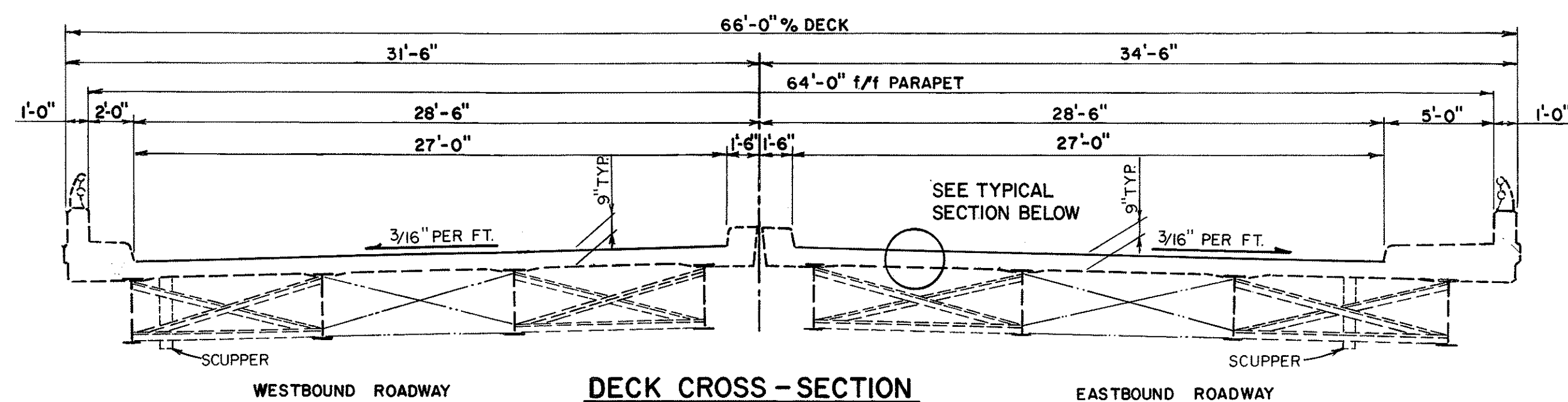


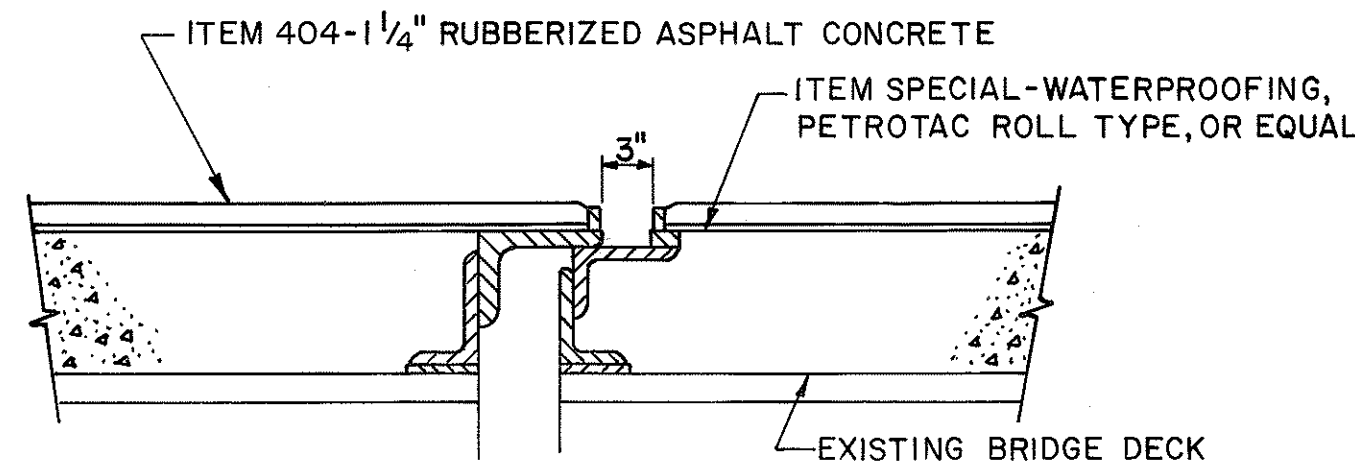
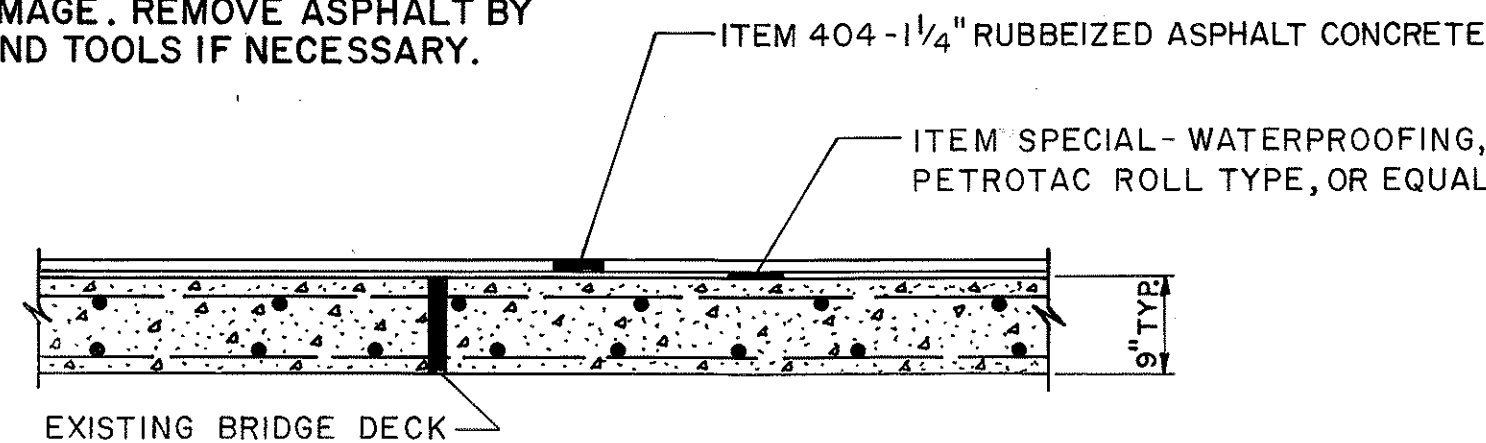
NOTE: TRIM WATERPROOFING AROUND ALL SCUPPERS
AND TAPER ASPHALT TO DRAIN



GENERAL SUMMARY

ITEM	QUANTITY	UNIT	DESCRIPTION
202	4684	SQ. YD.	PAVEMENT REMOVED
404	170	CU. YD.	RUBBERIZED ASPHALT CONCRETE
614	LUMP	LUMP	MAINTENANCE OF TRAFFIC
SPEC.	4384	SQ. YD.	WATERPROOFING (PETROTAC BDG, OR EQUAL)
624	LUMP	LUMP	MOBILIZATION

CARE SHALL BE TAKEN
AROUND END DAMS TO AVOID
DAMAGE. REMOVE ASPHALT BY
HAND TOOLS IF NECESSARY.



1989 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, dated January 1, 1989, including changes and supplemental specifications, shall govern this improvement. The Engineer shall be the Stark County Bridge Engineer or his representative.

EXISTING STRUCTURE VERIFICATION

Details and dimensions shown on these plans pertaining to the existing structure have been obtained from plans of the existing structure and/or from field observations and measurements. Consequently, they are indicative of the existing structure and the proposed work but they shall be considered tentative and approximate.

Contract bid prices shall be based upon a recognition of the uncertainties described above and upon a prebid examination of the existing structure by the Contractor. However, all project work shall be based upon actual details and dimensions which have been verified by the Contractor in the field.

