



SITE LOCATION MAP

NTS

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PROJECT LOCATION  
 BERTRAND RESIDENCE  
 1 PERCH BAY ROAD OGDENSBURG, NEW YORK 13669  
 TOWN OF MORRISTOWN - COUNTY OF ST. LAWRENCE  
 OWNER ADDRESS  
 304 HAYWARD STREET  
 OGDENSBURG, NEW YORK 13369

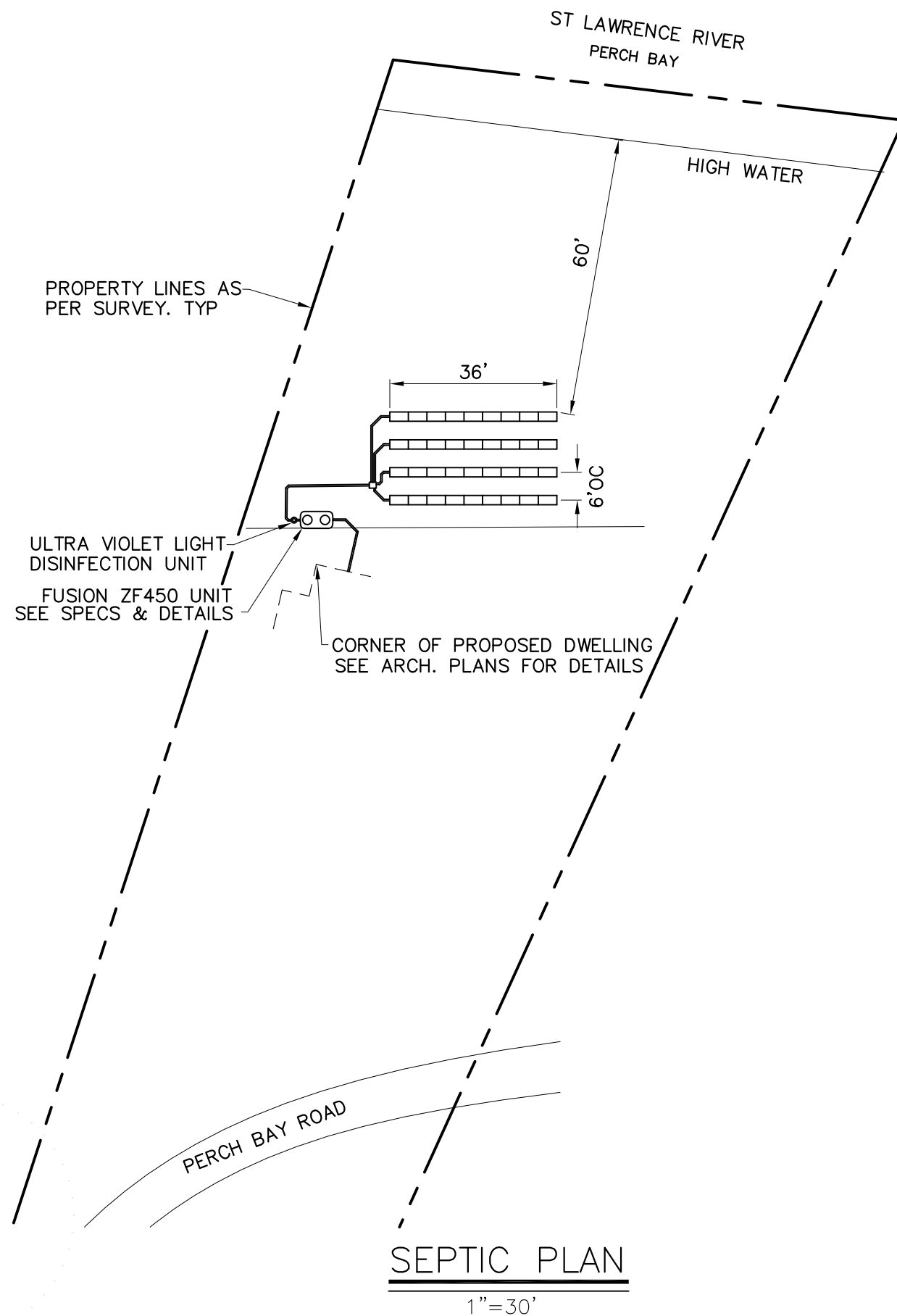
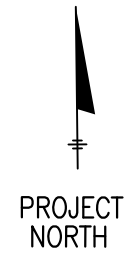
**SITE LOCATION MAP & DRAWINGS INDEX**

FILE NUMBER  
 EEM2018-057

DATE  
 10-29-2018

FIGURE NO.

