OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

LIC-62-0.00

1/37

PLAN NO. 119

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI BEGIN	PROJECT TERMINI END	NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
1	LIC	US 62	(0.00) (5.03-10.48)	0.00	10.57	9.07			
2	LIC	US 62	(3.53-4.95)	3.53	5.03	1.50			JOHNSTOWN

The Standard 1989 Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the plans and proposal shall govern these improvements.

562(8

I hereby approve these plans and declare that the making of these improvements will require the closing of the highways to traffic on Parts No. 1 and that detours will be provided by State forces. The closing to traffic of the highways will not be required on Parts No. 2 and provisions for the maintenance and safety of traffic will be indicated in the proposal.

Approved Date 6-27-88 — John M. Hagan, District Deputy Director of Transportation

Approved Date 12-22-88 — B. D. Sandi, Engineer of Bridges

Approved Date _____ — Engineer of Maintenance

Approved Date 6-2-89 — James R. Lindsey, Deputy Director, Operations

Approved Date _____ — Assistant Deputy Director, Program Development

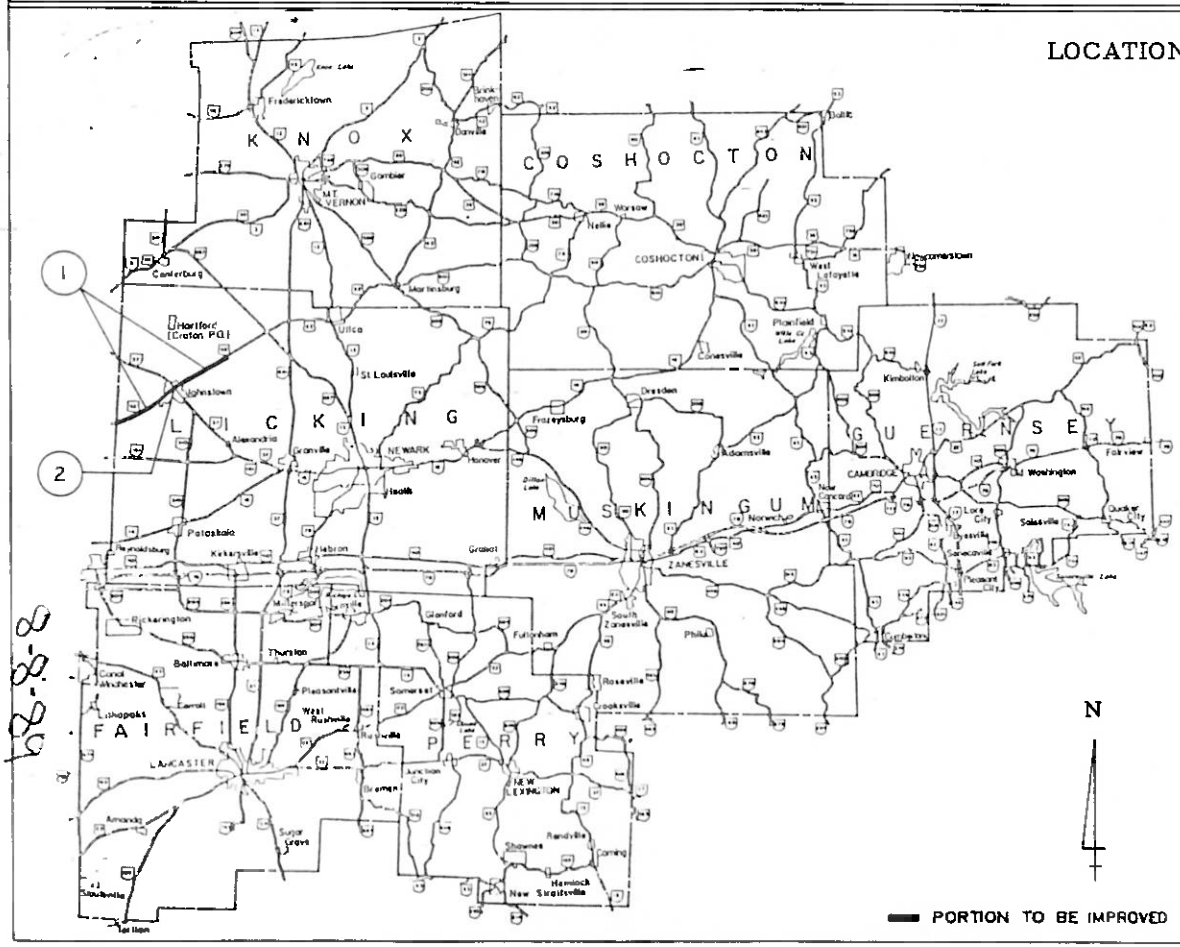
Approved Date _____ — Chief Engineer, Construction

Approved Date _____ — Chief Engineer, Design

Approved Date _____ — Assistant Director, Department of Transportation

Approved Date 6-5-89 — Bernard B. Hinz, Director, Department of Transportation

LOCATION MAP



CALC. BY RLH
DATE 6-14-88

CHKD. BY SKB
DATE 6-15-88

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

STANDARD DRAWINGS				SUPPLEMENTAL SPECIFICATIONS	
		BP-5	1-11-85	SS-847	10-17-83
		TC-71.10	4-9-79	SS-947	10-17-83
		MT-99.10	11-14-86		
		MT-99.20	4-29-88		
		GR-1	1-11-85		
BP-6	10-1-87	GR-2B	2-5-82		
BP-7	10-1-87	GR-3	1-21-65		
BP-3	12-6-76	GR-4	2-5-82		
BP-4	1-11-85	GR-5	2-5-82		
HW-48	4-1-80	CBR-2-73	4-10-73		
MC-4	[illegible]	MC-11	8-1-78		

562(89)

8-8-89

CALC. BY RLM
DATE 6-14-88
CHKD. BY SKG
DATE 6-15-88

GENERAL NOTES

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 PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL – GRADER RENTAL, AND SHALL BE 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.

	PART 1	PART 2
ITEM SPECIAL – GRADER RENTAL	27 HOUR	3 HOUR
ITEM SPECIAL – LOADER RENTAL	27 HOUR	3 HOUR

UNDERGROUND UTILITIES

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES.

VILLAGE OF JOHNSTOWN
WATER AND SEWAGE DEPT.
614-967-5951

COLUMBUS SOUTHERN POWER
215 N. FRONT ST.
COLUMBUS, OHIO 43215
614-464-7911

UNITED TELEPHONE COMPANY OF OHIO
P.O. BOX 3555
MANSFIELD, OHIO 44907
419-755-7138

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PAVEMENT MARKING

STOP LINES, CROSSWALK LINES, CHANNELIZING LINES, TURN ARROWS, ETC., SHOWN ON THE PLAN ARE TAKEN FROM EXISTING MARKINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PLACE NEW PAVEMENT MARKINGS AS NEAR AS POSSIBLE TO THE EXISTING LOCATIONS UNLESS OTHERWISE DESIGNATED BY THE ENGINEER.

ITEM 254 – PAVEMENT PLANING, BITUMINOUS

S.L.M. 4.27 TO S.L.M. 4.37 – S.L.M. 4.47 TO S.L.M. 4.836 – S.L.M. 4.855 TO S.L.M. 4.95

THESE AREAS SHALL BE PLANED WITHOUT HEATING AS DIRECTED BY THE ENGINEER. APPROXIMATELY 4 INCHES SHALL BE PLANED AT THE ℄ OF THE PAVEMENT AND SLOPED EVENLY TO THE FACE OF THE CURB. APPROXIMATELY 3 INCHES SHALL BE PLANED AT THE FACE OF THE CURB.
THE INTENT OF THE PLANING IS TO ESTABLISH AS MUCH CURB HEIGHT AS POSSIBLE AFTER THE PLANING AND RESURFACING. THE ENGINEER WILL DETERMINE THE FINAL PLANING DEPTH AT THE TIME OF CONSTRUCTION. FEATHERING INTO AND OUT OF THE PLANED AREAS SHALL BE AT A RATE OF 1 INCH IN 25 FEET. THE ENTIRE PAVEMENT WIDTH SHALL BE PLANED EACH DAY AS DIRECTED BY THE ENGINEER. AFTER THE PLANING OPERATION IS PERFORMED THE AREAS SHALL BE OVERLAID WITH 1 1/4 INCHES OF ITEM 404 ASPHALT CONCRETE. FEATHER RESURFACING TO 1/2 INCH AT THE FACE OF THE CURB. INTERSECTING STREETS SHALL BE PLANED AND FEATHERED AT A RATE OF 1 INCH IN 10 FEET.

S.L.M. 4.37 TO S.L.M. 4.47

THIS AREA SHALL HAVE THE ASPHALT CONCRETE PLANED FROM THE CONCRETE GUTTERS, EXERCISING CAUTION SO AS NOT TO DAMAGE THE EXISTING CONCRETE. PLANE 1 1/4 INCHES FROM THE PAVEMENT BETWEEN THE CONCRETE GUTTERS. THE AREA BETWEEN THE CONCRETE GUTTERS SHALL BE OVERLAID WITH 1 1/4 INCHES OF ITEM 404 ASPHALT CONCRETE.

GENERAL NOTES

614 WORK ZONE MARKING SIGNS

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND SUBSEQUENTLY REMOVE WORK ZONE MARKING SIGNS (OW-167 AND OW-168) WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS.
THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD CONDITION PROVIDED THE SIGNS MEET CURRENT DEPARTMENT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF 730.19. WORK ZONE MARKING SIGNS SHALL BE PROVIDED WITH SUITABLE YIELDING SUPPORTS OF SUFFICIENT STRENGTH AND STABILITY.
WORK ZONE MARKING SIGNS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. ALL OTHER WORK ZONE SIGNS SHALL BE INCLUDED IN 614 MAINTAINING TRAFFIC UNLESS SEPERATELY ITEMIZED.
PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR PLACEMENT, MAINTENANCE AND REMOVAL OF THE SIGNS.

ITEM	UNIT	DESCRIPTION
614	EACH	WORK ZONE MARKING SIGNS

A QUANTITY OF __A__ EACH WORK ZONE MARKING SIGNS (__B__ EACH "NO EDGE LINES" OW-167 AND __C__ EACH "UNMARKED NO PASSING ZONES" OW-168) ARE CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

	A	B	C
PART 1	30	15	15
PART 2	4	2	2

PAVED SHOULDERS

THE PAVED SHOULDER SHALL BE APPLIED AT THE SAME TIME AS THE FINAL COURSE OF 404 ASPHALT CONCRETE, AS DIRECTED BY THE ENGINEER.

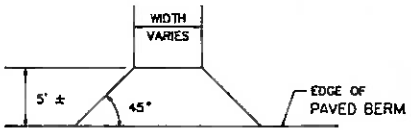
ITEM 407 TACK COAT,

THE RATE OF APPLICATION OF 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT, AS DIRECTED BY THE ENGINEER. WHEN COVER AGGREGATE IS NEEDED, IT SHALL BE USED AS DIRECTED BY THE ENGINEER, AND IT SHALL BE CONSIDERED INCIDENTAL TO, AND BE INCLUDED FOR PAYMENT IN ITEM 407 TACK COAT.
PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.10 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY

RESIDENCE AND COMMERCIAL DRIVES

AN ESTIMATED QUANTITY OF ITEM 404 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO PAVE APPROACH AREAS TO EXISTING DRIVEWAYS. PAVING SHALL EXTEND APPROXIMATELY 5 FEET INTO THE DRIVEWAY, MEASURED FROM THE EDGE OF THE PAVED BERM THICKNESS SHALL BE APPROXIMATELY THE SAME AS THE ROADWAY PAVEMENT. FIELD DRIVES AND OIL WELL DRIVES WILL NOT BE PAVED.
PAYMENT FOR DRIVES SHALL BE INCLUDED IN ITEM 404 ASPHALT CONCRETE.

	404 ASPHALT CONCRETE AC-20 CU.YD.
PART 1	60
PART 2	27



FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 150 SQ. FT. OF FLOOR SPACE. PAYMENT SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

MANHOLES, CATCH BASINS AND WATER VALVE BOXES ADJUSTED TO GRADE

SEWER MANHOLES, CATCH BASINS AND WATER VALVE BOXES THAT ARE TO BE ADJUSTED TO GRADE ARE LISTED BELOW. THESE NUMBERS ARE TAKEN FROM FIELD COUNTS. HOWEVER, THE ACTUAL NUMBER THAT ARE TO BE ADJUSTED TO GRADE WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. PAYMENT SHALL BE FOR THE ACTUAL NUMBERS OF EACH ITEM THAT ARE ADJUSTED TO GRADE AS DETERMINED BY THE ENGINEER.
GAS VALVE BOXES AND TELEPHONE COMPANY MANHOLES AND ANY OTHER UTILITIES ENCOUNTERED ON THE PROJECT SHALL BE ADJUSTED TO GRADE BY THEIR RESPECTIVE OWNERS.

	604 MANHOLE ADJUSTED TO GRADE EACH	604 CATCH BASIN ADJUSTED TO GRADE EACH	604 WATER VALVE BOXI ADJUSTED TO GRADE EACH
PART 2	5	6	9

CALC. BY RLM DATE 11-10-88
CHKD. BY SKB DATE 11-11-88

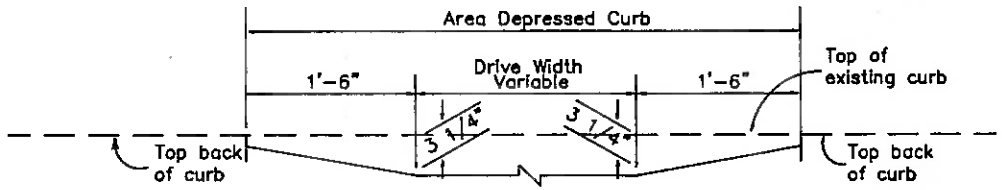
LIC-62-0.00 3A/37
PART 1
PLAN NO. 119

GENERAL NOTES

CURB, TYPE 6

AN ESTIMATED QUANTITY OF TYPE 6 CURB HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO REPLACE ANY CURB THAT HAS TO BE LOWERED AT EXISTING DRIVEWAYS BECAUSE OF PLANING ON USR 62 IN JOHNSTOWN (PART 2). THE CURB SHALL BE CONSTRUCTED AS SHOWN ON THIS SHEET. PAYMENT FOR THIS ITEM SHALL INCLUDE REMOVING AND DISPOSING OF EXISTING CURB, PREPARING THE AREAS FOR NEW CURB AS DIRECTED BY THE ENGINEER, CONSTRUCTING THE NEW CURB AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM TO THE SATISFACTION OF THE ENGINEER. THE TOP OF THE PROPOSED CURB SHALL BE LEVEL WITH THE TOP OF THE EXISTING CURB. THE QUANTITY SHOWN IS FOR ESTIMATING PURPOSES ONLY, HOWEVER, PAYMENT SHALL BE FOR THE ACTUAL AMOUNT OF CURB CONSTRUCTED AS DETERMINED BY THE ENGINEER.

ITEM 609 – CURB, TYPE 6 100 LIN. FT.

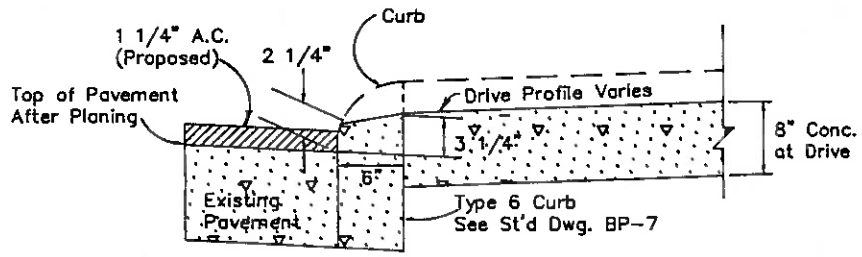


CURB HEIGHT REDUCTION DETAIL
(AT BACK OF CURB)

CONCRETE FOR DRIVES

AN ESTIMATED QUANTITY OF ITEM 452, PLAIN CONCRETE PAVEMENT HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER TO RECONSTRUCT EXISTING CONCRETE DRIVEWAYS AS REQUIRED DUE TO PAVEMENT PLANING ON USR 62 IN JOHNSTOWN (PART 2). THE REPLACEMENT CONCRETE SHALL BE 8" THICK. PAYMENT FOR THIS ITEM SHALL INCLUDE REMOVAL AND DISPOSAL OF EXISTING CONCRETE, PREPARING THE BASE AS DIRECTED BY THE ENGINEER FOR THE PLACEMENT OF THE NEW CONCRETE, PLACING THE NEW CONCRETE AND ANY INCIDENTALS NECESSARY TO COMPLETE THE ITEM TO THE SATISFACTION OF THE ENGINEER. DRIVEWAYS SHALL BE REPLACED AT THEIR EXISTING DIMENSIONS. THE QUANTITY SHOWN IS FOR ESTIMATING PURPOSES ONLY, HOWEVER PAYMENT SHALL BE FOR THE ACTUAL AMOUNT OF CONCRETE PLACED AS DETERMINED BY THE ENGINEER.

ITEM 452-8" PLAIN CONCRETE PAVEMENT 75 SQ. YD.



DEPRESSED CURB DETAILS AT DRIVEWAYS

FEATHERING AT END OF PROJECT

FEATHERING AT BRIDGE NO. LIC-62-1057 SHALL BE THE BUTT JOINT TYPE AS SHOWN ON STANDARD DRAWING BP-5. THE JOINT SHALL BE MADE AT THE APPROACH SLAB.

Note: Drive locations shall be determined by the Engineer at the time of construction.

CALC. BY RLM
DATE 6-14-88
CHKD. BY SKG
DATE 6-15-88

GENERAL NOTES

UNDERGROUND UTILITIES
TWO WORKING DAYS
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LIC-62-0.00
PART 1

119

PUBLIC SAFETY

THE PERIOD OF TIME THAT ANY HAZARD IS LEFT UNPROTECTED BY GUARDRAIL SHALL BE HELD TO AN ABSOLUTE MINIMUM, AND IN NO CASE SHALL SUCH PERIOD BE LONGER THAN TWO WEEKS, WHERE THE REBUILDING OF ANY RUN OF GUARDRAIL IS NOT ACCOMPLISHED WITHIN TWO WEEKS AFTER REMOVAL OF EXISTING GUARDRAIL, THE CONTRACTOR WILL ERECT AND MAINTAIN ACCEPTABLE TEMPORARY RAILS IN THE INTERIM AT NO ADDITIONAL COST TO THE STATE. ON THE TRAFFIC APPROACH END OF THE TEMPORARY RAIL THE END OF THE FIRST SECTION OF RAIL SHALL BE FASTENED TO THE STEEL DRUM OR THEIR SUPPORT SO THAT THE BOTTOM OF THE RAIL IS AT THE PAVEMENT OR GROUND SURFACE.
FOR SAFETY PURPOSES, NO EQUIPMENT, PRIVATE VEHICLE, OR MATERIAL SHALL BE PARKED OR STORED WITHIN THIRTY (30) FEET OF THE OUTSIDE EDGE OF THE PAVEMENT UNLESS BEHIND GUARDRAIL.

GUARDRAIL FLARES

ANCHOR ASSEMBLIES SHALL BE INSTALLED AT LOCATIONS NOTED ON THESE PLANS AT THE DIRECTION OF THE ENGINEER.
IT IS THE INTENT OF THE PLAN TO FLARE THE ANCHOR ASSEMBLIES TO THE MAXIMUM EXTENT THAT THE BERM WIDTH WILL ALLOW.
THE ENGINEER SHALL DETERMINE THE OFFSET DISTANCE FROM THE NORMAL FACE OF RAIL TO THE ANCHOR ASSEMBLY INSTALLATION.

LINE SHEET LEGEND

AA ANCHOR ASSEMBLY, TYPE A
GRT-5 GUARDRAIL, TYPE 5
DBRw/TBU DEEP BEAM RAIL WITH TUBULAR BACKUP

GUARDRAIL, TYPE 5, AS PER PLAN

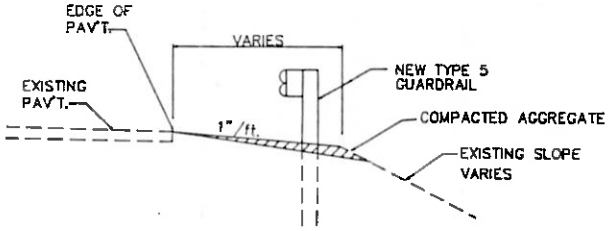
PLACE ADJACENT TO THE 9' STEEL END POST ON BOTH THE APPROACH AND TRAILING ENDS OF THE 517 RAILING, TWO (2) GUARDRAIL POSTS, SPACED AT 6'-3" ENCASED IN A MINIMUM OF 4" OF CONCRETE. COMPLETE THE LENGTH OF GUARDRAIL RUNS WITH TYPE 5 GUARDRAIL AS SPECIFIED IN THE PLANS. PAYMENT FOR THE ABOVE SHALL BE INCLUDED UNDER BID ITEM 606, GUARDRAIL, TYPE 5, AS PER PLAN.
GUARDRAIL SHALL BE A MINIMUM OF 4' FROM EDGE OF PAVEMENT OR AS DIRECTED BY THE ENGINEER.

