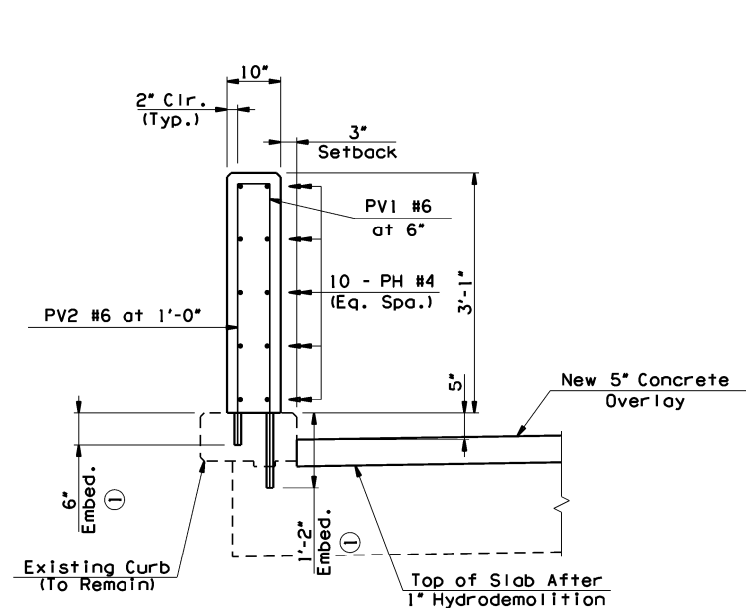
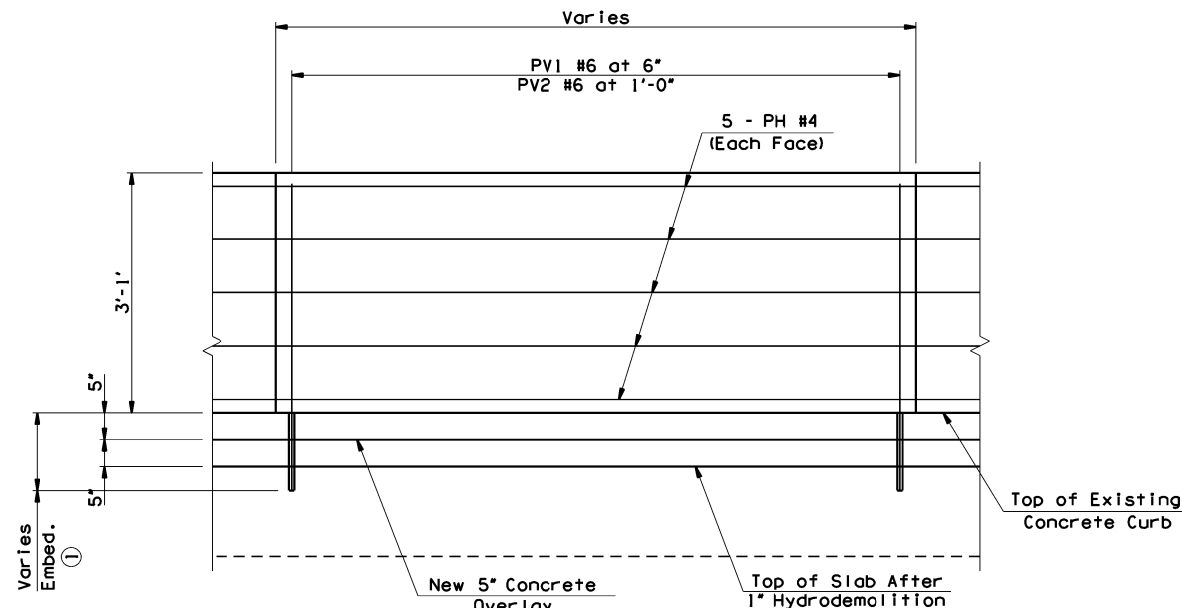


FED. ROAD DIST. NO.	STATE	JOB/PIECE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	28878(04)			

DESCRIPTION	REVISIONS	DATE



**BRIDGE RETRO-FIT PARAPET DETAIL**



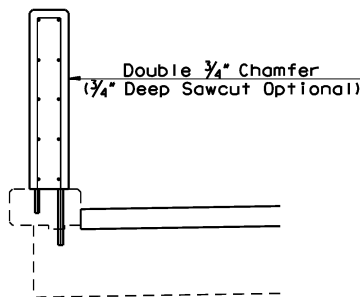
**ELEVATION - TYPICAL RETRO-FIT PARAPET SECTION**

**① ANCHORAGE SYSTEM:**

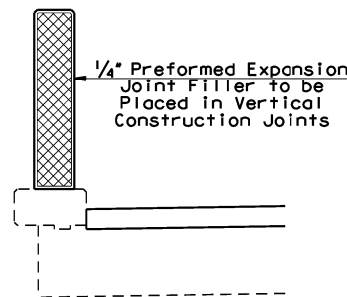
The Contractor shall use an Anchorage System that has been approved by ODOT's materials division. The Anchorage System shall be capable of developing the full strength of the reinforcing steel that is to be anchored. The embedment depth shown is to be adjusted to meet the Manufacturer's requirements. Anchorages shall be installed in accordance with the Manufacturer's specifications for the system used.

Drilling into the existing concrete to install the anchorage shall be accomplished without cutting existing concrete reinforcing steel bars. Prior to drilling, the Contractor shall locate and mark the existing concrete reinforcing steel bars with non-destructive tools, equipment and methods approved by the Engineer. If existing reinforcing steel bars are encountered during drilling, the drilling shall cease and the hole shall be grouted. The hole shall then be relocated to clear the existing reinforcing steel bars. Any adjustment in the locations of the PV1 & PV2 bars from the plan locations shown shall be the minimum amount necessary to avoid cutting the existing concrete reinforcing steel bars and shall be approved by the Engineer.

