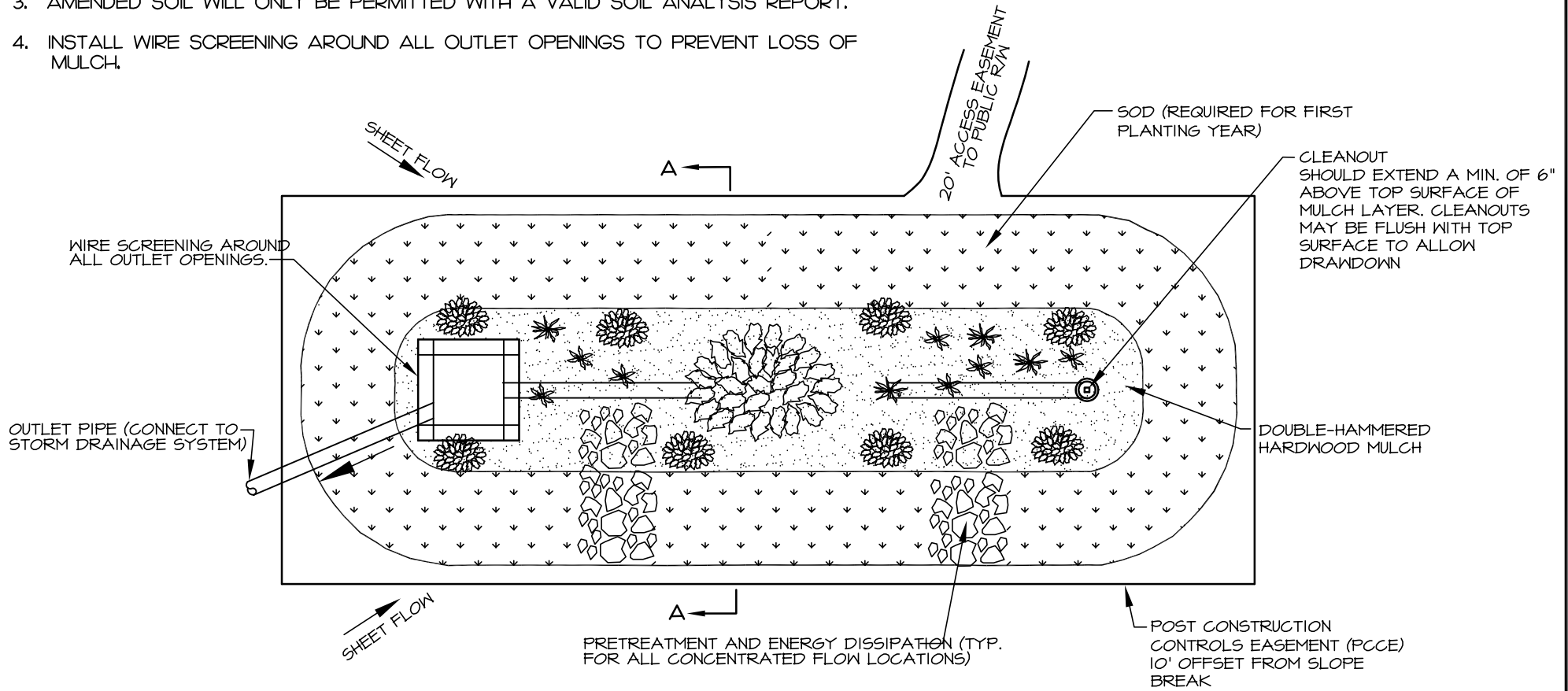


NOTES:

1. ALL BIORETENTION SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.
2. ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.
3. AMENDED SOIL WILL ONLY BE PERMITTED WITH A VALID SOIL ANALYSIS REPORT.
4. INSTALL WIRE SCREENING AROUND ALL OUTLET OPENINGS TO PREVENT LOSS OF MULCH.



PLAN

NOT TO SCALE



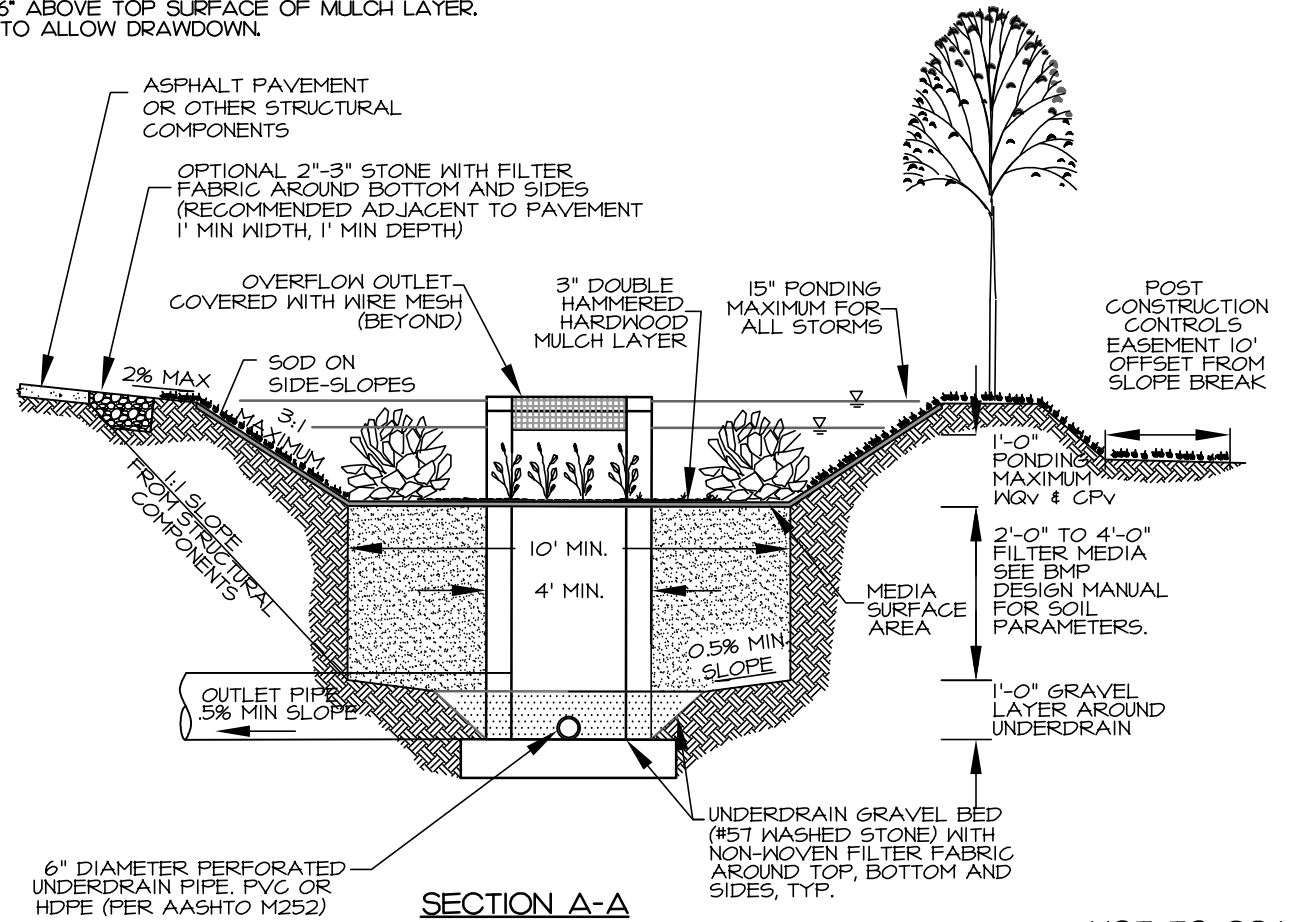
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**BIORETENTION PLAN
BMP FIG. 4.1.2**

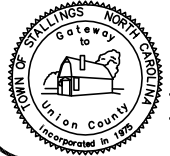
STD. NO.	REV.
21.00	

NOTES:

1. ALL BIORETENTION FACILITIES SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.
2. ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.
3. AMENDED SOIL WILL ONLY BE PERMITTED WITH A VALID SOIL ANALYSIS REPORT. NO AMENDED SOIL SHALL BE ALLOWED ON THE SIDE SLOPES.
4. INSTALL WIRE SCREENING AROUND ALL OUTLET OPENINGS TO PREVENT LOSS OF MULCH.
5. PVC UNDERDRAIN PIPE SHOULD HAVE 3/8" PERFORATIONS SPACED AT 6" CENTERS, MIN. 4 HOLES PER ROW. MAX SPACING OF UNDERDRAIN PIPE IS 10 FEET ON CENTER. HDPE SHALL ADHERE TO AASHTO M252 SPECS.
6. UNDERDRAIN CLEANOUTS SHOULD EXTEND A MIN. OF 6" ABOVE TOP SURFACE OF MULCH LAYER. CLEANOUTS MAY BE FLUSH WITH TOP OF SURFACE TO ALLOW DRAWDOWN.
7. ONLY SMALL MATURING TREES ARE ALLOWED TO BE PLANTED IN THE AMENDED SOILS.



NOT TO SCALE



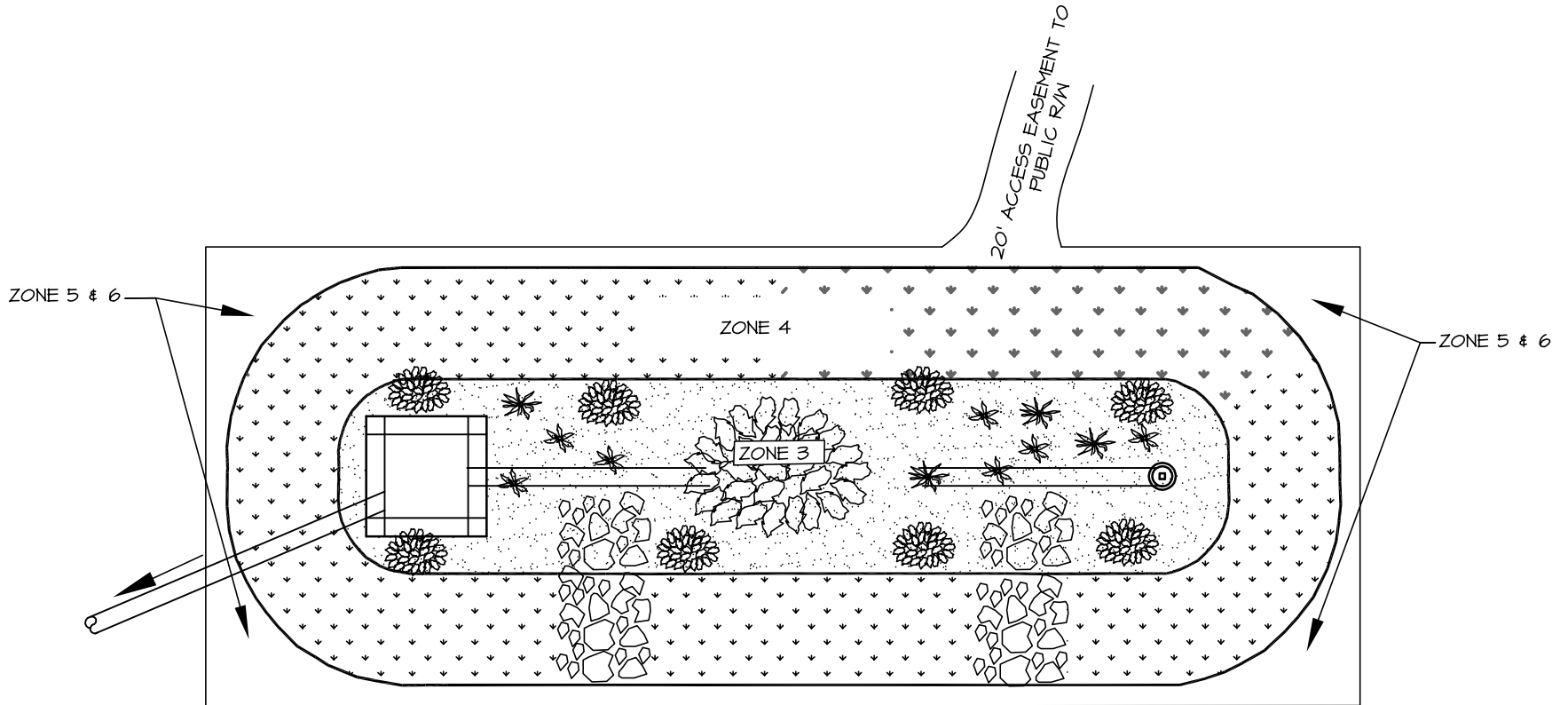
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

BIORETENTION CROSS-SECTION
BMP FIG. 4.1.3

STD. NO.	REV.
21.01	

NOTES:

1. PLANTING ZONES AND PLANT SELECTION PER THE BMP DESIGN MANUAL.
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.
4. ONLY SMALL MATURING TREES ARE ALLOWED TO BE PLANTED IN THE AMENDED SOILS.



