



**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-1460.00.MF.0915**

ARCHITECTURAL SITE PLAN

No.	Date	Purpose of Document Issue
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Designed	EL
Drawn	HLA
Checked	CCG
Date	SEP. 11, 2015
File No.	-

Project No.
12655-05



Sheet No.
AS101

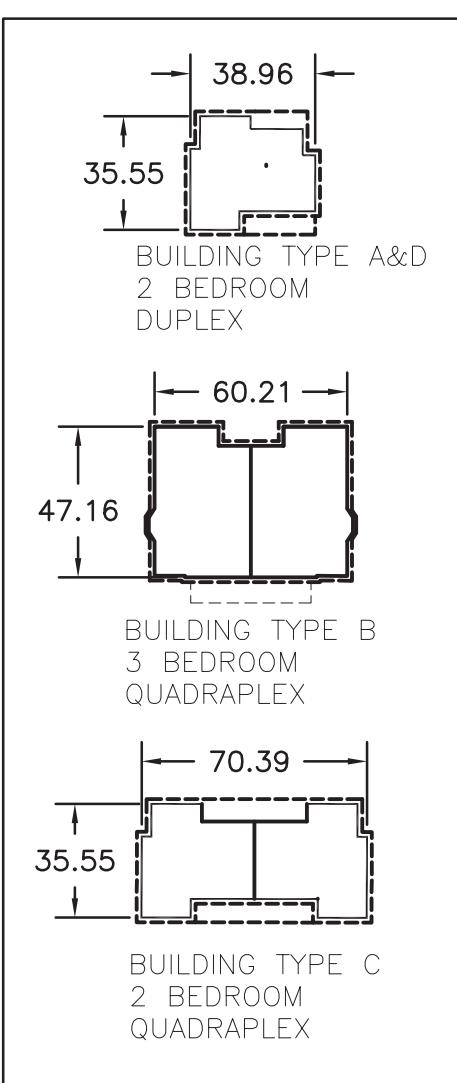
PARKING DATA	
PARKING SPACES	71
HANDICAP PARKING SPACES (VAN ACCESSIBLE)	1
HANDICAP PARKING SPACES (CAR ACCESSIBLE)	24
TOTAL PARKING SPACES	96

SCALE: 1" = 30'

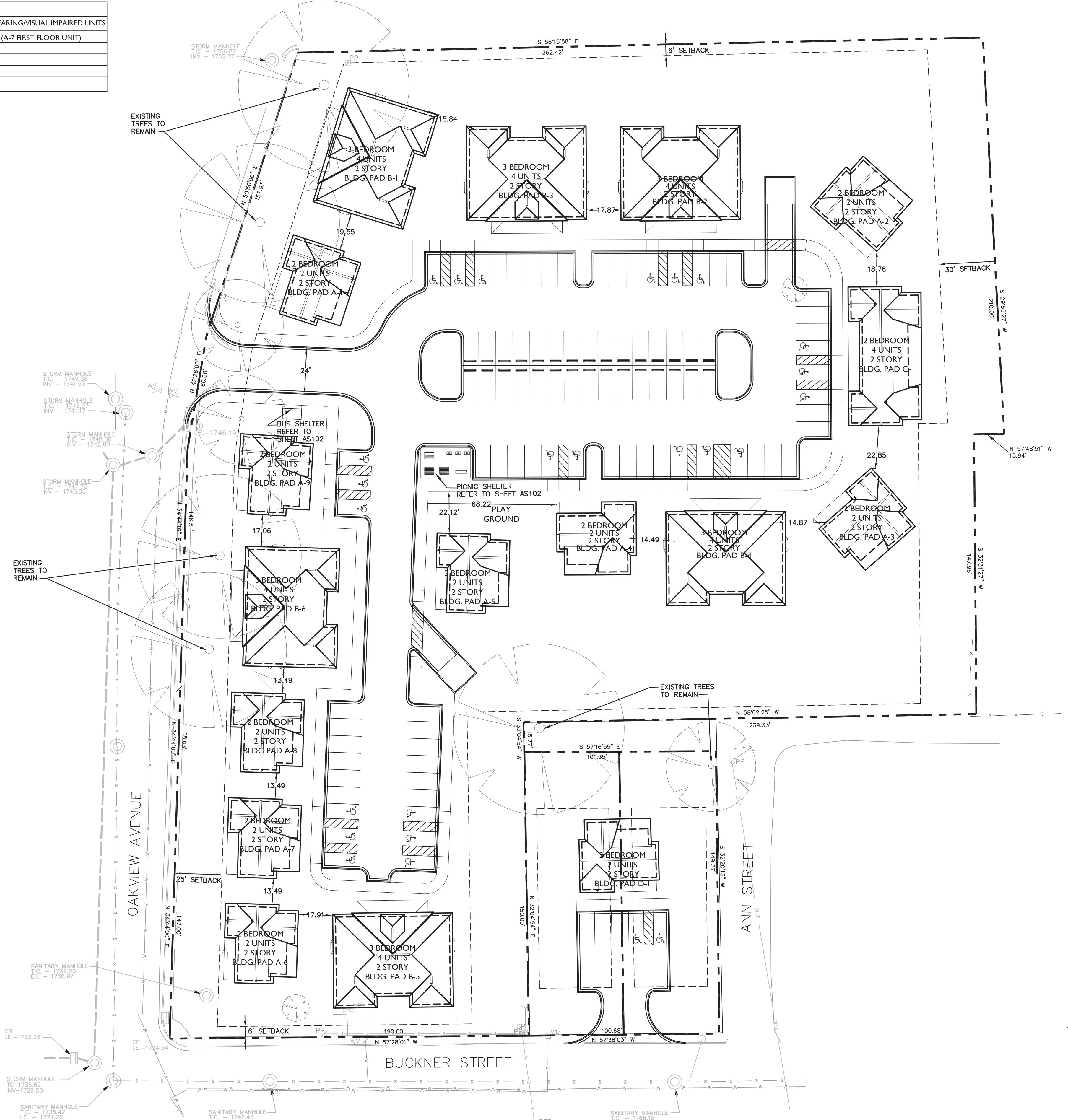
UNIT DATA							
BUILDING TYPE	UNIT TYPE	GROSS SF PER UNIT	NET SF PER UNIT	# OF BUILDINGS	TOTAL # OF FIRST FLOOR UNITS	TOTAL # OF SECOND FLOOR UNITS	ACCESSIBLE UNITS
A	2 BEDROOM	929	854	9	9	9	2 (A-4 AND A-9 FIRST FLOOR UNITS) I (A-7 FIRST FLOOR UNIT)
B	3 BEDROOM	1,162	1,089	6	12	12	4 (B-3 AND B-4 FIRST FLOOR UNITS)
C	2 BEDROOM	930	854	1	2	2	-
D	2 BEDROOM	929	854	1	1	1	-
				TOTAL	17	24	24
							6
							-

GENERAL LEGEND

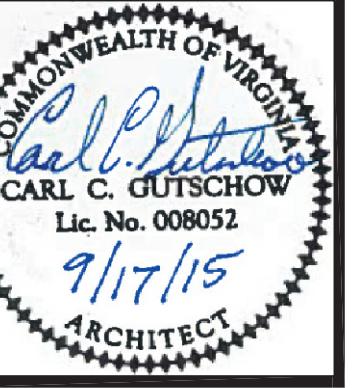
- PROPERTY/ROW BOUNDARY
- W WATER LINE
- S WATER VALVE
- SANITARY SEWER
- MANHOLE



MASONRY SCHEDULE		
BUILDING	BRICK	CAST STONE
A-1	M/S SPALDING TUDOR	CITADEL SILVER SLATE
A-2	M/S SPALDING TUDOR	CITADEL IRON MOUNTAIN
A-3	M/S NOTTINGHAM TUDOR	CITADEL SILVER SLATE
A-4	Q/M MILLSTONE	CITADEL IRON MOUNTAIN
A-5	M/S NOTTINGHAM TUDOR	CITADEL IRON MOUNTAIN
A-6	Q/M MILLSTONE	CITADEL SILVER SLATE
A-7	M/S NOTTINGHAM TUDOR	CITADEL SILVER SLATE
A-8	Q/M MILLSTONE	CITADEL IRON MOUNTAIN
A-9	M/S NOTTINGHAM TUDOR	CITADEL IRON MOUNTAIN
B-1	Q/M MILLSTONE	CITADEL SILVER SLATE
B-2	M/S NOTTINGHAM TUDOR	CITADEL SILVER SLATE
B-3	M/S SPALDING TUDOR	CITADEL IRON MOUNTAIN
B-4	M/S SPALDING TUDOR	CITADEL SILVER SLATE
B-5	M/S NOTTINGHAM TUDOR	CITADEL IRON MOUNTAIN
B-6	M/S SPALDING TUDOR	CITADEL SILVER SLATE
C-1	Q/M MILLSTONE	CITADEL IRON MOUNTAIN
D-1	Q/M MILLSTONE	CITADEL SILVER SLATE

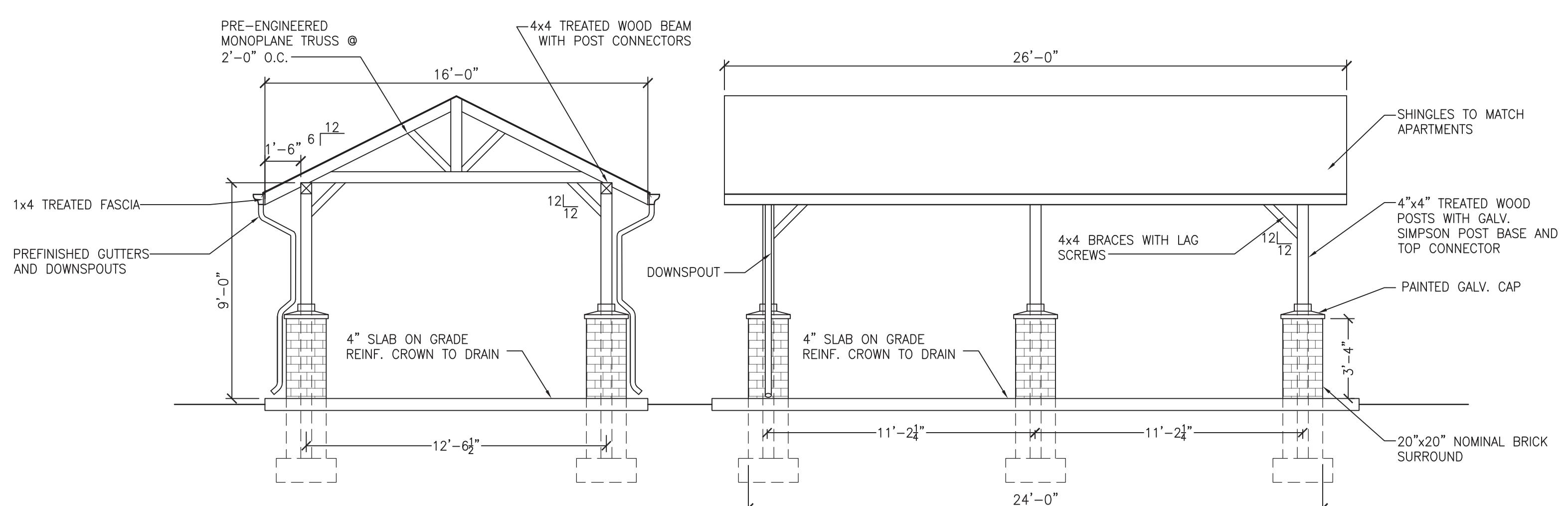


ARCHITECTURAL SITE PLAN



**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TWO-1460.00.MF.0915**

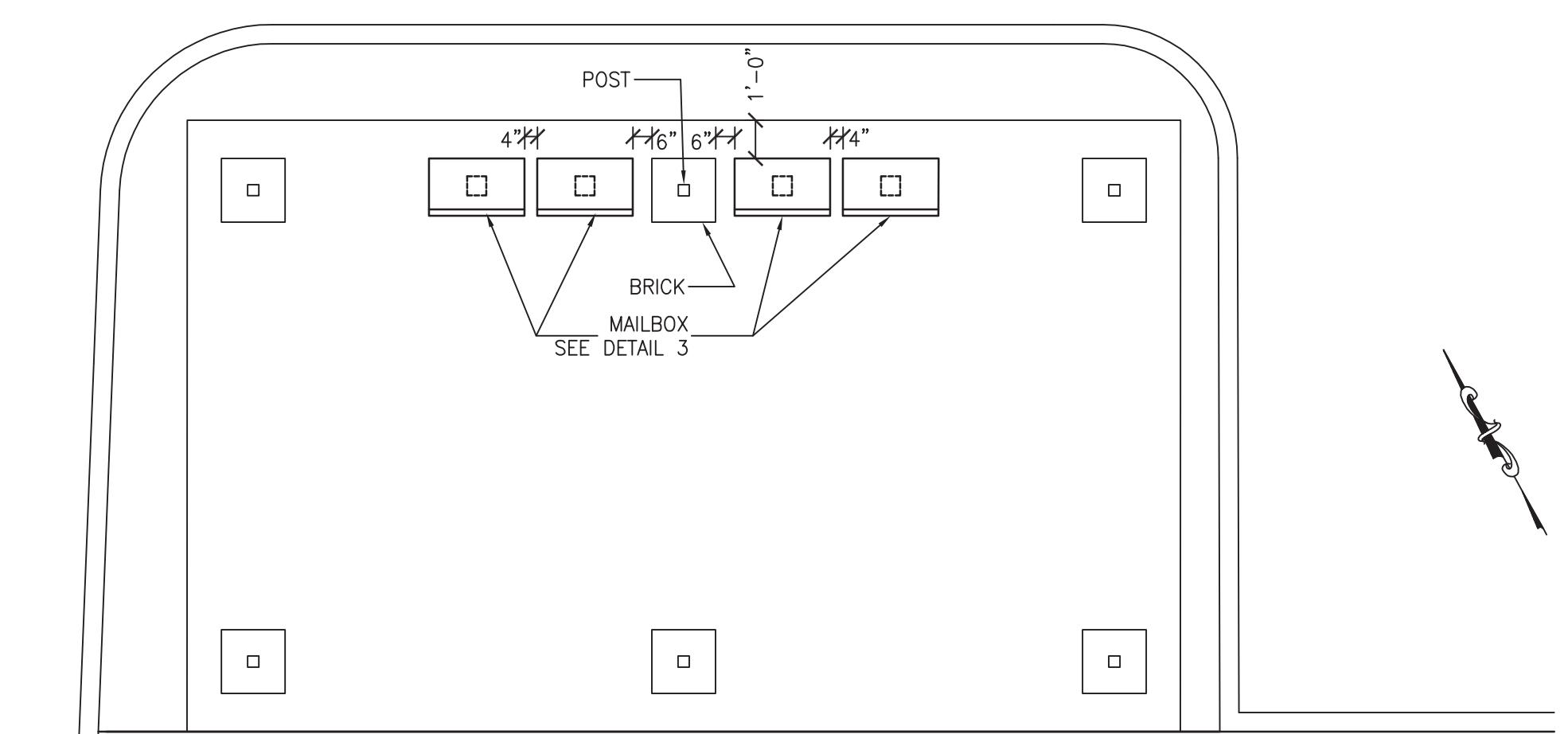
SHELTER DETAILS



PICNIC SHELTER

SCALE: 1/4"=1'-0"

