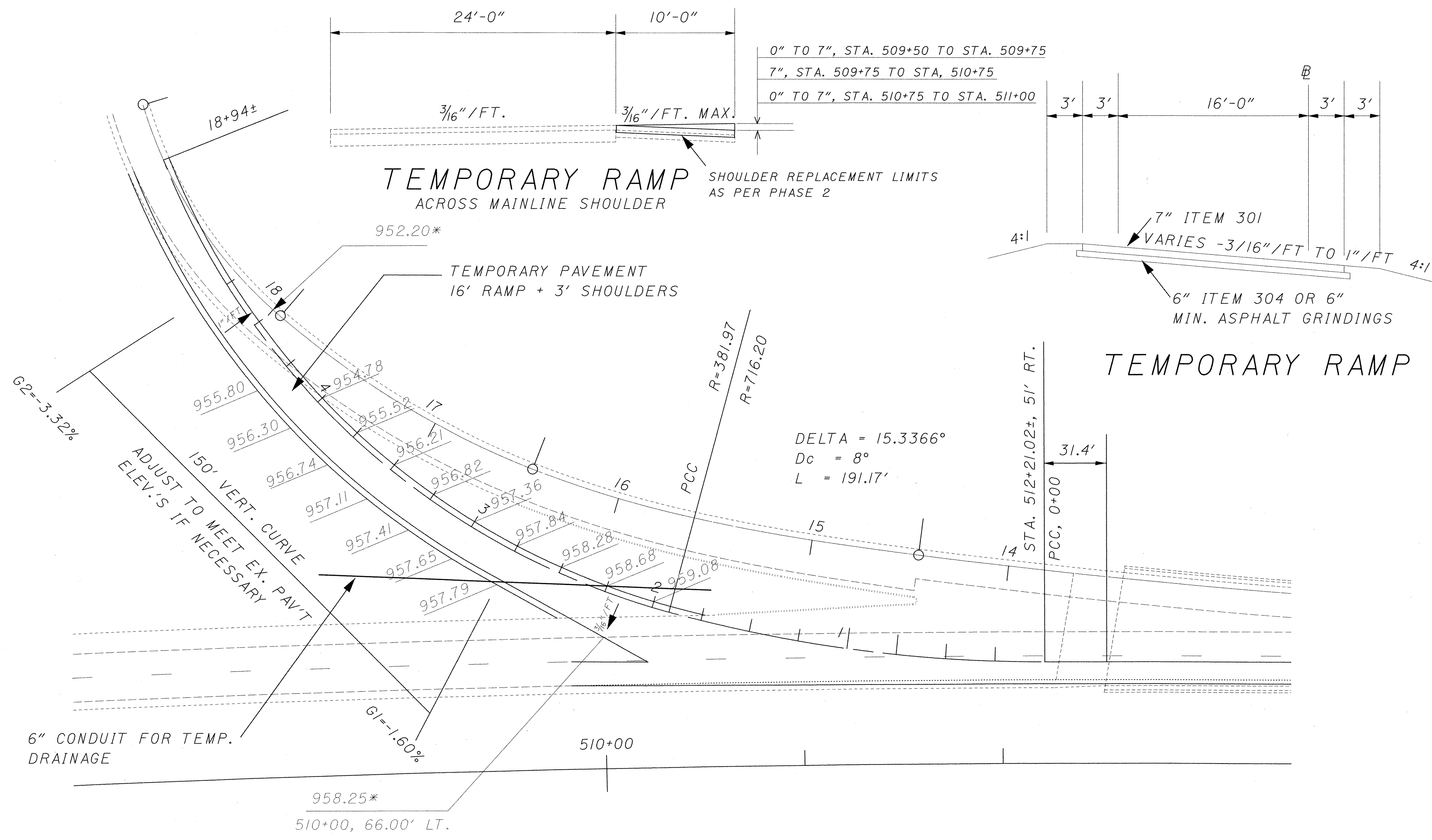
P:\PR29300\cadd\22163\MP1.dgn



CHECKED
CALCULATED

MAINTENANCE OF TRAFFIC - PHASE I
TEMPORARY RAMP "B"

TRU-80-9.08



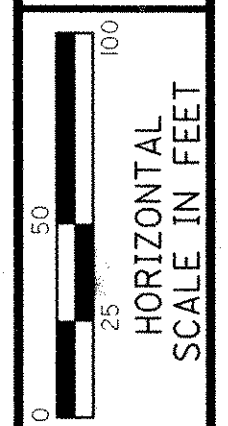
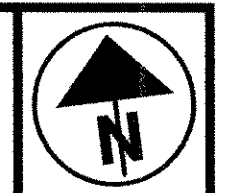
* - LOCAL REFERENCE ELEV.

P:\PR29300\cadd\22263MPL.dgn

515+00

I-80

520+00



CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC - PHASE I
TEMPORARY RAMP "D"

TRU-80-9.08

23
70

* - LOCAL REFERENCE ELEV.

PCC
STA. 515+23.48±, 5' RT.

REMOVE CURB
(DO NOT REPLACE)

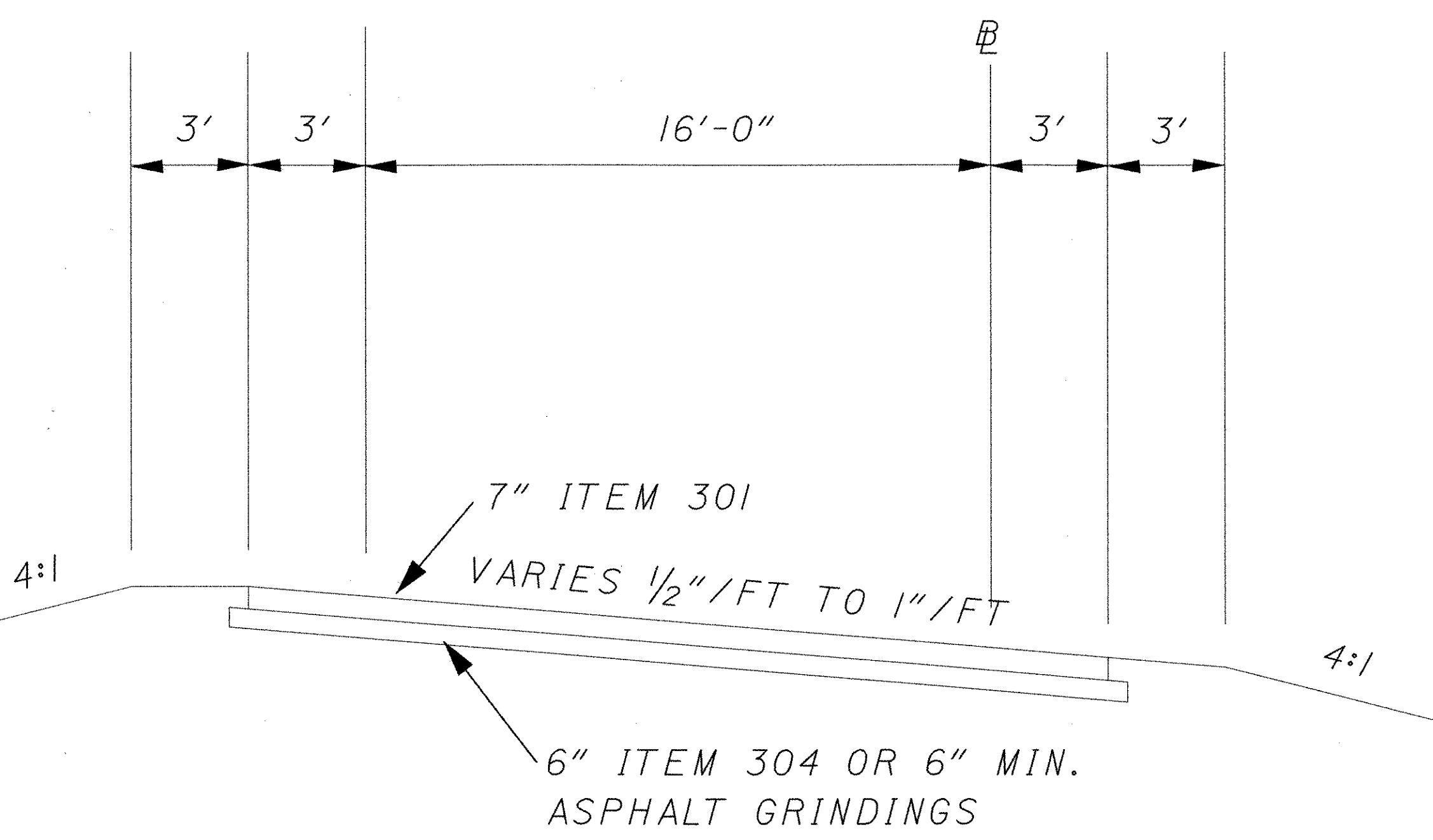
ADJUST TO MEET
EX. PAV'T. ELEV'S.
IF NECESSARY
150' VERTICAL CURVE
G1=+0.59%
G2=-2.65%

6" CONDUIT FOR TEMP. DRAINAGE

REPLACE SHOULDER

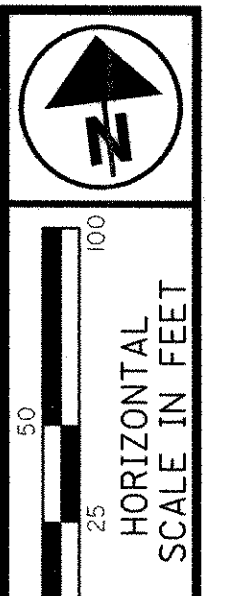
TEMPORARY PAVEMENT
16' RAMP + 3' SHOULDERS

R=716.20'



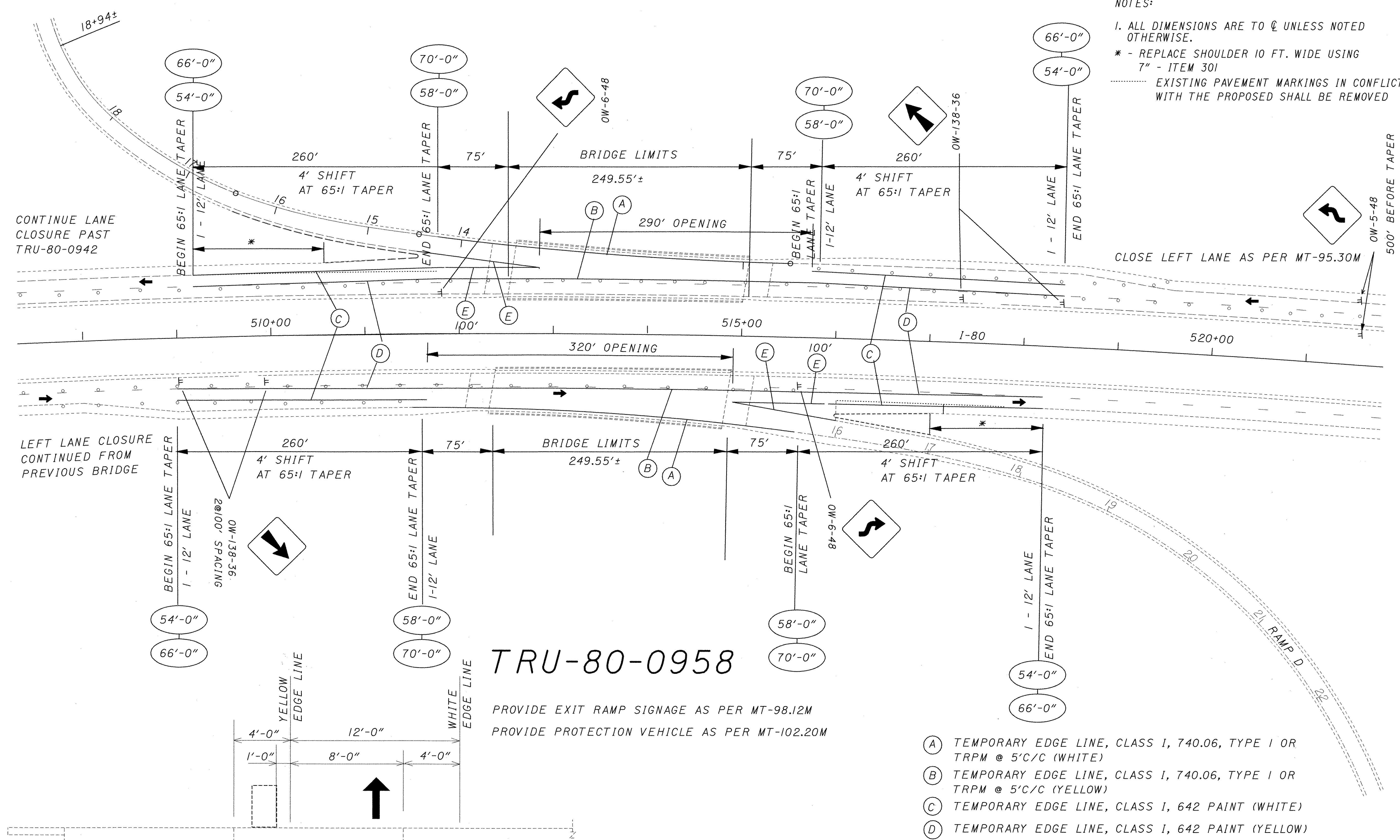
TEMPORARY RAMP

P:\PR29300\cadd\22163MPL.dgn



NOTES:

- 1. ALL DIMENSIONS ARE TO ϕ UNLESS NOTED OTHERWISE.
- * - REPLACE SHOULDER 10 FT. WIDE USING 7" - ITEM 301
- EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED



CONTINUE LANE CLOSURE PAST TRU-80-0942

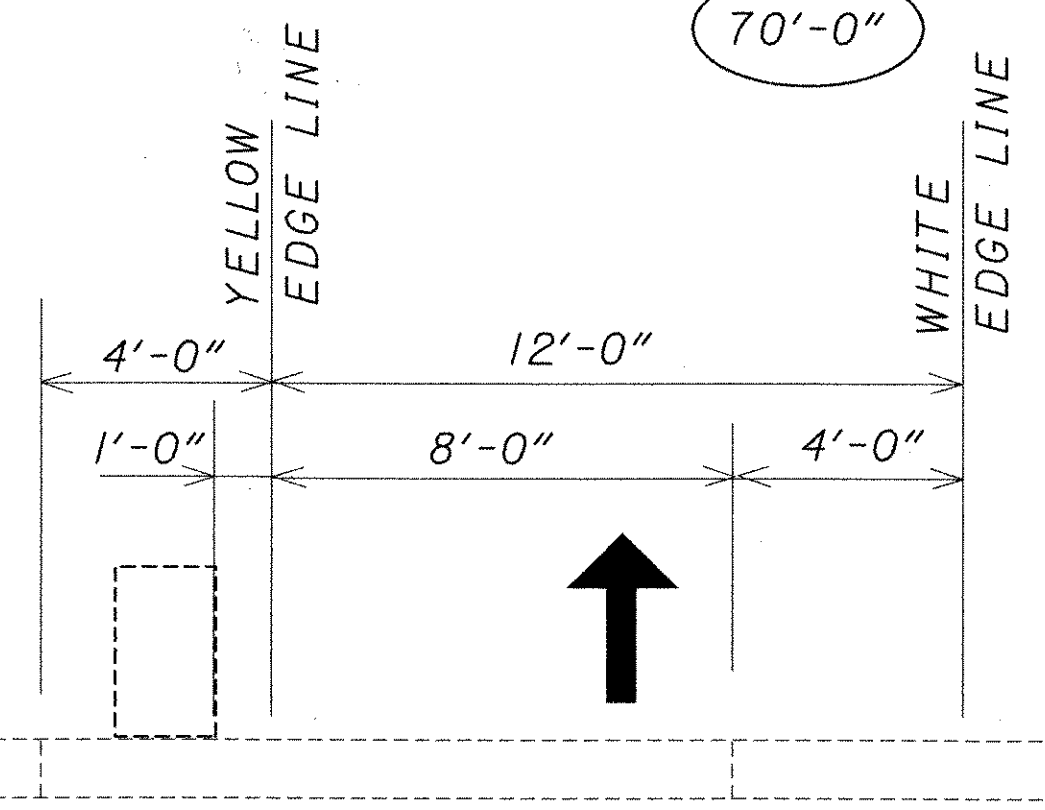
CLOSE LEFT LANE AS PER MT-95.30M

LEFT LANE CLOSURE CONTINUED FROM PREVIOUS BRIDGE

TRU-80-0958

PROVIDE EXIT RAMP SIGNAGE AS PER MT-98.12M
 PROVIDE PROTECTION VEHICLE AS PER MT-102.20M

PHASE 2 - FULL SHIFT



- (A) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (YELLOW)
- (E) TEMPORARY CHANNELIZING LINE, CLASS 1, 642 PAINT (WHITE)
- TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 50' C/C TYP.

MAINTENANCE OF TRAFFIC - PHASE 2
BR. NO. TRU-80-0958

TRU-80-9.08

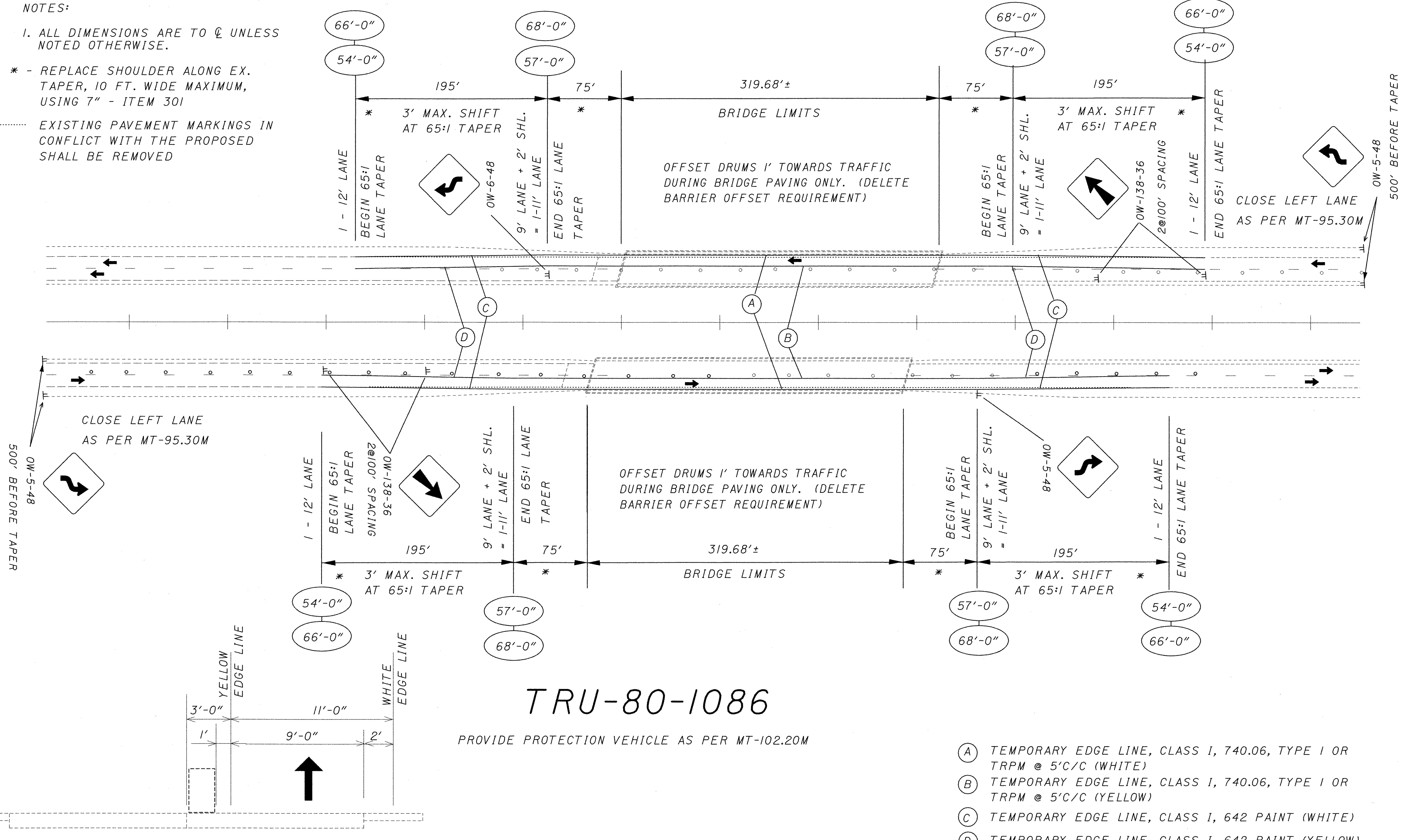
P:\PR29300\cadd\22163MP1.dgn

NOTES:

1. ALL DIMENSIONS ARE TO \varnothing UNLESS NOTED OTHERWISE.

* - REPLACE SHOULDER ALONG EX. TAPER, 10 FT. WIDE MAXIMUM, USING 7" - ITEM 301

EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED

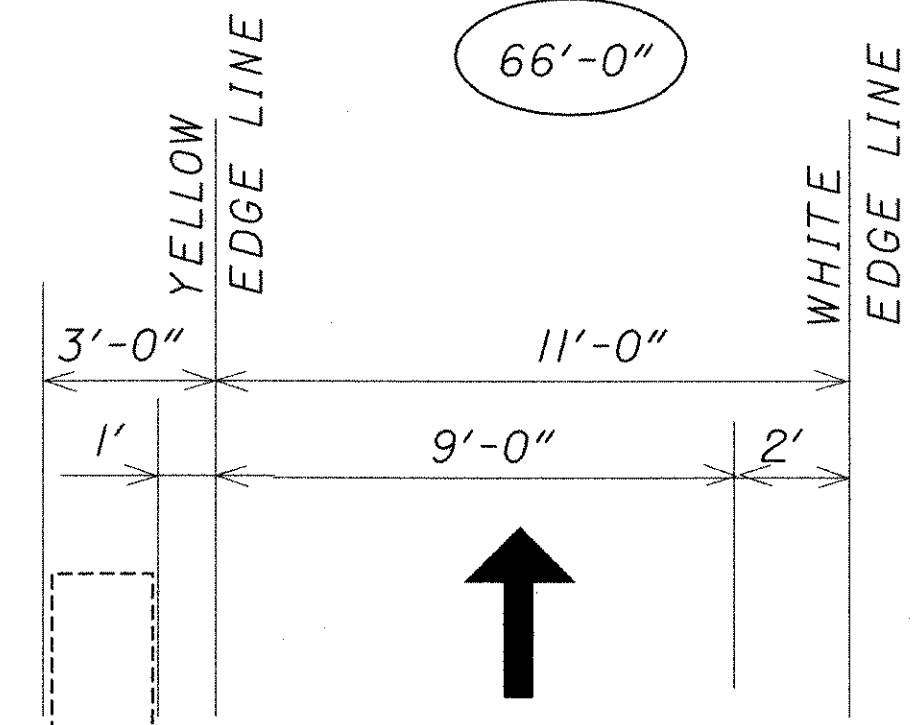


CLOSE LEFT LANE AS PER MT-95.30M
500' BEFORE TAPER
OW-5-48

CLOSE LEFT LANE AS PER MT-95.30M
500' BEFORE TAPER
OW-5-48

OFFSET DRUMS 1' TOWARDS TRAFFIC DURING BRIDGE PAVING ONLY. (DELETE BARRIER OFFSET REQUIREMENT)

OFFSET DRUMS 1' TOWARDS TRAFFIC DURING BRIDGE PAVING ONLY. (DELETE BARRIER OFFSET REQUIREMENT)



TRU-80-1086

PROVIDE PROTECTION VEHICLE AS PER MT-102.20M

- (A) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (WHITE)
- (B) TEMPORARY EDGE LINE, CLASS 1, 740.06, TYPE 1 OR TRPM @ 5'C/C (YELLOW)
- (C) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (WHITE)
- (D) TEMPORARY EDGE LINE, CLASS 1, 642 PAINT (YELLOW)

• • • TRAFFIC DRUMS, OFFSET 1' FROM EDGE LINES (TYP.) 50' C/C TYP.

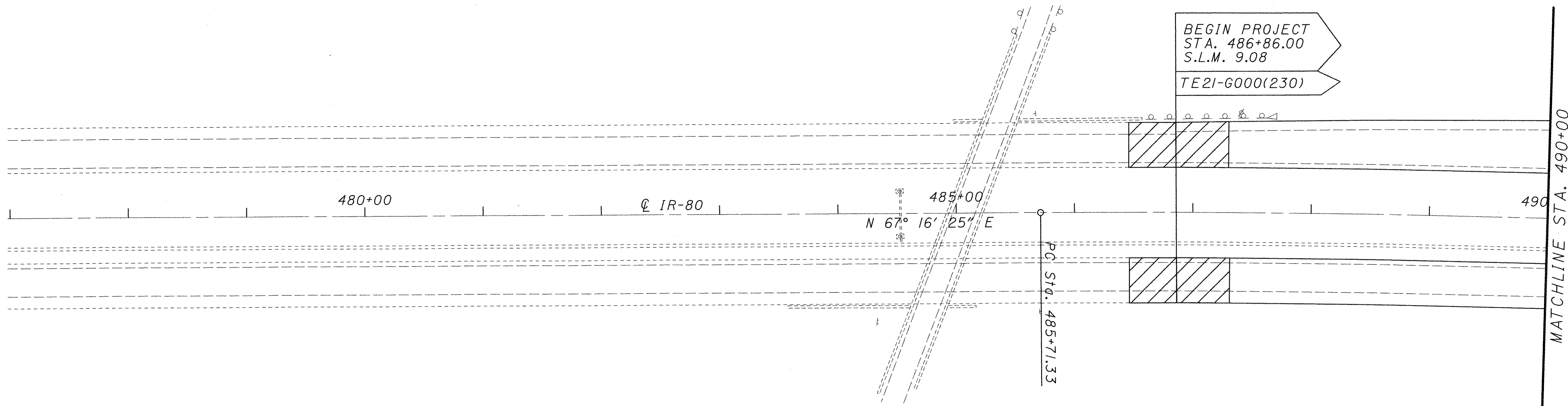
PHASE 2 - FULL SHIFT

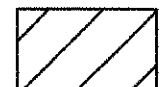


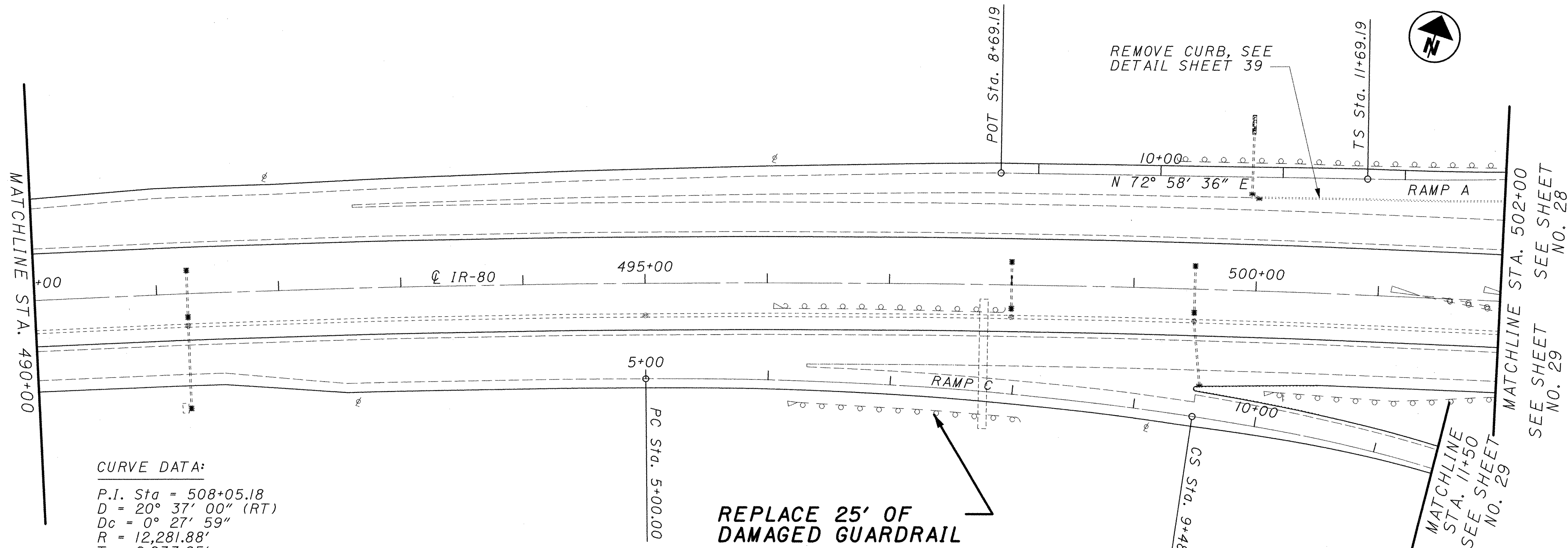
MAINTENANCE OF TRAFFIC - PHASE 2
BR. NO. TRU-80-1086

TRU-80-9.08

P:\PR29300\cadd\221636P1.dgn



 - SEE TRANSITION DETAIL, SHEET NO. 37



CURVE DATA:
 P.I. Sta = 508+05.18
 D = 20° 37' 00" (RT)
 Dc = 0° 27' 59"
 R = 12,281.88'
 T = 2,233.85'
 L = 4,419.39'
 E = 201.49'

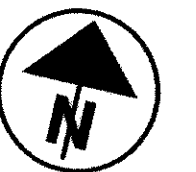
CALCULATED	0
AEP	25
CHECKED	100
ENF	

PLAN SHEET - I.R. 80
STA. 477+00 TO STA. 502+00

TRU-80-9.08

***AS BUILT INFORMATION**

 - SEE TRANSITION DETAIL, SHEET NO. 37 & 38

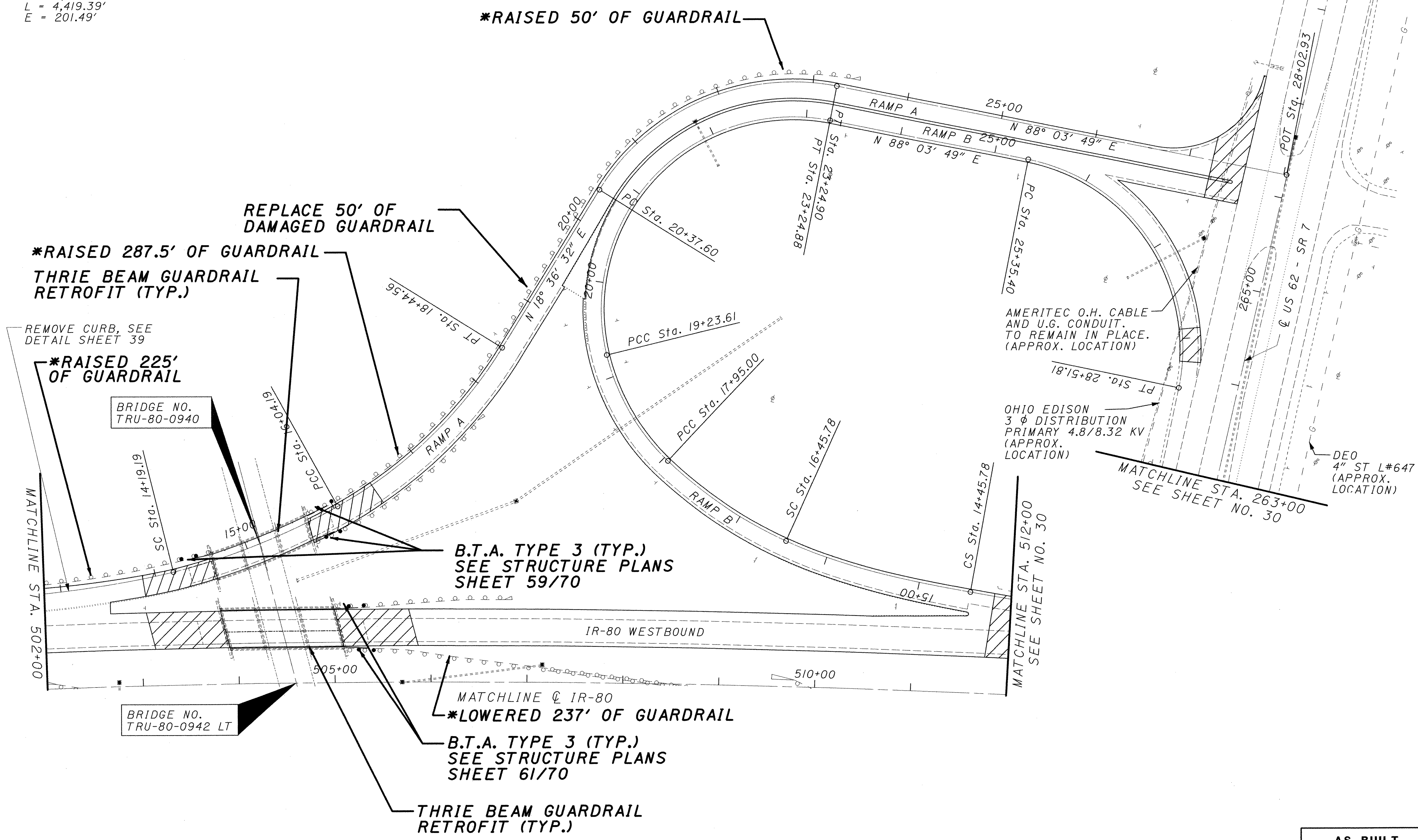


CALCULATED	0
AEP	25
CHECKED	50
ENF	100

HORIZONTAL SCALE IN FEET

CURVE DATA:

P.I. Sta = 508+05.18
 D = 20° 37' 00" (RT)
 Dc = 0° 27' 59"
 R = 12,281.88'
 T = 2,233.85'
 L = 4,419.39'
 E = 201.49'



***RAISED 50' OF GUARDRAIL**

REPLACE 50' OF DAMAGED GUARDRAIL

***RAISED 287.5' OF GUARDRAIL
 THRIE BEAM GUARDRAIL
 RETROFIT (TYP.)**

REMOVE CURB, SEE
 DETAIL SHEET 39

***RAISED 225'
 OF GUARDRAIL**

BRIDGE NO.
 TRU-80-0940

**B.T.A. TYPE 3 (TYP.)
 SEE STRUCTURE PLANS
 SHEET 59/70**

AMERITEC O.H. CABLE
 AND U.G. CONDUIT.
 TO REMAIN IN PLACE.
 (APPROX. LOCATION)

OHIO EDISON
 3 φ DISTRIBUTION
 PRIMARY 4.8/8.32 KV
 (APPROX.
 LOCATION)

MATCHLINE STA. 263+00
 SEE SHEET NO. 30

DEO
 4" ST L#647
 (APPROX.
 LOCATION)

IR-80 WESTBOUND

MATCHLINE @ IR-80
***LOWERED 237' OF GUARDRAIL**

**B.T.A. TYPE 3 (TYP.)
 SEE STRUCTURE PLANS
 SHEET 61/70**

**THRIE BEAM GUARDRAIL
 RETROFIT (TYP.)**

BRIDGE NO.
 TRU-80-0942 LT

**PLAN SHEET - I.R. 80
 STA. 502+00 TO STA. 512+00**

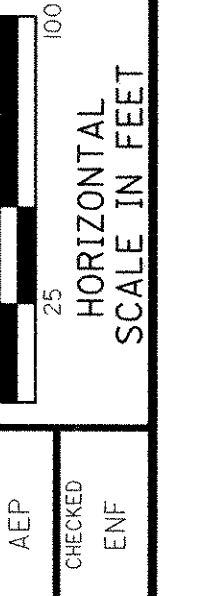
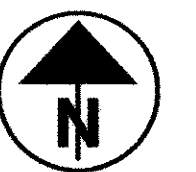
TRU-80-9.08

**AS BUILT
 JULY 16, 2002**

**28
 70**

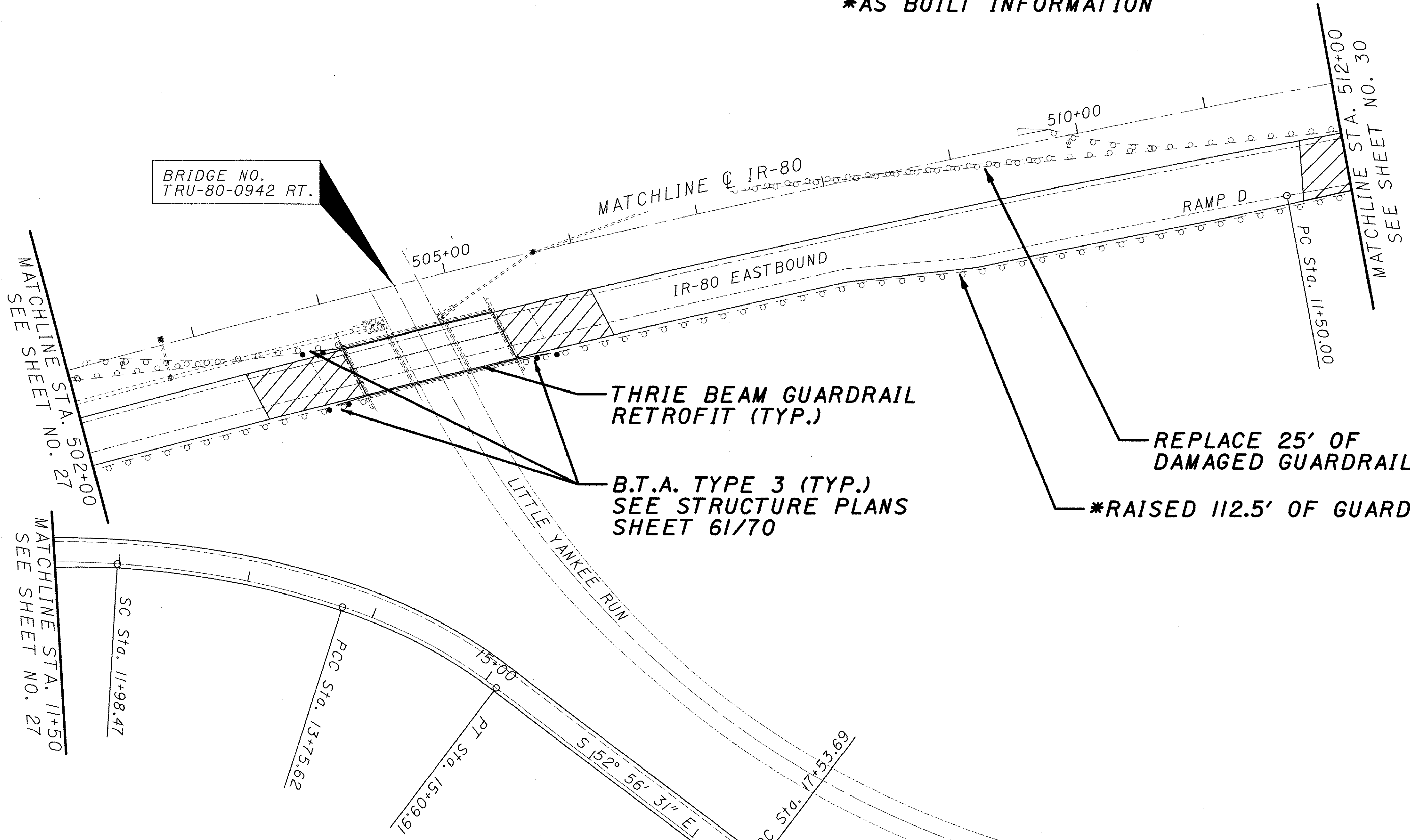
P:\PR29300\cadd\221630P2.dgn


*AS BUILT INFORMATION



CURVE DATA:

P.I. Sta = 508+05.18
D = 20° 37' 00" (RT)
Dc = 0° 27' 59"
R = 12,281.88'
T = 2,233.85'
L = 4,419.39'
E = 201.49'



 - SEE TRANSITION DETAILS, SHEET NO. 37 & 38

THRIE BEAM GUARDRAIL RETROFIT (TYP.)

