

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

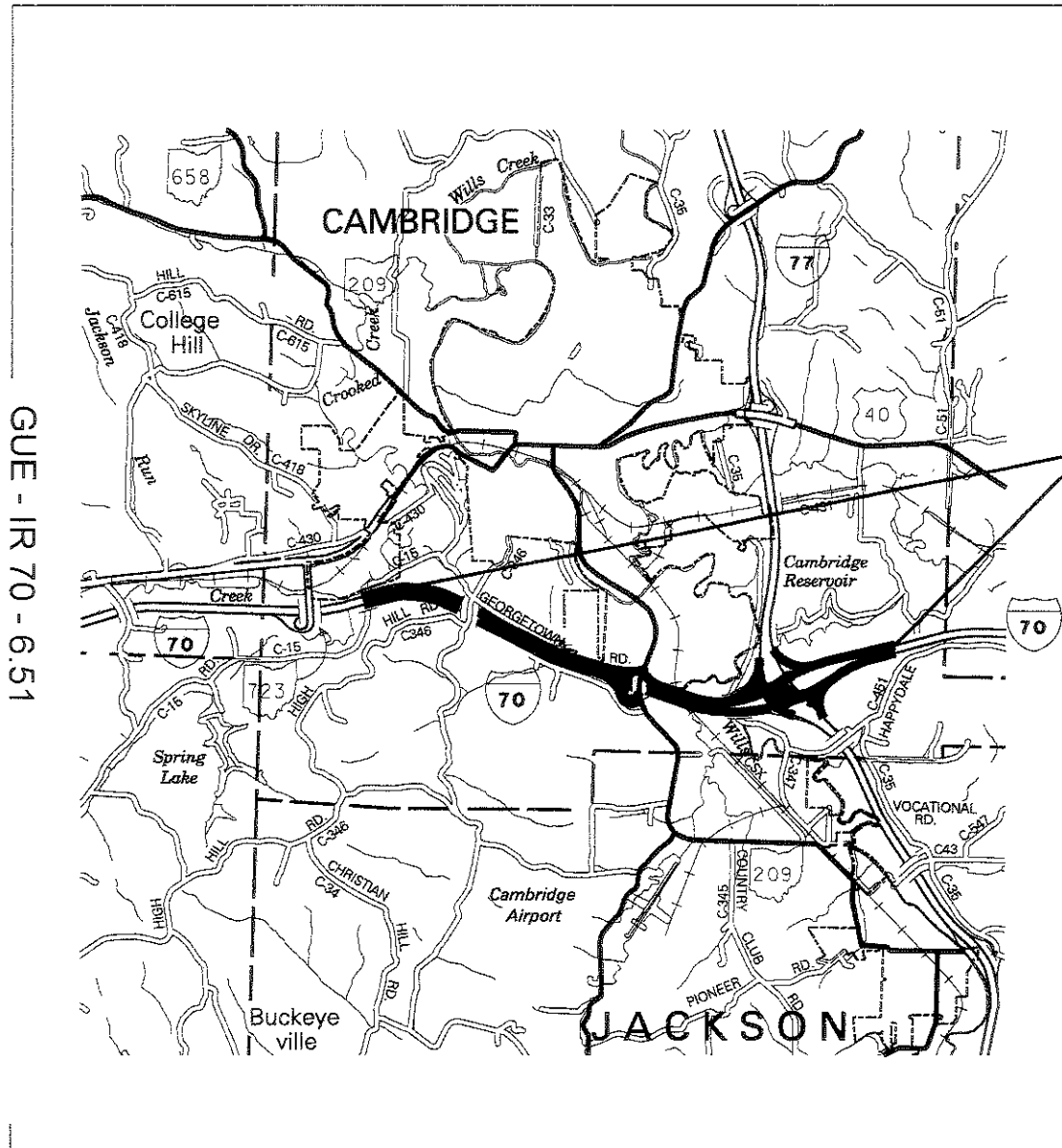
**GUE-70-6.51**  
**CAMBRIDGE TOWNSHIP**  
**GUERNSEY COUNTY**

PROJECT DESCRIPTION:

\* LOCATION 1:

(NIGHT PAVING OPERATION)  
RESURFACING OF 4.04 MILES OF EASTBOUND AND WESTBOUND  
LANES OF I.R. 70 IN GUERNSEY COUNTY FROM S.L.M. 6.51  
TO S.L.M. 10.55. INCLUDING ALL RAMPS AT S.R. 209 AND  
I.R. 70/I.R. 77 INTERCHANGE.  
TRAFFIC CONTROL AND PAVEMENT PLANNING  
AS INDICATED IN THE PLAN.

\* PROJECT EARTH DISTURBED  
AREA = N/A (MAINTANCE PROJECT)  
ESTIMATED CONTRACTOR EARTH  
DISTURBED AREA = N/A  
(MAINTANCE PROJECT)  
NOTICE OF INTENT EARTH  
DISTURBED AREA = N/A  
(MAINTANCE PROJECT)



LOCATION MAP  
PORTION TO BE IMPROVED

LOCATION	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII		NET LENGTH MILES	CITY	VILLAGE
				BEGIN	END			
1	GUE	70	6.51	6.51	10.55	4.04		

I.R. 70 EASTBOUND - STATION EQUATION: STATION 274+30.13 BACK - STATION 272+67.75 AHEAD  
I.R. 70 WESTBOUND - STATION EQUATION: STATION 272+26.34 BACK - STATION 272+67.75 AHEAD

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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.

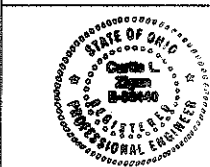
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

STANDARD CONSTRUCTION DRAWINGS

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS
BP-3.1	7-28-00	TC-65.10	10-19-01	832 2-12-03
BP-9.1	7-28-00	TC-65.11	10-19-01	833 2-12-03
		TC-71.10	4-19-02	908 4-19-02
DM-4.3	7-19-02	TC-72.20	1-19-01	
DM-4.4	7-19-02	TC-73.10	1-19-01	
		TC-82.10	4-19-02	
MT-35.10	4-20-01			
MT-98.19	10-18-02			
MT-99.20M	1-30-95			
MT-105.10	10-18-02			
MT-105.11	10-18-02			

**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: Christopher T. Ruple  
DATE: 02/20/03

PLAN PREPARED BY:  
OHIO DEPARTMENT OF TRANSPORTATION  
DISTRICT 5  
9600 JACKSONTOWN ROAD  
JACKSONTOWN, OHIO 43030

APPROVED: Christopher T. Ruple  
DATE: 2/20/03 DISTRICT DEPUTY DIRECTOR

APPROVED: Gordon Proctor  
DATE: 2-6-03 DIRECTOR, DEPARTMENT OF TRANSPORTATION

Dist 5 10/8/2003  
GUE - IR 70 - 6.51  
030492 PID - 25656

FEDERAL PROJECT NO. E035(984)

PID NO. 25656

CONSTRUCTION PROJECT NO.

TITLE SHEET

GUE-70-6.51

1/38

## ITEM 614 WORK ZONE MARKING SIGNS

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

WORK ZONE MARKING SIGNS	LOCATION 1
OW-171 (UNEVEN LANE SYMBOL)	0
OWP-171 (UNEVEN LANES)	0
OW-167 (NO EDGE LINES)	28
R-33 (DO NOT PASS)	0
R-34 (PASS WITH CARE)	0
OW-128 (ROAD CONSTRUCTION AHEAD)	10
OC-8 (END CONSTRUCTION)	10
TOTAL (CARRIED TO THE GENERAL SUMMARY)	48

## 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.

## FEATHERING

FEATHERING OF THE ASPHALT CONCRETE WHERE REQUIRED SHALL BE ACCORDING TO DRAWING BP-3.1, 7-28-00.

## 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.

## TACK COAT

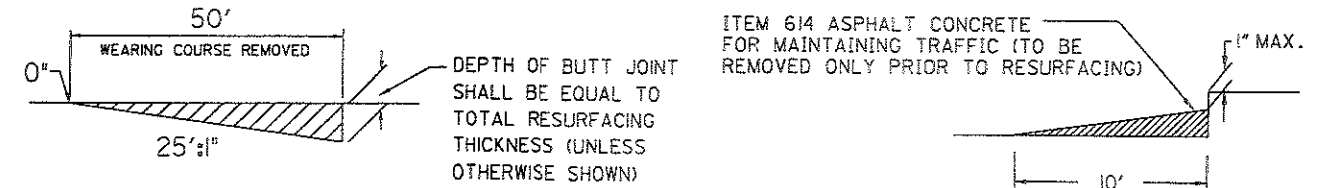
THE RATE OF APPLICATION OF THE 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD AND 0.025 GALLONS PER SQUARE YARD AT THE FACE OF THE TRENCH, FOR ESTIMATING PURPOSES ONLY.

## TACK COAT FOR INTERMEDIATE COURSE

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

## BUTT JOINT

A BUTT JOINT MAY BE REQUIRED AS DIRECTED BY THE PROJECT ENGINEER. AFTER THE JOINT IS CONSTRUCTED, THE DROP OFF CREATED SHALL BE MINIMIZED BY TEMPORARILY FILLING THE VOID TO WITHIN AT LEAST 1" OF THE EXISTING ROADWAY SURFACE (SEE DETAIL BELOW). PLACEMENT AND REMOVAL OF TEMPORARY WEDGE SHALL BE INCLUDED FOR PAYMENT IN THE UNIT BID PRICE FOR THE APPROPRIATE ASPHALT REMOVAL ITEM (PAVEMENT PLANING OR WEARING REMOVED).



## LOCATION 1

ITEM 407 TACK COAT 10 GAL  
 ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC 10 CU.YD.

## NOTIFICATION OF ROAD CLOSURE OR RESTRICTION

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

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

## CONVERSION OF STANDARD CONSTRUCTION DRAWINGS

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

**ITEM 253 - PAVEMENT REPAIR, AS PER PLAN**

AN ESTIMATED QUANTITY FOR PAVEMENT REPAIR HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER. THIS OPERATION SHALL BE PERFORMED BEFORE THE PLANING OPERATION.

THE INTENT OF THIS OPERATION IS TO REPAIR THOSE AREAS OF PAVEMENT OR SHOULDERS WHICH HAVE FAILED AND NOT TO CORRECT SURFACE IRREGULARITIES. THE DEPTH OF EXCAVATION SHALL BE APPROXIMATELY 7". AFTER EXCAVATION HAS BEEN COMPLETED, THE FACE OF THE REPAIR SHALL BE COATED WITH 407 TACK COAT. REPLACEMENT MATERIAL WILL BE 7" OF ITEM 301 ASPHALT CONCRETE BASE, PG64-22 (PLACED AND COMPACTED AS DIRECTED). ALL EXCAVATION NEEDED TO ACHIEVE THE PROPER SLOPES FOR DRAINAGE ON BERMS AND ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NEEDED TO COMPLETE THE WORK DESCRIBED ABOVE SHALL BE PAID FOR UNDER ITEM 253 PAVEMENT REPAIR, AS PER PLAN.

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

ITEM 253 PAVEMENT REPAIR, AS PER PLAN                      2,000 SQ.YD. LOCATION 1

**SHOULDER RESTORATION**

IN ORDER TO PROVIDE POSITIVE DRAINAGE FROM THE ROADWAY SURFACE TO THE SHOULDER BREAK, THE EXISTING ROADWAY SHOULDERS SHALL BE GRADED AND SHAPED USING A GRADER OF ADEQUATE SIZE TO PERFORM THE WORK TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE GRADING AND SHAPING WORK, INCLUDING LABOR AND INCIDENTALS, SHALL BE THE UNIT PRICE BID FOR ITEM SPECIAL - GRADER RENTAL, AND SHALL BE PAID FOR THE ACTUAL NUMBER OF GRADER HOURS WORKED.

ALL EXCESS MATERIAL REMAINING AROUND GUARDRAIL AND OTHER AREAS AFTER THE GRADER WORK IS COMPLETED AND NOT DISPOSED OF ON THE SITE, SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR ALL OF THE ABOVE REMOVAL WORK SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - LOADER RENTAL, AND SHALL BE FOR THE ACTUAL NUMBER OF LOADER HOURS WORKED. ANY OTHER EQUIPMENT, LABOR OR INCIDENTALS REQUIRED TO COMPLETE THIS ITEM SHALL BE INCLUDED THEREIN FOR PAYMENT. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE PURPOSES.

ITEM SPECIAL	LOCATION 1
GRADER RENTAL (HOURS)	10
LOADER RENTAL (HOURS)	5

**MAINTENANCE OF TRAFFIC**

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

**ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE**

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

ITEM 202 RAISED PAVEMENT MARKERS, REMOVED FOR STORAGE (LOCATION 1)      710 EACH

**ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN**

THE ENTIRE ROADWAY SURFACE SHALL BE PLANED TO A DEPTH AS INDICATED IN THE PLANS, AS DIRECTED BY THE ENGINEER. THE ROADWAY SHALL BE PLANED SUCH THAT A MINIMUM SLOPE OF 0.0156 FT/FT IS CREATED FROM THE CENTER LINE TO THE EDGE OF PAVEMENT. ALL SPECIFICATIONS OF ITEM 254 SHALL APPLY.

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

ALL OF THE GRINDINGS FROM THE PLANING OPERATION SHALL BE DELIVERED TO THE OHIO DEPARTMENT OF TRANSPORTATION: GUERNSEY COUNTY GARAGE ON U.S. 40, 6490 GLEN HILL RD. CAMBRIDGE, OHIO 43725 (PH. 740-432-7586). THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

THE QUANTITY FOR ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN IS SHOWN ON SHEETS II-29 AND IS CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.

**SPOT LEVELING COURSE**

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE PROJECT ENGINEER IN ORDER TO RESTORE THE CROWN OF THE EXISTING PAVEMENT. THE SPOT LEVELING COURSE SHALL BE USED AND PLACED IN A WHERE MORE THAN 1.25 INCHES OF CORRECTION IS NECESSARY. THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE.

LOCATION 1

ITEM 448 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 76-22                      50 CU.YD.

**ITEM 614 WORK ZONE STRIPING**

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO TEMPORARILY STRIPE THE AUXILARY MARKINGS ON THE INTERMEDIATE COURSE AS DIRECTED BY THE PROJECT ENGINEER.

LOCATION 1

ITEM 614 WORK ZONE LANE LINE, CLASS 1, 642 PAINT	8.46 MILE
ITEM 614 WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT	5,921 FT.
ITEM 614 WORK ZONE STOP LINE, CLASS 1, 642 PAINT	83 FT.
ITEM 614 WORK ZONE LANE ARROW, CLASS 1, 642 PAINT	3 EACH

GT0001.HCH 4/14/03

GENERAL NOTES

GUE-70-6.51

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**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

ITEM 407 TACK COAT, MISC.: FOR LONGITUDINAL JOINT 39,631 FT.

**ITEM 632 DETECTOR LOOP, AS PER PLAN**

ALL DETECTOR LOOPS SHALL BE CUT INTO THE EXISTING PAVEMENT PRIOR TO THE PLANING OPERATION AT A DEPTH SO AS NOT TO BE DISTURBED. PLACEMENT SHALL BE AS PER SPECIFICATION 632.10. ALL MATERIALS (INCLUDING SPLICE KITS), LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO FURNISH A COMPLETED, IN PLACE, WORKING DETECTOR LOOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 632 DETECTOR LOOP, AS PER PLAN. ALL LOCATIONS, SIZES AND ORIENTATIONS SHALL BE VERIFIED AND SUPPLIED TO THE CONTRACTOR BEFORE CONSTRUCTION.

LOCATION 1

ITEM 632 DETECTOR LOOP, AS PER PLAN 4 EACH

**ITEM 618 RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE)**

THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE INSTALLATION OF ITEM 618 RUMBLE STRIPS, TYPE 2, AS PER STANDARD CONSTRUCTION DRAWING BP-9.1.

(NOTE: RUMBLE STRIPS TO BE INSTALLED ON EXISTING I.R. 70 WHERE RESURFACING OCCURS.)

ITEM 618 RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE) 15.02 MILE

**ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN (FOR USE DURING NIGHT PAVING OF I.R. 70 AND RAMP CLOSURE NIGHT PAVING OPERATIONS)**

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, CHANGEABLE MESSAGE SIGNS, ON SITE, FOR THE DURATION OF THE PROJECT. THE SIGNS SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS MAINTAINED BY THE DIRECTOR. THE LIST CURRENTLY CONTAINS CLASS III WITH A MINIMUM LEGIBILITY DISTANCE OF 650 FT. EACH SIGN SHALL BE TRAILER MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLE-SHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. SURFACES OF A 9-INCH BY 15-INCH MINIMUM SIZE FACING TRAFFIC.

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

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND 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 THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OF PREPROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ONBOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHOULD BE EMPLOYED. ALTHOUGH THREE-PHRASES MAY BE USED IN USUAL CONDITIONS. THE PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST ONCE.

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

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

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

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

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

THIS PROJECT SHALL REQUIRE 6 (SIX) ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGNS. THE FOLLOWING QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO PERFORM THE WORK AS DESCRIBED ABOVE.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN, 12 SIGN MONTH

GENERAL NOTES

GUE-70-6.51

670001.MGN 4/14/03

**WORK RESTRICTIONS AND LANE CLOSURES -  
(FOR LOCATION 1 WORK ON E.B. & W.B. LANES  
OF I.R. 70 & RAMPS. (NIGHT PAVING OPERATIONS)**

NO WORK SHALL BE PERFORMED AND THERE WILL BE NO LANE OR RAMP RESTRICTIONS BETWEEN THE HOURS OF 5:30 AM TO 7:30 PM MONDAY THRU FRIDAY, 10:00 AM TO 7:30 PM SATURDAY AND 10:00 AM TO 9 PM SUNDAY. NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS: MEMORIAL DAY, JULY 4 AND LABOR DAY.

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME 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 THURSDAY THROUGH 12:00N MONDAY

AREAS THAT ARE PLANED SHALL NOT BE OPENED TO TRAFFIC. ALL PLANED AREAS MUST BE INLAID WITH PROPOSED COURSE OF ASPHALT CONCRETE PRIOR TO BEING OPENED TO TRAFFIC.

THE RAMPS TO BE PAVED (NIGHT PAVING), SHALL BE CLOSED TO TRAFFIC AND DETOURED AS DIRECTED BY THE PROJECT ENGINEER.

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.

AT NO TIME SHALL ANY ONE LANE CLOSURE EXCEED 2.5 MILES IN LENGTH.

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 CLOSURES BEFORE THE ALLOWABLE TIME OR FAILURE TO REOPEN ALL LANES 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 PURPOSES DESCRIBED ABOVE:

ITEM 614 MAINTAINING TRAFFIC LUMP SUM

**FLOODLIGHTING**

FLOODLIGHTING FOR THE WORK SITE FOR OPERATIONS 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 THEIR 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 ITEM 614 MAINTAINING TRAFFIC.

**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 SETUP 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. LOCATION 1 200 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.

670001.MGN 4/14/03

GENERAL NOTES

GUE - 70-6.51

## 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 OVERSEE 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 WORK ZONE 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 WORKZONE 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.