PLAN

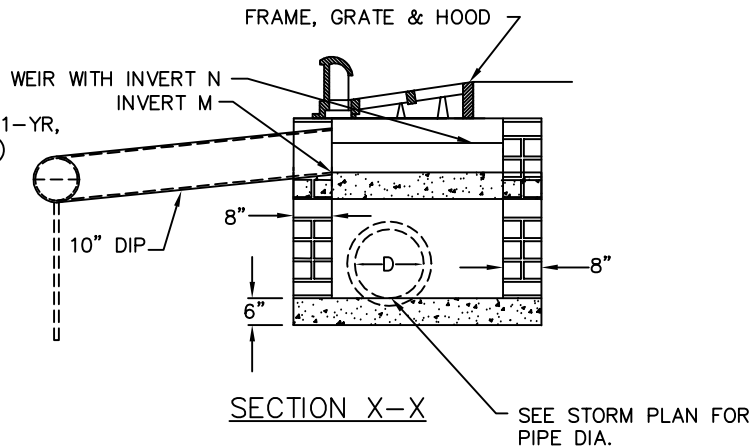
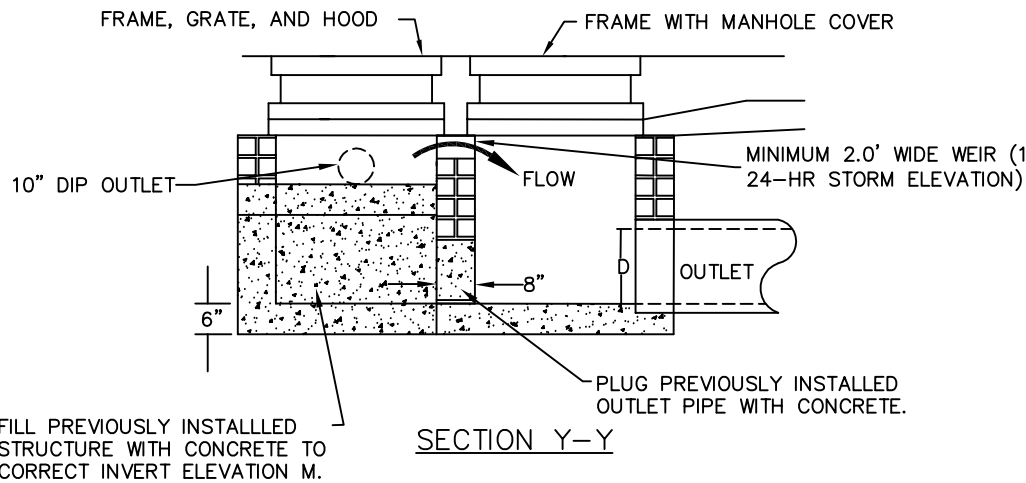
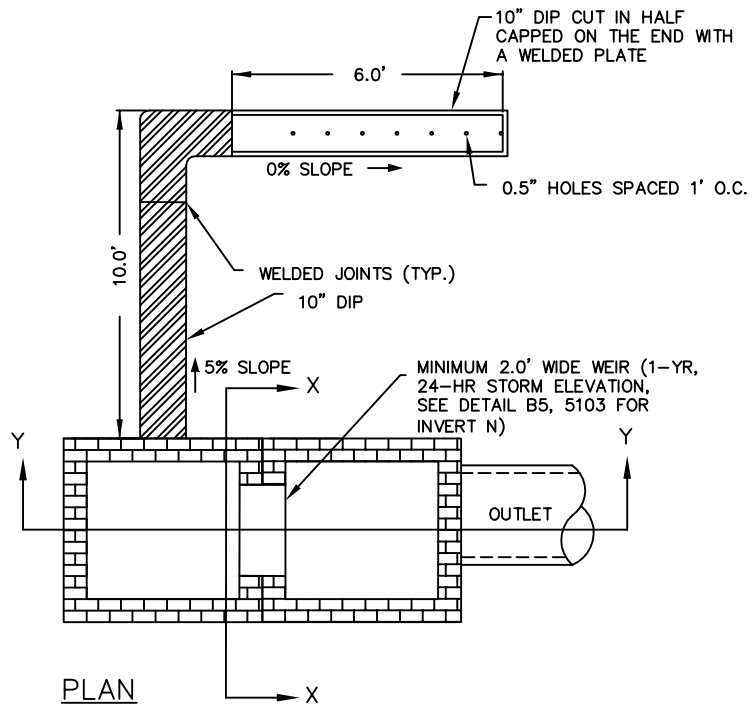
NOT TO SCALE



**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**BIORETENTION PLANTING PLAN
BMP FIG. 4.1.4**

STD. NO.	REV.
21.02	



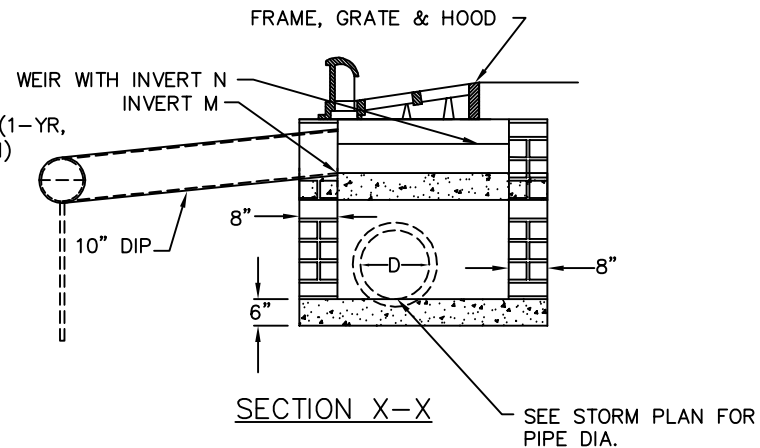
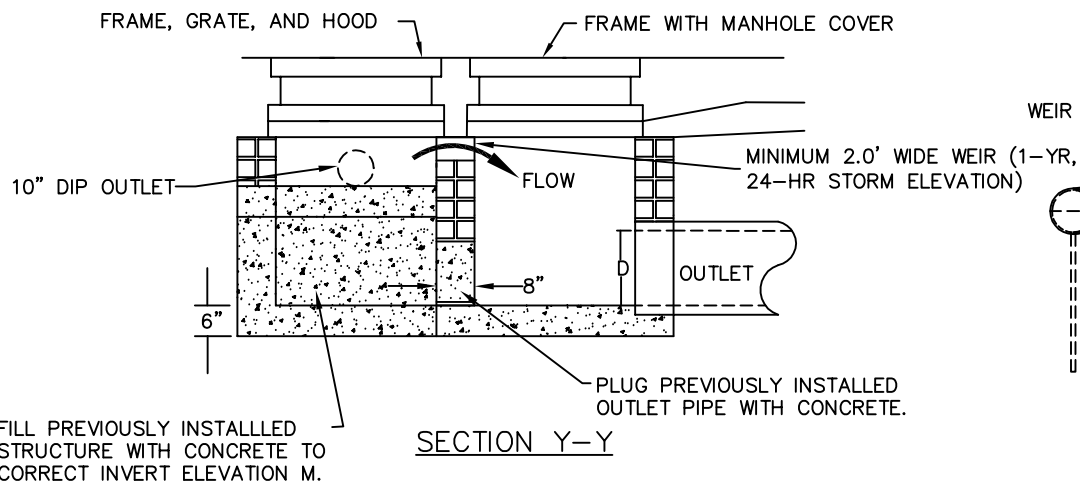
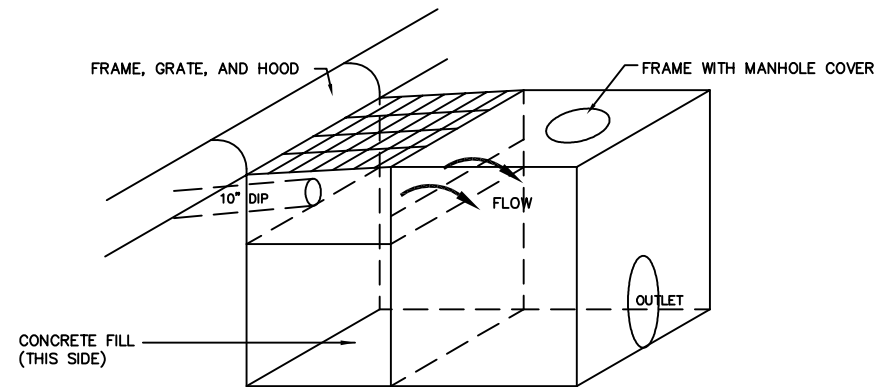
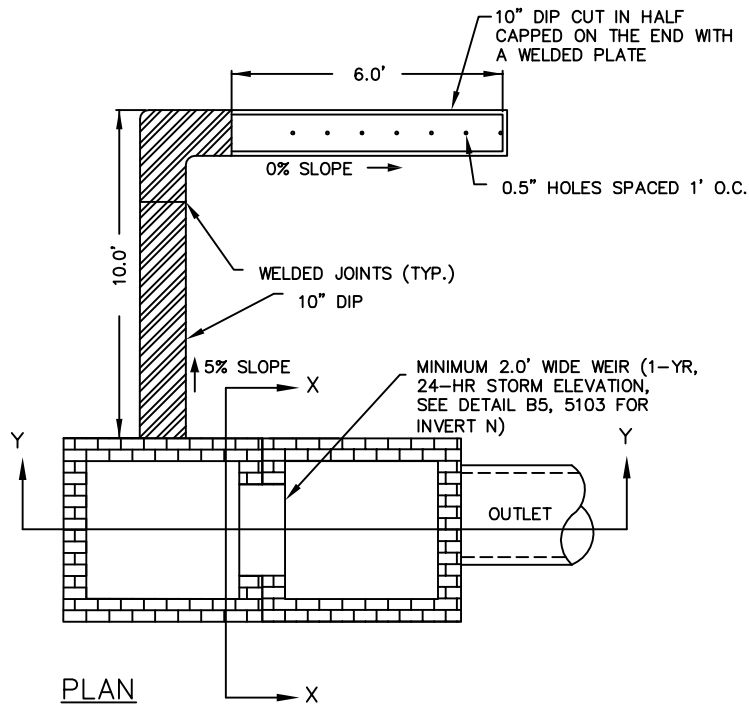
NOT TO SCALE



TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

BIORETENTION ENERGY DISSIPATOR

STD. NO.	REV.
21.03	



NOT TO SCALE



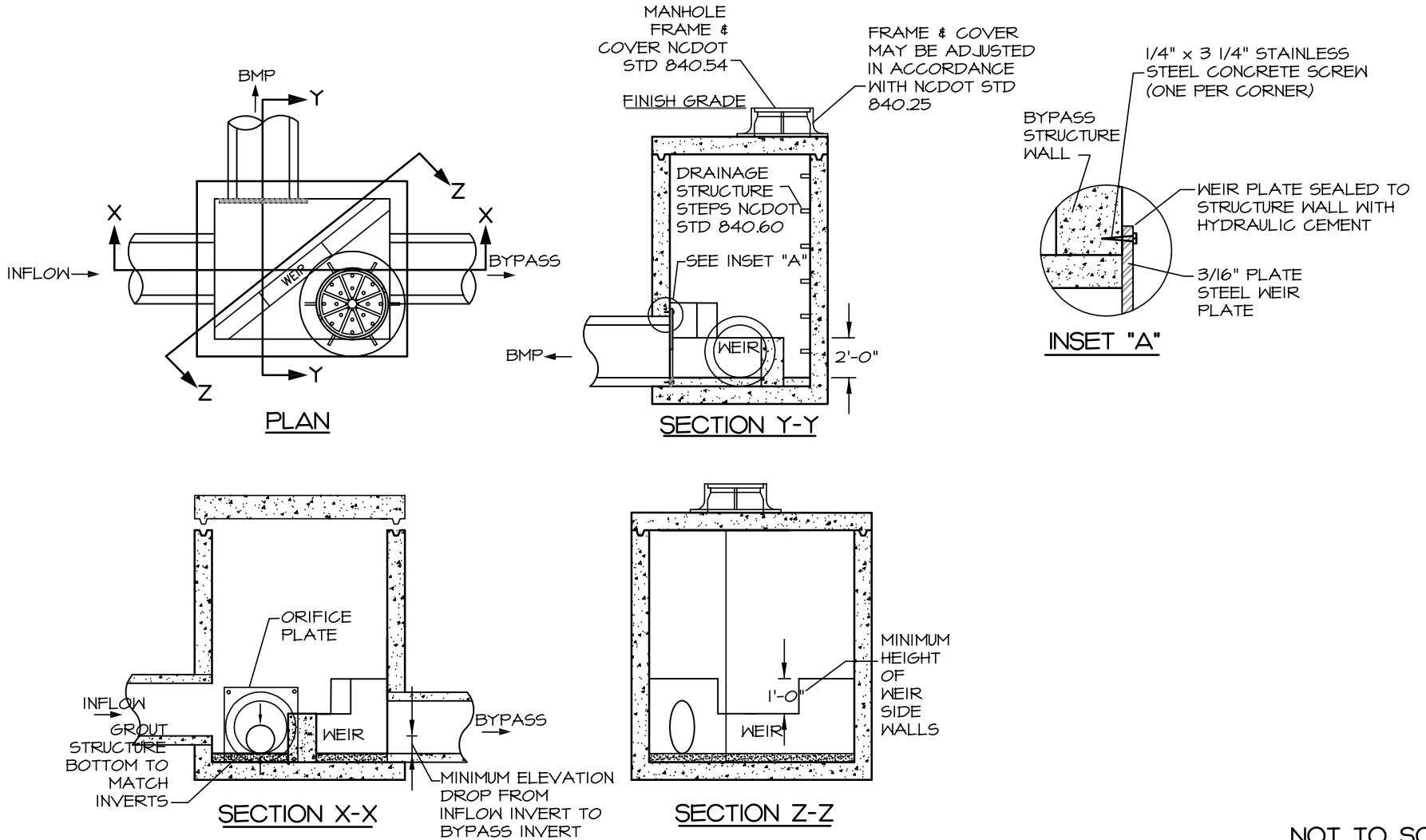
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

BIORETENTION ENERGY DISSIPATOR

STD. NO.	REV.
21.03A	

NOTES

1. ALL CONCRETE SHALL BE 3600 PSI.
2. ALL JOINTS ARE TO BE SEALED WATER TIGHT.
3. WEIR IS TO BE POURED-IN-PLACE CONCRETE.
4. REFER TO NCDOT STANDARD DRAWINGS FOR BOX CONSTRUCTION.
5. NOT ACCEPTABLE FOR USE IN STREET RIGHT OF WAY WITHOUT TOWN/NCDOT APPROVAL.