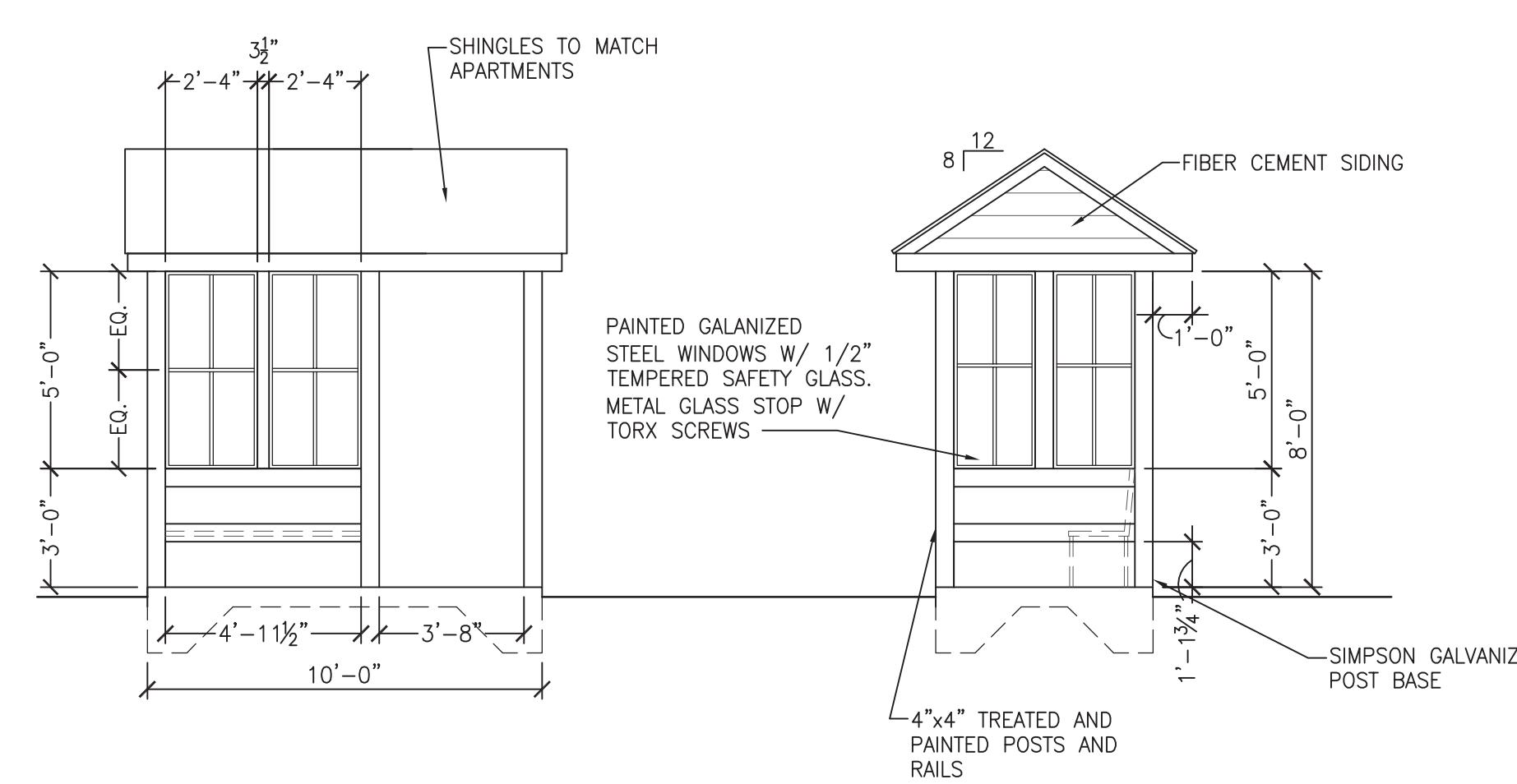
AS102 AS101



BUS SHELTER FLOOR PLAN

SCALE: 1/4"=1'-0"

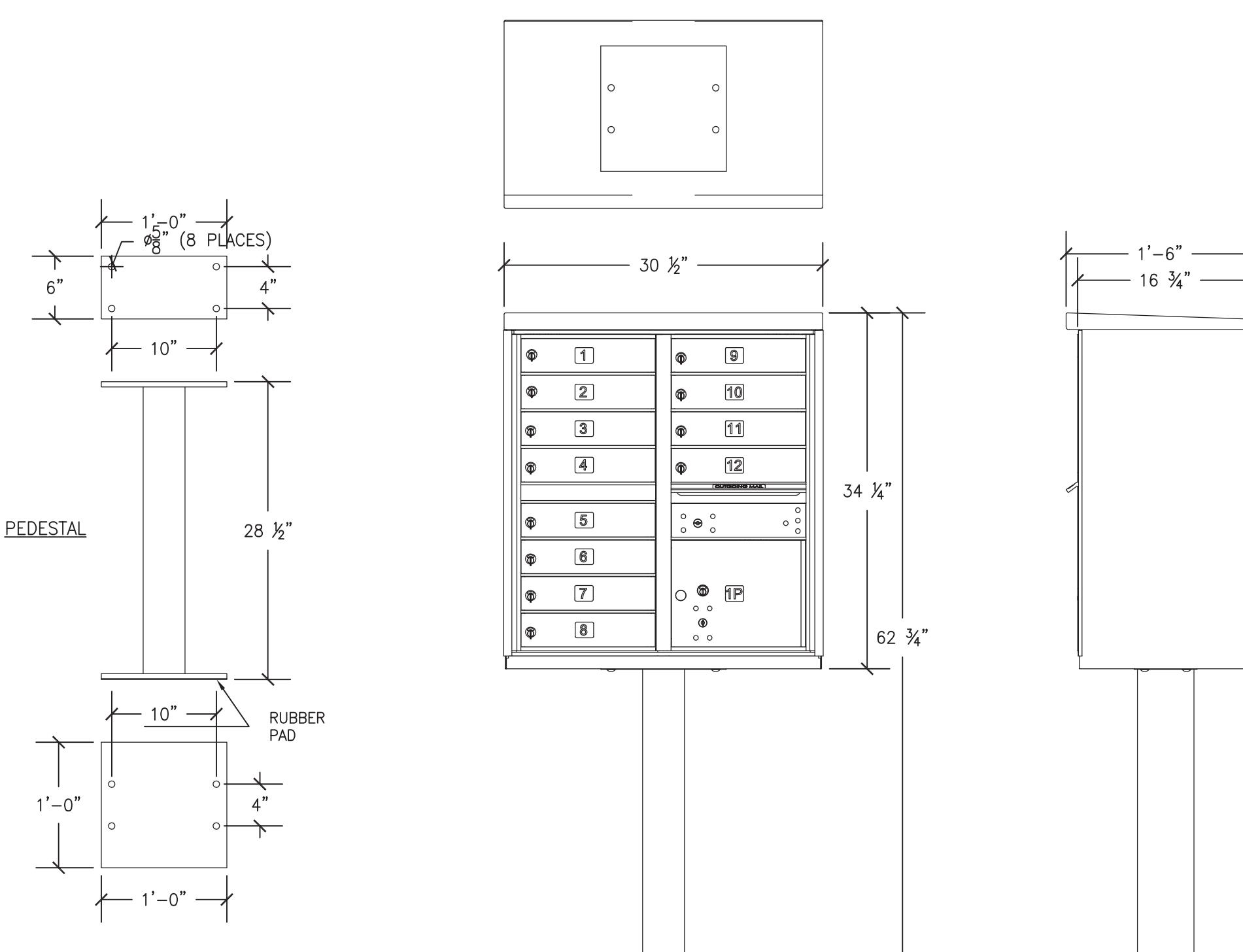
AS102 AS101



BUS SHELTER

SCALE: 1/4"=1'-0"

AS102 AS101



MAILBOX DETAIL

SCALE: 1"=1'-0"

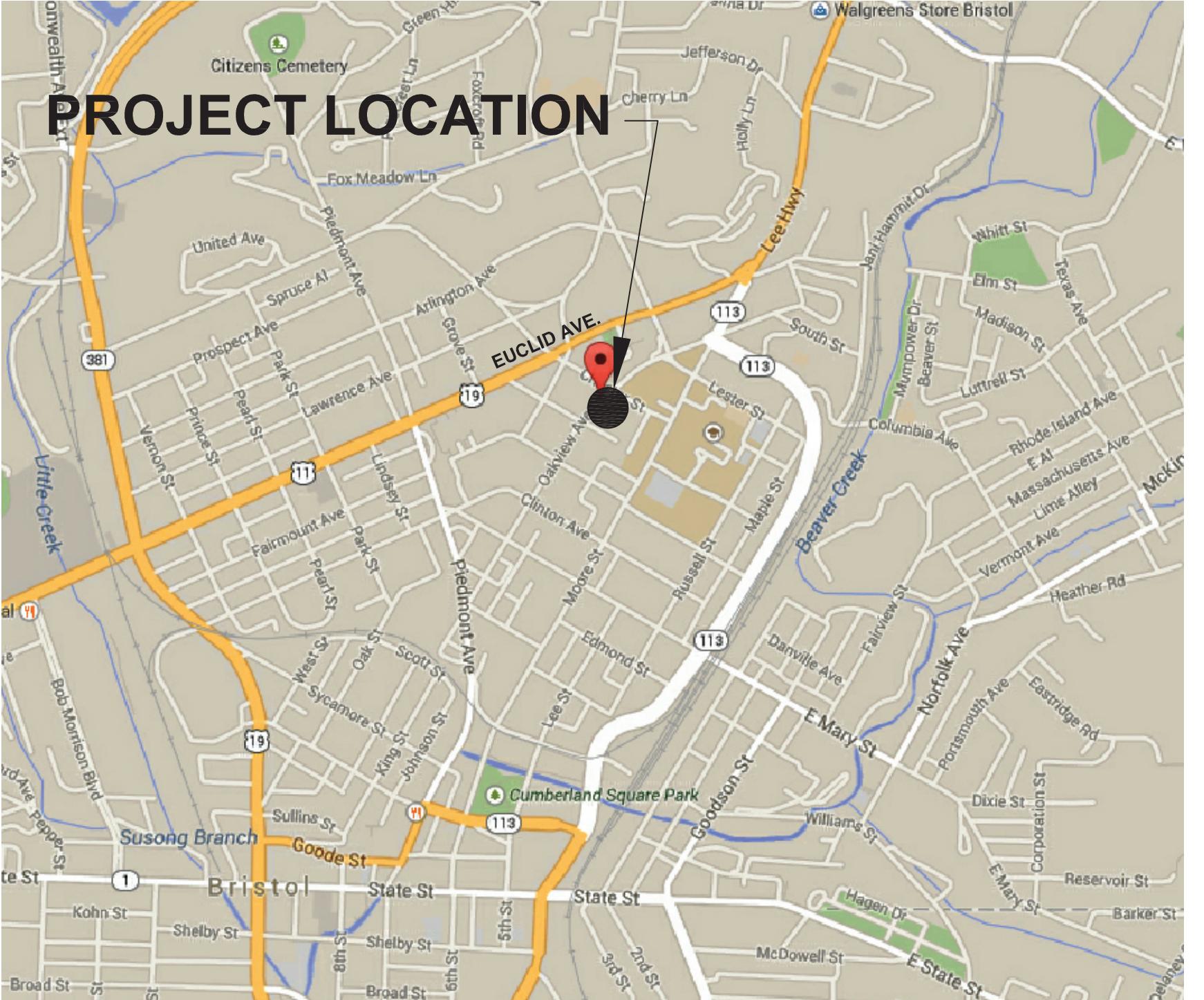
AS102 AS101

No.	Purpose of Document Issue
Date	
Designed	EL
Drawn	HLA
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Date	SEP. 11, 2015
File No.	I2655AS102

Project No.
I2655-05



Sheet No.
AS102



LOCATION MAP

N.T.S.

EROSION AND SEDIMENT CONTROL LEGEND

SYMBOL	DESCRIPTION
X	SILT FENCE
TO	TOPSOILING
PS	PERMANENT SEEDING
TS	TEMPORARY SEEDING
CE	CONSTRUCTION ENTRANCE
SR	SURFACE ROUGHENING
IP	INLET PROTECTION

SHEET INDEX

SHEET NO.	DESCRIPTION
C100.	COVER SHEET
C101.	LOCATION MAP, LEGEND & NOTES
C102.	SITE PLAN
C103.	GRADING PLAN
C104.	DRAINAGE & EROSION AND SEDIMENT CONTROL PLAN
C200.	WATER AND SANITARY SEWER PLAN
C300.	SANITARY SEWER LINE 100 & 101S PROFILES
C301.	SITE DETAILS
C302.	UTILITY DETAILS
C303.	STANDARD WATER AND SANITARY SEWER DETAILS
	STANDARD WATER LINE DETAILS

EROSION AND SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL SHALL BE IMPLEMENTED IN ACCORDANCE WITH ALL LOCAL REQUIREMENTS, THE EROSION AND SEDIMENT CONTROL PLAN FOR THIS PROJECT AND THE LATEST EDITION OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK," BY THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION, AS APPLICABLE.
2. THE CONTRACTOR SHALL KEEP AT THE PROJECT SITE COPIES OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND THE EROSION AND SEDIMENT CONTROL PLAN FOR THIS PROJECT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL FACILITIES NECESSARY TO PREVENT EROSION AND SEDIMENTATION ON-SITE OR OFF-SITE AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
4. ALL DISTURBED AREAS SHALL DRAIN TO APPROVED EROSION AND SEDIMENT CONTROL FACILITIES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE CONSTRUCTED AS A FIRST STEP IN ALL LAND DISTURBING ACTIVITIES AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
6. MATERIAL STOCKPILES SHALL BE CONTAINED WITHIN SEDIMENT BARRIERS. STOCKPILES THAT ARE TO REMAIN UNWORKED FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING WITHIN 7 DAYS AFTER THE COMPLETION OF STOCKPILING.
7. TEMPORARY STABILIZATION SHALL BE INSTALLED WITHIN 7 DAYS ON DENUDED AREAS THAT ARE TO REMAIN DORMANT FOR GREATER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. PERMANENT STABILIZATION SHALL BE INSTALLED WITHIN 7 DAYS OF FINAL STABILIZATION.
8. ALL AREAS WHICH REQUIRE SEEDING SHALL BE "TOPSOILED" AND STABILIZED WITH MULCH IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN AND SPECIFICATIONS FOR THIS PROJECT.
9. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE LOCAL PROGRAM ADMINISTRATOR OR HIS DESIGNATED AGENT, IS UNIFORM, MATURE ENOUGH TO SURVIVE, AND INHIBITS EROSION.
10. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME, OR SLOPE DRAIN STRUCTURE.
11. CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
12. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL FACILITIES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MADE IMMEDIATELY. RECORDS OF ALL INSPECTIONS AND REPAIRS MADE TO EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR.
13. NO MORE THAN 200 LINEAR FEET OF TRENCH MAY BE OPEN AT ONE TIME.
14. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
15. PAVED OR PUBLIC ROAD SURFACES SHALL BE CLEARED THOROUGHLY AT THE END OF EACH DAY.
16. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH A DEWATERING STRUCTURE AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
17. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IS COMPLETED IN THE WATERCOURSE.
18. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
19. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.

GENERAL LEGEND

EXISTING	NEW	DESCRIPTION
—	— 2140 —	CONTOUR
—	● 40.50	SPOT ELEVATION
▲		TEMPORARY BENCHMARK
— - -		PROPERTY BOUNDARY
— - -	—	RIGHT-OF-WAY BOUNDARY
— - -	—	DRAINAGE AND UTILITY EASEMENT
— - -	—	BUILDING SETBACK
—	■■■■■	PAVED ROAD
—	■■■■■	CULVERT
X		FENCE
E		ELECTRICAL LINE/CONDUIT
O		POWER POLE
S		SEWER LINE
O		MANHOLE
W		WATER LINE
NPW		NONPOTABLE WATER LINE
►		GATE VALVE
►		BOV BLOW-OFF VALVE
△		ARV AIR RELEASE VALVE
●		FH FIRE HYDRANT
WM		WATER METER
G		GAS LINE
F		FIBER OPTIC CONDUIT
SFM		SEWER FORCE MAIN
T		TELEPHONE LINE
		TREE

GENERAL NOTES

1. FIELD SURVEYS TO PROVIDE TOPOGRAPHIC MAPPING WERE PERFORMED BY OTHERS.
2. VERTICAL CONTROL IS BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. HORIZONTAL CONTROL IS BASED UPON THE NORTH AMERICAN DATUM OF 1983 (83).
4. THE EXISTENCE AND LOCATION OF EXISTING UTILITIES ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND FIELD VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. ANY DAMAGE DONE TO EXISTING UTILITIES AND FACILITIES SHALL BE REPAIRED WITH THE UTILITIES AND FACILITIES RESTORED TO AT LEAST THEIR ORIGINAL CONDITION.
5. THE TOPS OF MANHOLE COVERS SHALL TERMINATE AT GRADE UNLESS OTHERWISE NOTED.
6. ALL UNPAVED AND UNGRAVELED AREAS DISTURBED BY EXCAVATION SHALL BE SEADED.
7. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION'S ROAD AND BRIDGE SPECIFICATIONS AND ROAD AND BRIDGE STANDARDS, AS APPLICABLE.
8. PROPOSED CROSSWALKS, STOP BARS, AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D. MANUAL AND VIRGINIA DEPARTMENT OF TRANSPORTATION'S ROAD AND BRIDGE SPECIFICATIONS AND ROAD AND BRIDGE STANDARDS, AS APPLICABLE.
9. EXISTING CONTOURS SHOWN ON ALL PLANS REPRESENT THE APPROXIMATE FIELD CONDITIONS AND ARE NOT GUARANTEED AND SHALL BE INVESTIGATED AND FIELD VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK.
10. MINIMUM PIPE COVER FOR WATER LINES SHALL BE 3'-0" UNLESS OTHERWISE INDICATED.
11. SEWER SLOPES SHOWN ARE BASED ON THE HORIZONTAL DISTANCE BETWEEN THE CENTERLINE OF MANHOLES.
12. MINIMUM PIPE COVER FOR GRAVITY SEWER LINES SHALL BE 2'-6" UNLESS OTHERWISE INDICATED.
13. ALL UNPAVED AND UNGRAVELED AREAS DISTURBED BY EXCAVATION SHALL BE SEADED.
14. OWNERSHIP OF DOCUMENTS – THIS DOCUMENT, INCLUDING THE IDEAS AND DESIGNS INCORPORATED IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THOMPSON & LITTON.

**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-146.00.MF.0915**

LOCATION MAP, LEGEND, & NOTES

Purpose of Document Issue	REvised per City of Bristol, VA Comments
Date	11/22/2015
No.	

