

**OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

CALC. BY _____
DATE _____
CHKD. BY _____
DATE _____

PLAN NO. 260
PER-13-20.38

344

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII		NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
				BEGIN	END				
1	PER	SR 13	(20.38 - 26.12)	20.38	27.44	7.06			

774 - SHOULDER STABILIZATION

344(91)

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.

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. NONE and that detours will be provided by State forces. The closing to traffic of the highways will not be required on Parts No. 1 and provisions for the maintenance and safety of traffic will be indicated in the proposal.

Approved _____
Date 12/5/90 *Donald W. [Signature]*
District Deputy Director of Transportation

Approved _____
Date _____ Engineer of Bridges

Approved _____
Date _____ Engineer of Maintenance

Approved _____
Date 2-8-91 *Thomas J. Foody*
Deputy Director, Operations

Approved _____
Date _____ Assistant Deputy Director, Program Development

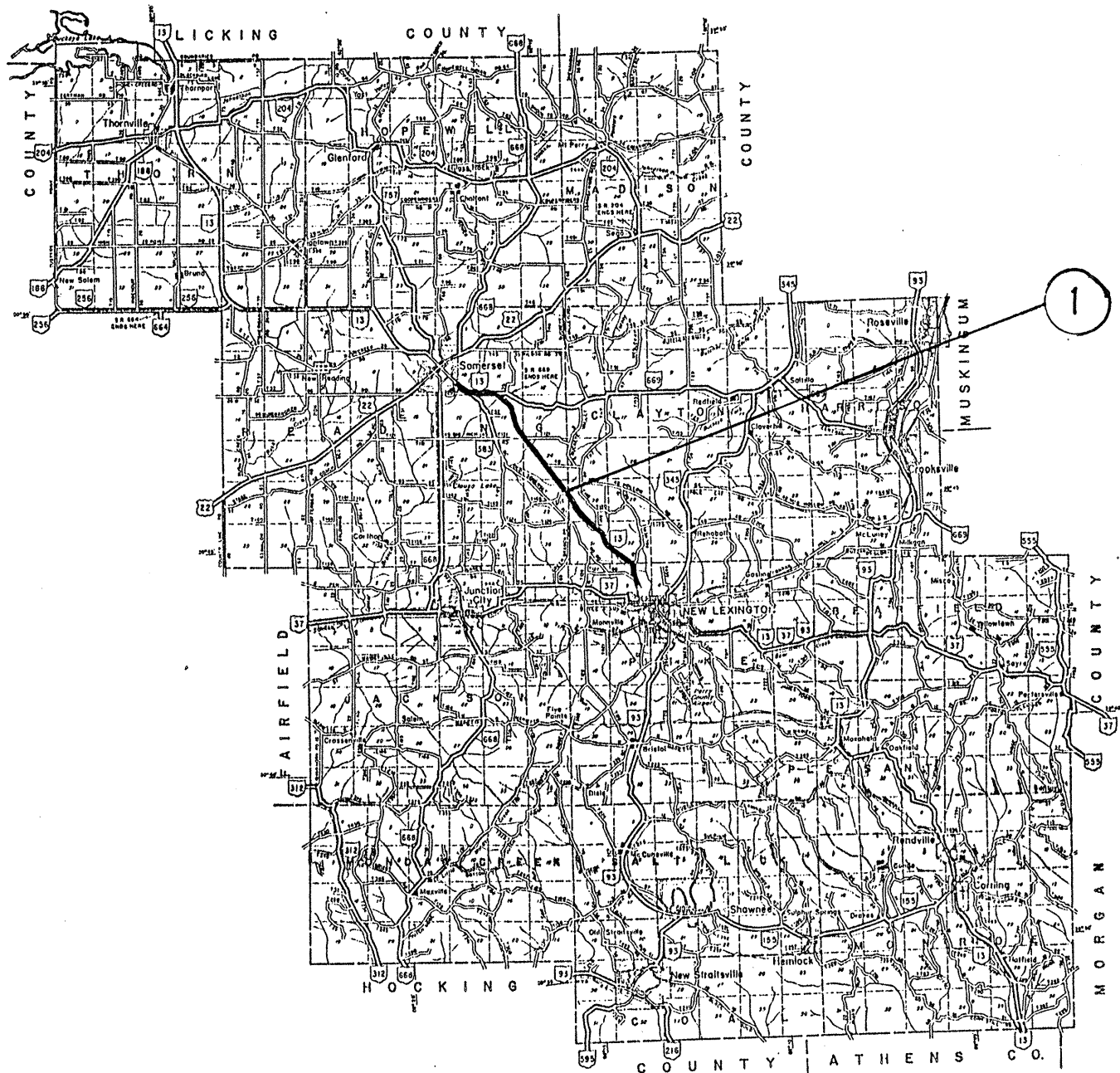
Approved _____
Date _____ Chief Engineer, Construction

