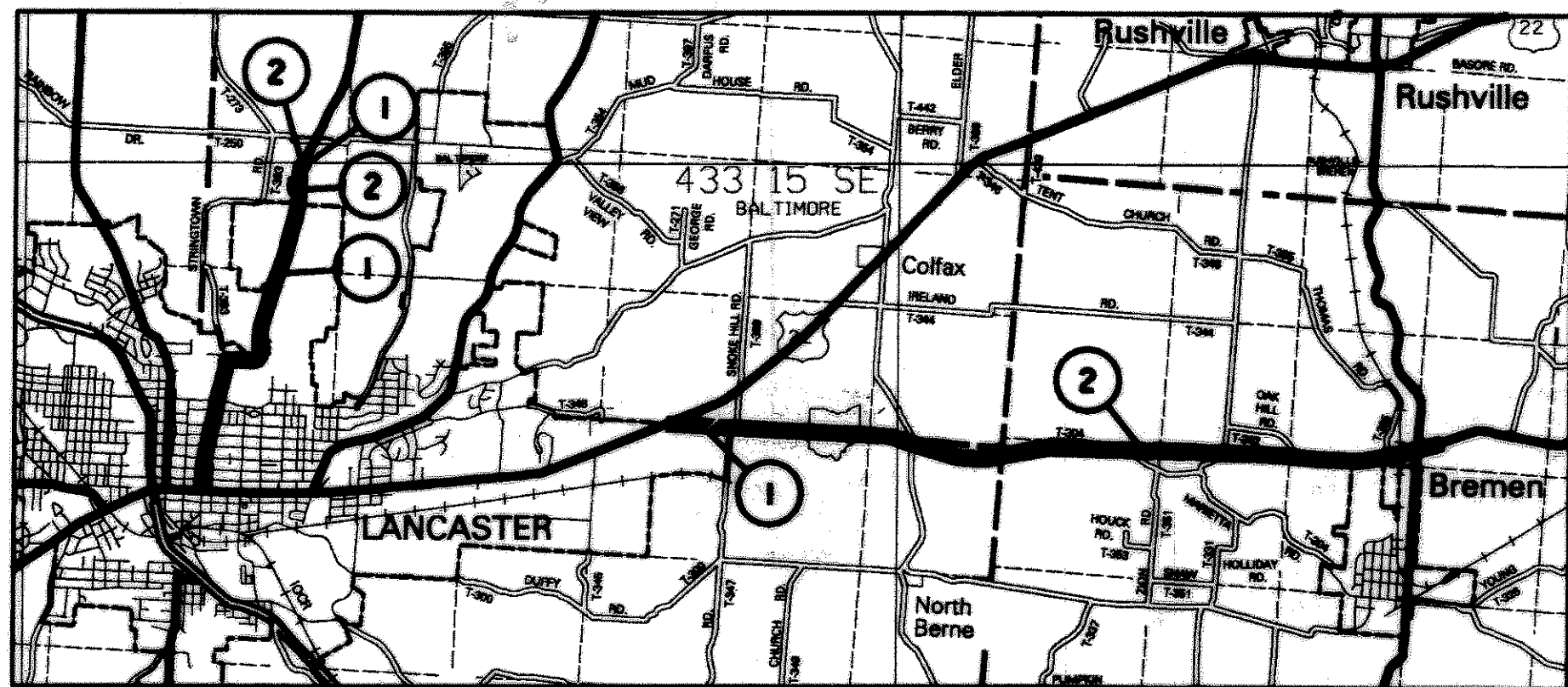
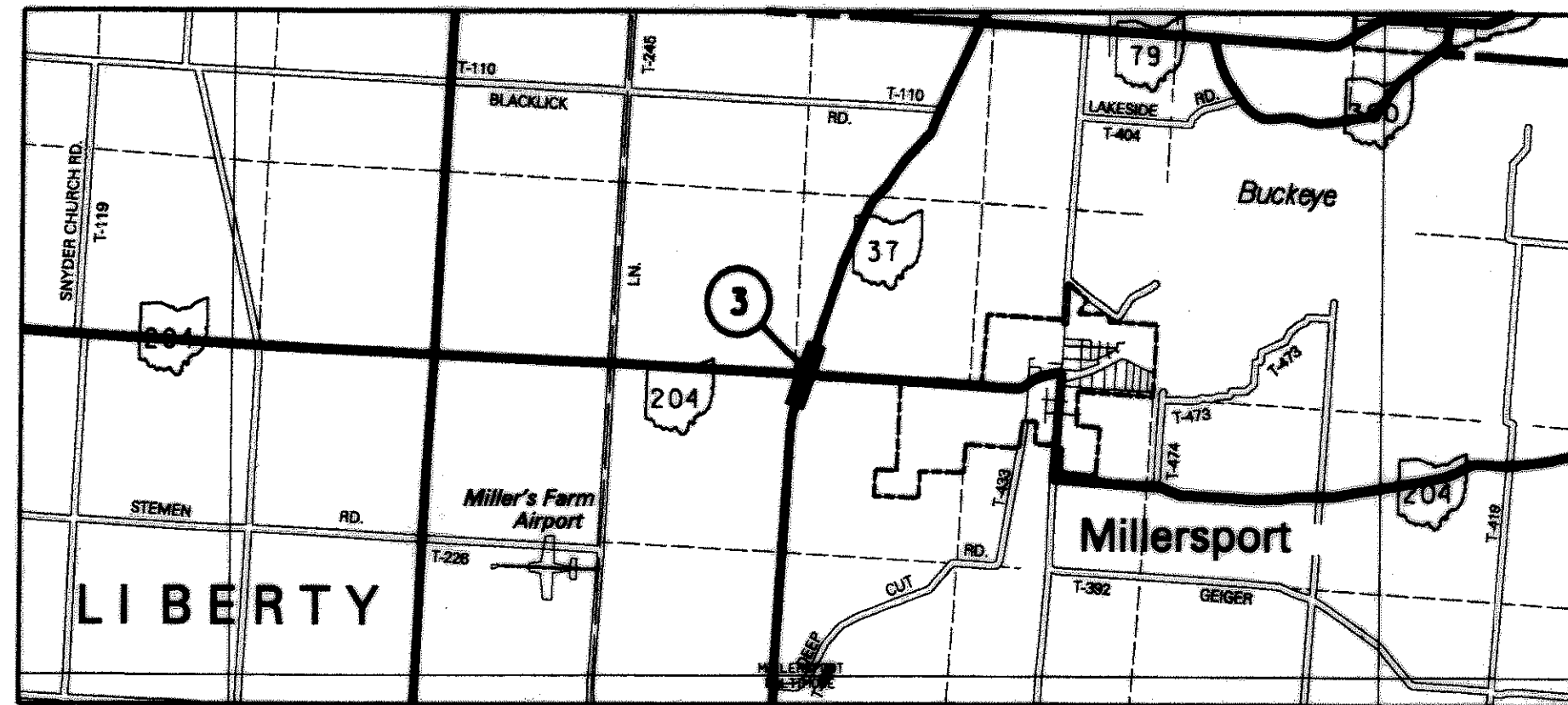


LOCATION MAPS



— PORTION TO BE IMPROVED



OHIO DEPARTMENT OF TRANSPORTATION
 FAI-37-12.73
 FAIRFIELD COUNTY
 CITY OF LANCASTER
 LIBERTY, PLEASANT, BERNE AND RUSH CREEK TOWNSHIPS

PROJECT DESCRIPTION

TWO LANE PAYMENT PLANING AND ASPHALT CONCRETE RESURFACING, INCLUDING CURB WORK IN THE CITY OF LANCASTER. IN ADDITION, SAFETY UPGRADE FOR THE INTERSECTION OF SR 37 AND SR 204 BY ADDING TURN LANES ON THE NORTH AND SOUTH APPROACHES OF SR 37.

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LOCATIONS 1 & 2
 EARTH DISTURBED AREA (EDA)

Project EDA = N/A
 Estimated Contractor EDA = N/A
 Notice of Intent EDA = N/A

2002 SPECIFICATIONS

THE STANDARD 2002 SPECIFICATIONS OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

APPROVED Christopher T. Smith
 DATE 12/11/03 DISTRICT DEPUTY DIRECTOR

APPROVED Jordan Proctor
 DATE 1-7-04 DIRECTOR, DEPARTMENT OF TRANSPORTATION

LOCATION	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	CITY
				BEGIN	END		
2	FAI	SR 37	(11.56,12.75)	12.73	12.92	0.19	
1	FAI	SR 37	(12.92-13.15)	12.92	13.69	0.77	LANCASTER
2	FAI	SR 37	(13.69-14.18)	13.69	14.40	0.71	
1	FAI	SR 37	(14.40-15.16)	14.40	15.58	1.18	LANCASTER
1	FAI	SR 37	(19.23-19.56)	19.23	19.70	0.47	LANCASTER
2	FAI	SR 37	(19.70)	19.70	25.26	5.56	
3	FAI	SR 37	(1.98)	2.10	2.40	0.30	

DESIGN DESIGNATION	LOCATION		
	1	2	3
Current ADT (2004)	10300	10300	8600
Design Year ADT (2014)	11300	11300	11700
Design Hourly Volume (2014)	1130	1130	1170
Directional Distribution	50%	50%	50%
Trucks (24 Hour B&C)	6%	6%	8%
Design Speed (MPH)	35	35/55	55
Legal Speed (MPH)	35	35/55	55

STANDARD DRAWINGS		STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-28-00	MT-97.10	4-19-02	832	2-12-03
BP-4.1	7-28-00	MT-97.11	4-19-02	833	2-12-03
DM-1.1	7-18-03	MT-99.20M	1-30-95	857	7-19-02
		TC-42.20	10-19-01		
		TC-65.10	10-19-01	908	4-19-02
		TC-65.11	10-19-01		
DM-4.3	7-19-02	TC-65.12	10-19-01		
DM-4.4	7-19-02	TC-71.10	4-19-02		
HW-2.1	7-19-02	TC-73.10	01-19-01		

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

SIGNED: M. E. Kadakia
 DATE 12/12/2003



PLAN PREPARED BY:
 District
D5
 Production

FEDERAL PROJECT NO.
 E036(166)

PLD NO.
 22489

CONSTRUCTION PROJECT NO.

TITLE SHEET

FAI-37-12.73

1
 70

FAI - SR 37-12.73
 040168 PLD - 22489
 Dist 5 3/10/2004

FO371000430

UTILITIES

THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA. BELOW IS A LIST OF UTILITIES LOCATED WITHIN THE WORK AREA AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT OWNERS AND VERIFY LOCATIONS:

American Electric Power Co 9135 St. Route 682 Athens, Ohio 45701 Attn: Jeff Wicker 740-594-1946	Time Warner Cable TV 1266 Dublin Rd. Columbus, Ohio 43215 Attn: Kevin Rich 614-481-5263
American Electric Power Transmission 825 Tech Center Drive Gahanna, Ohio 43230-8250 Attn: Michelle Odem 614-552-1899	Verizon 500 Lancaster Pike Circleville, Ohio 43113 Attn: Michael Edwards 740-474-7521
Columbia Gas Transmission 301 Maple Street P.O. Box 330 Sugar Grove, Ohio 43155 Attn: John Rader 740-746-2279	Columbia Gas of Ohio Columbus West Operations Center 920 W. Goodale Blvd. Columbus, Ohio 43212 Attn: Lyle Whittemore 614-460-2170
Dominion 5509 Berger Rd. Groveport, Ohio 43125 Attn: Dave Welsh 614-837-6881	Adelphia Cable TV 235 Bridge Street P.O. Box 627 Chillicothe, Ohio 45601 Attn: Greg McGrath 740-775-4288
Duke Energy 5151 San Felipe Room 711 Houston, Texas 77056 Attn: Jerry Smith 713-989-8469	National Gas And Oil Corp. 1500 Granville Road P.O. Box 4970 Newark, Ohio 43058 Attn: Greg Wilson 740-348-1254
SBC 3935 North Point Rd. Zanesville, Ohio 43701 Attn: Sandy Randolph 740-454-3455	Lancaster Municipal Gas 1424 Camp Ground Road Lancaster, Ohio 43130 Attn: Mark Morgan 740-687-6670
Sprint P.O. Box 1031 Pataskala, Ohio 43062 Attn: Dennis Figley 740-927-3000	City of Lancaster* Division of Water 225 North Memorial Drive Lancaster, Ohio 43130 Attn: David Bornino 740-687-6631
South Central Power Co. 2780 Coonpath Rd. P.O. Box 250 Lancaster, Ohio 43130 Attn: Scott Flowers 740-689-6251	Teppco 3590 Yankee Road Middletown, Ohio 45044 Attn: Larry Long 513-422-4791

NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

IN ORDER FOR ODOT TO PROPERLY PERMIT OVERSIZE LOADS, PREPARE PROPER SIGNING WHEN REQUIRED AND FURTHER TO NOTIFY THE GENERAL MOTORING PUBLIC, THE CONTRACTOR SHALL NOTIFY (IN WRITING) THE DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR WITH COPIES FOR THE DISTRICT 5 ROADWAY SERVICES MANAGER AND PROJECT ENGINEER NOT LESS THAN 21 DAYS BEFORE SUCH CLOSURE OR LANE RESTRICTIONS.

SEND NOTIFICATION TO:

DISTRICT 5 HIGHWAY MANAGEMENT ADMINISTRATOR
P.O. BOX 306
JACKSONSTOWN, OH 43030
PHONE: (740) 323-4400 EXT. 5241

ITEM 617, COMPACTED AGGREGATE, TYPE A, AS PER PLAN

ALL AGGREGATE SHALL BE 100% CRUSHED LIMESTONE. ALL QUALITY REQUIREMENTS EXCEPT SHALE BE WAIVED. OTHER GRADATION REQUIREMENTS SHALL BE AS SPECIFIED EXCEPT THE PLASTICITY INDEX SHALL BE WAIVED. IF SO DIRECTED, THE CONTRACTOR MAY USE RECYCLED ASPHALT CONCRETE PAVEMENT (RACP MEETING REQUIREMENTS OF 617.02) IN LIEU OF CRUSHED LIMESTONE.

PROFILE AND ALIGNMENT

THE PROPOSED PAVEMENT RESURFACING SHALL FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT.

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 0.075 GALLONS PER SQUARE YARD FOR ESTIMATING PURPOSES ONLY.

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 FOR ESTIMATING PURPOSES ONLY.

MAINTENANCE OF TRAFFIC

PLACING OF THE ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE SHALL OCCUR AS CLOSE BEHIND THE PLANING OPERATION AS POSSIBLE, WHERE APPLICABLE, SUCH THAT TRAFFIC SHALL NOT BE MAINTAINED ON THE PLANED SURFACE AT THE END OF THE WORK DAY.

FEATHERING

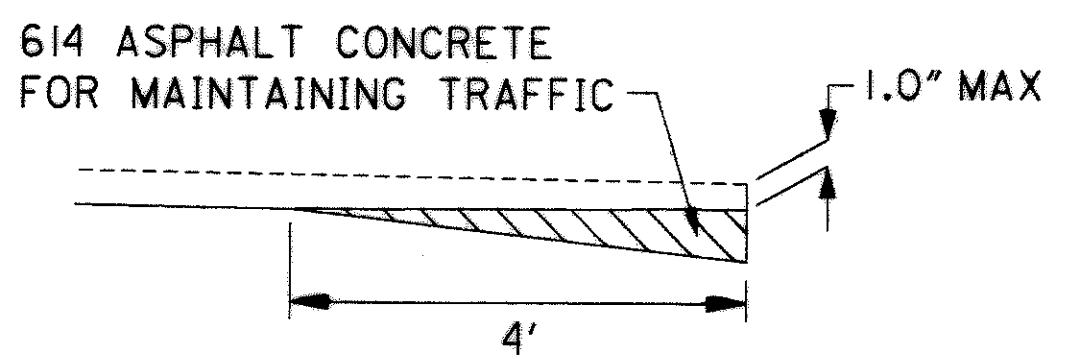
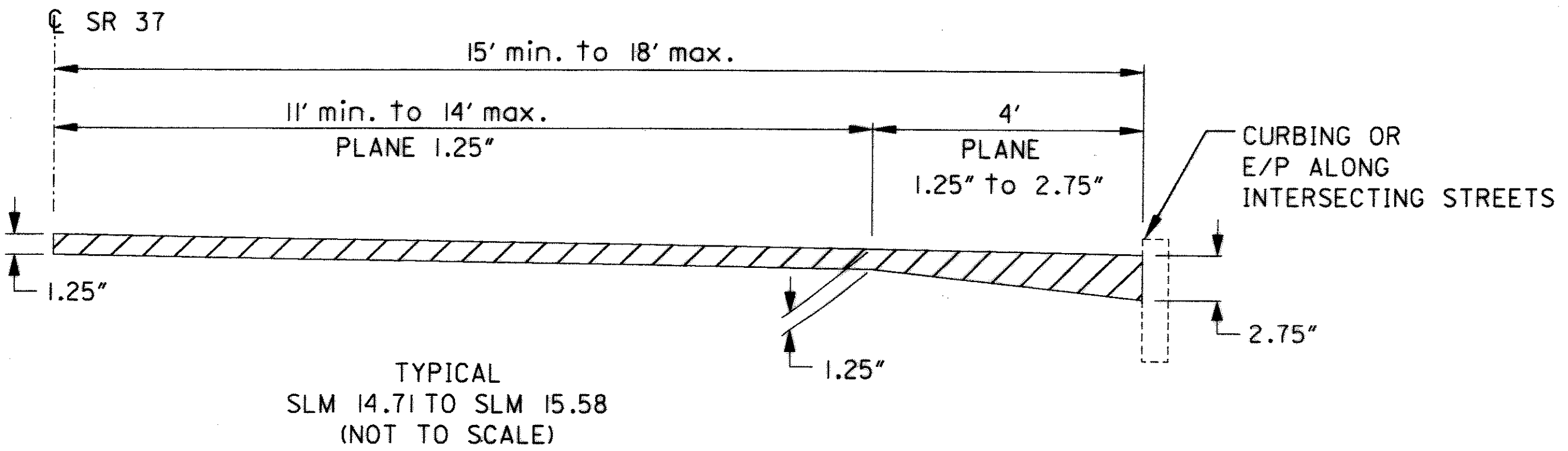
FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH SCD DRAWING BP-3.1, 7-28-00

PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
 PLANING SHALL BE A MINIMUM OF 1.25" IN DEPTH THE FULL WIDTH OF THE ROADWAY EXCEPT IN SECTIONS WITH CURB WHERE MILLING DEPTH SHALL BE TAPERED FROM 1.25" TO 2.75" OVER A DISTANCE OF 4' ADJACENT TO CURB (SEE DETAIL BELOW). THE ROADWAY SHALL BE PLANED SUCH THAT A MINIMUM SLOPE OF 0.016 IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT. THIS MAY REQUIRE A DEEPER MILLING DEPTH DUE TO EXISTING GRADER PATCHES, SURFACE CRACKING AND PAVEMENT REPAIR. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

ROADWAY SHALL BE PLANED AS SHOWN IN TABLE & DETAIL BELOW:

LOCATION	BEGIN	END	PLANING (INCH)		MILES
			ROADWAY	@CURBING	
1	14.40	14.71	1.25		0.31
1	14.71	15.58	1.25	2.75*	0.87
1	19.23	19.70	1.25		0.47

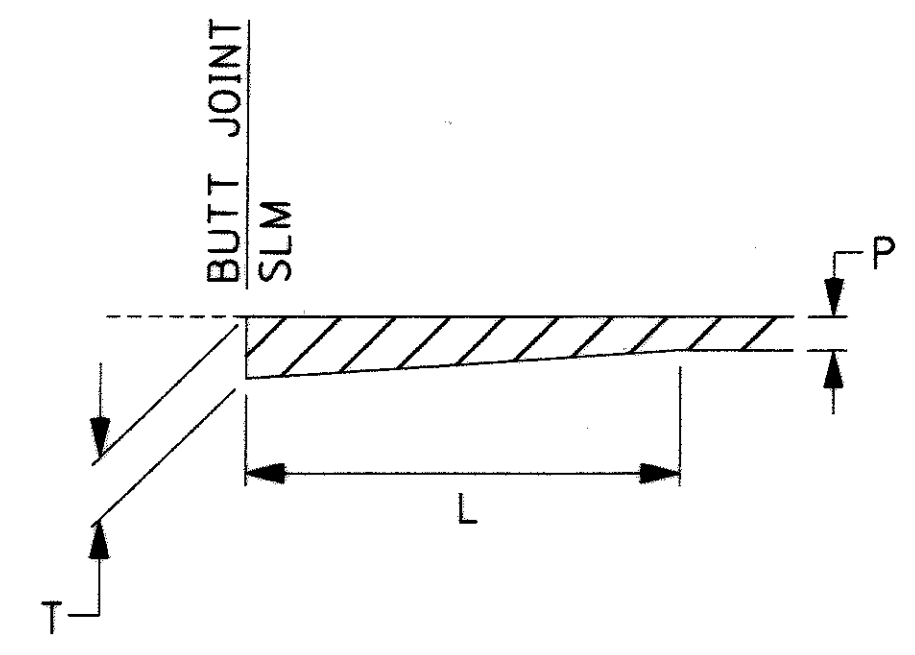
*FROM SLM 14.71 TO SLM 15.58, ROADWAY SHALL BE PLANED AS SHOWN IN DETAIL BELOW.



PLACING OF ITEM 857 ASPHALT CONCRETE WITH GILSONITE, INTERM. COURSE, SHALL OCCUR AS CLOSELY BEHIND THE PLANING OPERATION AS POSSIBLE SUCH THAT TRAFFIC SHALL NOT BE MAINTAINED ON THE MILLED SURFACE AT THE END OF THE WORK DAY. ONE THOUSAND AND FIVE HUNDRED (1500) TONS OF GRINDINGS FROM THE PLANING OPERATION SHALL BE DELIVERED TO THE OHIO DEPARTMENT OF TRANSPORTATION: FAIRFIELD COUNTY GARAGE ON SR33 IN LANCASTER. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

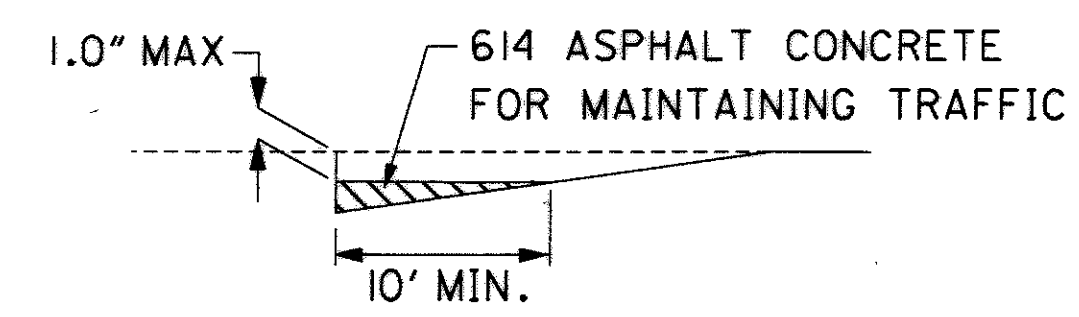
BUTT JOINT

A BUTT JOINT SHALL BE REQUIRED AT LOCATIONS GIVEN BELOW. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE MINIMIZED BY IMMEDIATELY PLACING THE PROPOSED 448 OR 857 INTERMEDIATE COURSE TO WITHIN 1.0" OF EXISTING ROADWAY SURFACE OR BY PLACING WEDGE AS SHOWN. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, 7-28-00.



LOCATIONS AND DIMENSIONS FOR BUTT JOINT CONSTRUCTION ARE GIVEN IN TABLES BELOW.

SLM	T	P	L	TAPER RATE
12.73	1.25"	0.00"	3'	1.0"/25'
14.40	1.50"	1.25"	6'	1.0"/25'
15.58	2.75"	1.25"	37.5'	1.0"/25'
19.62	1.75"	1.25"	25'	1.0"/50'
25.26	2.00"	0.00"	50'	1.0"/25'



2.75" BUTT JOINT @ SLM 15.58 (MAIN ST) SUSPEND PLANING & RESURF. USE ITEM 614 A.C. FOR MAINTAINING TRAFFIC

2.75" PLANING ALONG E/P @ INTERSECTING STREETS USE ITEM 614 A.C. FOR MAINTAINING TRAFFIC

1.25" BUTT JOINT
EXTRA AREAS 1.25" PLANING

1.50" BUTT JOINT @ SLM 14.40 BEGIN PAVEMENT PLANING USE ITEM 614 A.C. FOR MAINTAINING TRAFFIC

1.25" BUTT JOINT @ SLM 12.73 USE ITEM 614 A.C. FOR MAINTAINING TRAFFIC

*WEARING COURSE REMOVED
*ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

LOCATION	ROUTE	DESCRIPTION	ITEM	
			202*	614#
2	SR 37	SLM 12.73 (BEGIN WORK)	98	1
1	SR 37	SLM 14.40 (LANCASTER CORP)		1
1	SR 37	E/P @ FAIR AVE (LT & RT)		2
1	SR 37	E/P @ LAKE ST (LT & RT)		2
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	E/P @ ALLEY (RT)		0.5
1	SR 37	E/P @ ALLEN ST (LT & RT)		2
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	E/P @ 6th AVE (LT & RT)		3
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	E/P @ 5th AVE (LT & RT)		2
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	E/P @ KING ST (LT & RT)		2
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	E/P @ MULBERRY ST (LT & RT)		2
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	E/P @ WHEELING ST (LT & RT)		2
1	SR 37	E/P @ ALLEY (LT & RT)		1
1	SR 37	SLM 15.58 - @ MAIN ST		1
1	SR 37	BRIDGE 1962 - BOTH APPROACHES		2
2	SR 37	SLM 25.26 (END WORK)	156	1
TOTALS LOATION 1: CARRIED TO GENERAL SUMMARY				29 CY
TOTALS LOATION 2: CARRIED TO GENERAL SUMMARY			254 SY	2 CY

F0370002.MGN

RESIDENCE AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 448 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL TYPICALLY EXTEND 4' INTO THE DRIVEWAY (MEASURED FROM THE EDGE OF THE PAVEMENT). THERE ARE 5 TYPES OF DRIVES: CONCRETE, ASPHALT, GRAVEL, GRAVEL WITH ASPHALT APRON, AND FIELD/OIL WELL DRIVES. FIELD DRIVES AND OIL WELL DRIVES SHALL NOT BE PAVED. GRAVEL DRIVES SHALL BE PAVED BACK 4' INTO THE DRIVEWAY. CONCRETE AND ASPHALT DRIVES SHALL HAVE BUTT JOINTS OR AS SHORT A ASPHALT TAPER AS POSSIBLE (UP TO 4') AS DIRECTED BY THE ENGINEER SO AS TO PROVIDE A SMOOTH TRANSITION. GRAVEL DRIVES WITH ASPHALT APRONS SHALL ALSO HAVE BUTT JOINTS OR AS SHORT A ASPHALT TAPER A POSSIBLE (UP TO 4') BUT ONLY IF THE EXISTING ASPHALT APRON IS IN AN ACCEPTABLE CONDITION TO BE PAVED OVER AS DIRECTED BY THE ENGINEER. IF THE ASPHALT APRON CANNOT BE PAVED OVER (FOR EXAMPLE, BROKEN INTO SMALL PIECES) AS DETERMINED BY THE ENGINEER, IT SHALL BE REMOVED BEFORE BEING PAVED BACK 4' INTO THE DRIVEWAY. EXCEPT AS NOTED UNDER ITEM 202 REMOVAL MISC.: RESIDENCE AND COMMERCIAL DRIVES, ANY PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE DRIVES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
 LOCATION 1 - 7 CU.YD.
 LOCATION 2 - 22 CU.YD.
 QUANTITIES CARRIED TO SUBSUMMARY

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

WORK ZONE MARKING SIGNS	LOCATION	
	1	2
OW-167 (NO EDGE LINES)	22	2
R-33 (DO NOT PASS)	64	2
R-34 (PASS WITH CARE)	53	
OW-128 (BEGIN ROAD CONSTRUCTION AHEAD)	50	5
OC-8 (END ROAD CONSTRUCTION)	50	5
TOTAL	239	14

QUANTITIES CARRIED TO SUBSUMMARY

CONTINGENCY QUANTITIES

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

ITEM 408 PRIME COAT, AS PER PLAN

THE CONTRACTOR SHALL APPLY ONE COAT OF MC-70 (AS PER SECTION 702) AT A RATE OF 0.40 GALLON PER SQUARE YARD TO THE COMPLETED AGGREGATE SHOULDER (ITEM 617) AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A SHIELD TO PREVENT THE SPRAYING OR DRIFTING OF LIQUID BITUMINOUS MATERIAL ONTO THE EDGE OF PAVEMENT OR EDGE LINE. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO 107.10 OF THE SPECIFICATIONS. PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, ETC., SHOWN IN THE PLANS ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING MARKING LOCATIONS (i.e. BY USE OF VIDEO, PICTURES) AND PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

ITEM 202: RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR STORAGE. THE KNOX COUNTY MANAGER SHALL BE CONTACTED FOR INSTRUCTIONS ON WHERE TO DELIVER THE RAISED PAVEMENT MARKERS.

ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE:
 LOCATION 1 - 69 EACH
 LOCATION 2 - 64 EACH
 QUANTITIES CARRIED TO SUBSUMMARY

CONVERSION OF METRIC DRAWINGS

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) OF THE 2002 CONSTRUCTION AND MATERIALS SPECIFICATIONS. ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.02 IEEE/ASTM SI 10 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

PARK ACCESS

THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO RISING PARK AT ALL TIMES.

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. REPAIRS SHALL TAKE PLACE PRIOR TO ANY PAVEMENT PLANING OPERATION. THERE MAY BE A NEED TO MAKE FURTHER REPAIRS IF MORE FAILURES ARE PRESENT AFTER PLANING AND/OR PAVING OF THE INTERMEDIATE COURSE. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT WHICH HAVE COMPLETELY FAILED (PUMPING OF SUBBASE MATERIAL) AND NOT TO CORRECT SURFACE IRREGULARITIES. DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED). ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON BERMS AND ALL MATERIALS, LABOR, EQUIPMENT, TRAFFIC CONTROL, TOOLS AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE SUBSUMMARIES FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, AS PER PLAN 500 SQ.YD. LOCATION 1
ITEM 253 PAVEMENT REPAIR, AS PER PLAN 1500 SQ.YD. LOCATION 2

ITEM 253 - PAVEMENT REPAIR, MISC.: BRICK PAVEMENT

AN ESTIMATED QUANTITY FOR BRICK PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE THE PAVING OPERATION. THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF BRICK PAVEMENT OR SHOULDERS WHICH HAVE FAILED AND NOT TO CORRECT SURFACE IRREGULARITIES. THE DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 12". AFTER EXCAVATION HAS BEEN COMPLETED, PLACE APPROXIMATELY 10" +/- CLASS FS CONCRETE AS PER ITEM 499 OF CMS BRINGING THE TOP OF CONCRETE SURFACE IN LINE WITH EXISTING ADJOINING TOP OF BRICK ELEVATION. PLACE 2" +/- OF ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 BRINGING THE REPAIRED SURFACE TO MEET THE EXISTING ADJOINING PAVEMENT ELEVATIONS. ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON PAVEMENT AND BERMS AND ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, DISPOSAL OF EXCAVATED MATERIAL AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, MISC.: BRICK PAVEMENT.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE SUBSUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

ITEM 253 PAVEMENT REPAIR, MISC.: BRICK PAVEMENT 2000 SY (LOCATION 1)

DETECTOR LOOPS, AS PER PLAN

ALL DETECTOR LOOPS SHALL BE CUT INTO THE INTERMEDIATE COURSE BEFORE PLACEMENT OF ASPHALT CONCRETE SURFACE COURSE. PLACEMENT SHALL BE AS PER SPECIFICATION 632.II. ALL MATERIALS (INCLUDING SPLICE KITS), LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO FURNISH A COMPLETED, IN PLACE, WORKING DETECTOR LOOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632 DETECTOR LOOP, AS PER PLAN. ALL LOCATIONS, SIZES AND ORIENTATIONS SHALL BE VERIFIED BY ODOT AND SUPPLIED TO THE CONTRACTOR BY AT THE PERCONSTRUCTION MEETING.

LOCATION 1: ITEM 632 DETECTOR LOOP, AS PER PLAN 21 EACH

MAIL BOX TURN OUTS

A QUANTITY OF ASPHALT CONCRETE HAS BEEN PROVIDED IN THE PLAN TO COVER MAIL BOX TURN OUTS. TURN OUTS SHALL BE PAVED AS SHOWN IN THE DETAIL IN DRAWING BP-4.1, 7-28-00.

ANY EXTRA GRADING OF THE SHOULDERS, PRIME OR TACK COAT, MATERIALS, LABOR, EQUIPMENT TOOLS AND INCIDENTALS NECESSARY TO COMPLETE MAIL BOX TURN OUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG 64-22 AND ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22.

ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
LOCATION 1 - 5 CU.YD.
LOCATION 2 - 32 CU.YD.

QUANTITIES CARRIED TO SUBSUMMARY

ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT

IN ORDER TO ASSURE A GOOD BOND AT THE LONGITUDINAL JOINT, A RUBBERIZED ASPHALT EMULSION (ITEM 407 TACK COAT AS PER 702.13) SHALL BE APPLIED TO THE FACE OF THE SURFACE COURSE OF ASPHALT PAVEMENT IMMEDIATELY BEFORE PLACING THE ADJACENT PAVEMENT. RUBBERIZED TACK SHALL HAVE 100% COVERAGE ON THE FACE OF THE TOP COURSE AND BE APPLIED AT THE RATE OF 0.25 GALLONS PER SQUARE YARD, AS DIRECTED BY THE ENGINEER. CARE SHALL BE TAKEN (AS PER SECTION 407.07) IN THE APPLICATION OF THE TACK SO AS TO AVOID PLACING EMULSION ON THE TOP SURFACE OF THE PAVEMENT. PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE ABOVE MENTIONED WORK.

**ITEM 604 MANHOLE ADJUSTED TO GRADE
ITEM 638 VALVE BOX ADJUSTED TO GRADE**

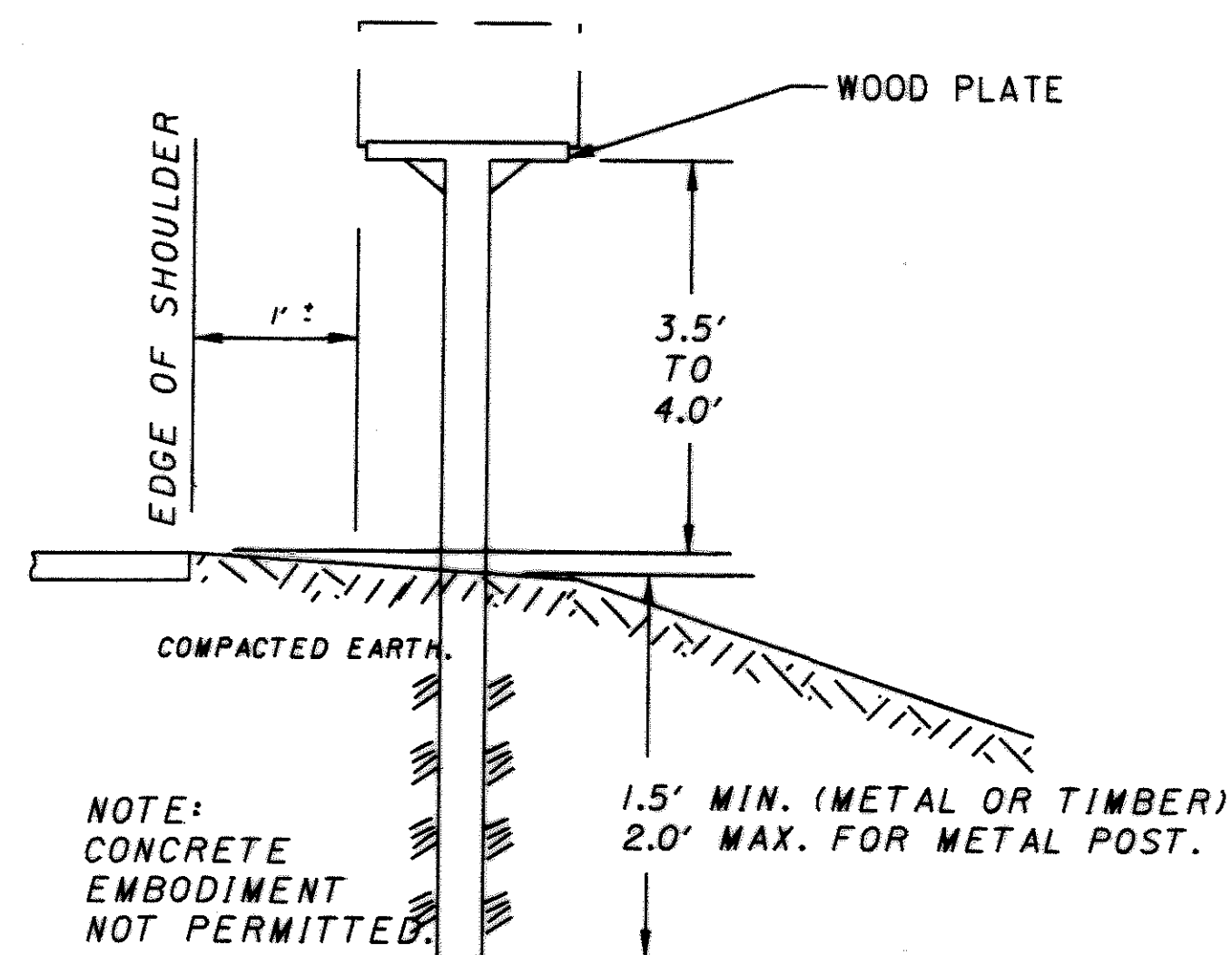
EXISTING INLETS, MANHOLES, CATCH BASINS AND VALVE BOXES THAT ARE TO BE ADJUSTED TO GRADE ARE LISTED BELOW, THESE NUMBERS ARE TAKEN FROM FIELD COUNTS. HOWEVER, THE ACTUAL NUMBER THAT ARE TO BE ADJUSTED TO GRADE WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. PAYMENT SHALL BE FOR THE ACTUAL NUMBERS OF EACH ITEM THAT ARE ADJUSTED TO GRADE AS DETERMINED BY THE ENGINEER. WHEN ADJUSTING MANHOLES EXTREME CARE SHALL BE TAKEN WHEN REMOVING CONCRETE TO AVOID DAMAGING MANHOLE COVERS AND FRAMES. MANHOLES SHALL BE ADJUSTED USING CONCRETE SHOWN IN DRAWING BP-3.1, 7-28-00. WHEN ADJUSTING MANHOLES, CATCH BASINS AND VALVE BOXES ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND ANY OTHER INCIDENTALS AND REMOVAL OF THE EXISTING CONCRETE SHALL BE PAID FOR UNDER EACH ITEM AS SHOWN ON THE GENERAL SUMMARY.

LOCATION 1 - SR 37 (CITY OF LANCASTER)

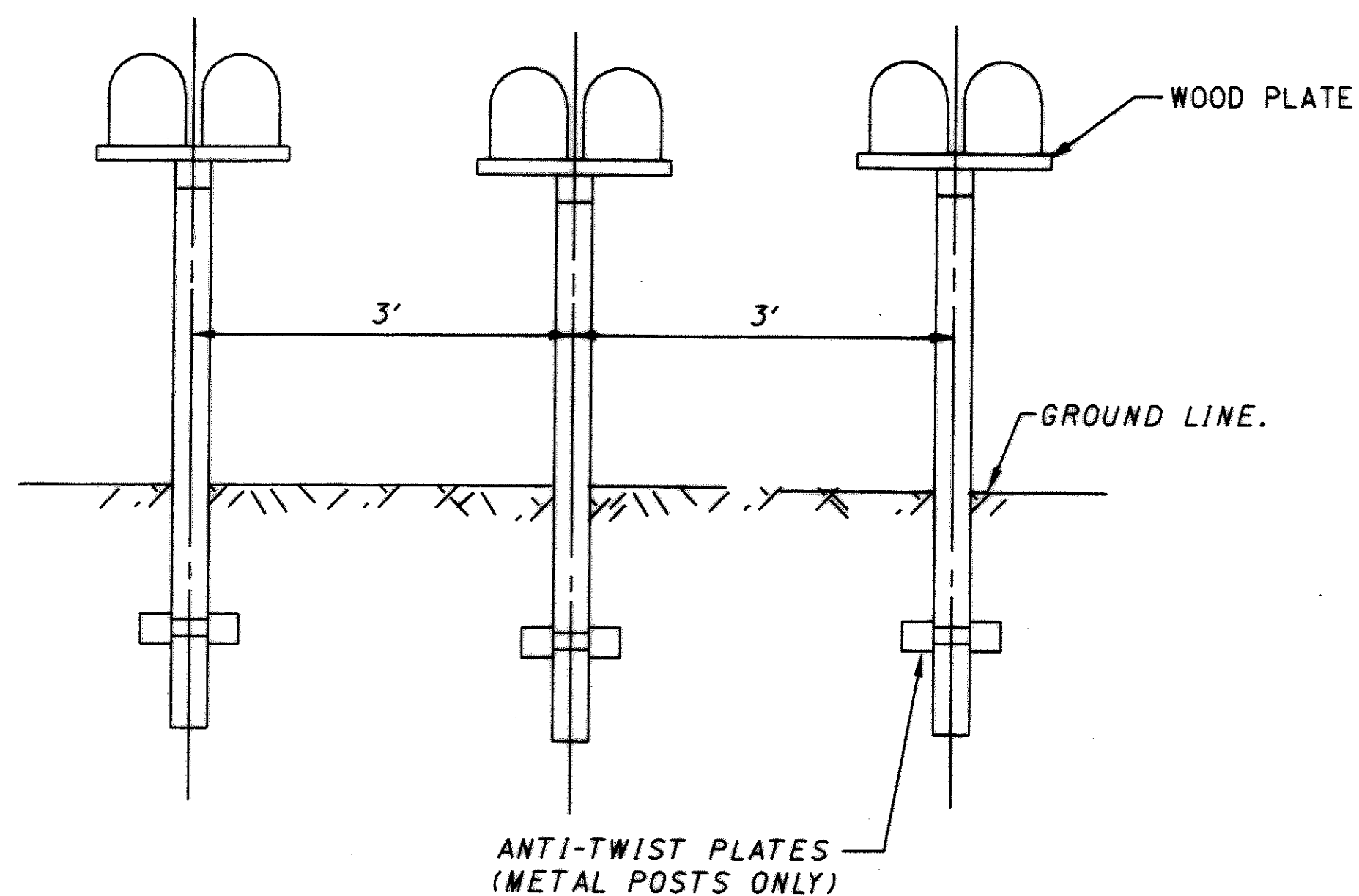
ITEM 604 MANHOLE ADJUSTED TO GRADE 12 EACH
ITEM 638 VALVE BOX ADJUSTED TO GRADE 8 EACH

F0370004.MGN

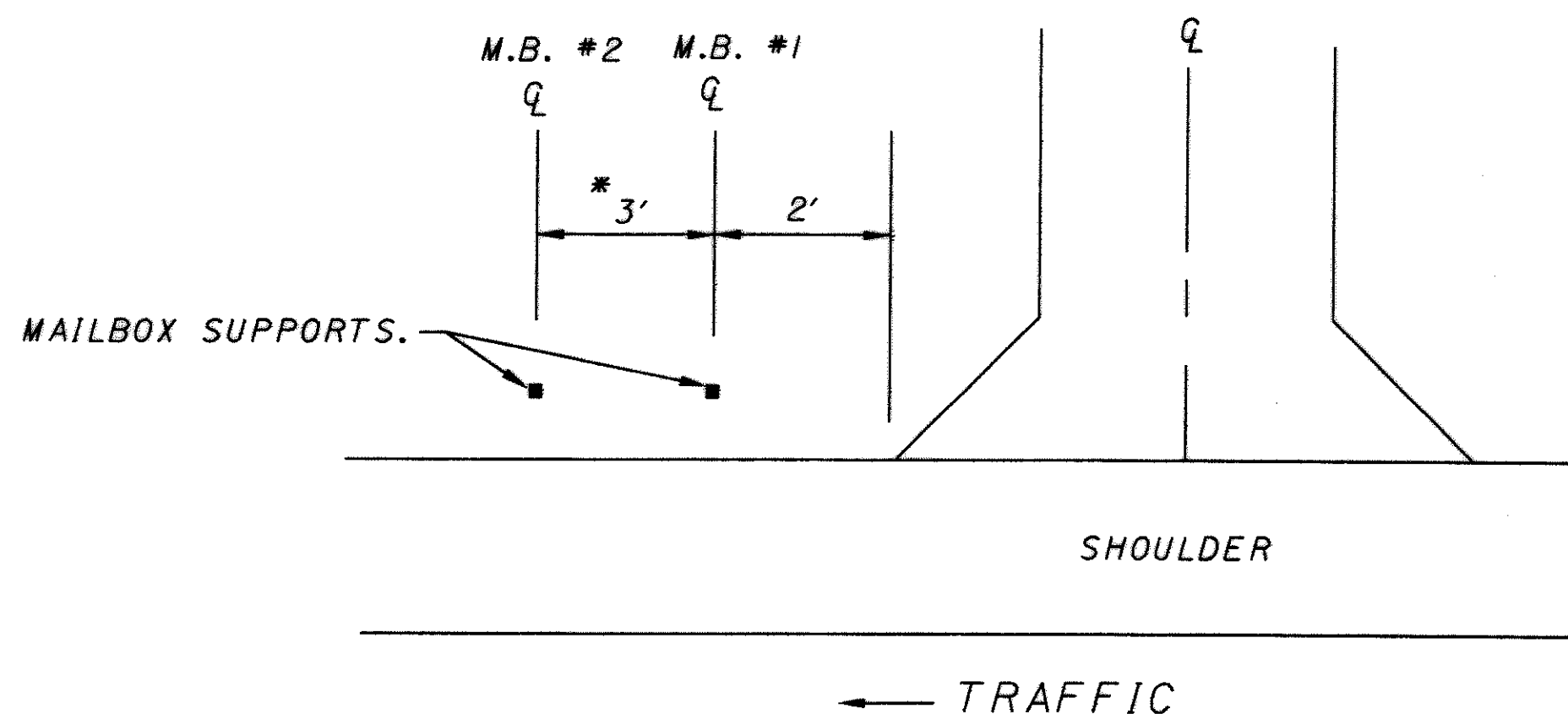
MAILBOX DETAILS



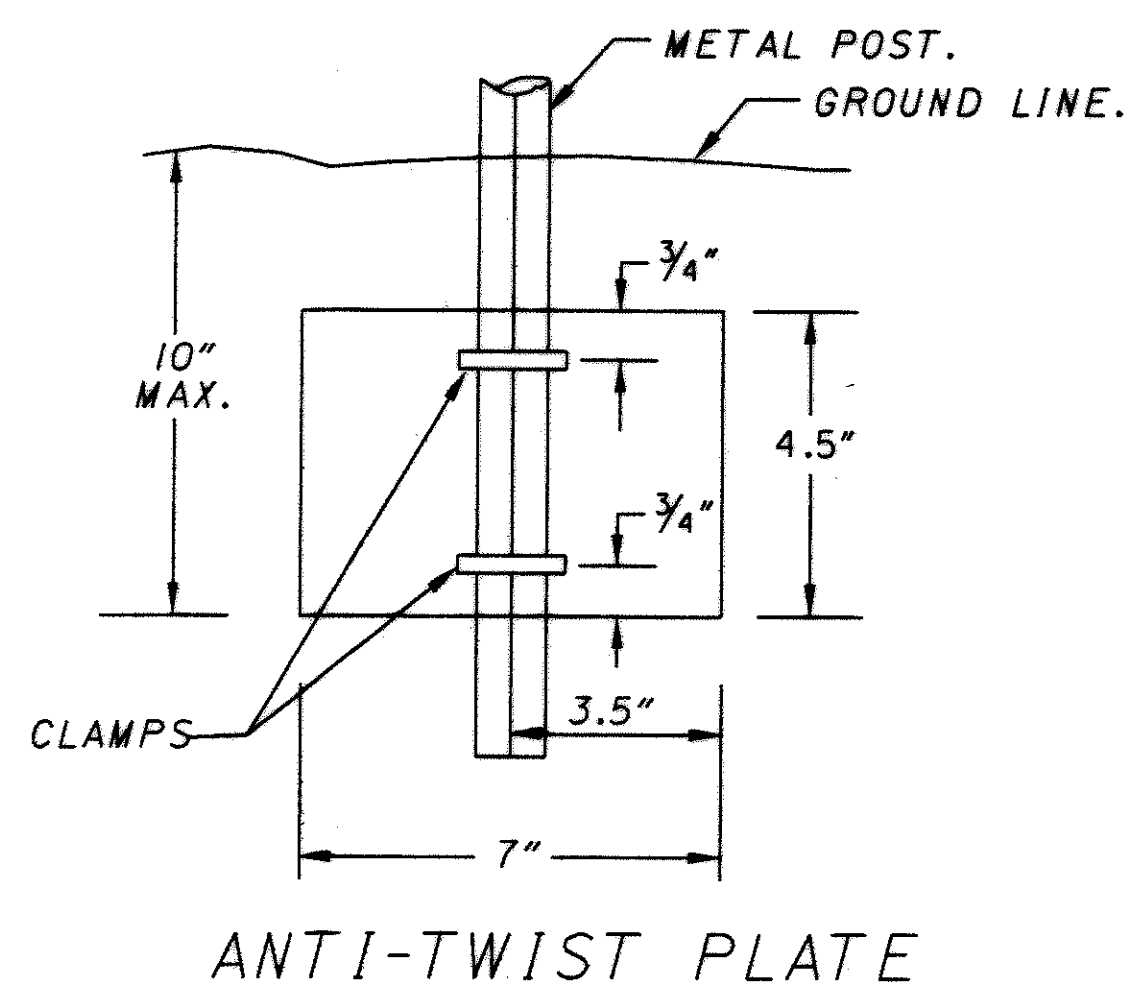
TYPICAL MAILBOX LOCATION AND MOUNTING HEIGHT



GROUP MAILBOX INSTALLATION



* ADD 3' FOR EACH ADDITIONAL MAILBOX.