ITEM 617, COMPACTED AGGREGATE, TYPE A

THE FOLLOWING ESTIMATED QUANTITY OF ITEM 617 HAS BEEN INCLUDED IN THE PLAN TO BE USED AS DETERMINED BY THE ENGINEER TO LEVEL THE SHOULDER AREA AS SHOWN IN THE DRAWING BELOW PRIOR TO ERECTING THE NEW GUARDRAIL. IT SHALL BE PAID FOR AS ITEM 617, COMPACTED AGGREGATE, TYPE A

PART 1 – 5 CU.YDS.

THIS QUANTITY IS CARRIED TO THE GENERAL SUMMARY.



RAILING (DEEP BEAM RAIL WITH TUBULAR BACKUP AND ANCHOR BOLTS), AS PER PLAN

THE RAILING ACROSS THE STRUCTURE SHOWN ON SHEETS 17 AND 18 SHALL BE ERECTED AS SHOWN. THE STEEL POSTS AT EACH END OF THE STRUCTURE SHALL BE 9 FEET IN LENGTH AND ENCASED IN A MINIMUM OF 4 INCHES OF CONCRETE. THE TUBULAR BACKUP AND POST SIZE ARE SHOWN IN THE TABLE.
COST OF THIS ITEM SHALL INCLUDE DEEP BEAM RAIL, TUBULAR BACKUP, 9' STEEL POSTS, CONCRETE FOR ENCASEMENT OF POSTS, ALL LABOR, MATERIAL AND ANY INCIDENTAL ITEMS NECESSARY TO COMPLETE THE ITEM TO THE SATISFACTION OF THE ENGINEER AND SHALL BE PAID FOR AS ITEM 517 RAILING (DEEP BEAM RAIL WITH TUBULAR BACKUP AND ANCHOR BOLTS), AS PER PLAN.
THE DEEP BEAM RAIL SHALL BE BOLTED TO THE TUBULAR BACKUP AT 6'-3" C/C USING STANDARD DEEP BEAM RAIL BOLTS 5/8" Φ x 10" LONG WITH SPECIAL WASHERS.

CALC. BY RLM
DATE 6-14-88
CHKD. BY SMB
DATE 6-15-88

PLAN NO. 119

GENERAL NOTES

ITEM 253 – PAVEMENT REPAIR

QUANTITIES FOR PAVEMENT REPAIR HAVE BEEN INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER WHERE THE PAVEMENT IS DETERIORATED OR IS TO BE REPLACED. THE PRIMARY LOCATION FOR THIS TREATMENT IS IN THE AREA OF THE ABANDONED RAILROAD ON USR 62 IN JOHNSTOWN. (SLM 4.85±) DETAILS FOR THE PAVEMENT REPAIR IN THIS AREA ARE SHOWN ON SHEETS 14 AND 15 . DEPTH OF EXCAVATION IN THIS AREA WILL VARY FROM APPROXIMATELY 10 INCHES TO APPROXIMATELY 24 INCHES. REPLACEMENT MATERIAL SHALL BE 8 INCHES OF ITEM 301, BITUMINOUS AGGREGATE BASE, PLACED AND COMPACTED IN TWO LAYERS OF EQUAL THICKNESS. 3/4 INCH OF ITEM 403 ASPHALT CONCRETE SHALL BE PLACED ON THE BITUMINOUS AGGREGATE BASE PRIOR TO OVERLAYING THE ENTIRE ROADWAY WITH 1 1/4 INCHES OF ITEM 404 ASPHALT CONCRETE.
OTHER AREAS THAT WILL HAVE THE PAVEMENT REPAIR PERFORMED SHALL HAVE APPROXIMATELY 8 INCHES OF EXCAVATION AND 8 INCHES OF ITEM 301, PLACED AS DESCRIBED ABOVE TO THE LEVEL OF THE EXISTING PAVEMENT OR THE LEVEL OF THE EXISTING PAVEMENT AFTER THE PLANING OPERATION HAS BEEN PERFORMED. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS OF THE PAVEMENT REPAIRS AT THE TIME OF CONSTRUCTION. AN ESTIMATED NUMBER AND SIZE OF LOCATIONS ARE SHOWN ON THIS SHEET. THE PAVEMENT REPAIR SHALL BE PERFORMED ACCORDING TO ITEM 253 SPECIFICATION. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.
THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR THE ABOVE DESCRIBED PURPOSE.
ITEM SPECIAL – PAVEMENT REPAIR

PART 1	PART 2
4 – 20 X 6 ÷ 9 = 53 SQ.YD.	1 – 100 X 6 ÷ 9 = 67 SQ.YD.
4 – 20 X 10 ÷ 9 = 88 SQ.YD.	1 – 100 X 28 ÷ 9 = 311 SQ.YD.
3 – 30 X 10 ÷ 9 = 100 SQ.YD.	1 – 125 X 8 ÷ 9 = 111 SQ.YD.
2 – 50 X 10 ÷ 9 = 111 SQ.YD.	TOTAL 489 SQ.YD.
TOTAL 352 SQ.YD.	

ITEM 605 AGGREGATE DRAINS 150 L.F
NOTE:
PAVEMENT REPAIR TYPICAL SECTIONS ARE SHOWN ON SHEET 14.

EXTRA ASPHALT FOR PRE-LEVELING

A QUANTITY OF 403 ASPHALT CONCRETE HAS BEEN INCLUDED IN THE PLAN TO BE USED AT THE DIRECTION OF THE ENGINEER FOR PRE-LEVELING WHERE THE PAVEMENT OR BERM IS LOW OR DETERIORATED.
THE QUANTITY OF ITEM 403 SHOWN BELOW HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 403 ASPHALT CONCRETE 200 CU. YD. (PART 1)

DRIVEWAY RECONSTRUCTION

ESTIMATED QUANTITIES OF ITEM 254 PAVEMENT PLANING AND ITEM 404 ASPHALT CONCRETE ARE INCLUDED IN THE PLAN TO BE USED AS DIRECTED BY THE ENGINEER FOR DRIVEWAYS THAT REQUIRE ADJUSTMENT DUE TO PAVEMENT PLANING ON USR 62.

ITEM 254 - PAVEMENT PLANING 480 SQ.YD. (PART 2)
ITEM 404 - ASPHALT CONCRETE 20 CU.YD. (PART 2)

CALC. BY B.T. DATE 14-12-89			
CHKD. BY ____ DATE ____			

FHWA REGION	STATE	PROJECT	
5	OHIO		

PLAN NO. 119

LIC-62-0.00

PART 1

GENERAL NOTES

CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ECT.

EROSION CONTROL

ITEM 601, IS PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THIS ITEM. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS BETWEEN TEN (10) FEET OUTSIDE THE WORK LIMITS, AS SHOWN ON THE CROSS SECTIONS, OR TO THE RIGHT-OF-WAY LINE, IF SUCH LINE IS LESS THAN TEN (10) FEET FROM THE WORK LIMITS.

ROUNDING OF CORNERS SHOWN ON CROSS SECTIONS

THE ROUNDED CORNERS SHOWN ON THE TYPICAL SECTIONS, APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THESE PLANS.

DETOUR MAP

0 2

SCALE IN MILES

WATERING AND MOWING PERMANENT SEEDED AREAS

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR THE PERMANENT SEEDED AREAS, AS PER 659.09: - CARRIED TO SUB SUMMARY ON PAGE 8.

659	WATER	3	M GAL.

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER, FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

207	STRAW OR HAY BALES	50	EACH
659	REPAIR SEEDING AND MULCHING	100	SQ. YD.

QUANTITIES CARRIED TO SUB SUMMARY ON PAGE 8

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE (1) COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF THE ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY 603 CONDUIT, TYPE F. THE OPTIMUM OUTLET ELEVATION SHALL BE, IF POSSIBLE, ONE (1) FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL FIELD TILE WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY ITEM 603, TYPE E, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION, AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

NECESSARY BENDS AND BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE SUB SUMMARY ON PAGE 8 FOR THE WORK NOTED ABOVE.

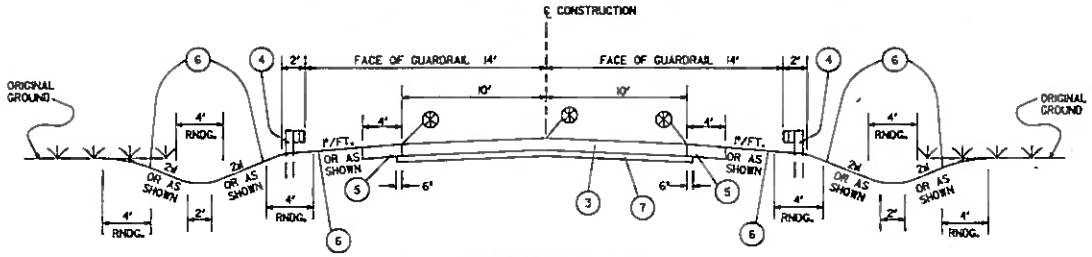
ITEM 603	6" CONDUIT, TYPE B	50	LIN. FT.
ITEM 603	6" CONDUIT, TYPE E	50	LIN. FT.
ITEM 603	6" CONDUIT, TYPE F	50	LIN. FT.
ITEM 601	ROCK CHANNEL PROTECTION TYPE C WITH FILTER	5	CU. YD.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

CALC BY ___ DATE ___ CHKD BY ___ DATE ___	LIC-62-0.00	OHIO FHWA REGION 5

PLAN NO 119

TYPICAL SECTIONS



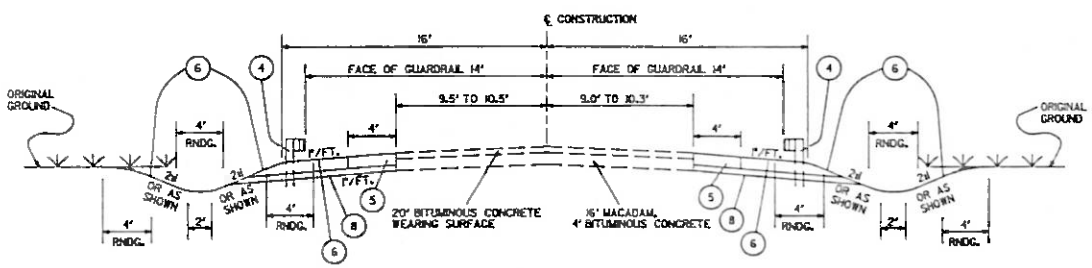
PAVEMENT REPLACEMENT
SCHEDULE OF STATIONING

STA. 9+75 TO STA. 10+50 = 75. LIN.FT.

⊛ FOR ELEVATIONS, SEE X-SECTIONS.

LEGEND

3	ITEM 305	8" CONCRETE BASE
4	ITEM 606	GUARDRAIL, TYPE 5
5	ITEM 304	8" AGGREGATE BASE
6	ITEM 659	SEEDING AND MULCHING (SEE GENERAL NOTE)
7	ITEM 301	4" BITUMINOUS AGGREGATE BASE
8	ITEM 605	AGGREGATE DRAIN



SCHEDULE OF STATIONING

STA.8+00	TO	STA.9+75	= 175'(RT.)
STA.10+50	TO	STA.10+71.8	= 21.8'(RT.)
STA.8+75	TO	STA.9+75	= 100'(LT.)
STA.10+50	TO	STA.12+00	= 150'(LT.)
			446.8 LIN.FT.

CALCULATIONS

* ITEM 305 8" CONCRETE BASE
75'X 20'/9 = 166.7 S.Y.

* ITEM 203 SUBGRADE COMPACTION
75'X 20'/9 = 166.7 S.Y.

* ITEM 304 8" AGGREGATE BASE
(225) X 4 X 0.67 /2 =22.3 C.Y. RT.STA.8+25 TO STA. 10+50
(275) X 4 X 0.67 /2 =27.3 C.Y. LT.STA.9+00 TO STA. 11+75

* ITEM 301 4" BITUMINOUS AGGREGATE BASE
75' x 21' x 0.33 / 27 = 19.25 CU.YD.

\# ITEM 659 WATER ⊕
1379 S.Y. SEEDING X 9/1000 X 0.120 = 1.49 M.GAL. USE 3 M.GAL.

\# ITEM 659 AGRICULTURAL LIMING
1379 S.Y. SEEDING X 9/1000/2000X100 = 0.62 TON

\# ITEM 659 COMMERIAL FERTILIZER
1379 S.Y. SEEDING X 9X20/1000/2000 = 0.12 TON

* ITEM 605 AGGREGATE DRAIN
16' + 19' = 35. LIN.FT.

* CARRIED TO SHEET 9
\# CARRIED TO GENERAL SUMMARY SHEET 8

⊕ SEE CULVERT NOTES (SHT.6) FOR "WATERING PERMANENT SEEDED AREAS"

CULVERT SUMMARY

8/37

LIC-62-0.00	OHIO
	FHWA REGION 5

PLAN NO. 119
PART 1

SHEET NUMBER 6	7		9			12	ITEM	QUANT.	UNIT	ITEM EXT.	DESCRIPTION
											ROADWAY
			LUMP				201	LUMP			CLEARING AND GRUBBING
			256				202	LUMP			STRUCTURES REMOVED
			12				202	256	LIN.FT.		GUARDRAIL REMOVED
			167				203	12	CU.YD.		EMBANKMENT
			16				203	167	SQ.YD.		SUBGRADE COMPACTION
			362.5				203	16	CU.YD.		EXCAVATION NOT INCLUDING EMBANK.CONST
			25				606	362.5	LIN.FT.		GUARDRAIL, TYPE 5
							606	25	LIN.FT.		GUARDRAIL TYPE 5, AS PER PLAN
			3				606	3	EACH		ANCHOR ASSEMBLY, STANDARD TYPE A
			1				606	1	EACH		ANCHOR ASSEMBLY, STANDARD TYPE T
			25				517	25	LIN.FT.		RAILING (DEEP BEAM RAIL WITH TUBULAR BACKUP AND ANCHOR BOLTS), AS PER PLAN
											EROSION CONTROL
			1379				659	1379	SQ.YD.		SEEDING AND MULCHING
	3						659	3	M.GAL.		WATER
	0.62						659	0.62	TON		AGRICULTURAL LIMING
	0.12						659	0.12	TON		COMMERCIAL FERTILIZER
5							601	5	CU.YD.		ROCK CHANNEL PROTECTION TYPE C WITH FILTER
100							659	100	SQ.YD.		REPAIR SEEDING AND MULCHING
30							807	30	EACH		STRAW OR HAY BALES
											DRAINAGE
			3.2				602	3.2	CU.YD.		CONCRETE MASONRY
			48				603	48	LIN.FT.		48" x 76" CONDUIT, TYPE A, 706.04 CLASS HE-II
50							603	50	LIN.FT.		6" CONDUIT, TYPE B
50							603	50	LIN.FT.		6" CONDUIT, TYPE E
50							603	50	LIN.FT.		6" CONDUIT, TYPE F
						29	601	29	SQ.YD.		RIPRAP USING 6" REINFORCED CONCRETE SLAB
			35				605	35	LIN.FT.		AGGREGATE DRAIN
											PAVEMENT
			167				305	167	SQ.YD.		8" CONCRETE BASE
			49				304	49	CU.YD.		AGGREGATE BASE
			19				301	19	CU.YD.		BITUMINOUS AGGREGATE BASE
							623	LUMP			CONSTRUCTION LAYOUT STAKES

* QUANTITIES IN CULVERT SUB SUMMARY ARE CARRIED TO THE GENERAL SUMMARY SHEETS ON PAGES 31-33.

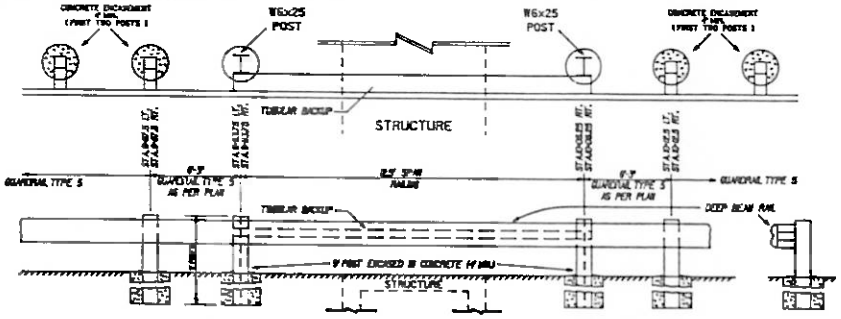
DEEP BEAM RAIL W/TUBULAR BACKUP AND ANCHOR BOLTS, AS PER PLAN

THE RAILING ACROSS THIS STRUCTURE SHALL BE ERECTED AS SHOWN. THE STEEL POSTS AT EACH END OF THE STRUCTURE SHALL BE 9 FEET IN LENGTH AND SHALL BE ENCASED IN A MINIMUM OF 4 INCHES OF CONCRETE. THE TUBULAR BACKUP AND POST SIZE ARE SHOWN IN THE TABLE. COST OF THIS ITEM SHALL INCLUDE DEEP BEAM RAIL, TUBULAR BACKUP, 9' STEEL POSTS, CONCRETE FOR ENCASEMENT OF POSTS, ALL LABOR, MATERIAL AND ANY INCIDENTAL ITEMS NECESSARY TO COMPLETE THE ITEM TO THE SATISFACTION OF THE ENGINEER AND SHALL BE PAID FOR AS ITEM 517 RAILING, DEEP BEAM RAIL W/TUBULAR BACKUP AND ANCHOR BOLTS, AS PER PLAN. THE DEEP BEAM RAIL SHALL BE BOLTED TO THE TUBULAR BACKUP AND ANCHOR AT 6'-3" c/c USING STANDARD DEEP BEAM RAIL BOLTS 5/8" dia. x 10" long WITH SPECIAL WASHERS.

SPAN LIN.FT.	TUBE SIZE LIN.FT.	POST SIZE
12.5	8"x4"x1/4"	W6x25

GUARDRAIL, TYPE 5, AS PER PLAN

PLACE ADJACENT TO THE 9' STEEL END POST ON BOTH THE APPROACH AND TRAILING ENDS OF THE 517 RAILING, TWO (2) GUARDRAIL POSTS, SPACED AT 6'-3", ENCASED IN A MINIMUM OF 4" OF CONRETE. COMPLETE THE LENGTH OF GUARDRAIL RUNS WITH TYPE 5 GUARDRAIL AS SPECIFIED IN THE PLANS. PAYMENT FOR THE ABOVE SHALL BE INCLUDED UNDER BID ITEM 606 GUARDRAIL TYPE 5, AS PER PLAN.



STATION TO STATION	SIDE	606 GUARDRAIL TYPE 5, AS PER PLAN LIN.FT.	517 RAILING (DEEP BEAM RAIL W/TUBULAR BACKUP), AS PER PLAN LIN.FT.
STA.[illegible] TO STA.[illegible]	RT.	12.5	12.5
STA.[illegible] TO STA.[illegible]	LT.	12.5	12.5
TOTAL		25.	25.