B.T.A. TYPE 3 (TYP.)
SEE STRUCTURE PLANS SHEET 61/70

REPLACE 25' OF DAMAGED GUARDRAIL

*RAISED 112.5' OF GUARDRAIL

MATCHLINE STA. 254+00
SEE SHEET NO. 30

OHIO EDISON
3 φ DISTRIBUTION
PRIMARY
4.8/8.32 KV

AMERITEC O.H.
CABLE AND U.G.
CONDUIT. TO
REMAIN IN PLACE.
(APPROX.
LOCATION)

DEO
4" ST L#668
(APPROX. LOCATION)

US 60 - SR 7

PLAN SHEET - I.R. 80
STA. 502+00 TO STA. 512+00

TRU-80-9.08

AS BUILT
JULY 16, 2002

29
70

P:\PR29300\cadd\221636P3.dgn

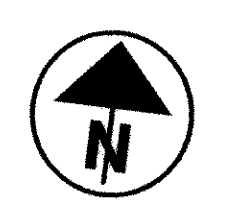
MATCHLINE STA. 263+00

*AS BUILT INFORMATION

SEE TRANSITION DETAIL, SHEET NO. 37 & 38

CURVE DATA:

P.I. Sta = 508+05.18
D = 20° 37' 00" (RT)
Dc = 0° 27' 59"
R = 12,281.88'
T = 2,233.85'
L = 4,419.39'
E = 201.49'



CALCULATED
AEP
CHECKED
ENF
HORIZONTAL
SCALE IN FEET
0 25 50 100

O.E. 108-173
60' POLE

MATCHLINE STA. 512+00
SEE SHEET
NO. 28

MATCHLINE STA. 512+00
SEE SHEET
NO. 29

O.E. 108-172
60' POLE

BRIDGE NO.
TRU-80-0958 LT&RT

DEO
4" ST L#668
(APPROX.
LOCATION)

OHIO EDISON
3 Ø DISTRIBUTION
PRIMARY
4.8/8.32 KV
(APPROX.
LOCATION)

AMERITEC O.H.
CABLE AND U.G.
CONDUIT. TO
REMAIN IN PLACE
(APPROX.
LOCATION)

MATCHLINE STA. 254+00

THRIE BEAM GUARDRAIL
RETROFIT (TYP.)

*REPLACED 50' OF GUARDRAIL

*LOWERED 125' OF GUARDRAIL

*REBUILD 437.5' OF
LOW (<24") GUARDRAIL

*REPLACED 62.5'
OF GUARDRAIL

B.T.A. TYPE 3 (TYP.)
SEE STRUCTURE PLANS
SHEET 64/70

PLAN SHEET - I.R. 80
STA. 512+00 TO STA. 525+00

TRU-80-9.08

AS BUILT
JULY 16, 2002

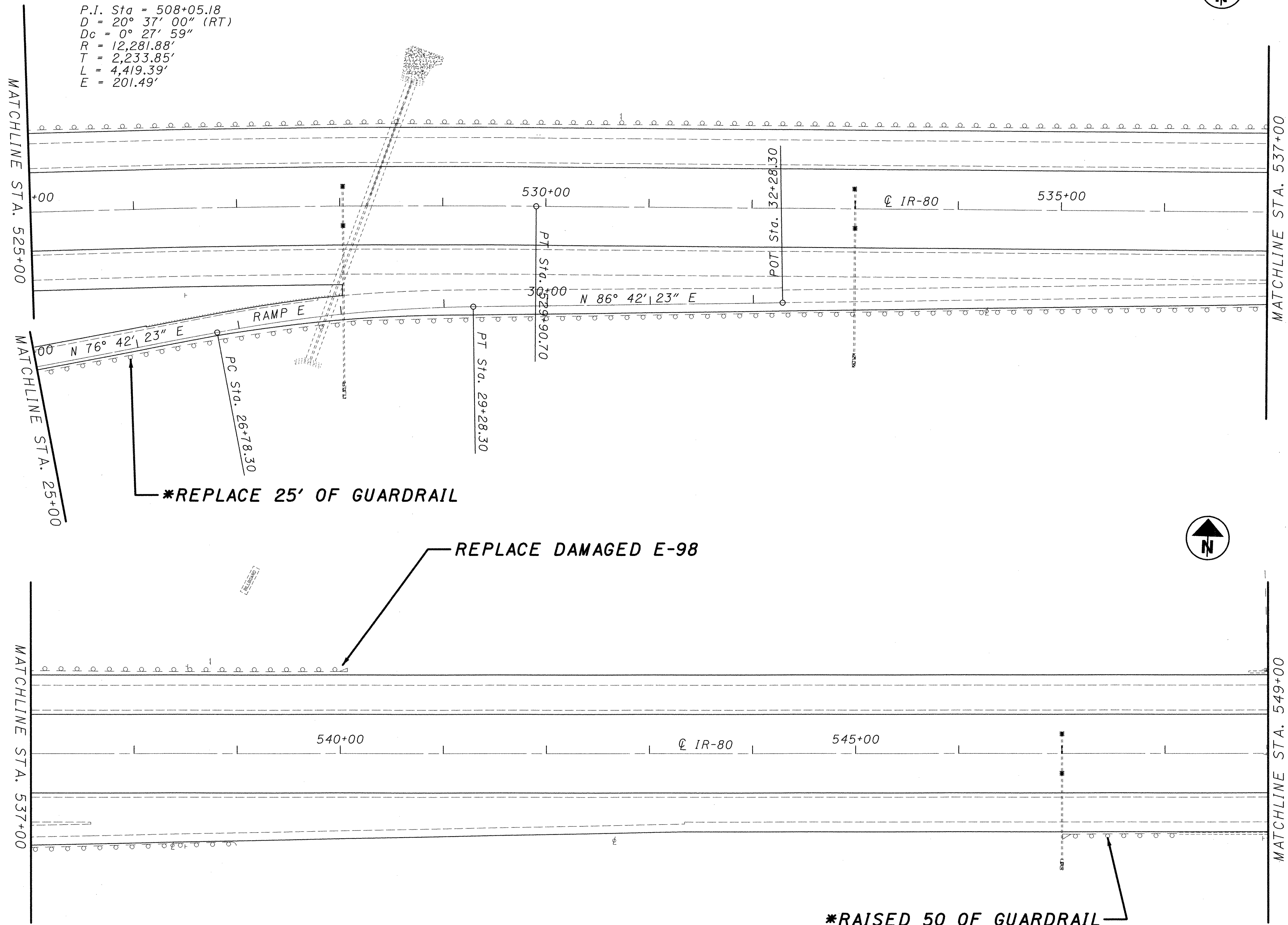
30
70

P:\PR29300\cadd\221630P4.dgn

***AS BUILT INFORMATION**

CURVE DATA:

P.I. Sta = 508+05.18
 D = 20° 37' 00" (RT)
 Dc = 0° 27' 59"
 R = 12,281.88'
 T = 2,233.85'
 L = 4,419.39'
 E = 201.49'



CALCULATED	AEP	CHECKED	ENF

PLAN SHEET - I.R. 80
STA. 525+00 TO STA. 549+00

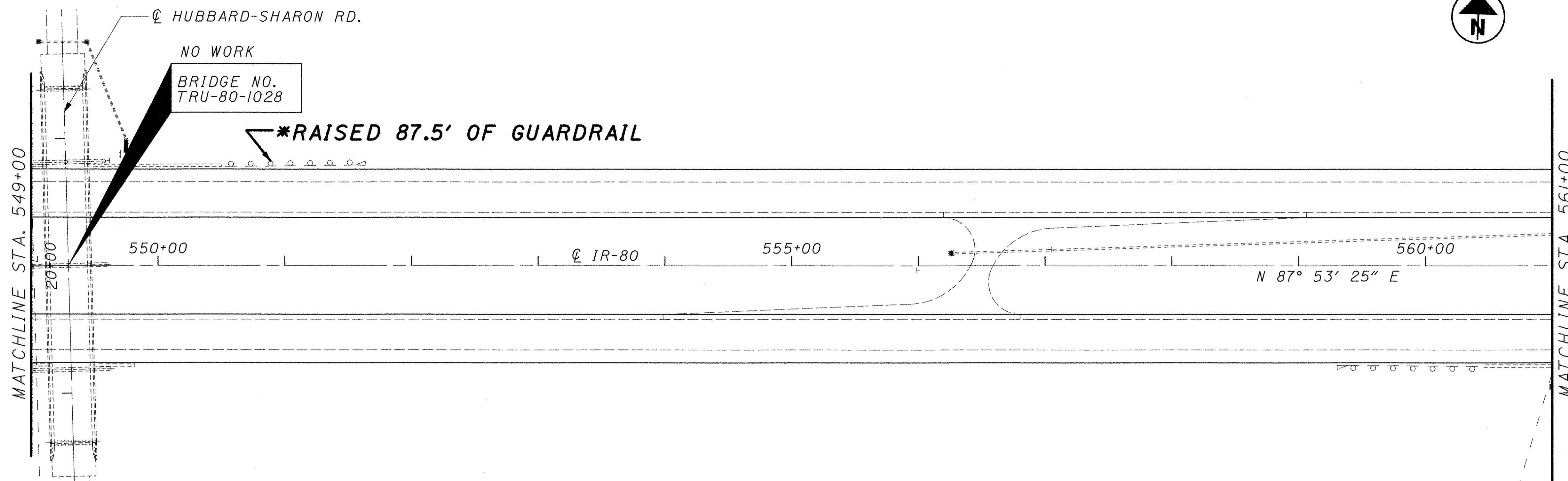
TRU-80-9.08

AS BUILT
JULY 16, 2002

31
70

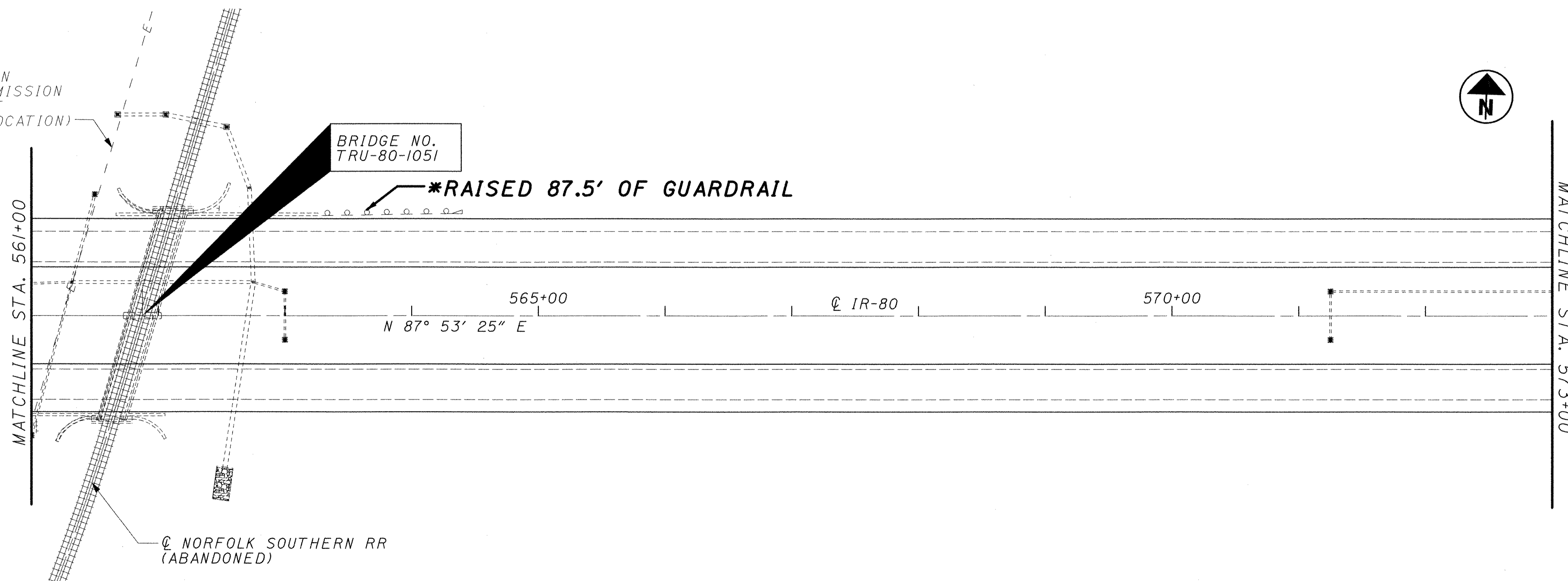
P:\PR29300\cadd\221630P5.dgn

***AS BUILT INFORMATION**

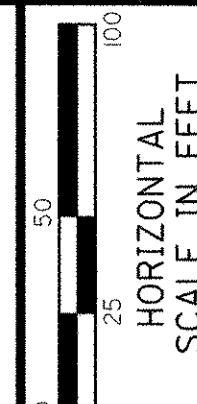


OHIO EDISON
1 ϕ DISTRIBUTION
PRIMARY 4.32 KV LN
(APPROX. LOCATION)

OHIO EDISON
3 ϕ TRANSMISSION
69,000 VOLT
(APPROX. LOCATION)



☉ NORFOLK SOUTHERN RR
(ABANDONED)



CALCULATED
AEP
CHECKED
ENF

PLAN SHEET - I.R. 80
STA. 549+00 TO STA. 573+00

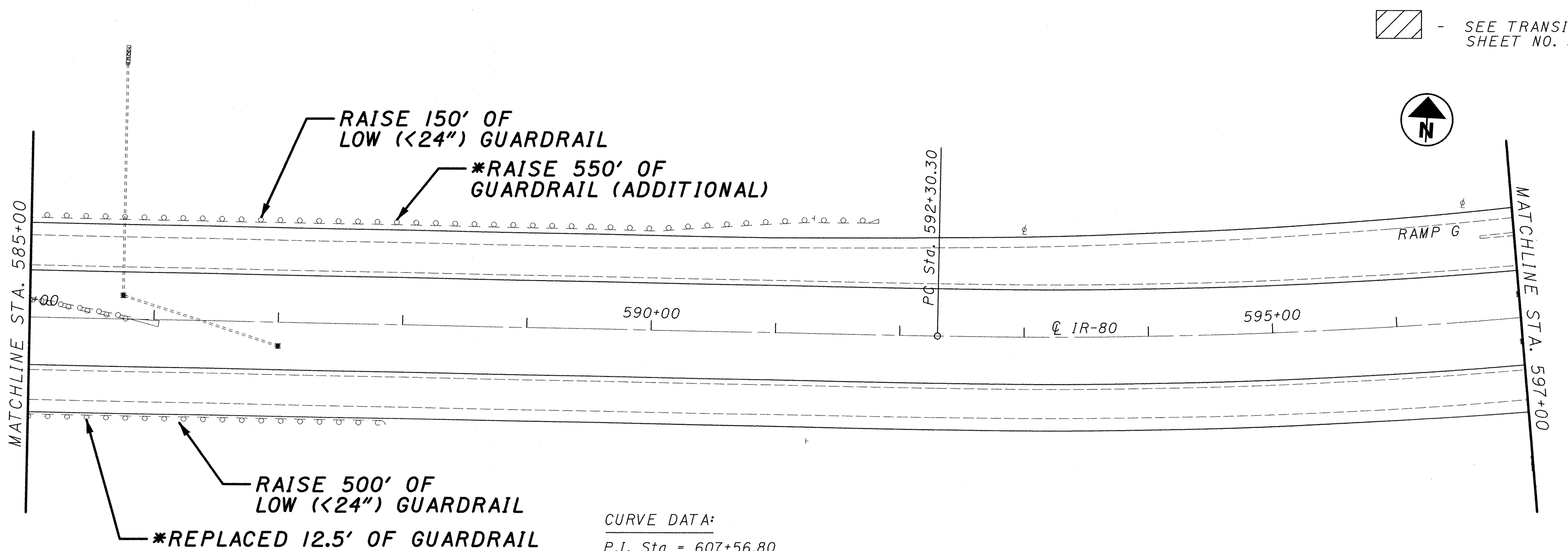
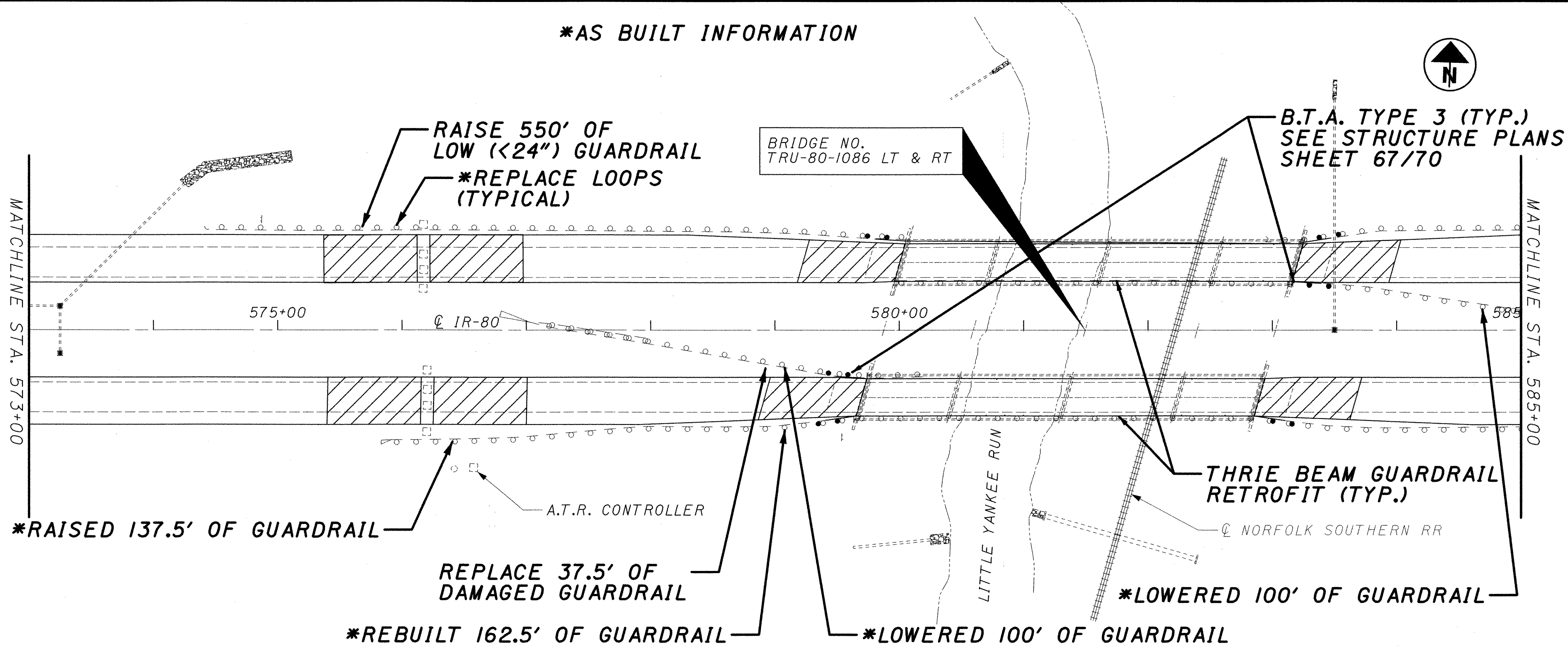
TRU-80-9.08

AS BUILT
JULY 16, 2002

32
70

P:\PR29300\cadd\221636P6.dgn

***AS BUILT INFORMATION**



CURVE DATA:
 P.I. Sta = 607+56.80
 D = 37° 18' 45" (LT)
 Dc = 1° 16' 02"
 R = 4,521.16'
 T = 1,526.48'
 L = 2,944.30'
 E = 250.74'

- SEE TRANSITION DETAIL, SHEET NO. 37 & 38

0	25	50	100
HORIZONTAL SCALE IN FEET			
CALCULATED	AEP	CHECKED	ENF

PLAN SHEET - I.R. 80
STA. 573+00 TO STA. 597+00

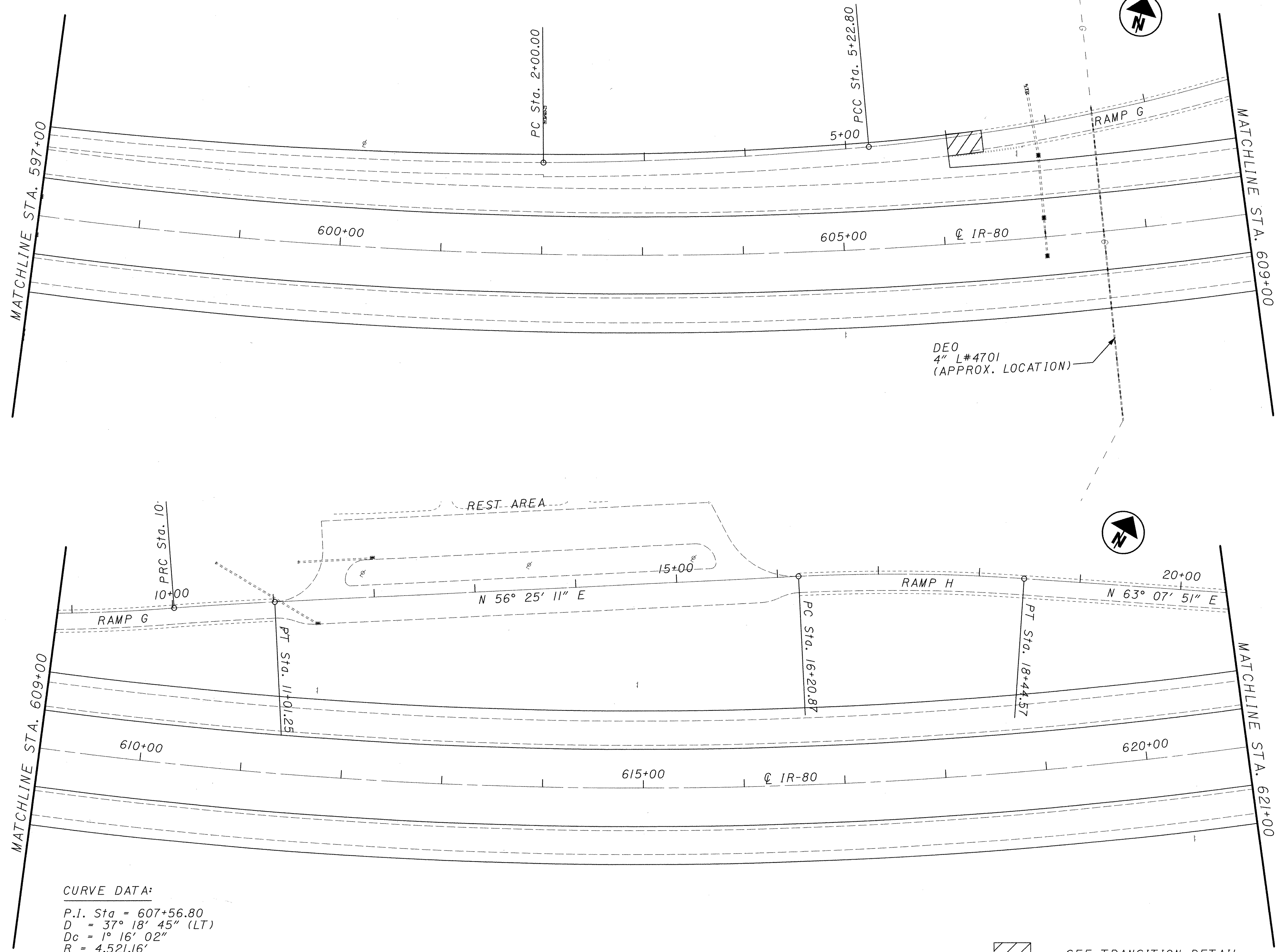
TRU-80-9.08

AS BUILT
JULY 16, 2002

33
70

P:\PR29300\cadd\221636P7.dgn

P:\PR29300\cadd\22163GP8.DGN



CURVE DATA:

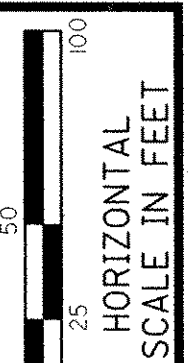
P.I. Sta = 607+56.80
 D = 37° 18' 45" (LT)
 Dc = 1° 16' 02"
 R = 4,521.16'
 T = 1,526.48'
 L = 2,944.30'
 E = 250.74'

 - SEE TRANSITION DETAIL, SHEET NO. 37

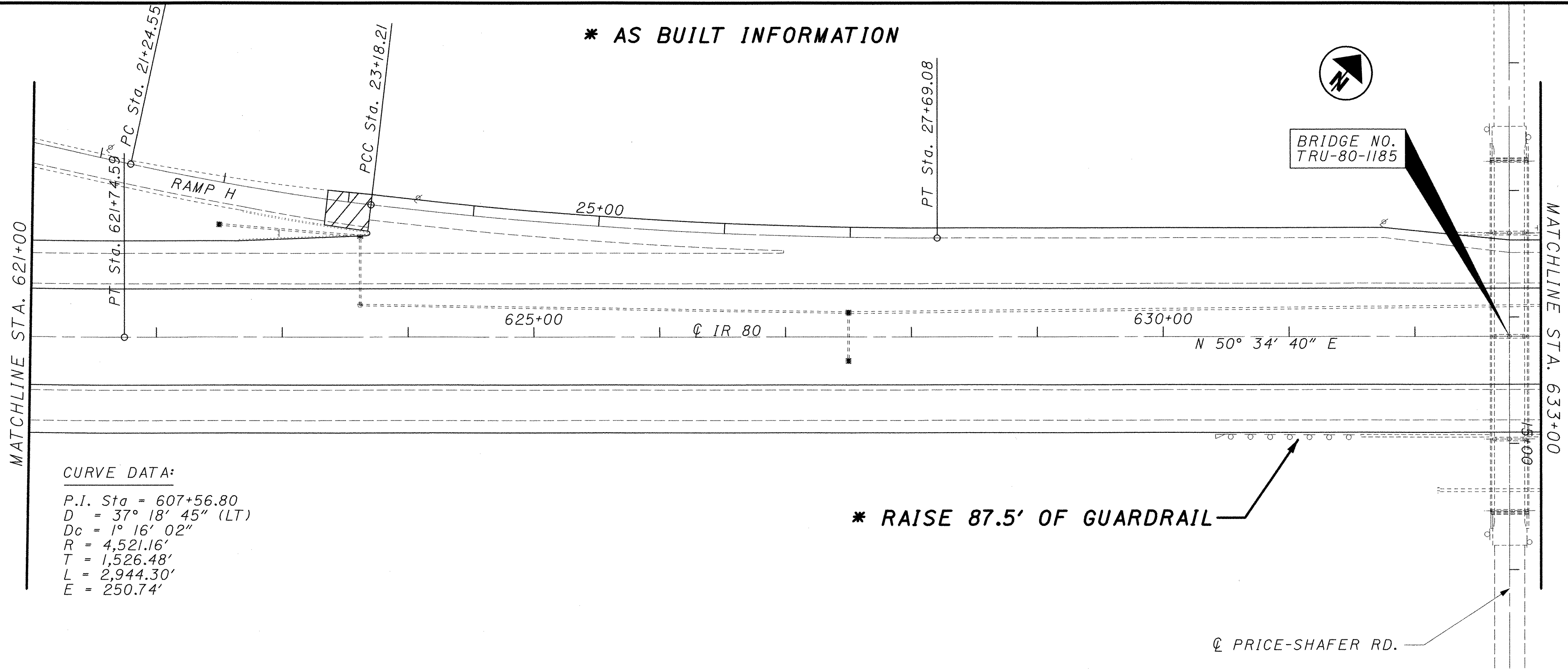
CALCULATED	AEP	CHECKED	ENF

PLAN SHEET - I.R. 80
 STA. 597+00 TO STA. 621+00

TRU-80-9.08
 34
 70



* AS BUILT INFORMATION

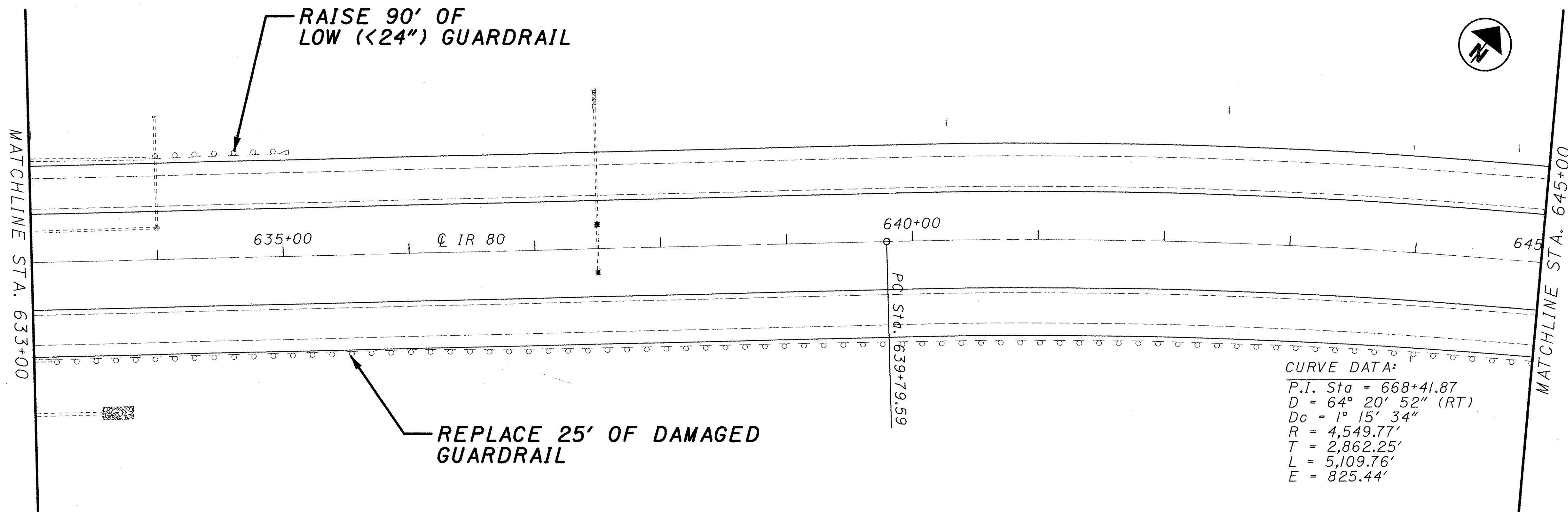


CURVE DATA:

P.I. Sta = 607+56.80
 D = 37° 18' 45" (LT)
 Dc = 1° 16' 02"
 R = 4,521.16'
 T = 1,526.48'
 L = 2,944.30'
 E = 250.74'

* RAISE 87.5' OF GUARDRAIL

☉ PRICE-SHAFER RD.



CURVE DATA:

P.I. Sta = 668+41.87
 D = 64° 20' 52" (RT)
 Dc = 1° 15' 34"
 R = 4,549.77'
 T = 2,862.25'
 L = 5,109.76'
 E = 825.44'

 - SEE TRANSITION DETAIL, SHEET NO. 37



CALCULATED	AEP	CHECKED	ENF
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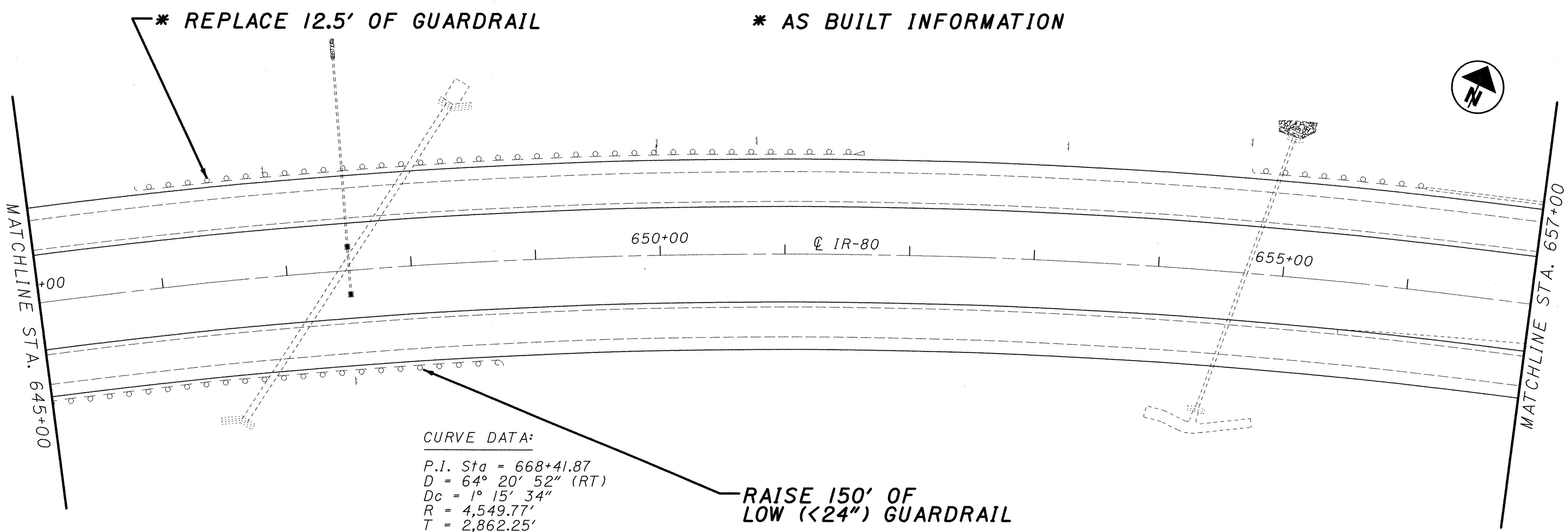
PLAN SHEET - I.R. 80
 STA. 621+00 TO STA. 645+00

TRU-80-9.08

AS BUILT
 JULY 16, 2002

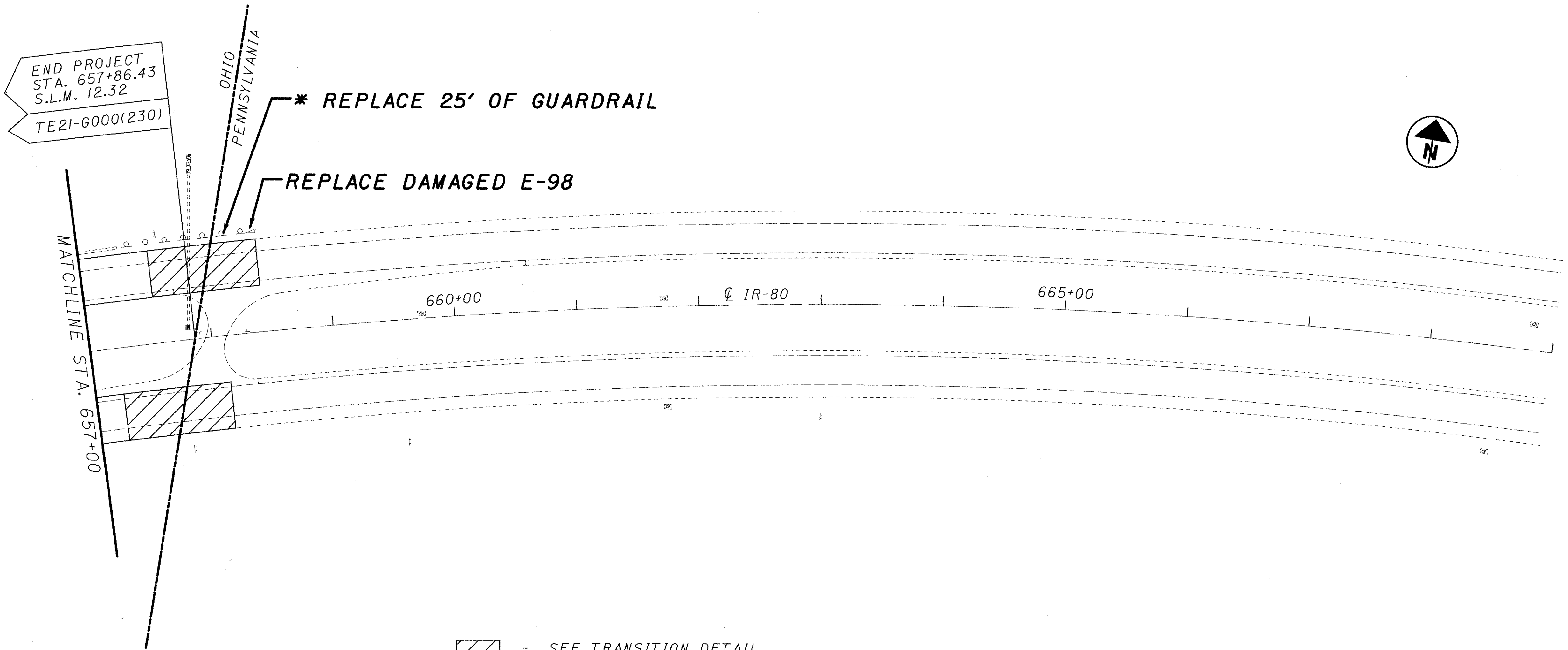
35
 70

P:\PR29300\cadd\221636P9.dgn

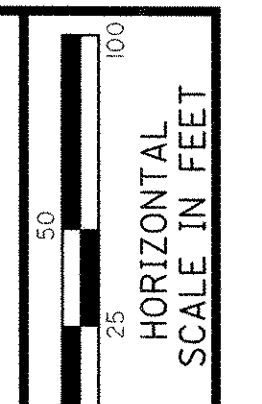


CURVE DATA:
 P.I. Sta = 668+41.87
 D = 64° 20' 52" (RT)
 Dc = 1° 15' 34"
 R = 4,549.77'
 T = 2,862.25'
 L = 5,109.76'
 E = 825.44'

