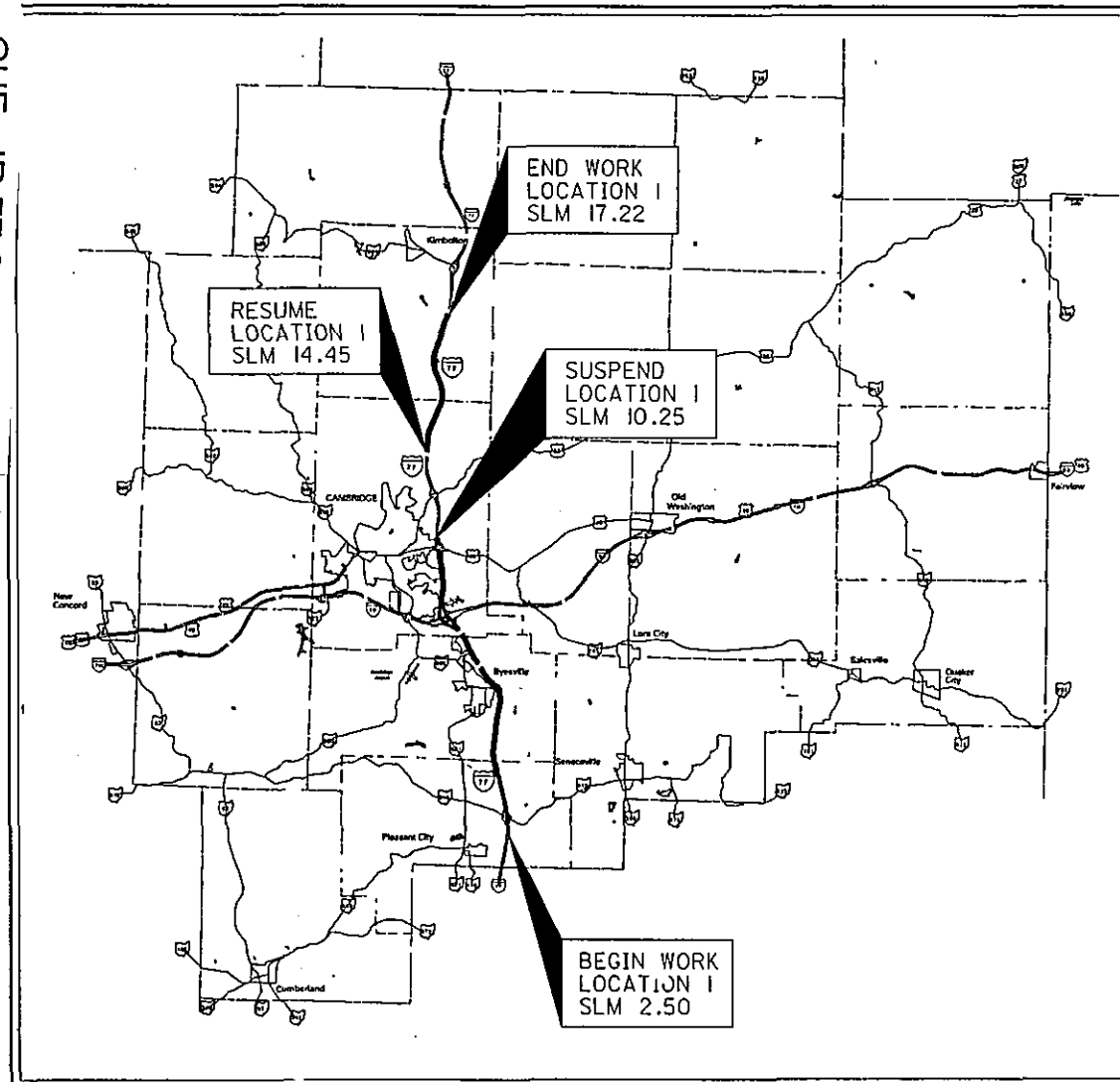


OHIO DEPARTMENT OF TRANSPORTATION  
GUE-77-2.50  
GUERNSEY COUNTY  
VALLEY, JACKSON, CAMBRIDGE  
AND LIBERTY TOWNSHIPS

LOCATION MAP



PORTION TO BE IMPROVED

DESIGN EXCEPTIONS: NONE



STANDARD DRAWINGS		STANDARD DRAWINGS		STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	7-28-00	MT-98.15	4-19-02	TC-65.12	10-19-01	832	4-17-04
BP-9.1	7-28-00	MT-98.19	10-18-02	TC-72.20	1-19-01	833	2-12-03
		MT-99.20M	1-30-95	TC-73.10	1-19-01	908	4-18-03
MT-35.10	4-20-01	MT-105.10	10-18-02			1059	4-18-03
MT-95.30	4-19-02	MT-105.11	10-18-02				
MT-98.12	4-19-02						
MT-98.13	4-19-02	TC-65.10	10-19-01				
MT-98.14	4-19-02	TC-65.11	10-19-01				

PROJECT DESCRIPTION:  
UPGRADING 10.52 MILES NORTHBOUND AND  
10.52 MILES SOUTHBOUND OF IR 77 AND RAMPS  
AT US 40 AND US 22 IN GUERNSEY COUNTY BY  
RESURFACING AND OTHER RELATED WORK.

Project Earth Disturbed Area =  
N/A (Maintenance Project)  
Estimated Contractor Earth Disturbed Area =  
N/A (Maintenance Project)  
Notice of Intent Earth Disturbed Area =  
N/A (Maintenance Project)

TOTAL MILES	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	VILLAGE
				BEGIN	END		
1	GUE	IR 77 N.B.	(2.51)(5.20)	2.50	17.22	*10.52	
1	GUE	IR 77 S.B.	(2.51)(5.20)	2.50	17.22	*10.52	

\*SUSPEND BETWEEN 10.25 TO 14.45

INDEX OF SHEETS:

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GENERAL NOTES	2-9
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GORE AND RAMP DATA	15-17
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BRIDGE DECK DETAILS	19,20
EDGE LINE SUB-SUMMARY	21
LANE LINE/AUXILLIARY SUB-SUMMARY	22
RAISED PAVEMENT MARKER DATA	23
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Sheet 7 not used

DESIGN DESIGNATION	IR-77
CURRENT ADT (2004)	21100
DESIGN YEAR ADT (2016)	26000
DESIGN HOURLY VOLUME (2016)	2600
DIRECTIONAL DISTRIBUTION	50%
TRUCKS	18%
DESIGN SPEED	70 mph
LEGAL SPEED	65 mph

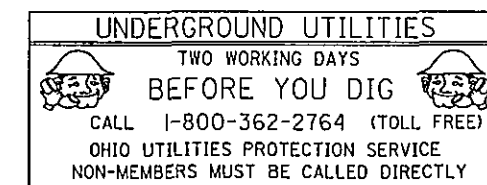
2002 SPECIFICATIONS

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  
DATE 2/23/04  
DISTRICT DEPUTY DIRECTOR

APPROVED  
DATE 2-13-04  
DIRECTOR, DEPARTMENT OF  
TRANSPORTATION



PLAN PREPARED BY:  
District  
D5  
Production

## WORK LIMITS

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

## ITEM 407 TACK COAT

THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

## 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. THE FOLLOWING QUANTITY OF ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL TO PERFORM THE ABOVE WORK.

LOCATION 1 - IR 77

ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT 222182 FT.

## 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.

## UTILITIES

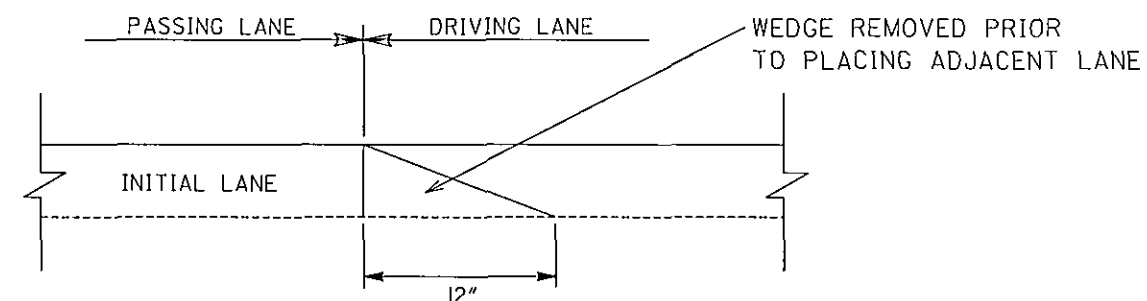
THERE ARE NO UNDERGROUND UTILITIES SHOWN ON THIS PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT SHOULD NOT AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ADJACENT TO THE WORK AREA.

## 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. IT IS ESTIMATED THAT APPROXIMATELY 20% OF THE SHOULDER AREA SHALL NOT RECEIVE ITEM 617 TO BACK UP PAVED SHOULDER DUE TO LACK OF WIDTH FOR PLACEMENT. THE ENGINEER SHALL IDENTIFY THOSE AREAS AT THE TIME OF CONSTRUCTION.

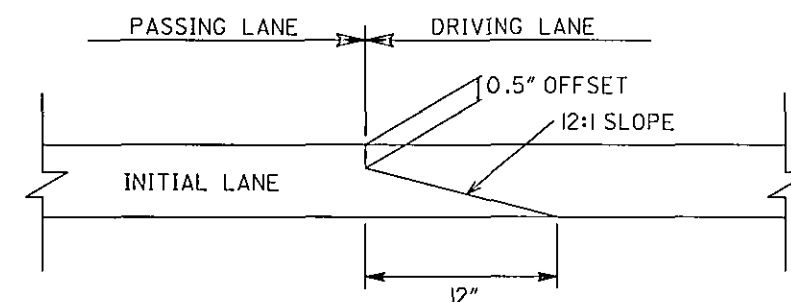
## ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5MM, TYPE A (446), AS PER PLAN

A 12" WEDGE SHALL BE PLACED WITH INITIAL LANE (PASSING LANE) OF PAVEMENT FOR THE PURPOSE OF MAINTAINING TRAFFIC. THIS WEDGE SHALL BE REMOVED TO CREATE A VERTICAL FACE PRIOR TO PLACEMENT OF THE ADJACENT LANE OF PAVEMENT. THE PASSING LANE SHALL BE COMPACTED WITH A ROLLER NOT EXTENDING MORE THAN 2" BEYOND THE TOP OF THE UNCONFINED EDGE. THE TAPERED, UNCONFINED FACE OF THE WEDGE SHALL BE COMPACTED WITH A SMALL ROLLER ATTACHED TO THE PAVER. THE ASPHALT BINDER FOR THE INTERMEDIATE COURSE SHALL BE PG 76-22M IN LIEU OF PG 70-22. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO CONSTRUCT AND REMOVE THE WEDGE FOR THE INTERMEDIATE COURSE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446), AS PER PLAN.



## ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) WITH SUPPLEMENT 1059 WARRANTY, AS PER PLAN

THIS PROJECT SHALL BE CONSTRUCTED USING A TAPERED JOINT (12:1) WITH 0.5" OFFSET, ALSO KNOWN AS THE MICHIGAN WEDGE JOINT TECHNIQUE (SEE DETAIL BELOW). THE PASSING LANE SHALL BE PAVED FIRST WITH THE WEDGE EXTENDING INTO THE DRIVING LANE (FOR THE PURPOSE OF BETTER MAINTENANCE OF TRAFFIC). THE CONTRACTOR SHALL MODIFY PAVING EQUIPMENT AS NEEDED TO CREATE THE WEDGE AS SHOWN.



THE PASSING LANE SHALL BE COMPACTED WITH A ROLLER NOT EXTENDING MORE THAN 2" BEYOND THE TOP OF THE UNCONFINED EDGE. THE TAPERED, UNCONFINED FACE OF THE WEDGE SHALL BE COMPACTED WITH A SMALL ROLLER ATTACHED TO THE PAVER.