ITEM SPECIAL - MAILBOX SUPPORT

DESCRIPTION

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS, AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATION SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER. THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING POSTS AND OTHER MATERIAL NOT CONSIDERED SALVAGEABLE AND DISPOSED OF IN ACCORDANCE WITH 202.02.

MATERIALS

WOOD POSTS SHALL BE NOMINAL 4" x 4" SQUARE OR 4" DIAMETER ROUND. ALL WOOD INCLUDING POST AND PLATES SHALL CONFORM TO 710.14.

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

HARDWARE (PLATES, SCREWS, BOLTS, ETC.) SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

SETTING POSTS

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

MOUNTING BOXES

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

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

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

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

BASIS OF PAYMENT

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.12. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR THE TYPE SPECIFIED, COMPLETE IN PLACE.

PAYMENT WILL BE MADE UNDER:

ITEM	UNIT	DESCRIPTION
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM SINGLE
SPECIAL	EACH	MAILBOX SUPPORT SYSTEM DOUBLE

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE PURPOSE:

LOCATION	ITEM	QUANTITY
2	SPECIAL MAILBOX SUPPORT SYSTEM SINGLE	7 EACH
	SPECIAL MAILBOX SUPPORT SYSTEM DOUBLE	2 EACH

MATERIALS SUPPLIED BY THE DEPARTMENT

ALL MATERIALS ARE TO BE CONTRACTOR FURNISHED, EXCEPT THAT THE DEPARTMENT SHALL SUPPLY RAISED PAVEMENT MARKING CASTINGS IN THE QUANTITIES SHOWN HEREIN TO THE CONTRACTOR. PAY ITEMS FOR THE DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED IN "INSTALLATION ONLY". THE QUANTITY AND TYPE OF DEPARTMENT SUPPLIED MATERIALS ARE SHOWN ON SHEET 29.

THE CONTRACTOR SHALL PICK UP THE SUPPLIED RAISED PAVEMENT MARKER MATERIALS AT THE
O.P.I.
315 PHILLIPI RD.
COLUMBUS, OHIO 45895

FOR TRANSPORT TO THE WORK SITE OR TO THE CONTRACTOR'S STORAGE FACILITY. THE RECYCLED RAISED PAVEMENT MARKER (RPM) AUTHORIZATION FORM (SS 1082) IS TO BE SIGNED BY THE DISTRICT CONSTRUCTION ENGINEER PRIOR TO PICK UP OF THE RPM'S. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND/OR THE PARTIES LISTED ON THE AUTHORIZATION FORM IN WRITING AT LEAST FIVE CALENDAR DAYS PRIOR TO PICK UP OF THE DEPARTMENT SUPPLIED MATERIALS. THE CONTRACTOR SHALL STORE THE RPM'S WITHOUT DAMAGE OR CONTAMINATION WITH FOREIGN MATTER. A DEDUCTION IN THE AMOUNT OF THE ACTUAL COST TO THE DEPARTMENT SHALL BE MADE FOR THE MATERIALS DAMAGED BY THE CONTRACTOR OR FOR CASTINGS RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED AND WERE NOT RETURNED TO THE DEPARTMENT.

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

RAISED PAVEMENT MARKER MATERIALS SUPPLIED BY THE DEPARTMENT, THAT ARE NON-PERFORMED, SHALL BE CAREFULLY PACKED OR REPACKED IN THE BOXES SUPPLIED BY THE RAISED PAVEMENT MARKER RECYCLER. BOXES SHALL BE MARKED WITH THE RECYCLER'S PART OR CATALOG NUMBER, THE ODOT PROJECT NUMBER, THE STYLE OF THE CASTING, AND THE COLOR OF THE PRISMATIC RETRO-REFLECTOR. THE RECYCLER'S CATALOG OR PART NUMBERS MAY BE OBTAINED FOR THE OFFICE OF TRAFFIC ENGINEERING IN COLUMBUS, OHIO. CASTING STYLES SHALL NOT BE MIXED WITHIN A BOX. ANY BOXES NOT PROPERLY PACKED OR MARKED WILL NOT BE ACCEPTED AT THE RECYCLER'S WAREHOUSE.

THE BOXES SHALL BE PLACED ON SKIDS OR PALLETS WITH ONLY ONE STYLE (LOW PROFILE OR CONVENTIONAL, REFLECTORIZED OR NON-REFLECTORIZED) AND NO MORE THAN TWENTY-ONE BOXES (420 RPM'S) ON EACH SKID.

NON-PERFORMED MATERIALS SHALL BE RETURNED, TO A LOCATION SPECIFIED BY THE DISTRICT CONSTRUCTION ENGINEER, WITHIN THIRTY CALENDAR 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 RPM'S CORRECTLY, THE CONTRACTOR WILL BE ASSESSED THE ACTUAL COST FOR REPACKAGING THE MATERIALS BY THE DEPARTMENT'S FORCES.

LOADING OF MATERIALS SUPPLIED BY THE DEPARTMENT OF THE RECYCLER'S WAREHOUSE

TRUCKS SHALL HAVE A LOADING HEIGHT OF 48 INCHES AND BE ABLE TO BACK UP FLUSH TO THE LOADING DOCK. TRUCKS SHALL NOT HAVE ANY OBSTRUCTIONS THAT PREVENT THE LOADING BY A STANDARD FORKLIFT OR LIFT TRUCK.

SEMI-TRUCKS OR 20 FOOT COMMERCIAL TRUCKS ARE THE MOST APPROPRIATE TRUCKS FOR LOADS IN EXCESS OF FOUR PALLETS (ONE PALLET=21 BOXES=2100 POUNDS).

STAKE BODY TRUCKS ARE APPROPRIATE TO LOAD LESS THAN FOUR PALLETS, PROVIDED THE TRUCK IS RATED FOR THE LOAD AND THE LOAD CAN BE SAFELY SECURED FOR TRANSPORT BY CHAINING OR STRAPPING DOWN AS NEEDED.

PICKUP TRUCKS ARE APPROPRIATE FOR LOADS OF APPROXIMATELY ONE PALLET, PROVIDED THE PICKUP TRUCK IS RATED FOR THE LOAD AND THE LOAD CAN BE SAFELY SECURED FOR TRANSPORT.

DUMP TRUCKS, TILT BED TRUCKS, AND NON COMMERCIAL MOVING VANS WILL NOT BE LOADED BY THE RECYCLER'S WAREHOUSE.

THE WAREHOUSE SUPERVISOR WILL REFUSE TO LOAD ANY TRUCK THAT IS UNSAFE TO LOAD OR UNSUITABLE FOR THE LOAD BEING PLACED ON THE TRUCK.

DATE OF COMPLETION

IN ADDITION TO THE REQUIREMENTS OF SECTION 108.02 OF THE OHIO DEPARTMENT OF TRANSPORTATION'S CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND IN CONSIDERATION OF THE DEPARTMENT'S INTENTION TO PROVIDE THE AWARDED CONTRACTOR WITH A MORE FLEXIBLE TIME FRAME FOR PERFORMING REQUIRED CONSTRUCTION ACTIVITIES, THE AWARDED CONTRACTOR FOR THIS PROJECT SHALL BE GIVEN A DATE FOR PROJECT COMPLETION IN ACCORDANCE WITH THE FOLLOWING:

ALL CONSTRUCTION WORK FOR LOCATION 3, SR 37 AND SR 204 INTERSECTION, SHALL BE COMPLETED ON OR BEFORE MAY 31, 2004. THIS SHALL BE CONSIDERED AN INTERIM COMPLETION DATE.

FAILURE TO COMPLETE ALL CONSTRUCTION ACTIVITIES AT LOCATION 3 BY THE DATE GIVEN FOR INTERIM COMPLETION SHALL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES AS PER 108.07 OF CMS.

ALL CONSTRUCTION WORK ON REMAINING LOCATIONS 1 AND 2 SHALL BE COMPLETED ON OR BEFORE THE COMPLETION DATE INDICATED IN THE PROPOSAL.

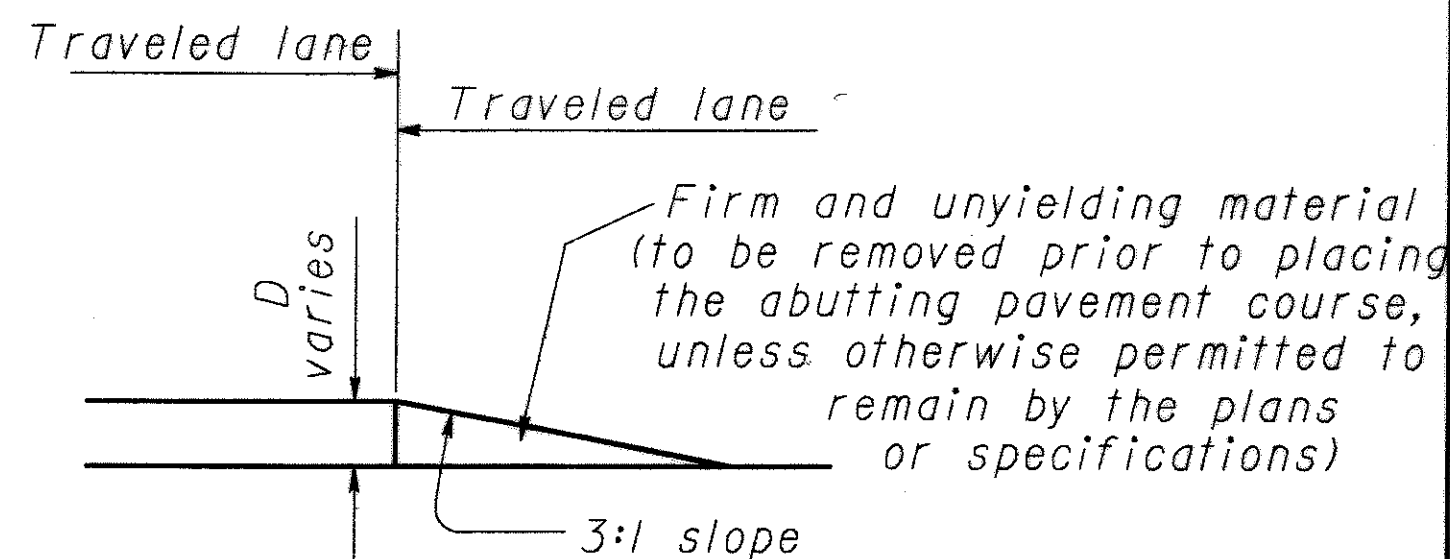
(SEE SHEETS 38 AND 39 FOR ADDITIONAL NOTES FOR LOCATION 3.)

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 hereon, 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 hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, 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 hereon may be required.
4. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
6. When drums are specified for a dropoff 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) and OWP-171 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 dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 3:1 slope treatment similar to 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 dropoff 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 effected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

**OPTIONAL WEDGE TREATMENT
(MILLING OR RESURFACING)**

1. This treatment may be used when permitted for Condition I only.
2. OW-171 and OWP-171 signs required.

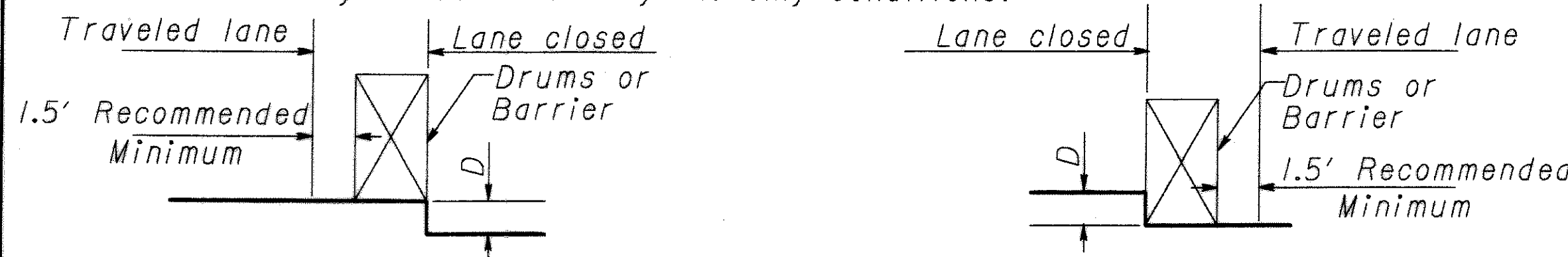


**CONDITION I
DROPOFFS BETWEEN TRAVELED LANES**

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

D (In.)	Treatment
≤ 1/2	Erect OW-171 and OWP-171 signs.
> 1/2 - 3	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
> 3 - 5	Lane closure utilizing drums as shown below.
> 5	Lane closure utilizing portable concrete barrier as shown below.

*Cones may be used for daytime only conditions.

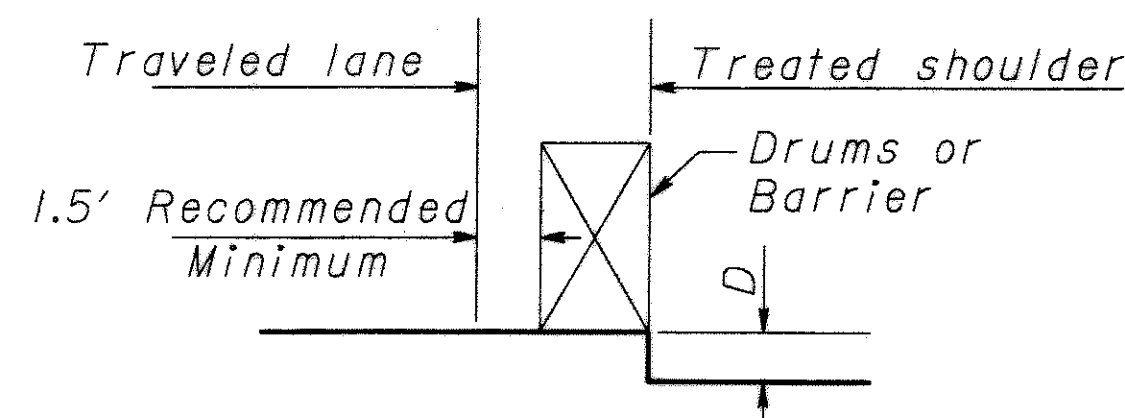


**CONDITION II
DROPOFFS WITHIN GRADED SHOULDER AREA**

1. The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
2. The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials, or concrete). For the purposes herein, its maximum width shall be considered to be twelve (12) feet.

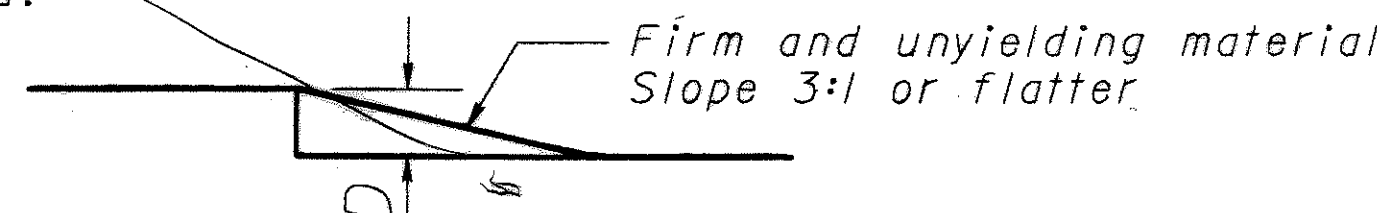
D (In.)	Treatment
≤ 1/2	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
> 1/2 - 5	1) If min. lane width requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
> 5 - 12 Daylight only	If min. lane width requirements can be met, maintain lanes utilizing drums as shown below.
> 5 - 24	1) If min. lane width requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min. lane width requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane 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 may not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.
2. OW-151 signs required.



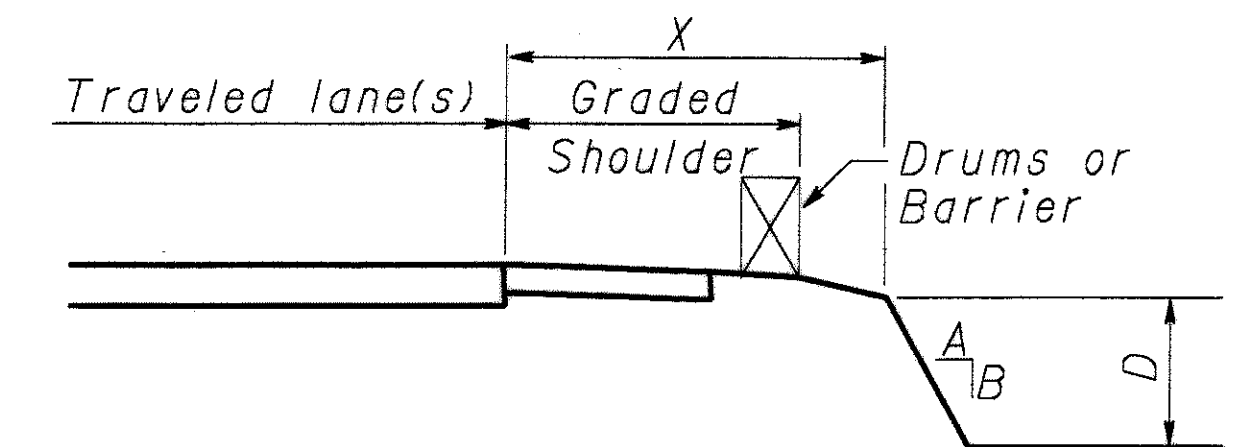
FAI-37-12.73

**CONDITION III
DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB**

1. See Note 2 under Condition II.
2. Use Chart A or B below, as applicable.

CHART A

- USE FOR:
1. Uncurbed Facilities.
 2. Curbed Facilities, where:
 - a. Curbs are less than 6" in height.
 - b. Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

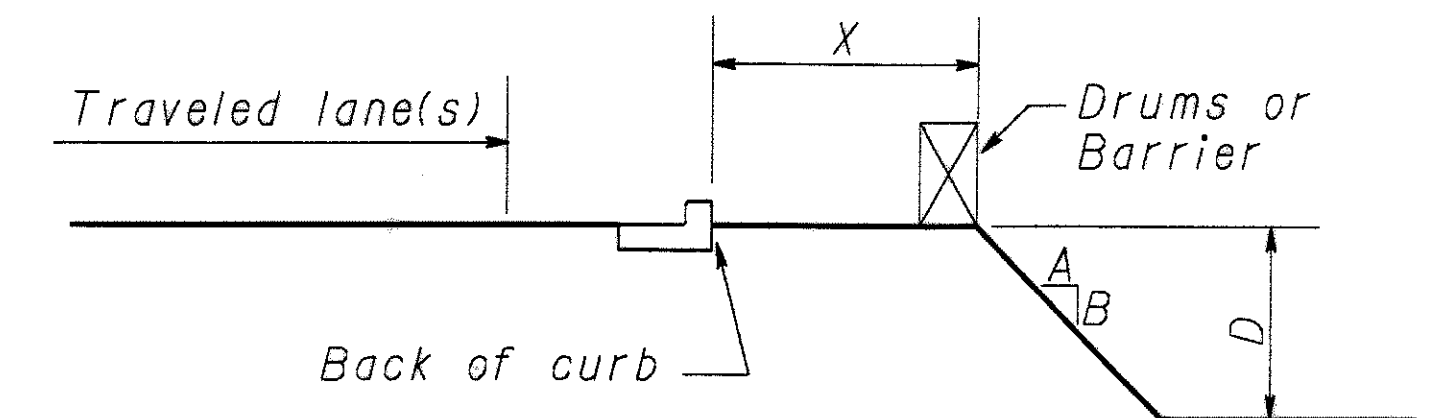


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	≤ 3	Steeper than 3:1	None	None
4-12	> 3 - < 12	Steeper than 3:1	Drums	Drums
4-12	> 12	Steeper than 3:1	Drums	Barrier
> 12 - 20	< 12	Steeper than 3:1	None	None
> 12 - 20	> 12 - < 24	Steeper than 3:1	Drums	Drums
> 12 - 20	> 24	Steeper than 3:1	Drums	Barrier
> 20 - 30	< 24	Steeper than 3:1	None	Drums
> 20 - 30	> 24	Steeper than 3:1	Drums	Barrier
> 30	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

- USE FOR: Curbed facilities, where the curb is 6" or greater in height and the legal speed is 40 mph or less.

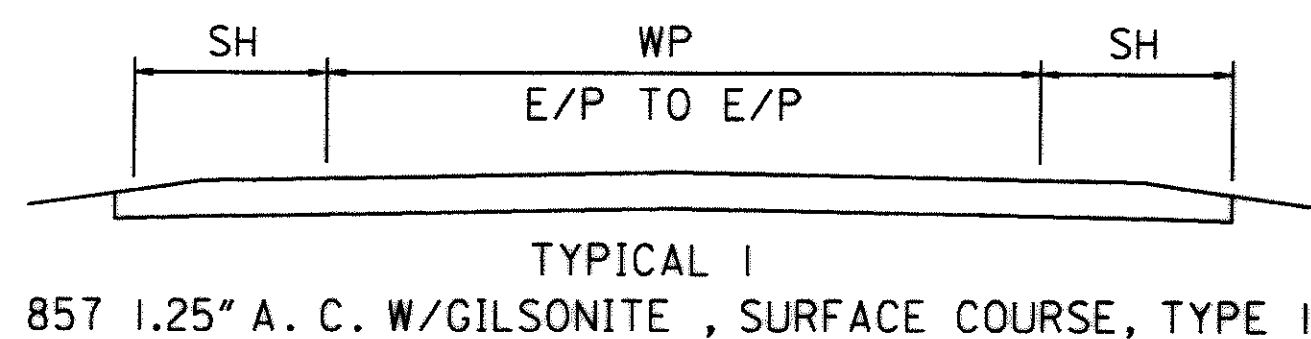


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-10	< 12	Any	None	Drums
0-10	> 12	Any	Drums	Drums
> 10	Any	Any	None	None

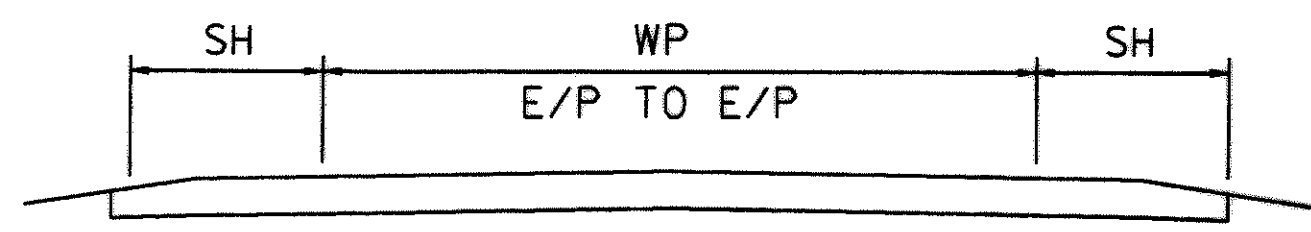
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BUREAU OF LOCATION AND DESIGN

**DROPOFFS IN
WORK ZONES**

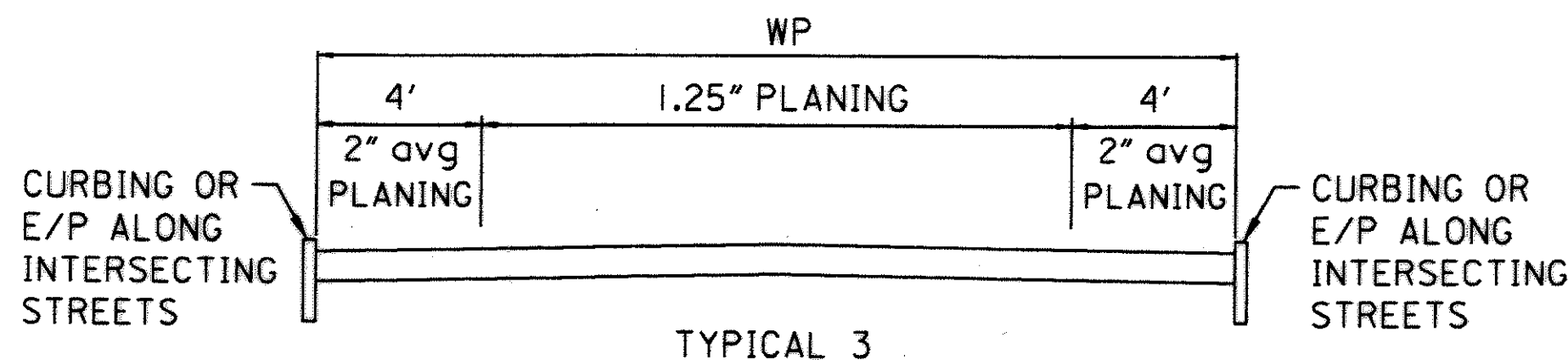
DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED



TYPICAL 1
857 1.25" A. C. W/GILSONITE, SURFACE COURSE, TYPE 1

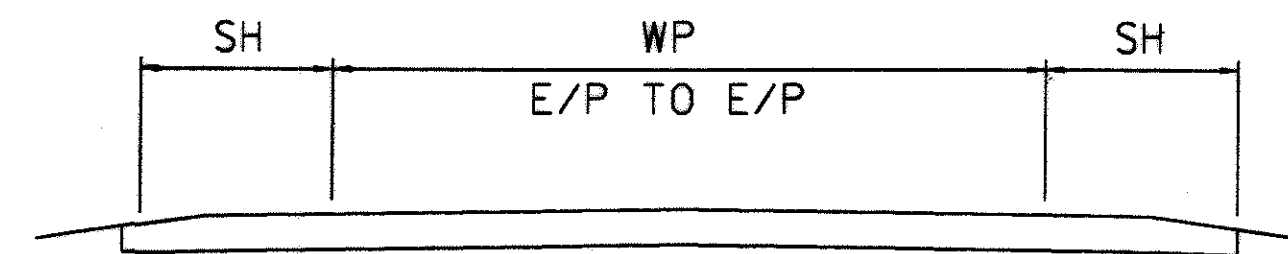


TYPICAL 2
254 1.25" PAVEMENT PLANING, ASPHALT CONCRETE, APP
857 1.25" A. C. W/GILSONITE, SURFACE COURSE, TYPE 1
857 1.50" A. C. W/GILSONITE, INTERMEDIATE COURSE, TYPE 2



TYPICAL 3

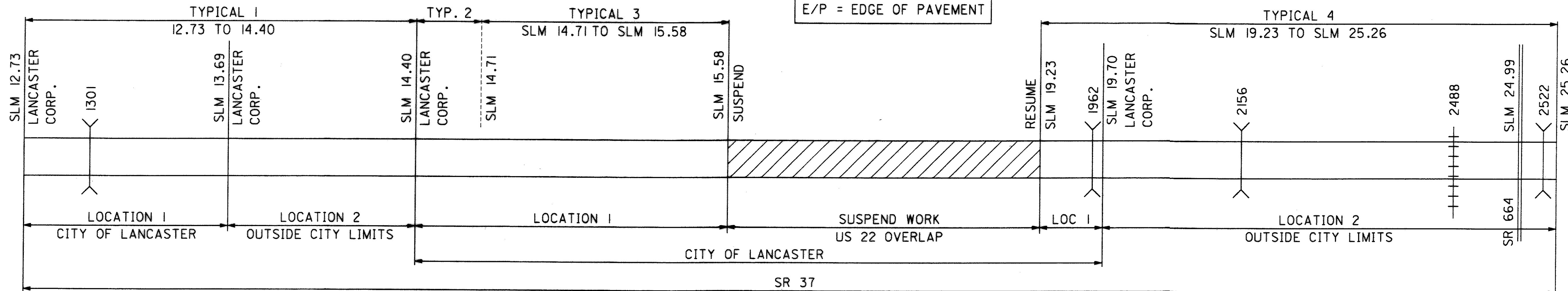
254 1.25" & 2" avg. PAVEMENT PLANING, ASPHALT CONCRETE, APP
857 1.25" A. C. W/GILSONITE, SURFACE COURSE, TYPE 1
857 1.50" A. C. W/GILSONITE, INTERMEDIATE COURSE, TYPE 2



TYPICAL 4

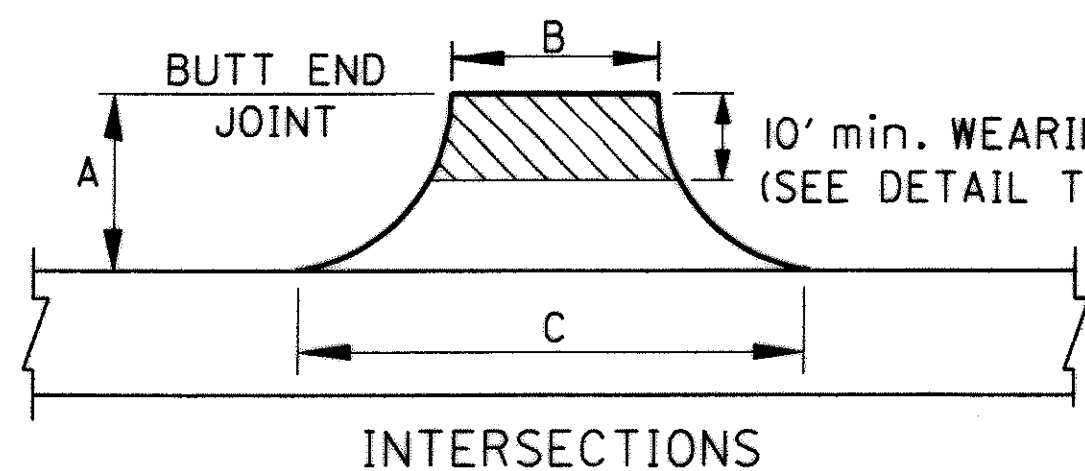
448 1.00" 1" ASPHALT CONCRETE SURFACE COURSE, TYPE 1
448 1.00" 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1

WP = WIDTH PAVEMENT
SH = SHOULDER
E/P = EDGE OF PAVEMENT

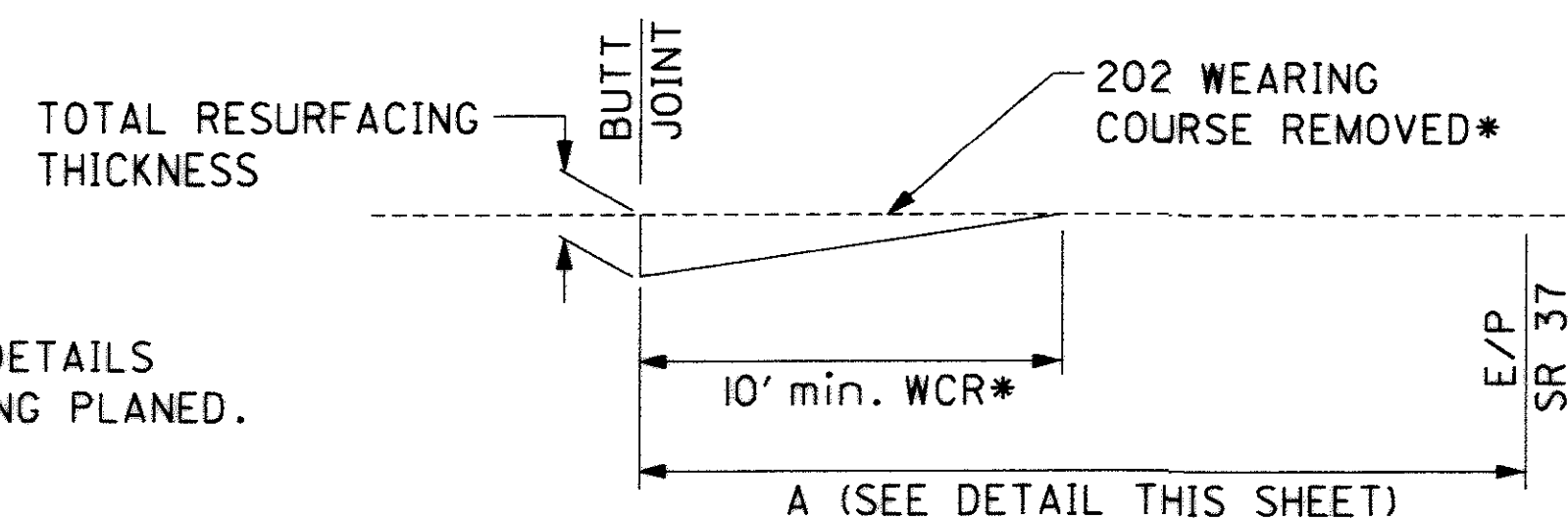


PAVEMENT DATA

LOCATION	COUNTY	ROUTE	LOG POINT TO LOG POINT	LENGTH		WP FEET	TYPICAL	EXIST PAV'T TYPE	PAV'T AREA SY	PROPOSED PAVEMENT										254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN SY	614 WORK ZONE CENTER LINE, CLASS II MILE						
				MILES	LIN. FT.					407			448 ASPHALT CONCRETE			857 ASPHALT CONCRETE W/GILSONITE											
										TACK COAT @ 0.075 gal./s.y. GAL	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y. GAL	TACK COAT, MISC. FOR LONGITUDINAL JOINT FT	THICK IN	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CY	THICK IN	SURFACE COURSE, TYPE 1, PG 64-22 CY	THICK IN	INTERMEDIATE COURSE, TYPE 2 IN	THICK IN			SURFACE COURSE, TYPE 1 CY					
1	FAI	SR 37	12.73-13.69	0.96	5069	24	1	448	13518	1014		5069															
1	FAI	SR 37	14.40-14.66	0.26	1373	22	2	448	3357	252	168	1373															
1	FAI	SR 37	14.66-14.71	0.05	264	30	2	448	880	66	44	264															
1	FAI	SR 37	14.71-14.87	0.16	845	30	3	448	2817	212	141	845															
1	FAI	SR 37	14.87-14.91	0.04	212	33	3	448	778	59	39	212															
1	FAI	SR 37	14.91-15.16	0.25	1320	33	3	448	4840	363	242	1320															
1	FAI	SR 37	15.16-15.58	0.42	2218	36	3	448	8872	666	444	2218															
1	FAI	SR 37	19.23-19.70	0.47	2482	24	4	448	6619	497	329	2482	1.0	184	1.0	184											
BRIDGE AREA DEDUCTION (CARRIED FROM SHT 17)									(1770)	(88)	(15)	(116)	(7)		(7)						(51)	(1770)	(0.04)				
1	FAI	SR 37	TOTALS						39911	3129	1409	13667		177		177		900		1168	26393	4.22					
2	FAI	SR 37	13.69-13.88	0.19	1004	24	1	448	2678	201		1004															
2	FAI	SR 37	13.88-14.18	0.30	1584	30	1	448	5280	396		1584															
2	FAI	SR 37	14.18-14.40	0.22	1162	22	1	448	2841	213		1162															
2	FAI	SR 37	19.70-25.26	5.56	29357	24	4	448	78286	5872	3914	29357	1.0	2175	1.0	2175											
BRIDGE AREA DEDUCTION (CARRIED FROM SHT 17)									(1388)	(104)	(69)		(38)		(38)												
2	FAI	SR 37	TOTALS						87697	6682	3845	33107		2137		2137				376		11.83					



*USE WEARING COURSE REMOVED AS SHOWN IN DETAILS ONLY IF THE INTERSECTING STREET IS NOT BEING PLANNED.



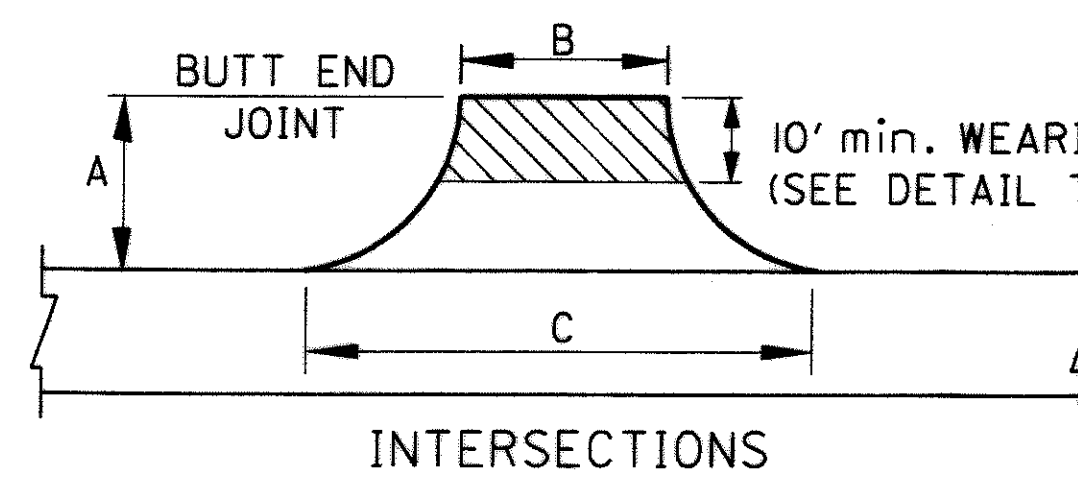
L O C A T I O N	C O U N T Y	R O U T E	L O G P O I N T	S I D E	D E S C R I P T I O N	I N T E R S E C T I O N S			A R E A S Q. Y D.	T A C K C O A T @ 0.075 g a l./s.y. G A L.	857 ASPHALT CONCRETE W/GILSONITE				254 P A V E M E N T P L A N I N G A S P H A L T C O N C R E T E, A.P.P. S Q. Y D.	202 W E A R I N G C O U R S E R E M O V E D S Q. Y D.		
						A I N F E E T	B I N F E E T	C I N F E E T			T H I C K I N C H	S U R F A C E C O U R S E, T Y P E I C U. Y D.	773	250			153	259
I	FAI	SR 37		LT	CARPICO DR.	50	24	110	372	28			1.25	13		32		
I	FAI	SR 37			WIDENING @ CARPICO DR.				530	40			1.25	19				
I	FAI	SR 37		LT	CREEKSIDE DR.	50	38	134	478	36			1.25	17		51		
I	FAI	SR 37		RT	MONDHANK RD.	50	24	120	400	30			1.25	13		32		
I	FAI	SR 37			WIDENING @ MONDHANK RD.				647	49			1.25	23				
I	FAI	SR 37		LT	COLLEGE AVENUE	60	40	116	520	39			1.25	18		54		
I	FAI	SR 37		RT	ENTRANCE TO BEAVER FIELD	20	22	46	76	6			1.25	3		30		
I	FAI	SR 37			WIDENING @ COLLEGE AVENUE				787	59			1.25	27				
I	FAI	SR 37		LT	COLLEGE EXIT	30	29	74	172	13			1.25	6		39		
I	FAI	SR 37		LT	COLLEGE ENTRANCE	30	35	86	202	15			1.25	7		47		
I	FAI	SR 37		RT	HIGH ST	87	25	135	773	58			1.25	27	773			
I	FAI	SR 37		LT	BAINTER CIRCLE	28	43	118	250	19			1.25	9	250			
I	FAI	SR 37		LT	FAIR AVE	29	31	64	153	12			1.25	5	153			
I	FAI	SR 37		RT	FAIR AVE	35	42	91	259	20			1.25	9	259			
I	FAI	SR 37		RT	ALLEY	10	11	18	16	2			1.25	1	16			
I	FAI	SR 37		RT	LAKE ST	13	36	50	62	5			1.25	2	62			
I	FAI	SR 37		LT	LAKE ST	12	36	55	61	5			1.25	2	61			
I	FAI	SR 37		RT	ALLEY	11	11	18	18	2			1.25	1	18			
I	FAI	SR 37		LT	ALLEY	11	11	21	20	2			1.25	1	20			
I	FAI	SR 37		LT	ALLEN ST	12	38	60	65	5			1.25	2	65			
I	FAI	SR 37		RT	ALLEN ST	12	25	38	42	4			1.25	1	42			
I	FAI	SR 37		LT	ALLEY	10	12	25	20	2			1.25	1	20			
I	FAI	SR 37		RT	ALLEY	10	11	21	18	2			1.25	1	18			
I	FAI	SR 37		RT	6th AVE	15	41	60	84	7			1.25	3	84			
I	FAI	SR 37		LT	6th AVE	13	53	68	87	7			1.25	3	87			
I	FAI	SR 37		RT	ALLEY	10	12	19	17	2			1.25	1	17			
I	FAI	SR 37		LT	ALLEY	10	11	12	13	1			1.25	1	13			
I	FAI	SR 37		LT	5th AVE	12	34	52	57	5			1.25	2	57			
I	FAI	SR 37		RT	5th AVE	12	34	54	59	5			1.25	2	59			
I	FAI	SR 37		RT	ALLEY	14	12	19	24	2			1.25	1	24			
I	FAI	SR 37		LT	ALLEY	12	10	19	19	2			1.25	1	19			
I	FAI	SR 37		LT	KING ST	15	38	60	82	6			1.25	3	82			
I	FAI	SR 37		RT	KING ST	15	38	60	82	6			1.25	3	82			
I	FAI	SR 37		RT	ALLEY	14	12	20	25	2			1.25	1	25			
I	FAI	SR 37		LT	ALLEY	16	12	21	29	2			1.25	1	29			
I	FAI	SR 37		LT	MULBERRY ST	18	36	58	94	7			1.25	3	94			
I	FAI	SR 37		RT	MULBERRY ST	18	36	58	94	7			1.25	3	94			
I	FAI	SR 37		RT	ALLEY	16	19	32	45	4			1.25	2	45			
I	FAI	SR 37		LT	ALLEY	15	14	20	28	2			1.25	1	28			
I	FAI	SR 37		LT	WHEELING ST	19	39	62	107	8			1.25	3	107			
I	FAI	SR 37		RT	WHEELING ST	19	35	64	105	8			1.25	3	105			
I	FAI	SR 37		RT	ALLEY	16	13	22	31	3			1.25	1	31			
					SUBTOTAL CARRIED TO SHT 12				7023	539				246		2839		285

CALCULATED
BY
CHECKED
DATE

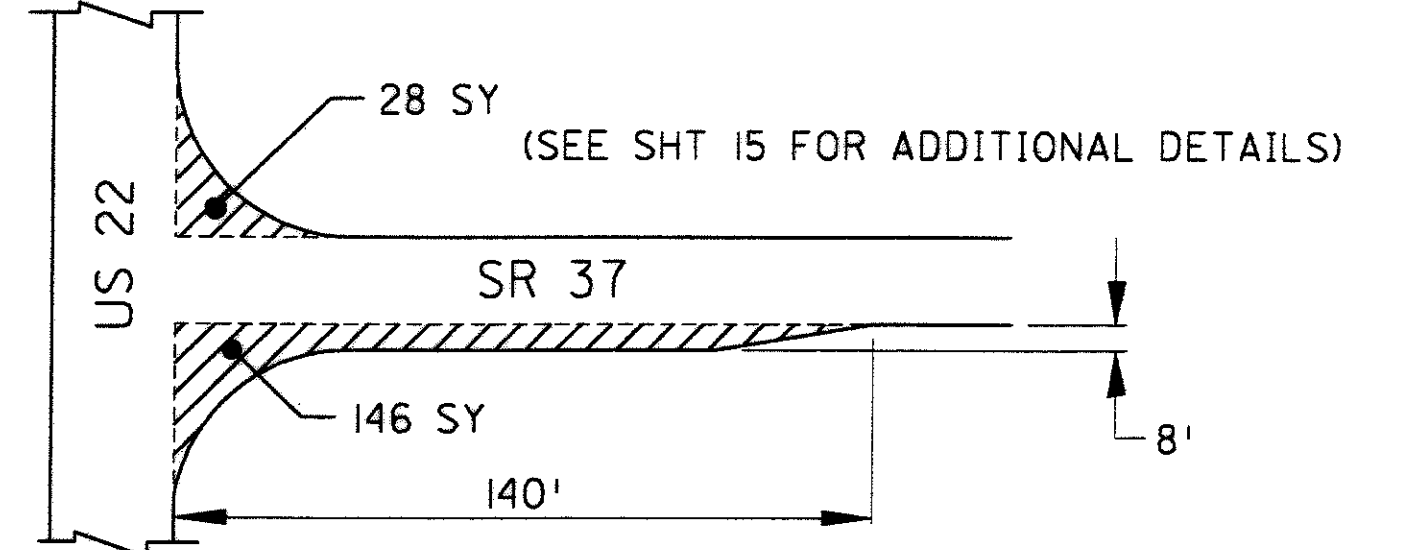
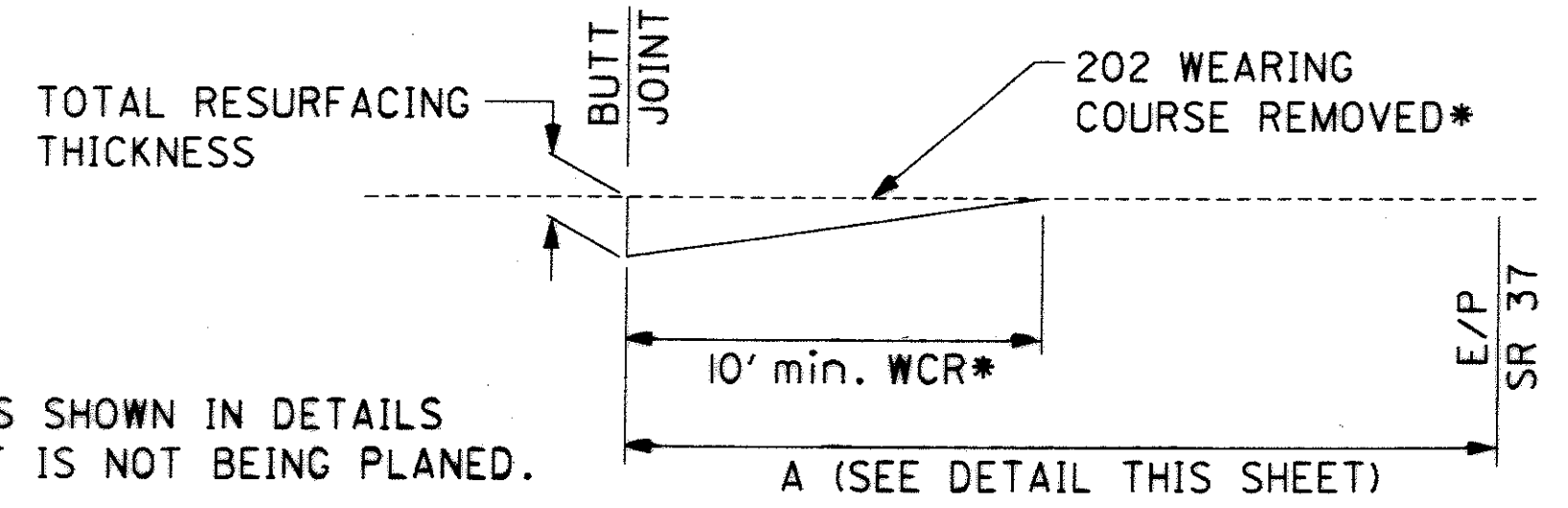
EXTRA AREAS

FAI-37-12.73

11
70



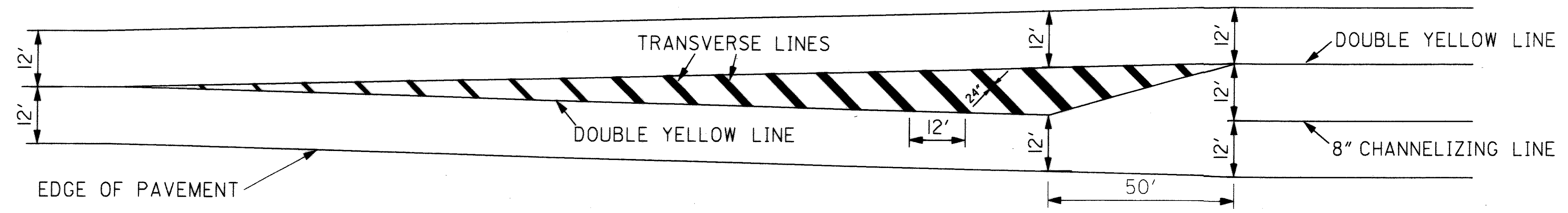
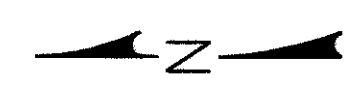
*USE WEARING COURSE REMOVED AS SHOWN IN DETAILS ONLY IF THE INTERSECTING STREET IS NOT BEING PLANNED.



