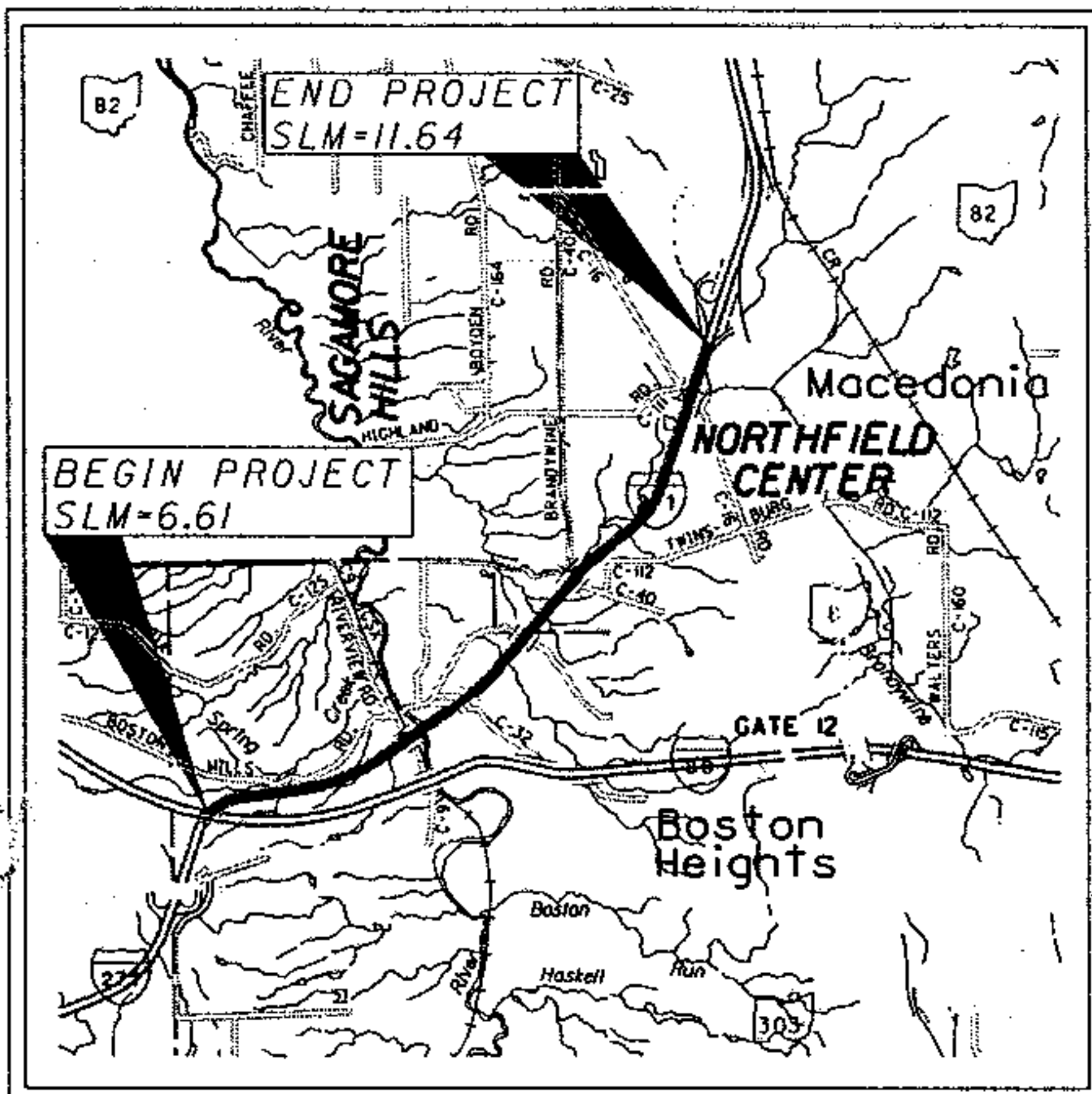


STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
SUM-271-6.61

PID NO.
19871
FEDERAL PROJECT NO.
CONSTRUCTION PROJECT NO.

LOCATION MAP



1997 SPECIFICATIONS

THE STANDARD 1997 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 THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY TO TRAFFIC AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH IN THE PLANS AND ESTIMATES.

APPROVED *David R. Draper*
DATE 4/30/99 DISTRICT DEPUTY DIRECTOR

APPROVED *Gordon Proctor Jr.*
DATE 5-20-99 DIRECTOR, DEPARTMENT OF
TRANSPORTATION

PROJECT DESCRIPTION:

THIS IMPROVEMENT WILL CONSIST OF MILLING, PAVEMENT REPAIR AND REPLACING THE SURFACE COURSE.

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SUM - 272 - 6.61

995021

DIST 04

PID# 19871

07/07/99

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	

ENGINEERS SEAL:



SIGNED: *B. P. Olson*
DATE: 5-3-99

STANDARD CONSTRUCTION
DRAWINGS

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
BP-3.1	10-28-94	MT-105.10M	7-1-92	921	6-14-95
		MT-105.11M	7-1-92		
MT-35.10M	1-30-95			806	9-9-97
MT-35.11M	1-30-95	TC-41.20M	6-21-94		
MT-95.30M	10-10-88	TC-52.10M	4-3-79		
MT-98.12M	6-24-93	TC-52.20M	4-3-79		
MT-98.13M	6-24-93	TC-65.10	7-7-95		
MT-98.14M	6-24-93	TC-65.11	7-7-95		
MT-98.15M	6-24-93	TC-65.12	7-7-95		
MT-98.16M	6-24-93				
MT-99.20M	4-29-88				

PLAN PREPARED BY:

District	
Four	
Production	

Scope of Work

The intent of this project is to plane both 12' wide lanes as well as all of the inside shoulder and 2' of the outside shoulder to a depth of 2" and replace with new Item 448 material throughout the entire length of the project (SLM 6.61 to SLM 11.64). Full and partial depth repair(s) shall be done as detailed on sheet 15 and 16. When directed by the Engineer, the contractor shall provide a milled trench or other acceptable method to provide drainage of water from the planed locations within the project which would otherwise obstruct free drainage of water from pavement surfaces. All labor, equipment and materials necessary to provide drainage of planed surfaces shall be considered incidental to Item 254, Pavement Planing, Bituminous. Prior to the removal of any auxiliary pavement markings, the contractor shall record in a sufficient manner the location of such markings in order to replace them in kind at the same locations.

Profile and Alignment for Resurfacing Projects

The proposed pavement planing and resurfacing shall follow the alignment and profile of the existing pavement. The propose asphalt concrete inlay shall have a uniform thickness of 2 inches.

The existing vertical alignment has been examined on meets design speed criteria.

Construction plans, showing the original alignment and profile, are available for inspection at the District 4 office.

407 TACK COAT

The rate of application of the 407 tack coat shall be subject to adjustment as directed by the engineer. The plan quantities indicate as average application rate of 0.125 gallons per square yard of tack coat for estimating purposes.

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.

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.

UTILITY NOTIFICATION

AT LEAST TWO (2) DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE REGISTERED UTILITY PROTECTION SERVICE AND THE OWNERS OF EACH UNDERGROUND UTILITY FACILITY.

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GENERAL NOTES

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Advance Notice to Pave

The contractor shall submit for approval to the district construction engineer a detailed schedule 15 days prior to the placement of the overlay courses, and how they propose to prosecute the paving operations. The details shall show the order of performance of each stage (start to finish) of the work including the maintenance of traffic that will be used.

CONVERSION OF METRIC STANDARD DRAWINGS

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

Item 448, Asphalt Concrete, Type IH, As Per Plan

The asphalt surface course specified herein shall be Item 448, Type IH designed for HEAVY traffic volume. The requirements of 441, 448 and Supplemental Specification 1055 shall apply. Deviation from these are as follows.

This item shall be provided using crushed air-cooled slag as the coarse aggregate per 703.05.

The asphalt binder for this item shall be PG 70-22 polymer modified with SBS in accordance with Supplemental Specification 1055.

Prior to the removal of any auxiliary pavement markings, the contractor shall record in a sufficient manner the location of such markings in order to replace them in kind at the same locations.

