
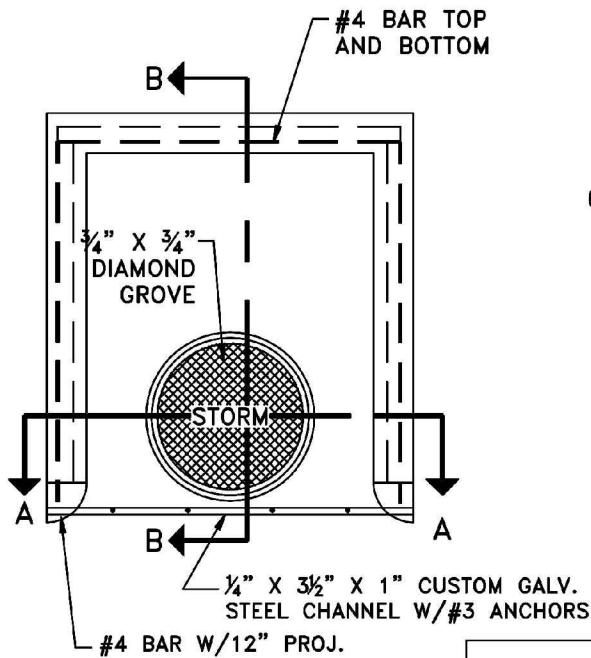
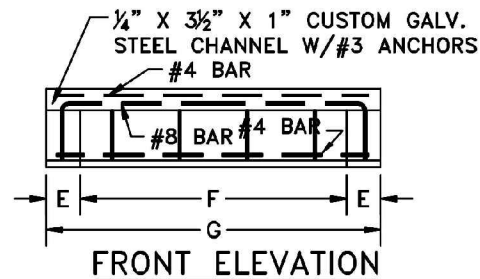
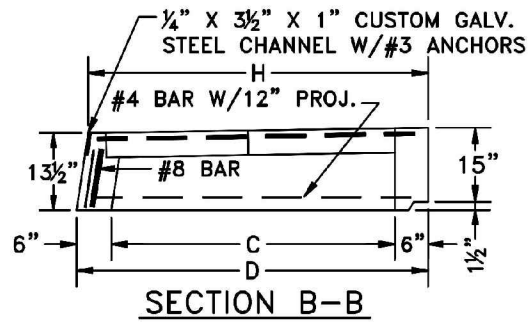
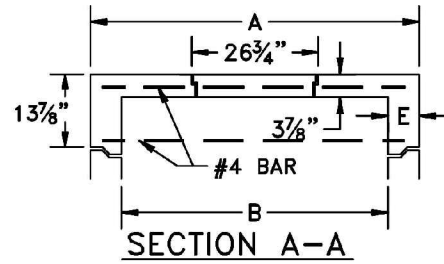
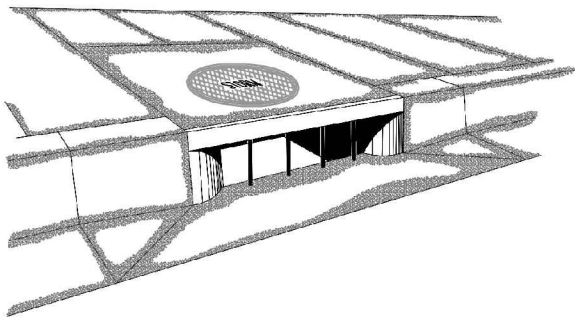




NOTE:

CONTRACTOR TO OBTAIN CATCH BASIN MARKERS FROM THE CITY OF GIG HARBOR AND INSTALL PRIOR TO FINAL INSPECTION.



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|  CITY OF GIG HARBOR ENGINEERING DIVISION | |
| CATCH BASIN MARKER | DETAIL NO. 3-01 |
| APPROVED FOR PUBLICATION CITY ENGINEER <u><i>Stephen Marshall</i></u> DATE <u>MAY 16, 2016</u> | |