LOCATION	COUNTY	ROUTE	LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS			AREA SQ.YD.	407		857 ASPH. CONC.		448 ASPHALT CONCRETE			202	254
						A IN FEET	B IN FEET	C IN FEET		TACK COAT @ 0.075 gal./s.y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y. GAL.	THICK INCH	WITH GILSONITE, SURFACE COURSE, TYPE I CU.YD.	THICK INCH	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU.YD.	THICK INCH	SURFACE COURSE, TYPE I, PG 64-22 CU.YD.	WEARING COURSE REMOVED SQ.YD.
1	FAI	SR 37		LT	ALLEY	17	15	31	43	4		1.25	2				43	
1	FAI	SR 37			SR 37 @ US 22 (SEE DETAIL ABOVE)				174	13		1.25	6				174	
					SUBTOTAL THIS SHEET				217	17			8				217	
					SUBTOTAL FROM PREVIOUS SHEET				7023	539			246				285	
1	FAI	SR 37			TOTALS CARRIED TO LOCATION 1 SUBSUMMARY				7240	556			254				285	
2	FAI	SR 37		RT	FAIR ACRES DR.	52	20	78	283	22		1.25	10				27	
2	FAI	SR 37		LT	ARBOR VALLEY DR.	37	25	84	224	17		1.25	8				34	
2	FAI	SR 37			WIDENING @ ARBOR VALLEY DR (SEE SHT 16)				1054	79		1.25	37					
2	FAI	SR 37		LT	ORCHARD HILL	40	15	81	213	16		1.25	8				20	
2	FAI	SR 37		RT	SR 51(SCHWILK RD)	40	20	74	209	16	11		6	1	6	27		
2	FAI	SR 37		LT	SNOKE HILL RD	44	20	70	220	17	11		6	1	6	27		
2	FAI	SR 37		LT	CR 60 (LAKE RD)	40	22	86	240	18	12		7	1	7	30		
2	FAI	SR 37		RT	CR 60 (LAKE RD)	58	22	104	406	31	21		12	1	12	30		
2	FAI	SR 37		LT	MARIETTA RD	38	22	76	207	16	11		6	1	6	30		
2	FAI	SR 37		RT	MARIETTA RD	48	20	82	272	21	14		8	1	8	27		
2	FAI	SR 37		LT	MARIETTA RD	58	20	74	303	23	16		9	1	9	27		
2	FAI	SR 37		RT	HOLLIDAY RD	28	20	68	137	11	7		4	1	4	27		
2	FAI	SR 37		LT	CR 66 (WEST RUSH	56	24	96	373	28	19		11	1	11	32		
2	FAI	SR 37		LT	OAK HILL RD	40	22	82	231	18	12		7	1	7	30		
2	FAI	SR 37		LT	THOMAS RD	42	20	64	196	15	10		6	1	6	27		
2	FAI	SR 37		RT	THOMAS RD	34	22	74	181	14	9		5	1	5	30		
2	FAI	SR 37		LT	SR 664	72	22	94	464	35	24		13	1	13	30		
2	FAI	SR 37		RT	SR 664	80	28	10	569	43	29		16	1	16	38		
2	FAI	SR 37			TURN LANES @ SR 664 (SEE SHT 16)				1338	10	67		37	1	37			
2	FAI	SR 37			TOTALS CARRIED TO LOCATION 2 SUBSUMMARY				7120	450	273		63		153		153	

CALCULATED BY: _____ CHECKED BY: _____
EXTRA AREAS
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12/70

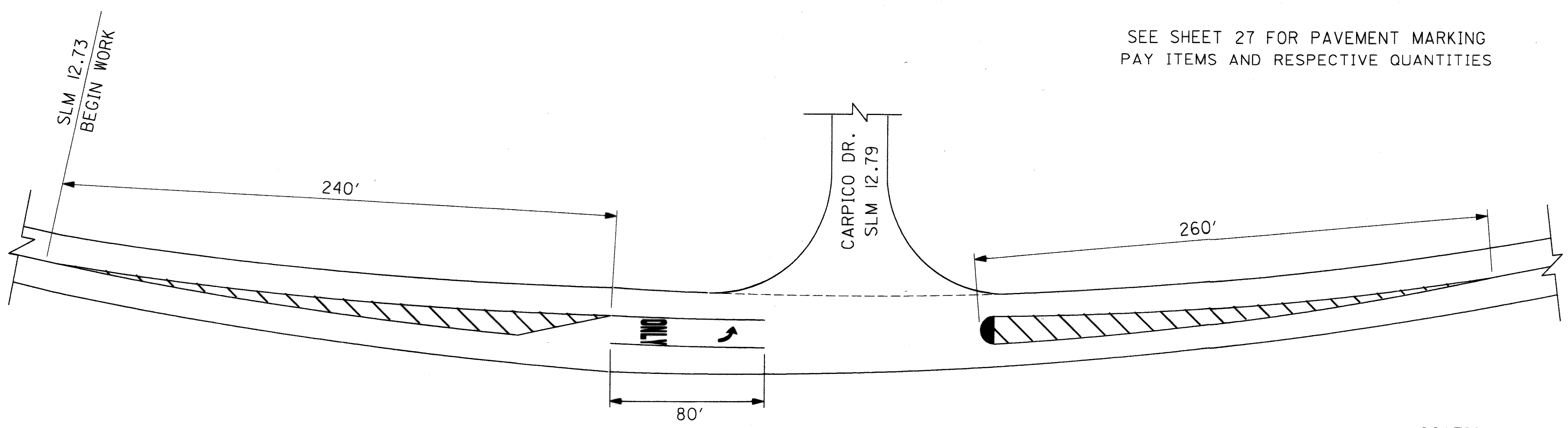
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TYPICAL ISLAND DETAIL

LOCATION 1

DRAWING NOT TO SCALE



SEE SHEET 27 FOR PAVEMENT MARKING
PAY ITEMS AND RESPECTIVE QUANTITIES

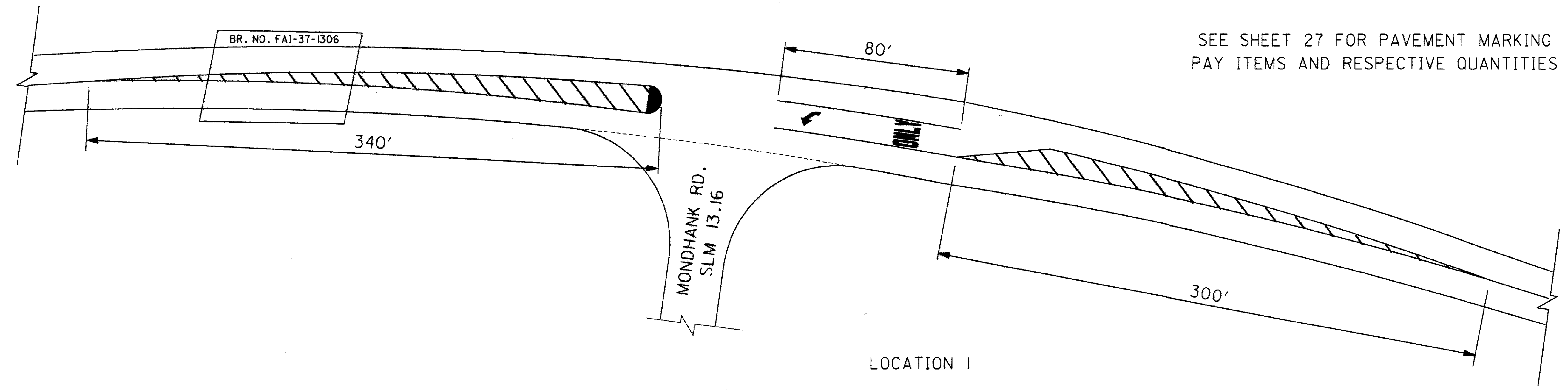
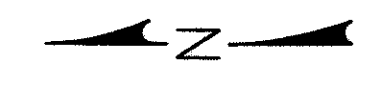
LOCATION 1

DRAWING NOT TO SCALE

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CARPICO DR. & TYPICAL ISLAND DETAILS

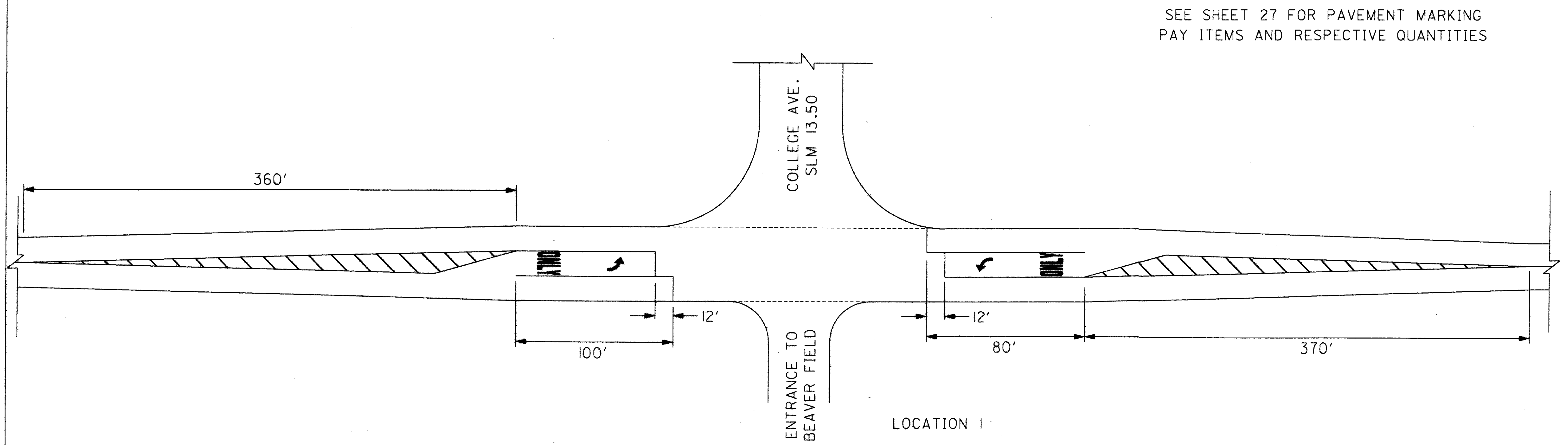
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LOCATION I

DRAWING NOT TO SCALE

MONDHANK DR. & COLLEGE DR. DETAILS

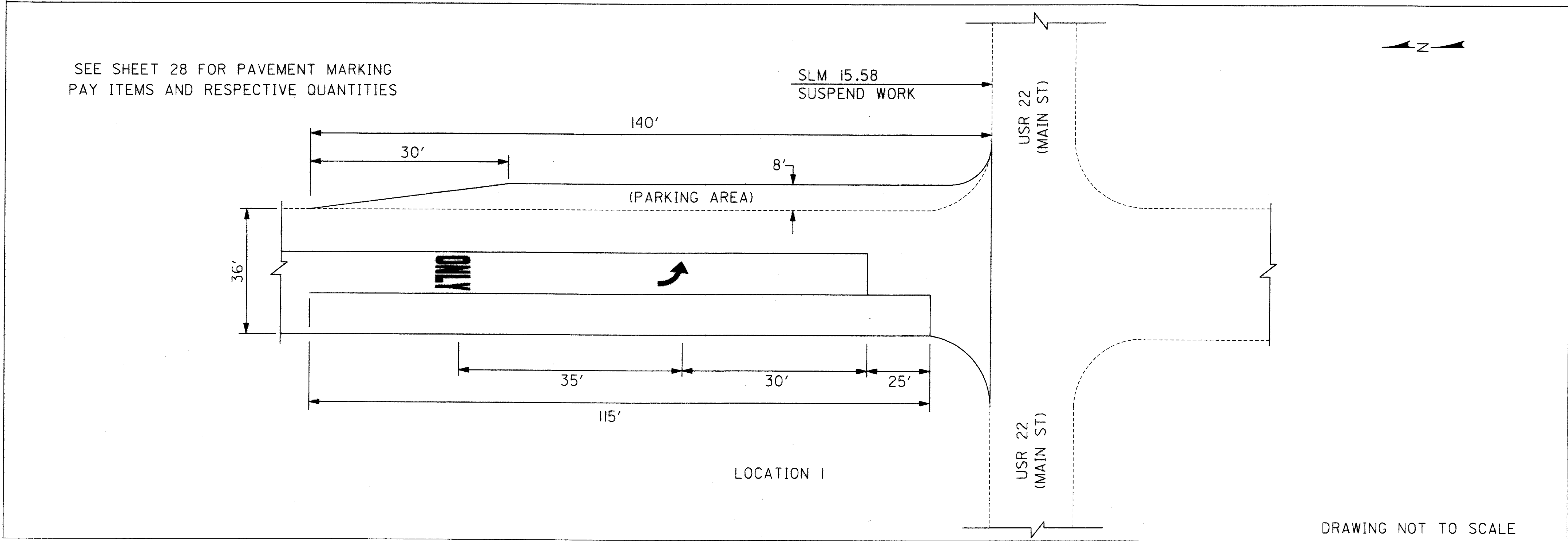
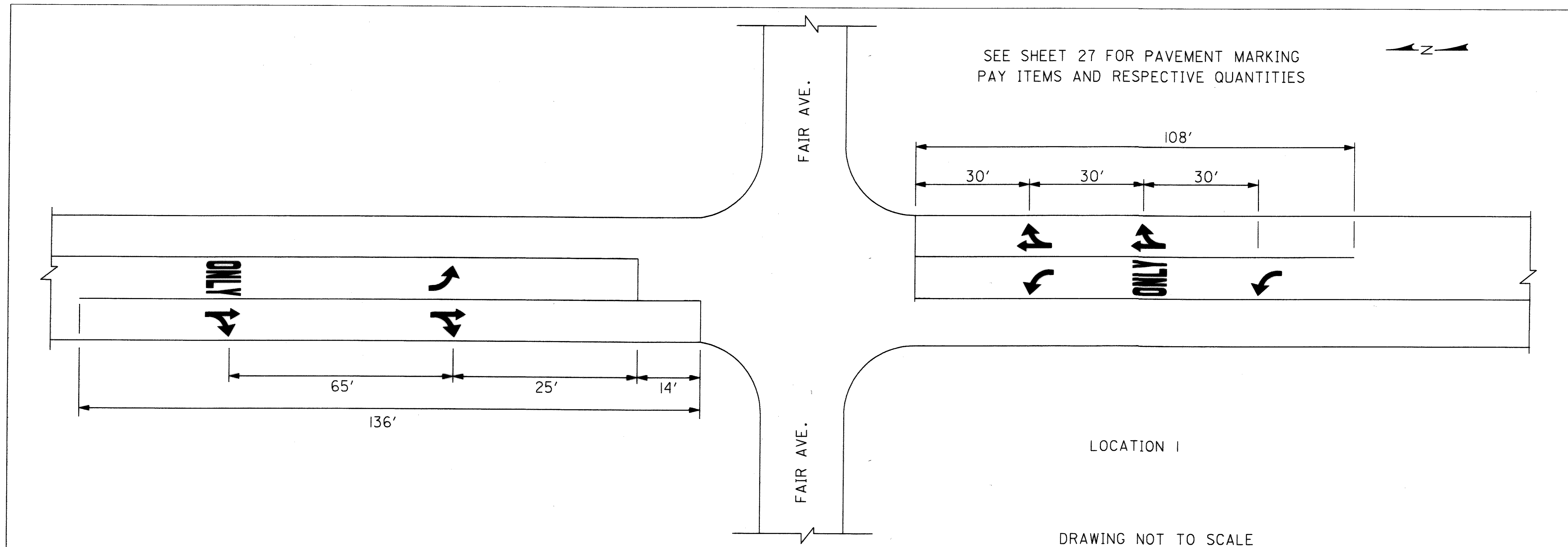


LOCATION I

DRAWING NOT TO SCALE

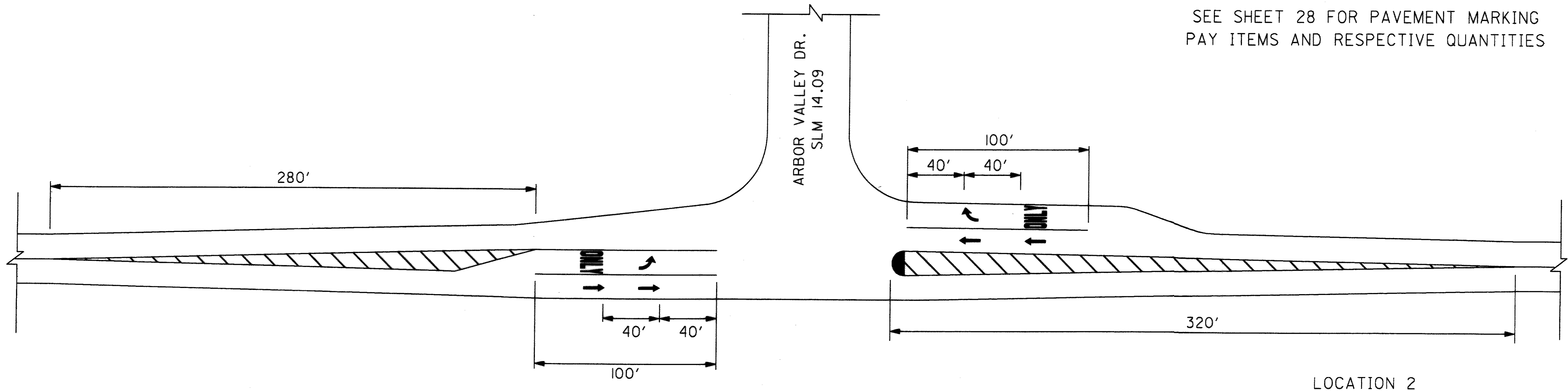
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F037000 IC.MEA



F037000.D.MEA

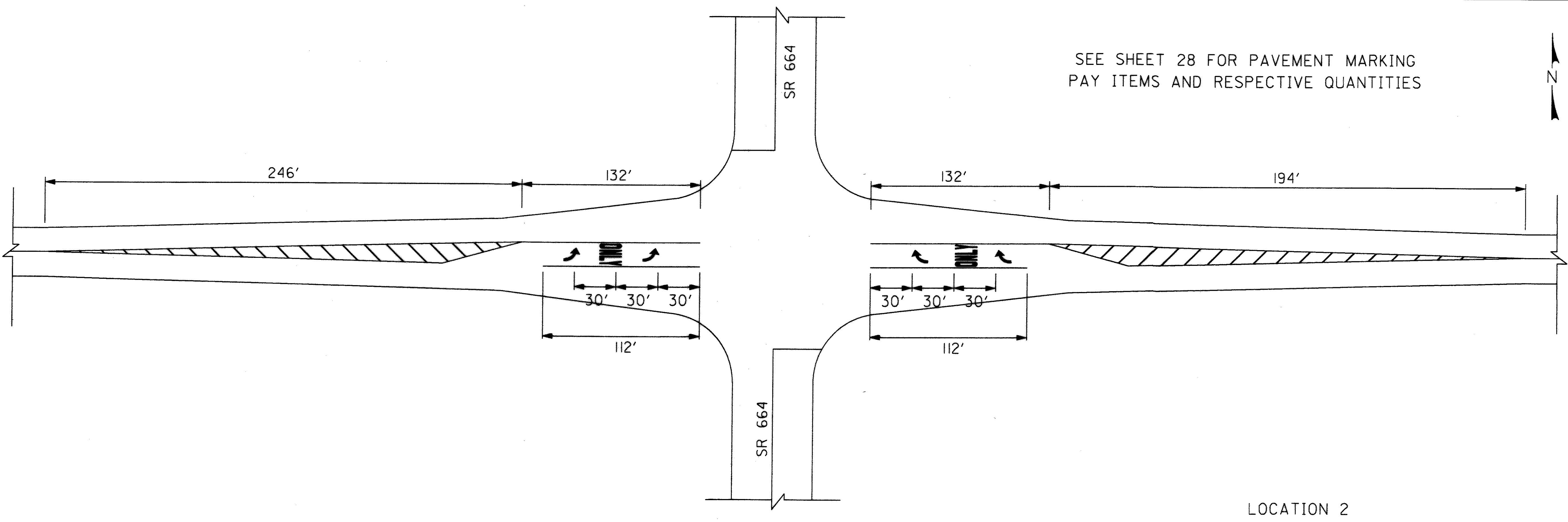
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SEE SHEET 28 FOR PAVEMENT MARKING
PAY ITEMS AND RESPECTIVE QUANTITIES

LOCATION 2

DRAWING NOT TO SCALE



SEE SHEET 28 FOR PAVEMENT MARKING
PAY ITEMS AND RESPECTIVE QUANTITIES

LOCATION 2

DRAWING NOT TO SCALE

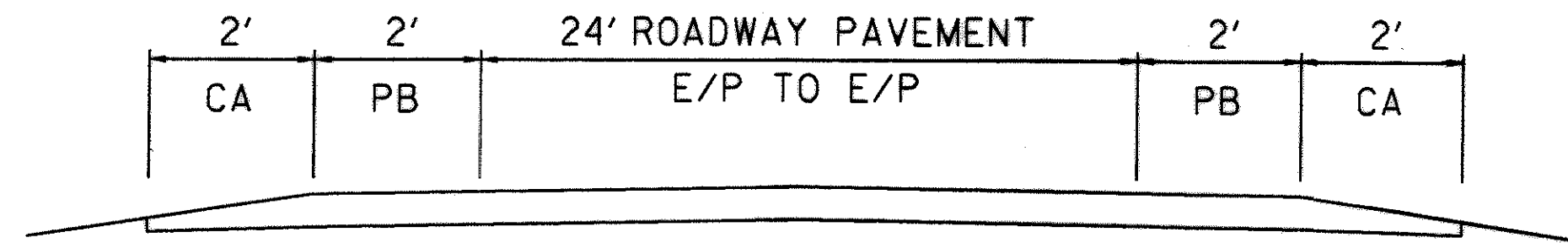
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LME

ARBOR VALLEY DR. & TURN LANES @ SR 664 DETAILS

FAI-37-12.73

16/20

AREA DEDUCTIONS @ BRIDGES



PB = PAVED BERM
CA = COMPACTED AGGREGATE

LOCATION 1

FAI-37-1301:
MILLING; 4" WEARING COURSE REMOVED
PAVING; 2" ASPHALT CONCRETE WITH GILSONITE, SURFACE COURSE, TYPE 1
[2 x ((160x28) x (0.1042) + (40x28) x (0.1354 avg)) + (147x50) x (0.1667)] / 27 = 91.2 CY
WATERPROOFING; NONE

FAI-37-1962:
MILLING; NONE
PAVING; DO NOT PAVE. BUTT JOINT AT APPROACH SLABS

LOCATION 2

FAI-37-2156:
MILLING; NONE
PAVING; 1" A. C. SURFACE COURSE, TYPE 1 AND 1" A. C. INTERMEDIATE COURSE, TYPE 1
(86.2 x 44) x (0.0833) / 27 = 11.7 CY
WATERPROOFING; NONE

FAI-37-2522:
MILLING; 3" WEARING COURSE REMOVED (REMOVE ALL ASPHALT & WATERPROOFING FROM DECK)
PAVING; 1.5" A. C. SURFACE COURSE, TYPE 1 AND 1.5" A. C. INTERMEDIATE COURSE, TYPE 1
SURFACE: [2x((50x28)x(0.0833) + (25x28)x(0.1042 avg)) + (25x28)x(0.125)] / 27 = 68.3 CY
INTERMEDIATE: [2x((75x28)x(0.0833) + (25x28)x(0.1042 avg)) + (234.3x44)x(0.125)] / 27 = 66.1 CY
WATERPROOFING; ITEM 512 TYPE 3 WATERPROOFING 901 (DECK AREA)
EXPANSION JOINTS: REMOVE EXISTING JOINTS AND REPLACE POLYMER MODIFIED ASPHALT EXPANSION JOINTS.
INCLUDE THE REMOVAL OF EXISTING JOINTS WITH:
ITEM SPECIAL: 516 POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM 1.4 CU. YD.
3"/12 X 20"/12 X 2 X 44'/27 = 1.35 CU. YD.

DEDUCTIONS FOR ROADWAY PAVEMENT

LOCATION 1
FAI-37-1301: (547' x 24') / 9 = 1459 SQ.YD.
FAI-37-1962: (116.5' x 24') / 9 = 311 SQ.YD.
1770 SQ.YD.
LOCATION 2
FAI-37-2156: (86.2' x 24') / 9 = 230 SQ.YD.
FAI-37-2522: (434.3' x 24') / 9 = 1158 SQ.YD.
1388 SQ.YD.

AREA DEDUCTIONS FOR ROADWAY PAVEMENT
CARRIED TO SHEET 9

DEDUCTIONS FOR TREATED SHOULDERS

LOCATION 1
FAI-37-1301: 2x(547' x 2') / 9 = 243 SQ.YD.
FAI-37-1962: 2x(116.5' x 2') / 9 = 52 SQ.YD.
295 SQ.YD.
LOCATION 2
FAI-37-2156: 2x(86.2' x 2') / 9 = 38 SQ.YD.
FAI-37-2522: 2x(434.3' x 2') / 9 = 193 SQ.YD.
231 SQ.YD.

AREA DEDUCTIONS FOR TREATED SHOULDERS
CARRIED TO SHEET 9

SEE DETAILS ON SHEETS 18 & 19

SEE CALCULATIONS ABOVE

BRIDGE DECK DATA

LOCATION	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS) LIN.FT.	WIDTH LIN.FT.	BRIDGE DECK AREA SQ.YDS.	* BRIDGE DETAILS		202	407		857 A. C.		448 ASPHALT CONCRETE			512	516		
					DEPTH VAR. SQ.YDS.	TACK COAT @ 0.075 GAL./S.Y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y. GAL.	THICK INCH	ASPHALT CONCRETE W/GILSONITE SURFACE COURSE, TYPE I, CU.YD.	THICK INCH	INTERMEDIATE COURSE, TYPE 2, PG 64-22 CU.YD.	THICK INCH	SURFACE COURSE, TYPE I, PG 64-22 CU.YD.	TYPE 3 WATERPROOFING SQ.YDS.	ITEM SPECIAL: 516 POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM CU.YD.			
																DETAIL NO.		
1	FAI-37-1301	97	50	539	1	18	2062	155		*	92 #							
1	FAI-37-1962	66.5	44	326	2	18	156											
1	TOTALS CARRIED TO		LOCATION 1	SUBSUMMARY			2218	155			92							
2	FAI-37-2156	86.2	44	422	3	19		32	21			1.0	12	1.0	12			
2	FAI-37-2522	184.3	44	901	4	19	2079	133	89			*	66 #	*	69 #	901	1.4	
2	TOTALS CARRIED TO		LOCATION 2	SUBSUMMARY			2079	165	110				78		81	901	1.4	

F0370001.mbt

BRIDGE DECK TREATMENT

FAI-37-12.73

GENERAL NOTES AND DETAILS FOR POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

ITEM SPECIAL - POLYMER-MODIFIED ASPHALT EXPANSION JOINT SYSTEM

THIS ITEM WILL BE USED TO SEAL THE EXPANSION/CONTRACTION JOINTS AS PER THESE DETAILS AND THE MANUFACTURER'S REQUIREMENTS USING A POLYMER-MODIFIED ASPHALT SYSTEM. THE PRIME CONTRACTOR WILL OBTAIN THE SERVICES OF ONE OF THE FOLLOWING APPROVED APPLICATORS WHO WILL FURNISH AND INSTALL THE NEW BRIDGE EXPANSION JOINT SYSTEM AFTER ALL PAVING ON THE AFFECTED BRIDGE(S) HAS BEEN COMPLETED.

PAVETECH INTERNATIONAL
4660 DUKE DRIVE
SUITE 390
MASON, OH 45040
TEL: (513) 770-3122

LINEAR DYNAMICS, INC.
79 MONTGOMERY ST.
MONTGOMERY, PA 17752
TEL: (570) 547-1621

WATSON-BOWMAN ACME
95 PINEVIEW DR.
AMHERST, NY 14228
TEL: (716) 691-7566 OR
TEL: (800) 253-9226

MATERIALS:

BRIDGING PLATE:

MILD STEEL $\frac{1}{8}$ " OR $\frac{1}{4}$ " THICK PLATE, 8" WIDE OR 18 GAUGE ALUMINUM, 8" WIDE.

BINDER:

TYPE: POLYMER MODIFIED ASPHALT
SOFTENING POINT: 180 DEGREES F. MIN.
FLOW: 3 mm. MAX. AT 140 DEGREES F.
PENETRATION: 9 mm. MAX. AT 77 DEGREES F.
1 mm. MIN AT 0 DEGREES F.
ASTM D 3407
DUCTILITY: 40 cm. MIN. ASTM D 113
RESILIENCE: 60% MIN. AT 77 DEGREES F.
TENSILE ADHESION: 700% MIN.
SPECIFIC GRAVITY: 1.10 ± 0.05
POURING TEMP: 350 - 390 DEGREES F.

AGGREGATE:

TYPE: CRUSHED, DOUBLE WASHED, AND DRIED GRANITE OR BASALT

GRADATION

THE GRADATION OF THE AGGREGATE VARIES BY MANUFACTURER AND WILL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS FOR THE SYSTEM BEING USED ON THIS PROJECT.

BACKER ROD:

THE BACKER SHALL BE A CLOSED CELL FOAM EXPANSION JOINT FILLER CAPABLE OF WITHSTANDING THE PLACEMENT TEMPERATURE OF THE POLYMER MODIFIED ASPHALT.

NOTE: PRIOR TO PLACEMENT OF ANY PORTION OF THE JOINT SYSTEM, THE PROJECT ENGINEER MUST HAVE CERTIFIED TEST DATA MEETING ALL THE MINIMUM REQUIREMENTS OF ALL THE MATERIALS OF THE JOINT SYSTEM.

INSTALLATION PROCEDURES:

SAWING AND SURFACE PREPARATION:

AFTER ALL PAVING OPERATIONS ARE COMPLETE, THE OVERLAY IS TO BE TRANSVERSELY SAW CUT FULL DEPTH NO LESS THAN TWO INCHES DEEP (20" CENTERED OVER JOINT OPENING, UNLESS OTHERWISE NOTED). REMOVE ALL MATERIAL, INCLUDING WATER-PROOFING MATERIAL, BETWEEN SAW CUTS. THOROUGHLY CLEAN AND DRY EXPOSED CONCRETE, STEEL, AND CUT SURFACES USING COMPRESSED AIR AND A HOT COMPRESSED AIR (HCA) LANCE. THE LANCE MUST PRODUCE A FLAME RETARDED AIR STREAM TEMPERATURE OF 3000 DEGREES F. AT A VELOCITY OF 3,000 FEET PER

SECOND WITH 15 PSIG CHAMBER PRESSURE. IF THERE IS AN INTERRUPTION DUE TO WEATHER OR OTHER CAUSES, THE OPERATION WILL BE REPEATED WITH THE HCA LANCE IMMEDIATELY BEFORE THE BINDER COAT OPERATION. ALSO, 6 INCHES OF THE ROAD SURFACE ON EITHER SIDE OF THE JOINT WILL BE DRIED SO THAT A SUITABLE SURFACE FOR BITUMEN ADHESION IS OBTAINED.

SEALING OF EXPANSION JOINT: (PRE-STRESSED BOX OR CONCRETE SLAB)

THE EXPANSION JOINT GAP IS TO BE SEALED AND A BRIDGING PLATE CENTERED ALONG IT. A VERY NARROW GAP WILL BE SEALED BY POURING HOT BINDER INTO THE GAP. GAPS OF $\frac{1}{8}$ " OR MORE WILL FIRST BE FILLED WITH AN APPROPRIATELY SIZED BACKER ROD. THE BACKER ROD WILL BE INSTALLED SO THAT IT IS BETWEEN $\frac{1}{8}$ " AND 1-1/8" BELOW THE TOP OF THE EXISTING GAP. THE GAP WILL THEN BE FILLED WITH BINDER.

BOND BREAKER:

SPREAD BINDER OVER SURFACE AREA WHERE THE METAL BRIDGING PLATE WILL BE PLACED. CENTER THE BRIDGING PLATE OVER THE EXISTING JOINT AND BED INTO THE HOT BINDER. BUTT JOINT THE BRIDGING PLATES TO ACCOMMODATE THE ENTIRE JOINT LENGTH. SPIKE HOLES WILL BE DRILLED AT 1 FOOT INTERVALS ALONG THE LONGITUDINAL CENTERLINE OF THE PLATES. SECURE BRIDGING PLATE WITH NAILS OR SPIKES. SEAL BUTT JOINTS WITH HOT BINDER AND ALLOW BINDER TO SETUP BEFORE NEXT OPERATION. WHEN ALUMINUM BRIDGING PLATES ARE USED, ONLY THE BINDER IS REQUIRED TO SECURE THE INDIVIDUAL PLATES.

BINDER COAT:

SEAL ALL PREPARED, EXPOSED SURFACES OF THE JOINT WITH BINDER. POUR THE HOT BINDER OVER THE FLOOR AREA OF THE JOINT AND SPREAD TO COAT ALL EXPOSED SURFACES. THE BINDER WILL BE A MINIMUM OF $\frac{1}{2}$ " THICK ON THE BOTTOM OF THE JOINT CAVITY, WITH POOLS OF GREATER THICKNESS WHERE SURFACE IRREGULARITIES EXIST. THE BINDER APPLICATION TEMPERATURE WILL BE BETWEEN 350 AND 390 DEGREES F. THE BINDER WILL NOT BE ALLOWED TO BE HEATED ABOVE 410 DEGREES F. NOR ALLOWED TO EXCEED 390 DEGREES F. FOR MORE THAN 1 HOUR. A DOUBLE JACKETED OIL MELTER WILL BE USED TO HEAT THE BINDER. THE MELTER WILL BE EQUIPPED WITH A CONTINUOUS AGITATION SYSTEM, TEMPERATURE CONTROLS, AND A CALIBRATED THERMOMETER. ALSO A SYSTEM FOR ACCURATELY MEASURING THE WEIGHTS OF THE BINDER AND THE AGGREGATE WILL BE REQUIRED.

BUILD-UP OF JOINT LAYERS:

AGGREGATE PREPARATION:

HEAT THE AGGREGATE TO A TEMPERATURE OF 275 TO 325 DEGREES F., WITH A SUITABLE ROTATING DRUM WITH ATTACHED HEAT SOURCE OR A HOT COMPRESSED AIR LANCE, TO REMOVE DUST AND MOISTURE.

AGGREGATE PROPORTION AND LAYER THICKNESS:

MIX THE AGGREGATE WITH THE BINDER SUCH THAT THE MINIMUM AGGREGATE CONTENT BY WEIGHT WILL BE 68%. THE HEATED AGGREGATE AND BINDER WILL BE COMBINED IN LAYERS, UNLESS PATENTED INSTALLATION REQUIRES DIFFERENTLY, NOT LESS THAN $\frac{3}{4}$ OF AN INCH NOR EXCEEDING 2-1/2 INCHES. THE THICKNESS OF EACH LAYER CAN BE VARIED WITHIN THESE LIMITS, TO ACHIEVE THE REQUIRED JOINT THICKNESS (MIN. 2 INCHES). THE OBJECTIVE IS TO COAT EACH STONE AND FILL THE VOIDS WHILE AVOIDING AN EXCESS OF BINDER. THIS WILL ACHIEVE THE MAXIMUM CONTENT OF STONE CONSISTENT WITH ALL STONES BEING COATED WITH BINDER. RAKE THE MIXTURE TO MIX AND LEVEL.

THE TOP LAYER THICKNESS WILL VARY BETWEEN $\frac{1}{2}$ INCH AND ONE (1) INCH. IN PREPARING THE TOP LAYER, THE RATIO OF AGGREGATE TO BINDER WILL BE APPROXIMATELY 6:1 BY WEIGHT. OVERFILL THE TOP LAYER AND COMPACT TO THE LEVEL OF THE ADJACENT SURFACES USING A ROLLER OR VIBRATORY PLATE COMPACTOR. IMMEDIATELY AFTER COMPLETION OF THE COMPACTION, POUR SUFFICIENT BINDER OVER THE JOINT TO FILL THE SURFACE VOIDS AND COAT THE SURFACE STONE. DUST THE FINISHED JOINT WITH A FINE, DRY AGGREGATE TO PREVENT TACKINESS.

MAINTENANCE OF TRAFFIC:

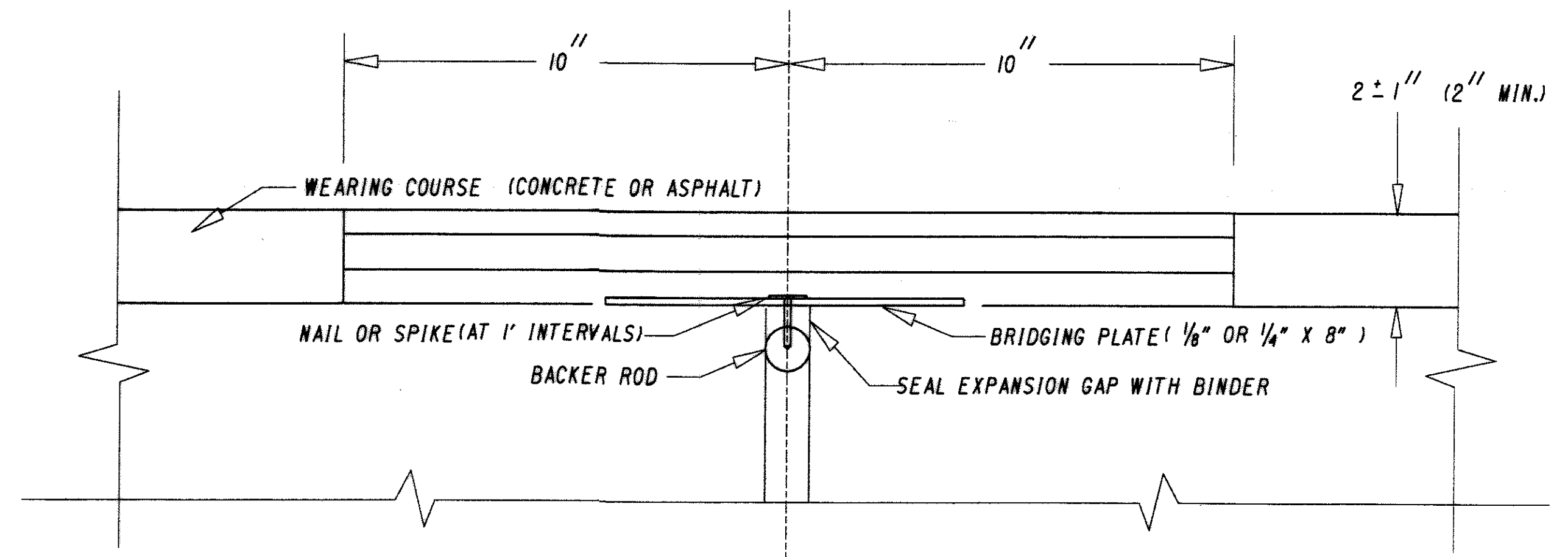
IF NECESSARY TO FACILITATE TRAFFIC MAINTENANCE, THE JOINT WILL BE INSTALLED IN TWO (2) HALF-WIDTH PHASES. DURING PHASE 1 APPROXIMATELY HALF OF THE TOTAL JOINT WILL BE INSTALLED. DURING PHASE 2, A MINIMUM OF TWO (2) INCHES OF THE PHASE 1 JOINT WILL BE REMOVED, AT OR NEAR THE CENTERLINE, WITH THE REMAINDER OF THE JOINT INSTALLED. IN ALL CASES, OPERATIONS WILL BE SCHEDULED SO THAT ALL LANES CAN BE OPEN TO TRAFFIC DURING ALL NON-WORKING HOURS.