GENERAL NOTES

SUM-271-6.61

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. TWO ELEVEN (11) FOOT LANES IN EACH DIRECTION SHALL BE MAINTAINED FROM 6:00AM TO 7:00PM EACH DAY MONDAY THRU FRIDAY THROUGHOUT THE DURATION OF THE PROJECT FOR ALL WORK. FOR EVERY HOUR OR PORTION THEREOF BEYOND THE GIVEN LIMITATIONS, IF TWO LANES IN EACH DIRECTION ARE NOT MAINTAINED, LIQUIDATED DAMAGES OF \$1000 PER HOUR WILL BE ASSESSED. A MINIMUM OF ONE ELEVEN (11) FOOT LANE SHALL BE MAINTAINED AT ALL OTHER TIMES.
2. THE MILLING OPERATION WILL BE LIMITED TO AN AMOUNT THE CONTRACTOR CAN MILL, REPAIR AND REOPEN IN ONE NIGHT.
3. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 297-0801 EXT 209, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
4. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET.
5. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO. THE ABOVE ITEMS SHALL BE UTILIZED IN CONFORMANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, LATEST REVISION.
6. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS PER SHEET 16.
7. THE USE OF SHOULDERS TO MAINTAIN TRAFFIC IS PROHIBITED. SHOULD ANY EXISTING OR NEW SHOULDER AREAS BECOME DAMAGED OR DESTROYED DUE TO THE CONTRACTOR'S NEGLIGENCE OR FAILURE TO PROVIDE ADEQUATE SIGNS, BARRICADES, CONES, FLAGGERS OR OTHER TRAFFIC CONTROL DEVICES, THE RESTORATION OF THE SHOULDERS WILL BE AT THE CONTRACTORS EXPENSE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
8. SIGNS FURNISHED SHALL BE IN NEW OR LIKE NEW CONDITIONS. LIKE NEW SIGNS SHALL BE SUBJECT TO THE APPROVAL OF THE PROJECT ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR PROVIDING AND MAINTAINING LIGHTS, SIGNS, AND BARRICADES FOR THE MAINTENANCE OF TRAFFIC AND SAFETY OF HIS/HER WORK AT THE LOCATIONS SHOWN ON THESE PLANS OR AS DIRECTED BY THE ENGINEER.
9. THE LIGHTING OF THE WORK AREA SHALL BE APPROVED BY THE PROJECT ENGINEER ON A NIGHTLY BASIS. ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTAL ITEMS NEEDED TO PERFORM THE LIGHTING OF THE WORK AREA SHALL BE INCIDENTAL TO THE COST OF THE PROJECT.

MAINTENANCE OF TRAFFIC NOTES

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MAINTENANCE OF TRAFFIC (CON'T)

10. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE WORK ZONES THAT ALTERNATELY CLOSE BOTH THE PASSING LANE AND THE DRIVING LANE UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES.
11. IN ADDITION TO THE REQUIREMENTS OF 614 WORK ZONE PAVEMENT MARKINGS (614.10), AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH TEMPORARY MARKINGS) ALL LANE AND CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH REPLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 TEMPORARY PAVEMENT MARKINGS.
12. A QUANTITY OF 15 CU. YDS. OF 614 BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS PRIOR TO RESURFACING, AS DIRECTED BY THE ENGINEER. (SS 921 OR HPM MAY BE USED AS ALTERNATE MATERIAL WHEN 448 IS NOT AVAILABLE).
13. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION,. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
14. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THIS QUANTITY SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING SIGNS: OW-62 [BUMP], OW-167 [NO EDGE LINES], OW-171 [UNEVEN LANES SYMBOL]

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

ITEM 614 TEMPORARY CHANNELIZING LINE, CLASS I	917 LIN.FT.
ITEM 614 TEMPORARY LANE LINE, CLASS I	20 MILE
ITEM 614 WORK ZONE MARKING SIGN	24 EACH

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECTS MAY BE ONGOING IN AREAS IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECTS LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECT OR PROJECTS. IN ACCORDANCE WITH 105.07 THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS, A MUTUALLY ACCEPTABLE WORK SCHEDULE, SUBJECT TO THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVAL FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

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MAINTENANCE OF TRAFFIC NOTES

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CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

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

DATE FOR COMPLETION

IN ADDITION TO THE REQUIREMENTS OF SECTION 108.06 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 ON THE PROJECT SHALL BE COMPLETED ON OR BEFORE THE 60 DAY FOLLOWING THE DATE OF THE DISTRICT HIGHWAY MANAGEMENT ADMINISTRATOR'S WRITTEN AUTHORIZATION TO PROCEED WITH THE CONSTRUCTION ACTIVITIES, BUT NO LATER THAN THE COMPLETION DATE INDICATED IN THE PROPOSAL.

THEREFORE, THE AWARDED CONTRACTOR HAS A WINDOW OF TIME IN WHICH TO CONSTRUCT THIS PROJECT. FAILURE TO COMPLETE ALL CONSTRUCTION ACTIVITIES, ONCE INITIATED, EITHER WITHIN THIS WINDOW OF TIME OR BY THE GIVEN DATE FOR COMPLETION SHALL RESULT IN A BREACH OF CONTRACT BY THE AWARDED CONTRACTOR.

TRAFFIC CONTROL INSPECTOR

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

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MAINTENANCE OF TRAFFIC NOTES

SUM-271-6.61

LAW ENFORCEMENT OFFICER WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE CURRENT EDITION, LATEST REVISION OF THE OHIO MANUAL OF UNIFORM TRAFFIC DEVICES (OMUTCD), THE CONTRACTOR SHALL PROVIDE THE SERVICE OF LAW ENFORCEMENT OFFICERS (LEO) WITH AN OFFICIAL PATROL CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING LIGHTS, AT THE ENGINEER'S REQUEST, FOR THE PURPOSE OF CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

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

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.

INFORMATION REGARDING ARRANGEMENTS AND PAYMENTS BY THE CONTRACTOR FOR THE LEO MAY BE OBTAINED BY CONTACTING THE OHIO HIGHWAY PATROL 1970 WEST BROAD STREET, COLUMBUS, OHIO 43223, TELEPHONE: 614-466-2660. IF AFTER CONTACTING THE OHIO HIGHWAY PATROL, IT IS DETERMINED THAT THEY CANNOT SUPPLY THE LEO, THEN AN AUTHORIZED MUNICIPAL OR COUNTY POLICE OFFICER EQUIPPED WITH A MARKED AND FLASHER-LIGHT EQUIPPED OFFICIAL POLICE OR PATROL CAR SHALL BE PROVIDED.

LEO'S 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 100 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 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.

CALCULATED

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MAINTENANCE OF TRAFFIC NOTES

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ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

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

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

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

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

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

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

THE PCMS 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 THE CONTRACTOR ON HIS CONTRACT.

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MAINTENANCE OF TRAFFIC NOTES

SUM-271-6.61

ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (CON'T)

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 FOR EACH SIGN MONTH OF 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.

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

METHOD OF PAYMENT

PAYMENT FOR THE MAINTENANCE OF TRAFFIC ITEMS, UNLESS SPECIFIED SEPARATELY, SHALL BE AT THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT AND INCIDENTALS TO COMPLETE THE WORK AS DETAILED IN THE PLANS.

HOLIDAY LANE CLOSURES

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPENED TO TRAFFIC AND ALL SIGNALS IN OPERATION DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

MEMORIAL DAY	FOURTH OF JULY	LABOR DAY
DAY OF THE WEEK	TIMES ALL LANES MUST BE OPEN TO TRAFFIC	
SUNDAY	12:00N FRIDAY	THROUGH 12:00N MONDAY
MONDAY	12:00N FRIDAY	THROUGH 12:00N TUESDAY
TUESDAY	12:00N MONDAY	THROUGH 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

THERE SHALL NOT BE ANY EXTENSIONS DUE TO WEATHER OR MATERIAL DELAYS WHATSOEVER.

SHALL THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES OF \$5,000 PER DAY.

GENERAL NOTES

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

2. While the need for certain advisory signing is noted herein, it is not intended that this be indicative of all signing that may be required to advise or warn 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 herein may be required.

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

5. Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC - 9.2 and Item 622.

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

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

8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate any difference in elevation between pavements, a 8:1 min. 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 widths designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the drop-off depth does not exceed 5" and approval is granted by the Project Engineer.