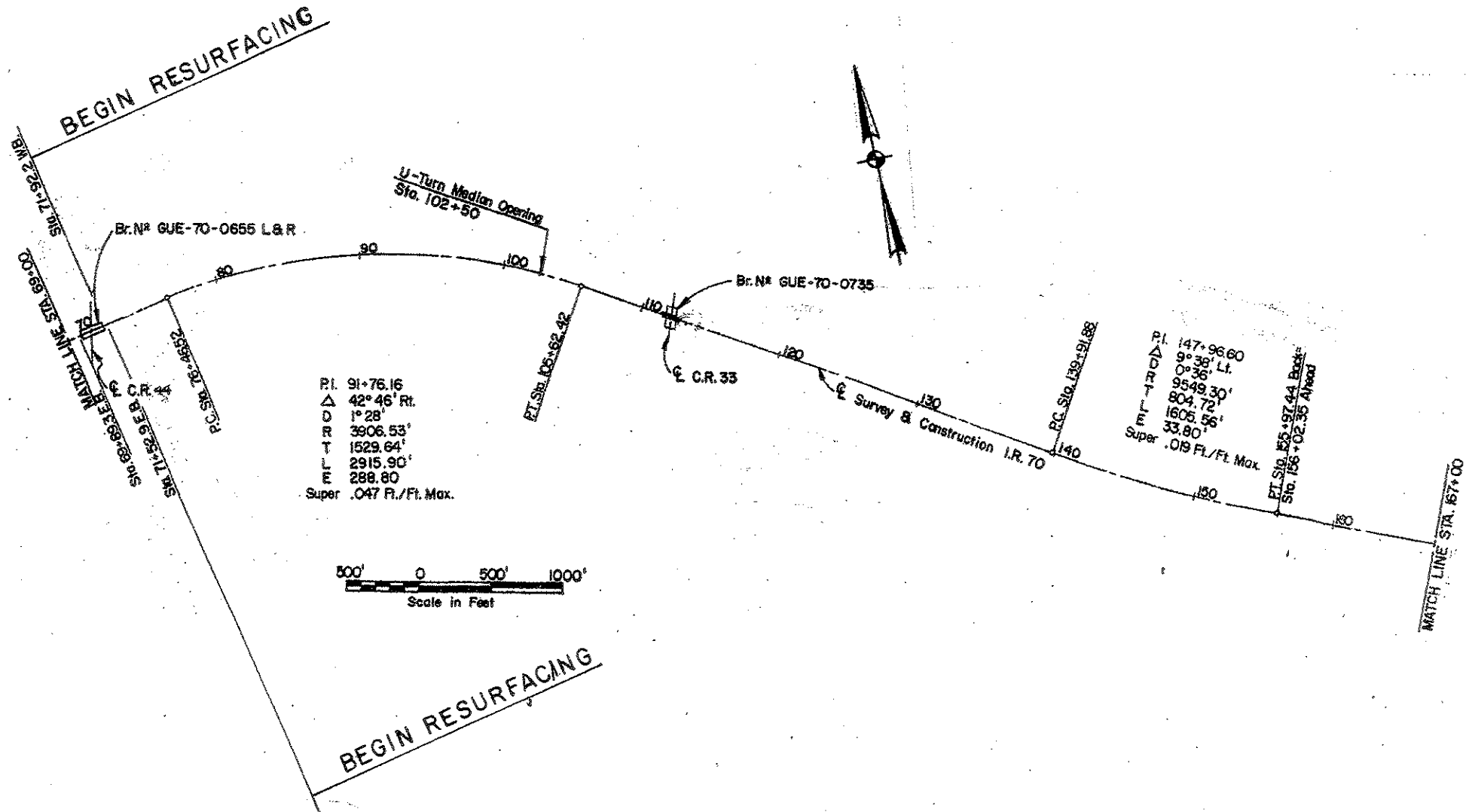
## COOPERATION BETWEEN CONTRACTORS

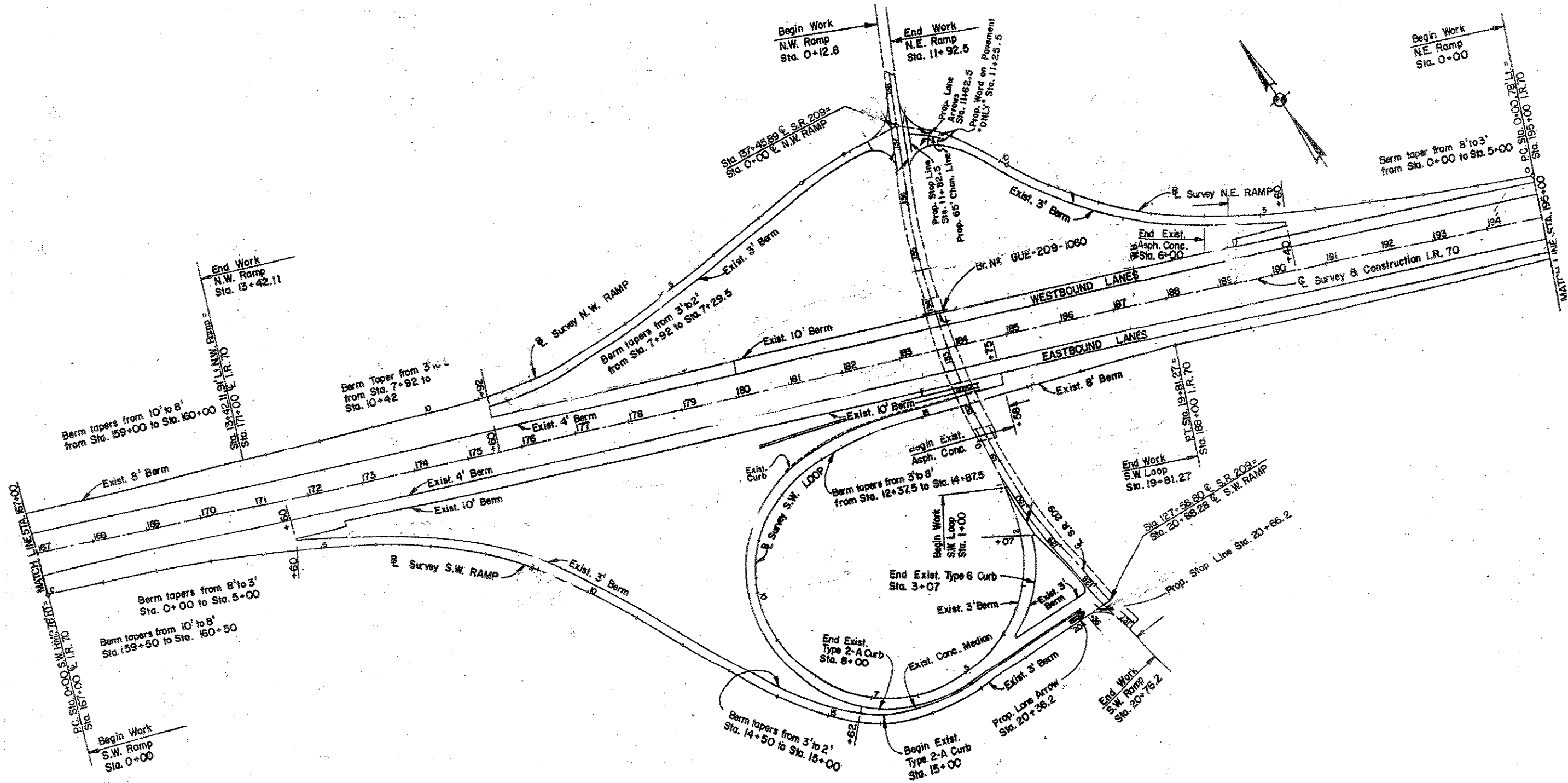
THE STATE OF OHIO HAS A CONTRACT TO IMPROVE I.R. 70 IN GUERNSEY COUNTY FROM S.L.M. 6.51 TO S.L.M. 10.55. DUE TO AN OVERLAP OF WORK ZONES, IT IS PERTINENT THAT THIS CONTRACTOR FULLY COOPERATES WITH THE GUE-77-7.54 CONTRACTOR (COMPLETE GENERAL) AS OUTLINED IN SECTION 105.07 OF THE SPECIFICATIONS.