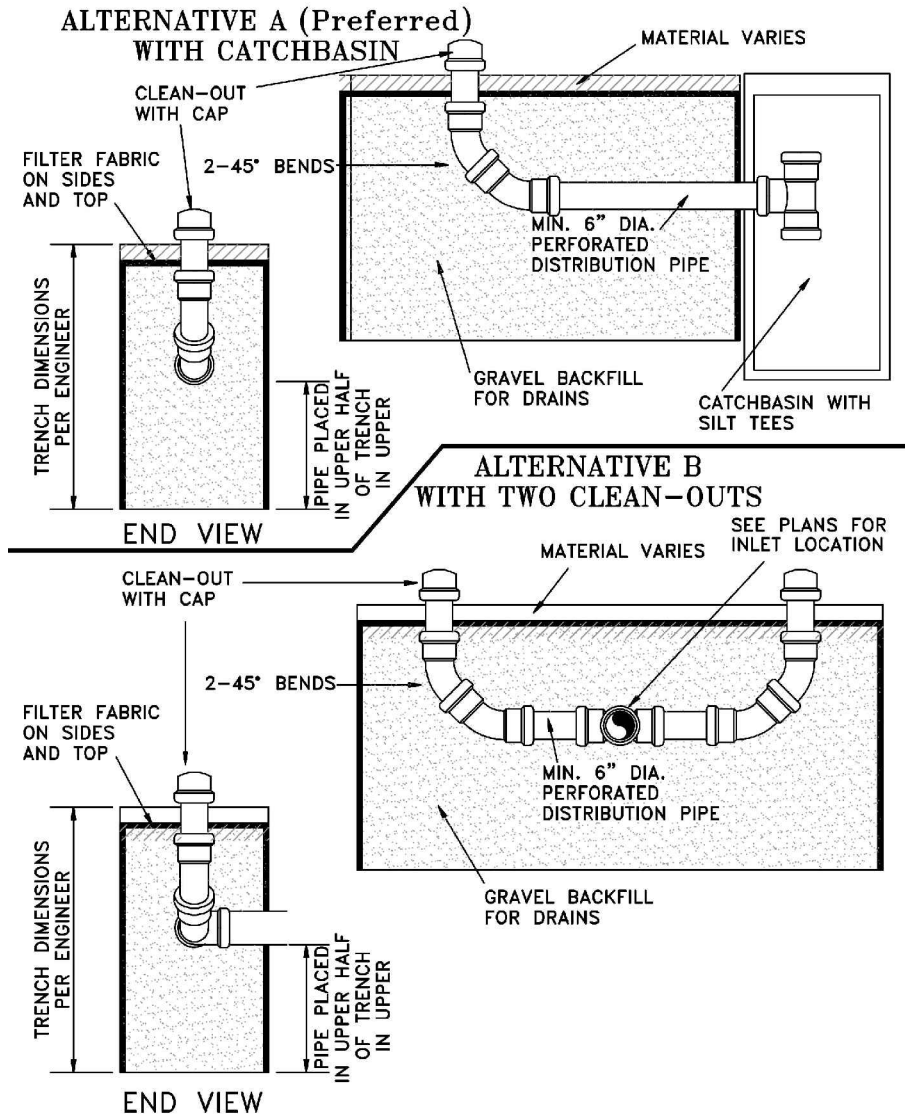


| DIMENSIONS IN INCHES | | | | | | | | | |
|----------------------|----|----|--------|--------|-------|----|----|--------|----------------|
| CURB INLET | A | B | C | D | E | F | G | H | NO. OF ANCHORS |
| TYPE I | 59 | 48 | 23 3/4 | 35 3/4 | 5 1/2 | 48 | 59 | 34 | 4 |
| TYPE II | 59 | 48 | 55 3/4 | 67 3/4 | 5 1/2 | 48 | 59 | 54 | 5 |
| TYPE III | 42 | 30 | 23 | 35 | 6 | 30 | 42 | 32 3/4 | 3 |

NOTES:

1. MANHOLE RING AND LOCKING COVER BY INLAND FOUNDARY "STORM".
2. ALL CONCRETE MINIMUM 3500 P.S.I. AT 28 DAYS.

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|  CITY OF GIG HARBOR ENGINEERING DIVISION | | DETAIL NO. 3-02 |
| CURB INLET | | |
| APPROVED FOR PUBLICATION CITY ENGINEER  | | DATE MAY 16, 2016 |