CULVERT SUB SUMMARY AND GENERAL NOTES CONTINUED

REV 7/11 RJS

9/37

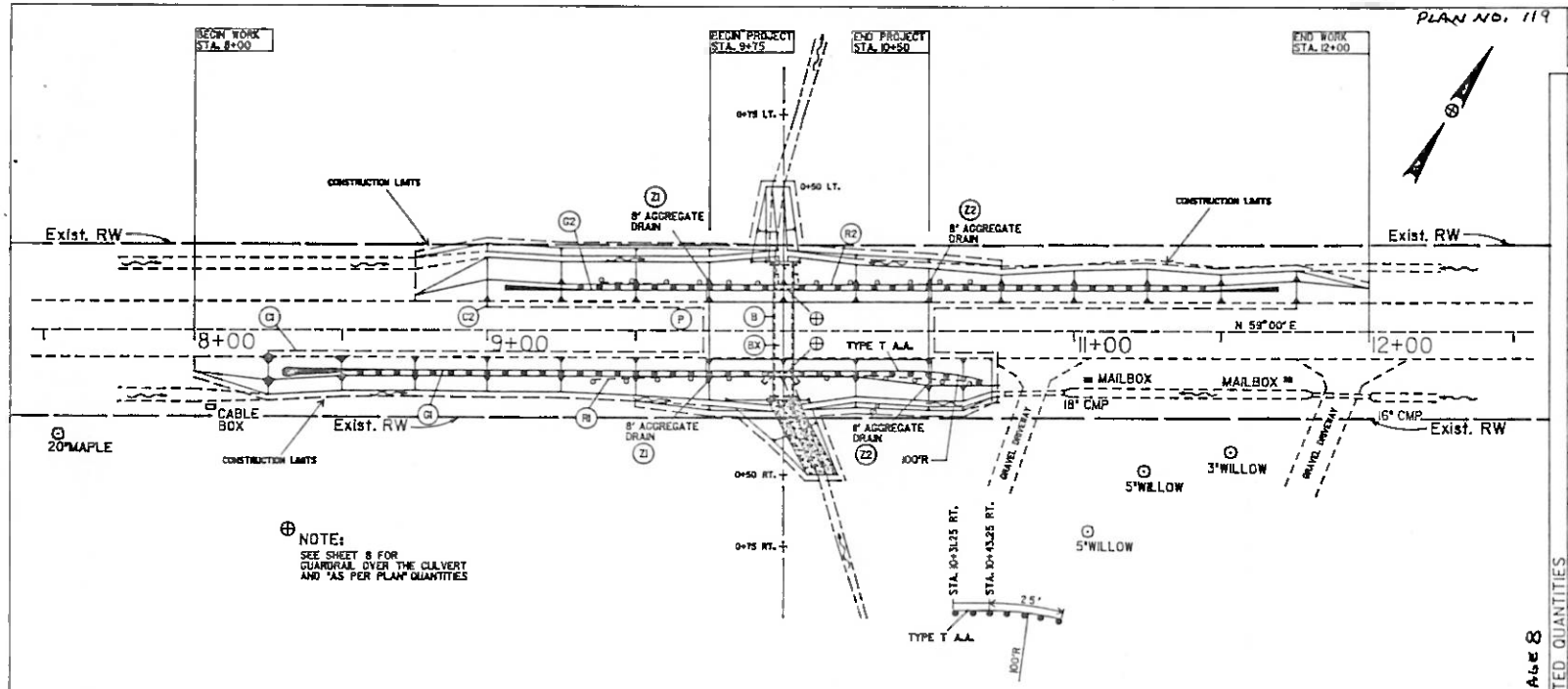
119

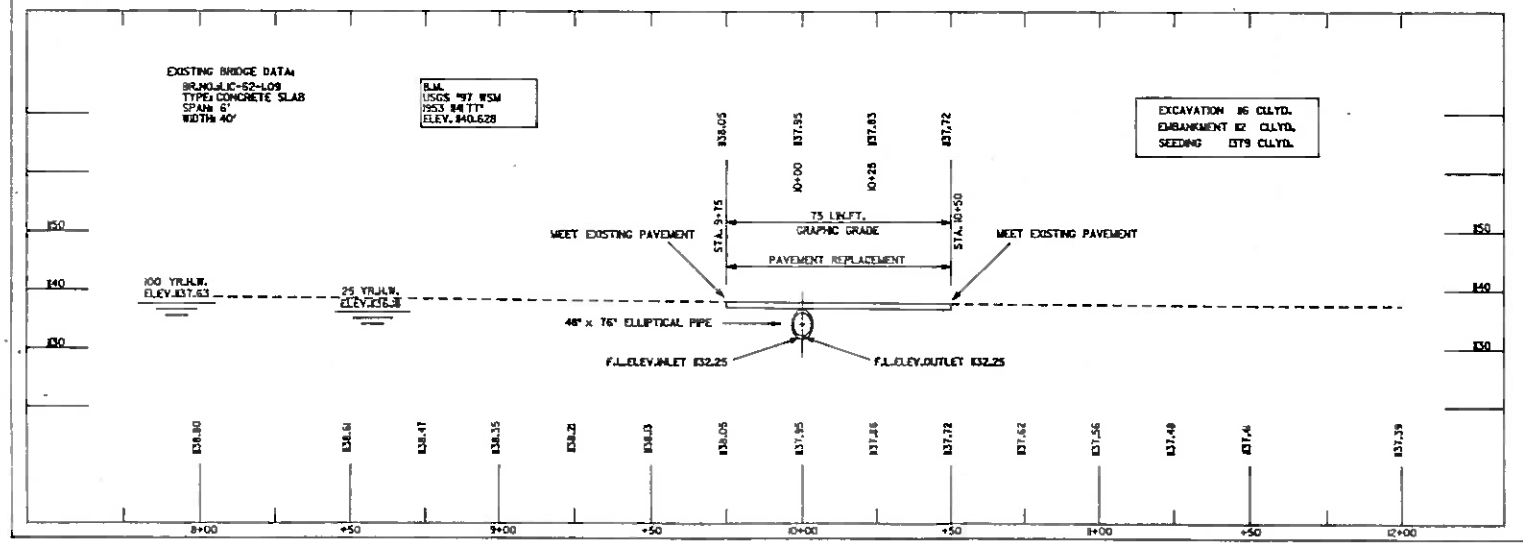
PLAN NO. 119

LIC-62-0.00

OHIO

FHWA REGION 5



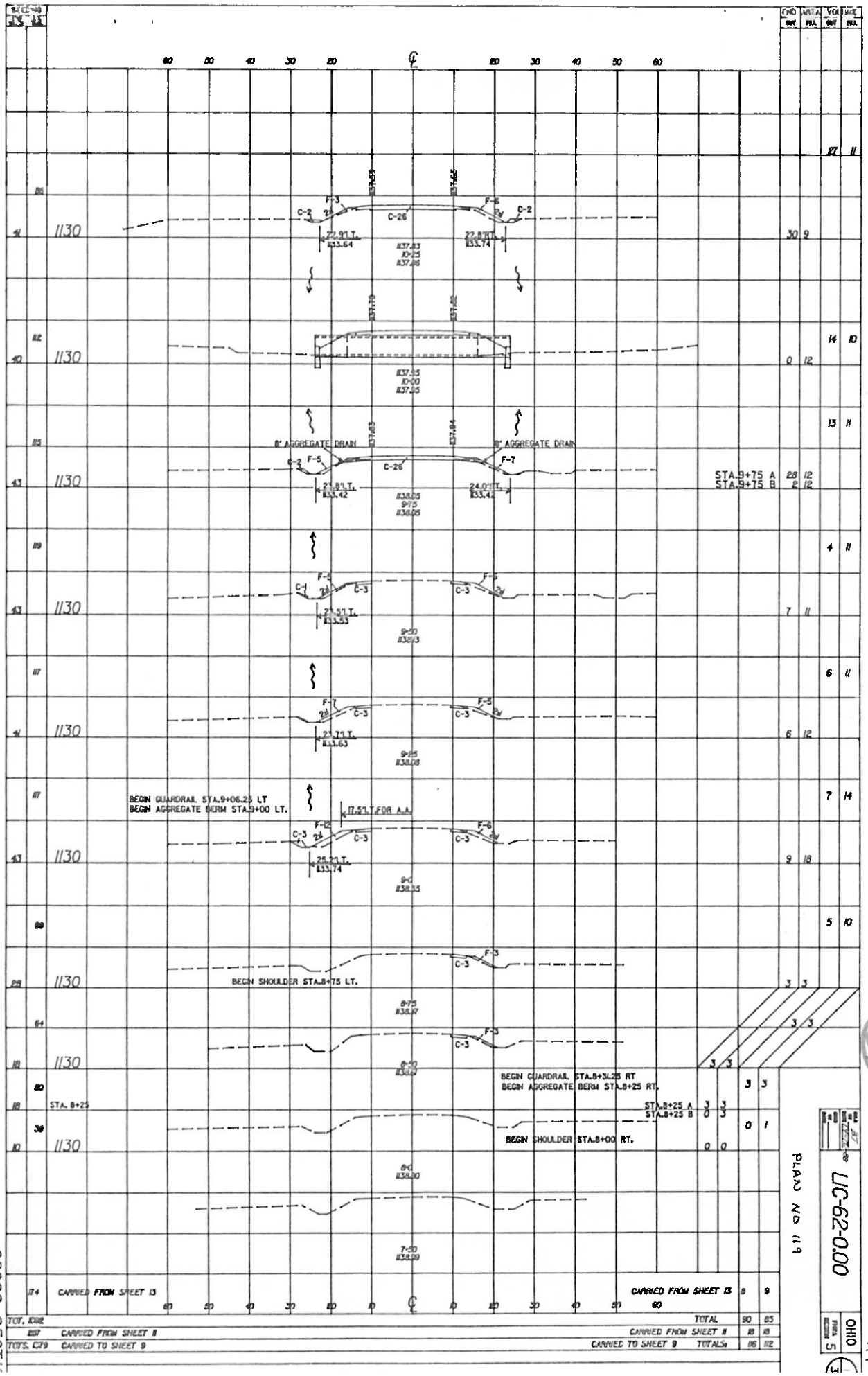


QUANTITIES CARRIED TO SUB SUMMARY - PAGE 8

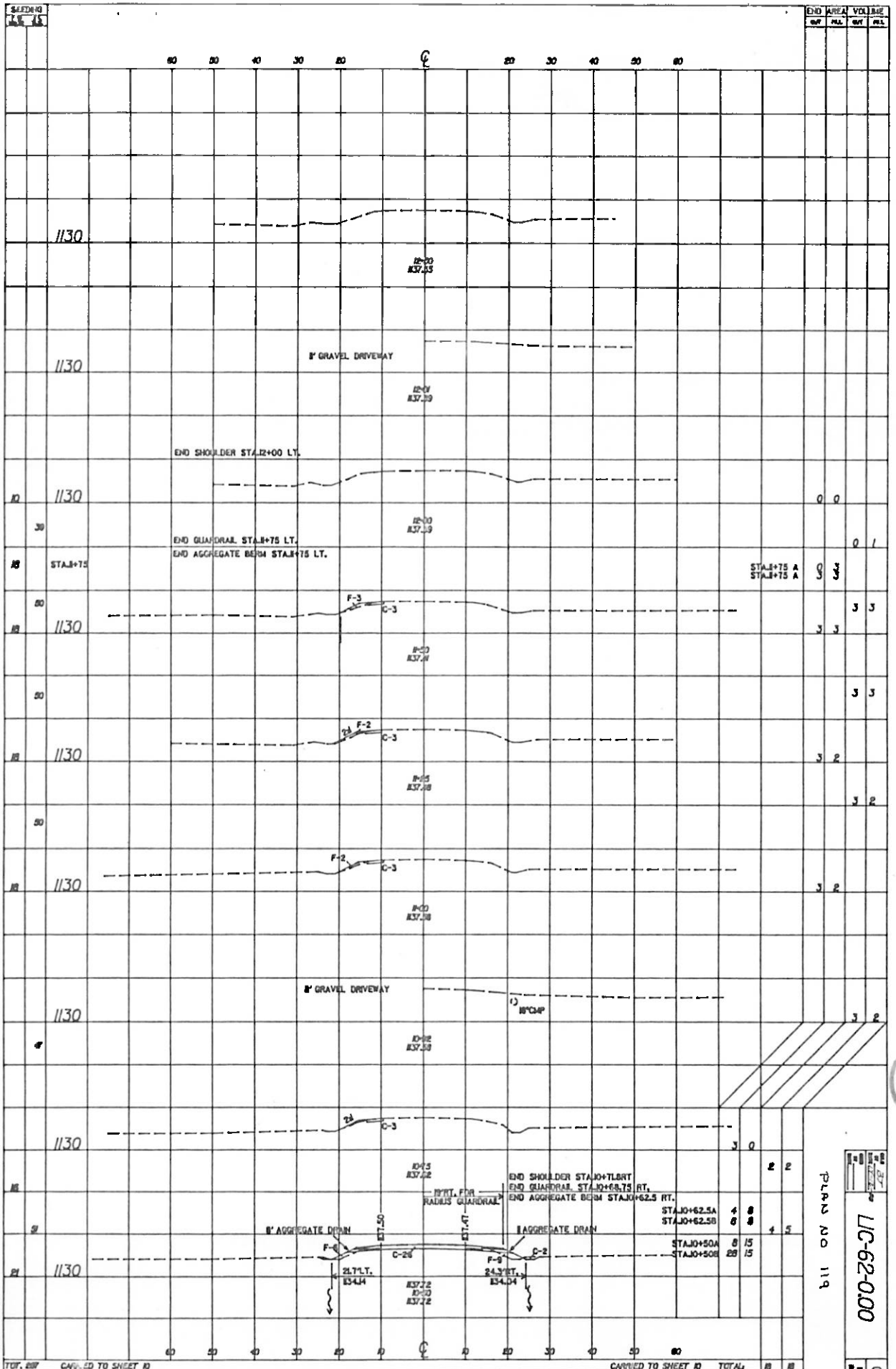
ESTIMATED QUANTITIES

REF. NO.	STATION TO STATION	SIDE	203 SUBGRADE COMPACTION	305 PCC BASE	304 AGGREGATE BASE	452 CONCRETE MASONRY	601 48" x 76" CONCRETE "TYPE A" INLET WITH GRATE AS PER PLAN	654 SEEDING	659 ANCHOR ASSEMBLY TYPE T	202 STRUCTURE REMOVED	202 GUARDRAIL REMOVED	606 GUARDRAIL TYPE B	606 ANCHOR ASSEMBLY TYPE A	304 BITUMINOUS AGGREGATE BASE	605 AGGREGATE DRAIN	606 GUARDRAIL TYPE B, BEAM RAIL WITH BLOCKOUT AS PER PLAN	607 RAILING BEAM RAIL WITH BLOCKOUT AS PER PLAN
			SY.YD.	CU.YD.	CU.YD.	CU.YD.	EACH	CU.YD.	EACH	LUMP	LIN.FT.	LIN.FT.	EACH	CU.YD.	LIN.FT.	LIN.FT.	LIN.FT.
Z1	8+25 TO 8+90	RT.			22												
Z2	8+90 TO 9+75	LT.			27												
P	9+75 TO 10+50	CL.	167	167	172	116		1379						19		12.5	12.5
G	8+31.25 TO 10+43.75	RT.							1			175	1			12.5	12.5
E	9+06.25 TO 9+43.75	LT.										187.5	2			12.5	12.5
											130						
R	9+36 TO 10+48	RT.									126						
R2	9+38 TO 10+44	LT.				3.2	48										
B	10+00	T.&RT.								LUMP							
B1	10+80	T.&RT.													19		
B2	9+75	T.&RT.													16		
	10+50	T.&RT.															

PLAN & PROFILE SHE



CROSS SECTIONS



CROSS SECTION

PLAN NO 119

LIC-62-0.00

OHIO

FINAL

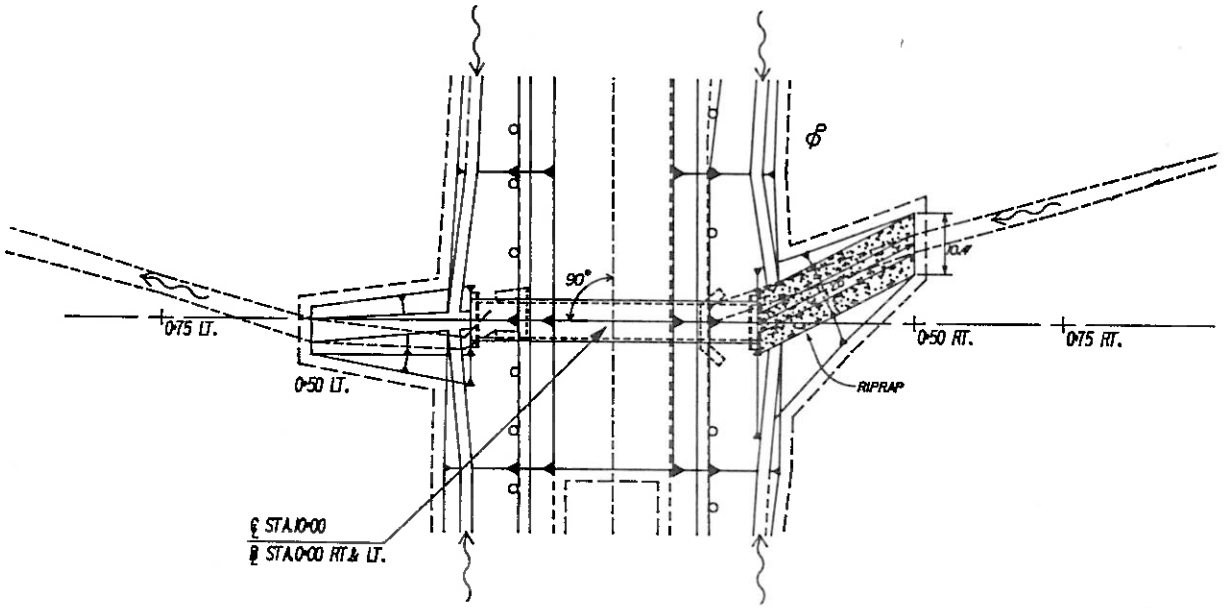
5

119

12/37

LIC-62-0.00	OH10	12/37
	REVISION 5	

PLAN NO 119



PLAN

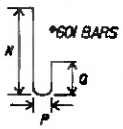
℄ S.R.62

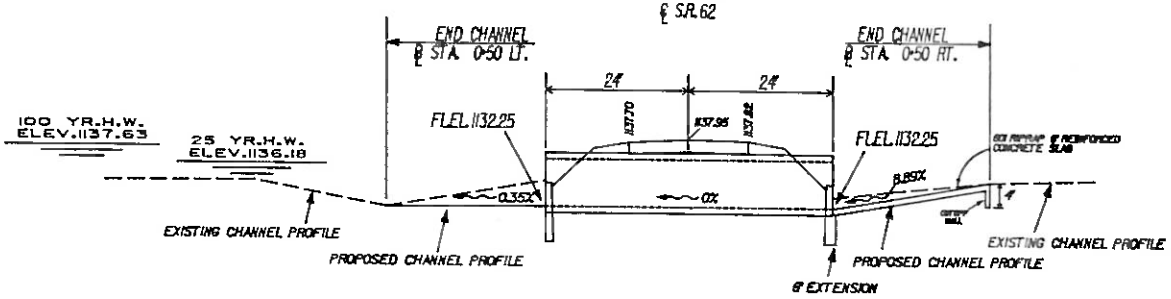
NOTE: THE REQUIREMENTS FOR ITEM 509 SHALL GOVERN THE FURNISHING AND INSTALLATION OF THE REINFORCING STEEL. COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 602 CONCRETE MASONRY.

ITEM	QUANTITY	UNIT	DESCRIPTION
603[x]	48	LIN.FT.	48"x76" CONDUIT, TYPE A, 706.04 CLASS HE-II [illegible]
602[x]	3.2	CU.YD.	CONCRETE MASONRY
601[#]	29	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB

[#]CARRIED TO SHEET 8 [x]CARRIED TO SHEET 9

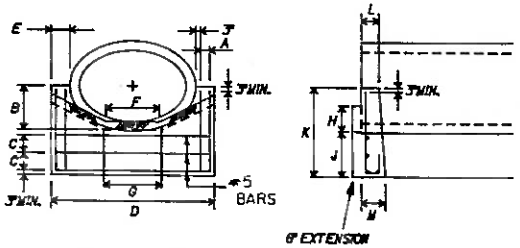
HEADWALL DIMENSION TABLE		
A = 0.54'	F = 3'	L = 1.0'
B = 2.5'	G = 3.24'	M = 1.33'
C = 1.0'	H = 1.5'	N = 3.5'
D = 9.0'	J = 2.5'	P = 0.79'
E = 1'-1½"	K = 5'	Q = 1.0'





LONGITUDINAL SECTION

VERTICAL
HORIZONTAL
SCALE IN FEET



HW-48 HEADWALL AS PER PLAN
(NO SCALE)

602 CONCRETE MASONRY

(SEE STD.DWG.HW-48): 1.34 CU.YD./ HEADWALL, WITHOUT 8" EXT.
8" EXTENSION: (1.5'x2.5'+1.5'x1.0'+2.5'x1.0') x 0.5/27 = 0.51 CU.YD.
TOTAL BOTH HEADWALLS: (1.34 x 2) + 0.51 = 3.2 CU.YD.

601 RIPRAP USING 6" REINFORCED CONCRETE SLAB

9.85'x 29'/ 9 = 28.54 SQ.YD.
TOTAL: 29 SQ.YD.