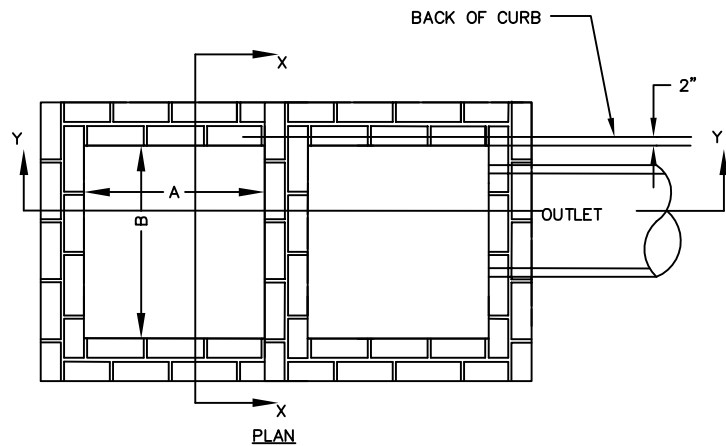
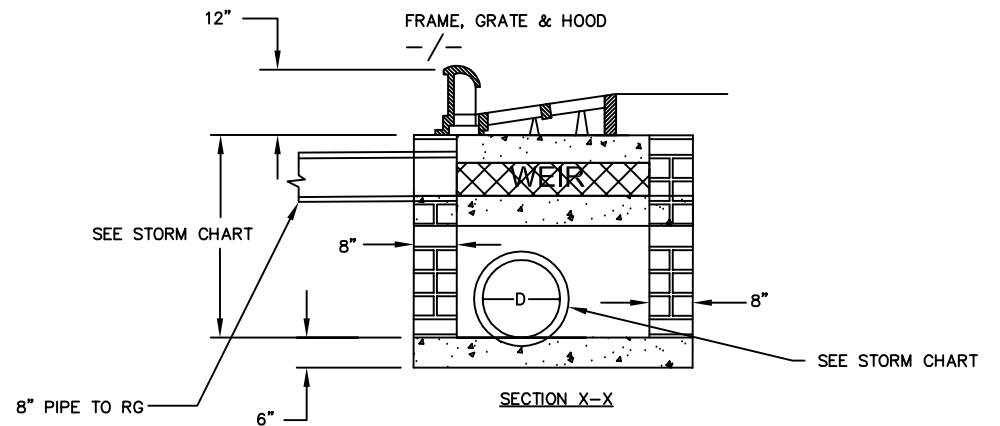
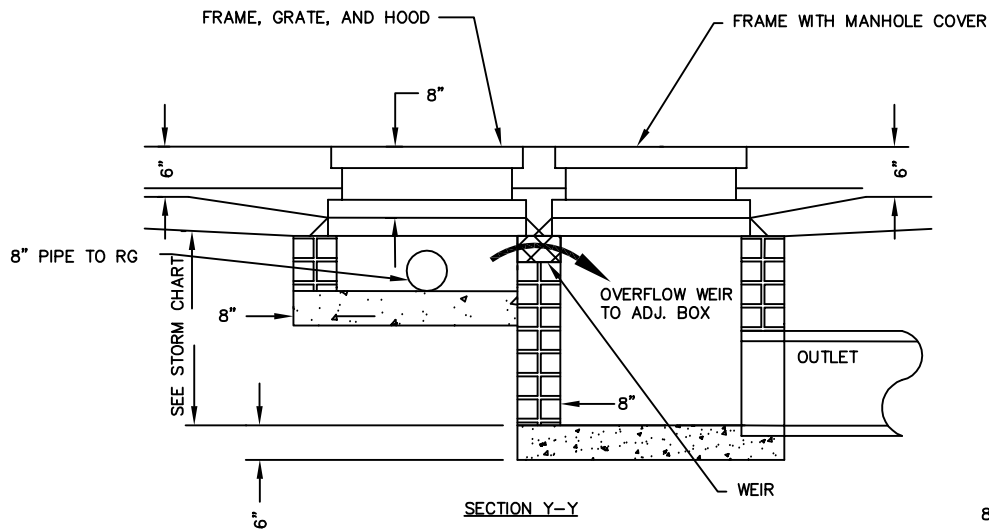
NOT TO SCALE



TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

FLOW SPLITTER STRUCTURE
BMP FIG. 4.1.11

STD. NO.	REV.
21.04	



GENERAL NOTES:

1. MORTAR JOINTS 1/2" +/- 1/8" THICK
2. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.
3. PRECAST STRUCTURES MAY BE SUBSTITUTED AFTER APPROVAL BY TOWN ENGINEER.
4. ALL CATCH BASIN OVER 3'-6" IN DEPTH SHALL BE PROVIDED WITH STEPS 1'-2" ON CENTERS.
5. CONCRETE BRICK MAY BE USED IN LIEU OF HARD COMMON CLAY BRICK.
6. JUMBO BRICK WILL BE PERMITTED.
7. FOR 8'-0" IN HEIGHT OR LESS USE 8" WALL. OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'-0".
8. FOR FRAME AND GRATE DETAIL SEE NCDOT STD. 840.03.
9. ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH THE INSIDE WALL, GROUDED AND BRUSHED SMOOTH.
10. WEEP HOLE(S) SHALL BE PLACED IN BACK WALL. A STONE DRAIN CONSISTING OF 1 (ONE) CUBIC FOOT OF NUMBER 78M STONE CONTAINED IN A BAG OF POROUS FABRIC SHALL BE PLACED AT WEEP HOLE.
11. BRICK SHALL BE BONDED WITH FULL HEADERS EVERY 3 COURSES.
12. SEE BOX DIMENSIONS ON STD. 20.04B.

NOT TO SCALE

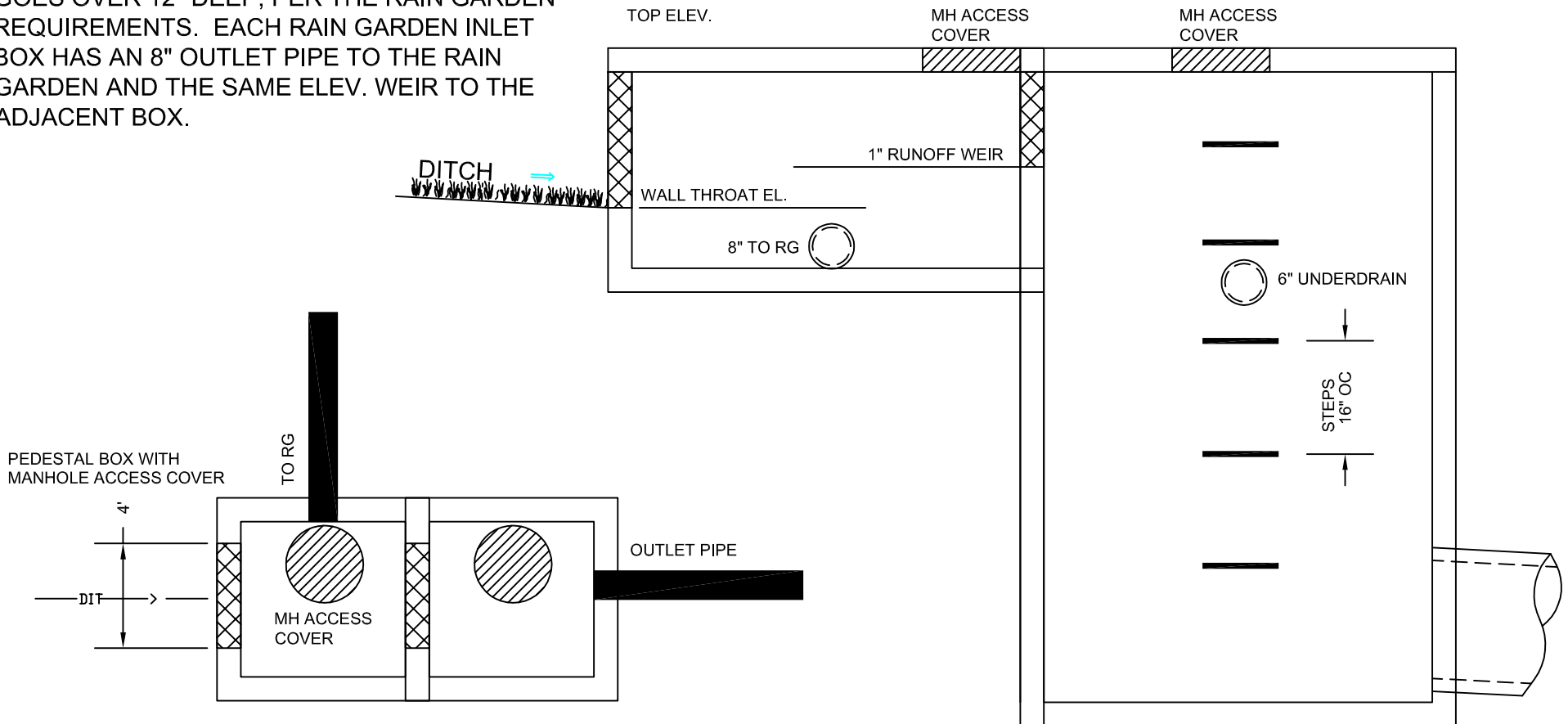


TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

ALTERNATE FLOW SPLITTER STRUCTURE

STD. NO.	REV.
21.04A	

BOX OUTLET TO RAIN GARDEN PASSES THE 1" RUNOFF TO THE RAIN GARDEN THRU THE 8" OUTLET PIPE AND THE REMAINDER OF THE FLOW FOR ALL OTHER STORMS GOES OVER THE INTERNAL WEIR INTO THE ADJACENT BOX. WATER LEVEL IN THE RAIN GARDEN AND THE CONTROL BOX ARE EQUALIZED AND NEVER GOES OVER 12" DEEP, PER THE RAIN GARDEN REQUIREMENTS. EACH RAIN GARDEN INLET BOX HAS AN 8" OUTLET PIPE TO THE RAIN GARDEN AND THE SAME ELEV. WEIR TO THE ADJACENT BOX.



NOT TO SCALE



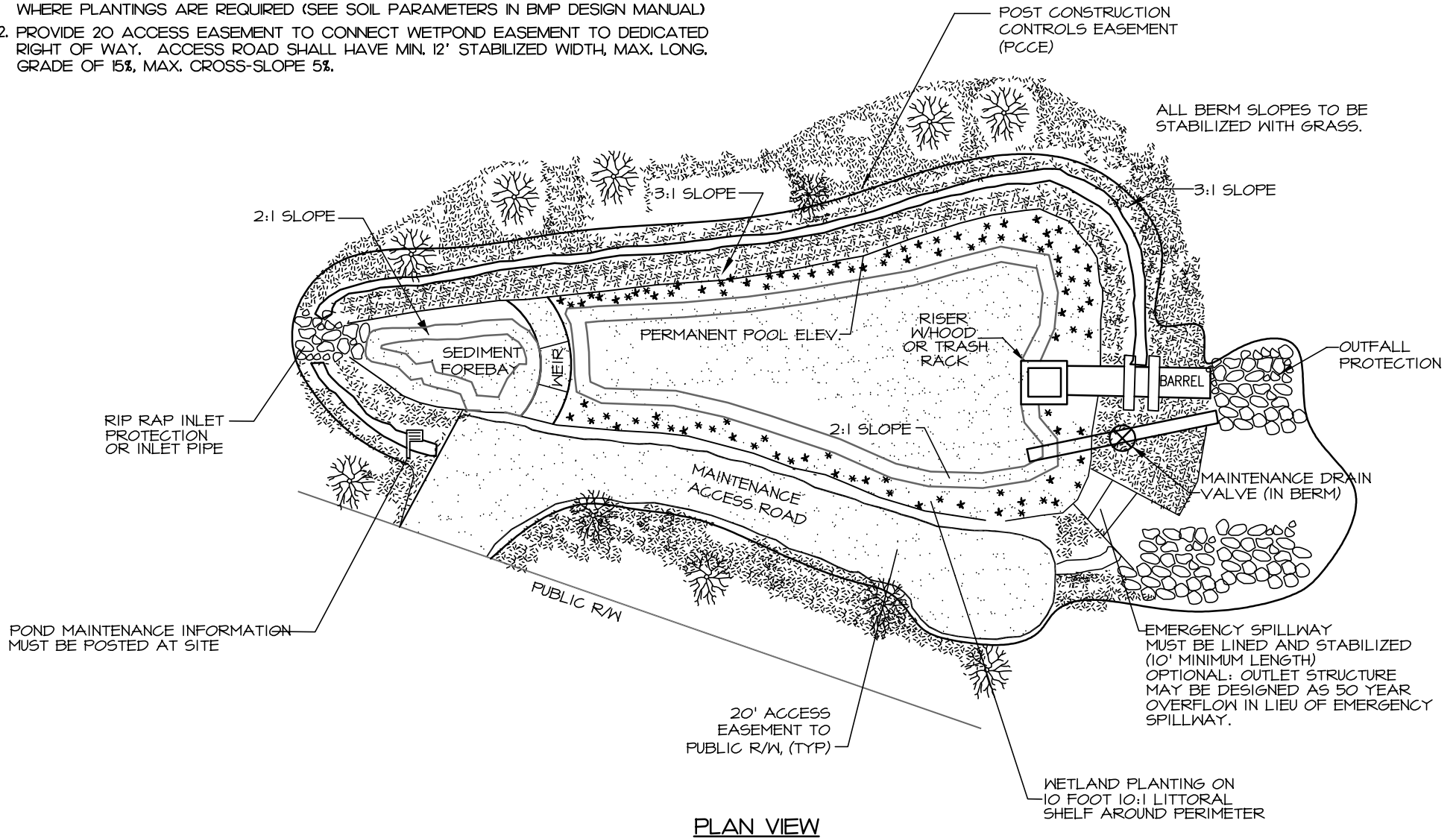
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

ALTERNATE FLOW SPLITTER STRUCTURE

STD. NO.	REV.
21.04B	

NOTES

1. 4-6 INCH LAYER OF AMENDED SOIL IS RECOMMENDED ON LITTORAL SHELF AREA WHERE PLANTINGS ARE REQUIRED (SEE SOIL PARAMETERS IN BMP DESIGN MANUAL)
2. PROVIDE 20' ACCESS EASEMENT TO CONNECT WETPOND EASEMENT TO DEDICATED RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.



PLAN VIEW

NOT TO SCALE



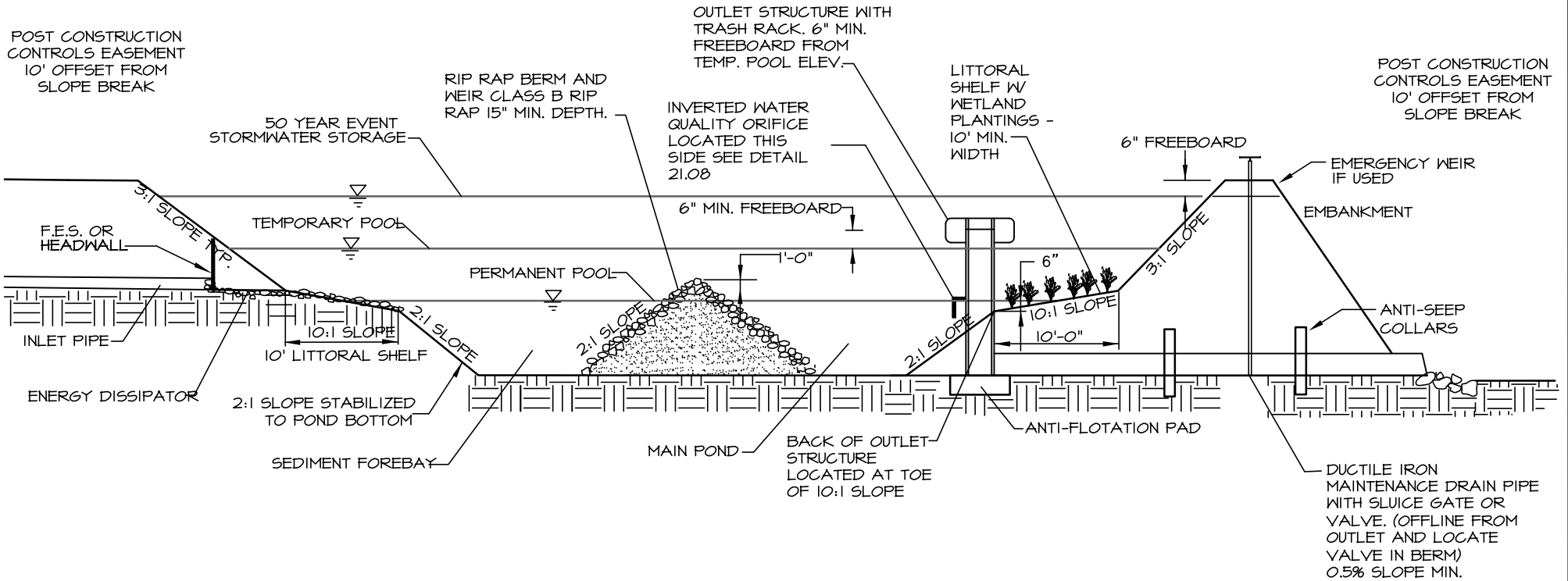
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**WETPOND PLAN
BMP FIG. 4.2.2**

STD. NO.	REV.
21.05	

NOTES:

1. 4-6 INCH LAYER OF AMENDED SOIL IS RECOMMENDED IN ANY AREA WHERE PLANTINGS ARE REQUIRED (SEE BMP DESIGN MANUAL).



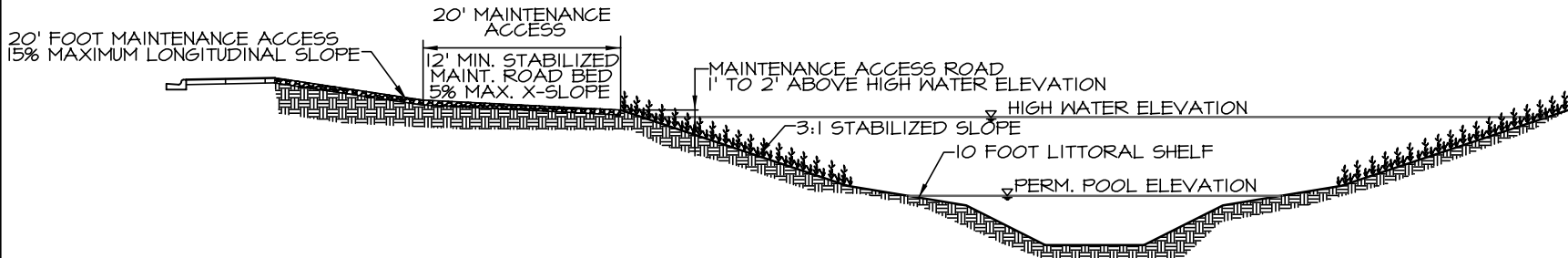
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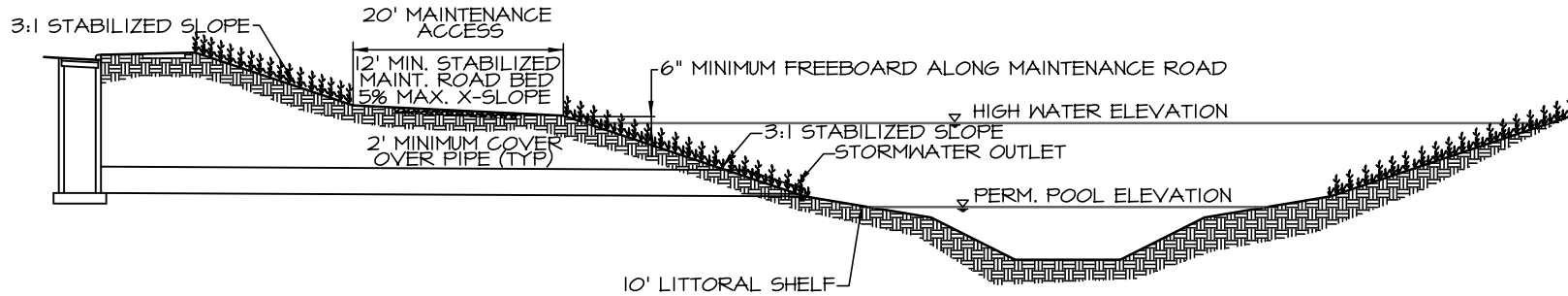
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**WETPOND PROFILE
BMP FIG. 4.2.2**

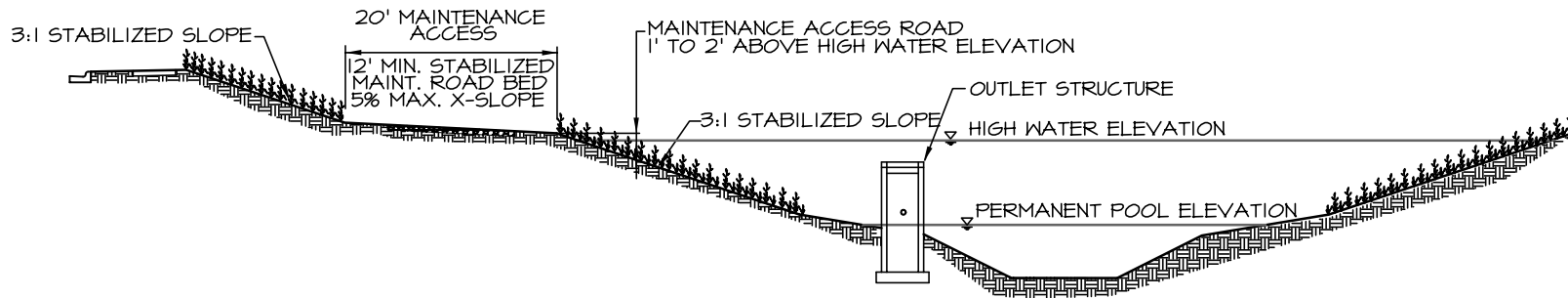
STD. NO.	REV.
21.06	



SECTION AT MAINTENANCE ROAD ACCESS AND FOREBAY



SECTION AT STORMWATER OUTFALL



SECTION AT OUTLET STRUCTURE

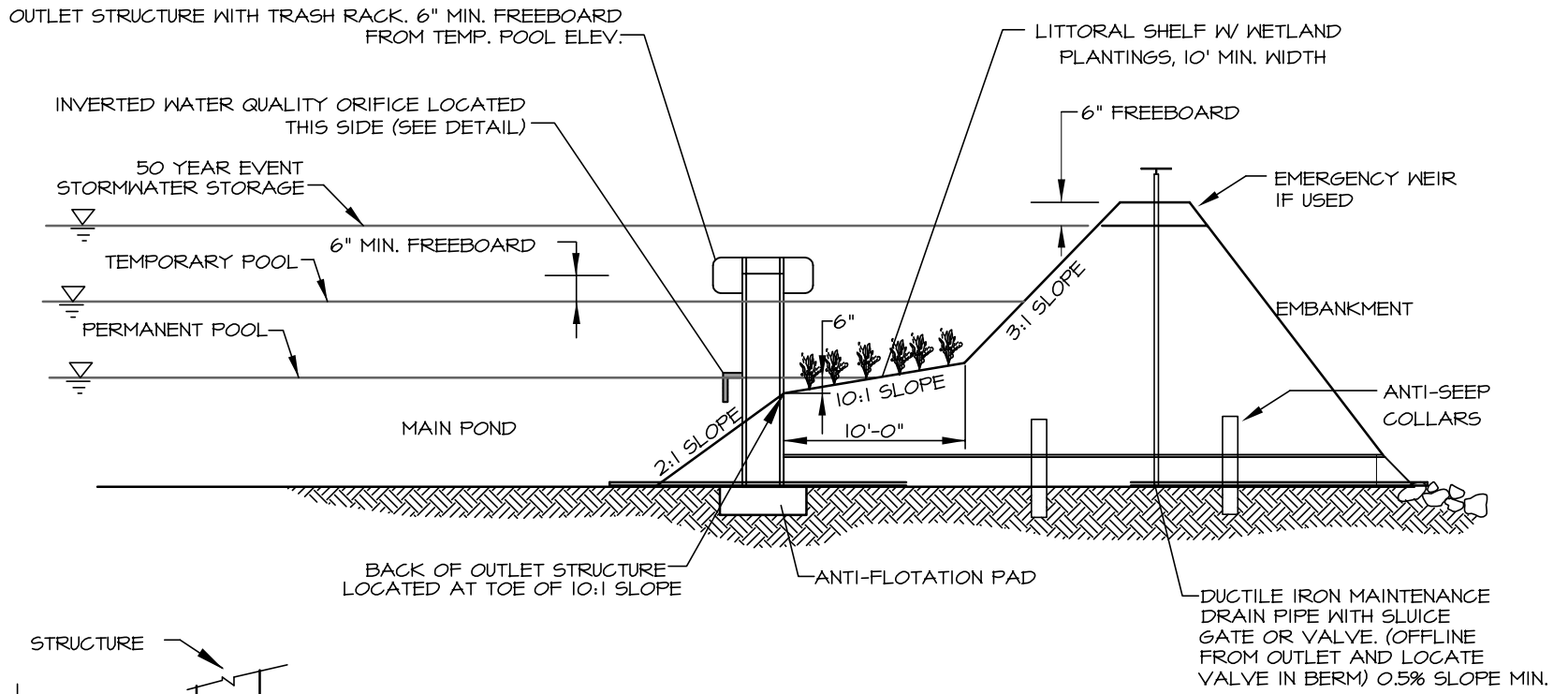
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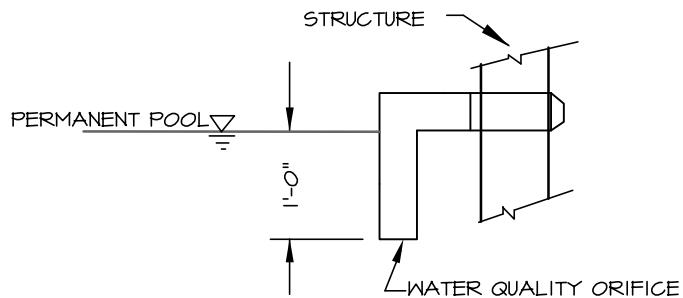
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

WETPOND CROSS SECTIONS
BMP FIG. 4.2.3

STD. NO.	REV.
21.07	



POND PROFILE



WATER QUALITY ORIFICE DETAIL

NOT TO SCALE



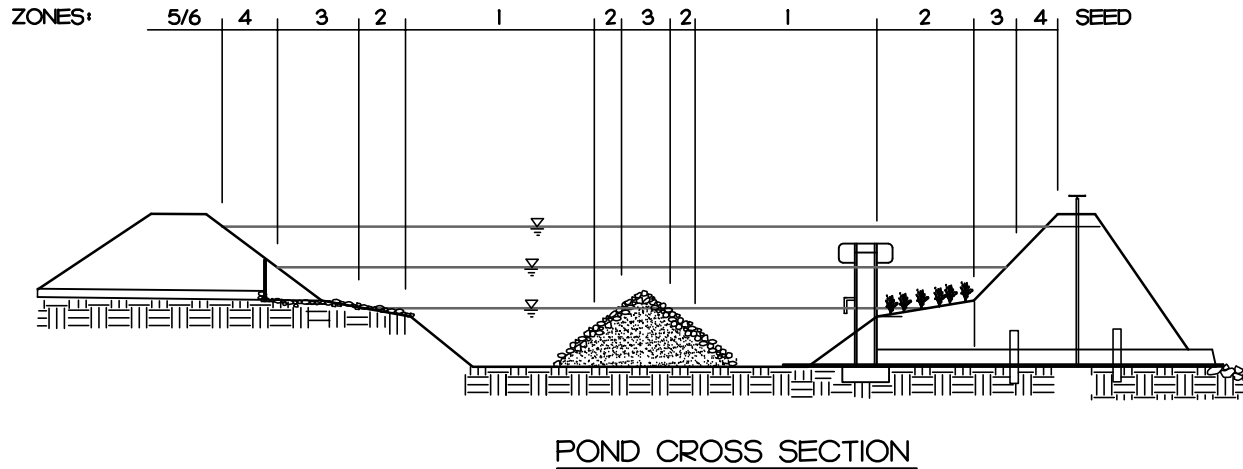
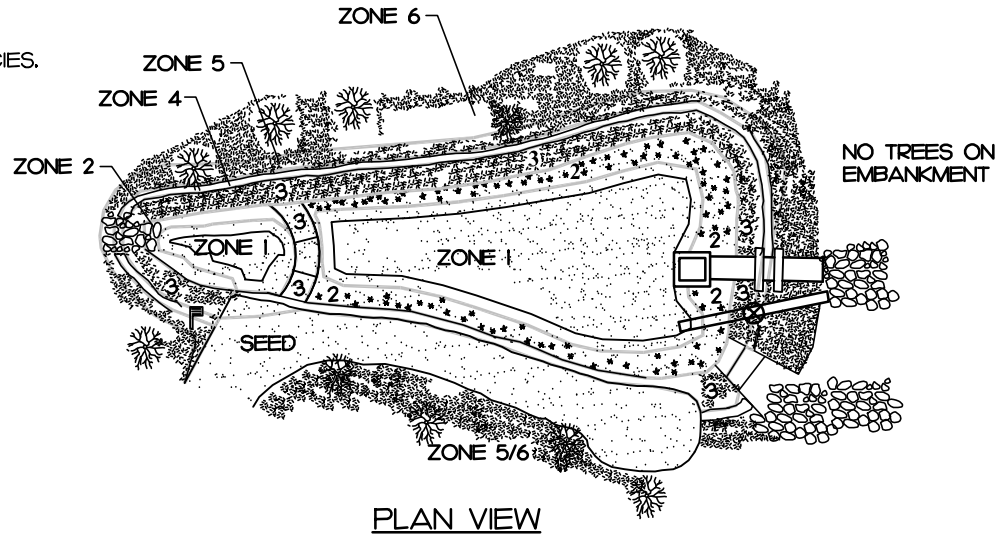
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

WETPOND
LITTORAL SHELF AND BERM DETAIL
BMP FIG. 4.2.4

STD. NO.	REV.
21.08	

NOTES:

1. PLANTINGS ZONES AND PLANT SELECTION PER THE BMP DESIGN MANUAL
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



NOT TO SCALE



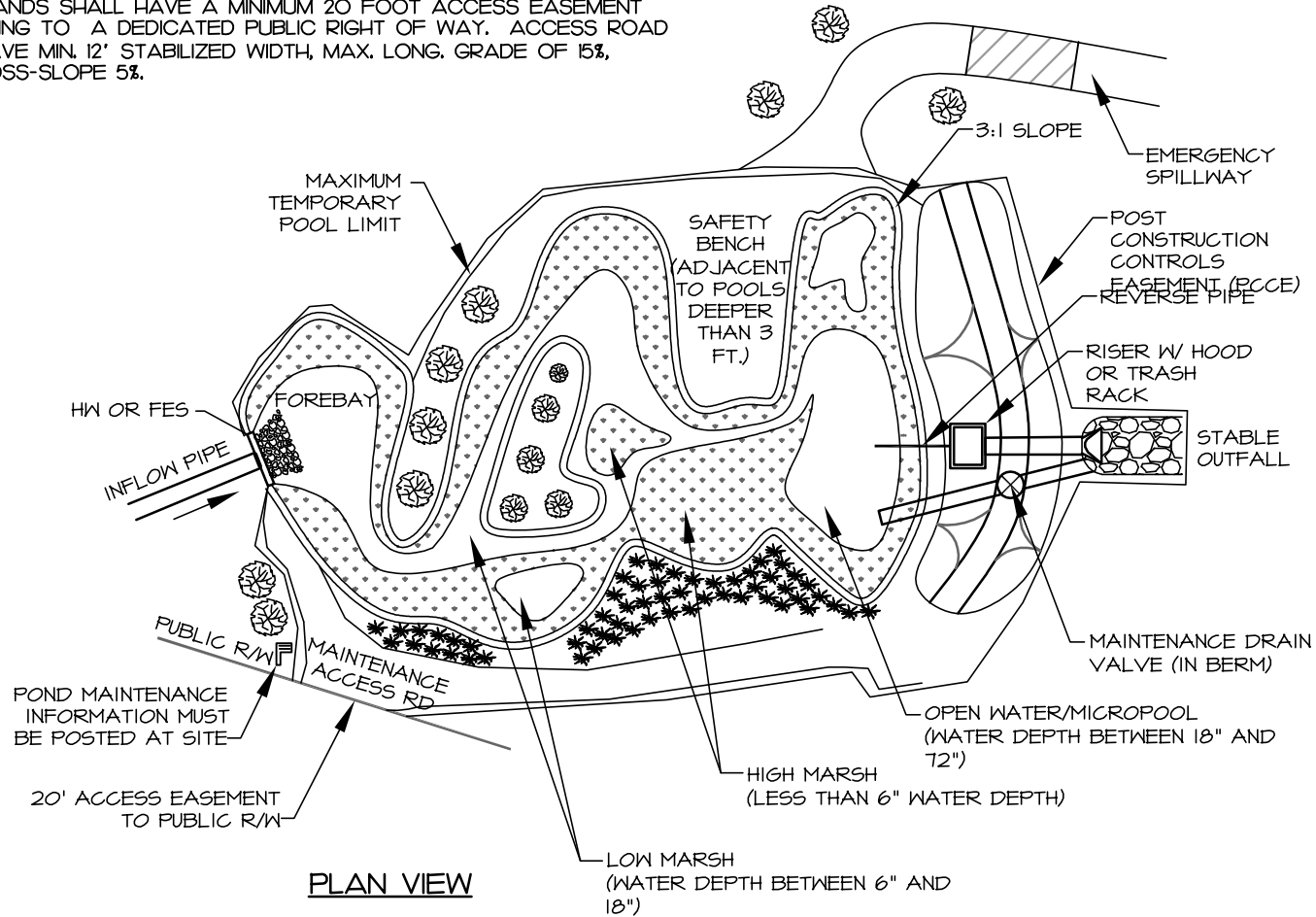
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

WETPOND
PLANTING PLAN
BMP FIG. 4.2.5

STD. NO.	REV.
21.09	

NOTES

1. 4-6 INCH LAYER OF AMENDED SOIL IS REQUIRED ON ANY MARSH AREA WHERE PLANTINGS ARE REQUIRED (SEE SOIL PARAMETERS IN BMP DESIGN MANUAL)
2. PROVIDE 20' ACCESS EASEMENT TO CONNECT WETLAND EASEMENT TO DEDICATED RIGHT OF WAY.
3. ALL WETLANDS SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.



PLAN VIEW

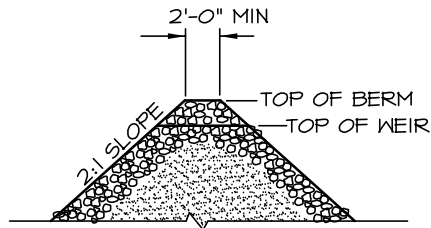
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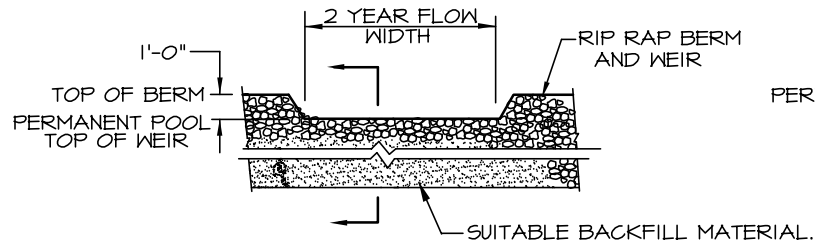
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**WETLAND PLAN
BMP FIG. 4.3.2**

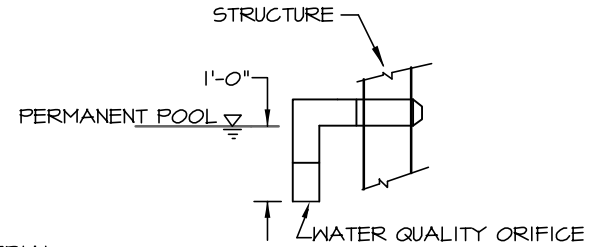
STD. NO.	REV.
21.10	



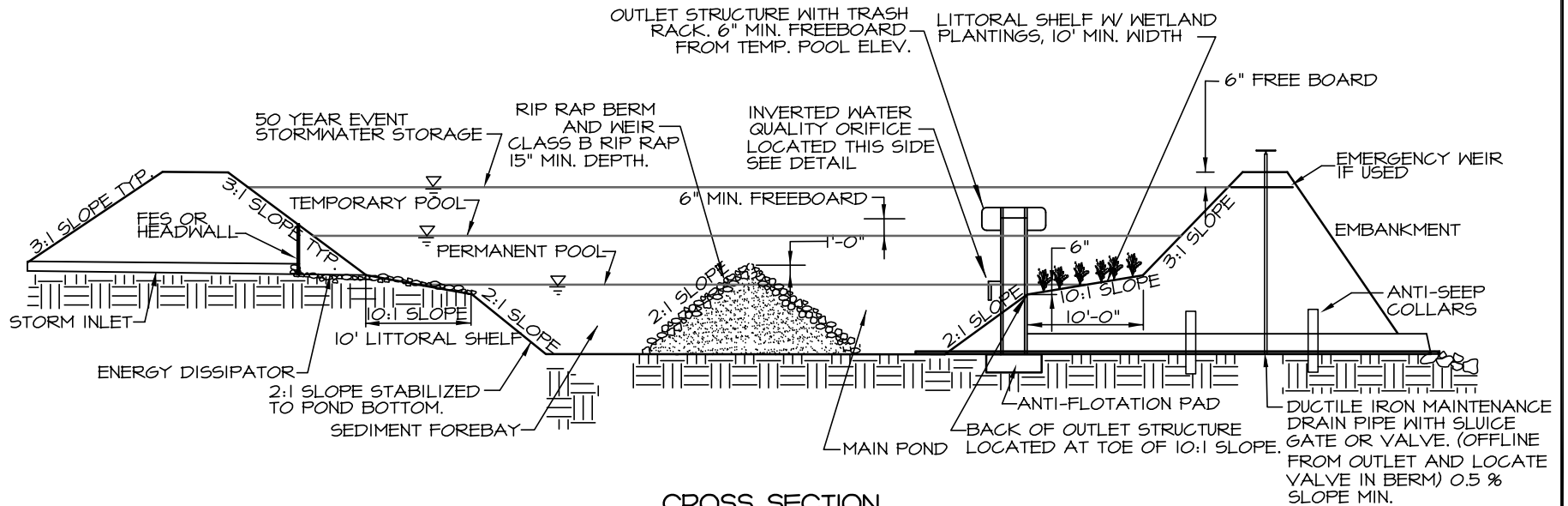
BERM AND WEIR SECTION



BERM AND WEIR DETAIL



WATER QUALITY ORIFICE DETAIL



CROSS SECTION

NOT TO SCALE



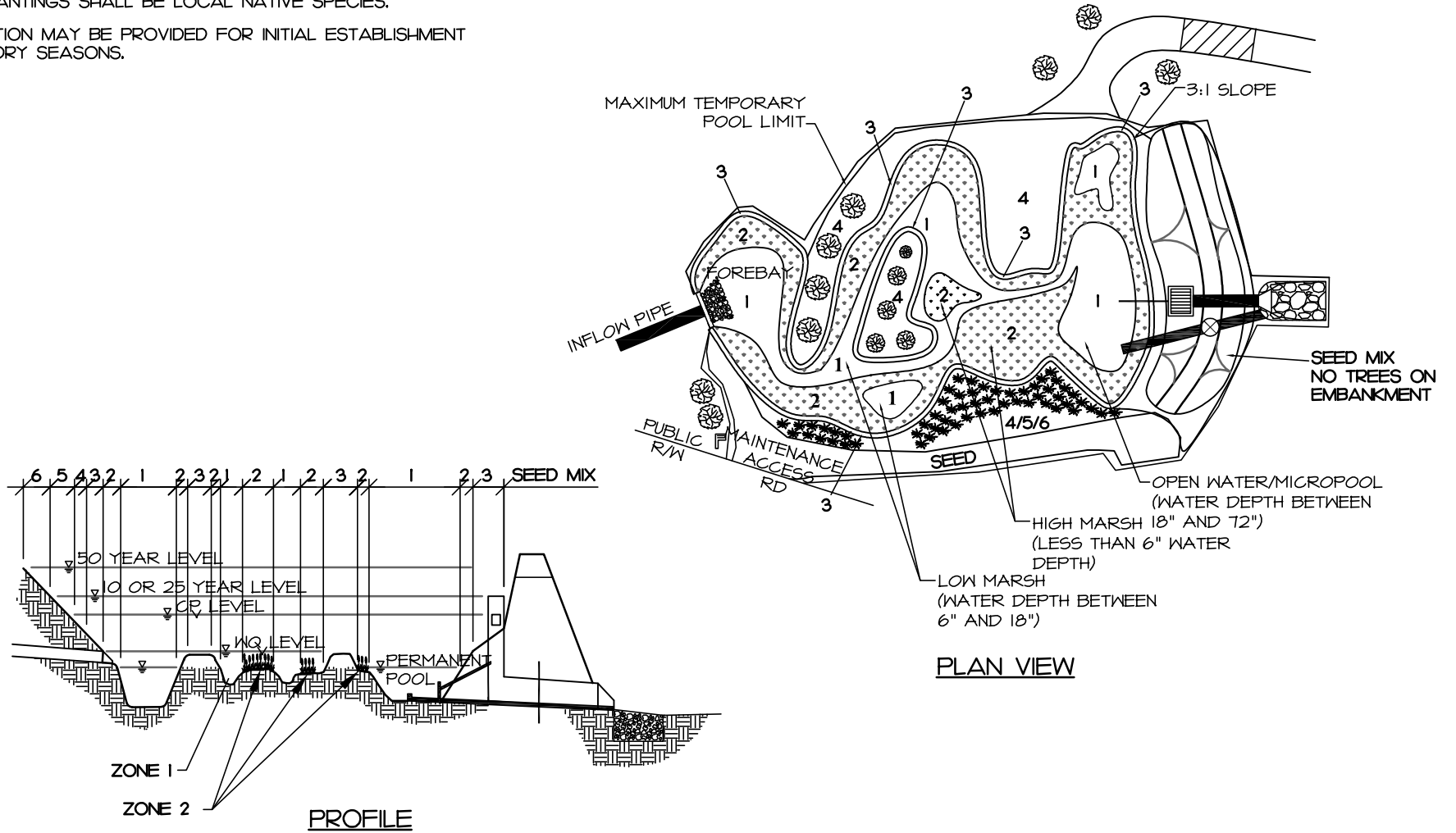
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**WETLAND DETAILS
BMP FIG. 4.3.4**

STD. NO.	REV.
21.13	

NOTES

1. PLANTINGS ZONES AND PLANT SELECTION PER THE BMP DESIGN MANUAL
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



NOT TO SCALE



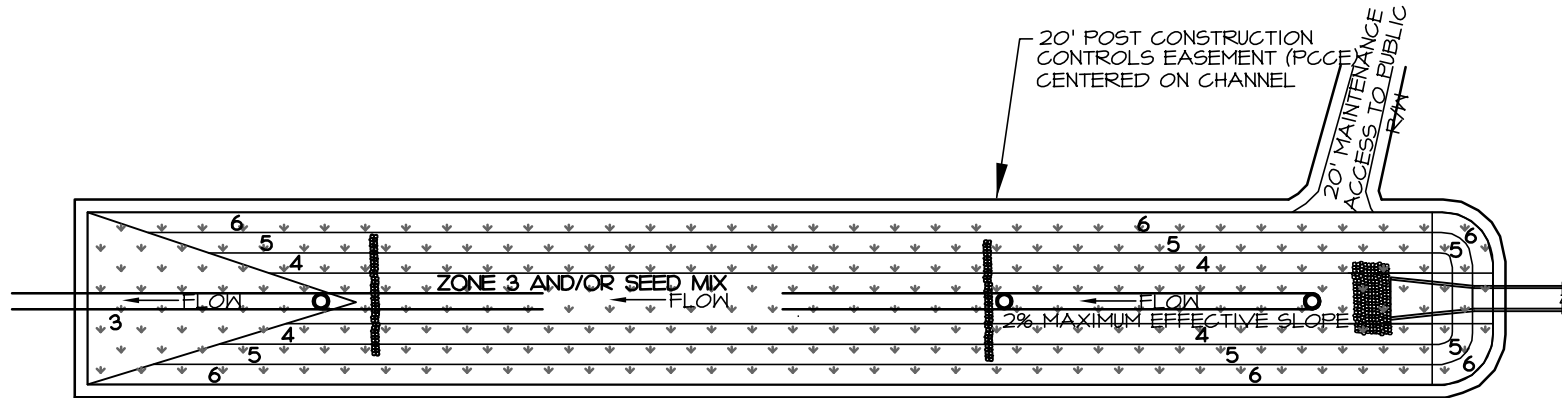
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

WETLAND
PLANTING PLAN
BMP FIG. 4.3.5

STD. NO.	REV.
21.14	

NOTES:

1. PLANTING ZONES AND PLANT SELECTION PER THE BMP DESIGN MANUAL,
2. ALL PLANTINGS SHALL BE LOCAL NATIVE SPECIES.
3. IRRIGATION MAY BE PROVIDED FOR INITIAL ESTABLISHMENT AND DRY SEASONS.