RAISE 150' OF
 LOW (<24") GUARDRAIL



 - SEE TRANSITION DETAIL, SHEET NO. 37



CALCULATED
 AEP
 CHECKED
 ENF

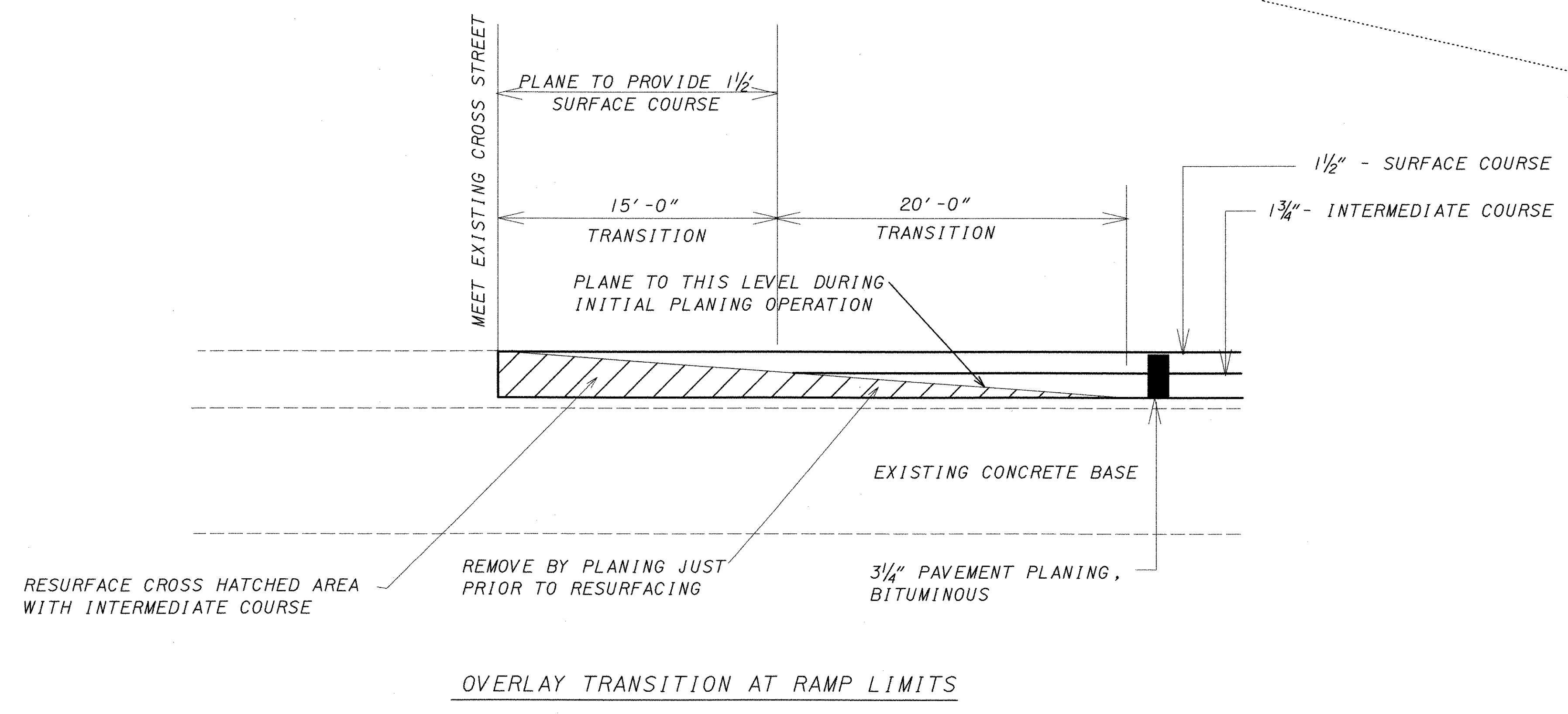
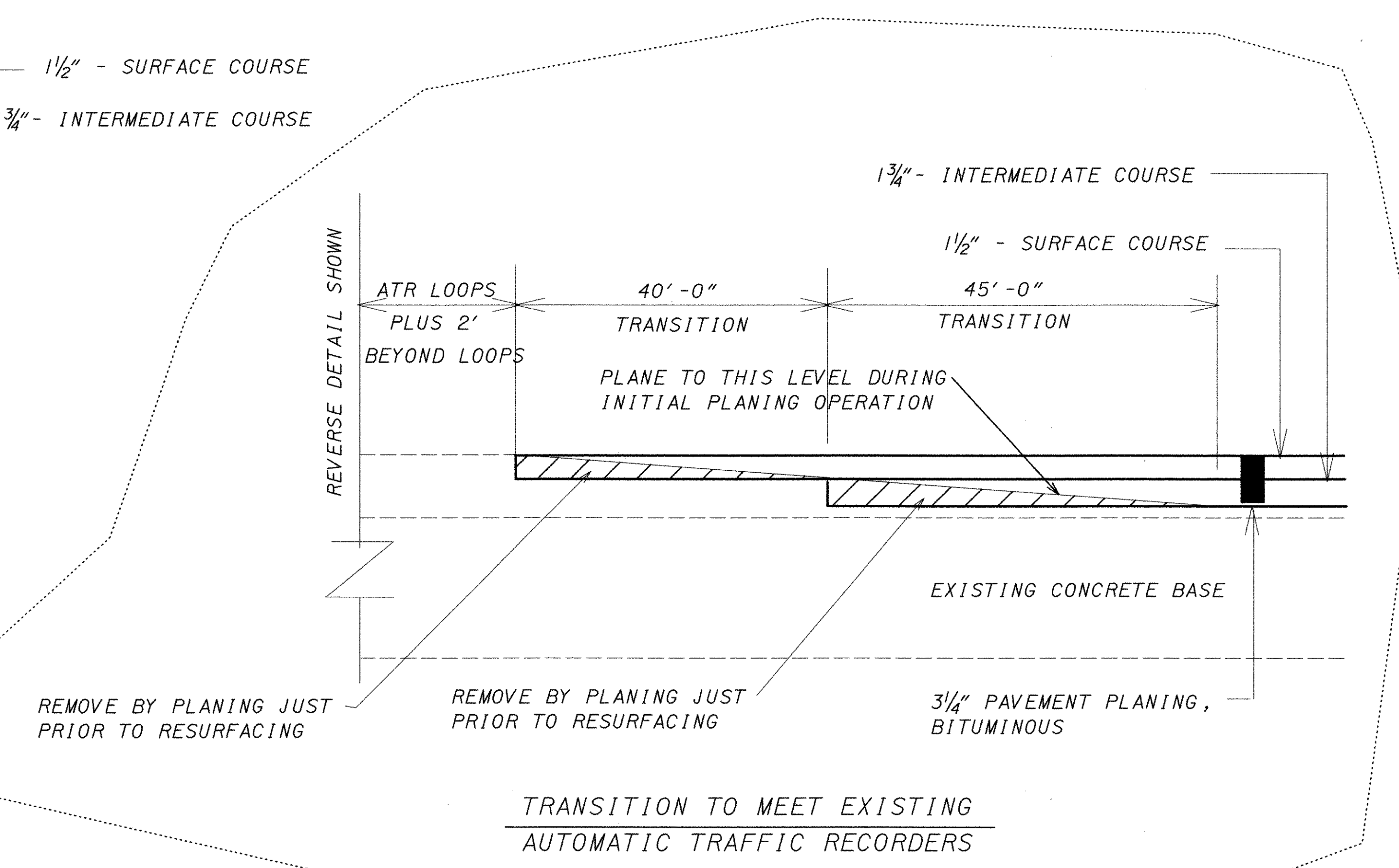
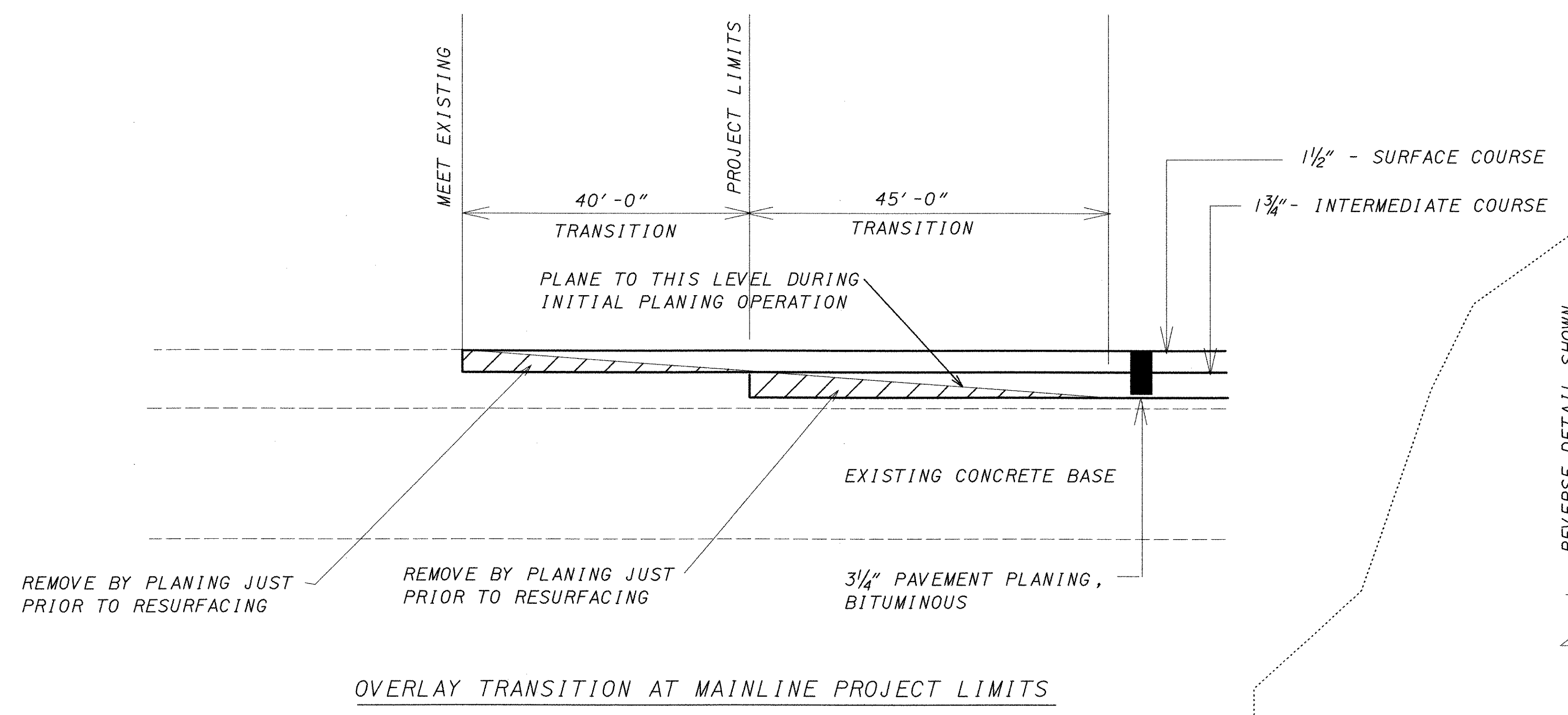
PLAN SHEET - I.R. 80
 STA. 645+00 TO STA. 669+00

TRU-80-9.08

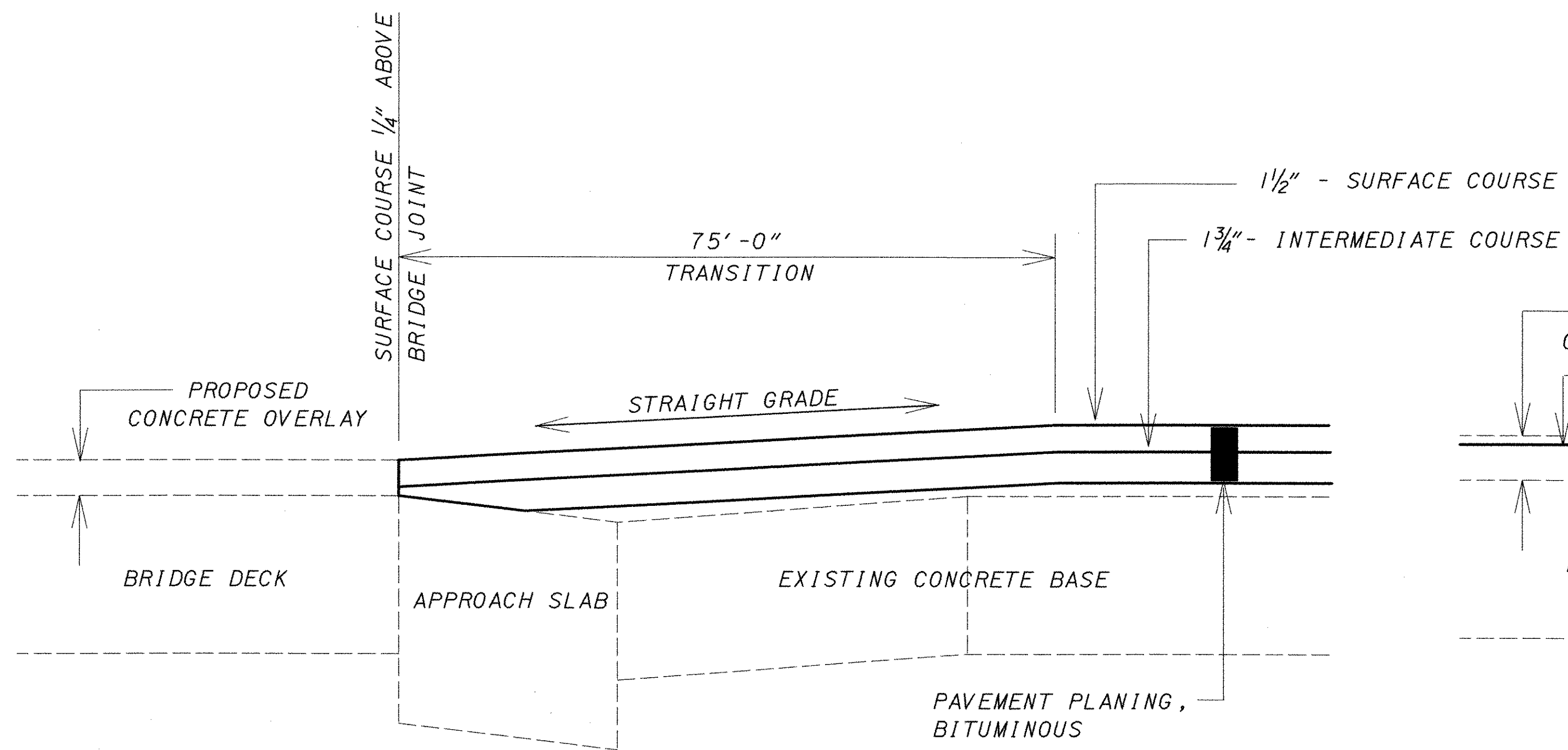
AS BUILT
 JULY 16, 2002

36
 70

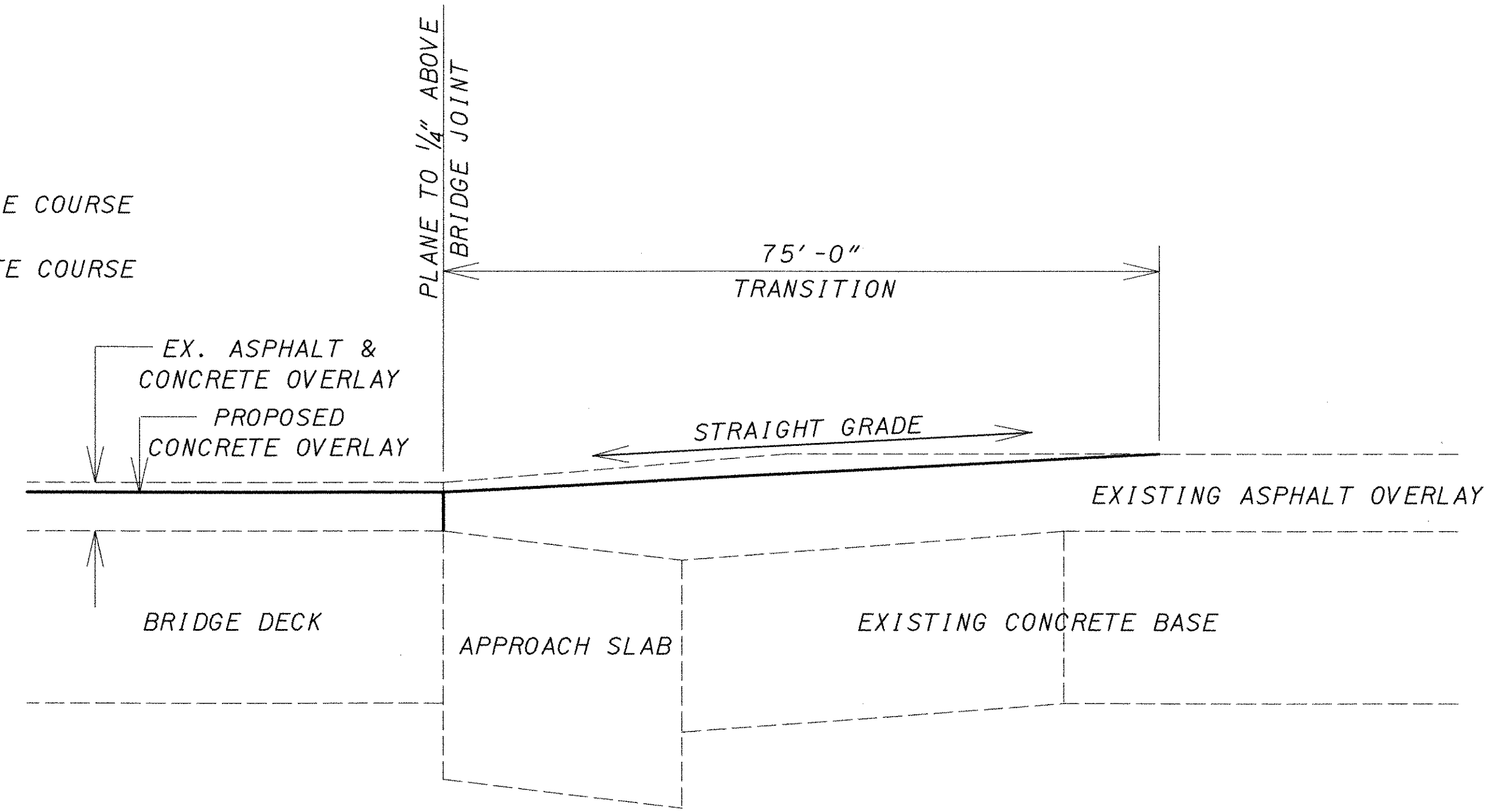
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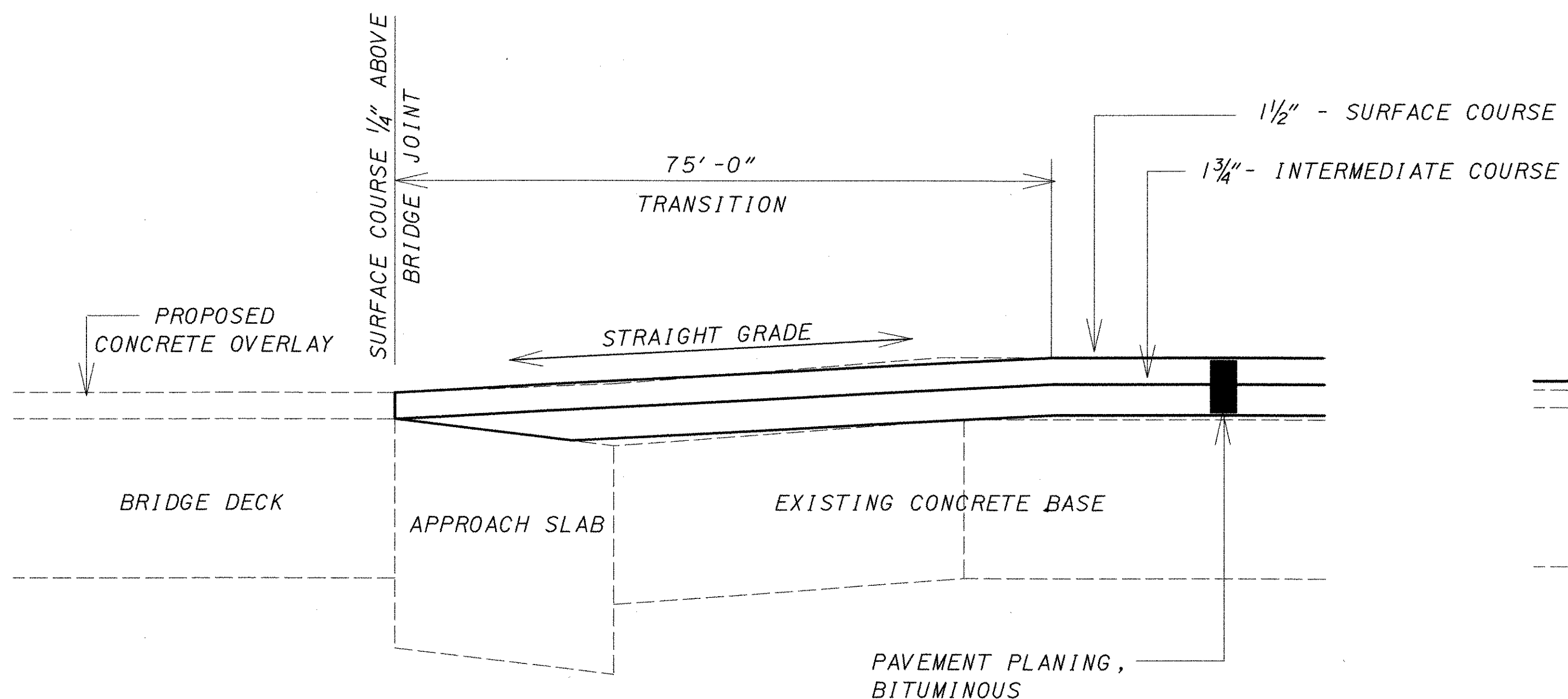
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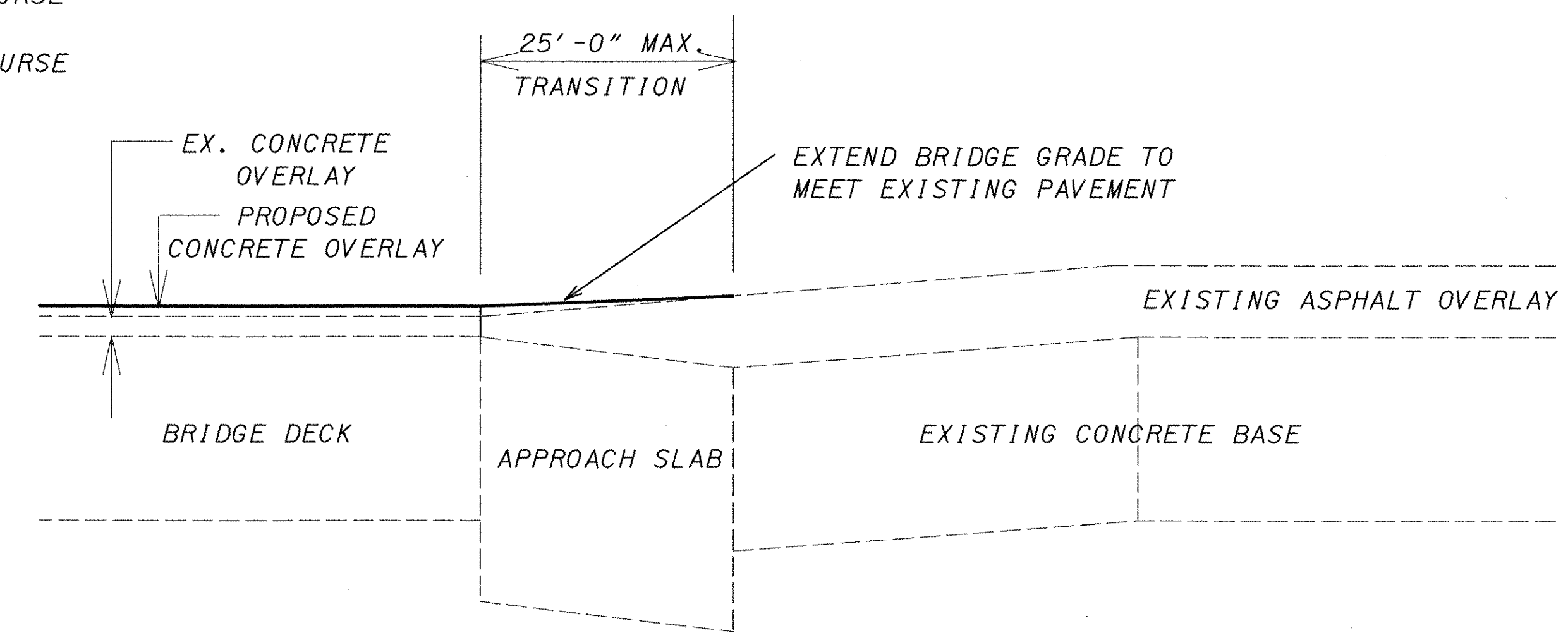
OVERLAY TRANSITION AT STRUCTURES
ALL STRUCTURES EXCEPT TRU-80-0940



PLANING TO MEET BRIDGE OVERLAY
ALL STRUCTURES EXCEPT TRU-80-0940

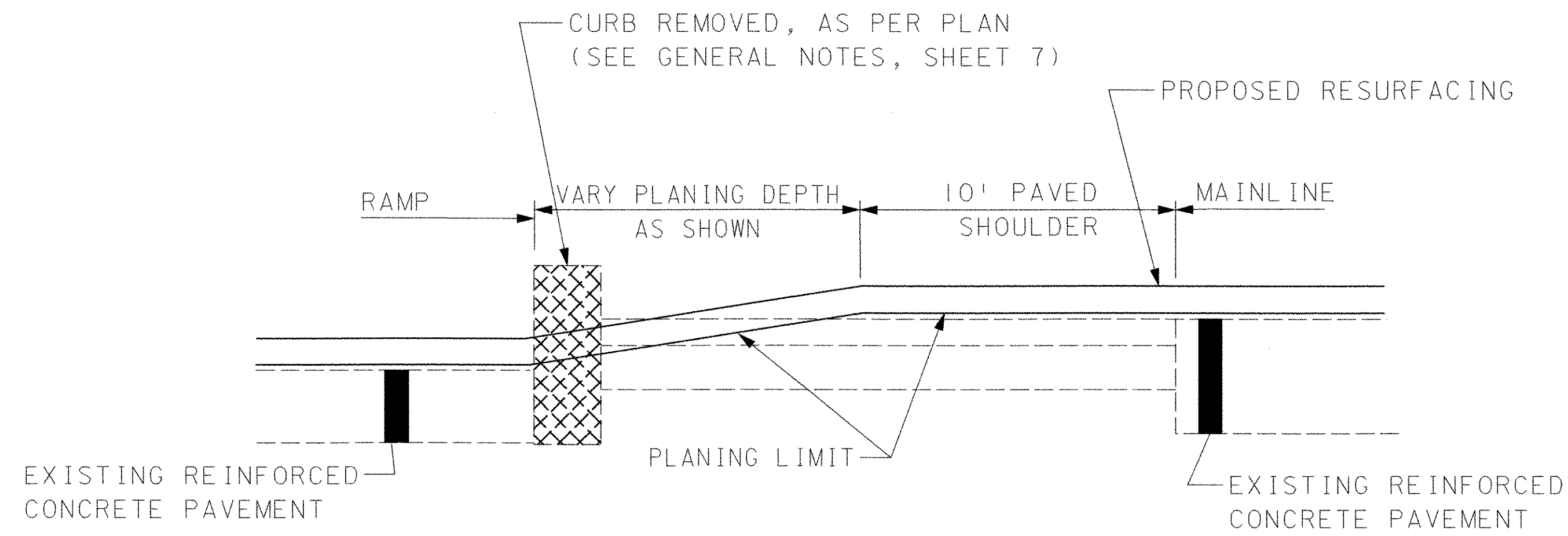


OVERLAY TRANSITION AT STRUCTURE
TRU-80-0940



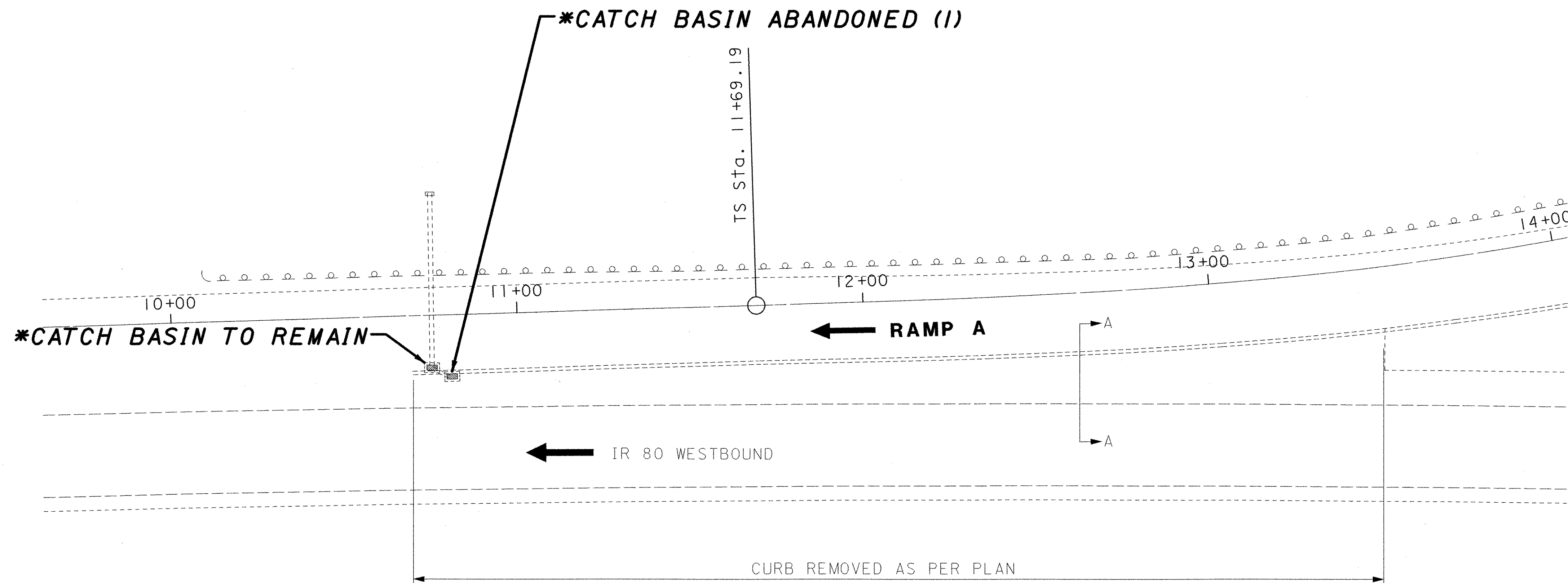
TEMPORARY TRANSITION TO MEET BRIDGE OVERLAY
FEATHER USING ITEM 614 - BITUMINOUS CONCRETE
TRU-80-0940

***AS BUILT INFORMATION**



SECTION A-A

ITEM 202 CURB REMOVED, AS PER PLAN



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED
CHECKED

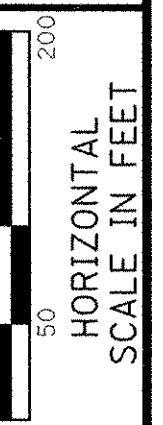
MISCELLANEOUS DETAILS

TRU-80-9.08

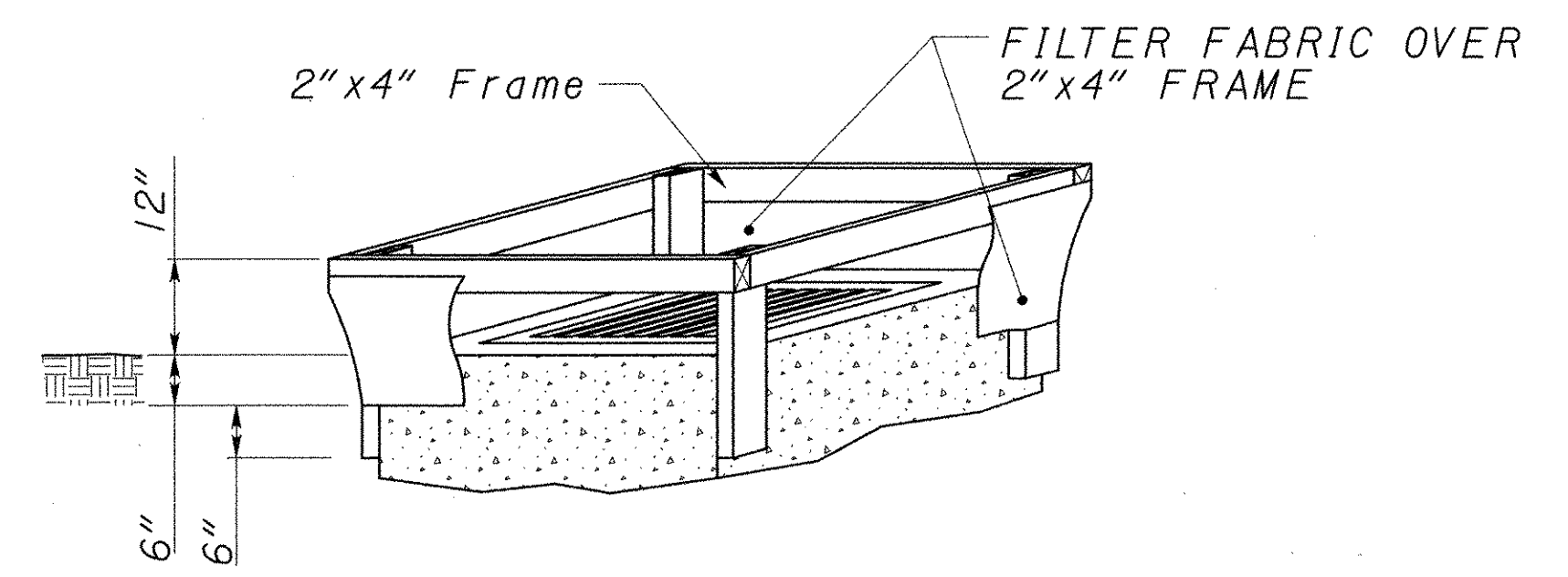
AS BUILT
JULY 16, 2002

39
70

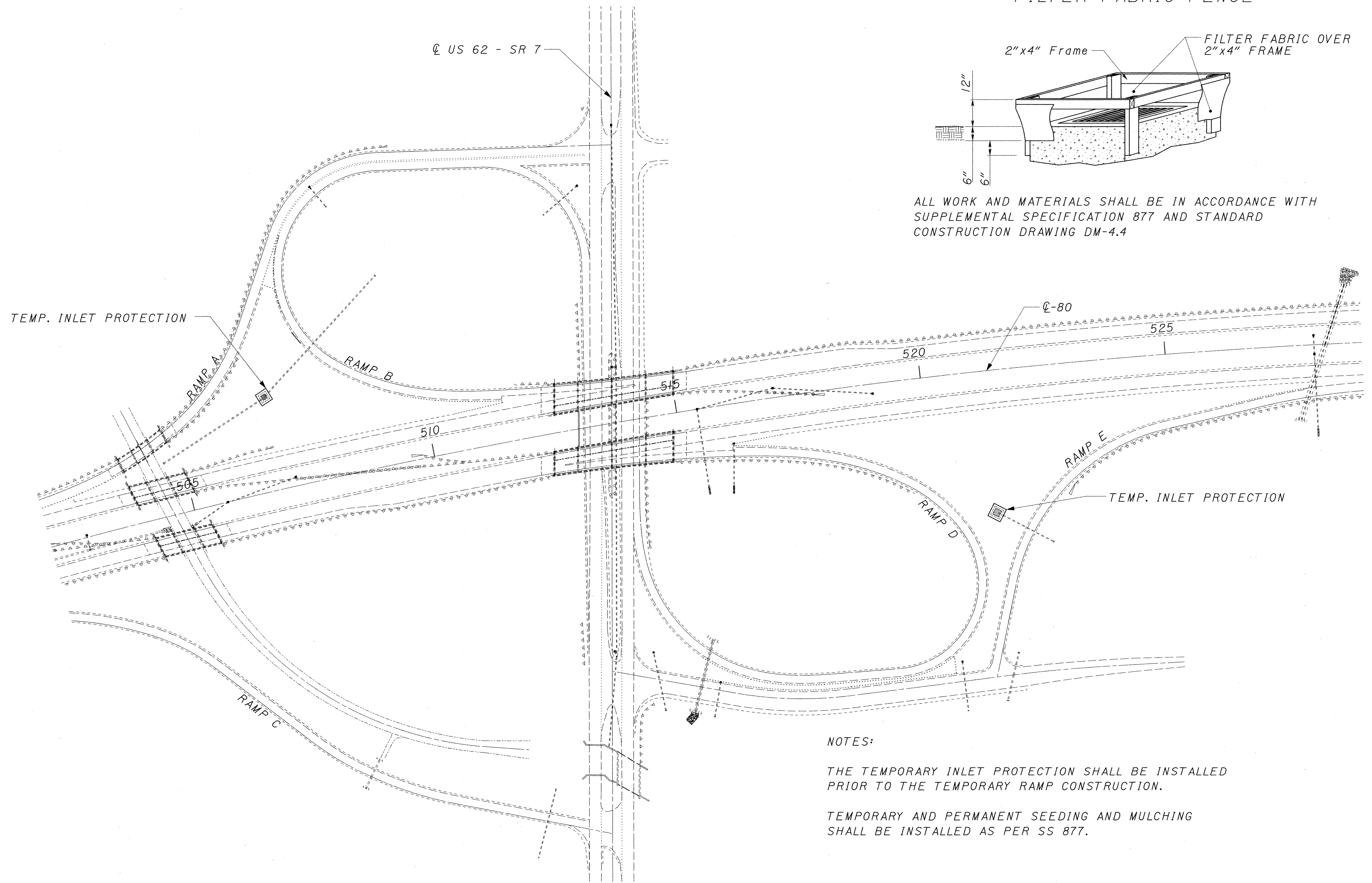
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TEMPORARY INLET PROTECTION FILTER FABRIC FENCE



ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH
SUPPLEMENTAL SPECIFICATION 877 AND STANDARD
CONSTRUCTION DRAWING DM-4.4



NOTES:
THE TEMPORARY INLET PROTECTION SHALL BE INSTALLED
PRIOR TO THE TEMPORARY RAMP CONSTRUCTION.
TEMPORARY AND PERMANENT SEEDING AND MULCHING
SHALL BE INSTALLED AS PER SS 877.