AFTER A LIFT AS BEEN PLACED FOR A SECTION OF THE PASSING LANE, THEN A LIFT FOR THE ADJACENT DRIVING SHALL BE CONSTRUCTED SUCH THAT THE LONGITUDINAL JOINT IS COMPLETED WITHIN 24 HOURS. THE ASPHALT BINDER FOR THE SURFACE COURSE SHALL BE PG 76-22M IN LIEU OF PG 70-22. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO CONSTRUCT THE MICHIGAN WEDGE JOINT FOR THE SURFACE COURSE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) WITH SUPPLEMENT 1059 WARRANTY, AS PER PLAN.

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

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 AND II UNITS WITHIN MINIMUM LEGIBILITY DISTANCES OF 650' AND 850' RESPECTIVELY.

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.

THE LOCATIONS FOR THOSE UNITS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE PROJECT ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE PROJECT 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 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 OR PREPROGAMMED 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 SHALL BE SUPPORTED, BUT NORMALLY, NOT MORE THAN TWO-MESSAGE PHASES SHOULD BE EMPLOYED, ALTHOUGH THREE-PHASES MAY BE USED IN UNUSUAL 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 DIFFERANT TIMES OF THE DAY FOR DIFFERANT 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 PROJECT.

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

THIS PROJECT SHALL REQUIRE 4 (FOUR) ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE.

ALL WORK SHALL BE COMPLETED ON ONE PART BEFORE THE SIGNS ARE MOVED AND UTILIZED ON THE OTHER SECTION OF INTERSTATE.

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 614 AND THE LATEST EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), 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:

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

LAW ENFORCEMENT OFFICERS (L.E.O.'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'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.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH: THE OHIO HIGHWAY PATROL, 660 EAST MAIN STREET, COLUMBUS, OHIO, TELEPHONE: (614) 466-2660

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:

LAW ENFORCEMENT OFFICER WITH PATROL CAR. PART 1 - 160 HOUR

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 FOR 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.

FLOODLIGHTING

FLOODLIGHTING FOR THE ASPHALT CONCRETE PLANING AND PAVING OPERATION DURING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE HIGHWAYS. TO INSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS. THE CONTRACTOR SHALL SUBMIT A COPY OF THIER FLOODLIGHTING PLACEMENT PLAN TO THE DISTRICT OFFICE FOR APPROVAL BY THE AREA ENGINEER BEFORE ANY WORK IS TO COMMENCE. THE COST OF FLOODLIGHTING WILL BE INCLUDED IN THE LUMP SUM COST OF THE ITEM 614 MAINTAINING TRAFIC.

ITEM 614 MAINTAINING TRAFFIC

TRAFFIC SHALL BE MAINTAINED AS PER THE SPECIFICATIONS AND AS OUTLINED IN THE CONSTRUCTION AND MAINTENANCE OPERATIONS SECTION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES EXCEPT FOR DESIGNATED HOLIDAYS, AS SHOWN BELOW.

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. AT NO TIME SHALL ANY ONE LANE CLOSURE EXCEED 3 MILES IN LENGTH.

ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS:

MEMORIAL DAY, INDEPENDENCE DAY AND LABOR DAY

THE PERIOD OF TIME THAT ALL LANES ARE TO BE OPEN IS DETERMINED BY THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING TABLE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL TRAFFIC LANES MUST BE OPEN
SUNDAY	12:00N FRIDAY THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY THOUGH 12:00N WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 12:00N THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 12:00N MONDAY
FRIDAY	12:00N THURSDAY THROUGH 12:00N MONDAY
SATURDAY	12:00N FRIDAY THROUGH 12:00N MONDAY

ALL WORK ON RAMPS AT US 40 AND US 22 SHALL BE DONE AT NIGHT. ALLOWABLE RAMP CLOSURES SHALL BE FROM 8:00 P.M. TO 5:00 A.M. (SUNDAY THROUGH SATURDAY)

THE RAMPS SHALL BE DETOURED BY THE USE OF PORTABLE CHANGEABLE MESSAGE SIGNS. THE PCMS SHALL BE INSTALLED 24 HOURS PRIOR TO THE RAMP BEING CLOSED TO TRAFFIC. THE PCM, AT THE CLOSED RAMP, SHALL INDICATE THE DETOUR ROUTE AND ADDITIONAL PCMS SHALL BE USED ALONG THE DETOUR ROUTE AS DIRECTED BY THE PROJECT ENGINEER FOR THE DETOURING OF TRAFFIC.

TRAFFIC SHALL NOT BE PERMITTED ON NEWLY CONSTRUCTED LANES WITHOUT EITHER TEMPORARY OR PERMANENT PAVEMENT MARKINGS. NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE. SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH CMS 108.07 EXCEPT AS FOLLOWS:

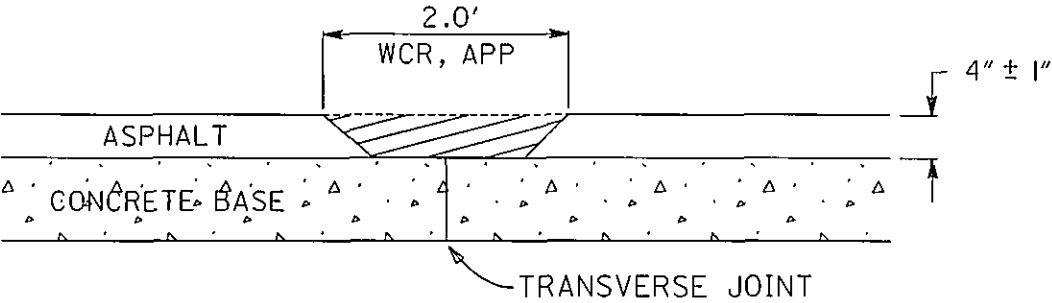
LANE/RAMP CLOSURES BEFORE THE ALLOWABLE TIME OR FAILURE TO REOPEN ALL LANES/RAMPS TO TRAFFIC AS DESIGNATED IN THE PLANS SHALL RESULT IN A LIQUIDATION OF DAMAGES CLAIM PAYABLE TO THE OHIO DEPARTMENT OF TRANSPORTATION AT A RATE OF \$5000.00 (FIVE THOUSAND DOLLARS) PER HOUR UNTIL CONDITION IS CORRECTED FOR EACH INFRACTION. EACH INFRACTION OVER ONE HOUR IS TO BE ROUNDED UP TO THE NEXT HOUR.

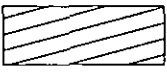
THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE PURPOSE DESCRIBED ABOVE.

ITEM 614 MAINTAINING TRAFFIC LUMP SUM

ITEM 202 WEARING COURSE REMOVED, AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING ASPHALT CONCRETE PAVEMENT TO THE UNDERLYING CONCRETE BASE AT TRANSVERSE JOINTS ON IR 77. THE INTENT IS TO REPLACE THE DAMAGED ASPHALT AND TO CREATE A SMOOTH SURFACE BEFORE PLACING THE PROPOSED INTERMEDIATE AND SURFACE COURSES. THE REPLACEMENT MATERIAL SHALL BE 1/8" (ONE-EIGHTH) HIGHER THAN EXISTING SURFACE AFTER INITIAL PLACEMENT AND COMPACTION. BEFORE PLACING OF THE INTERMEDIATE COURSE, THE REPAIRED AREAS SHALL BE GROUND FLUSH WITH EXISTING SURFACE. REPLACEMENT MATERIAL SHALL BE ITEM 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448) WITH PG 64-22 OR GREATER BINDER. ALL MATERIALS, (INCLUDING ITEM 442), LABOR, EQUIPMENT, TRAFFIC CONTROL AND INCIDENTALS NECESSARY TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 202 WEARING COURSE REMOVED, AS PER PLAN. THIS WORK SHALL BE PERFORMED ON APPROXIMATELY 300 OF THE JOINTS LOCATED WITHIN THE WORK LIMITS AT THE DIRECTION OF THE PROJECT ENGINEER. ALL REPAIR AREAS SHALL BE INLAID WITH ITEM 442 ASPHALT CONCRETE BEFORE OPENING TO TRAFFIC.



 ITEM 202  
WEARING COURSE REMOVED, A.P.P.

$24' \times 2' / 9 = 5.3 \text{ SY/JOINT}$   
 $300 \text{ JOINTS} \times 5.3 \text{ SY/JT} = 1600 \text{ SY}$

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 202 WEARING COURSE REMOVED, AS PER PLAN 1600 SY

## ITEM 202 RAISED PAVEMENT MARKERS REMOVED AND DISPOSED, AS PER PLAN

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE PLANS TO REMOVE RAISED PAVEMENT MARKERS FOR DISPOSAL BY THE CONTRACTOR. ALL RPM'S REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.

ITEM 202 RAISED PAVEMENT MARKERS REMOVED AND DISPOSED, AS PER PLAN  
LOCATION 1 - 1316 EACH

## ITEM 618 RUMBLE STRIP, TYPE 2 (ASPHALT)

RUMBLE STRIPS SHALL BE AS PER STANDARD CONSTRUCTION DRAWING BP-9.1, 7-28-00. CARE SHALL BE TAKEN SO THAT THE DEPTH OF THE RUMBLE STRIPS SHALL BE NO MORE THAN 0.5" IN DEPTH. QUANTITY IS SHOWN ON SHEET 11 OF THIS PLAN.

## WORKSITE TRAFFIC SUPERVISOR

THE CONTRACTOR SHALL EMPLOY (OTHER THAN THE SUPERINTENDENT) AND SUBJECT TO THE APPROVAL OF THE ENGINEER, A CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS). THE WTS MAY BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

- 1). AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION A.T.S.S.A., PHONE NUMBER 1-800-272-8772, CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS)
- 2). THE NATIONAL SAFETY COUNCIL, TRAFFIC CONTROL ZONES SUPERVISOR COURSE, PHONE NUMBER 1-800-441-5103
- 3). NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0528

THE WTS POSITION IS ESTABLISHED FOR THE PURPOSE OF MONITORING THE TRAFFIC CONTROL PLAN (TCP) AND CORRECTING ANY TRAFFIC CONTROL DEFICIENCIES IN THE WORK ZONE. THE WTS MUST ALSO COORDINATE WITH ALL LAW ENFORCING AGENCIES RESPONSIBLE FOR THE ROADWAY UNDER CONSTRUCTION AND RETRIEVE ALL CRASH REPORTS (OH-1) THAT OCCUR WHEN TEMPORARY TRAFFIC CONTROL DEVICES ARE IN PLACE. THE WTS SHALL OVER-SEE ALL OPERATIONS THAT AFFECT THE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH THE WORK ZONE. TRAFFIC CONTROL AND CRASH DATA EVALUATION WILL BE THE WTS MAIN RESPONSIBILITY WHEN A WORKZONE IS IN PLACE.

A CERTIFIED WTS SHALL BE PRESENT WHEN THE CONTRACTOR OR SUBCONTRACTOR INSTALLS TRAFFIC RESTRICTION, LANE CLOSURE, ETC. THE CONTRACTOR OR SUBCONTRACTOR MUST PRESENT A COPY OF CERTIFICATES FOR ALL WTS TO THE ENGINEER. A WTS MUST BE PRESENT WHEN THE WORK ZONE IS BEING SETUP OR REMOVED.

DAILY, INCLUDING WEEKENDS AND HOLIDAYS, THE WTS SHALL SPEND A MINIMUM OF ONE HOUR REVIEWING THE WORK ZONE AND/OR CRASH DATA FOR DEFICIENCIES AND MAINTAINING THE WORK ZONE.