**1**



**SEPTIC PLAN**  
1"=30'

## BASIS OF DESIGN

THIS DESIGN IS FOR A NEW ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) TO SERVE A 3 BEDROOM DWELLING. THIS SYSTEM WILL HANDLE ALL THE WASTEWATER GENERATED AT THE PROPERTY.

THIS DESIGN SPECIFIES THE INSTALLATION OF A CLARUS FUSION ZF450 ENHANCED TREATMENT UNIT. THE FUSION ZF 450 IS AN NSF STANDARD 40 APPROVED CLASS I SYSTEM WITH A 450 GPD TREATMENT CAPACITY. GRAVITY FLOW THROUGH THE FUSION CONTINUES THROUGH AN ULTRA VIOLET LIGHT TO A 6-OUTLET DISTRIBUTION BOX. FINAL DISPERSAL IS BY GRAVITY TO GRAVELLESS CHAMBERS USING INFILTRATOR EQ-36.

DESIGN FLOW 110 GALLONS PER BEDROOM X 3 BEDROOMS = 330 GALLONS PER DAY; NO GARBAGE GRINDER. NO ADDITIONAL BEDROOMS SHALL BE ADDED.

POTABLE DRINKING WATER WILL BE TEMPORARILY PUMPED FROM THE ST. LAWRENCE RIVER. IN THE FUTURE A DRILLED WELL WILL BE INSTALLED AT A LOCATION THAT IS OVER 100 FEET OF THE PROPOSED SEPTIC DISPERSAL FIELD. THE DRINKING WATER SUPPLY WELL THAT SERVES THE ADJACENT NEIGHBORING PROPERTY TO THE NORTHEAST IS LOCATED NEXT TO THE PROPOSED WELL LOCATION FOR THE SUBJECT PROPERTY. THE PROPOSED SEPTIC DISPERSAL FIELD IS OVER 100 FEET FROM THESE WELLS.

THE SEPTIC DISPERSAL FIELD IS LESS THAN 100 FEET FROM THE ST. LAWRENCE RIVER. THE FUSION TREATMENT UNIT AND ULTRA VIOLET LIGHT HAVE BEEN SPECIFIED FOR DISINFECTION AND ARE INTENDED TO MITIGATE THE LIMITED SEPARATION DISTANCE BETWEEN THE SEPTIC DISPERSAL AREA AND ST. LAWRENCE RIVER. THIS DESIGN FOR AN OWTS, TO THE BEST EXTENT POSSIBLE, TREATS AND DISINFECTS THE WASTEWATER SO THE THREAT OF ENVIRONMENTAL IMPACT HAS BEEN MITIGATED.

SITE CONDITIONS: HAUL IN IMPORTED USEABLE FILL HAVING AN IN-PLACE PERCOLATION RATE OF 8-10 MINUTES PER INCH. IMPORTED MATERIAL SHALL BE PLACED IN 8" THICK LIFTS AND TRACKED IN WITH A MACHINE OR LEFT IN-PLACE THROUGH A FREEZE THAW CYCLE. INSTALL OWTS DISPERSAL AREA INTO USEABLE SOIL.

SOIL CONDITIONS: BROWN COURSE, MEDIUM, AND FINE SAND AND GRAVEL. IN-PLACE STABILIZED PERCOLATION RATE SHALL BE 8-10 MINUTES PER INCH. ENGINEER SHALL PERFORM PERCOLATION TESTING IN STABILIZED USEABLE FILL PRIOR TO INSTALLATION OF THE DISPERSAL LATERALS.

