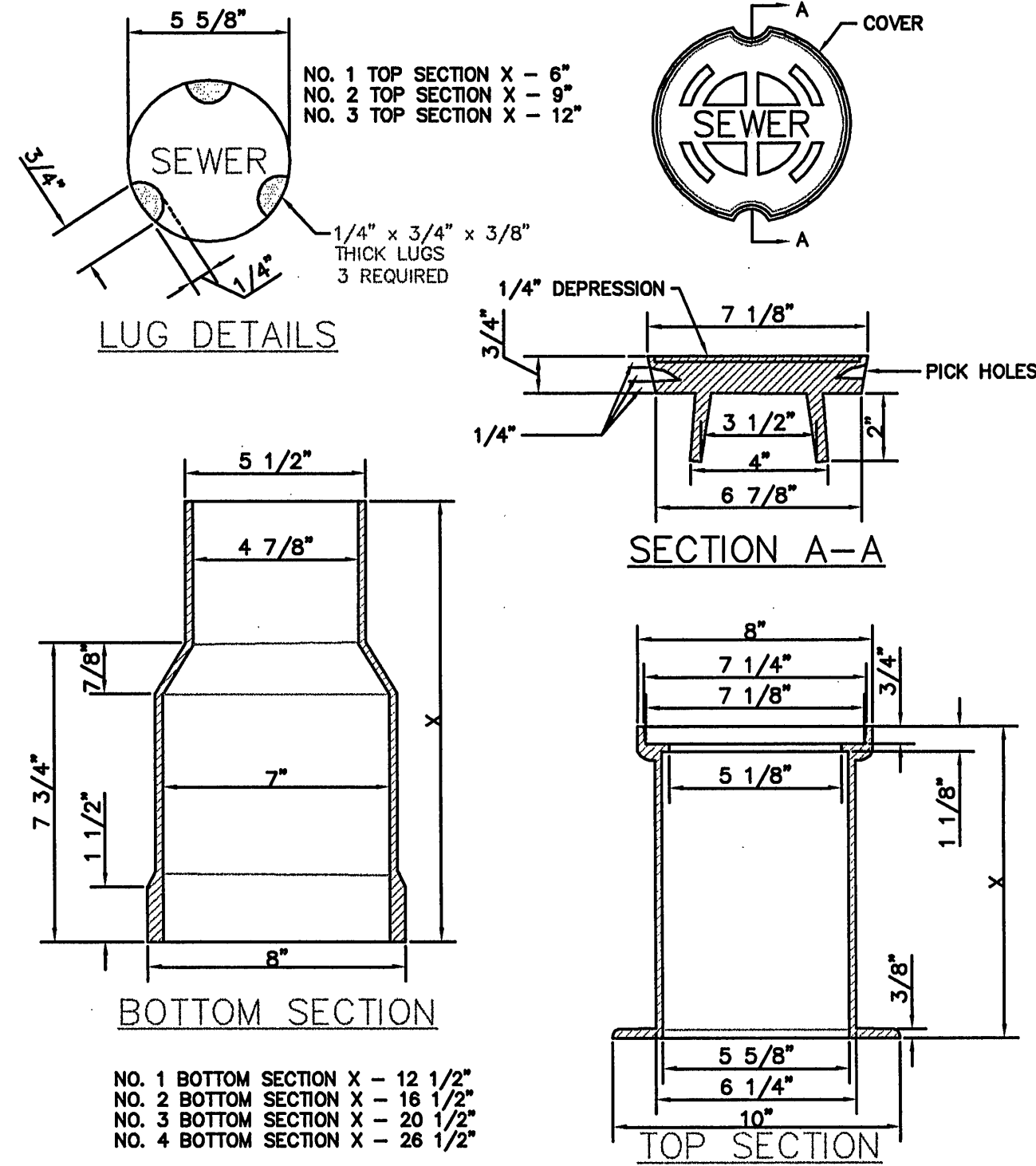


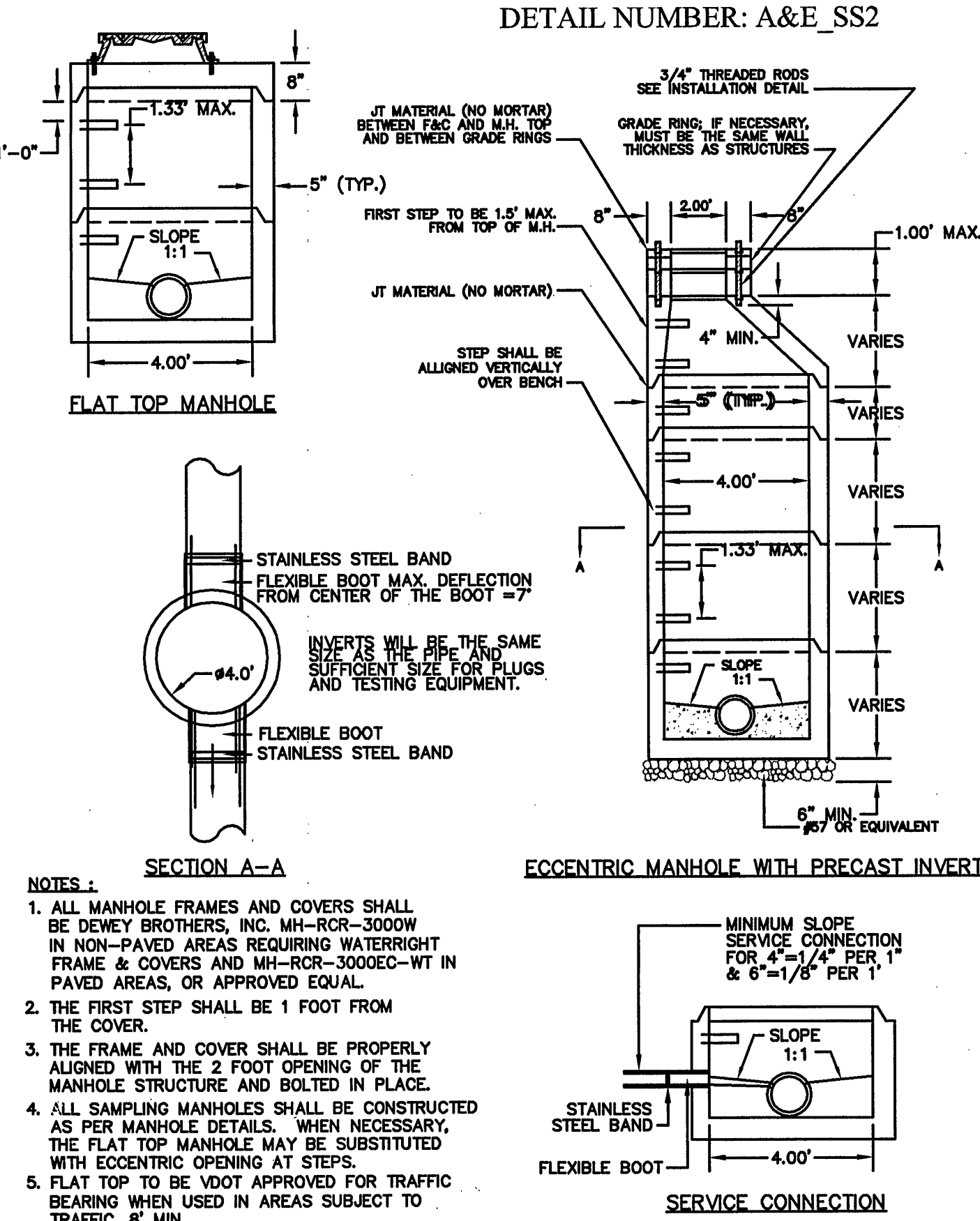
NOTE: DETAIL BASED ON VDOT UB-1 STANDARD "UTILITY BEDDING AND PROTECTION, WATER AND SANITARY SEWER FACILITIES"