PLAN VIEW

NOT TO SCALE



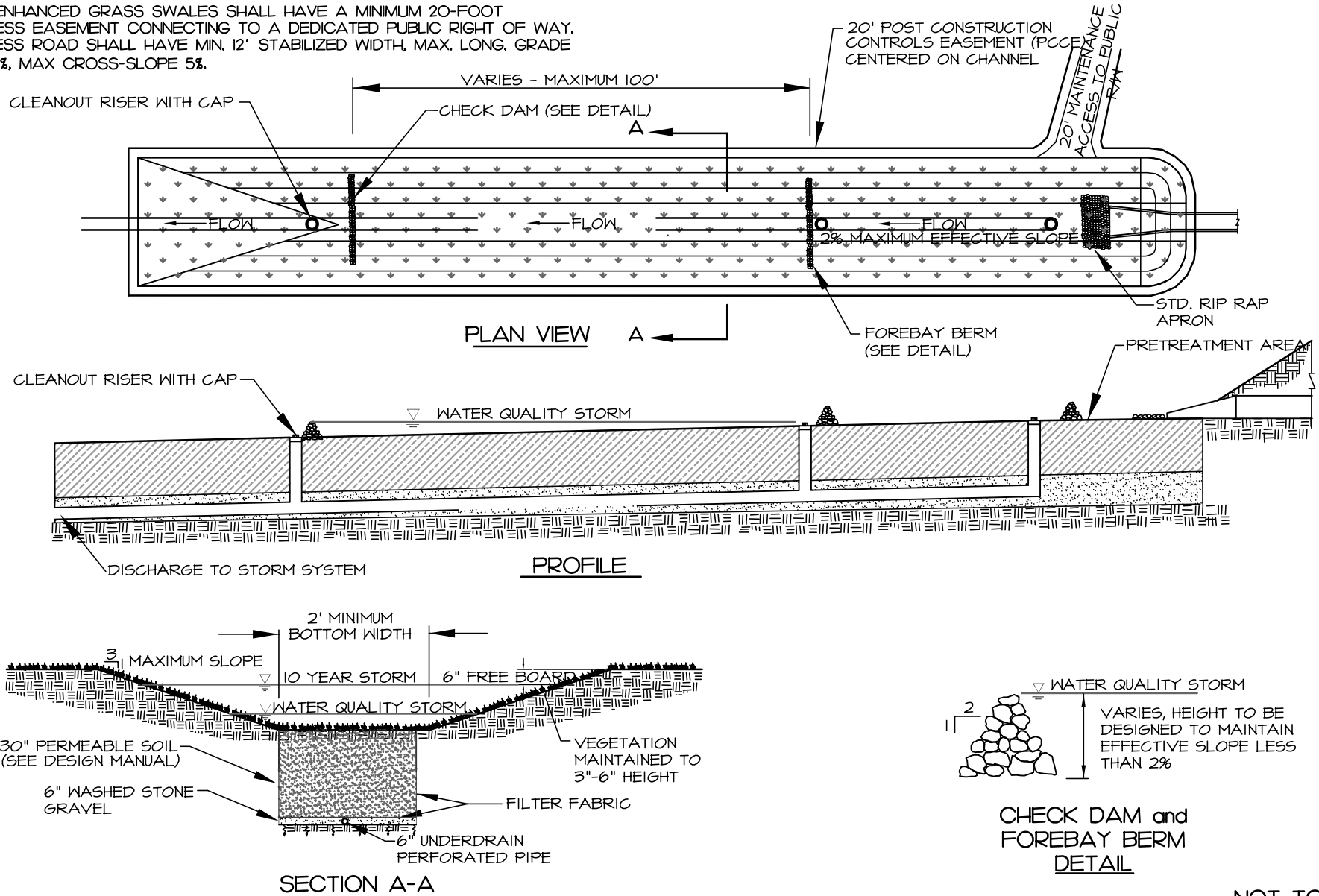
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**ENHANCED GRASS SWALE
PLANTING PLAN
BMP FIG. 4.4.3**

STD. NO.	REV.
21.15	

NOTES:

- ALL ENHANCED GRASS SWALES SHALL HAVE A MINIMUM 20-FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX CROSS-SLOPE 5%.



NOT TO SCALE



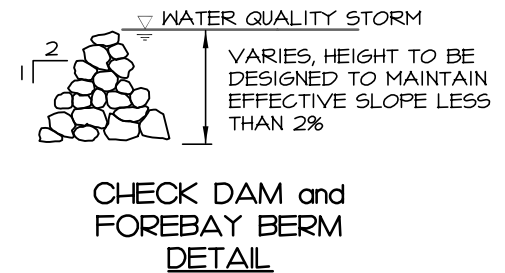
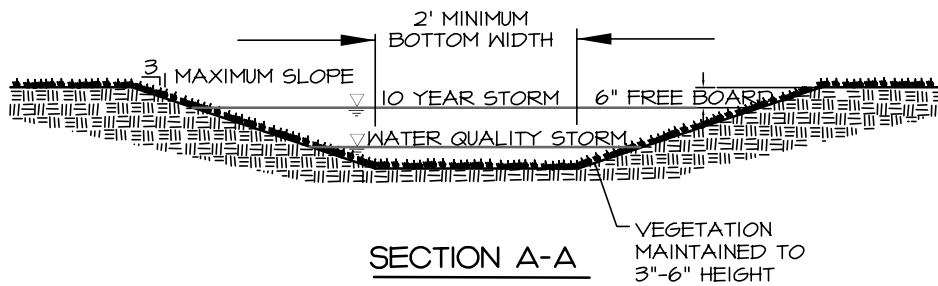
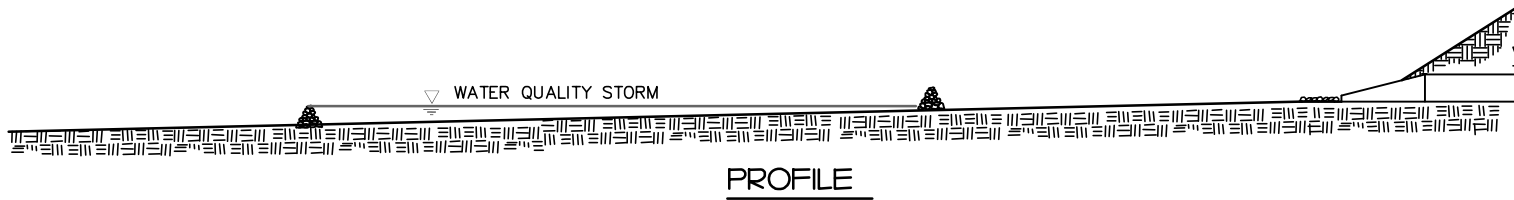
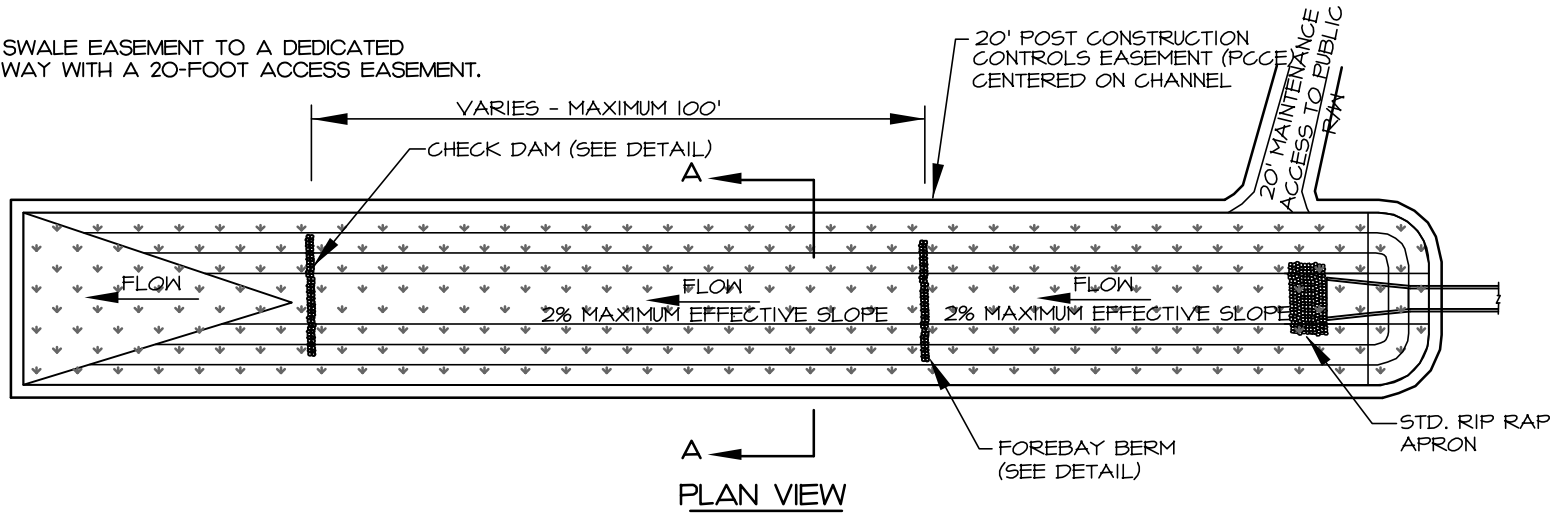
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

ENHANCED GRASS SWALE DETAILS
BMP FIG. 4.4.5

STD. NO.	REV.
21.16	

NOTES:

- 1. CONNECT GRASS SWALE EASEMENT TO A DEDICATED PUBLIC RIGHT OF WAY WITH A 20-FOOT ACCESS EASEMENT.



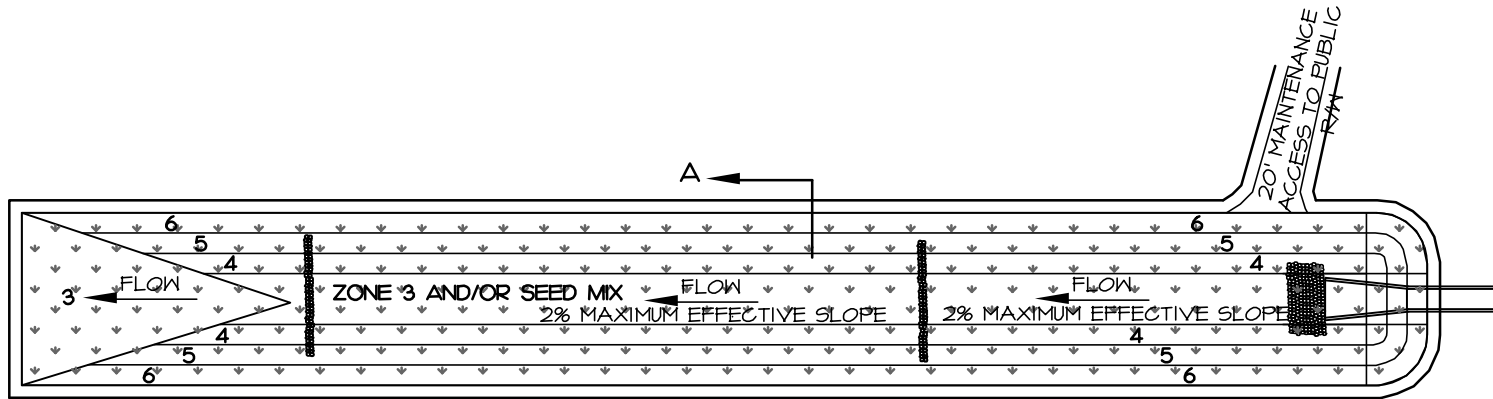
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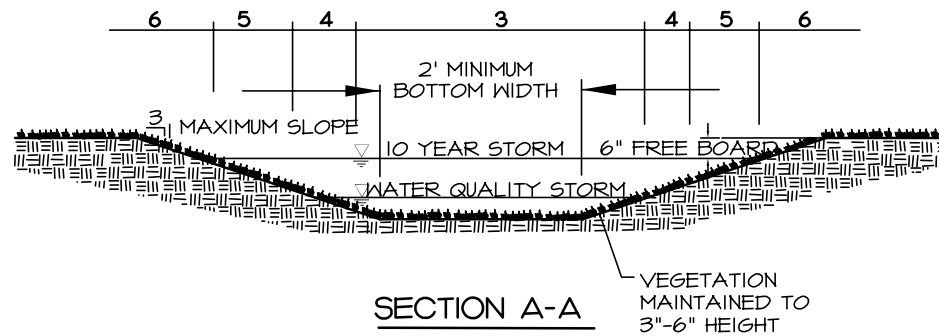
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

GRASS CHANNEL
BMP FIG. 4.5.2

STD. NO.	REV.
21.17	



A ←
PLAN VIEW



A ←
SECTION A-A

NOT TO SCALE



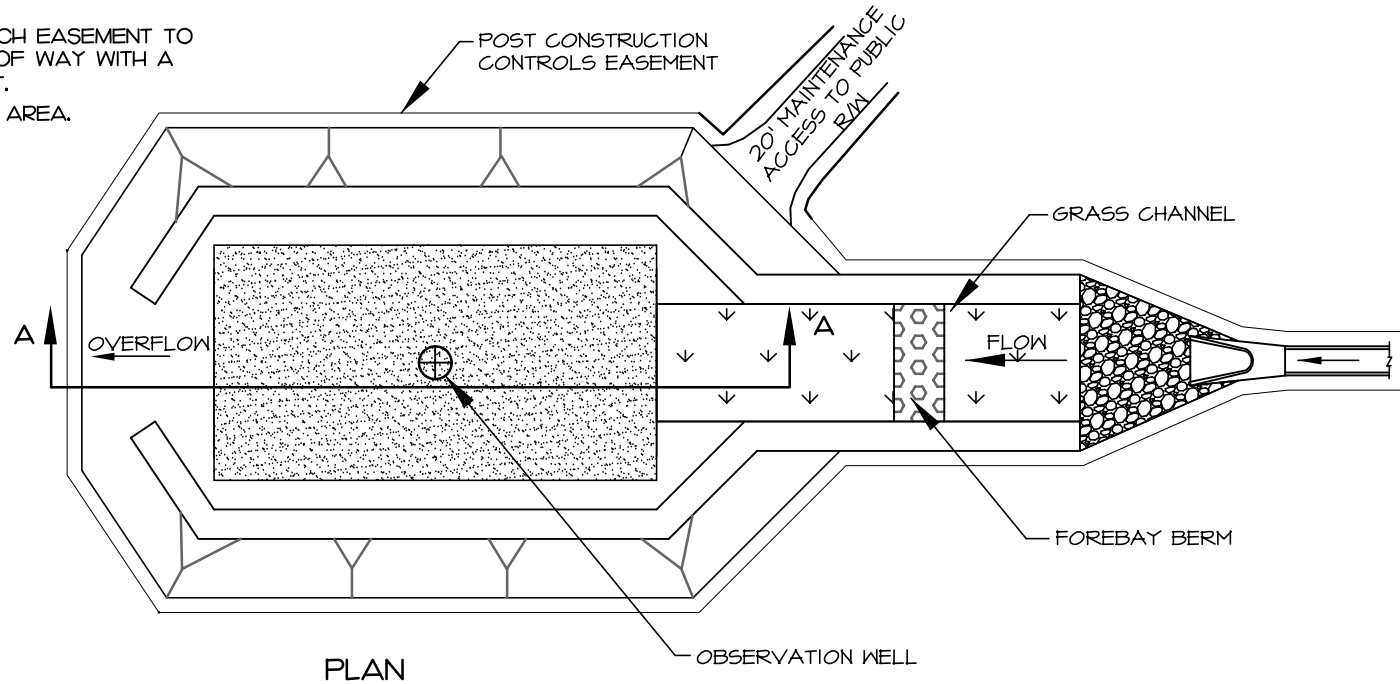
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