WEEKLY, THE WTS MUST RETRIEVE/COLLECT ALL CRASH REPORTS (OH-1) FROM ALL LAW ENFORCING AGENCIES, EVALUATE THE CRASHES, AND RECOMMEND SOLUTIONS TO ADDRESS ANY ISSUES WITH THE TCP THAT ARE POTENTIALLY CREATING CRASHES WITHIN THE WORK ZONE. THE WTS MUST PRESENT THESE SOLUTIONS TO THE ENGINEER FOR APPROVAL WEEKLY. UPON APPROVAL BY THE ENGINEER AND THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM), THE CONTRACTOR MUST IMPLEMENT THE RECOMMENDED SOLUTIONS TO THE WORK ZONE WITHIN ONE WEEK-ADDITIONAL COST TO BE PAID UNDER CONSTRUCTION AND MATERIAL SPECIFICATIONS - 109. THE WTS MUST INSPECT THE WORK ZONE AT THE BEGINNING AND THE END OF EACH WORK DAY AND ONE TIME PER WEEK DURING THE HOURS OF DARKNESS. THE FOLLOWING ITEMS SHALL BE INCLUDED, BUT NOT RESTRICTED TO, IN EACH REVIEW: TRAFFIC CONTROL DEVICE CONDITION; PLACEMENT; VISIBILITY; TRAFFIC FLOW CONDITIONS; INCIDENTS; CONGESTION POINTS; DELAYS; ADEQUACY OF ADVANCED INFORMATIONAL SIGNS BEYOND PROJECT LIMITS; INTERACTION OF WORK VEHICLES AND TRAFFIC; ACCIDENTS; PROPER STORAGE OF MATERIALS AND EQUIPMENT; CONFORMANCE WITH TCP; ADEQUACY OF TCP; CONFLICTING OR NON-CONFORMING PAVEMENT MARKINGS. THE WTS SHALL HAVE THE NECESSARY AUTHORITY TO IMMEDIATELY PERFORM ANY CORRECTIVE WORK. A RECORD OF EACH DAYS REVIEWS SHALL BE GIVEN TO THE ENGINEER THE FOLLOWING WORKDAY IN WRITING AND SHALL INCLUDE ALL DEFICIENCIES AND RESOLUTIONS TO THE DEFICIENCIES. THE INSPECTION WILL BE DOCUMENTED ON THE LONG/SHORT TERM WORK ZONE REVIEW FORM PROVIDED BY ODOT. WEEKLY, THE INSPECTION FORM MUST BE ACCOMPANIED BY ALL OF THE OH-1 CRASH REPORTS AND THE PROPOSED SOLUTIONS TO ANY IDENTIFIED CRASH PROBLEMS.

IF THE RESTRICTIONS ARE SHORT TERM, THE WTS SHALL MONITOR THE ZONE FOR COMPLIANCE, DURING LANE CLOSURES; HE SHALL MAKE SURE ALL TRAFFIC CONTROL ITEMS ARE FUNCTIONING PROPERLY. TRAFFIC CONTROL AND CRASH DATA EVALUATION WILL BE THE WTS MAIN RESPONSIBILITY DURING IMPLEMENTATION OF ZONES OR SHORT TERM ZONES. THE WTS SHALL PROVIDE THE DWZTM A SKETCH OF THE TRAFFIC CONTROL PLAN (TCP) EVERYDAY THERE IS TO BE A SHORT TERM TRAFFIC RESTRICTION, LANE CLOSURE, ETC. THIS TCP SHALL SHOW HOW THE WORK ZONES ARE TO BE IMPLEMENTED.

THE WTS SHALL BE ON STANDBY 24-HOUR BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. A 24-HOUR CONTACT NUMBER(S) SHALL BE MADE AVAILABLE TO THE ENGINEER TO CONTACT THE WTS.

FAILURE OF THE CONTRACTOR TO COMPLY WITH ANY OF THE ABOVE, SHALL CONSTITUTE CAUSE FOR THE PROJECT ENGINEER TO DEDUCT \$500.00 PER DAY FROM THE MONEY DUE TO THE CONTRACTOR NOT AS A PENALTY, BUT AS A LIQUIDATED DAMAGE.

PAYMENT FOR THE WTS SHALL BE INCLUDED IN THE LUMP SUM ITEM 614 - MAINTAINING TRAFFIC.

## COOPERATION BETWEEN CONTRACTORS

THE STATE OF OHIO HAS A CONTRACT TO IMPROVE RAMPS AT IR 70 AND IR 77 LOCATED WITHIN THE LIMITS OF THIS PROJECT. DUE TO POSSIBLE OVERLAPS OF WORK ZONES, IT IS PERTINENT THAT THE CONTRACTOR FULLY COOPERATES WITH THE REST AREA CONTRACTOR AS OUTLINED IN SECTION 105.08 OF THE SPECIFICATIONS.

ITEM 254  
PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

PLANING SHALL BE A WIDTH OF 3.0 FT BY A MINIMUM DEPTH OF 1.0" TO REMOVE THE RUMBLE STRIPS ALONG THE OUTSIDE SHOULDERS OF IR 77. THE 3.0FT PLANING WIDTH SHALL INCLUDE THE REMOVAL OF THE EXISTING OUTSIDE EDGE LINES. THE PLANED AREA SHALL BE BACK-FILLED WITH ITEM 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448). BACKFILLING SHALL OCCUR AS CLOSELY BEHIND THE PLANING OPERATION AS POSSIBLE. PAVEMENT PLANING AND BACK-FILLING SHALL BE COMPLETED IN SECTIONS CORRESPONDING TO THE SECTION LIMITS ESTABLISHED FOR RESURFACING AND AND SHALL NOT EXCEED THE LIMITS OF LANE CLOSURE AS DEFINED IN THE "MAINTAINING TRAFFIC" NOTE ON SHEET 4. THIS WORK SHALL BE COMPLETED BEFORE ANY WORK IS PERFORMED ON THE MAINLINE THAT WOULD REQUIRE THE USE OF THE OUTSIDE SHOULDER FOR MAINTAINING TRAFFIC. ALL MATERIALS, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

EB; 10.52 mile x 5280 x 3' / 9 = 18515 SY  
WB; 10.52 mile x 5280 x 3' / 9 = 18515 SY  
TOTAL = 37030 SY

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 254  
PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN 37030 SY

ITEM 614 TEMPORARY PAVEMENT MARKINGS AND  
ITEM 614 WORK ZONE MARKING SIGN

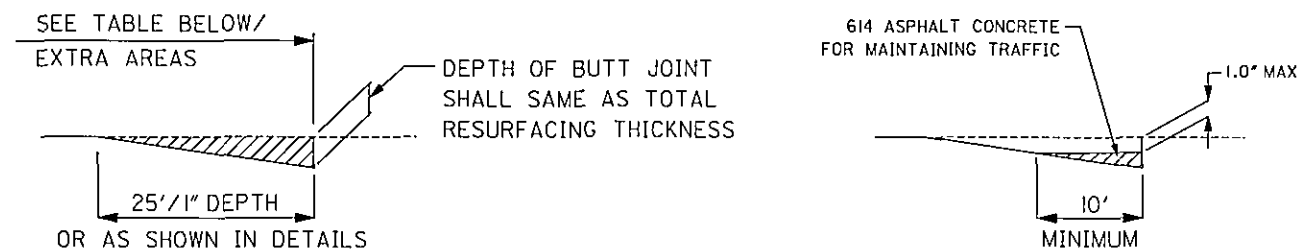
QUANTITIES OF TEMPORARY LANE LINE, CLASS II AND TEMPORARY EDGE LINE, CLASS I HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. THE ROAD SHALL NOT BE OPENED TO TRAFFIC WITHOUT EITHER THE PERMANENT OR TEMPORARY MARKINGS IN PLACE.

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

- ITEM 614 TEMPORARY LANE LINE, CLASS II  
LOCATION 1- 21.04 MILE
- ITEM 614 TEMPORARY EDGE LINE, CLASS I  
LOCATION 1- 42.08 MILE
- ITEM 614 WORK ZONE MARKING SIGN  
LOCATION 1- 10 EACH
- ITEM 614 WORK ZONE GORE MARKING, CLASS II  
LOCATION 1- 10677 FT.

BUTT JOINT

A BUTT JOINT WILL BE REQUIRED AT LOCATIONS SPECIFIED BELOW AND BRIDGES SPECIFIED IN THE PLAN. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE MINIMIZED BY IMMEDIATELY PLACING THE PROPOSED 442 INTERMEDIATE COURSE TO WITHIN 1.0" OF EXISTING ROADWAY SURFACE OR BY PLACING WEDGE AS SHOWN. IF WEDGE IS PLACED, IT SHALL BE REMOVED BEFORE PLACING SUBSEQUENT ASPHALT COURSES. WEDGE REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC. AN EXTRA QUANTITY OF ITEM 614 HAS BEEN ADDED FOR WEDGES NEEDED AT THE END OF EACH DAYS OPERATION. BUTT JOINTS SHALL BE AS PER SCD BP-3.1, 7-28-00.



LOCA-TION	ROUTE	SLM	DESCRIPTION	202 WEARING COURSE REMOVED	614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC
				SQ.YD.	CU.YD.
1	IR 77	2.50	BEGIN WORK NORTHBOUND	343	2.3
		2.50	BEGIN WORK SOUTHBOUND	343	2.3
		10.25	SUSPEND WORK NORTHBOUND	343	2.3
		10.25	SUSPEND WORK SOUTHBOUND	343	2.3
		14.45	RESUME WORK NORTHBOUND	343	2.3
		14.45	RESUME WORK SOUTHBOUND	343	2.3
		17.22	END WORK NORTHBOUND	343	2.3
		17.22	END WORK SOUTHBOUND	343	2.3
			EXTRA QUANTITY		27.6
1	IR 77	TOTALS		2744	46.0

FEATHERING

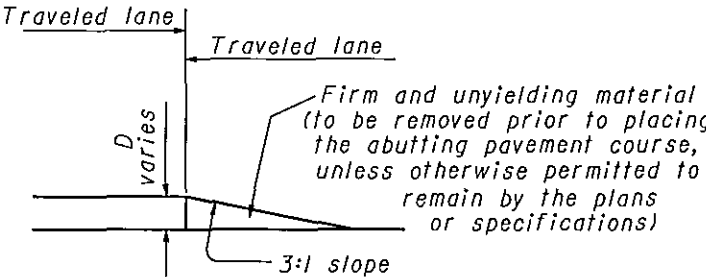
FEATHERING OF THE ASPHALT CONCRETE SHALL BE DONE IN ACCORDANCE WITH SCD DRAWING BP-3.1, 7-28-00

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-9.2M 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 230 m 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 0.80 km, additional signs should be erected at intervals of 1.60 km 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 3 m, drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 125 mm and approval is granted by the Project Engineer.
10. Pavement Repairs (or similar work):
- a. Lengths greater than 18.0 m - utilize appropriate treatment from Condition I.
  - b. Lengths of 18.0 m 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.



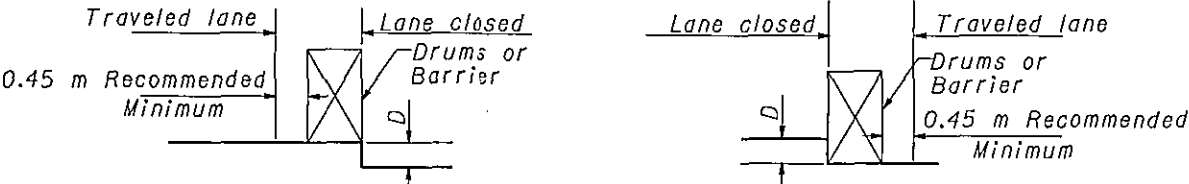
CONDITION I

DROPOFFS BETWEEN TRAVELED LANES

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

D (mm)	Treatment
≤40	Erect OW-171 and OWP-171 signs.
>40-75	1) Lane closure utilizing drums*as shown below OR 2) Optional Wedge Treatment
>75-125	Lane closure utilizing drums as shown below.
>125	Lane closure utilizing portable concrete barrier as shown below.

\*Cones may be used for daytime only conditions.



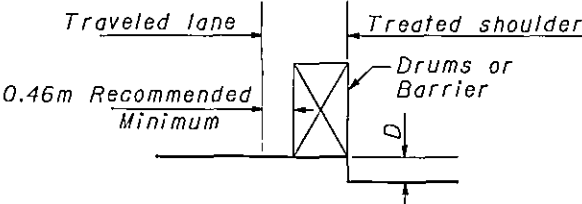
CONDITION II

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 3.6 m.