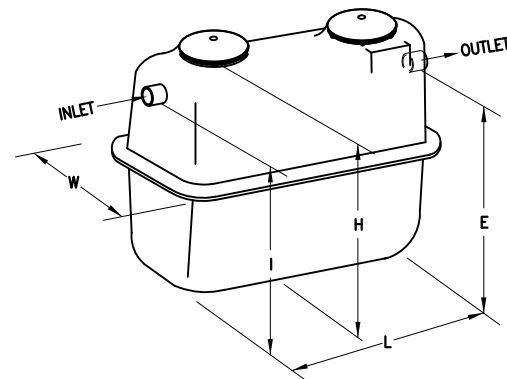
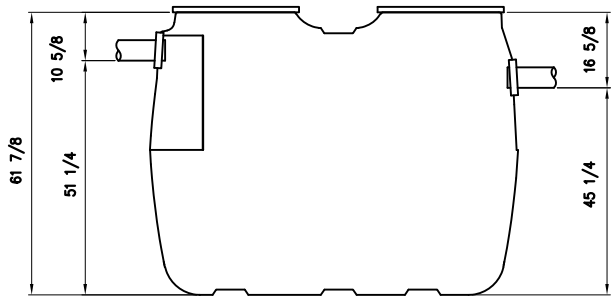
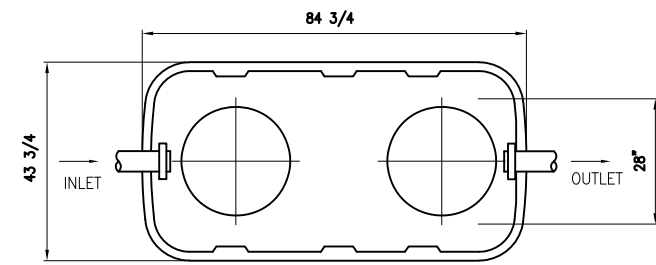
CONSTRUCTION SHALL BE UNDER THE SUPERVISION OF THE PROFESSIONAL ENGINEER CERTIFYING THAT THE SYSTEM WAS INSTALLED IN SUBSTANTIAL ACCORDANCE WITH THE APPROVED DOCUMENTS. THESE PLANS HAVE BEEN PREPARED FOR THE USE BY THE CURRENT PROPERTY OWNER. UNAUTHORIZED ALTERATION OR ADDITION OF THESE PLANS IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209.



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**SEPTIC PLAN**



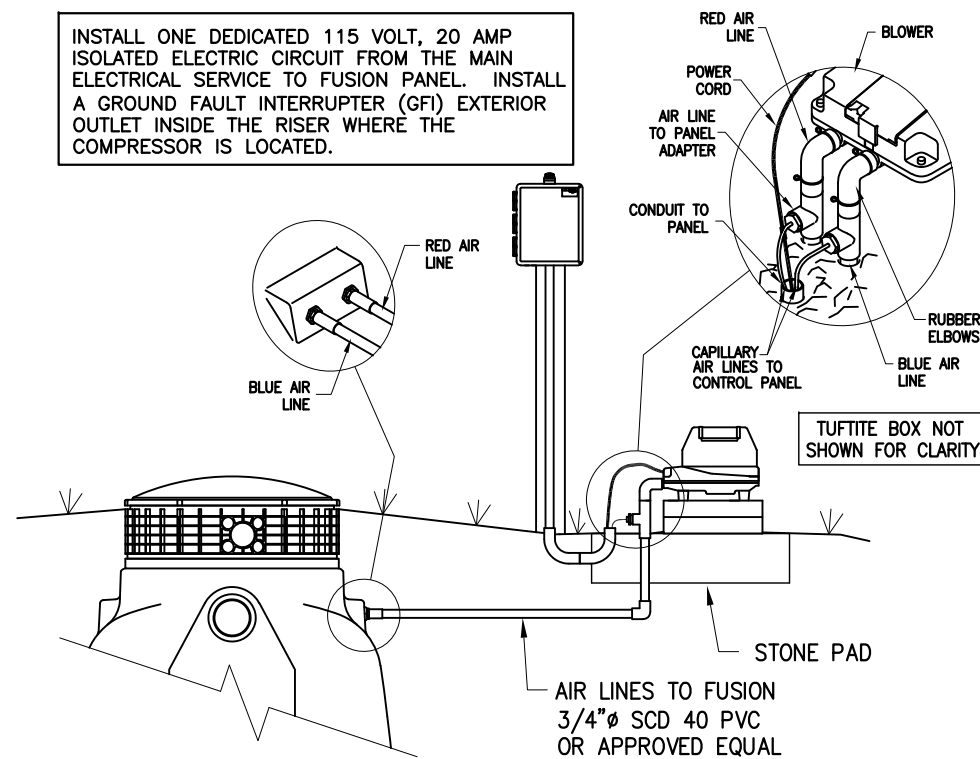
- NOTES:**
- 1) DIMENSIONS "I" AND "E" ARE TO THE BOTTOM OF THE INLET/OUTLET PIPE.
  - 2) THE OVERALL HEIGHT DIMENSION "H" IS TO THE TOP OF THE NARROW ADAPTER RING, NOT THE RISER LID.
  - 3) A RISER COVER COMES STANDARD. ADDITIONAL RISERS ARE PURCHASED SEPERATELY.
  - 4) TANK EXCAVATION SHALL EXTEND 12"-18" LONGER & WIDER THAN FUSION TANK.

