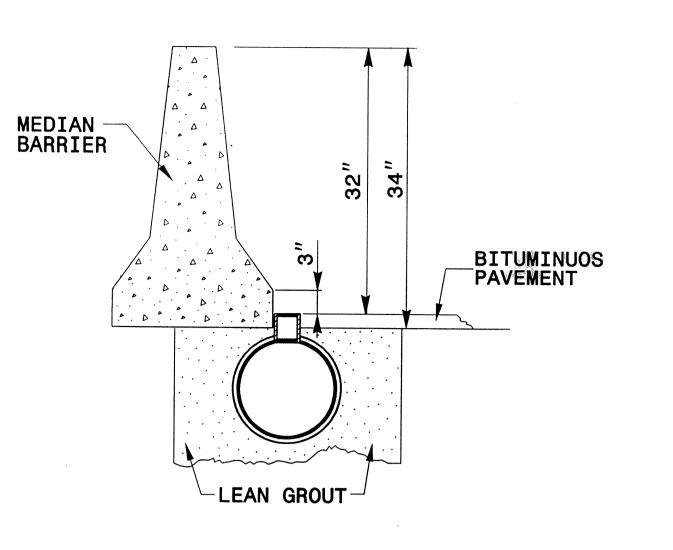
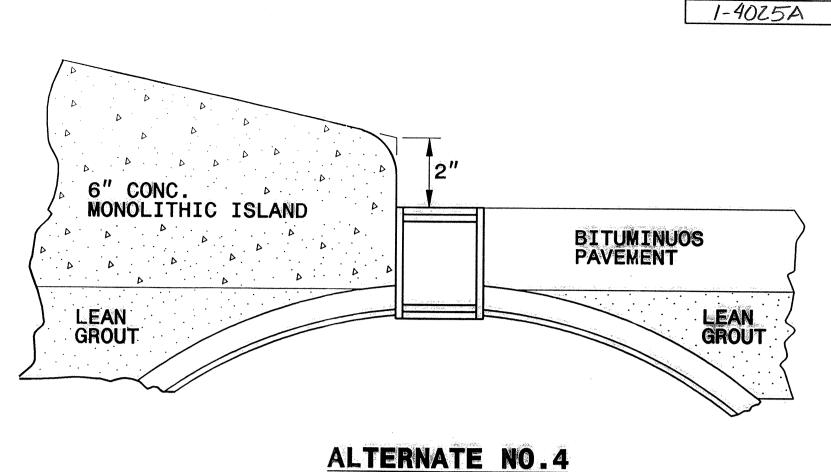
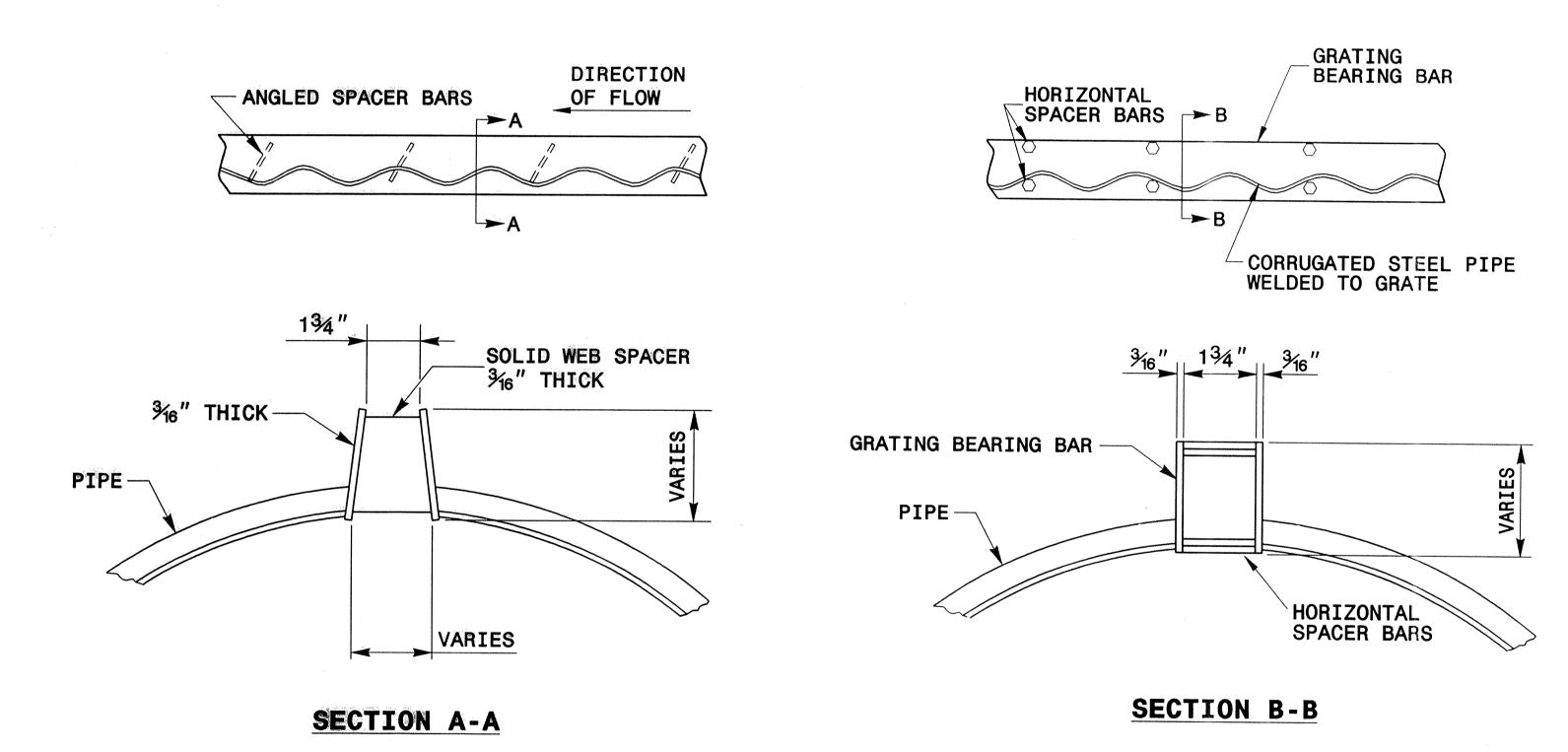


