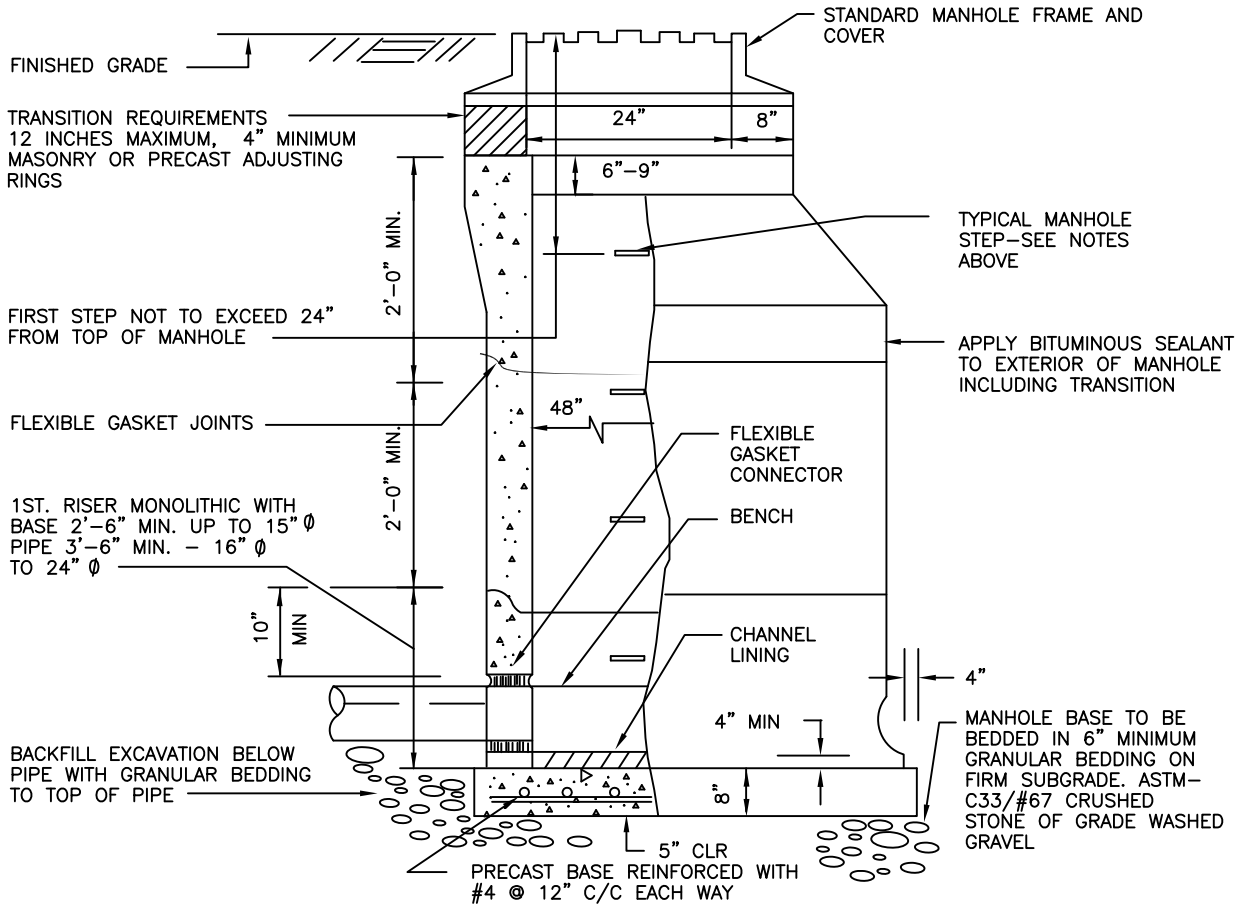
MANHOLE NOTES:

1. PRECAST MANHOLES SHALL CONFORM TO THE LASTEST REQUIREMENTS OF ASTM C–478 AND SHALL BE DESIGNED FOR A H20 LOADING. THE CONTRACTOR SHALL SUBMIT FOR COUNTY APPROVAL MANUFACTURING DRAWINGS PREPARED BY A MAYLAND PROFESSIONAL ENGINEER. DRAWING SHALL SHOW SIZE AND LOCATION OF ALL OPENINGS.
2. PROVIDE LIFTING HOLES OR DEVICES FOR ALL PRECAST SECTIONS. HOLE COMPLETELY THRU WALLS SHALL BE PLUGGED W/NEOPRENE OF RUBBER PLUG INSERTS, MORTARED FLUSH ON EACH SIDE OF WALL WITH NON–SHRINK GROUT. HOLES NOT COMPLETELY THRU WALL SHALL BE FILLED FLUCH WITH WALL WITH NON–SHRINK GROUT.
3. UNLESS OTHERWISE NOTED, MAXIMUM DEPTH OF MANHOLE SHALL BE 16'–0".
4. PROVIDE FLEXIBLE GASKET CONNECTOR BETWEEN PIPE AND MANHOLE.
5. GRADE OF PIPE ENTERING OF LEAVING MANHOLE SHALL NOT EXCEED 10%.
6. MINIMUM HEIGHT OF RISERS = 1'–0". NO MORE THAN ONE 1'–0" RISERS IS PERMITTED ON EACH MANHOLE.
7. MAXIMUM SIZE PIPE TO BE USED WITH 48" DIAMETER MANHOLE IS 24"
8. MANHOLE JOINTS SHALL O–RING TYPE IN ACCORDANCE WITH ASTM C–361 & C–443
9. MANHOLE STEPS SHALL BE MINIMUM 12" WIDE AND SPACED 12" WITH + 1" TOLERANCE, CENTER TO CENTER, IN VERTICAL ALIGNMENT AND ALIGN WITH BENCH. EMBED STEPS MINIMUM 3" WITH A MINIMUM PROJECTION OF 5". INSTALL BOTTOM STEP MINIMUM 5" AND MAXIMUM 16 1/2" ABOVE BENCH. THIS STEP MAY BE INSTALLED AT POINT OF MANUFACTURE BY DRILLING HOLES OF MINIMUM 1 1/2" DIAMETER AND 3" DEEP ON INSIDE OF MANHOLE, AND FILL VOID WITH NON–SHRINK GROUT. STEPS SHALL BE ALUMIMUM OF REINFORCED PVC.



REVISIONS:	CALVERT COUNTY	STANDARD DETAILS	S
8–23–13	DEPARTMENT OF PUBLIC WORKS–BUREAU OF UTILITIES APPROVED: _____ BUREAU CHIEF DATE: AUGUST 23, 2013	48"Ø PRECAST CONCRETE MANHOLE	1.10