CALCULATED  
CREATED  
**GENERAL NOTES**

**GUE-70-6.51**

5A  
38



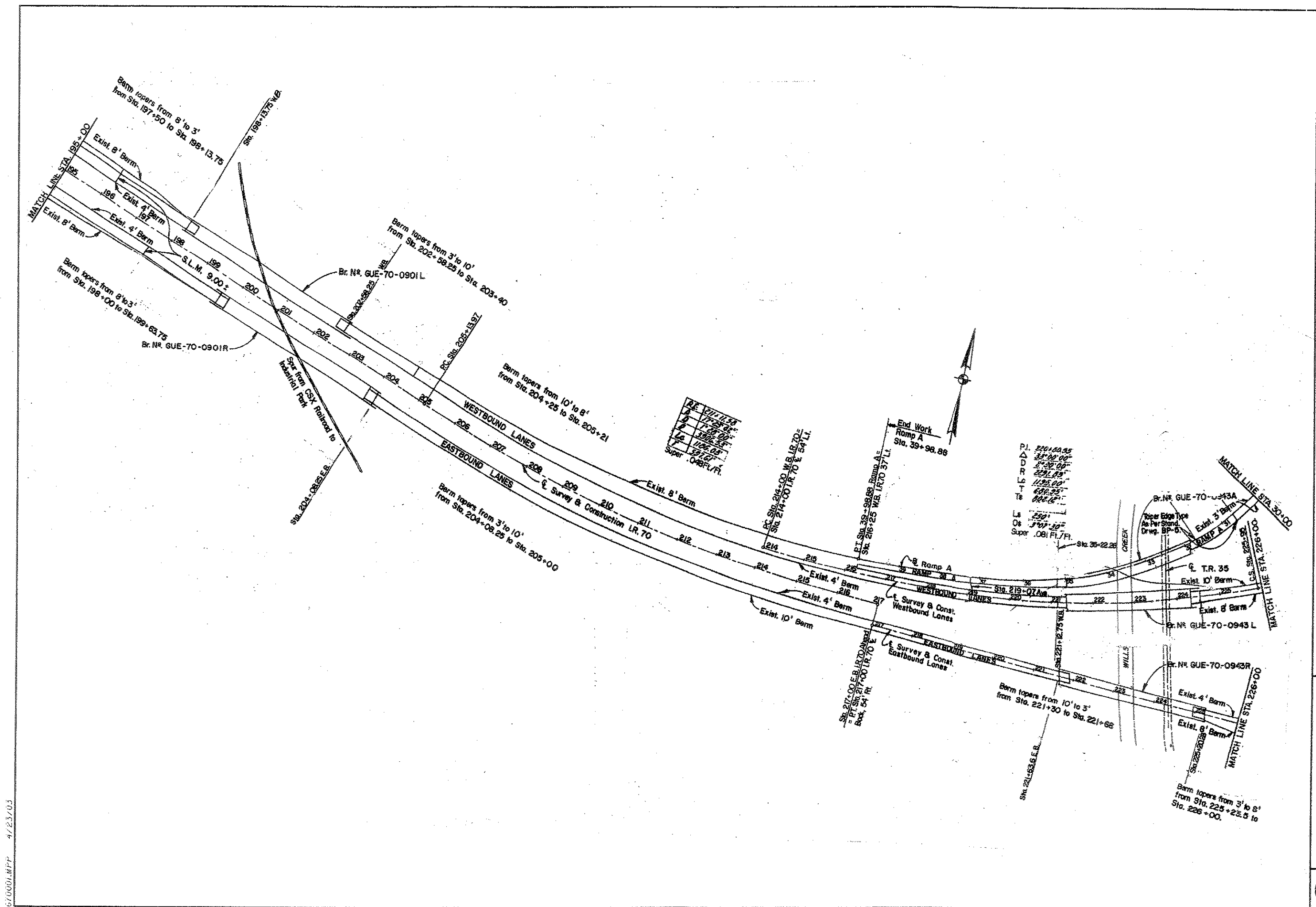


CALCULATED  
CHECKED

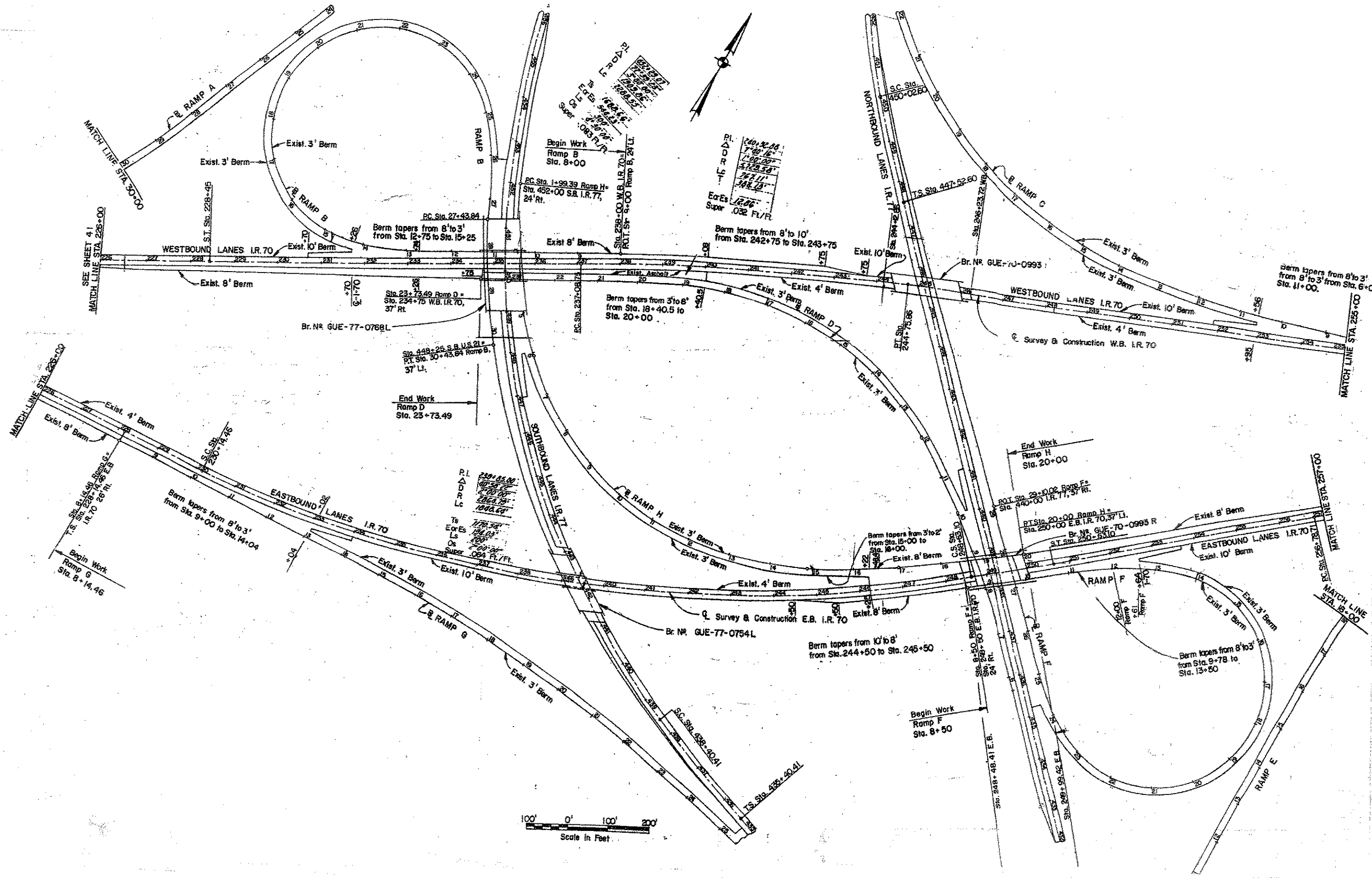
PLAN SHEET

GUE-70-6.51

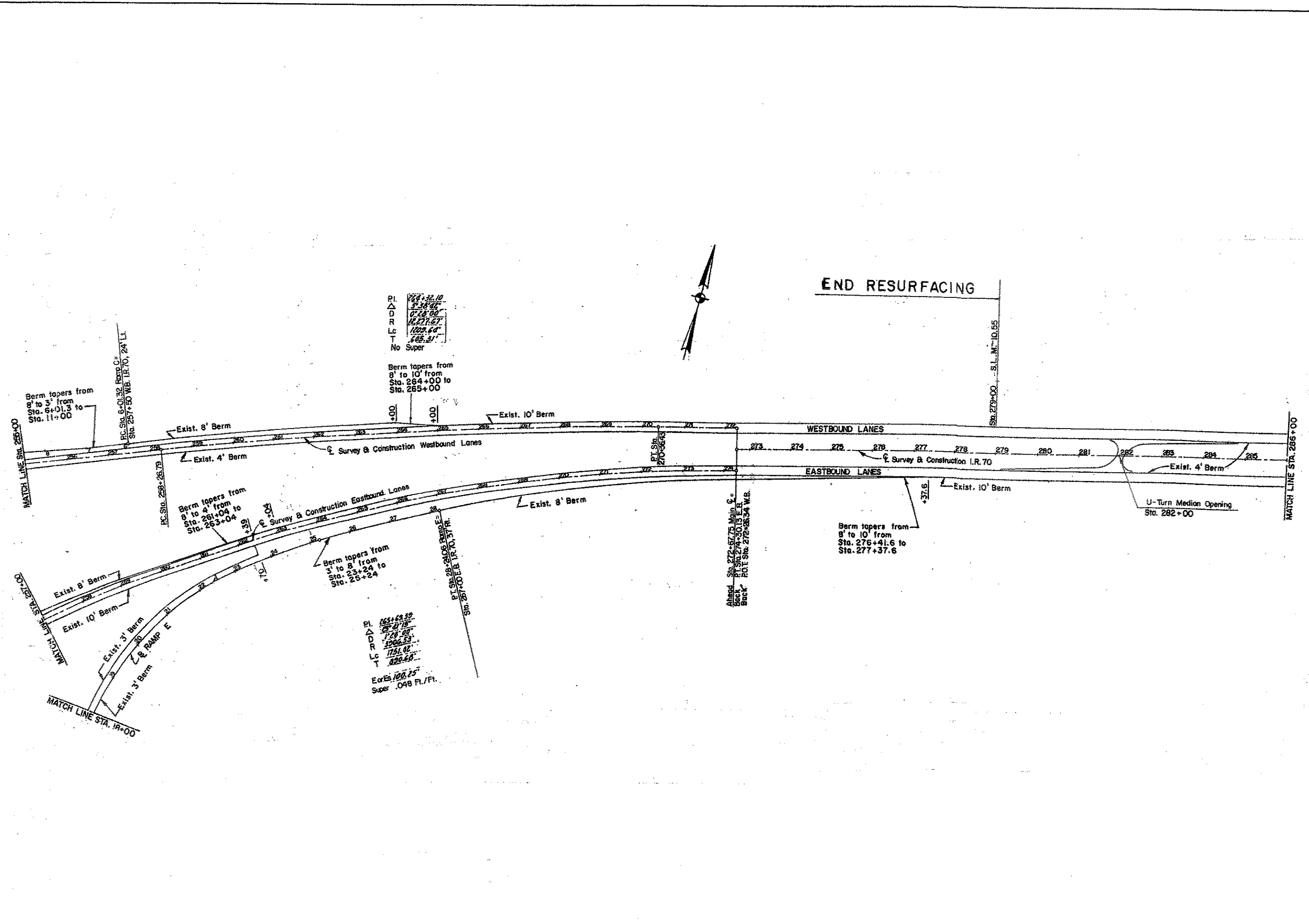




670001.MPP 4/23/03



670001.MPP 4/23/83

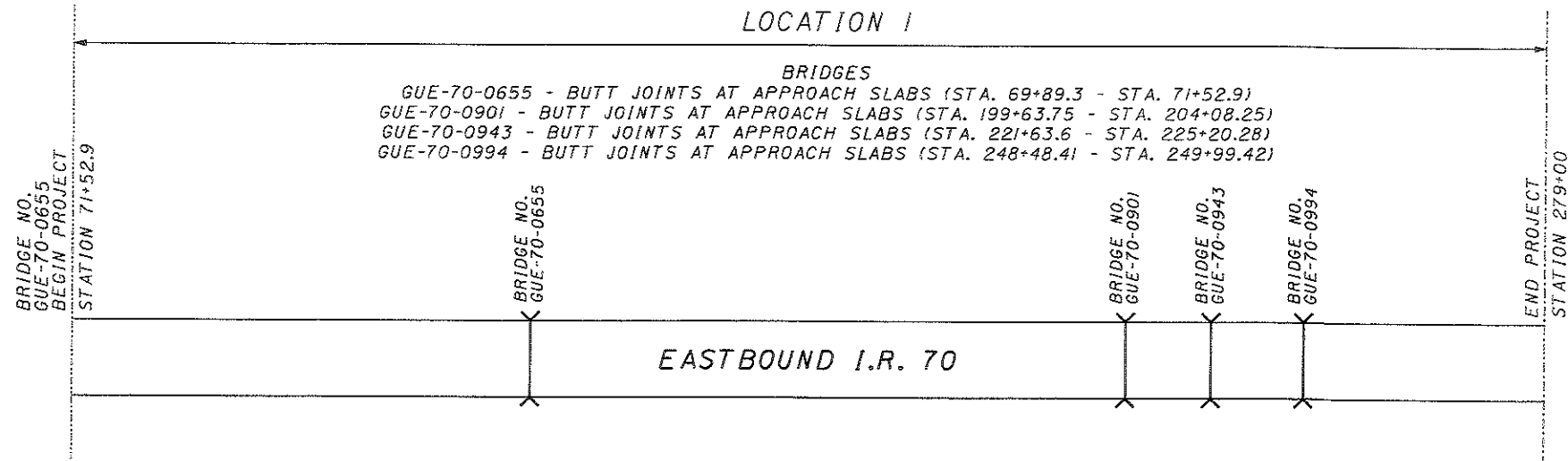
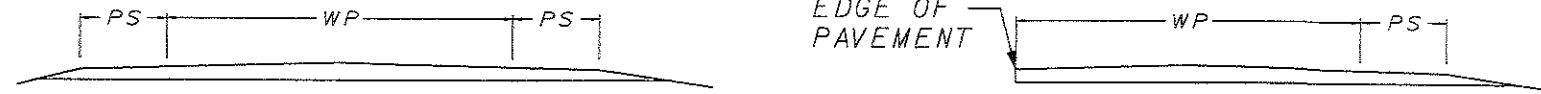


ST0001.HPP 4/23/03

# ASPHALT CONCRETE

TYPICAL 1

TYPICAL 2



STATION EQUATION EASTBOUND  
 274+30.13 BACK =  
 272+67.75 AHEAD

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## PAVEMENT DATA

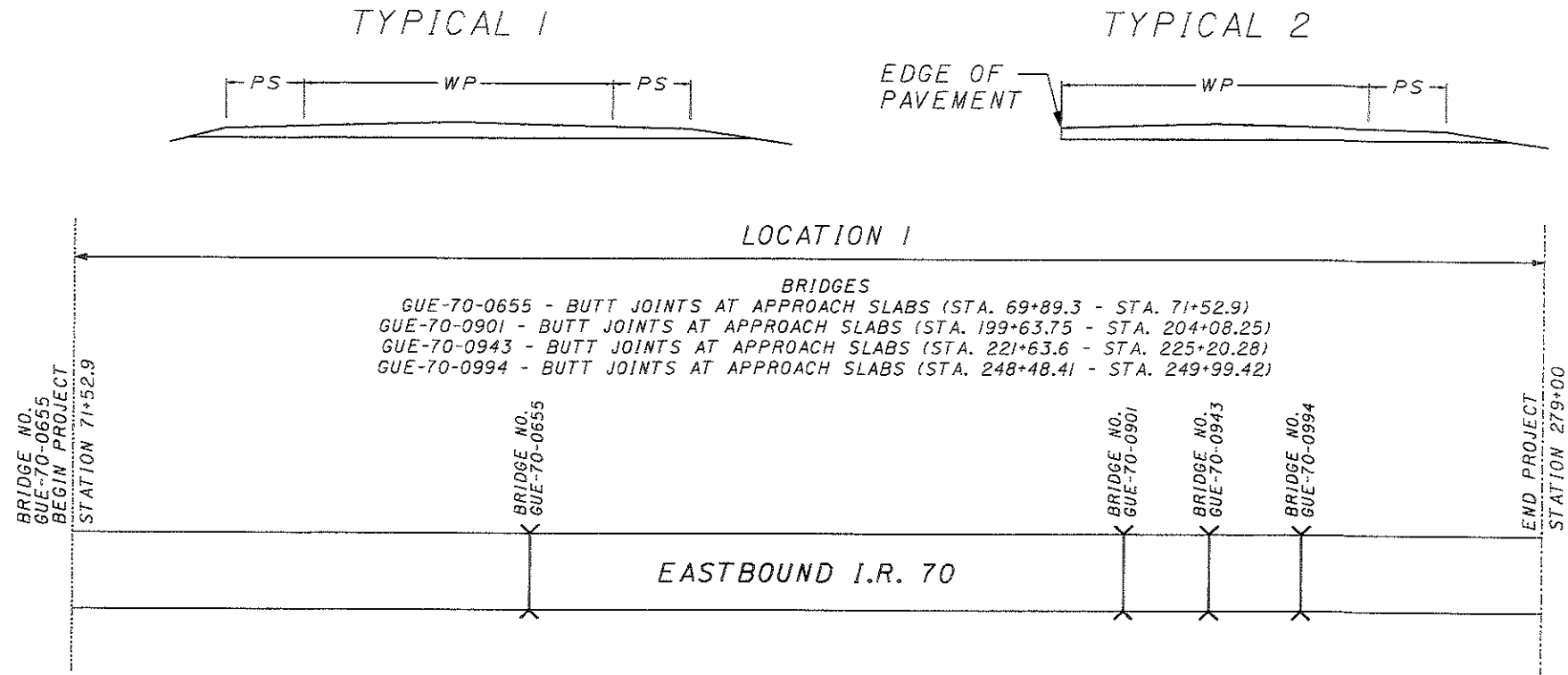
LOCATION	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS# SQ. YD.		
				MILES	LIN. FT.					407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE			
										TACK COAT @ 0.075 GAL./S. Y.	TACK COAT 702.13 @ 0.075 GAL./S. Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S. Y.	THICK INCHES	SURFACE COURSE, 12.5 MM, TYPE A (446) CU. YD.	THICK INCHES		INTERMEDIATE COURSE, TYPE 2, PG 76-22 CU. YD.	
<b>EASTBOUND</b>																		
1	I.R. 70	GUE	71+52.9 - 197+63.75		12,611	24	1	446	33,630	2,522.3				1.75	1,634.8			33,630
1	I.R. 70	GUE	197+63.75 - 199+63.75		200	26.5 AVG.	1	446	589	44.3				1.75	28.7			589
1	I.R. 70	GUE	204+08.25 - 221+63.6		1,756	24	1	446	4,683	351.3				1.75	227.7			4,683
1	I.R. 70	GUE	225+20.28 - 226+00		80	30 AVG.	1	446	267	20.1				1.75	13.0			267
1	I.R. 70	GUE	226+00 - 227+20.28		121	36	1	446	484	36.3				1.75	23.6			484
1	I.R. 70	GUE	227+20.28 - 246+48.41		1,928	24	1	446	5,142	385.7				1.75	250.0			5,142
1	I.R. 70	GUE	246+48.41 - 248+48.41		200	69.5 AVG.	1	446	1,545	115.9				1.75	75.1			1,545
1	I.R. 70	GUE	249+99.42 - 251+99.42		200	68.5 AVG.	1	446	1,523	114.3				1.75	74.1			1,523
1	I.R. 70	GUE	251+99.42 - 274+30.13 (BK)		2,231	24	1	446	5,950	446.3				1.75	289.3			5,950
1	I.R. 70	GUE	272+67.75 (AH) - 279+00		633	24	1	446	1,688	126.6				1.75	82.1			1,688
1	I.R. 70	GUE	<b>SUB TOTALS (EASTBOUND)</b>							<b>4,163.1</b>					<b>2,698.4</b>			<b>55,501</b>
<b>S.W. RAMP S.R. 209</b>																		
1	I.R. 70	GUE	0+00 - 4+60		460	25.5 AVG.	2	446	1,304	97.8				1.75	63.4			1,304
1	I.R. 70	GUE	4+60 - 5+60		100	17 AVG.	1	446	189		14.2	9.5		1.50	7.9	1.50	7.9	189
1	I.R. 70	GUE	5+60 - 15+00		940	16	1	446	1,672		125.4	83.6		1.50	69.7	1.50	69.7	1,672
1	I.R. 70	GUE	15+00 - 15+50		50	17.5 AVG.	1	446	98		7.4	4.9		1.50	4.1	1.50	4.1	98
1	I.R. 70	GUE	15+50 - 20+36		486	17	2	446	918		68.9	45.9		1.50	38.3	1.50	38.3	918
1	I.R. 70	GUE	20+36 - 20+76.2		41	VAR.	2	446	210		15.9	10.5		1.50	8.8	1.50	8.8	210
1	I.R. 70	GUE	20+36 - 19+07		129	17	2	446	244		18.3	12.2		1.50	10.2	1.50	10.2	244
<b>EASTBOUND DECEL LANE</b>																		
1	I.R. 70	GUE	159+50 - 160+50		100	6 AVG.	2	446	67	5.1				1.75	3.3			67
1	I.R. 70	GUE	160+50 - 167+00		650	12	2	446	867	65.1				1.75	42.2			867
1	I.R. 70	GUE	<b>SUB TOTALS (S.W. RAMP S.R. 209)</b>							<b>168.0</b>	<b>250.1</b>	<b>166.6</b>			<b>247.9</b>	<b>139.0</b>		<b>5,569</b>
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										<b>4,331.1</b>	<b>250.1</b>	<b>166.6</b>			<b>2,946.3</b>	<b>139.0</b>		<b>61,070</b>

PAVEMENT CALCULATIONS

GUE-70-6.51

GT0001.MAC 4/7/03

# ASPHALT CONCRETE



BRIDGES  
 GUE-70-0655 - BUTT JOINTS AT APPROACH SLABS (STA. 69+89.3 - STA. 71+52.9)  
 GUE-70-0901 - BUTT JOINTS AT APPROACH SLABS (STA. 199+63.75 - STA. 204+08.25)  
 GUE-70-0943 - BUTT JOINTS AT APPROACH SLABS (STA. 221+63.6 - STA. 225+20.28)  
 GUE-70-0994 - BUTT JOINTS AT APPROACH SLABS (STA. 248+48.41 - STA. 249+99.42)

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## PAVEMENT DATA

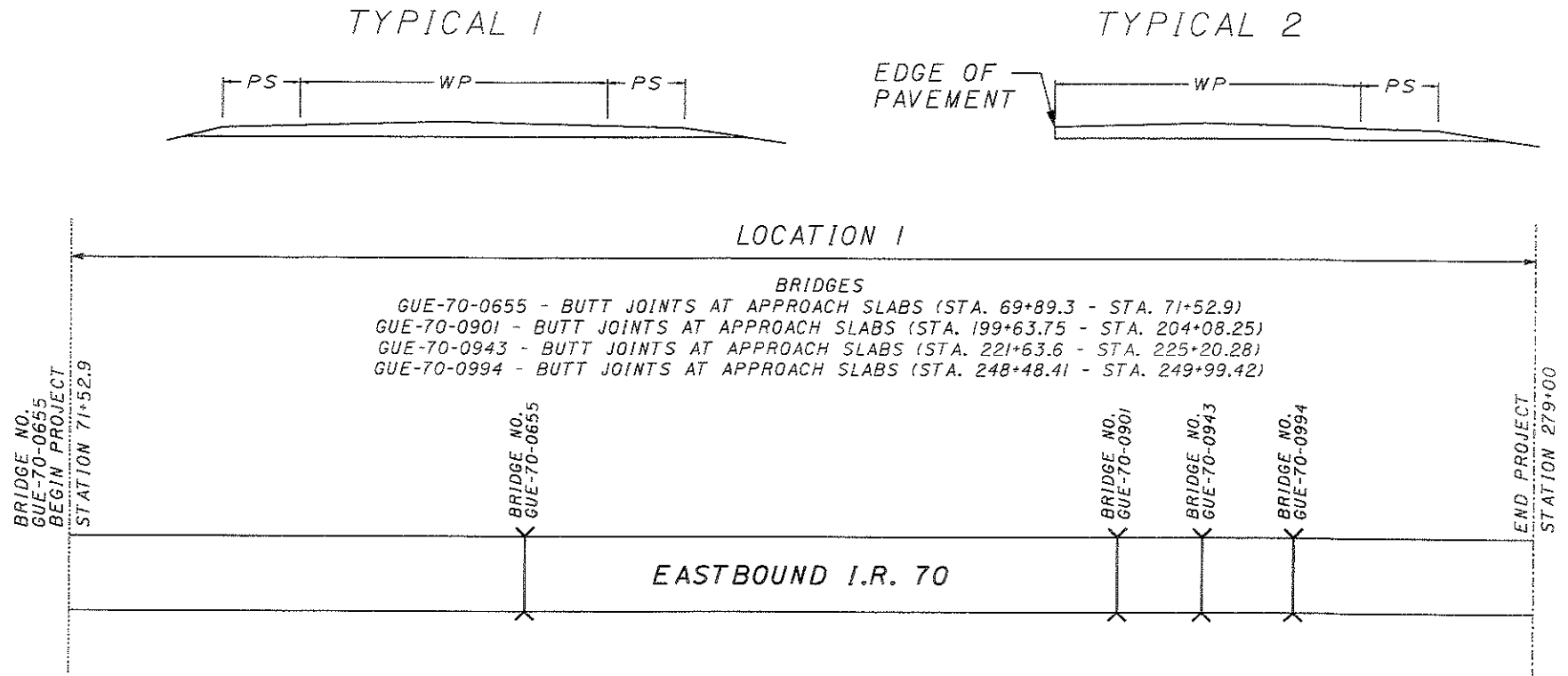
L O C A T I O N	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	T Y P I C A L	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT						PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS* SQ. YD.			
				MILES	LIN. FT.					407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE		254		
										TACK COAT @ 0.075 GAL./S. Y.	TACK COAT, 702.13 @ 0.075 GAL./S. Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S. Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK			INTERMEDIATE COURSE, TYPE 2, PG 76-22	
			<b>S.W. LOOP S.R. 209</b>																
I	I.R. 70	GUE	1+00 - 2+07		107	VAR.	2	446	241		18.1	12.1		1.50	10.1	1.50	10.1	241	
I	I.R. 70	GUE	2+07 - 3+07		100	17 AVG.	1	446	189		14.2	9.5		1.50	7.9	1.50	7.9	189	
I	I.R. 70	GUE	3+07 - 3+93		86	16	1	446	153		11.5	7.7		1.50	6.4	1.50	6.4	153	
I	I.R. 70	GUE	3+93 - 5+00		107	VAR.	2	446	112		8.4	5.6		1.50	4.7	1.50	4.7	112	
I	I.R. 70	GUE	5+00 - 8+00		300	17	1	446	567		42.6	28.4		1.50	23.7	1.50	23.7	567	
I	I.R. 70	GUE	8+00 - 12+87.5		488	16	1	446	868		65.1	43.4		1.50	36.2	1.50	36.2	868	
I	I.R. 70	GUE	12+87.5 - 15+58		271	17 AVG.	1	446	512		38.4	25.6		1.50	21.4	1.50	21.4	512	
I	I.R. 70	GUE	15+58 - 16+58		100	16	2	446	178		13.4	8.9		1.50	7.5	1.50	7.5	178	
I	I.R. 70	GUE	16+58 - 16+81.37		24	16	2	446	43	3.3				1.75	2.1			43	
I	I.R. 70	GUE	16+81.3 - 19+81.27		300	15 AVG.	2	446	500	37.5				1.75	24.3			500	
			<b>EASTBOUND ACCEL LANE</b>																
I	I.R. 70	GUE	188+00 - 197+63.75		964	15 AVG.	2	446	1,607	120.6				1.75	78.2			1,607	
			<b>EASTBOUND DECEL LANE</b>																
I	I.R. 70	GUE	227+20.28 - 228+14.46		95	12	2	446	127	9.6				1.75	6.2			127	
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>																			
									171.0	211.7	141.2			228.7	117.9			5,097	

PAVEMENT CALCULATIONS

GUE-70-6.51

ST0001.WAC 4/7/03

# ASPHALT CONCRETE



BRIDGES  
 GUE-70-0655 - BUTT JOINTS AT APPROACH SLABS (STA. 69+89.3 - STA. 71+52.9)  
 GUE-70-0901 - BUTT JOINTS AT APPROACH SLABS (STA. 199+63.75 - STA. 204+08.25)  
 GUE-70-0943 - BUTT JOINTS AT APPROACH SLABS (STA. 221+63.6 - STA. 225+20.28)  
 GUE-70-0994 - BUTT JOINTS AT APPROACH SLABS (STA. 248+48.41 - STA. 249+99.42)

