

NEPTUNE (A.K.A. WEST MALL DRIVE) BOULEVARD

(70' RIGHT OF WAY - T.M.)

PROP. 2" DOMESTIC METER

HOT-BOX CONCRETE
SLAB FORM; TOP OF
FORM ELEV=46.35
0.33' CLEAR OF R.O.W.

END OF EX. PIPE
UNDER TREE ROOTS;
INVERT INACCESSIBLE

INLET
TC=40.61
GR=39.95
INV=37.75 (15")
INV=32.7 (18")

UTILITY
POLE
#JC3269

APPROXIMATE LOCATION EXISTING GAS MAIN

PROPOSED 2" DOMESTIC
WATER SERVICE LATERAL

PROPOSED WATER MAIN
'TEE' & VALVE ASSEMBLY

PROP. WATER MAIN ~ 8" D.I.P. CLASS 50

PROPOSED 3:1 SLOPE

15" RCP @ 0.7 %

18" CMP ~
40' @ 1.0%

INLET
TC=40.81
GR=40.16
INV=33.1

18" CMP
INV=33.26

12" WATER MAIN PER MARK-OUT

TC=42.27
BC=41.77

TC=41.90
BC=41.40

18" CMP ~
16' @ 1.0%

PROP. ARBORVITAE SCREEN;
5'-6' TALL; 3' ON CENTER
16 PLANTS TOTAL

PROP. 'HOT BOX'
PER APPROVED
SITE PLANS

FILE

PROP. NATURAL
GAS SERVICE

INV=45.86

CONSTRUCT 216 LF ~ 4" PVC
SAN. LATERAL @ 2.00%

PROP. THREE STORY BUILDING
COVERAGE= 33,294 SQ. FT.
GFA= 87,513 SQ. FT.

FAR=0.663 PROP. FIRE SUPPRESSION
SERVICE LATERALS ~
FFE=49.86 (2) 6" D.I.P. CLASS 50

2. ADDED PAGE 2 WITH DETAILS	08-01-21	DHB	MRD
1. ADJUSTED HOT BOX SIZE AND SLOPE TO SIDEWALK	08-12-21	DHB	MRD
NO. REVISION DESCRIPTION	DATE	DRWN	CHKD BY

PROPOSED WATER SERVICE 'HOT-BOX'
WASATCH STORAGE PARTNERS
 TAX BLOCK 816, TAX LOT 5.02
 TOWNSHIP OF NEPTUNE
 MONMOUTH COUNTY, NEW JERSEY
(TAX MAP REFERENCE TOWNSHIP OF NEPTUNE SHEET No. 8, DATED DECEMBER 2014)

Nelson Engineering Associates, Inc.

444 NEPTUNE BOULEVARD, SUITE 4
 NEPTUNE, NEW JERSEY 07753
 TEL. (732)-918-2180
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CERTIFICATE OF AUTHORIZATION # 245A28014900

SITE ENGINEERING
 TRAFFIC ENGINEERING
 LANDSCAPE ARCHITECTURE
 ENVIRONMENTAL STUDIES
 LAND SURVEYING & MAPPING

Matthew R. Dubois
MATTHEW R. DUBOIS, P.E.
PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 48357

SCALE: 1"=10'
 FILE: 180102

DRAWN BY: DHB
 DATE: 06-14-2021

CHKD. BY: MRD
 SHEET 1 OF 2

- 1 GENERAL**
- 1.1 WORK INCLUDED**
- A. Provide manufactured outdoor enclosure for backflow prevention assembly.
- 1.2 QUALITY ASSURANCE**
- A. Qualifications: The manufacturer of the outdoor enclosure shall be a company specializing in the field of manufacturing of such enclosures with at least ten (10) years of successful field installations and be ASSE 1060 Seal certified.
- 1.3 REFERENCES**
- A. ASSE 1060-Performance Requirements for Outdoor Enclosures for Backflow Prevention Assemblies.
B. ASTM B209
- 1.4 ACCEPTABLE MANUFACTURERS**
- A. AquaSHIELD or Engineer approved equivalent.