EXCAVATING DIMENSIONS					
SYSTEM	L	W	H	I	E
FUSION 450	7'-1"	3'-8"	5'-2"	4'-4"	3'-10"

## FUSION 450 – DIMENSIONS & EXCAVATION DETAILS

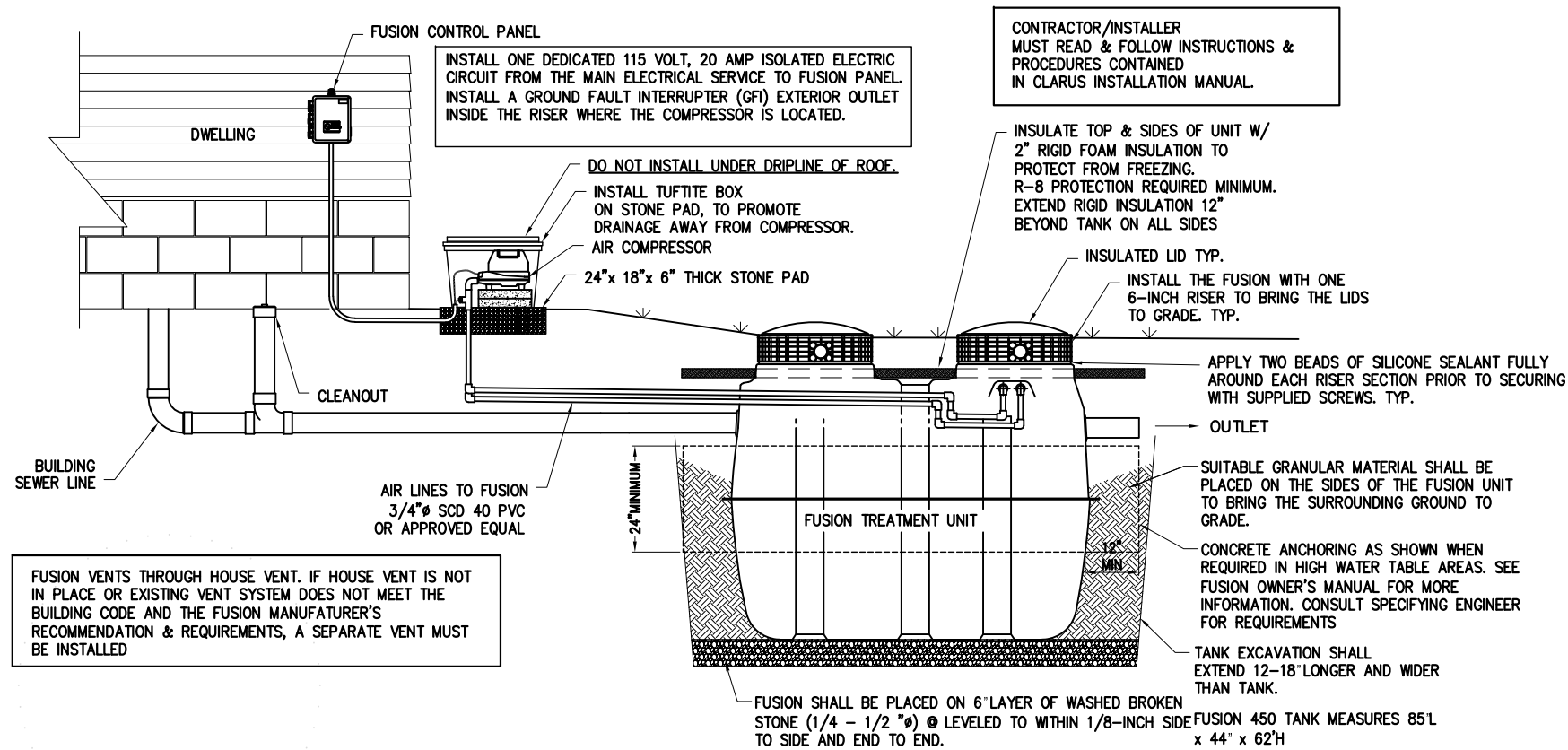
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INSTALL ONE DEDICATED 115 VOLT, 20 AMP ISOLATED ELECTRIC CIRCUIT FROM THE MAIN ELECTRICAL SERVICE TO FUSION PANEL. INSTALL A GROUND FAULT INTERRUPTER (GFI) EXTERIOR OUTLET INSIDE THE RISER WHERE THE COMPRESSOR IS LOCATED.