614 MAINTAINING TRAFFIC

The Contractor shall maintain and protect traffic in accordance with specification 614 and the Traffic Control Plan shown on plan sheet 2.

The installation, maintenance, and operation of all traffic controls and traffic control devices shall conform to the requirements of the "Ohio Manual of Uniform Traffic Control Devices for Streets and Highways" hereinafter called the Ohio Manual. If Revision 14 of the Ohio Manual has been adopted and issued with an effective date prior to the start of construction on this project, the Contractor may use Type C steady burn yellow barricade warning lights in place of the specified red barricade warning lights.

The County Engineer will provide to the Contractor the following signs: R-1-36 (Stop), R-33-24 (Do Not Pass), R-37R-24 (Keep Right) and the road name plaques (Oberlin), for installation on contractor-provided supports. The Contractor shall install, maintain, remove, and return these signs to the County Engineer. The Contractor shall provide, install, maintain, and remove all other required traffic control devices. The Contractor shall provide at least one week of notice to the County Engineer prior to the Contractor requesting the use of the County devices. The county-provided signs will be made available to the Contractor at the County Engineer's facility located at 5165 Southway Street.

All required signs shall be erected with a minimum height of five feet as measured between the bottom of sign to the relative pavement elevation. Portable sign supports used for signs located in paved areas shall not utilize metal drums. Portable sign support bases may be weighted with sand bags to prevent tipping.

Additional plastic drums with lights and or barricades as may be necessary in the opinion of the Engineer will be provided by the Contractor.

The Contractor should note 614, Paragraph #2, devices using retroreflective sheeting other than Type G are not acceptable.

The Contractor shall furnish and install temporary retroreflective pavement markings on reconstructed, resurfaced, temporary, or planned roadway surfaces exposed to traffic within the work limits in accordance with the following requirements.

Temporary white lane line markings shall be complete on all pavement courses exposed to traffic at the end of each day's operation. White lane line shall consist of 48" x 4" segments spaced at a maximum of 40' center to center. Temporary lane line markings other than the length and color specified are not acceptable. The temporary markings are to be accurately located in a true line for the lane line as directed by the Engineer.

Temporary pavement markings may be either 621.02 Paint or 947.03 Type B preformed material.

Painted markings shall be in accordance with 621 except that, (1) paragraph 621.14 shall not apply, (2) where the markings are not liable to be tracked, either conventional or fast dry paint may be used for 621.02, and (3) when applied to new asphalt pavement surfaces or planned asphalt surfaces, the specified application rate shall be six gallons per mile of dashed line.

Preformed material shall comply with 947.03 except no preformed material containing metal shall be placed on any surface.

Payment for all temporary pavement marking, construction warning signs, barricades, plastic drums, lights and other required traffic control devices shall be included in the lump sum under Item 614 Maintaining Traffic.

ITEM 202 - PAVEMENT REMOVED

This work shall include grinding off all existing asphalt and existing rubber membrane from the concrete bridge deck and approach slabs to the existing concrete surface. The existing asphalt shall also be tapered from the end of the approach slabs to existing grade within a distance of ten feet. This work shall be paid for at the unit price bid for Item 202, Pavement Removed.

ITEM SPECIAL - WATERPROOFING

This item includes supplying all materials, labor, and equipment necessary to complete the application of the waterproofing bridge deck membrane.

The deck surface shall be clean and dry, free of dust, dirt, and vegetation. Immediately prior to placement of membrane, the deck shall be air blown clean. Membrane shall be installed in accordance with manufacturer's specifications. Acceptable waterproofing membranes include PETROTAC (BDG) and ROYSTON (10AR). No membrane shall be applied to approach slabs.

ITEM 404 - MODIFIED

DESCRIPTION: This work shall consist of constructing a surface course of aggregate, rubber, and asphalt cement mixed in a central plant and spread and compacted on a prepared surface, and in accordance with these specifications and in reasonably close conformity with the lines, grades, and typical sections shown on the plans or established by the Engineer.