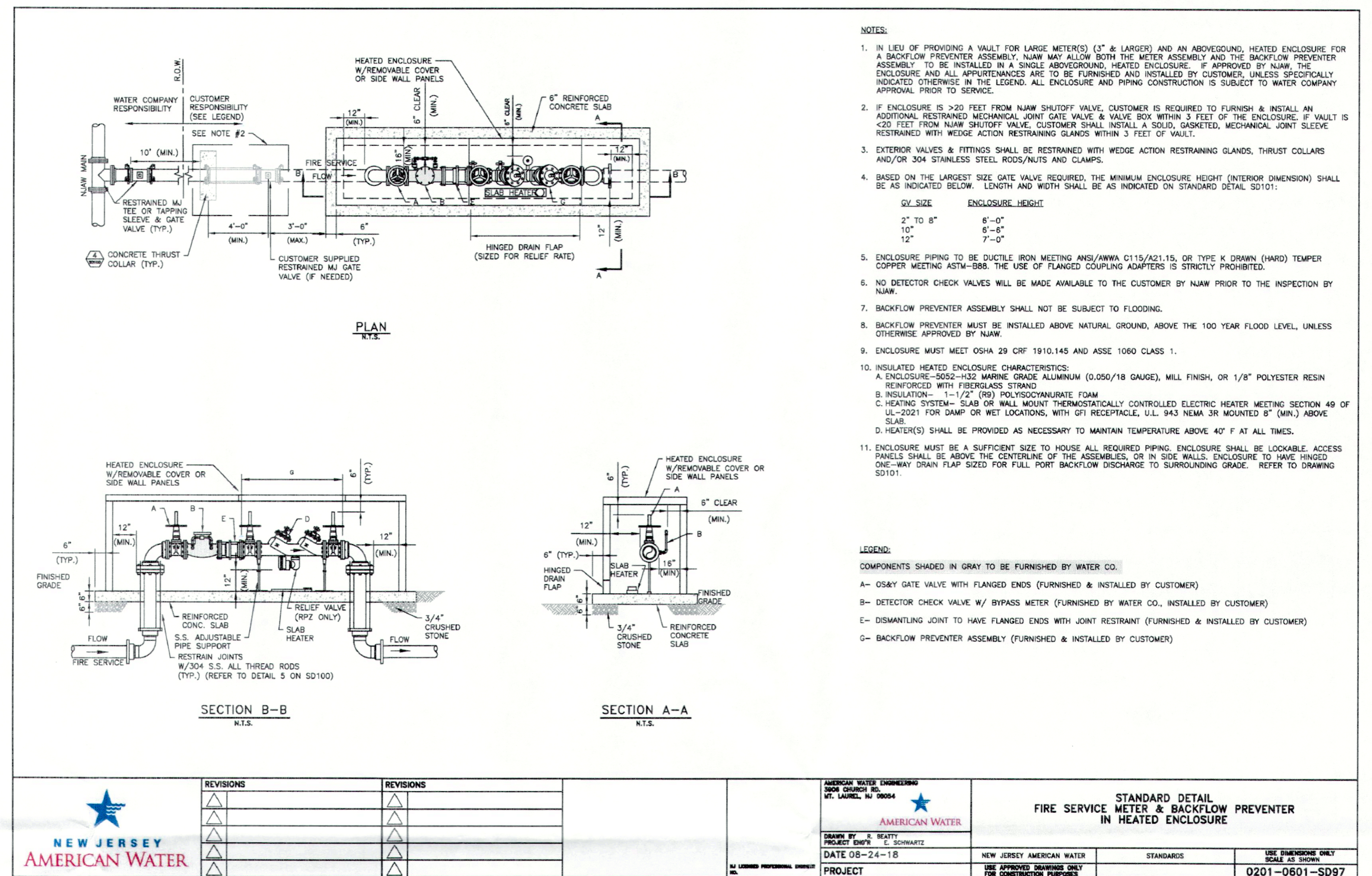
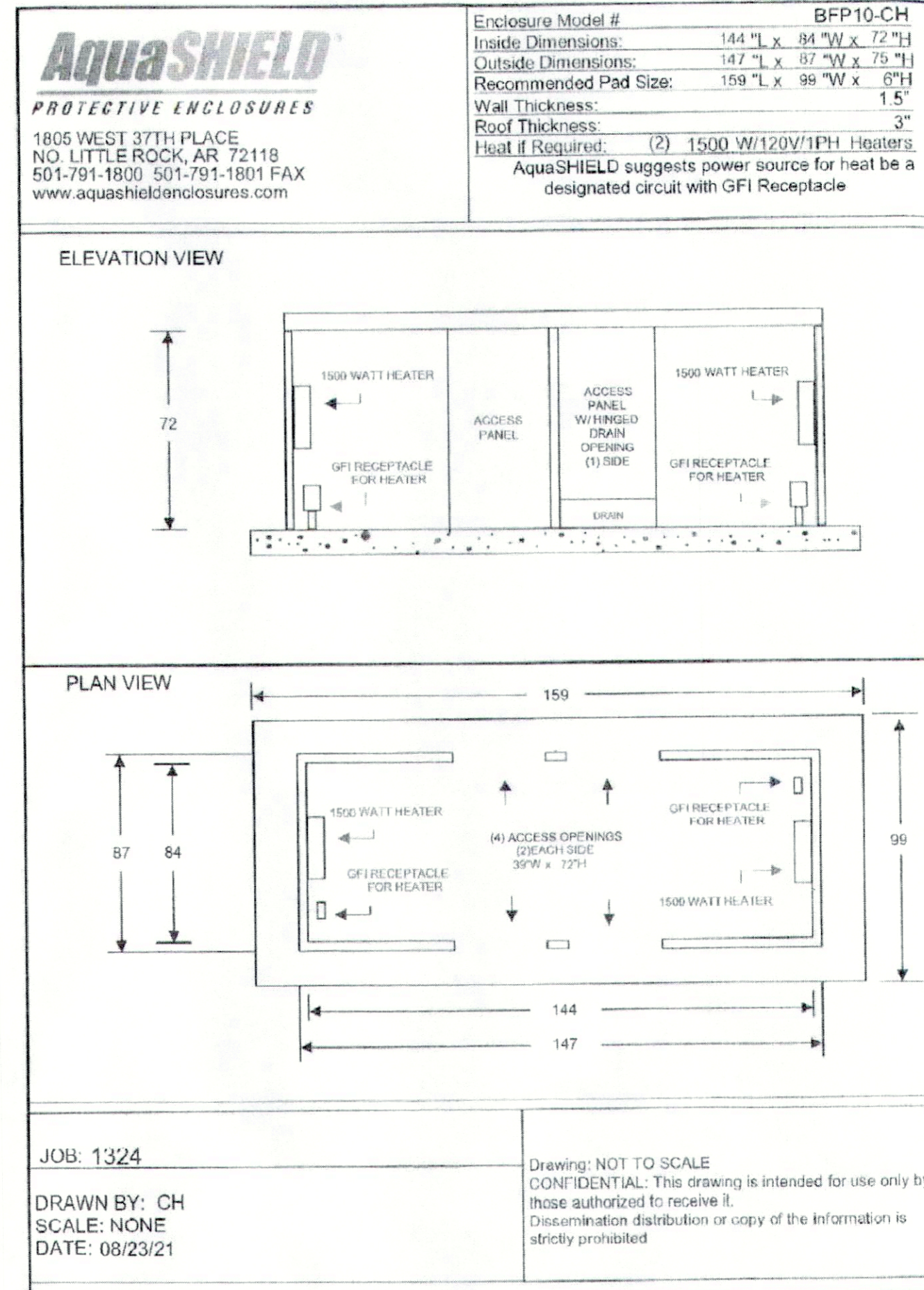
- 2 PRODUCTS**
- 2.1 MODEL NO. & SIZE**
- A. Model No. shall be BFP10-CH
B. Inside dimensions shall be 144"L x 84"W x 72"H (+ or - 1/2")
- 2.2 MATERIALS OF FABRICATION**
- A. Materials for exterior walls shall be 5052-H32 aluminum (.050/18 gauge) and shall comply with ASTM B209. The aluminum shall have a factory mill finish.
B. Insulation shall be a closed cell polyisocyanurate foam core laminated to heavy black glass fiber reinforced facers on each side. The insulation shall have the following properties:
- R-Value - 9.0
 - Dimensional Stability - 2% Linear Change
 - Compressive Strength - 20 psi and 25 psi
 - Product Density - Nominal 2.0 pcf
 - Water Absorption - <1% By Volume
 - Service Temperature - (-100°F to +250°F)
 - Moisture Vapor Transmission - < One (1) Perm
 - Flame Spread - 25
 - Insulation shall be 1.5" thick
- C. Adhesive shall be ChemLink WallSecure brand and shall have the following features:
- Bonds foam products
 - Water resistant bond
 - Stays resilient
 - Will not freeze
 - Freeze/thaw stable