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## PAVEMENT DATA

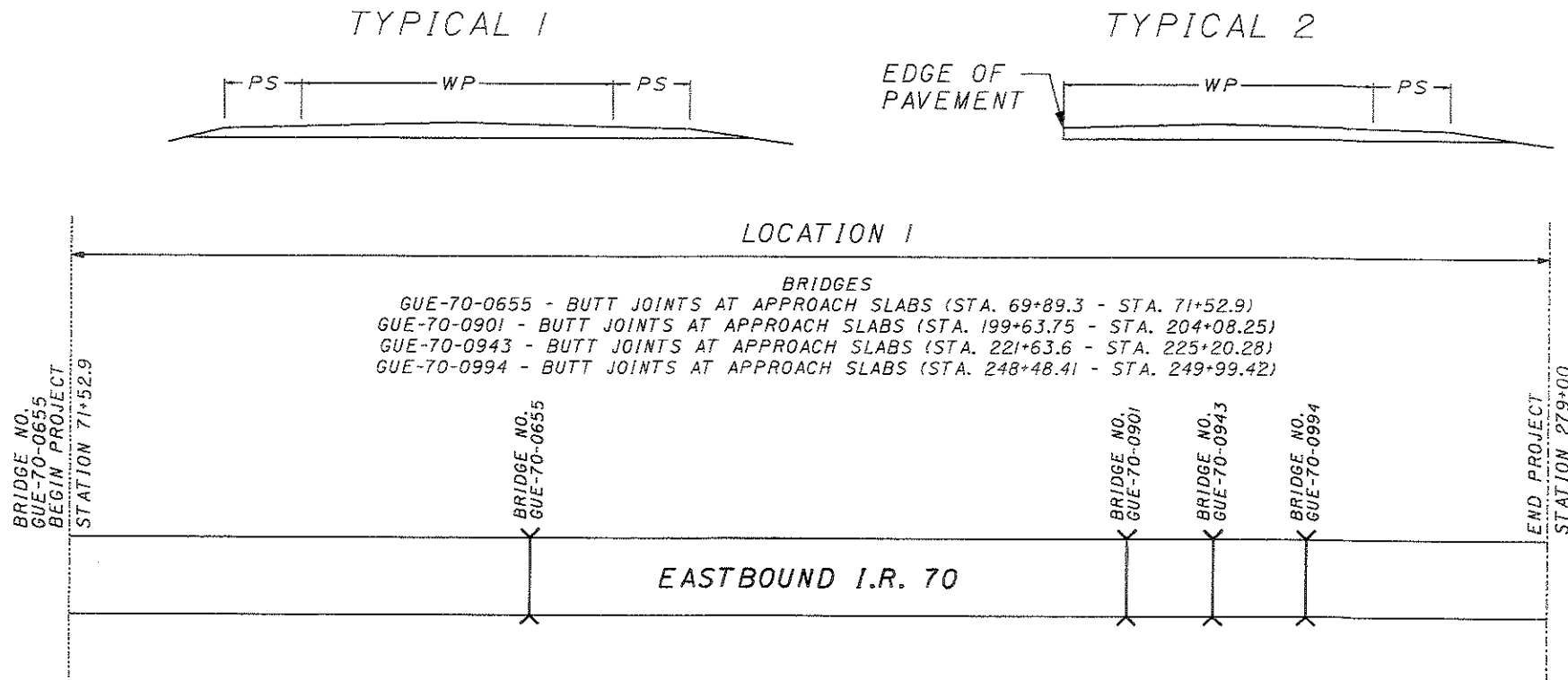
L O C A T I O N	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	T Y P I C A L	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS* SQ. YD.		
				MILES	LIN. FT.					407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE			
										TACK COAT @ 0.075 GAL./S. Y.	TACK COAT, 702.13 @ 0.075 GAL./S. Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S. Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK		INTERMEDIATE COURSE, TYPE 2, PG 76-22	
<b>RAMP G</b>																		
1	I.R. 70	GUE	8+14.46 - 13+04		490	25.5 AVG.	2	446	1,389	104.2				1.75	67.6			1,389
1	I.R. 70	GUE	13+04 - 25+35		1,231	16	1	446	2,189		164.2	109.5		1.50	91.2	1.50	91.2	2,189
<b>EASTBOUND DECEL LANE</b>																		
1	I.R. 70	GUE	244+50 - 245+50		100	6 AVG.	2	446	67	5.1				1.75	3.3			67
<b>EASTBOUND ACCEL LANE</b>																		
1	I.R. 70	GUE	245+50 - 246+48.41		99	12	2	446	132	10.0				1.75	6.5			132
1	I.R. 70	GUE	<b>SUB TOTALS (RAMP G)</b>							<b>119.3</b>	<b>164.2</b>	<b>109.5</b>		<b>168.6</b>	<b>91.2</b>			<b>3,777</b>
<b>RAMP F</b>																		
1	I.R. 70	GUE	12+00 - 12+61		61	33 AVG.	2	446	224	16.8				1.75	10.9			224
1	I.R. 70	GUE	12+61 - 24+50		1,189	16	1	446	2,114		158.6	105.7		1.50	88.1	1.50	88.1	2,114
1	I.R. 70	GUE	<b>SUB TOTALS (RAMP F)</b>							<b>16.8</b>	<b>158.6</b>	<b>105.7</b>		<b>99.0</b>	<b>88.1</b>			<b>2,338</b>
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										<b>136.1</b>	<b>322.8</b>	<b>215.2</b>		<b>267.6</b>	<b>179.3</b>			<b>6,115</b>

PAVEMENT CALCULATIONS

GUE-70-6.51

G:\0001.MAC 4/7/03

# ASPHALT CONCRETE



\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## PAVEMENT DATA

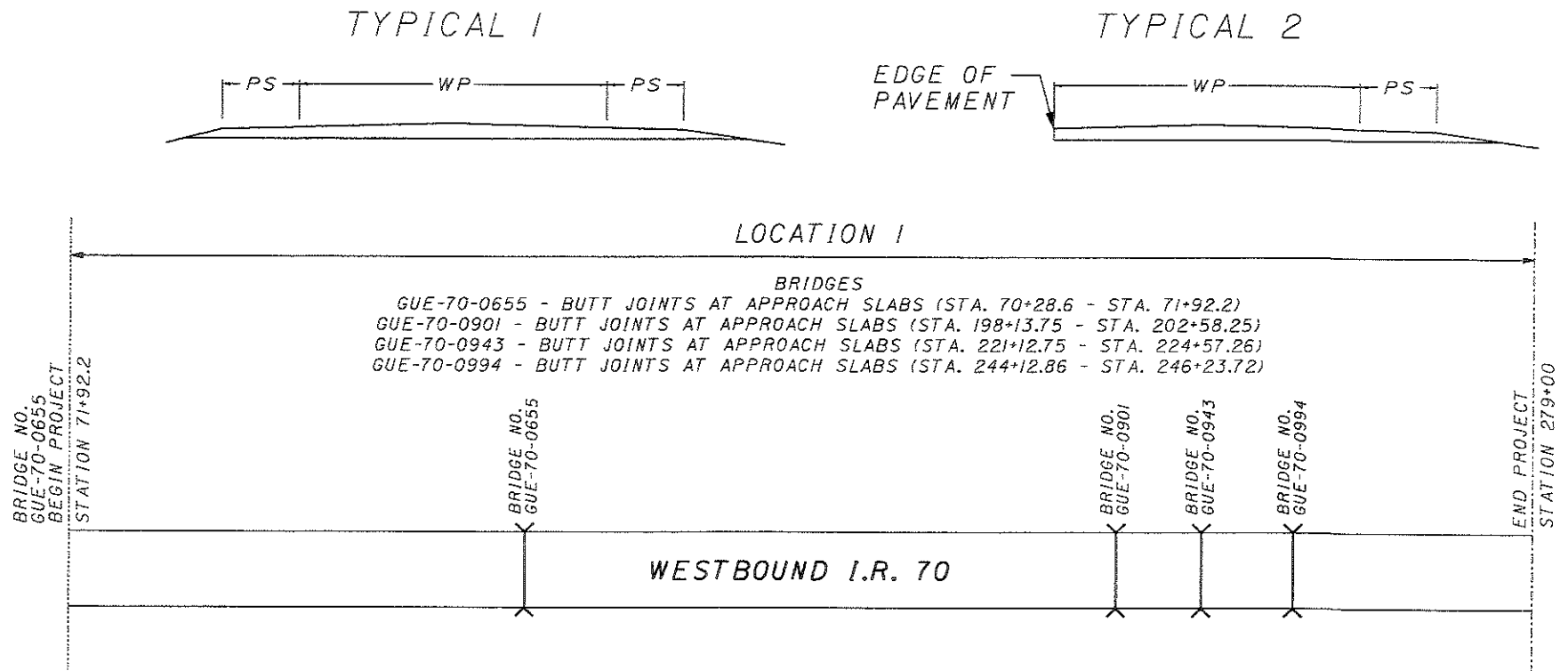
L O C A T I O N	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	T Y P I C A L	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS* SQ. YD.		
				MILES	LIN. FT.					407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE			
										TACK COAT @ 0.075 GAL./S. Y.	TACK COAT, 702.13 @ 0.075 GAL./S. Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S. Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK		INTERMEDIATE COURSE, TYPE 2, PG 76-22	
<b>RAMP H</b>																		
I	I.R. 70	GUE	5+96 - 16+00		1,004	16	1	446	1,785		133.9	89.3		1.50	74.4	1.50	74.4	1,785
I	I.R. 70	GUE	16+00 - 16+22		22	17.5 AVG.	1	446	43		3.3	2.2		1.50	1.8	1.50	1.8	43
I	I.R. 70	GUE	16+22 - 16+48.4		27	17.5 AVG.	1	446	53	4.0				1.75	2.6			53
<b>EASTBOUND ACCEL LANE</b>																		
I	I.R. 70	GUE	251+99.42 - 263+04		1,105	10.5 AVG.	2	446	1,290	96.8				1.75	62.7			1,290
I	I.R. 70	GUE	<b>SUB TOTALS (RAMP H)</b>							<b>100.8</b>	<b>137.2</b>	<b>91.5</b>		<b>141.5</b>	<b>76.2</b>			<b>3,171</b>
<b>RAMP E</b>																		
I	I.R. 70	GUE	5+05 - 23+70		1,865	16	1	446	3,316		248.7	165.8		1.50	138.2	1.50	138.2	3,316
I	I.R. 70	GUE	23+70 - 24+24		54	16 AVG.	2	446	96	7.2				1.75	4.7			96
I	I.R. 70	GUE	24+24 - 28+24		400	16 AVG.	2	446	712	53.4				1.75	34.7			712
<b>EASTBOUND ACCEL LANE</b>																		
I	I.R. 70	GUE	267+00 - 277+37.6		1,038	12.5 AVG.	2	446	1,442	108.2				1.75	70.1			1,442
I	I.R. 70	GUE	<b>SUB TOTALS (RAMP E)</b>							<b>168.8</b>	<b>248.7</b>	<b>165.8</b>		<b>247.7</b>	<b>138.2</b>			<b>5,566</b>
<b>U-TURN MEDIAN OPENING</b>																		
I	I.R. 70	GUE	102+50					446	511	38.3				1.75	24.9			511
I	I.R. 70	GUE	<b>SUB TOTALS (U-TURN)</b>							<b>38.3</b>				<b>24.9</b>				<b>511</b>
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										<b>307.9</b>	<b>385.9</b>	<b>257.3</b>		<b>414.1</b>	<b>214.4</b>			<b>9,248</b>

G70001.MAC 4/7/03

**PAVEMENT CALCULATIONS**

**GUE-70-6.51**

# ASPHALT CONCRETE



STATION EQUATION WESTBOUND  
 272+26.34 BACK =  
 272+67.75 AHEAD

\* NOTE: PAVEMENT PLANING  
 SHALL EXPOSE EXISTING  
 CONCRETE PAVEMENT

## PAVEMENT DATA

L O C A T I O N	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	T Y P I C A L	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT				254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS* SQ. YD.		
				MILES	LIN. FT.					407		442 ASPHALT CONCRETE			THICK INCHES	SURFACE COURSE, 12.5 MM, TYPE A (446) CU. YD.
										TACK COAT @ 0.075 GAL./S. Y. GAL.						
<b>WESTBOUND</b>																
I	I.R. 70	GUE	71+92.2 - 196+13.75		12,422	24	I	446	33,126	2,484.5			1.75	1,610.3	33,126	
I	I.R. 70	GUE	196+13.75 - 197+00		87	36	I	446	348	26.1			1.75	17.0	348	
I	I.R. 70	GUE	197+00 - 198+13.75		114	30 AVG.	I	446	380	28.5			1.75	18.5	380	
I	I.R. 70	GUE	202+58.25 - 204+25		167	24	I	446	446	33.5			1.75	21.7	446	
I	I.R. 70	GUE	204+25 - 204+58.25		34	24.35 AVG.	I	446	92	7.0			1.75	4.5	92	
I	I.R. 70	GUE	204+58.25 - 221+12.75		1,655	24	I	446	4,414	331.1			1.75	214.6	4,414	
I	I.R. 70	GUE	224+57.26 - 226+57.26		200	30 AVG.	I	446	667	50.1			1.75	32.5	667	
I	I.R. 70	GUE	226+57.26 - 231+26		469	36.85 AVG.	I	446	1,921	144.1			1.75	93.4	1,921	
I	I.R. 70	GUE	231+26 - 233+26		200	43.82 AVG.	I	446	974	73.1			1.75	47.4	974	
I	I.R. 70	GUE	233+26 - 240+08		682	70.3 AVG.	I	446	5,328	399.6			1.75	259.0	5,328	
I	I.R. 70	GUE	240+08 - 242+75		267	36	I	446	1,068	80.1			1.75	52.0	1,068	
I	I.R. 70	GUE	242+75 - 243+75		100	30 AVG.	I	446	334	25.1			1.75	16.3	334	
I	I.R. 70	GUE	243+75 - 244+12.86		38	24	I	446	102	7.7			1.75	5.0	102	
I	I.R. 70	GUE	246+23.72 - 272+26.34 (BK)		2,603	24	I	446	6,942	520.7			1.75	337.5	6,942	
I	I.R. 70	GUE	272+67.75 (AH) - 279+00		633	24	I	446	1,688	126.6			1.75	82.1	1,688	
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>									<b>4,337.8</b>				<b>2,811.8</b>		<b>57,830</b>	

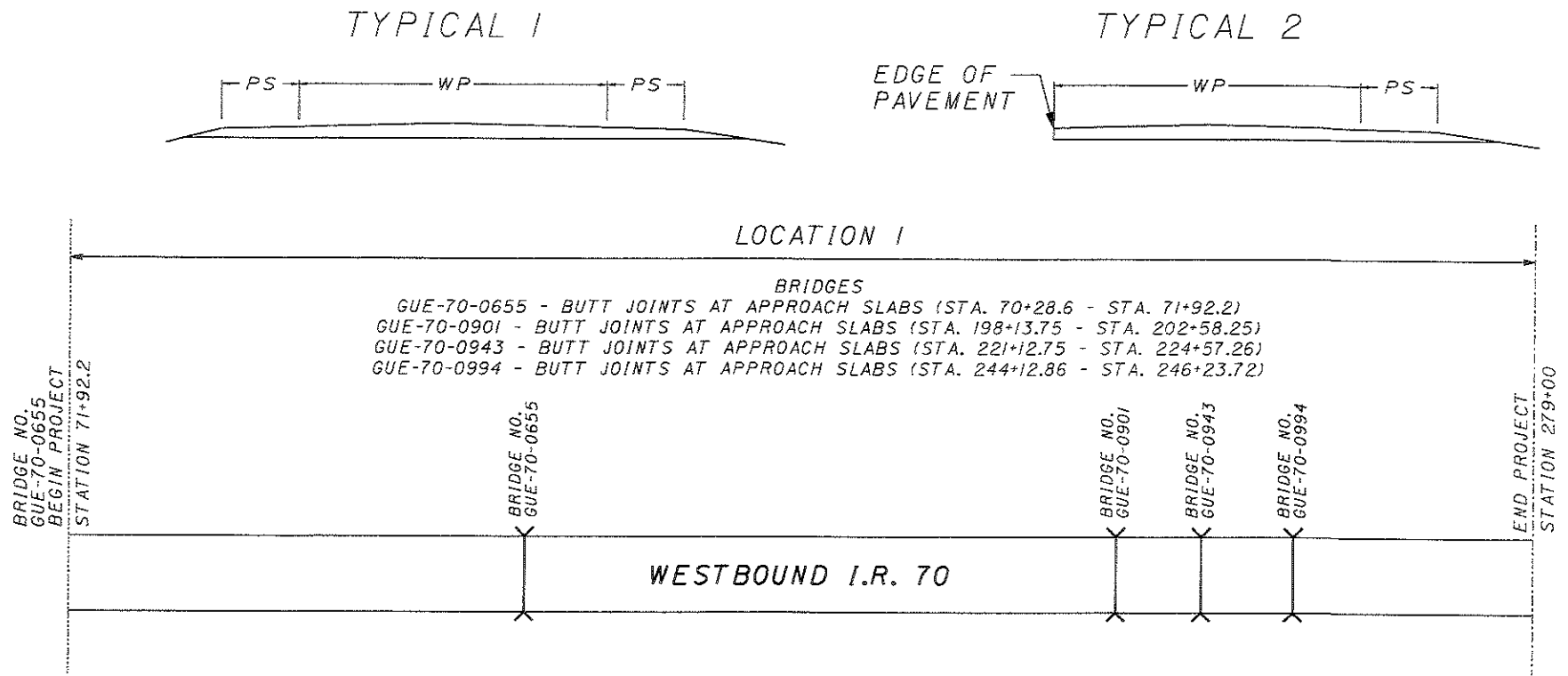
PAVEMENT CALCULATIONS

GUE-70-6.51

670001.MAC 4/7/03



# ASPHALT CONCRETE



BRIDGES  
 GUE-70-0655 - BUTT JOINTS AT APPROACH SLABS (STA. 70+28.6 - STA. 71+92.2)  
 GUE-70-0901 - BUTT JOINTS AT APPROACH SLABS (STA. 198+13.75 - STA. 202+58.25)  
 GUE-70-0943 - BUTT JOINTS AT APPROACH SLABS (STA. 221+12.75 - STA. 224+57.26)  
 GUE-70-0994 - BUTT JOINTS AT APPROACH SLABS (STA. 244+12.86 - STA. 246+23.72)