The general plant mix pavement specifications, 401, shall apply with deviations as follows:

COMPOSITION:

Coarse aggregate (No. 8) and fine aggregate shall be combined in such proportions that the resulting blend shall be as directed by the Laboratory but within the following limits: No reclaimed material will be permitted.

Sieve Number	Total Passing Percent by Weight
1/2 Inch	100
3/8 Inch	90-100
No. 4	45-75
No. 16	15-45
No. 50	3-22
No. 200	0-8

The combined asphalt cement and rubber solids content shall be as directed by the Laboratory but within the following limits:

Asphalt cement and rubber solids (percent of total mix), 5.8 to 12.0

The quantity of asphalt cement and rubber compound shall be as required to produce a composition of 97 plus or minus 0.2 percent asphalt cement to 3 plus or minus 0.2 percent residual rubber solids.

The finished mix shall contain no materials other than the approved aggregate, asphalt cement, and residual rubber solids.

MATERIALS: Materials shall be:

Aggregate	703.05
Asphalt Cement	702.01 (85-100, AC10)
Rubber Compound	903 (with additional requirements as noted below)

The maximum solids content of the latex shall be 64%. Bidder is to furnish manufacturer's literature and specifications on the latex product offered. A list of not less than three governmental agencies (ie. city, county, or state highway departments) which have had a minimum of eight year's experience with bidder's latex modifier for similar mix design under similar climatic conditions must accompany the bid for evaluation by the Engineer.

The rubber solids content of the rubber compound and additional requirements shall be certified in triplicate to the laboratory two weeks prior to the start of production.

MIXING PLANTS: Means shall be provided for proportioning the rubber compound into the mixer.

WEATHER LIMITATIONS: Rubberized asphalt concrete shall not be placed between November 1st and May 15th except by special permission of the Engineer.

MIXING: The coarse and fine aggregate shall be mixed dry for not less than five seconds. Asphalt cement shall then be added in an evenly spread sheet over the full length of the mixer box and the mixing continued for a period of not less than ten seconds and at least until aggregate is completely coated with bitumen. Rubber compound shall then be added to the coated aggregate and the mixing continued for a period of not less than 30 seconds. The length of dry mixing and wet mixing periods may vary, but under no circumstances shall the total mixing time or interval of time between the opening of the weight box gate and the opening of the mixer gate be less than 45 seconds. The rubber compound shall be so dispersed in the asphalt of the paving mixture that there will be no remaining black rubber particles visible to the naked eye when the mixture is tested in accordance with Method 1012 on file in the Office of the Engineer. The temperature of the mixture when discharged from the mixer shall be 300° F to 330° F as required for good workability.

Traffic shall not be permitted on the compacted mixture until it has cooled sufficiently to prevent damage as determined by the Engineer.

SPREADING AND SURFACE TOLERANCES: The completed surface course will be checked with straight-edges and/or rolling straight-edges by the Engineer. The variation of the surface course from the testing edge of the ten-foot straight-edge shall not exceed 1/4 inch. Variations in excess of slope or surface tolerances shall be corrected by removal of mixture to neat lines and replacement or by surface grinding in a matter satisfactory to the Engineer.

MANUFACTURER'S REPRESENTATIVE: The rubber manufacturer's technical representative shall be notified in order that he can provide the Engineer with recommended procedures and he shall also be present during installation.

BASIS OF PAYMENT: Payment for accepted quantities complete in place, will be made at the contract price for:

ITEM	UNIT	DESCRIPTION
404 Modified	Cubic Yards	Rubberized Asphalt Concrete

STARK COUNTY, OHIO DECK WATERPROOFING AND ASPHALTING BRIDGE NO. PE-17-33

OBERLIN ROAD (CITY OF MASSILLON)
S.W. QTR. SEC. 17, T-10 (PERRY), R-9

DESIGNED	DRAWN	CHECKED	F.B.	P.	REVISED	DATE
MJR	MJR	R.A.L.				10-88
						1-89