Approved _____
Date _____ Chief Engineer, Design

Approved _____
Date _____ Assistant Director, Department of Transportation

Approved _____
Date 2-11-91 *Jerry Waay*
Director, Department of Transportation

LOCATION MAP



PORTION TO BE IMPROVED

344(91)

16-91-7

GENERAL NOTES

MAILBOX TURNOUT

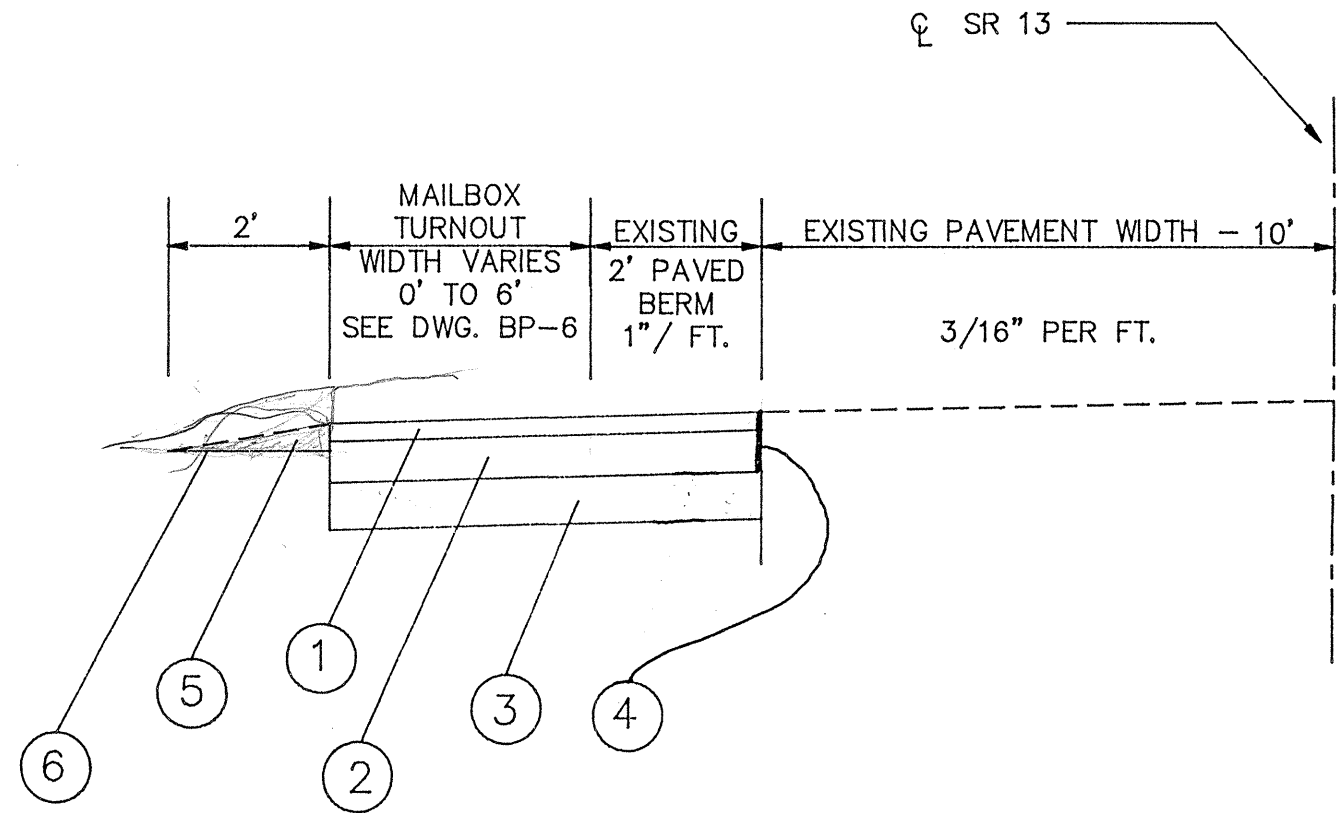
MAILBOX TURNOUTS SHALL BE DONE AT THE SAME TIME AS THE BERM OPERATION; OR AS THE ENGINEER DECIDES AT THE TIME OF CONSTRUCTION. IF THERE IS A DISTANCE OF 100' OR LESS BETWEEN MAILBOXES, APPROACHES SHALL BE PAVED THROUGH TO THE LAST MAILBOX. IF THERE IS A DISTANCE OF 50' OR LESS BETWEEN DRIVEWAY AND MAILBOX, THE APPROACH SHALL BE PAVED THROUGH TO MAILBOX. SEE DRAWING BP-6, 10-1-87 FOR FURTHER DETAILS.