Designed	JB
Drawn	JB
Checked	JJM / TAM
Date	SEP. 18, 2015
File No.	TITLE.dwg

Project No. 12655-06

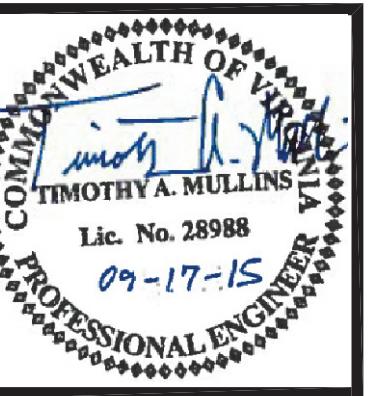


THOMPSON & LITTON

100 Fifth Street
Suite 400
Bristol, Tennessee 37620

Sheet No.

C100



SITE DATA

ADDRESS: 401 OAKVIEW AVENUE
BRISTOL, VA. 24201

OWNER: BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
809 EDMOND ST.
BRISTOL, VA. 24201
CONTACT: TODD MUSICK
PHONE: (276) 642-2001

TAX MAP / PARCEL :

T.M. 17(14)-BK5-I-12
T.M. 17(14)-BK6-5,6,A
T.M. 17(15)-BK4-4,6,10-14

ZONING: R-3, MODERATE DENSITY RESIDENTIAL

PROPOSED USE: MULTI-FAMILY RESIDENTIAL HOUSING

PROPERTY DIMENSIONS & AREA: AREA - 4.43 AC. (193,163 S.F.)

SETBACKS REQUIREMENTS: FRONT = 25'
REAR = 30'
NORTH SIDE = 6'
SOUTH SIDE = 12.5'

BUILDING AREA: 28,048 S.F.

BUILDING HEIGHT: 2-STORY

PARKING: 2 SPACES / RESIDENTIAL UNIT REQUIRED - 96 SPACES PROVIDED - 71 STD. & 25 H/C

SIGNS: FREE STANDING - I @ 25 S.F., 7' H

DRAINAGE: PRE/POST & QUALITY STORMWATER MANAGEMENT REQUIRED

BENCHMARK: B.M. #1 - BACK OF CURB IN GRASS
D.B. 284, Pg. 401
D.B. 290, Pg. 622
D.B. 332, Pg. 195
D.B. 422, Pg. 482 (Zoned 0-1)
ELEV.: 1750.66

FLOOD ZONE DESIGNATION: SAID PROPERTY IS LOCATED WITHIN AN AREA HAVING ZONE DESIGNATION "X" ON FLOOD INSURANCE RATE MAP NO. S10022008D. AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

BRISTOL REDEVELOPMENT & HOUSING AUTHORITY THE VILLAGE AT OAKVIEW BRISTOL, VIRGINIA

SITE PLAN

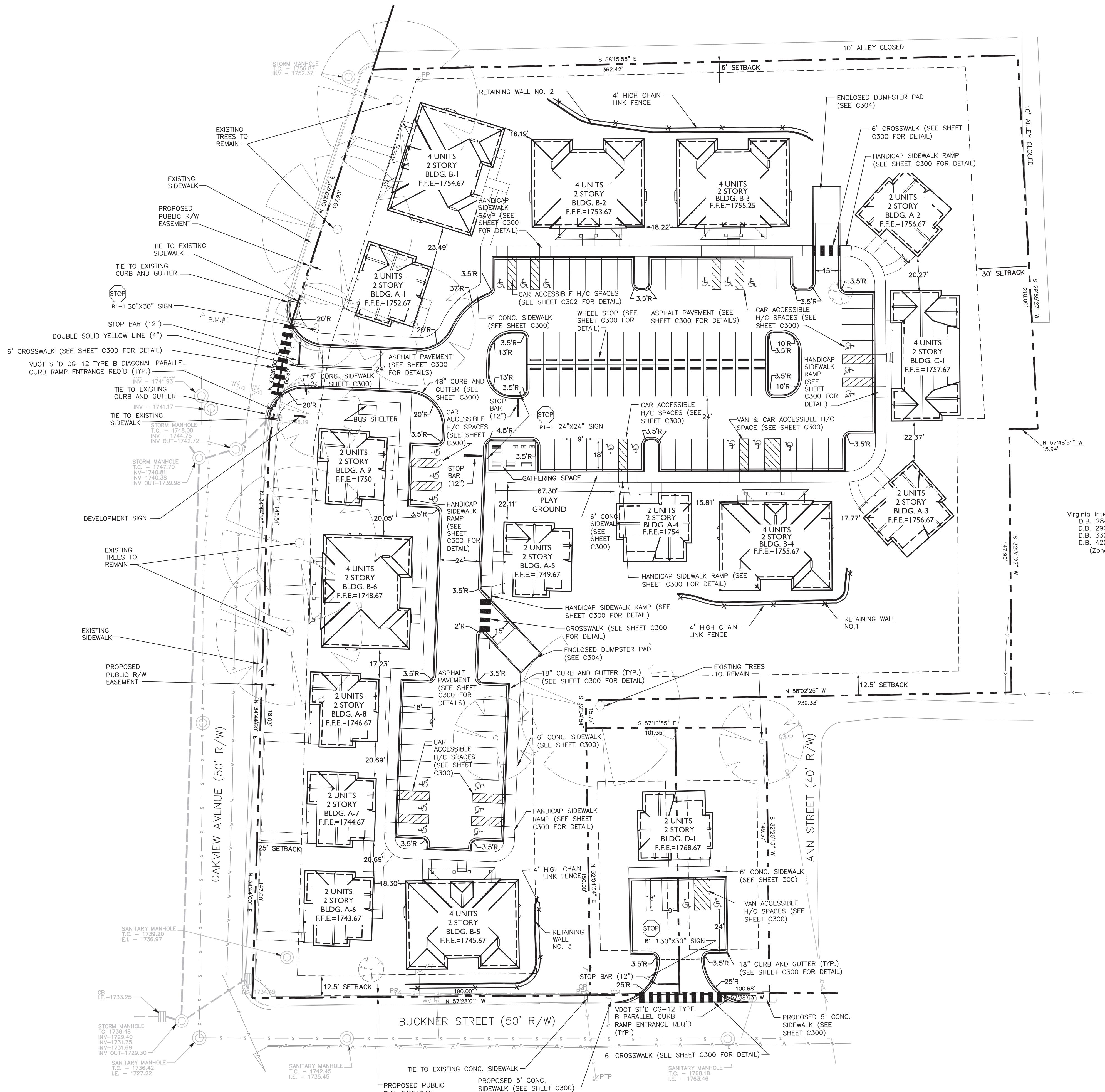
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Date	1/22/2015
No.	REvised per City of Bristol, VA. Comments 2/29/2015

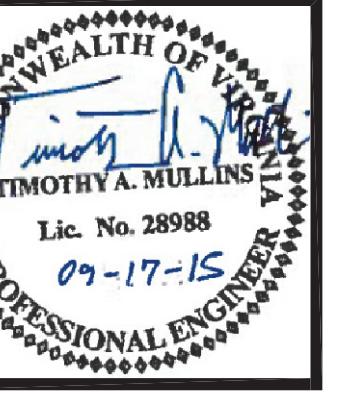
Designed	JB
Drawn	JB
Checked	JJM
Date	SEP. 11, 2015
File No.	BONHAM SITE PLAN.dwg

Project No. 12655-06

THOMPSON & LITTON
100 Fifth Street
Suite 400
Bristol, Tennessee 37620

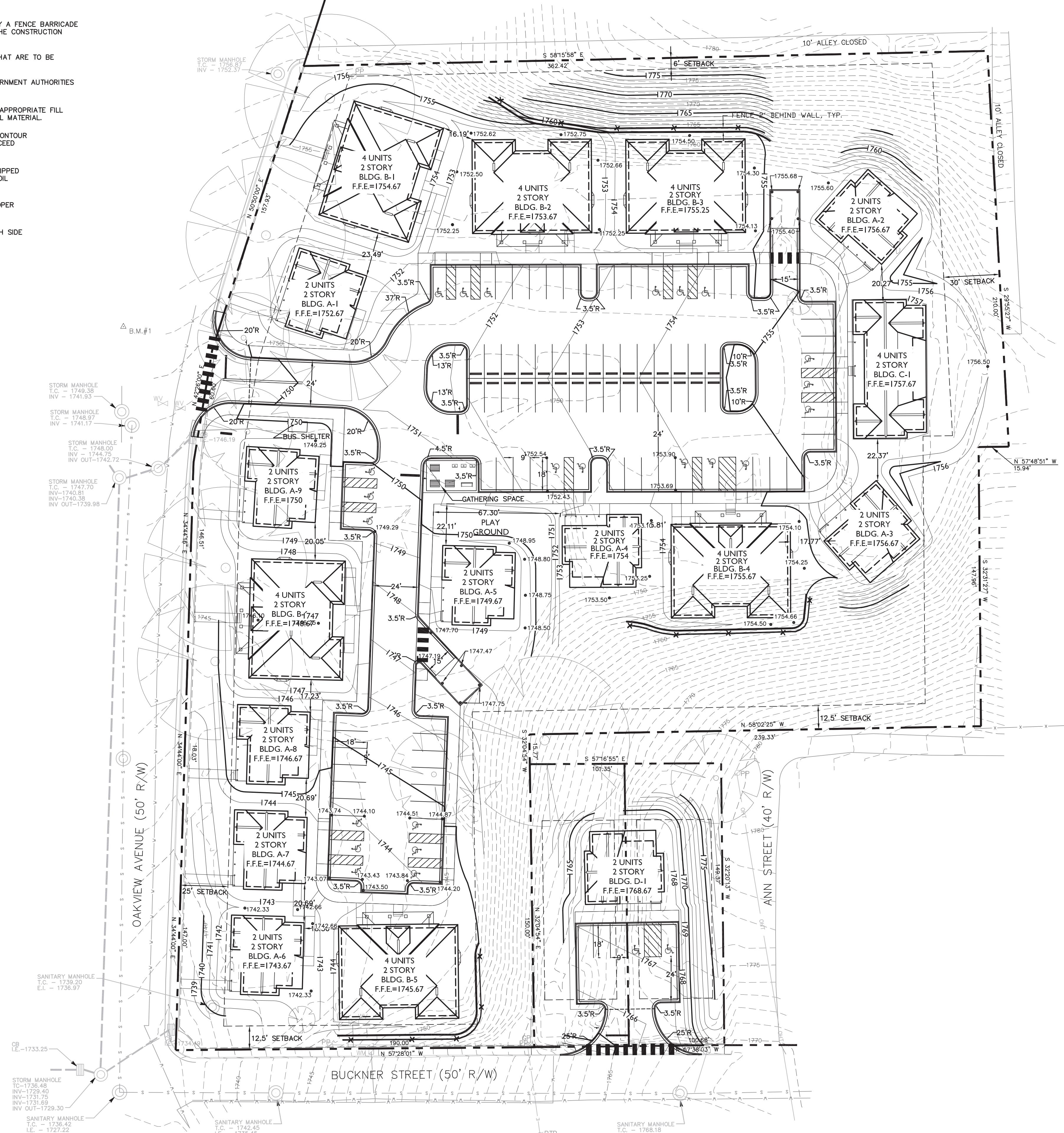
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GRAPHIC SCALE
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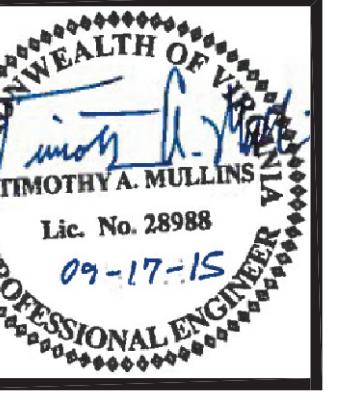




GRADING NOTES

- NOTED TREES AND VEGETATION TO BE SAVED SHALL BE PROTECTED FROM DAMAGE BY A FENCE BARRICADE PRIOR TO CONSTRUCTION OPERATIONS. NO TREES ARE TO BE REMOVED OUTSIDE OF THE CONSTRUCTION LIMITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH TREES THAT ARE TO BE REMOVED FROM THE SITE.
- BURNING ONSITE IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE LOCAL GOVERNMENT AUTHORITIES HAVING JURISDICTION.
- ANY YIELDING, PUMPING OR SOFT MATERIAL SHALL BE CUT OUT AND REPLACED WITH APPROPRIATE FILL MATERIAL. SOIL CLASSIFIED AS: PT, OH, OL, CH, AND MH, ARE NOT SATISFACTORY FILL MATERIAL.
- FILLS AND EMBANKMENTS SHALL BE CONSTRUCTED AT THE LOCATIONS AND TO THE CONTOUR LINES AND GRADES INDICATED ON THE CONSTRUCTION PLANS. SLOPES SHALL NOT EXCEED 2:1 SLOPES.
- AREAS DESIGNATED FOR GRADING OPERATIONS THAT CONTAIN TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR LATER USE. ONCE THE PROPOSED GRADING IS COMPLETE TOPSOIL SHALL BE PLACED OVER THE GRADED AREAS.
- STOCKPILED TOPSOIL SHALL BE STORED IN A SATISFACTORY MANNER TO AFFORD PROPER DRAINAGE AND EROSION AND SEDIMENT CONTROL MEASURES.
- IF ROCK IS ENCOUNTERED, REMOVE ROCK TO A DEPTH OF 6" BELOW AND 8" OF EACH SIDE OF PIPES IN TRENCHES.





**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-1460.00.MF.0915**

**DRAINAGE &
EROSION AND SEDIMENT CONTROL PLAN**

Purpose of Document Issue
REVISED PER CITY OF BRISTOL, VA. COMMENTS
REVISED PER CITY OF BRISTOL, VA. COMMENTS

No. Date
1-22-2015
2-29-2015

Designed JJM
Drawn JB
Checked JJMTAM
Date SEP. 11, 2015
File No. BONHAM SITE DRAINAGE & ES PLAN.Dwg

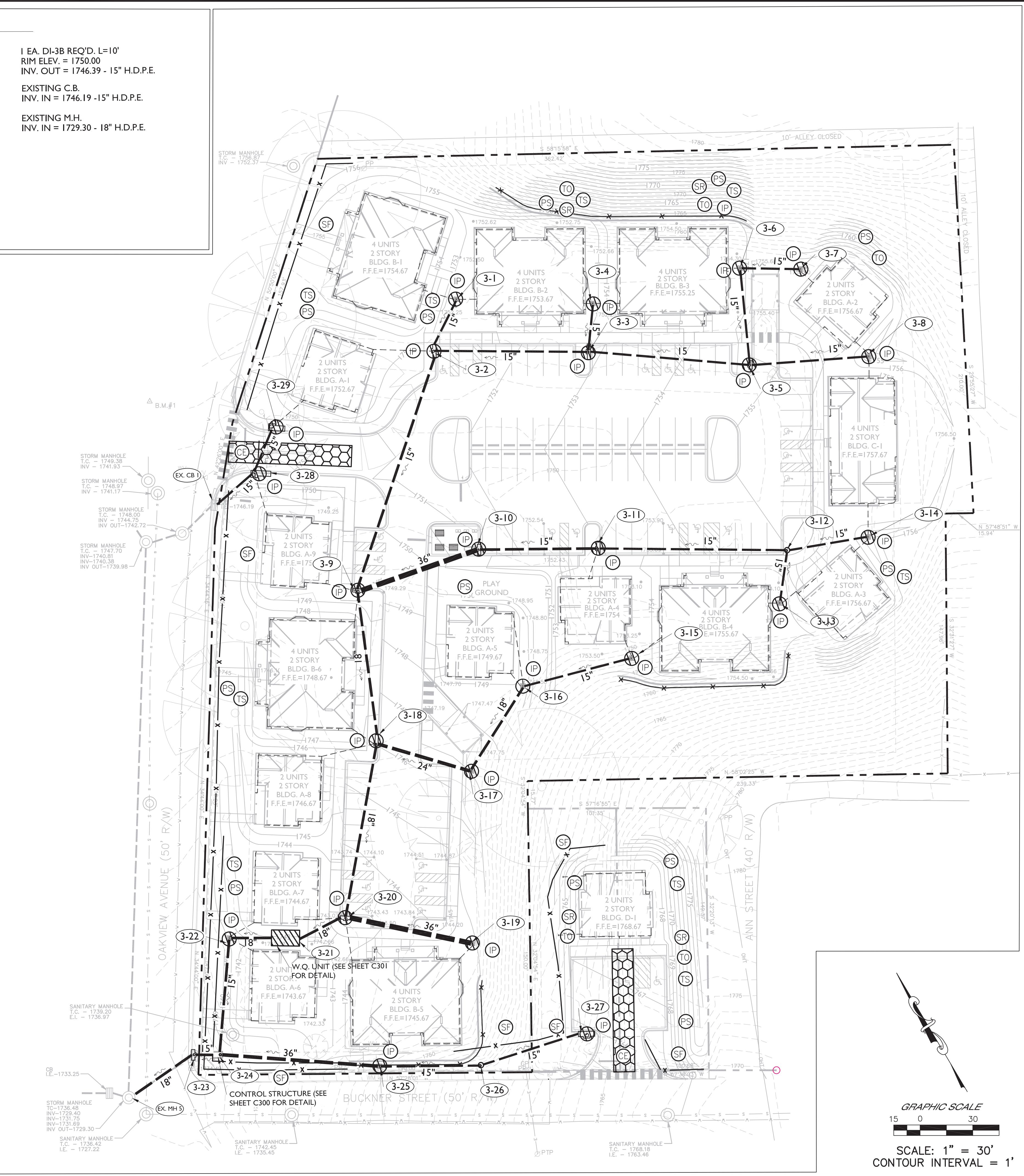
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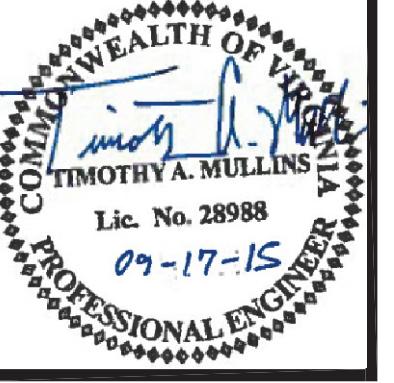
THOMPSON & LITTON
100 Fifth Street
Suite 400
Bristol, Tennessee 37620