TESTING:

CERTIFICATION WILL BE SUPPLIED FOR EACH PROJECT SHOWING BINDER COMPLIANCE WITH REQUIRED PROPERTIES. A ONE QUART SAMPLE OF BINDER WILL BE RETRIEVED FROM EACH BRIDGE FOR FURTHER TESTING BY THE O.D.O.T OFFICE OF MATERIALS MANAGEMENT.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT:

THE DEPARTMENT WILL MEASURE THE JOINT BY THE NUMBER OF CUBIC YARDS AND WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS: ITEM SPECIAL, POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM.**



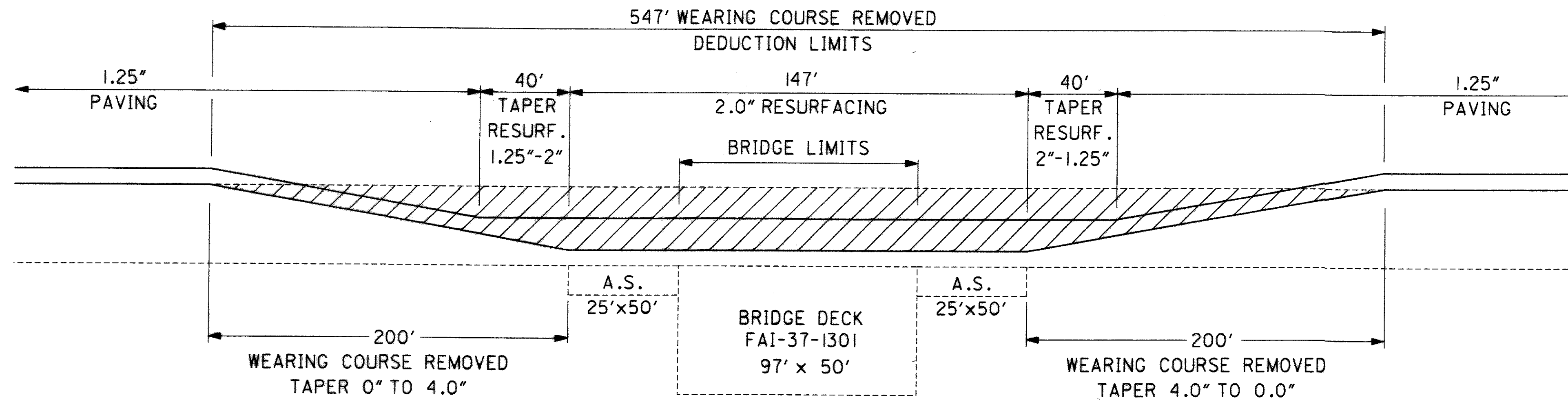
FAI-37-2522

TYPICAL PRESTRESSED BOX BEAM

**INCLUDES REMOVAL OF EXISTING JOINTS.

FAI-37-1301

DETAIL ①
NOT TO SCALE



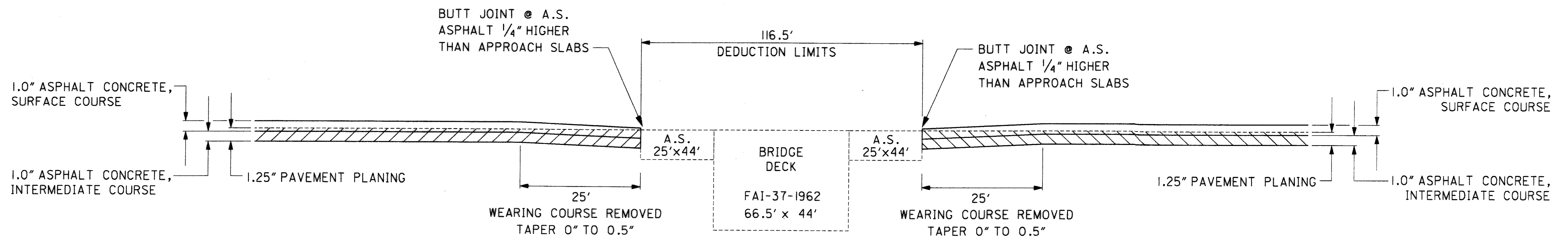
202 WEARING COURSE REMOVED:
 $[2 \times (200' \times 28') + (147' \times 50')] / 9 = 2062 \text{ SQ.YD.}$
 TOTAL CARRIED TO SHEET 17

REMOVE 4.0" ASPHALT CONCRETE FROM BRIDGE DECK & APPROACH SLABS
 PLACE 2.0" A. C. W/GILSONITE (ONE LIFT) ON BRIDGE DECK & APPROACH SLABS
 WATERPROOFING; NONE

LOCATION 1

FAI-37-1962

DETAIL ②
NOT TO SCALE



202 WEARING COURSE REMOVED:
 $2 \times (25' \times 28') / 9 = 156 \text{ SQ.YD.}$
 TOTAL CARRIED TO SHEET 17

DO NOT PAVE BRIDGE DECK OR APPROACH SLABS

LOCATION 1

F0370001A.mbt

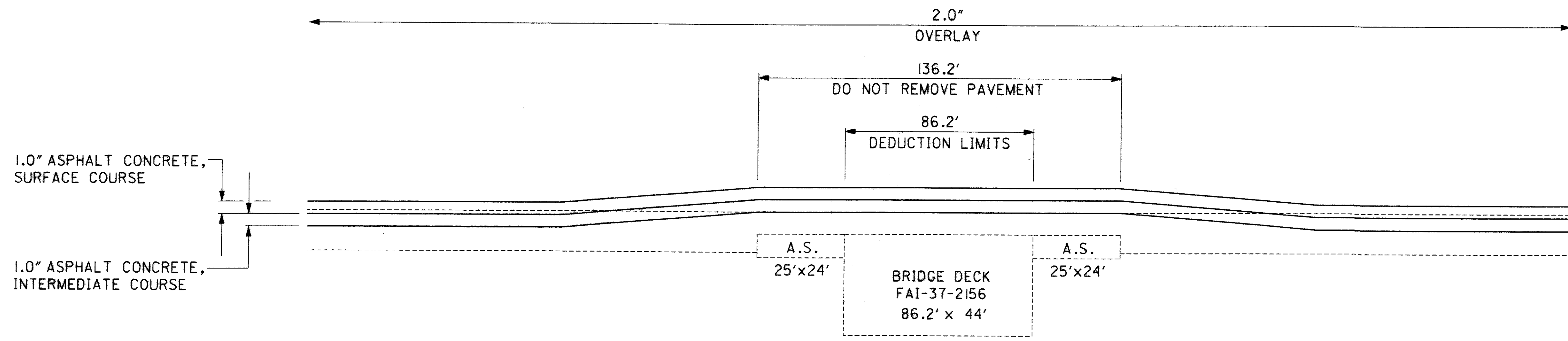
BRIDGE DECK DETAILS

FAI-37-12.73

CALCULATED
BCT
CHECKED
LINE

FAI-37-2156

DETAIL 3
NOT TO SCALE

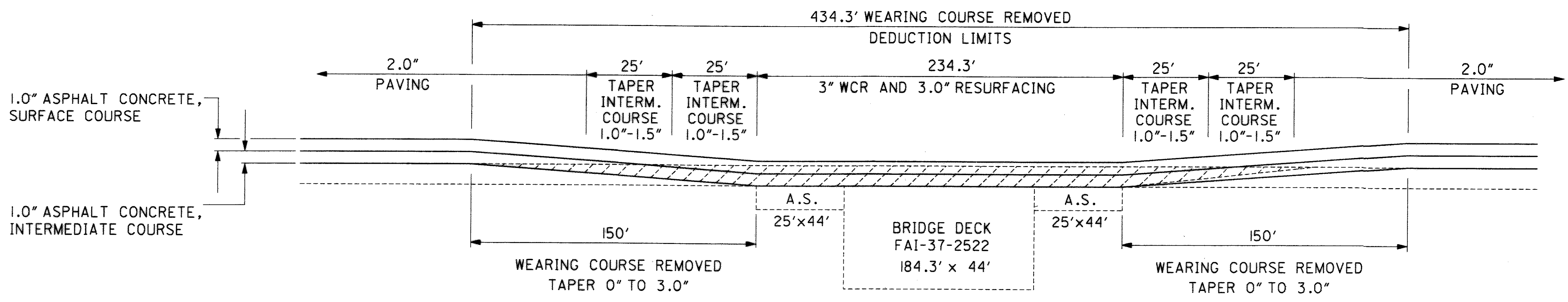


DO NOT REMOVE ASPHALT CONCRETE FROM BRIDGE DECK OR APPROACH SLABS
PLACE 1" A. C. SURFACE COURSE & 1" A. C. INTERMEDIATE COURSE
DO NOT PLACE WATERPROOFING

LOCATION 2

FAI-37-2522

DETAIL 4
NOT TO SCALE



202 WEARING COURSE REMOVED:
 $[2 \times (150' \times 28') + (234.3' \times 44')] / 9 = 2079 \text{ SQ.YD.}$
TOTAL CARRIED TO SHEET 17

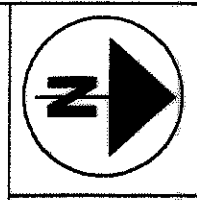
REMOVE WATERPROOFING AND ALL (ABOUT 3") ASPHALT CONCRETE FROM DECK AND APPROACH SLABS
PLACE 1.5" A. C. SURFACE COURSE & 1.5" A. C. INTERMEDIATE COURSE
PLACE TYPE 3 WATERPROOFING
REMOVE AND REPLACE POLYMER MODIFIED ASPHALT EXPANSION JOINTS

LOCATION 2

F0370001B.mbt

BRIDGE DECK DETAILS

FAI-37-12.73



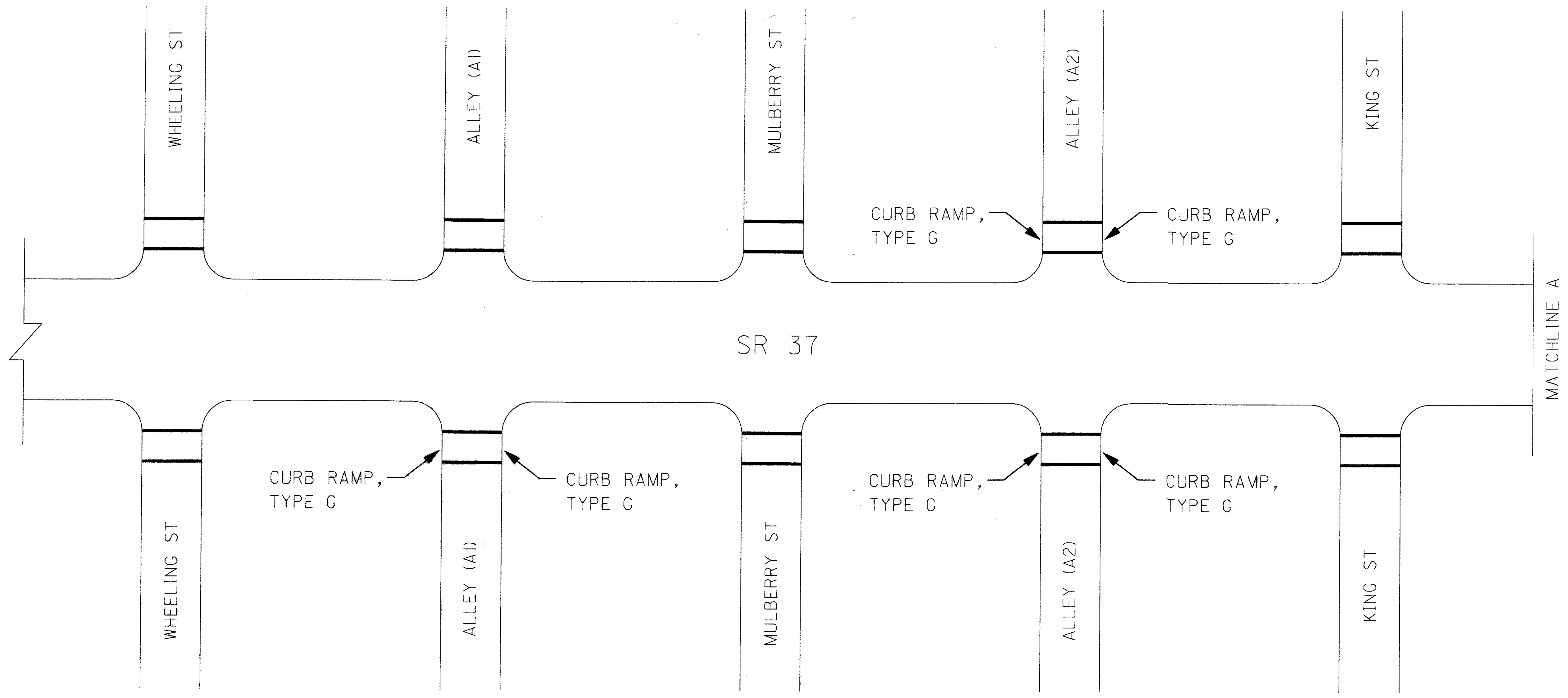
DRAWING
NOT TO SCALE

CALCULATED	BCY	CHECKED	LINE

CURB WORK - CITY OF LANCASTER

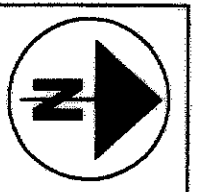
FAI-37-12.92

20
70



LOC	ROUTE	INTERSECTING STREET	CORNER				CURB RAMP, TYPE				
			NE	NW	SE	SW	A	D	E	G	
I	SR 37	ALLEY (A1)	G		G						2
I	SR 37	ALLEY (A2)	G	G	G	G					4
SUBTOTALS (CARRIED TO SHT 22)											6

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED ON SHEET 25.



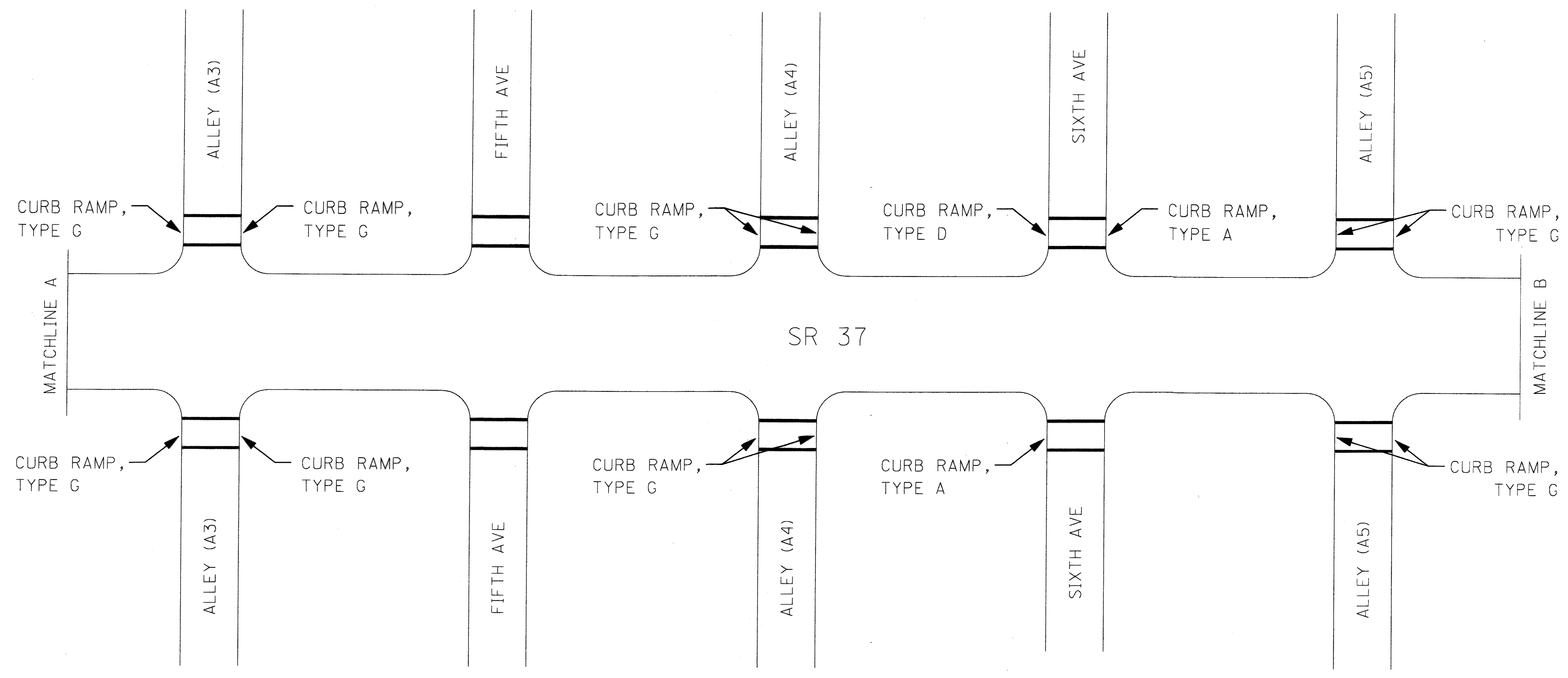
DRAWING
NOT TO SCALE

CALCULATED
BY
CHECKED
DATE

CURB WORK - CITY OF LANCASTER

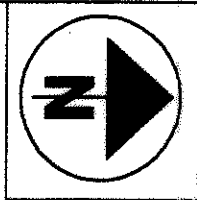
FAI-37-12.92

21
70



LOC	ROUTE	INTERSECTING STREET	CORNER				CURB RAMP, TYPE			
			NE	NW	SE	SW	A	D	E	G
I	SR 37	ALLEY (A3)	G	G	G	G				4
I	SR 37	ALLEY (A4)	G	G	G	G				4
I	SR 37	SIXTH AVE		A	A	D	2	1		
I	SR 37	ALLEY (A5)	G	G	G	G				4
SUBTOTALS (CARRIED TO SHT 22)							2	1		12

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED ON SHEET 25.



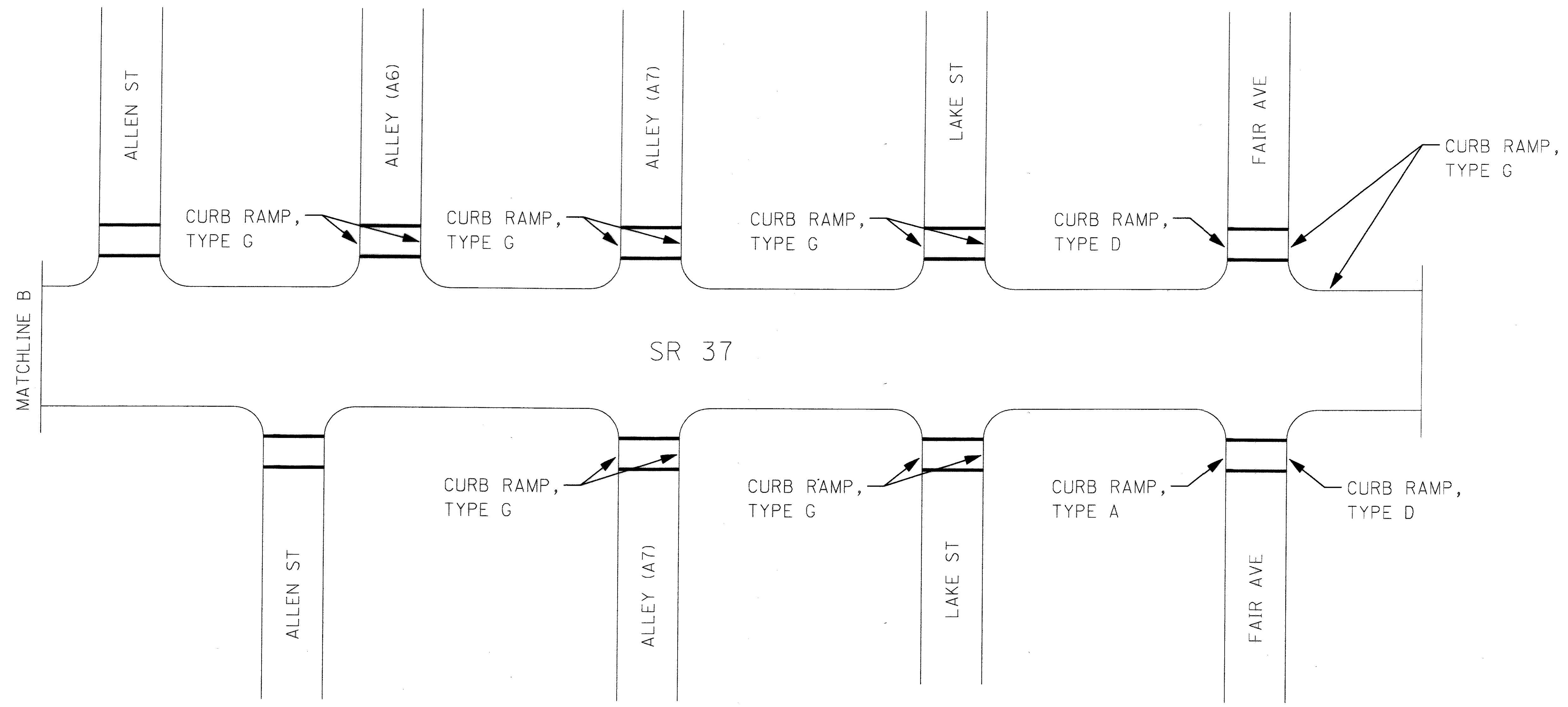
DRAWING
NOT TO SCALE

CALCULATED
BY
CHECKED
DATE

CURB WORK - LOCATION I (CITY OF LANCASTER)

FAI-37-12.92

22
70



LOC	ROUTE	INTERSECTING STREET	CORNER				CURB RAMP, TYPE					
			NE	NW	SE	SW	A	D	E	G		
I	SR 37	ALLEN ST										
I	SR 37	ALLEY (A6)		G		G					2	
I	SR 37	ALLEY (A7)	G	G	G	G					4	
I	SR 37	LAKE ST	G	G	G	G					4	
I	SR 37	FAIR AVE	D	GG	A	D	1	2			2	
SUBTOTALS (THIS SHEET)								1	2		12	
SUBTOTALS (CARRIED FROM SHT 20)												6
SUBTOTALS (CARRIED FROM SHT 21)								2	1			12
TOTALS								3	3			30

TYPE A RAMPS = 108 SF, 29 FT CURB
 TYPE D RAMPS = 60 SF, 15 FT CURB
 TYPE G RAMPS = 24 SF, 14 FT CURB

THE ABOVE GIVEN ESTIMATED QUANTITIES ASSOCIATED WITH EACH TYPE OF CURB RAMP WERE USED FOR PURPOSES OF CALCULATING PAY ITEMS SHOWN BELOW.

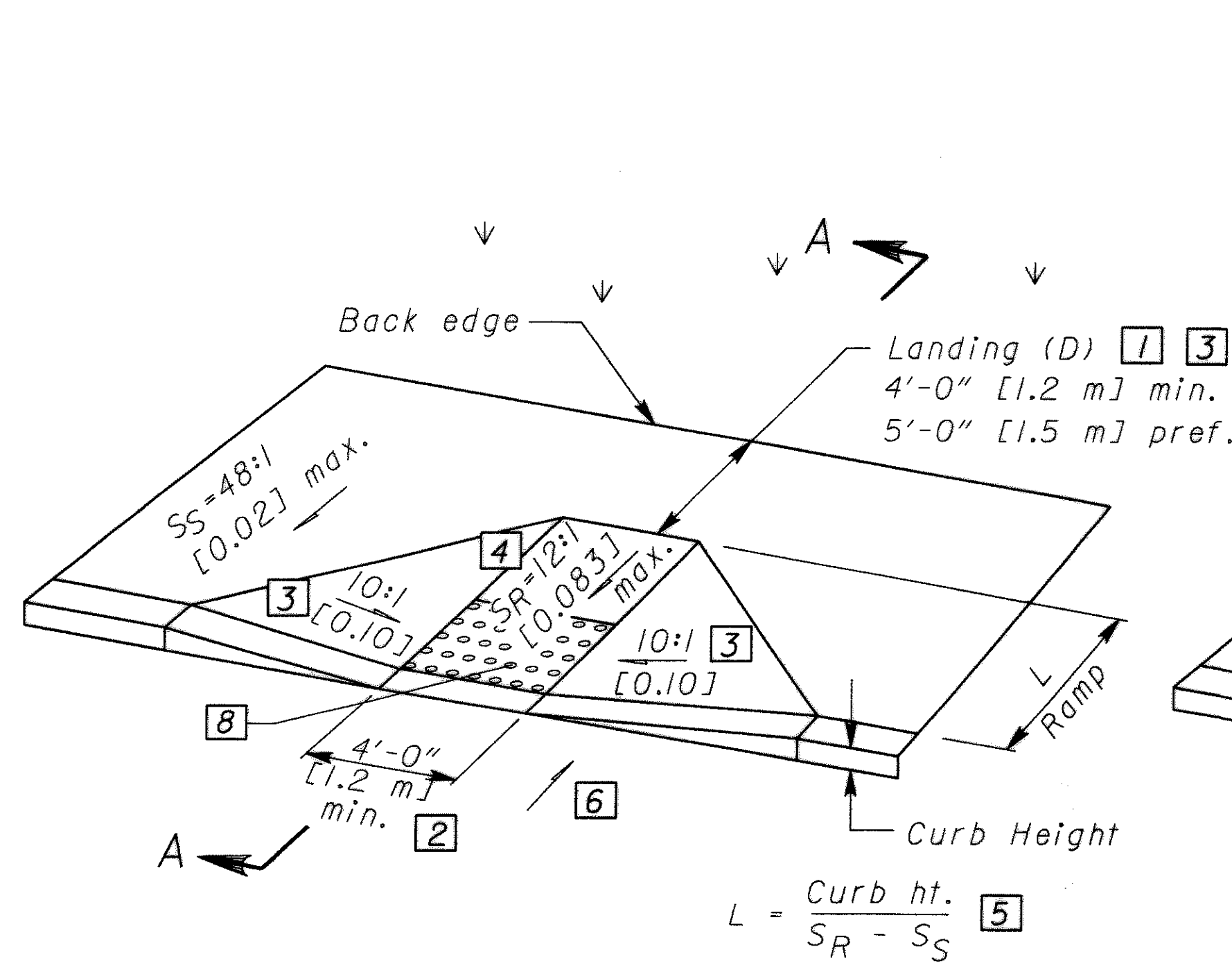
ITEM 202 CURB REMOVED
 $(3 \times 29) + (3 \times 15) + (30 \times 14) = 552 \text{ FT}$

ITEM 202 WALK REMOVED
 $(3 \times 108) + (3 \times 60) + (30 \times 24) = 1224 \text{ SF}$

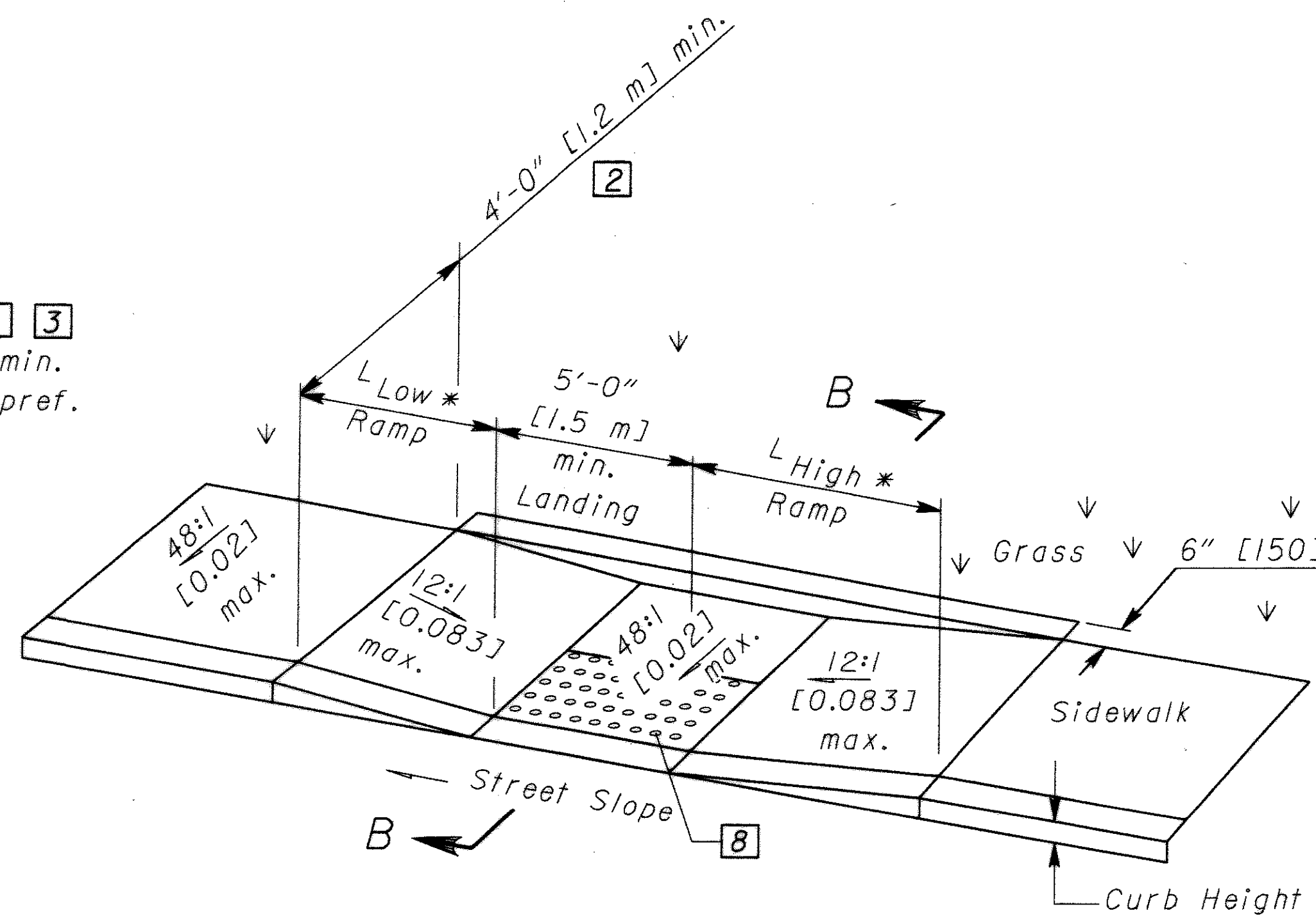
ITEM 608 CURB RAMP, A.P.P. (SEE SHTS 23-25)
 $(3 \times 108) + (3 \times 60) + (30 \times 24) = 1224 \text{ SF}$

TRUNCATED DOMES SHALL BE INCLUDED FOR PAYMENT WITH ITEM 608 CURB RAMP, AS PER PLAN AS INDICATED ON SHEET 25.

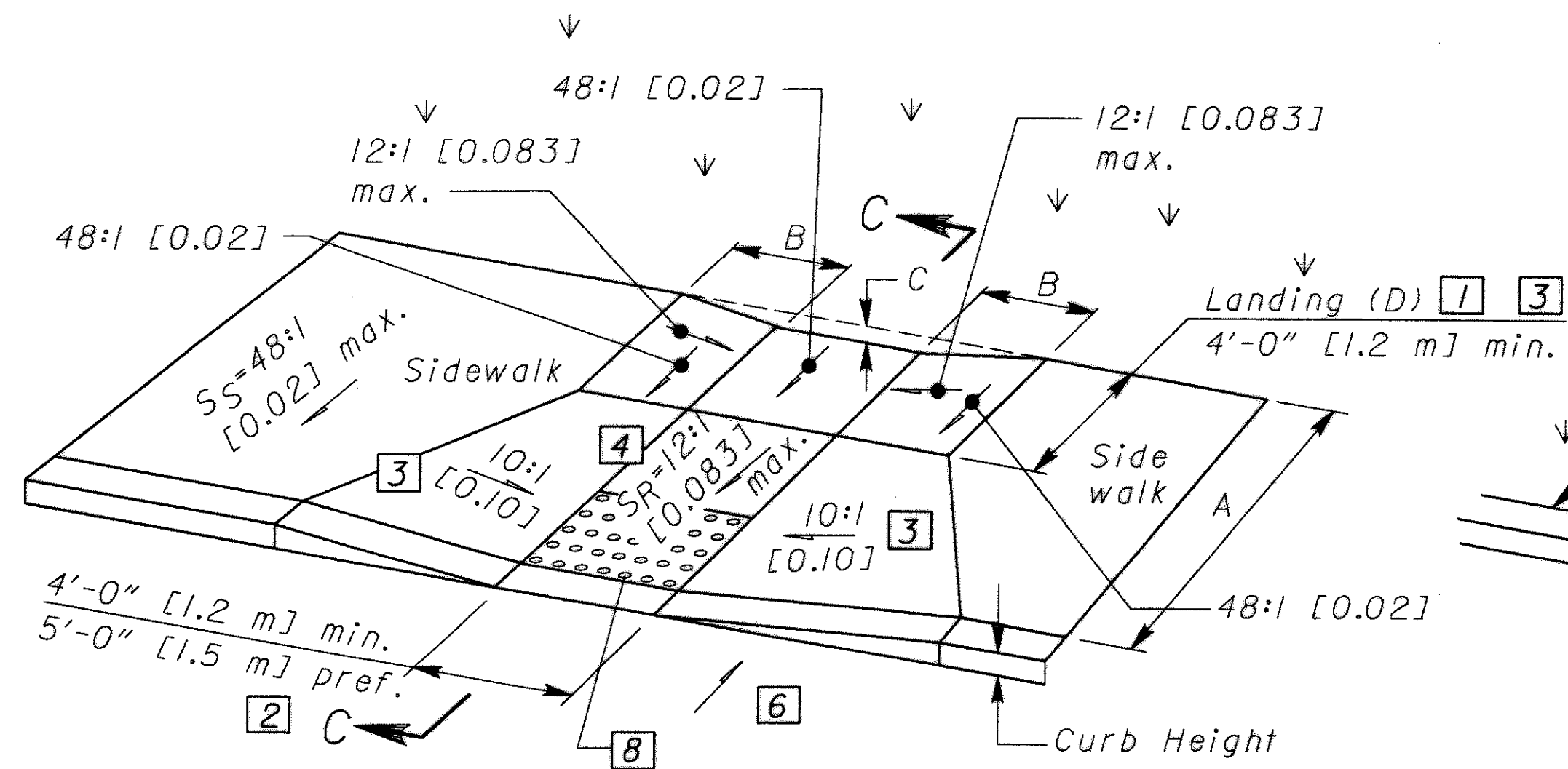
QUANTITIES CARRIED TO SUBSUMMARY



See Sht. 3/3 for SECTION A-A
PERPENDICULAR CURB RAMP DETAIL

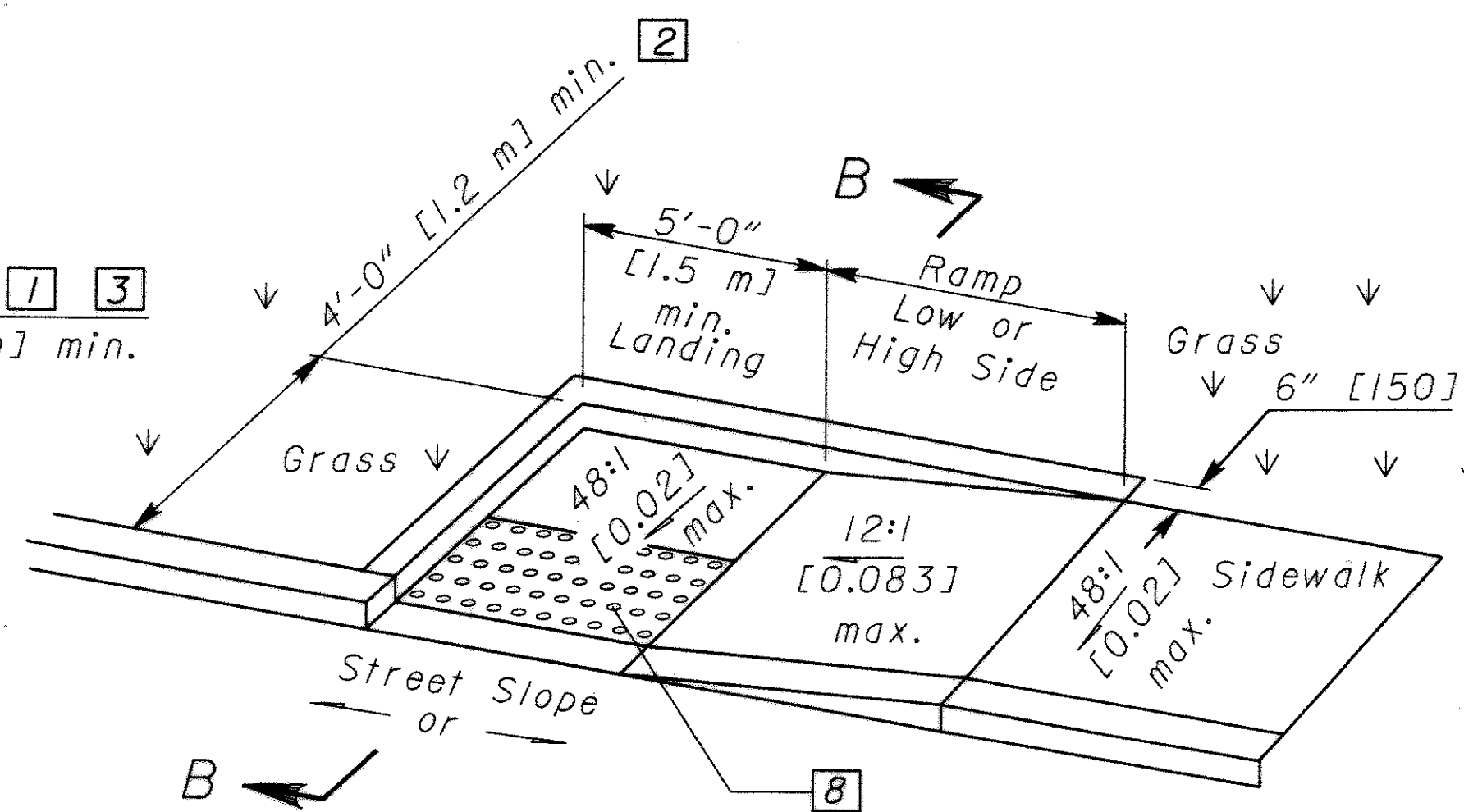


See Sht. 3/3 for SECTION B-B
PARALLEL CURB RAMP DETAIL (DOUBLE)



See Sht. 3/3 for SECTION C-C
COMBINED CURB RAMP DETAIL

$B = C / 0.083$
 $C = [Curb\ ht. + A(S_S)] - [(A-D)S_R + D(0.02)]$



See Sht. 3/3 for SECTION B-B
PARALLEL CURB RAMP DETAIL (SINGLE)

Street Slope	Ramp Length @ 1"/ft [0.083]	
	L LOW SIDE*	L HIGH SIDE*
0.01	5'-5" [1.6 m]	6'-10" [2.1 m]
0.02	4'-10" [1.5 m]	7'-11" [2.4 m]
0.03	4'-5" [1.3 m]	9'-5" [2.9 m]
0.04	4'-1" [1.2 m]	11'-8" [3.6 m]
0.05	3'-9" [1.1 m]	15'-2" [4.6 m]

* Measured along the back of a 6" [150] high curb.

$L_{HIGH} = \frac{Curb\ ht.}{0.083 - Street\ Slope}$ [7]

$L_{LOW} = \frac{Curb\ ht.}{0.083 + Street\ Slope}$ [7]

LEGEND

- [1] May be reduced to 3'-0" [915] in existing sidewalks if the landing is unconstrained along the back edge.
- [2] May be reduced to 3'-4" [1.02 m] in existing sidewalks to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.
- [3] Where landing width (D) has been reduced to 3'-0" [915] the flared sides shall have a maximum slope of 12:1 [0.083].

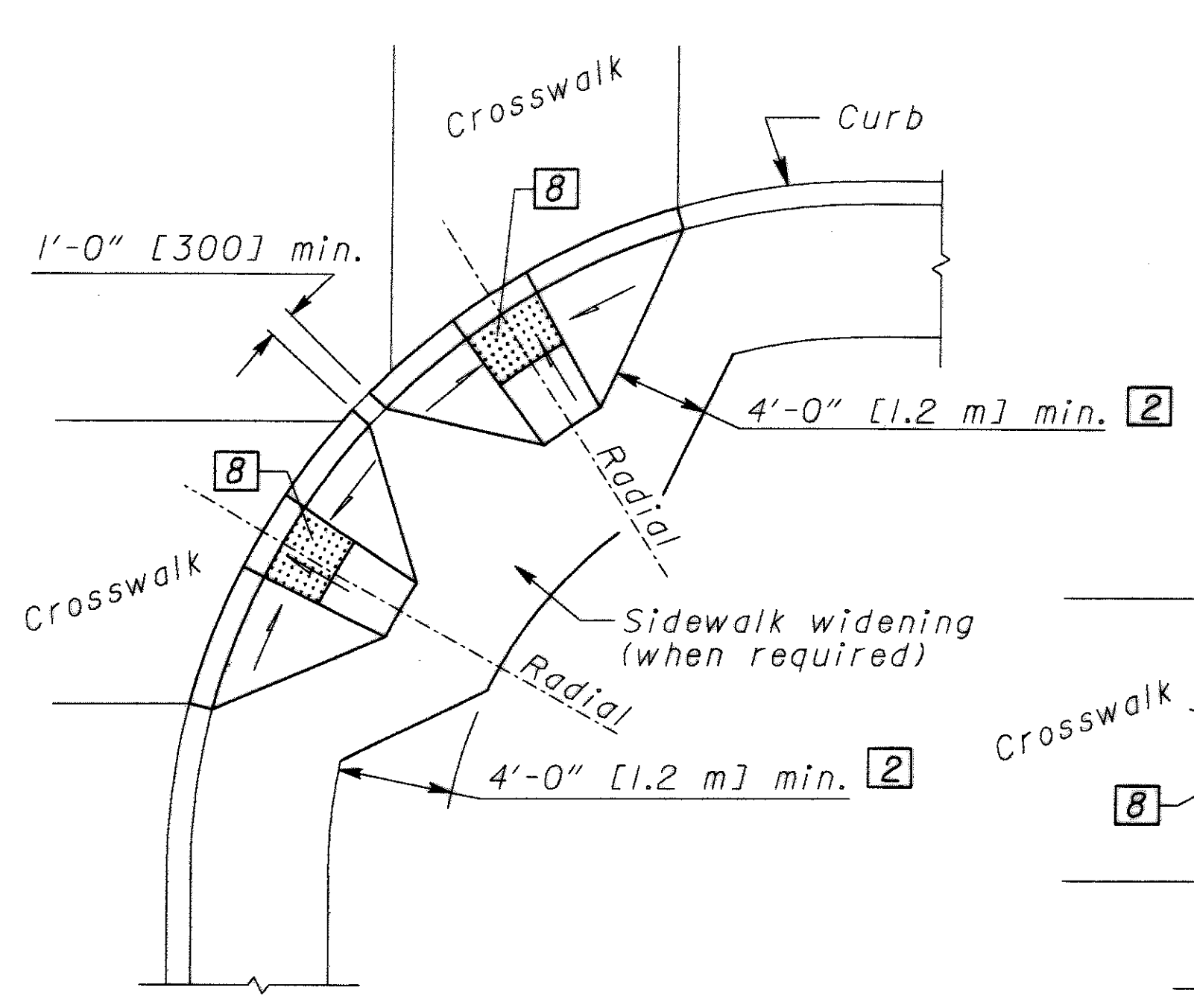
Flared sides are not required where the edges of a curb ramp are protected by landscaping or other barriers to travel by wheel chair users or pedestrians across the edge of the curb ramp. However, if the flared sides are used in these areas, they may be of any slope.

- [4] The slope of the ramp toward the curb is preferred to be 12:1 [0.083] or flatter related to the horizontal, but the maximum slope shall be 12:1 [0.083] relative to the existing or proposed walk slope.

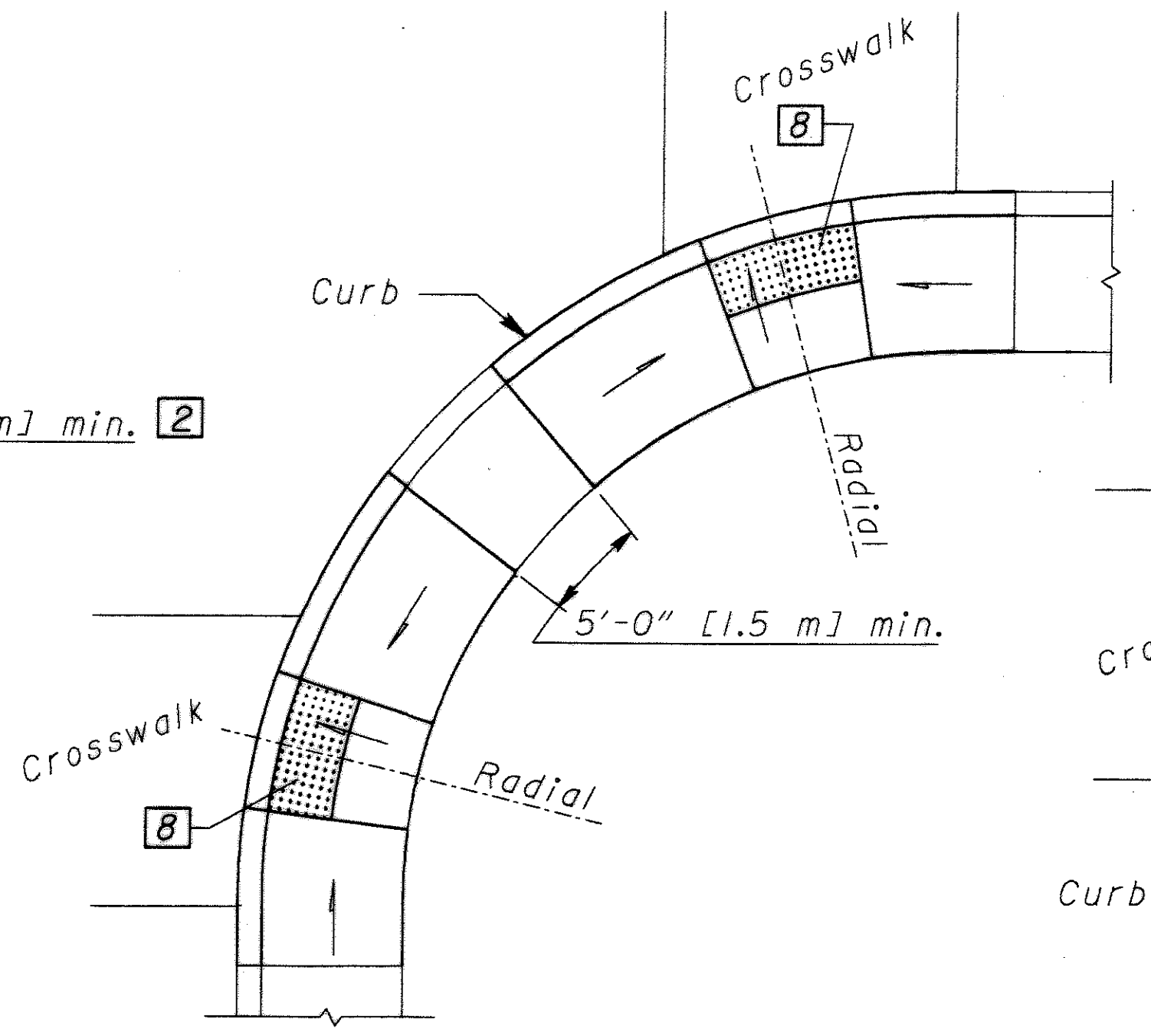
In existing sidewalks, where the maximum ramp slope (S_R) is not feasible, it may be reduced as follows:

- A) 10:1 [0.10] for a max. rise of 6" [150],
- B) 8:1 [0.125] for a max. rise of 3" [75],
- C) 6:1 [0.167] over a max. run of 2'-0" [610] for historic areas where a flatter slope is not feasible.

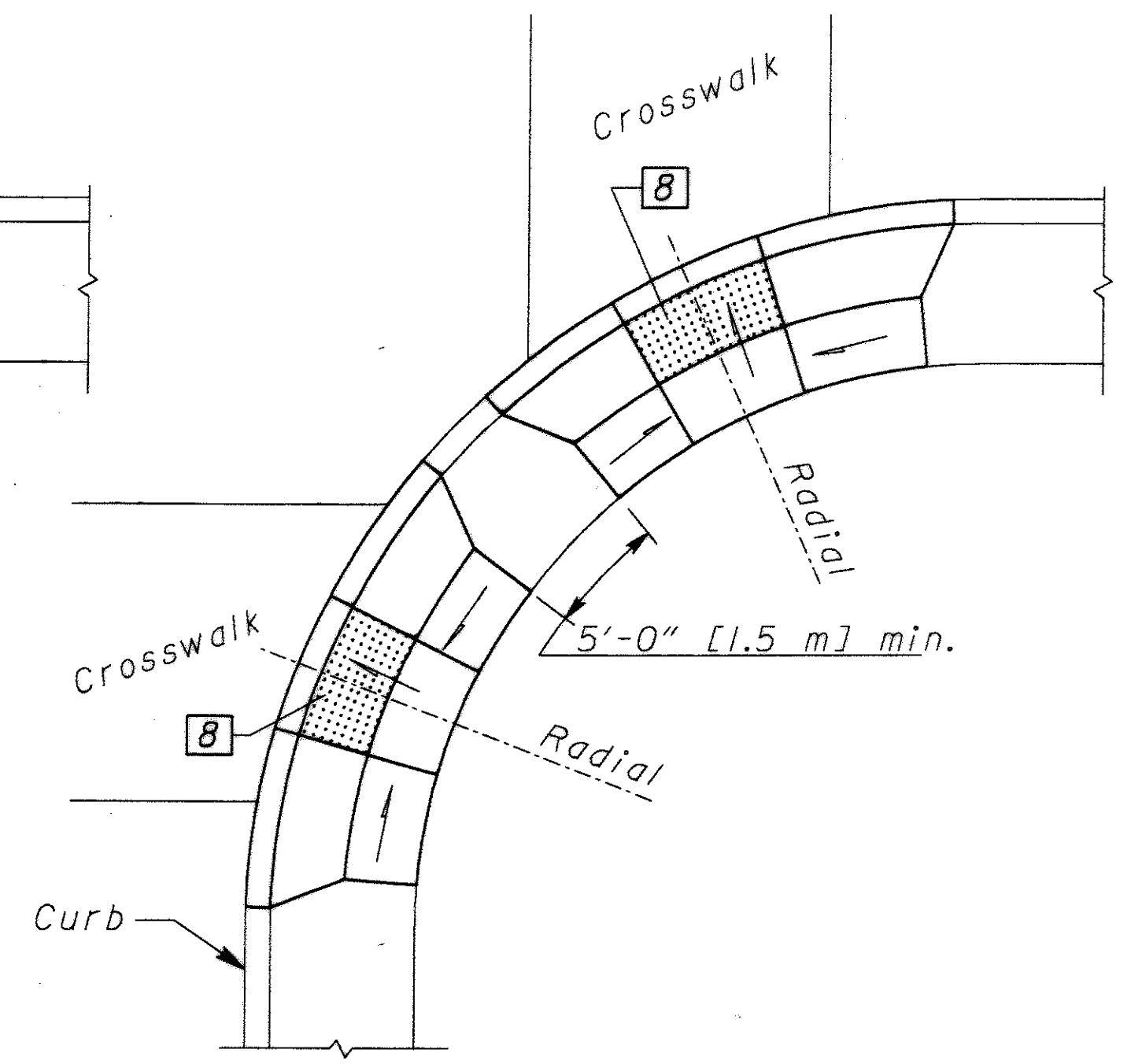
- [5] The minimum length of a perpendicular ramp is 6' [2.0 m] from the back of a 6" [150] curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration.
- [6] Gutter counter slopes at the foot of perpendicular curb ramps should not exceed 20:1 [0.05] over a distance of 2'-0" [610] from the curb.
- [7] Dimensions derived by equation are nominal. Construct ramps to meet required slopes and existing conditions.
- [8] Detectable Warnings (truncated domes) are to be installed in the location shown. Dimensions of the domes are 24" [610] from the back of the curb by the width of the ramp. See NOTES on sheet 3.



