

GENERAL NOTES

1. MANHOLE DIAMETER SHALL BE 48" WHEN DEPTH FROM RIM TO INVERT IS LESS THAN 10'.
2. MANHOLE DIAMETER SHALL BE 54" WHEN DEPTH FROM RIM TO INVERT IS EQUAL TO OR GREATER THAN 10'.
3. LARGER DIAMETER STRUCTURES MAY BE REQUIRED TO CONFORM TO DOE CRITERIA FOR SEWAGE WORKS DESIGN MANUAL.

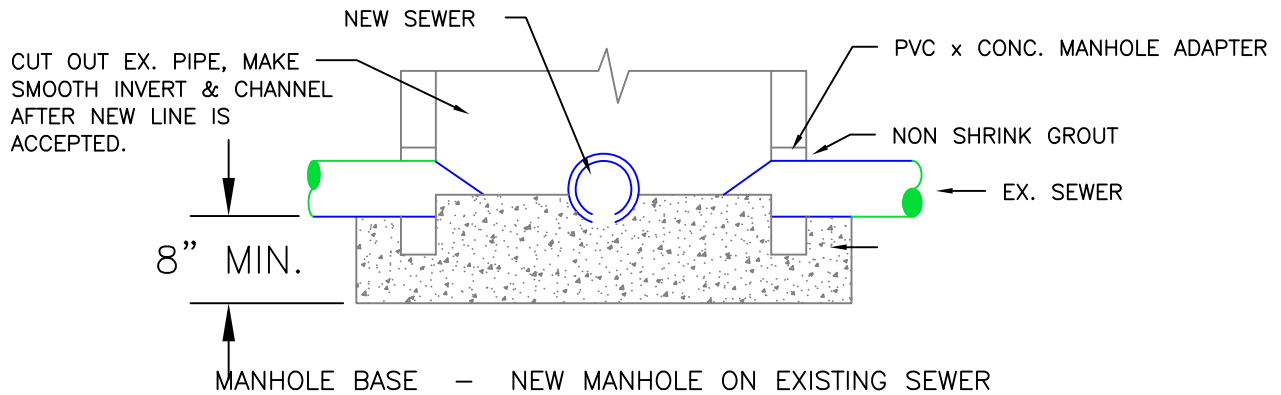


CITY OF POULSBO  
DEPARTMENT OF PUBLIC WORKS

Sanitary Sewer Standard  
Manhole Type II

Detail 3-01A  
Approval Date:

## STANDARD MANHOLE



### GENERAL NOTES (APPLY TO ALL MANHOLES)

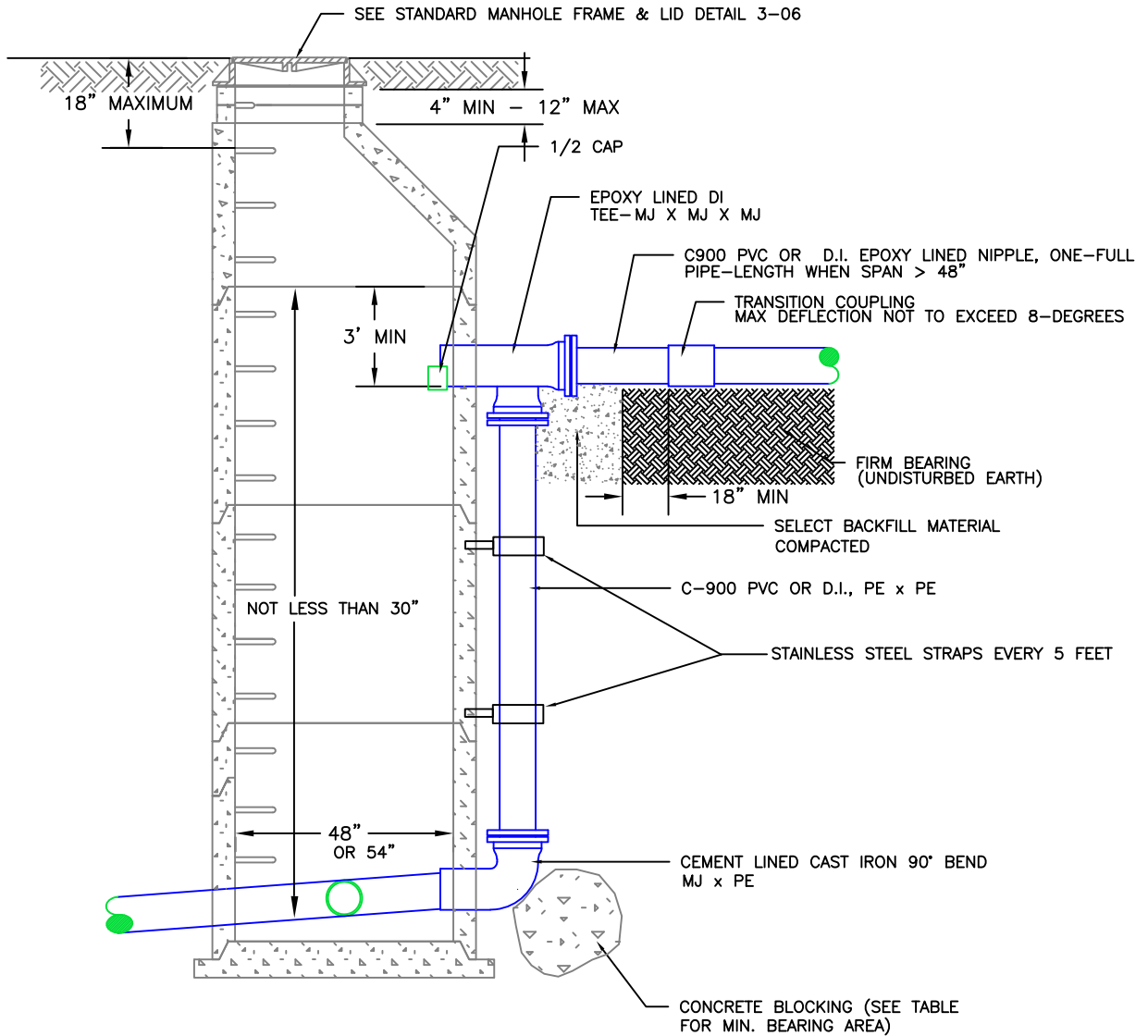
1. PRECAST SECTIONS SHALL BE REINFORCED PER ASTM SPECS FOR CORRESPONDING SEWER PIPE.
2. GALVANIZED PLASTIC COATED STEPS, SEE DETAIL 3-07.
3. STEPS IN PRECAST BASE SECTION MAY BE CAST IN PLACE OR MOVABLE SAFETY LADDER GROUTED IN PLACE. SEE DETAIL 3-07.
4. ALL HOLES FOR PIPE SHALL BE BLOCKED OUT AT THE TIME OF CASTING OF THE SECTION.
5. ALL RUBBER GASKETED MANHOLES SHALL BE FURNISHED WITH RUBBER GASKET JOINT CONFORMING TO ASTM C443.
6. ALL MANHOLES SHALL BE FURNISHED WITH RUBBER GASKET JOINT CONFORMING TO ASTM C443.
7. MINIMUM 3% SLOPE ACROSS MANHOLE CHANNEL.
8. SEE DETAIL 3-06 FOR MANHOLE FRAME AND COVER.
9. MANHOLE DIAMETER SHALL BE 48" WHEN DEPTH FROM RIM TO INVERT IS LESS THAN 10'.
10. MANHOLE DIAMETER SHALL BE 54" WHEN DEPTH FROM RIM TO INVERT IS EQUAL TO OR GREATER THAN 10'.
11. LARGER DIAMETER STRUCTURES MAY BE REQUIRED TO CONFORM TO DOE CRITERIA FOR SEWAGE WORKS DESIGN MANUAL.



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DEPARTMENT OF PUBLIC WORKS

Sanitary Sewer Standard  
Manhole Type II  
Base Detail and Notes

Detail 3-01B  
Approval Date:



HEIGHT OF DROP (FT)	MINIMUM BEARING AREA (SF)
2.5 - 5	1.0
6 - 10	2.0
11 - 15	2.5
16 - 20	3.0
21 - 25	4.0

BEARING AREA BASED ON 2000 PSF SAFE BEARING LOAD (UP TO 18" DIAMETER PIPE).