Sheet No.
C103
SCALE: 1" = 30'
CONTOUR INTERVAL = 1'

DRAINAGE SCHEDULE

(3-1)	I EA. DI-I REQ'D. RIM ELEV. = 1752.05 INV. IN = 1748.65 - 15" H.D.P.E.
(3-1) (3-2)	28 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-2)	I EA. DI-3C REQ'D. L=10' RIM ELEV. = 1751.60 INV. IN = 1747.35 - 15" H.D.P.E. INV. IN = 1745.10 - 15" H.D.P.E. INV. OUT = 1745.10 - 15" H.D.P.E.
(3-2) (3-9)	140 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-3)	I EA. DI-3C REQ'D. L=10' RIM ELEV. = 1752.80 INV. IN = 1748.55 - 15" H.D.P.E. INV. IN = 1746.55 - 15" H.D.P.E. INV. OUT = 1746.55 - 15" H.D.P.E.
(3-3) (3-2)	87 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-4)	I EA. DI-I REQ'D. RIM ELEV. = 1752.05 INV. OUT = 1748.85 - 15" H.D.P.E.
(3-4) (3-3)	26 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-5)	I EA. DI-3C REQ'D. L = 6' RIM ELEV. = 1755.00 INV. IN = 1747.25 - 15" H.D.P.E. INV. IN = 1750.25 - 15" H.D.P.E. INV. OUT = 1747.25 - 15" H.D.P.E.
(3-5) (3-3)	90 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-6)	I EA. DI-I REQ'D. RIM ELEV. = 1754.05 INV. IN = 1750.75 - 15" H.D.P.E. INV. OUT = 1750.75 - 15" H.D.P.E.
(3-6) (3-5)	53 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-7)	I EA. DI-I REQ'D. RIM ELEV. = 1755.50 INV. OUT = 1751.75 - 15" H.D.P.E.
(3-7) (3-6)	32 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-8)	I EA. DI-I REQ'D. RIM ELEV. = 1755.00 INV. OUT = 1747.75 - 15" H.D.P.E.
(3-8) (3-5)	65 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-9)	I EA. DI-3B REQ'D. L=8' RIM ELEV. = 1749.05 INV. IN = 1740.00 - 15" H.D.P.E. INV. IN = 1740.00 - 36" H.D.P.E. INV. OUT = 1740.00 - 18" H.D.P.E.
(3-9) (3-18)	80 L.F. - 18" DIAMETER H.D.P.E. PIPE REQ'D
(3-10)	I EA. DI-3B REQ'D. L=8' RIM ELEV. = 1751.50 INV. IN = 1746.50 - 15" H.D.P.E. INV. OUT = 1740.50 - 36" H.D.P.E.
(3-10) (3-9)	70 L.F. - 36" DIAMETER H.D.P.E. PIPE REQ'D
(3-11)	I EA. DI-3B REQ'D. L=12' RIM ELEV. = 1753.50 INV. IN = 1747.65 - 15" H.D.P.E. INV. OUT = 1747.65 - 15" H.D.P.E.
(3-11) (3-10)	66 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-12)	I EA. M.H.-1 OR M.H.-2 REQ'D. RIM ELEV. = 1755.50 INV. IN = 1749.25 - 15" H.D.P.E. INV. IN = 1749.25 - 15" H.D.P.E. INV. OUT = 1749.25 - 15" H.D.P.E.
(3-12) (3-11)	105 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-13) (3-12)	24 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-13)	I EA. DI-I REQ'D. RIM ELEV. = 1754.01 INV. OUT = 1750.75 - 15" H.D.P.E.
(3-14)	I EA. DI-I REQ'D. RIM ELEV. = 1755.00 INV. OUT = 1750.75 - 15" H.D.P.E.
(3-14) (3-12)	45 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-15)	I EA. DI-I REQ'D. RIM ELEV. = 1753.10 INV. OUT = 1749.55 - 15" H.D.P.E.
(3-15) (3-16)	62 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-16)	I EA. DI-I REQ'D. RIM ELEV. = 1748.30 INV. IN = 1745.95 - 15" H.D.P.E. INV. OUT = 1742.00 - 18" H.D.P.E.
(3-16) (3-17)	55 L.F. - 18" DIAMETER H.D.P.E. PIPE REQ'D
(3-17)	I EA. DI-I REQ'D. RIM ELEV. = 1747.00 INV. IN = 1740.75 - 18" H.D.P.E. INV. OUT = 1737.50 - 24" H.D.P.E.
(3-17) (3-18)	54 L.F. - 24" DIAMETER H.D.P.E. PIPE REQ'D
(3-18)	I EA. DI-3B REQ'D. L=8' RIM ELEV. = 1746.00 INV. IN = 1736.75 - 24" H.D.P.E. INV. IN = 1735.75 - 18" H.D.P.E. INV. OUT = 1735.75 - 18" H.D.P.E.
(3-18) (3-20)	99 L.F. - 18" DIAMETER H.D.P.E. PIPE REQ'D
(3-19)	I EA. DI-I REQ'D. RIM ELEV. = 1744.90 INV. OUT = 1737.25 - 36" H.D.P.E.
(3-19) (3-20)	70 L.F. - 36" DIAMETER H.D.P.E. PIPE REQ'D
(3-20)	I EA. DI-3B REQ'D. L=12' RIM ELEV. = 1743.57 INV. IN = 1735.25 - 18" H.D.P.E. INV. IN = 1735.25 - 36" H.D.P.E. INV. OUT = 1735.25 - 18" H.D.P.E.
(3-20) (3-21)	26 L.F. - 18" DIAMETER H.D.P.E. PIPE REQ'D
(3-21)	I EA. WATER QUALITY BMP REQ'D. RIM ELEV. = 1743.00 INV. IN = 1735.12 - 18" H.D.P.E. INV. OUT = 1734.37 - 18" H.D.P.E.
(3-21) (3-22)	23 L.F. - 18" DIAMETER H.D.P.E. PIPE REQ'D
(3-22)	I EA. DI-I REQ'D. RIM ELEV. = 1740.80 INV. IN = 1730.50 - 18" H.D.P.E. INV. OUT = 1730.50 - 15" H.D.P.E.
(3-23)	I EA. DI-3B REQ'D. L = 4' RIM ELEV. = 1736.49 INV. IN = 1729.50 - 15" H.D.P.E. INV. OUT = 1729.50 - 18" H.D.P.E.
(3-23) (EX MH 5)	38 L.F. - 18" DIAMETER H.D.P.E. PIPE REQ'D
(3-24) (3-23)	11 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-22) (3-24)	63 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-24)	I EA. JUNCTION BOX REQ'D. CONTROL STRUCTURE (SEE SHEET C300 FOR DETAIL) RIM ELEV. = 1738.00 INV. IN = 1729.67 - 15" H.D.P.E. INV. IN = 1729.67 - 36" H.D.P.E. INV. OUT = 1729.67 - 15" H.D.P.E.
(3-25) (3-24)	89 L.F. - 36" DIAMETER H.D.P.E. PIPE REQ'D
(3-25)	I EA. DI-I REQ'D. RIM ELEV. = 1747.50 INV. IN = 1741.25 - 15" H.D.P.E. INV. OUT = 1732.67 - 36" H.D.P.E.
(3-26) (3-25)	55 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-26)	I EA. M.H.-1 OR M.H.-2 REQ'D. RIM ELEV. = 1755.5 INV. IN = 1751.25 - 15" H.D.P.E. INV. OUT = 1749.25 - 15" H.D.P.E.
(3-27) (3-26)	58 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-27)	I EA. DI-3B REQ'D. L=8' RIM ELEV. = 1766.00 INV. OUT = 1759.68 - 15" H.D.P.E.
(3-28)	I EA. DI-3B REQ'D. L=10' RIM ELEV. = 1750.00 INV. IN = 1746.26 - 15" H.D.P.E. INV. OUT = 1746.26 - 15" H.D.P.E.
(3-29) (3-28)	26 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D
(3-28) (EX CB 1)	26 L.F. - 15" DIAMETER H.D.P.E. PIPE REQ'D





BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-I 460.00.MF.0915

**BRISTOL, VIRGINIA
BRHA - TWO-1460.00.MF.0915
WATER AND SANITARY SEWER PLAN**

SEWER AND SANITARY SEWER PLAN

Designed	JB
Drawn	JB
Checked	JJM/TAM
Date	SEP 11, 2015
File No.	BONHAM SITE WATER AND SEWER PLAN.dwg