10. Pavement Repairs (or similar work):

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

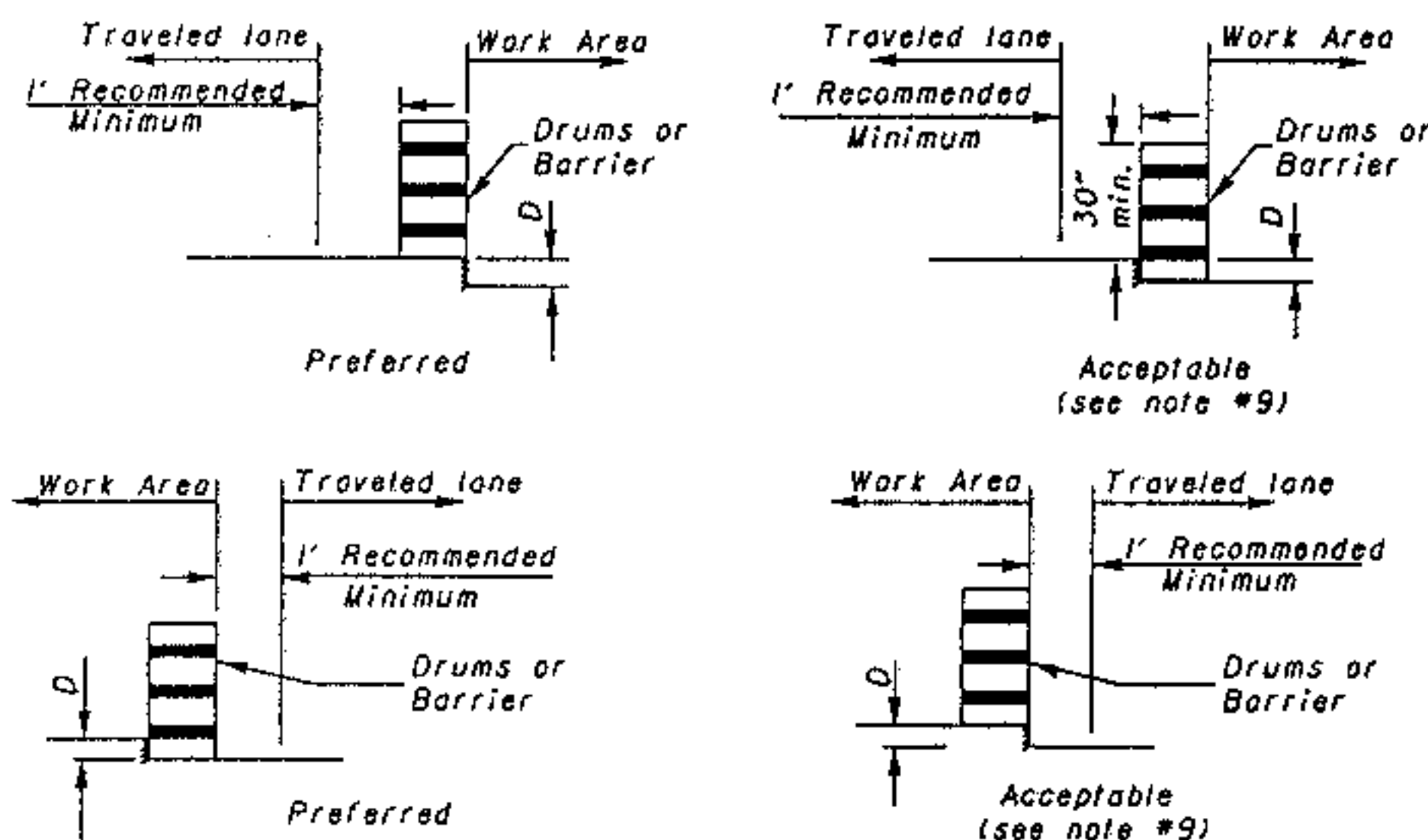
b. Lengths of 60 feet or less - repairs shall be affected in accordance with Item 255.08. Drums may be used as a separator adjacent to the traveled lane.

CONDITION I

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

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

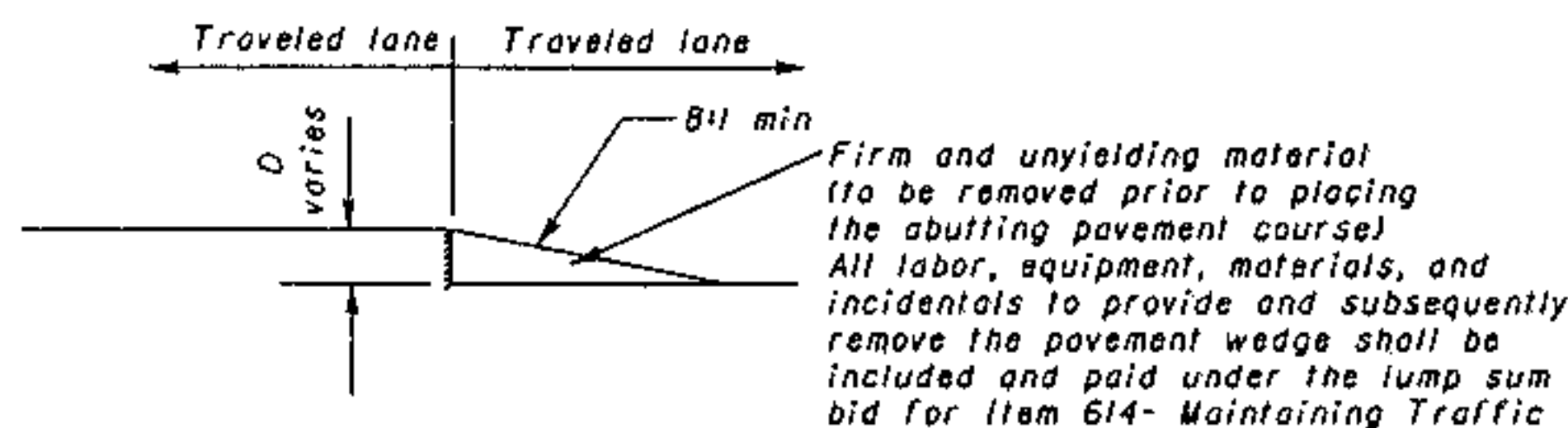
*Cones may be used for daytime only conditions.



OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.
2. OW-171, OWP-171, and OC-53 signs required.



CONDITION II

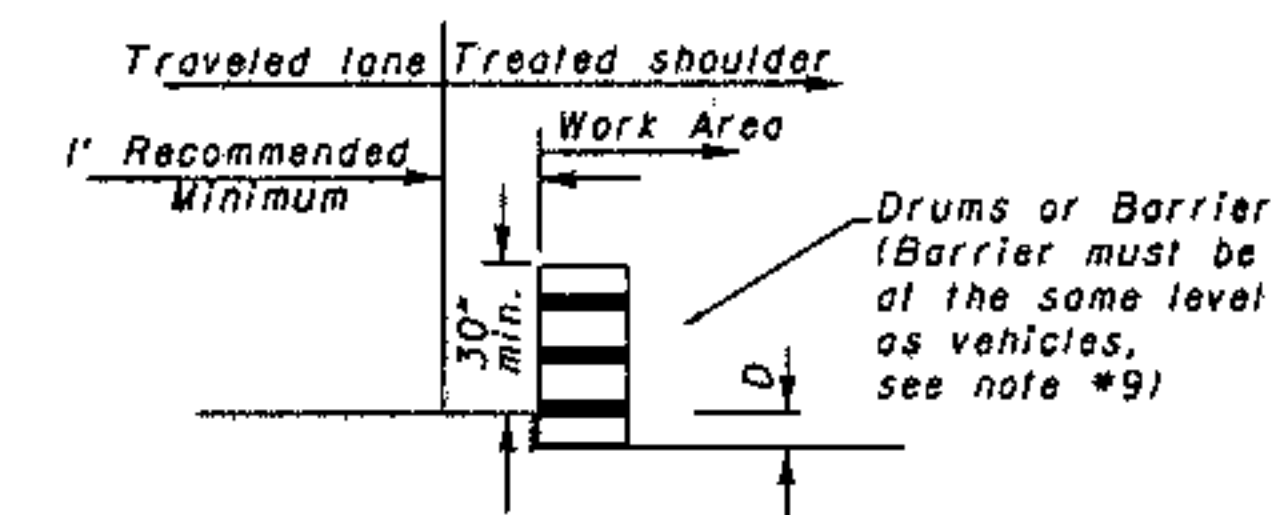
DROPOFFS WITHIN GRADED SHOULDER AREA

1. The treatments indicated below are for use in conjunction with resurfacing, planing, or excavation 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 1/2	1.) If edgelines are present, no treatment necessary. or 2.) Erect OW-171, OWP-171, and OC-53 signs
1 1/2 - 5	1) If min. lane widths* requirements can be met, maintain lanes utilizing drums as shown below. - or - 2) If min. lane width* requirements cannot be met, close adjacent lane utilizing drums. (use only on 3 or more lanes) - or - 3) Optional shoulder treatment