DRAINAGE AREA 2.38 AC. Q_{25}=124CFS Q_{100}=178CFS		
STA.10+00	48" x 76" ELLIPTICAL PIPE	LIC-62-1.09

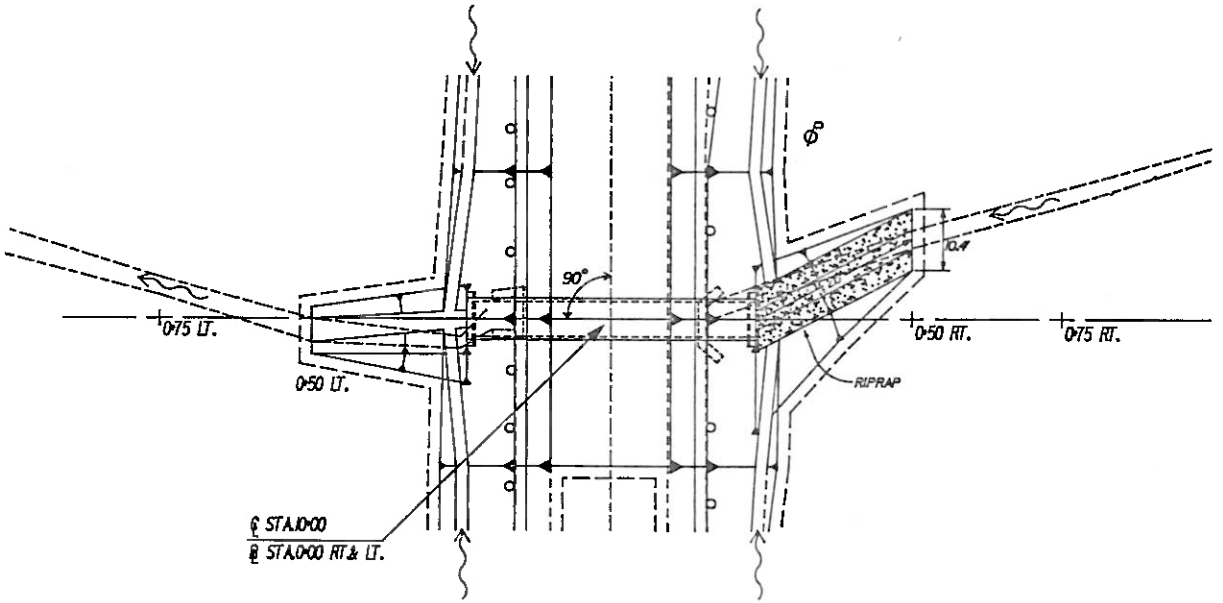
CULVERT DETAIL

REV 7-11 N3

13/37

LIC-62-0.00	OHIO	5

PLAN NO 119



PLAN

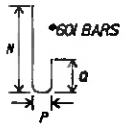
℄ S.R.62

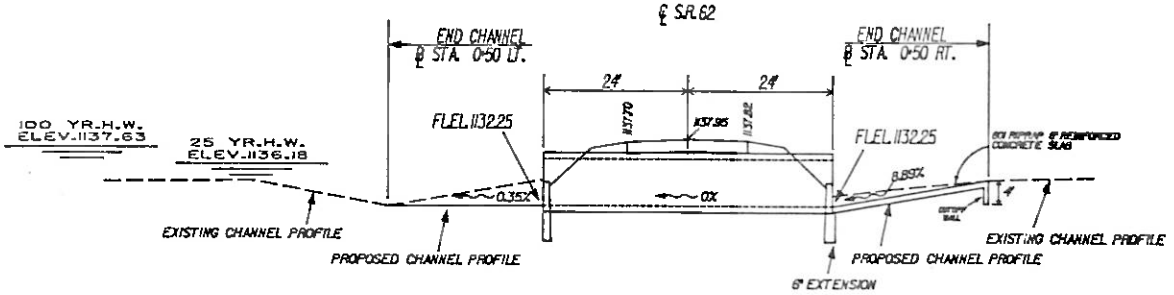
NOTE: THE REQUIREMENTS FOR ITEM 509 SHALL GOVERN THE FURNISHING AND INSTALLATION OF THE REINFORCING STEEL. COST SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 602 CONCRETE MASONRY.

ITEM	QUANTITY	UNIT	DESCRIPTION
603 Z	48	LIN.FT.	48"x76" CONDUIT, TYPE A, 706.04 CLASS HE-II (AS PER S.S.955) C-850 TABLE 2, AS PER PLAN
602 Z	3.2	CU.YD.	CONCRETE MASONRY
601 #	29	SQ.YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB

#CARRIED TO SHEET 8 ZCARRIED TO SHEET 9

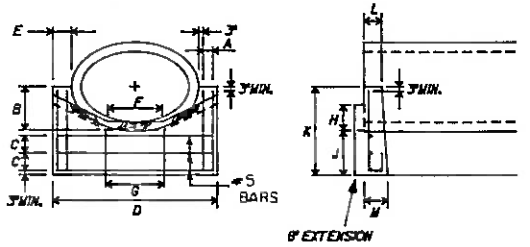
HEADWALL DIMENSION TABLE		
A = 0.54'	F = 3'	L = 10'
B = 2.5'	G = 3.24'	M = 1.33'
C = 10'	H = 1.5'	N = 3.5'
D = 9.17'	J = 2.5'	P = 0.75'
E = 1'-1¼"	K = 5'	Q = 10'





LONGITUDINAL SECTION

VERTICAL
HORIZONTAL
SCALE IN FEET



HW-4B HEADWALL AS PER PLAN
(NO SCALE)

602 CONCRETE MASONRY

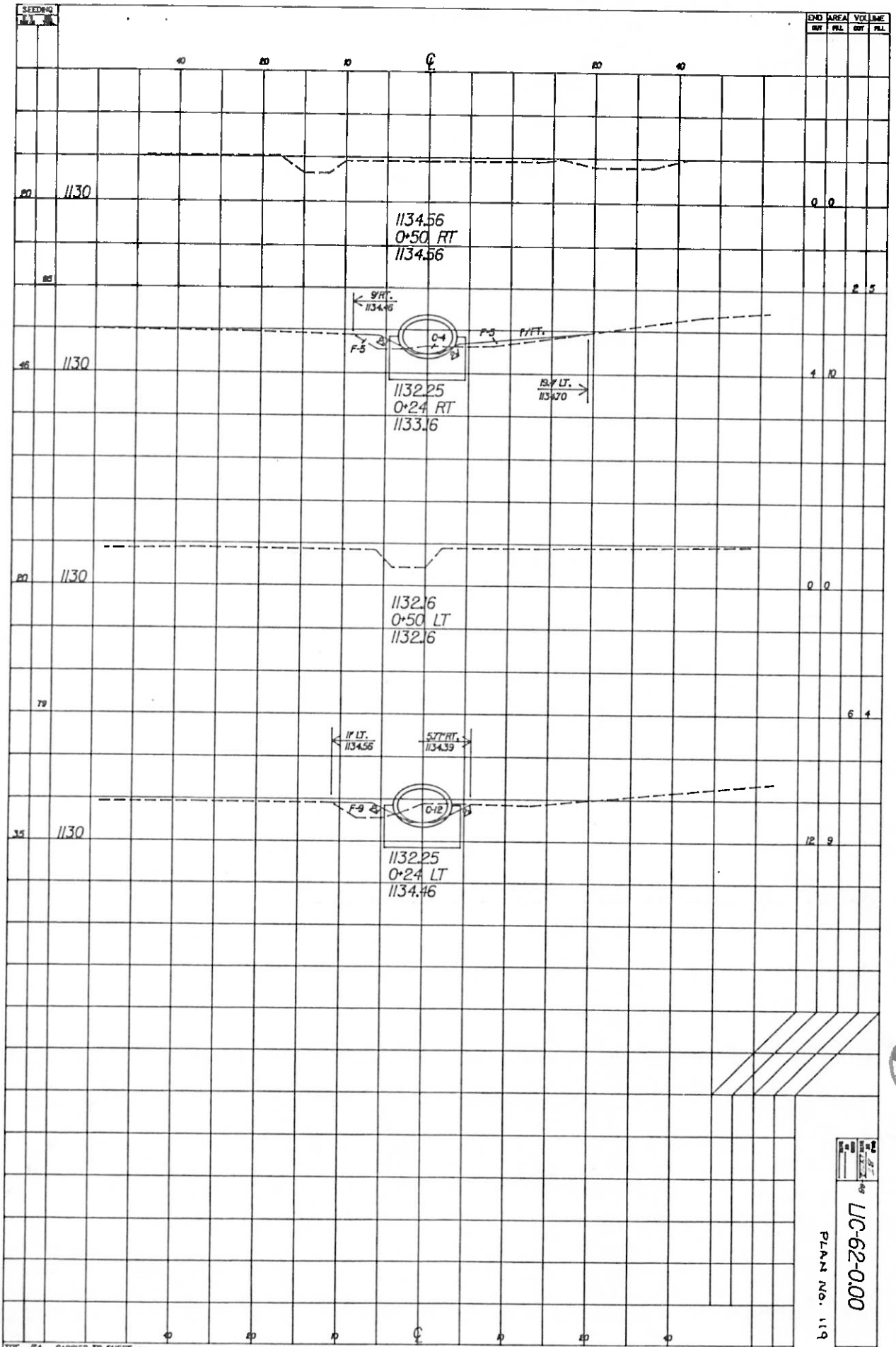
(SEE STD.DWG.HW-4B): 1.34 CU.YD./ HEADWALL, WITHOUT 6" EXT.
6" EXTENSION: [(1.5'x2.5')+(5.17'x2.5')] x 0.5/27' = 0.51 CU.YD.
TOTAL BOTH HEADWALLS: (1.34 x 2) + 0.51 = 3.2 CU.YD.

601 RIPRAP USING 6" REINFORCED CONCRETE SLAB

9.88'x 29'/ 9 = 28.54 SQ.YD.
TOTAL: 29 SQ.YD.

DRAINAGE AREA 2.38 AC. Q_{25}=124 CFS Q_{100}=178 CFS		
STA.10+00	48" x 76" ELLIPTICAL PIPE	LIC-62-1.09

CULVERT DETA


SEEDING
END AREA VOLUME
CUT FILL CUT FILL
40 80 10 ℄ 80 40
80 1130
1134.56
0+50 RT
1134.56
0 0
85
2 5
9' RT.
1134.46
F-5
C-4
F-3
1'/FT.
46 1130
1132.25
0+24 RT
1133.16
19.7' LT.
1134.70
4 10
80 1130
1132.16
0+50 LT
1132.16
0 0
79
6 4
11' LT.
1134.56
5.77' RT.
1134.39
F-9
C-12
35 1130
1132.25
0+24 LT
1134.46
12 9
TOT. 114 CARRIED TO SHEET 10
CARRIED TO SHEET 10
8 9
CROSS SECTIO
PLAN No. 119
LIC-62-0.00
OHIO
SHEET TOTAL 5

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

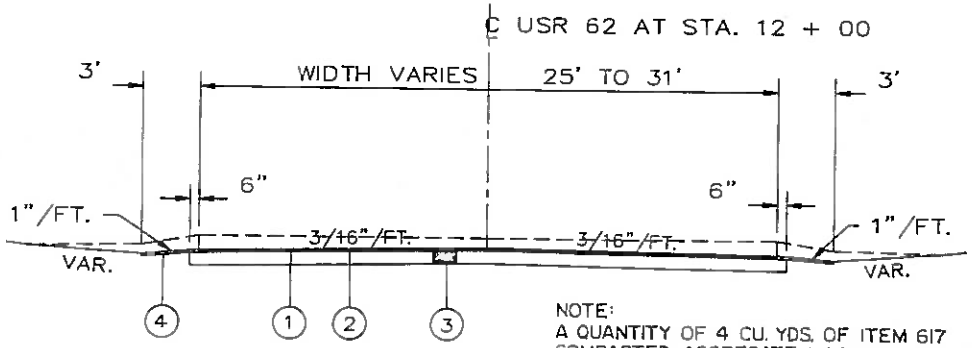
CALC. BY RLM
DATE 6-22-88
CHKD. BY SKG
DATE 6-23-88

LIC-62-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

14/37

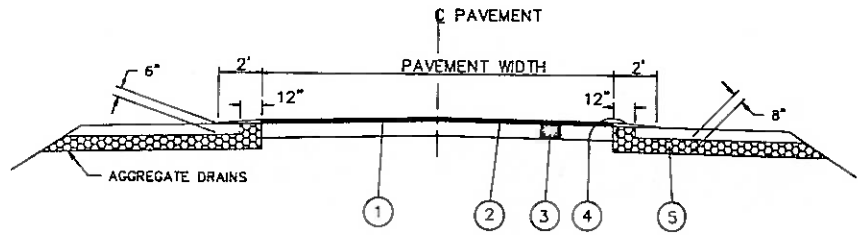
PLAN NO. 119



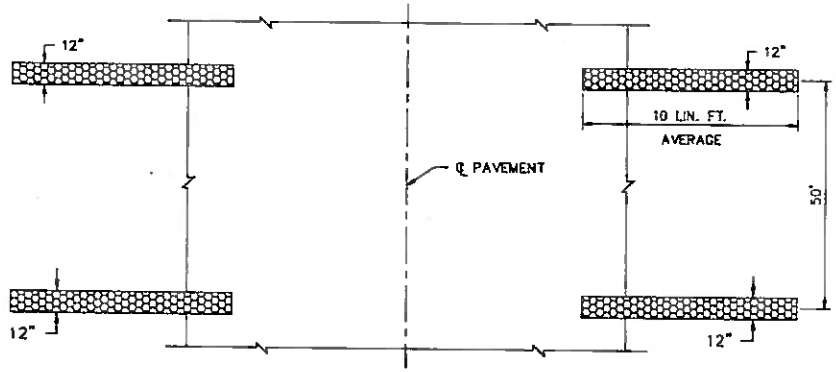
NOTE:
A QUANTITY OF 4 CU. YDS. OF ITEM 617 COMPACTED AGGREGATE HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THE BERMS IN THIS AREA. (PART 2)

1. 404 1 1/4" ASPHALT CONCRETE, AC-20
2. 403 3/4" ASPHALT CONCRETE, AC-20
3. 301 8" BITUMINOUS AGGREGATE BASE
4. 617 2" COMPACTED AGGREGATE, TYPE A

TYPICAL SECTION FOR PAVEMENT REPAIR
AT ABANDONED RAILROAD
PART 2



1. 404 – 1/2" ASPHALT CONCRETE, AC-20
2. 403 – 1" ASPHALT CONCRETE, AC-20
3. 301 – 8" BITUMINOUS AGGREGATE BASE
4. 617 – 2" (AVERAGE) COMPACTED AGGREGATE, TYPE A
5. 605 – AGGREGATE DRAINS



PAVEMENT REPAIR DETAIL

DEPARTMENT OF TRANSPORTATION
M& R 712 REV. 9-1-83

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

CALC. BY RLM
DATE 6-22-88
CHKD. BY SNG
DATE 6-23-88

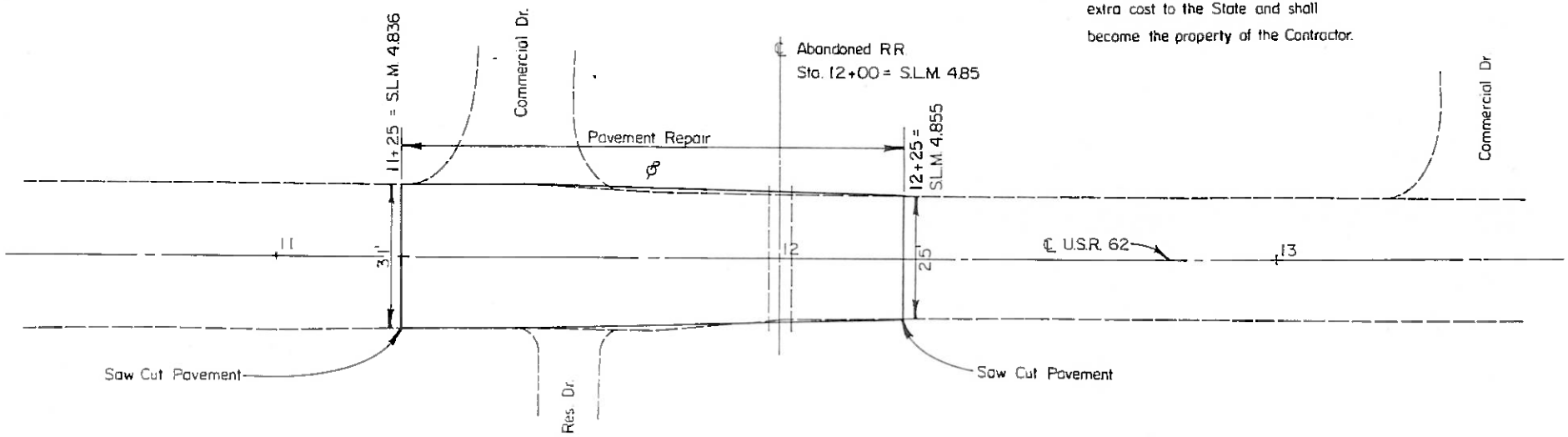
LIC-62-0.00

15
37

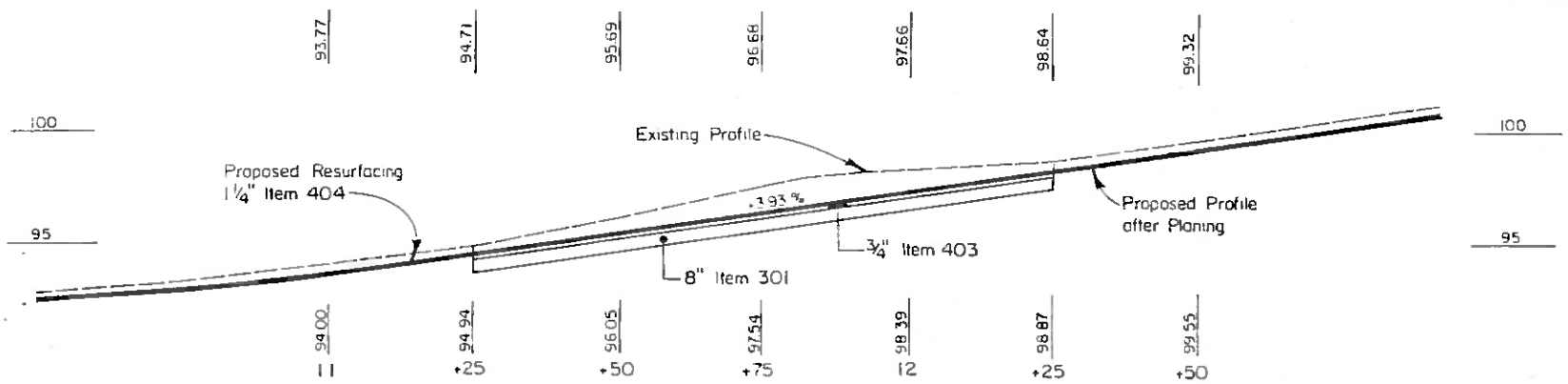
PLAN NO.
119

NOTE:
Any additional work required at the commercial and residential drives in this area shall be included in the cost of the pavement repair

NOTE: Railroad Tracks and Ties encountered during the excavation operation shall be removed in their entirety at no extra cost to the State and shall become the property of the Contractor.



Bench Mark
Spike ℄ Existing Pavement
Sta. 10+00
Elevation 91.85



DOT 1925

DEPARTMENT OF TRANSPORTATION
M&R 703 REV. 9-1-83

CALC. BY JKB DATE 6-23-88
CHKD. BY RLM DATE 6-23-88

LIC-62-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

PLAN NO. 119

GUARDRAIL DATA

PART *	ROUTE	STARTING LOG POINT	MARK	ITEM 202 GUARDRAIL REMOVED: REMOVED LIN.FT.	FOR STORAGE LIN.FT.	FOR RE-USE LIN.FT.	ITEM 606 GUARDRAIL: TYPE	GUARD RAIL, AS PER PLAN LIN.FT.	REBUILT LIN.FT.	CURVED RAIL ELEMENTS: LENGTH LIN.FT.	RADIUS FT.	ANCHOR ASSEMBLY: TYPE T (GR-4A) EACH	SINGLE RAIL (GR-4) TYPE A EACH	BARRIER RAIL (GR-4) EACH	GUARDRAIL CONNECTIONS TO BRIDGES: TYPE	EACH	GUARD POSTS EACH	9' GUARD RAIL POSTS EACH	BERM RESHAPING LIN.FT.	517 (DEEP BEAM RAIL WITH TUBULAR BACKUP) AS PER PLAN LIN.FT.
1	US 62	02.82	1-L				5	50					2						100	18.75
		02.82	2-R				5	50					2						100	18.75
1	TOTALS							100					4						200	37.50

* NOTES:

1. ITEM 202 GUARDRAIL REMOVED: Guardrail, posts and miscellaneous hardware designated for removal become the property of the contractor and shall be disposed of. Payment for the above shall be included in the unit price bid for Item 202 Guardrail Removed.

2. ITEM 202 GUARDRAIL REMOVED FOR STORAGE: Guardrail, standard terminals, posts and miscellaneous hardware designated for salvage shall be stored _____ as directed by the Engineer for removal by State forces. All material not considered salvageable shall be disposed of by the Contractor as directed. Payment for the above shall be included in the unit price bid for Item 202 Guardrail Removed for Storage.

3. ITEM 202 GUARDRAIL REMOVED FOR RE-USE: Guardrail, posts, standard terminals and miscellaneous hardware designated for re-use shall be removed and stored for re-use as directed by the Engineer. This work will be paid in the unit price bid for Item 202 Guardrail Removed for Re-Use.

4. 9' GUARDRAIL POSTS: An estimated number of nine (9) foot long guardrail posts have been listed to be used as directed by the Engineer to obtain a reasonable line and elevation of the guardrail elements. Except for length, the posts shall meet the applicable requirements noted in Item 710. The unit price bid for this item shall be the difference for supplying the nine (9) foot long posts in lieu of the standard length guardrail posts included in the 606 guardrail bid items, and shall be paid as each, Item 606 9 ft. Guardrail Posts, As Per Plan. Standard length posts required to complete the various runs shall be included in the 606 guardrail bid items.