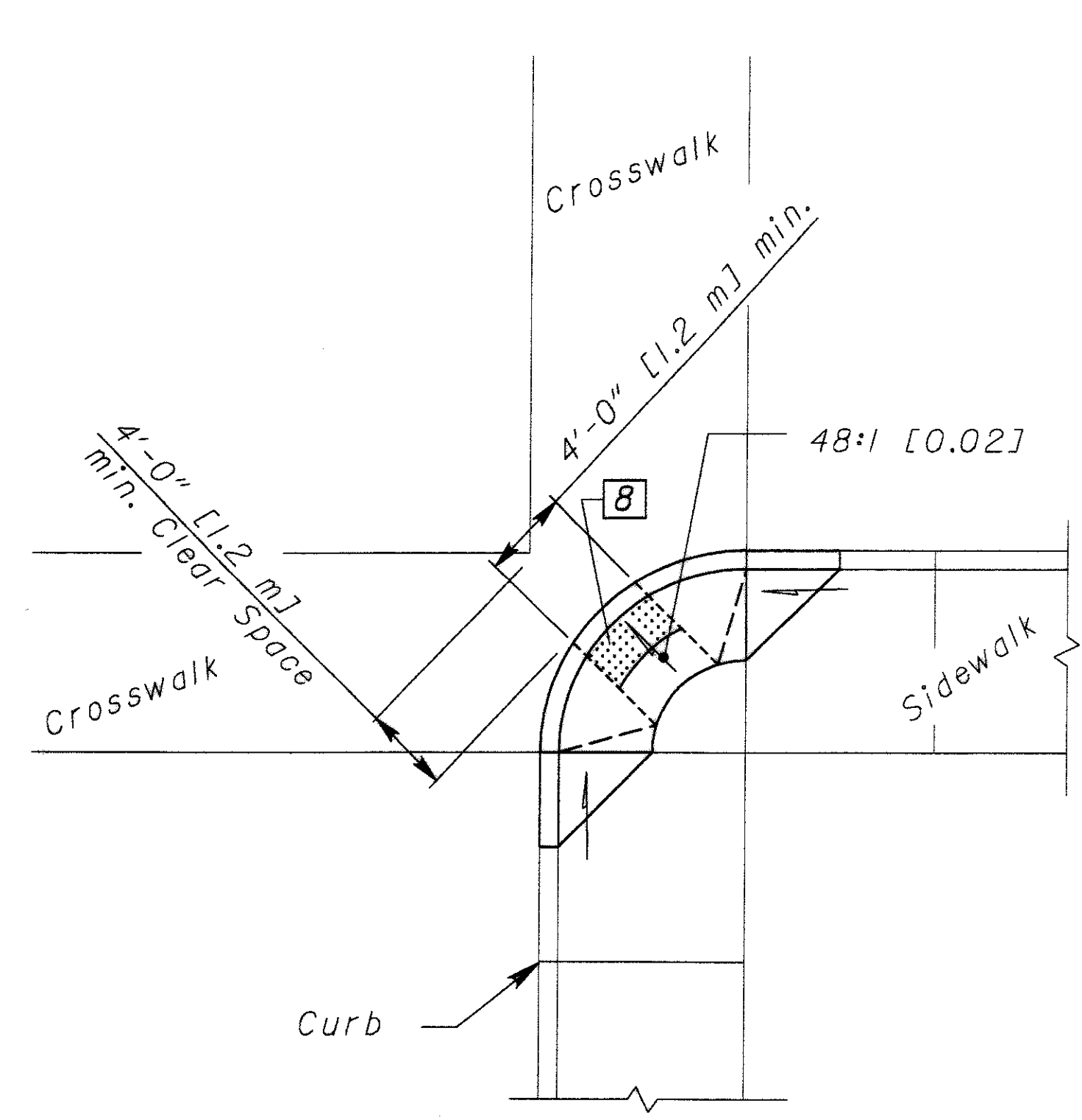
DESIGN A
PERPENDICULAR RAMP



DESIGN B
PARALLEL RAMP



DESIGN C
COMBINATION RAMP



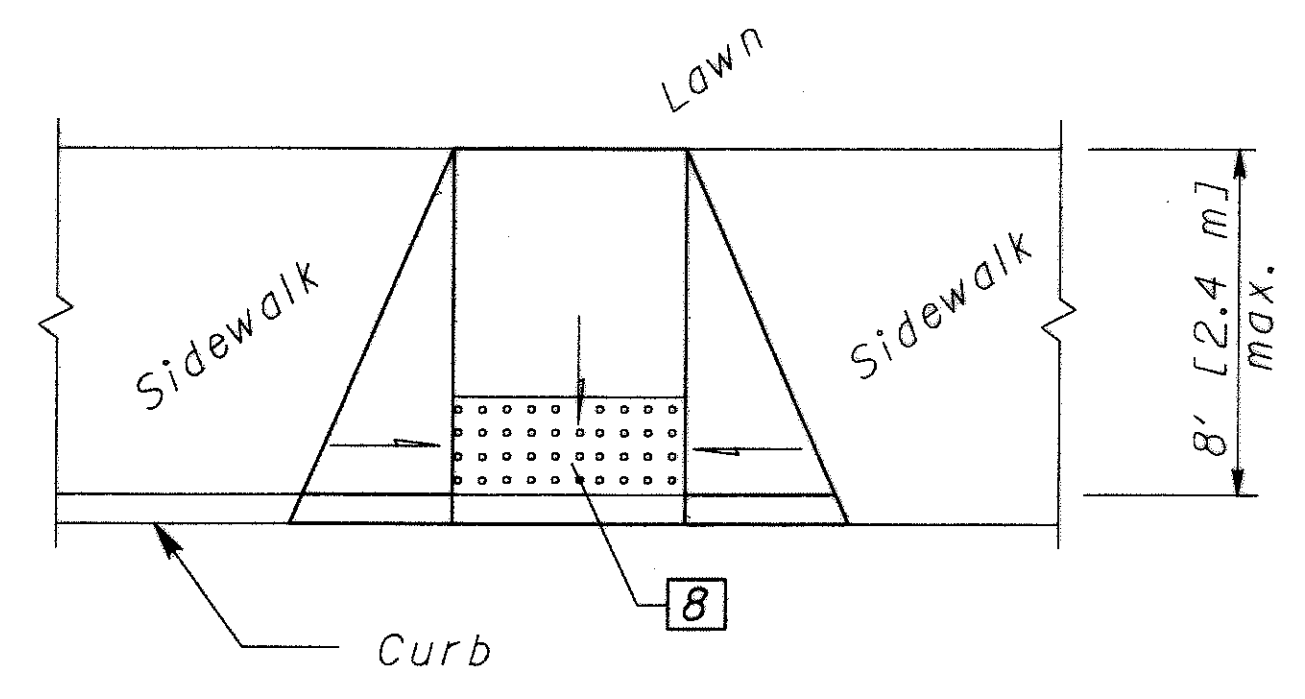
DESIGN D
DIAGONAL RAMP

CORNER CURB RAMP DESIGNS

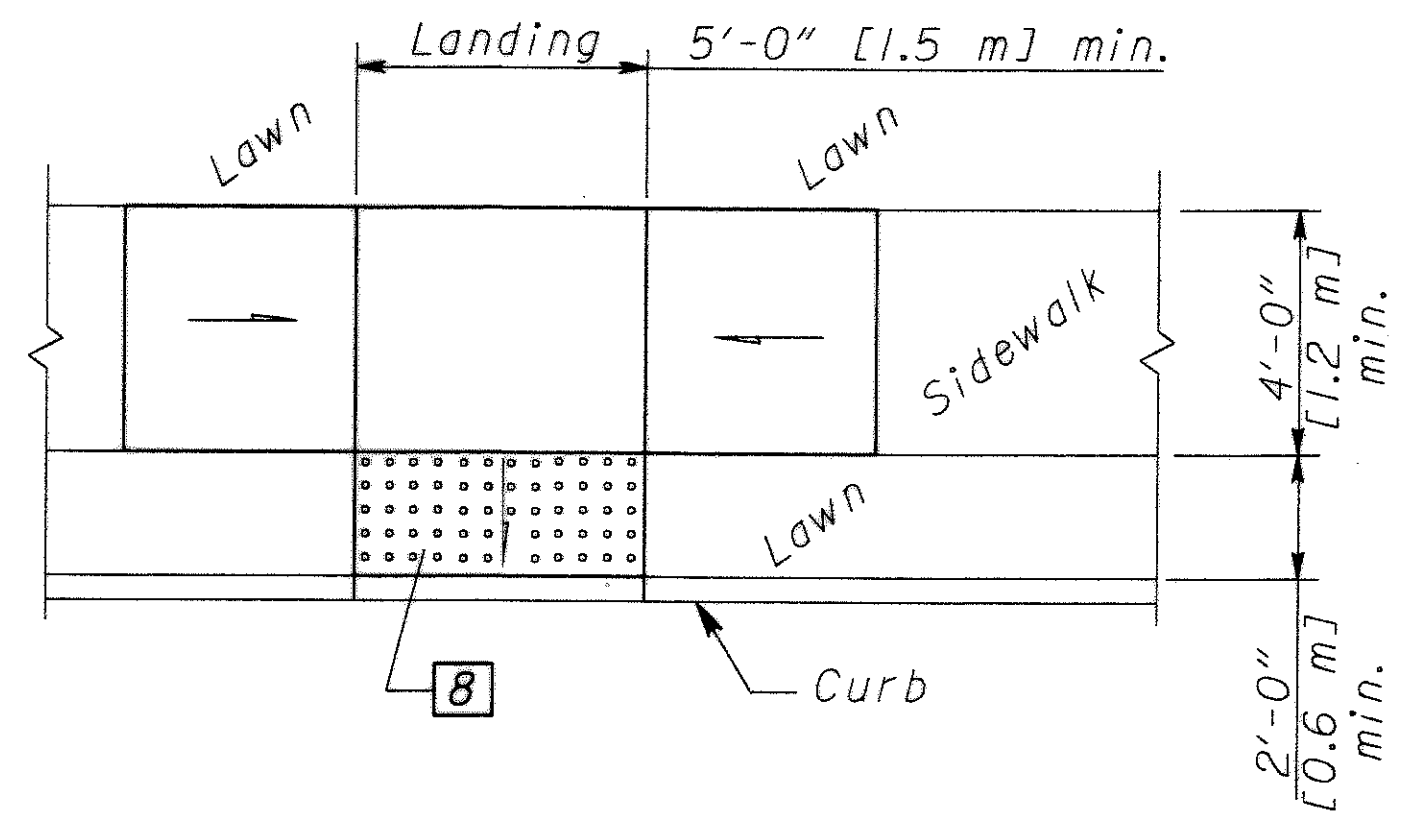
(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

For LEGEND, See sheet 1.

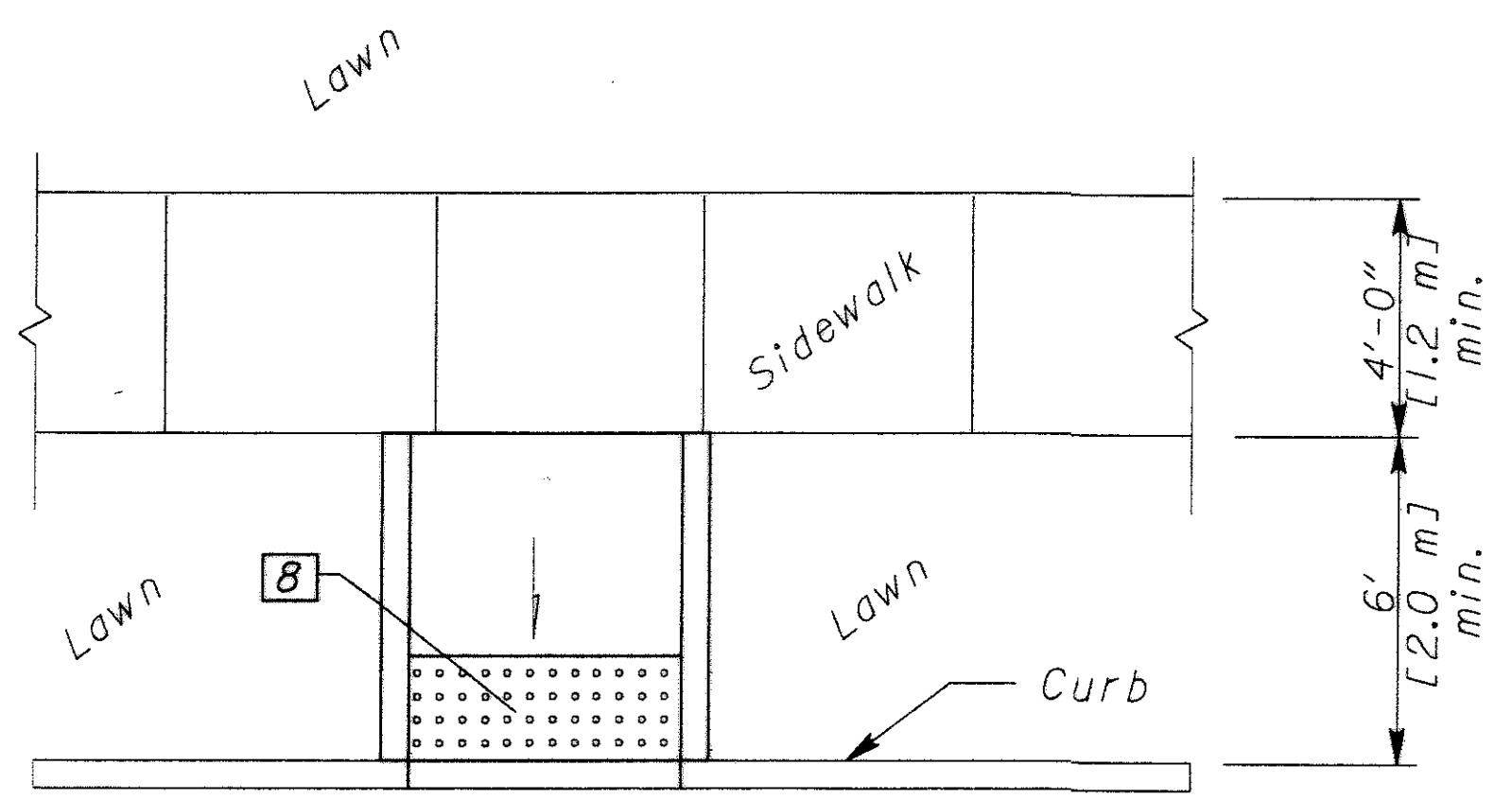
Use in existing walks only and when site constraints prohibit other designs. The diagonal ramp may be perpendicular, parallel or combination. Avoid using where curb radii are less than 20'-0" [6.0 m].



DESIGN E
PERPENDICULAR RAMP



DESIGN F
PARALLEL RAMP



DESIGN G
PERPENDICULAR RAMPS
w/o FLARES

MID BLOCK CURB RAMP DESIGNS

(See Curb Ramp Details on Sht. 1/3 for additional requirements.)

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NOTES

SURFACE TEXTURE: Texture of concrete surfaces shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk.

TRUNCATED DOMES: Install detectable warnings (truncated domes) for a distance of 24" [610] from the back of the curb for the entire width of the ramp opening as shown on details on Sheet 1.

Pavers will meet ASTM C 902 Class SX, Type I, or C 936, or C 1272 Type R.

Acceptable manufacturers and products are:

- Whitacre-Greer Fireproofing Company, 1400 S. Mahoning Ave, Alliance, OH, 44601, (800) WG PAVER ADA Paver, 4"x8"x2-1/4", Clear Red (Rustic) #30.

- Hanover Architectural Products, 240 Bender Rd., Hanover, PA. 17331, (717) 637-0500 Detectable Warning Paver, 12"x12"x2", or 24"x24"x2", Red or Quarry Red.
- Endicott Clay Products, PO Box 17, Fairbury, NE, 68352, (402) 729-5804 Handicap Detectable Warning Paver, 4"x8"x2-1/4", Red Blend.

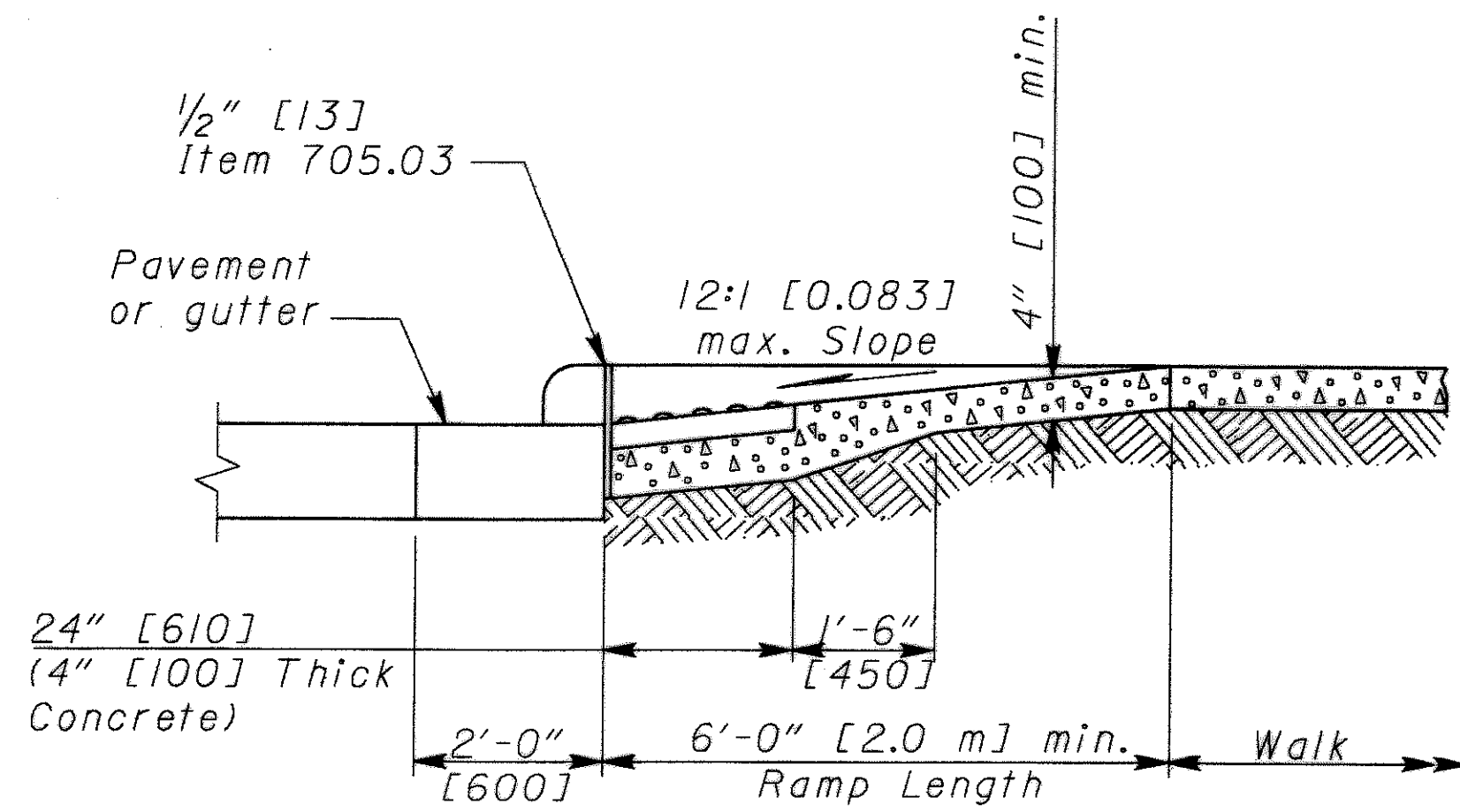
Pavers will laid on top of a 4" [100] unreinforced concrete base. Setting bed and joints to be mortared in accordance with manufacturer's instruction, or with a maximum 1/2" [13] thick bed of latex modified cement mortar. Mortar joints to a width not greater than 5/32" [4] and not less than 1/16" [1.5]. Pavers shall not be directly touching each other unless they have spacing bars.

Mortared joints are to be flush with top surface and struck so as to give a smooth surface. Pavers shall be laid such that joints are level with adjoining joints so as to provide a smooth transition from brick to brick and brick to concrete surface.

The surface of any two adjacent units should not differ by more than 1/8" [3] in height. Bricks shall be placed in a running bond pattern. Face of all brick shall be clean of cement and protected so as to avoid chipping during construction.

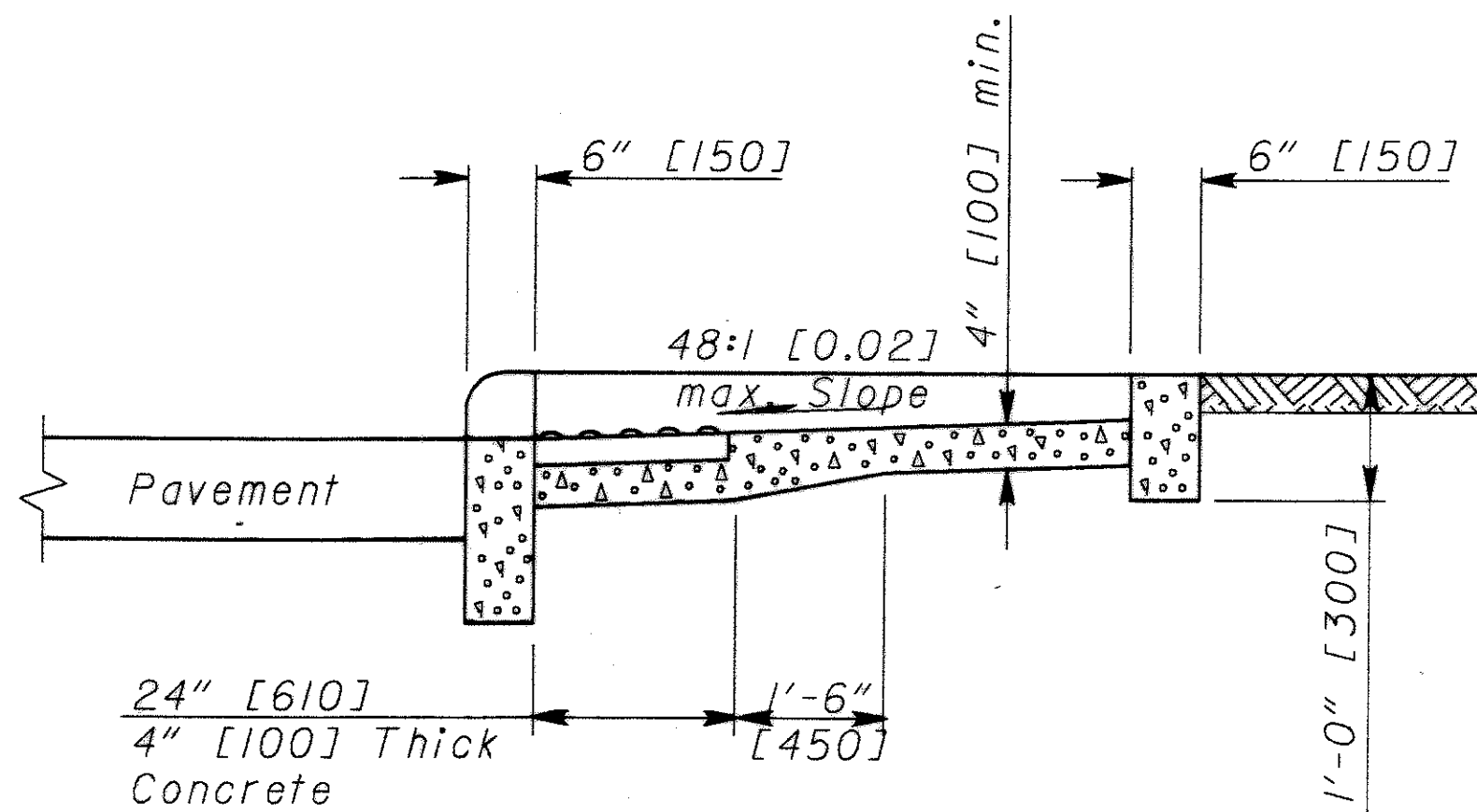
EXPANSION JOINTS: shall be provided in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. A 1/2" [13] Item 705.03 expansion joint filler shall be provided around the edge of ramps built in existing concrete walk. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

PAYMENT: Walk and curb, Items 608 and 609, shall be measured through the curb ramp area paid for under their respective Items. Item 608 - Curb Ramp, As Per Plan, Each constructed in new curb and walk shall include the cost of any additional materials and installation (including truncated domes), grading, forming and finishing. Item 608 - Curb Ramp, As Per Plan, Square Foot [Meter], constructed in existing curb and walk shall include the cost of furnishing and installing all materials (including truncated domes), grading, forming, and finishing of the curb and walk of the curb ramp. Removal of existing curb and walk shall be paid for under Item 202.



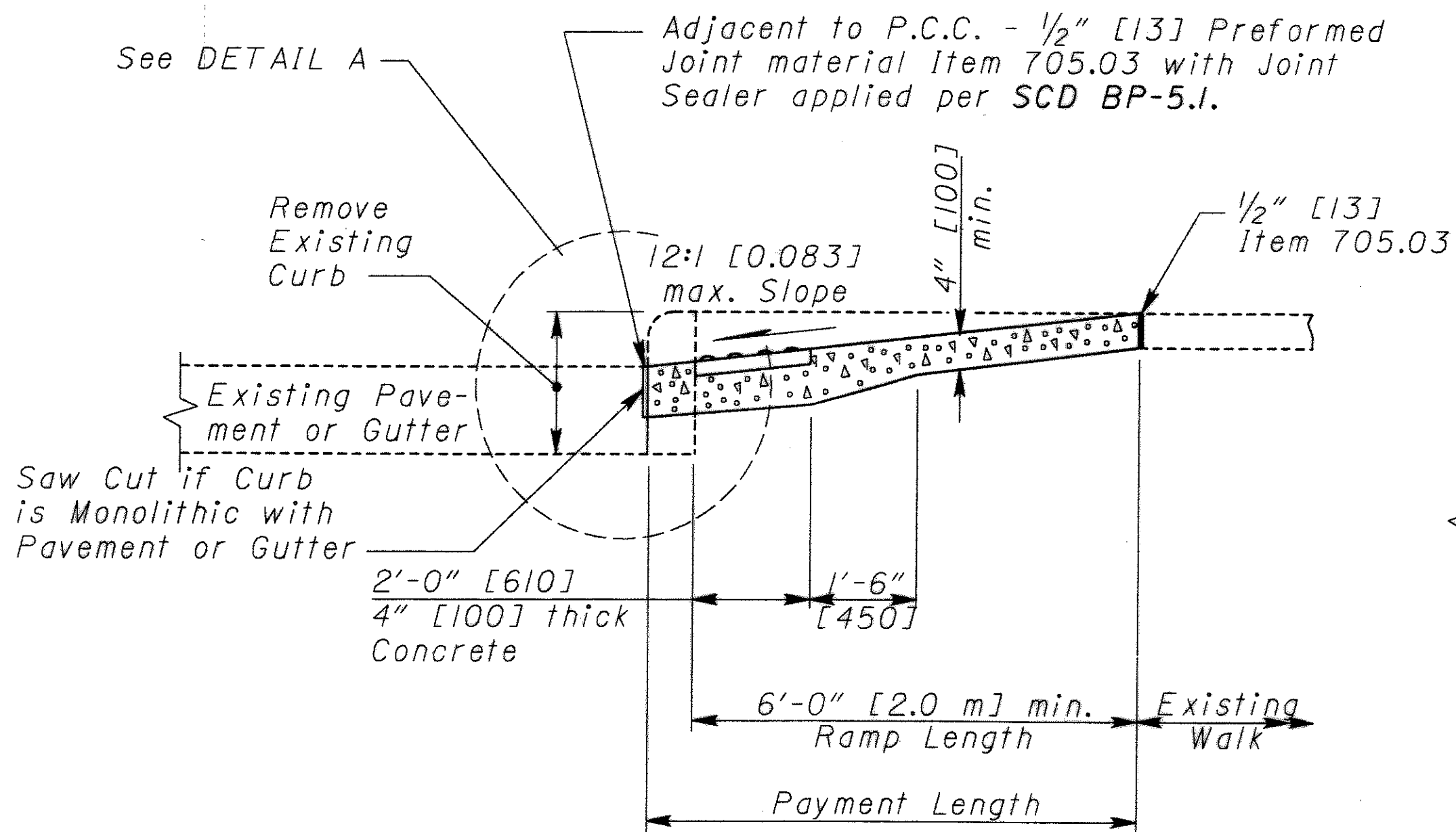
**SECTION A-A
NORMAL DETAIL**

See Sheet 1 of 3.
(Gutter shown)



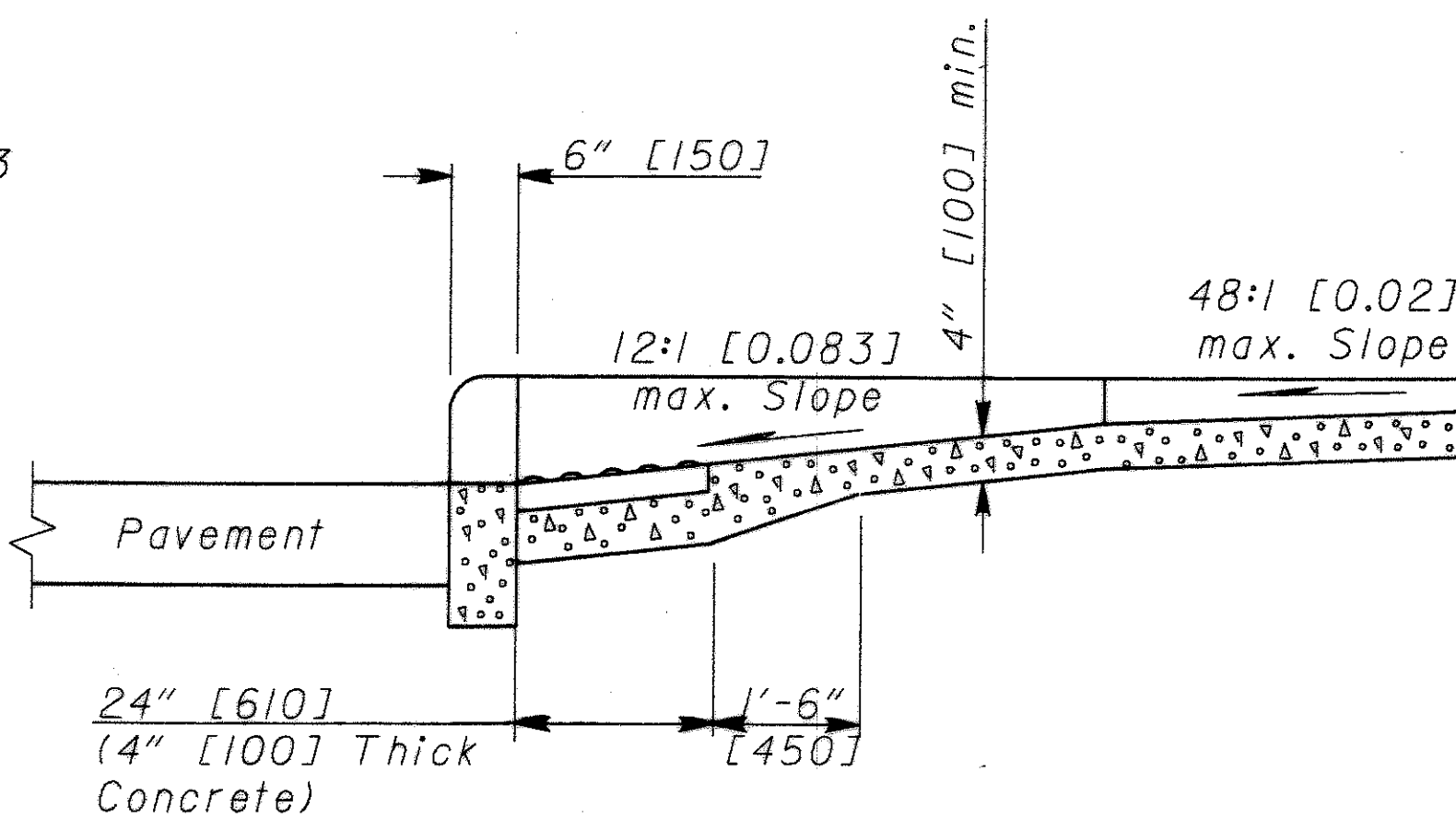
SECTION B-B

See Sheet 1 of 3.



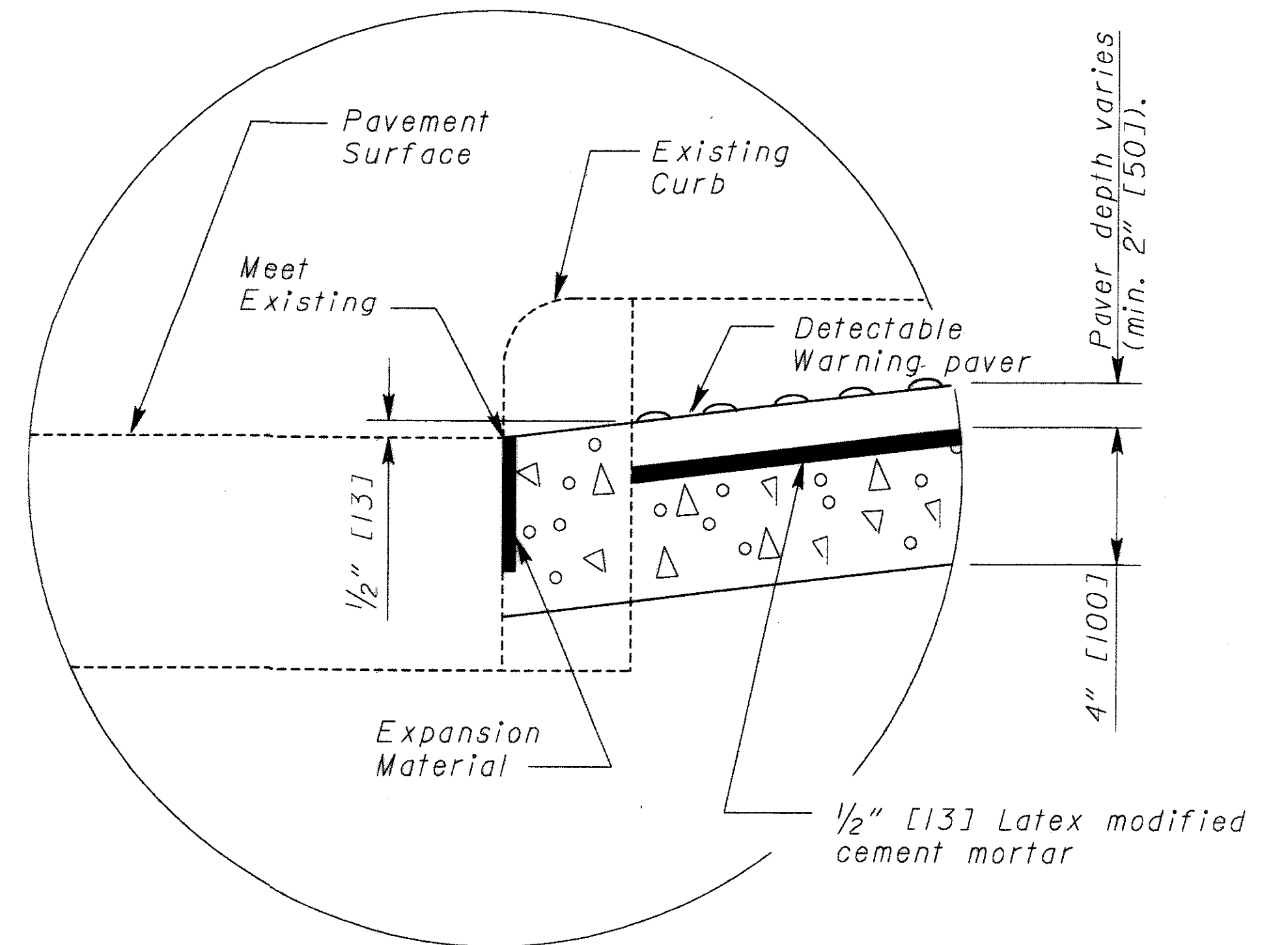
**SECTION A-A
EXISTING WALK DETAIL**

See Sheet 1 of 3.



SECTION C-C

See Sheet 1 of 3.



DETAIL A

CENTER LINE SUB-SUMMARY

LOCATION	COUNTY	ROUTE	S.L.M.		CENTER LINE QUANTITIES		PARTICIPATION TYPE				642 FAST DRY	644 THERMOPLASTIC	
			FROM	TO	TOTAL MILES	EQUIVALENT SOLID LINE	IRG	FG	RSG	NON FED STATE	CENTER LINE, TYPE I MILES	CENTER LINE MILES	
1	FAI	SR 37	12.92	13.69	0.77	2.02						0.77	
1	FAI	SR 37	14.40	15.58	1.18	2.14						1.18	
1	FAI	SR 37	19.23	19.70	0.47	0.94					0.47		
1	FAI	SR 37	TOTALS CARRIED TO SUB-SUMMARY									0.47	1.95
2	FAI	SR 37	13.69	14.40	0.71	2.02						0.71	
2	FAI	SR 37	19.70	25.20	5.50	3.58					5.50		
2	FAI	SR 37	TOTALS CARRIED TO SUB-SUMMARY									5.50	0.71

EDGE LINE SUB-SUMMARY

LOCATION	COUNTY	ROUTE	S.L.M.		WHITE EDGE LINE		YELLOW EDGE LINE			PARTICIPATION TYPE				642 FAST DRY	644 THERMOPLASTIC	
			FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP	IRG	FG	RSG	NON FED STATE	EDGE LINE, TYPE I MILES	EDGE LINE MILES
1	FAI	SR 37	12.92	13.69	1.54	1.54									1.54	
1	FAI	SR 37	14.40	15.58	2.36	2.36									2.36	
1	FAI	SR 37	19.23	19.70	0.94	0.94								0.94		
1	FAI	SR 37	TOTALS CARRIED TO SUB-SUMMARY												0.94	3.90
2	FAI	SR 37	13.69	14.40	1.42	1.42									1.42	
2	FAI	SR 37	19.70	25.20	11.00	11.00								11.00		
2	FAI	SR 37	TOTALS CARRIED TO SUB-SUMMARY												11.00	1.42

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EDGE/CENTER LINE SUB-SUMMARY

FAI-37-12.73

ITEM 644 AUXILIARY PAVEMENT MARKING SUB-SUMMARY

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES			WORD ON PAVEMENT ONLY		SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	ISLAND MARKING (YELLOW)	24" DOTTED LINE		REMARKS			
						WHITE	YELLOW	24"	WHITE	72"	96"	72"	96"	LT/TH	RT/TH	LT	RT	TH	EA.	EA.				EA.	FEET		SQ. FT.	WH	YEL
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EACH	FEET				SQ. FT.	FT.		FT.		
I	FAI	SR 37	CARPICO DR.		LT			36																		PLACE AS DIRECTED			
I	FAI	SR 37	WIDENING @ CARPICO DR.				300																80	57		SEE SHEET 13			
I	FAI	SR 37	ON SR 37 @ SLM 13.04																										
I	FAI	SR 37	CREEKSIDE DR.		LT			26																		PLACE 38' FROM SR 37 C			
I	FAI	SR 37	MONDHANK RD.		RT			32																		PLACE 28' FROM SR 37 C			
I	FAI	SR 37	WIDENING @ MONDHANK RD.				430																80	57		SEE SHEET 14			
I	FAI	SR 37	COLLEGE AVENUE		LT			32																		PLACE AS DIRECTED			
I	FAI	SR 37	ENTRANCE TO BEAVER FIELD		RT			11																					
I	FAI	SR 37	WIDENING @ COLLEGE AVENUE				520																180			SEE SHEET 14			
I	FAI	SR 37	ON SR 37 @ SLM 13.86																										
I	FAI	SR 37	COLLEGE EXIT		LT			34																		PLACE 38' FROM SR 37 C			
I	FAI	SR 37	COLLEGE ENTRANCE		LT																					NO STOP LINE			
I	FAI	SR 37	HIGH ST		RT			12																		PLACE AS DIRECTED			
I	FAI	SR 37	BAINTER CIRCLE		LT			32																		PLACE 22' FROM SR 37 C			
I	FAI	SR 37	ON SR 37 BEFORE FAIR AVE					20	168														136			SEE SHEET 15			
I	FAI	SR 37	FAIR AVE		LT			23	160																	PLACE AS DIRECTED			
I	FAI	SR 37	FAIR AVE		RT			15	82																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 AFTER FAIR AVE					20	90														108			SEE SHEET 15			
I	FAI	SR 37	ALLEY		RT				22																	PLACE AS DIRECTED			
I	FAI	SR 37	LAKE ST		RT				60																	PLACE AS DIRECTED			
I	FAI	SR 37	LAKE ST		LT				80																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		RT				22																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		LT				22																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37																							325' NORTH OF ALLEN ST. (EAST)			
I	FAI	SR 37	ON SR 37 BEFORE ALLEN ST					12																		PLACE AS DIRECTED			
I	FAI	SR 37	ALLEN ST		LT				82																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 BETWEEN ALLEN STS						70																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEN ST		RT				52																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 AFTER ALLEN ST					12																		PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37																							150' SOUTH OF ALLEN ST. (WEST)			
I	FAI	SR 37	ALLEY		LT				24																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		RT				28																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 BEFORE 6th AVE					13	72																	PLACE AS DIRECTED			
I	FAI	SR 37	6th AVE		RT				90																	PLACE AS DIRECTED			
I	FAI	SR 37	6th AVE		LT				86																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 AFTER 6th AVE					17	72																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		RT				22																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		LT				24																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 BEFORE 5th AVE					18	74																	PLACE AS DIRECTED			
I	FAI	SR 37	5th AVE		LT				74																	PLACE AS DIRECTED			
I	FAI	SR 37	5th AVE		RT				72																	PLACE AS DIRECTED			
I	FAI	SR 37	ON SR 37 AFTER 5th AVE					18	82																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		RT				20																	PLACE AS DIRECTED			
I	FAI	SR 37	ALLEY		LT				24																	PLACE AS DIRECTED			
I	FAI	SR 37	KING ST		LT				80																	PLACE AS DIRECTED			
I	FAI	SR 37	KING ST		RT				78																	PLACE AS DIRECTED			
			SUBTOTAL CARRIED TO NEXT SHEET				1250	383	1832		4	2	2		4	7						584	114						

CALCULATED
BCT
CHECKED
LME

AUXILIARY PAVEMENT MARKING

FAI-37-12.73

F0370001.TAS

ITEM 644 AUXILIARY PAVEMENT MARKING SUB-SUMMARY

644 THERMOPLASTIC

LOCATION	COUNTY	ROUTE	DESCRIPTION	SLM	SIDE	24" TRANSVERSE LINES		STOP LINE	12" CROSSWALK LINES			WORD ON PAVEMENT ONLY		SCHOOL SYMBOL MARKING		LANE ARROWS					RAILROAD SYMBOL MARKING	8" CHANNEL LINE	ISLAND MARKING (YELLOW)	24" DOTTED LINE		REMARKS			
						WHITE	YELLOW	24"	WHITE	72"	96"	72"	96"	LT/TH	RT/TH	LT	RT	TH	EA.	EA.				EA.	FEET		SQ. FT.	FT.	FT.
						FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EACH	FEET				SQ. FT.	FT.		FT.		
1	FAI	SR 37	ALLEY		LT				28																	PLACE AS DIRECTED			
1	FAI	SR 37	ALLEY		RT				38																	PLACE AS DIRECTED			
1	FAI	SR 37	ON SR 37 BEFORE WHEELING ST					18	74																	PLACE AS DIRECTED			
1	FAI	SR 37	WHEELING ST		LT				78																	PLACE AS DIRECTED			
1	FAI	SR 37	WHEELING ST		RT				74																	PLACE AS DIRECTED			
1	FAI	SR 37	ON SR 37 AFTER WHEELING ST					18	74																	PLACE AS DIRECTED			
1	FAI	SR 37	ALLEY		LT				30																	PLACE AS DIRECTED			
1	FAI	SR 37	ALLEY		RT				26																	PLACE AS DIRECTED			
1	FAI	SR 37	SR 37 @ US 22					24	106	1											115					SEE SHEET 15			
			SUBTOTAL THIS SHEET					60	528	1											115								
			SUBTOTAL FROM PREVIOUS SHEET					1250	383		4	2	2			4	7				584	114							
			TOTAL LOCATION 1					1250	443	2360	1	4	2	2		4	8				699	114							
2	FAI	SR 37	FAIR ACRES DR.		RT			26																		PLACE AS DIRECTED			
2	FAI	SR 37	ARBOR VALLEY DR.		LT			22																		PLACE AS DIRECTED			
2	FAI	SR 37	WIDENING @ ARBOR VALLEY DR					260			2					1	1	4			200	57				SEE SHEET 16			
2	FAI	SR 37	SR 37 @ SLM 14.18										1													PLACE AS DIRECTED			
2	FAI	SR 37	ORCHARD HILL		LT			22																		PLACE 22' FROM C SR 37			
2	FAI	SR 37	SR 51(SCHWILK RD)		RT			22																		PLACE 24' FROM C SR 37			
2	FAI	SR 37	SNOKE HILL RD		LT			20																		PLACE 27' FROM C SR 37			
2	FAI	SR 37	CR 60 (LAKE RD)		LT			27																		PLACE 30' FROM C SR 37			
2	FAI	SR 37	CR 60 (LAKE RD)		RT			26																		PLACE 27' FROM C SR 37			
2	FAI	SR 37	MARIETTA RD		LT			24																		PLACE 25' FROM C SR 37			
2	FAI	SR 37	MARIETTA RD		RT			28																		PLACE 24' FROM C SR 37			
2	FAI	SR 37	MARIETTA RD		LT			28																		PLACE 25' FROM C SR 37			
2	FAI	SR 37	HOLLIDAY RD		RT			24																		PLACE 25' FROM C SR 37			
2	FAI	SR 37	CR 66 (WEST RUSHVILLE RD)		LT			22																		PLACE 25' FROM C SR 37			
2	FAI	SR 37	OAK HILL RD		LT			24																		PLACE 24' FROM C SR 37			
2	FAI	SR 37	THOMAS RD		LT			20																		PLACE 25' FROM C SR 37			
2	FAI	SR 37	THOMAS RD		RT			22																		PLACE 26' FROM C SR 37			
2	FAI	SR 37	SR 37 @ SLM 24.90																	2						BEFORE TRACKS 840' WEST & 400' EAST			
2	FAI	SR 37	SR 37 BEFORE SR 664					220			1										112					SEE SHEET 16			
2	FAI	SR 37	SR 664		LT			14																		PLACE 43' FROM C SR 37			
2	FAI	SR 37	SR 664		RT			14																		PLACE 43' FROM C SR 37			
2	FAI	SR 37	TURN LANES @ SR 664					220			1										112					SEE SHEET 16			
			TOTAL LOCATION 2					700	385		4		1			5	1	4		2	424	57							

CALCULATED BY
CHECKED LME

AUXILIARY PAVEMENT MARKING

FAI-37-12.73

F037000IA.TAS

ITEM 621 RPM SUB-SUMMARY

DETAIL	
1	TAPERED ACCELERATION LANE
2	DECELERATION LANE
3	MULTILANE DIVIDED/ CONTROLLED ACCESS

DETAIL	
4	4 LANE DIVIDED TO 2 LANE TRANSITION
5	4 LANE UNDIVIDED TO 2 LANE TRANSITION
6	ONE LANE BRIDGE
7	STOP APPROACH
8	THRU APPROACH
9	TWO WAY LEFT TURN LANE

DETAIL	
10	APPROACH W/LT. TURN LANE
11	HORIZONTAL CURVE 40' (NOTE 2)
12	HORIZONTAL CURVE ALT. (NOTE 3)
GAP	CENTERLINE AT 80' TYP.