TEMPORARY EROSION CONTROL DETAILS

TRU-80-9.08

40
70

TRAFFIC CONTROL

REMOVAL OF EXISTING ITEMS

ALL 630 REMOVAL ITEMS NOT SPECIFICALLY INCLUDING STORAGE OR REERECTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR.

PAVEMENT MARKING MATERIAL

ALL PAVEMENT MARKINGS SHALL BE AS PER ITEM 644, THERMOPLASTIC PAVEMENT MARKINGS. PAYMENT FOR ALL PAVEMENT MARKINGS SHALL BE INCLUDED UNDER ITEM SPECIAL - PAVEMENT MARKING.

STRUCTURE IDENTIFICATION SIGNS

THESE SIGNS (SHOWN ON THE PLAN VIEWS AT EACH STRUCTURE) SHALL BE BLACK ON WHITE WITH A MINIMUM SIGN SIZE OF 10" X 10".

ITEM 630 - FLAT SHEET SIGN REPLACEMENT

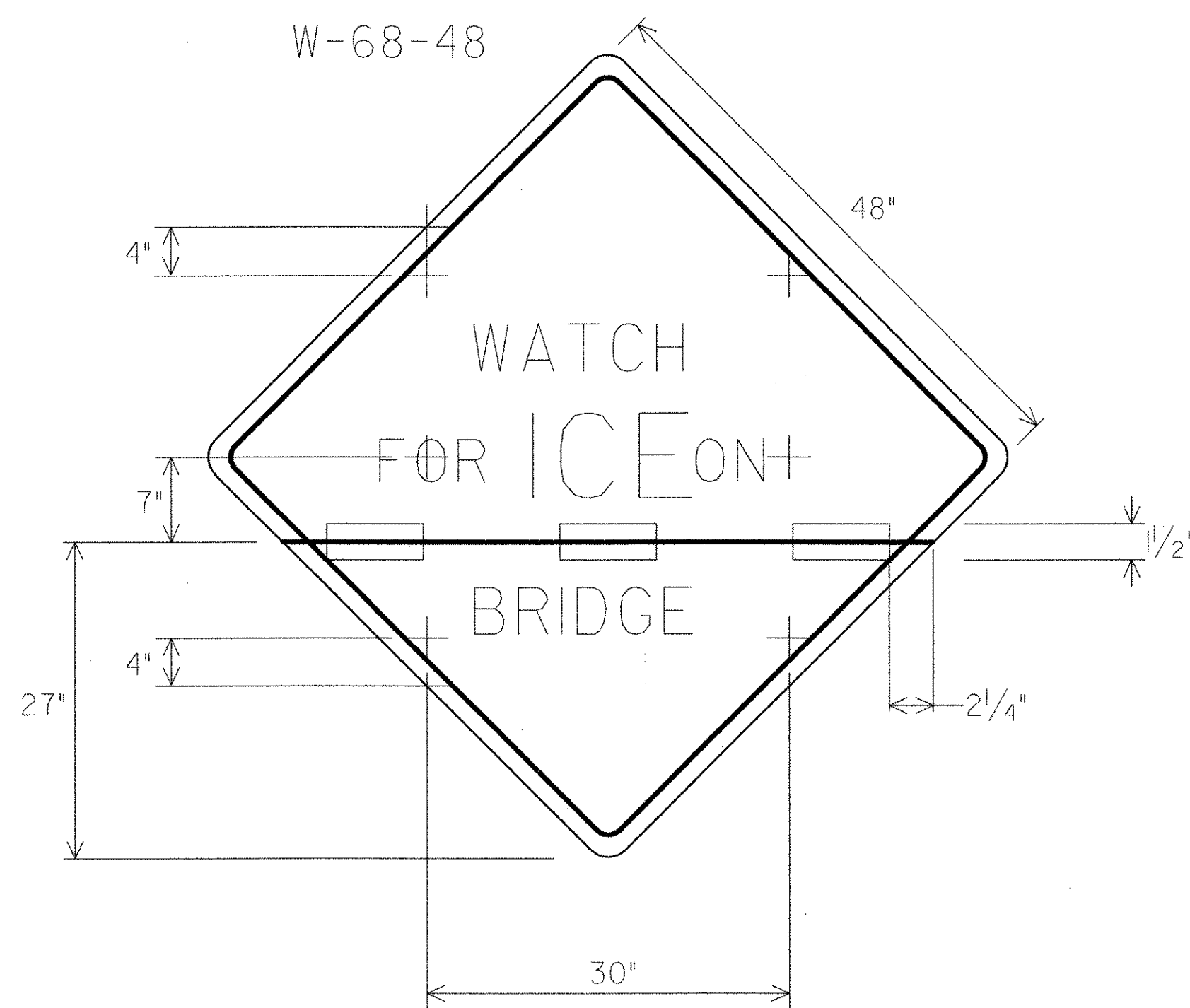
ALL EXISTING FLAT SHEET SIGNS ON THE MAINLINE AND RAMPS ARE TO BE REPLACED WITH NEW SIGNS. SIGN SIZES SHALL BE IN ACCORDANCE WITH THE OMTCD.

SIGN LOCATIONS OF EXISTING AND PROPOSED SIGNS ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR PRIOR TO THE ERECTION OF ALL POST SIGN SUPPORTS SHALL STAKE THE PROPOSED LOCATIONS IF THEY ARE DIFFERENT FROM THE EXISTING LOCATION. THE ENGINEER SHALL APPROVE ALL SUPPORT LOCATIONS AND MAY ADJUST THE LOCATION TO CORRECT SLOPE AND SUB-SURFACE DIFFICULTIES, SIGN SIGHT DISTANCE OBSTRUCTIONS, IMPROVE SAFETY AND ELIMINATE OVERHEAD OBSTACLES.

#4 U-CHANNEL POSTS SHALL NOT BE USED.

PAYMENT FOR ALL FLAT SHEET SIGN REPLACEMENT WORK SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM SPECIAL - SIGNS AND SUPPORTS

TRAFFIC CONTROL DETAILS



NOTES:

- 1) THE SIGN SHALL BE HINGED WITH 8" LENGTHS OF 1/2" BRASS-PLATED HINGE WHICH IS RIVETED TO EACH SECTION OF THE SIGN AND THEN COVERED WITH YELLOW REFLECTIVE SHEETING (TYPE G-730.19) TO MATCH THE BACKGROUND OF THE SIGN.
- 2) TO FOLD THE SIGN DOWN, REMOVE THE TOP TWO BOLTS, FOLD THE UPPER PART OF THE SIGN DOWN AND INSERT A BOLT THROUGH THE LOWEST HOLE IN THE SIGN AND INTO THE POST. TIGHTEN THE BOLT TO PREVENT THE SIGN FROM FLAPPING IN THE WIND AND SUSTAINING DAMAGE.

RETURN OF NON-PERFORMED RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT

RAISED PAVEMENT MARKERS

EXISTING RAISED PAVEMENT MARKERS ARE TO BE REMOVED FOR STORAGE. RECYCLED RPM'S ARE TO BE PLACED ON IR-80 AND THE RAMPS. THE RPM'S WILL BE SUPPLIED BY THE STATE AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH ITEMS 202, 621 AND 721 AND SUPPLEMENTAL SPECIFICATION 1082. ALL RAISED PAVEMENT WORK SHALL BE PAID FOR UNDER ITEM SPECIAL - RAISED PAVEMENT MARKERS.

RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT, THAT ARE NON-PERFORMED SHALL BE CAREFULLY REPACKED OR PACKED IN THE BOXES IN THE SAME STYLE AND QUANTITY AS ORIGINALLY RECEIVED FROM THE DEPARTMENT. CASTING STYLES SHALL NOT BE MIXED WITHIN ANY ONE CONTAINER. THE CONTRACTOR SHALL CLEARLY MARK ON THE OUTSIDE OF EACH CONTAINER THE COLOR OF THE PRISMATIC RETRO-REFLECTOR AND THE STYLE OF CASTING. BOXES SHALL BE PLACED ON SKIDS OR PALLETS IN THE SAME STYLE (LOW PROFILE OR CONVENTIONAL, REFLECTORISED OR NON REFLECTORISED) AND NO MORE THAN 420 RPMS (OR 21 BOXES) ON ONE SKID.

SEE SUPPLEMENTAL SPECIFICATION 1082.

THE FOLLOWING ESTIMATED QUANTITIES ARE SHOWN FOR INFORMATION ONLY.

ITEM 621-RAISED PAVEMENT MARKER, INSTALLATION ONLY.....470 EACH

ITEM 202 - RAISED PAVEMENT MARKERS REMOVED FOR STORAGE, AS PER PLAN

RAISED PAVEMENT MARKERS SHALL BE REMOVED FROM THE ROADWAY IN A MANNER THAT PREVENTS DAMAGE TO THE CASTINGS. REMOVED MARKERS SHALL BE COLLECTED, STORED IN 55 GALLON DRUMS (WITH AMOUNT CLEARLY MARKED) AND THEN DELIVERED TO THE ODOT DISTRICT OFFICE AT 705 OAKWOOD STREET, RAVENNA, OHIO 44266. THE CONTRACTOR SHALL CONTACT THE DISTRICT (330-297-0801 EXT. 391) TO ARRANGE DELIVERY. ALL COSTS ASSOCIATED WITH THE REMOVAL, STORAGE, AND DELIVERY OF THESE MARKERS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM SPECIAL - RAISED PAVEMENT MARKERS.

ONLY USE THE BOXES SUPPLIED BY THE RAISED PAVEMENT MARKER RECYCLER. BOXES MUST BE MARKED WITH THE RECYCLER'S PART OR CATALOG NUMBER AND THE PROJECT NUMBER. THE RECYCLER'S CATALOG OR PART NUMBERS MAY BE OBTAINED FROM THE OFFICE OF TRAFFIC ENGINEERING IN COLUMBUS, OHIO OR FROM THE RECYCLER. BOXES NOT MARKED WITH THE PROPER RECYCLER'S CATALOG OR PART NUMBERS, AND THE DEPARTMENT'S PROJECT NUMBER WILL NOT BE ACCEPTED AT THE RECYCLER'S WAREHOUSE. NON PERFORMED MATERIALS WILL BE RETURNED TO THE LOCATION AS SPECIFIED BY THE DISTRICT CONSTRUCTION ENGINEER WITHIN 30 DAYS OF THE COMPLETION OF THE PROJECT.

THE ABOVE WORK INCLUDING ALL LABOR, EQUIPMENT AND MATERIAL NEEDED TO PERFORM THE WORK, SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE PAY ITEM.

IF THE DEPARTMENT HAS TO REPACKAGE THE RPMS CORRECTLY, THE CONTRACTOR WILL BE ASSESSED THE ACTUAL COST FOR REPACKAGING THE MATERIALS BY THE DEPARTMENT'S FORCES.

MATERIAL FURNISHED BY THE DEPARTMENT (INSTALLATION ONLY)

RAISED PAVEMENT MARKER MATERIAL AND INSTALLATION

FOR THIS PROJECT, THE RPM CASTINGS SUPPLIED BY O.D.O.T. WILL COME WITH REFLECTORS ATTACHED.

ALL MATERIALS ARE TO BE CONTRACTOR FURNISHED, EXCEPT THAT THE DEPARTMENT SHALL SUPPLY RPM CASTINGS WITH REFLECTORS IN THE QUANTITIES SHOWN HEREIN TO THE CONTRACTOR. PAY ITEMS FOR THE DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED AS "INSTALLATION ONLY". THE TYPE OF DEPARTMENT SUPPLIED MATERIAL SHALL BE RAISED PAVEMENT MARKER CASTINGS.

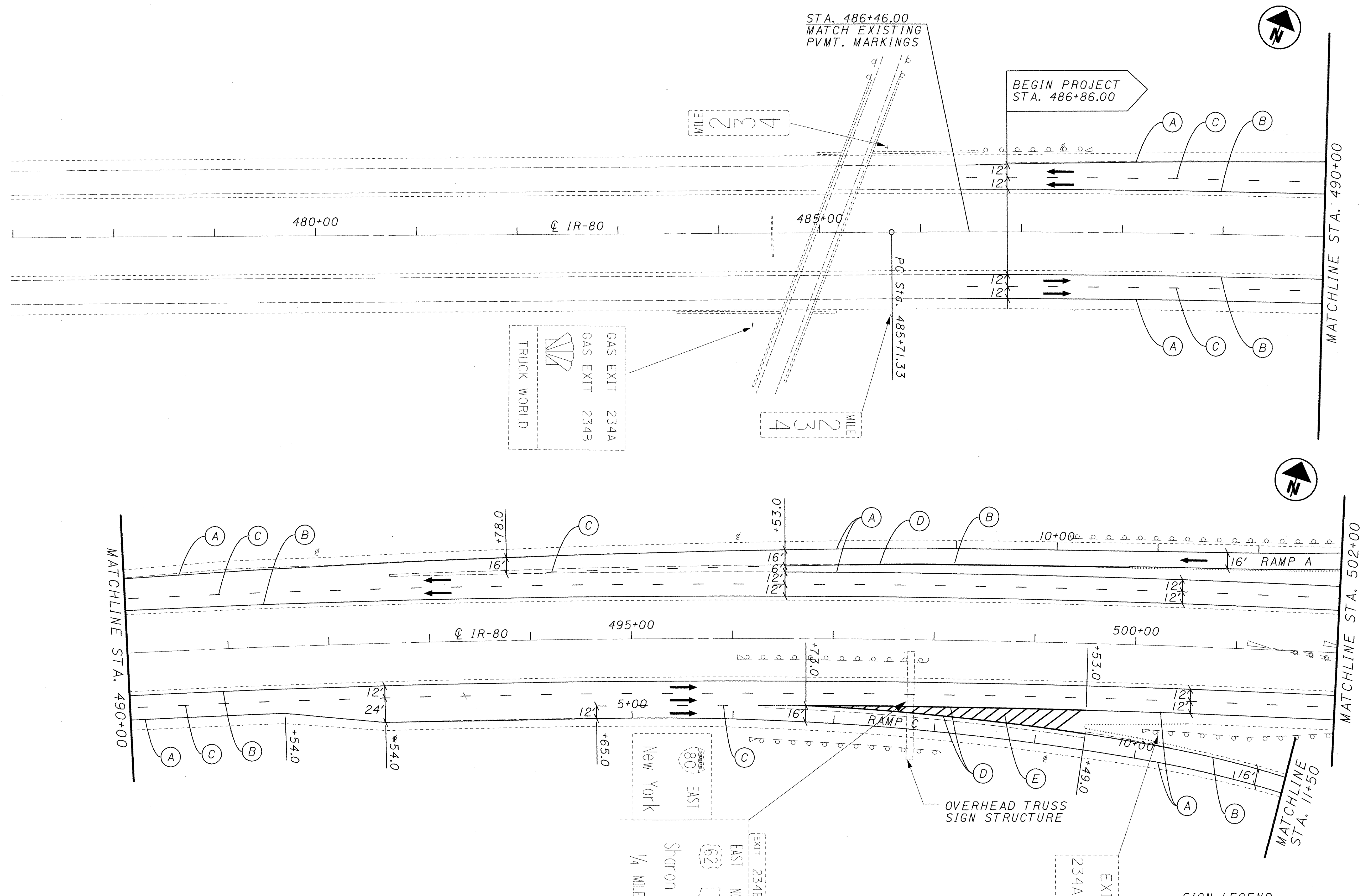
THE CONTRACTOR SHALL PICK UP THE DEPARTMENT SUPPLIED RPM MATERIALS AT THE OPI WAREHOUSE IN COLUMBUS, OHIO.

THE CONTRACTOR SHALL PICK UP DEPARTMENT SUPPLIED RPM MATERIALS AT THE SPECIFIED LOCATION(S) FOR TRANSPORT TO THE WORK SITE OR TO THE CONTRACTOR'S STORAGE FACILITY. THE RECYCLED RAISED PAVEMENT MARKER (RPM) AUTHORIZATION FORM IS TO BE SIGNED BY THE DISTRICT CONSTRUCTION ENGINEER PRIOR TO PICK UP OF THE RPMS. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND / OR THE PARTIES LISTED ON THE AUTHORIZATION FORM IN WRITING AT LEAST FIVE (5) CALENDAR DAYS PRIOR TO PICK UP OF THE DEPARTMENT SUPPLIED MATERIALS. THE CONTRACTOR SHALL STORE THE RPMS WITHOUT DAMAGE OR CONTAMINATION WITH FOREIGN MATTER. A DEDUCTION IN THE AMOUNT OF THE ACTUAL COST TO THE DEPARTMENT SHALL BE MADE FOR MATERIALS DAMAGED BY THE CONTRACTOR OR FOR CASTINGS RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED AND WERE NOT RETURNED TO THE DEPARTMENT.

DESCRIPTION	ONE-WAY WHITE		ONE-WAY YELLOW		TWO-WAY WHITE		TWO-WAY YELLOW		TWO-WAY WHITE-RED		TWO-WAY YELLOW-RED	
	COLS.	DIST.	COLS.	DIST.	COLS.	DIST.	COLS.	DIST.	COLS.	DIST.	COLS.	DIST.
RAISED PAVEMENT MARKER	288								79		103	
TOTAL BY COLOR	288								79		103	

	TOTAL	NUMBER OF CONVENTIONAL HIGH PROFILE	NUMBER OF TAPERED LOW PROFILE	DISTRICT STORED	COLUMBUS STORED
ITEM 621 - RAISED PAVEMENT MARKER, INSTALLATION ONLY	470	----	470	----	470
ITEM 621 - RAISED PAVEMENT MARKER CASTING, INSTALLATION ONLY	----	----	----	----	----
ITEM 621 - PRISMATIC RETRO-REFLECTORS, INSTALLATION ONLY	----	----	----	----	----
ITEM 621 - RAISED PAVEMENT MARKER MISC., REPLACEMENT OF RAISED PAVEMENT MARKER	----	----	----	----	----

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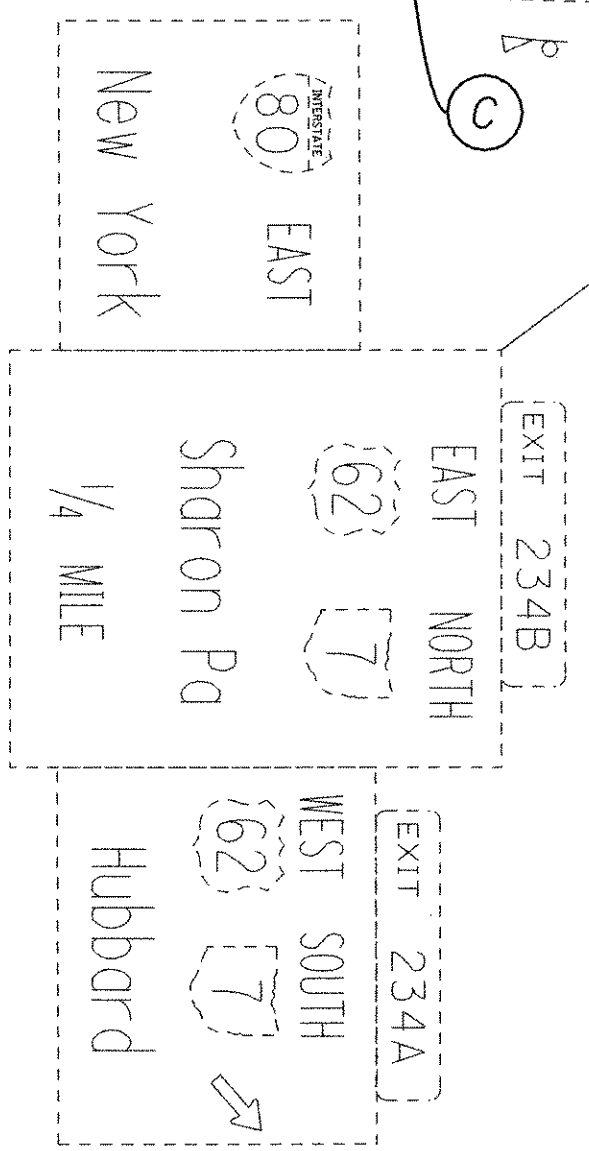


PAVEMENT MARKING LEGEND

- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

SIGN LEGEND

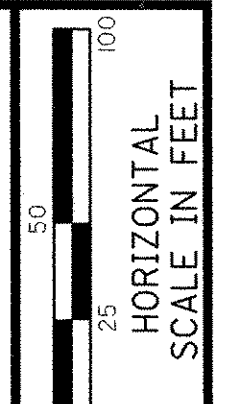
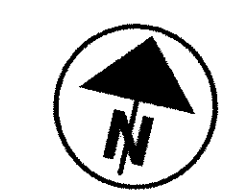
- [Dashed Box] EX. SIGN, NO WORK
- [Solid Box] REPLACE EX. SIGN ON NEW SUPPORTS



CALCULATED AEP CHECKED ENF
 0 25 50 100
 HORIZONTAL SCALE IN FEET

PAVEMENT MARKING AND SIGNING PLAN
STA. 477+00 TO STA. 502+00

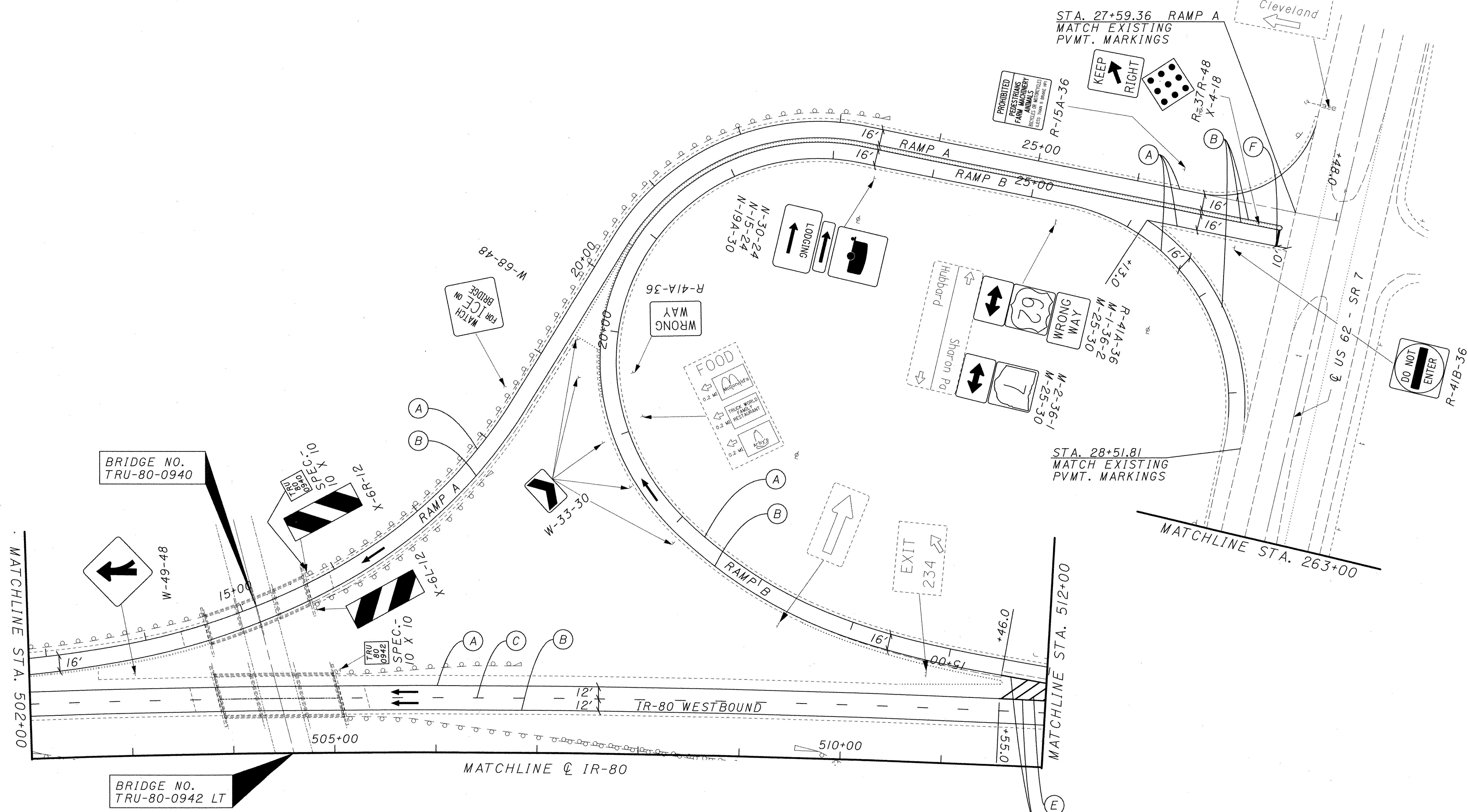
TRU-80-9.08



CALCULATED AEP CHECKED ENF

PAVEMENT MARKING AND SIGNING PLAN
STA. 502+00 TO STA. 512+00

TRU-80-9.08



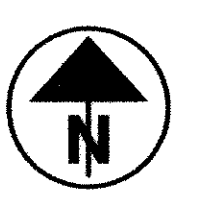
PAVEMENT MARKING LEGEND

- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

SIGN LEGEND

- EX. SIGN, NO WORK
- REPLACE EX. SIGN ON NEW SUPPORTS

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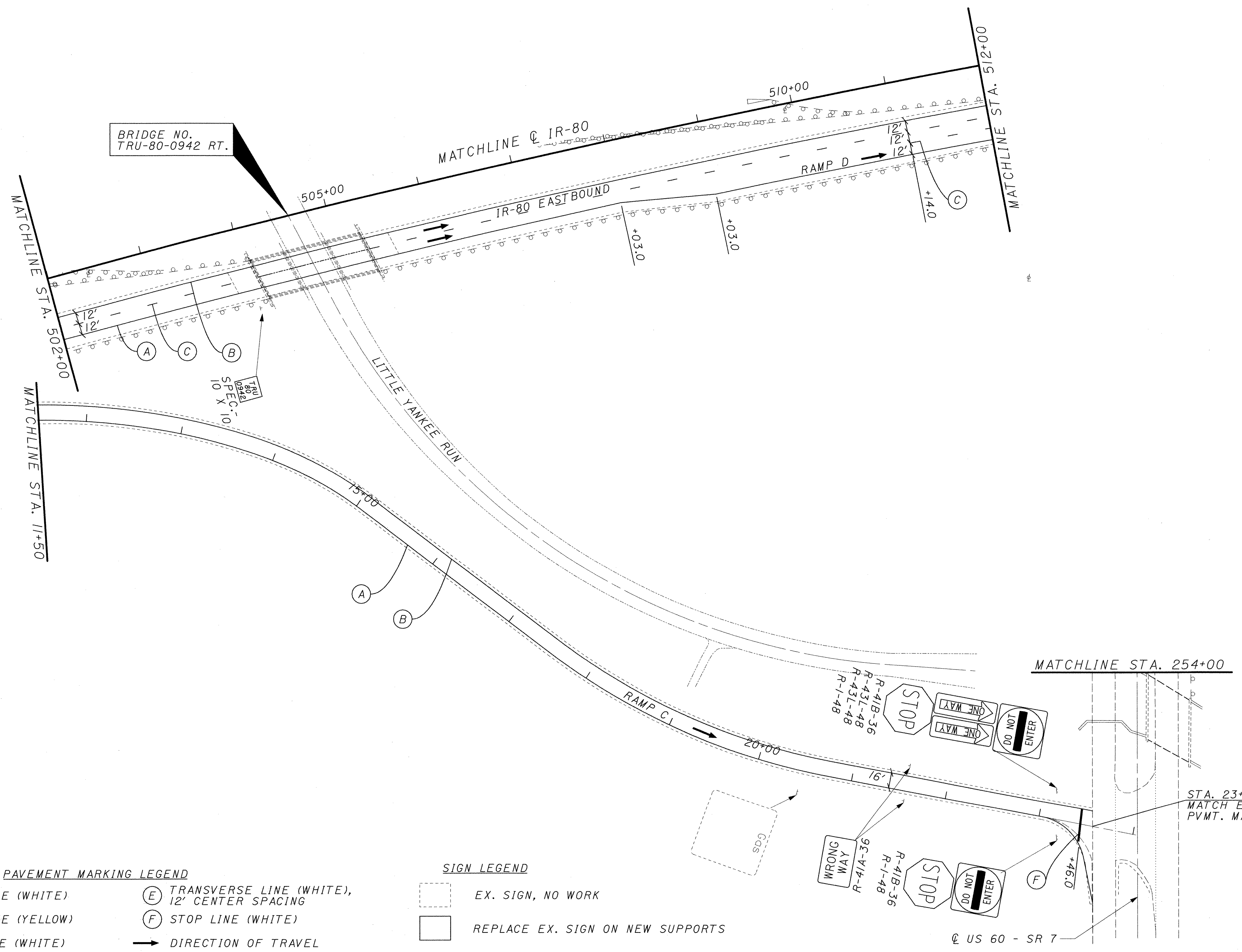
0 25 50 100
 HORIZONTAL SCALE IN FEET

CALCULATED AEP
 CHECKED ENF

PAVEMENT MARKING AND SIGNING PLAN
 STA. 502+00 TO STA. 512+00

TRU-80-9.08

45
70



PAVEMENT MARKING LEGEND

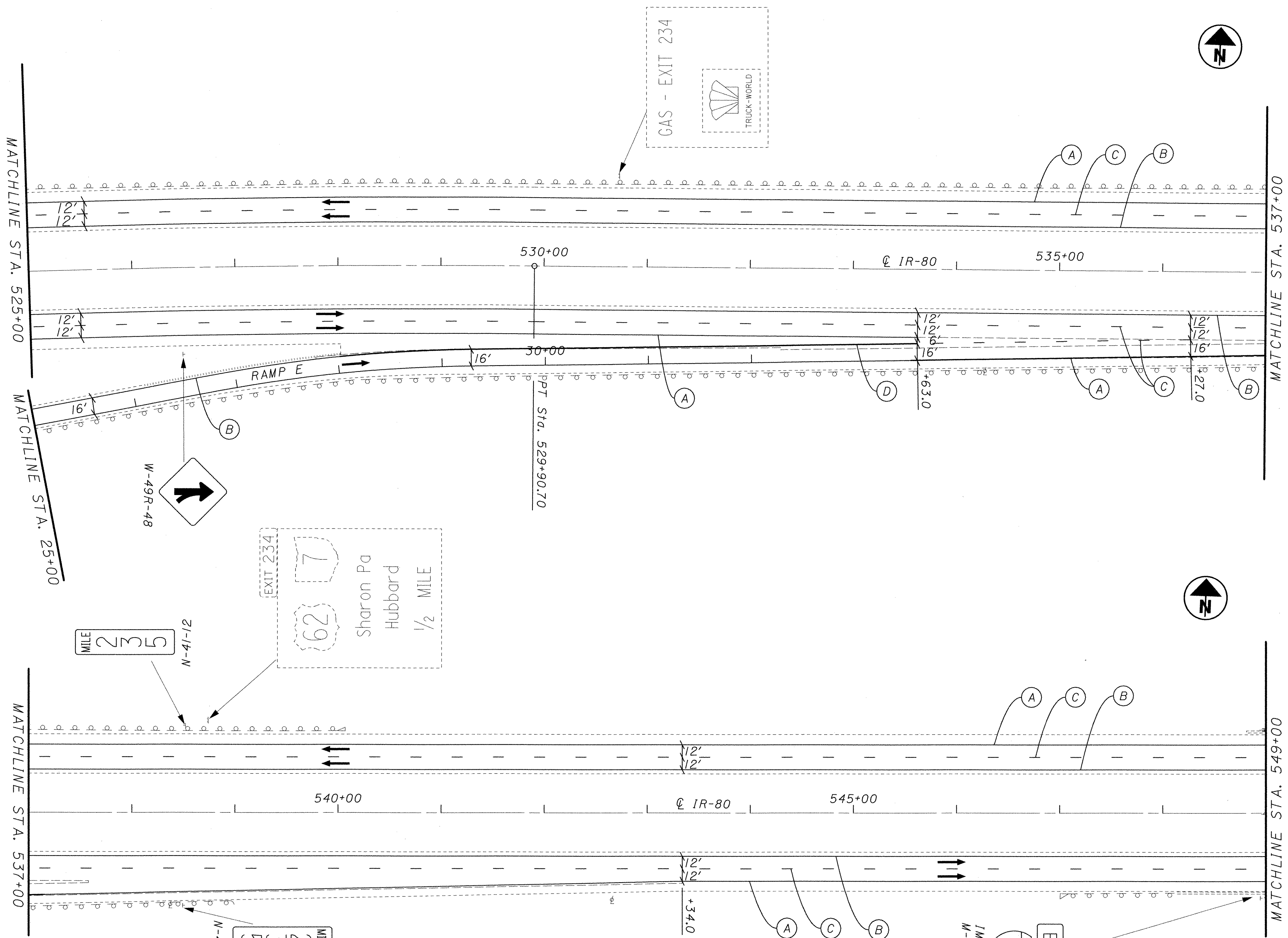
- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

SIGN LEGEND

- EX. SIGN, NO WORK
- REPLACE EX. SIGN ON NEW SUPPORTS

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PAVEMENT MARKING LEGEND

- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

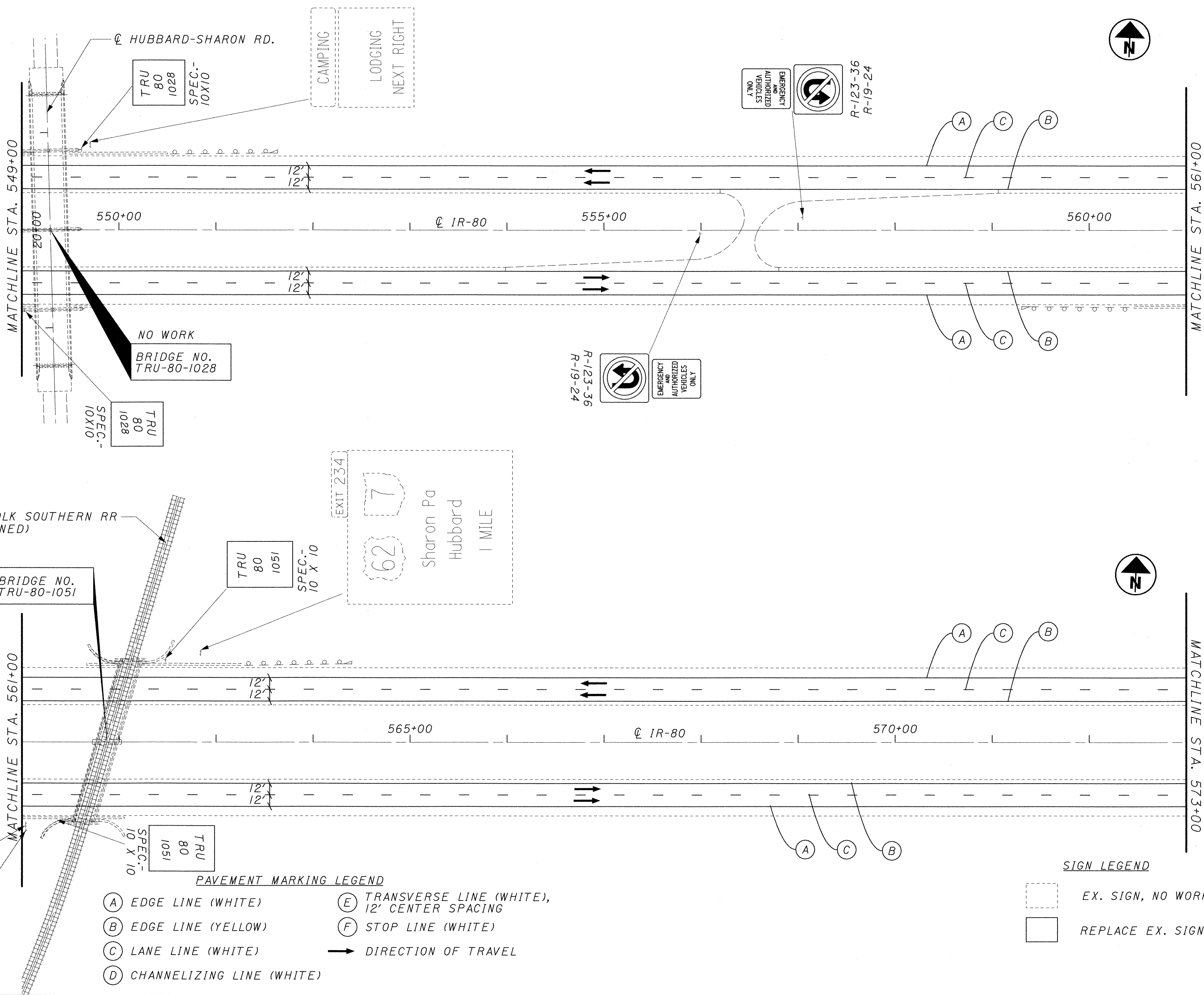
SIGN LEGEND

- EX. SIGN, NO WORK
- REPLACE EX. SIGN ON NEW SUPPORTS

0	50	100
HORIZONTAL SCALE IN FEET		
CALCULATED	AEP	ENF
	CHECKED	ENF

PAVEMENT MARKING AND SIGNING PLAN
STA. 525+00 TO STA. 549+00

TRU-80-9.08



- PAVEMENT MARKING LEGEND**
- (A) EDGE LINE (WHITE)
 - (B) EDGE LINE (YELLOW)
 - (C) LANE LINE (WHITE)
 - (D) CHANNELIZING LINE (WHITE)
 - (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
 - (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