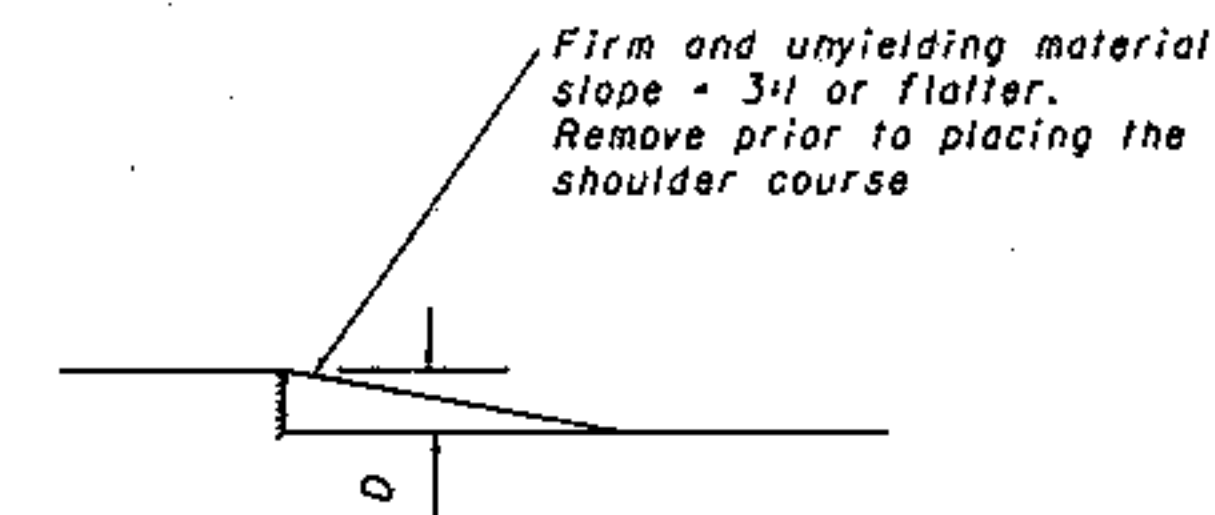
*Minimum lane widths shall be 10' unless otherwise specified in the plans.



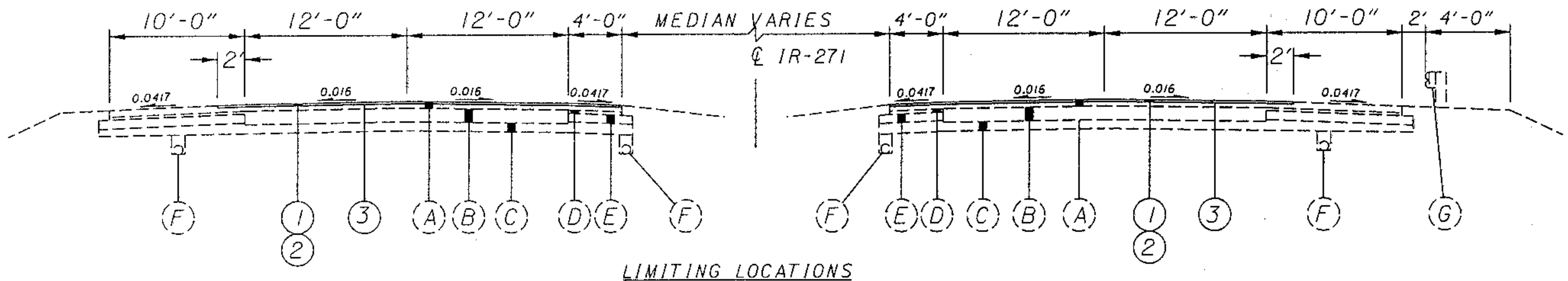
OPTIONAL SHOULDER TREATMENT

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

2. OW-151 signs required.



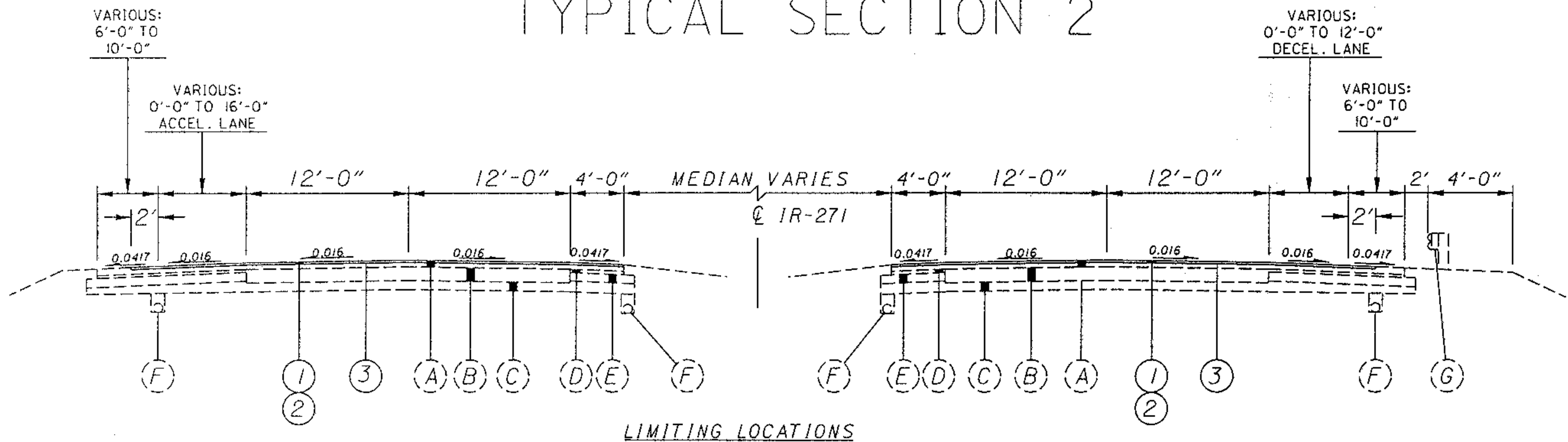
TYPICAL SECTION I



S.L.M. 6.61 TO S.L.M. 11.43 = 4.82 MILES

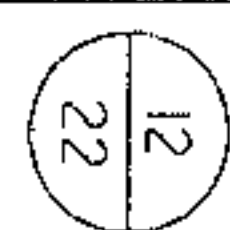
- ① 448 2" ASPHALT CONCRETE SURFACE COURSE, TYPE IH, AS PER PLAN
- ② 254 2" PAVEMENT PLANING, BITUMINOUS
- ③ 407 TACK COAT
- (A) EXISTING ASPHALT OVERLAYS
- (B) EXISTING REINFORCED CONCRETE PAVEMENT
- (C) EXISTING SUBBASE
- (D) EXISTING 3" BITUMINOUS AGGREGATE BASE
- (E) EXISTING 5" AGGREGATE BASE
- (F) EXISTING 6" SHALLOW PIPE UNDERDRAINS
- (G) EXISTING GUARDRAIL, TYPE 5