LINEAR GRADING APPROXIMATELY 7 INCHES DEEP WILL BE PERFORMED IN TURNOUT AREAS; THIS WILL BE FOLLOWED BY 3 INCHES OF ITEM 304 AGGREGATE BASE, 3 INCHES OF ITEM 301 BITUMINOUS AGGREGATE BASE AND 1 INCH OF ITEM 404 ASPHALT CONCRETE. WHEN COMPLETED MAILBOX TURNOUTS AND BERMS SHALL BE EVEN WITH EXISTING PAVEMENT.

ITEM 404 ASPHALT CONCRETE, AC-20, AS PER PLAN: MAILBOX TURNOUTS ONLY, ALL WORK, MATERIALS, EXCEPT ITEMS 304, 203 & 301, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE ABOVE DESCRIBED WORK SHALL BE INCIDENTAL TO THE PLACEMENT OF ITEM 404 ASPHALT CONCRETE AC-20, AS PER PLAN

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO SHEET 4.

	(PART 1)
ITEM 203 LINEAR GRADING	4686 LIN. FT.
ITEM 301 BITUMINOUS AGGREGATE BASE	173 CU. YD.
ITEM 304 AGGREGATE BASE	173 CU. YD.
ITEM 404 ASPHALT CONCRETE, AC-20, APP	58 CU. YD.



BERM STABILIZATION WITH MAILBOX TURNOUT
TYPICAL (FOR BOTH SIDES)

- ① 404 - 1" ASPHALT CONCRETE, AC-20, AS PER PLAN
- ② 301 - 3" BITUMINOUS AGGREGATE BASE
- ③ 304 - 3" AGGREGATE BASE
- ④ 407 - TACK COAT AT 0.25 GAL./S.Y. ALONG FACE OF TRENCH
- ⑤ 617 - COMPACTED AGGREGATE, TYPE A (2" AVG. THICKNESS)
- ⑥ 617 - SHOULDER PREPARATION

NOTE:
QUANTITIES FOR PAVED BERM AND AGGREGATE BERM
HAVE BEEN CALCULATED SEPERATELY ON SHEET 4.