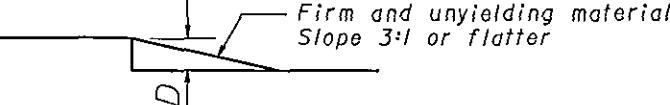
D (mm)	Treatment
≤40	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
>40-125	1) If min. lane width*requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min. lane width*requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
>125-300 Daylight only	If min. lane width*requirements can be met, maintain lanes utilizing drums as shown below.
>125-600	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.
>600	Lane closure utilizing portable concrete barrier as shown below.

\*Minimum lane widths shall be 3.0 m 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.



GUE-77-2.50

OHIO  
FHWA  
REGION 5

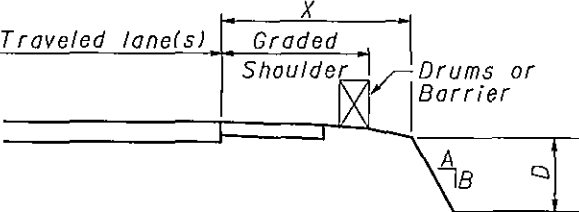
CONDITION III

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 150 mm in height.
    - b. Curbs are 150 mm or greater in height and the legal speed is greater than 40 mph.

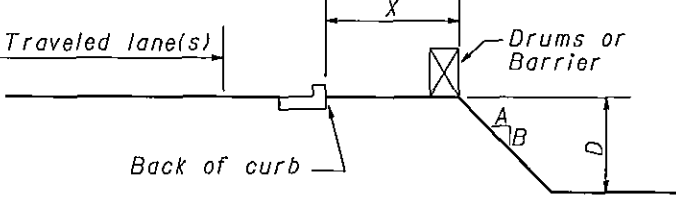


X (m)	D (mm)	A/B	Treatment Required	
			Day	Night
0-1.2	Any	Any	(a)	(a)
1.2-9.1	Any	3:1 or Flatter	None	None
1.2-3.6	<75	Steeper than 3:1	None	None
1.2-3.6	>75-300	Steeper than 3:1	Drums	Drums
1.2-3.6	>300	Steeper than 3:1	Drums	Barrier
>3.6-6.1	<300	Steeper than 3:1	None	None
>3.6-6.1	>300-600	Steeper than 3:1	Drums	Drums
>3.6-6.1	>600	Steeper than 3:1	Drums	Barrier
>6.1-9.1	<600	Steeper than 3:1	None	Drums
>6.1-9.1	>600	Steeper than 3:1	Drums	Barrier
>9.1	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

- USE FOR: Curbed facilities, where the curb is 150 mm or greater in height and the legal speed is 40 mph or less.



X (m)	D (mm)	A/B	Treatment Required	
			Day	Night
0-3.0	<300	Any	None	Drums
0-3.0	>300	Any	Drums	Drums
>3.0	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 LME 7-8-97

IR 77 IMPROVEMENT: SEQUENCE OF OPERATIONS

PHASE 1:  
CLOSE OUTSIDE LANE (3.0 MILE MAX. SECTION LENGTH, SEE "MAINTAINING TRAFFIC" NOTE ON SHEET 2) AND MAINTAIN ONE LANE OF TRAFFIC USING INSIDE LANE. PLANE 3.0' OF OUTSIDE PAVED BERM AS DESCRIBED IN "PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN" NOTE ON SHEET 4.

PHASE 2:  
CLOSE INSIDE LANE AND MAINTAIN ONE LANE OF TRAFFIC USING OUTSIDE LANE & 10' BERM. MILL PAVEMENT JOINTS AS DESCRIBED IN "WEARING COURSE REMOVED, AS PER PLAN" NOTE ON SHEET 4.  
RESURFACE INSIDE LANE & 4' BERM WITH 1.75" 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446).

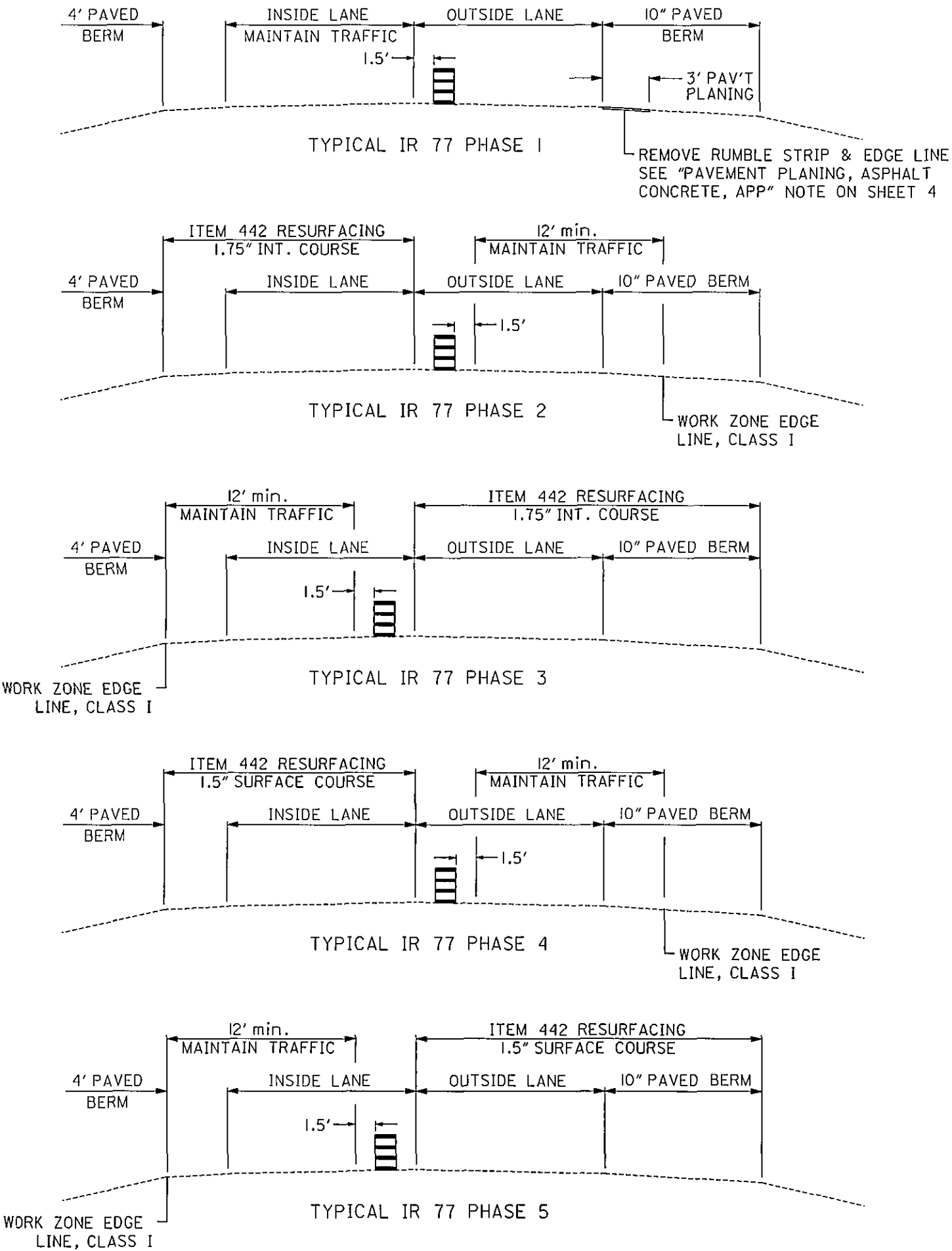
PHASE 3:  
CLOSE OUTSIDE LANE AND MAINTAIN ONE LANE OF TRAFFIC USING INSIDE LANE & 4' BERM. MILL PAVEMENT JOINTS AS DESCRIBED IN "WEARING COURSE REMOVED, AS PER PLAN" NOTE ON SHEET 4.  
RESURFACE OUTSIDE LANE & 10' BERM WITH 1.75" 442 ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446).

PHASE 4:  
CLOSE INSIDE LANE AND MAINTAIN ONE LANE OF TRAFFIC USING OUTSIDE LANE & 10' BERM. RESURFACE INSIDE LANE & 4' BERM WITH 1.5" 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) WITH SUPPLEMENT 1959 WARRANTY.

PHASE 5:  
CLOSE OUTSIDE LANE AND MAINTAIN ONE LANE OF TRAFFIC USING INSIDE LANE & 4' BERM. RESURFACE OUTSIDE LANE & 10' BERM WITH 1.5" 442 ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) WITH SUPPLEMENT 1059 WARRANTY.

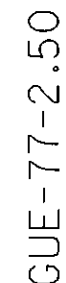
PHASE 6:  
OPEN BOTH LANES TO TRAFFIC AND INSTALL RAISED PAVEMENT MARKERS, PERMANENT PAVEMENT MARKING AND RUMBLE STRIPS USING SHOULDER CLOSURES AS DIRECTED BY THE ENGINEER.

NOTE:  
TYPICALS APPLY TO BOTH NORTHBOUND AND SOUTHBOUND OF IR 77.



CALCULATED	CHECKED
LME	TJD

## ASPHALT CONCRETE


$$\frac{10}{24}$$

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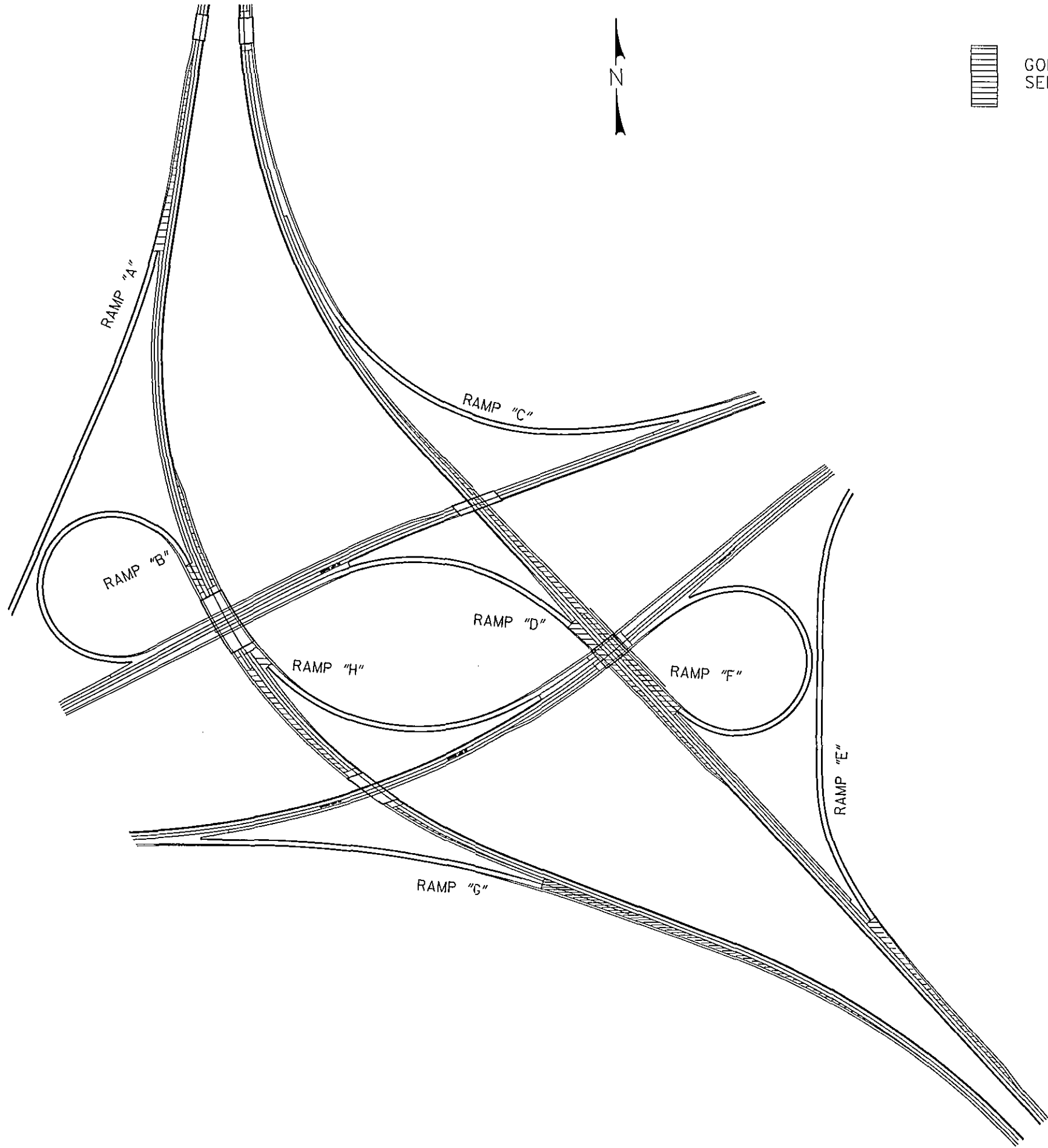
PAVED SHOULDERS