TYPICAL SECTION 2



S.L.M. 11.43 TO S.L.M. 11.64 = 0.21 MILES

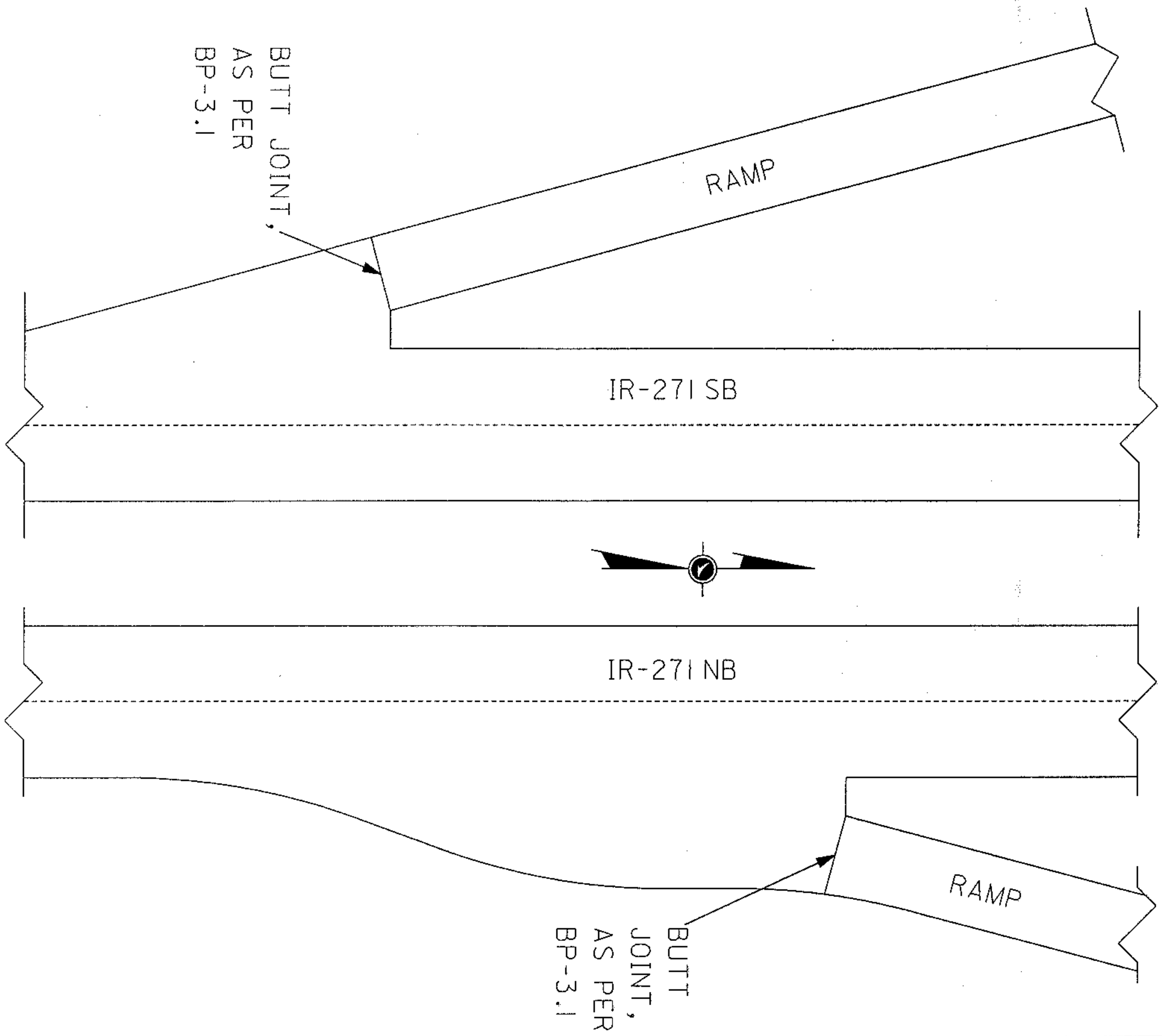
- (1) 448 2" ASPHALT CONCRETE SURFACE COURSE, TYPE IH, AS PER PLAN
- (2) 254 2" PAVEMENT PLANING, BITUMINOUS
- (3) 407 TACK COAT
- (A) EXISTING ASPHALT OVERLAYS
- (B) EXISTING REINFORCED CONCRETE PAVEMENT
- (C) EXISTING SUBBASE
- (D) EXISTING 3" BITUMINOUS AGGREGATE BASE
- (E) EXISTING 5" AGGREGATE BASE
- (F) EXISTING 6" SHALLOW PIPE UNDERDRAINS
- (G) EXISTING GUARDRAIL, TYPE 5



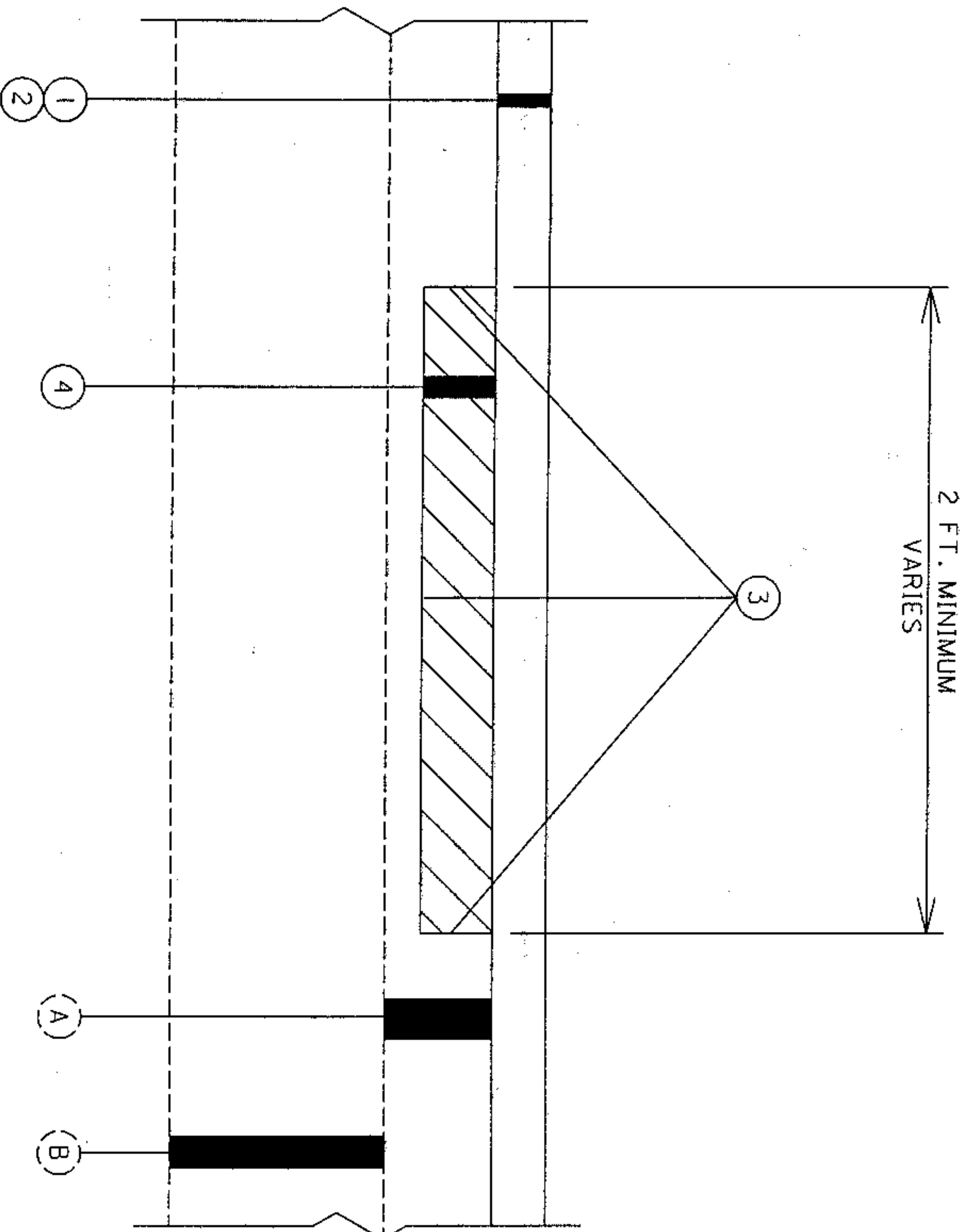
SUM-271-6.61

TYPICAL SECTION

CALCULATED
CHECKED



BUTT JOINTS ON RAMPS AT SR 8



ITEM 251. PARTIAL DEPTH PAVEMENT REPAIR

A quantity of this item shall be provided for use as directed by the engineer. This item shall be used to repair surface deteriorations and transverse and longitudinal joint spalling in the existing asphalt overlays. The repair depth shall be to the top of the underlying existing reinforced concrete pavement and the replacement material shall meet the requirements of Item 448, Type 2. The maximum compacted depth of any on layer shall be 3 inches. The asphalt concrete shall be compacted with a Type 1 pneumatic tire roller and a steel roller as per 401.11.