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## PAVEMENT DATA

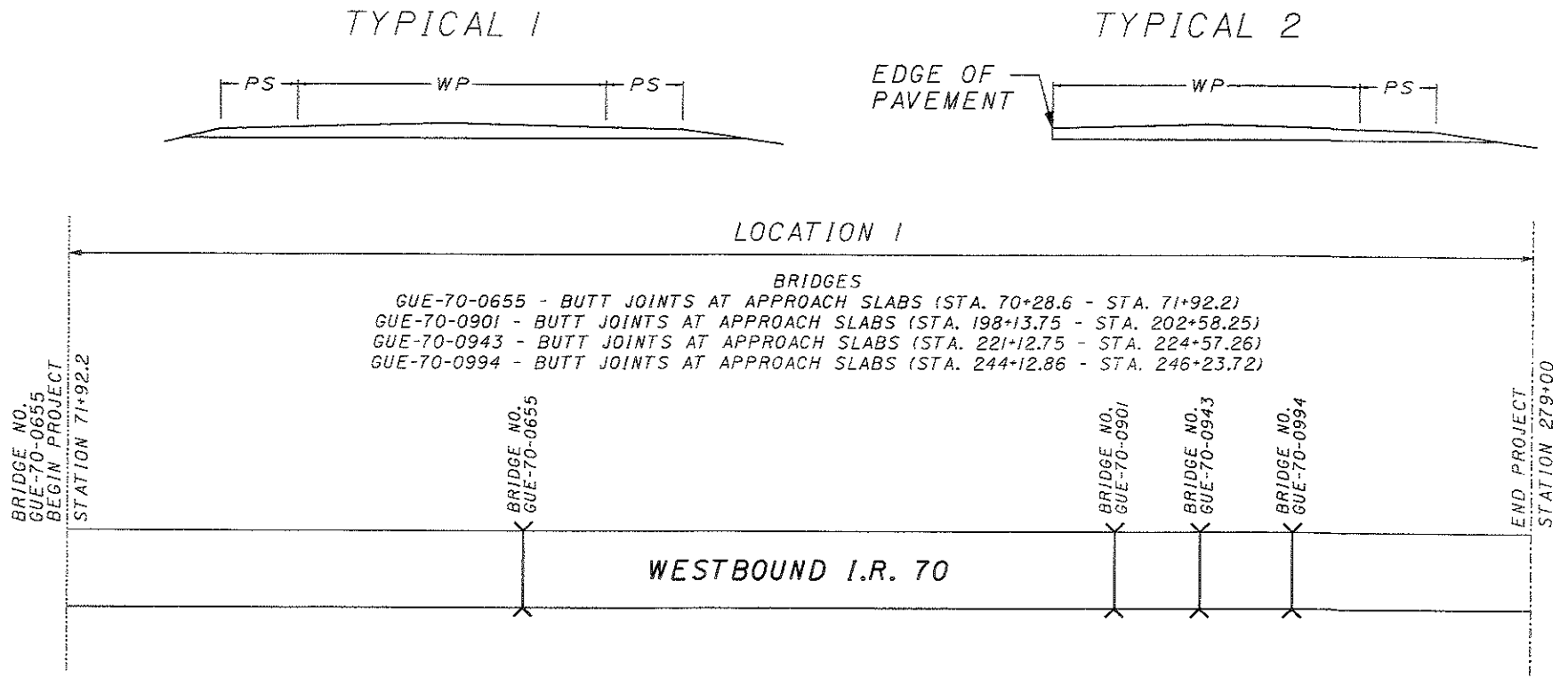
LOCATION	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS* SQ. YD.					
				MILES	LIN. FT.					407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE		THICK INCHES	SURFACE COURSE, 12.5 MM, TYPE A (446) CU. YD.	THICK INCHES	INTERMEDIATE COURSE, TYPE 2, PG 76-22 CU. YD.	
										TACK COAT @ 0.075 GAL./S. Y.	TACK COAT, 702.13 @ 0.075 GAL./S. Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S. Y.	THICK INCHES	THICK INCHES							
<b>N.W. RAMP S.R. 209</b>																					
I	I.R. 70	GUE	13+42.11 - 10+42		301	15 AVG.	2	446	502	37.7				1.75	24.4			502			
I	I.R. 70	GUE	10+42 - 8+92		150	17 AVG.	1	446	284	21.3				1.75	13.8			284			
I	I.R. 70	GUE	8+92 - 7+92		100	17 AVG.	1	446	189		14.2	9.5		1.50	7.9	1.50	7.9	189			
I	I.R. 70	GUE	7+92 - 0+62.8		730	16	1	446	1,298		97.4	64.9		1.50	54.1	1.50	54.1	1,298			
I	I.R. 70	GUE	0+62.8 - 0+12.8		50	VAR.	1	446	256		19.9	12.8		1.50	10.7	1.50	10.7	256			
<b>WESTBOUND DECEL LANE</b>																					
I	I.R. 70	GUE	159+00 - 171+00		1200	12.5 AVG.	2	446	1,667	125.1				1.75	81.6			1,667			
I	I.R. 70	GUE	<b>SUB TOTALS (N.W. RAMP S.R. 209)</b>							<b>184.1</b>	<b>131.5</b>	<b>87.2</b>		<b>192.5</b>	<b>72.7</b>			<b>4,196</b>			
<b>N.E. RAMP S.R. 209</b>																					
I	I.R. 70	GUE	11+92.5 - 11+42.5		50	VAR.	1	446	302		22.7	15.1		1.50	12.6	1.50	12.6	302			
I	I.R. 70	GUE	11+42.5 - 10+46		97	20 AVG.	1	446	216		16.2	10.8		1.50	9.0	1.50	9.0	216			
I	I.R. 70	GUE	10+46 - 5+60		486	16	1	446	864		64.8	43.2		1.50	36.0	1.50	36.0	864			
I	I.R. 70	GUE	5+60 - 4+60		100	17 AVG.	2	446	189		14.2	9.5		1.50	7.9	1.50	7.9	189			
I	I.R. 70	GUE	4+60 - 0+00		460	25.5 AVG.	2	446	1,304	97.8				1.75	63.4			1,304			
<b>WESTBOUND DECEL LANE</b>																					
I	I.R. 70	GUE	195+00 - 196+13.75		114	12	2	446	152	11.4				1.75	7.4			152			
<b>WESTBOUND ACCEL LANE</b>																					
I	I.R. 70	GUE	204+58.25 - 216+25		1,167	13.11 AVG.	2	446	1,700	127.5				1.75	82.7			1,700			
I	I.R. 70	GUE	<b>SUB TOTALS (N.E. RAMP S.R. 209)</b>							<b>236.7</b>	<b>117.9</b>	<b>78.6</b>		<b>219.0</b>	<b>65.5</b>			<b>4,727</b>			
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										<b>420.8</b>	<b>249.4</b>	<b>165.8</b>		<b>411.5</b>	<b>138.2</b>			<b>8,923</b>			

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PAVEMENT CALCULATIONS

GUE-70-6.51

# ASPHALT CONCRETE



\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## PAVEMENT DATA

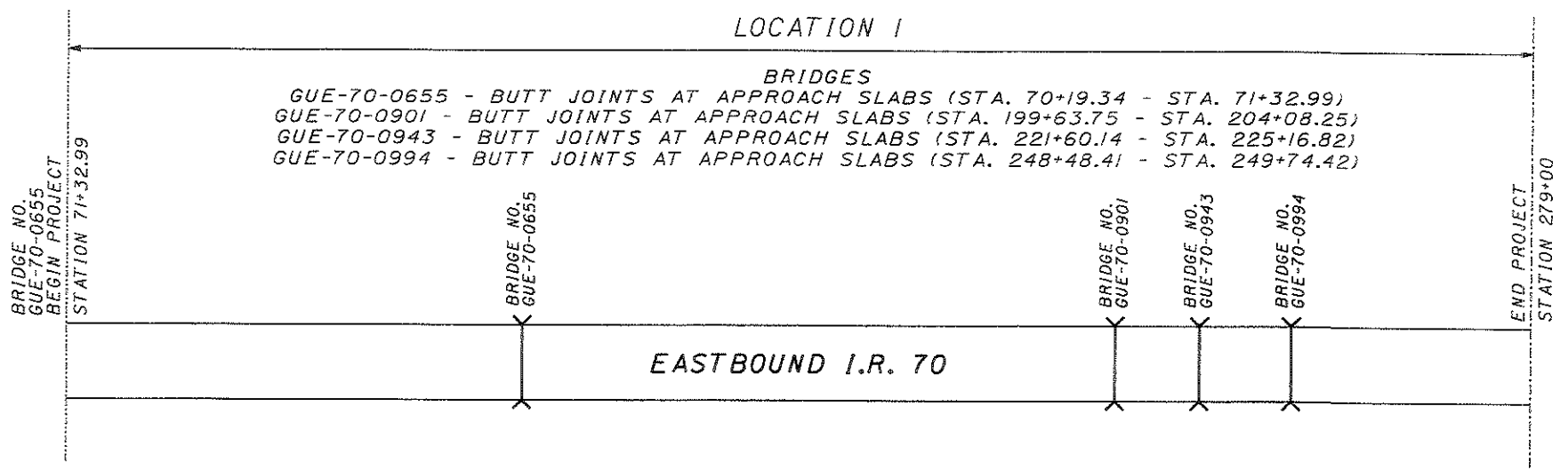
LOCATION	ROUTE	CO.	STATION TO STATION	LENGTH		WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YD.	PROPOSED PAVEMENT						PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3") RAMPS & LOOPS* SQ. YD.		
				MILES	LIN. FT.					407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE		254	
										TACK COAT @ 0.075 GAL./S. Y.	TACK COAT, 702.13 @ 0.075 GAL./S. Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S. Y.	THICK INCHES	SURFACE COURSE, 12.5 MM, TYPE A (446) CU. YD.	THICK INCHES			INTERMEDIATE COURSE, TYPE 2, PG 76-22 CU. YD.
<b>RAMP A</b>																		
I	I.R. 70	GUE	39+98.88 - 37+22.26		277	15 AVG.	1	446	462	34.7				1.75	22.5			462
I	I.R. 70	GUE	37+22.26 - 35+22.26		200	17 AVG.	1	446	378	28.4				1.75	18.4			378
I	I.R. 70	GUE	31+63.44 - 13+30		1,834	16	1	446	3,261		244.6	163.1		1.50	135.9	1.50	135.9	3,261
I	I.R. 70	GUE	SUB TOTAL (RAMP A)							63.1	244.6	163.1			176.8		135.9	4,101
<b>RAMP B</b>																		
I	I.R. 70	GUE	26+10 - 14+26		1,184	16	1	446	2,105		157.9	105.3		1.50	87.7	1.50	87.7	2,105
I	I.R. 70	GUE	SUB TOTAL (RAMP B)								157.9	105.3			87.7		87.7	2,105
<b>RAMP D</b>																		
I	I.R. 70	GUE	18+40.5 - 10+03		838	16	1	446	1,490		111.8	74.5		1.50	62.1	1.50	62.1	1,490
I	I.R. 70	GUE	SUB TOTAL (RAMP D)								111.8	74.5			62.1		62.1	1,490
<b>RAMP C</b>																		
I	I.R. 70	GUE	23+00 - 10+50		1,250	16	1	446	2,223		166.8	111.2		1.50	92.7	1.50	92.7	2,223
I	I.R. 70	GUE	10+50 - 6+01.32		449	25.5 AVG.	2	446	1,273	95.5				1.75	61.9			1,273
<b>WESTBOUND DECEL LANE</b>																		
I	I.R. 70	GUE	257+00 - 264+00		700	12	2	446	934	70.1				1.75	45.4			934
I	I.R. 70	GUE	264+00 - 265+00		100	6 AVG.	2	446	67	5.1				1.75	3.3			67
I	I.R. 70	GUE	SUB TOTALS (RAMP C)							170.7	166.8	111.2			203.3		92.7	4,497
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										233.8	681.1	454.1			529.9		378.4	12,193

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PAVEMENT CALCULATIONS

GUE-70-6.51

# SHOULDER TREATMENT



STATION EQUATION EASTBOUND  
 274+30.13 BACK =  
 272+67.75 AHEAD

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## SHOULDER DATA

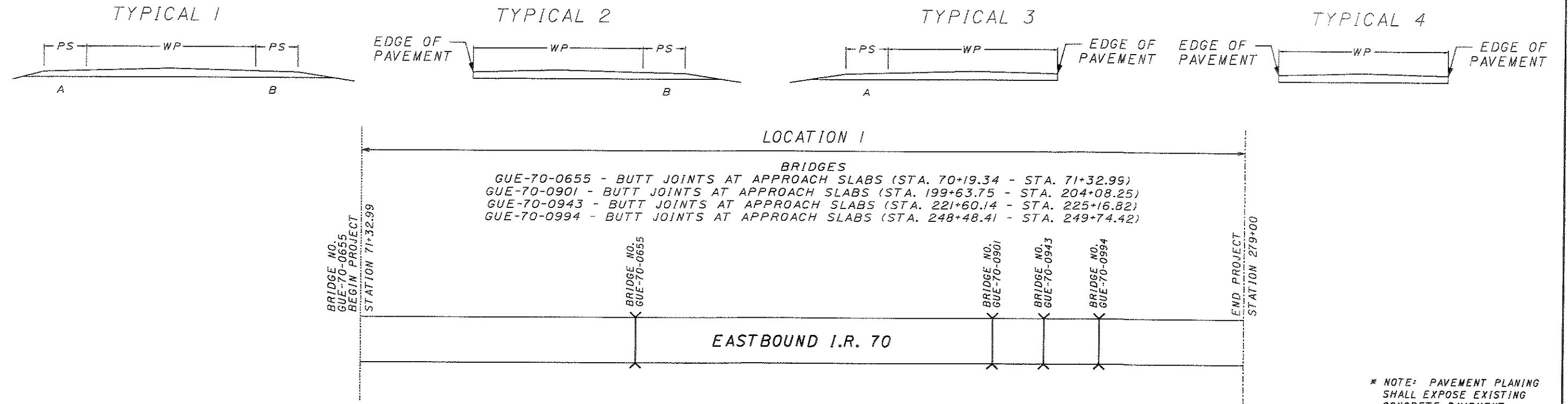
LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT											
			MILES	LIN. FT.		A		B			407				442 ASPHALT CONCRETE				254		617	
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	THICK	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	THICK	COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)	
											GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.	CU. YD.	
<b>EASTBOUND I.R. 70</b>																						
	I.R. 70	71+32.99 - 199+63.75		12,831	3	446	4			5,703	427.8				1.75	277.3				5,703	396.0	
	I.R. 70	204+08.25 - 221+60.14		1,752	3	446	4			779	58.5				1.75	37.9				779	54.1	
	I.R. 70	225+16.82 - 246+25		2,109	3	446	4			938	70.4				1.75	45.6				938	65.1	
	I.R. 70	246+25 - 246+48.41		24	4	446	21			56	4.2				1.75	2.8				56	0.8	
<b>RAMP H</b>																						
	I.R. 70	5+96 - 16+22		1,026	1	446	3	446	3	684		51.3	34.2		1.50	28.5	1.50	28.5		684	63.4	
	I.R. 70	16+22 - 16+47.5		26	3	446	6.5 AVG.			19	1.5				1.75	1.0				19	0.9	
	I.R. 70	16+47.5 - 18+47.5		200	3	446	8			179	13.5				1.75	8.7				179	6.3	
<b>EASTBOUND I.R. 70</b>																						
	I.R. 70	249+74 - 261+04		1,130	3	446	8			1,005	75.4				1.75	48.9				1,005	34.9	
	I.R. 70	261+04 - 263+04		200	3	446	6 AVG.			134	10.1				1.75	6.6				134	6.3	
	I.R. 70	263+04 - 274+30.13 (BK)		1,127	3	446	4			501	37.6				1.75	24.4				501	34.8	
	I.R. 70	272+67.75 (AH) - 279+00		633	3	446	4			282	21.2				1.75	13.7				282	19.5	
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>											<b>720.2</b>	<b>51.3</b>	<b>34.2</b>			<b>495.4</b>	<b>28.5</b>			<b>10,280</b>	<b>682.1</b>	

G70001.MPS 4/8/03

**SHOULDER CALCULATIONS**

**GUE-70-6.51**

# SHOULDER TREATMENT



**SHOULDER DATA**

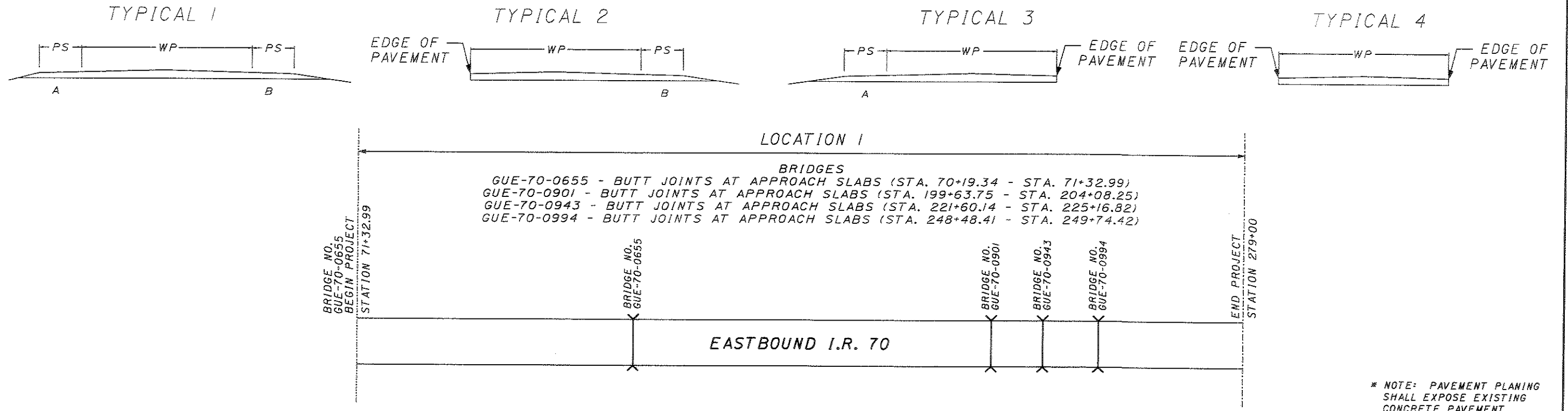
LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT									
			MILES	LIN. FT.		A		B			407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE			254	617
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	THICK	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	COMPACTED AGGREGATE, TYPE A, AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5" WIDTH)
<b>EASTBOUND I.R. 70</b>																				
	I.R. 70	71+21.71 - 159+50		8,829	2		446	2		1,962	147.2			1.75	95.4			1,962	272.6	
	I.R. 70	159+50 - 160+50		100	2		446	2		23	1.8			1.75	1.2			23	3.2	
	I.R. 70	160+50 - 167+00		650	2		446	2		145	10.9			1.75	7.1			145	20.1	
<b>S.W. RAMP S.R. 209</b>																				
	I.R. 70	0+00 - 2+00		200	2		446	7 AVG.		156	11.7			1.75	7.6			156	6.3	
	I.R. 70	2+00 - 4+60		260	2		446	6		174	13.1			1.75	8.5			174	8.2	
	I.R. 70	4+60 - 14+50		990	1	446	3	446	6	990		74.3	49.5	1.50	41.3	1.50	41.3	990	61.1	
	I.R. 70	14+50 - 15+00		50	1	446	2.5 AVG.	446	6	48		3.6	2.4	1.50	2.0	1.50	2.0	48	3.2	
	I.R. 70	15+00 - 19+07		407	2		446	6		272		20.4	13.6	1.50	11.4	1.50	11.4	272	12.9	
	I.R. 70	19+07 - 20+36		129	1	446	3	446	6	129		9.7	6.5	1.50	5.4	1.50	5.4	129	8.0	
	I.R. 70	20+36 - 20+76.20		60**	2		446	6		40		3.0	2.0	1.50	1.7	1.50	1.7	40	1.9	
	I.R. 70	20+36 - 20+76.20		41	3	446	3			14		1.1	0.7	1.50	0.6	1.50	0.6	14	1.3	
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>											184.7	112.1	74.7			182.2	62.4		3,953	398.8