L O C A T I O N N U M B E R	L O C A T I O N				D E T A I L	R P M	I T E M Q U A N T I T I E S			P R I S M A T I C R E T R O - R E F L E C T O R C O L O R S					R E M A R K S
	C O U N T Y	R O U T E	S. L. M. M I L E S				I N S T A L L A T I O N O N L Y			O N E - W A Y		T W O - W A Y			
			F R O M	T O			R P M	R P M C A S T I N G	P R I S M A T I C R E T R O - R E F L E C T O R	W H I T E	Y E L L O	Y E L L O/ Y E L L O	W H I T E/ R E D	Y E L L O/ R E D	
1	FAI	SR 37	12.92	13.08	10		21					18	3		@ LANCASTER CORP.
1	FAI	SR 37	13.08	13.24	10		11					11			80' SPACING
1	FAI	SR 37	13.24	13.43	GAP		29					23	6		OPPOSING LEFT TURNS
1	FAI	SR 37	13.43	13.69	GAP		17					17			80' SPACING
1		TOTAL					78					69	9		
2	FAI	SR 37	12.73	12.86	10		17					14	3		NORTH & SOUTH APPROACHES TO CARPICO DRIVE
2	FAI	SR 37	12.86	12.92	GAP		5					5			80' SPACING
2	FAI	SR 37	13.69	13.87	GAP		12					12			80' SPACING
2	FAI	SR 37	13.87	14.04	10		23					17	6		LT & RT TURNS @ ARBOR VALLEY DRIVE
2	FAI	SR 37	14.04	14.17	GAP		9					9			80' SPACING
2	FAI	SR 37	14.17	14.35	12		38					38			PC 14.26 PT 14.31 L=264' DEG 30
2	FAI	SR 37	14.35	14.40	GAP		4					4			80' SPACING END @ LANCASTER CORP.
2	FAI	SR 37	19.70	20.81	GAP		74					74			80' SPACING, BEGIN @ LANCASTER SOUTH CORP.
2	FAI	SR 37	20.81	20.86	11		7					7			PC 20.81 PT 20.86 L=264' DEG 8
2	FAI	SR 37	20.86	21.95	GAP		72					72			80' SPACING
2	FAI	SR 37	21.95	22.30	12		69					69			PC 22.04 PT 22.21 L=898' DEG 17
2	FAI	SR 37	22.30	24.90	GAP		171					171			80' SPACING
2	FAI	SR 37	24.90	24.99	10		18					15	3		WEST APPROACH TO SR 664
2	FAI	SR 37	24.99	25.06	10		18					15	3		EAST APPROACH TO SR 664
2	FAI	SR 37	25.06	25.26	GAP		14					14			80' SPACING
2		TOTAL					551					536	15		

F0370001.TRM

CALCULATED
BCT
CHECKED
LME

RPM SUB-SUMMARY

FAI-37-12.73

F0370001.mls

SHEET NUMBER											ITEM	ITEM EXT. NO.	LOC. I TOTALS	UNIT	DESCRIPTION	SHEET NO.
3	4	5	9	10	12	17	22	26	29							
					285	2218					202	23500	2503	SQ.YD.	WEARING COURSE REMOVED	
							1224				202	30000	1224	SQ.FT.	WALK REMOVED	
							552				202	32000	552	FT	CURB REMOVED	
	69										202	54100	69	EACH	RAISED PAVEMENT MARKERS REMOVED FOR STORAGE	
		500									253	01001	500	SQ.YD.	PAVEMENT REPAIR, AS PER PLAN	5
		2000									253	90100	2000	SQ.YD.	PAVEMENT REPAIR, MISC.: BRICK PAVEMENT	5
			26393	433	3056						254	01001	29882	SQ.YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	3
			3129	285	556	155					407	10000	4125	GALLON	TACK COAT	
			1409	90							407	14000	1499	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
			13667								407	98000	13667	FT	TACK COAT MISC.: FOR LONGITUDINAL JOINT	
				1516							408	10001	1516	GALLON	PRIME COAT, AS PER PLAN	5
			177	29							448	46050	206	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22	
	7	5	177	29							448	47020	218	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	
			12								604	34600	12	EACH	MANHOLE ADJUSTED TO GRADE	
							1224				608	52001	1224	SQ.FT.	CURB RAMP, AS PER PLAN	23-25
	239										614	12460	239	EACH	WORK ZONE MARKING SIGN	
29											614	13000	29	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			4.22								614	21400	4.22	MILE	WORK ZONE CENTER LINE, CLASS II	
				213							617	10101	213	CU.YD.	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	2
								78			621	00200	78	EACH	RPM, INSTALLATION ONLY	
		21									632	26501	21	EACH	DETECTOR LOOP, AS PER PLAN	5
		8									638	10800	8	EACH	VALVE BOX ADJUSTED TO GRADE	
							0.94				642	00100	0.94	MILE	EDGE LINE, TYPE I	
							0.47				642	00300	0.47	MILE	CENTER LINE, TYPE I	

CALCULATED BY: _____ CHECKED BY: _____
 LOCATION I SUB-SUMMARY
 FAI-37-12.73
 30/70

F037000IA.mis

SHEET NUMBER										ITEM	ITEM EXT. NO.	LOC. 1 TOTALS	UNIT	DESCRIPTION	SHEET NO.
	9	10	12	17	26	28									
					3.90					644	00100	3.90	MILE	EDGE LINE	
					1.95					644	00300	1.95	MILE	CENTER LINE	
						699				644	00400	699	FT	CHANNELIZING LINE	
						443				644	00500	443	FT	STOP LINE	
						2360				644	00600	2360	FT	CROSSWALK LINE	
						1250				644	00700	1250	FT	TRANSVERSE LINE	
						114				644	00900	114	SQ FT	ISLAND MARKING	
						2				644	01100	2	EACH	SCHOOL SYMBOL MARKING, 72"	
						2				644	01110	2	EACH	SCHOOL SYMBOL MARKING, 96"	
						12				644	01300	12	EACH	LANE ARROW	
						1				644	01400	1	EACH	WORD ON PAVEMENT, 72", "ONLY"	
						4				644	01410	4	EACH	WORD ON PAVEMENT, 96", "ONLY"	
		1168	96	254	92					857	10000	1610	CU.YD.	ASPHALT CONCRETE WITH GILSONITE, SURFACE COURSE, TYPE 1	
		900	31							857	20000	931	CU.YD.	ASPHALT CONCRETE WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2	

CALCULATED
BCT
CHECKED
MCK

LOCATION | SUB-SUMMARY

FAI-37-12.73

31
70

F0370002.mis

SHEET NUMBER										ITEM	ITEM EXT. NO.	LOC. 2 TOTALS	UNIT	DESCRIPTION	SHEET NO.
3	4	5	9	10	12	17	26	29							
254					493	2079				202	23500	2826	SQ.YD.	WEARING COURSE REMOVED	
	641									202	54100	641	EACH	RAISED PAVEMENT MARKERS REMOVED FOR STORAGE	
		1500								253	01001	1500	SQ.YD.	PAVEMENT REPAIR, AS PER PLAN	5
			6682	1139	450	165				407	10000	8436	GALLON	TACK COAT	
			3845	676	273	110				407	14000	4904	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
			33107							407	98000	33107	FT	TACK COAT MISC.: FOR LONGITUDINAL JOINT	
				6076						408	10001	6076	GALLON	PRIME COAT, AS PER PLAN	5
			2137	375	153	78				448	46050	2743	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22	
22	32		2137	375	153	81				448	47020	2800	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	
						901				512	33010	901	SQ.YD.	TYPE 3 WATERPROOFING	
						1.4				SPECIAL	51631400	1.4	CU.YD.	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	
	14									614	12460	14	EACH	WORK ZONE MARKING SIGN	
2										614	13000	2	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			11.83							614	21400	11.83	MILE	WORK ZONE CENTER LINE, CLASS II	
				844						617	10101	844	CU.YD.	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	
							551			621	00200	551	EACH	RPM, INSTALLATION ONLY	2
							11.00			642	00100	11.00	MILE	EDGE LINE, TYPE I	
							5.50			642	00300	5.50	MILE	CENTER LINE, TYPE I	

CALCULATED BY: _____ CHECKED BY: _____
 LOCATION 2 SUB-SUMMARY
 FAI-37-12.73
 32 / 70

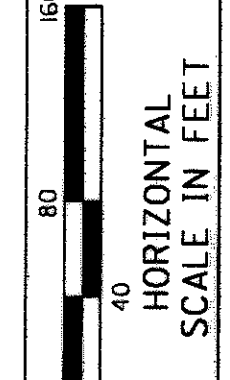
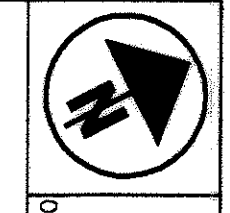
SHEET NUMBER

SHEET NUMBER										ITEM	ITEM EXT. NO.	LOC. 2 TOTALS	UNIT	DESCRIPTION	SHEET NO.
			6	9	10	12	26	28							
							1.42			644	00100	1.42	MILE	EDGE LINE	
							0.71			644	00300	0.71	MILE	CENTER LINE	
								424		644	00400	424	FT	CHANNELIZING LINE	
								385		644	00500	385	FT	STOP LINE	
								700		644	00700	700	FT	TRANSVERSE LINE	
								57		644	00900	57	SQ FT	ISLAND MARKING	
								2		644	01000	2	EACH	RAILROAD SYMBOL MARKING	
								1		644	01110	1	EACH	SCHOOL SYMBOL MARKING, 96"	
								10		644	01300	10	EACH	LANE ARROW	
								4		644	01410	4	EACH	WORD ON PAVEMENT, 96", "ONLY"	
			7							SPECIAL	69050100	7	EACH	MAILBOX SUPPORT SYSTEM, SINGLE	
			2							SPECIAL	69050200	2	EACH	MAILBOX SUPPORT SYSTEM, DOUBLE	
				376	58	63				857	10000	497	CU.YD.	ASPHALT CONCRETE WITH GILSONITE, SURFACE COURSE, TYPE I	

LOCATION 2 SUB-SUMMARY

FAI-37-12.73

CALCULATED
BY
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BCT
CHECKED
NCK

SCHEMATIC PLAN - LOCATION 3

FAI-37-12.73

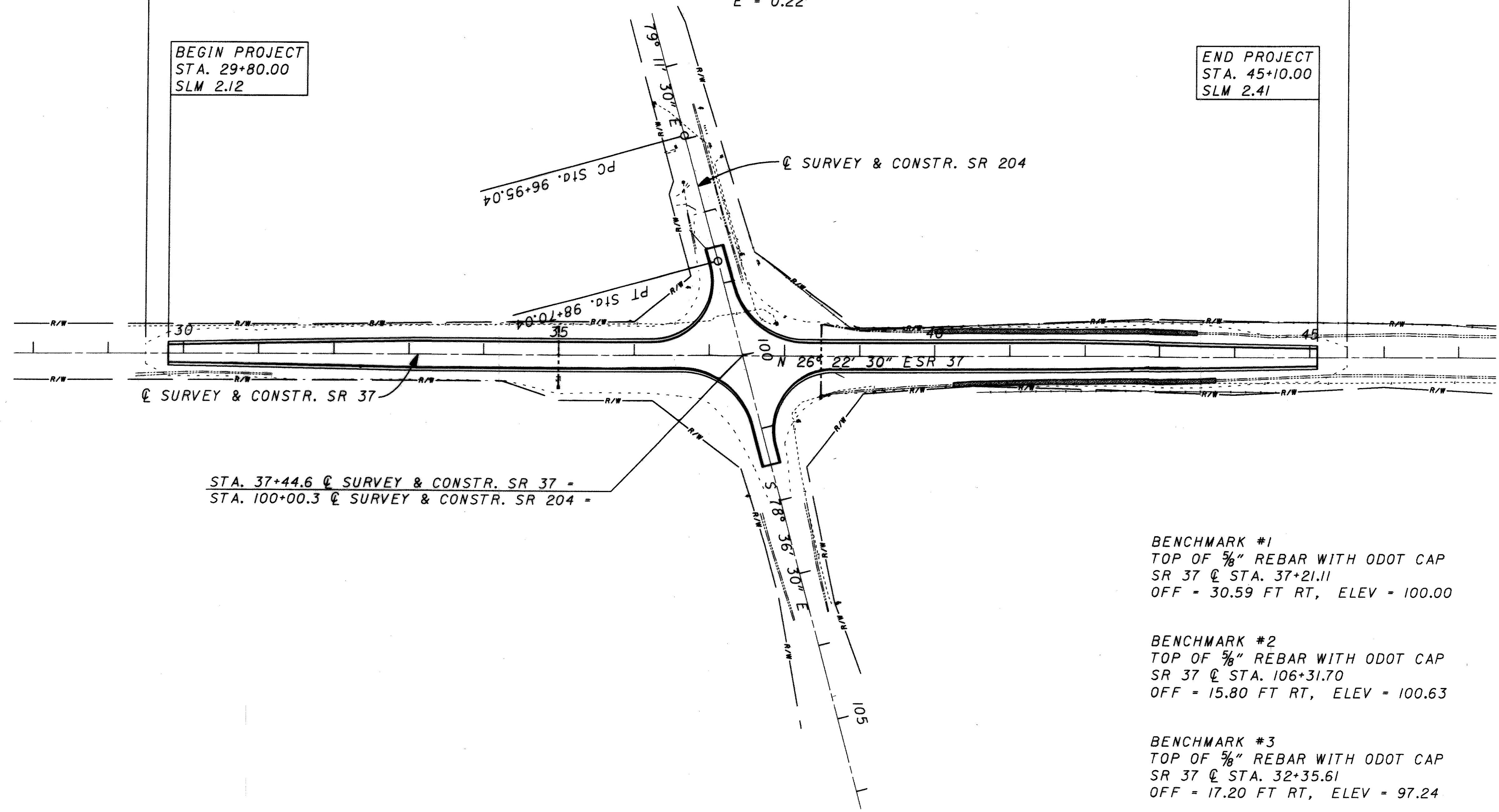
SR 204
P.I. Sta = 97+82.54
D = 0° 35' 00" (RT)
Dc = 0° 20' 00"
R = 17,188.74'
T = 87.50'
L = 175.00'
E = 0.22'

BEGIN WORK
STA. 29+50.00

END WORK
STA. 45+50.00

BEGIN PROJECT
STA. 29+80.00
SLM 2.12

END PROJECT
STA. 45+10.00
SLM 2.41



STA. 37+44.6 ϕ SURVEY & CONSTR. SR 37 =
STA. 100+00.3 ϕ SURVEY & CONSTR. SR 204 =

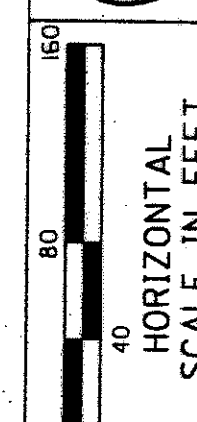
BENCHMARK #1
TOP OF 5/8" REBAR WITH ODOT CAP
SR 37 ϕ STA. 37+21.11
OFF = 30.59 FT RT, ELEV = 100.00

BENCHMARK #2
TOP OF 5/8" REBAR WITH ODOT CAP
SR 37 ϕ STA. 106+31.70
OFF = 15.80 FT RT, ELEV = 100.63

BENCHMARK #3
TOP OF 5/8" REBAR WITH ODOT CAP
SR 37 ϕ STA. 32+35.61
OFF = 17.20 FT RT, ELEV = 97.24

BENCHMARK #4
TOP OF 3/8" REBAR WITH ODOT CAP
SR 37 ϕ STA. 42+62.97
OFF = 17.55 FT RT, ELEV = 109.32

F0370001.GSP



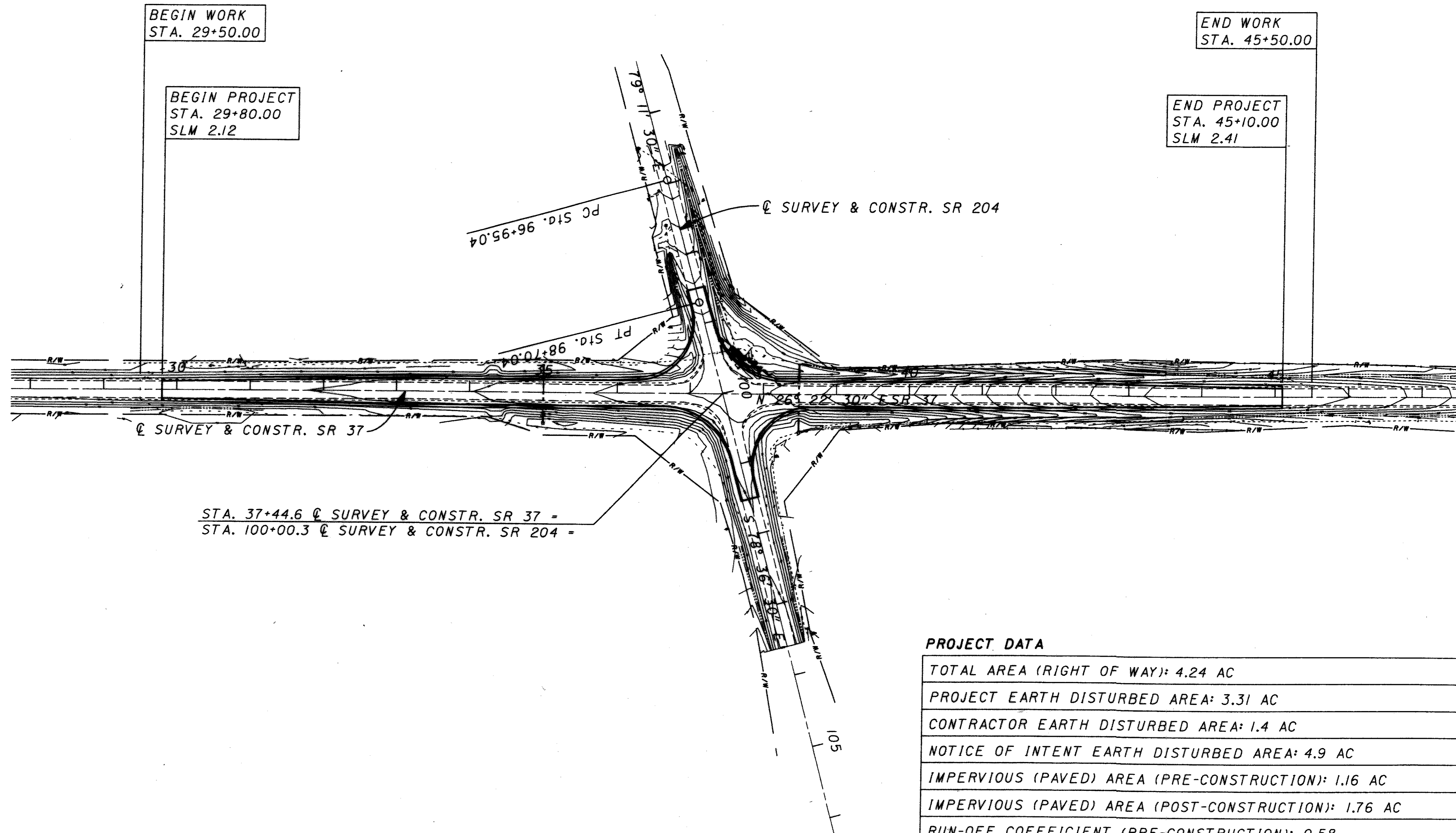
CALCULATED
BCT
CHECKED
INCK

PROJECT SITE PLAN - LOCATION 3

FAI-37-12.73

35
70

NOTE:
1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE.
ACTUAL SLOPES SHALL CONFIRM TO PLAN CROSS SECTIONS.



BEGIN WORK
STA. 29+50.00

END WORK
STA. 45+50.00

BEGIN PROJECT
STA. 29+80.00
SLM 2.12

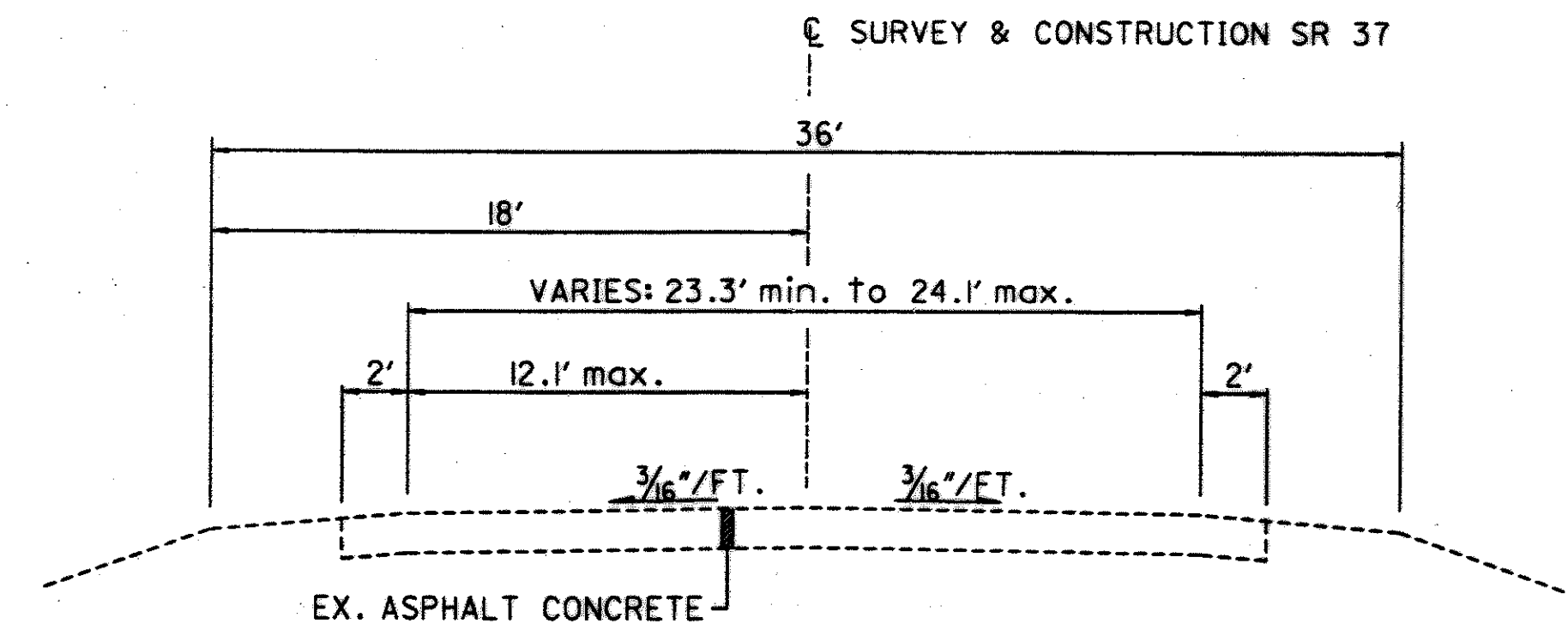
END PROJECT
STA. 45+10.00
SLM 2.41

STA. 37+44.6 @ SURVEY & CONSTR. SR 37 =
STA. 100+00.3 @ SURVEY & CONSTR. SR 204 =

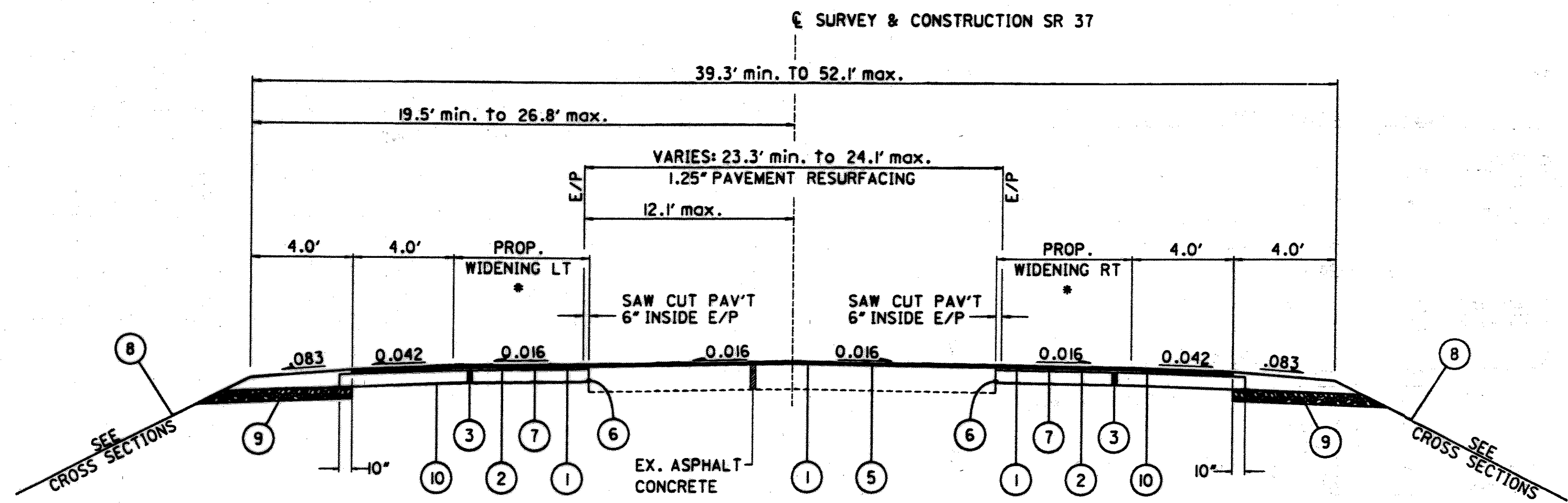
PROJECT DATA

TOTAL AREA (RIGHT OF WAY): 4.24 AC
PROJECT EARTH DISTURBED AREA: 3.31 AC
CONTRACTOR EARTH DISTURBED AREA: 1.4 AC
NOTICE OF INTENT EARTH DISTURBED AREA: 4.9 AC
IMPERVIOUS (PAVED) AREA (PRE-CONSTRUCTION): 1.16 AC
IMPERVIOUS (PAVED) AREA (POST-CONSTRUCTION): 1.76 AC
RUN-OFF COEFFICIENT (PRE-CONSTRUCTION): 0.58
RUN-OFF COEFFICIENT (POST-CONSTRUCTION): 0.68
SOIL AND WATER CONSERVATION MAPS:
IMMEDIATE RECEIVING WATER: ROADSIDE DITCH
SUBSEQUENT RECEIVING WATER: TRIBUTARY TO BUCKEYE LAKE

F0370002.GSP



EXISTING TYPICAL SECTION
STA. 29+50.00 TO STA. 45+50.00 = 1600.00 FT



PROPOSED TYPICAL SECTION

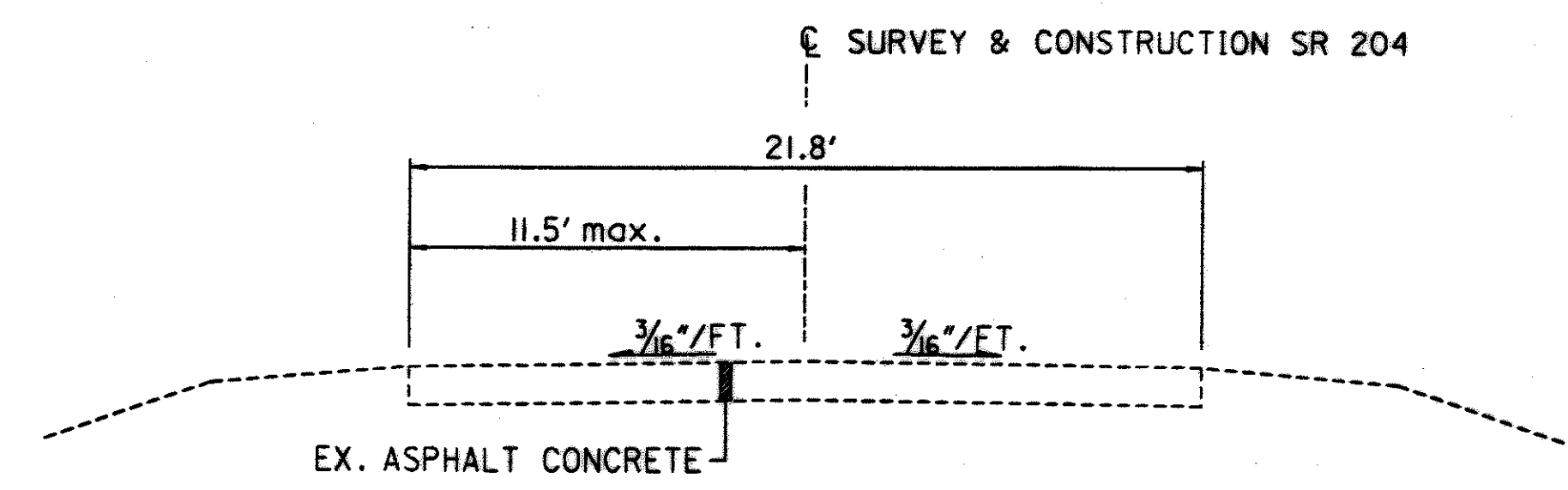
***PROP. WIDENING LT:**
TAPERS FROM 0.8' @ STA. 29+80.00 TO 6.3' @ STA. 33+10.00 = 330.00 FT
6.5' avg. FROM STA. 33+10.00 TO STA. 36+24.00 = 314.00 FT
6.6' avg. FROM STA. 38+30.13 TO STA. 41+80.00 = 349.87 FT
TAPERS FROM 6.6' @ STA. 41+80.00 TO 0.7' @ STA. 45+10.00 = 330.00 FT
TOTAL = 1323.87 FT

23.9' avg. PAVEMENT RESURFACING:
STA. 29+80.00 TO STA. 36+60.00 = 680.00 FT
STA. 38+30.00 TO STA. 45+10.00 = 680.00 FT
TOTAL = 1360.00 FT

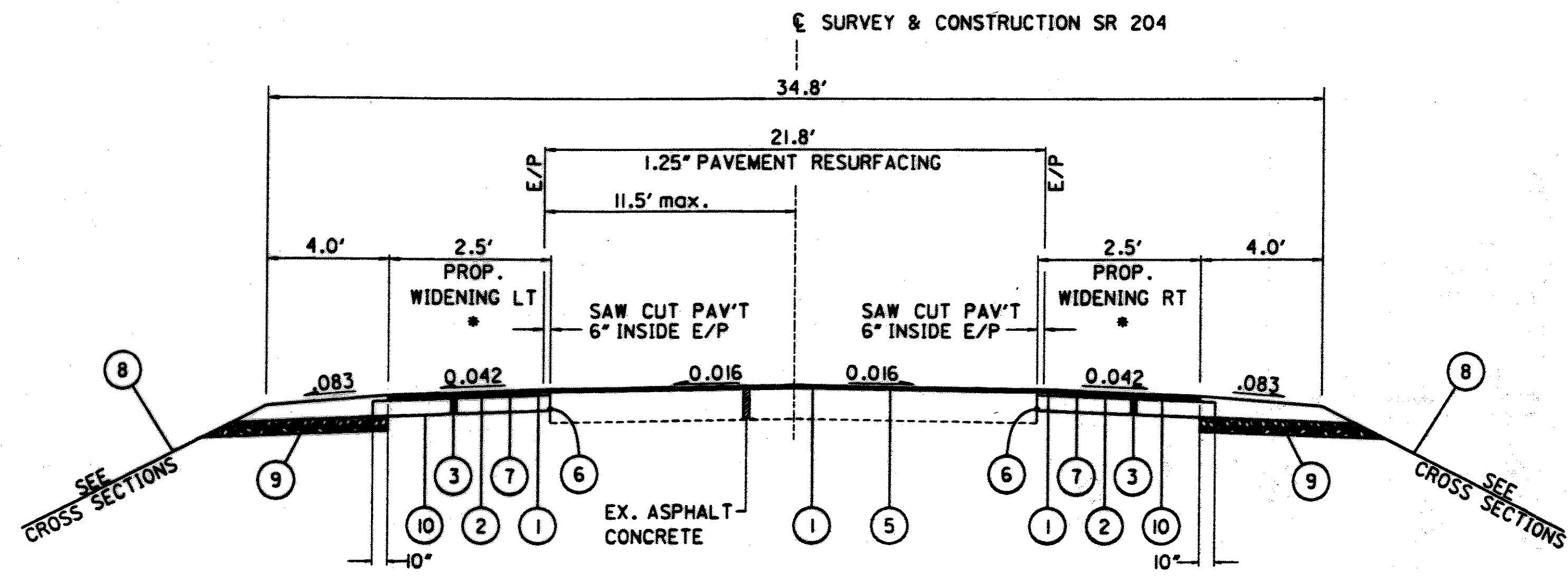
***PROP. WIDENING RT:**
TAPERS FROM 0.7' @ STA. 29+80.00 TO 7.5' @ STA. 33+10.00 = 330.00 FT
7.1' avg. FROM STA. 33+10.00 TO STA. 36+62.16 = 352.16 FT
7.1' avg. FROM STA. 38+66.34 TO STA. 41+80.00 = 313.66 FT
TAPERS FROM 7.2' @ STA. 41+80.00 TO 1.1' @ STA. 45+10.00 = 330.00 FT
TOTAL = 1325.82 FT

- ① 857 1 1/4" ASPHALT CONCRETE WITH GILSONITE, SURFACE COURSE, TYPE 1
- ② 857 1 1/2" ASPHALT CONCRETE WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2
- ③ 301 10" ASPHALT CONCRETE BASE, AS PER PLAN
- ④ *** NOT USED ***
- ⑤ 407 TACK COAT (@ 0.075 GAL/SY)
- ⑥ 407 TACK COAT (FOR LONG. JOINT @ 0.25 GAL/SY)
- ⑦ 407 TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 GAL/SY)
- ⑧ 870 SEEDING AND MULCHING
- ⑨ 605 AGGREGATE DRAINS
- ⑩ 204 SUBGRADE COMPACTION

LOCATION 3



EXISTING TYPICAL SECTION
STA. 98+00.00 TO STA. 102+00.00 = 400.00 FT



PROPOSED TYPICAL SECTION

***PROP. WIDENING LT:**
STA. 98+50.00 TO STA. 99+10.68 = 60.68 FT
STA. 101+25.78 TO STA. 101+50.00 = 24.22 FT
TOTAL = 84.90 FT

21.8' PAVEMENT RESURFACING:
STA. 98+50.00 TO STA. 99+25.00 = 75.00 FT
STA. 100+65.00 TO STA. 101+50.00 = 85.00 FT
TOTAL = 160.00 FT

***PROP. WIDENING RT:**
STA. 98+50.00 TO STA. 98+75.10 = 25.05 FT
STA. 100+92.82 TO STA. 101+50.00 = 57.23 FT
TOTAL = 82.28 FT

- ① 857 1 1/4" ASPHALT CONCRETE WITH GILSONITE, SURFACE COURSE, TYPE 1
- ② 857 1 1/2" ASPHALT CONCRETE WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2
- ③ 301 10" ASPHALT CONCRETE BASE, AS PER PLAN
- ④ *** NOT USED ***
- ⑤ 407 TACK COAT (@ 0.075 GAL/SY)
- ⑥ 407 TACK COAT (FOR LONG. JOINT @ 0.25 GAL/SY)
- ⑦ 407 TACK COAT FOR INTERMEDIATE COURSE (@ 0.05 GAL/SY)
- ⑧ 870 SEEDING AND MULCHING
- ⑨ 605 AGGREGATE DRAINS
- ⑩ 204 SUBGRADE COMPACTION

LOCATION 3

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, A.P.P.

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THE LIST CURRENTLY CONTAINS CLASS III WITHIN MINIMUM LEGIBILITY DISTANCES OF 650 FT.

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 TROUBLE-SHOOT 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 CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE 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 A 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 ODOT PERSONNEL TO OPERATE AND TROUBLE-SHOOT THE UNIT AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PREPROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OF PREPROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ONBOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHOULD BE EMPLOYED. ALTHOUGH THREE PHRASES MAY BE USED IN USUAL CONDITIONS. THE 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, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT 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 TO 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 AT THE CONTRACT UNIT PRICE BID PER SIGN-MONTH FOR EACH ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

THIS PROJECT SHALL REQUIRE 2 (TWO) PORTABLE CHANGEABLE MESSAGE SIGNS.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 4 SIGN MONTH

ITEM 614 LAW ENFORCEMENT OFFICER WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF ITEM 614 AND THE LATEST EDITION OF THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (O.M.U.T.C.D.), A UNIFORMED LAW ENFORCEMENT OFFICER AND OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

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

DURING THE INSTALLATION OF A TRAFFIC SIGNAL.

LAW ENFORCEMENT OFFICERS (L.E.O.'S) SHOULD NOT BE USED WHERE THE O.M.U.T.C.D. INTENDS THAT FLAGGERS BE USED. THE L.E.O.'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

INFORMATION REGARDING ARRANGEMENTS AND PAYMENTS BY THE CONTRACTOR FOR THE L.E.O. MAY BE OBTAINED BY CONTACTING THE OHIO HIGHWAY PATROL, 2855 W. DUBLIN-GRANVILLE RD, COLUMBUS, OHIO, (614-466-2660). IF AFTER CONTACTING THE OHIO HIGHWAY PATROL, IT IS DETERMINED THAT THEY CANNOT SUPPLY THE L.E.O., THEN AN AUTHORIZED MUNICIPAL OR COUNTY POLICE OFFICER EQUIPPED WITH A MARKED AND FLASHER-LIGHT EQUIPPED OFFICIAL POLICE OR PATROL CAR, SHALL BE PROVIDED.

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR 50 HOURS

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

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN THAT REQUIRED IN THESE PLANS, HE MAY DO SO AT HIS OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614, MAINTAINING TRAFFIC.

SR 37 PROFILE GRADE CHANGE

ABOUT 6 MILES SOUTH OF SR 204 AND JUST TO THE NORTH OF CR 17, ODOT FORCES SHALL MAKE IMPROVEMENTS TO A SECTION OF SR 37 BY LOWERING THE PROFILE GRADE. STATE FORCES WILL EXCAVATE A 340' SECTION OF SR 37 AND SHALL BE RESPONSIBLE FOR SUBGRADE COMPACTION AND THE PLACEMENT OF ITEM 304 AGGREGATE BASE. AFTER STATE FORCES HAVE CONSTRUCTED THE BASE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE FULL DEPTH ASPHALT BUILDUP AND SHALL BEGIN WORK ON JUNE 1, 2004. THE 340' SECTION OF ROADWAY SHALL BE PAVED WITH 9" OF ITEM 301 ASPHALT AGGREGATE BASE, 1.75" OF ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 AND 1.25" OF ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22.

THE WORK AT THIS LOCATION SHALL BE COMPLETED WITHIN FIVE DAYS OF NOTIFICATION BY THE PROJECT ENGINEER THAT THE LOCATION IS READY TO BE PAVED. THE END OF THE FIVE DAY PERIOD SHALL CONSTITUTE AN INTERIM COMPLETION DATE AS PER SECTION 108.07 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS WITH THE EXCEPTION THAT THE LIQUIDATED DAMAGES IN THE AMOUNT OF \$1,500.00 PER DAY SHALL BE ACCESSED. FOR THIS WORK THE CLOSURE WILL BE IN EFFECT. ALL DETOURS WILL BE ESTABLISHED BY STATE FORCES.

THE FOLLOWING QUANTITIES ARE CARRIED TO THE GENERAL SUMMARY AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL COSTS TO PERFORM ALL WORK AS DESCRIBED ABOVE:

ITEM 301 ASPHALT CONCRETE BASE 264 C.Y.
ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22 52 C.Y.
ITEM 448 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 37 C.Y.

CALCULATED
BID
CHECKED
LINE

GENERAL NOTES - LOCATION 3

FIA-37-12.73

38
70

ITEM 632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, A.P.P

THE TRAFFIC SIGNAL INSTALLATION, INCLUDING SIGNAL HEADS, CABLE, MESSENGER WIRE, STRAIN POLES, CABINET, CONTROLLER, ETC., SHALL BE REMOVED IN ACCORDANCE WITH CMS 632.26. THE STRAIN POLES SHALL BE STORED ON THE PROJECT FOR SALVAGE BY DISTRICT 5 TO PICK UP.

IN THE EVENT THE ITEMS STORED ON THE PROJECT FOR SALVAGE BY THE LOCAL AGENCY ARE NOT REMOVED, THE CONTRACTOR SHALL, WHEN DIRECTED BY THE ENGINEER IN WRITING, REMOVE AND DISPOSE OF THE ITEMS AT NO ADDITIONAL COST TO THE PROJECT.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO GENERAL SUMMARY: REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN 1 EACH

ITEM 614 WORK ZONE MARKING SIGNS

A QUANTITY OF WORK ZONE MARKING SIGNS HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

WORK ZONE MARKING SIGNS	LOCATION	
	3	
OW-167 (NO EDGE LINES)	4	
R-33 (DO NOT PASS)	4	
R-34 (PASS WITH CARE)		
OW-128 (BEGIN ROAD CONSTRUCTION AHEAD)	4	
OC-8 (END ROAD CONSTRUCTION)	4	
TOTAL (CARRIED TO GENERAL SUMMARY)	16	

ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR STORAGE. THE FAIRFIELD COUNTY MANAGER SHALL BE CONTACTED FOR INSTRUCTIONS ON WHERE TO DELIVER THE RAISED PAVEMENT MARKERS.

ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE: 23 EACH

ITEM 301 ASPHALT CONCRETE BASE, PG 64-22, A.P.P.

THIS WORK SHALL CONSIST OF PLACEMENT OF 10 INCHES OF ASPHALT CONCRETE BASE ADJACENT TO THE EXISTING PAVEMENT. THIS ITEM IS TO BE PLACED IN 2 SEPARATE LIFTS. THE FIRST LIFT TO BE PLACED SHALL BE 7 INCHES THICK AND THE SECOND LIFT SHALL BE 3 INCHES THICK. ALL OTHER REQUIREMENTS OF ITEM 301 SHALL APPLY.

ITEM 605 AGGREGATE DRAINS

AGGREGATE DRAINS SHALL BE PLACED AT 50 FOOT INTERVALS ON EACH SIDE OF NORMAL CROWNED SECTIONS, STAGGERED SO THAT EACH DRAIN IS 25 FT FROM THE ADJACENT DRAIN ON THE OPPOSITE SIDE, AND AT 25 FT INTERVALS ON THE LOW SIDE ONLY OF SUPERELEVATED SECTIONS. AN AGGREGATE DRAIN SHALL BE PLACED AT THE LOW POINT OF EACH SAG VERTICAL CURVE. THE FOLLOWING ESTIMATED QUANTITY OF AGGREGATE DRAINS SHALL BE CONSTRUCTED AT LOCATIONS DIRECTED BY THE PROJECT ENGINEER.

ITEM 605 AGGREGATE DRAINS 460 FT

ITEM 614 MAINTENANCE OF TRAFFIC

THIS WORK CONSISTS OF PREPARING AREAS UPON WHICH TO PLACE ITEM 301 ASPHALT CONCRETE BASE, AS PER PLAN, AS WELL AS THE PLACEMENT OF THE ITEM 301. WORK SHALL INCLUDE EXCAVATION FOR THE PAVEMENT WIDENING, SUBGRADE COMPACTION, AND PLACEMENT OF 10 INCHES, ITEM 301 ASPHALT CONCRETE BASE. ALL EXCAVATED AREAS SHALL BE BACKFILLED WITH THE FIRST LIFT OF ITEM 301 ON THE SAME DAY THAT THE EXCAVATION IS PERFORMED AND THE SECOND LIFT SHALL BE PLACED WITHIN THE FOLLOWING 24 HOURS. NO PAVEMENT DROP-OFFS IN EXCESS OF 3 INCHES SHALL BE PERMITTED OVERNIGHT. ALL MAINTENANCE OF TRAFFIC SHALL FOLLOW STANDARD DRAWINGS AND OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

LOCATION OF UTILITIES

NOT ALL UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS. THE SIZE, DEPTH AND LOCATION OF THE BURIED UTILITIES SHOWN OR NOT, ARE NOT WARRANTED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT SIZE, DEPTH AND LOCATION OF ALL BURIED UTILITIES WITHIN THE CONSTRUCTION ARE PRIOR TO EXCAVATING.

ITEM 201 CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS "DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED: NONE

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS WITHIN THE RIGHT-OF-WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING. ALSO ANY FENCE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THIS ITEM.

ITEM 603: 12" AND 15" CONDUIT, TYPE A, 707.01 (0.079), 707.01 AL. COATED, 707.21

THIS WORK INVOLVES CONNECTING CORRUGATED METAL PIPE TO THE EXISTING CULVERT SUCH THAT THE INLET AND OUTLET OF THE STRUCTURE EXTEND BEYOND THE LIMITS OF THE PROPOSED EMBANKMENT. CONDUITS SHALL BE JOINED USING COUPLING BANDS AS PER 603.06.

ITEM 659 SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS AS PER SUPPLEMENTAL SPECIFICATION 659:

SEEDING AND MULCHING 9960 S.Y. (CARRIED FROM SHT 45)
 SODDING DEDUCTION 468 S.Y. (SEE SHT 65)
 ITEM 659 SEEDING AND MULCHING 9960 - 468 = 9492 S.Y.
 ITEM 659 COMMERCIAL FERTILIZER 1.3 TON
 1 TON PER 7,410 SQ. YD. OF THE PERMANENT SEEDED AREA
 9492 SQ.YD. ÷ 7,410 = 1.3 TON

ITEM 659 LIME 2.0 ACRE
 1 ACRE PER 4,840 SQ. YD. OF THE PERMANENT SEEDED AREA
 9492 SQ.YD. ÷ 4,840 = 2.0 ACRE

ITEM 659 WATER 52 M. GAL.
 0.0054 M. GAL PER SQ. YD. OF THE PERMANENT SEEDED AREA
 9492 SQ.YD. x 0.0054 = 51.3 M.GAL.

ITEM 659 MOWING 22 M. SQ. FT.
 0.00225 M. SQ. FT. PER SQ. YD. OF THE PERMANENT SEEDED AREA
 9492 SQ.YD. x 0.00225 = 21.4 M. S.F.

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

CALCULATED BY _____ CHECKED BY _____
 GENERAL NOTES - LOCATION 3
 FIA-37-12.73
 39/70

SR 37 RESURFACING

SR 37 WIDENING LT & RT

LOCATION 3

NB & SB LANES:

STA. 29+80.00 TO STA. 36+60.00 = 680.00 FT
 STA. 38+30.00 TO STA. 45+10.00 = 680.00 FT

680.00 + 680.00 = 1360.00 FT
 (1360.00)(23.9 avg)/9 = 3611.6 SY

ITEM 407 TACK COAT

3611.6 x 0.075 GAL/SY = 270.9 GAL
 ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")
 3611.6 x 0.035 YD = 126.4 CY

ITEM 202 WEARING COURSE REMOVED

STA. 29+80.00 TO STA. 30+11.00 = 31.00 FT
 STA. 44+79.00 TO STA. 45+10.00 = 31.00 FT
 31.00 + 31.00 = 62.00 FT
 62.00 x 27.9 avg / 9 = 192.2 SY

FOR WEARING COURSE REMOVED, USE TAPER RATE OF 1"/25'
 WITH DEPTH OF BUTT END JOINT EQUAL TO THE TOTAL
 RESURFACING THICKNESS.

NOTE:

FOR THE PURPOSE OF ESTIMATING QUANTITIES FOR PROPOSED
 WIDENING, IT IS ASSUMED THAT A 6" WIDTH OF THE EXISTING
 ROADWAY SHALL BE REMOVED ALONG THE INSIDE EDGE OF
 PAVEMENT AND THE CALCULATIONS REFLECT THIS ASSUMPTION.