- SIGN LEGEND**
- EX. SIGN, NO WORK
 - REPLACE EX. SIGN ON NEW SUPPORTS

CALCULATED AEP
CHECKED ENF

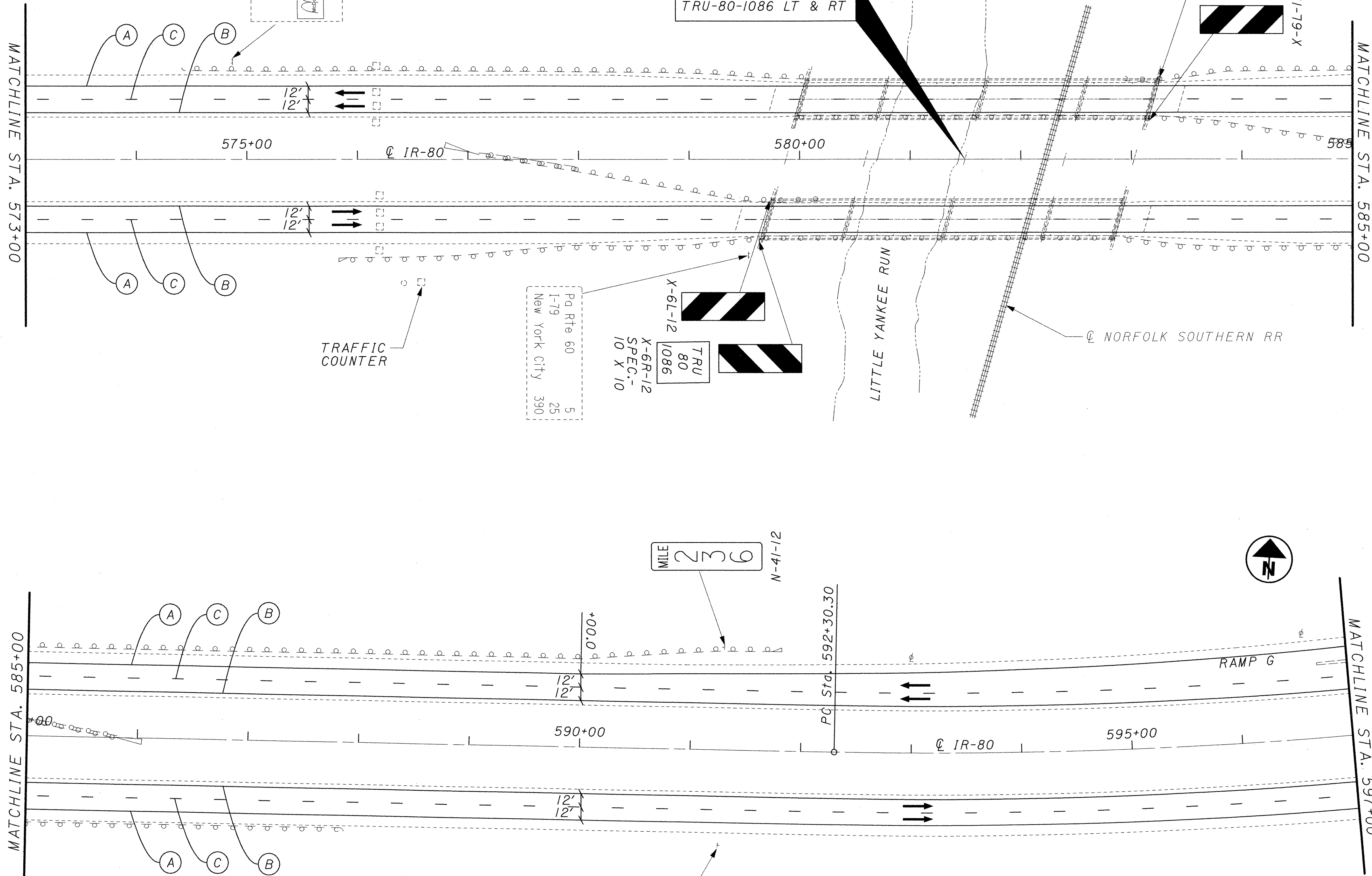
0 25 50 100
HORIZONTAL SCALE IN FEET

PAVEMENT MARKING AND SIGNING PLAN
STA. 549+00 TO STA. 573+00

TRU-80-9.08

48
70

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PAVEMENT MARKING LEGEND

- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

SIGN LEGEND

- EX. SIGN, NO WORK
- REPLACE EX. SIGN ON NEW SUPPORTS

PAVEMENT MARKING AND SIGNING PLAN
STA. 573+00 TO STA. 597+00

TRU-80-9.08

CALCULATED	AEP	CHECKED	ENF

HORIZONTAL SCALE IN FEET
 0 25 50 100

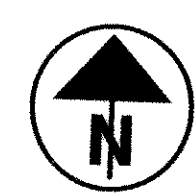
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I-79	25
New York City	390

X-6L-12
 TRU 80 1086
 X-6R-12
 SPEC.-
 10 X 10

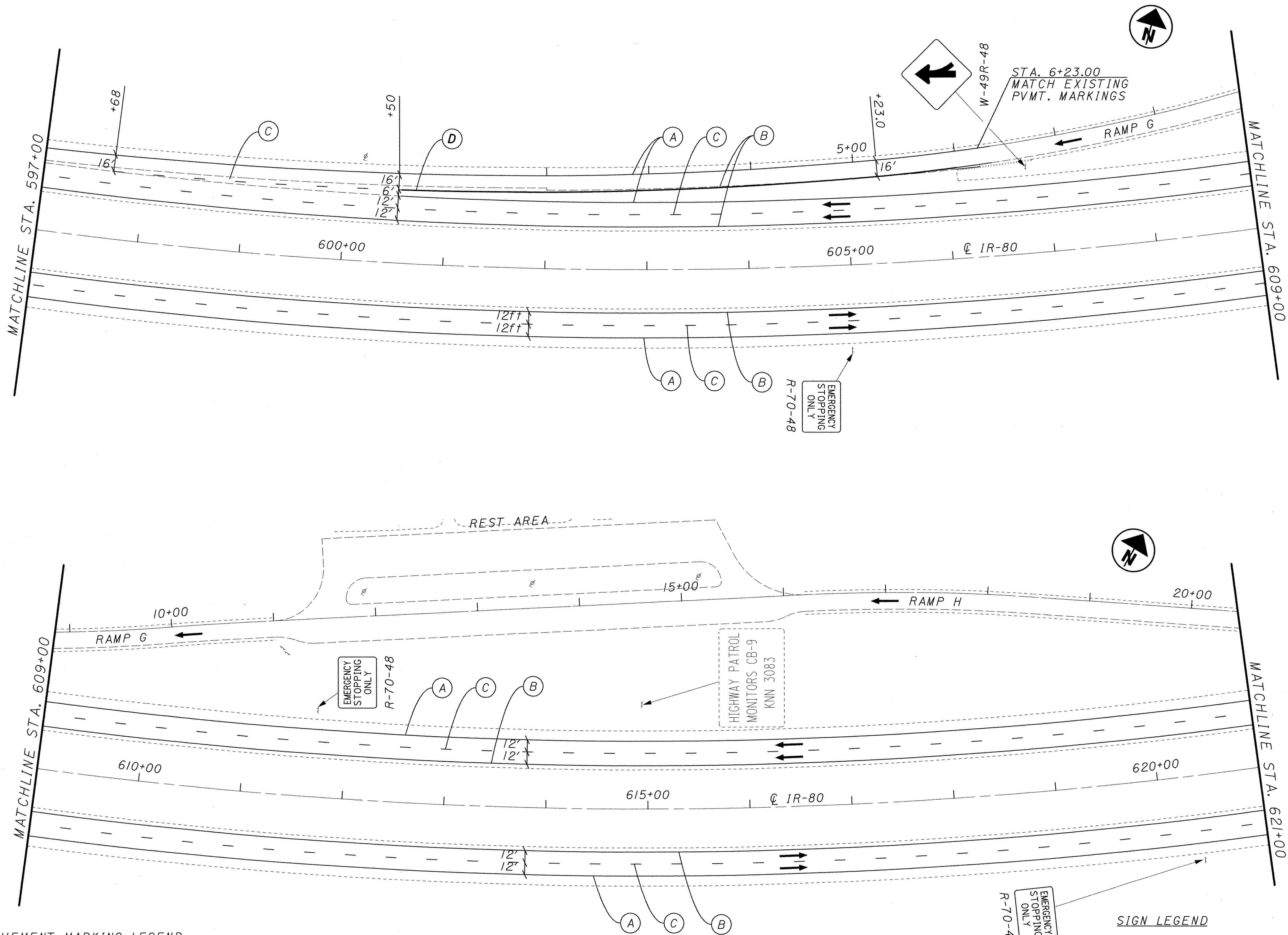
TRU 80 1086
 X-6R-12
 SPEC.-
 10 X 10

MILE 236
 N-41-12

MILE 236
 N-41-12



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PAVEMENT MARKING LEGEND

- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

SIGN LEGEND

- EX. SIGN, NO WORK
- REPLACE EX. SIGN ON NEW SUPPORTS

PAVEMENT MARKING AND SIGNING PLAN
STA. 597+00 TO STA. 621+00

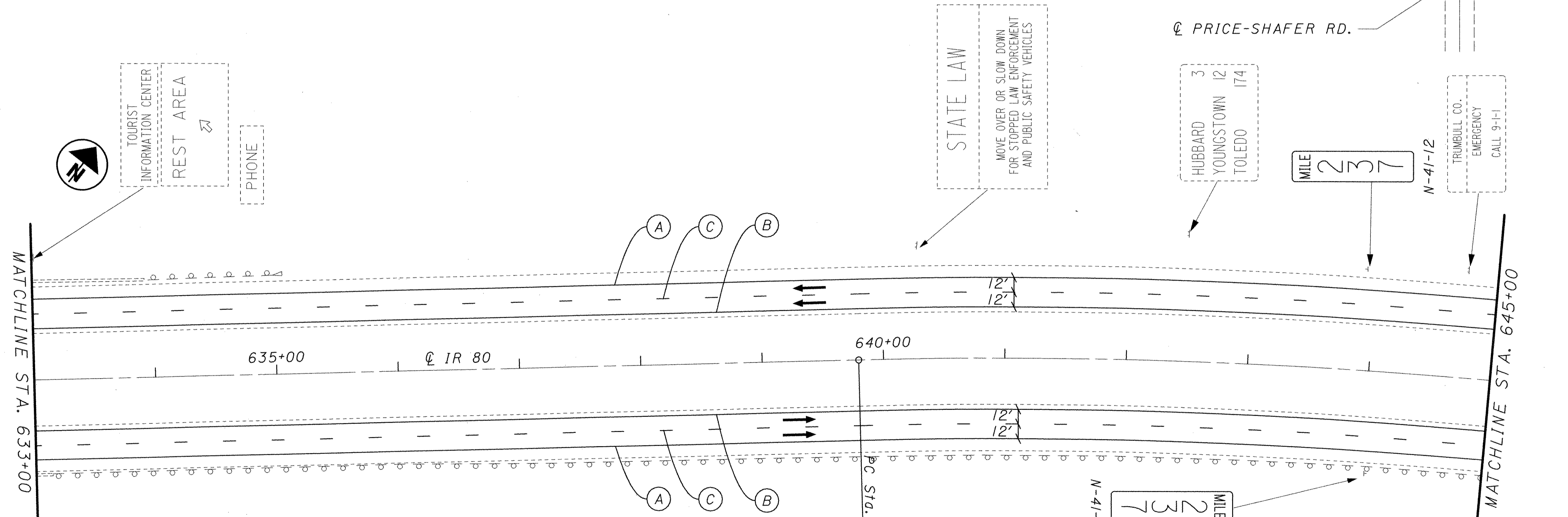
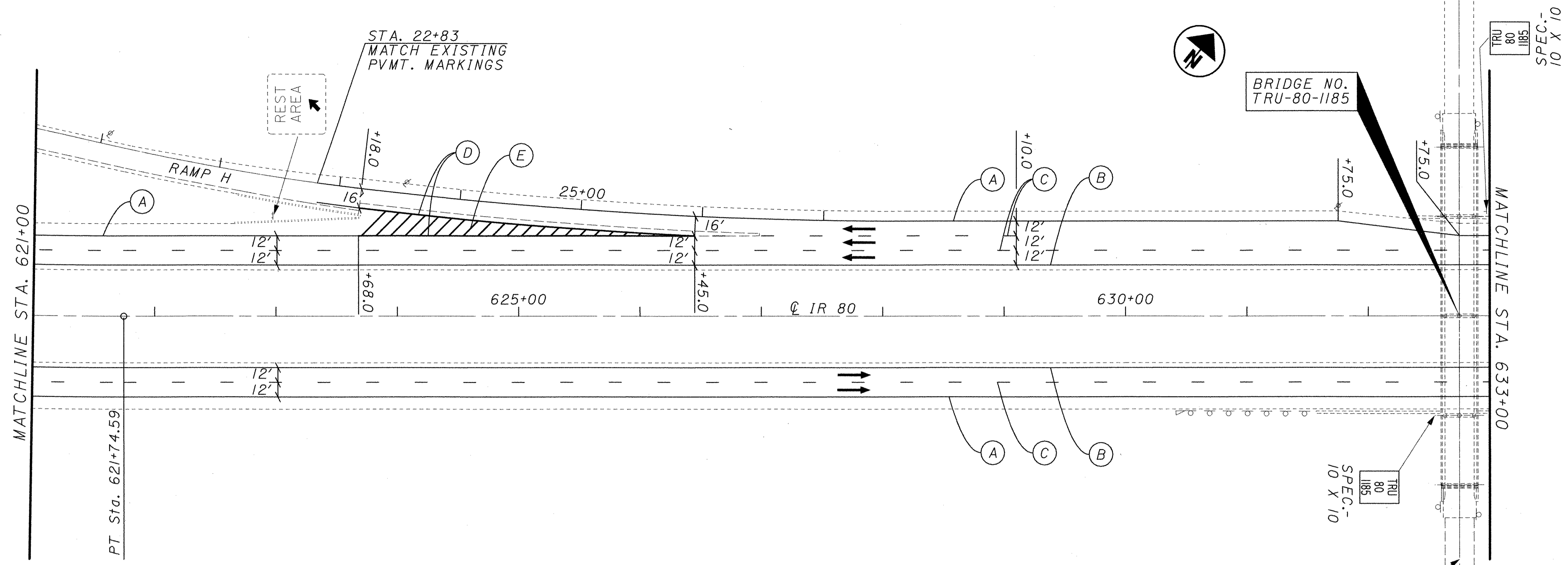
TRU-80-9.08

50
70

CALCULATED AEP CHECKED ENF

0 50 100
HORIZONTAL SCALE IN FEET

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PAVEMENT MARKING LEGEND

- (A) EDGE LINE (WHITE)
- (B) EDGE LINE (YELLOW)
- (C) LANE LINE (WHITE)
- (D) CHANNELIZING LINE (WHITE)
- (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
- (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

SIGN LEGEND

- EX. SIGN, NO WORK
- REPLACE EX. SIGN ON NEW SUPPORTS

CALCULATED	AEP	CHECKED	ENF
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PAVEMENT MARKING AND SIGNING PLAN
STA. 621+00 TO STA. 645+00

TRU-80-9.08

HORIZONTAL SCALE IN FEET

TRU 80 1185
 SPEC.- 10 X 10

BRIDGE NO.
 TRU-80-1185



STATE LAW
 MOVE OVER OR SLOW DOWN
 FOR STOPPED LAW ENFORCEMENT
 AND PUBLIC SAFETY VEHICLES

HUBBARD 3
 YOUNGSTOWN 12
 TOLEDO 174

MILE 37

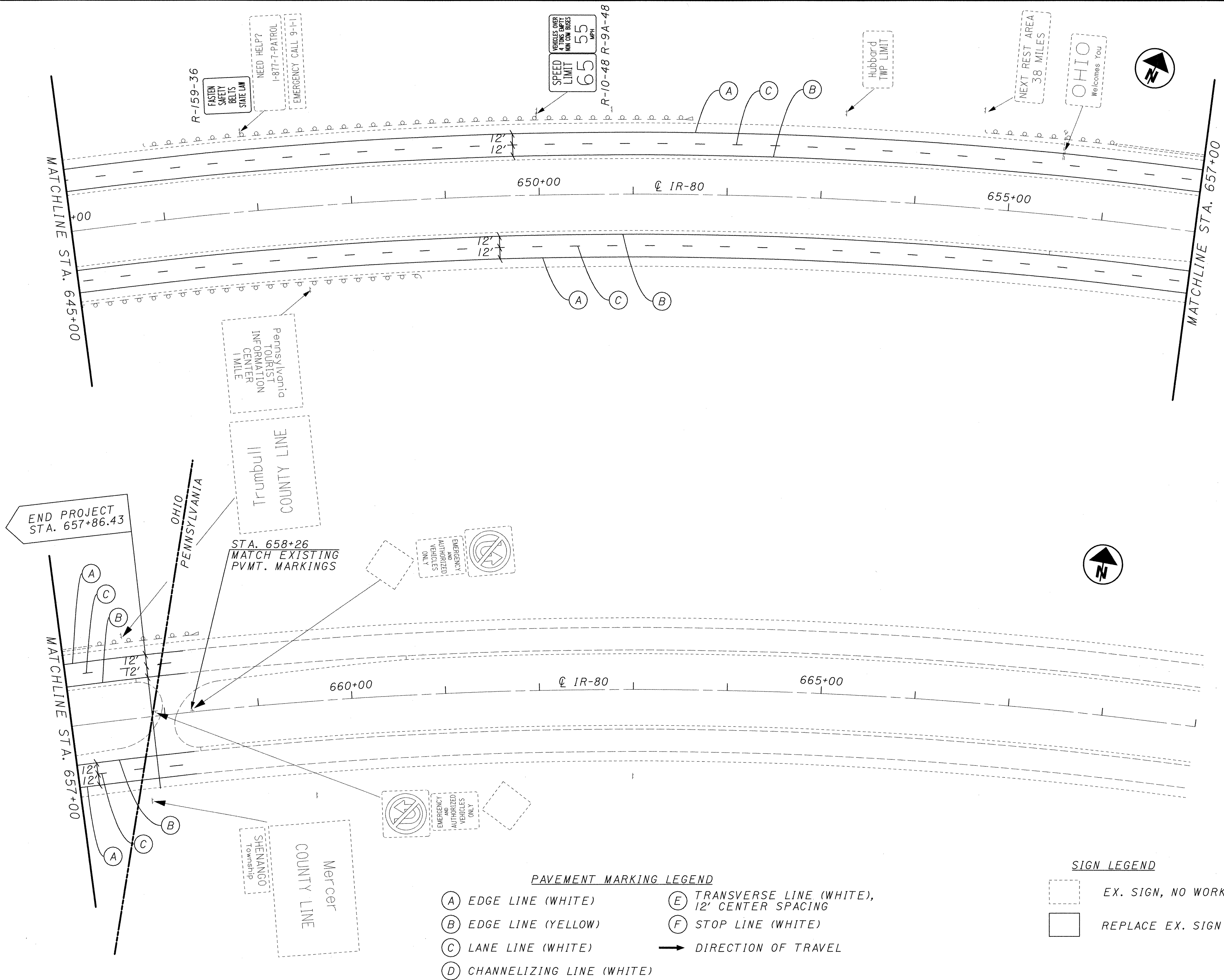
N-41-12

TRUMBULL CO.
 EMERGENCY
 CALL 9-1-1

MILE 27

N-41-12

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- PAVEMENT MARKING LEGEND**
- (A) EDGE LINE (WHITE)
 - (B) EDGE LINE (YELLOW)
 - (C) LANE LINE (WHITE)
 - (D) CHANNELIZING LINE (WHITE)
 - (E) TRANSVERSE LINE (WHITE), 12' CENTER SPACING
 - (F) STOP LINE (WHITE)
- DIRECTION OF TRAVEL

- SIGN LEGEND**
- EX. SIGN, NO WORK
 - REPLACE EX. SIGN ON NEW SUPPORTS

<p>TRU-80-9.08</p>	<p>PAVEMENT MARKING AND SIGNING PLAN STA. 645+00 TO STA. 669+00</p>
<p>52 70</p>	<p>CALCULATED AEP CHECKED ENF</p> <p>0 50 100 HORIZONTAL SCALE IN FEET</p>

STRUCTURE NOTES

PROPOSAL NOTES:

SEALING OF CONCRETE SURFACES

STANDARD DRAWINGS:

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

TBR-91M DATED 12-19-94
 VPF-1-90M DATED 03-20-95
 EXJ-4-87 DATED 04-20-01

AND TO SUPPLEMENTAL SPECIFICATION(S):

842 DATED 01-06-99
 843 DATED 05-05-98
 846 DATED 09-09-97
 847 DATED 06-30-98
 848 DATED 06-30-98
 863 DATED 10-12-99
 885 DATED 08-10-99
 892 DATED 09-14-99
 899 DATED 10-21-98
 910 DATED 07-11-00
 954 DATED 09-09-97

ITEM 202 - PORTIONS OF STRUCTURE REMOVED

DESCRIPTION: THIS WORK SHALL CONSIST OF THE REMOVAL OF THE TOP OF THE BACKWALL ON BR. NO. TRU-80-1086R.. THIS ITEM SHALL ALSO INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION.

SUBSTRUCTURE CONCRETE REMOVAL: SUBSTRUCTURE CONCRETE REMOVAL SHALL BE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, A HAMMER HEAVIER THAN 35 POUNDS, BUT NOT TO EXCEED 90 POUNDS, MAY BE USED UPON THE APPROVAL OF THE ENGINEER. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

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 863.07.

ITEM 847 - WEARING COURSE REMOVED, ASPHALT

THIS WORK IS FOR THE REMOVAL OF THE ASPHALT WEARING SURFACE ON THE TOP SURFACE OF THE BACKWALLS AS PER ODOT SUPPLEMENTAL SPECIFICATION 847.

ITEM 848 - SURFACE PREPARATION USING HYDRO-DEMOLITION

THIS WORK SHALL BE PERFORMED AS PER ODOT SUPPLEMENTAL SPECIFICATION 848. THE DIMENSION "D" SHALL BE 1/2 INCHES. FULL DEPTH REPAIR WILL NOT HAVE TO BE USED UNLESS THE FULL DEPTH OF THE DECK HAS BEEN PENETRATED.

MAINTENANCE OF TRAFFIC

SEE THE ROADWAY NOTES FOR MAINTENANCE OF TRAFFIC REQUIREMENTS.

UTILITY LINES

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

CONVERSION OF STANDARD BRIDGE DRAWINGS

THE STANDARD BRIDGE DRAWINGS REFERENCED IN THIS PLAN ARE METRIC. ANY CONVERSION OF DIMENSIONS REQUIRED TO CONSTRUCT THE ITEMS SHOWN ON THE STANDARDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONVERSIONS SHALL BE MADE USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

STREAM CHANNEL EXCAVATION

THE CONTRACTOR SHALL 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 (I.E. FOUNDATION PIER OR ABUTMENT EXCAVATION, CHANNEL CLEANOUT, EXCAVATION FOR ROCK CHANNEL PROTECTION, AND REMOVAL OF ANY TEMPORARY FILL ASSOCIATED WITH CONSTRUCTION OPERATIONS).

DEMOLITION DEBRIS

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

INSTREAM WORK

INSTREAM WORK WILL BE LIMITED WHERE PRACTICABLE AND ONLY CLEAN, NON-ERODIBLE MATERIAL WILL BE USED FOR FORDS, COFFERDAMS, OR OTHER EQUIPMENT ACCESS PADS. THIS TEMPORARY PLACED MATERIAL WILL BE REMOVED AND THE STREAM BOTTOM RESTORED TO NEAR NATURAL CONDITIONS WHEN THE WORK IS COMPLETED.



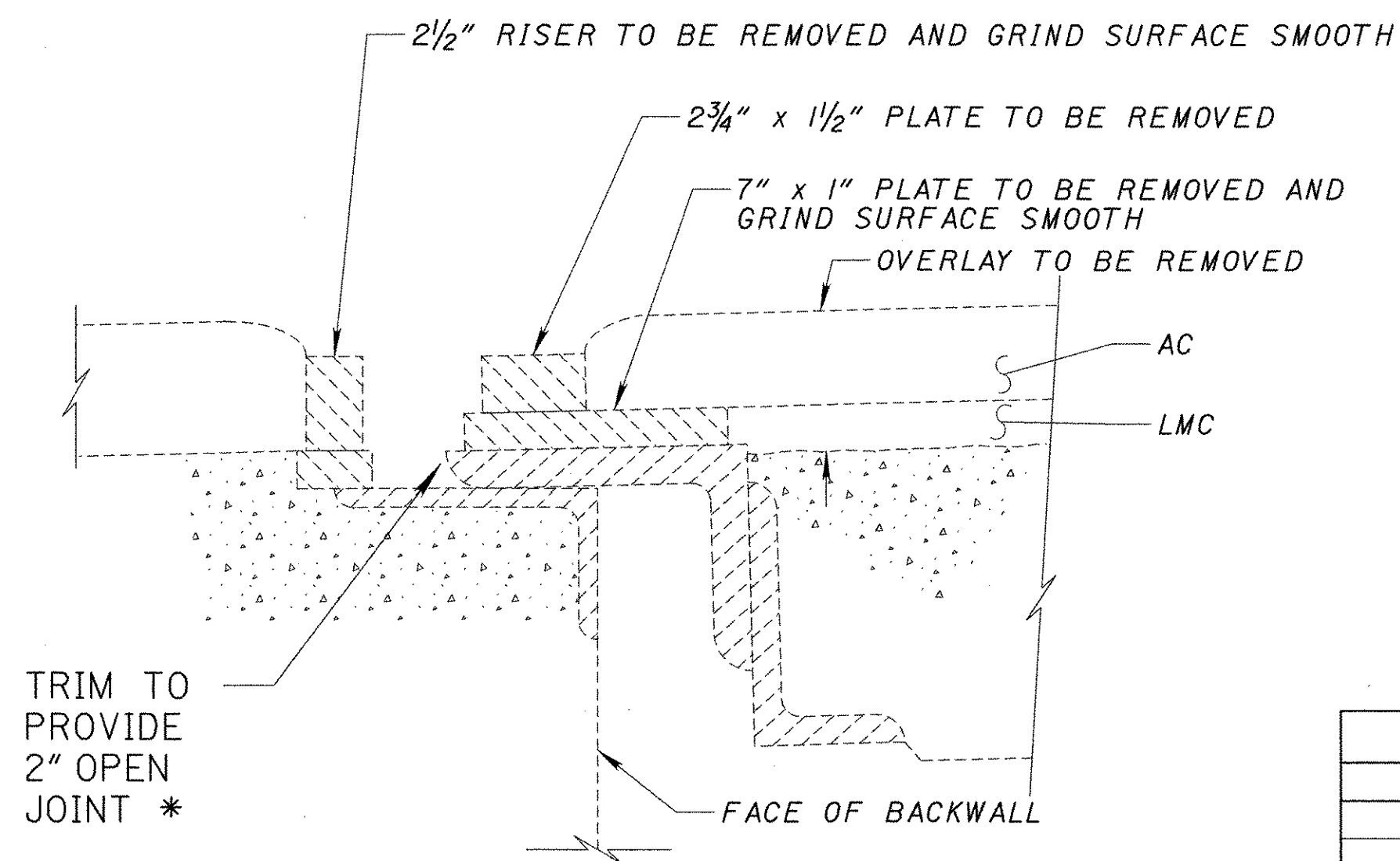
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MKB	MKB		

STRUCTURE NOTES

TRU-80-9.08

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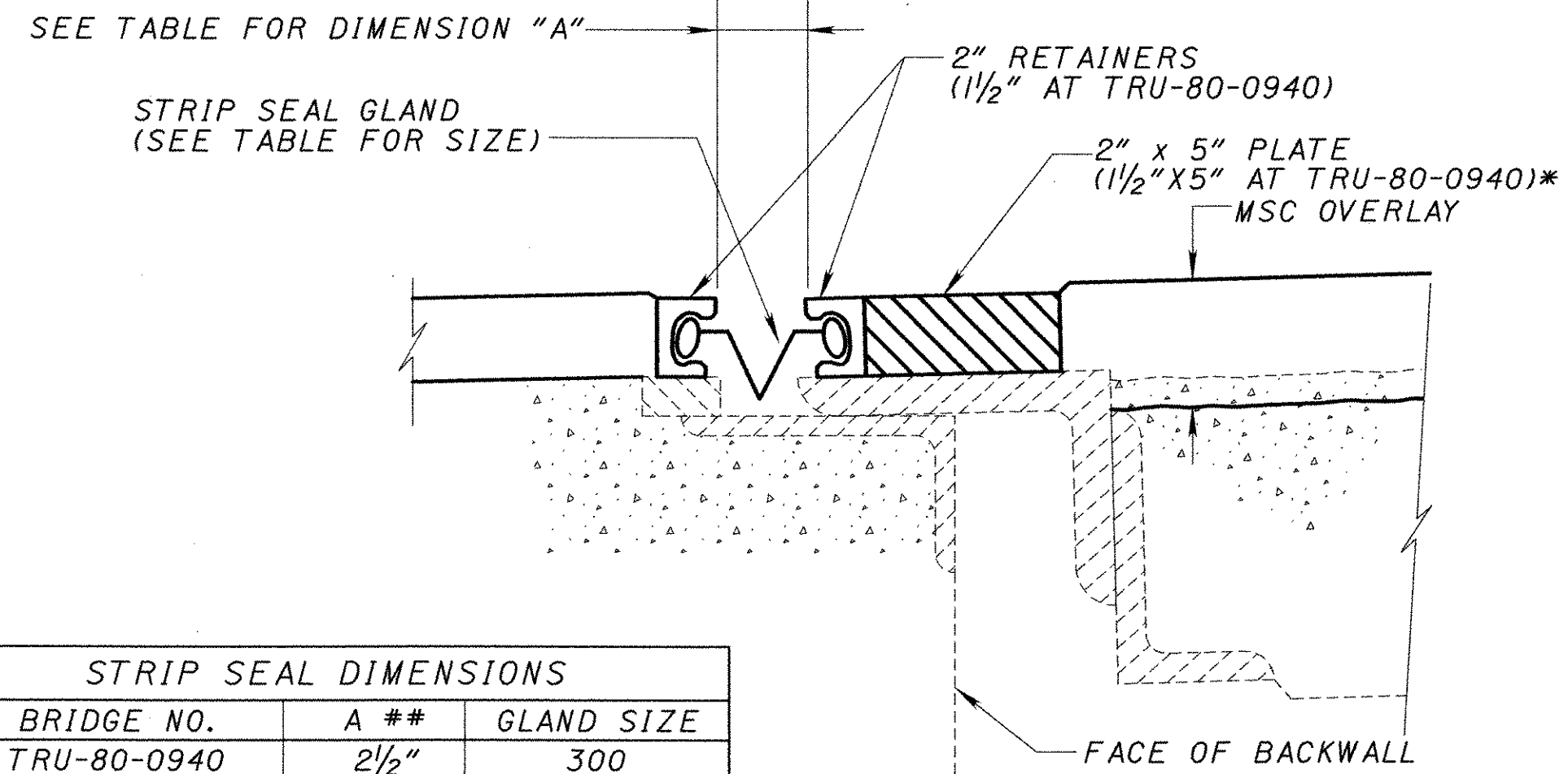
* - "AS BUILT" REVISION



REMOVAL DETAIL

EX. BAR SIZES TO BE FIELD VERIFIED

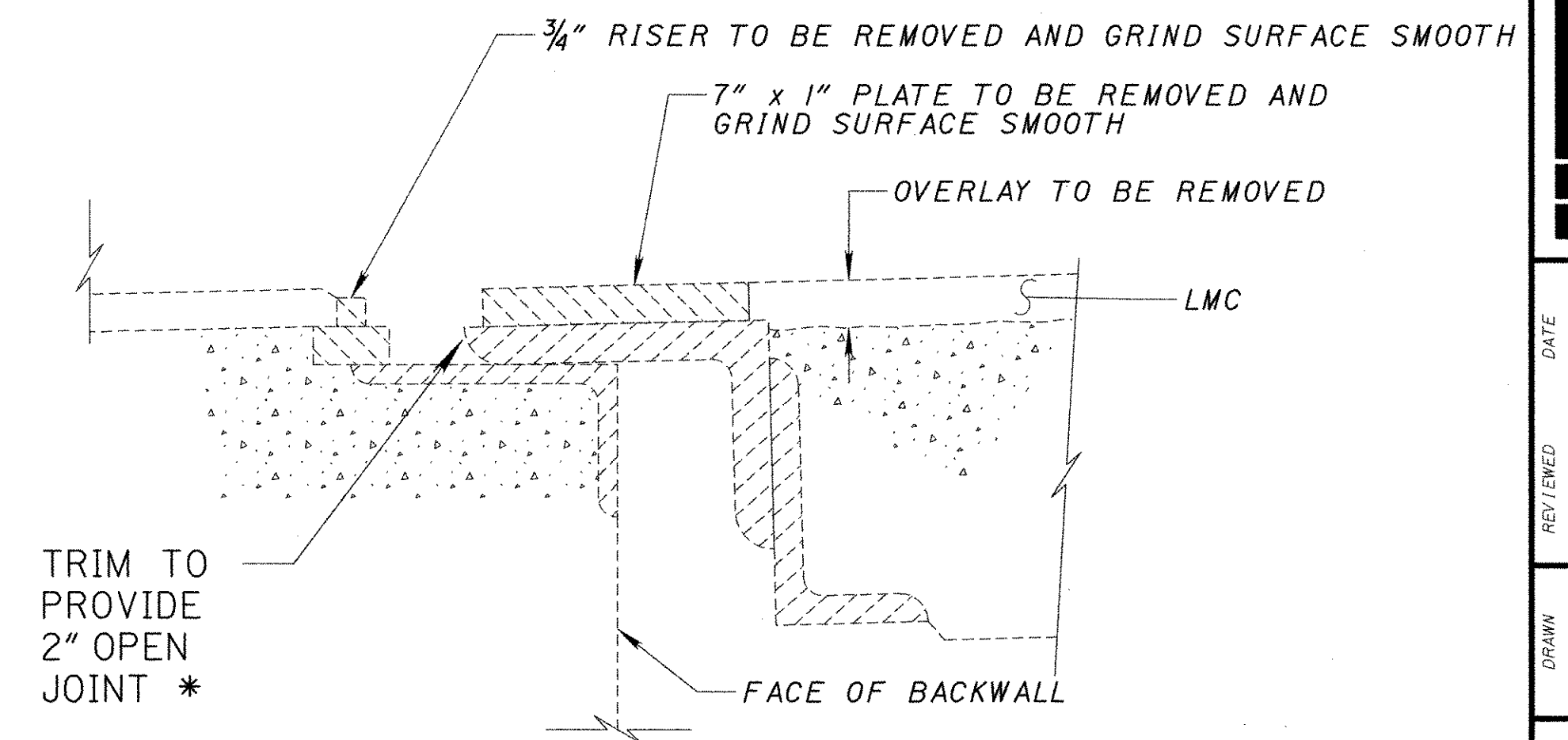
TRU-80-0942, TRU-80-0958, TRU-80-1086



RETROFIT DETAIL

STRIP SEAL DIMENSIONS		
BRIDGE NO.	A ##	GLAND SIZE
TRU-80-0940	2 1/2"	300
TRU-80-0942	2 1/2"	300
TRU-80-0958	3"	400
TRU-80-1086	3"	400