5. BERM RESHAPING: Berms at locations where existing guardrail is removed or where new guardrail is to be erected shall be reshaped as directed by the Engineer to insure a smooth surface free of all irregularities. Excess excavation shall be disposed of as directed by the Engineer. Payment for reshaping berms as described shall be included in the contract price bid per lineal foot for Item Special, Berm Reshaping.

6. CURVED RAIL ELEMENTS: Length of curved rail elements, where called for in a run, shall not be included in the total length of run shown in the guardrail or guardrail rebuilt columns. However, the curved rail element total shall be included with the guardrail or guardrail rebuilt totals on the general summary sheet.

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

DGT 1606

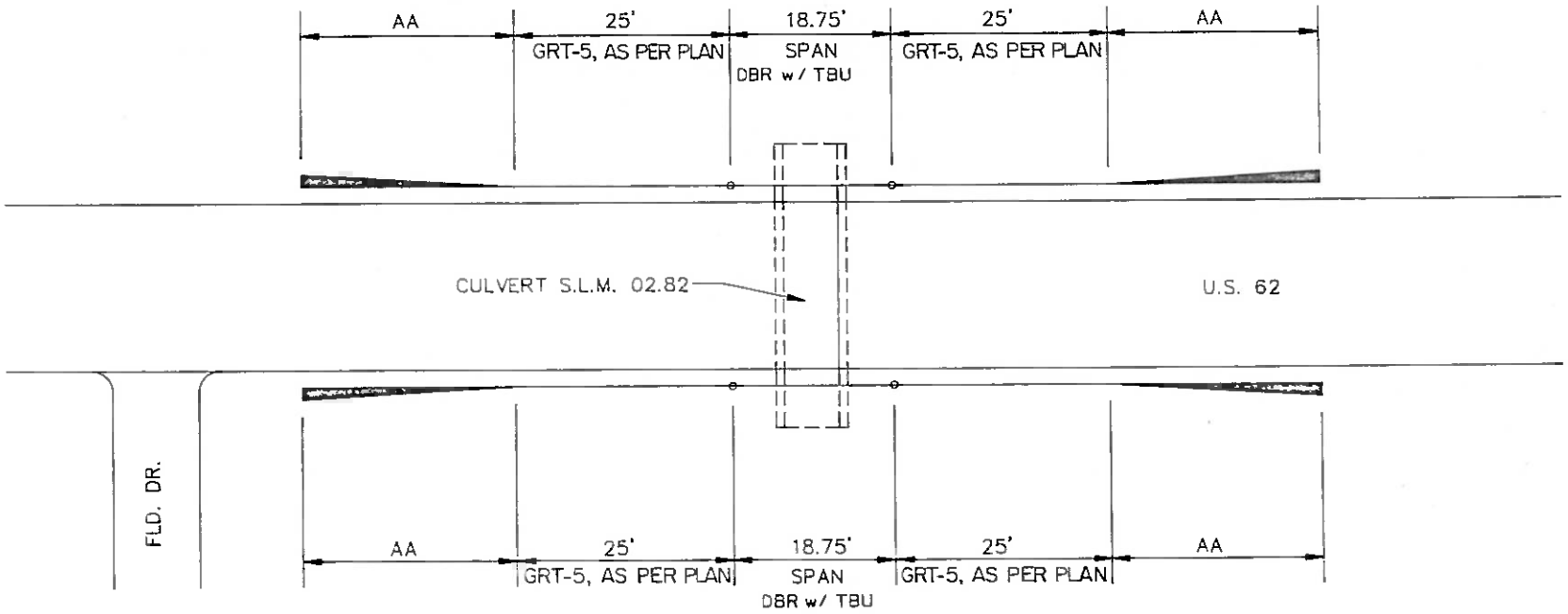
CA. C. BY SKB
DATE 6-21-88
CHKD. BY RLM
DATE 6-22-88

LIC-62-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

PLAN NO. 119

I-L



NOTE:
SEE SHEET 18 FOR
SPAN DETAIL.

2-R

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

NOTE:
SEE STANDARD DRAWING DBR-2-73 FOR ADDITIONAL DETAILS FOR TUBULAR BACKUP.

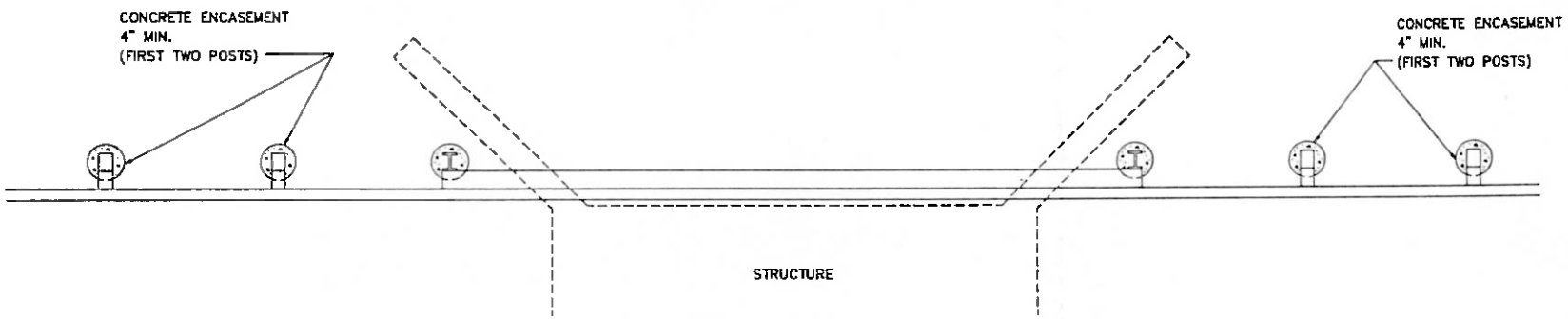
CALC. BY SNG DATE 6-22-88
CHKD. BY RJM DATE 6-23-88

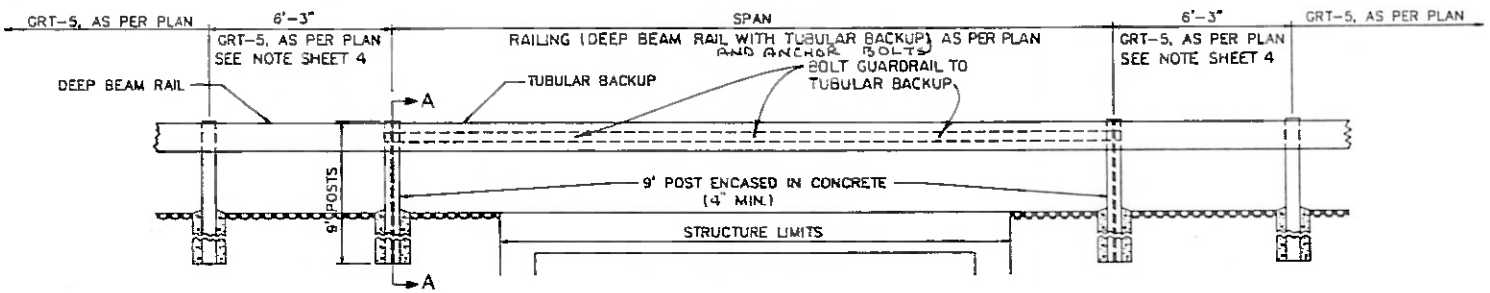
LIC-62-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

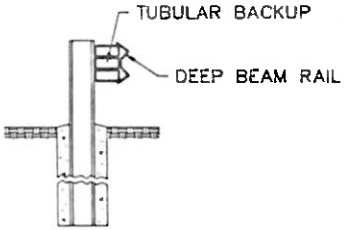
18/37

PLAN NO. 119





SPAN DETAIL



SECTION A-A

PART	MARK	SPAN LIN.FT.	TUBE SIZE	POST SIZE
1	1-L	18.75	8" x 4" x 1/2"	W8 x 24
1	2-R	18.75	8" x 4" x 1/2"	W8 x 24

UNDERGROUND UTILITIES
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OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

INITIAL PAVEMENT MARKINGS FOR RESURFACED SECTIONS

GENERAL NOTES

In addition to the requirements of 621 and 847 the following shall apply:

621 Materials

Glass beads shall be kept dry during storage and prior to use.

621 SPECIAL EQUIPMENT

The Contractor's striper shall be equipped with an odometer graduated to 1/100 of a mile. The Engineer will determine the degree of accuracy of the Contractor's odometer and establish an adjustment factor as may be required to accurately determine the pay item quantities. The Engineer will periodically check the odometer's operation to assure maintenance of accurate measurements.

Failure of the odometer to function properly shall be cause to stop the work until the odometer is made to function properly. On short projects the Engineer may approve alternate methods to accurately measure the length of the various types of markings applied. If measurement of the work has to be done by the Department, the cost of the Department labor and equipment plus 10 percent will be deducted from payment due the Contractor for the work. When measuring lane, edge and center line marking the odometer shall be started at the first marked line and remain in operation, until the end of the section being marked, where it shall be shut off and the reading of the odometer recorded.

Electrical foot counters shall be provided and installed in the striper. The counters shall individually tabulate the amount of footage applied by each striping gun on the center line carriage and lane line carriage, whether solid or dashed. The counters shall be 6 digit type with a reset feature.

The pavement marking equipment shall be equipped with a pressure regulated air jet which shall remove all debris from the pavement in advance of the applicator gun. The air jet shall operate when marking material is being applied and shall be synchronized with marking material application or remain "on" at all times.

The Contractor shall use an accurate dashing mechanism, capable of being easily adjusted

Provision for the above special equipment by the Contractor shall be incidental to the application.

847 LAYOUT AND PREMARKING

In addition to the requirements of 847 premarking for auxiliary markings shall be located from schematic forms provided at the pre-construction conference.

621 MATERIAL QUANTITY MEASUREMENT

The quantity of marking material or glass beads per unit of measurement will be computed by the Engineer at the end of each day's work. A day's applied mileage of less than 2 miles may be included in the next day's applied markings for the purpose of computing marking material and bead application rates.

The Contractor shall provide a calibrated measuring device acceptable to the Engineer for measuring material in the striper tanks.

The quantity of marking material used shall be determined by measuring the marking material in the tanks before and after marking material is applied. The Contractor shall cooperate with the Engineer in providing measurements whenever requested. The marking material application rate shall be determined by dividing the total gallons used by the appropriate marking length as determined from the foot counter as described within the Special Equipment Section of these notes. Any determination of pay deduction resulting from shortages in marking quantities shall be based on the measurements obtained by this method. The amount of glass beads applied will be ascertained by the Engineer by observation and from information supplied by the Contractor as to quantity used.

847 AUXILIARY PAVEMENT MARKING

For this project auxiliary markings shall be defined as: stop lines, crosswalk lines, transverse lines, railroad symbol markings, lane arrows, word on pavement and dotted lines except when used to extend edge lines.

STANDARD CONSTRUCTION DRAWING TC 71.10

The dimensions shown on Standard Construction Drawing TC 71.10 are nominal. Letters, numerals and symbols conforming to the requirements of section 3B-17 of the 1978 National Manual On Uniform Traffic Control Devices may also be used. Any of the following standards for letters, numeral or symbol dimensioning may be used: A.) Standard dimensions shown on this detail or B.) Standard dimensions (either metric or their hard converted English unit equivalents) in accord with the 1977 Metric Edition Standard Alphabets For Highway Signs and Pavement Marking with Errata or C.) Standard dimensions shown in figures 3-17, 3-18, 7-2, 7-3, 8-2 or 9-6 of the 1978 National Manual On Uniform Traffic Contol Devices.

20
59

FED.RD. DIV.	STATE	PROJECT	
5	OHIO		

PAVEMENT MARKING TYPICAL DETAILS

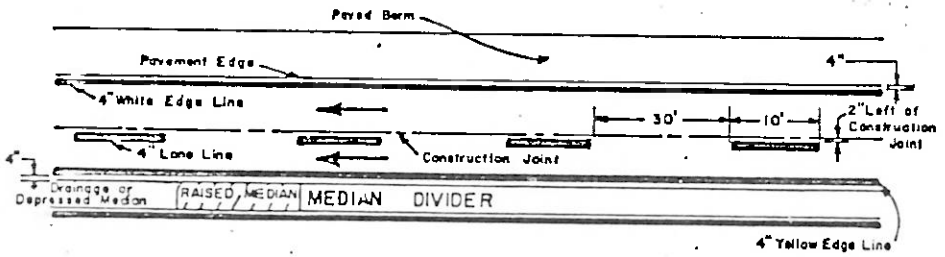
CALC. BY RLM
DATE 6-12-88

CHKD. BY SKG
DATE 6-13-88

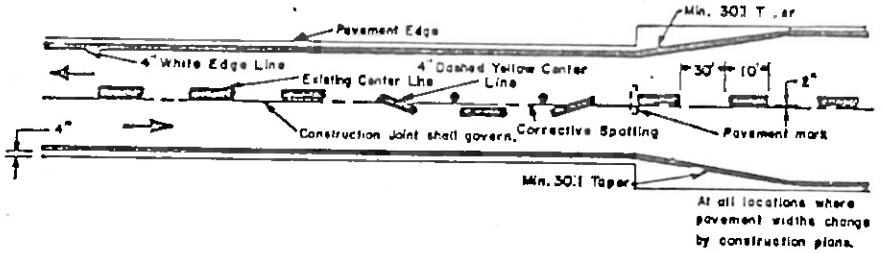
PLAN NO. 119

LIC-62-0.00

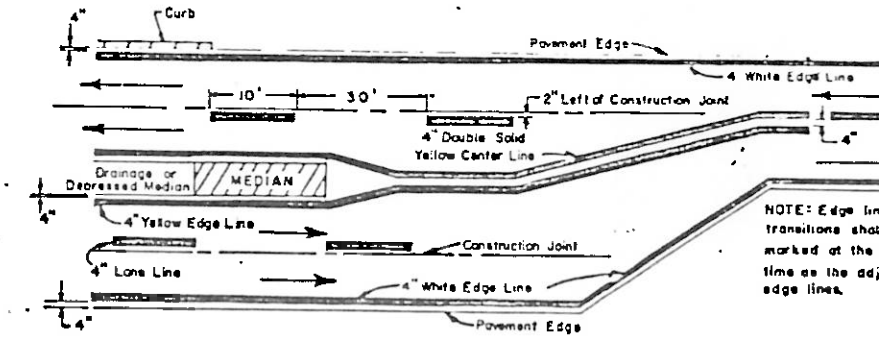
FREEWAY & EXPRESSWAY MAINLINE MARKINGS



TWO LANE MARKINGS



MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKIN



NOTES:

1. THE DISTANCE FROM THE PAVEMENT EDGE TO THE NEARSIDE EDGE OF THE EDGELINE MAY BE INCREASED WITH THE APPROVAL OF THE ENGINEER IN ORDER TO MAINTAIN UNIFORM LANE WIDTH.

2. SEE TC 72.20 FOR PAVEMENT ENTRANCE AND EXIT RAMP TERMINALS.

PAVEMENT M RKIN
TYPICAL DETAILS

12/81

QUANTITIES INCLUDE CL AROUND OUTSIDE OF PAINTED ISLAND

CENTER LINE SUB-SUMMARY

CALC. BY SKB DATE 6-22-88
CHKD. BY RLM DATE 6-23-88

LIC-62-0.00

PLAN NO. 1!!

COUNTY	ROUTE	S.L.M. FROM	S.L.M. TO	CENTER LINES QUANTITIES TOTAL MILES	CENTER LINES QUANTITIES EQUIVALENT SOLID LINE	PARTICIPATION TYPE IRG	FG	RSG	NON FED STATE		REMARKS
LIC	USR 62	0.00	3.53	3.53	2.293				PART 1		FRANKLIN CO. LINE TO JOHNSTOWN SW CORP.
LIC	USR 62	5.03	10.57	5.54	2.995				PART 1		JOHNSTOWN NE CORP TO END PROJECT
TOTALS				9.07							
LIC	USR 62	3.53	5.03	1.50	2.866				PART 2		JOHNSTOWN SW CORP. TO JOHNSTOWN NE CORP.
TOTALS				10.57	8.154						

L06200P

EDGE LINE SUB-SUMMARY

CALC. BY SKO DATE 6-22-88
CHKD. BY RLM DATE 6-23-88

LIC-62-0.00
PLAN NO. 119

21A
37

CO.	ROUTE	S.L.M.		WHITE EDGE LINE QU.			YELLOW EDGE LINE QU.			PARTICIPATION TYPE				EDGE LINE TOTAL MILES	REMARKS
		FROM	TO	TOTAL MILES	HIGHWAY	RAMP	TOTAL MILES	HIGHWAY	RAMP	IRG	FG	RSG	NON FED STATE		
LIC	USR 62	0.00	3.53	7.06	3.53								PART 1	7.06	FRANKLIN CO. LINE TO JOHNSTOWN SW CORP.
LIC	USR 62	5.03	10.57	11.08	5.54								PART 1	11.08	JOHNSTOWN NE CORP. TO END PROJECT
TOTALS														18.14	
LIC	USR 62	3.53	4.27	1.48	0.74								PART 2	1.48	JOHNSTOWN SW CORP. TO CURB SECTION
LIC	USR 62	4.95	5.03	0.16	0.08								PART 2	0.16	CURB SECTION TO JOHNSTOWN NE CORP.
TOTALS														1.64	
TOTALS														19.78	

CALC. BY RLM
DATE 6-11-88
CHKD. BY SKB
DATE 6-23-88

PAVEMENT MARKING SUB-SUMMARY

PLAN NO.	FHWA REGION	STATE	PROJECT
119	5	OHIO	LIC-62-0.00

847 AUXILIARY MARKING 947.02

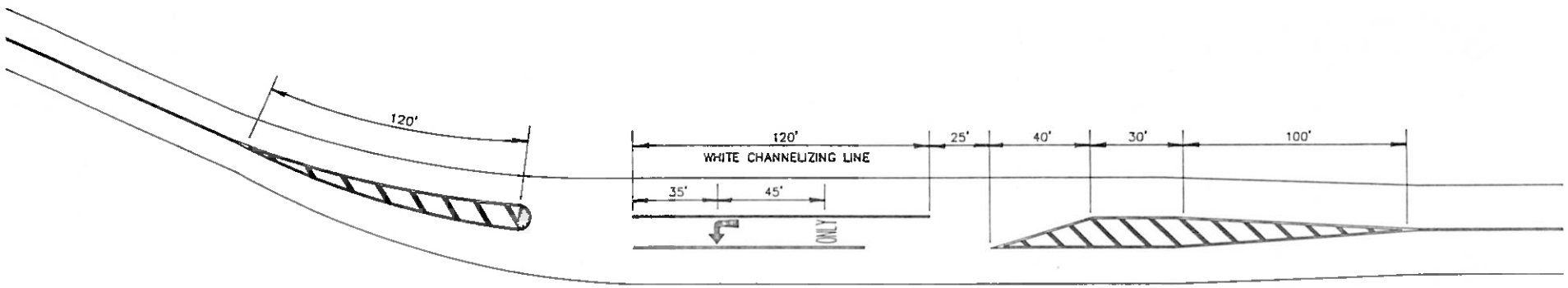
CO.	ROUTE	S.L.M. SIDE	S.L.M. TO	24" TRANSVERSE LINES WHITE LIN.FT.	24" TRANSVERSE LINES YELLOW LIN.FT.	STOP LINE 24" LIN.FT.	12" CROSSWALK LINES WHITE LIN.FT.	WORD ON PAVEMENT ONLY EACH 72"	WORD ON PAVEMENT ONLY EACH 96"	WORD ON PAVEMENT SCHOOL EACH 72"	WORD ON PAVEMENT SCHOOL EACH 96"	LANE ARROWS TURN LEFT EACH	LANE ARROWS TURN RIGHT EACH	LANE ARROWS THRU EACH	LANE ARROWS COMB. EACH	ISLAND MARKING SQ.FT.	DOTTED LINES WHITE LIN.FT.	DOTTED LINES YELLOW LIN.FT.	8" CHANNEL LINE LIN.FT.	REMARKS
PART 1																				
U.S. 62	LIC. CO.																			
	TIPPET RD.	LT.				20														PLACE 26' FROM U.S. 62 ℄
	BEECH RD.	RT.				13														PLACE 21' FROM U.S. 62 ℄
	GREEN CHAPEL RD.	RT.				22														PLACE 21' FROM U.S. 62 ℄
	FANCHER RD.	LT.				27														PLACE 22' FROM U.S. 62 ℄
	MILLER CHURCH RD.	LT.				23														PLACE 20' FROM U.S. 62 ℄
	CLOVER VALLEY RD.	RT.				25														PLACE 20' FROM U.S. 62 ℄
	DUNCAN PLAINS RD.	LT.				27														PLACE 20' FROM U.S. 62 ℄
	DUNCAN PLAINS RD.	RT.				30														PLACE 23' FROM U.S. 62 ℄
	SPORTSMAN CLUB RD.	RT.				44														PLACE 26' FROM U.S. 62 ℄
	CROUSE WILLISON RD.	LT.				17														PLACE 21' FROM U.S. 62 ℄
	DUTCH LANE RD.	RT.				31														PLACE 22' FROM U.S. 62 ℄
	NICHOLS LANE	LT.				14														PLACE 26' FROM U.S. 62 ℄
	NICHOLS LANE	RT.				19														PLACE 23' FROM U.S. 62 ℄
	COOPER RD.	LT.				21														PLACE 22' FROM U.S. 62 ℄
	ON U.S. 62	S.L.M. 9.20									1									SEE REQUEST FORM
	NORTHRIDGE RD.	RT.				24														PLACE 23' FROM U.S. 62 ℄
	ON U.S. 62	S.L.M. 9.69									1									SEE REQUEST FORM
	LOUDON ST. RD.	RT.				22														PLACE 24' FROM U.S. 62 ℄
	APPLETON RD.	LT.				35														PLACE 21' FROM U.S. 62 ℄
PART 1	TOTALS					414					2									
PART 2																				
U.S. 62	IN JOHNSTOWN																			
	CHEERY HILL DR.	LT.				12														PLACE 21' FROM U.S. 62 ℄
	CHEERY HILL DR.	LT.				11														PLACE 21' FROM U.S. 62 ℄
	WESTVIEW DR.	RT.				26														PLACE 22' FROM U.S. 62 ℄
	BENEDICT DR.	LT.				18														PLACE 20' FROM U.S. 62 ℄
	MEADOW LANE	RT.					52													PLACE AS DIRECTED BY ENGINE
	ON U.S. 62				203			1				1				57			120	SEE SHEET 23
	WILLIAM ST.	LT.					40													PLACE AS DIRECTED BY ENGINE
	WILLIAM ST.	RT.					44													PLACE AS DIRECTED BY ENGINE
ON	U.S. 62 AT OREGON	ST.				15	66													SEE SHEET 24
	OREGON ST.	RT.					90													SEE SHEET 24
	OREGON ST.	LT.					42													SEE SHEET 24
ON U.S.	62 BETWEEN OREGON ST. AND	S.R. 37			153	54	206	3				3	2						220	SEE SHEET 24
	S.R. 37	RT.					90	1												PLACE AS DIRECTED BY ENGINE
	S.R. 37	LT.					92													PLACE AS DIRECTED BY ENGINE
ON	U.S. 62 N.E. OF S.R.	37				22	90					1							50	SEE SHEET 25
	KASSON ST.	LT.					42													PLACE AS DIRECTED BY ENGINE
	KASSON ST.	RT.					38													PLACE AS DIRECTED BY ENGINE
	FORD ST.	RT.				17														PLACE 19' FROM U.S. 62 ℄
	YARDNER ST.	RT.				12														PLACE 20' FROM U.S. 62 ℄
PART 2	TOTALS				356	187	892	5				5	2			57			390	