**SANITARY SEWER FORCE MAIN
UTILITY BEDDING AND PROTECTION**
NTS

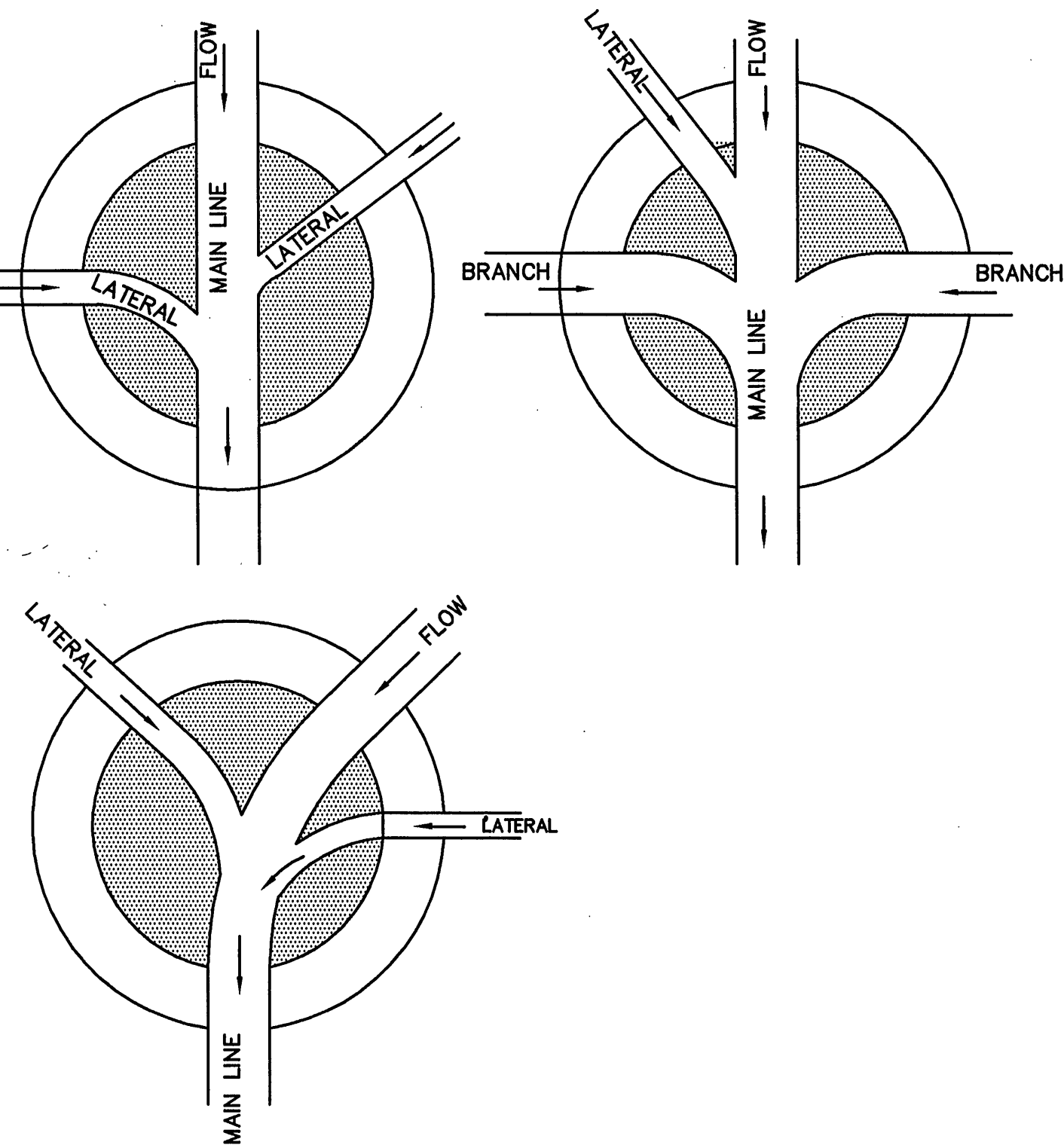


NOTE: A MINIMUM CLEARANCE OF 4 INCHES IS REQUIRED BETWEEN CLEANOUT CAP AND TOP OF COVER.