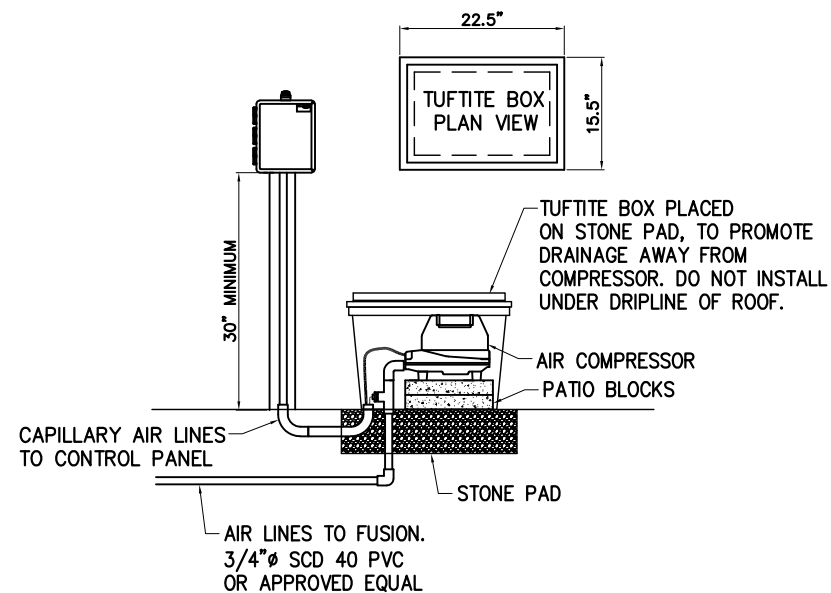
## FUSION 450 – AIR COMPRESSOR DETAILS

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## FUSION 450 – TYPICAL PROFILE

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## AIR COMPRESSOR INSTALLATION

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FIGURE NO.