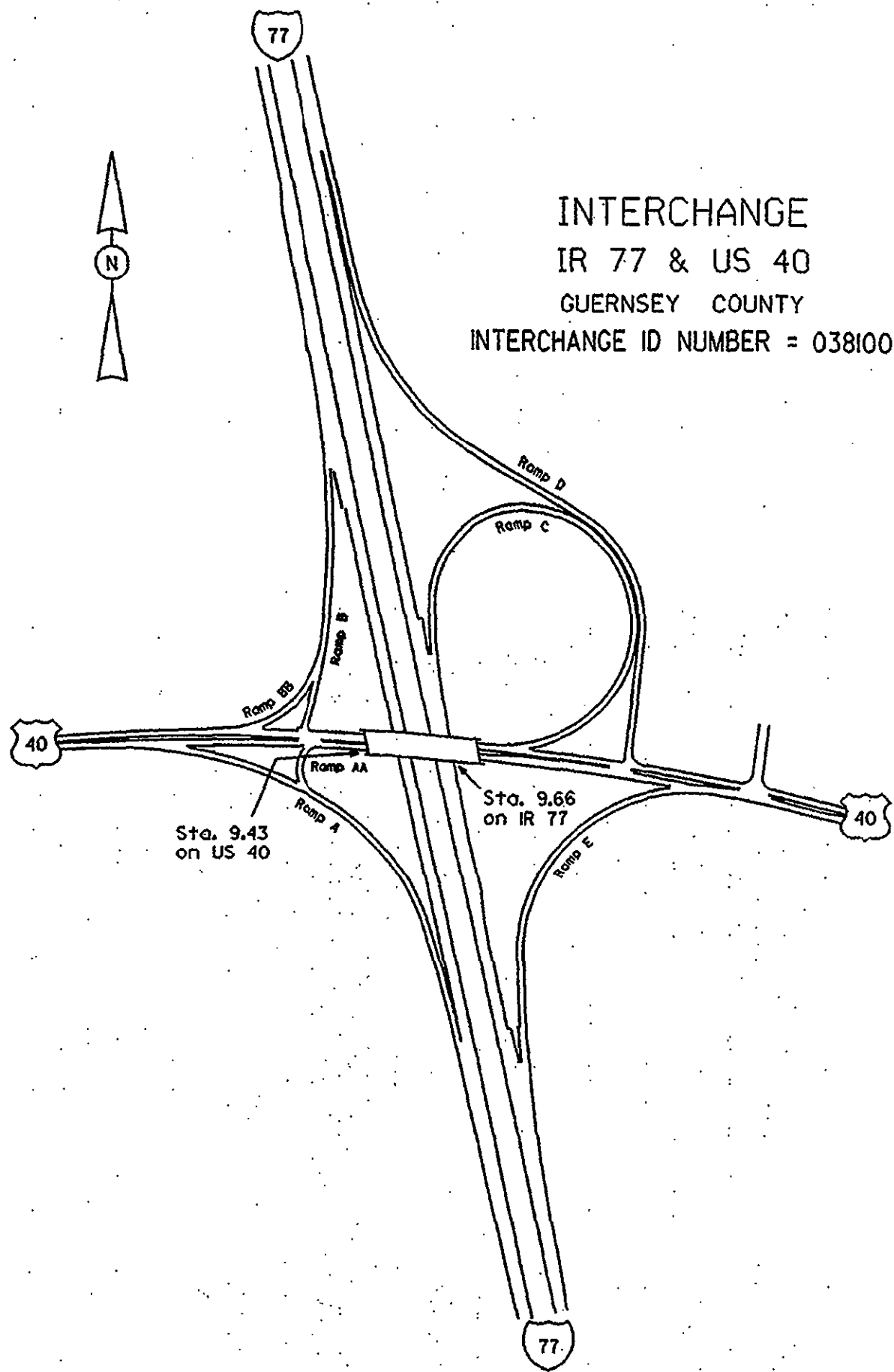
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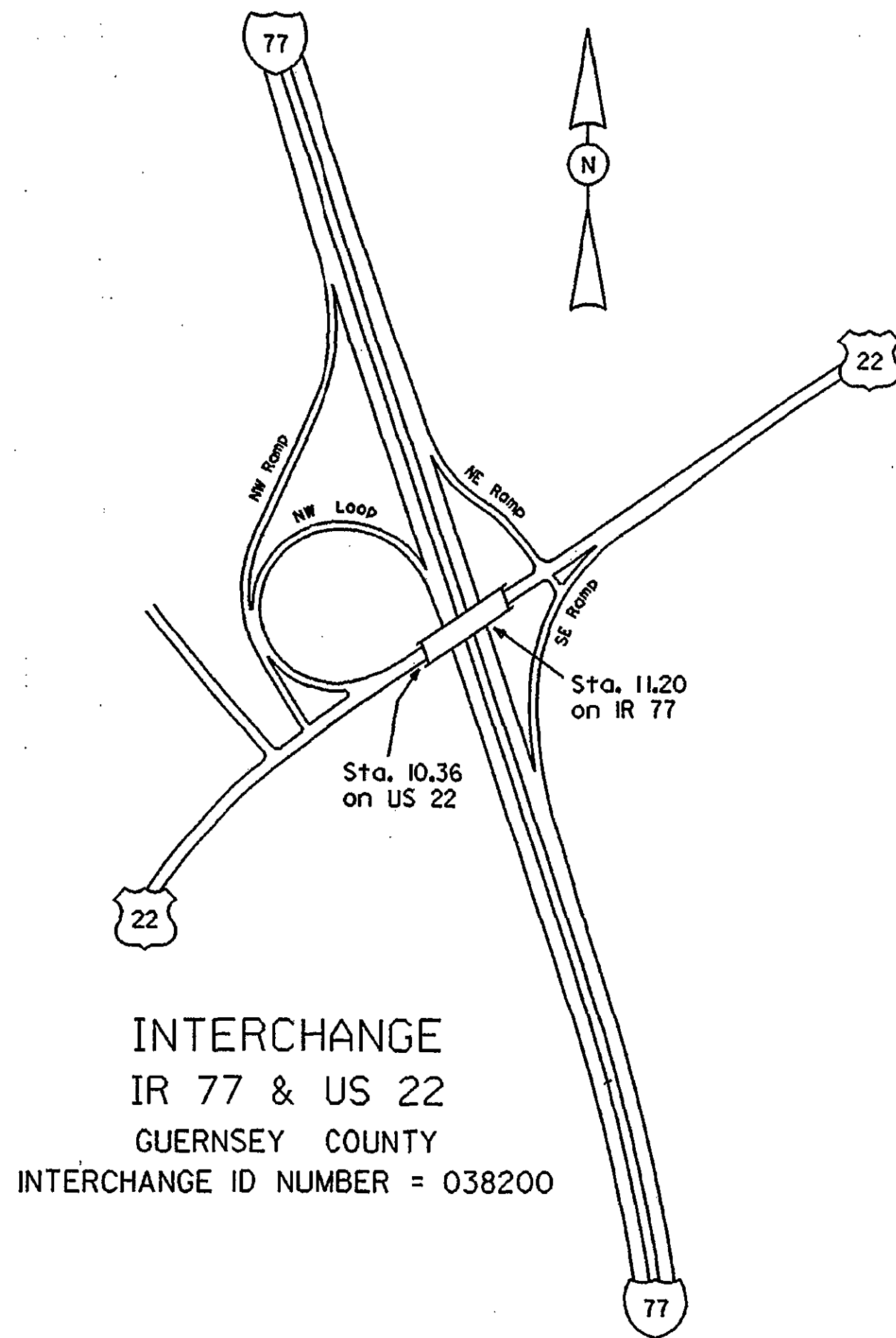


INTERCHANGE  
IR 77 & US 40  
GUERNSEY COUNTY  
INTERCHANGE ID NUMBER = 038100



IR 77/US 40 INTERCHANGE DETAIL

GUE-77-2.50

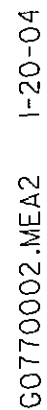


INTERCHANGE  
IR 77 & US 22  
GUERNSEY COUNTY  
INTERCHANGE ID NUMBER = 038200

CALCULATED	CHECKED
LME	TJD

## TREATMENT ON GORE AREAS

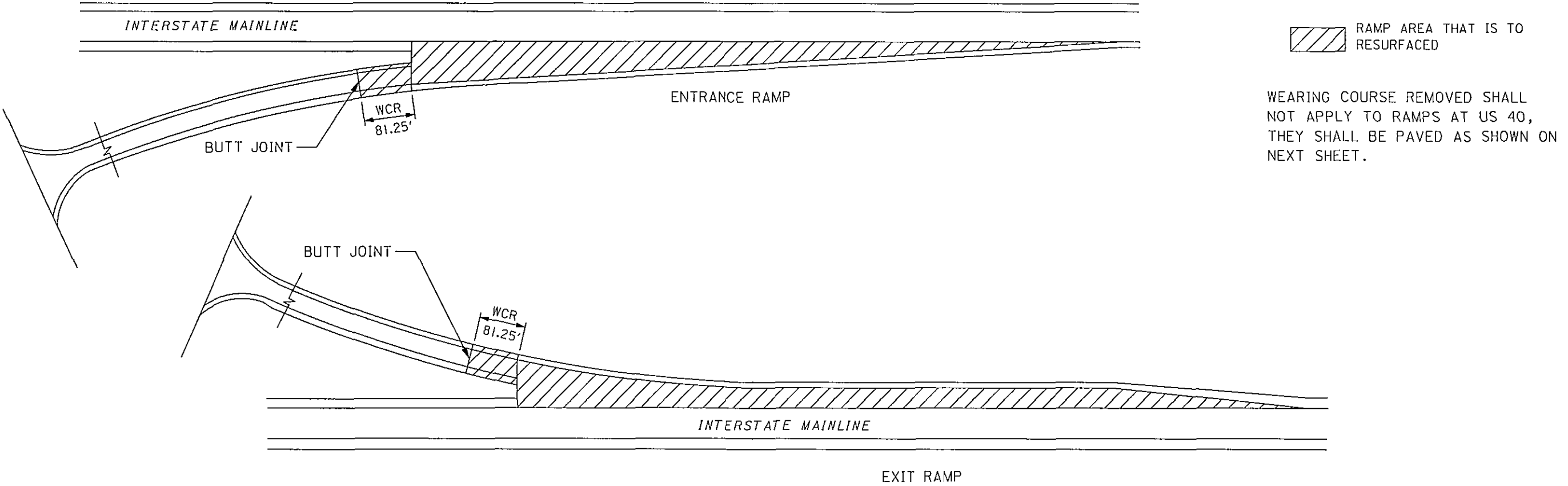
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24



TREATMENT ON GORE AREAS

ALL AREAS CALCULATED FROM PREVIOUS PLANS

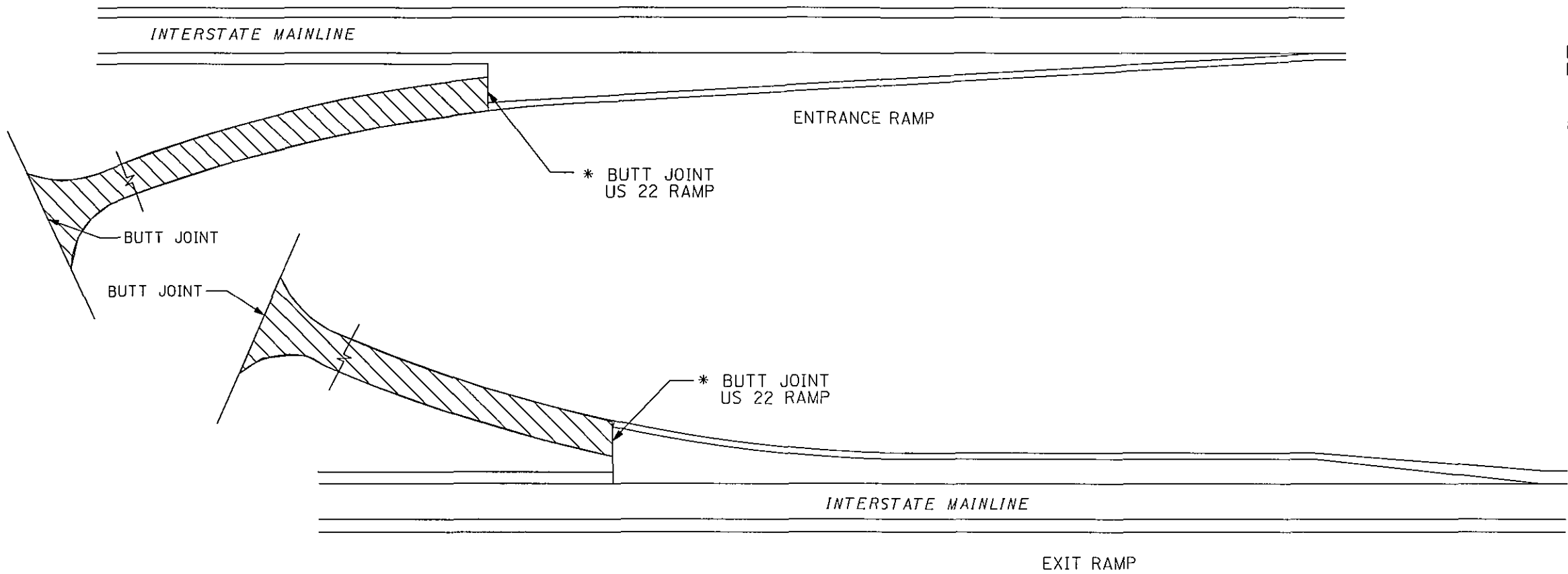
LOCATION	ROUTE	LOG POINT TO LOG POINT	DESCRIPTION	AREA IN SQ. YDS.	PROPOSED ITEMS										
					407		442 ASPHALT CONCRETE				202 WEARING COURSE REMOVED (FOR BUTT JOINT)				
					TACK COAT @ 0.075 gal./s.y. GAL.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y. GAL.	THICK INCHES	INTERMEDIATE COURSE, 19 mm, TYPE A CU. YD.	THICK INCHES	SURFACE COURSE, 12.5 mm, TYPE A CU. YD.	SO. YD.				
I	IR 77	NORTHBOUND	RAMP "E" OFF RAMP TO IR 70 EB	1381	104	69	1.75	67.1	1.5	57.5	226				
			RAMP "D" OFF RAMP (LEFT) TO IR 70 WB	1464	110	74	1.75	71.2	1.5	61	226				
			RAMP "F" ON RAMP FROM IR 70 EB	3261	245	163	1.75	158.5	1.5	135.9	226				
			RAMP "C" ON RAMP FROM IR 70 WB	3200	240	160	1.75	155.6	1.5	133.3	226				
			EXIT RAMP "E" - TO USR 40	1697	128	85	1.75	82.5	1.5	70.7					
			EXIT RAMP "C" - TO USR 40	1697	128	85	1.75	82.5	1.5	70.7					
		SOUTHBOUND	RAMP "A" OFF RAMP TO IR 70 WB	1376	104	69	1.75	66.9	1.5	57.3	226				
			RAMP "H" OFF RAMP (LEFT) TO IR 70 EB	1737	134	89	1.75	86.9	1.5	74.3	226				
			RAMP "B" ON RAMP FROM IR 70 WB	3411	256	171	1.75	165.8	1.5	142.1	226				
			RAMP "G" ON RAMP FROM IR 70 EB	2782	209	139	1.75	135.2	1.5	115.9	226				
			EXIT RAMP "B" - TO USR 40	1697	128	85	1.75	82.5	1.5	70.7					
			ENTRANCE RAMP "A" - FROM USR 40	1657	125	84	1.75	81.0	1.5	69.5					
			SHEET TOTALS		1911	1273		1235.7		1058.9	1808				
			PREVIOUS SHEET TOTALS		1101	735		714.3		612.0	1356				
		TOTALS	(TOTALS CARRIED TO NEXT SHEET)		3012	2008		1950.0		1670.9	3164				



TREATMENT ON RAMPS

ALL AREAS TAKEN FROM PREVIOUS CONSTRUCTION PLANS

LOCATION	ROUTE	LOG POINT TO LOG POINT	DESCRIPTION	AREA	PROPOSED ITEMS									
					407		442 ASPHALT CONCRETE				254		202	
					TACK COAT @ 0.075 gal./s.y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y.	THICK	INTERMEDIATE COURSE, 19mm, TYPE A	THICK	SURFACE COURSE, 12.5mm, TYPE A	THICK	PAVEMENT PLANING, ASPHALT CONCRETE	WEARING COURSE REMOVED (FOR BUTT JOINT)	
				sq.yds.	gal.	gal.	inches	cu. yd.	inches	cu. yd.	inches	sq.yd.	sq. yd.	
I	IR 77	NORTHBOUND	EXIT RAMP "E" - TO USR 40	2933	220	147	1.75	142.6	1.5	122.2	1.5	2933		
			EXIT RAMP "C" - TO USR 40	4234	318	212	1.75	205.8	1.5	176.4	1.5	4234		
			ENTRANCE RAMP "D" - FROM USR 40	5742	431	288	1.75	279.1	1.5	239.3	1.5	5742		
			S.E. OFF RAMP TO US 22	2488	187	125	1.75	120.9	1.5	103.7	1.5	2488		
			N.E. ON RAMP FROM US 22	3196	240	160	1.75	155.4	1.5	133.2	1.5	3196		
		SOUTHBOUND	EXIT RAMP "B" - TO USR 40	1837	138	92	1.75	89.3	1.5	76.5	1.5	1837		
			RAMP "BB" - TO USR 40	810	61	41	1.75	39.4	1.5	33.8	1.5	810		
			ENTRANCE RAMP "A" - FROM USR 40	3867	290	194	1.75	188.0	1.5	161.1	1.5	3867		
			RAMP "AA" - FROM USR 40	376	29	19	1.75	18.3	1.5	15.7	1.5	376		
			N.W. OFF RAMP TO US 22	4558	342	228	1.75	221.6	1.5	189.9	1.5	4558		
			N.W. LOOP FROM US 22	4963	373	249	1.75	241.3	1.5	206.8	1.5	4963		
			SHEET TOTALS		2629	1755		1701.7		1458.6		35004		
			PREVIOUS SHEET TOTALS		3012	2008		1950.0		1670.9			3164	
I	IR 77	TOTALS	CARRIED TO GENERAL SUMMARY		5641	3763		3651.7		3129.5		35004	3164	



\* REQUIRES BUTT JOINT AT BOTH ENDS OF RAMP

RAMP AREAS INCLUDE PAVED SHOULDERS

PAVEMENT AND PLANING TAPERS FOR BUTT JOINTS SHALL BE AT A RATE OF 1"/25'

BRIDGE TREATMENT

GUE-77-0517R: REMOVE 3" AND REPLACE 3" ASPHALT CONCRETE  
GUE-77-0517L: REMOVE 3" AND REPLACE 3" ASPHALT CONCRETE  
GUE-77-0804R: REMOVE 3" AND REPLACE 3.25" ASPHALT CONCRETE  
GUE-77-0804L: REMOVE 3" AND REPLACE 3.25" ASPHALT CONCRETE  
GUE-77-0900R: BUTT JOINT @ APPROACH SLABS  
GUE-77-0900L: BUTT JOINT @ APPROACH SLABS  
GUE-77-0926R: BUTT JOINT @ APPROACH SLABS  
GUE-77-0926L: BUTT JOINT @ APPROACH SLABS  
GUE-77-1474R: REMOVE 2.25" ASPHALT CONCRETE AND BUTT JOINT @ EXP. JOINT  
GUE-77-1474L: REMOVE 2.25" ASPHALT CONCRETE AND BUTT JOINT @ EXP. JOINT  
GUE-77-1548R: REMOVE 2.25" ASPHALT CONCRETE AND BUTT JOINT @ EXP. JOINT  
GUE-77-1548L: BUTT JOINT @ APPROACH SLABS

\* PAVING OF APPROACH SLABS ONLY

BRIDGE DEDUCTIONS (BRIDGE LENGTH X PAVEMENT WIDTH)

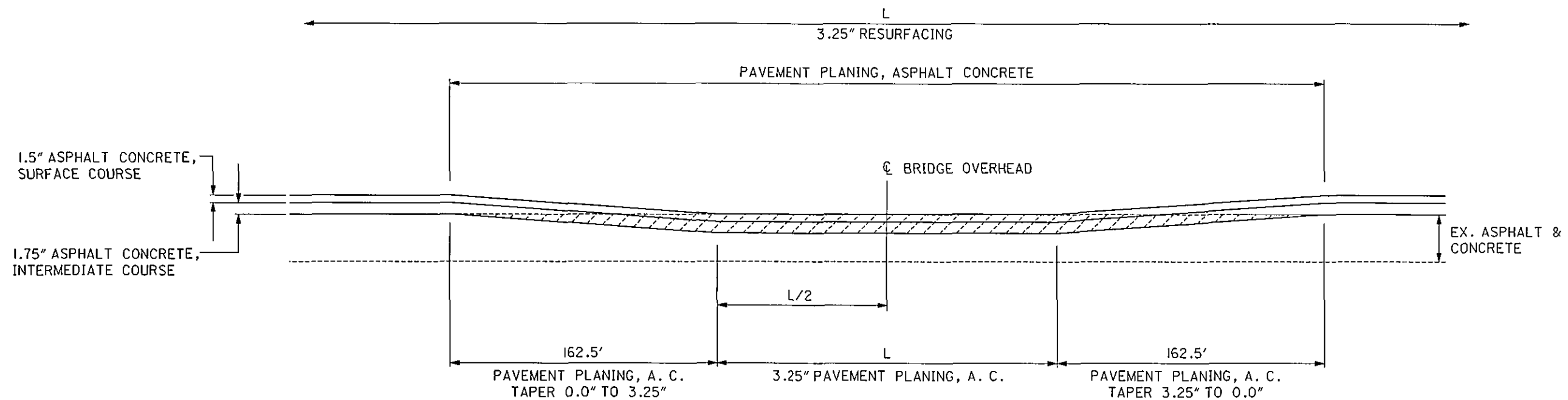
GUE-77-0517R: 148.0' X 24' / 9 = 395 SQ. YDS.  
GUE-77-0517L: 148.0' X 24' / 9 = 395 SQ. YDS.  
GUE-77-0804R: 92.5' X 24' / 9 = 247 SQ. YDS.  
GUE-77-0804L: 92.5' X 24' / 9 = 247 SQ. YDS.  
GUE-77-0900R: 317.0' X 24' / 9 = 845 SQ. YDS.  
GUE-77-0900L: 317.0' X 24' / 9 = 845 SQ. YDS.  
GUE-77-0926R: 196.0' X 24' / 9 = 523 SQ. YDS.  
GUE-77-0926L: 196.0' X 24' / 9 = 523 SQ. YDS.  
GUE-77-1474R: 194.5' X 24' / 9 = 519 SQ. YDS.  
GUE-77-1474L: 194.5' X 24' / 9 = 519 SQ. YDS.  
GUE-77-1548R: 234.5' X 24' / 9 = 625 SQ. YDS.  
GUE-77-1548L: 163.3' X 24' / 9 = 436 SQ. YDS.

TOTAL = 6119 SQ. YDS.

(TOTAL CARRIED TO SHEET 7)

BRIDGE DECK DATA														
L O C A T I O N	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	BRIDGE DECK AREA	202	SEE DETAILS SHEET XX	407		442 ASPHALT CONCRETE				516	
					WEARING COURSE REMOVED DEPTH VAR."		TACK COAT @ 0.075 gal./s.y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 gal./s.y.	THICK AVG.	INTERMEDIATE COURSE 19 mm, TYPE A (446)	THICK AVG.	SURFACE COURSE, 12.5 mm, TYPE A (446)	2" DEEP JOINT SEALER, AS PER PLAN	
		LIN.FT.	LIN.FT.	SQ.YD.	SQ.YD.		GALS.	GALS.	INCHES	CU. YD.	INCHES	CU. YD.	FT	
I	GUE-77-0517R	148.0	38.0	625	2314	DETAIL 3	47	32	1.50	26.0	1.50	26.0		
	GUE-77-0517L	148.0	38.0	625	2314	DETAIL 3	47	32	1.50	26.0	1.50	26.0		
	GUE-77-0804R	92.5	47.5	488	2177	DETAIL 2	37	25	1.75	23.7	1.50	20.3		
	GUE-77-0804L	92.5	39.7	408	2097	DETAIL 2	31	21	1.75	19.8	1.50	17.0		
	GUE-77-0900R	267.0	40.0	1187	844	DETAIL 1							80	
	GUE-77-0900L	267.0	40.0	1187	844	DETAIL 1							80	
	GUE-77-0926R	146.0	42.0	681	844	DETAIL 1							84	
	GUE-77-0926L	146.0	40.0	649	844	DETAIL 1							80	
	GUE-77-1474R	144.5	38.2	133*	343	DETAIL 4	*10				2.25	8.3		
	GUE-77-1474L	144.5	38.2	133*	343	DETAIL 4	*10				2.25	8.3		
	GUE-77-1548R	184.5	38.2	203*	343	DETAIL 4	*16				2.25	12.7		
	GUE-77-1548L	163.3	44.0	798	844	DETAIL 1							88	
I	TOTALS			7117	14151		162	110		95.5		118.6	412	

QUANTITIES CARRIED TO GENERAL SUMMARY



BRIDGE	L	ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE
GUE-77-0599R	50'	$(50' + 162.5' + 162.5') \times 38' / 9 = 1584 \text{ SY}$
GUE-70-0599L	50'	$(50' + 162.5' + 162.5') \times 38' / 9 = 1584 \text{ SY}$
GUE-77-0708R	50'	$(50' + 162.5' + 162.5') \times 38' / 9 = 1584 \text{ SY}$
GUE-77-0708L	50'	$(50' + 162.5' + 162.5') \times 38' / 9 = 1584 \text{ SY}$
GUE-77-0966R	80'	$(80' + 162.5' + 162.5') \times 38' / 9 = 1710 \text{ SY}$
GUE-77-0966L	80'	$(80' + 162.5' + 162.5') \times 38' / 9 = 1710 \text{ SY}$
GUE-77-1674 R	50'	$(50' + 162.5' + 162.5') \times 38' / 9 = 1584 \text{ SY}$
GUE-77-1674 L	50'	$(50' + 162.5' + 162.5') \times 38' / 9 = 1584 \text{ SY}$
<b>TOTAL</b>		<b>TOTAL = 12924 SY</b>

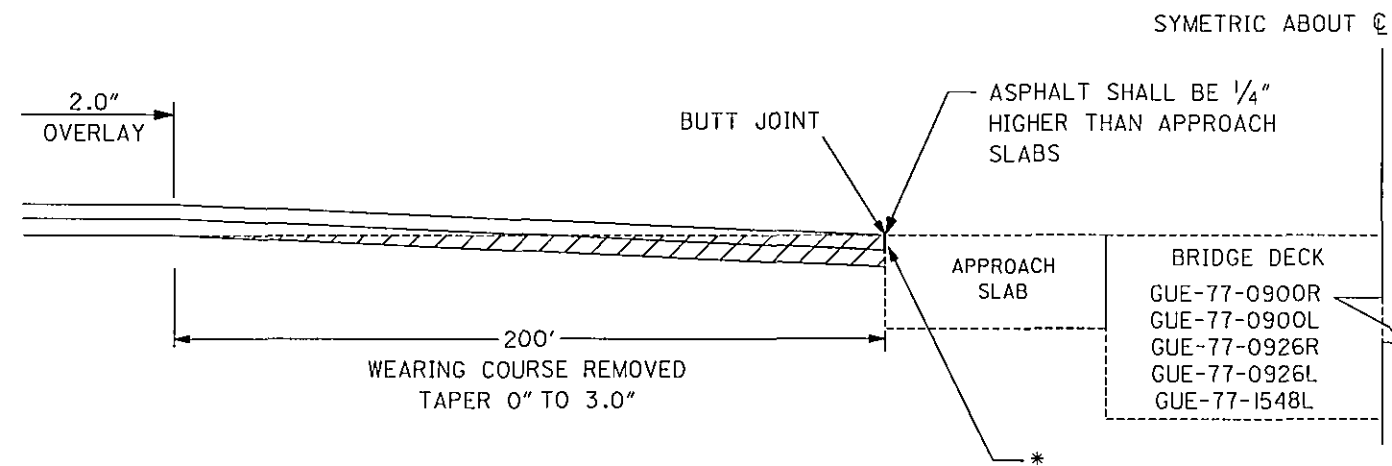
IR 77 N.B. SHALL BE PLANED CONTINUALLY UNDER GUE-77-0754 AND GUE-77-0768. TAPER SHALL START AT SLM 7.44 AS SHOWN ABOVE AND PLANING SHALL END AT SLM 7.73. PAVEMENT WIDTH IS VARIABLE THROUGHOUT THIS SECTION DUE TO GORE AREAS FOR RAMPS "D" AND "F". THE FOLLOWING CALCULATIONS INCLUDE GORE AREAS FOR PLANING.

MAINLINE -  $[(1531' \times 38') / 9] = 6464 \text{ SQ.YD.}$   
 GORE AREAS -  $(1464 \text{ S.Y.} + 3261 \text{ S.Y.}) = 4725 \text{ SQ.YD.}$

ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE  
 LOCATION 1 -  $12924 \text{ S.Y.} + 11189 \text{ S.Y.} = 24113 \text{ SQ.YD.}$

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1



202 WEARING COURSE REMOVED:

GUE-77-0900R: 200' X 38' / 9 = 844 SQ.YD.  
 GUE-77-0900L: 200' X 38' / 9 = 844 SQ.YD.  
 GUE-77-0926R: 200' X 38' / 9 = 844 SQ.YD.  
 GUE-77-0926L: 200' X 38' / 9 = 844 SQ.YD.  
 GUE-77-1548L: 200' X 38' / 9 = 844 SQ.YD.

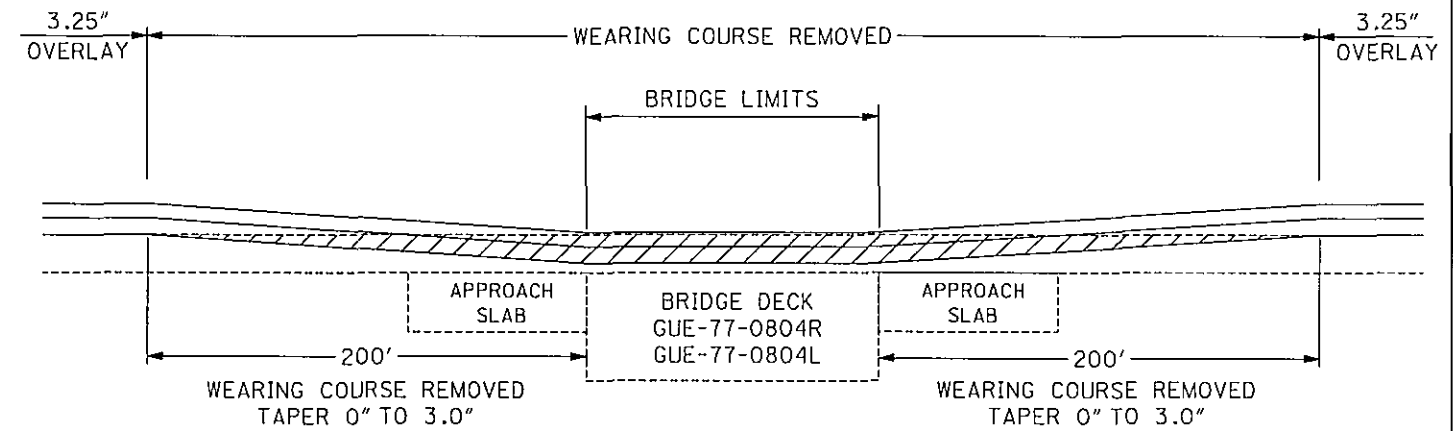
TOTALS CARRIED TO SHEET 16

\* 2" DEEP JOINT SEALER, AS PER PLAN

A 1/2" WIDE X 2.0" DEEP BEAD OF JOINT SEALER (AS PER 705.04) SHALL BE PLACED BETWEEN THE APPROACH SLABS AND THE ASPHALT CONCRETE PAVEMENT. THE COST FOR SAW CUTTING THE CHANNEL FOR THE JOINT SEALER SHALL BE INCLUDED FOR PAYMENT WITH ITEM 516 2" DEEP JOINT SEALER, AS PER PLAN.

BUTT JOINT @ APPROACH SLABS

2



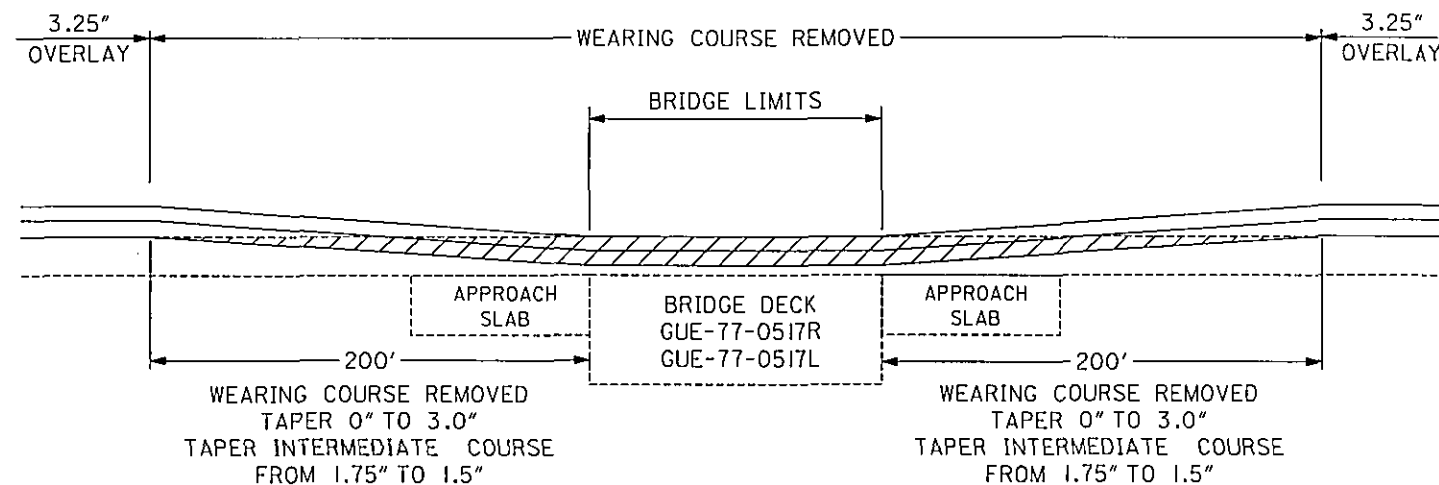
202 WEARING COURSE REMOVED:

GUE-77-0804R: [(400' X 38') + (92.5' X 47.5')] / 9 = 2177 SQ.YD.  
 GUE-77-0804L: [(400' X 38') + (92.5' X 39.7')] / 9 = 2097 SQ.YD.