CALC. BY RLM
DATE 6-22-88
CHKD. BY SKG
DATE 6-23-88

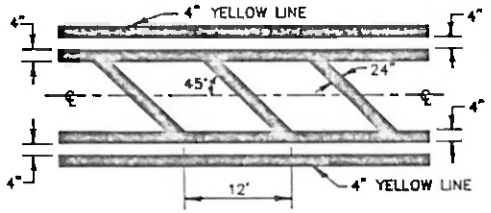
FHWA REGION	STATE	PROJECT	
5	OHIO		

23/37

LIC-62-0.00
PLAN NO. 119



KROGER PARKING AREA



ISLAND DETAILS

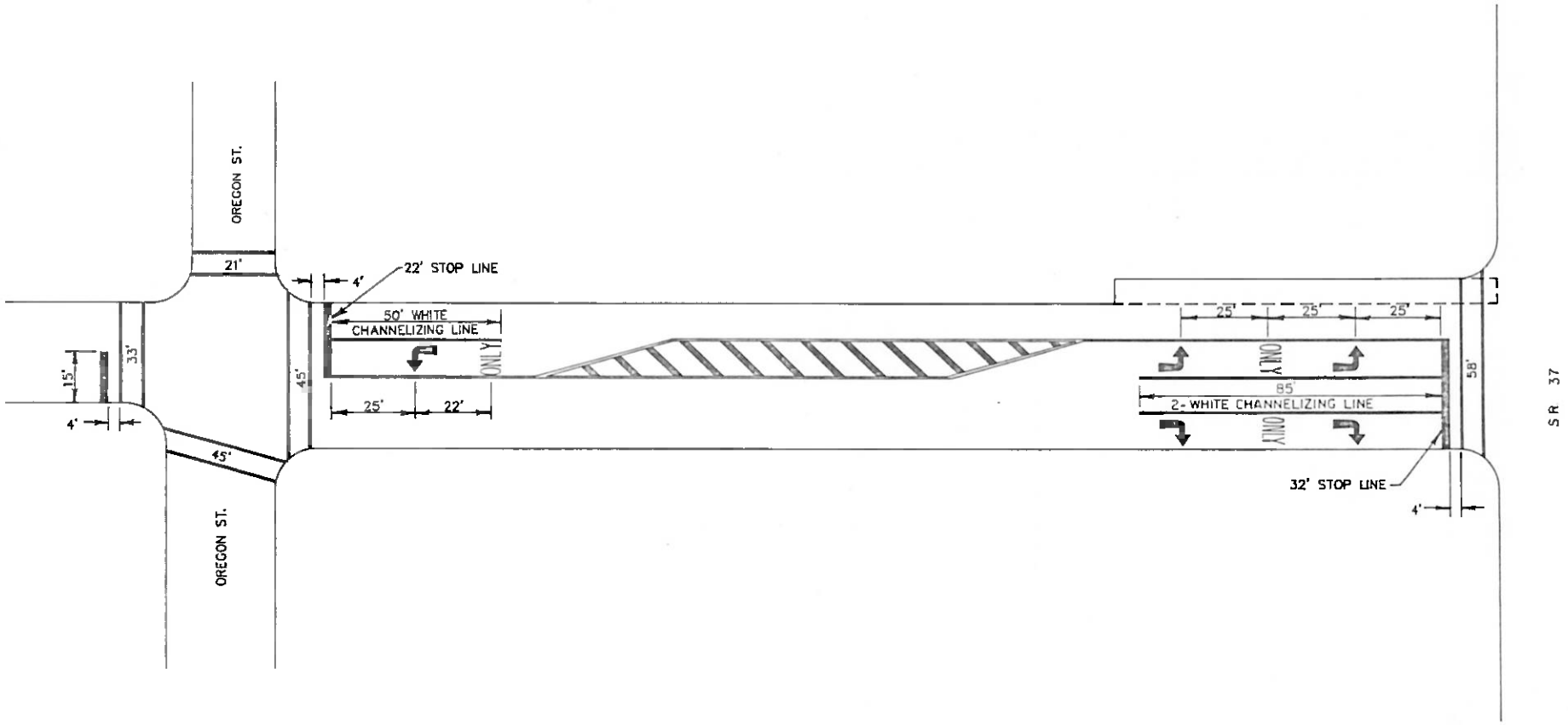
FHWA REGION	STATE	PROJECT	
5	OHIO		

24/37

CALC. BY RLM
DATE 6-11-88

CHKD. BY SKB
DATE 6-23-88

LIC-62-0.00
PLAN NO. 119

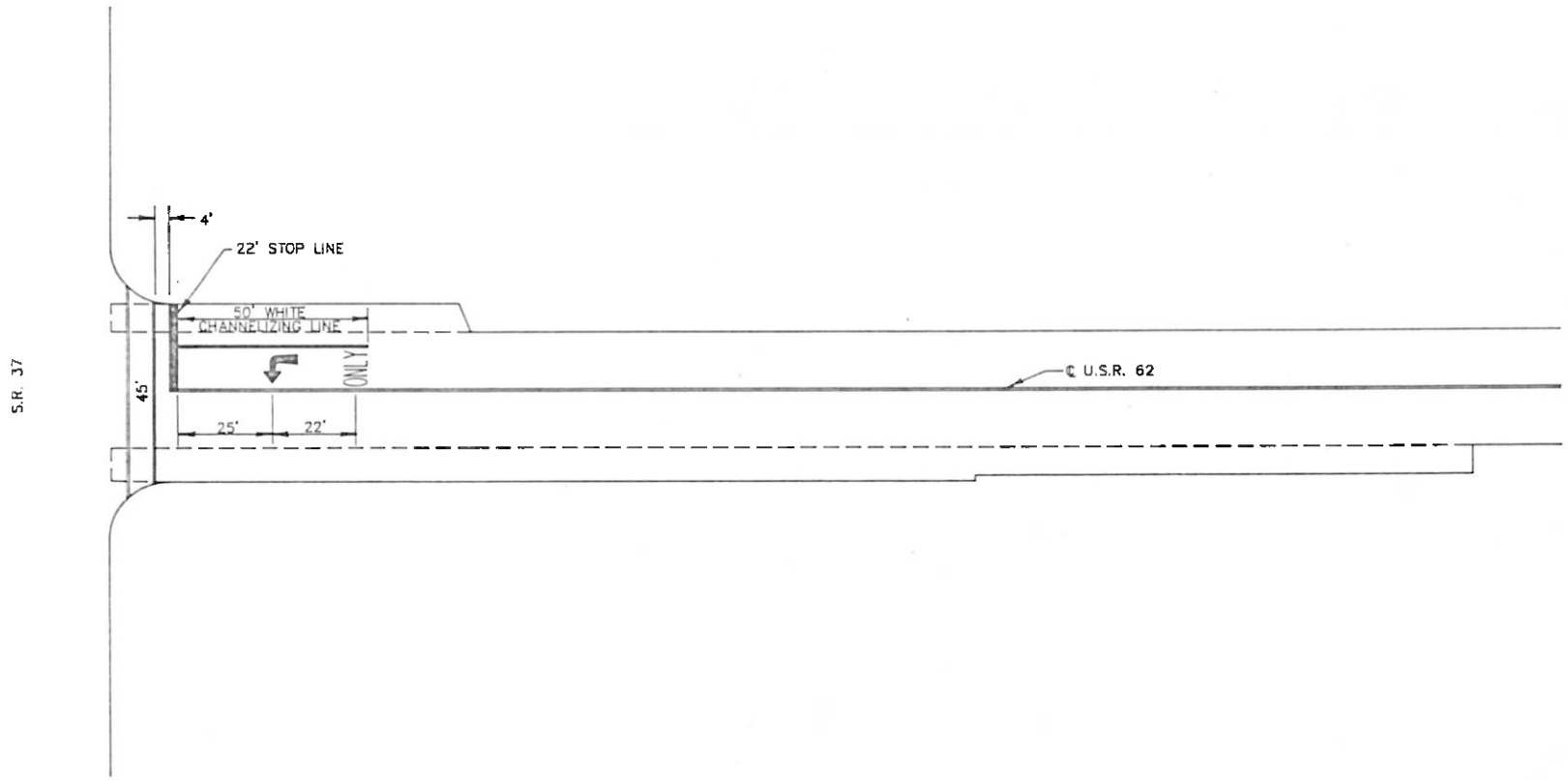


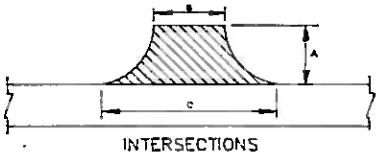
CALC. BY RLM
DATE 6-22-88
CHKD. BY SKB
DATE 6-23-88

FHWA REGION	STATE	PROJECT	
5	OHIO		

25/37

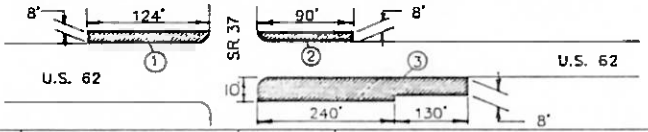
LIC-62-0.00
PLAN NO 119





INTERSECTIONS

EXTRA AREA AND DEDUCTIONS



CALC. BY RLM
DATE 6-22-88
CHKD. BY SKB
DATE 6-23-88

LIC-62-0.00

26/37

PLAN NO. 119

PART	ROUTE	LOG POINT TO LOG POINT	SIDE	DESCRIPTION	INTERSECTIONS A IN FEET	B IN FEET	C IN FEET	AREA IN SQ. YD.	PROPOSED ITEMS 407 AS PER PLAN TACK COAT @ 0.10 gal./s.y. GAL.	COVER AGGR. @ 1 lbs./s.y. TON	ASPHALT CONCRETE THICK INCHES	CU. YD. ITEM 403	ITEM 404	THICK INCHES	EXISTING SURFACE	408 BITUMINOUS PRIME COAT @ 0.40 gal./s.y. GAL.	254 PAVEMENT PLANING, BITUMINOUS SQ. YD.
1	U.S. 62		LT.	TIPPET RD. (TWP.RD. 51)	35	22	68	175	18				7	1.5	ASPH.		
			RT.	BEECH RD. (TWP.RD. 88)	30	21	54	125	13				5	1.5	ASPH.		
			RT.	GREEN CHAPEL RD.NW (TWP.RD.63)	40	22	57	176	18				7	1.5	ASPH.		
			LT.	FANCHER RD. (TWP.RD. 87)	40	19	63	182	18				8	1.5	ASPH.		
			LT.	MILLER CHURCH RD. (TWP.RD. 86)	30	23	72	158	16				7	1.5	ASPH		
			RT.	CLOVER VALLEY RD. (CO.RD. 26)	45	19	85	260	26				11	1.5	ASPH.		
			LT.	DUNCAN PLAINS RD. (CO.RD. 33)	45	26	116	355	36				15	1.5	ASPH.		
			RT.	DUNCAN PLAINS RD. (CO.RD. 33)	45	24	92	290	29				12	1.5	ASPH.		
			RT.	SPORTSMAN CLUB RD. (CO.RD.16)	70	24	110	521	52				22	1.5	ASPH.		
			LT.	CROUSE-WILLISON RD. (CO.RD. 13)	30	24	53	128	13				5	1.5	ASPH.		
			RT.	DUTCH LANE RD. (CO.RD.15)	45	19	79	245	25				10	1.5	ASPH.		
			LT.	NICHOLS LANE (CO.RD. 27)	40	17	55	160	16				7	1.5	ASPH.		
			RT.	NICHOLS LANE (CO.RD. 27)	35	20	55	146					8	2.0	GRAVEL	58	
			LT.	COOPER RD. N.W. (TWP.RD. 60)	45	19	77	240	24				10	1.5	ASPH.		
			RT.	NORTHRIDGE RD. (CO.RD. 21)	60	22	83	350	35				15	1.5	ASPH.		
			RT.	LOUDON ST. RD. (CO.RD. 10)	30	23	70	155	16				6	1.5	ASPH.		
			LT.	APPLETON RD. (CO.RD. 10)	40	24	82	236	24				10	1.5	ASPH.		
1	U.S. 62	TOTALS		(TOTALS CARRIED TO SHEET 27)				3902	379				165			58	
2	U.S. 62	IN JOHNSTOWN	LT.	CHEERY HILL DR.	20	16	42	64					4	2.0	GRAVEL	26	
			LT.	CHEERY HILL RD.	20	12	32	49					3	2.0	GRAVEL	20	
			RT.	WESTVIEW DR.	35	34	75	212	21				9	1.5	ASPH.		
			LT.	BENEDICT DR.	20	24	57	90	9				4	1.5	ASPH.		
			RT.	MEADOW LANE	20	24	51	83	8				3	1.25	ASPH.		83
			LT.	WILLIAMS ST.	15	20	30	42	4				1	1.25	ASPH.		42
			RT.	WILLIAMS ST.	22	20	53	89	9				3	1.25	ASPH.		89
			RT.	OREGON AVE.	12	45	62	71	7				2	1.25	ASPH.		71
			LT.	OREGON AVE.	20	21	34	61	6				2	1.25	ASPH.		61
			LT.	EXTRA AREA ON LEFT (1)				110	11				4	1.25	ASPH.		110
			LT.	S.R. 37	15	45	54	83	8				3	1.25	ASPH.		83
			RT.	S.R. 37	15	46	70	97	10				3	1.25	ASPH.		97
			LT.	EXTRA AREA ON LEFT (2)				80	8				3	1.25	ASPH.		80
			RT.	EXTRA AREA ON RIGHT (3)				383	38				13	1.25	ASPH.		
			LT.	KASSON ST.	20	21	32	59	6				2	1.25	ASPH.		59
			RT.	KASSON ST.	10	19	28	26	3				1	1.25	ASPH.		26
			RT.	FORD ST.	20	23	46	77	8				3	1.5	ASPH.		
			RT	YARDNER ST	20	21	27	53	5				2	1.5	ASPH.		
2	U.S. 62	TOTALS		(TOTALS CARRIED TO SHEET 28)				1,729	161				65			46	801

DEPARTMENT OF TRANSPORTATION
MAR707 REV. 9-1-83

ASPHALT CONCRETE

CALC. BY RLM DATE 6-22-88	FHWA REGION	STATE	PROJECT	
CHKD. BY SKB DATE 6-23-88	5	OHIO		

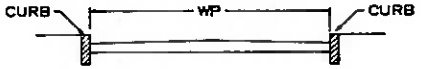
27/37

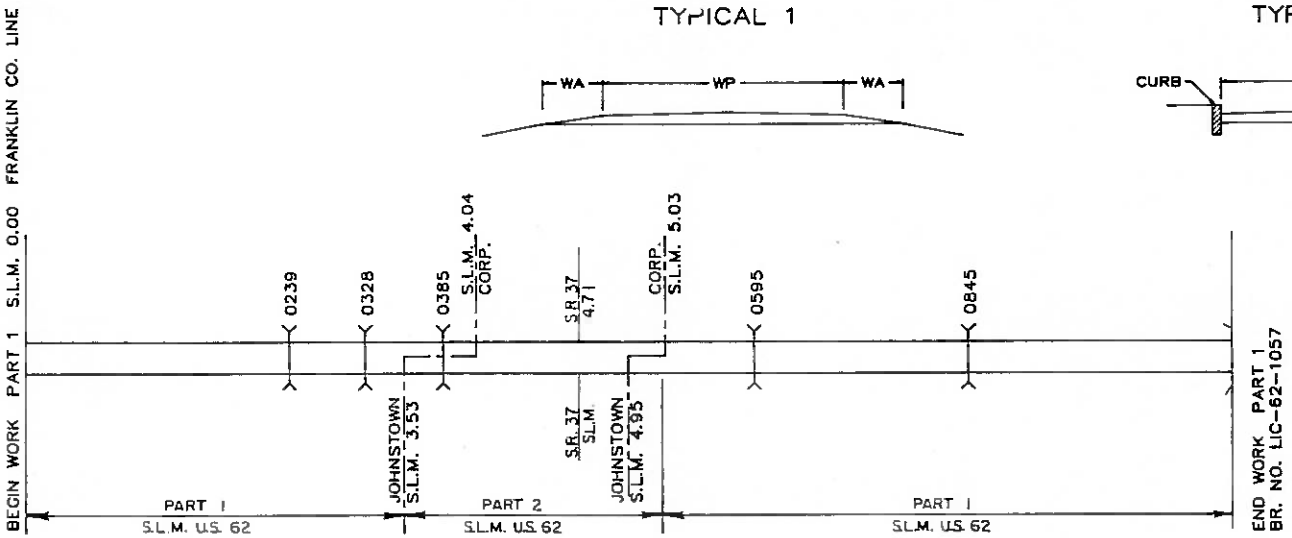
LIC-62-0.00

PLAN NO. 119

TYPICAL 1

TYPICAL 2





PART 1

LIC-62-0239	19.5' x 30.0'	SEE SHEET 30
LIC-62-0328	47.5' x 36.33'	SEE SHEET 30
LIC-62-0595	50.0' x 40.0'	SEE SHEET 30
LIC-62-0845	19.0' x 28.17'	SEE SHEET 30

PART 2

LIC-62-0385	137.17' x 27.67'	SEE SHEET 30

(1) BRIDGE LENGTH X PAVEMENT WIDTH (2) AVERAGE (3) FIELD MEASURED PAVEMENT DATA (4) INCLUDES CONC. GUTTERS (2' EACH SIDE)