NOTES

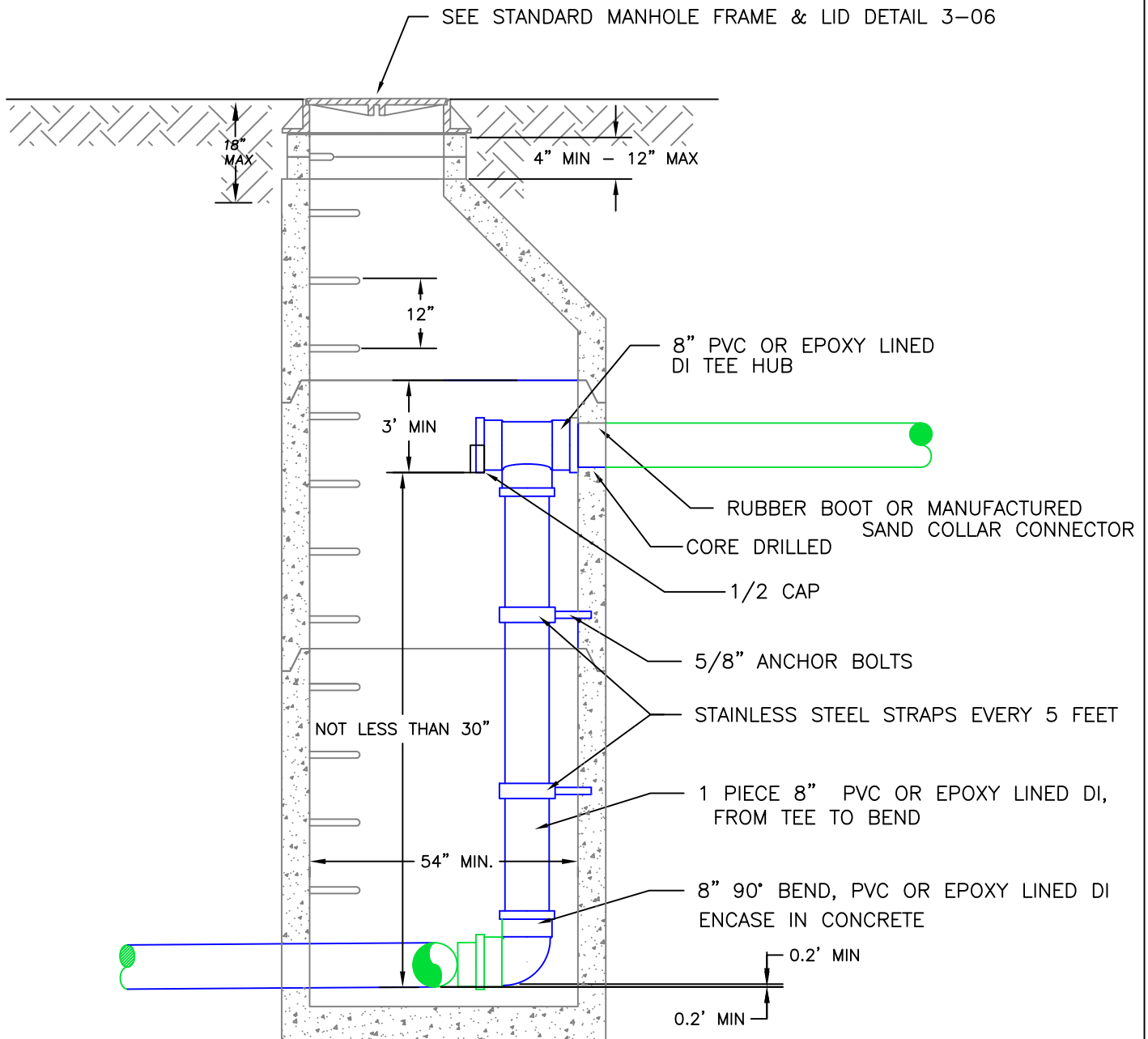
1. OUTSIDE DROP MANHOLE SHALL BE INSTALLED ONLY WHERE APPROVED BY THE CITY



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DEPARTMENT OF PUBLIC WORKS

OUTSIDE DROP STRUCTURE

DETAIL 3-02  
Approval Date:



NOTES

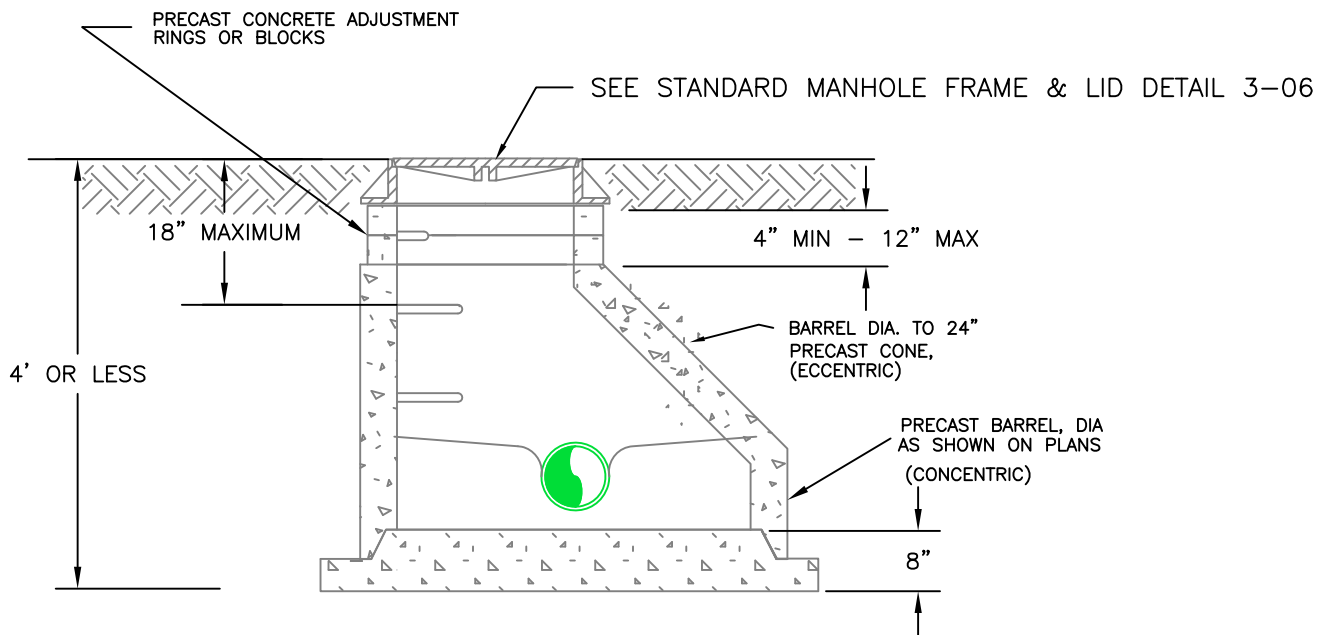
1. DROP TEE TO BE INSTALLED MINIMUM OF 3' BELOW CONE SECTION



CITY OF POULSBO  
DEPARTMENT OF PUBLIC WORKS

INSIDE DROP STRUCTURE

DETAIL 3-03  
Approval Date:



NOTES

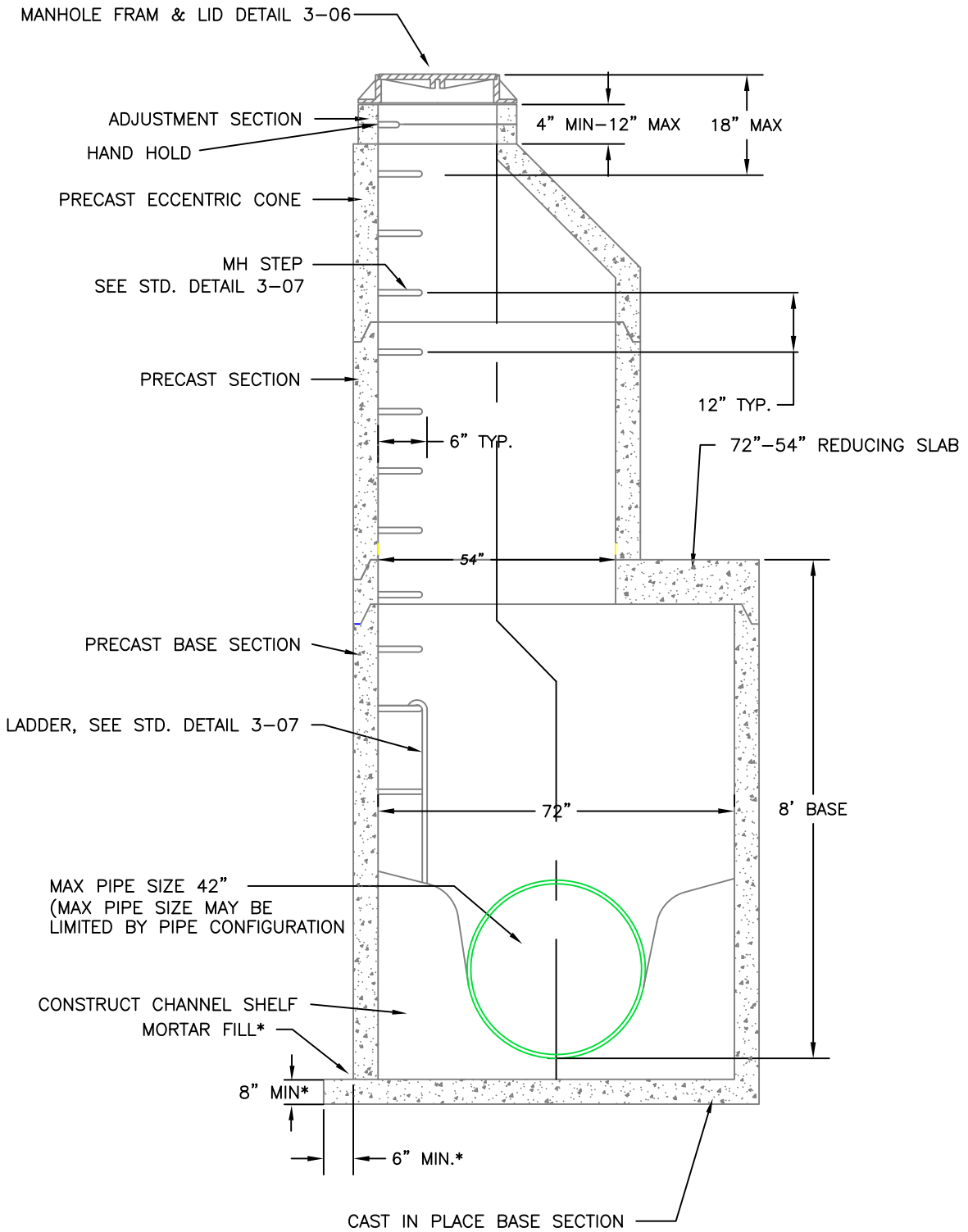
1. SHALLOW MANHOLE SHALL BE INSTALLED ONLY WHERE APPORVED BY THE CITY



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SHALLOW MANHOLE

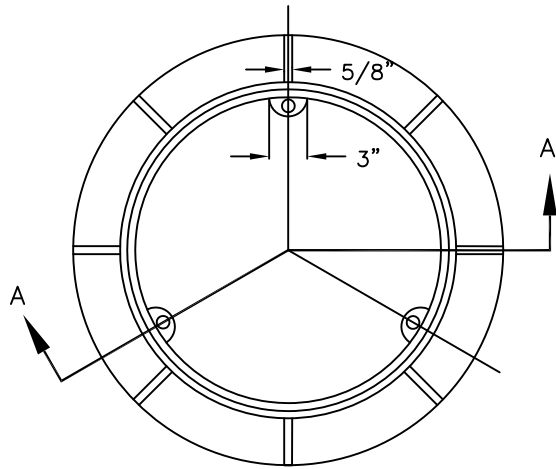
DETAIL 3-04  
Approval Date:



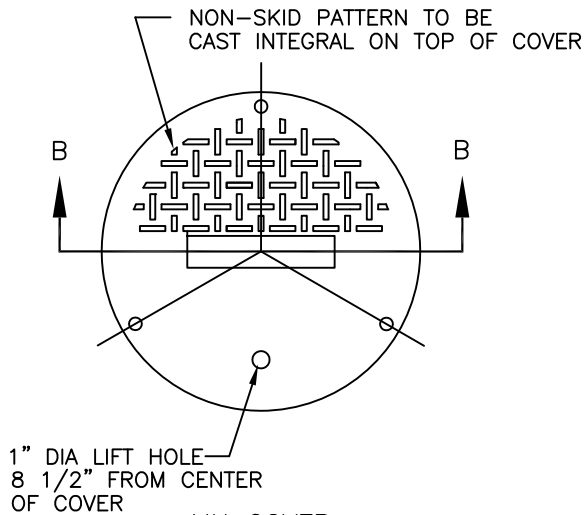
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DEPARTMENT OF PUBLIC WORKS

Sanitary Sewer Manhole  
Type II - 72"

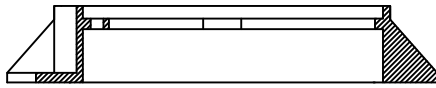
DETAIL 3-05  
Approval Date:



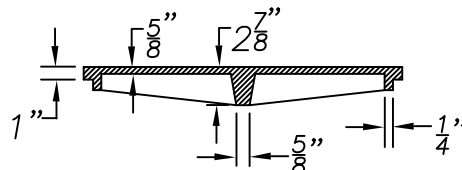
MH RING



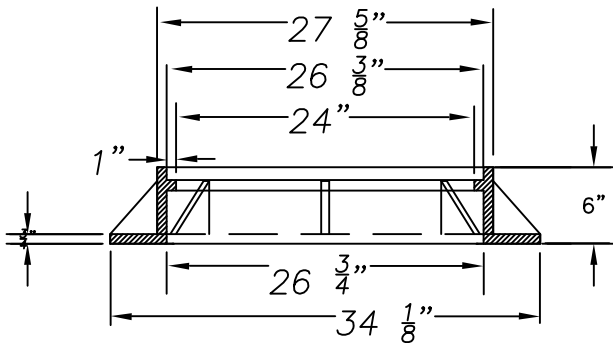
MH COVER



SECTION A-A



SECTION B-B



DUCTILE OR CAST IRON FRAME  
MINIMUM WEIGHT 210 LBS

NOTES

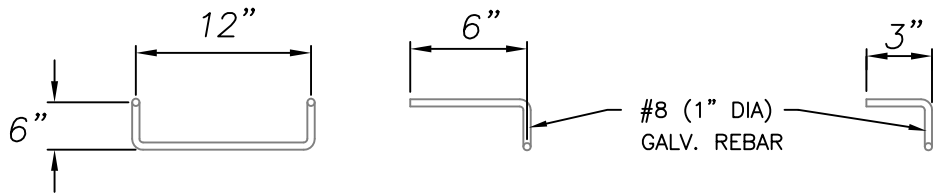
1. IDENTIFY SPECIFIC UTILITY ON LID WITH 2" RAISED LETTERS
2. CAST IRON, BOLT-DOWN COVER
3. MANHOLE COVERS REQUIRE 3-1" DIA. HOLES SPACED AT 120° TO ACCEPT 1" BOLTS



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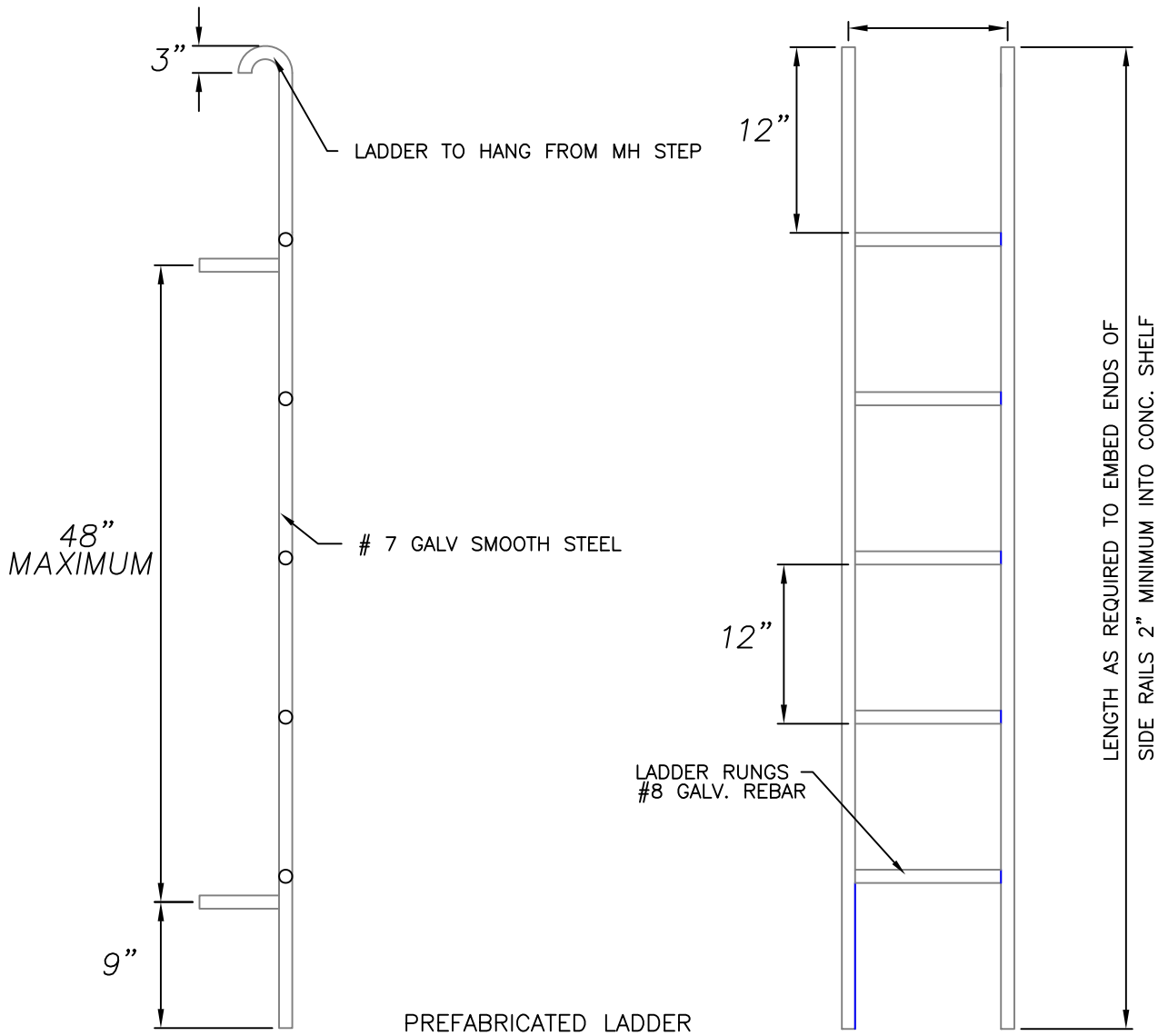
24" MANHOLE FRAME AND LID