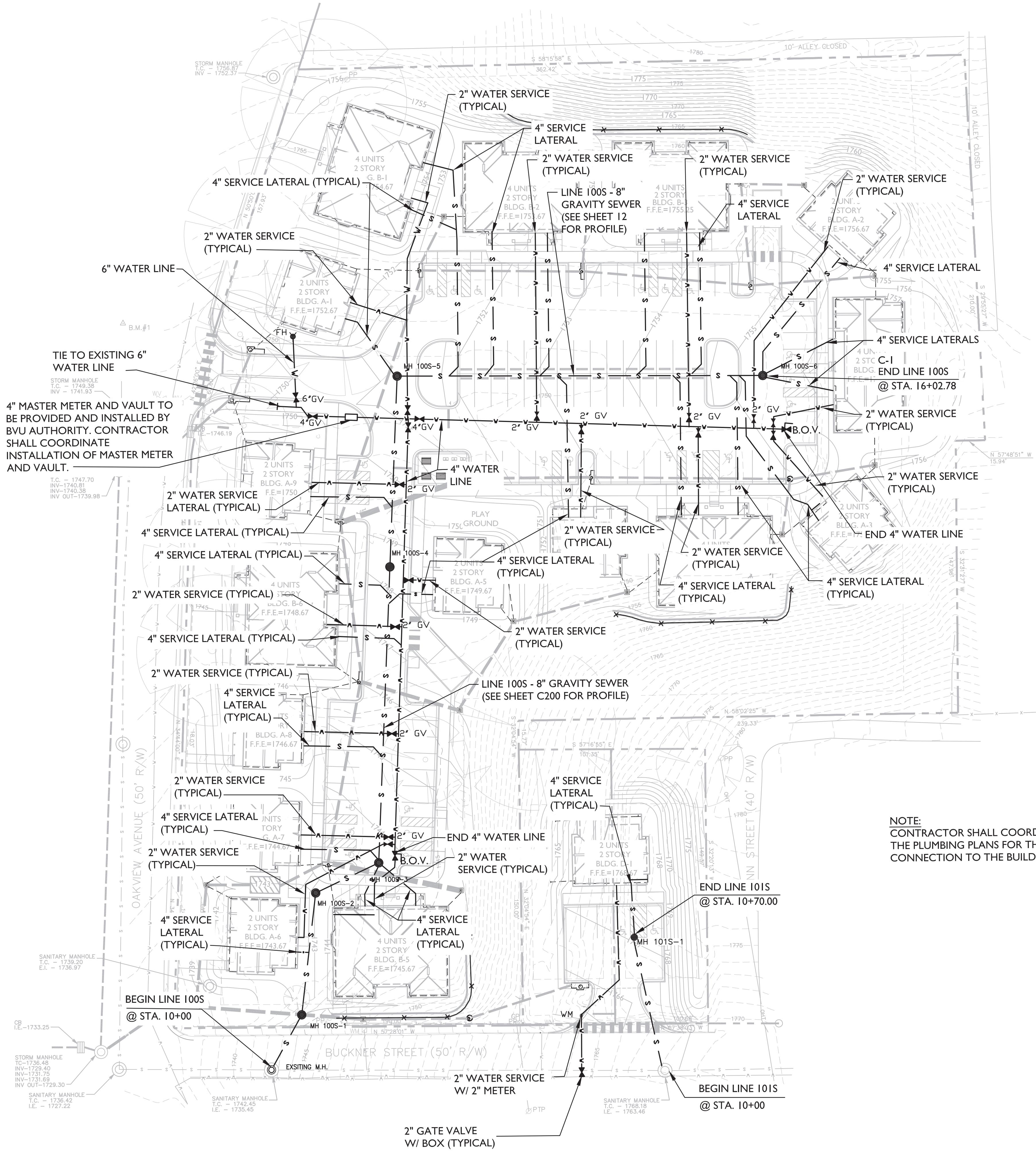
Project No.
12655-06

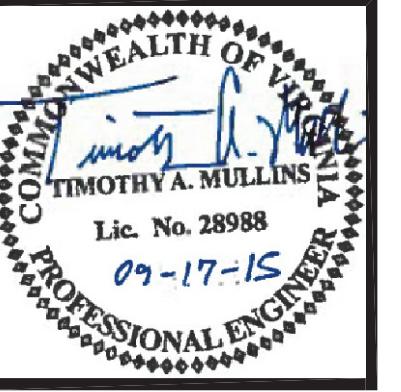


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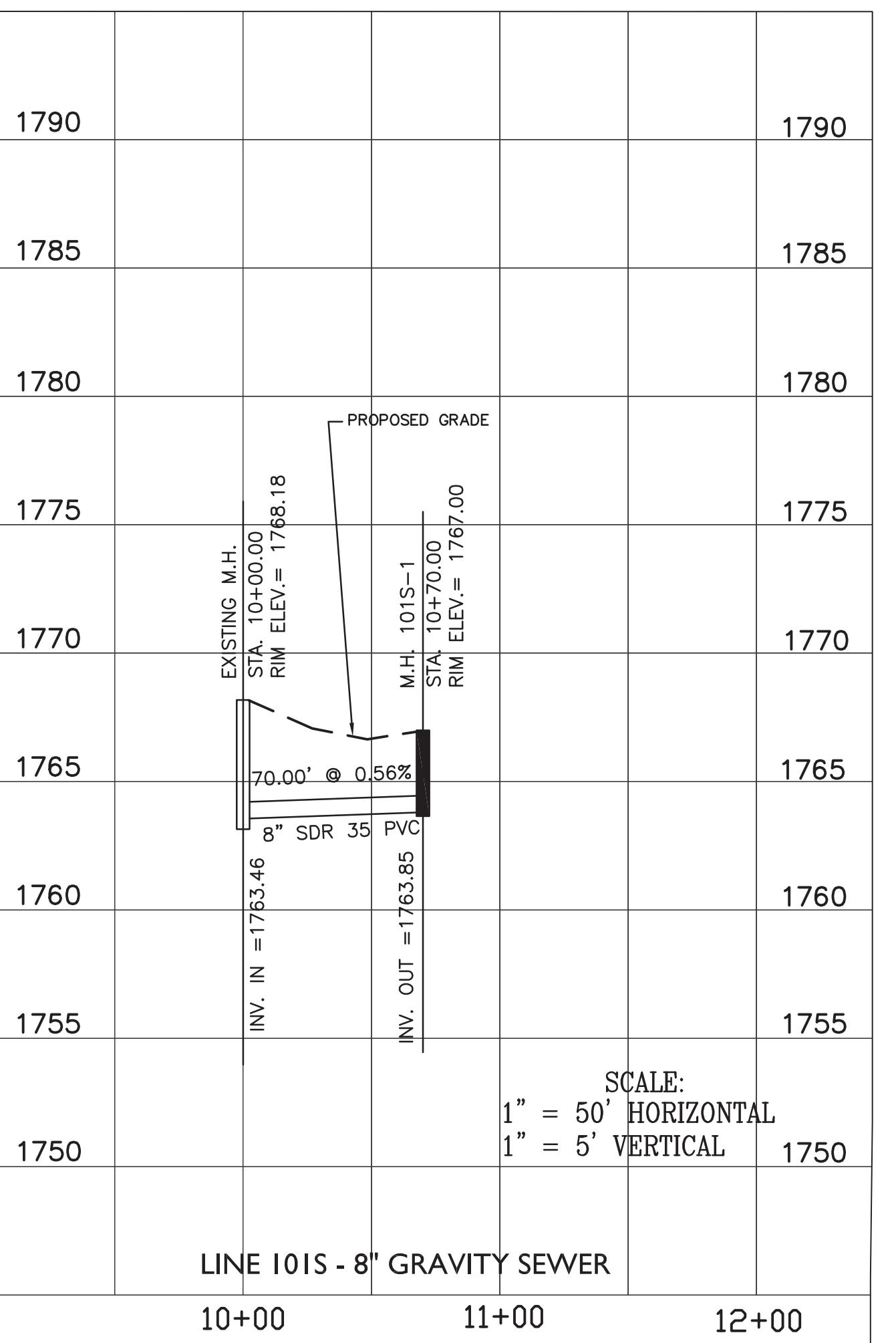
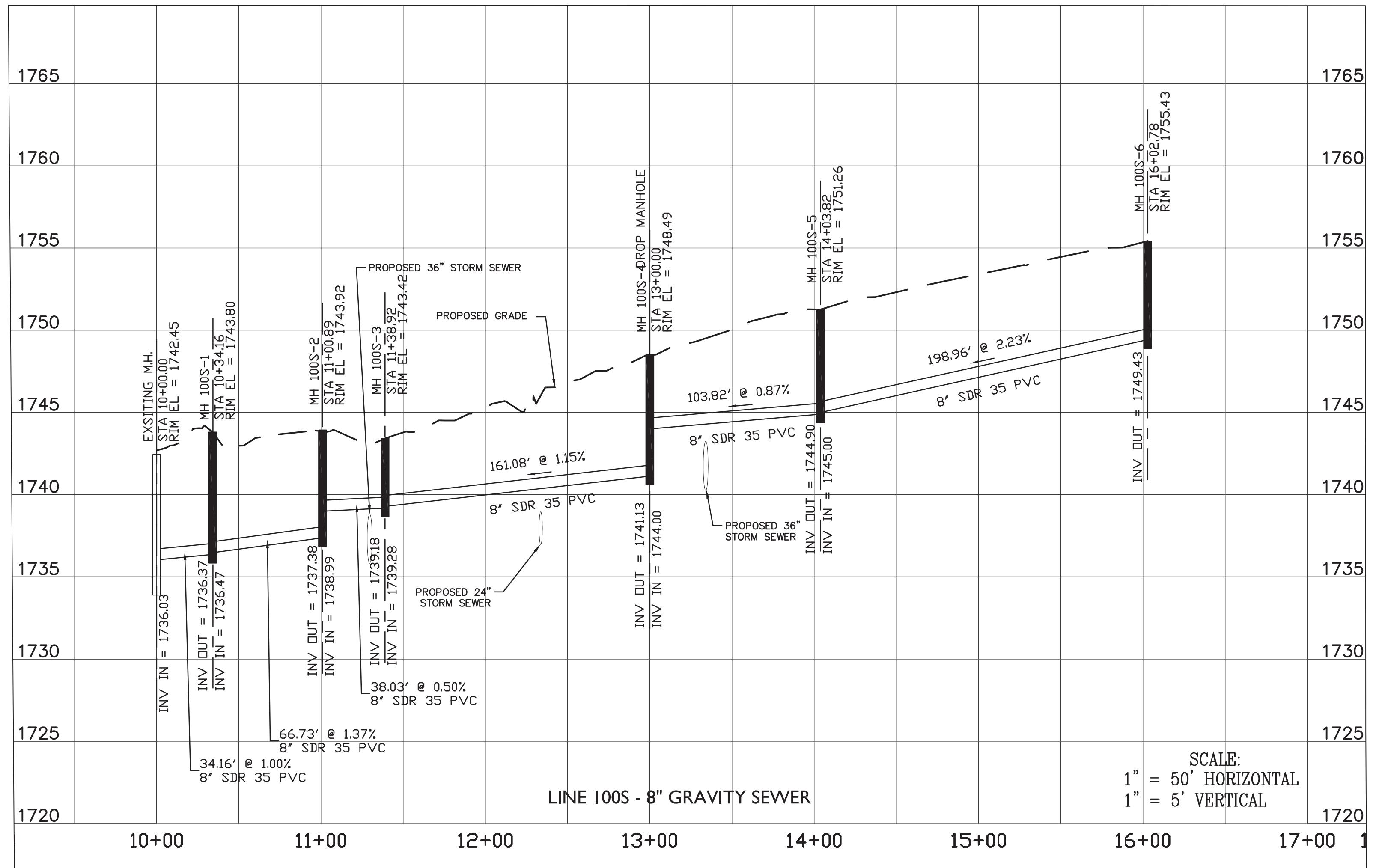
C104





**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
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SANITARY SEWER LINE 100S AND 101S PROFILES



No.	Date	Purpose of Document Issue
	1/22/2015	REVISED PER CITY OF BRISTOL, VA COMMENTS

Designed	JB
Drawn	JB
Checked	JJMITAM
Date	SEP 11, 2015
File No.	BONHAM SITE WATER AND SEWER PLAN.Dwg

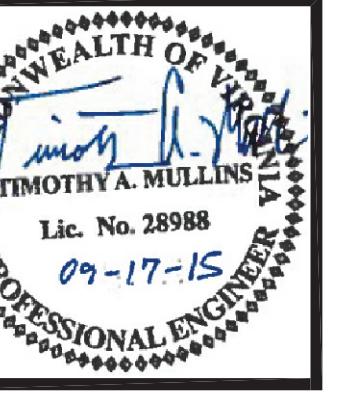
Project No.
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Sheet No.

C200



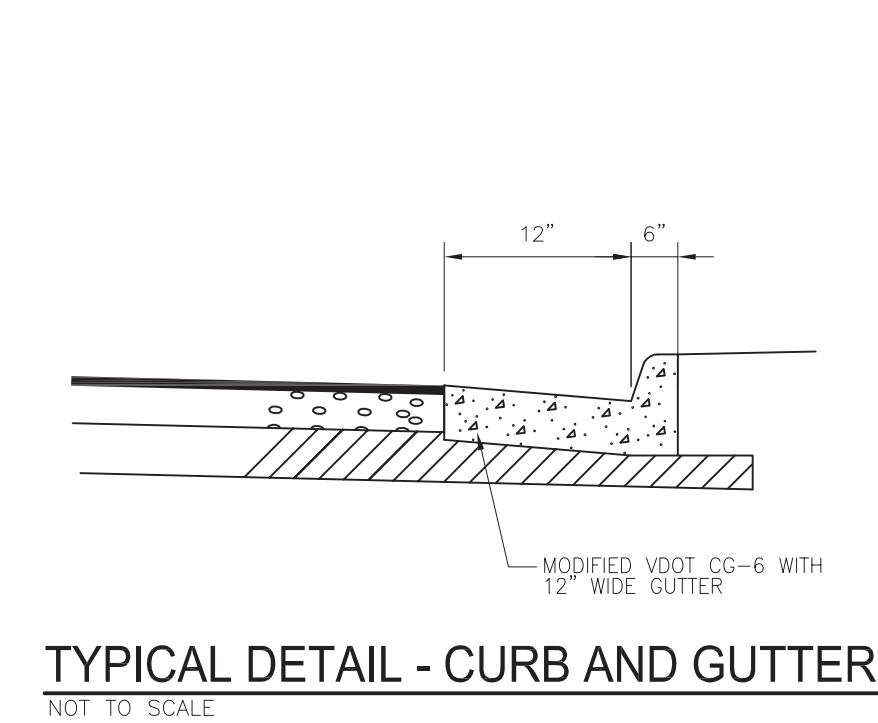
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THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-146.00.MF.0915**

SITE DETAILS

Purpose of Document Issue			
Date	1/22/2015	REvised per City of Bristol, VA, Comments	
Drawn	JB	2/29/2015	REvised per City of Bristol, VA, Comments
Checked	JJ/TAM		
Date	SEP. 11, 2015		
File No.	DETAILS.dwg		

Project No.	12655-06
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Sheet No.	C300
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TYPICAL DETAIL - CURB AND GUTTER

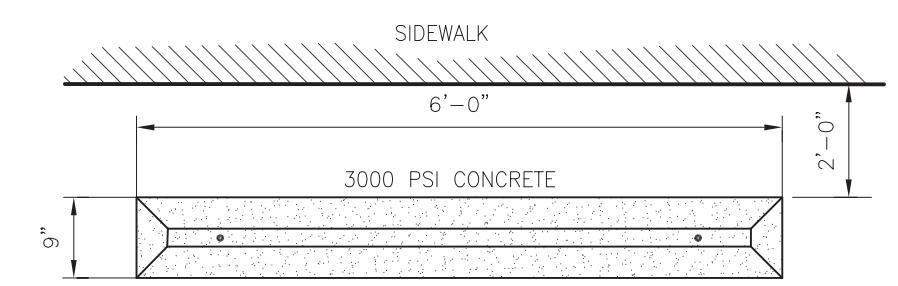
NOT TO SCALE

FINAL GRADE
1.5" SM-9.5A ASPHALT SURFACE COURSE
3" BM-25.0 ASPHALT BASE COURSE
6" TYPE 1, NO. 21A AGGREGATE BASE MATERIAL

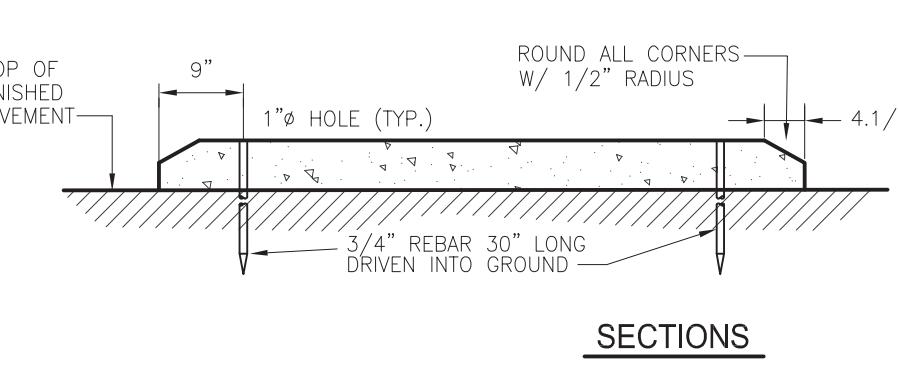


TYPICAL DETAIL - PARKING LOT PAVEMENT

NOT TO SCALE



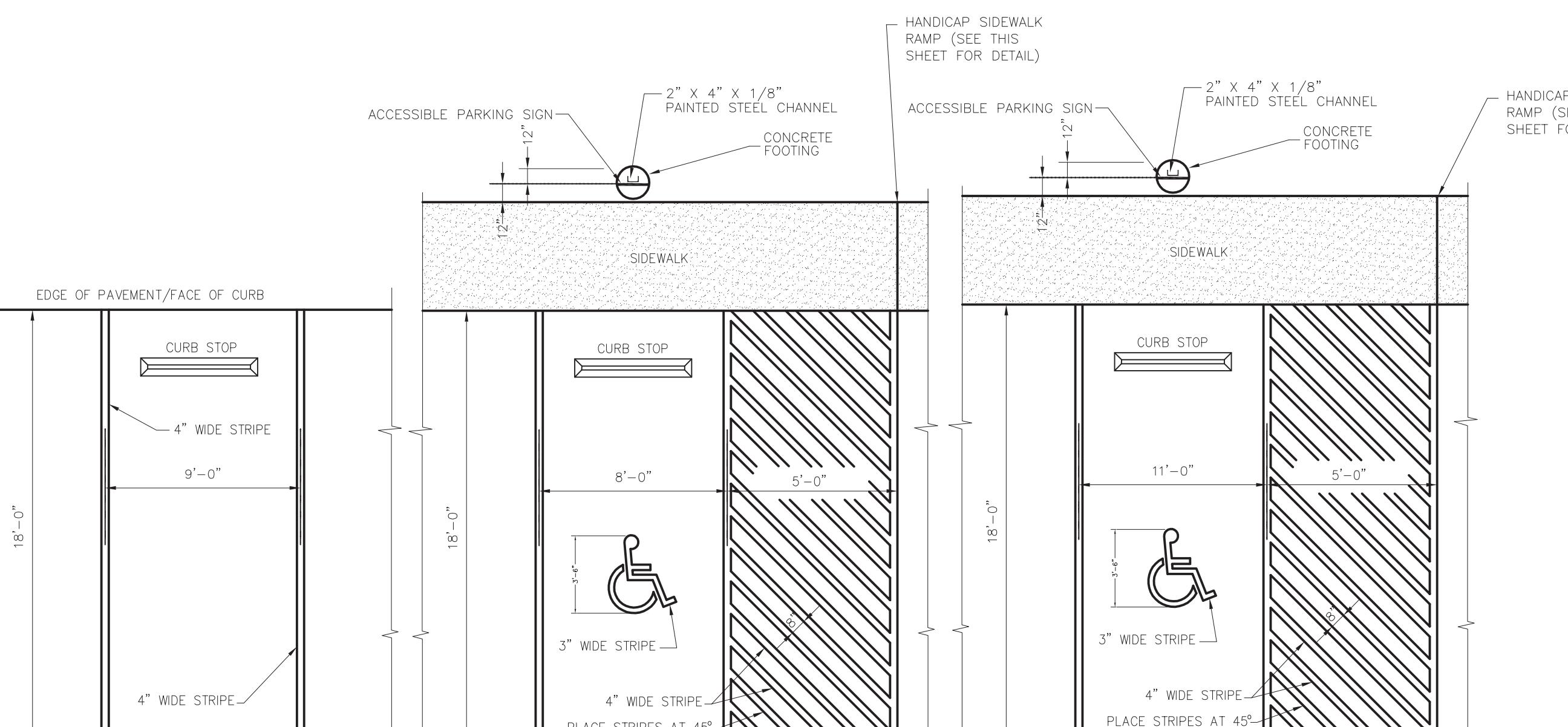
PLAN



SECTIONS

TYPICAL DETAIL - CURB STOP

NOT TO SCALE



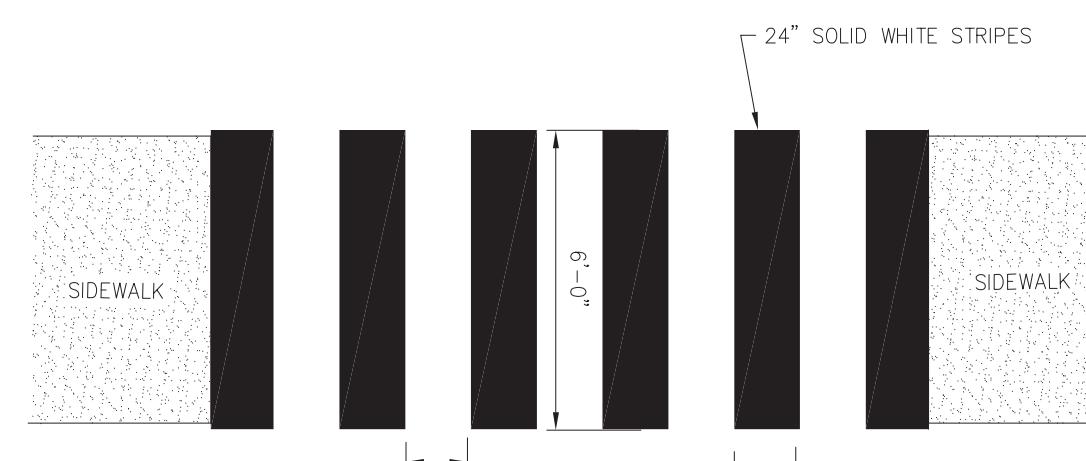
STANDARD

CAR ACCESSIBLE

VAN ACCESSIBLE

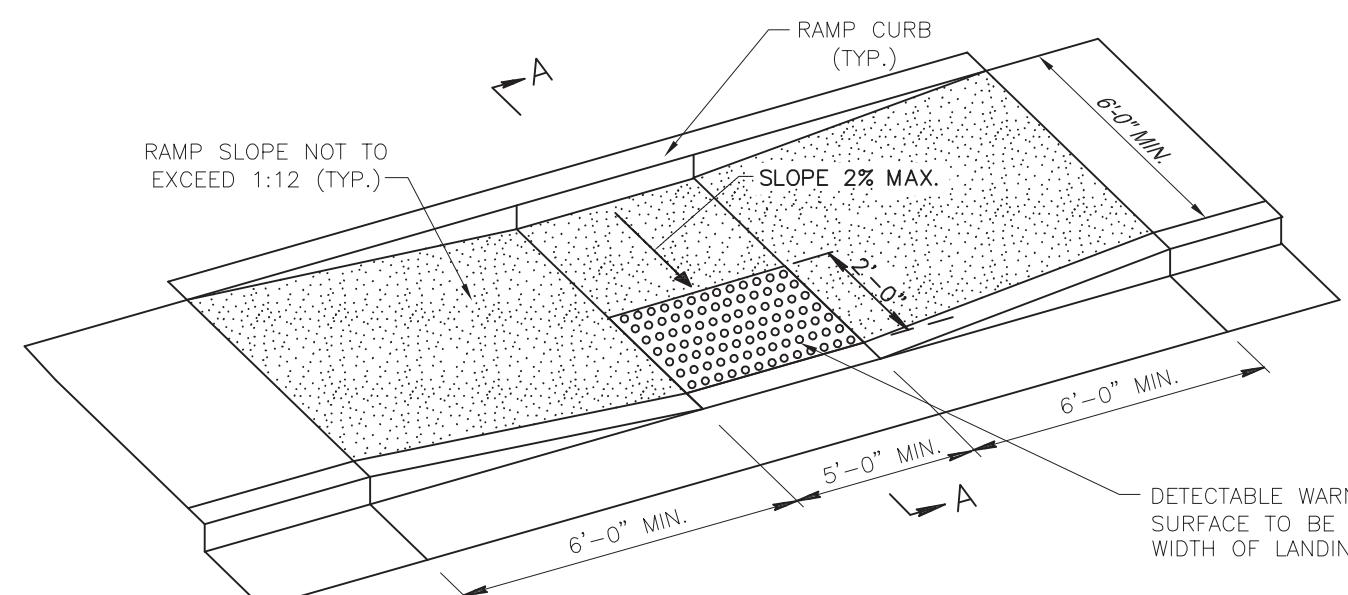
TYPICAL DETAIL - PARKING STALL LAYOUT

NOT TO SCALE



TYPICAL DETAIL - CROSSWALK

NOT TO SCALE



ISOMETRIC VIEW OF RAMP

SHALL BE A SQUARE GRID, EQUAL IN BOTH DIRECTIONS. DOMES SHALL BE ALIGNED IN THE DIRECTION OF PEDESTRIAN TRAVEL AND DIRECTED TOWARD RAMP ON OPPOSITE SIDE OF STREET.

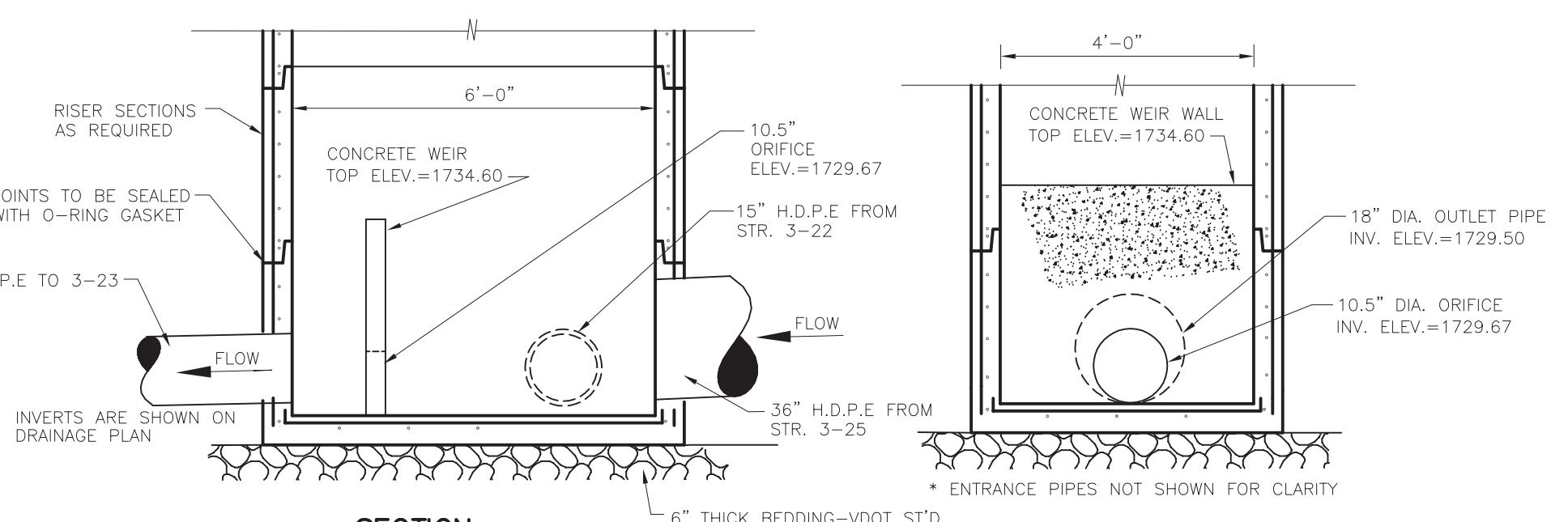
SECTION A-A

DETECTABLE WARNING DETAIL

- NOTES:
1. HANDICAP RAMP CONSTRUCTION SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES AND SPECIFICATIONS.
 2. SURFACES SHALL MEET THE GUIDELINES OF THE ADA STANDARDS FOR ACCESSIBILITY, APPENDIX A, PART 36.
 3. THE SLOPE OF THE GUTTER MUST NOT EXCEED 1:20 ADJACENT TO THE RAMP.
 4. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 INCHES, A HEIGHT OF NOMINAL 0.2 INCHES AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. IF THE SIDEWALK AND RAMP ARE CONSTRUCTED OF CONCRETE, THE WARNING AREA SHALL BE RED BRICK IN COLOR. TRUNCATED DOME SURFACE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.

TYPICAL DETAIL - HANDICAP SIDEWALK RAMP

NOT TO SCALE



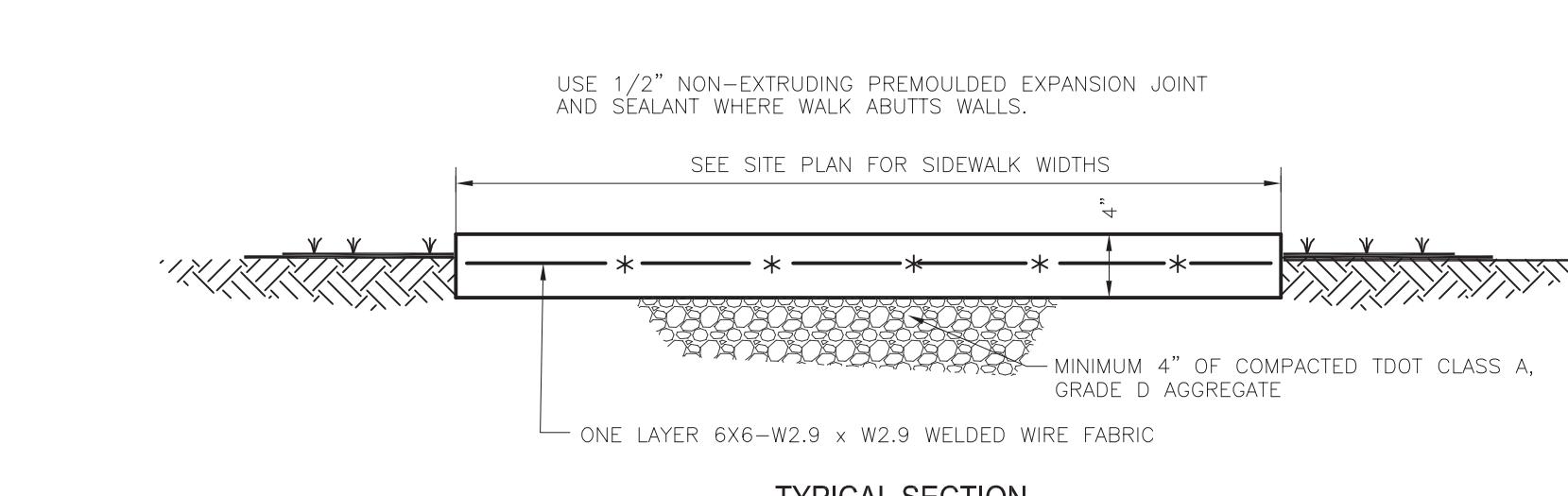
NOTES:

1. THE WEIR WALL SHALL BE ANCHORED TO THE INVERT AND INTERIOR WALLS OF THE BOX. THE WEIR SHALL BE 4" THICK AND CONSTRUCTED OF VDOT STD CLASS A3 CONCRETE.

TYPICAL DETAIL - CONTROL STRUCTURE 3-24

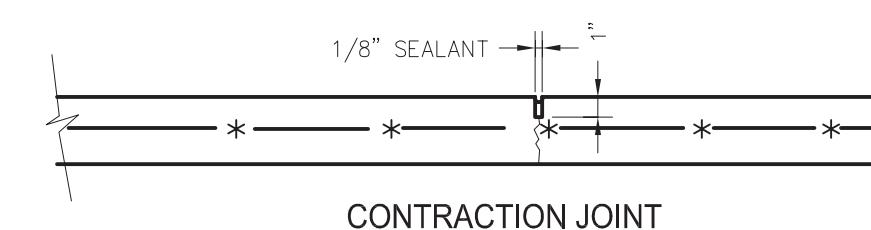
NOT TO SCALE

SECTION



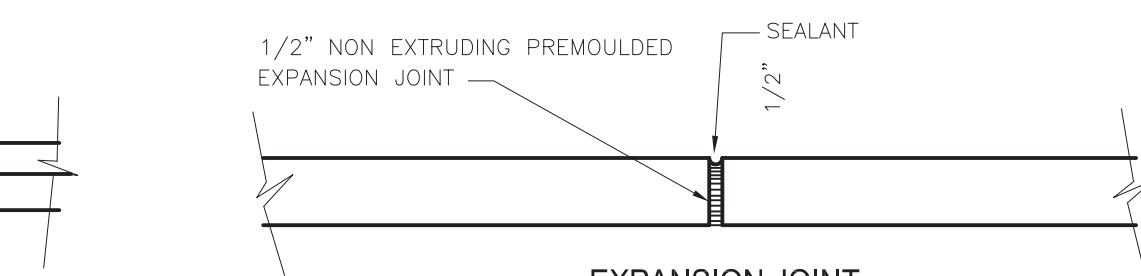
PLAN VIEW

TYPICAL SECTION



CONTRACTION JOINT

SPACED @ 6'-0" C/C



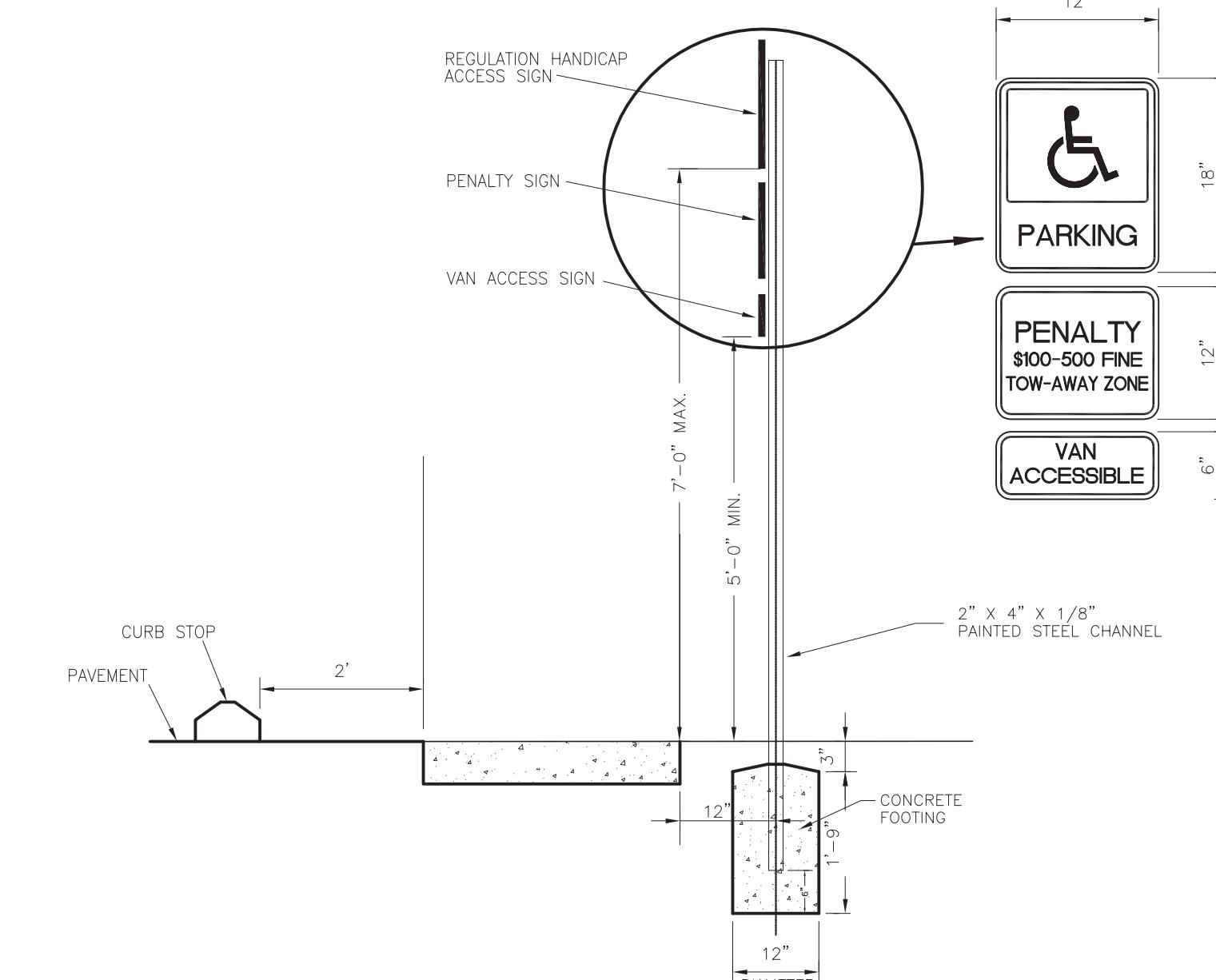
EXPANSION JOINT

SPACED @ 30'-0" C/C

- NOTES:
1. IN LOCATIONS WHERE ALL SURFACE DRAINAGE IS DIRECTED AWAY FROM SIDEWALK, FINAL GRADE ADJACENT TO BOTH SIDES OF SIDEWALK IS TO BE 2-INCHES BELOW THE EDGE OF THE SIDEWALK.
 2. IN LOCATIONS WHERE SURFACE DRAINAGE FROM ADJACENT AREAS IS DIRECTED ACROSS SIDEWALKS, FINAL GRADE ADJACENT TO THE LOW SIDE OF THE SIDEWALK IS TO BE 2-INCHES BELOW THE EDGE OF SIDEWALK. FINAL GRADE ADJACENT TO THE HIGH SIDE OF SIDEWALK IS TO MATCH THE FINAL GRADE OF THE SIDEWALK.
 3. THE FIRST 5 FEET OF ALL SIDEWALKS AT DOORWAYS SHALL BE LEVEL AND SHALL BE AT FINISH FLOOR ELEVATION.

TYPICAL DETAIL - SIDEWALK

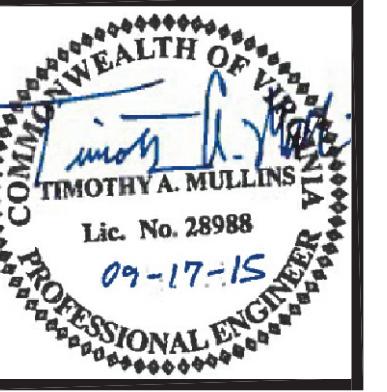
NOT TO SCALE



TYPICAL DETAIL - ACCESSIBLE PARKING SIGN

NOT TO SCALE

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THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
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	11/22/2015	REVISED PER CITY OF BRISTOL, VA COMMENTS

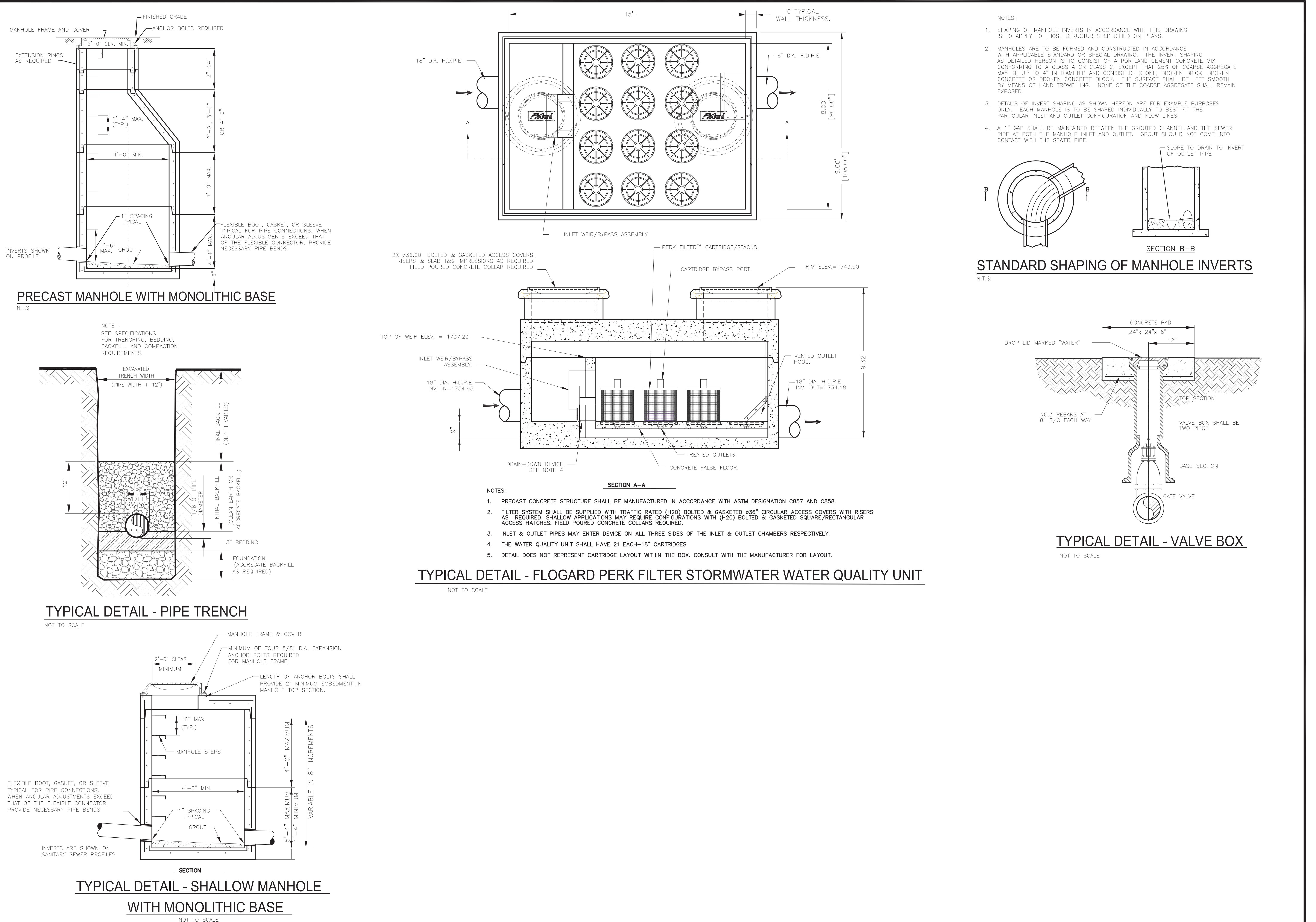
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Date	SEP. 11, 2015
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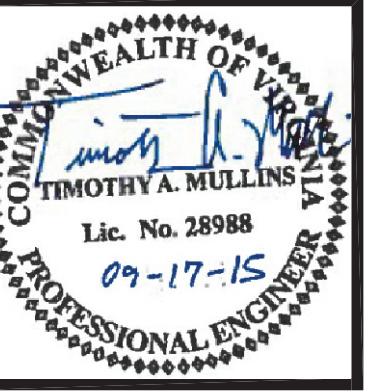
Project No.
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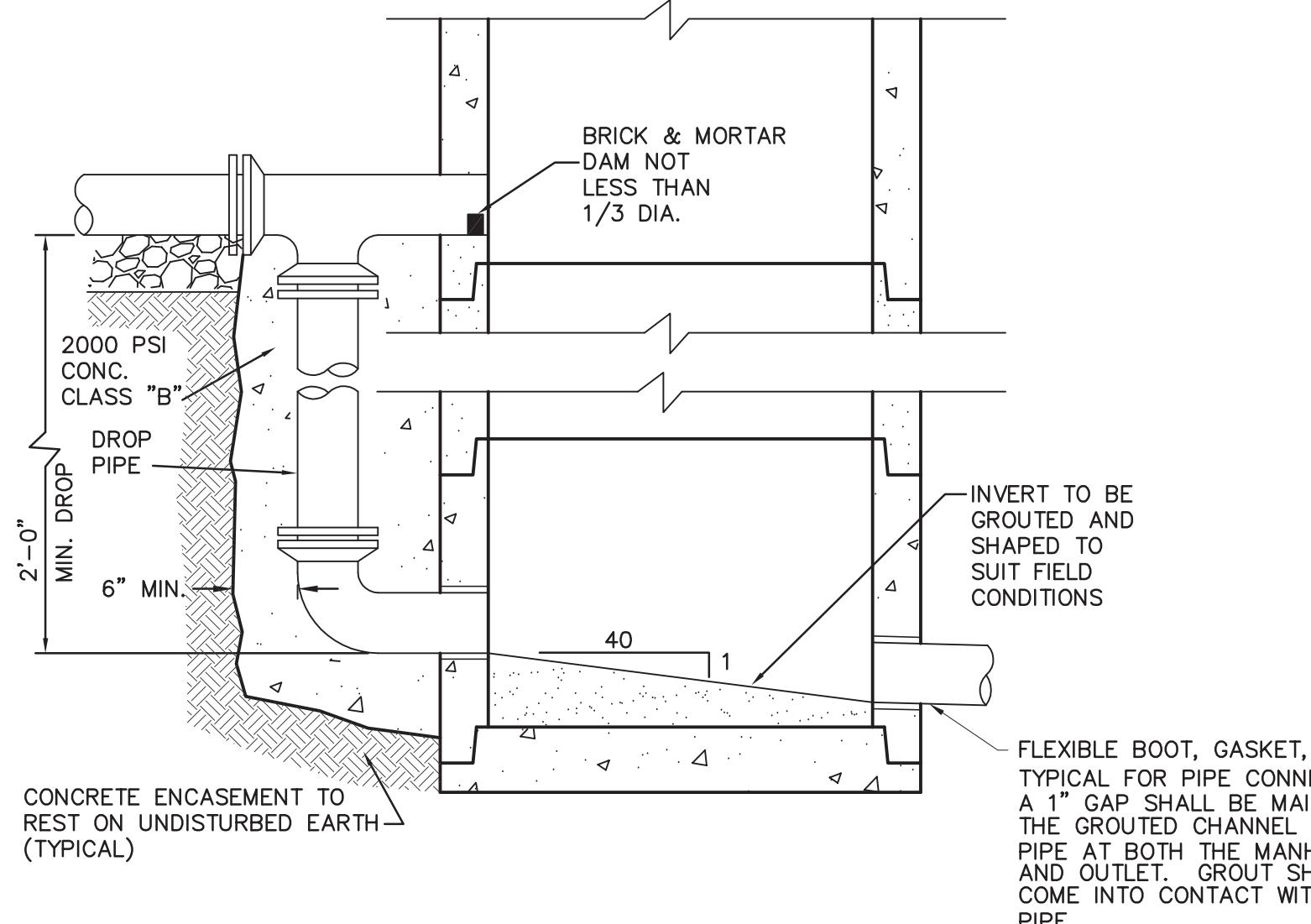
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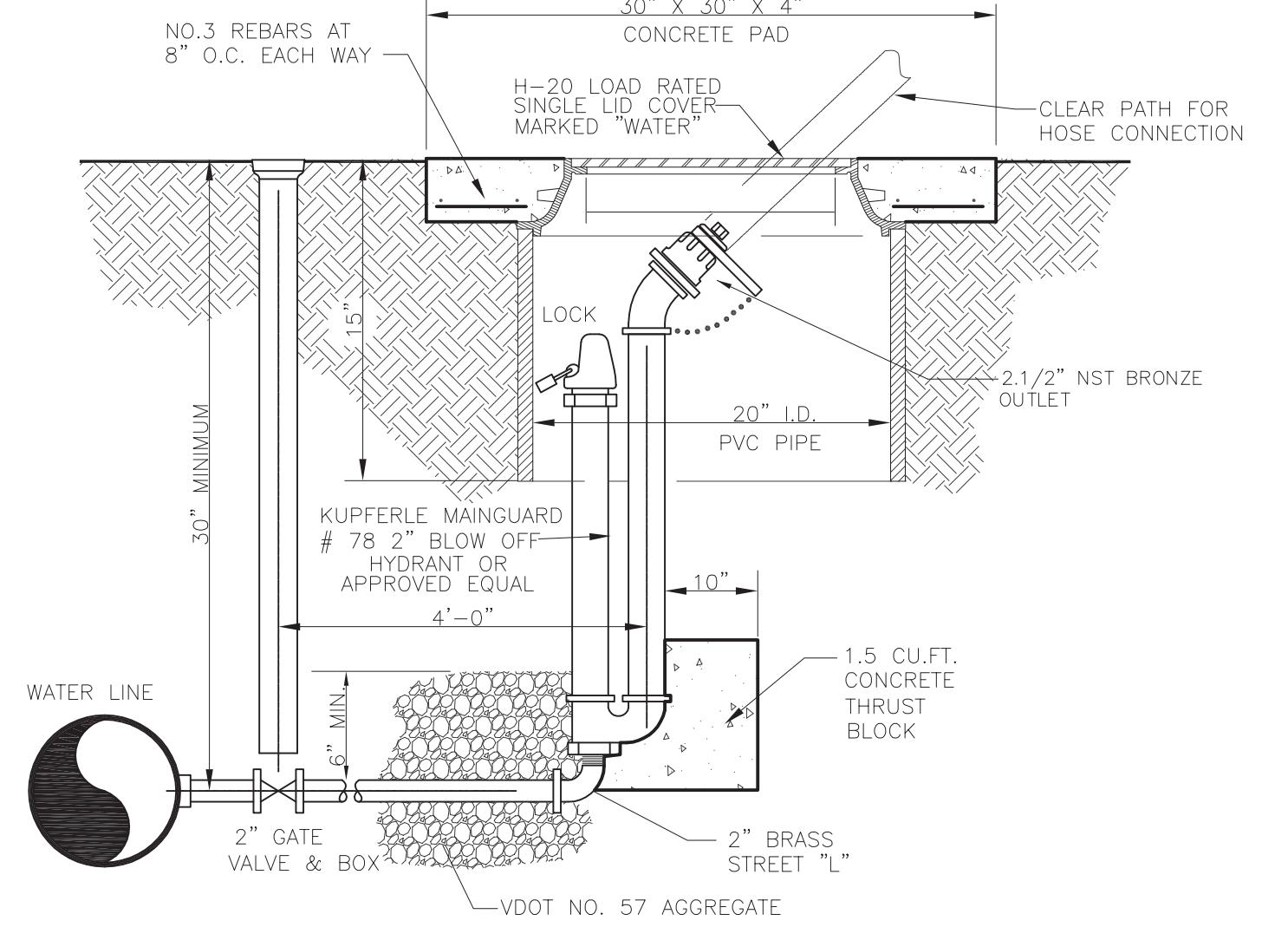
**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-1460.00.MF.0915**

**STANDARD WATER AND
SANITARY SEWER DETAILS**



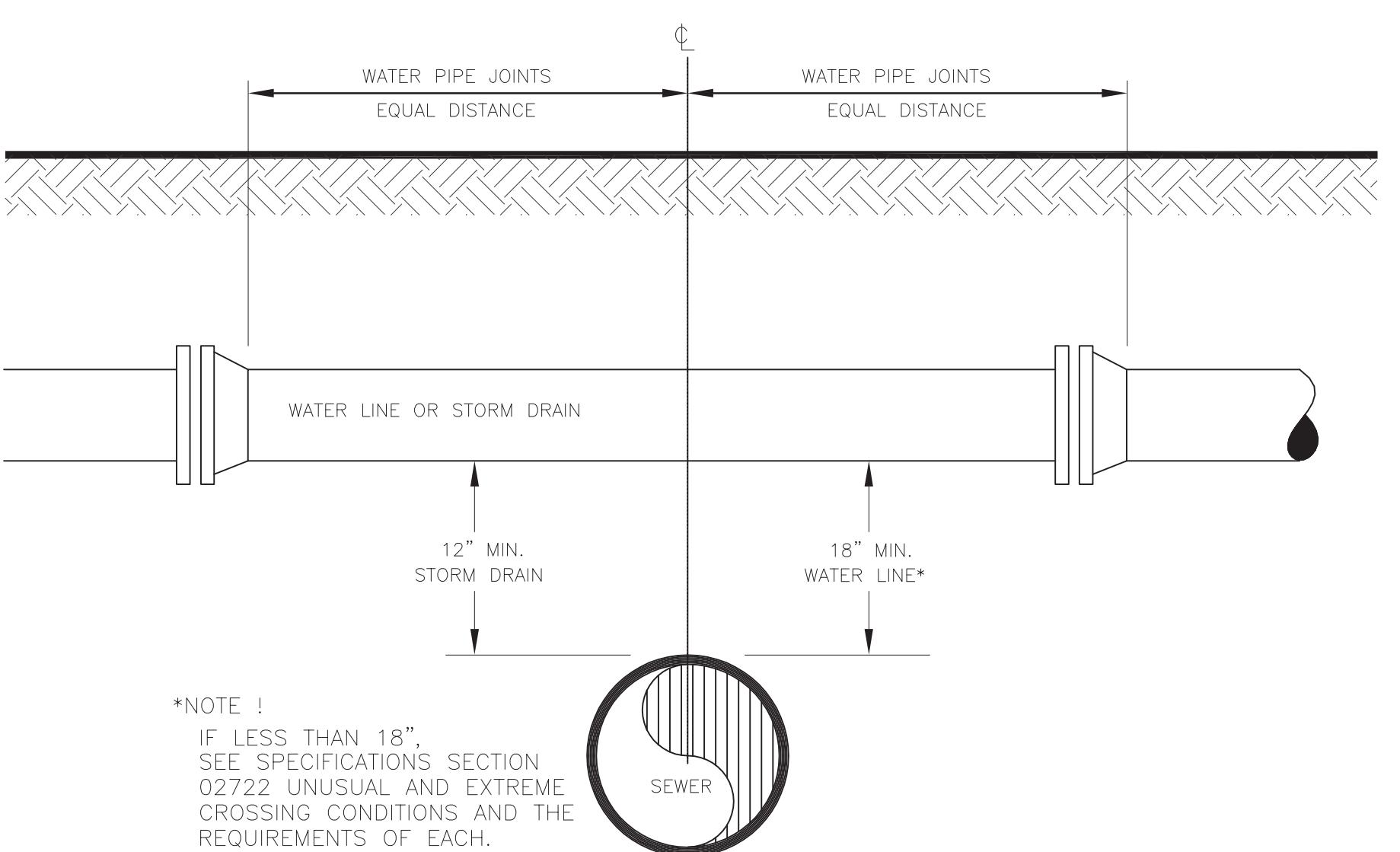
DETAIL OF DROP MANHOLE

NOT TO SCALE



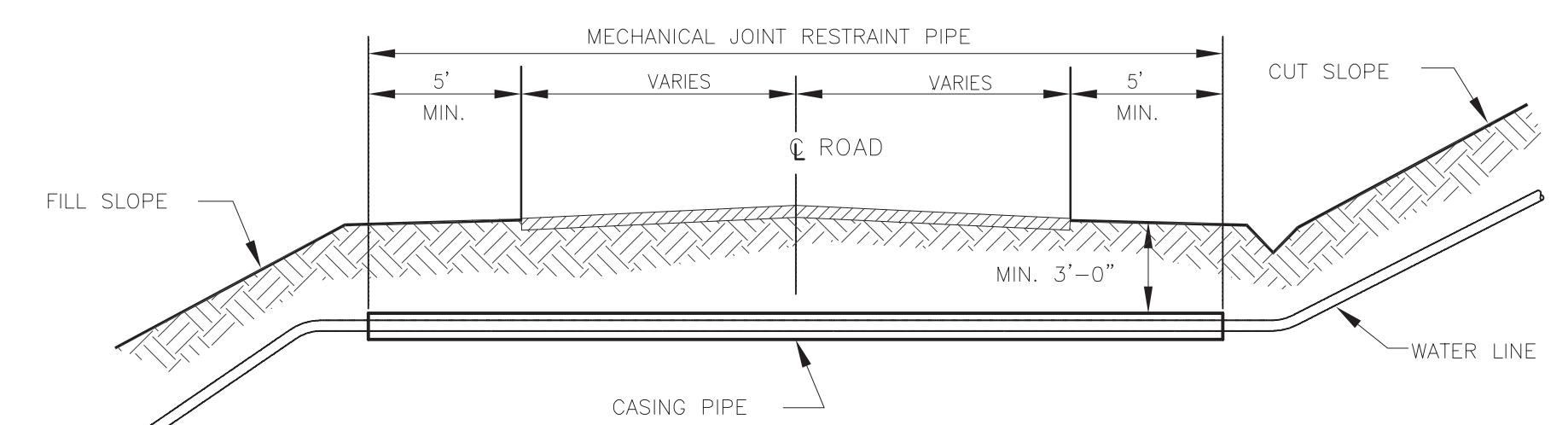
TYPICAL DETAIL - BLOW-OFF VALVE

NOT TO SCALE



TYPICAL DETAIL - UTILITY CROSSING

NOT TO SCALE



TYPICAL DETAIL - WATER LINE ROAD CROSSING

Purpose of Document Issue	
Date	1/22/2015
Comments	REVISED PER CITY OF BRISTOL, VA COMMENTS

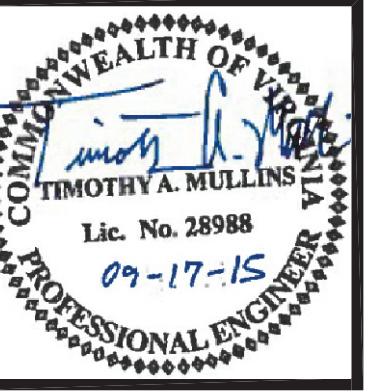
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Checked	JJMITAM
Date	SEP. 11, 2015
File No.	DETAILS.dwg

**Project No.
12655-06**

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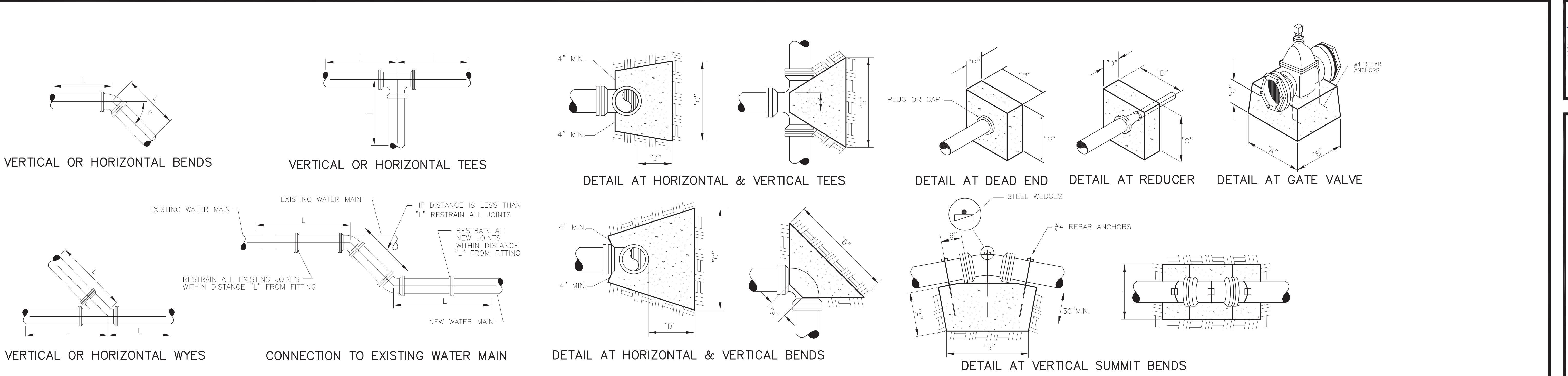
Sheet No.