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT 0.10 gal./s.y. GALS.	407 COVER AGGR. lbs./s.y. TONS	ASPHALT CONCRETE ITEM 403 THICK INCHES AVG.	ITEM 403 CU. YDS.	ITEM 404 THICK INCHES	ITEM 404 CU. YDS.	ITEM ____ THICK INCHES	ITEM ____ CU. YDS.	614 TEMPORARY CENTER LINES, CLASS II MILE	202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE EACH	408 BITUMINOUS PRIME COAT GAL.	254 PAVEMENT PLANING, BITUMINOUS (SEE PLANING NOTE) SQ. YD.	604 CATCH BASIN RECONSTRUCTED TO GRADE EACH
1	U.S. 62	0.00 – 3.53	3.53	18,638	20	1	404	41,418	4,142		0.5	575	1.0	1,151			7.06	321			
		5.03 – 10.57	5.54	29,251	24	1	404	78,003	7,800		0.5	1,083	1.0	2,167			11.08	432			
EXTRA AREAS FROM SHEET 26								3,902	379					165					58		
EXTRA TACK COAT FOR LONGITUDINAL JOINT									112												
DEDUCT FOR BRIDGES (1)								(333)	(33)			(5)		(9)							
1	TOTALS		9.07	47,889				122,990	12,400			1,653		3,474			18.14	753	58		
2	U.S. 62	3.53 – 4.04	0.51	2,693	10/10	1	404	5,984	598		0.5	83	1.0	166			1.02	40			
		4.04 – 4.27	0.23	1,214	20	1	404	2,698	270		0.5	37	1.0	75			0.46				
		4.27 – 4.37	0.10	528	25	2	404	1,467	147				1.25	51			0.20			1,467	
		4.37 – 4.41	0.04	211	28(2)(3)	2	404	656	66				1.25	23			0.08			750 (4)	
		4.41 – 4.45	0.04	211	35(3)	2	404	821	82				1.25	29			0.08			914 (4)	
		4.45 – 4.47	0.02	106	30.5(2)(3)	2	404	359	36				1.25	12			0.04			406 (4)	
		4.47 – 4.63	0.16	845	30(3)	2	404	2,817	282				1.25	98			0.32			2,817	
		4.63 – 4.71	0.08	422	44	2	404	2,063	206				1.25	72			0.16			2,063	
		4.71 – 4.836	0.126	665	31	2	404	2,291	229				1.25	80			0.252			2,291	1
		4.836 – 4.855	0.019	100	28 (2)	1		311	31		0.5	4	1.25	11			0.038				

DOT 1920

PART 2 CONTINUED ON NEXT SHEET

DEPARTMENT OF TRANSPORTATION
M&R707 REV. 9-1-83

ASPHALT CONCRETE

CALC. BY RLM
DATE 6-22-88
CHKD. BY SMB
DATE 6-23-88

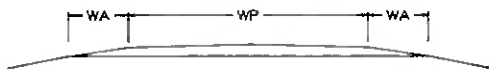
FHWA REGION	STATE	PROJECT	
5	OHIO		

LIC-62-0.00

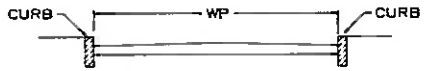
PLAN NO. 119

28/37

TYPICAL 1



TYPICAL 2



(1) BRIDGE LENGTH X PAVEMENT WIDTH

PAVEMENT DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN. FT.	WP FEET	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA SQ. YDS.	PROPOSED PAVEMENT 407 TACK COAT - 0.10 gal./s.y. GALS.	407 COVER AGGR. lbs./s.y. TONS	ASPHALT CONCRETE ITEM 403 THICK INCHES AVG.	ITEM 403 CU.YDS.	ITEM 404 THICK INCHES	ITEM 404 CU.YDS.	ITEM ____ THICK INCHES	ITEM ____ CU.YDS.	614 TEMPORARY CENTER LINES, CLASS II MILE	202 RAISED PAVEMENT MARKERS REMOVED FOR STORAGE EACH	408 BITUMINOUS PRIME COAT GAL.	254 PAVEMENT PLANING, BITUMINOUS (SEE PLANING NOTE) SQ. YD	604 CATCH BASIN RECONSTRUCTED TO GRADE EACH
2	CONTINUED FROM PREVIOUS SHEET																				
		4.855 – 4.95	0.095	502	25	2	404	1,394	139				1.25	48			0.19			502	
		4.95 – 5.03	0.08	422	12/12	1	404	1,125	113		0.5	16	1.0	31			0.16				
EXTRA AREAS FROM SHEET 26								1,729	161					65					46	801	
EXTRA TACK COAT FOR LONGITUDINAL JOINT									17												
DEDUCT FOR BRIDGE (1)								(305)	(31)			(4)		(8)							
2	TOTALS		1.50	7,919				23,410	2,346			136		753			3.00	40	46	12,011	1

DOT 1920

DEPARTMENT OF TRANSPORTATION
M & R 684 REV.9-1-79

CALC. BY R.L.M.
DATE 6-22-88
CHKD. BY SKR
DATE 6-23-88

29/37

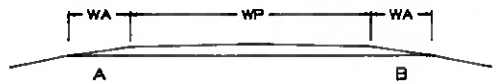
LIC-62-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

PLAN NO 119

PAVED SHOULDERS

TYPICAL 1



▲ NOTES

1. ITEM 203 LINEAR GRADING:
This work shall consist of preparing a subgrade for the shoulder paving by excavating the existing shoulder material to the depth shown on the plan or as directed by the Engineer to remove any unstable material and by shaping and compacting the subgrade. The unsound or broken edge of bituminous pavements shall first be trimmed to a line established by the Engineer. The existing shoulder then shall be excavated and the subgrade shaped and compacted. Compaction shall be carried out to the satisfaction of the Engineer by means of trench roller, 401.11. Areas graded in excess of depths specified or directed by the Engineer shall be backfilled to desired grade using 617 Compacted Aggregate at the Contractor's expense. Excavation material shall be diposed of as indicated in the plan.
   - ☐ a. Used to back up shoulders where required; the balance to be dispos as directed by the Engineer.
   - ☐ b. Disposed of by the Contractor at his own responsibility outside the limits of the right of way.
   - ☐ c. Wasted adjacent to the pavement and within the right of way as directed by the Engineer.
2. ITEM 402 ASPHALT CONCRETE:
Prior to placing a bituminous mixture for shoulder paving, the edge of the existing pavement, for the full depth of the trench, shall be coated with bituminous material in accordance with 401.12.
3. ITEM 301 BITUMINOUS AGGREGATE BASE
May be used in lieu of Item 402 Asphalt Concrete.
4. ITEM 617 COMPACTED AGGREGATE:
A quantity of Item 617 Compacted Aggregate has been provided for areas where the shoulders were low prior to grading and/or low areas caused by removal of unsuitable material.
5. ITEM 408 BITUMINOUS PRIME COAT:
After application of the Prime Coat, no further treatment shall be performed until as directed by the Engineer.
6. SHIELD: The Contractor shall provide a shield to prevent the spraying or drifting of liquid bituminous material onto the edge of the pavement or edge lines. The attention of the Contractor is directed to 107.12 of the Specificati

PAVED SHOULDER DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH MILES	LENGTH LIN.FT.	TYPICAL	PROPOSED WIDTH (FT.) A	B	C	D	SHOULDER AREA SQ.YDS.	203 LINEAR GRADING	404 ASPHALT CONCRETE THICK IN.	CU YD	409 SEAL Blt. Matl. ..... gal./s.y. GALS.	Aggr. @..... c.y./s.y. CU.YDS.	617 COMPACTED AGGREGATE TO BACK UP PAVED BERM 24" x 2" TYPE A CU.YDS.	617 SHOULDER PREPARATION SQ.YDS.	407 TACK COAT @ 0.10 gal./sq.yd. GALS.	COVER AGGREGATE @ 7 lbs./s.y. TON
1	U.S. 62	0.00 – 3.53	3.53	18,638	1	2.5	2.5			10,354		2	575			460		1,035	
		5.03 – 10.57	5.54	29,251	1	3	3			19,501		1.5	813			722		1,950	
1	TOTALS		9.07	47,889						29,855			1,388			1,182		2,985	
2	U.S. 62	3.53 – 3.64	0.11	581	1	2.5	2.5			323		2	18			14		32	
		3.64 – 4.27	0.63	3,326	1	3	3			2,217		1.5	92			82		222	
		4.95 – 5.03	0.08	422	1	3	3			281		1.5	12			10		28	
2	TOTALS		0.82	4,329						2,821			122			106		282	

DEPARTMENT OF TRANSPORTATION
M&R 878 REV.8-1-79

BRIDGE DECK TREATMENT

LIC-62-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

30/37

PLAN NO. 119

CALC. BY RLM
DATE 6-22-88

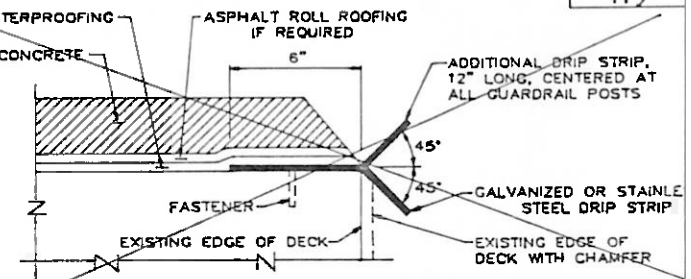
CHKD. BY SKB
DATE 6-23-88

PROTECTIVE COURSE FOR MEMBRANE WATERPROOFING

MEMBRANE WATERPROOFING, Sheet Type 1:
A minimum of 1-1/2 inches of 404 Asphalt Concrete shall be placed over the membrane.

MEMBRANE WATERPROOFING:
A minimum of 2-1/2 inches of 404 Asphalt Concrete shall be placed over the membrane.

DRIP STRIP: Prior to applying deck membrane waterproofing, a bent drip strip shall be installed along the edges of the deck as shown. The strips shall be fastened at 1'-6" c/c maximum with no.10 galvanized skrews and expansion anchors, subject to the approval of the Engineer. The strips shall be placed for the full length of the deck, ending at the face of the abutment wingwall or steel end dam angle. Where splices are required a 3" (Min.) lap shall be used with a fastener through the lap. Steel for the galvanized strips shall be 8"x0.105" and shall meet the requirements of ASTM A167, Type 304, mill finish. Payment shall be at the contract price bid for Item Special Sq.Ft. Steel Drip Strip, which shall include all materials, labor, tools and incidentals necessary to complete this item.



TYP. SEC. DRIP STRIP

BRIDGE DECK DATA

PART	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	BRIDGE DECK AREA	202 WEARING COURSE REMOVED DEPTH ___"	BRIDGE DECK REPAIR ☐ SS-845 LATEX MODIFIED CONCRETE ☐ SS-850 DENSE CONCRETE ___" THICK OVERLAY	VARIABLE THICKNESS OVERLAY	FULL-DEPTH REPAIR	SPECIAL PATCHING TYPE	PATCHING SQ.YD.	STEEL DRIP STRIP	DECK WATERPROOFING MEMBRANE WATERPROOFING SHEET TYPE 1	MEMBRANE WATERPROOFING	516 VERT. EXT. OF STR. EXP. JOINTS	ASPHALT CONCRETE THICK INS.	404	407 TACK COAT @ 0.10 GAL./S.Y.		
		LIN.FT.	LIN.FT.	SQ.YDS.	SQ.YDS.	SQ.YDS.	CU.YDS.	CU.YDS.			SQ.FT.	SQ.YDS.	SQ.YDS.	LIN.FT.		CU.YDS.	GAL.		
1	LIC-62-0239	19.5	30.0	65.0											2	4	7		
	LIC-62-0328	47.5	36.33	191.74											2	11	19		
	LIC-62-0595	50.0	40.0	222.22											2	12	22		
	LIC-62-0845	19.0	28.17	59.47											2	3	6		
1	TOTALS			538.43												30	54		
2	LIC-62-0385	137.17	27.67	421.72											2	23	42		

DEPARTMENT OF TRANSPORTATION
M&R 704 REV. 9-1-81

CALC. BY RLM
DATE 6-22-88
CHKD. BY SKG
DATE 6-23-88

LIC-62-0.00

PLAN NO. 119

GENERAL SUMMARY

ITEM	PART 1					ITEM	ITEM EXT.	GRAND TOTAL PART 1		UNIT	DESCRIPTION
202	256					202		256		LIN.FT.	GUARDRAIL REMOVED FOR STORAGE
606	125					606		125		LIN.FT.	GUARDRAIL, TYPE 5, AS PER PLAN
606	362.5					606		362.5		LIN.FT.	GUARDRAIL, TYPE 5
606	7					606		7		EACH	ANCHOR ASSEMBLY, TYPE A
606	1					606		1		EACH	ANCHOR ASSEMBLY, TYPE T
SPECIAL	200					SPECIAL		200		LIN.FT.	BERM RESHAPING
517	62.5					517		62.5		LIN.FT.	RAILING (DEEP BEAM RAIL WITH TUBULAR BACKUP AND ANCHOR BOLTS), AS PER PLAN
624	LUMP					624		LUMP			MOBILIZATION

GENERAL NOTES

MAINTENANCE OF TRAFFIC:
Traffic shall be maintained on the existing pavement without interruption during construction of the work except as otherwise approved by the Engineer. The Contractor shall set up and operate his equipment in such a manner that encroachment upon the traveled width of pavement will be kept to a minimum.

Berm reshaping and guardrail removal and construction shall be performed only on one side of the pavement at any given time. The open area due to guardrail removal shall be adequately maintained and protected with temporary guide markers or barricades at all times. Where existing guardrail is removed, new guardrail shall be erected as soon as practical. Any areas left unguarded overnight shall be protected by the use of barricades, drums, or other warning devices satisfactory to the Engineer.

All traffic control devices required inside the work limits, except regulatory, guide signs, and pavement markings shall be furnished, erected and maintained by the Contractor.

GUARDRAIL:
The log points of the proposed guardrail shown are approximate. Exact locations will be determined and marked by stakes or other marks by the Engineer. Mail boxes that interfer with the removal or replacement of guardrail shall be relocated by the Contractor as approved by the Engineer. The cost of this item shall be included in the unit price bid for Item 606 Guardrail.

GUARDRAIL OVER CULVERTS:
When sufficient post depth is not available due to a culvert, guardrail posts directly over the culvert shall be set in holes, encased in a minimum of 4" thickness of Class C concrete for the full depth of the hole, or as detailed on GR-1 for inlet mounted posts. Method shall be approved by the Engineer. Payment for the above shall be included in the unit price bid for the applicable guardrail item.

GUARDRAIL POST AND GUARD POST HOLES:
All holes remaining after removal of guardrail posts or guard posts shall be filled with granular material, excess material resulting from guardrail reconstruction or excess material from berm reshaping. All fill material shall be approved by the Engineer. Material placed in holes shall be thoroughly compacted and leveled off as directed by the Engineer. Payment for the above shall be included in the unit price bid for the applicable guardrail item.

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

CALC. BY RLM
DATE 6-22-88
CHKD. BY SKB
DATE 6-23-88

GENERAL SUMMARY

LIC-62-0.00

PLAN NO. 119

32/37

ITEM	PART 1	PART 2						ITEM	ITEM EXT.	GRAND TOTAL PARTS 1 AND 2	UNIT		DESCRIPTION
202	753	40						202		793	EACH		RAISED PAVEMENT MARKERS REMOVED FOR STORAGE
403	1,853	136						403		1,989	CU.YD.		ASPHALT CONCRETE, AC-20
404	4,952	945						404		5,897	CU.YD.		ASPHALT CONCRETE, AC-20
407	15,439	2,670						407		18,109	GAL.		TACK COAT, [illegible]
408	58	46						408		104	GAL.		BITUMINOUS PRIME COAT
604		6						604		6	EACH		CATCH BASIN ADJUSTED TO GRADE
604		1						604		1	EACH		CATCH BASIN RECONSTRUCTED TO GRADE
604		5						604		5	EACH		MANHOLE ADJUSTED TO GRADE
604		9						604		9	EACH		WATER VALVE BOX ADJUSTED TO GRADE
614	LUMP	LUMP						614		LUMP	[illegible]		MAINTAINING TRAFFIC
614	18.14	3.00						614		21.14	MILE		TEMPORARY CENTER LINES, CLASS II
614	30	4						614		34	EACH		WORK ZONE MARKING SIGNS
617	1,187	110						617		1,297	CU.YD.		COMPACTED AGGREGATE, TYPE A
619	LUMP	LUMP						619		LUMP	[illegible]		FIELD OFFICE

GENERAL NOTES

TRAFFIC
TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. THE LENGTH OF RESTRICTED TRAFFIC ZONES SHALL BE KEPT TO A MINIMUM CONSISTENT WITH THE SPECIFICATION REQUIREMENTS FOR PROTECTION OF COMPLETED COURSES.

RAILROAD CROSSING
THE NEW SURFACE COURSE SHALL BE FEATHERED OR BUTT JOINTED TO MEET THE RAIL GRADES AS SPECIFIED.

ALIGNMENT AND PROFILE
THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT EXCEPT THAT IT WILL BE RAISED AN AMOUNT EQUAL TO THE THICKNESS OF THE RESURFACING COURSE OR COURSES SPECIFIED IN THESE PLANS.

INTERMEDIATE COURSE, SPOT LEVELING AND PATCHING
THIS MATERIAL SHALL BE PLACED IN A SEPERATE OPERATION WHERE AND AS DIRECTED BY THE ENGINEER.

CONTROL OF ONE WAY TRAFFIC
IN ADDITION TO THE REQUIREMENTS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND MATERIAL SPECIFICATIONS THE FOLLOWING REQUIREMENTS SHALL APPLY.
COMMUNICATIONS BETWEEN FLAGGERS SHALL BE BY TWO-WAY RADIO DURING THE PAVING OPERATIONS.
PAVEMENT FOR THE ABOVE SHALL BE INCLUDED IN ITEM 614, MAINTAINING TRAFFIC.

BRIDGES
THE PROPOSED DEPTH OF ASPHALT RESURFACING SHALL BE ALTERED TO MATCH THE PROPOSED DEPTH OF THE TREATMENT ON THE STRUCTURES. THE RESURFACING THICKNESS SHALL BE ADJUSTED AS REQUIRED AT THE APPROXIMATE RATE OF 25 FT. PER INCH OF DIFFERENCE IN THICKNESS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

CALC. BY RLM
DATE 6-11-98
CHKD. BY JKB
DATE 6-23-98

GENERAL SUMMARY

LIC-62-0.00 PLAN NO. 119

32A / 37

ITEM	PART 1								ITEM	ITEM EXT.	GRAND TOTAL PARTS 1 AND 2	UNIT	DESCRIPTION
201	LUMP								201		LUMP	LUMP	CLEARING AND GRUBBING
202	LUMP								202		LUMP	LUMP	STRUCTURES REMOVED
203	112								203		112	CU. YD.	EMBANKMENT
203	167								203		167	SQ. YD.	SUBGRADE COMPACTION
203	116								203		116	CU. YD.	EXCAVATION, NOT INCLUDING EMBANKMENT CONSTRUCTION
659	1,379								659		1,379	SQ. YD.	SEEDING AND MULCHING
659	3								659		3	M.GAL	WATER
659	0.62								659		0.62	TON	AGRICULTURAL LIMING
659	0.12								659		0.12	TON	COMMERCIAL FERTILIZER
601	5								601		5	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER
659	100								659		100	SQ. YD.	REPAIR SEEDING AND MULCHING
207	50								207		50	EACH	STRAW OR HAY BALES
602	3.2								602		3.2	CU. YD.	CONCRETE MASONRY
603	48								603		48	LIN. FT.	48"X76" Conduit, TYPE A, 706.04 CL.HEII PER SS[illegible], [illegible] TABLE [illegible] AS PER [illegible]
603	50								603		50	LIN. FT.	6" CONDUIT, TYPE B
603	50								603		50	LIN. FT.	6" CONDUIT, TYPE E
603	50								603		50	LIN. FT.	6" CONDUIT, TYPE F
601	29								601		29	SQ. YD.	RIPRAP USING 6" REINFORCED CONCRETE SLAB
305	167								305		167	SQ. YD.	8" CONCRETE BASE
304	49								304		49	CU. YD.	AGGREGATE BASE
301	19								301		19	CU. YD.	BITUMINOUS AGGREGATE BASE
623	LUMP								623		LUMP	LUMP	CONSTRUCTION LAYOUT STAKES

FCN 7-11 RB

CALC. BY JLM
DATE 6-22-89
CHKD. BY SKB
DATE 6-29-89

GENERAL SUMMARY

LIC-62-0.00 PLAN NO. 119

32A/37

ITEM	PART 1								ITEM	ITEM EXT.	GRAND TOTAL PARTS 1 AND 2	UNIT	DESCRIPTION
201	LUMP								201		LUMP	LUMP	CLEARING AND GRUBBING
202	LUMP								202		LUMP	LUMP	STRUCTURES REMOVED
203	112								203		112	CU. YD.	EMBANKMENT
203	167								203		167	SQ. YD.	SUBGRADE COMPACTION
203	116								203		116	CU. YD.	EXCAVATION, NOT INCLUDING EMBANKMENT.
													CONSTRUCTION
659	1,379								659		1,379	SQ. YD.	SEEDING AND MULCHING
659	3								659		3	M.GAL	WATER
659	0.62								659		0.62	TON	AGRICULTURAL LIMING
659	0.12								659		0.12	TON	COMMERCIAL FERTILIZER
601	5								601		5	CU. YD.	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER
659	100								659		100	SQ. YD.	REPAIR SEEDING AND MULCHING
207	50								207		50	EACH	STRAW OR HAY BALES
602	3.2								602		3.2	CU. YD.	CONCRETE MASONRY
603	48								603		48	LIN. FT.	48"X76" Conduit, TYPE A, 706.04 CL.HEII (AS
													PER SS955) C-850 TABLE 2, AS PER PLAN
603	50								603		50	LIN. FT.	6" CONDUIT, TYPE B
603	50								603		50	LIN. FT.	6" CONDUIT, TYPE E
603	50								603		50	LIN. FT.	6" CONDUIT, TYPE F
601	29								601		29	SQ. YD.	RIPRAP USING 6" REINFORCED CONCRETE
													SLAB
305	167								305		167	SQ. YD.	8" CONCRETE BASE
304	49								304		49	CU. YD.	AGGREGATE BASE
301	19								301		19	CU. YD.	BITUMINOUS AGGREGATE BASE
623	LUMP								623		LUMP	LUMP	CONSTRUCTION LAYOUT STAKES