GT0001.MPS 4/8/03

**SHOULDER CALCULATIONS**

**GUE-70-6.51**

# SHOULDER TREATMENT



\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## SHOULDER DATA

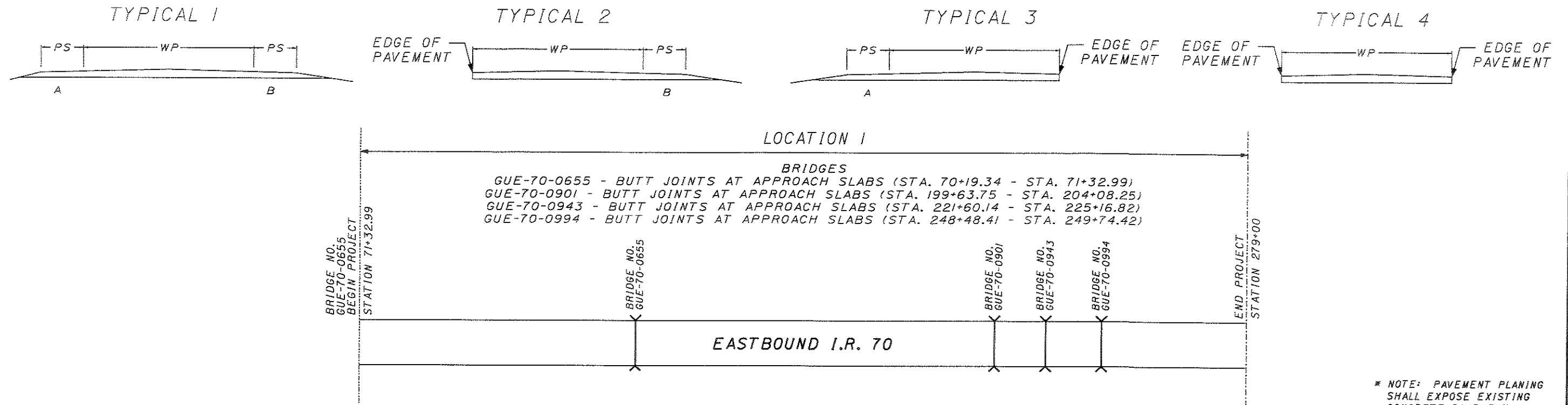
LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT								254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	617 COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)			
			MILES	LIN. FT.		A		B			407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE							
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	THICK			CU. YD.	CU. YD.	CU. YD.
		<b>S.W. LOOP S.R. 209</b>																					
	I.R. 70	2+07 - 3+93		186	3	446	3			62		4.7	3.1		1.50	2.6	1.50	2.6		62	5.7		
	I.R. 70	8+00 - 12+37.5		438	3	446	3			146		11.0	7.3		1.50	6.1	1.50	6.1		146	13.5		
	I.R. 70	12+37.5 - 12+87.58		50	3	446	2.5 AVG.			14		1.1	0.7		1.50	0.6	1.50	0.6		14	1.5		
	I.R. 70	12+87.5 - 14+94.5		207	3																6.4		
		<b>S.W. LOOP S.R. 209</b>																					
	I.R. 70	1+00 - 13+87.5		1,288	2		446	6		859		64.5	43.0		1.50	35.8	1.50	35.8		859	39.8		
	I.R. 70	13+87.5 - 14+87.5		100	2		446	7 AVG.		78		5.9	3.9		1.50	3.3	1.50	3.3		78	3.1		
	I.R. 70	14+87.5 - 16+58		171	2		446	8		152		11.4	7.6		1.50	6.4	1.50	6.4		152	5.3		
	I.R. 70	16+58 - 19+81.27		324	2		446	8		288	21.6				1.75	14.0				288	10.0		
		<b>EASTBOUND I.R. 70</b>																					
	I.R. 70	171+60 - 172+60		100	2		446	2		23	1.8				1.75	1.2				23	3.1		
	I.R. 70	172+60 - 184+75		1,215	2		446	2		270	20.3				1.75	13.2				270	37.5		
	I.R. 70	184+75 - 188+00		325	4		446	2		73	5.5				1.75	3.6				73			
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>																							
										49.2	98.6	65.6				86.8	54.8			1,965	125.9		

G/0001.MPS 4/8/03

SHOULDER CALCULATIONS

GUE-70-6.51

# SHOULDER TREATMENT



\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## SHOULDER DATA

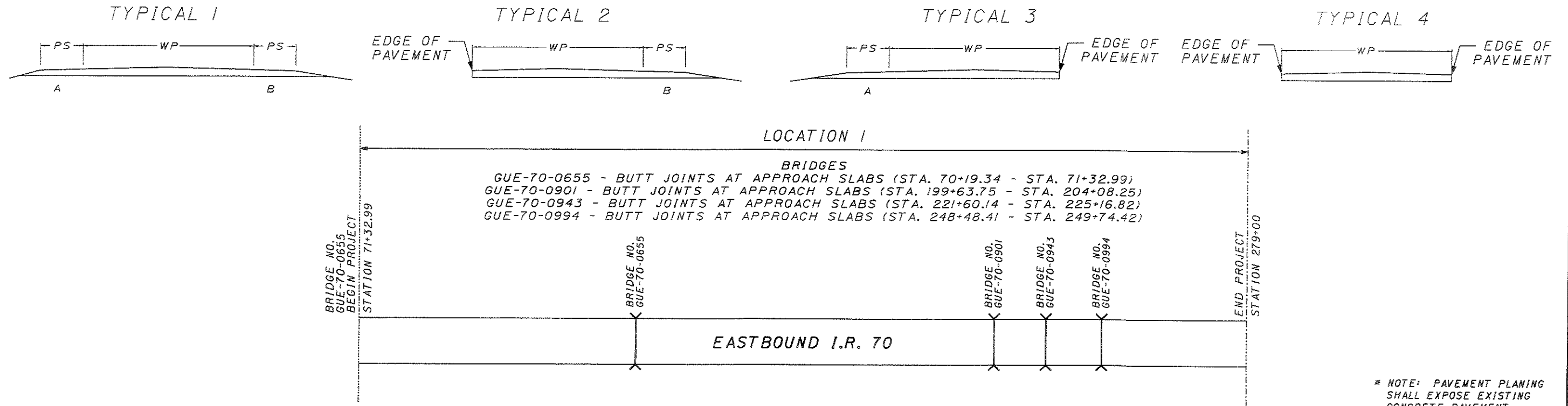
LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT												
						A		B			407				442 ASPHALT CONCRETE				254		617		
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)
<b>EASTBOUND I.R. 70</b>																							
	I.R. 70	188+00 - 197+63.75		964	2		446	2	215	16.2			1.75	10.5			215	29.8					
	I.R. 70	197+63.75 - 199+63.75		200	2		446	2	45	3.4			1.75	2.2			45	6.2					
	I.R. 70	204+08.25 - 205+00		92	2		446	2	21	1.6			1.75	1.1			21	2.8					
	I.R. 70	205+00 - 221+30		1,630	2		446	2	363	27.3			1.75	17.6			363	50.3					
	I.R. 70	221+30 - 221+67.06		38	2		446	2	9	0.7			1.75	0.5			9	1.2					
	I.R. 70	225+23.74 - 226+00		77	2		446	2	18	1.4			1.75	0.9			18	2.4					
	I.R. 70	226+00 - 228+14.46		215	2		446	2	48	3.6			1.75	2.4			48	6.6					
<b>RAMP G</b>																							
	I.R. 70	8+14.46 - 9+00		86	2		446	8	77	5.8			1.75	3.8			77	2.7					
	I.R. 70	9+00 - 13+04		404	2		446	5.5 AVG.	247	18.6			1.75	12.0			247	12.5					
	I.R. 70	13+04 - 25+35		1,231	1	446	3	446	3	821		61.6	41.1	1.50	34.2	1.50	34.2	821	76.0				
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										78.6	61.6	41.1				85.2	34.2		1,864	190.5			

ST0001.MPS 4/8/03

SHOULDER CALCULATIONS

GUE-70-6.51

# SHOULDER TREATMENT



## SHOULDER DATA

LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPE	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT									
			MILES	LIN. FT.		A		B			407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE		254	617	
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (13")- RAMPS & LOOPS*	COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)	
											INCHES	CU. YD.	INCHES	CU. YD.	SQ. YD.	CU. YD.				
<b>EASTBOUND I.R. 70</b>																				
	I.R. 70	233+02 - 234+02		100	2			446	2	23	1.8				1.75	1.2			23	3.1
	I.R. 70	234+02 - 244+50		1,048	2			446	2	233	17.5				1.75	11.4			233	32.3
	I.R. 70	244+50 - 245+50		100	2			446	2	23	1.8				1.75	1.2			23	3.1
	I.R. 70	245+50 - 248+48.41		299	2			446	2	67	5.1				1.75	3.3			67	9.2
	I.R. 70	249+74.42 - 251+99.42		225	2			446	2	50	3.8				1.75	2.5			50	6.9
<b>RAMP. F</b>																				
	I.R. 70	12+00 - 12+61		61	2			446	4 AVG.	28	2.1				1.75	1.4			28	1.9
	I.R. 70	12+61 - 24+50		1,189	1	446	3	446	3	793		59.5	39.7		1.50	33.1	1.50	33.1	793	73.4
<b>EASTBOUND I.R. 70</b>																				
	I.R. 70	252+64 - 253+64		100	2			446	2	23	1.8				1.75	1.2			23	3.1
	I.R. 70	253+64 - 262+39		875	2			446	2	195	14.7				1.75	9.5			195	27.0
	I.R. 70	262+39 - 267+00		461	2			446	2	103	7.8				1.75	5.0			103	14.2
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>											56.4	59.5	39.7			69.8	33.1	1,538	174.2	

GT0001.MPS 4/8/03

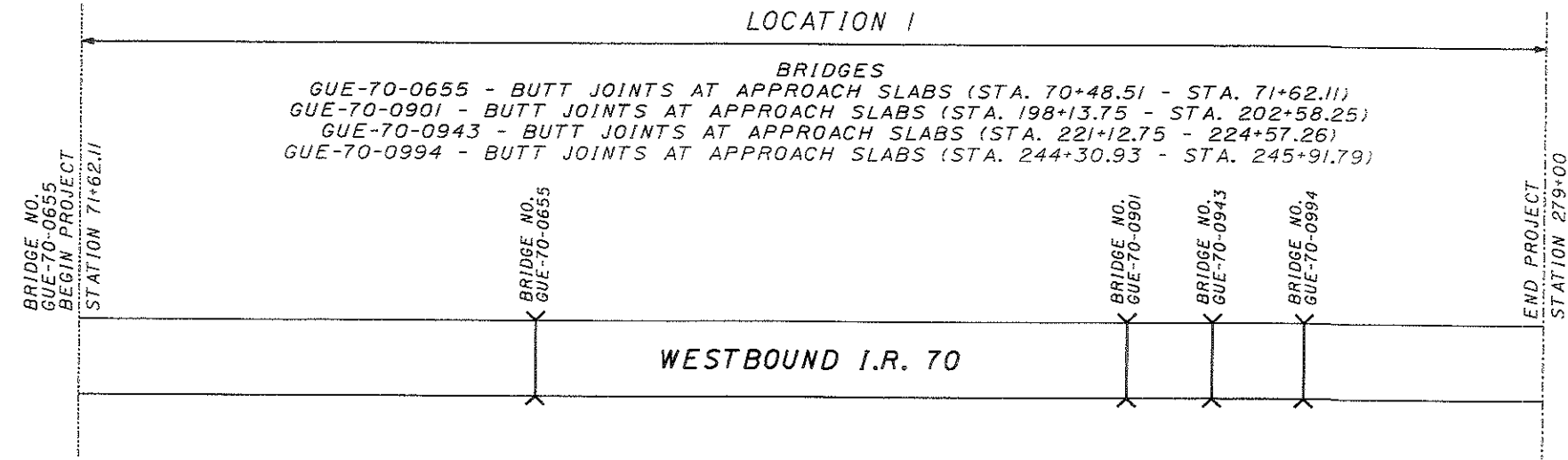
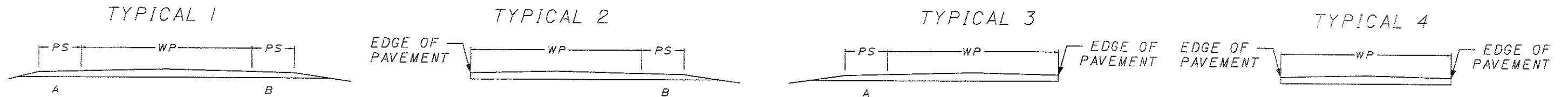
SHOULDER CALCULATIONS

GUE-70-6.51





# SHOULDER TREATMENT



STATION EQUATION WESTBOUND  
 272+26.34 BACK =  
 272+67.75 AHEAD

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## SHOULDER DATA

LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT										
			MILES	LIN. FT.		A		B			407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE			254	617	
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	THICK	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)	
GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	INCHES	CU. YD.	SO. YD.	CU. YD.											
<b>WESTBOUND I.R. 70</b>																					
I.R. 70		71+62.11 - 198+13.75		12,652	2		446	2	2,812	210.9			1.75	136.7			2,812	390.6			
I.R. 70		202+58.25 - 221+12.75		1,855	2		446	2	413	31.0			1.75	20.1			413	57.3			
I.R. 70		224+57.26 - 234+75		1,018	2		446	2	227	17.1			1.75	11.1			227	31.4			
<b>RAMP D</b>																					
I.R. 70		23+73.49 - 20+00		374	2		446	8	333	25.0			1.75	16.2			333	11.5			
I.R. 70		20+00 - 18+40.5		160	2		446	5.5 AVG.	98	7.4			1.75	4.8			98	4.9			
I.R. 70		18+40.5 - 10+03		838	1	446	3	446	3	559	42.0	28.0	1.50	23.3	1.50	23.3	559	51.7			
<b>WESTBOUND I.R. 70</b>																					
I.R. 70		240+08 - 244+43.56		436	2		446	2	97	7.3			1.75	4.8			97	13.5			
I.R. 70		246+04.42 - 272+26.34 (BK)		2,622	2		446	2	583	43.8			1.75	28.4			583	80.9			
I.R. 70		272+67.75 (AH) - 279+00		633	2		446	2	141	10.6			1.75	6.9			141	19.5			
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										353.1	42.0	28.0				252.3		23.3		5,263	661.3

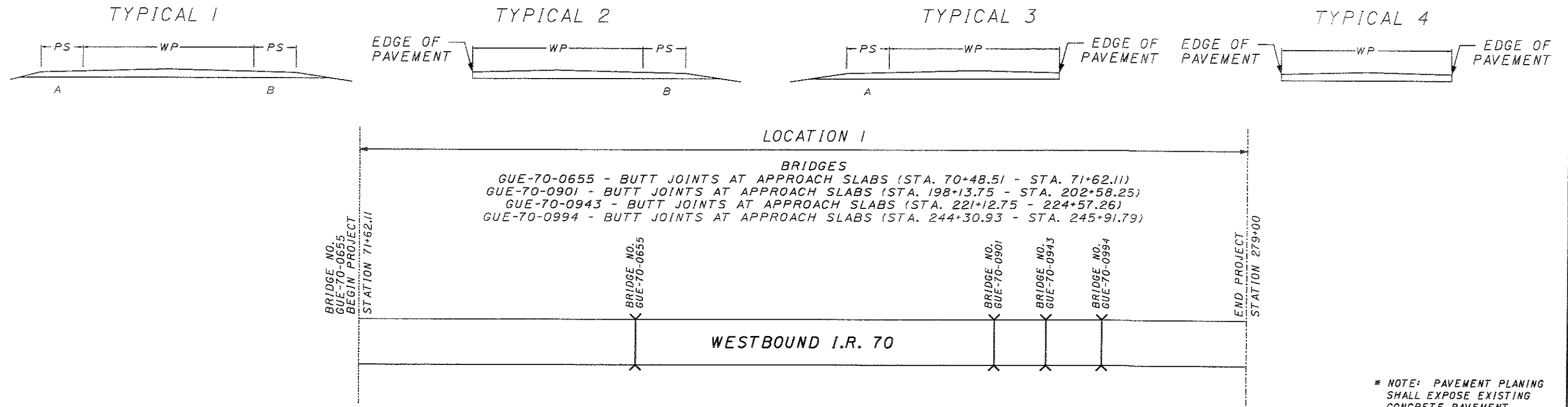
**SHOULDER CALCULATIONS**

**GUE-70-6.51**

G70001.MPS 4/8/03

CALCULATED  
CHECKED

# SHOULDER TREATMENT



**SHOULDER DATA**

\*\* - RADIUS

LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT									
			MILES	LIN. FT.		A		B			407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE		254	617	
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)	
<b>WESTBOUND I.R. 70</b>																				
I.R. 70		71+73.39 - 159+00		8,727	3	446	2			1,940	145.5			1.75	94.3			1,940	269.4	
I.R. 70		159+00 - 160+00		100	3	446	2			23	1.8			1.75	1.2			23	3.1	
I.R. 70		160+00 - 171+00		1,100	3	446	2			245	18.4			1.75	11.9			245	34.0	
<b>N.W. RAMP S.R. 209</b>																				
I.R. 70		13+42.11 - 10+42		301	3	446	8			268	20.1			1.75	13.1			268	9.3	
I.R. 70		10+42 - 9+42		100	3	446	7 AVG.			78	5.9			1.75	3.8			78	3.1	
I.R. 70		9+42 - 8+92		50	3	446	6			34	2.6			1.75	1.7			34	1.5	
I.R. 70		8+92 - 0+62.8		830	3	446	6			554		41.6	27.7	1.50	23.1	1.50	23.1	554	25.6	
I.R. 70		0+62.8 - 0+12.8		89**	3	446	6			60		4.5	3.0	1.50	2.5	1.50	2.5	60	2.7	
I.R. 70		7+92 - 7+29.5		63	2		446	2.5 AVG.		18		1.4	0.9	1.50	0.8	1.50	0.8	18	1.9	
I.R. 70		7+29.5 - 0+62.8		667	2		446	3		223		16.8	11.2	1.50	9.3	1.50	9.3	223	20.6	
I.R. 70		0+62.8 - 0+12.8		58**	2		446	3		20		1.5	1.0	1.50	0.9	1.50	0.9	20	1.8	
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>											194.3	65.8	43.8			162.6	36.6		3,463	373.0

**SHOULDER CALCULATIONS**

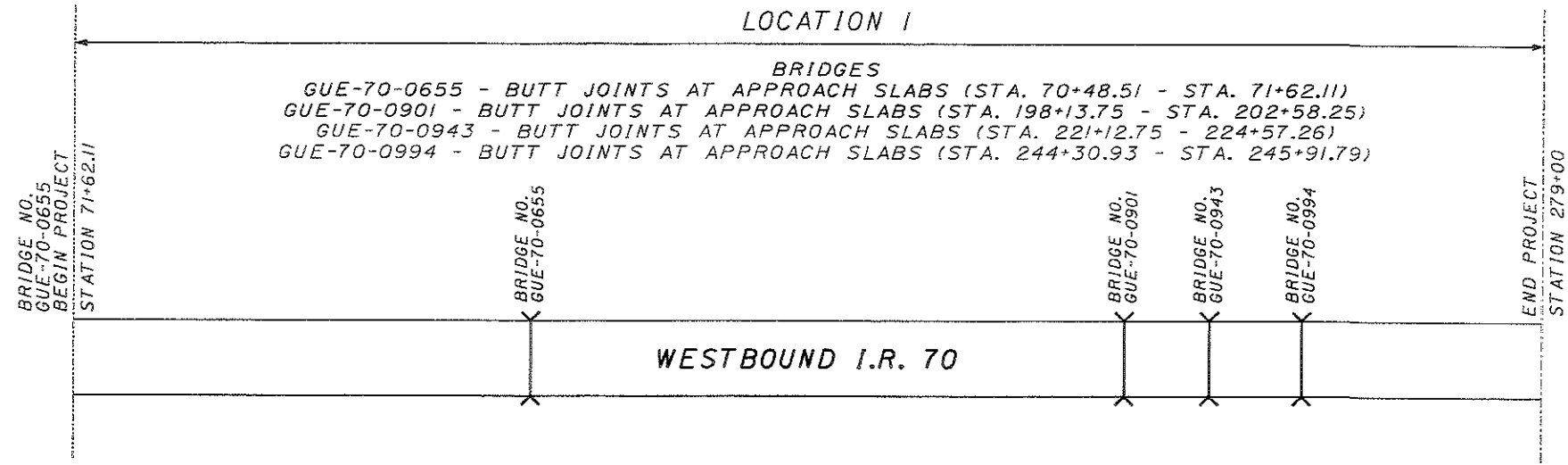
**GUE-70-6.51**

25  
38

670001.MPS 4/8/03

CALCULATED  
CHECKED

# SHOULDER TREATMENT



\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

\*\* - (APPROACH SLAB) DEDUCT 22.2 SQ.YD.