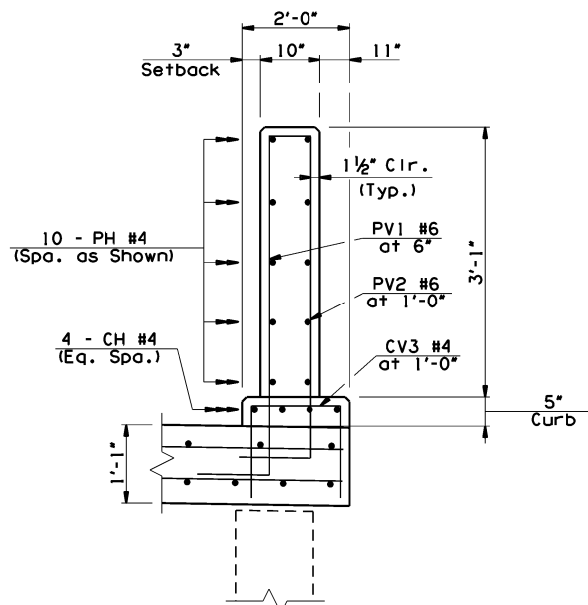
All costs of the Anchorage Assemblies including labor, materials, tools, drilling, and incidentals necessary to complete the work shown in the plans shall be included in the price bid per Cubic Yard of "CLASS AA CONCRETE".



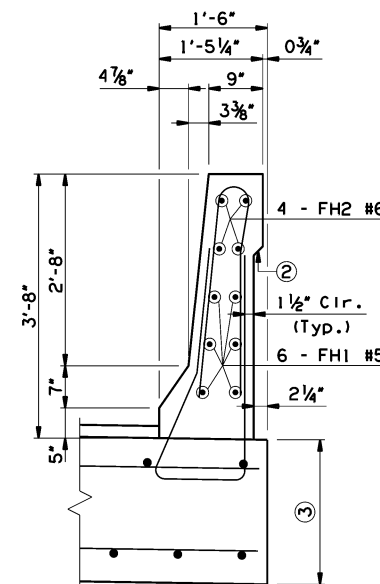
**CRACK CONTROL JOINT**  
(PH Bars to be continuous through Crack Control Joint)



**CONSTRUCTION JOINT**  
(Typical at Piers)



**SECTION A-A**  
Applies only to the NE barrier at Approach Slab No. 1)



**SECTION B-B**  
Applies only to the NE barrier at Approach Slab No. 1)

**RETRO-FIT CONCRETE PARAPET NOTES:**

Construct the Retro-Fit Concrete Parapet to meet the requirements of the Standard Specification For Highway Construction (English) as well as the following requirements.

**CLASS AA CONCRETE:**  
Use Class AA Concrete in the Retro-Fit Concrete Parapet. All costs of concrete to be included in the price bid per Linear Foot of "CONCRETE PARAPET".

**REINFORCING STEEL:**  
All reinforcing steel used in the Retro-Fit Concrete Parapet is to be epoxy coated. All reinforcing steel is to have 1/2 inch clearance, unless otherwise noted. The bar lengths for the PV1 and PV2 bars shall be determined in accordance with the embedment depth required by the Anchorage System used (see "ANCHORAGE SYSTEM" note this sheet). Place and tie all PV1 and PV2 bars before concrete is placed in the deck slab. Reinforcing steel (except PV1 and PV2 Bars) is not to be measured for payment. All costs of PH bars are to be included in the price bid per Linear Foot of "CONCRETE PARAPET".

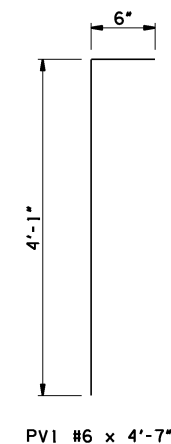
**CONSTRUCTION JOINTS:**  
Place a construction joint at each pier and at other locations shown in the plans. Place 1/4 inch thick preformed expansion material in the construction joint in accordance with the details shown. Do not place PH Bars through a construction joint.

**EXPANSION JOINTS:**  
At expansion joints between the deck slab and approach slab, match the width of the opening between the ends of the railing with the opening of the expansion joints.

**CRACK CONTROL JOINTS:**  
Crack Control Joints in the Retro-Fit Concrete Parapet shall be placed at each construction joint and between joints as needed to maintain a maximum joint spacing of 10'-0", unless otherwise shown in the plans.

All costs associated with the Retro-Fit Concrete Parapet, including concrete, reinforcing steel (excluding PV1 & PV2 Bars), joints (construction, expansion, and crack control), materials, labor, equipment and incidentals shall be included in the price bid per Linear Foot of "CONCRETE PARAPET".

- ② 1/2" chamfer.
- ③ 2'-0" Reinforced Paved Shoulder. See detail on Sheet No. 2. Cost of Class AA Concrete, Epoxy Coated Reinforcing Steel & Excavation shall be included in the price bid per L.F. of "42 F-SHAPED PARAPET" in Roadway Quantities.



**NOTES:**  
Field bend and cut reinforcing in the transition area (NE corner of Approach Slab No. 1 only) to maintain the required clearances.

US-64/SH-51 WB OVER SHERIDAN RD.		TULSA COUNTY		DESIGN	JGS	6/15
BRIDGE "A"				DETAIL	SJL	9/16
				CHECK	BRT	12/16
				<b>GARVER</b>		
STATE OF OKLAHOMA		DEPARTMENT OF TRANSPORTATION				
		JOB PIECE NO. 28878(04)			SHEET NO. 20	