- 2.3 COMPONENTS**
- A. The roof, walls and access panels shall be constructed of 5052-H32 (.050/18 gauge) mill finish marine grade aluminum ASTM B209 outside with insulation 1.5" thick (9.0 "R" value) in the walls and access panels and 3" thick (18.0 "R" value) in the roof panel.
B. The above components shall be securely bonded to form a composite panel.
C. The exterior of the panels shall have a protective PVC masking to protect the finish. The protective masking shall be removed by the customer immediately after installation of the enclosure.
D. The roof and wall panels shall be fastened together with self-tapping stainless steel screws through holes provided in panels.
E. The roof panel shall be secured to the wall panels by stainless steel screws on the outside and security clips on the inside.
F. Access panels shall be (4) total in number (2) per side and shall be 39"W x 72"H.
G. Each access panel shall have factory installed locks with master keys provided.
H. Drain relief panel for the enclosure shall be constructed of same said materials as wall panels and be located in one or more of the access panels.
I. Drain relief panel shall have a stainless steel hinge and stainless steel spring as a positive means of closure after water discharge to prevent the intrusion of outside air, debris, and small animals.

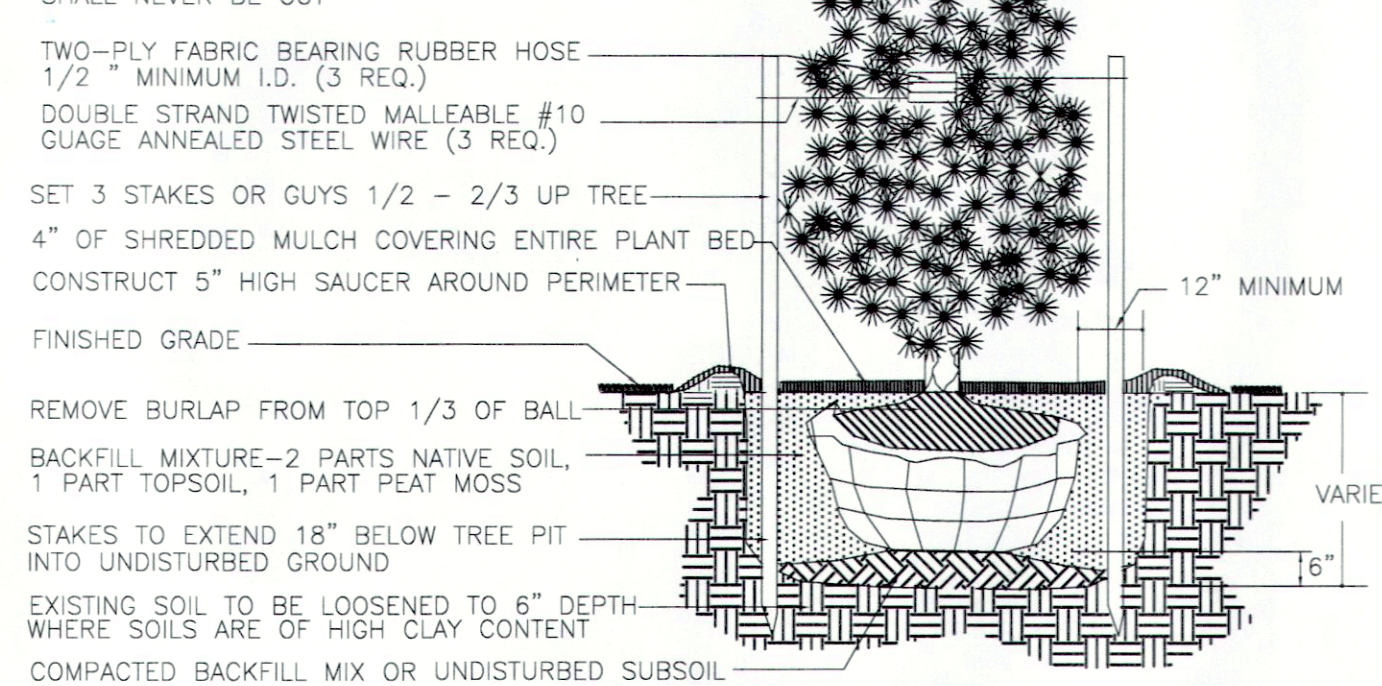
- 2.4 HEATING EQUIPMENT**
- A. Enclosure with heating equipment provided by manufacturer will maintain an interior temperature of +40°F with an external temperature of -30°F.
B. Enclosure without heating equipment are designated for climates where the ambient temperature does not go below 33°F for long periods of time.
C. Heater shall be ETL, UL, or CSA certified.
D. Heating equipment shall be installed above the level of RPZ discharge.
E. Electrical power source for heater shall be a designated circuit with G.F.I. protection and a minimum of 8" clearance from receptacle base to top of slab.

- 2.5 INSTALLATION HARDWARE**
- A. Threaded fasteners shall be stainless steel and provided by the manufacturer.
B. Concrete anchors shall be metal hit type and provided by the manufacturer. Optional anchors with Florida Building Code High-Velocity Hurricane Zone approval available.
C. Masonry drill bit and screw chuck shall be provided by the manufacturer

- 2.6 INSTALLATION**
- A. Recommended pad size shall be 159"L x 99"W x 6"T.
B. Enclosure shall be assembled per manufacturer's instructions provided with enclosure.
C. Enclosure shall be mounted to concrete pad per manufacturer's instructions.
D. Enclosure shall be assembled plumb and square.



NOTES:
STAKE ALL EVERGREEN TREES UNDER 8 FT. GUY TREES 8 FT. AND OVER AS SPECIFIED FOR DECIDUOUS TREES
TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE IN THE NURSERY
PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES. LEADER OF TREE SHALL NEVER BE CUT



EVERGREEN TREE PLANTING DETAIL
N.T.S.

NO.	REVISION DESCRIPTION	DATE	DRWN	CHKD BY
2	ADDED PAGE 2 WITH DETAILS	09-01-21	DHB	MRD
1	ADJUSTED HOT BOX SIZE AND SLOPE TO SIDEWALK	08-12-21	DHB	MRD

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