WIDENING LT:

STA. 29+80.00 TO STA. 33+10.00 = 330.00 FT
 (330.00)(3.6 avg)/9 = 132.0 SY
 STA. 33+10.00 TO STA. 36+24.00 = 314.00 FT
 (314.00)(6.5 avg)/9 = 226.8 SY
 STA. 38+30.13 TO STA. 41+80.00 = 349.87 FT
 (348.87)(6.6 avg)/9 = 256.6 SY
 STA. 41+80.00 TO STA. 45+10.00 = 330.00 FT
 (330.00)(3.7 avg)/9 = 135.7 SY

TOTAL AREA SR 37 WIDENING LT:

132.0 + 226.8 + 256.6 + 135.7 = 751.1 SY

SECTION LENGTHS:

330.00 + 314.00 + 349.90 + 330.00 = 1323.90 FT

EXTRA AREA FOR 10" STEP:

1323.9 x 0.833 / 9 = 122.6 SY

EXTRA AREA FOR 6" STEP:

1323.9 x 0.50 / 9 = 73.6 SY

ITEM 204 SUBGRADE COMPACTION

751.1 SY
 ITEM 301 ASPHALT CONCRETE BASE, AS PER PLAN (10")
 (751.1 + 122.6) x 0.278 YD = 242.9 CY

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

751.1 x 0.05 GAL/YD = 37.6 GAL

ITEM 407 TACK COAT (FOR LONG. JOINT)

1323.90 FT

ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")

751.1 x 0.035 YD = 26.3 CY

ITEM 857 A.C. WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2 (1.5")

751.1 x 0.042 = 31.5 CY

WIDENING RT:

STA. 29+80.00 TO STA. 33+10.00 = 330.00 FT
 (330.00)(4.1 avg)/9 = 150.3 SY
 STA. 33+10.00 TO STA. 36+62.16 = 352.16 FT
 (352.16)(7.1 avg)/9 = 277.8 SY
 STA. 38+66.30 TO STA. 41+80.00 = 313.66 FT
 (313.66)(7.1 avg)/9 = 247.5 SY
 STA. 41+80.00 TO STA. 45+10.00 = 330.00 FT
 (330.00)(4.2 avg)/9 = 154.0 SY

TOTAL AREA SR 37 WIDENING RT:

150.3 + 277.8 + 247.5 + 154.0 = 829.6 SY

SECTION LENGTHS:

330.00 + 352.10 + 313.70 + 330.00 = 1325.80 FT

EXTRA AREA FOR 10" STEP:

1325.8 x 0.833 / 9 = 122.7 SY

EXTRA AREA FOR 6" STEP:

1325.8 x 0.50 / 9 = 73.7 SY

ITEM 204 SUBGRADE COMPACTION

829.6 SY
 ITEM 301 ASPHALT CONCRETE BASE, AS PER PLAN (10")
 (829.6 + 122.7) x 0.278 YD = 264.7 CY

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

829.6 x 0.05 GAL/YD = 41.5 GAL

ITEM 407 TACK COAT (FOR LONG. JOINT)

1325.80 FT

ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")

829.6 x 0.035 YD = 29.1 CY

ITEM 857 A.C. WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2 (1.5")

829.6 x 0.042 = 34.8 CY

ITEM	DESCRIPTION	SR 37			TOTALS CARRIED TO SUBSUMMARY
		RESURFACING	WIDENING LT	WIDENING RT	
202	WEARING COURSE REMOVED	192.2			192.2 SY
203	EXCAVATION (CARRIED FROM SHT 45)				838 CY
203	EMBANKMENT (CARRIED FROM SHT 45)				2200 CY
204	SUBGRADE COMPACTION		751.1	829.6	1580.7 SY
301	ASPHALT CONCRETE BASE, AS PER PLAN		242.9	264.7	507.6 CY
407	TACK COAT FOR INTERMEDIATE COURSE		37.6	41.5	79.1 GAL
407	TACK COAT	270.9			270.9 GAL
407	TACK COAT (FOR LONG. JOINT @ 0.25 GAL/SY)		1323.9	1325.8	2649.7 FT
857	A.C. WITH GILSONITE, SURFACE COURSE, TYPE 1	126.4	26.3	29.1	126.4 CY
857	A.C. WITH GILSONITE, INTERM. COURSE, TYPE 2		31.5	34.8	281.9 CY

/F0370001.PCS

CALCULATED
BY
CHECKED
INX

CALCULATIONS SR 37 RESURFACING & PAVEMENT WIDENING

FAI-37-12.73

40
70

SR 204 RESURFACING

EB & WB LANES:

STA. 98+50.00 TO STA. 99+25.00 = 75.00 FT
 STA. 100+65.00 TO STA. 101+50.00 = 85.00 FT

75.00 + 85.00 = 160.00 FT
 (160.00)(21.8 avg)/9 = 387.6 SY

ITEM 407 TACK COAT

387.6 x 0.075 GAL/SY = 29.1 GAL

ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")

387.6 x 0.035 YD = 13.6 CY

ITEM 202 WEARING COURSE REMOVED

STA. 98+50.00 TO STA. 98+81.00 = 31.00 FT

STA. 101+19.00 TO STA. 101+50.00 = 31.00 FT

31.00 + 31.00 = 62.00 FT

62.00 x 24.8 avg / 9 = 170.8 SY

FOR WEARING COURSE REMOVED, USE TAPER RATE OF 1"/25'
 WITH DEPTH OF BUTT END JOINT EQUAL TO THE TOTAL
 RESURFACING THICKNESS.

SR 37 & SR 204 INTERSECTION

SR 37 INTERSECTION W/ SR 204:

965.0 SY (SEE SHT 59)

ITEM 407 TACK COAT

965.0 x 0.075 GAL/SY = 72.4 GAL

ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")

965.0 x 0.035 YD = 33.8 CY

SR 204 WIDENING LT & RT

WIDENING LT:

STA. 98+50.00 TO STA. 99+10.68 = 60.68 FT
 (60.68)(2.5)/9 = 15.2 SY

STA. 101+25.7 TO STA. 101+50.0 = 24.22 FT
 (24.22)(2.5)/9 = 6.7 SY

WIDENING RT:

STA. 98+50.00 TO STA. 98+75.05 = 25.05 FT
 (25.05)(2.5)/9 = 7.0 SY

STA. 100+92.8 TO STA. 101+50.0 = 57.23 FT
 (57.23)(2.5)/9 = 15.9 SY

TOTAL AREA SR 37 WIDENING LT & RT:

15.2 + 6.7 + 7.0 + 15.9 = 44.8 SY

SECTION LENGTHS:

60.68 + 24.22 + 25.05 + 57.23 = 167.18 FT

EXTRA AREA FOR 10" STEP:

167.18 x 0.833 / 9 = 15.5 SY

EXTRA AREA FOR 6" STEP:

167.18 x 0.50 / 9 = 9.3 SY

ITEM 204 SUBGRADE COMPACTION

44.8 SY

ITEM 301 ASPHALT CONCRETE BASE, AS PER PLAN (10")

(44.8 + 15.5) x 0.278 YD = 16.8 CY

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

44.8 x 0.05 GAL/YD = 2.3 GAL

ITEM 407 TACK COAT (FOR LONG. JOINT)

167.18 FT

ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")

44.8 x 0.035 YD = 1.6 CY

ITEM 857 A.C. WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2 (1.5")

44.8 x 0.042 = 1.9 CY

SR 37 & SR 204 INTERSECTION

WIDENING RETURNS:

1022.9 SY (SEE SHT 59)

DISTANCE ALONG EXISTING EDGE OF PAVEMENT:

659.3 FT (SEE SHT 59)

LENGTH ALONG PROPOSED EDGE OF PAVEMENT:

554.0 FT (SEE SHT 59)

EXTRA AREA FOR 10" STEP:

554.0 x 0.833 / 9 = 51.3 SY

EXTRA AREA FOR 6" STEP:

554.0 x 0.50 / 9 = 30.8 SY

ITEM 204 SUBGRADE COMPACTION

1022.9 SY

ITEM 301 ASPHALT CONCRETE BASE, AS PER PLAN (10")

(1022.9 + 51.3) x 0.278 YD = 298.6 CY

ITEM 407 TACK COAT FOR INTERMEDIATE COURSE

1022.9 x 0.05 GAL/YD = 51.1 GAL

ITEM 407 TACK COAT (FOR LONG. JOINT)

659.3 FT

ITEM 857 A. C. WITH GILSONITE, SURFACE COURSE, TYPE 1 (1.25")

1022.9 x 0.035 YD = 35.8 CY

ITEM 857 A.C. WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2 (1.5")

1022.9 x 0.042 = 43.0 CY

NOTE:

FOR THE PURPOSE OF ESTIMATING QUANTITIES FOR PROPOSED
 WIDENING, IT IS ASSUMED THAT A 6" WIDTH OF THE EXISTING
 ROADWAY SHALL BE REMOVED ALONG THE INSIDE EDGE OF
 PAVEMENT AND THE CALCULATIONS REFLECT THIS ASSUMPTION.

ITEM	DESCRIPTION	SR 204		SR 37 & SR 204 INTERSECTION		TOTALS CARRIED TO SUBSUMMARY
		RESURFACING	WIDENING LT & RT	RESURFACING	WIDENING	
202	WEARING COURSE REMOVED	170.8				170.8 SY
203	EXCAVATION (SEE NOTE ON SHT 45)		43		129	172 CY
203	EMBANKMENT (CARRIED FROM SHT 45)		37		671	708 CY
204	SUBGRADE COMPACTION		44.8		1022.9	1067.7 SY
301	ASPHALT CONCRETE BASE, AS PER PLAN		16.8		298.6	315.4 CY
407	TACK COAT FOR INTERMEDIATE COURSE		2.3		51.1	53.4 GAL
407	TACK COAT	29.1		72.4		101.5 GAL
407	TACK COAT (FOR LONG. JOINT @ 0.25 GAL/SY)		167.2		659.3	826.5 FT
857	A.C. WITH GILSONITE, SURFACE COURSE, TYPE 1	13.6	1.6	33.8	35.8	84.8 CY
857	A.C. WITH GILSONITE, INTERM. COURSE, TYPE 2		1.9		43.0	44.9 CY



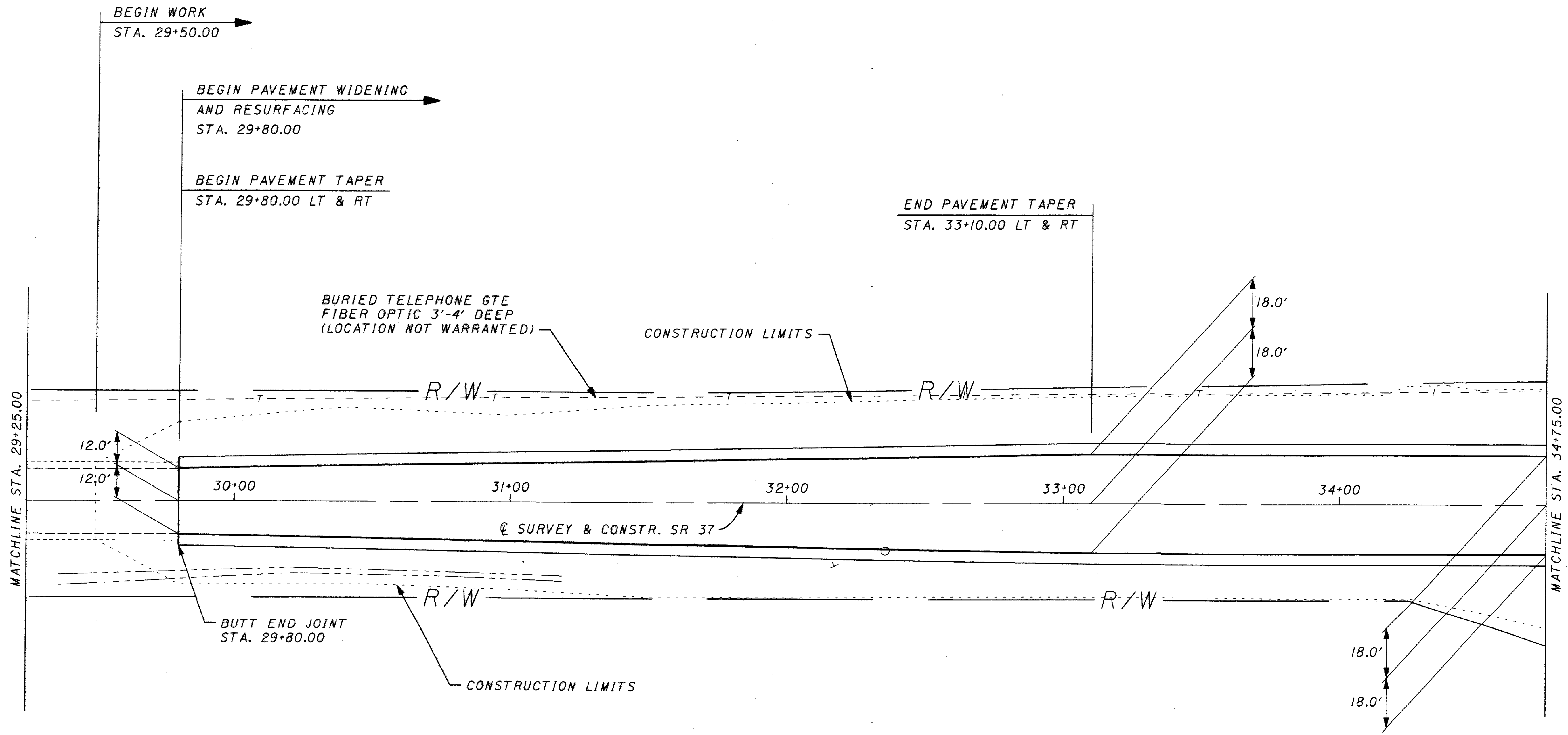
0 10 20 40
HORIZONTAL
SCALE IN FEET

CALCULATED
BY
CHECKED
BY

PLAN SHEET SR 37
STA. 29+25.00 TO STA. 34+75.00

FAI-37-12.73

42
70



SEE SHEET 65 FOR U QUANTITIES

F03T0061.FPP

(C1) 15" CONDUIT, TYPE A, 707.01 (0.079),
 707.01 AL. COATED, 707.21
 STA. 34+99.71, 30.21' LT, E 94.01
 STA. 34+99.71, 38.21' LT, E 94.73

(C3) 12" CONDUIT, TYPE A, 707.01 (0.079),
 707.01 AL. COATED, 707.21
 STA. 38+48.63, 30.02' LT, E 96.81
 STA. 38+48.63, 42.02' LT, E 97.07

BURIED TELEPHONE GTE
 FIBER OPTIC 3'-4' DEEP
 (LOCATION NOT WARRANTED)

BURIED TELEPHONE GTE
 FIBER OPTIC 3'-4' DEEP
 (LOCATION NOT WARRANTED)

BURIED TELEPHONE GTE
 FIBER OPTIC 3'-4' DEEP
 (LOCATION NOT WARRANTED)

BURIED TELEPHONE
 GTE 3' DEEP
 (LOCATION NOT WARRANTED)

BURIED TELEPHONE
 GTE 3' DEEP
 (LOCATION NOT WARRANTED)

(C2) 15" CONDUIT, TYPE A, 707.01 (0.079),
 707.01 AL. COATED, 707.21
 STA. 34+99.71, 29.79' RT, E 93.86
 STA. 34+99.71, 41.79' RT, E 93.50

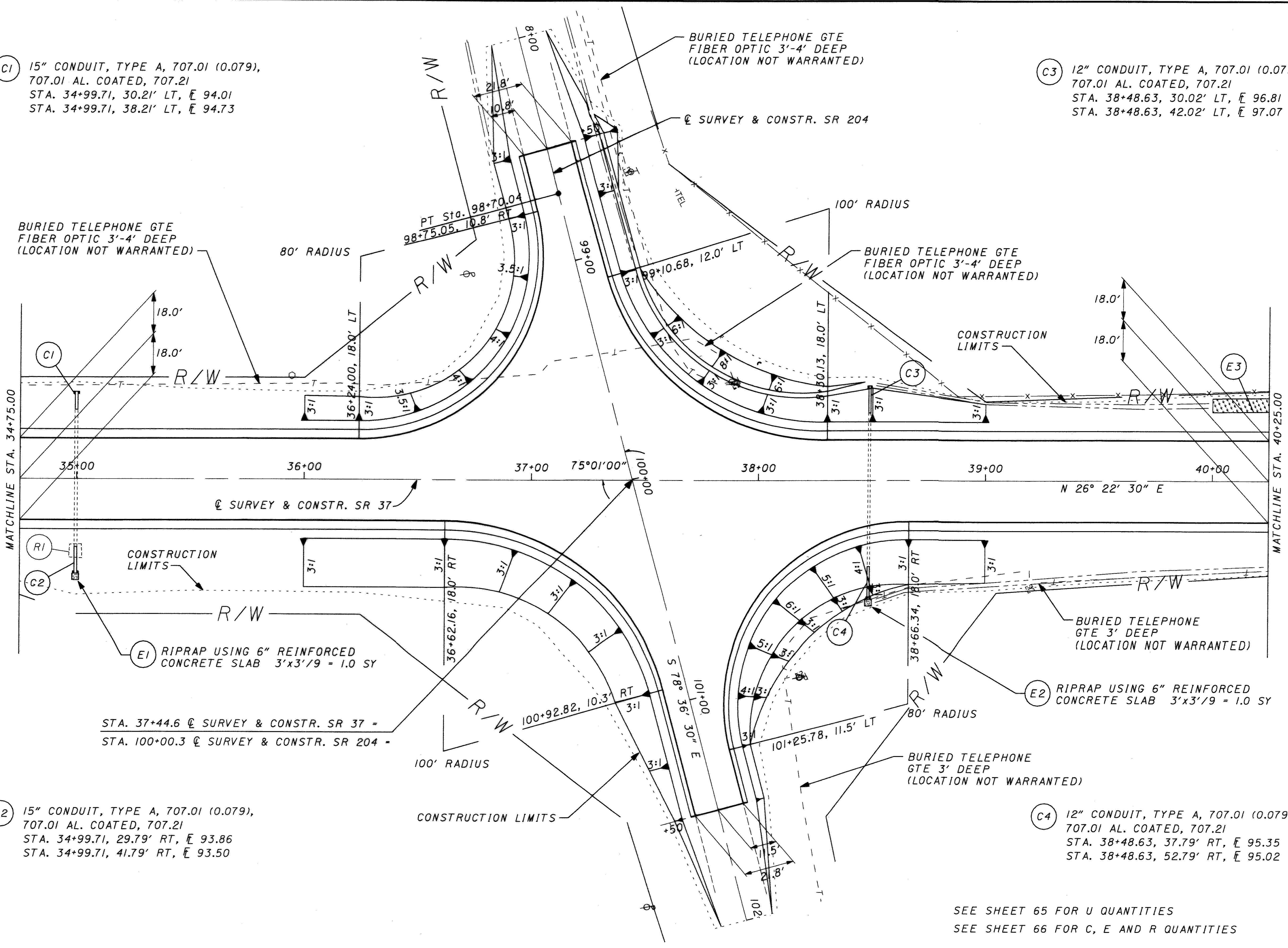
(C4) 12" CONDUIT, TYPE A, 707.01 (0.079),
 707.01 AL. COATED, 707.21
 STA. 38+48.63, 37.79' RT, E 95.35
 STA. 38+48.63, 52.79' RT, E 95.02

(E1) RIPRAP USING 6" REINFORCED
 CONCRETE SLAB 3'x3'/9 = 1.0 SY

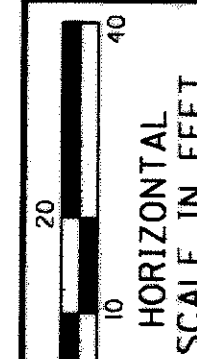
(E2) RIPRAP USING 6" REINFORCED
 CONCRETE SLAB 3'x3'/9 = 1.0 SY

STA. 37+44.6 @ SURVEY & CONSTR. SR 37 =
 STA. 100+00.3 @ SURVEY & CONSTR. SR 204 =

SEE SHEET 65 FOR U QUANTITIES
 SEE SHEET 66 FOR C, E AND R QUANTITIES



F03T0002.PPP



CALCULATED
BCT
CHECKED
NCK

PLAN SHEET SR 37
STA. 40+25.00 TO STA. 45+75.00

FAI-37-12.73

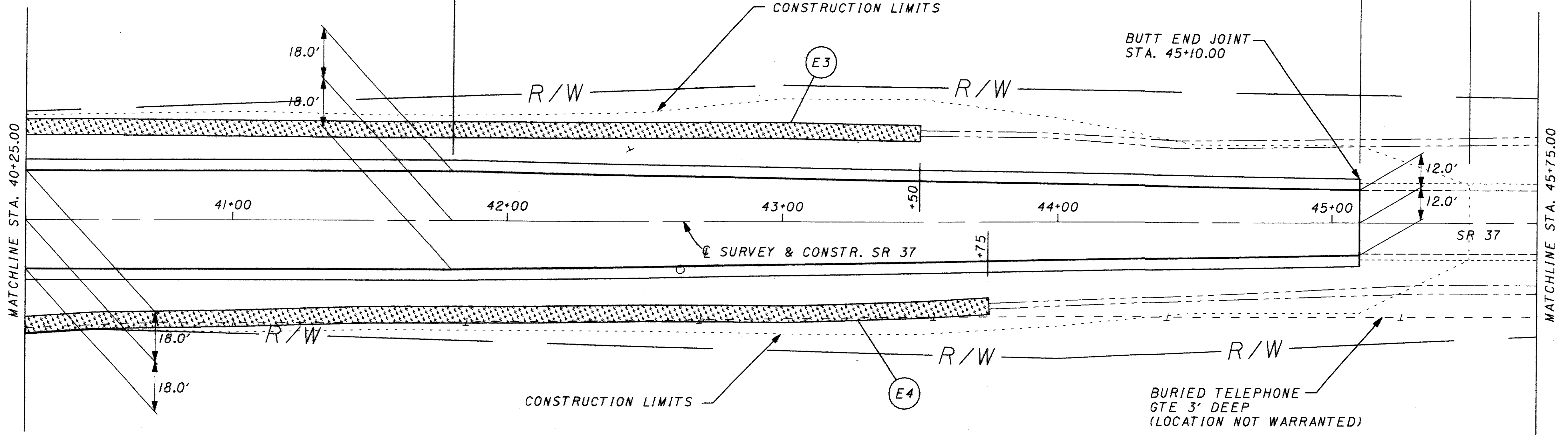
END WORK
STA. 45+50.00

END PAVEMENT WIDENING
AND RESURFACING
STA. 45+10.00

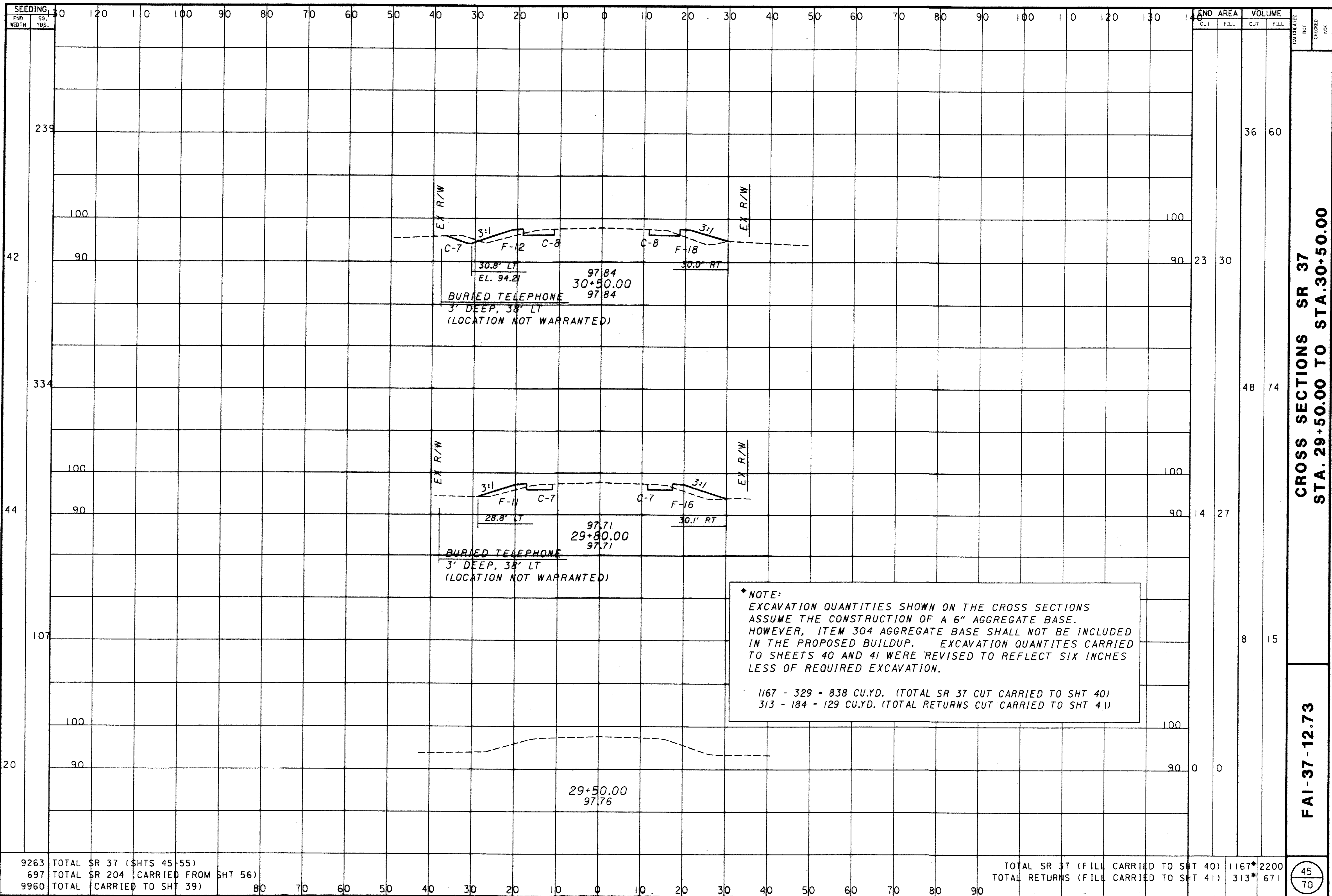
END PAVEMENT TAPER
STA. 45+10.00 LT & RT

BEGIN PAVEMENT TAPER
STA. 41+80.00 LT & RT

BUTT END JOINT
STA. 45+10.00



SEE SHEET 65 FOR U QUANTITIES
SEE SHEET 66 FOR E QUANTITIES



*** NOTE:**
 EXCAVATION QUANTITIES SHOWN ON THE CROSS SECTIONS ASSUME THE CONSTRUCTION OF A 6" AGGREGATE BASE. HOWEVER, ITEM 304 AGGREGATE BASE SHALL NOT BE INCLUDED IN THE PROPOSED BUILDUP. EXCAVATION QUANTITIES CARRIED TO SHEETS 40 AND 41 WERE REVISED TO REFLECT SIX INCHES LESS OF REQUIRED EXCAVATION.

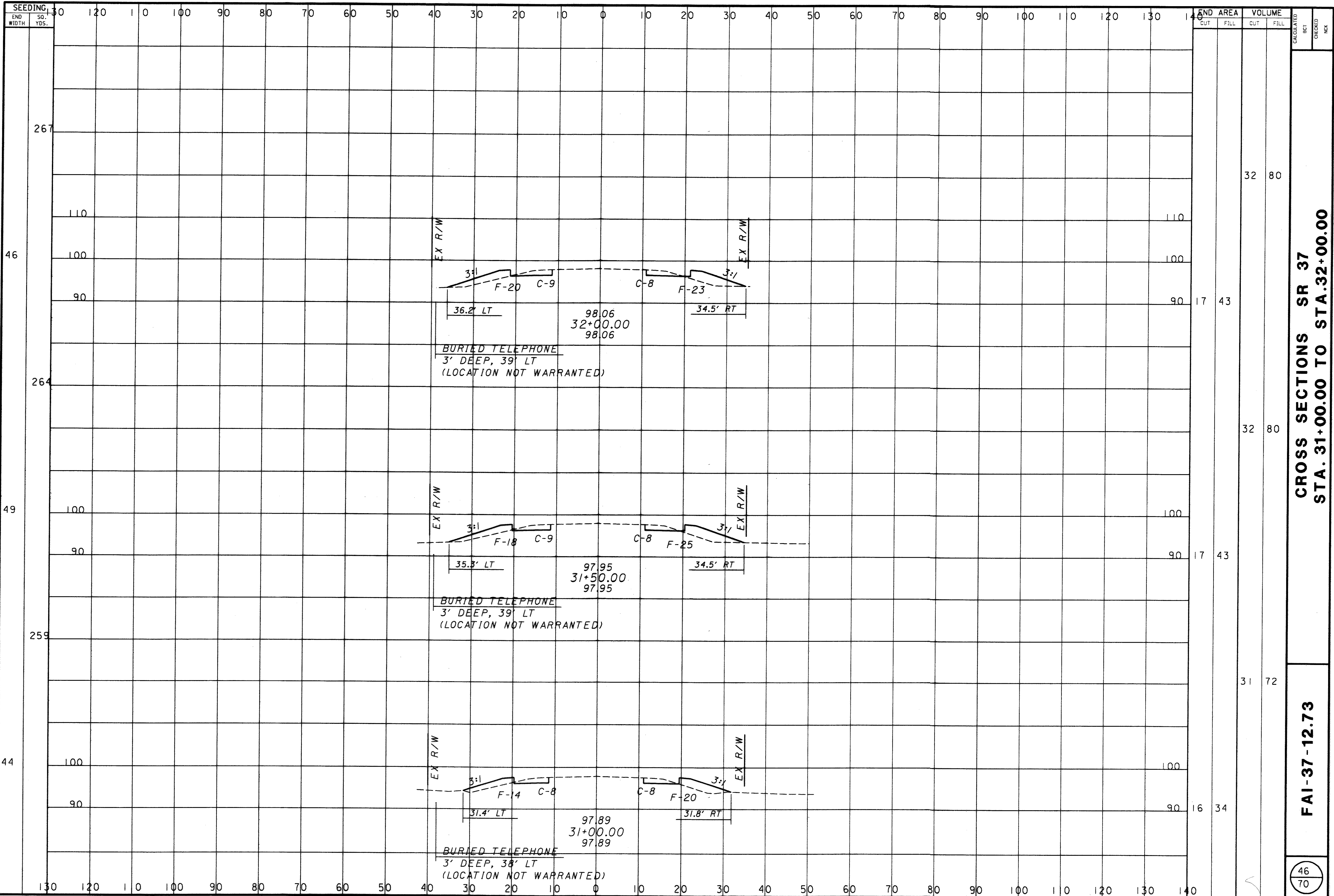
1167 - 329 = 838 CU.YD. (TOTAL SR 37 CUT CARRIED TO SHT 40)
 313 - 184 = 129 CU.YD. (TOTAL RETURNS CUT CARRIED TO SHT 41)

END STA.	AREA		VOLUME		CALCULATED	BCT	CHECKED	MCK
	CUT	FILL	CUT	FILL				
239			36	60				
42	23	30						
334			48	74				
44	14	27						
107			8	15				
20			0	0				
9263 TOTAL SR 37 (SHTS 45-55) 697 TOTAL SR 204 (CARRIED FROM SHT 56) 9960 TOTAL (CARRIED TO SHT 39)					TOTAL SR 37 (FILL CARRIED TO SHT 40) 1167* 2200 TOTAL RETURNS (FILL CARRIED TO SHT 41) 313* 671			

**CROSS SECTIONS SR 37
 STA. 29+50.00 TO STA. 30+50.00**

FAI-37-12.73

XSht37.pxs



SEEDING
END WIDTH SO. YDS.

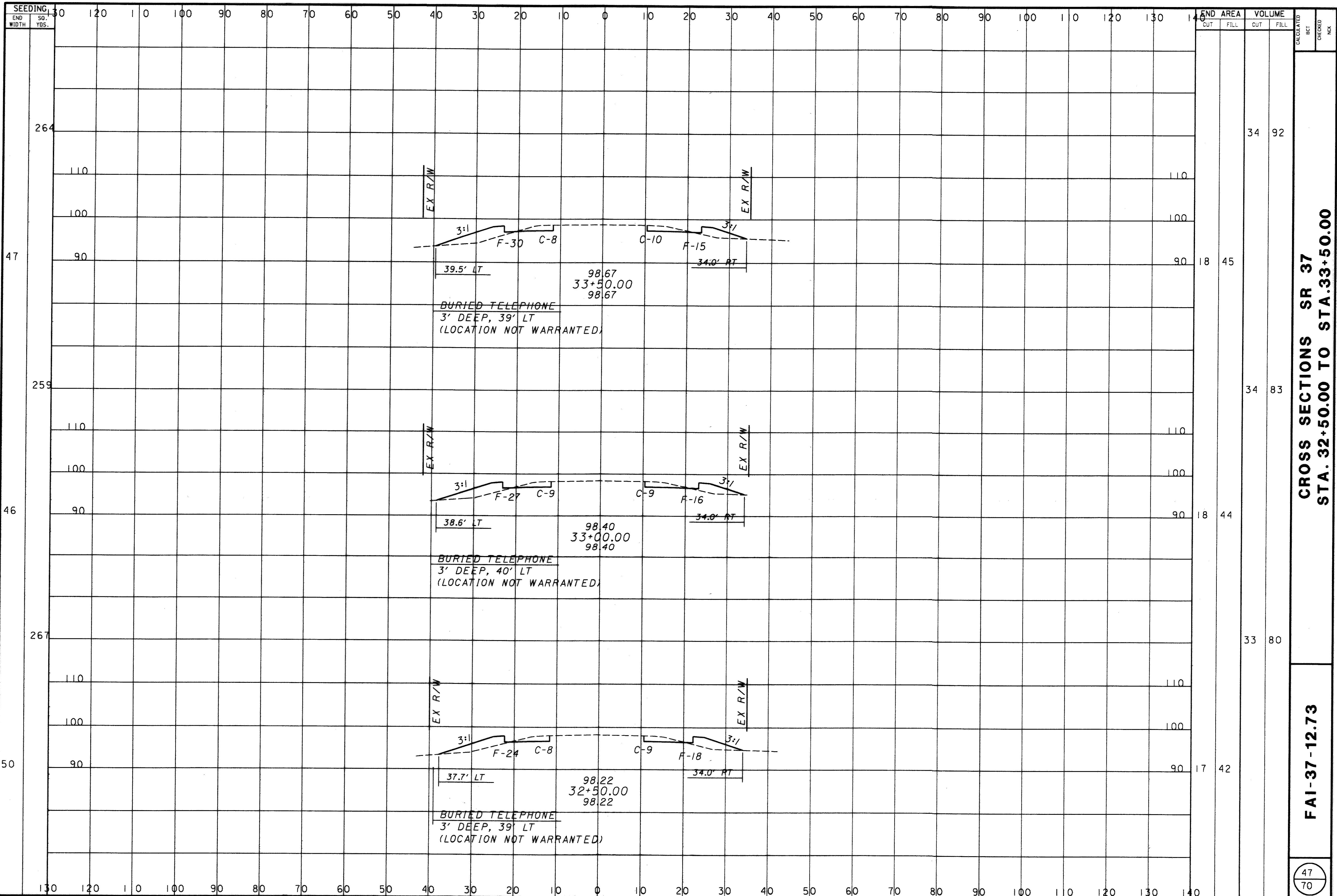
130	120	110	100	90	80	70	60	50	40	30	20	10	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140
-----	-----	-----	-----	----	----	----	----	----	----	----	----	----	---	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----

END AREA	VOLUME		CALCULATED BY	CHECKED BY
	CUT	FILL		
17	43	32	80	
17	43	32	80	
16	34	31	72	

CROSS SECTIONS SR 37
STA. 31+00.00 TO STA. 32+00.00

FAI-37-12.73

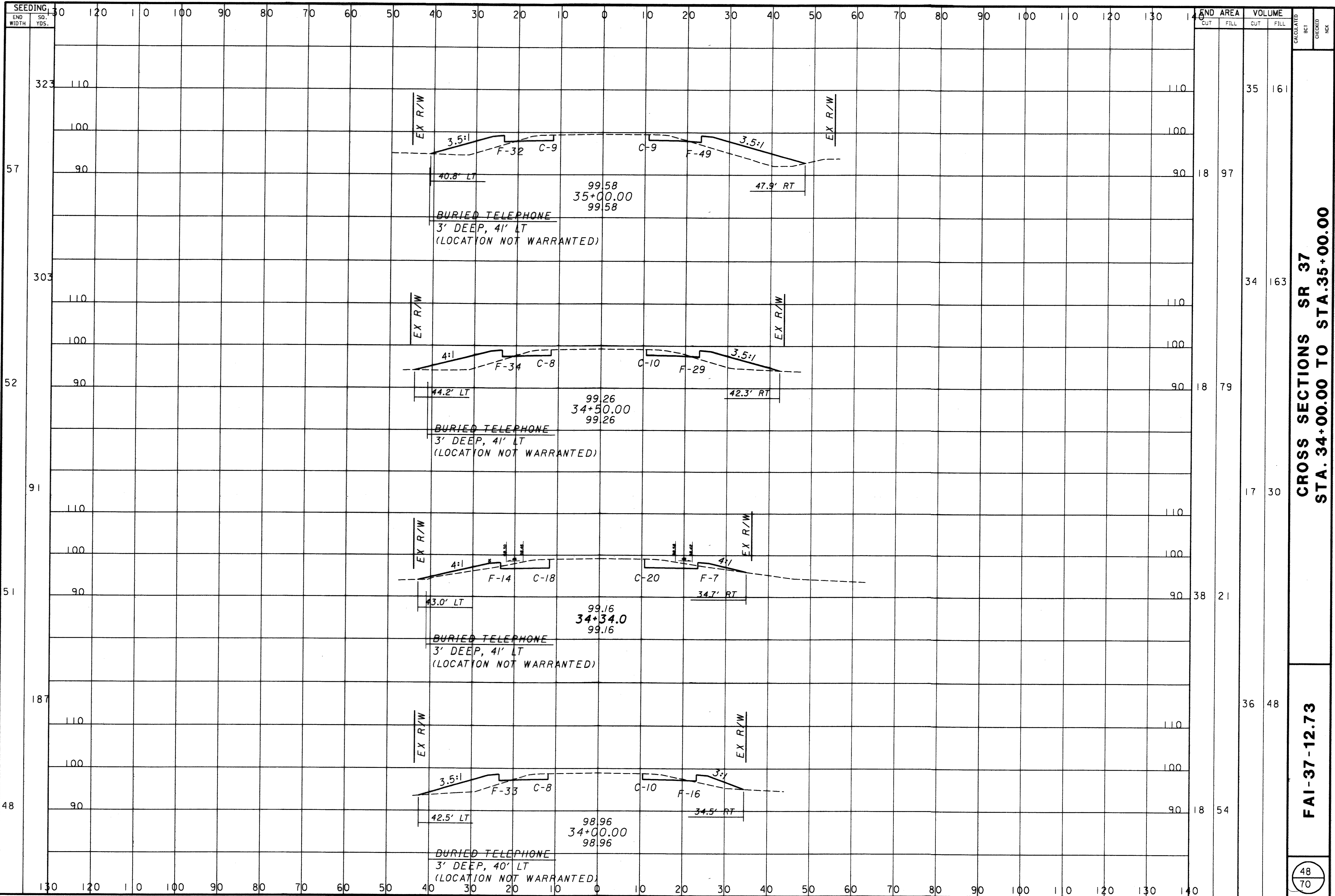
46
70



CROSS SECTIONS SR 37
STA. 32+50.00 TO STA. 33+50.00

FAI-37-12.73

47
70

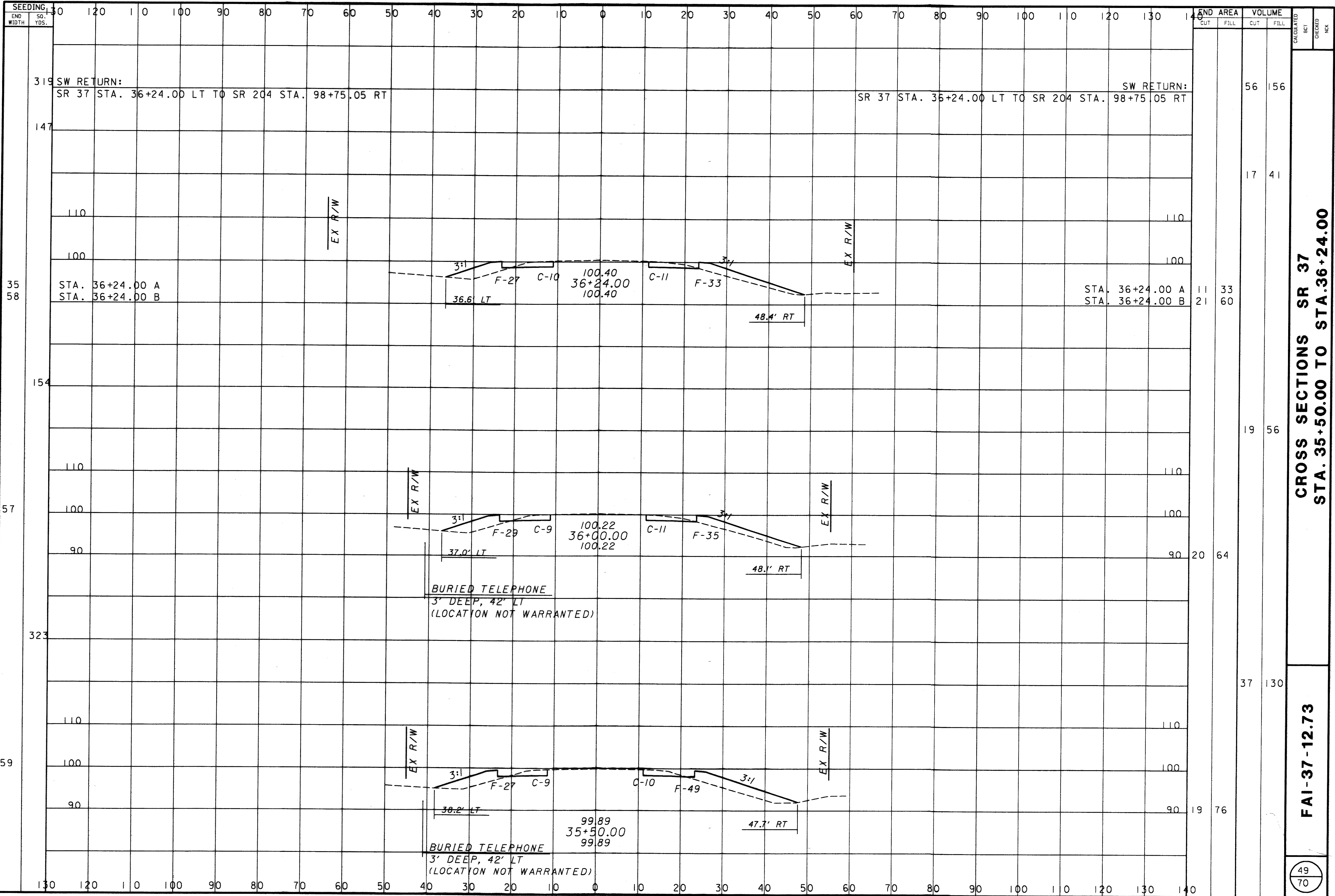


**CROSS SECTIONS SR 37
 STA. 34+00.00 TO STA. 35+00.00**

FAI-37-12.73

CALCULATED BY: []
 CHECKED BY: []
 DATE: []

XS11137L.pxs



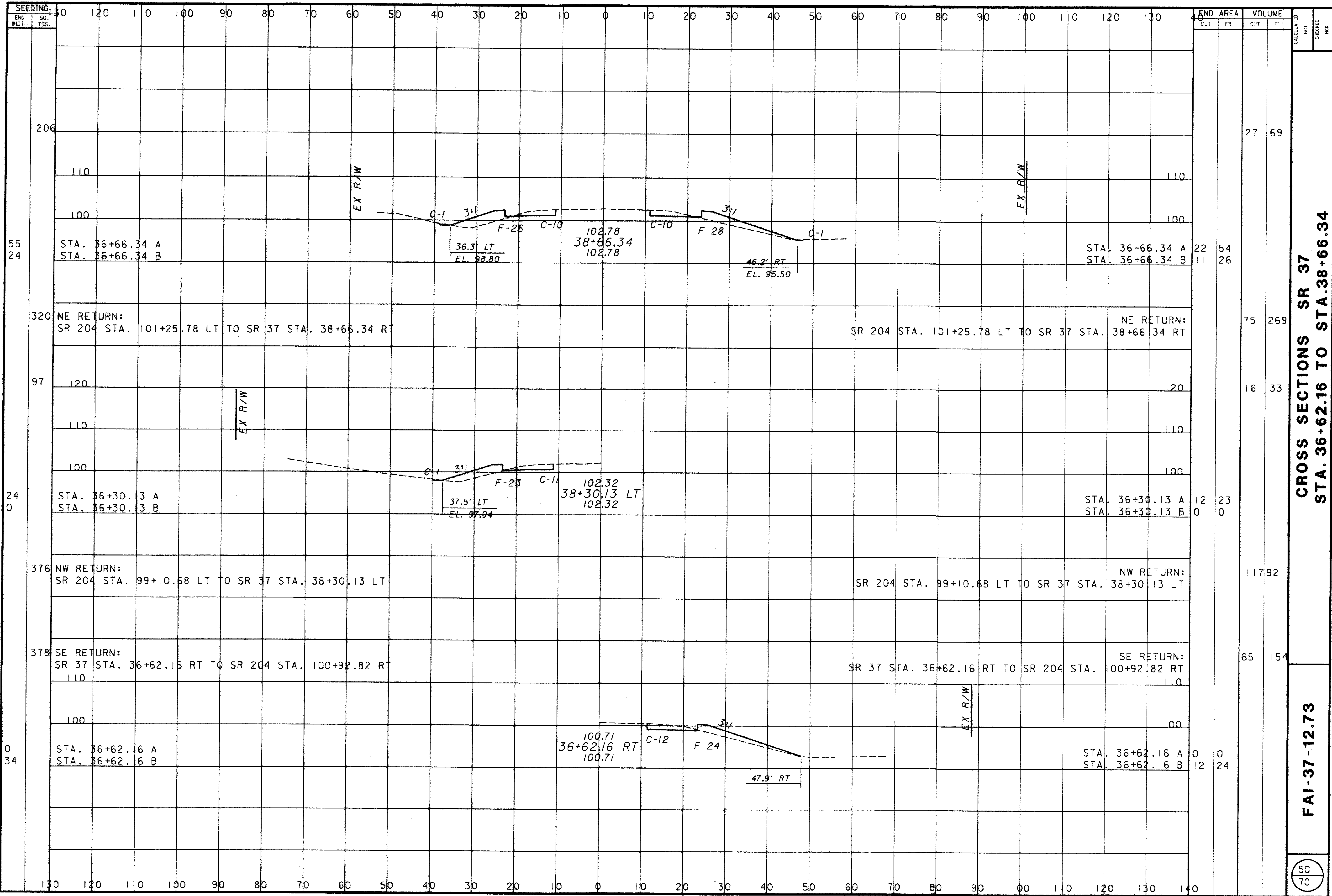
CROSS SECTIONS SR 37
STA. 35+50.00 TO STA. 36+24.00

FAI-37-12.73

49
 70

STATION	END AREA		VOLUME		CALCULATED	BY	CHECKED	INCH
	CUT	FILL	CUT	FILL				
36+24.00	11	33	21	60				
36+00.00	19	56	20	64				
35+50.00	37	130	19	76				
TOTAL	56	156	41	196				

XSh37.pxs

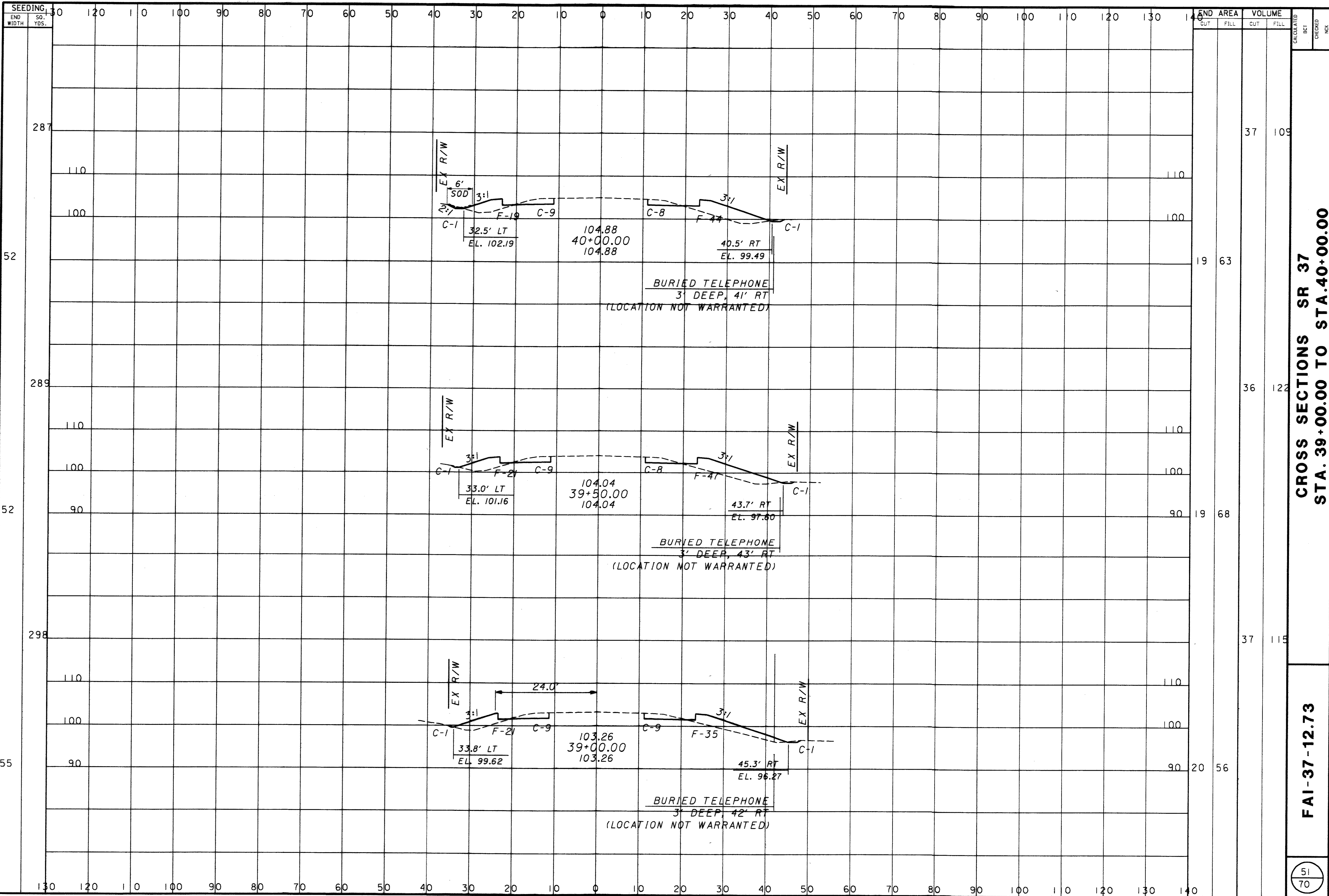


**CROSS SECTIONS SR 37
STA. 36+62.16 TO STA. 38+66.34**

FAI-37-12.73

50
70

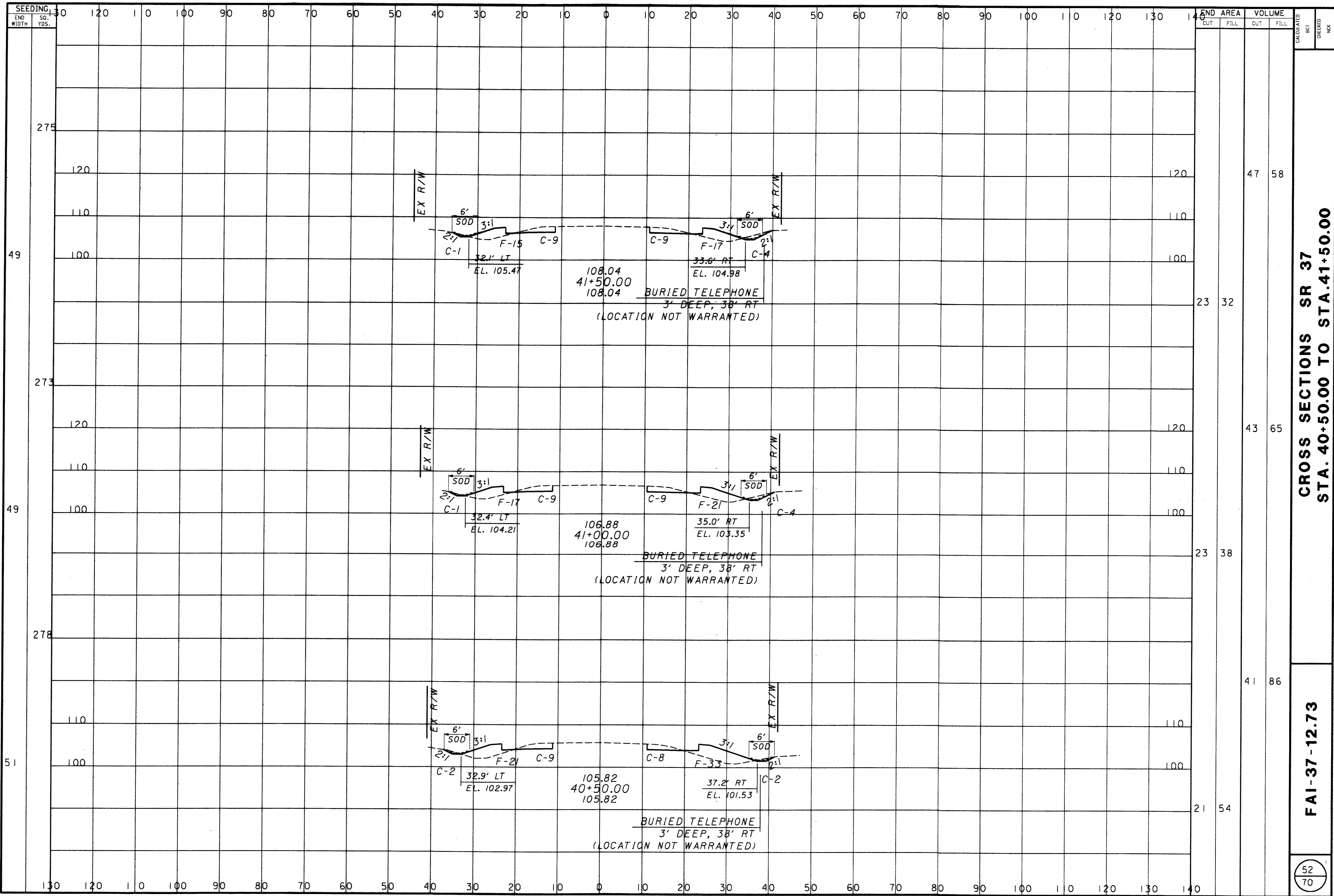
XSh37.dwg



CROSS SECTIONS SR 37
 STA. 39+00.00 TO STA. 40+00.00

FAI-37-12.73

XSh37.pxs

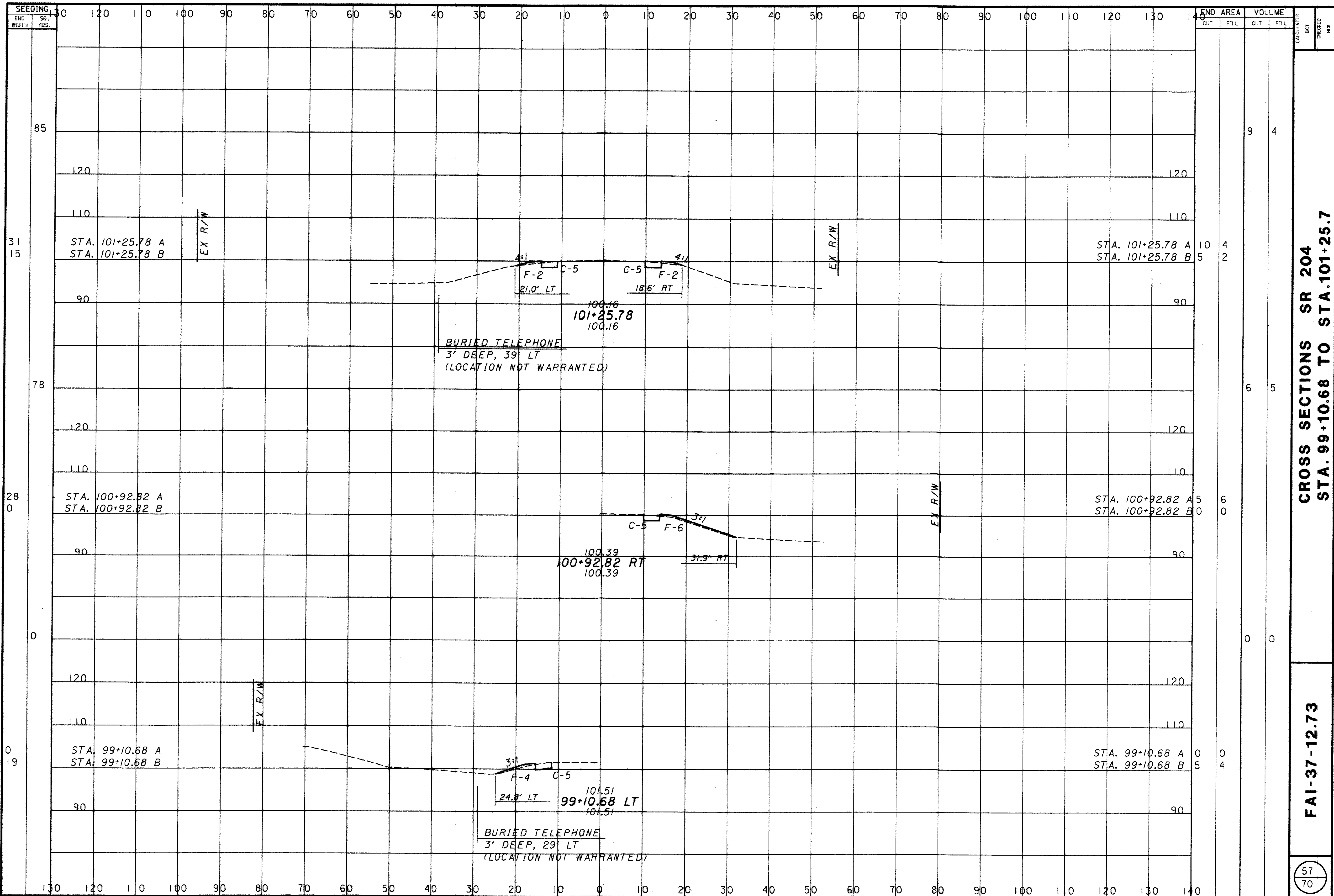


SEEDING, SO. YDS.
 END WIDTH
 30 120 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

END AREA		VOLUME		CALCULATED	BCT	CHECKED	INR
CUT	FILL	CUT	FILL				
47	58	23	32				
43	65	23	38				
41	86	21	54				

CROSS SECTIONS SR 37
 STA. 40+50.00 TO STA. 41+50.00

FAI-37-12.73

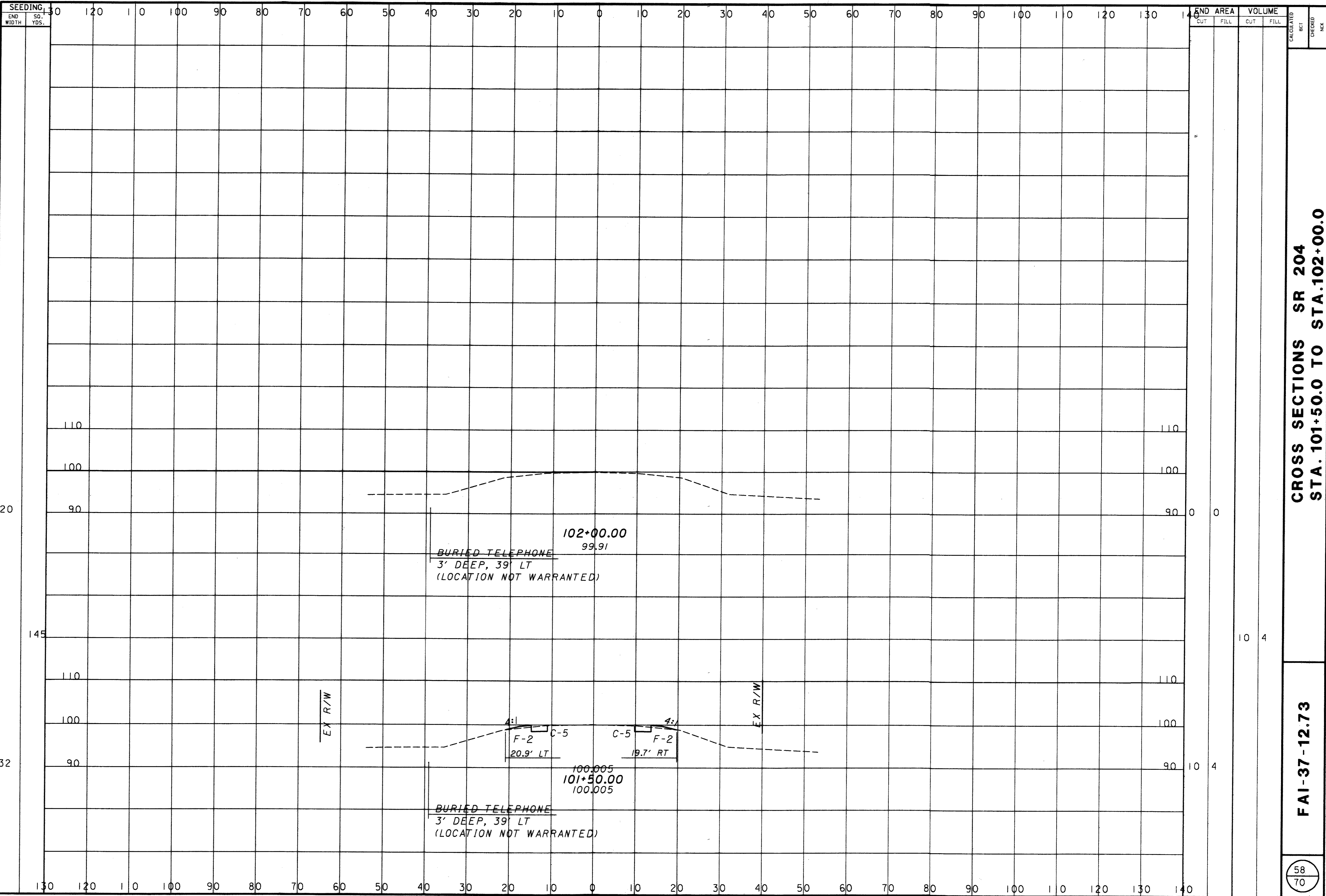


**CROSS SECTIONS SR 204
 STA. 99+10.68 TO STA. 101+25.7**

FAI-37-12.73

57
70

XSH+TIRT.DGN



CROSS SECTIONS SR 204
 STA. 101+50.0 TO STA. 102+00.0

FAI-37-12.73

58
70

XSH:TIRT.DGN

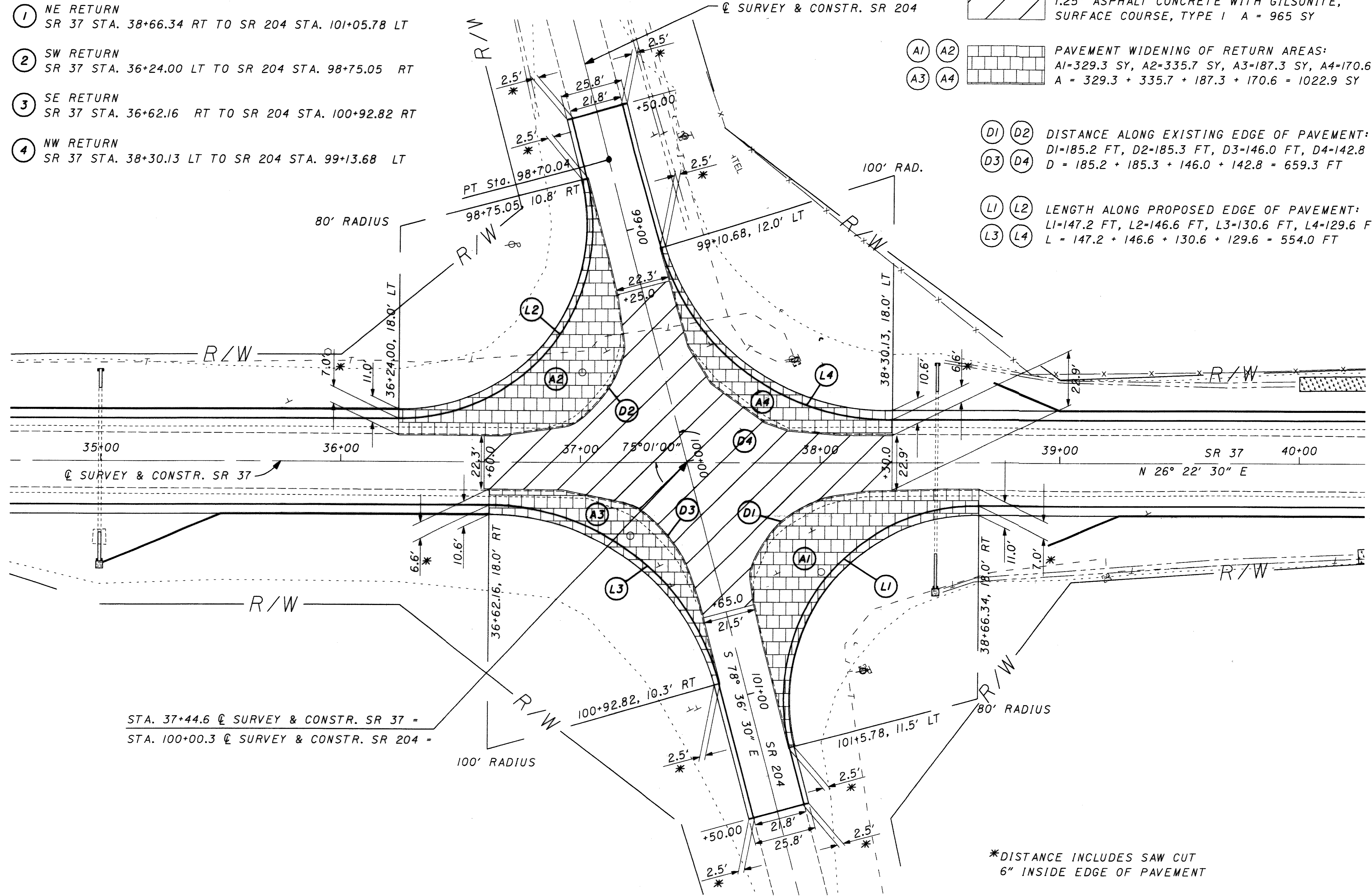
- ① NE RETURN
SR 37 STA. 38+66.34 RT TO SR 204 STA. 101+05.78 LT
- ② SW RETURN
SR 37 STA. 36+24.00 LT TO SR 204 STA. 98+75.05 RT
- ③ SE RETURN
SR 37 STA. 36+62.16 RT TO SR 204 STA. 100+92.82 RT
- ④ NW RETURN
SR 37 STA. 38+30.13 LT TO SR 204 STA. 99+13.68 LT

RESURFACING OF INTERSECTION AREA:
1.25" ASPHALT CONCRETE WITH GILSONITE,
SURFACE COURSE, TYPE 1 A = 965 SY

PAVEMENT WIDENING OF RETURN AREAS:
A1=329.3 SY, A2=335.7 SY, A3=187.3 SY, A4=170.6 SY
A = 329.3 + 335.7 + 187.3 + 170.6 = 1022.9 SY

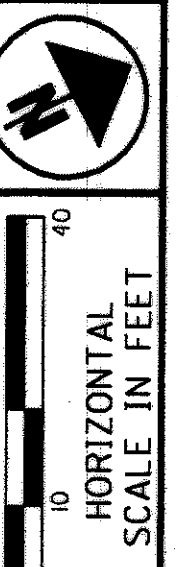
DISTANCE ALONG EXISTING EDGE OF PAVEMENT:
D1=185.2 FT, D2=185.3 FT, D3=146.0 FT, D4=142.8 FT
D = 185.2 + 185.3 + 146.0 + 142.8 = 659.3 FT

LENGTH ALONG PROPOSED EDGE OF PAVEMENT:
L1=147.2 FT, L2=146.6 FT, L3=130.6 FT, L4=129.6 FT
L = 147.2 + 146.6 + 130.6 + 129.6 = 554.0 FT



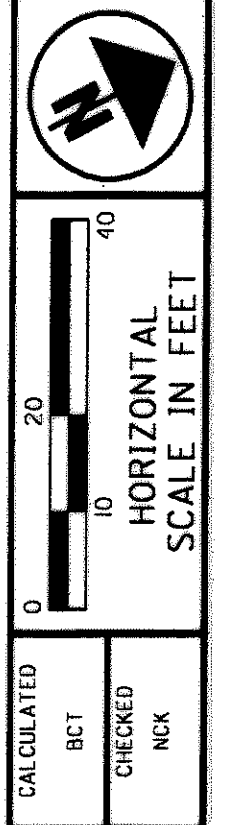
STA. 37+44.6 @ SURVEY & CONSTR. SR 37 =
STA. 100+00.3 @ SURVEY & CONSTR. SR 204 =

*DISTANCE INCLUDES SAW CUT
6" INSIDE EDGE OF PAVEMENT



SR 37 AND SR 204 INTERSECTION DETAILS

FAI-37-12.73

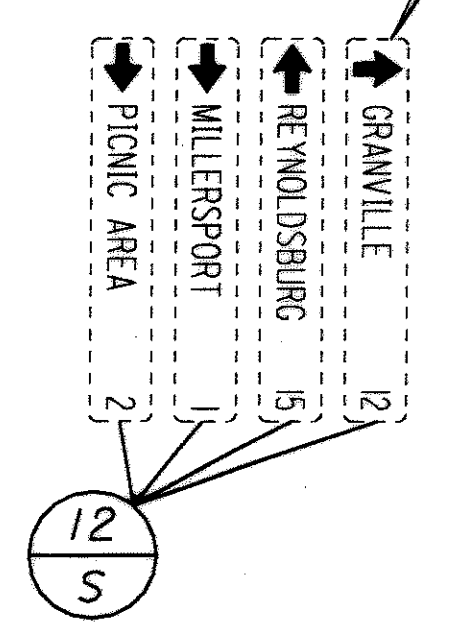
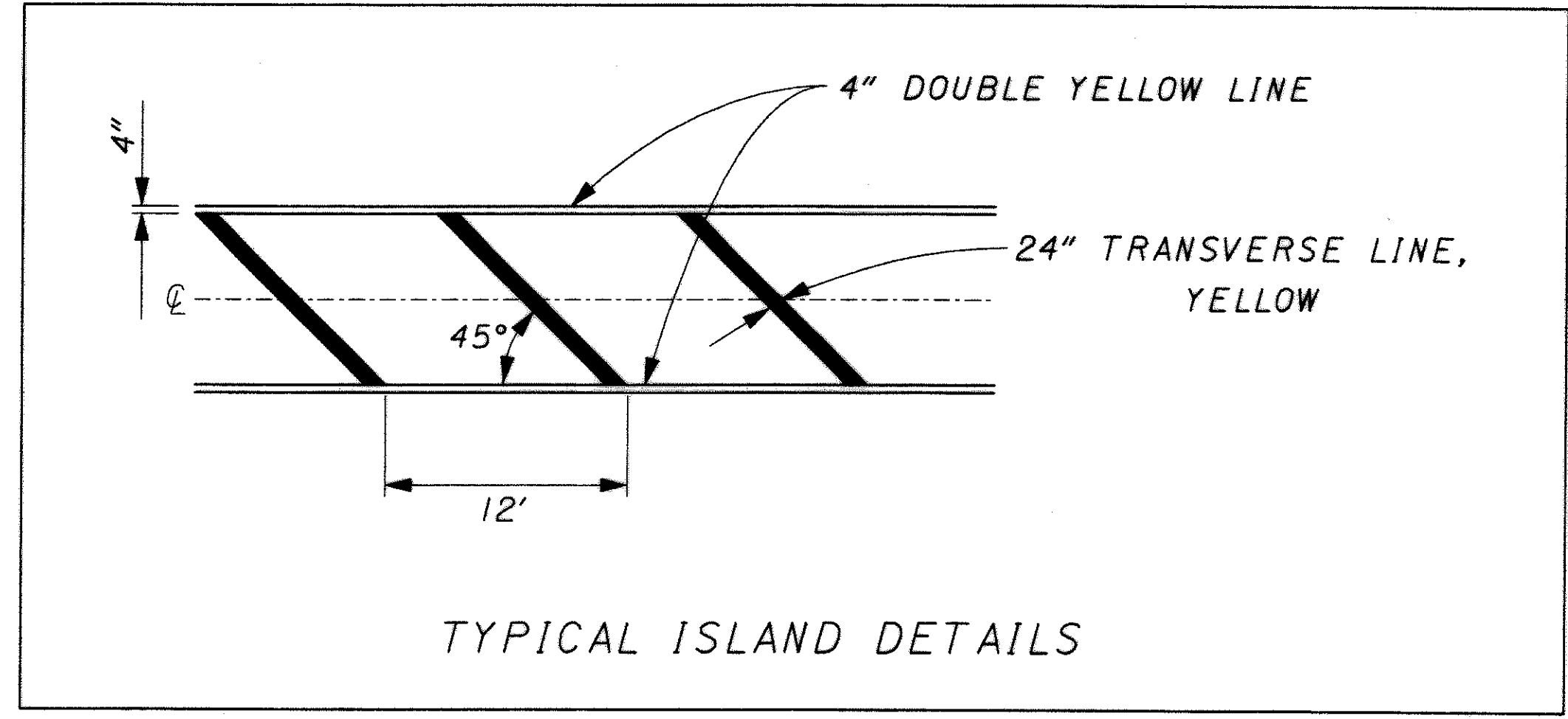
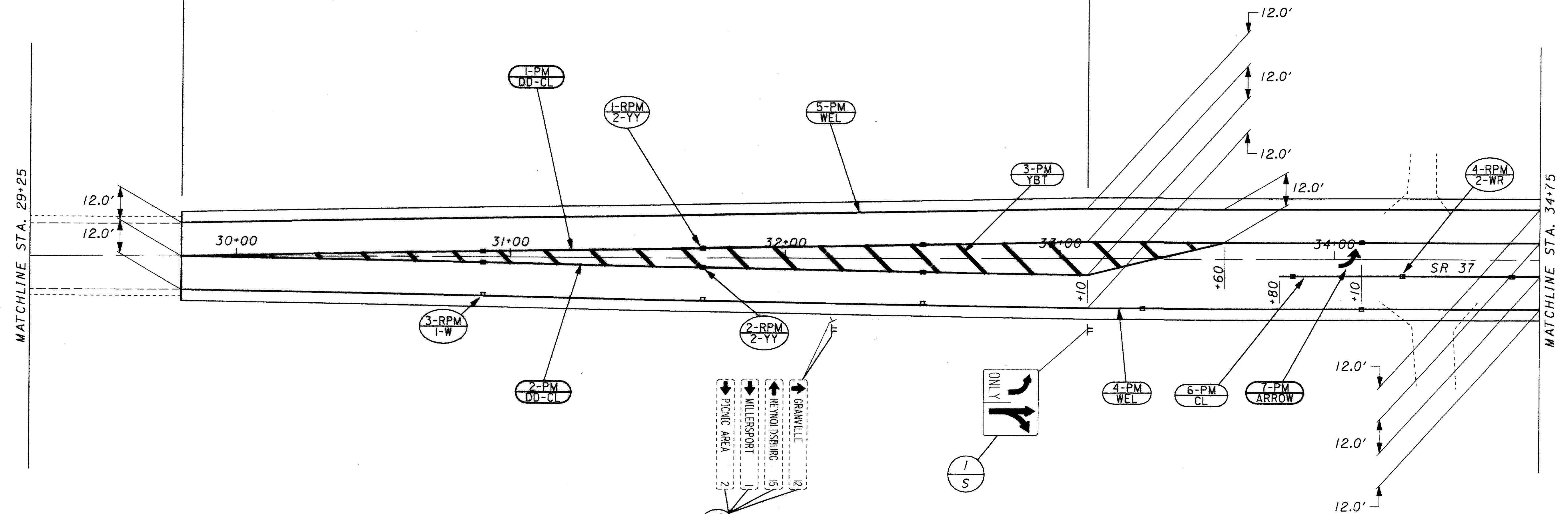


SEE SHEET 63 FOR PM QUANTITIES
SEE SHEET 64 FOR S AND RPM QUANTITIES

BEGIN PAVEMENT WIDENING
AND RESURFACING
STA. 29+80.00

BEGIN PAVEMENT TAPER
STA. 29+80.00 LT & RT

END PAVEMENT TAPER
STA. 33+10.00 LT & RT



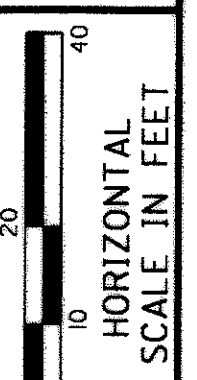
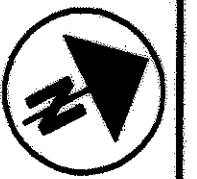
- EXISTING SIGN, TO REMAIN
- EXISTING SIGN, TO BE REMOVED
- PROPOSED SIGN

- ⊥ SINGLE POST SIGN
- ⊥⊥ DOUBLE POST SIGN
- ⊥⊥ DOUBLE POST SIGN, BACK TO BACK
- ▤ 1-WAY RAISED PAVEMENT MARKER
- ▤ 2-WAY RAISED PAVEMENT MARKER

- 1-W - ONE WAY WHITE RAISED PAVEMENT MARKER
- 2-YY - TWO WAY YELLOW/YELLOW RAISED PAVEMENT MARKER
- 2-WR - TWO WAY YELLOW/YELLOW RAISED PAVEMENT MARKER
- WEL - WHITE EDGE LINE
- CL - CHANNELIZING LINE
- YBT - YELLOW BROAD TRANSVERSE LINE
- DD-CL - DOUBLE YELLOW CENTERLINE

SR 37 SIGNING AND PAVEMENT MARKING
STA. 29+25 TO STA. 34+75

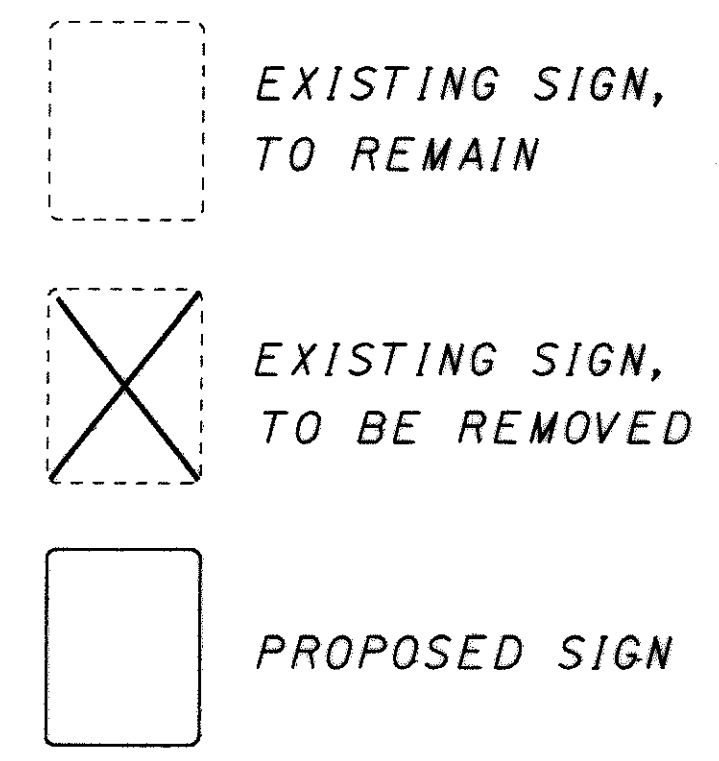
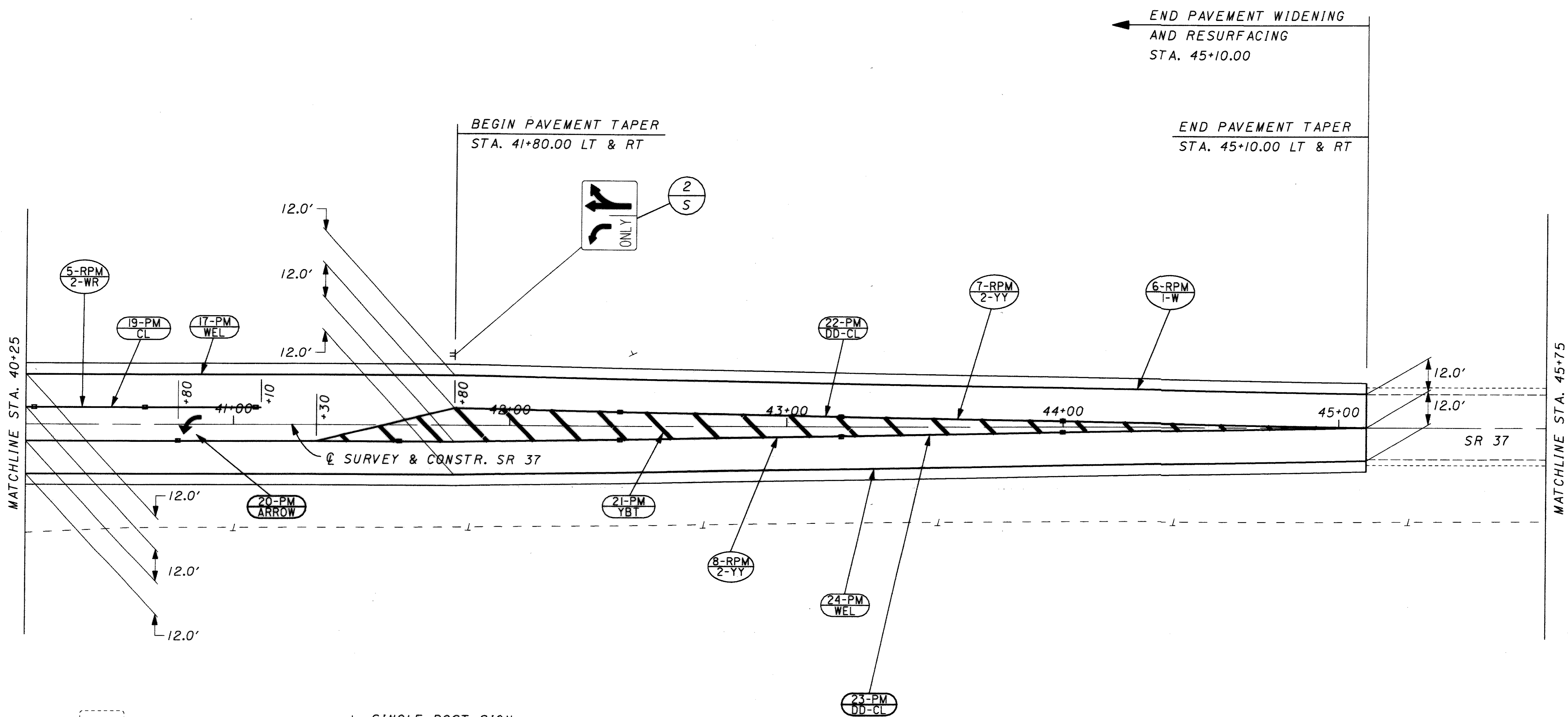
FAI-37-12.73



CALCULATED BCT
CHECKED INK

SR 37 SIGNING AND PAVEMENT MARKING
STA. 40+25 TO STA. 45+75

FAI-37-12.73



- ⊥ SINGLE POST SIGN
- ⊥⊥ DOUBLE POST SIGN
- ⊥⊥ DOUBLE POST SIGN, BACK TO BACK
- I-WAY RAISED PAVEMENT MARKER
- 2-WAY RAISED PAVEMENT MARKER
- 1-W - ONE WAY WHITE RAISED PAVEMENT MARKER
- 2-YY - TWO WAY YELLOW/YELLOW RAISED PAVEMENT MARKER
- 2-WR - TWO WAY YELLOW/YELLOW RAISED PAVEMENT MARKER
- WEL - WHITE EDGE LINE
- CL - CHANNELIZING LINE
- YBT - YELLOW BROAD TRANSVERSE LINE
- DD-CL - DOUBLE YELLOW CENTERLINE

SEE SHEET 63 FOR PM QUANTITIES
SEE SHEET 64 FOR S AND RPM QUANTITIES

REFERENCE NO. (SEE SHTS 60-62)	STATIONING						ITEM 642			ITEM 644			
	FROM			TO			DOUBLE YELLOW CENTERLINE, TYPE 1	WHITE EDGE LINE, TYPE 1	STOP LINE	TRANSVERSE LINE	CHANNELIZING LINE	LANE ARROW (LEFT)	WORD ON PAVEMENT "ONLY" (72 INCH)
	SR	STA	SIDE	SR	STA	SIDE							
							MILE	MILE	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH
1-PM	37	29+80	LT	37	36+55	LT	0.13						
2-PM	37	29+80	RT	37	33+60	RT	0.07						
3-PM	37	29+80	MED	37	33+60	MED				260			
4-PM	37	29+80	RT	37	36+62.1	RT		0.13					
5-PM	37	29+80	LT	37	36+24.0	LT		0.12					
6-PM	37	33+80	RT	37	36+80	RT					300		
7-PM	37	34+10	MED										
8-PM	37	35+20	MED										
9-PM	37	36+35	MED										
10-PM	204	100+48	LT						46				
11-PM	204	99+52	RT						46				
12-PM	37	36+62.1	RT	20	101+50	RT		0.04					
13-PM	37	36+24.0	LT	20	98+50	RT		0.03					
14-PM	204	98+50	LT	37	38+30.0	LT		0.04					
15-PM	204	101+50	LT	37	38+66.3	RT		0.03					
16-PM	37	39+70	MED										
17-PM	37	38+30.0	LT	37	45+10	LT		0.13					
18-PM	37	38+55	MED										
19-PM	37	38+10	LT	37	45+10	LT					300		
20-PM	37	40+80	MED										
21-PM	37	41+30	MED	37	45+10	MED				260			
22-PM	37	41+30	LT	37	45+10	LT	0.07						
23-PM	37	38+35	RT	37	45+10	RT	0.13						
24-PM	37	38+66.3	RT	37	45+10	RT		0.12					
25-PM	204	98+50	℄	204	99+52	℄	0.02						
26-PM	204	100+48	℄	204	101+50	℄	0.02						
TOTALS CARRIED TO GENERAL SUMMARY							0.44	0.64	92	520	600	4	2

LOCATION 3 TRAFFIC CONTROL SUBSUMMARY

FAI-37-12.73

F0370002.dwd

REF SHEET NO.	STATION TO STATION	SIDE	603		602	601	670	202	
			12" CONDUIT, TYPE A, 707.01(0.079), 707.01 AL. COATED, 707.21	15" CONDUIT, TYPE A, 707.01(0.079), 707.01 AL. COATED, 707.21					CONCRETE MASONRY (FOR HEADWALLS)
			LIN. FT.		CU. YD.	SQ. YD.	SQ. YD.	SQ. FT.	
SR 37									
C1	43	34+99.7	LT		8				
C2	43	34+99.7	RT		12				
C3	43	38+48.6	LT	12					
C4	43	38+48.6	RT	15					
E1	43	34+99.7	RT			1.0			
E2	43	38+48.6	RT			1.0			
E3	43,44	40+00.00 TO 43+50.00	LT				234		
E4	44	40+25.00 TO 43+75.00	RT				234		
RI	43	34+99.7	LT					33	
TOTALS CARRIED TO GENERAL SUMMARY				27	20	0.96	2.0	468	33

CALCULATED BCT	CHECKED NCK
DRAINAGE SUBSUMMARY - LOCATION 3	
FAI-37-12.73	
65	70

SHEET NUMBER										ITEM	ITEM EXT. NO.	LOC. 3 TOTALS	UNIT	DESCRIPTION	SHEET NO.
38	39		40	41		64	65								
										201	11000	LUMP		CLEARING AND GRUBBING	
	23		192.2	170.8						202	23500	363	SQ.YD.	WEARING COURSE REMOVED	
										202	54100	23	EACH	RAISED PAVEMENT MARKERS REMOVED FOR STORAGE	
							33			202	98400	33	SQ.FT.	REMOVAL MISC.: CONCRETE SLAB REMOVED	
			838	172						203	12000	1010	CU.YD.	EXCAVATION WITHOUT EMBANKMENT CONSTRUCTION	
			2200	708						203	20000	2908	CU.YD.	EMBANKMENT	
			1581	1068						204	10000	2649	SQ.YD.	SUBGRADE COMPACTION	5
264										301	46000	264	CU.YD.	ASPHALT CONCRETE BASE, PG 64-22	
			507.6	315.4						301	46001	823	CU.YD.	ASPHALT CONCRETE BASE, PG 64-22, AS PER PLAN	39
			79.1	101.5						407	10000	181	GALLON	TACK COAT	
			270.9	53.4						407	14000	325	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
			2649.7	826.5						407	98000	3477	FT	TACK COAT MISC.: FOR LONGITUDINAL JOINT	
52										448	46050	52	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22	
37										448	47020	37	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	
							2.0			601	11000	2.0	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB	
							0.96			602	20000	0.96	CU.YD.	CONCRETE MASONRY	
							27			603	04200	27	FT	12" CONDUIT, TYPE A, 707.01(0.079), 707.01 AL. COATED, 707.21	
							20			603	05700	20	FT	15" CONDUIT, TYPE A, 707.01(0.079), 707.01 AL. COATED, 707.21	
	460									605	31100	460	FT	AGGREGATE DRAINS	
50										614	11100	50	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
	16									614	12460	16	EACH	WORK ZONE MARKING SIGN	
4										614	18601	4	SIGN MONTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	38
							78			621	00200	78	EACH	RAISED PAVEMENT MARKER, INSTALLATION ONLY	

LOCATION 3 SUB-SUMMARY

FAI-37-12.73

F0370003.mls

66
70

F0370004.m/s

SHEET NUMBER										ITEM	ITEM EXT. NO.	LOC. 3 TOTALS	UNIT	DESCRIPTION	SHEET NO.
39	40	41	63	64	65										
				252						630	02100	252	LIN.FT.	GROUND MOUNTED SUPPORT, No. 2 POST	
				30.0						630	80100	30.0	SQ.FT.	SIGN, FLAT SHEET, TYPE G	
				20						630	85100	20	EACH	REMOVAL OF GROUND MOUNTED SIGN AND RE-ERECTION	
				13						630	86002	13	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
1										632	90101	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	39
				0.64						642	00100	0.64	MILE	EDGE LINE, TYPE I	
				0.44						642	00300	0.44	MILE	CENTER LINE, TYPE I	
				92						642	00500	92	FT	STOP LINE, TYPE I	
				600						644	00400	600	FT	CHANNELINZING LINE	
				520						644	00700	520	FT	TRANSVERSE LINE	
				4						644	01300	4	EACH	LANE ARROW	
				2						644	01410	2	EACH	WORD ON PAVEMENT, 96", "ONLY"	
9492										659	10000	9492	SQ.YD.	SEEDING AND MULCHING	
1.3										659	20000	1.3	TON	COMMERCIAL FERTILIZER	
2.0										659	31000	2.0	ACRE	LIME	
52										659	35000	52	M GAL.	WATER	
22										659	40000	22	M SQ.FT.	MOWING	
								468		670	00700	468	SQ.YD.	DITCH EROSION PROTECTION	
										832	10000	1	EACH	STORM WATER POLLUTION PREVENTION PLAN	
										832	20000	LUMP		EROSION CONTROL	
		126.4	44.9							857	10000	172	CU.YD.	ASPHALT CONCRETE WITH GILSONITE, INTERMEDIATE COURSE, TYPE 2	
		281.9	84.8							857	20000	367	CU.YD.	ASPHALT CONCRETE WITH GILSONITE, SURFACE COURSE, TYPE 1	

LOCATION 3 SUB-SUMMARY

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CALCULATED	BCT	CHECKED	MC
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SHEET NUMBER			CITY URBAN TOTAL	MPa CITY TOTAL	100% FED TOTAL	100% STATE TOTAL	ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET NO.
30, 31	32, 33	66, 67										
LOCATION												
1	2	3										
		LUMP				LUMP	201	11000	LUMP		CLEARING AND GRUBBING	
2503	2826	363	2503		2826	363	202	23500	5692	SQ.YD.	WEARING COURSE REMOVED	
1224				1224			202	30000	1224	SQ.FT.	WALK REMOVED	
552				552			202	32000	552	FT	CURB REMOVED	
69	641	23	69		641	23	202	54100	733	EACH	RAISED PAVEMENT MARKERS REMOVED FOR STORAGE	
		33				33	202	98400	33	SQ.FT.	REMOVAL MISC.: CONCRETE SLAB REMOVED	
		1010				1010	203	10000	1010	CU.YD.	EXCAVATION	
		2908				2908	203	20000	2908	CU.YD.	EMBANKMENT	
		2649				2649	204	10000	2649	SQ.YD.	SUBGRADE COMPACTION	
500	1500		500		1500		253	01001	2000	SQ.YD.	PAVEMENT REPAIR, AS PER PLAN	5
2000			2000				253	90100	2000	SQ.YD.	PAVEMENT REPAIR, MISC.: BRICK PAVEMENT	5
29882			29882				254	01001	29882	SQ.YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	3
		264				264	301	46000	264	CU.YD.	ASPHALT CONCRETE BASE, PG 64-22	
		823				823	301	46001	823	CU.YD.	ASPHALT CONCRETE BASE, PG 64-22, AS PER PLAN	39
4125	8436	181	4125		8436	181	407	10000	12742	GALLON	TACK COAT	
1499	4904	325	1499		4904	325	407	14000	6728	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
13667	33107	3477	13667		33107	3477	407	98000	50251	FT	TACK COAT MISC.: FOR LONGITUDINAL JOINT	
1516	6076		1516		6076		408	10001	7592	GALLON	PRIME COAT, AS PER PLAN	5
206	2743	52	206		2743	52	448	46050	3001	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22	
218	2800	37	218		2800	37	448	47020	3055	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	
		901				901	512	33010	901	SQ.YD.	TYPE 3 WATERPROOFING	
		1.4				1.4	SPECIAL	51631400	1.4	CU.YD.	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM	
		2.0				2.0	601	11000	2.0	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB	
		0.96				0.96	602	20000	0.96	CU.YD.	CONCRETE MASONRY	

CALCULATED BY: _____ CHECKED BY: _____
 GENERAL SUMMARY
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SHEET NUMBER			CITY URBAN TOTAL	MPO CITY TOTAL	100% FED TOTAL	100% STATE TOTAL	ITEM	ITEM EXT. NO.	GRAND TOTALS	UNIT	DESCRIPTION	SEE SHEET NO.
30, 31	32, 33	66, 67										
LOCATION												
1	2	3										
		27				27	603	04200	27	FT	12" CONDUIT, TYPE A, 707.01(0.079), 707.01 AL. COATED, 707.21	
		20				20	603	05700	20	FT	15" CONDUIT, TYPE A, 707.01(0.079), 707.01 AL. COATED, 707.21	
12			12				604	34500	12	EACH	MANHOLE ADJUSTED TO GRADE	
		460				460	605	31100	460	FT	AGGREGATE DRAINS	
1224				1224			608	52001	1224	SQ.FT.	CURB RAMP, AS PER PLAN	23-25
		50				50	614	11100	50	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
239	14	16	239		14	16	614	12460	269	EACH	WORK ZONE MARKING SIGN	
29	2		29		2		614	13000	31	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		4				4	614	18601	4	SIGN MONTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	38
4.22	11.83		4.22		11.83		614	21400	16.05	MILE	WORK ZONE CENTER LINE, CLASS II	
213	844		213		844		617	10101	1057	CU.YD.	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	2
78	551	78	78		551	78	621	00200	707	EACH	RAISED PAVEMENT MARKER, INSTALLATION ONLY	
		252				252	630	02100	252	FT	GROUND MOUNTED SUPPORT, No. 2 POST	
		30.0				30.0	630	80100	30.0	SQ.FT.	SIGN, FLAT SHEET, TYPE G	
		20				20	630	85100	20	EACH	REMOVAL OF GROUND MOUNTED SIGN AND RE-ERECTION	
		13				13	630	86002	13	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
21			21				632	26501	21	EACH	DETECTOR LOOP, AS PER PLAN	5
		1				1	632	90101	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	
8			8				638	10800	8	EACH	VALVE BOX ADJUSTED TO GRADE	
0.94	11.00	0.64	0.94		11.00	0.64	642	00100	12.58	MILE	EDGE LINE, TYPE I	
0.47	5.50	0.44	0.47		5.50	0.44	642	00300	6.41	MILE	CENTER LINE, TYPE I	
		92				92	642	00500	92	FT	STOP LINE, TYPE I	
3.90	1.42		3.90		1.42		644	00100	5.32	MILE	EDGE LINE	
1.95	0.71		1.95		0.71		644	00300	2.66	MILE	CENTER LINE	
699	424	600	699		424	600	644	00400	1723	FT	CHANNELIZING LINE	
443	385		443		385		644	00500	828	FT	STOP LINE	
2360			2360				644	00600	2360	FT	CROSSWALK LINE	
1250	700	520	1250		700	520	644	00700	2470	FT	TRANSVERSE LINE	
114	57		114		57		644	00900	171	SQ FT	ISLAND MARKING	
	2				2		644	01000	2	EACH	RAILROAD SYMBOL MARKING	

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