Payment shall be based on the actual number of cubic yards of pavement repair to the limits designated by the engineer. The following estimated quantity has been carried to the general summary:

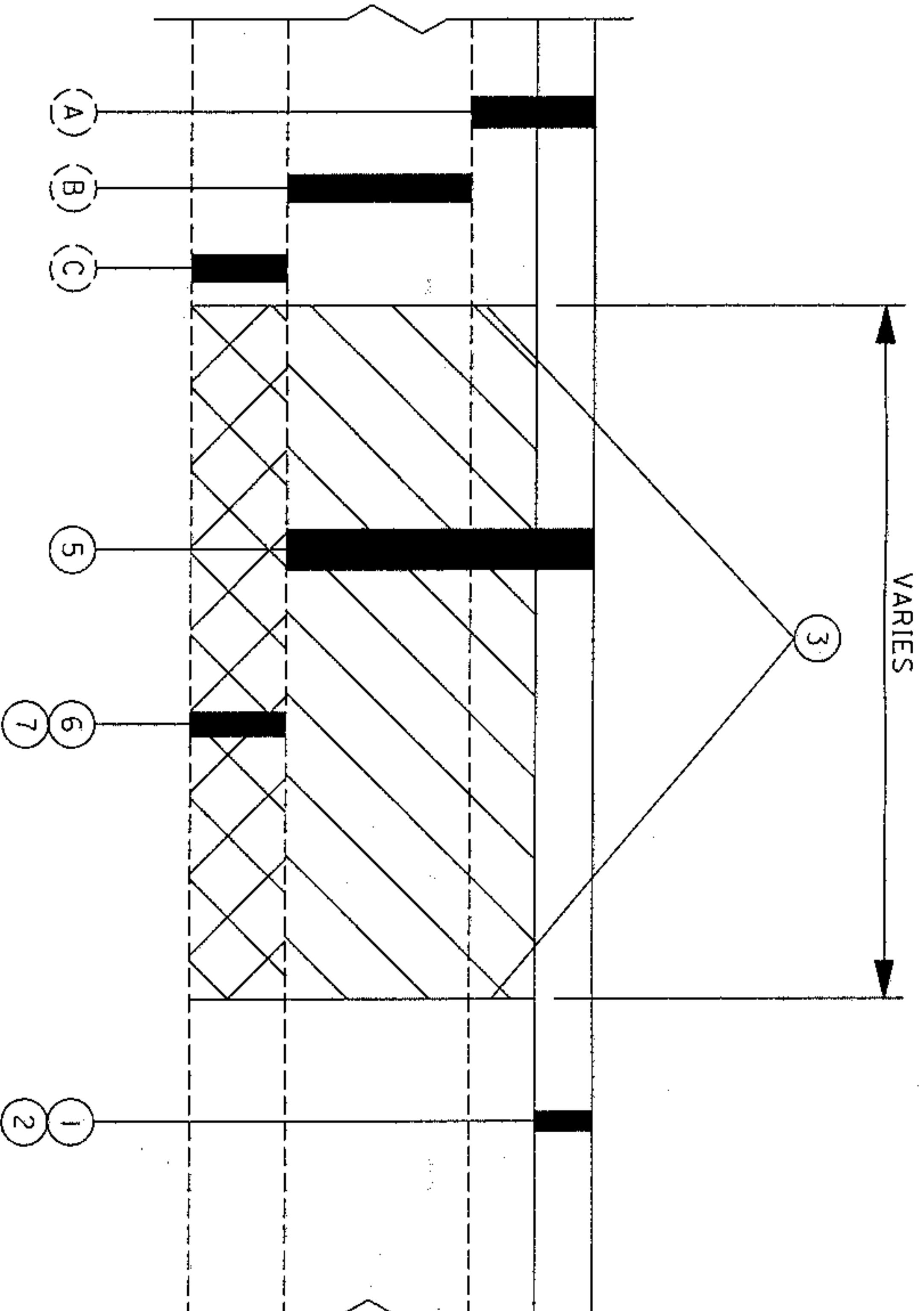
ITEM 251 Partial Depth Pavement Repair 100 CU. YD.

- ① 446 2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN
- ② 254 2" PAVEMENT PLANING, BITUMINOUS
- ③ 407 TACK COAT
- ④ 251 PARTIAL DEPTH PAVEMENT REPAIR
- ⑤ 253 PAVEMENT REPAIR
- ⑥ 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
- ⑦ 304 AGGREGATE BASE
- ①A EXISTING ASPHALT OVERLAYS
- ①B EXISTING REINFORCED CONCRETE PAVEMENT
- ①C EXISTING SUBBASE

SUM -271-6.61

251 PARTIAL DEPTH PAVEMENT REPAIR

CALCULATED
CHECKED



Item 253, Pavement Repair

** FOR LEGEND, SEE SHEET 15.

A quantity of this item shall be provided for use as directed by the engineer. This item shall consist of removing deteriorated pavement full depth and replacing it with 301 Bituminous Aggregate Base. The maximum compacted depth of any on layer of 301 shall be 5 inches.

Method of measurement shall be per 253.05 and payment shall be based on the actual number of cubic yards of pavement removed and replaced to the limits designated by the engineer.

In addition to the above requirements, all full depth repairs designated by the engineer shall be completed and open to traffic for seven (7) days prior to the pavement planing operation commencing in that location.

The following estimated quantity has been carried to the general summary:

Item 253 Pavement Repair 100 CU. YD.

Item 203, Excavation Not Including Embankment Construction

In areas where unsuitable subgrade material is encountered during the pavement repair operation. This item of work shall consist of removing and disposing of all unsuitable material by excavating the existing subgrade and subbase to an average depth of 6 inches or as directed by the engineer. Exact limits of removal shall be determined by the engineer. Cared shall be taken not to undermine the existing concrete pavement. All equipment, labor, tools, and incidentals necessary to complete this item shall be included in the unit price bid for Item 203 Excavation not including embankment construction. The following estimated quantity has been carried to the general summary. This quantity is based on an estimate of approximately 10% of the total pavement repair areas requiring undercutting.

The following estimated quantity has been carried to the general summary:

Item 203, Excavation Not Including Embankment Construction 10 CU. YD.

Item 304 Aggregate Base

The following estimated quantity has been provided and shall be used as directed by the engineer to backfill areas which were excavated under Item 203 excavation not including embankment construction.

Item 304 Aggregate Base 10 CU. YD.

Item 605 Aggregate Drains, As Per Plan

The following estimated quantity has been provided and shall be used, in conjunction with Item 203, and as directed by the engineer, at areas where unsuitable subgrade has been excavated and replaced with Item 304 aggregate base. The bid price shall also include sawing the existing asphalt shoulder, tack coat and the replacement of Item 301 for the shoulder in kind.

Item 605 Aggregate Drains, As Per Plan 100 LIN. FT.

CALCULATED
CHECKED

253 FULL DEPTH PAVEMENT REPAIR

SUM - 271-6.61

RAISED PAVEMENT MARKER, INSTALLATION ONLY, AS PER PLAN

THE DEPARTMENT WILL SUPPLY THE BARE RPM CASTINGS FOR ITEM 621, RAISED PAVEMENT MARKER CASTINGS, INSTALLATION ONLY, AS PER PLAN. THE CONTRACTOR SHALL FURNISH THE RETRO-REFLECTORS AND ALL OTHER MATERIALS REQUIRED TO COMPLETE THIS ITEM.

THE CONTRACTOR WILL BE INFORMED AT THE PRE-CONSTRUCTION CONFERENCE AS TO THE LOCATION IN COLUMBUS OF THE DEPARTMENT SUPPLIED RPM MATERIALS. WHEN SPECIFIED, ADDITIONAL RPM MATERIALS WILL BE STORED WITHIN THE DISTRICT FOR USE ON THIS PROJECT. THE CONTRACTOR OR SHALL PICK UP DEPARTMENT SUPPLIED MATERIALS AT THE SPECIFIED LOCATION(S) FOR TRANSPORT TO THE WORK SITE OR THE CONTRACTOR'S STORAGE FACILITY. AN AUTHORIZATION FOR PICK-UP FORM WILL BE FURNISHED BY THE DISTRICT CONSTRUCTION ENGINEER TO THE CONTRACTOR AT THE PRE-CONSTRUCTION CONFERENCE. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND/OR THE PARTIES LISTED ON THE AUTHORIZATION FORM IN WRITING A LEAST 5 WORKING DAY PRIOR TO PICK-UP OF DEPARTMENT SUPPLIED MATERIALS. THE MATERIAL SHALL BE STORED 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 CASTING RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED OR WERE NOT RETURNED TO THE DEPARTMENT.

ALL CASTING SHALL BE PLACED THE SAME WORKING DAY THE RPM SLOTS ARE CUT INTO THE PAVEMENT. THE ENGINEER MAY ALLOW RPM PLACEMENT FOR RECENTLY RESURFACED ROADWAY TO BEGIN AS SOON AS THE PERMANENT PAVEMENT MARKING FOR THE SECTION IS COMPLETED AND DRY.

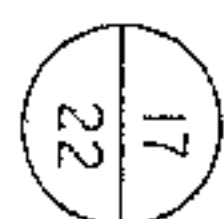
RPMS SHALL NOT BE INSTALLED WHEN THE AMBIENT AIR TEMPERATURE AND THE PAVEMENT SURFACE TEMPERATURE ARE LESS THEN 40 F. BOTH PART A AND B OF THE RPM CASTING EPOXY SHALL BE HEATED TO 100° +/- 10° F. DURING INSTALLATION BETWEEN 40° AND 50° F. RPMS INSTALLED WHEN TEMPERATURES ARE BELOW 50° F. SHALL BE PROTECTED FORM TRAFFIC A MINIMUM OF 60 MINUTES.