DETAIL 3-06  
Approval Date:



LADDER RUNG

HANDLE



PREFABRICATED LADDER

NOTES:

1. DEFORMED REINFORCING BAR SHALL CONFORM TO ASTM A 615
2. GALVANIZE SHALL CONFORM TO ASTM A 123
3. LADDER REQUIRED IN VAULTS OVER 2' DEEP.
4. POLYPROPYLENE COATING ON STEPS & HANDLES

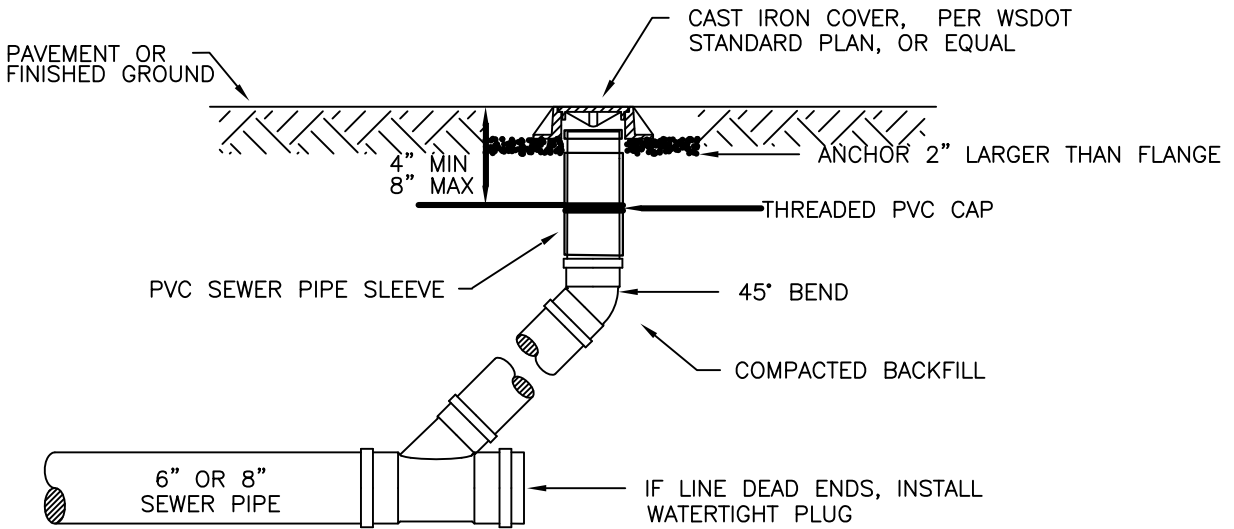


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MANHOLE LADDERS

DETAIL 3-07  
Approval Date:





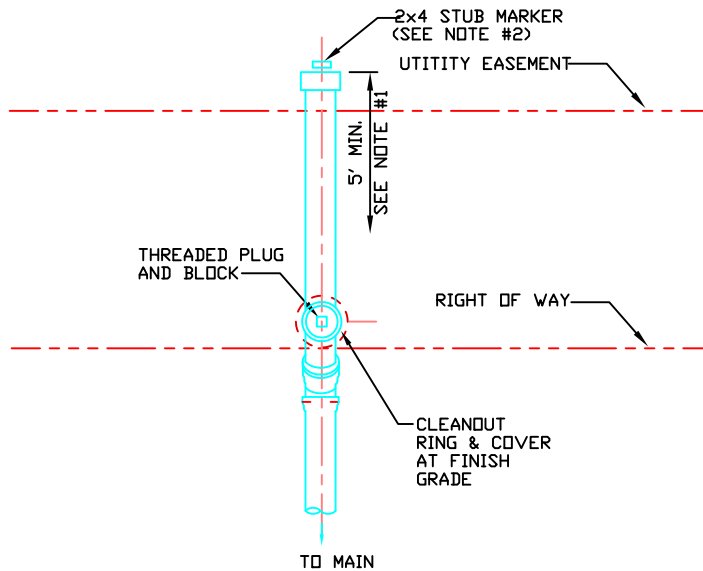
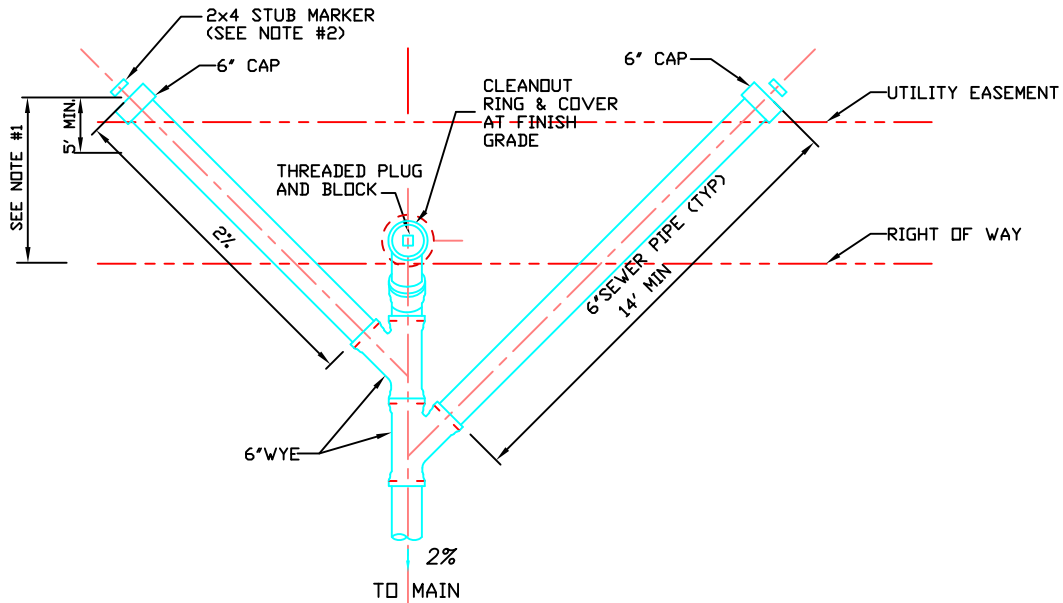
BEDDING AND BACKFILL SHALL BE PER DETAIL 6-02



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CLEANOUT

DETAIL 3-09  
Approval Date:



**NOTE:**

1. CLEAN OUTS SHALL BE CAST IRON AND IN ACCORDANCE WITH C.O.P. FIG 3-09 AND SHALL BE LOCATED BEHIND THE RIGHT OF WAY/PROPERTY LINE. THE STUB AND MARKER SHALL EXTEND BEHIND THE 10' UTILITY EASEMENT IN PLATS.

2. FOR PLATS, 12' BEHIND PROPERTY LINE, PROVIDE MARKER PER WSDOT STANDARD SPECIFICATIONS EXCEPT MARKER SHALL BE AT END OF PIPE 12' BEHIND PROPERTY LINE.

3. THE LOCATION OF SIDE SEWERS AT THE PROPERTY LINE SHALL BE MARKED WITH A 2 BY 4-INCH WOODEN STAKE 4- FEET LONG BURIED IN THE GROUND A DEPTH OF 3- FEET. THE LOW END SHALL HAVE A 2 BY 4-INCH CLEAT NAILED TO IT TO PREVENT WITHDRAWAL OF THE STAKE. THE EXPOSED END SHALL BE PAINTED TRAFFIC WHITE AND THE DEPTH TO THE SIDE SEWER OR TEE SHALL BE INDICATED IN BLACK PAINT ON THE 2 BY 4. IN ADDITION, A LENGTH OF 12-GAUGE GALVANIZED WIRE SHALL BE PROVIDED TO EXTEND FROM THE PLUGGED END OF THE SIDE SEWER OR TEE. THE UPPER END SHALL EMERGE AT THE 4-FOOT STAKE, BUT SHALL NOT BE FASTENED TO IT



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SIDE SEWER

DETAIL 3-10  
Approval Date: