CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS
STANDARD DRAWINGS

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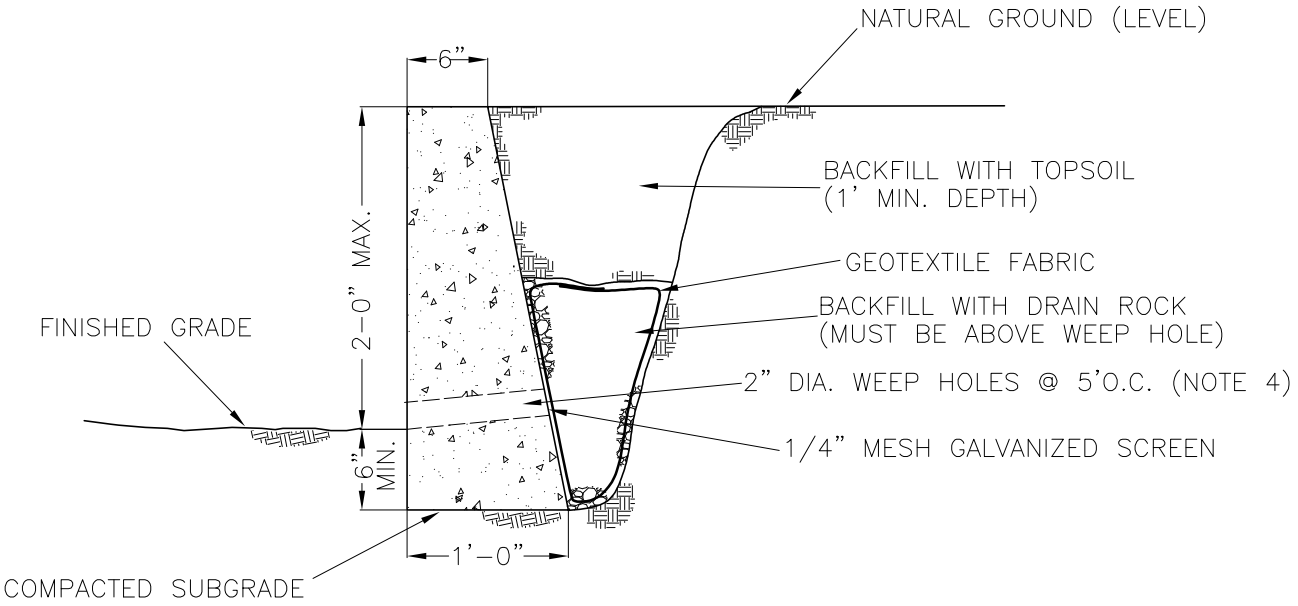


DESIGN NOTES

LEVEL BACKFILL
γ = 100 P.C.F.
Kγ = E.F.W.=40 P.C.F.
f'c = 3000 P.S.I. CONC.

CONSTRUCTION NOTES

1. CONTRACTION JOINT: SCORE A 3/4" DEEP "V" NOTCHED GROOVE THE FULL HEIGHT OF THE EXPOSED FACE, ACROSS THE TOP, AND 6" DOWN THE BACK OF THE WALL. INSTALL "TEE BAR" CONTRACTION JOINTS TO SEPARATE THE LARGE AGGREGATE IN THE TOP 6" OF THE WALL AT THE "V" NOTCHED GROOVE. JOINTS SHALL BE UNIFORMLY SPACED AT 10' TO 15' CENTERS.
2. CONSTRUCTION JOINT: IF WALL IS TO BE POURED IN SECTIONS, USE 2-24", NO.4 REINFORCING BARS EXTENDED 12" INTO EACH SECTION.
3. WHEN EXPOSED WALL HEIGHT IS LESS THAN 2 FEET MAINTAIN 6" TOP DIMENSION AND REDUCE BASE DIMENSION TO MAINTAIN 1:5 BATTER ON BACK OF WALL.
4. AS ALTERNATE TO WEEPHOLES, USE CONTINUOUS 3-INCH DIA. PERFORATED PIPE WITH OUTLET TO APPROVED POINT OF DISPOSAL.

Approved Karl O. Houston City Engineer 1-7-00 Date

No.	Description	Date	By	Appr
3	REVISED FABRIC	1-00	I.D.F.	
2	ADDED GEOTEXTILE FABRIC AND			
1	PERF. PIPE ALTERNATE	3/99		

REVISION

CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
RETAINING WALL
HEIGHT OF WALL 2'-0" or LESS

DRAWN BY GS & SP
CHECKED BY D.W.

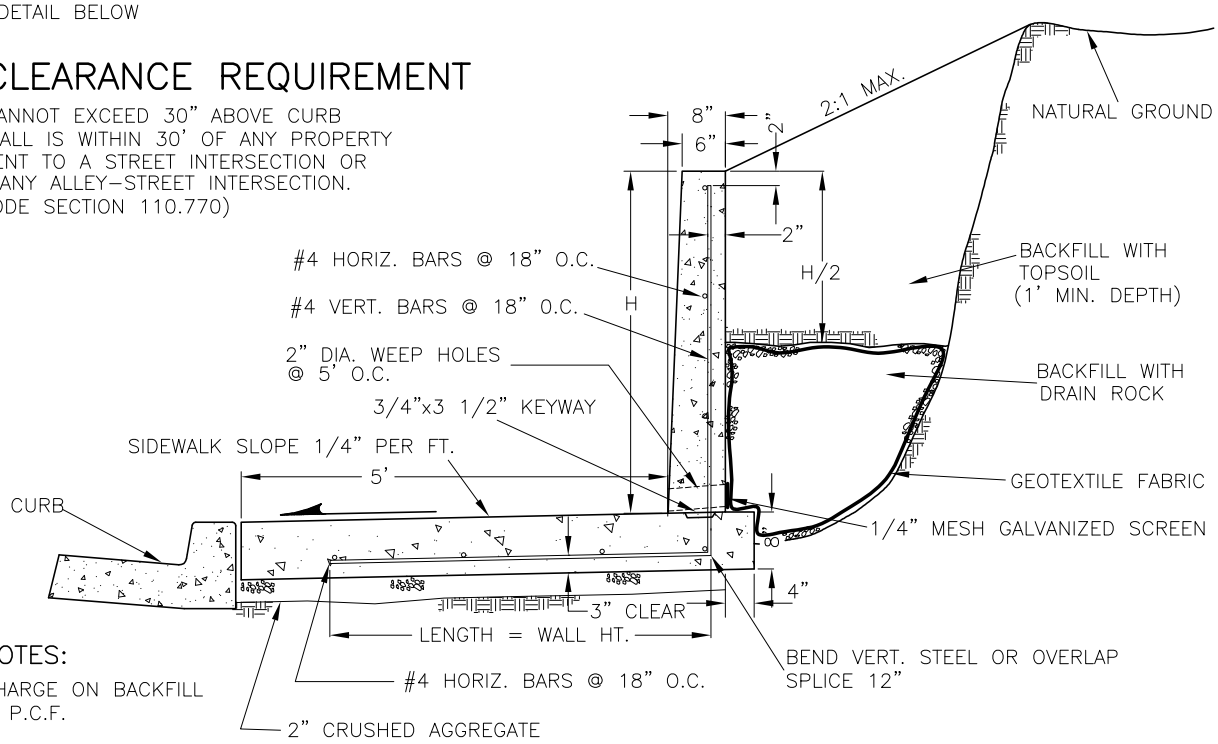
NO.501

CONSTRUCTION NOTES:

1. OVERLAP ALL BAR SPLICES 12"
2. SEE JOINT DETAIL BELOW

VISION CLEARANCE REQUIREMENT

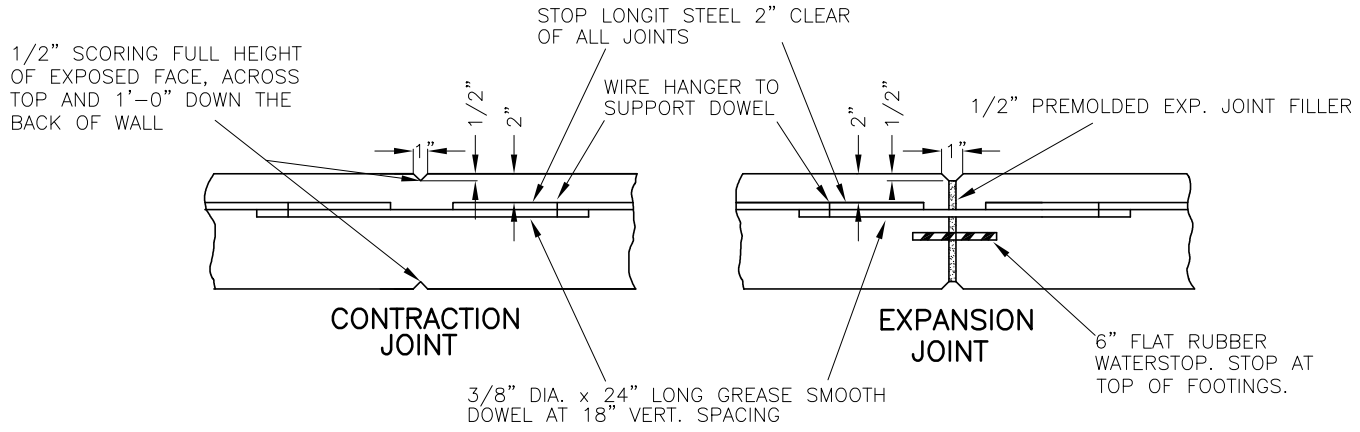
WALL HEIGHT CANNOT EXCEED 30" ABOVE CURB GRADE WHEN WALL IS WITHIN 30' OF ANY PROPERTY CORNER ADJACENT TO A STREET INTERSECTION OR WITHIN 10' OF ANY ALLEY–STREET INTERSECTION. (SALEM CITY CODE SECTION 110.770)



DESIGN NOTES:

2:1 MAX. SURCHARGE ON BACKFILL
Kδ = E.F.W.=40 P.C.F.
γ=100 P.C.F.
f'c = 3,000 P.S.I. CONC.'
fs = 40,000 P.S.I.

NOTE: AS ALTERNATE TO 2" WEEPHOLES USE CONTINUOUS 3–INCH DIA. PERFORATED PIPE WITH OUTLET TO APPROVED POINT OF DISPOSAL.



JOINT DETAIL

NOTE:
PLACE EXPANSION JOINTS AT APPROXIMATELY 90' CENTERS THROUGH WALL AND SIDEWALK PORTION OF WALL, AND CONTRACTION JOINTS AT APPROXIMATELY 30' CENTERS IN WALL ONLY.

Approved Karl O. Houston City Engineer 9–15–99 Date

No.	Description	Date	By	Appr
	DRAIN ROCK IN LIEU OF PEA GRAVEL			
	ALLOWED PERF. PIPE IN LIEU OF WEEP HOLES			
	ADDED GEOTEXTILE FABRIC			

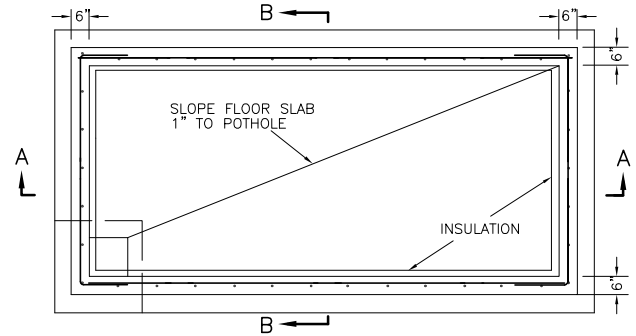
REVISION

CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS

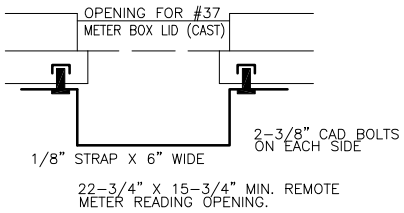
STANDARD PLAN
RETAINING WALL
HEIGHT OF WALL 2'–0" to 4'–0"

DRAWN BY GS
CHECKED BY D.W.

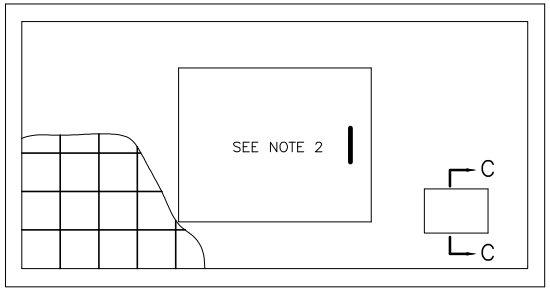
NO.502



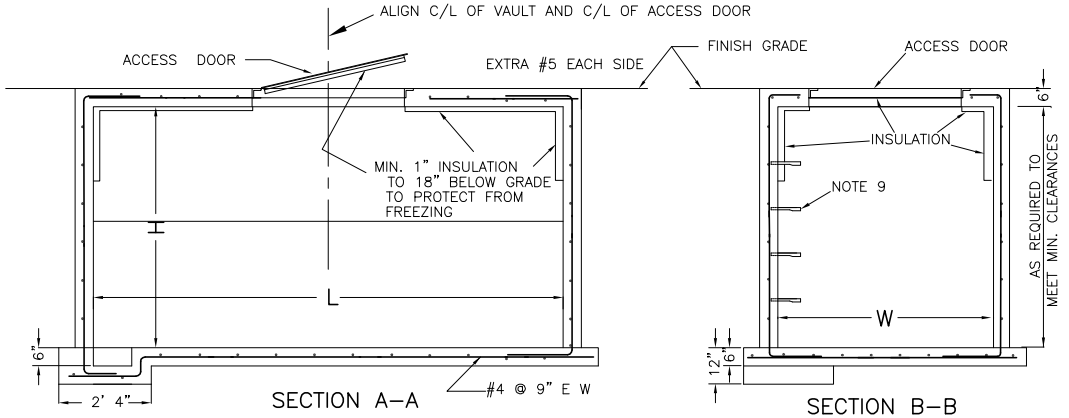
PLAN
(TOP SLAB NOT SHOWN)



SECTION C–C



TOP

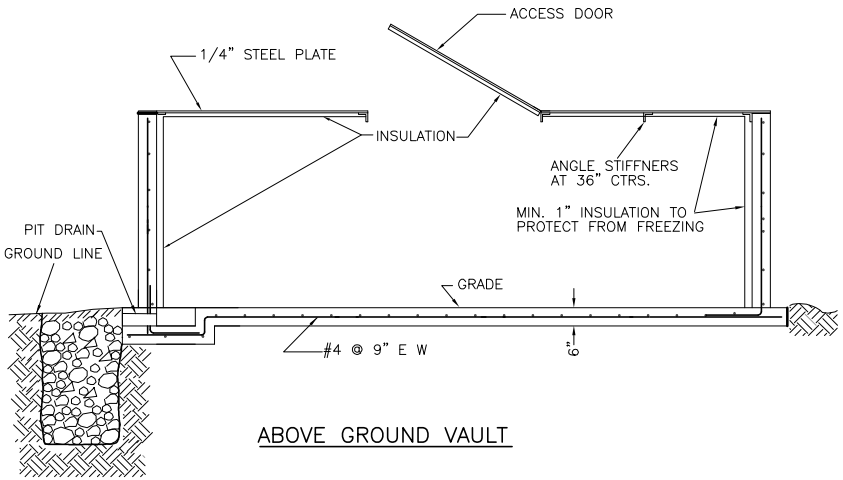


SECTION A–A

SECTION B–B

BELOW GROUND VAULT

NOTE: ALL REINFORCING BARS SHALL BE #4 @ 12" EW EXCEPT AS NOTED.



ABOVE GROUND VAULT

NOTES:

1. ALL REINFORCING BARS SHALL BE #4 @ 12" EW EXCEPT AS NOTED.
2. REFER TO STD PLAN NO. 506 FOR PIPE LOCATION IN VAULT DETAIL AND METER AND VAULT SIZE SPECIFICATIONS..
3. VAULT INSTALLATION IS NOT TO BE SUBJECT TO VEHICULAR LOADING: MAXIMUM ALLOWABLE LIVE LOAD IS 75 P.S.F.
4. CONCRETE SHALL HAVE 3,000 P.S.I. MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS.
5. REINFORCING STEEL SHALL HAVE 40,000 P.S.I. GRADE DEFORMED BARS IN ACCORDANCE WITH CURRENT ASTM SPECIFICATIONS.
6. INSTALLATIONS SHOULD BE LOCATED IN A PROTECTED AREA OR PROTECTION SUCH AS CHAIN LINK FENCING, TRAFFIC BARRIER POSTS, ETC. BY THE CONTRACTOR.
7. VAULT SHALL BE WATERTIGHT TO PREVENT GROUND WATER INTRUSION.
8. PROVIDE ACCESS DOOR, OF SIZE SHOWN ON DRAWING 506, PROVIDE ADDITIONAL REMOVABLE TOP SECTION, AS REQUIRED TO PERMIT BACK FLOW DEVICE OR METER REMOVAL, ACCESS DOOR AND TOP SECTION SHALL BE GASKETED TO CONTROL SURFACE WATER INFILTRATION.
9. ACCESS LADDER SHALL BE OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION APPROVED.
10. PRECAST VAULT WILL BE APPROVED ON A SUBMITTED PROPOSAL BASIS.

Approved Karl O. Goerlitz
City Engineer
9-15-99
Date

No.	Description	Date	By	Appr
1	REVISED TO CONTINUOUS REBAR	5/99	S.P.	D.W.
	REMOVED REF. TO PIPE LOCAT-			
	ION. MOVED DOOR TO ℄ OF			
	VAULT.			

REVISION

CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS

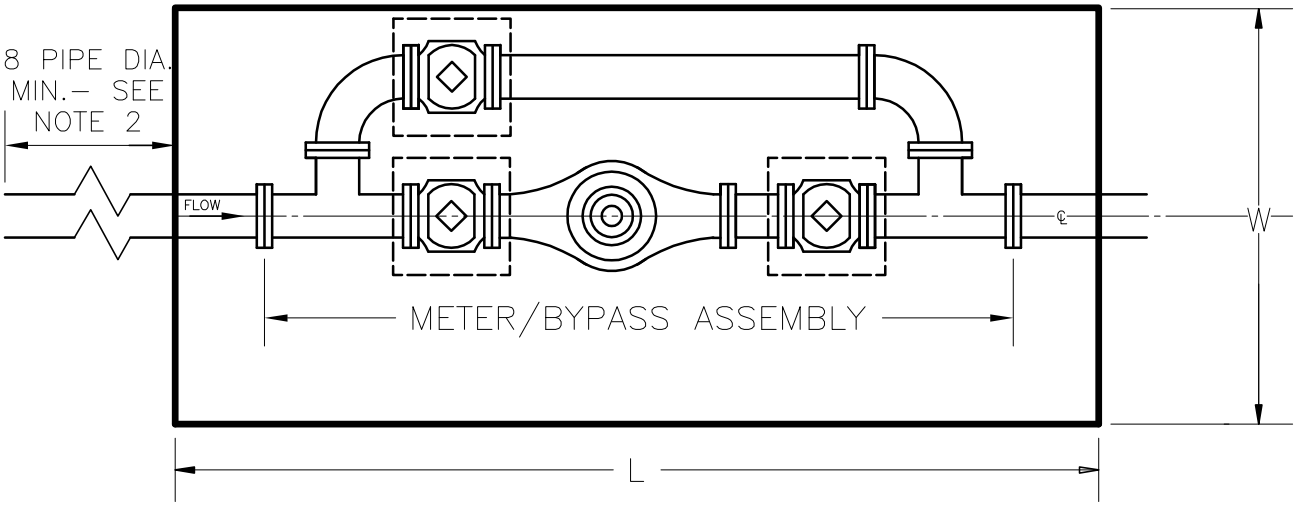
STANDARD PLAN

UTILITY VAULT (CAST IN PLACE)

DRAWN BY GS

CHECKED BY D.W.

NO.505



METER SIZE	INSIDE DIMENSIONS (MIN) VAULT SIZE L	W	H
3" OR 4" COMPOUND / FIRELINE	8'	6'	7'
6" OR 8" COMPOUND / FIRELINE	10'	8'	7'

NOTES:

1. VAULT SIZING IS FOR METER INSTALLATION ONLY.
2. CONTRACTOR TO INSTALL VAULT AND STRAIGHT RUN OF PIPE WITHOUT JOINTS THROUGH IT. CITY FORCES TO INSTALL METER/BYPASS ASSEMBLY. PIPE SHALL EXTEND IN A STRAIGHT LINE (FROM INSIDE VAULT WALL ON DELIVERY SIDE) AT LEAST THE EQUIVALENT OF 8 PIPE DIAMETERS.
3. VAULT SHALL BE PLACED WITHIN RIGHT–OF–WAY UNLESS OTHERWISE APPROVED.
4. BENDS, CROSSES, AND TEES SHALL BE A MINIMUM OF 5 FEET FROM THE OUTSIDE WALL OF THE VAULT.
5. CENTERLINE OF WATERLINE SHALL BE 24 INCHES ABOVE THE VAULT FLOOR AND RUNNING THROUGH THE CENTERLINE OF THE VAULT.
6. VAULT SHALL HAVE AN 11" X 17" READER LID AND OPENING.
7. MINIMUM ACCESS DOOR SIZE:
   A. 3–INCH AND 4–INCH METERS–3 FEET BY 3 FEET.
   B. 6–INCH AND 8–INCH METERS–2 EACH, 3 FEET 6 INCHES WIDE BY 3 FEET LONG.
8. REFER TO STANDARD PLAN NUMBER 505 FOR ADDITIONAL VAULT REQUIREMENTS.

Approved Karl O. Gentzler City Engineer 9–15–99 Date

No.	Description	Date	By	Appr
	WATER MAIN TO GO THROUGH CENTERLINE OF VAULT			

REVISION

CITY OF SALEM
DEPARTMENT OF PUBLIC WORKS

STANDARD PLAN
METER AND VAULT
SIZE AND SPECIFICATIONS

DRAWN BY S.G.P.
CHECKED BY D.W.

NO.506

9–15–99