GRASS CHANNEL
PLANTING PLAN
BMP FIG. 4.5.3

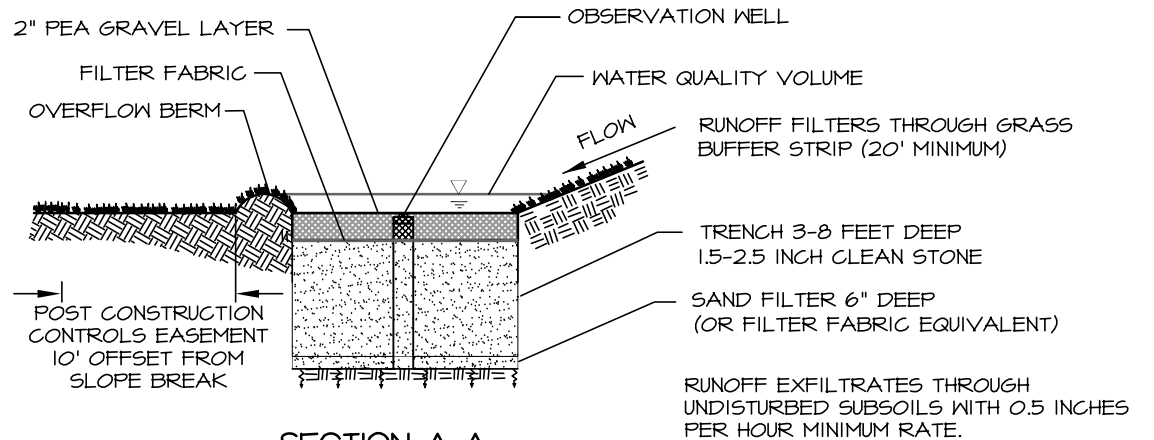
STD. NO.	REV.
21.18	

NOTES :

1. CONNECT INFILTRATION TRENCH EASEMENT TO A DEDICATED PUBLIC RIGHT OF WAY WITH A 20-FOOT ACCESS EASEMENT.
2. 5 ACRE MAXIMUM DRAINAGE AREA.



PLAN



SECTION A-A

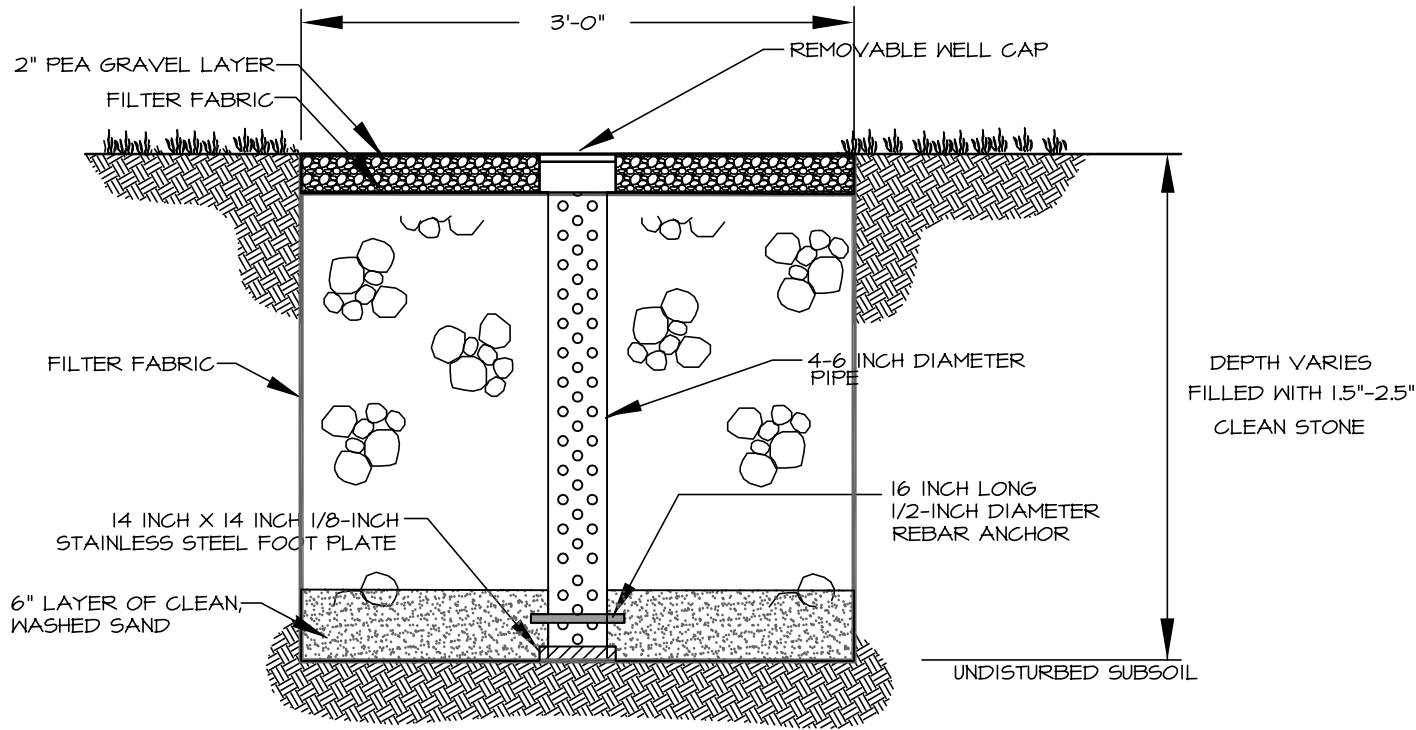
NOT TO SCALE



**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

**INFILTRATION TRENCH
BMP FIG. 4.6.2**

STD. NO.	REV.
21.19	



PERFORATION HOLES TO BE 1/2 INCH DIAMETER AT 3 INCH MINIMUM VERTICAL SPACING

NOT TO SCALE



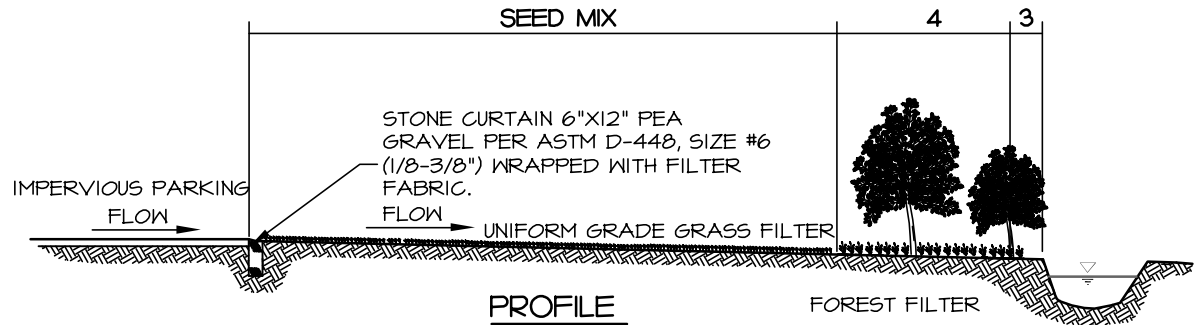
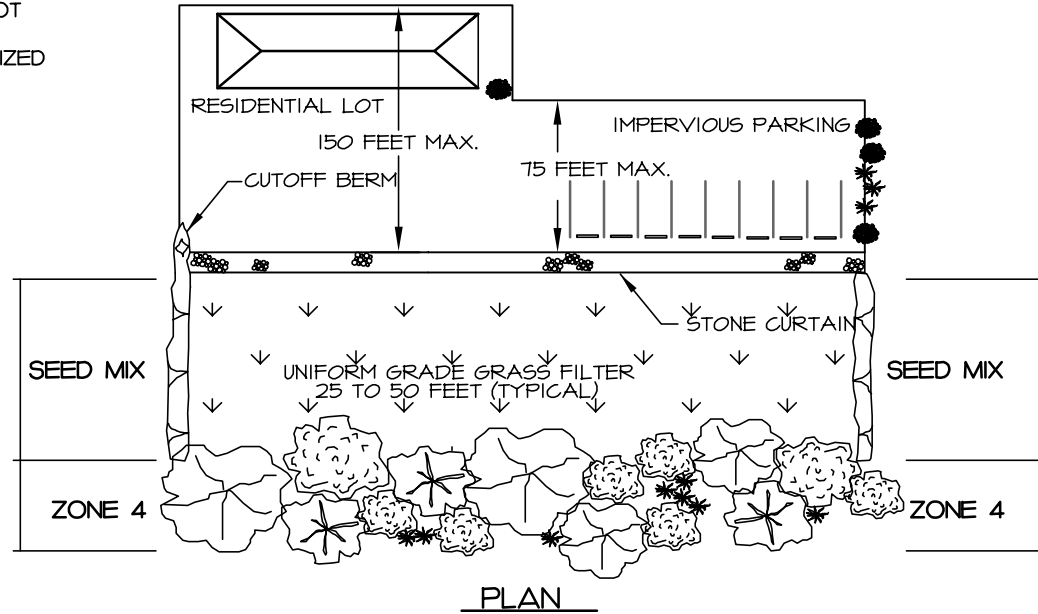
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

OBSERVATION WELL
BMP FIG. 4.6.3

STD. NO.	REV.
21.20	

NOTES

1. MAXIMUM SLOPE 2% FOR FILTER STRIP AND 5% FOR BUFFER STRIP.
2. 5 ACRE MAXIMUM DRAINAGE AREA.
3. ALL FILTER/BUFFER STRIPS SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%.



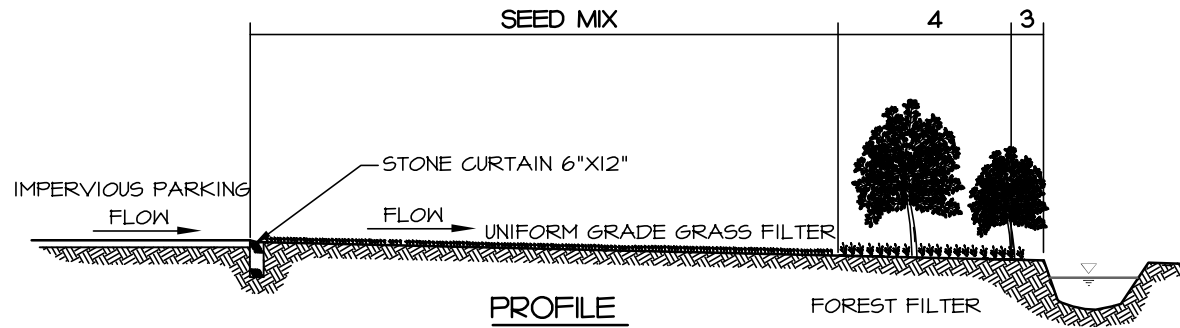
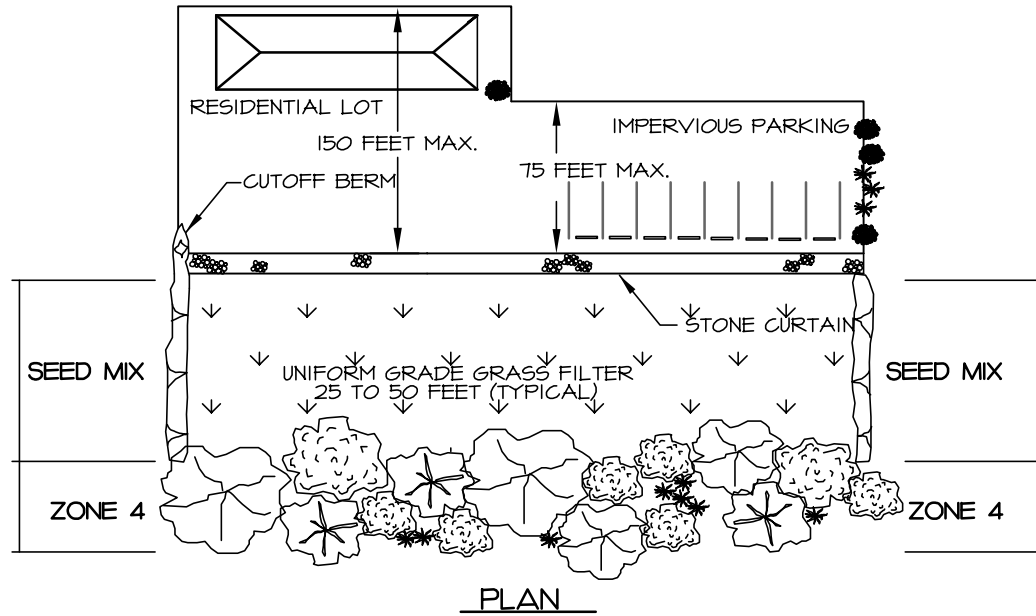
NOT TO SCALE



TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

BUFFER STRIP
BMP FIG. 4.7.3

STD. NO.	REV.
21.21	



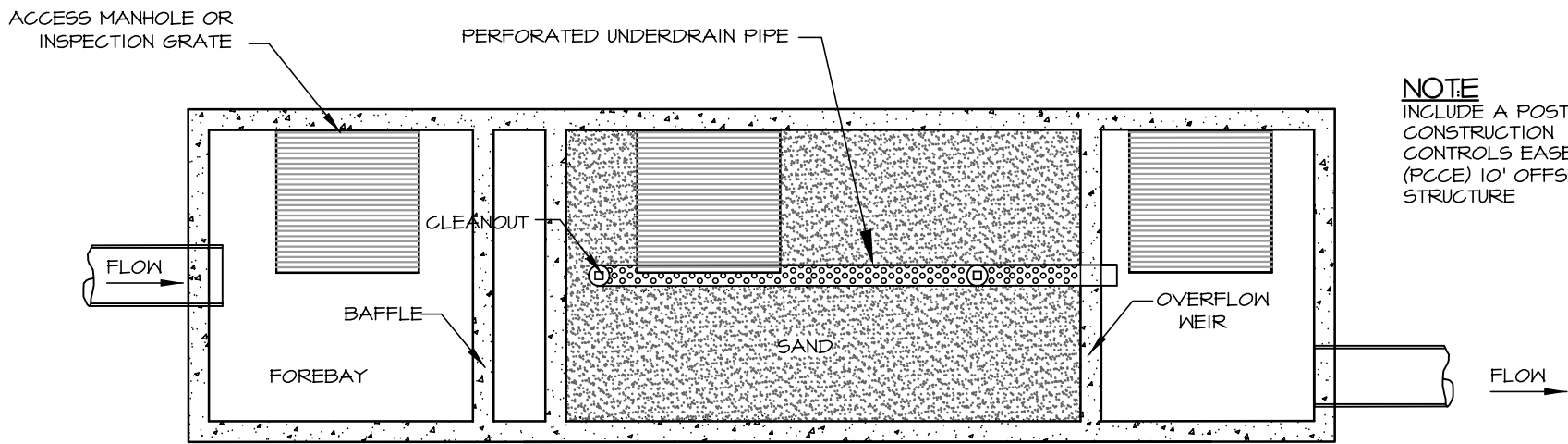
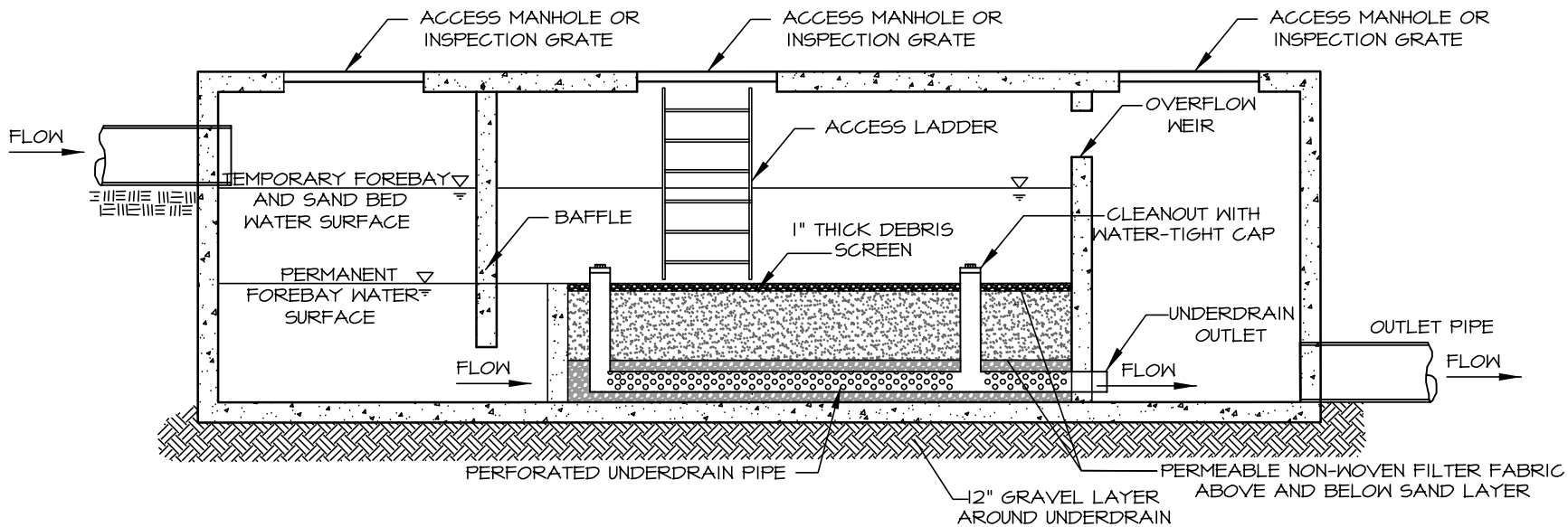
NOT TO SCALE



TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

**BUFFER STRIP
PLANTING PLAN
BMP FIG. 4.7.4**

STD. NO.	REV.
21.22	



NOTE
 INCLUDE A POST
 CONSTRUCTION
 CONTROLS EASEMENT
 (PCC) 10' OFFSET FROM
 STRUCTURE

NOT TO SCALE



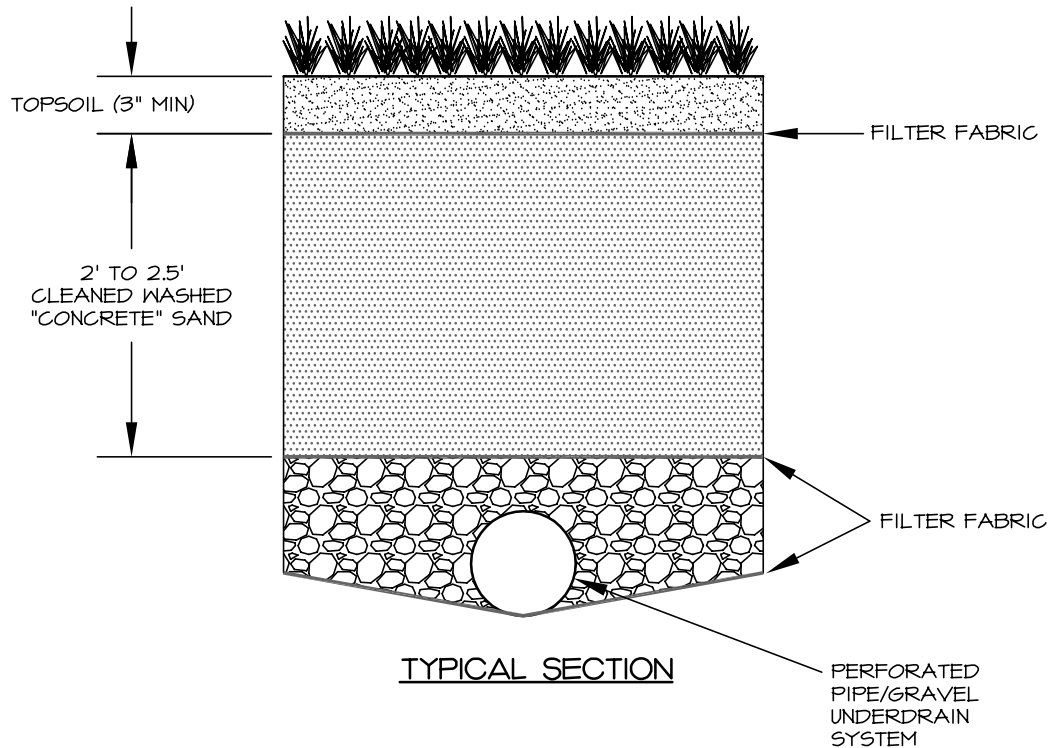
TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

UNDERGROUND SAND FILTER

STD. NO.	REV.
21.23	

NOTES:

1. "CONCRETE" SAND REFERS TO SAND THAT IS COMMONLY USED IN CONCRETE MIXES.
2. ALL DRAINAGE AREAS TO A SAND FILTER FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF SAND.
3. UNDERDRAIN PIPES SHOULD BE MIN. 6" PERFORATED SCHEDULE 40 PVC (PER AASHTO M278) OR DOUBLE WALL HDPE (PER AASHTO M252). PERFORATIONS SHOULD BE 3/8" SPACED 3" ON CENTER ALONG 4 LONGITUDINAL ROWS SPACED 90° APART.



NOT TO SCALE



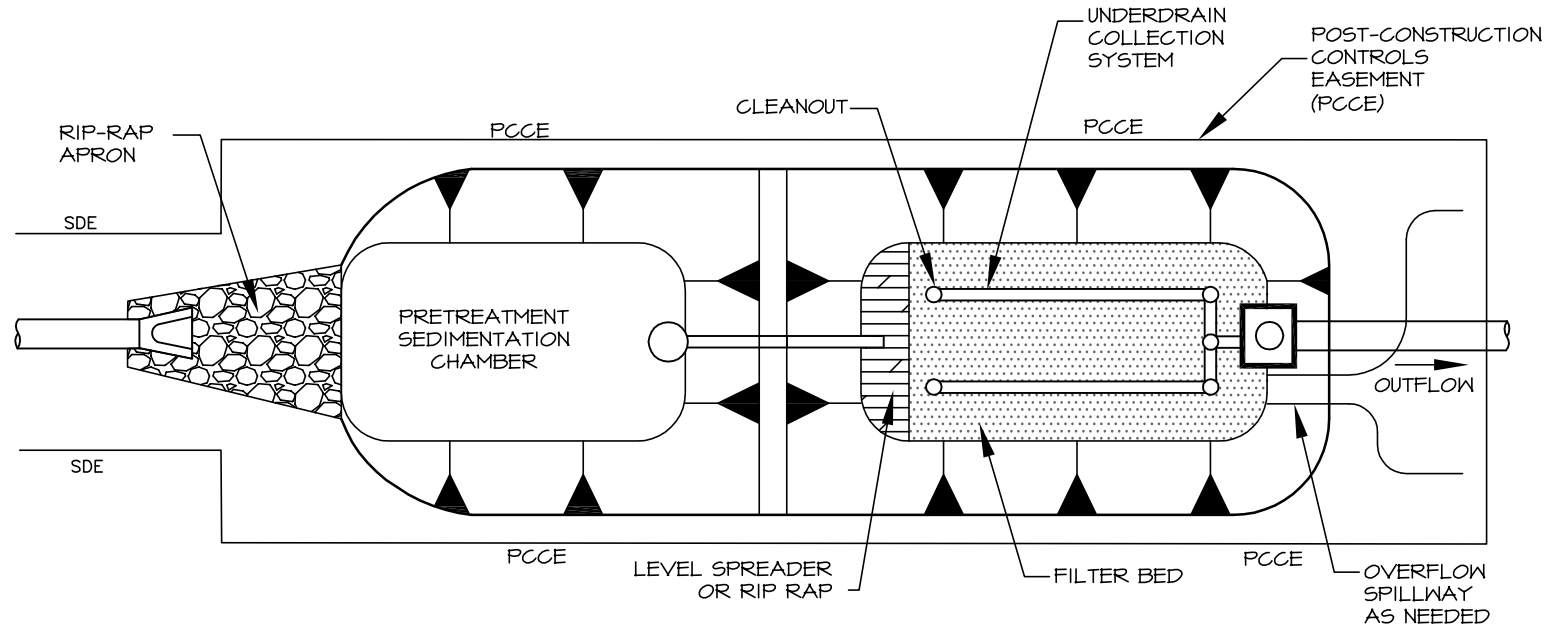
**TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS**

SURFACE SAND FILTER SECTION

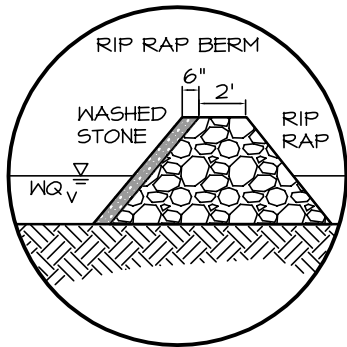
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NOTES:

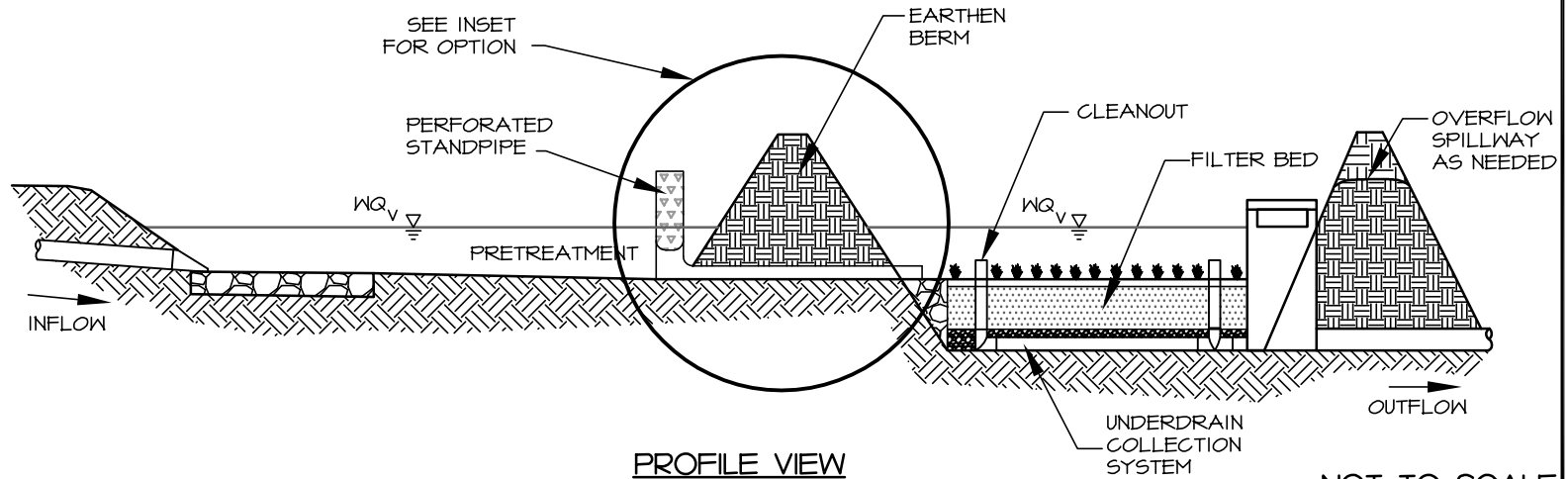
1. ALL SAND FILTERS SHALL HAVE A MINIMUM 20 FOOT ACCESS EASEMENT CONNECTING TO A DEDICATED PUBLIC RIGHT OF WAY. ACCESS ROAD SHALL HAVE MIN. 12' STABILIZED WIDTH, MAX. LONG. GRADE OF 15%, MAX. CROSS-SLOPE 5%. IN ADDITION, A 10-FOOT WIDE PERMANENT MAINTENANCE ACCESS EASEMENT MUST BE PROVIDED AROUND THE PERIMETER OF ALL BMPs TO ALLOW FOR ADEQUATE MAINTENANCE AND REPAIR.
2. ALL DRAINAGE AREAS TO A SAND FILTER FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF SAND.
3. CLEAN OUTS IN THE UNDERDRAIN SYSTEM ARE TO BE PROVIDED EVERY 50' MINIMUM. CLEAN OUTS SHALL HAVE WATER TIGHT, VANDAL PROOF CAPS AND EXTEND 6" ABOVE THE SURFACE.



PLAN VIEW



INSET



PROFILE VIEW

NOT TO SCALE



TOWN OF STALLINGS
LAND DEVELOPMENT STANDARDS

SURFACE SAND FILTER

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