CITY OF GIG HARBOR
ENGINEERING DIVISION

INFILTRATION TRENCH

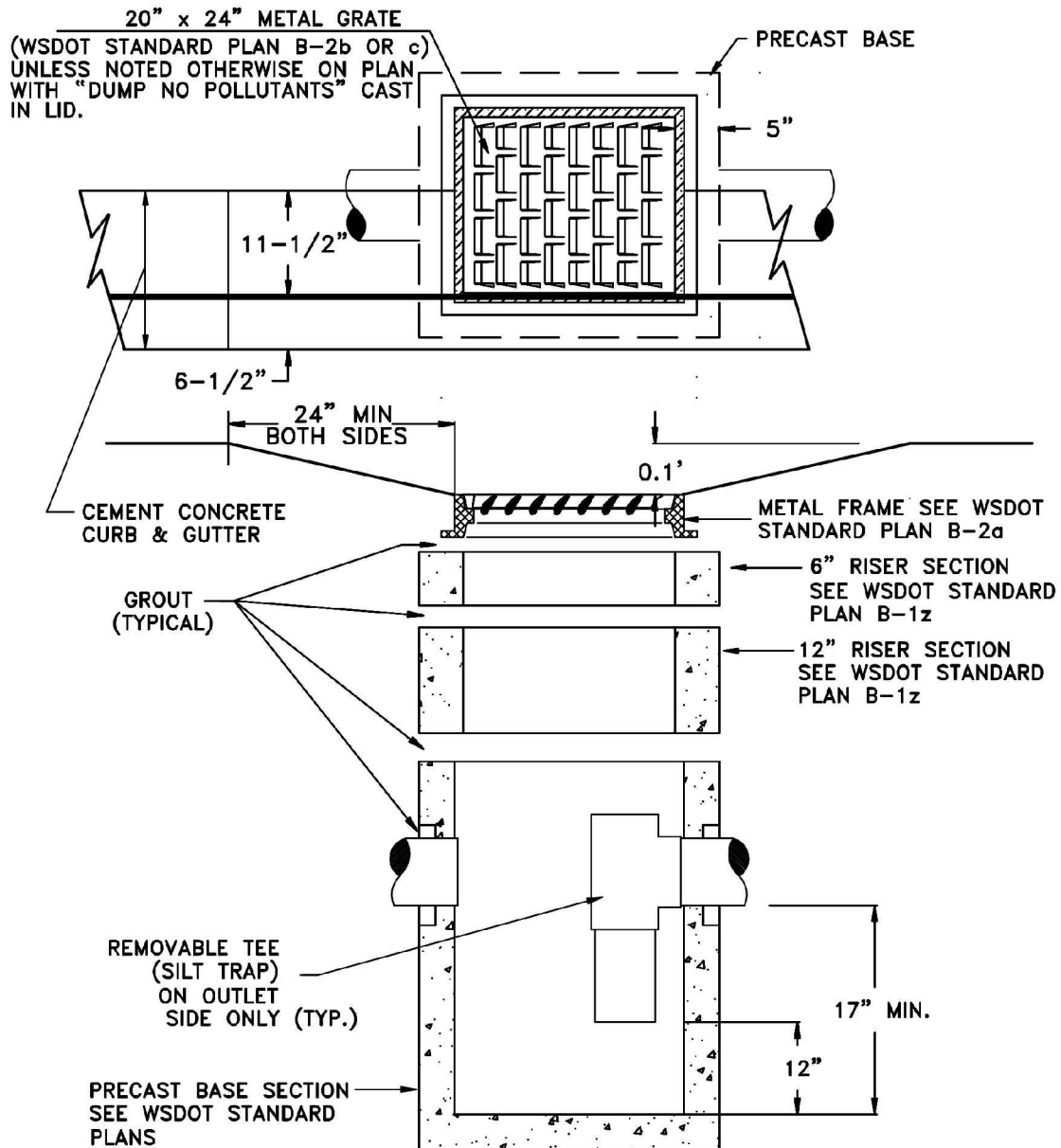
DETAIL NO.

3-03

APPROVED FOR PUBLICATION
CITY ENGINEER



Stephen Marshall

DATE MAY 16, 2016

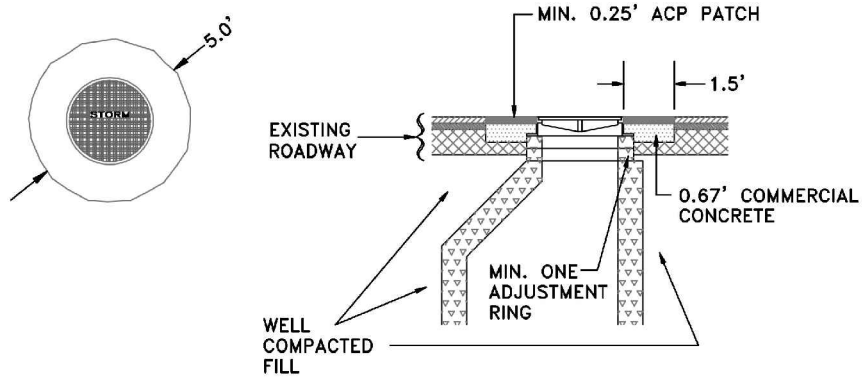


NOTES:

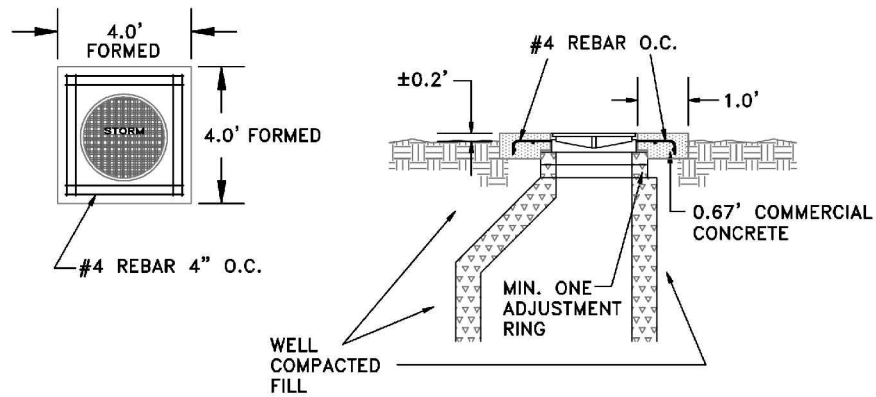
1. CATCH BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS IN WSDOT STANDARD PLANS.
2. SEE DETAIL 3-5 FOR PAD REQUIREMENTS.
3. WSDOT GRATE B-2C IS FOR BI-DIRECTIONAL FLOWS.
4. REMOVABLE SILT TRAP TEES TO BE INSTALLED IN ALL CATCH BASINS.

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|  CITY OF GIG HARBOR ENGINEERING DIVISION | | DETAIL NO. |
| SILT TRAP TEE AND DEPRESSION DETAIL FOR CATCH BASINS | | 3-04 |
| APPROVED FOR PUBLICATION CITY ENGINEER  DATE MAY 16, 2016 | | |

MANHOLE IN ASPHALT





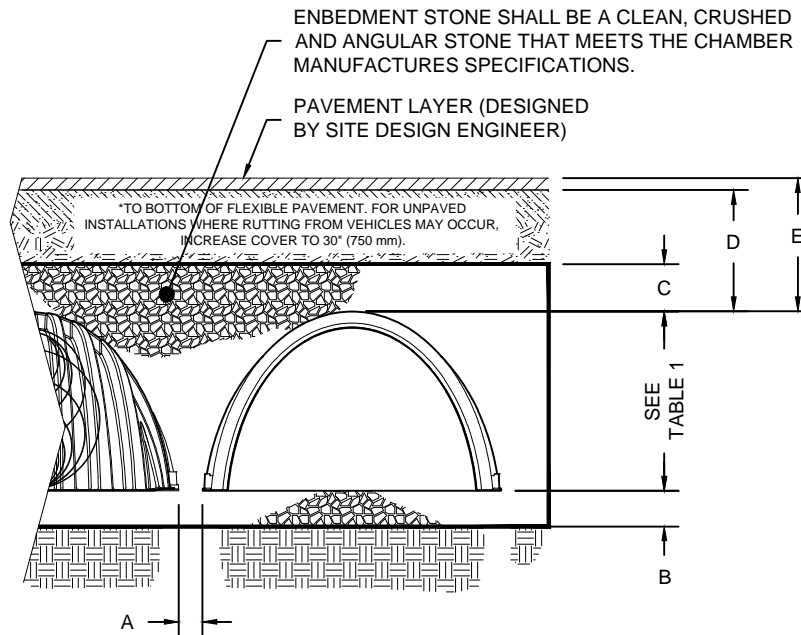
MANHOLE OUTSIDE ASPHALT



NOTE:



FOR STORM MANHOLE LOCATED OUTSIDE ASPHALT, ADD REINFORCING STEEL AND CONCRETE PAD AS SHOWN ABOVE. DEFORMED BAR TO MEET ASTM A615 GRADE 60 FY=60,000 P.S.I.