RPM REPLACEMENT / REMOVAL

STANDARD CONSTRUCTION DRAWINGS

TC-65.10	7-7-95	TC-65.12	7-7-95
TC-65.11	7-7-95		

LOCATION				ITEM 202	ITEM 621							REMARKS
COUNTY	ROUTE	CENTER LINE LOG MILES		RPM REMOVED FOR STORAGE EACH	INSTALLATION ONLY				PRISMATIC RETRO-REFLECTORS			
		FROM	TO		RPM CASTING EACH			ONE-WAY	TWO-WAY			
								WHITE EACH		WHITE/RED EACH		
SUM	I-271	6.61	11.64	664		442			442			LANE LINE NB AND SB
SUM	I-271	11.55	11.62	21		21					21	CHANNELIZING LINE AT SR 82 AND ENTRANCE AND EXIT RAMPS
TOTAL:				685		463			442		21	TOTALS CARRIED TO GENERAL SUMMARY



SUM-271-6.61

RAISED PAVEMENT MARKER SUB-SUMMARY

CALCULATED
CHECKED

CENTER LINE						GENERAL SPEC. 640 MATERIAL TYPE: 642, TYPE 1 (LONGLINE), TYPE 2 (AUXILIARY)		
COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	TOTAL MILES	EQUIVALENT SOLID LINE	COMMENTS
TOTAL								

LANE LINE									
COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	TOTAL MILES	4" LANE LINE		COMMENTS
						DASHED	SOLID		
SUM	271	6.61	ICT SR 303	11.64	MACEDONIA CORP. LIMIT	10.133			Includes Ramps A & D @ I-271 & SR 8
TOTAL						10.133			

EDGE LINE												
COUNTY	ROUTE	TRU LOG	FROM	TRU LOG	TO	WHITE EDGE LINE			YELLOW EDGE LINE			COMMENTS
						TOTAL MILES	HIGH-WAY	RAMP	TOTAL MILES	HIGH-WAY	RAMP	
SUM	271	6.61	ICT. SR 303	11.64	MACEDONIA CORP. LIMIT	10.06	10.06		10.06	10.06		
TOTAL						10.06	10.06		10.06	10.06		

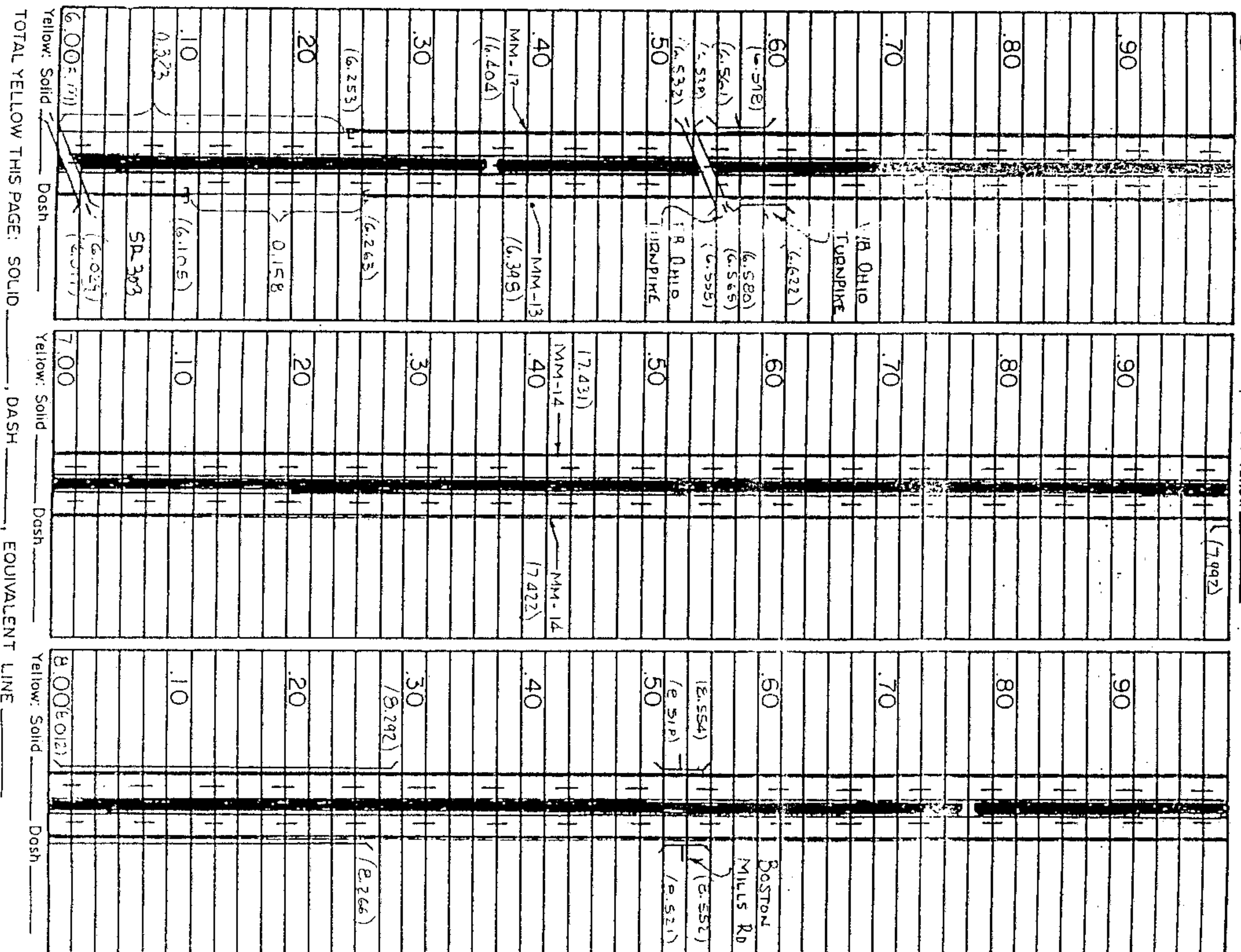
AUXILIARY																		
CTY	ROUTE LOCATION	TRU LOG	8" CHANNEL LINE	24" STOP LINE	24" TRANSVERSE LINE		12" CROSS-WALK LINES	WORD ON PAVEMENT		LANE ARROWS				SYMBOL MARKINGS		ISLAND MARK-INGS	DOTTED LINES	
					WHITE	YELLOW		ONLY		TURN LEFT	TURN RIGHT	THRU	COMB.	RxR	SCHOOL			
								72"	96"						72"			96"
			LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SQ FT	LIN FT	
SUM	I-271 NB OFF RAMP TO SR 8	(11.597)	668		496													
SUM	I-271 SB FROM SR 8	(11.599)	249															
TOTAL			917		496													

22 18		PAVEMENT MARKING SUB-SUMMARY	CALCULATED CHECKED
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COUNTY Summit ROUTE 271

1. *Chlorophyll a* (Chl *a*)