CLEANOUT BOX
NTS

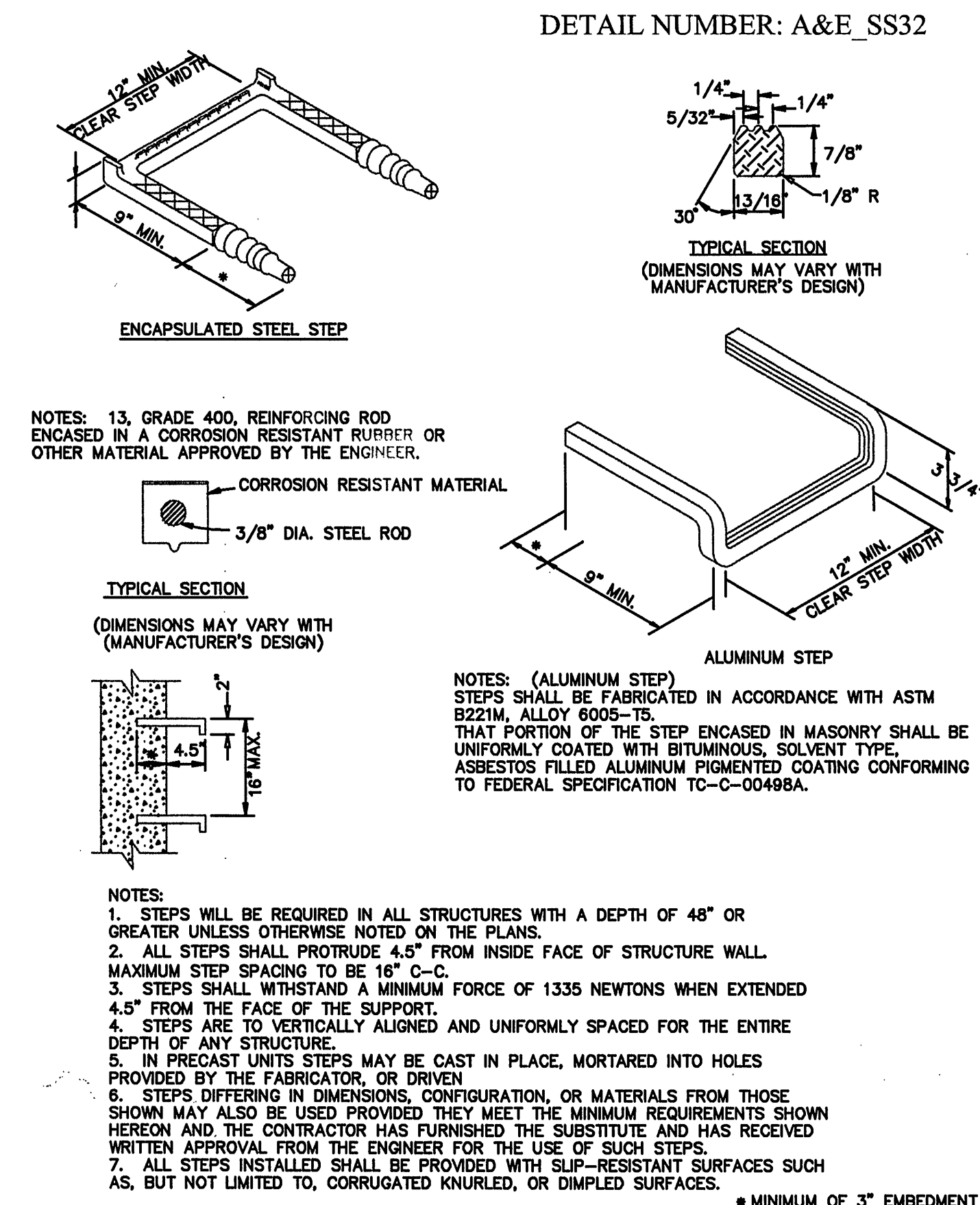


- NOTES:
1. ALL MANHOLE FRAMES AND COVERS SHALL BE DEWEY BROTHERS, INC. MH-RCR-3000W IN NON-PAVED AREAS REQUIRING WATERTIGHT FRAME & COVERS AND MH-RCR-3000EC-WT IN PAVED AREAS, OR APPROVED EQUAL.
 2. THE FIRST STEP SHALL BE 1 FOOT FROM THE COVER.
 3. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE 2 FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
 4. ALL SAMPLING MANHOLES SHALL BE CONSTRUCTED AS PER MANHOLE DETAILS. WHEN NECESSARY, THE FLAT TOP MANHOLE MAY BE SUBSTITUTED WITH ECCENTRIC OPENING AT STEPS.
 5. FLAT TOP TO BE VDOT APPROVED FOR TRAFFIC BEARING WHEN USED IN AREAS SUBJECT TO TRAFFIC, 8" MIN.