TOTAL CARRIED TO SHEET 16

REMOVE 3.0" ASPHALT CONCRETE  
 PLACE 3.25" ASPHALT CONCRETE

3



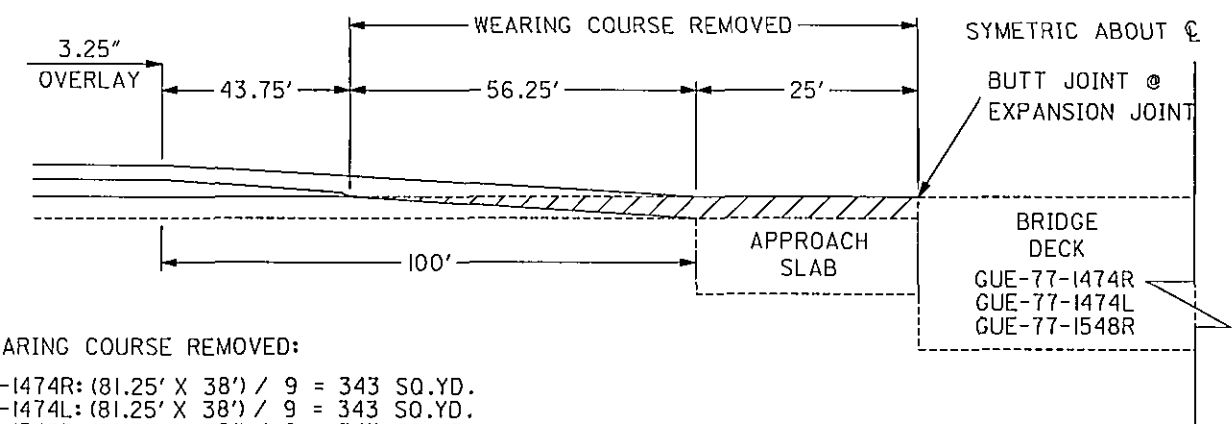
202 WEARING COURSE REMOVED:

GUE-77-0517R: [(400' + 148') X 38'] / 9 = 2314 SQ.YD.  
 GUE-77-0517L: [(400' + 148') X 38'] / 9 = 2314 SQ.YD.

TOTAL CARRIED TO SHEET 16

REMOVE 3.0" ASPHALT CONCRETE  
 PLACE 3.0" ASPHALT CONCRETE

4



202 WEARING COURSE REMOVED:

GUE-77-1474R: (81.25' X 38') / 9 = 343 SQ.YD.  
 GUE-77-1474L: (81.25' X 38') / 9 = 343 SQ.YD.  
 GUE-77-1548R: (81.25' X 38') / 9 = 343 SQ.YD.

TOTAL CARRIED TO SHEET 16

BUTT JOINT @ EXPANSION JOINT

BRIDGE DECK DETAILS

GUE-77-2.50

20  
24

644 EDGE LINE SUB-SUMMARY

LOCATION	CO.	ROUTE	S.L.D.		WHITE EDGE LINE QU.			YELLOW EDGE LINE QU.			PARTICIPATION TYPE				EDGE LINE TOTAL MILES	REMARKS
			FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP	IRG	FG	RSG	NON FED STATE		
I	GUE	NB IR 77	2.50	10.25	7.75	7.75		7.75	7.75						15.50	
			14.45	17.22	2.77	2.77		2.77	2.77						5.54	
		US 40 RAMP "E"			0.20		0.20	0.20		0.20					0.40	
		US 40 RAMP "C"			0.28		0.28	0.28		0.28					0.56	
		US 40 RAMP "D"			0.39		0.39	0.39		0.39					0.78	
		US 22 S.E. RAMP			0.17		0.17	0.17		0.17					0.34	
		US 22 N.E. RAMP			0.20		0.20	0.20		0.20					0.40	
		SB IR 77	2.50	10.25	7.75	7.75		7.75	7.75						15.50	
			14.45	17.22	2.77	2.77		2.77	2.77						5.54	
		US 40 RAMP "B"			0.14		0.14	0.14		0.14					0.28	
		US 40 RAMP "BB"			0.05		0.05	0.05		0.05					0.10	
		US 40 RAMP "A"			0.26		0.26	0.26		0.26					0.52	
		US 40 RAMP "AA"			0.02		0.02	0.02		0.02					0.04	
		US 22 N.W. RAMP			0.32		0.32	0.32		0.32					0.64	
		US 22 N.W. LOOP			0.32		0.32	0.32		0.32					0.64	
I	GUE	TOTALS													46.78	

LANE LINE SUB-SUMMARY AND AUXILIARY MARKINGS

LOCATION	CO.	ROUTE	S.L.M.		QUANTITIES			AUXILIARY MARKINGS				REMARKS
					TOTAL MILES	4" LANE LINES		CHANNELIZING LINE	TRANSVERSE LINE	STOP LINE	LANE ARROW THRU EACH	
			FROM	TO		DASHED	SOLID					
I	GUE	NB IR 77	2.50 14.45	10.25 17.22	7.75 2.77	7.75 2.77						
					0.04	0.04		514				OFF RAMP TO REST AREA
					0.06	0.06		695				ON RAMP FROM REST AREA
					0.05	0.05		507				OFF RAMP TO SR 209
					0.04	0.04		574				ON RAMP FROM SR 209
					0.04	0.04		583				RAMP "E" OFF RAMP TO IR 70 EB
					0.04	0.04		759				RAMP "D" OFF RAMP (LEFT) TO IR 70 WB
					0.04	0.04		550				RAMP "F" ON RAMP FROM IR 70 EB
					0.05	0.05		578				RAMP "C" ON RAMP FROM IR 70 WB
					0.03	0.03		535			1	OFF RAMP E TO USR 40
					0.04	0.04		607			1	OFF RAMP C TO USR 40
								154				ON RAMP D FROM USR 40
										29	2	SE OFF RAMP TO USR 22
I	GUE	SB IR 77	2.50 14.45	10.25 17.22	7.75 2.77	7.75 2.77						
					0.03	0.03		752				OFF RAMP TO SR 209
					0.05	0.05		458				ON RAMP FROM SR 209
					0.03	0.03		737				RAMP "A" OFF RAMP TO IR 70 WB
					0.04	0.04		762				RAMP "H" OFF RAMP (LEFT) TO IR 70 EB
					0.03	0.03		553				RAMP "B" ON RAMP FROM IR 70 WB
					0.04	0.04		420				RAMP "G" ON RAMP FROM IR 70 EB
					0.04	0.04		275				ON RAMP A FROM USR 40
					0.03	0.03		664		15	2	OFF RAMP B TO USR 40
										18	3	NW OFF RAMP TO USR 22
I	GUE	IR 77	TOTALS		21.76			10677		62	9	
					</							

LOCATION 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.

LOCATION	LOCATION				DETAIL		ITEM QUANTITIES				PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
	COUNTY	ROUTE	S.L.M. MILES				RPM	RPM CASTING	PRISMATIC RETRO-REFLECTOR		ONE-WAY		TWO-WAY			
			FROM	TO							WHITE	YELLOW	YELLOW/YELLOW	WHITE/RED	YELLOW/RED	
I	GUE	IR 70 NORTH BOUND														
			2.50	10.25	REM		341				341				LANE LINE AT 120' SPACING	
			14.45	17.22	REM		122				122				LANE LINE AT 120' SPACING	
		OFF RAMP TO REST AREA			2		15						15			
		ON RAMP FROM REST AREA			1		14						9	5		
		OFF RAMP TO SR 209			2		15						15			
		ON RAMP FROM SR 209			1		11						7	4		
		RAMP E OFF RAMP TO IR 70 EB			2		13						13			
		RAMP D OFF RAMP LEFT TO IR 70 WB			2		19						19			
		RAMP F ON RAMP FROM IR 70 EB			1		10						5	5		
		RAMP C ON RAMP FROM IR 70 WB			1		10						5	5		
		RAMP E OFF RAMP TO US 40 EB			REM		22						9	13	GORE AREA AND 80' SPACING RAMP EL	
		RAMP C OFF RAMP TO US 40 WB			REM		33						14	19	GORE AREA AND 80' SPACING RAMP EL	
		RAMP D ON RAMP FROM US 40			REM		33						7	26	GORE AREA AND 80' SPACING RAMP EL	
		SE RAMP TO US 22			REM		11							11	80' SPACING RAMP EL	
		NE RAMP FROM US 22			REM		13							13	80' SPACING RAMP EL	
I	GUE	IR 70 SOUTH BOUND														
			2.50	10.25	REM		341				341				LANE LINE AT 120' SPACING	
			14.45	17.22	REM		122				122				LANE LINE AT 120' SPACING	
		RAMP A OFF RAMP TO IR 70 WB			2		15						15			
		RAMP H OFF RAMP LEFT TO IR 70 EB			2		17						17			
		RAMP B ON RAMP FROM IR 70 WB			1		10						5	5		
		RAMP G ON RAMP FROM IR 70 EB			1		8						5	3		
		OFF RAMP TO SR 209			2		19						19			
		ON RAMP FROM SR 209			1		11						7	4		
		RAMP B OFF RAMP TO US 40			REM		25						16	9	GORE AREA AND 80' SPACING RAMP EL	
		RAMP A ON RAMP FROM US 40			REM		24						7	17	GORE AREA AND 80' SPACING RAMP EL	
		NW RAMP TO US 22			REM		21							21	80' SPACING RAMP EL	
		NW LOOP FROM US 22			REM		21							21	80' SPACING RAMP EL	
I	GUE	TOTALS					1316									

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SHEET NUMBER.													ITEM	ITEM EXT. NO.	TOTALS	UNIT	DESCRIPTION	SHT NO.
2	3	4	5	6	10	11	17	18	19	21	22	23						
				2744			3164	14151					202	23500	20059	SQ.YD.	WEARING COURSE REMOVED	
		1600											202	23501	1600	SQ.YD.	WEARING COURSE REMOVED, AS PER PLAN	4
			1316										202	54001	1316	EACH	RAISED PAVEMENT MARKERS REMOVED AND DISPOSED, AS PER PLAN	
							35004		24113				254	01000	59117	SQ.YD.	PAVEMENT PLANING, ASPHALT CONCRETE	
				37030									254	01001	37030	SQ.YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	4
					21865	12694	5641	162					407	10000	40362	GALLON	TACK COAT	
					14577	8463	3763	110					407	14000	26913	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
222182													407	98000	222182	FT	TACK COAT MISC.: FOR LONGITUDINAL JOINT	
					12146	7052	3130	119					442	10003	22447	CU.YD.	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) WITH SUPPLIMENT 1059 WARRANTY, AS PER PLAN	2
					14170	8227	3652	96					442	10101	26145	CU.YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE A (446), AS PER PLAN	2
								412					516	31011	412	FT	2" DEEP JOINT SEALER, AS PER PLAN	
	160												614	11100	160	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
				10									614	12460	10	EACH	WORK ZONE MARKING SIGN	
				46									614	13000	46	CU.YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
	4												614	18601	4	SIGN MONTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	5
				21.04									614	20400	21.04	MILE	WORK ZONE LANE LINE, CLASS II	
				42.08									614	22000	42.08	MILE	WORK ZONE EDGE LINE, CLASS I	
				10677									614	28000	10677	FT	WORK ZONE GORE MARKING, CLASS II	
						7581							617	10101	7581	CU.YD.	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	2
						41.65							618	40600	41.65	MILE	RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE)	
												1316	621	00100	1316	EACH	RPM	
									46.78				644	00100	46.78	MILE	EDGE LINE	
										21.76			644	00200	21.76	MILE	LANE LINE	
										10677			644	00400	10677	FT	CHANNELIZING LINE	
										62			644	00500	62	FT	STOP LINE	
										9			644	01300	9	EACH	LANE ARROW	
		LUMP											614	11000	LUMP		MAINTAINING TRAFFIC	
													619	16000	1	MONTH	FIELD OFFICE, TYPE A	
													623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
													624	10000	LUMP		MOBILIZATION	

GENERAL SUMMARY

GUE-77-2.50