C302



**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-1460.00.MF.0915**

STANDARD WATER LINE DETAILS



TYPICAL DETAILS

WORKING PRESSURE : 350 P.S.I.									
PIPE SIZE (in)	L = MINIMUM LENGTH OF RESTRAINED PIPE (ft)								
	$\Delta=90^\circ$		$\Delta=45^\circ$		$\Delta=22.5^\circ$		$\Delta=11.25^\circ$		
HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.		
3" & UNDER	43	44	17	17	9	9	4	4	
4	63	64	26	26	13	13	6	6	

WORKING PRESSURE : 350 P.S.I.																
PIPE SIZE	TEES & DEADENDS				90 ° BENDS		45 ° BENDS		22 1/2 ° BENDS		11 1/4 ° BENDS		VALVES			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	
3" & UNDER	10"	2'-6"	2'-6"	1'-6"	1'-2"	3'-8"	3'-2"	1'-9"	1'-2"	2'-8"	2'-2"	12"	8"	1'-8"	1'-8"	12"
4"	1'-0"	3'-0"	3'-0"	1'-8"	1'-2"	4'-0"	3'-4"	2'-0"	1'-2"	3'-0"	2'-4"	1'-6"	8"	2'-0"	2'-0"	12"
6"	1'-2"	3'-6"	3'-0"	2'-0"	1'-2"	4'-4"	3'-6"	2'-3"	1'-2"	3'-4"	2'-6"	2'-0"	8"	2'-0"	2'-0"	12"

NOTE:

1. THE RESTRAINED LENGTH OF WATER MAIN IS BASED ON THE FOLLOWING: A WORKING PRESSURE AS SHOWN IN THE TABLES, 3'-0" OF PIPE COVER, AND A SOIL TYPE CLASSIFICATION OF "MH".
2. PLUGS SHALL BE RESTRAINED BASED ON THE RESTRAINED LENGTH FOR 90° VERTICAL BENDS.
3. VALVES, TEES, AND WYES SHALL BE RESTRAINED BASED ON THE RESTRAINED LENGTH FOR 45° HORIZONTAL BENDS.
4. EXISTING WATER MAIN ADJACENT TO PROPOSED BENDS, WYES, VALVES, TEES, AND PLUGS SHALL BE UNCOVERED AND THE EXISTING JOINTS SHALL BE RESTRAINED FOR THE LENGTH INDICATED. IF THE EXISTING WATER MAIN WILL NOT ACCEPT THE MECHANICAL JOINT RESTRAINING MECHANISM, THE EXISTING WATER MAIN SHALL BE REPLACED WITH DUCTILE IRON WATER MAIN FOR THE LENGTH INDICATED. MECHANICAL JOINT RESTRAINING MECHANISMS SHALL NOT BE USED ON EXISTING POLYVINYLCHLORIDE (PVC) PIPE.

TYPICAL DETAILS AND CONSTRUCTION DATA -
MECHANICAL JOINT RESTRAINING DEVICES

NOT TO SCALE

VERTICAL SUMMIT BENDS THRUST BLOCK DATA ALL WORKING PRESSURES										
PIPE SIZE	11 1/4 °			22 1/2 °			45 °			REBARS
	A	B	C	A	B	C	A	B	C	
3" & UNDER	2'-6"	2'-6"	12"	2'-6"	2'-6"	2'-0"	3'-0"	3'-0"	2'-6"	3 - NO. 3
4"	2'-8"	2'-8"	12"	2'-8"	2'-8"	2'-6"	3'-6"	3'-6"	3'-0"	3 - NO. 4
6"	2'-10"	2'-10"	2'-4"	3'-10"	3'-10"	3'-4"	4'-6"	4'-6"	4'-0"	3 - NO. 4

NOTE:

1. THRUST BLOCKS ARE DESIGNED FOR A WORKING PRESSURE AS SHOWN IN THE TABLES AND AN ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF. IF PRESSURES AND SOIL BEARING CAPACITIES DO NOT FALL WITHIN THESE LIMITS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO INSTALLATION OF THRUST BLOCKS.
2. SEE "TYPICAL DETAILS - CONCRETE THRUST BLOCKS" FOR DIMENSIONAL LAYOUT.
3. A JOINT RESTRAINT SYSTEM MAY BE USED IN LIEU OF THRUST BLOCKS. THE JOINT RESTRAINT SYSTEM SHALL BE MEGALUG BY EBBA IRON SALES, INC., EASTLAND TEXAS OR APPROVED EQUAL. THE JOINT RESTRAINT SYSTEM SHALL BE DESIGNED FOR THE WORKING PRESSURES AND SOIL BEARING CAPACITIES AS INDICATED ON THE PLANS OR AS ENCOUNTERED IN THE FIELD. THE MANUFACTURER'S DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

CONSTRUCTION DATA FOR CONCRETE THRUST BLOCKS

Purpose of Document Issue	REvised per City of Bristol, VA Comments
No.	Date
	1/22/2015

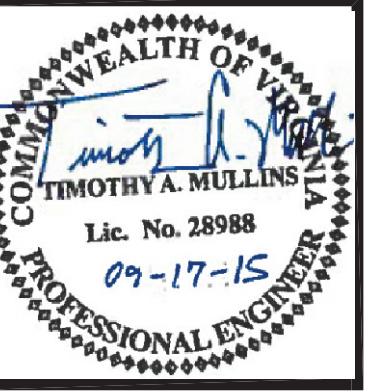
Designed	JB
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Sheet No.

C303



**BRISTOL REDEVELOPMENT & HOUSING AUTHORITY
THE VILLAGE AT OAKVIEW
BRISTOL, VIRGINIA
BRHA - TVO-1460.00.MF.0915
DUMPSTER PAD AND ENCLOSURE
PLAN AND DETAILS**

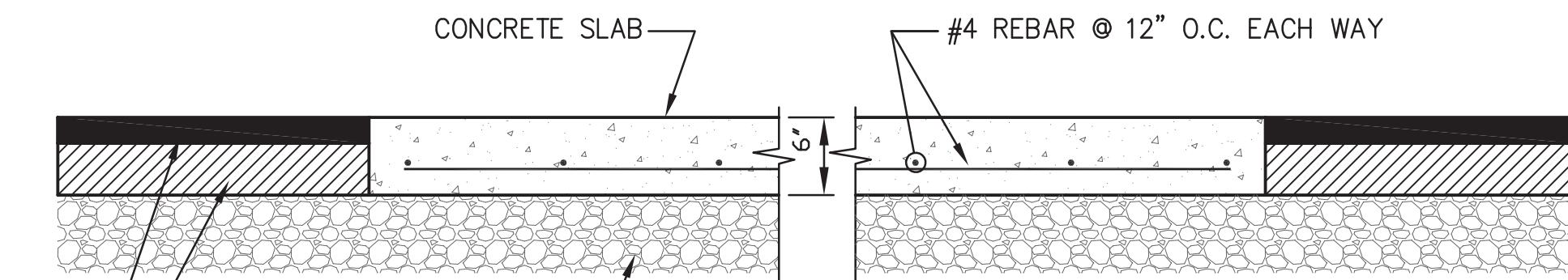
Purpose of Document Issue	
Date	REvised per City of Bristol, VA Comments
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Drawn	JB
Checked	JM/TAM
Date	SEP. 11, 2015
File No.	DETAILS.dwg

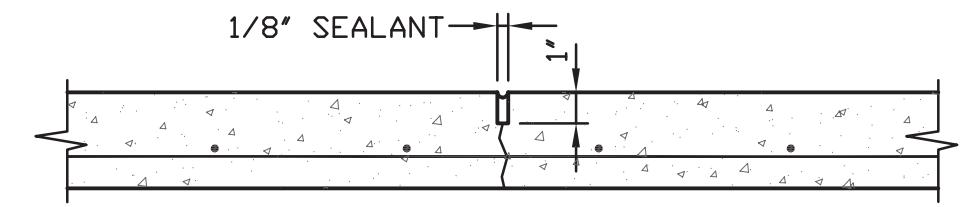
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Sheet No. **C304**



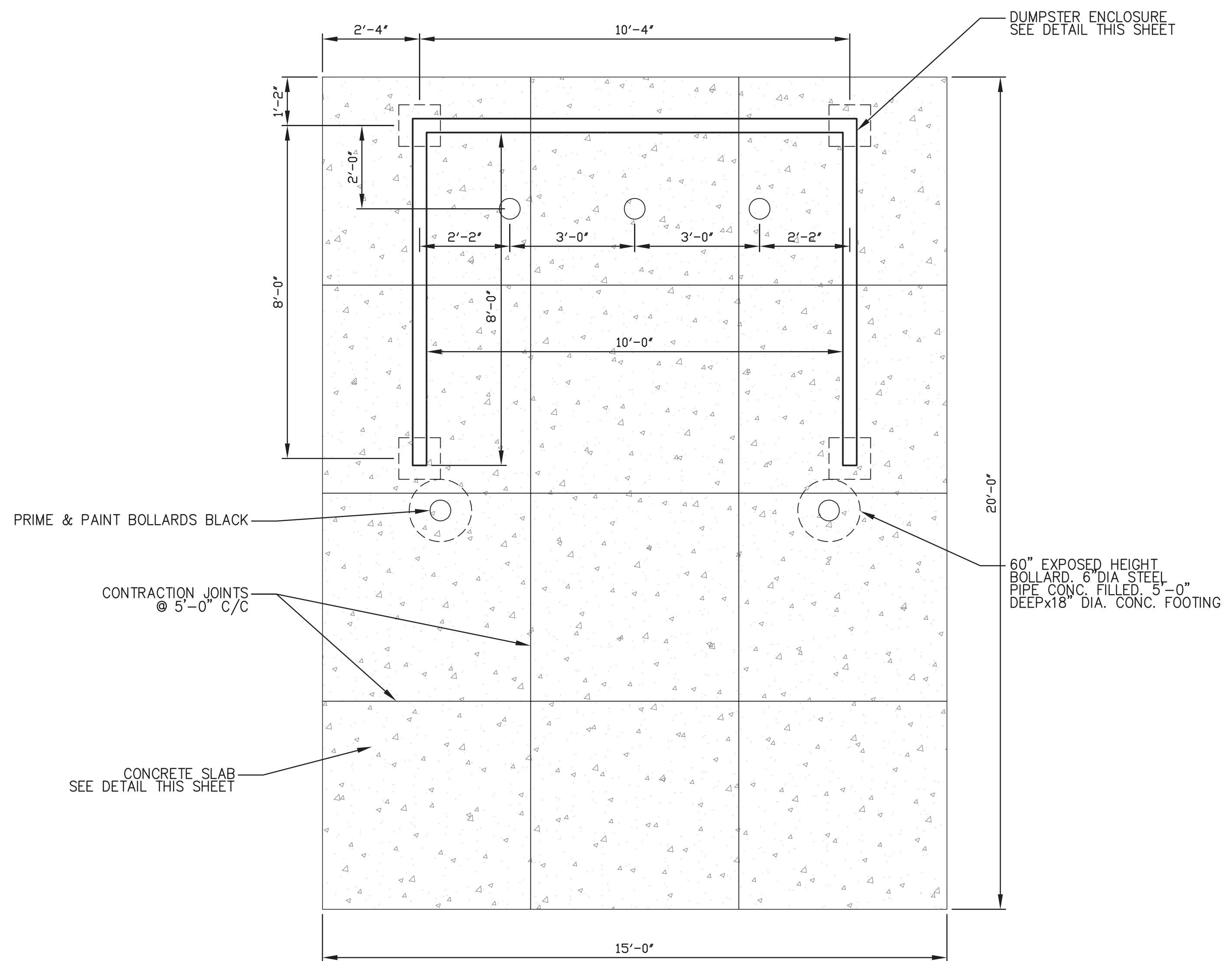
TYPICAL SECTION



CONTRACTION JOINT
JOINTS SPACED @ 5'-0" C/C

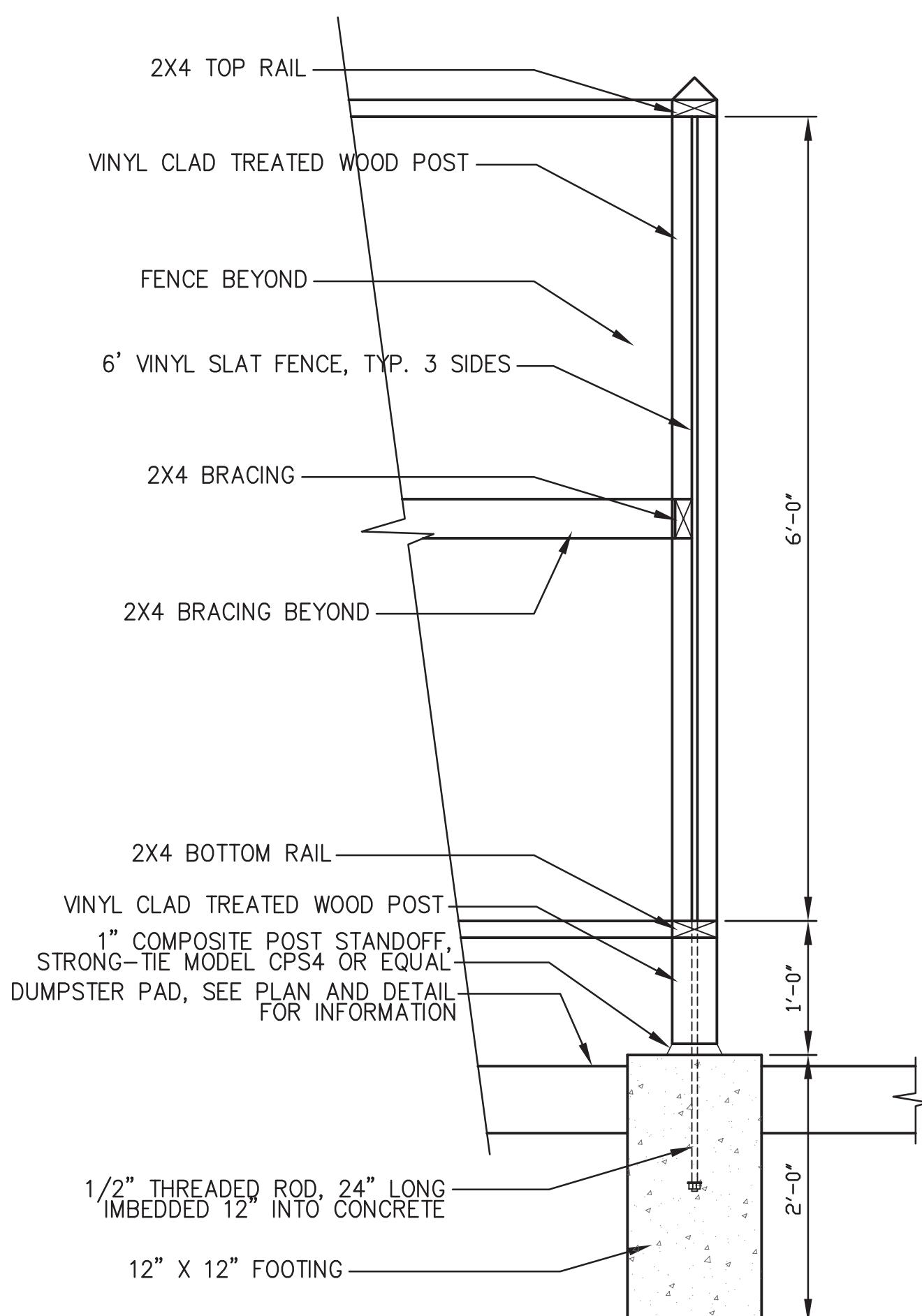
CONCRETE SLAB DETAIL

NOT TO SCALE



DUMPSTER PAD PLAN

SCALE: 1/2" = 1'-0"



DUMPSTER ENCLOSURE DETAIL

SCALE: 1" = 1'-0"