## SHOULDER DATA

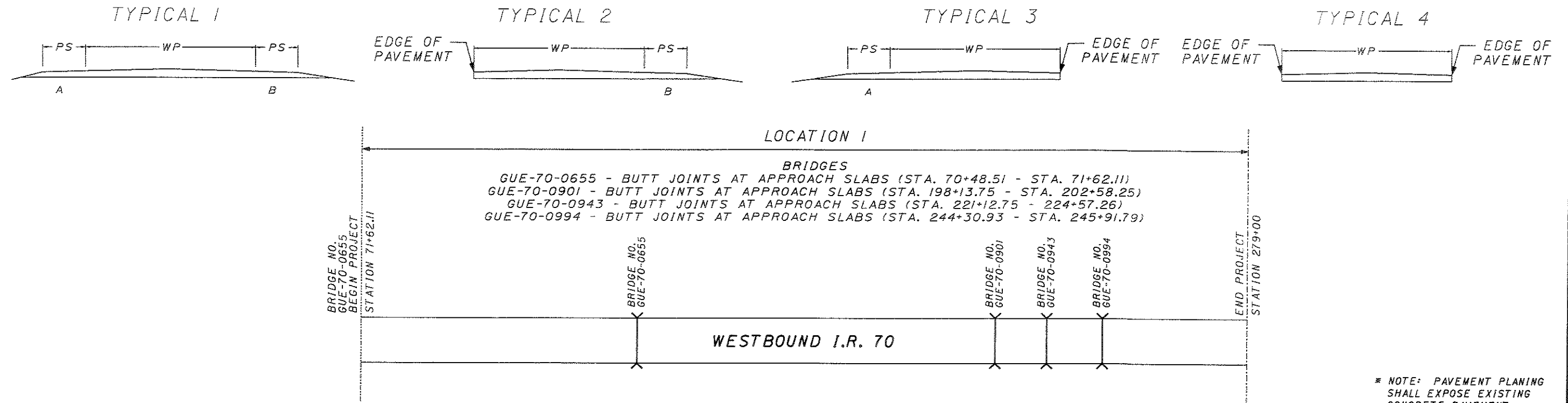
L O C A T I O N	R O U T E	S T A T I O N T O S T A T I O N	L E N G T H		T Y P E	E X I S T I N G				A R E A S Q. Y D.	P R O P O S E D P A V E M E N T											
						T Y P E - W I D T H ( F T. )					4 0 7				4 4 2 A S P H A L T C O N C R E T E				2 5 4		6 1 7	
						A	B				TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22	THICK	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS*	COMPACTED AGGREGATE, TYPE A AS PER PLAN (TO BACK UP PAVED SHOULDER) (5' WIDTH)		
						T Y P E	W I D T H	T Y P E	W I D T H		GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES	CU. YD.	CU. YD.	CU. YD.			
<b>WESTBOUND I.R. 70</b>																						
I.R. 70		171+00 - 175+60		460	4	446	2		103	7.8			1.75	5.0			103					
I.R. 70		175+60 - 189+40		1,380	3	446	2		307	23.1			1.75	15.0			307	42.6				
I.R. 70		189+40 - 190+40		100	3	446	2		23	1.8			1.75	1.2			23	3.1				
<b>N.E. RAMP S.R. 209</b>																						
I.R. 70		11+92.5 - 11+42.5		135**	1	446	6	446	135		10.2	6.8	1.50	5.7	1.50	5.7	135	8.3				
I.R. 70		11+42.5 - 4+60		683	1	446	6	446	683		51.3	34.2	1.50	28.5	1.50	28.5	683	42.2				
I.R. 70		4+60 - 2+00		260	3	446	6 AVG.		174	13.1			1.75	8.5			174	8.0				
I.R. 70		2+00 - 0+00		200	3	446	7 AVG.		156	11.7			1.75	7.6			156	6.2				
<b>WESTBOUND I.R. 70</b>																						
I.R. 70		195+00 - 197+00		200	3	446	2		45	3.4			1.75	2.2			45	6.2				
I.R. 70		197+00 - 198+13.75		114	3	446	2		26	2.0			1.75	1.3			26	3.5				
I.R. 70		202+58.25 - 203+40		82	3	446	2		19	1.5			1.75	1.0			19	2.5				
I.R. 70		203+40 - 204+58.25		119	3	446	2		27	2.1			1.75	1.4			27	3.7				
I.R. 70		204+58.25 - 205+21		63	3	446	2		14	1.1			1.75	0.7			14	2.0				
I.R. 70		205+21 - 216+25		1,104	3	446	2		246	18.5			1.75	12.0			246	34.1				
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>										<b>86.1</b>	<b>61.5</b>	<b>41.0</b>		<b>90.1</b>	<b>34.2</b>		<b>1,958</b>	<b>162.4</b>				

S70001.MPS 1/8/03

SHOULDER CALCULATIONS

GUE-70-6.51

# SHOULDER TREATMENT



## SHOULDER DATA

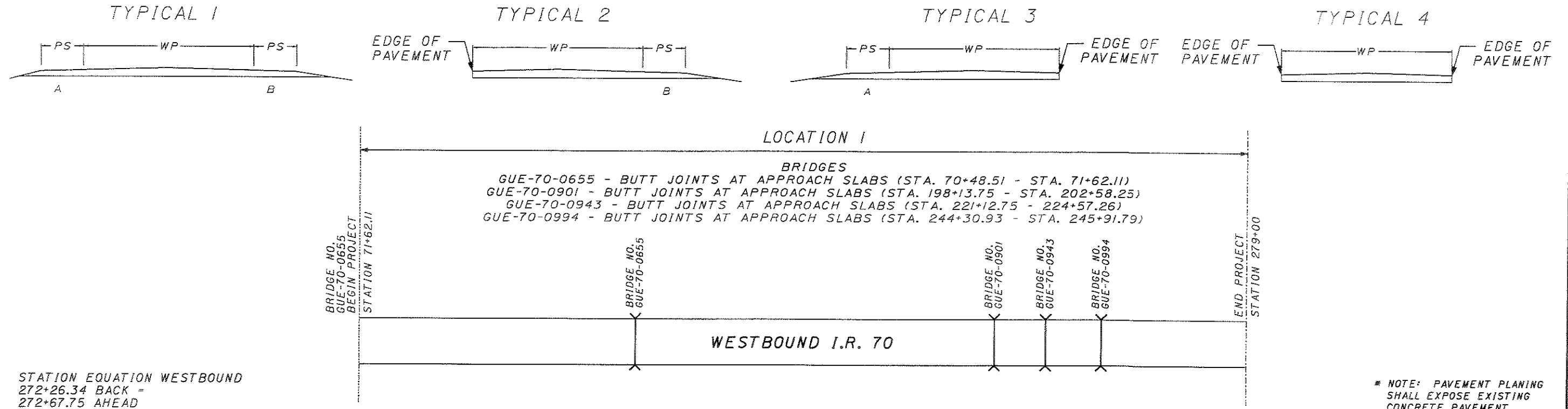
LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPICAL	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75")- I.R. 70 (3")- RAMPS & LOOPS	617 COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)		
			MILES	LIN. FT.		A		B			407			442 ASPHALT CONCRETE		448 ASPHALT CONCRETE				
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK			INTERMEDIATE COURSE, TYPE 2, PG 72-22	SQ. YD.
<b>RAMP A</b>																				
	I.R. 70	39+98.86 - 35+22.26		477	3	446	8			424	31.8			1.75	20.7			424	14.7	
	I.R. 70	31+63.44 - 13+30		1,834	1	446	3	446	3	1,223		91.8	61.2	1.50	51.0	1.50	51.0	1,223	113.2	
<b>WESTBOUND I.R. 70</b>																				
	I.R. 70	216+25 - 219+07		282	3	446	2			63	4.8			1.75	3.1			63	8.7	
	I.R. 70	219+07 - 221+37.75		231	3	446	2			52	3.9			1.75	2.6			52	7.1	
	I.R. 70	224+57.26 - 225+05		48	3	446	2			11	0.9			1.75	0.6			11	1.5	
	I.R. 70	225+05 - 230+70		565	3	446	2			126	9.5			1.75	6.1			126	17.4	
	I.R. 70	231+70 - 213+26		56	3	446	2			13	1.0			1.75	0.7			13	1.7	
<b>RAMP B</b>																				
	I.R. 70	26+10 - 14+26		1,184	1	446	3	446	3	790		59.3	39.5	1.50	33.0	1.50	33.0	790	73.1	
	I.R. 70	14+26 - 12+74		152	3	446	6 AVG.			102	7.7			1.75	5.0			102	4.7	
	I.R. 70	12+74 - 8+00		474	3	446	8			422	31.7			1.75	20.6			422	14.6	
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>											91.3	151.1	100.7			143.4	84.0		3,226	256.7

610001.MPS 4/8/03

SHOULDER CALCULATIONS

GUE-70-6.51

# SHOULDER TREATMENT



STATION EQUATION WESTBOUND  
 272+26.34 BACK =  
 272+67.75 AHEAD

\* NOTE: PAVEMENT PLANING SHALL EXPOSE EXISTING CONCRETE PAVEMENT

## SHOULDER DATA

LOCATION	ROUTE	STATION TO STATION	LENGTH		TYPE	EXISTING TYPE - WIDTH (FT.)				AREA SQ. YD.	PROPOSED PAVEMENT								254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (1.75" - I.R. 70 (3") RAMP & LOOPS*	617 COMPACTED AGGREGATE, TYPE A AS PER PLAN (2" DEPTH) (TO BACK UP PAVED SHOULDER) (5' WIDTH)			
						A		B			407		442 ASPHALT CONCRETE		448 ASPHALT CONCRETE		SQ. YD.	CU. YD.					
						TYPE	WIDTH	TYPE	WIDTH		TACK COAT @ 0.075 GAL./S.Y.	TACK COAT, 702.13 @ 0.075 GAL./S.Y.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./S.Y.	THICK	INTERMEDIATE COURSE, TYPE 1,	THICK					SURFACE COURSE, 12.5 MM, TYPE A (446)	THICK	INTERMEDIATE COURSE, TYPE 2, PG 72-22
											GAL.	GAL.	GAL.	INCHES	CU. YD.	INCHES					CU. YD.	INCHES	CU. YD.
<b>WESTBOUND I.R. 70</b>																							
	I.R. 70	238+00 - 242+75		475	3	446	2			106	8.0				1.75	5.2			106	14.7			
	I.R. 70	242+75 - 243+75		100	3	446	2			23	1.8				1.75	1.2			23	3.1			
	I.R. 70	243+75 - 244+30.93		56	3	446	2			13	1.0				1.75	0.7			13	1.7			
	I.R. 70	245+91.79 - 251+95		604	3	446	2			135	10.2				1.75	6.6			135	18.6			
	I.R. 70	251+95 - 252+95		100	3	446	2			23	1.8				1.75	1.2			23	3.1			
<b>RAMP C</b>																							
	I.R. 70	23+00 - 10+50		1,250	1	446	3	446	3	834		62.6	41.7		1.50	34.8	1.50	34.8	834	77.2			
	I.R. 70	10+50 - 6+01.32		449	3	446	5.5 AVG			275	20.7				1.75	13.4			275	13.9			
<b>WESTBOUND I.R. 70</b>																							
	I.R. 70	257+50 - 264+00		650	3	446	2			145	10.9				1.75	7.1			145	20.1			
	I.R. 70	264+00 - 265+00		100	3	446	2			23	1.8				1.75	1.2			23	3.1			
	I.R. 70	265+00 - 272+26.34 (BK)		727	3	446	2			162	12.2				1.75	7.9			162	22.4			
	I.R. 70	272+67.75 (AH) - 279+00		633	3	446	2			141	10.6				1.75	6.9			141	19.5			
<b>TOTALS (CARRIED TO THE PAVEMENT SUB SUMMARY)</b>											79.0	62.6	41.7				86.2	34.8		1,880	197.4		

CY0001.WPS 4/8/03

SHOULDER CALCULATIONS

GUE-70-6.51

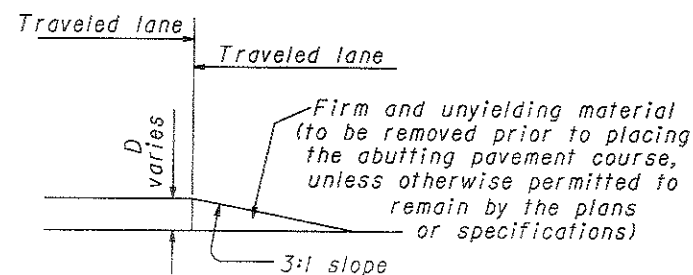


### GENERAL NOTES

- 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.
- 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.
- 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.
- The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
- Where concrete barrier is specified, it shall be in accordance with Standard Construction Drawing MC-9.2 and Item 622.
- 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.
- When OW-151 (Low Shoulder) signs or OW-171 (Uneven Lanes) and OWP-171 signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all intersecting roadways within the limits of the condition. When the dropoff condition extends more than one-half mile, additional signs should be erected at intervals of one mile or less.
- 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.
- Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
- Pavement Repairs (or similar work):
  - Lengths greater than 60 feet - utilize appropriate treatment from Condition I.
  - Lengths of 60 feet or less - repairs shall be effected in accordance with 255.08. Drums may be used as a separator adjacent to the traveled lane.

### OPTIONAL WEDGE TREATMENT (MILLING OR RESURFACING)

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



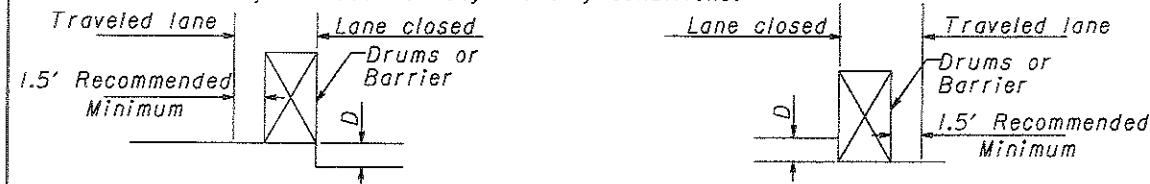
### CONDITION I

#### DROPOFFS BETWEEN TRAVELED LANES

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

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

\*Cones may be used for daytime only conditions.



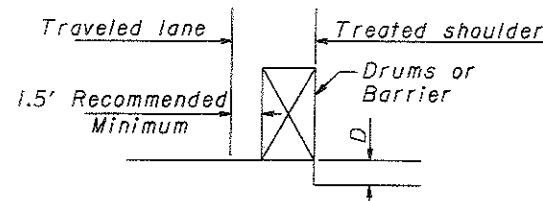
### CONDITION II

#### DROPOFFS WITHIN GRADED SHOULDER AREA

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

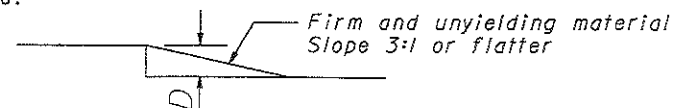
D (In.)	Treatment
≤ 1/2	1) If edgelines are present, no treatment necessary OR 2) Erect OW-171 and OWP-171 signs.
> 1/2 - 5	1) If min.*lane width requirements can be met, maintain lanes utilizing drums as shown below OR 2) If min.*lane width requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
> 5 - 12 Daylight only	If min.*lane width requirements can be met, maintain lanes utilizing drums as shown below.
> 5 - 24	1) If min.*lane width requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If min.*lane width requirements cannot be met, close adjacent lane utilizing drums.
> 24	Lane closure utilizing portable concrete barrier as shown below.

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



### OPTIONAL SHOULDER TREATMENT

- This treatment may not be used within a bituminous shoulder where a hot longitudinal joint per 401.15 is required.
- OW-151 signs required.



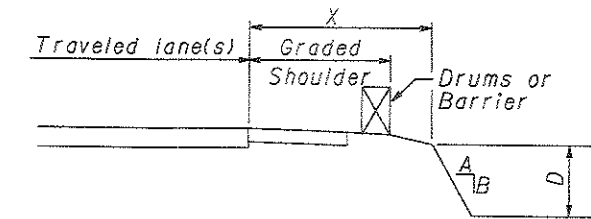
### CONDITION III

#### DROPOFFS BEYOND GRADED SHOULDER OR BACK OF CURB

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

### CHART A

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

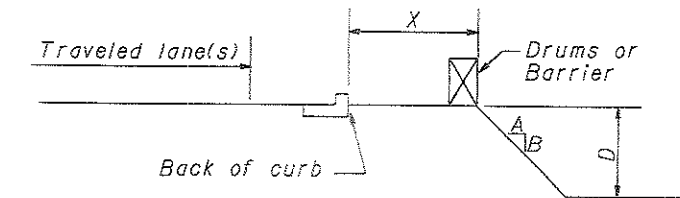


X (Ft.)	D (In.)	A/B	Treatment Required	
			Day	Night
0-4	Any	Any	(a)	(a)
4-30	Any	3:1 or Flatter	None	None
4-12	< 3	Steeper than 3:1	None	None
4-12	> 3 - < 12	Steeper than 3:1	Drums	Drums
4-12	> 12	Steeper than 3:1	Drums	Barrier
> 12 - 20	< 12	Steeper than 3:1	None	None
> 12 - 20	> 12 - < 24	Steeper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

(a) Use treatment specified under Condition II.

### CHART B

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



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

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF LOCATION AND DESIGN

### DROPOFFS IN WORK ZONES

DESIGNED DRAWN TRACED CHECKED REVIEWED DATE REVISED

**MATERIALS SUPPLIED BY THE DEPARTMENT**

ALL MATERIALS ARE TO BE CONTRACTOR FURNISHED, EXCEPT THAT THE DEPARTMENT SHALL SUPPLY RAISED PAVEMENT MARKING CASTINGS IN THE QUANTITIES SHOWN HEREIN TO THE CONTRACTOR. PAY ITEMS FOR THE DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED IN "INSTALLATION ONLY". THE QUANTITY AND TYPE OF DEPARTMENT SUPPLIED MATERIALS ARE SHOWN ON SHEETS 32 & 33.

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

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

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

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

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

NON-PERFORMED MATERIALS SHALL BE RETURNED, TO A LOCATION SPECIFIED BY THE DISTRICT CONSTRUCTION ENGINEER, WITHIN THIRTY CALENDAR DAYS OF THE COMPLETION OF THE PROJECT.