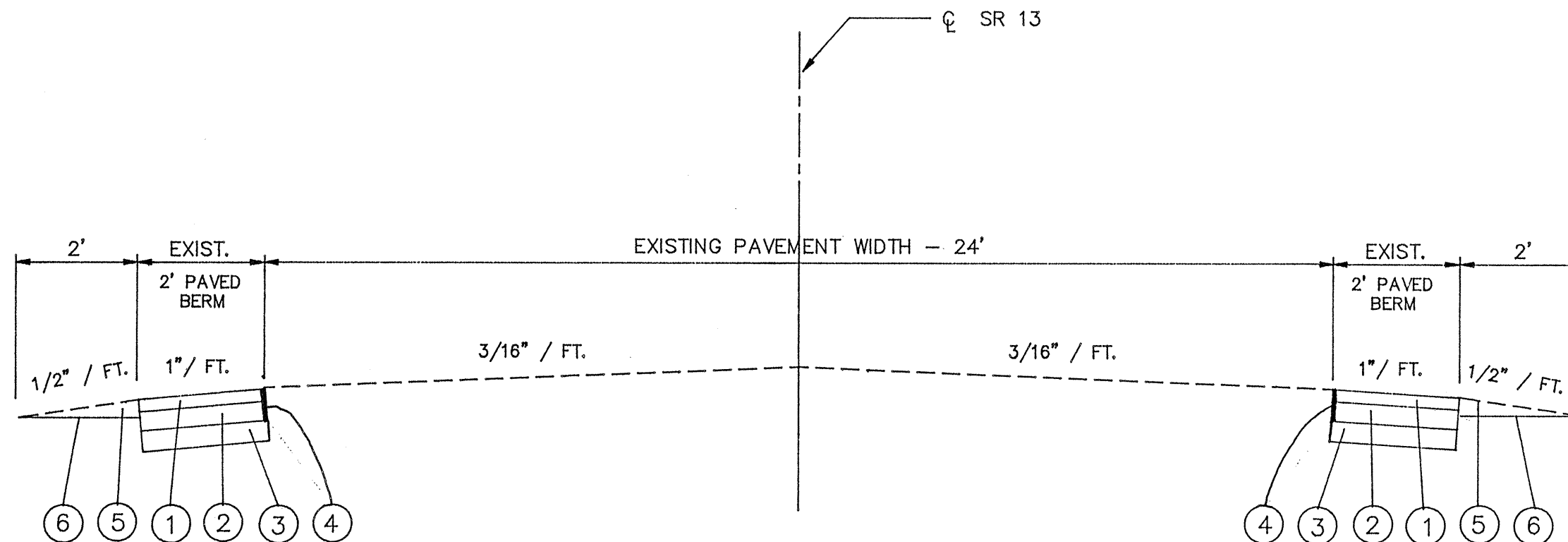
08-10-90 (TR) b:p13note1

CALC. BY SAM
 DATE 12-5-90

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1991 - BERM STABILIZATION



BERM STABILIZATION
 TYPICAL

- ① 404 - 1" ASPHALT CONCRETE, AC-20, AS PER PLAN
- ② 301 - 3" BITUMINOUS AGGREGATE BASE
- ③ 304 - 3" AGGREGATE BASE
- ④ 407 - TACK COAT @ 0.25 GAL./S.Y. ALONG FACE OF TRENCH
- ⑤ 617 - COMPACTED AGGREGATE, TYPE A (2" AVG. THICKNESS)
- ⑥ 617 - SHOULDER PREPARATION

08-09-90 (TR) b:p13typ

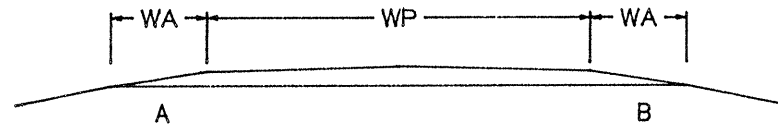
CALC. BY SKM
DATE 12-5-90
CHKD. BY _____
DATE _____

PAVED SHOULDERS 774 - SHOULDER STABILIZATION

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PER-13-20.38

4
5

TYPICAL 1



EDGE LINE DAMAGE:

ANY DAMAGE TO THE EDGE LINE SHALL BE REPAIRED TO MEET THE APPROVAL OF THE ENGINEER AND BE AT THE CONTRACTOR'S EXPENSE.

ITEM 803 FULL DEPTH PAVEMENT SAWING

PAVEMENT SAWING SHALL PROVIDE A CLEAN EDGE FOR BERM STABILIZATION TO BE PERFORMED. ANY EXISTING PAVEMENT THAT IS UNSOUND DUE TO THIS OPERATION SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

* NOTES

- 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 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 disposed of as indicated in the plan.
 - a. Used to back up shoulders where required; the balance to be disposed 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.
- 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.
- ITEM 301 BITUMINOUS AGGREGATE BASE**
May be used in lieu of Item 402 Asphalt Concrete.
- ITEM 617 COMPACTED AGGRGATE:**
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.
- ITEM 408 BITUMINOUS PRIME COAT:**
After application of the Prime Coat, no further treatment shall be performed until so directed by the Engineer.
- 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 Specifications.