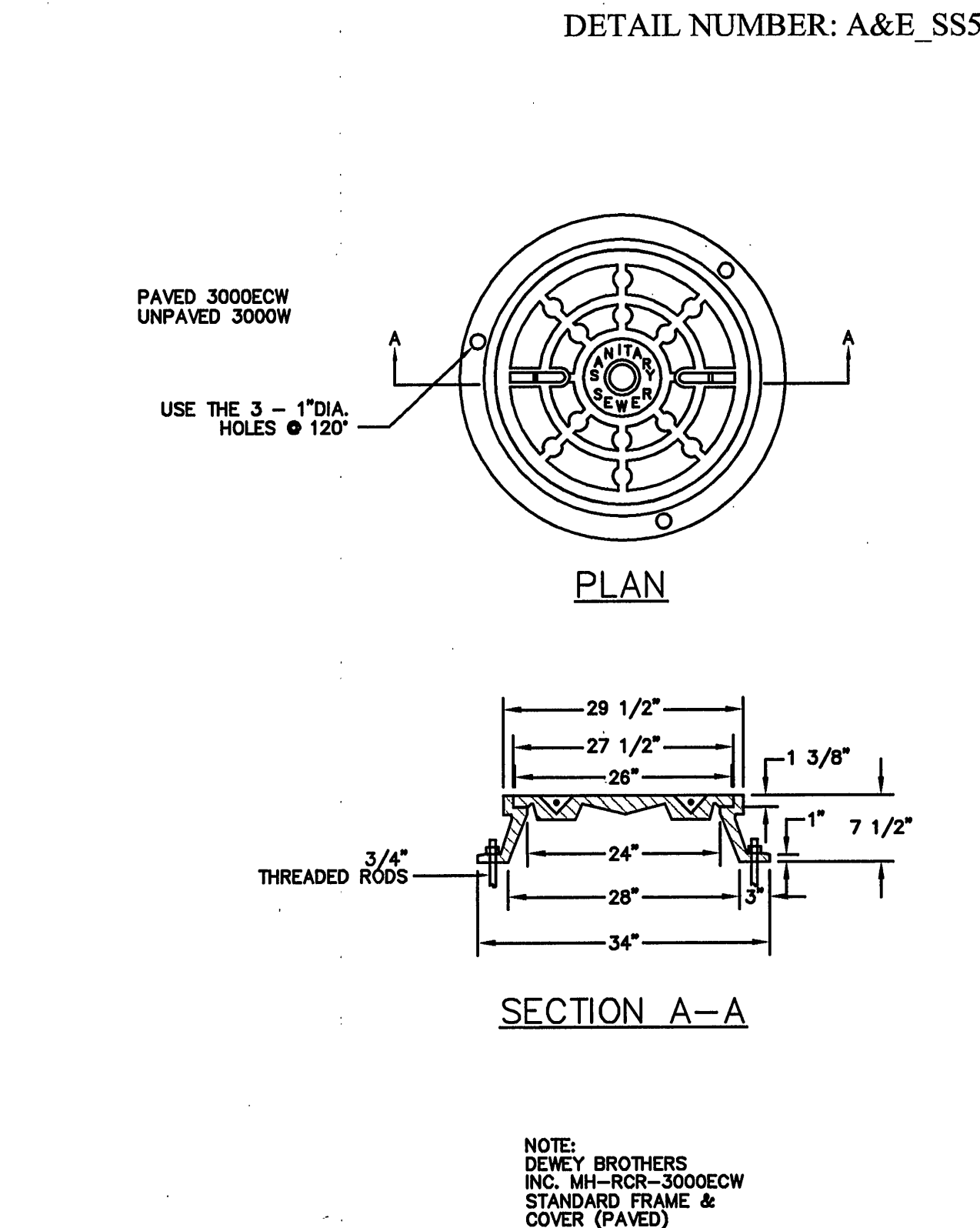


THE INVERT CHANNELS SHALL BE FORMED WITH CONCRETE AS SHOWN AND SHALL BE SMOOTH AND SEMI-CIRCULAR IN SHAPE, CONFORMING TO THE INSIDE OF THE ADJACENT SEWER SECTION. CHANGES IN THE DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE OF AS LARGE A RADIUS AS SIZE OF MANHOLE WILL PERMIT.