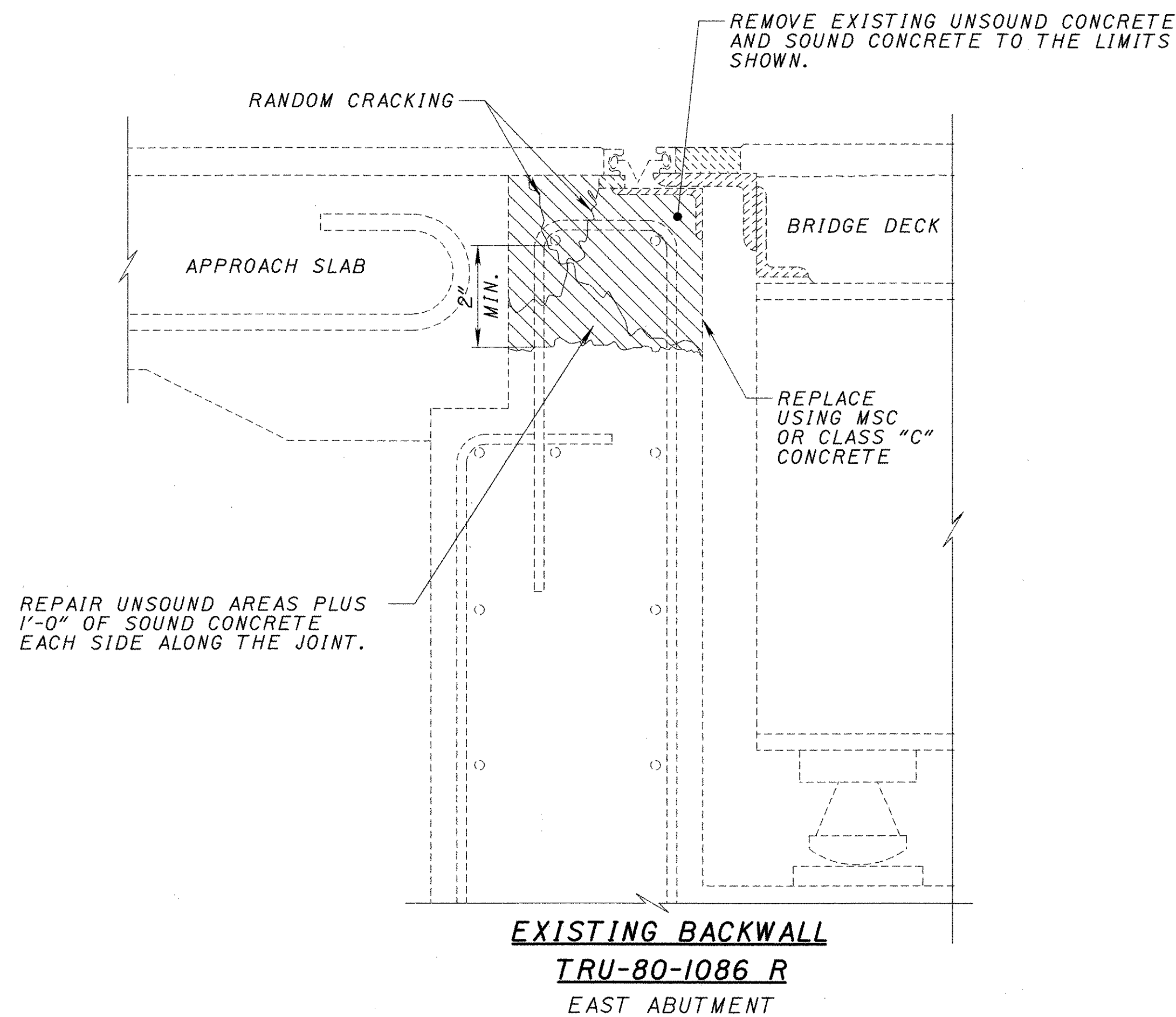
** MEASURED AT 70° F. CHECK WITH DESIGNER IF TEMPERATURE EXCEEDS 70° F ± 10° F



REMOVAL DETAIL

EX. BAR SIZES TO BE FIELD VERIFIED

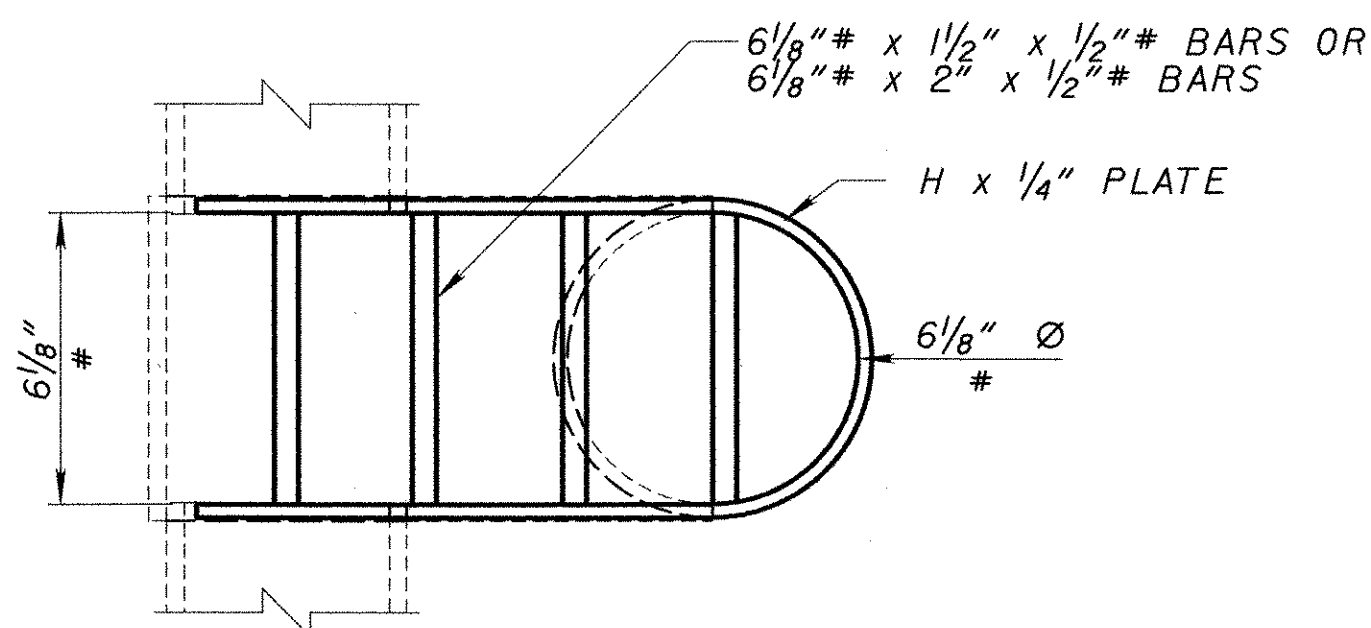
TRU-80-0940



EXISTING BACKWALL

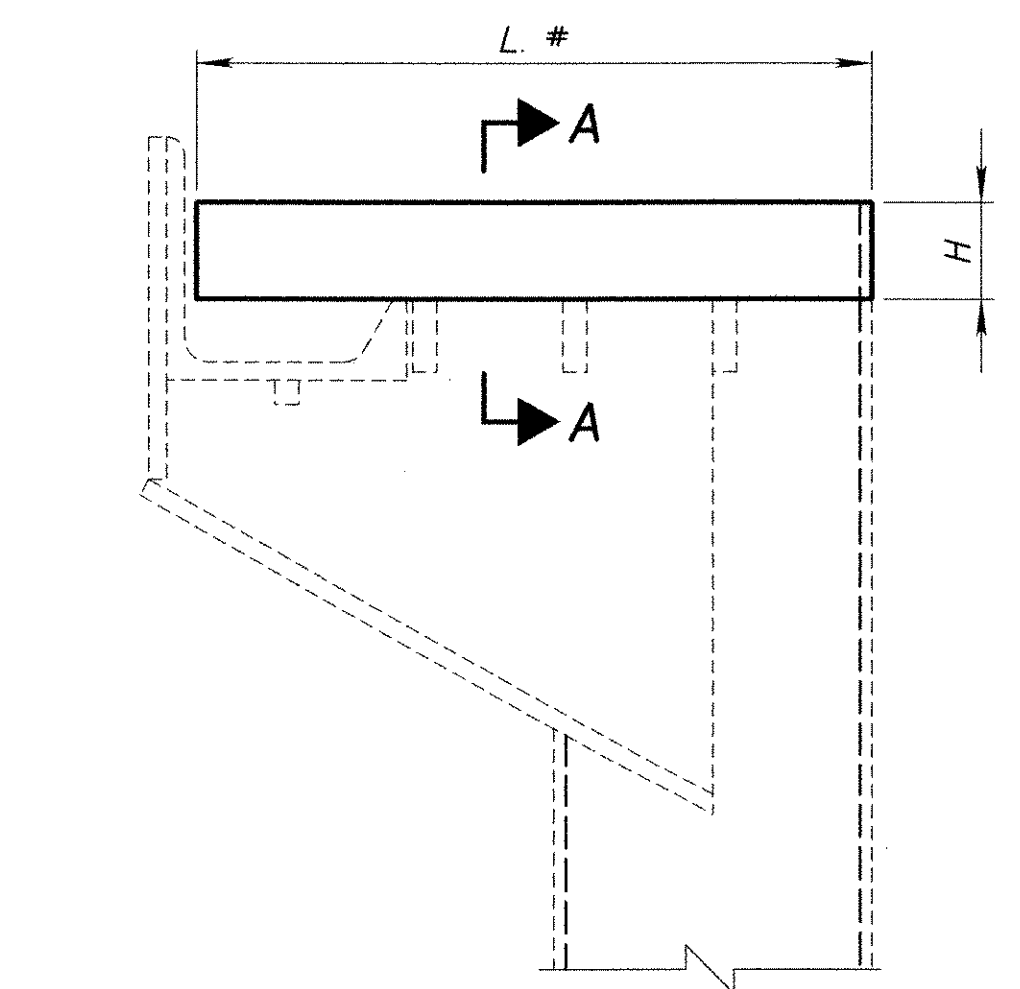
TRU-80-1086 R

EAST ABUTMENT



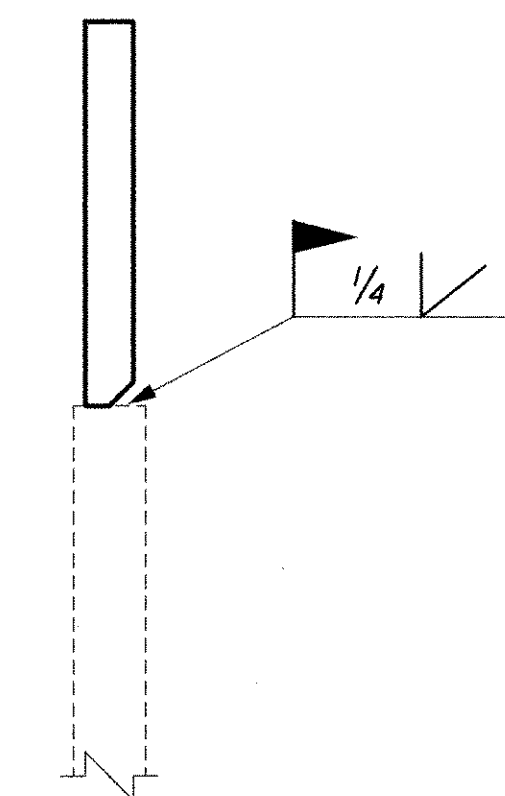
SCUPPER EXTENSION PLAN

SEE TABLE FOR H DIMENSION



SCUPPER EXTENSION ELEVATION

SEE TABLE FOR DIMENSIONS H AND L



SECTION A-A

SCUPPER EXTENSION			
BRIDGE NO.	QTY.	L #	H
TRU-80-0940	4	1'-2"	1 1/2"
TRU-80-0942	16	1'-2"	2"
TRU-80-0958	16	1'-2"	2"
TRU-80-1086	20	1'-4 3/8"	2"

FIELD VERIFY DIMENSIONS

LEGEND:

AC - ASPHALT CONCRETE
 LMC - LATEX MODIFIED CONCRETE
 MSC - MICRO SILICA CONCRETE

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BURGESS & NIPLE

DATE	REVISED	STRUCTURE FILE NUMBER
	JAA	
DESIGNED	CHECKED	SCT
JAA/DCF		

JOINT & SCUPPER EXTENSION DETAILS
 TRU-80-0942, TRU-80-0958
 TRU-80-1086 AND TRU-80-0940

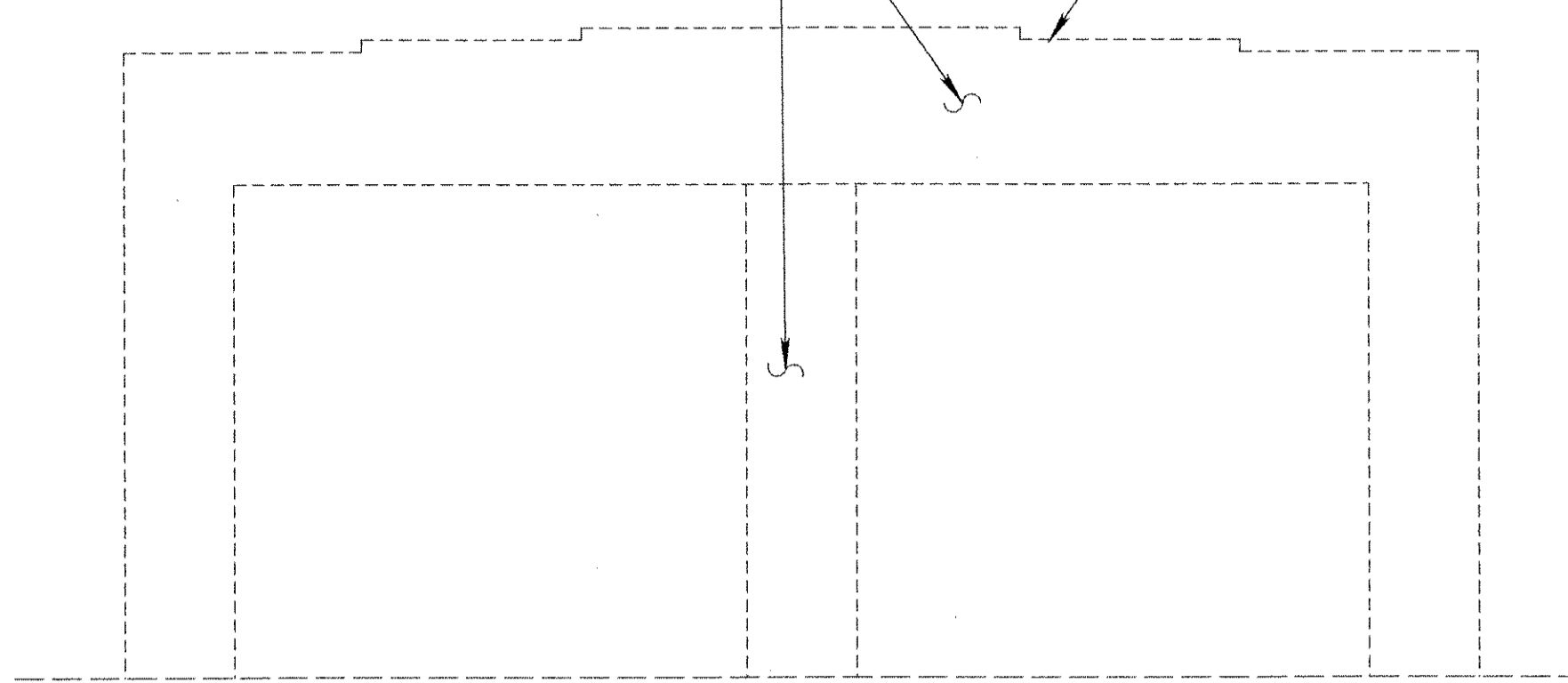
TRU-80-9.08

2 / 18

AS BUILT	54
JUNE 15, 2002	70

SEAL ALL EXPOSED CONCRETE SURFACES WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)

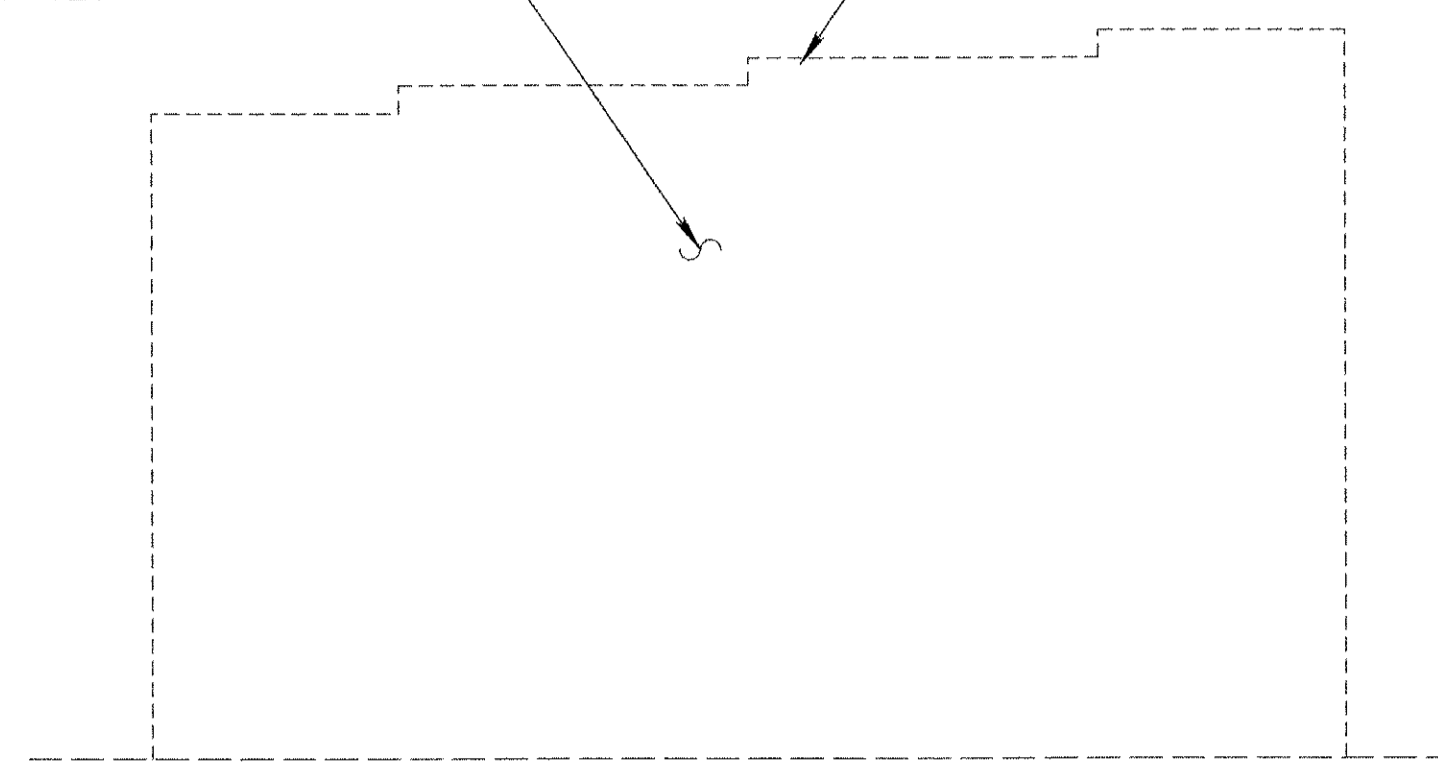
DO NOT SEAL TOP OF PIER



TYPICAL CAP AND COLUMN PIER ELEVATION
TRU-80-0102, TRU-80-0294, TRU-80-0958L&R, TRU-80-1185

SEAL ALL EXPOSED CONCRETE SURFACES WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)

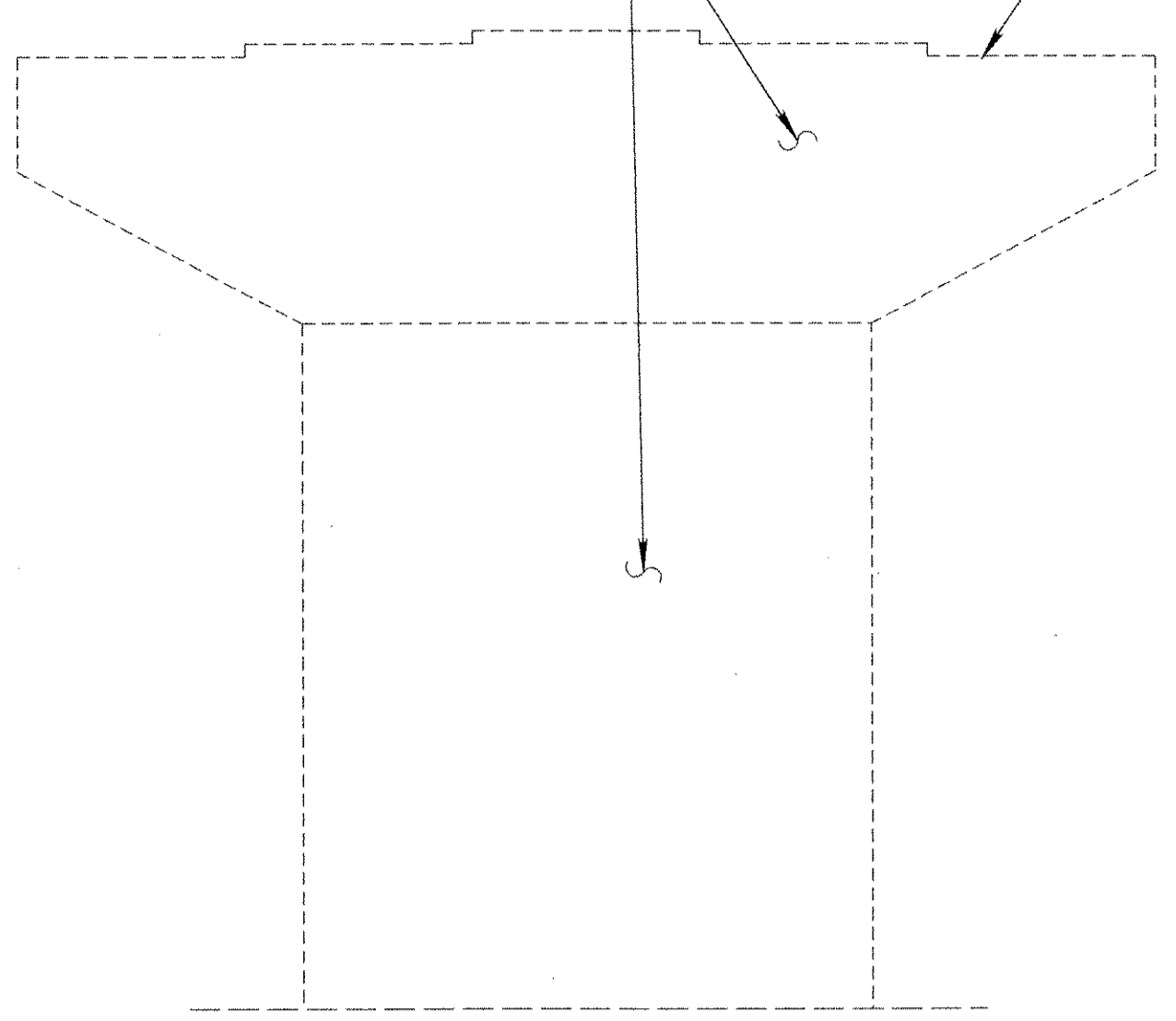
DO NOT SEAL TOP OF PIER



TYPICAL WALL PIER ELEVATION
TRU-80-0940, TRU-80-0942L&R, TRU-80-1051

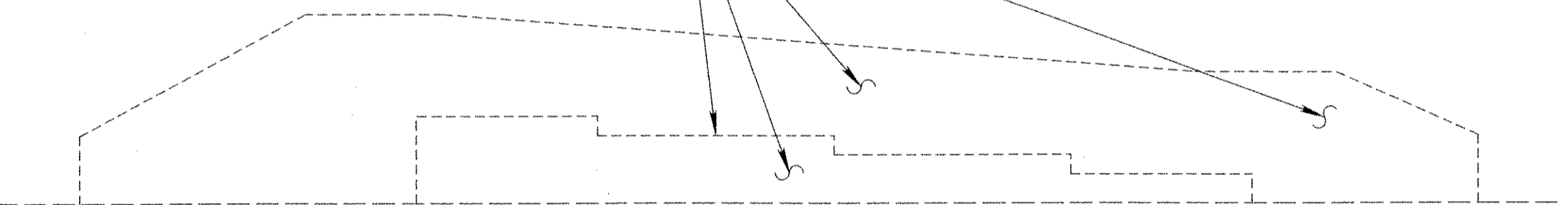
SEAL ALL EXPOSED CONCRETE SURFACES WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)

DO NOT SEAL TOP OF PIER



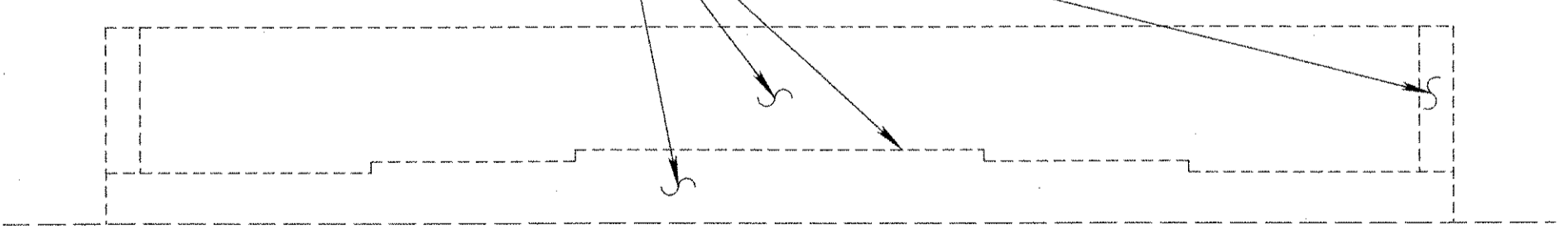
TYPICAL HAMMERHEAD PIER ELEVATION
TRU-80-0247, TRU-80-1086L&R

SEAL ALL EXPOSED CONCRETE SURFACES WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)



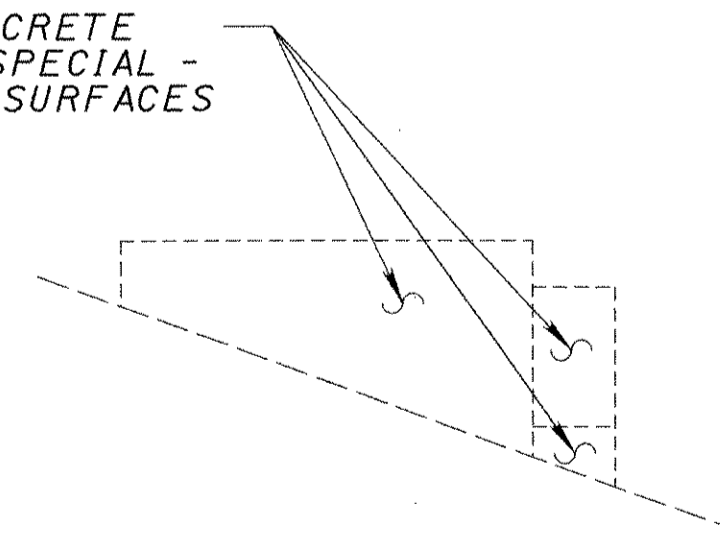
TYPICAL ABUTMENT ELEVATION
TRU-80-0940, TRU-80-0942L&R, TRU-80-1086L&R

SEAL ALL EXPOSED CONCRETE SURFACES WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)



TYPICAL ABUTMENT ELEVATION
TRU-80-0102, TRU-80-0247, TRU-80-0294, TRU-80-0958L&R, TRU-80-1185
(TRU-80-1051 - FULL HEIGHT ABUTMENT WITH CURVED BACK WINGWALLS)

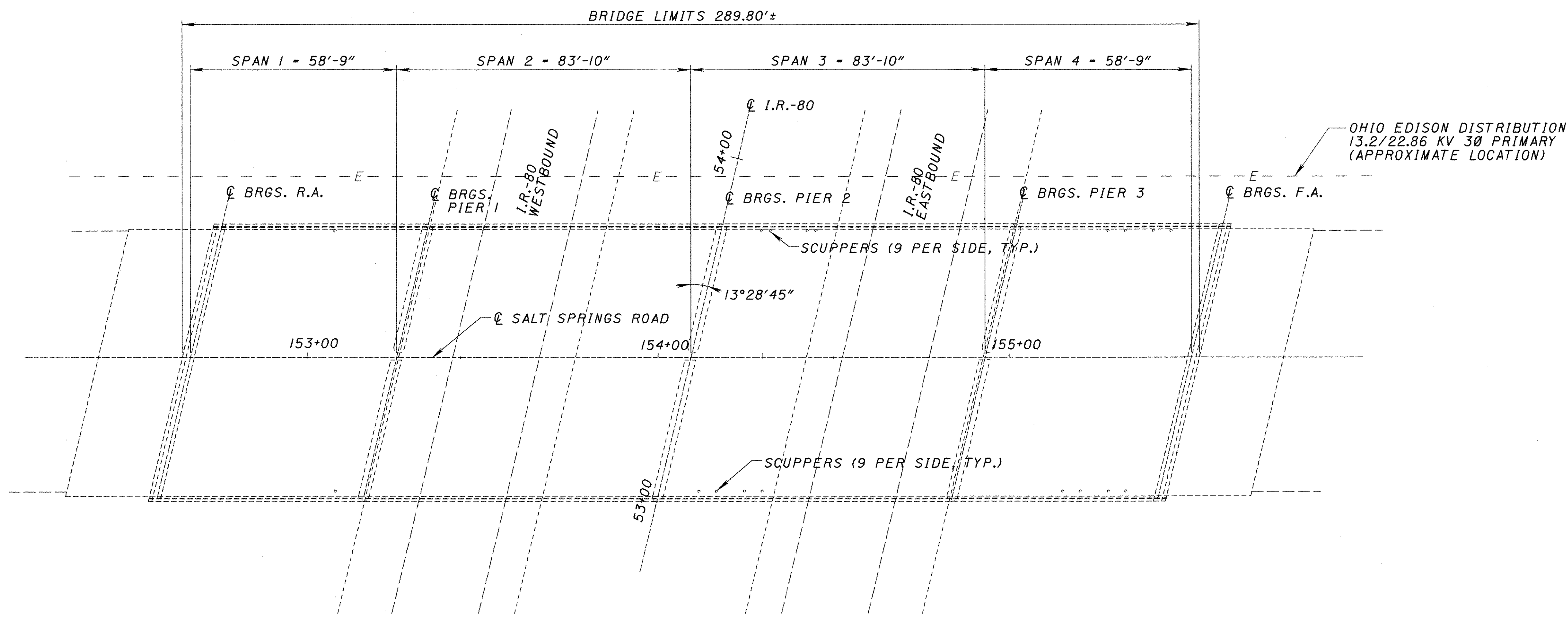
SEAL ALL EXPOSED CONCRETE SURFACES WITH ITEM SPECIAL - SEALING OF CONCRETE SURFACES (EPOXY - URETHANE)



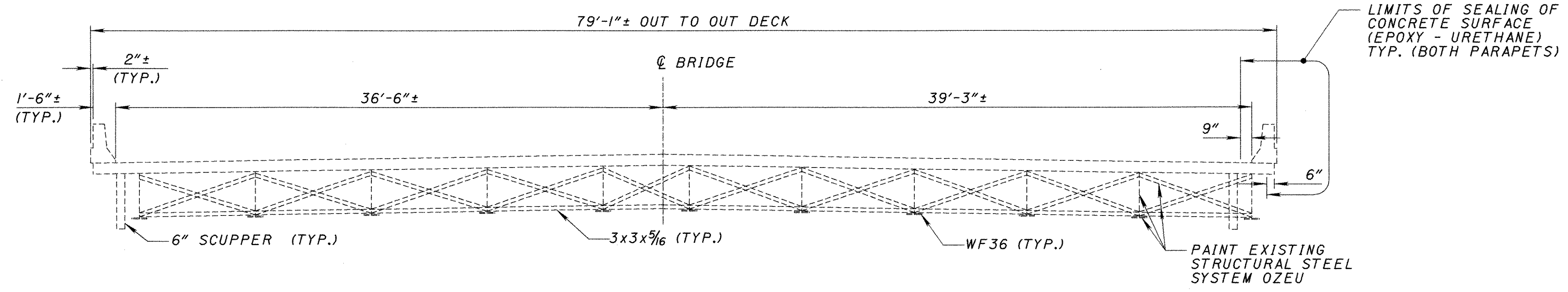
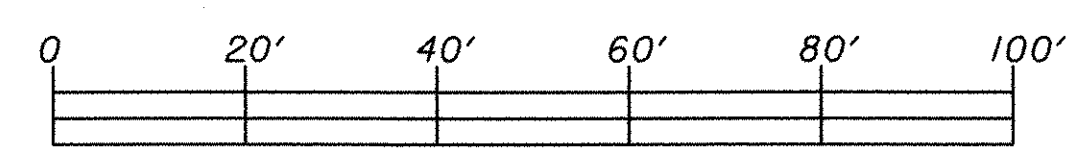
TYPICAL TURNBACK WINGWALL ELEVATION

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DATE			



PLAN



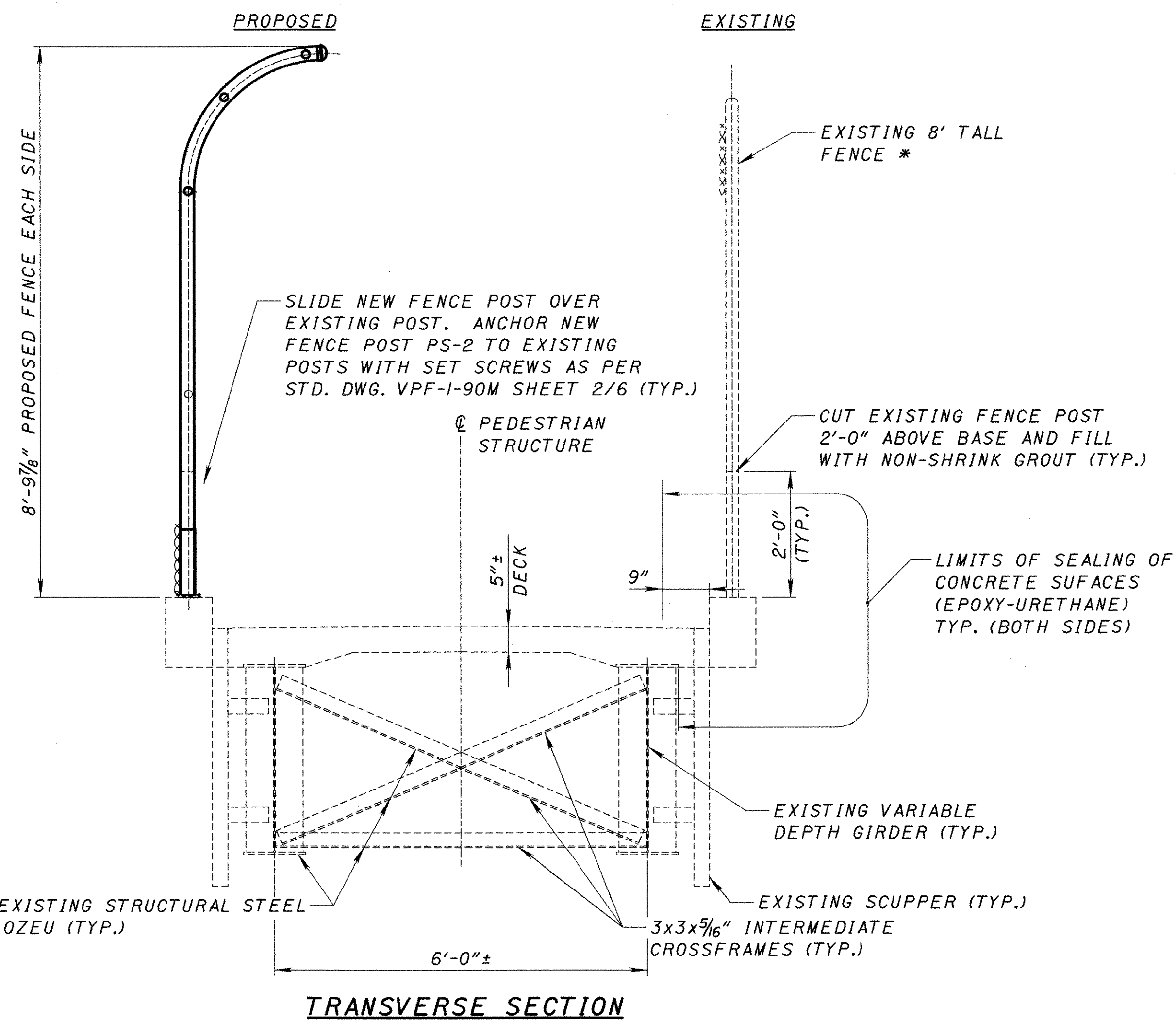
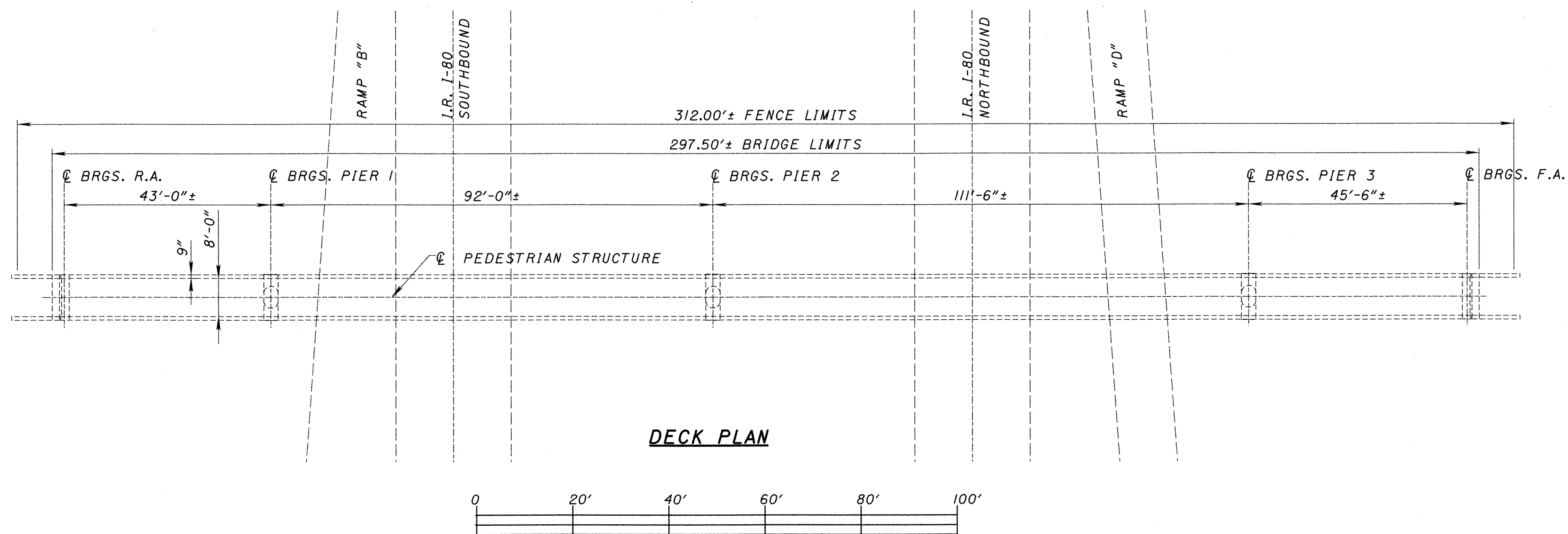
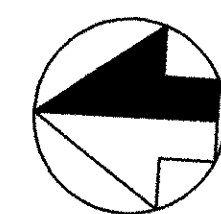
TRANSVERSE SECTION

- LEGEND:**
- BRGS. - BEARINGS
 - o/o - OUT TO OUT
 - R.A. - REAR ABUTMENT
 - F.A. - FORWARD ABUTMENT
 - TYP. - TYPICAL

- PROPOSED WORK:**
1. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINT COLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE
 2. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE FEDERAL COLOR NO. 27778 NEUTRAL
 4. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80. (SEE TRAFFIC CONTROL PLANS)

UTILITY DISPOSITION
THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

EXISTING STRUCTURE	
TYPE:	CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	58'9"±, 83'10"±, 83'10"±, 58'9"± c/o BRGS.
ROADWAY:	76'-11"± f/f BARRIERS
SKEW:	13°28'45" L.F.
LOADING:	HS20-44 (CLASS II) & ALT. MILITARY
APPROACH SLABS:	AS-1-81 (25' LONG)
WEARING SURFACE:	1" MONOLITHIC CONCRETE
ALIGNMENT:	TANGENT.
SUPERELEVATION:	NONE



PROPOSED WORK:

1. REPLACE VANDAL PROTECTION FENCE CONFORMING TO PS-2 AS SHOWN ON STD. DWG. VPF-I-90 (BOTH SIDES).
2. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINTCOLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
3. SOUND, MARK, AND PATCH SUBSTRUCTURE USING ITEM 519 OR SS843.
4. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE THE FEDERAL COLOR NO. 27778 NEUTRAL.
5. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).