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

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

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

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

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

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

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

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

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

GENERAL NOTES

GUE-70-6.51

670001.TRM 4/17/03



PART	ROUTE	SPACING	ITEM 621		PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
			RPM, INSTALLATION ONLY	ONE-WAY		TWO-WAY				
				WHITE	YELLOW	YELLOW/ YELLOW	WHITE/ RED	YELLOW/ RED		
			EACH	EACH	EACH	EACH	EACH	EACH		
GUE.	I.R. 70 (RURAL) EASTBOUND									
1	STA. 71+52.9 - 274+30.13 (BK)	120'	171	171						EASTBOUND LANE LINE
1	STATION EQUATION									STATION EQUATION- STA. 274+30.13 BACK = STA. 272+67.75 AHEAD
1	STA. 272+67.75 (AH) - STA. 279+00	120'	8	8						EASTBOUND LANE LINE
1	EASTBOUND DECEL LANE STA. 168+60 - STA. 171+60	40'	17			17				CHANNELIZING LINE FOR DECEL LANE
1	S.W. RAMP S.R. 209 STA. 4+60 - STA. 15+00	80'	15					15		OFF RAMP TO S.R. 209
1	S.W. LOOP S.R. 209 STA. 8+00 - STA. 16+58	80'	13					13		ON RAMP FROM S.R. 209
1	EASTBOUND ACCEL LANE STA. 184+75 - STA. 188+85	40'	13			13				CHANNELIZING LINE FOR ACCEL LANE
1	RAMP G STA. 10+49 - STA. 13+04	40'	15			15				CHANNELIZING LINE FOR DECEL LANE
1	STA. 13+04 - STA. 25+35	80'	18					18		OFF RAMP TO I.R. 77 SOUTH
1	RAMP H STA. 5+96 - STA. 16+22	80'	15					15		ON RAMP FROM I.R. 77 SOUTH
1	EASTBOUND ACCEL LANE STA. 246+25 - STA. 253+85	40'	19			19				CHANNELIZING LINE FOR ACCEL LANE
1	EASTBOUND DECEL LANE STA. 249+94 - STA. 252+64	40'	16			16				CHANNELIZING LINE FOR DECEL LANE
1	RAMP F STA. 12+61 - STA. 24+50	80'	17					17		OFF RAMP TO I.R. 77 NORTH
1	RAMP E STA. 5+05 - STA. 26+34	80'	29					29		ON RAMP FROM I.R. 77 NORTH
1	EASTBOUND ACCEL LANE STA. 265+03 - STA. 268+07	40'	10			10				CHANNELIZING LINE ACCEL LANE
TOTALS (CARRIED TO GENERAL SUMMARY)			361	179(*)		78(*)		104(*)	(*) - FOR INFORMATION ONLY	

CALCULATED  
CHECKED

RPM QUANTITIES

GUE-70-6.51

32  
38

CT0061.TRW 4/17/03

PART	ROUTE	SPACING	ITEM 621	PRISMATIC RETRO-REFLECTOR COLORS					REMARKS
			RPM, INSTALLATION ONLY	ONE-WAY		TWO-WAY			
				WHITE	YELLOW	YELLOW/ YELLOW	WHITE/ RED	YELLOW/ RED	
			EACH	EACH	EACH	EACH	EACH	EACH	
GUE.	I.R. 70 (RURAL)								
	WESTBOUND								
/	STA. 71+92.2 - STA. 272+26.34 (BK)	120'	169	169					WESTBOUND LANE LINE
/	STATION EQUATION								STATION EQUATION- STA. 272+26.34 BACK - STA. 272+67.75 AHEAD
/	STA. 272+67.75 - STA. 279+00	120'	8	8					WESTBOUND LANE LINE
/	WESTBOUND ACCEL LANE								
/	STA. 170+68 - STA. 175+60	40'	15			15			CHANNELIZING LINE FOR ACCEL LANE
/	N.W. RAMP S.R. 209								
/	STA. 8+92 - STA. 0+12.8	40'	13					13	ON RAMP FROM S.R. 209
/	N.E. RAMP S.R. 209								
/	STA. 11+92.5 - STA. 4+60	80'	12					12	OFF RAMP TO S.R. 209
/	WESTBOUND DECEL LANE								
/	STA. 190+40 - STA. 192+76	40'	14			14			CHANNELIZING LINE FOR DECEL LANE
/	WESTBOUND ACCEL LANE								
/	STA. 209+08 - STA. 216+25	40'	20			20			CHANNELIZING LINE FOR ACCEL LANE
/	RAMP A								
/	STA. 39+98.88 - STA. 13+30	80'	36					36	ON RAMP FROM I.R. 77 SOUTH
/	WESTBOUND DECEL LANE								
/	STA. 231+70 - STA. 233+80	40'	13			13			CHANNELIZING LINE FOR DECEL LANE
/	RAMP B								
/	STA. 14+26 - STA. 26+10	40'	32					32	OFF RAMP TO I.R. 77 SOUTH
/	WESTBOUND ACCEL LANE								
/	STA. 234+75 - STA. 240+08	40'	16			16			CHANNELIZING LINE FOR ACCEL LANE
/	RAMP D								
/	STA. 23+75.49 - STA. 10+03	80'	20					20	ON RAMP FROM I.R. 77 NORTH
/	RAMP C								
/	STA. 23+00 - 10+50	80'	18					18	OFF RAMP TO I.R. 77 NORTH
/	WESTBOUND DECEL LANE								
/	STA. 252+95 - STA. 255+92	40'	17			17			CHANNELIZING LINE FOR DECEL LANE
TOTALS (CARRIED TO GENERAL SUMMARY)			403	177(*)		95(*)	131(*)		(*) - FOR INFORMATION ONLY

RPM QUANTITIES

GUE-70-6.51

670001.RM 4/17/03

CALCULATED  
CHECKED

COUNTY	ROUTE	STATION		ITEM 644 EDGE LINE, TYPE 1 QUANTITIES (WHITE)			ITEM 644 EDGE LINE, TYPE 1 QUANTITIES (YELLOW)			EDGE LINE TOTAL MILES	REMARKS
		FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP		
		EASTBOUND I.R. 70									
GUERNSEY	I.R. 70	71+52.9	253+85				3.46	3.46		3.46	BRDGE NO. GUE-70-0655
GUERNSEY	I.R. 70	5+96	20+00				0.27		0.27	0.27	RAMP H
GUERNSEY	I.R. 70	250+00	274+30.13 (BK)				0.46	0.46		0.46	
GUERNSEY	I.R. 70	STATION EQUATION									STATION EQUATION 274+30.13 BACK - 272+67.75 AHEAD
GUERNSEY	I.R. 70	272+67.75 (AH)	279+00				0.12	0.12		0.12	
		EASTBOUND I.R. 70									
GUERNSEY	I.R. 70	71+52.9	167+00	1.81	1.81					1.81	BRIDGE NO. GUE-70-0655
GUERNSEY	I.R. 70	0+00	20+76.2	0.40		0.40				0.40	S.W. RAMP S.R. 209
GUERNSEY	I.R. 70	4+60	15+00				0.20		0.20	0.20	S.W. RAMP S.R. 209
GUERNSEY	I.R. 70	171+60	188+85	0.33	0.33					0.33	
GUERNSEY	I.R. 70	2+70	3+90				0.04		0.04	0.04	S.W. LOOP S.R. 209
GUERNSEY	I.R. 70	19+10	20+66.2	0.03		0.03				0.03	S.W. LOOP S.R. 209
GUERNSEY	I.R. 70	8+00	16+58				0.17		0.17	0.17	S.W. LOOP S.R. 209
GUERNSEY	I.R. 70	1+00	19+81.27	0.36		0.36				0.36	S.W. LOOP S.R. 209
GUERNSEY	I.R. 70	18+00	228+14.46	0.76	0.76					0.76	
GUERNSEY	I.R. 70	8+14.46	25+23	0.33		0.33				0.33	RAMP G
GUERNSEY	I.R. 70	13+04	25+23				0.23		0.23	0.23	RAMP G
GUERNSEY	I.R. 70	233+00	248+50	0.30	0.30					0.30	
GUERNSEY	I.R. 70	8+50	24+50	0.31		0.31				0.31	RAMP F
GUERNSEY	I.R. 70	12+61	24+50				0.23		0.23	0.23	RAMP F
GUERNSEY	I.R. 70	5+96	16+22	0.20		0.20				0.20	RAMP H
GUERNSEY	I.R. 70	252+64	268+07	0.30	0.30					0.30	
GUERNSEY	I.R. 70	5+05	26+34				0.41		0.41	0.41	RAMP E
GUERNSEY	I.R. 70	5+05	28+24.06	0.44		0.44				0.44	RAMP E
GUERNSEY	I.R. 70	267+00	274+30.13 (BK)	0.46	0.46					0.46	
GUERNSEY	I.R. 70	STATION EQUATION									STATION EQUATION 274+30.13 BACK - 272+67.75 AHEAD
GUERNSEY	I.R. 70	272+67.75 (AH)	279+00	0.12	0.12					0.12	
		TOTALS (CARRIED TO GENERAL SUMMARY)		6.15 (*)	4.08(*)	2.07 (*)	5.59 (*)	4.04 (*)	1.55 (*)	11.74	

(\* ) - FOR INFORMATION ONLY

EDGE LINE SUB-SUMMARY

GUE-70-6.51

670ELSS.DGN 4/1/03

COUNTY	ROUTE	STATION		ITEM 644 EDGE LINE, TYPE 1 QUANTITIES (WHITE)			ITEM 644 EDGE LINE, TYPE 1 QUANTITIES (YELLOW)			EDGE LINE TOTAL MILES	REMARKS
		FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP		
WESTBOUND I.R. 70											
GUERNSEY	I.R. 70	71+92.2	243+75				3.04	3.09		3.04	BRIDGE NO. GUE-70-0655
GUERNSEY	I.R. 70	23+73.49	10+03				0.26		0.26	0.26	RAMP D
GUERNSEY	I.R. 70	233+88	272+26.34 (BK)				0.73	0.73		0.73	
STATION EQUATION											
GUERNSEY	I.R. 70	272+67.75 (AH)	279+00				0.12	0.12		0.12	STATION EQUATION 272+26.34 BACK - 272+67.75 AHEAD
WESTBOUND I.R. 70											
GUERNSEY	I.R. 70	71+92.2	171+00	1.88	1.88					1.88	BRIDGE NO. GUE-70-0655
GUERNSEY	I.R. 70	13+42.11	0+12.8	0.26		0.26				0.26	N.W. RAMP S.R. 209
GUERNSEY	I.R. 70	8+92	0+12.8				0.17		0.17	0.17	N.W. RAMP S.R. 209
GUERNSEY	I.R. 70	170+68	190+40	0.38	0.38					0.38	
GUERNSEY	I.R. 70	11+92.5	4+60				0.14		0.14	0.14	N.E. RAMP S.R. 209
GUERNSEY	I.R. 70	11+92.5	0+00	0.23		0.23				0.23	N.E. RAMP S.R. 209
GUERNSEY	I.R. 70	195+00	216+25	0.41	0.41					0.41	
GUERNSEY	I.R. 70	39+98.88	13+30	0.51		0.51				0.51	RAMP A
GUERNSEY	I.R. 70	39+98.88	13+30				0.51		0.51	0.51	RAMP A
GUERNSEY	I.R. 70	209+08	231+70	0.43	0.43					0.43	
GUERNSEY	I.R. 70	26+10	14+26				0.23		0.23	0.23	RAMP B
GUERNSEY	I.R. 70	26+10	8+00	0.35		0.35				0.35	RAMP B
GUERNSEY	I.R. 70	19+40.5	10+03	0.18		0.18				0.18	RAMP D
GUERNSEY	I.R. 70	238+00	252+95	0.29	0.29					0.29	
GUERNSEY	I.R. 70	23+00	10+50				0.24		0.24	0.24	RAMP C
GUERNSEY	I.R. 70	23+00	6+01.32	0.33		0.33				0.33	RAMP C
GUERNSEY	I.R. 70	257+50	272+26.34 (BK)	0.28	0.28					0.28	
STATION EQUATION											
GUERNSEY	I.R. 70	272+67.75 (AH)	279+00	0.12	0.28					0.12	STATION EQUATION 272+26.34 BACK - 272+67.75 AHEAD
<b>TOTALS (CARRIED TO GENERAL SUMMARY)</b>				5.65 (*)	3.95 (*)	1.86 (*)	5.44 (*)	3.94 (*)	1.55 (*)	11.09	

(\*) - FOR INFORMATION ONLY

EDGE LINE SUB-SUMMARY

GUE-70-6.51

G70ELSS.DGN 4/17/03

CALCULATED  
CHECKED

COUNTY	ROUTE	STATION		ITEM 644 LANE LINE, TYPE 1 QUANTITIES		PARTICIPATION TYPE					REMARKS	
		FROM	TO	TOTAL MILES	4" LANE LINE		IRG	FG	RSG	NON-FEDERAL (STATE)		LANE LINE TOTAL MILES
					DASHED	SOLID						
<b>EASTBOUND I.R. 70</b>												
GUERNSEY	I.R. 70	71+52.9	274+30.13 (BK)	3.84	0.96						3.84	BRIDGE NO. GUE-70-0655
GUERNSEY	I.R. 70	STATION EQUATION										STATION EQUATION 274+30.13 BACK - 272+67.75 AHEAD
GUERNSEY	I.R. 70	272+67.75	279+00	0.12	0.03						0.12	
GUERNSEY	I.R. 70	164+60	168+60	0.08	0.02						0.08	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	188+85	191+65	0.06	0.015						0.06	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	9+43	10+49	0.02	0.005						0.02	REPLACE @ EXISTING LOCATION (RAMP G)
GUERNSEY	I.R. 70	247+54	249+94	0.05	0.013						0.05	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	253+85	256+65	0.06	0.015						0.06	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	268+07	270+47	0.05	0.013						0.05	REPLACE @ EXISTING LOCATION
<b>WESTBOUND I.R. 70</b>												
GUERNSEY	I.R. 70	71+92.2	272+26.34 (BK)	3.80	0.95						3.80	BRIDGE NO. GUE-70-0655
GUERNSEY	I.R. 70	STATION EQUATION										STATION EQUATION 272+26.34 BACK - 272+67.75 AHEAD
GUERNSEY	I.R. 70	272+67.75 (AH)	279+00	0.12	0.03						0.12	
GUERNSEY	I.R. 70	168+28	170+68	0.05	0.013						0.05	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	192+76	194+76	0.04	0.01						0.04	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	207+48	209+80	0.03	0.007						0.03	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	233+80	237+80	0.08	0.02						0.08	REPLACE @ EXISTING LOCATION
GUERNSEY	I.R. 70	255+92	259+12	0.06	0.015						0.06	REPLACE @ EXISTING LOCATION
<b>TOTALS (CARRIED TO GENERAL SUMMARY)</b>					2.116 (*)						8.46	

(\*) - FOR INFORMATION ONLY

LANE LINE SUB-SUMMARY

GUE-70-6.51

670CL55.DGN 4/7/03

PART	LOCATION	SIDE	ITEM 644 THERMOPLASTIC														REMARKS	
			8" CHANNELIZING LINE	STOP LINE	12" CROSSWALK LINE	24" TRANSVERSE LINE		ISLAND MARKING	CURB MARKING	SCHOOL SYMBOL MARKING		LANE ARROW				WORD ON PAVEMENT, "ONLY"		
						WHITE	YELLOW			72"	96"	TURN		THRU	COMB.	72"		96"
												LEFT	RIGHT					
FT.	FT.	FT.	FT.	FT.	SQ. FT.	FT.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH				
<b>GUE.</b>	<b>I.R. 70</b>																	
	<b>EASTBOUND</b>																	
/	STA. 168+60 - STA. 171+60		600			304											REPLACE @ EXISTING LOCATION	
/	STA. 184+75 - STA. 188+85		410														REPLACE @ EXISTING LOCATION	
	<b>S.W. RAMP S.R. 209</b>																	
/	STA. 15+00 - STA. 20+36						1,497	536									REPLACE @ EXISTING LOCATION	
/	STA. 20+36.2											1					REPLACE @ EXISTING LOCATION	
/	STA. 20+66.2			19													REPLACE @ EXISTING LOCATION	
	<b>S.W. LOOP S.R. 209</b>																	
/	STA. 8+00 - STA. 20+36							540									REPLACE @ EXISTING LOCATION	
	<b>RAMP G</b>																	
/	STA. 10+49 - STA. 13+04		510			263											REPLACE @ EXISTING LOCATION	
	<b>EASTBOUND</b>																	
/	STA. 249+94 - STA. 252+64		540			145											REPLACE @ EXISTING LOCATION	
/	STA. 262+39 - STA. 268+07		568														REPLACE @ EXISTING LOCATION	
	<b>WESTBOUND</b>																	
/	STA. 170+68 - STA. 175+60		492														REPLACE @ EXISTING LOCATION	
/	STA. 190+40 - STA. 192+76		472			260											REPLACE @ EXISTING LOCATION	
	<b>N.E. RAMP S.R. 209</b>																	
/	STA. 11+82.5 - STA. 11+17.5		65														REPLACE @ EXISTING LOCATION	
/	STA. 11+82.5			64													REPLACE @ EXISTING LOCATION	
/	STA. 11+62.5									1	1						REPLACE @ EXISTING LOCATION	
/	STA. 11+25.5													2			REPLACE @ EXISTING LOCATION	
	<b>WESTBOUND</b>																	
/	STA. 209+08 - STA. 216+25		717														REPLACE @ EXISTING LOCATION	
/	STA. 231+70 - STA. 233+80		420			145											REPLACE @ EXISTING LOCATION	
/	STA. 234+75 - STA. 240+08		533			218											REPLACE @ EXISTING LOCATION	
/	STA. 252+95 - STA. 255+92		594														REPLACE @ EXISTING LOCATION	
<b>TOTALS(CARRIED TO GENERAL SUMMARY)</b>			5,921	83		1,335	1,497	1,076			3			2				

PAVEMENT MARKING SUB-SUMMARY

GUE-70-6.51

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GTOPMS2.DGN 4/7/03

SHEET NUMBER											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.		
2	3	4	5	29	32	33	34	35	36	37								
	710												202	54100	710	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE	
	10												SPECIAL	20363000	10	HOURL	GRADER RENTAL	
	5												SPECIAL	20363500	5	HOURL	LOADER RENTAL	
	2,000												253	01001	2,000	SQ. YD.	PAVEMENT REPAIR, AS PER PLAN	3
				197,779									254	01001	197,779	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	3
10				11,891									407	10000	11,901	GALLON	TACK COAT	
				2,969									407	13900	2,969	GALLON	TACK COAT, 702.13	
				1,981									407	14000	1,981	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
	39,631												407	98000	39,631	FT.	TACK COAT, MISC.: FOR LONGITUDINAL JOINT	
				9,358									442	10000	9,358	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (446)	
50				1,653									448	46030	1,703	CU. YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 76-22	
			200										614	11100	200	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
48													614	12460	48	EACH	WORK ZONE MARKING SIGN	
10													614	13000	10	CU. YD.	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		12											614	18601	12	SIGN MNTH.	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	4
	8.46												614	20100	8.46	MILE	WORK ZONE LANE LINE, CLASS I, 642 PAINT	
	5,921												614	23200	5,921	FT.	WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT	
	83												614	26200	83	FT.	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
	3												614	30200	3	EACH	WORK ZONE LANE ARROW, CLASS I, 642 PAINT	
				3,399									617	10101	3,399	CU. YD.	COMPACTED AGGREGATE, TYPE A, AS PER PLAN	2
	15.02												618	40600	15.02	MILE	RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE)	
					361	403							621	00200	764	EACH	RPM, INSTALLATION ONLY	
		4											632	26501	4	EACH	DETECTOR LOOP, AS PER PLAN	4
							11.74	11.09					644	00100	22.83	MILE	EDGE LINE	
								8.46					644	00200	8.46	MILE	LANE LINE	
													644	00400	5,921	FT.	CHANNELIZING LINE	
													644	00500	83	FT.	STOP LINE	
													644	00700	1,335	FT.	TRANSVERSE LINE	
													644	00800	1,076	FT.	CURB MARKING	
													644	00900	1,497	SQ. FT.	ISLAND MARKING	
													644	01300	3	EACH	LANE ARROW	
													644	01410	2	EACH	WORD ON PAVEMENT, 96"	
			LUMP										614	11000	LUMP		MAINTAINING TRAFFIC	
													619	16000	2	MONTH	FIELD OFFICE, TYPE A	
													623	10000	LUMP		CONSTRUCTION LAYOUT STAKES	
													624	10000	LUMP		MOBILIZATION	

GENERAL SUMMARY

GUE-70-6.51

670001.MGS 7/7/03