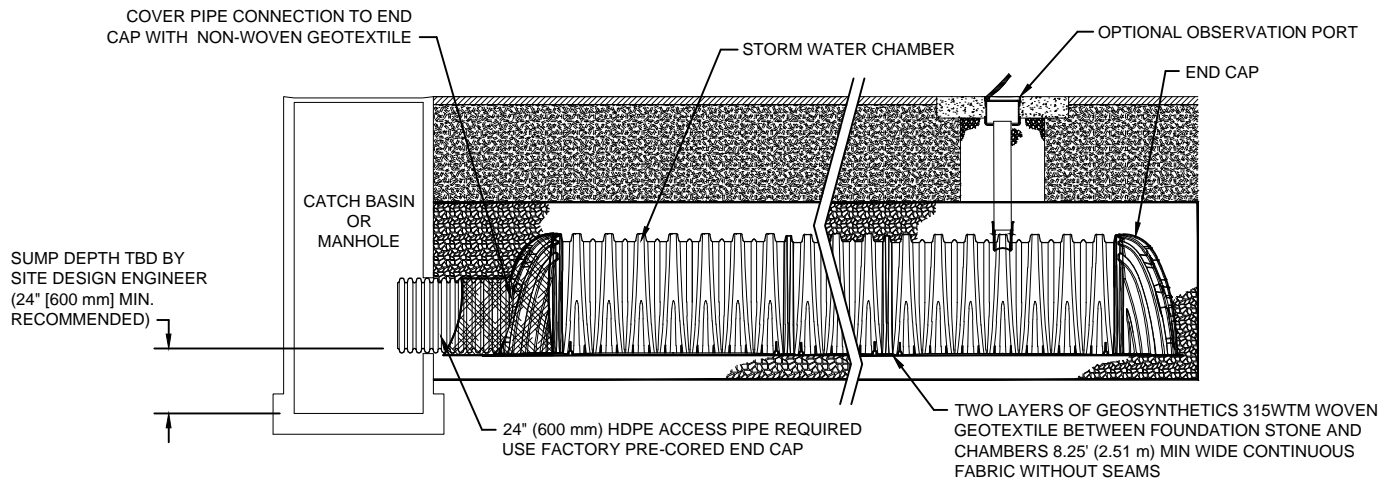
| | |
|--|--|
|  CITY OF GIG HARBOR ENGINEERING DIVISION | |
| STORM MANHOLE COLLAR | |
| DETAIL NO. 3-05 | |
| APPROVED FOR PUBLICATION CITY ENGINEER  DATE MAY 16, 2016 | |



NOTES:

1. CHAMBER DESIGN SHALL BE IN ACCORDANCE WITH ASTM F2787.
2. CHAMBER FOOT MUST BE DESIGNED TO DEVELOP A STRUCTURAL STONE COLUMN BETWEEN ROWS.
3. THE CHAMBER MANUFACTURES CUMULATIVE STORAGE SHALL BE USED AND INCLUDED IN THE DESIGN DOCUMENTATION.
4. THE CHAMBER ROW SPACING, BASE STONE, COVER STONE, MINIMUM COVER, AND MAXIMUM COVER SHALL BE PER THE CHAMBER MANUFACTURES SPECIFICATIONS.

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|--|-----------------------------------|
|  <p>CITY OF GIG HARBOR ENGINEERING DIVISION</p> | |
| <p>STORMWATER CHAMBER DETAIL</p> | <p>DETAIL NO. 3-06</p> |
| <p>APPROVED FOR PUBLICATION CITY ENGINEER  DATE MAY 16, 2016</p> | |



MAINTENANCE ROW DETAIL

NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT MAINTENANCE ROW FOR SEDIMENT

- A. OBSERVATION PORT (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON INLINE DRAIN
 - A.2. REMOVE AND CLEAN FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO MAINTENANCE ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL MAINTENANCE ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF MAINTENANCE ROW
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE MAINTENANCE ROW THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT MAINTENANCE ROW USING THE JETVAC PROCESS

- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE SYSTEM.

NOTES:

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

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| CITY OF GIG HARBOR ENGINEERING DIVISION | |
| CHAMBER INSPECTION AND MAINTENANCE | DETAIL NO. 3-07 |
| APPROVED FOR PUBLICATION | |
| CITY ENGINEER _____ | DATE MAY 16, 2016 |