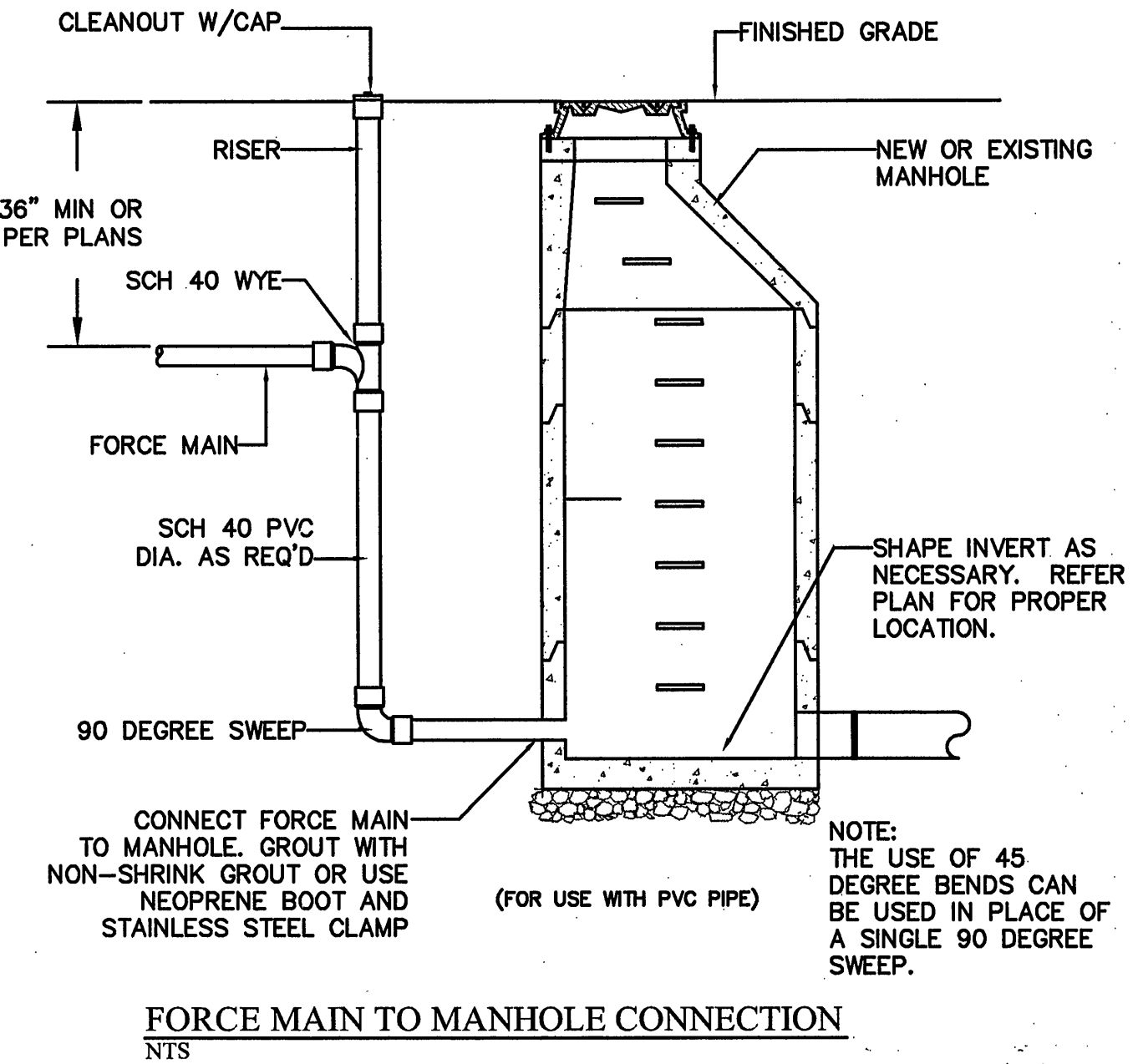
MAINHOLE INVERT CHANNELING
NTS



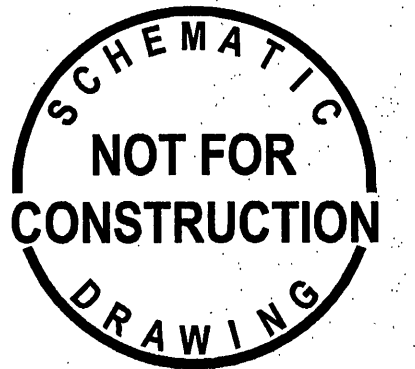
MANHOLE STEP



STANDARD MANHOLE FRAME & COVER
NTS



INSTALLATION DETAIL FOR ALL FRAMES AND COVERS
NTS



**ACS
DESIGN**

Engineering-Planning-Surveying
Landscape Architecture
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**GRAVITY SEWER 1
LAKEWATCH PLANTATION
GILLS CREEK MAGISTERIAL DISTRICT
FRANKLIN COUNTY, VIRGINIA**

DRAWN BY: DME

DESIGNED BY:

CHECKED BY: DME

DATE: 4/11/06

SCALE: NOT TO SCALE

REVISIONS

DATE	REVISION	COMMENT

SHEET No.

9 OF 11

SEWER DETAILS

JOB No. 21-04