UTILITY DISPOSITION

THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

NOTES:

* EXISTING FENCE POSTS ARE SPACED AT 8'-0"±

SEE STD. DWG. VPF-I-90 FOR ADDITIONAL FENCE DETAILS

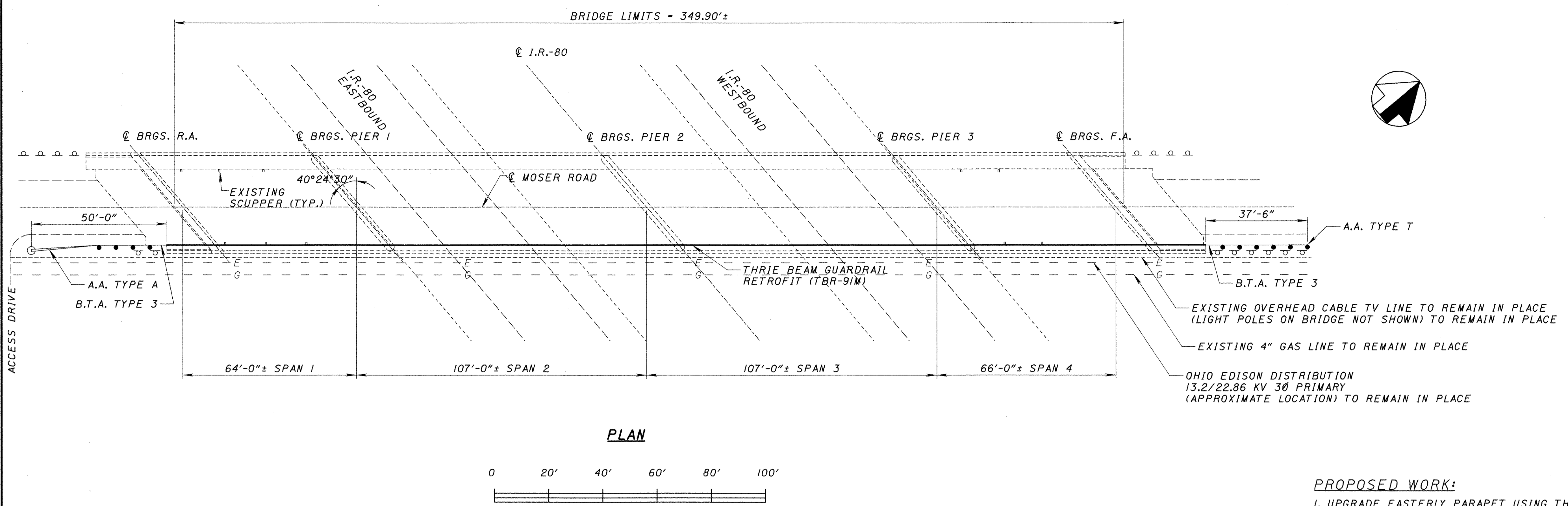
LEGEND:

- BRGS. = BEARINGS
- R.A. = REAR ABUTMENT
- F.A. = FORWARD ABUTMENT
- TYP. = TYPICAL

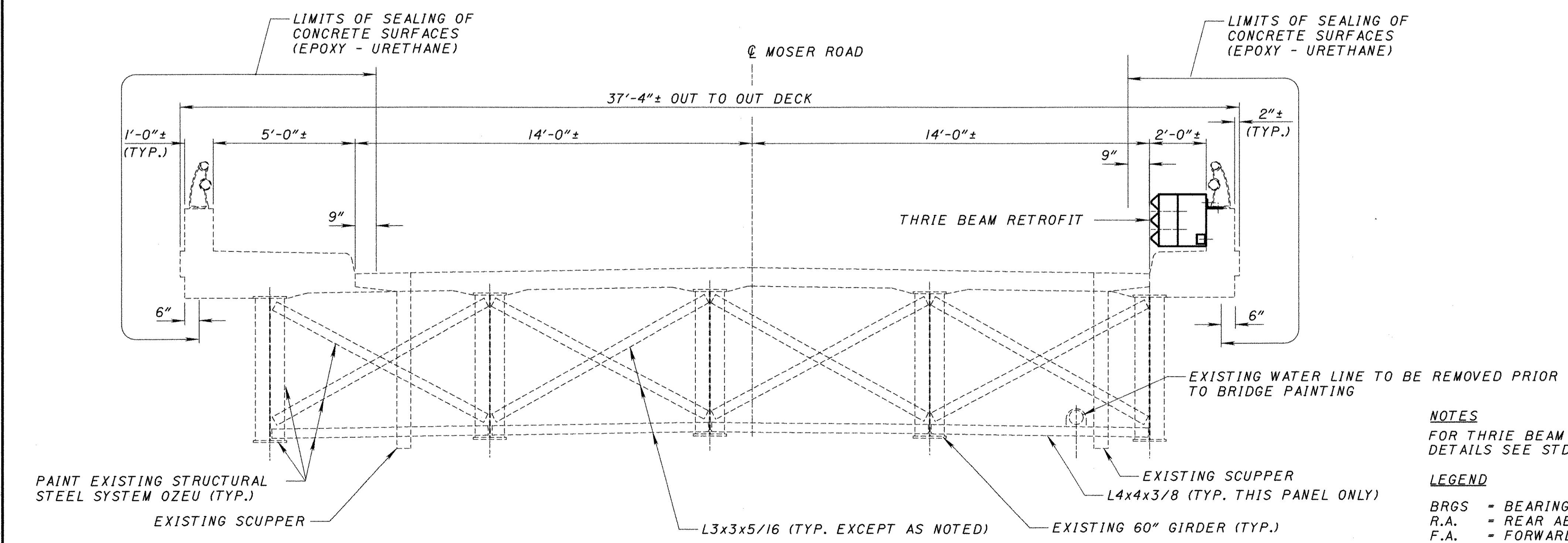
EXISTING STRUCTURE	
TYPE:	CONTINUOUS WELDED PLATE GIRDERS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	43'±, 92'±, 111'-6"±, 45'-6"± c/c BEARINGS
WIDTH OF WALKWAY:	8'-0"± f/f CURBS
SKEW:	NONE
LOADING:	85 LB/SF UNIFORM LIVE AND DEAD LOAD
APPROACH SLABS:	NONE
WEARING SURFACE:	1/2" MONOLITHIC CONCRETE
ALIGNMENT:	TANGENT
SUPERELEVATION:	NONE

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DATE	STRUCTURE FILE NUMBER
REVISED	7803516
DRAWN	CDC
DESIGNED	SCT
STRUCTURE PLAN & TRANSVERSE SECTION	
BRIDGE NO. TRU-80-0247	
UNDER PEDESTRIAN STRUCTURE	
TRU-80-9.08	
5	18
57	
70	



- PROPOSED WORK:**
1. UPGRADE EASTERLY PARAPET USING THRIE BEAM INSTALLATION.
 2. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINTCOLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
 3. SOUND, MARK, AND PATCH SUBSTRUCTURE USING ITEM 519 OR SS843.
 4. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE FEDERAL COLOR NO. 27778 NEUTRAL
 5. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).
- UTILITY COORDINATION**
THE EXISTING WATER LINE IS TO BE REMOVED BY THE OWNER PRIOR TO BRIDGE PAINTING.

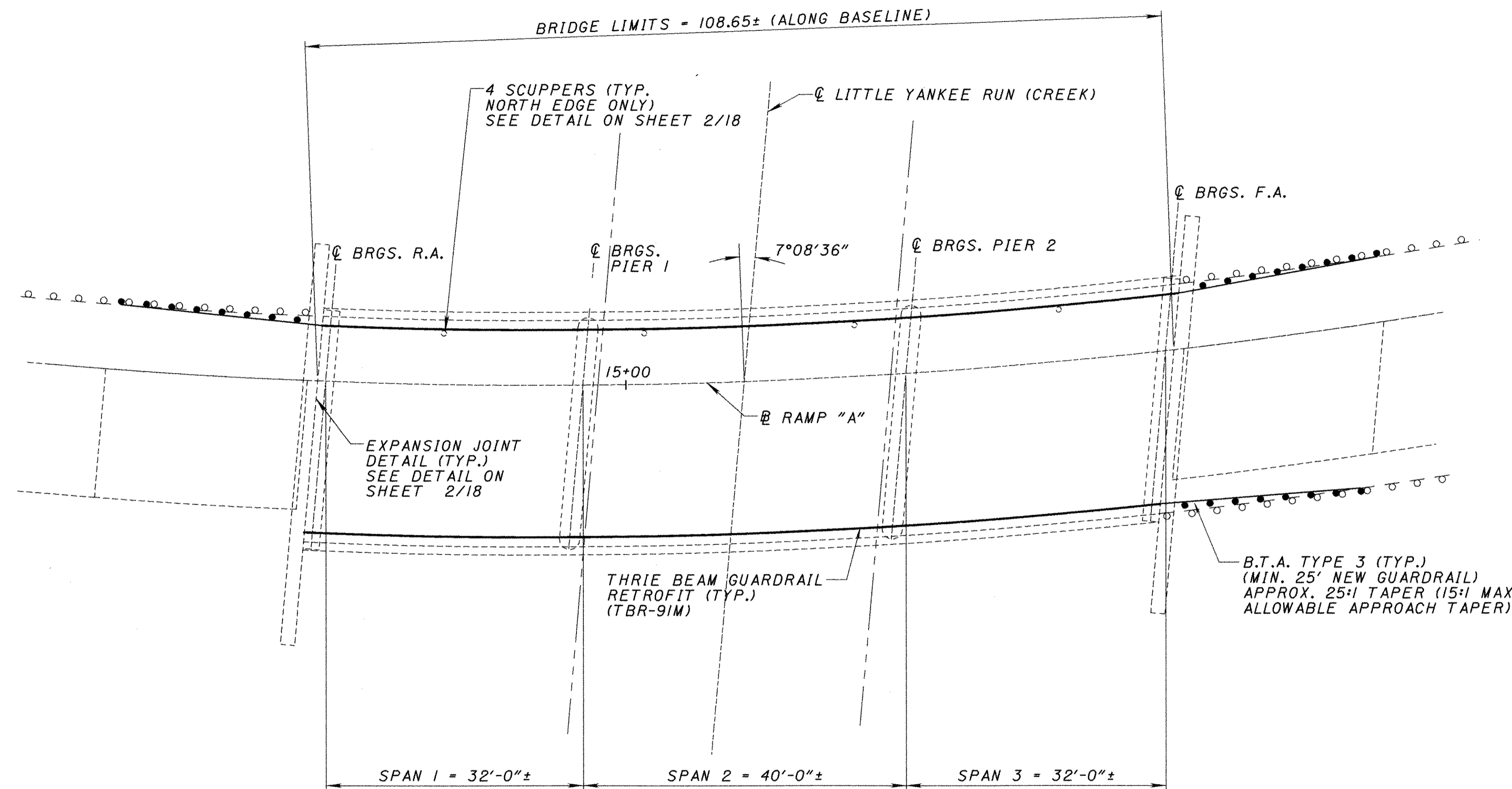
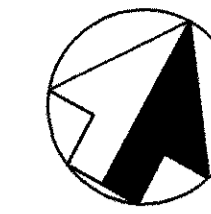


NOTES
FOR THRIE BEAM BRIDGE RAILING DETAILS SEE STD. DWG. TBR-91M.

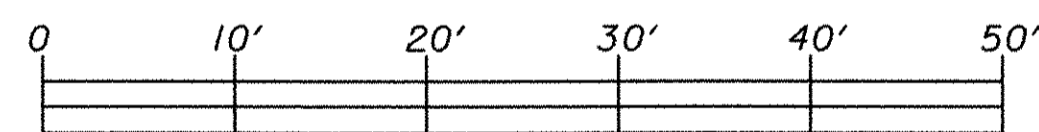
LEGEND
BRGS = BEARINGS
R.A. = REAR ABUTMENT
F.A. = FORWARD ABUTMENT
TYP. = TYPICAL
A.A. = ANCHOR ASSEMBLY
B.T.A. = BRIDGE TERMINAL ASSEMBLY

EXISTING STRUCTURE	
TYPE:	CONTINUOUS STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	64'±, 107'±, 107'±, 66'± c/c BRGS.
ROADWAY:	28'-0"± f/f CURBS
SKEW:	40°24'30" R.F.
LOADING:	CF-130 (57)
APPROACH SLABS:	AS-1-54 (20' LONG)
ALIGNMENT:	TANGENT
SUPERELEVATION:	NONE

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PLAN



PROPOSED WORK:

1. REMOVE EXISTING 1 1/4" LATEX CONCRETE OVERLAY AND REPLACE THE OVERLAY WITH 2 3/4" MINIMUM MSMC OVERLAY PER SUPPLEMENTAL SPECIFICATION 892. EXISTING ASPHALT CONCRETE OVERLAY SHALL BE REMOVED USING CONVENTIONAL SCARIFYING EQUIPMENT AS PER SUPPLEMENTAL SPECIFICATION 847. PERFORM CONSTRUCTION UNDER THE GUIDANCE OF THE SUPPLEMENTAL SPECIFICATION 848 - BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO-DEMOLITION.
2. UPGRADE PARAPETS USING THREE BEAM INSTALLATION.
3. PROVIDE FOR ELASTOMERIC STRIP SEAL JOINTS AT EACH END OF THE STRUCTURE. THIS INCLUDES MODIFICATION OR REMOVAL OF THE EXISTING RISER.
4. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINT COLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
5. SOUND, MARK, AND PATCH SUBSTRUCTURE USING ITEM 519 OR SS843.
6. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE FEDERAL COLOR NO. 27778 NEUTRAL.
7. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).

UTILITY DISPOSITION

THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

LEGEND:

- TYP. = TYPICAL
- R.A. = REAR ABUTMENT
- F.A. = FORWARD ABUTMENT
- BRGS. = BEARINGS
- B.T.A. = BRIDGE TERMINAL ASSEMBLY
- MIN. = MINIMUM

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 32'±, 40'±, 32'± c/c BRGS.

ROADWAY: 25'-8"± f/f CURBS

SKWEW: 7°08'36" L.F. TO CHORD

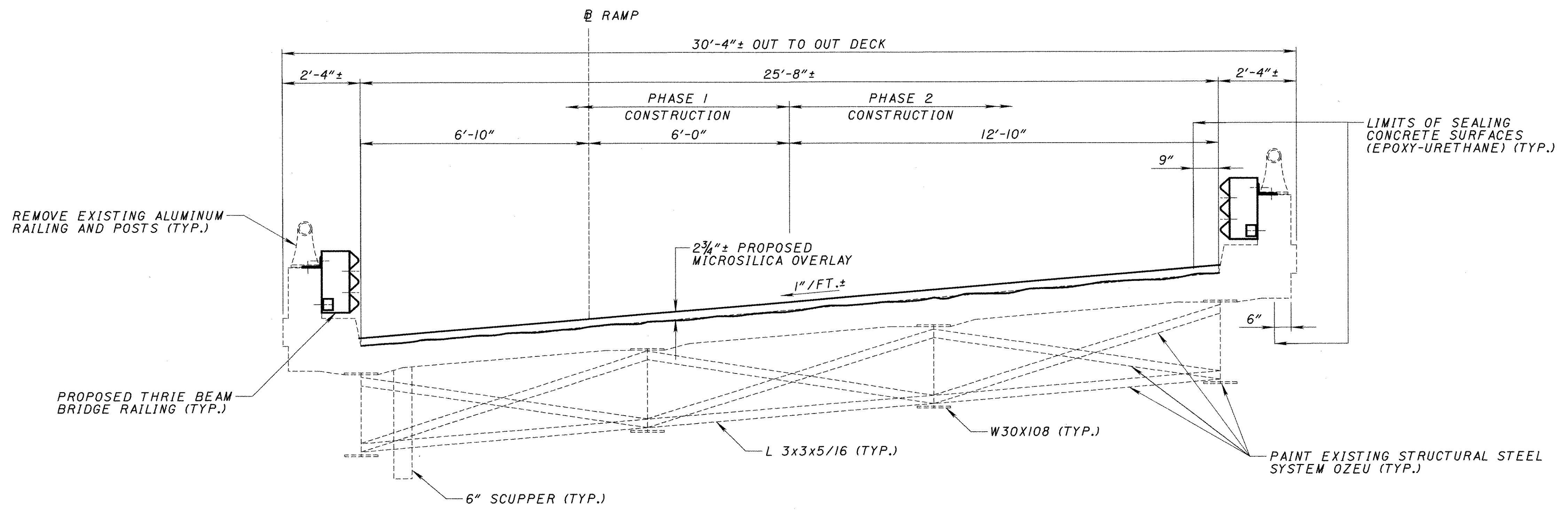
LOADING: CF-2000 (57)

APPROACH SLABS: AS-1-54 (25' LONG)

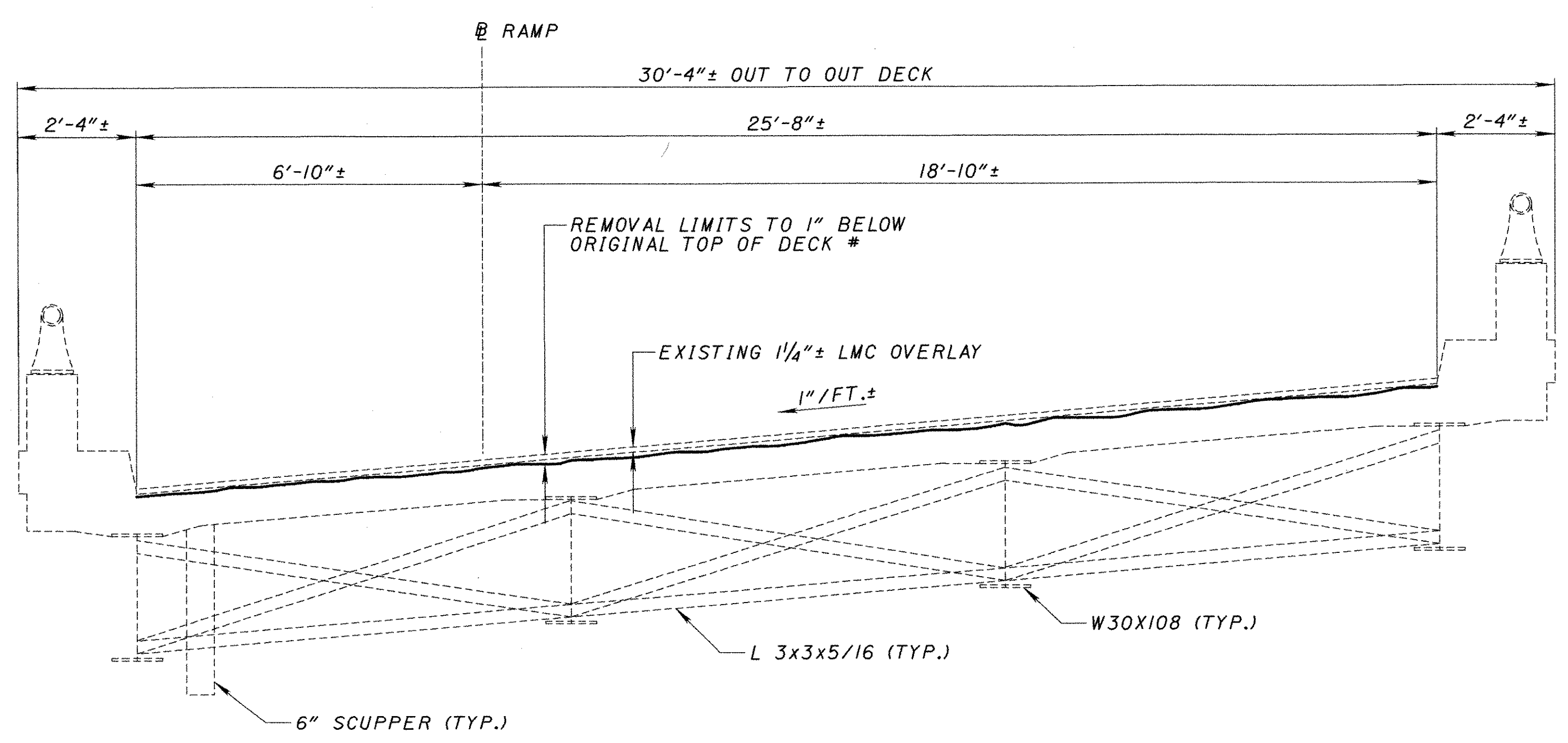
WEARING SURFACE: 1" LATEX & ASPHALT OVERLAY

ALIGNMENT: 8°11'06" CURVE LT.

SUPERELEVATION: 1" PER FOOT



PROPOSED TRANSVERSE SECTION



EXISTING TRANSVERSE SECTION

NOTES

FOR THRIE BEAM BRIDGE RAILING DETAILS SEE STD. DWG. TBR-91M

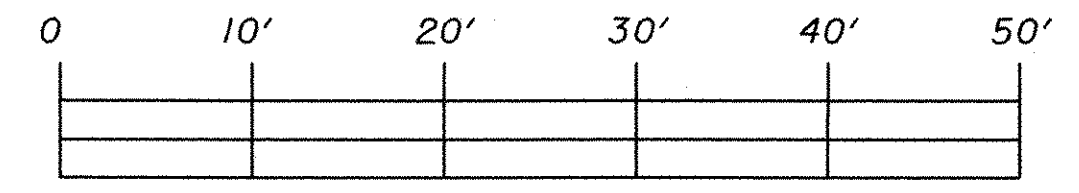
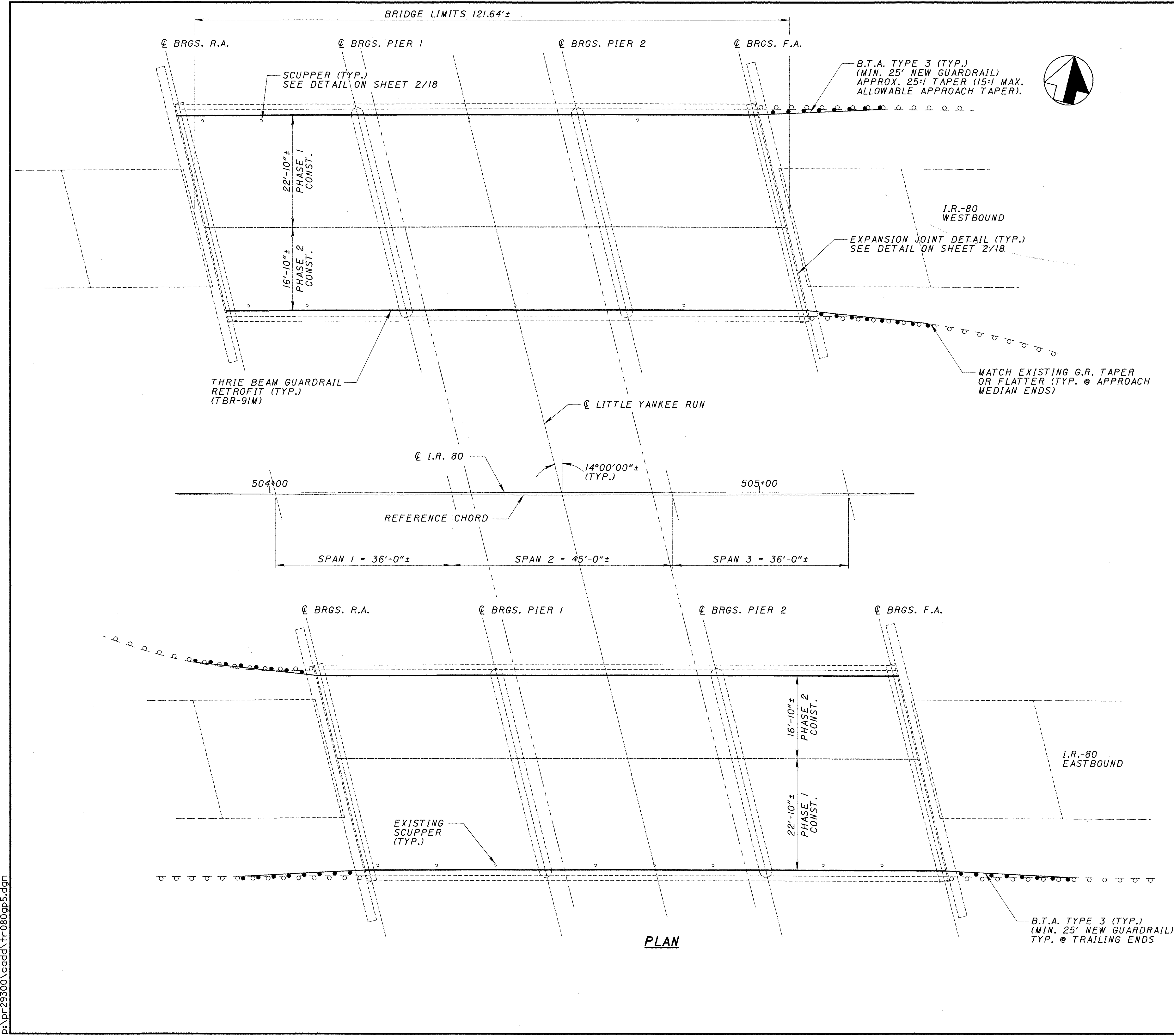
BY MILLING AND HYDRO-DEMOLITION

LEGEND

TYP. - TYPICAL

LMC - LATEX MODIFIED CONCRETE

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LEGEND

- TYP. = TYPICAL
- BRGS. = BEARINGS
- R.A. = REAR ABUTMENT
- F.A. = FORWARD ABUTMENT
- MSMC = MICRO-SILICA MODIFIED CONCRETE
- CONST. = CONSTRUCTION
- B.T.A. = BRIDGE TERMINAL ASSEMBLY
- MIN. = MINIMUM

PROPOSED WORK:

1. REMOVE EXISTING ASPHALT CONCRETE AND 1 1/4" LATEX CONCRETE OVERLAY AND REPLACE THE OVERLAY WITH 3/4"± MSMC OVERLAY PER SUPPLEMENTAL SPECIFICATION 892. EXISTING ASPHALT CONCRETE OVERLAY SHALL BE REMOVED USING CONVENTIONAL SCARIFYING EQUIPMENT AS PER SUPPLEMENTAL SPECIFICATION 847. PERFORM CONSTRUCTION UNDER THE GUIDANCE OF THE SUPPLEMENTAL SPECIFICATION 848 - BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO-DEMOLITION.
2. UPGRADE PARAPETS USING THRIE BEAM INSTALLATION.
3. PROVIDE FOR ELASTOMERIC STRIP SEAL JOINTS AT EACH END OF THE STRUCTURE. THIS INCLUDES MODIFICATION OR REMOVAL OF THE EXISTING RISER.
4. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINTCOLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
5. SOUND, MARK, AND PATCH SUBSTRUCTURE USING ITEM 519 OR SS843.
6. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE FEDERAL COLOR NO. 27778 NEUTRAL.
7. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).

UTILITY DISPOSITION

THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

EXISTING STRUCTURE	
TYPE:	CONTINUOUS ROLLED STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	36'±, 45'±, 36'± c/c BRGS.
ROADWAY:	39'-8"± f/f CURBS
SKIEW:	14°00'00" R.F.
LOADING:	CF2000 (57)
APPROACH SLABS:	AS-1-54 (25' LONG)
WEARING SURFACE:	ASPHALT CONCRETE
ALIGNMENT:	0°-28' CURVE, RT.
SUPERELEVATION:	3/16 INCH/FOOT

BURGESS & NIPLE

DATE	REVISED	DRAWN	DESIGNED	STRUCTURE FILE NUMBER
		JAA	JAA	7804296.7804261
			SCT	

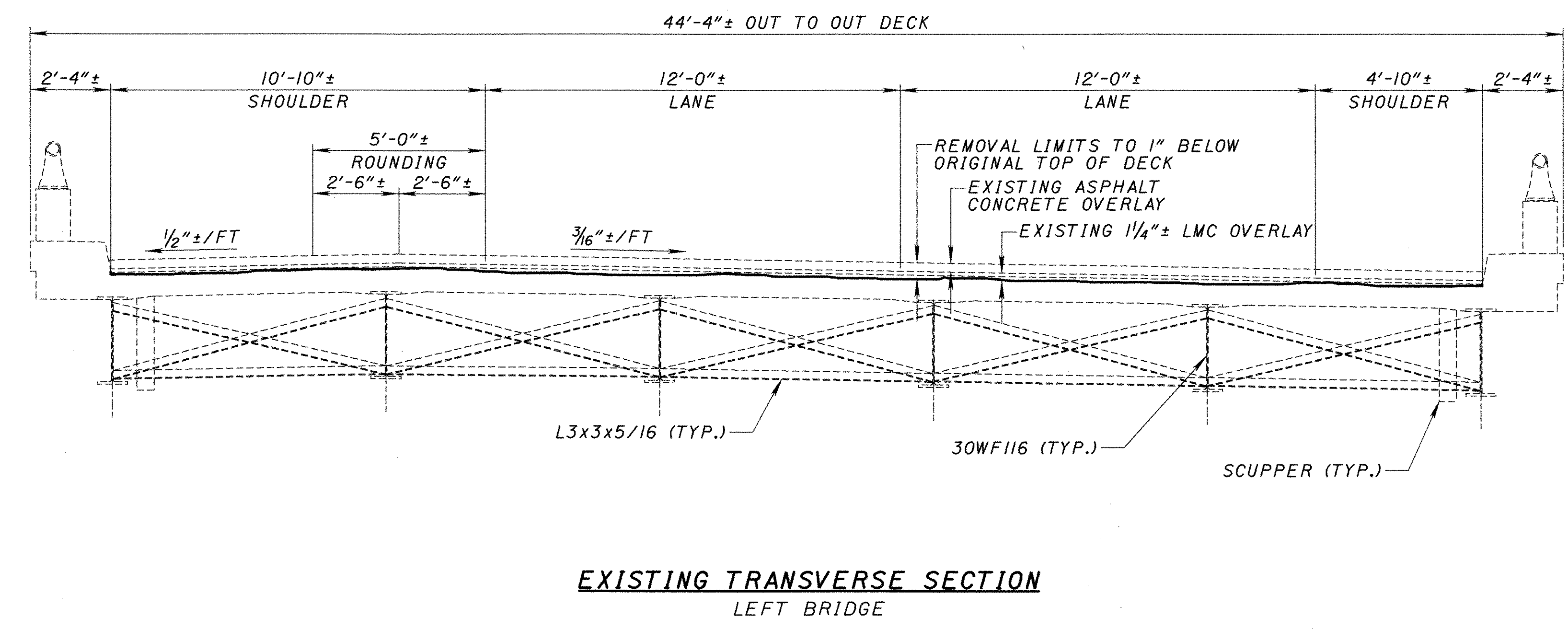
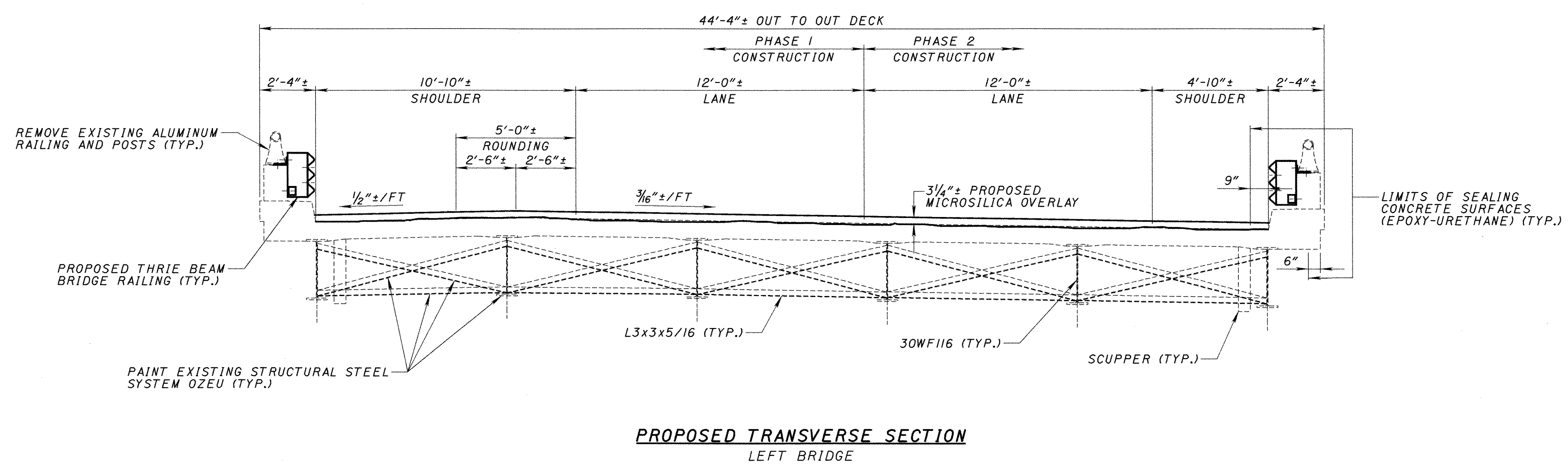
STRUCTURE PLAN

BRIDGE NO. TRU-80-0942L&R
I.R.-80 OVER LITTLE YANKEE RUN (CREEK)

TRU-80-9.08

9 / 18
61 / 70

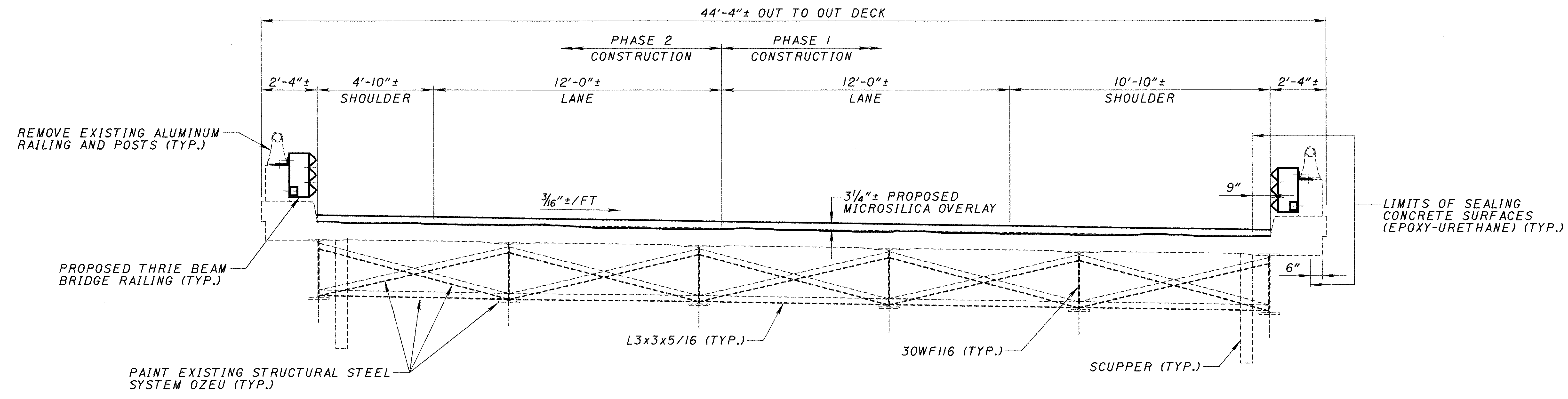
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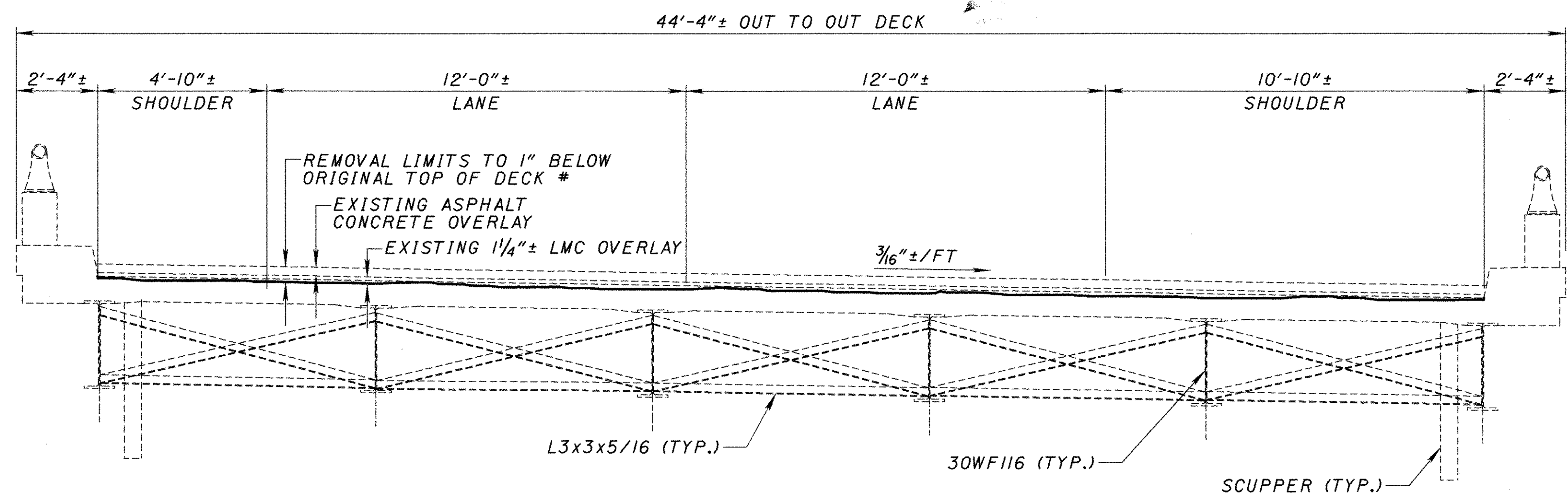
NOTES
FOR THRIE BEAM BRIDGE RAILING DETAILS
SEE STD. DWG. TBR-91M
* BY MILLING AND HYDRO-DEMOLITION

LEGEND
TYP. = TYPICAL
LMC = LATEX MODIFIED CONCRETE

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PROPOSED TRANSVERSE SECTION
RIGHT BRIDGE

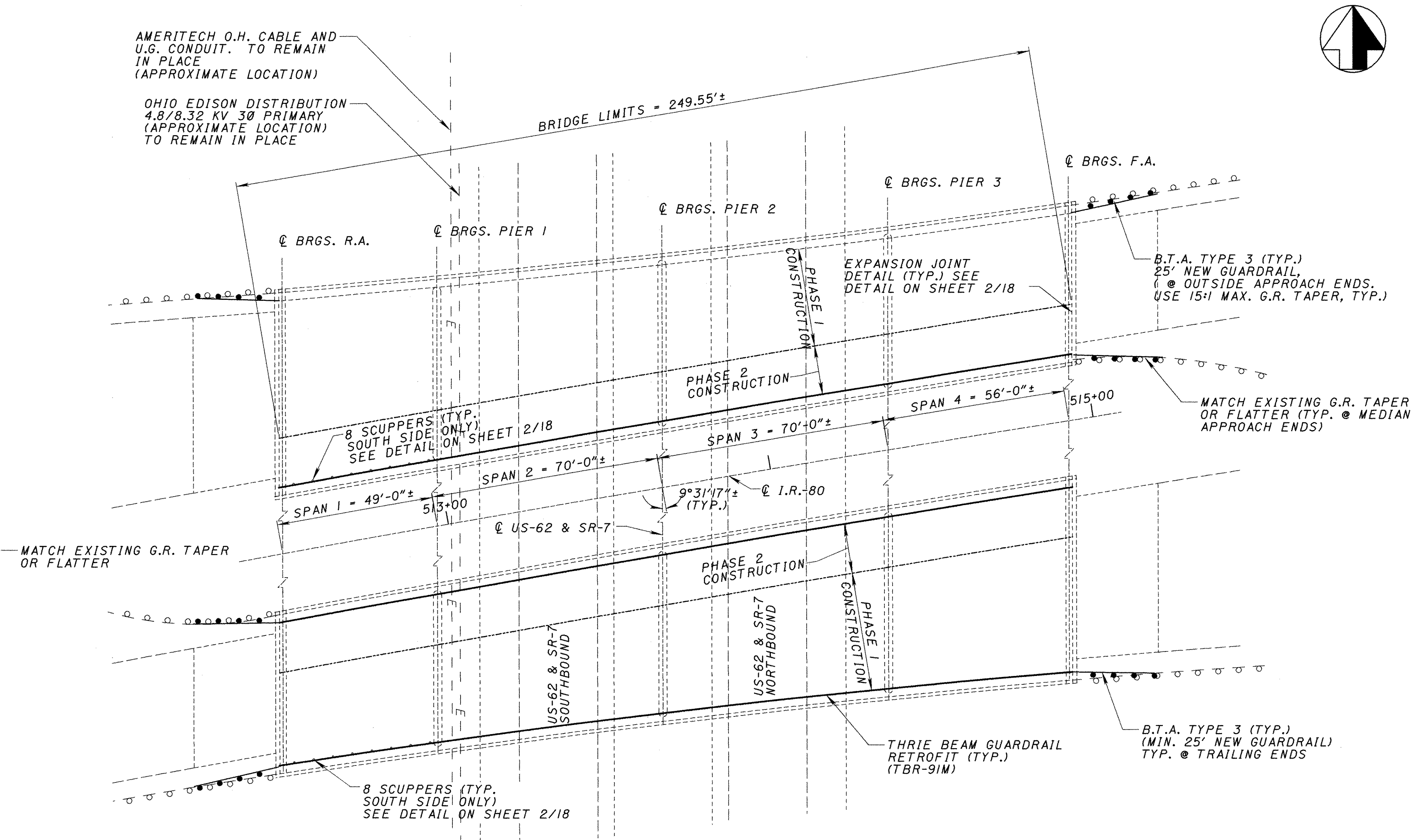


EXISTING TRANSVERSE SECTION
RIGHT BRIDGE

NOTES
FOR THRIE BEAM BRIDGE RAILING DETAILS
SEE STD. DWG. TBR-91M
* BY MILLING AND HYDRO-DEMOLITION

LEGEND
TYP. = TYPICAL
LMC = LATEX MODIFIED CONCRETE

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AMERITECH O.H. CABLE AND U.G. CONDUIT TO REMAIN IN PLACE (APPROXIMATE LOCATION)

OHIO EDISON DISTRIBUTION 4.8/8.32 KV 3Ø PRIMARY (APPROXIMATE LOCATION) TO REMAIN IN PLACE

PROPOSED WORK:

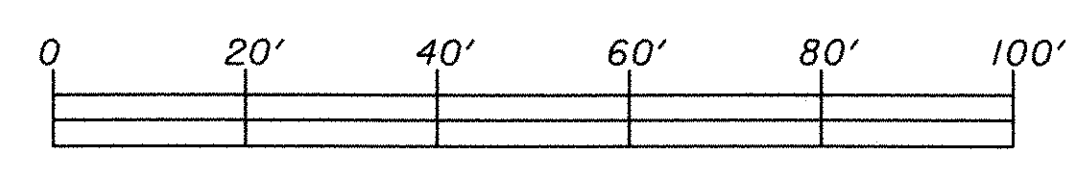
1. REMOVE EXISTING ASPHALT CONCRETE AND 1 1/4" LATEX CONCRETE OVERLAY AND REPLACE THE OVERLAY WITH 3/4"± MSMC OVERLAY PER SUPPLEMENTAL SPECIFICATION 892. EXISTING ASPHALT CONCRETE OVERLAY SHALL BE REMOVED USING CONVENTIONAL SCARIFYING EQUIPMENT AS PER SUPPLEMENTAL SPECIFICATION 847. PERFORM CONSTRUCTION UNDER THE GUIDANCE OF THE SUPPLEMENTAL SPECIFICATION 848 - BRIDGE DECK REPAIR AND OVERLAY WITH CONCRETE USING HYDRO-DEMOLITION.
2. UPGRADE PARAPETS USING THRIE BEAM INSTALLATION.
3. PROVIDE FOR ELASTOMERIC STRIP SEAL JOINTS AT EACH END OF THE STRUCTURE. THIS INCLUDES MODIFICATION OR REMOVAL OF THE EXISTING RISER.
4. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINTCOLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
5. SOUND, MARK, AND PATCH SUBSTRUCTURE USING ITEM 519 OR SS843.
6. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE FEDERAL COLOR NO. 27778 NEUTRAL.
7. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).