PAVED SHOULDER DATA

PART	ROUTE	LOG POINT TO LOG POINT	LENGTH		TYPICAL	PROPOSED WIDTH (FT.)				SHOULDER AREA SQ.YDS.	203		304		301		408	803	617	617	407	404		* NOTES
			MILES	LIN.FT.		DEPTH INCHES	LINEAR GRADING	AGGREGATE BASE			BITUMINOUS AGGREGATE BASE		PRIME	FULL DEPTH PAVEMENT SAWING	COMPACTED AGGREGATE	SHOULDER PREPARATION	TACK COAT @ 0.25 gal./sq.yd.	ASPHALT CONCRETE APP.						
								A	B		C	D						AVG. THICK INCHES	CU.YDS.	AVG. THICK INCHES	CU.YDS.	Bit. Matl.	LIN. FT.	
1	SR 13	20.38-27.44	7.06	37,277	1	2	2			16,568	7	14.12	3	1380	3	1380		74,554	920	16,568	690	1	460	1
		MAILBOX TURNOUTS FROM SHEET 2									7	0.89	3	173	3	173						1	58	1
1	TOTALS PART 1		7.06	37,277						16,568		15.01		1553		1553		74,554	920	16,568	690		518	

12-04-90 () B: P13PAVS

GENERAL SUMMARY

CALC. BY SAM
DATE 12-5-10

PER-13-20.38

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DATE _____

PLAN NO.
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ITEM	PART 1								ITEM	ITEM EXT. NO.	GRAND TOTAL PART 1	UNIT	DESCRIPTION
203	15.01								203	60500	15.01	MILE	LINEAR GRADING
301	1553								301	10002	1553	CU.YD.	BITUMINOUS AGGREGATE BASE, AC-20
304	1553								304	20000	1553	CU.YD.	AGGREGATE BASE
404	518								404	20000	518	CU.YD.	ASPHALT CONCRETE, AC-20, AS PER PLAN
407	690								407	10000	690	GALLON	TACK COAT
614	LUMP								614	11000	LUMP	LUMP	MAINTAINING TRAFFIC
617	920								617	10100	920	CU.YD.	COMPACTED AGGREGATE, TYPE A
617	16568								617	20000	16568	SQ. YD.	SHOULDER PREPARATION
619	LUMP								619	10000	LUMP	LUMP	FIELD OFFICE
624	LUMP								624	10000	LUMP	LUMP	MOBILIZATION
803	74554								803	10000	74554	LIN. FT.	FULL DEPTH PAVEMENT SAWING

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.

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.

OVERNIGHT TRENCH CLOSINGS:

THE BASE WIDENING OF THIS PROJECT SHALL BE COMPLETED TO A DEPTH OF 0 INCHES BELOW THE EXISTING PAVEMENT BY THE END OF EACH WORK DAY. A SHORT SECTION (25 FEET OR LESS) MAY BE LEFT OPEN WITH THE APPROVAL OF THE ENGINEER. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT. IN CASE WORK MUST BE SUSPENDED DUE TO INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED BASE WIDENING SHALL BE BACKFILLED AT THE DISCRETION OF THE ENGINEER, THOSE AREAS OF TRENCH ALLOWED TO REMAIN OPEN SHALL BE PROTECTED WITH DRUMS AND HAVE YELLOW BEACON LIGHTS SECURELY ATTACHED.

START DATE:

~~ALL WORK SHALL BE COMPLETED ON THIS JOB BEFORE PROJECT (91) PART 2 FROM SLM 20.38-26.12 CAN BE STARTED.~~

TRENCH FOR WIDENING:

TRENCH EXCAVATION FOR BASE WIDENING SHALL BE ONLY ON ONE SIDE OF THE PAVEMENT AT A TIME. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS AT ALL TIMES. PLACEMENT OF THE PROPOSED SUB-BASE AND BASE MATERIAL SHALL FOLLOW AS CLOSELY AS POSSIBLE BEHIND THE EXCAVATION OPERATION. THE LENGTH OF THE WIDENING TRENCH WHICH IS OPEN TO TRAFFIC SHALL BE HELD TO A MINIMUM AND BE SUBJECT TO THE APPROVAL OF 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. Payment for the above shall be included in Item 614, Maintaining Traffic.