ALTERNATE NO.2





ALTERNATE NO.3



NOTES:

USE GRATE ASSEMBLIES FABRICATED FROM STRUCTURAL STEEL MEETING THE REQUIREMENTS OF ASTM A 570, GRADE 36 OR ASTM A 36.

HOT-DIP GALVANIZE GRATES AFTER FABRICATION TO MEET ASTM A123.

USE SLOTTED DRAIN PIPE THAT IS ADEQUATE FOR AASHTO H20 LOADING WHEN INSTALLED AS SHOWN.

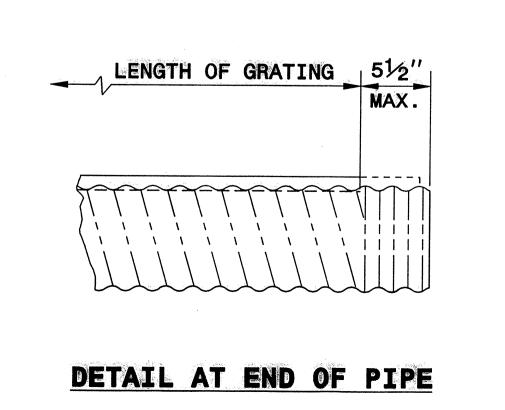
USE SLOTTED DRAIN PIPE FABRICATED FROM ALUMINIZED

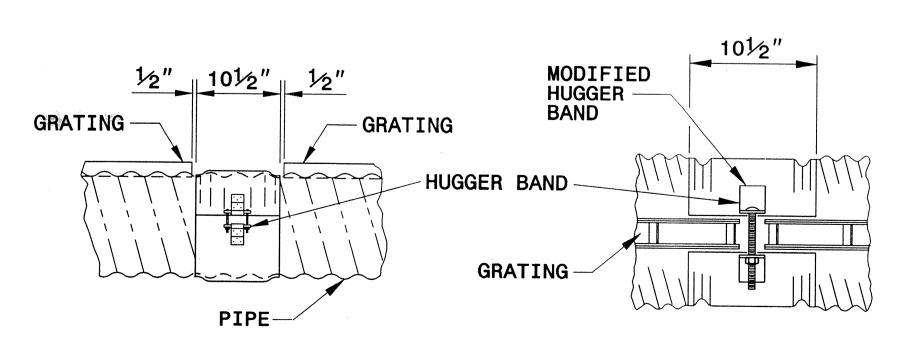
CORRUGATED STEEL PIPE MEETING THE REQUIREMENTS OF AASHTO

M274 TYPE 2.

NCDOT ALLOWS THE USE OF SIMILAR GRATE CONFIGURATIONS
MEETING THE REQUIREMENTS OF THIS DETAIL, THE REQUIREMENTS
OF THE SPECIAL PROVISIONS, AND THE APPROVAL OF THE ENGINEER.

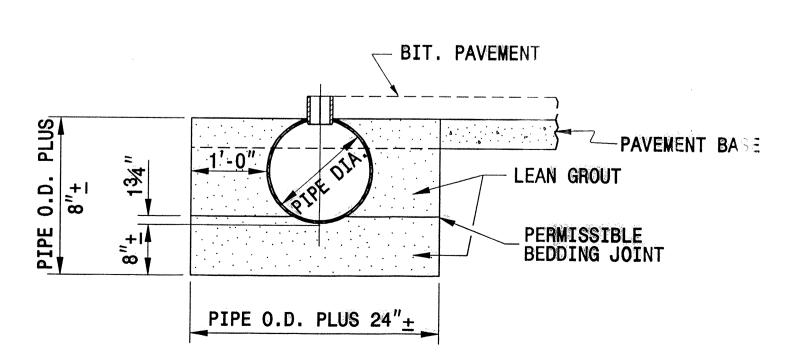
TYPICAL GRATE DETAILS



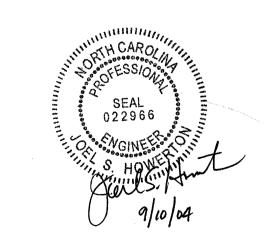




MODIFIED COUPLING BAND



SLOTTED DRAIN PIPE INSTALLATION



PROJ. REFERENCE NO.

SHEET NO.

DESIGN SERVICES UNIT STANDARDS AND SPECIAL DESIGN Office 919-250-4128 FAX 919-250-4119 DETAILS OF SLOTTED DRAIN 12" THRU 36" DIAMETER PIPE

ORIGINAL	589 so 11 cm	11 DATE:	5-22-99
	BY:	DATE:	8/30/04
		details\stand\s	