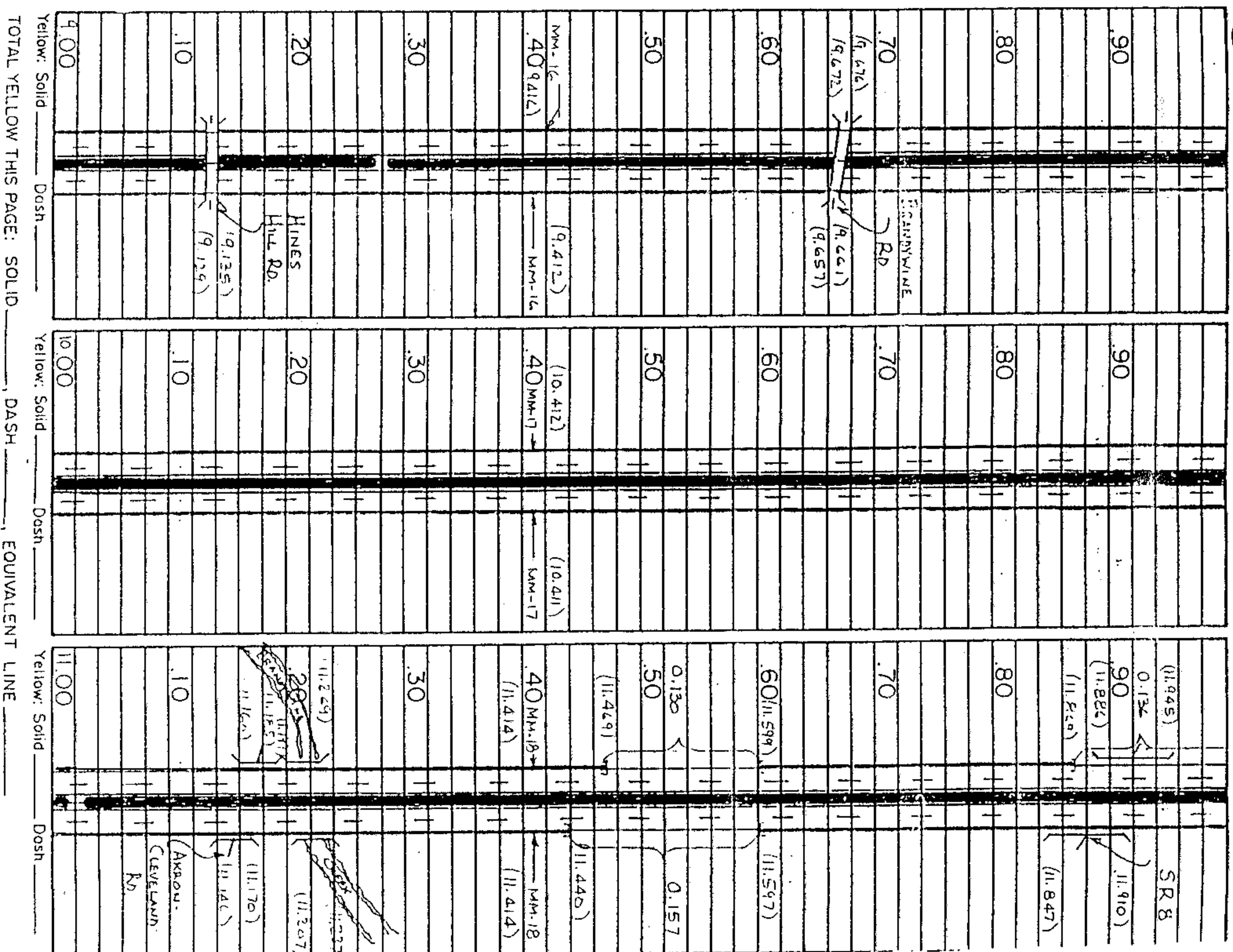
Equivalent Yellow _____



SUM-271-6.61

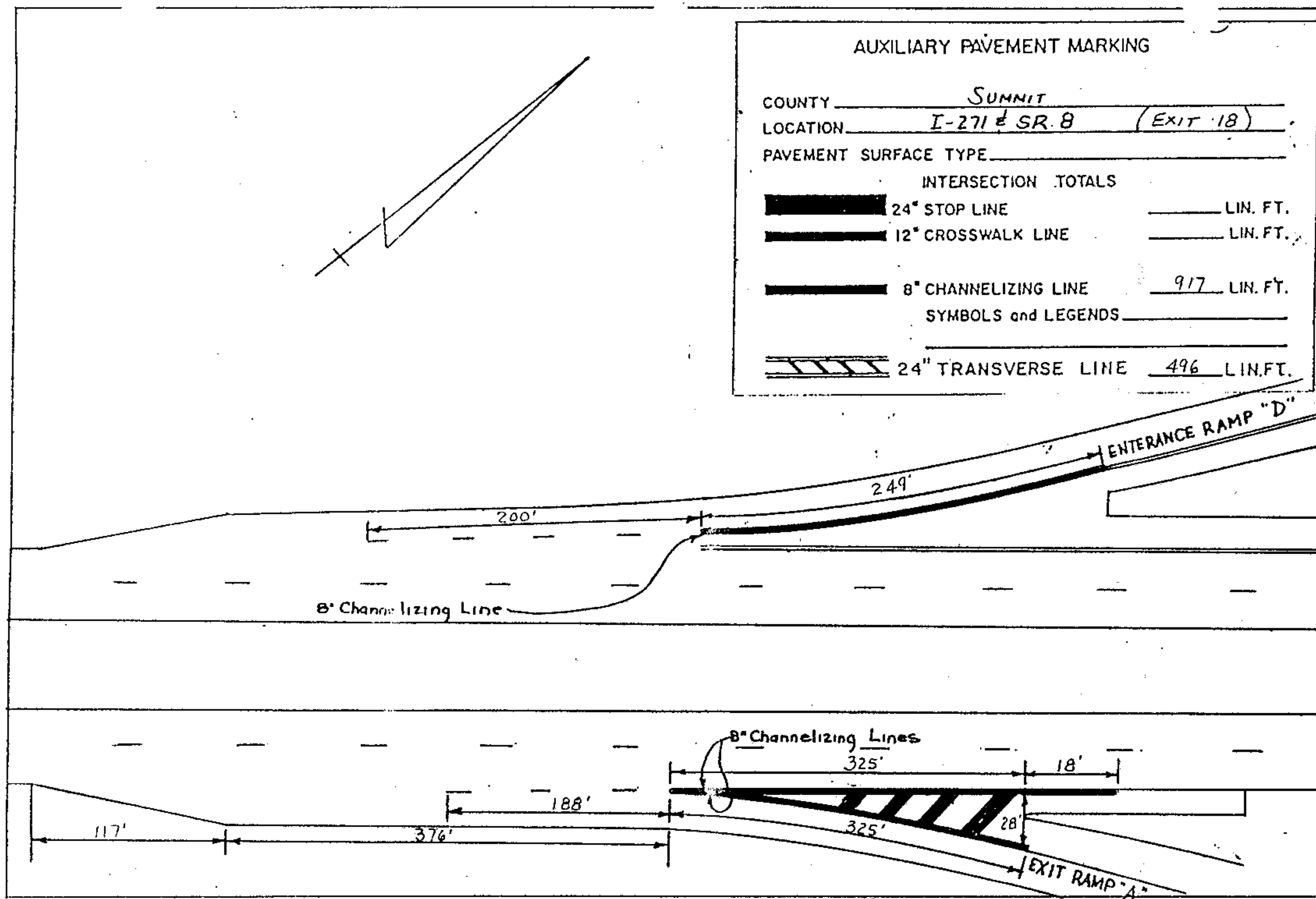
SHEET 4 OF 6

White: Dash



SUM-271-6.61

PAVEMENT MARKINGS



SHEET NUMBER				ITEM	ITEM EXT.	G AND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
								ROADWAY	
				202	54100	685	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE	
				203	12000	10	CU YD	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	
								DRAINAGE	
				605	31101	100	LIN FT	AGGREGATE DRAIN, AS PER PLAN	16
								PAVEMENT	
				251	01002	100	CU YD	PARTIAL DEPTH PAVEMENT REPAIR	
				253	02000	100	CU YD	PAVEMENT REPAIR	
				254	01000	168,077	SQ YD	PAVEMENT PLANING, BITUMINOUS	
				304	20000	10	CU YD	AGGREGATE BASE	
				407	10000	21,010	GALLON	TACK COAT	
				448	50001	9,338	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN	3
								TRAFFIC CONTROL	
				621	00300	463	EACH	PRISMATIC RETROREFLECTOR	
				621	00601	463	EACH	RAISED PAVEMENT MARKER CASTING, INSTALLATION ONLY, AS PER PLAN	17
				642	00100	20.12	MILE	EDGE LINE, TYPE 1	
				642	00200	10.133	MILE	LANE LINE, TYPE 1	
				642	00402	917	LIN FT	CHANNELIZING LINE, TYPE 2	
				642	00702	496	LIN FT	TRANSVERSE LINE, TYPE 2	
								MAINTENANCE OF TRAFFIC	
				614	11100	100	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
				614	12460	24	EACH	WORK ZONE MARKING SIGN	
				614	13000	15	CU YD	BITUMINOUS CONCRETE FOR MAINTAINING TRAFFIC	
				614	18601	4	SIGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
				614	20000	20	MILE	TEMPORARY LANE LINE, CLASS 1	
				614	23000	917	LIN FT	TEMPORARY CHANNELIZING LINE, CLASS 1	
				614	11000	LUMP		MAINTAINING TRAFFIC	
				623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
				624	10000	LUMP		MOBILIZATION	
				806	16010	3	MONTH	FIELD OFFICE, TYPE B	
SUM-271-6.61				GENERAL SUMMARY					CALCULATED
									CHECKED

22