CALC. BY S.L.M.
DATE 6-22-88
CHKD. BY SKB
DATE 6-23-88

GENERAL SUMMARY

LIC-62-0.00

PLAN NO. 119

ITEM	PART 1	PART 2						ITEM	ITEM EXT.	GRAND TOTAL PARTS 1 AND 2	UNIT		DESCRIPTION
621	9.07	1.50						621		10.57	MILE		CENTER LINES
621	18.14	1.64						621		19.78	MILE		EDGE LINES
847	414	187						847		601	LIN.FT.		STOP LINES, 947.02
847		356						847		356	LIN.FT.		TRANSVERSE LINES, 947.02
847		892						847		892	LIN.FT.		CROSSWALK LINES, 947.02
847		5						847		5	EACH		WORD ON PAVEMENT, 96", "ONLY", 947.02
847	2							847		2	EACH		WORD ON PAVEMENT, "SCHOOL", 96", 947.02
847		7						847		7	EACH		LANE ARROWS, 947.02
847		57						847		57	SQ.FT.		ISLAND MARKING, 947.02
847		390						847		390	LIN.FT.		CHANNELIZING LINES, 947.02
SPECIAL	27	3						SPECIAL		30	HOUR		GRADER RENTAL
SPECIAL	27	3						SPECIAL		30	HOUR		LOADER RENTAL
254		12,491						254		12,491	SQ.YD.		PAVEMENT PLANING, BITUMINOUS
253	352	489						253		841	SQ.YD.		PAVEMENT REPAIR
605	185							605		185	LIN.FT.		AGGREGATE DRAINS
609		100						609		100	LIN.FT.		CURB, TYPE 6
452		75						452		75	SQ.YD.		8" PLAIN CONCRETE PAVEMENT

FHWA REGION	STATE	PROJECT	
5	OHIO		

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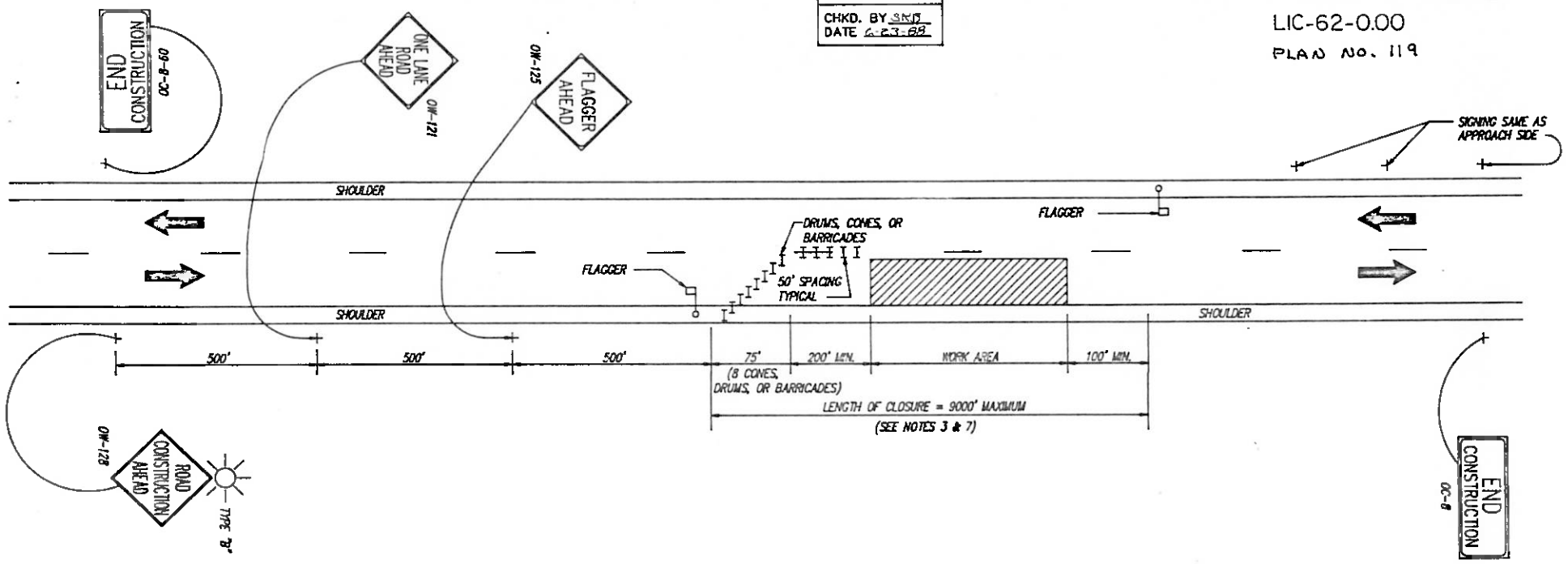
LIC-62-0.00

PLAN NO. 119

CALC. BY BLM
DATE 6-22-88

CHKD. BY SND
DATE 6-23-88



GENERAL NOTES:

1. FLAGGERS SHALL BE USED TO CONTROL TRAFFIC CONTINUOUSLY FOR AS LONG AS ONE LANE OPERATION IS IN EFFECT. FLAGGERS SHALL BE ABLE TO COMMUNICATE WITH EACH OTHER AT ALL TIMES EITHER VERBALLY OR BY MEANS OF RADIO OR FIELD TELEPHONES. FLAGGER STATIONS SHALL BE ADEQUATELY ILLUMINATED FOR NIGHT TIME OPERATIONS BY USE OF A 175 WATT MINIMUM LUMINAIRE.

2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS FOR THE LANE CLOSURES DURING DAYLIGHT HOURS ONLY.

3. WHEN THE AMBIENT TEMPERATURE EXCEEDS 80 DEGREES F. THE ENGINEER MAY INCREASE THE LENGTH OF CLOSURE TO ALLOW FOR SUFFICIENT COOLING OF THE NEW PAVEMENT.

   THE ENGINEER MAY SHORTEN THE MAXIMUM ALLOWABLE LENGTH OF CLOSURE TO RELIEVE EXCESSIVE BACKUPS.

   ALL TRAFFIC CONTROL SIGNS, CHANNELIZING DEVICES, AND FLAGGERS SHALL BE MOVED FORWARD BEFORE THE CLOSURE REACHES THE MAXIMUM ALLOWABLE LENGTH. ONLY ONE SIDE OF THE ROAD SHALL BE CLOSED AT ANY TIME IN A WORK AREA.

4. THE TYPE B HIGH INTENSITY BARRICADE WARNING LIGHT SHOWN ON THE RADIO CONSTRUCTION AHEAD SIGN IS REQUIRED WHENEVER NIGHT LANE CLOSURE IS NECESSARY.

5. TYPE C STEADY BURNING BARRICADE WARNING LIGHTS SHALL BE ERECTED OR DRUMS OR BARRICADES FOR NIGHT LANE CLOSURES.

6. THE ADVANCE WARNING SIGNS "OW-128" OW-121" AND "OW-125" SHALL BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.

7. WITHIN THE LENGTH OF CLOSURE, PROVISION SHALL BE MADE TO CONTROL TRAFFIC ENTERING FROM INTERSECTING STREETS AND MAJOR DRIVES AS NECESSARY TO PREVENT WRONG WAY MOVEMENTS AND TO KEEP VEHICLES OFF OF NEW PAVEMENT NOT READY FOR TRAFFIC.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT FIVE

FLAGGER CLOSING ONE LANE OF A TWO LANE HIGHWAY

PAVING OPERATIONS

REV. | DATE 4 - 87

35
37

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OHIO
FARM REGION 5

35/37

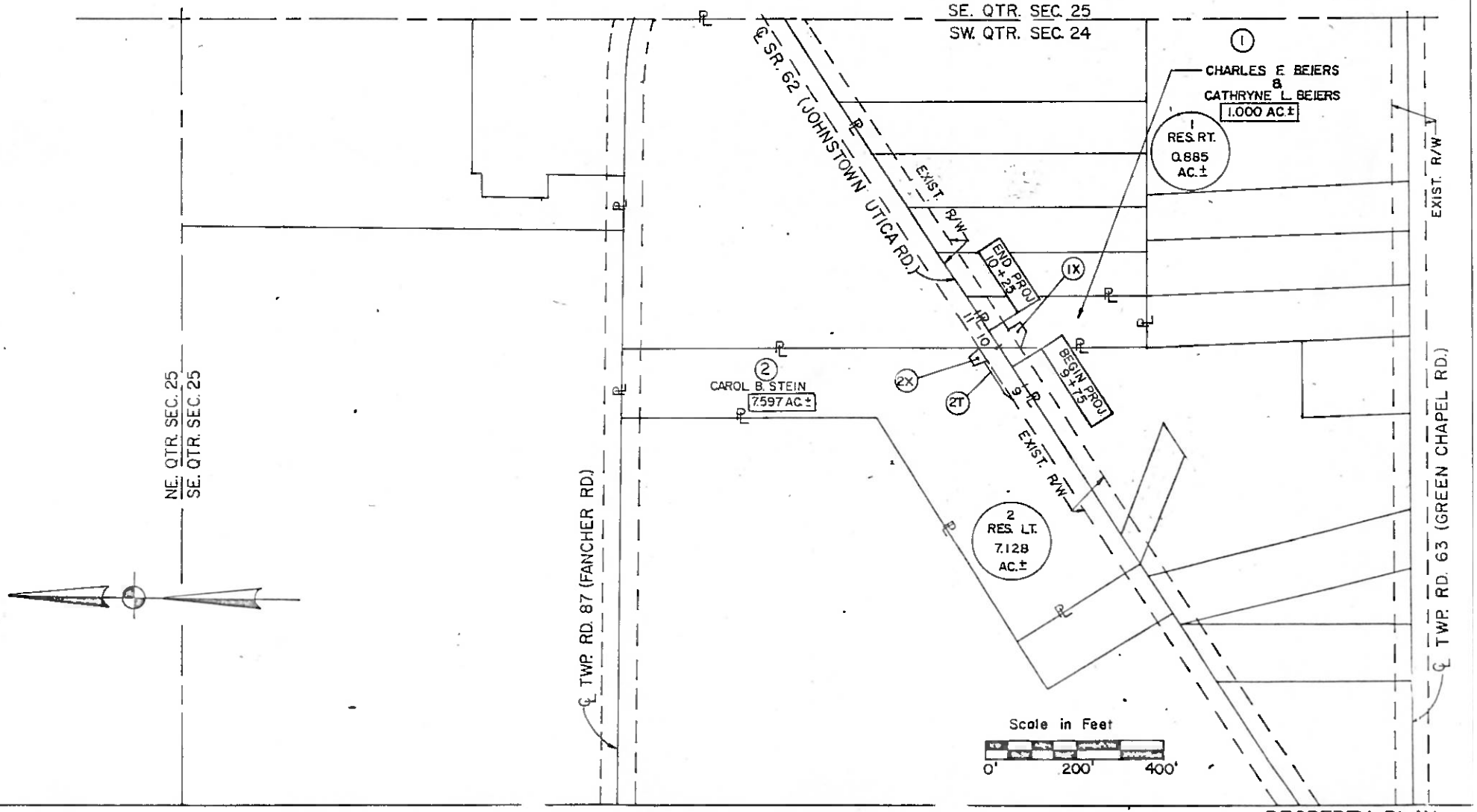
1/3

RIGHT OF WAY PLAN
LIC-62-1.09

PLAN NO. 119

LICKING COUNTY MONROE TOWNSHIP

SECTION 25 TOWNSHIP 3 RANGE 15



PROPERTY PLAN

36
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119

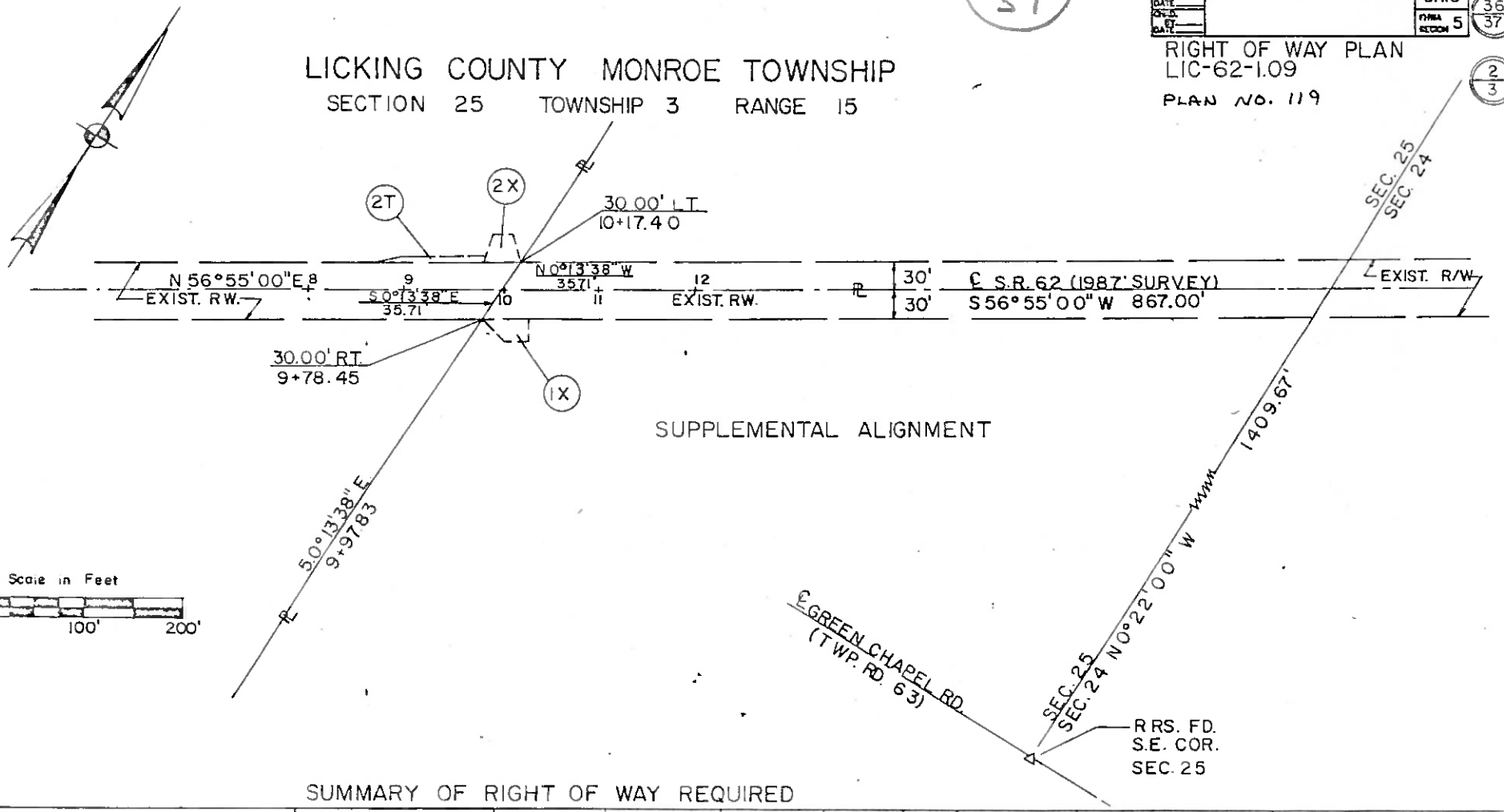
CALC. BY ____ DATE ____ CHK'D. BY ____ DATE ____		OHIO FHWA REGION 5

RIGHT OF WAY PLAN
LIC-62-1.09
PLAN NO. 119

2/3

LICKING COUNTY MONROE TOWNSHIP

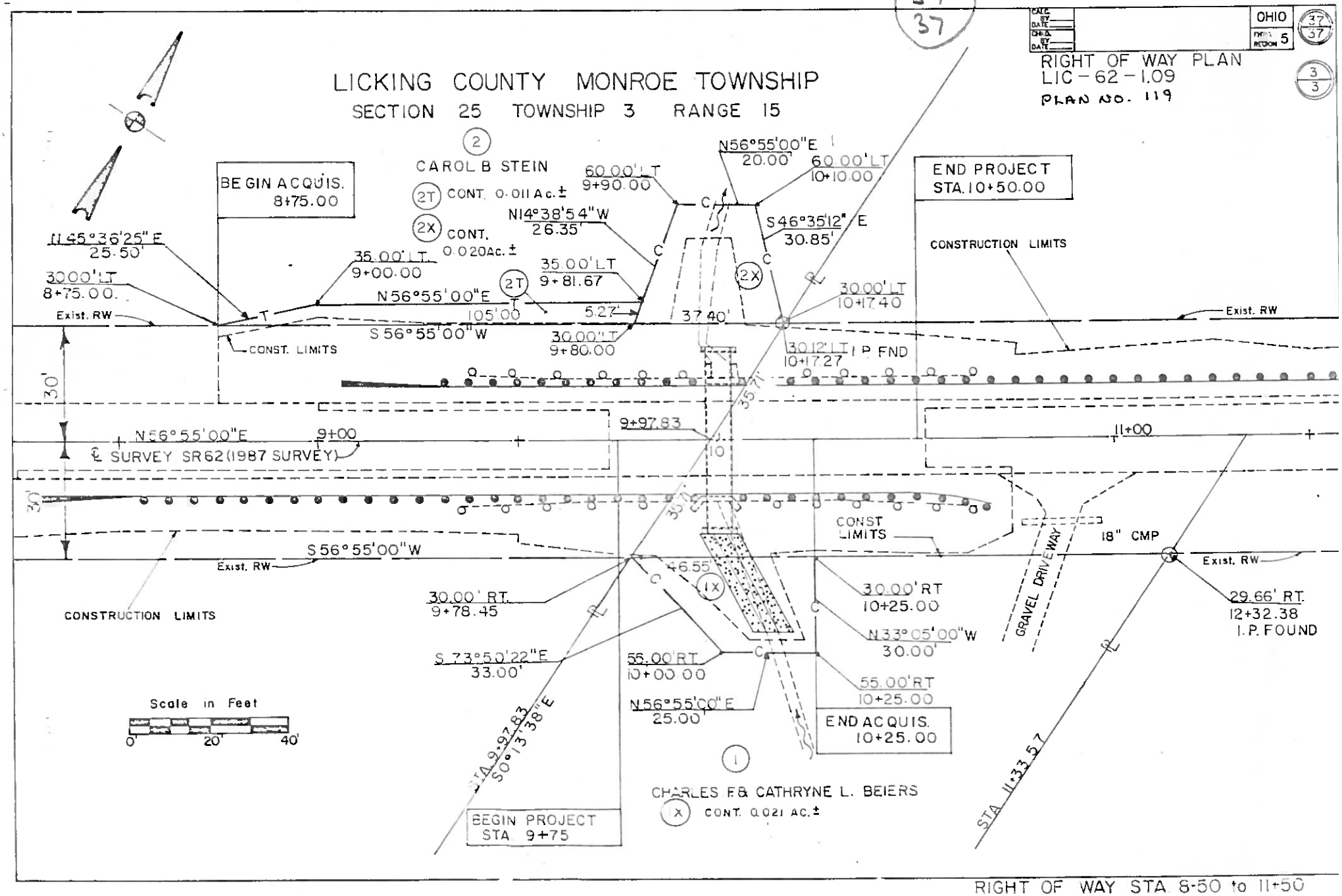
SECTION 25 TOWNSHIP 3 RANGE 15



SUMMARY OF RIGHT OF WAY REQUIRED

PAR. NO.	OWNER	SHEET NO.	DEED VOL.	RECORD PG.	DEED AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	TO BE ACQ. NET	TO BE ACQ. BLDG.	NET RESIDUE LT.	NET RESIDUE RT.	TYPE FUND
1X	CHARLES F. & CATHRYNE L. BEIERS	3	674	678	1.000Ac.±	0.094Ac.±	0.021Ac.±	0	0.021Ac.±	NO	____	0.885Ac.±	STATE
2X	CAROL B STEIN	3	775	91	7.597Ac.±	0.449Ac.±	0.020Ac.±	0	0.020Ac.±	NO	7.128Ac.±	____	STATE
2T		3					0.011Ac.±	0	0.011Ac.±	NO			STATE

SUMMARY OF RIGHT OF WAY SUPPLEMENTAL ALIGNMENT



RIGHT OF WAY STA 8+50 to 11+50