UTILITY DISPOSITION

THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

EXISTING STRUCTURES	
TYPE:	CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	49'±, 70'±, 70'±, 56'± c/c BRGS.
ROADWAY:	VARIES
SKEW:	9°31'17" L.F. TO CHORD
LOADING:	CF-2000 (57)
APPROACH SLABS:	AS-I-54 (25' LONG)
WEARING SURFACE:	ASPHALT CONCRETE
ALIGNMENT:	0°28' CURVE RT.
SUPERELEVATION:	3/16" / FT.

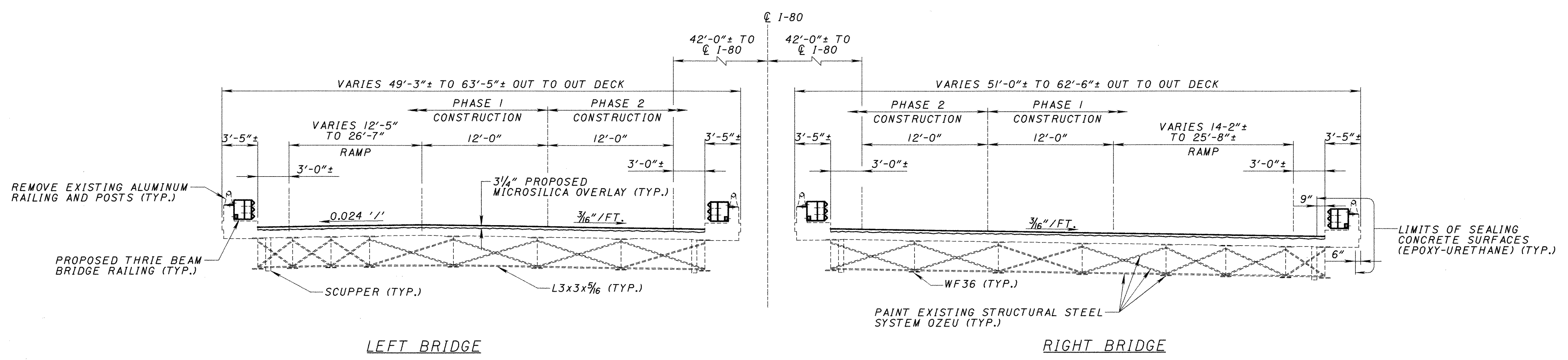
PLAN



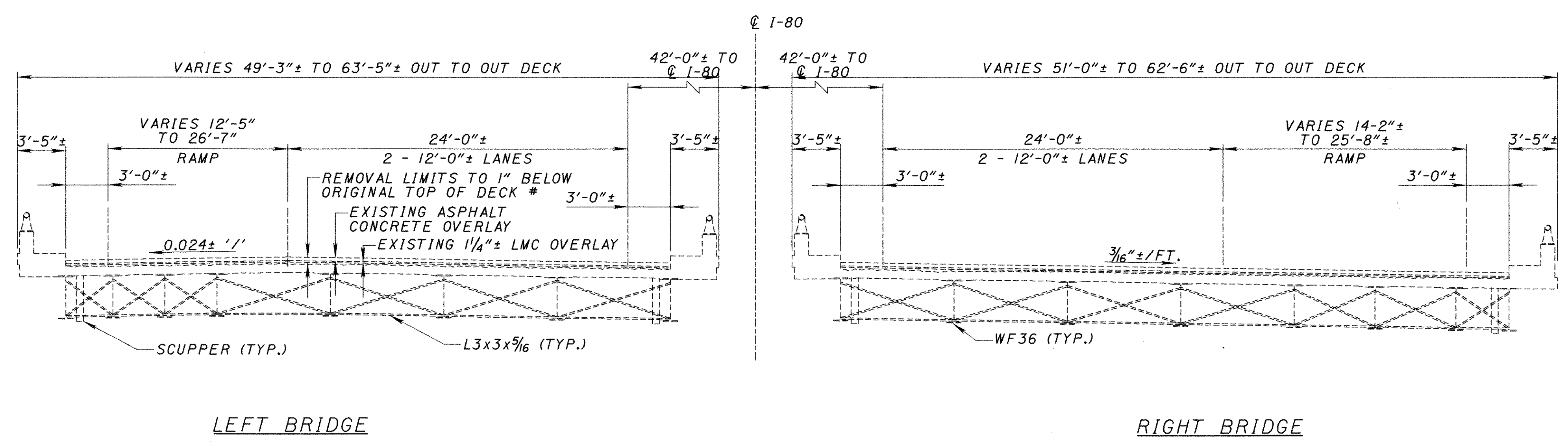
LEGEND

- TYP. = TYPICAL
- BRGS. = BEARINGS
- R.A. = REAR ABUTMENT
- F.A. = FORWARD ABUTMENT
- CONST. = CONSTRUCTION
- B.T.A. = BRIDGE TERMINAL ASSEMBLY
- MIN. = MINIMUM

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PROPOSED TRANSVERSE SECTION



EXISTING TRANSVERSE SECTION

NOTES

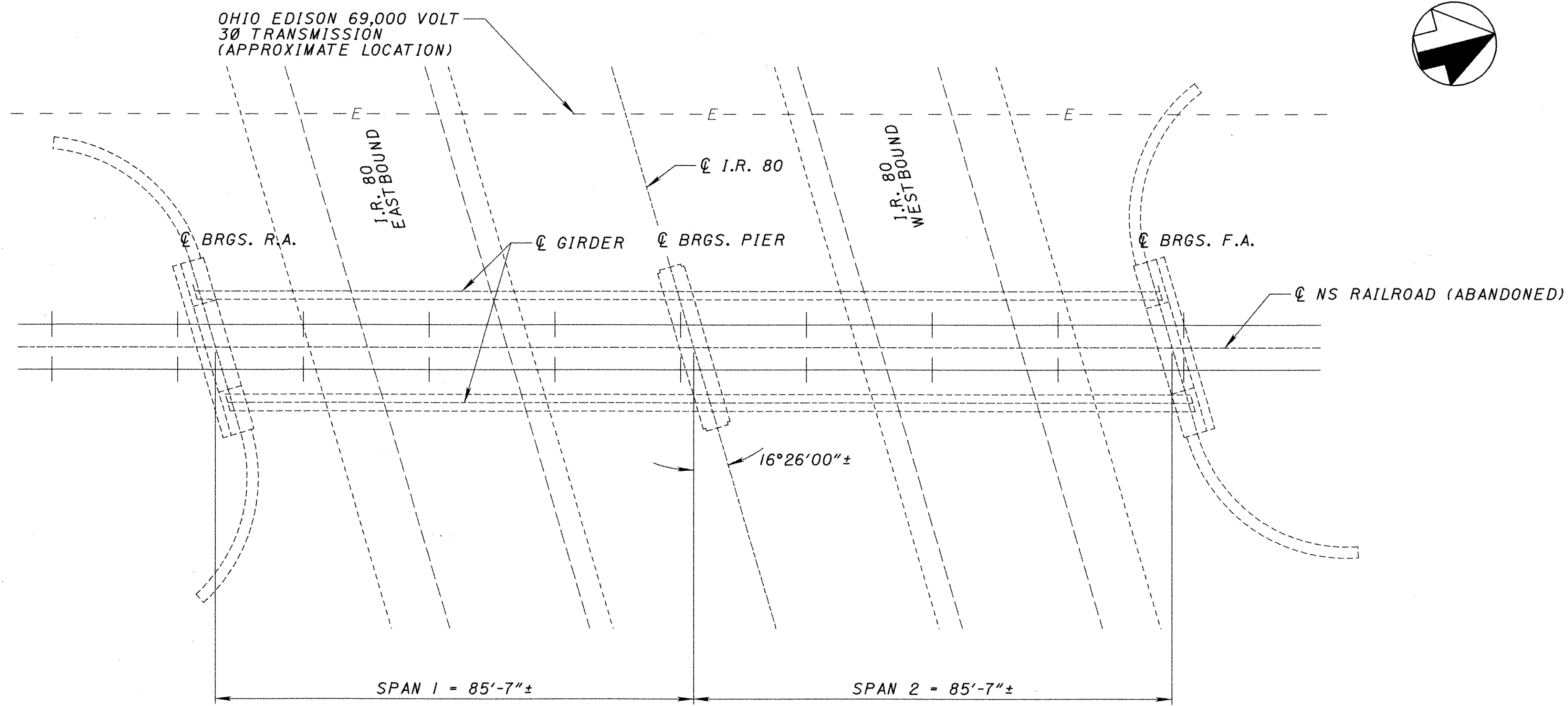
FOR THRIE BEAM BRIDGE RAILING DETAILS SEE STD. DWG. TBR-91M

* BY MILLING AND HYDRO-DEMOLITION

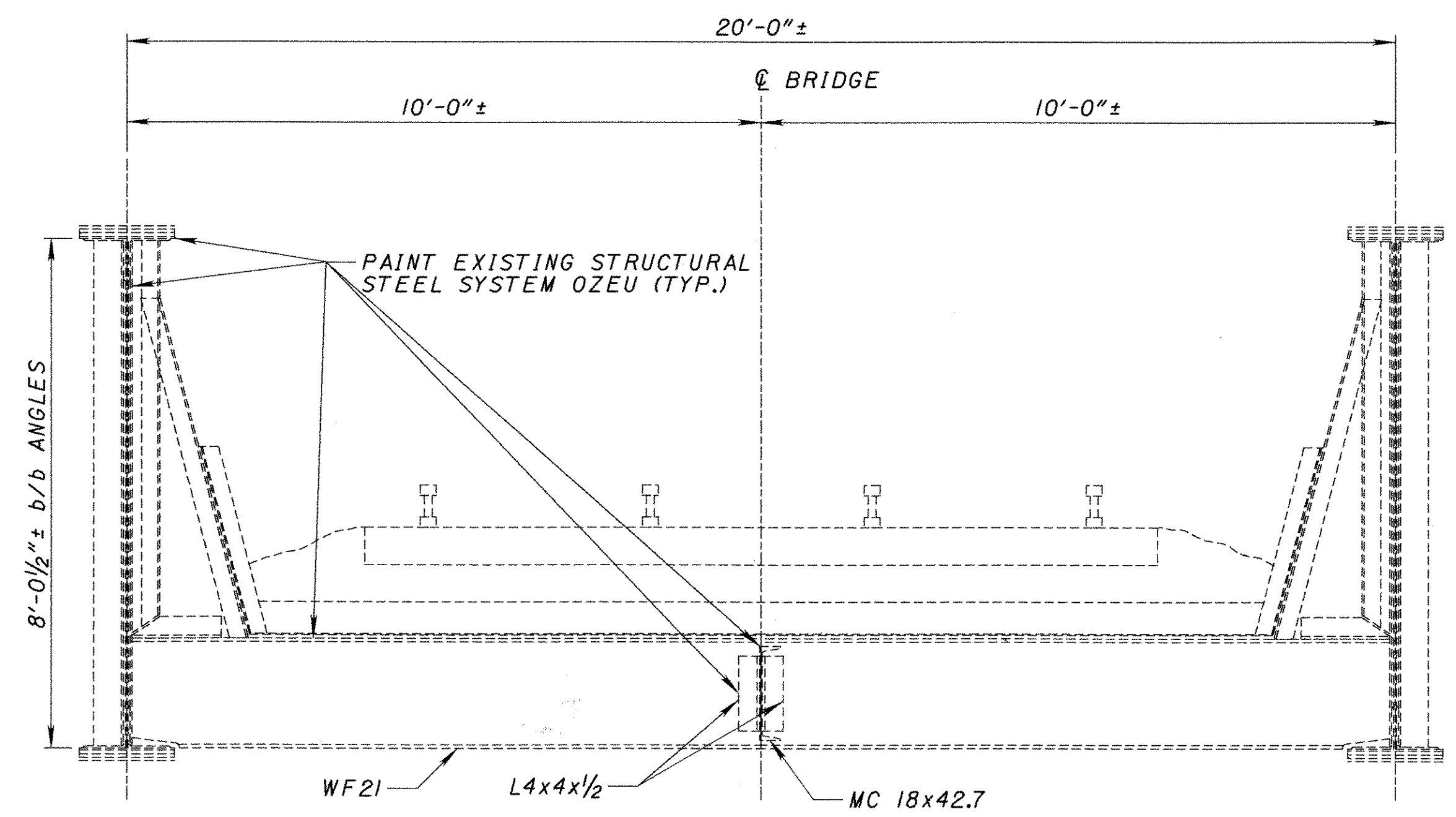
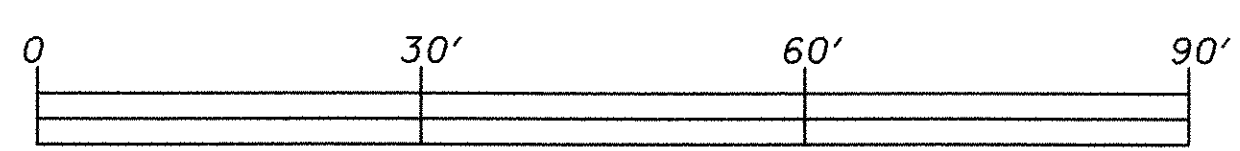
LEGEND

TYP. - TYPICAL

LMC - LATEX MODIFIED CONCRETE



PLAN



TRANSVERSE SECTION

- LEGEND:**
- TYP. = TYPICAL
 - R.A. = REAR ABUTMENT
 - F.A. = FORWARD ABUTMENT
 - BRGS. = BEARINGS
 - b/b = BACK TO BACK

PROPOSED WORK:

1. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINTCOLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
2. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).

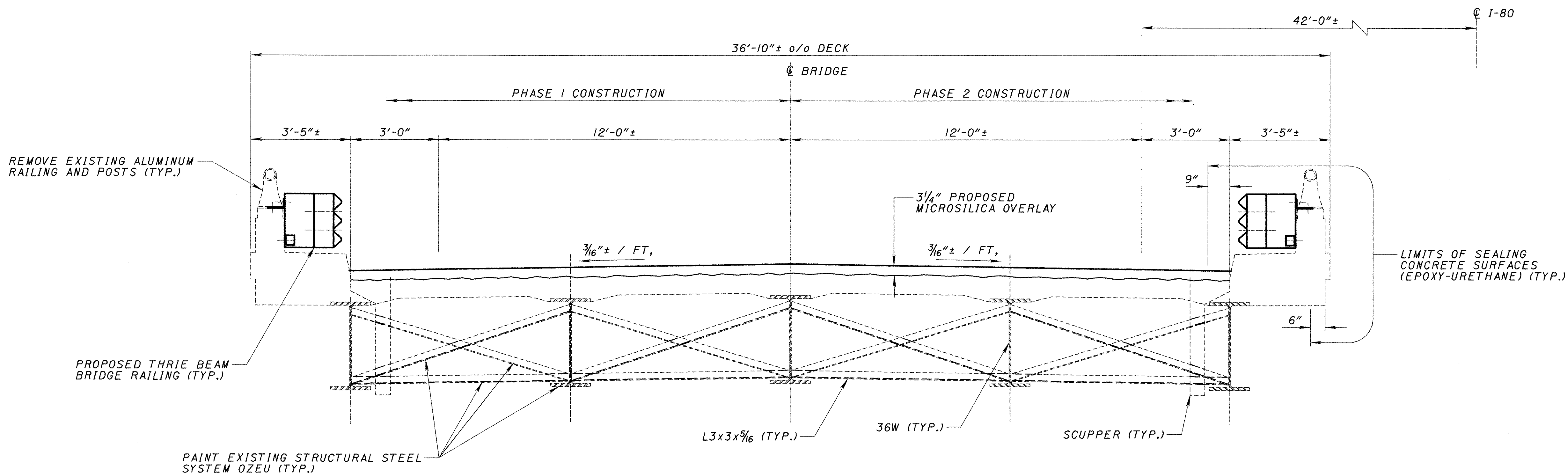
UTILITY DISPOSITION

THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

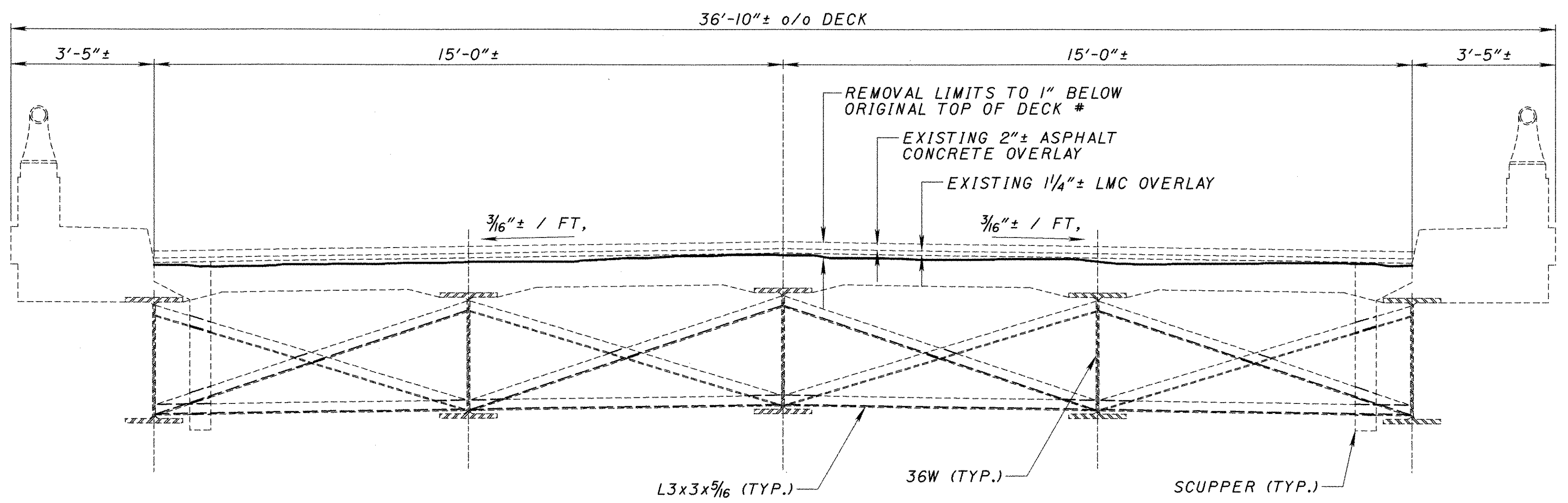
EXISTING STRUCTURE	
TYPE: CONTINUOUS TWO SPAN STEEL GIRDER WITH STEEL FLOOR BEAMS	
SPANS: 85'-7"±, 85'-7"± c/c BRGS.	
ROADWAY: 20'-0"± c/c GIRDERS	
SKEW: 16°26'00"	
LOADING: COOPER E-80	
APPROACH SLABS: NONE	
WEARING SURFACE: BALLAST	
ALIGNMENT: TANGENT	
SUPERELEVATION: NONE	

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BURGESS & NIPLE	
STRUCTURE PLAN	BRIDGE NO. TRU-80-1051 UNDER ABANDONED NS RAILROAD
TRU-80-9.08	14 / 18
66 70	



PROPOSED TRANSVERSE SECTION
LEFT BRIDGE SHOWN, RIGHT BRIDGE SIMILAR



EXISTING TRANSVERSE SECTION
LEFT BRIDGE AND RIGHT BRIDGE

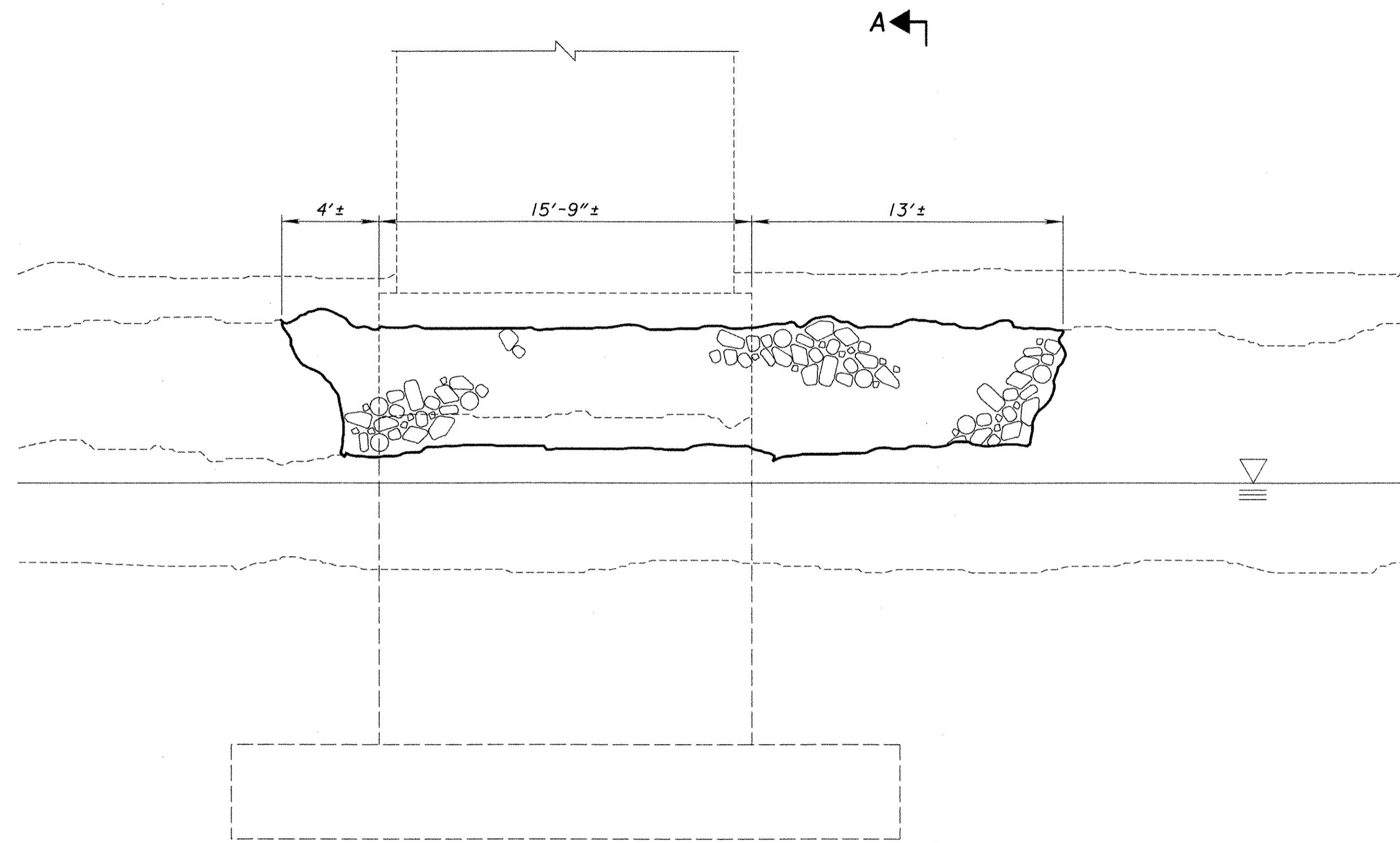
NOTES:
FOR THRIE BEAM BRIDGE RAILING DETAILS
SEE STD. DWG. TBR-91M
* BY MILLING AND HYDRO-DEMOLITION

LEGEND:
o/o = OUT TO OUT
TYP. = TYPICAL

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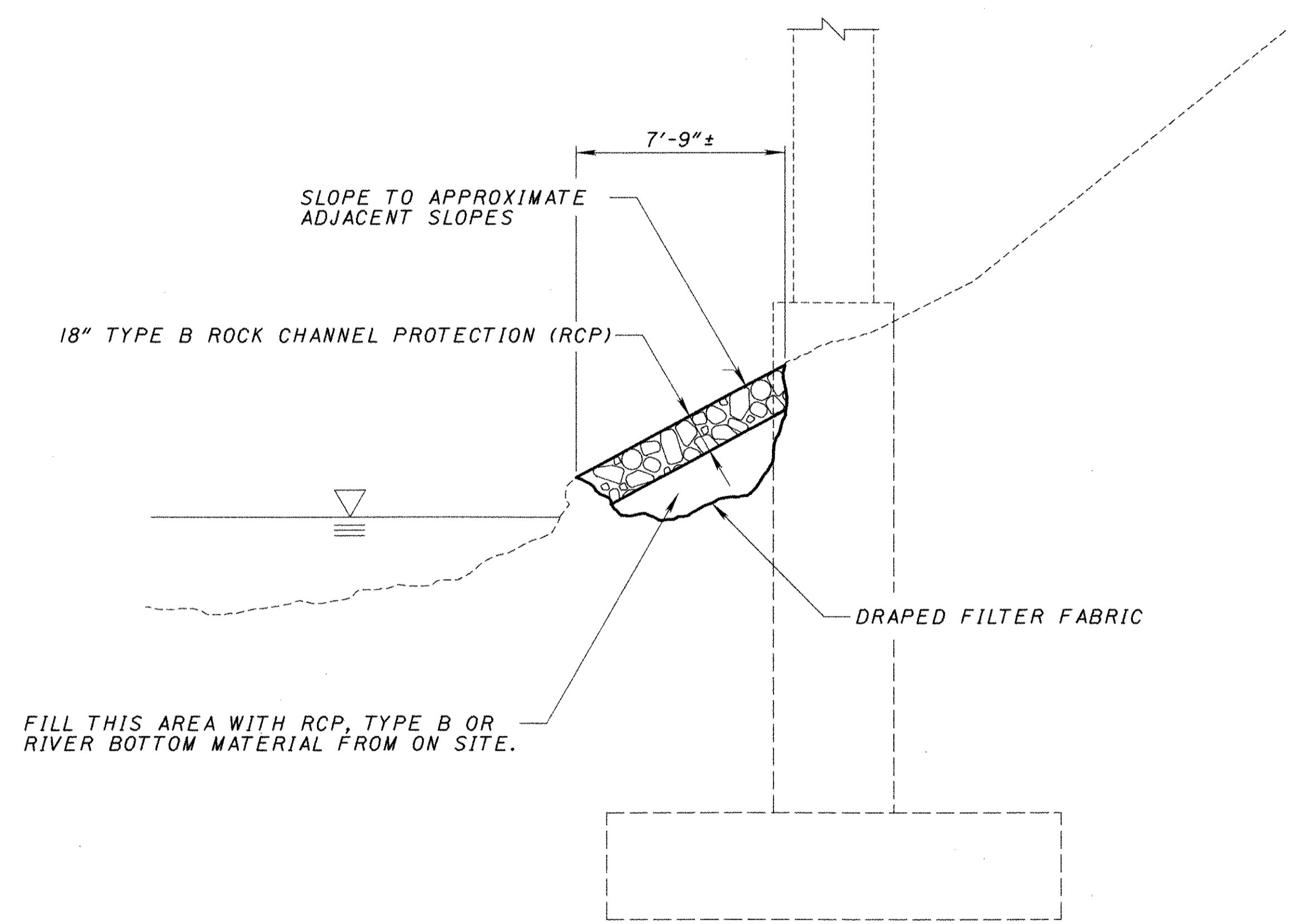
DESIGNED	MKB	CHECKED	SCT
DRAWN	MKB	REVISED	
REVIEWED		DATE	
STRUCTURE FILE NUMBER		78044747804504	

TRANSVERSE SECTIONS
BRIDGE NO. TRU-80-1086L&R
OVER LITTLE YANKEE RUN AND NORFOLK SOUTHERN RAILROAD



ELEVATION

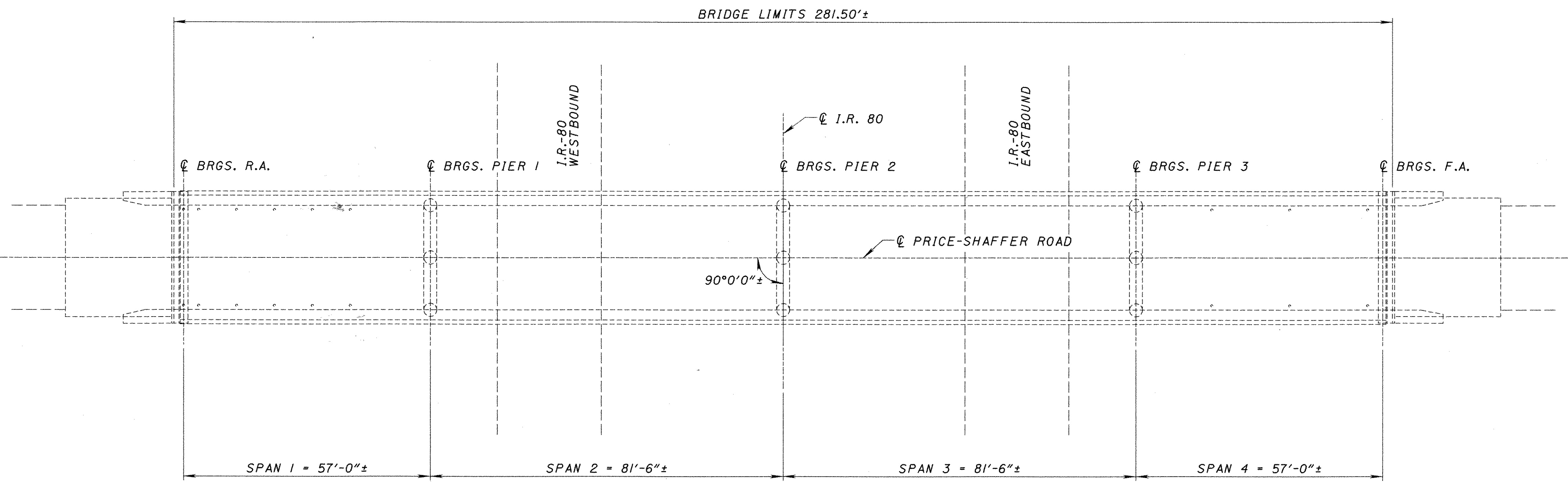
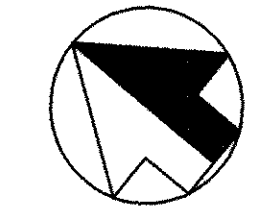
BRIDGE NO. 1086 L
PIER 2 EAST SIDE OF LITTLE YANKEE RUN



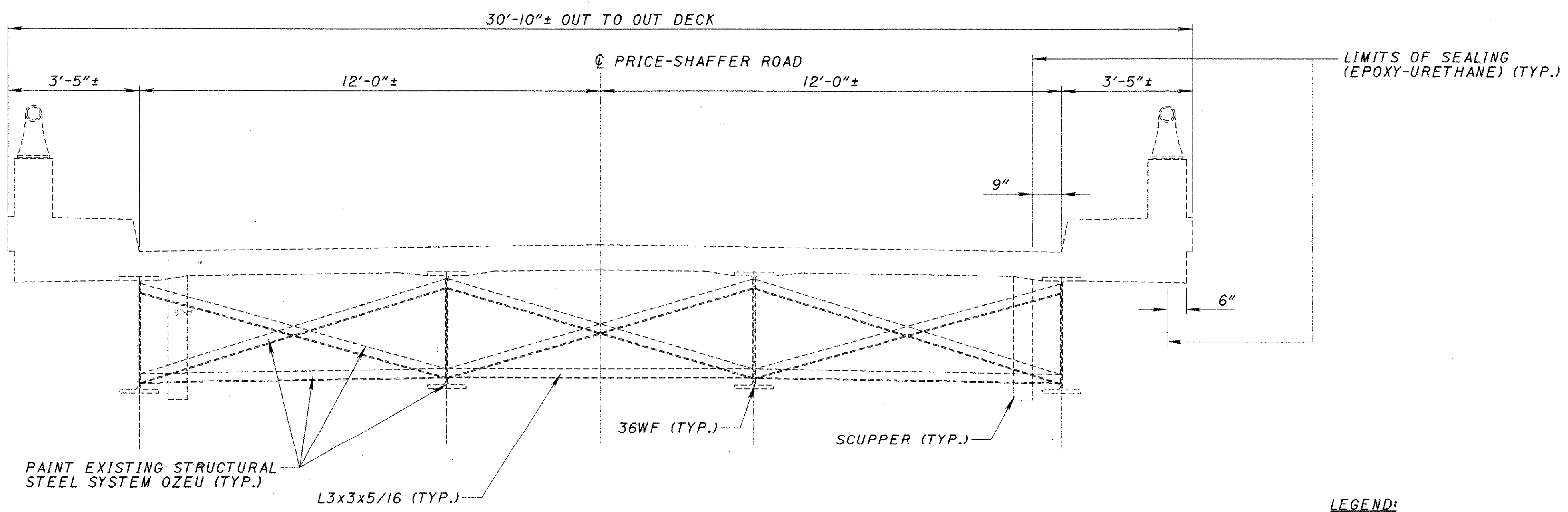
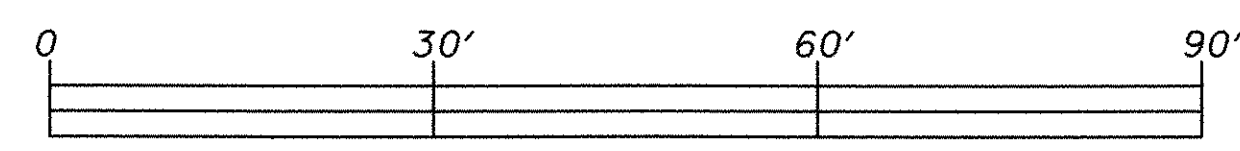
SECTION A-A

		DATE	REVIEWED	DESIGNED	DRAWN
		STRUCTURE FILE NUMBER 780447.4.7804504		MKB	MKB
PIER SLOPE REPAIR DETAILS TRU-80-1086 L OVER LITTLE YANKEE RUN		CHECKED	REVISED		
		ENF			
TRU-80-9.08					
17 / 18					
69 70					

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PLAN



TRANSVERSE SECTION

LEGEND:
 TYP. = TYPICAL
 R.A. = REAR ABUTMENT
 F.A. = FORWARD ABUTMENT
 BRGS. = BEARINGS

PROPOSED WORK:

1. PAINT EXISTING STRUCTURAL STEEL WITH SYSTEM OZEU PER SUPPLEMENTAL SPECIFICATION 885. THE PAINTCOLOR SHALL BE FEDERAL COLOR NO. 25526 BLUE.
2. SEAL CONCRETE SURFACES INCLUDING PARAPETS, WINGWALLS, ABUTMENTS AND PIERS USING EPOXY-URETHANE SEALER. THE COLOR OF THE SEALER SHALL BE FEDERAL COLOR NO. 27778 NEUTRAL.
3. INSTALL NEW STRUCTURE IDENTIFICATION SIGNS ON MAINLINE I-80 (SEE TRAFFIC CONTROL PLANS).

UTILITY DISPOSITION

THE PROPOSED WORK REQUIRES NO UTILITY INVOLVEMENT.

EXISTING STRUCTURE	
TYPE:	CONTINUOUS ROLLED STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	57'±, 81'-6"±, 81'-6"±, 57'± c/c BRGS.
ROADWAY:	24'-0"± f/f CURBS
SKEW:	0°00'00"
LOADING:	CF130 (57)
APPROACH SLABS:	AS-1-54 (25' LONG)
ALIGNMENT:	TANGENT
SUPERELEVATION:	NONE

BURGESS & NIPLE

DRAWN	JAA	REVIEWED	DATE	STRUCTURE FILE NUMBER
DESIGNED	JAA	CHECKED	SCT	7804539

STRUCTURE PLAN AND TRANSVERSE SECTION

BRIDGE NO. TRU-80-1185
UNDER PRICE-SHAFFER ROAD

TRU-80-9.08

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