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SELECT DETAILS

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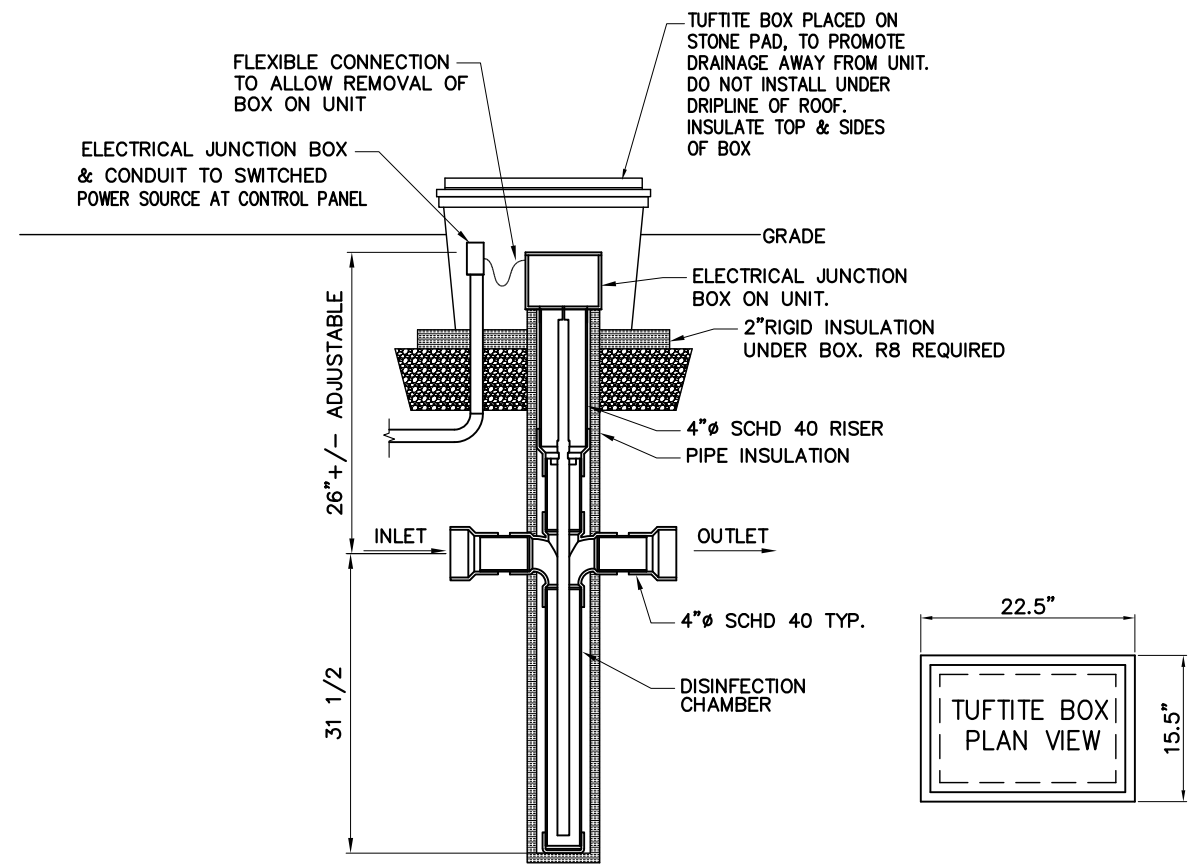
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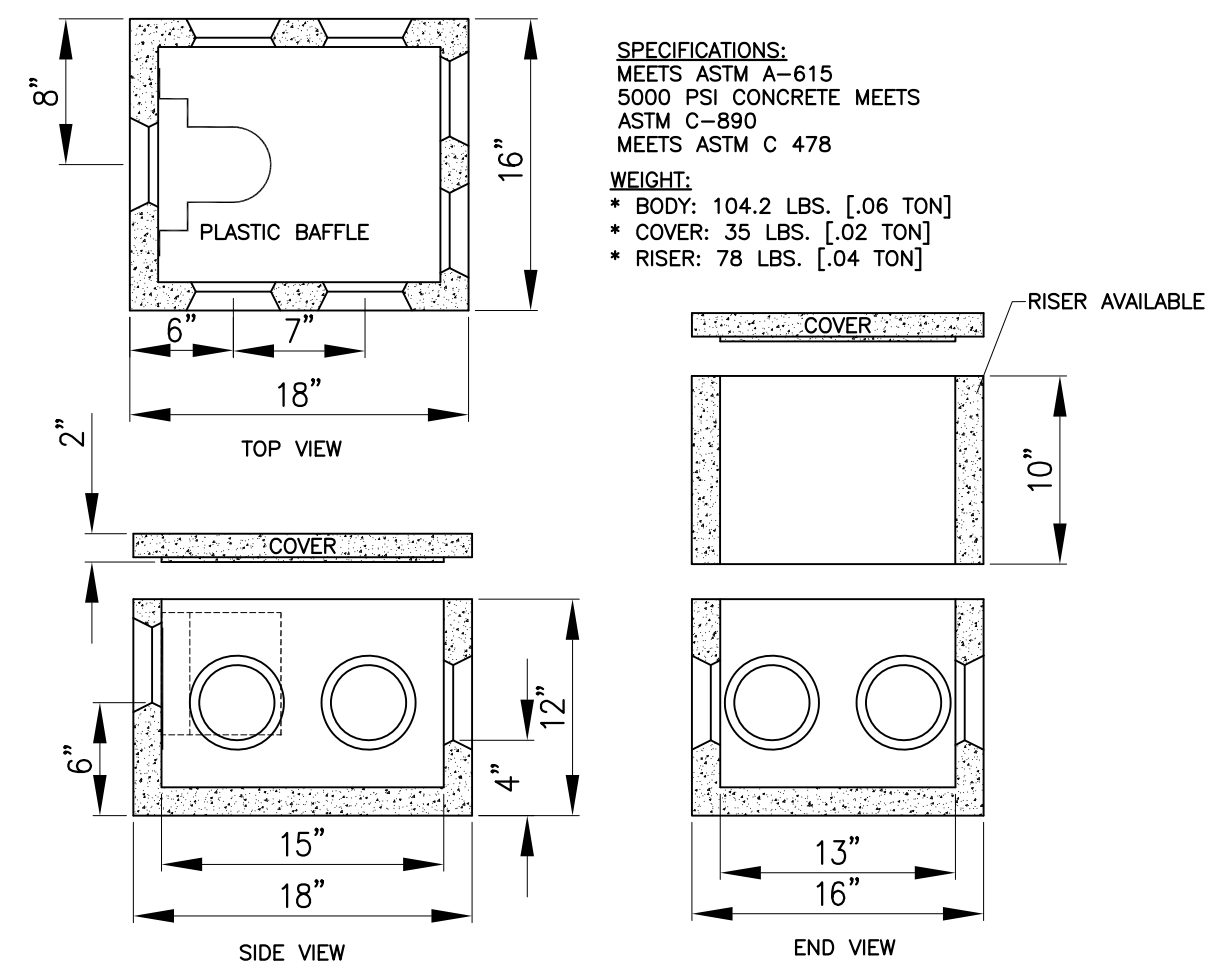
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FIGURE NO.  
**4**

**SELECT DETAILS**



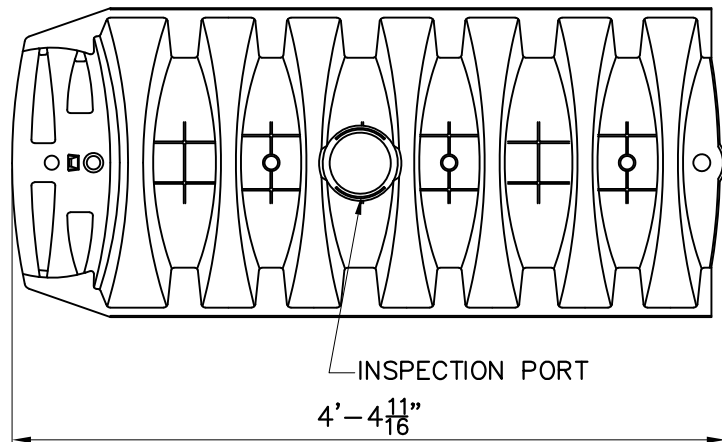
ULTRA VIOLET LIGHT DISINFECTION UNIT  
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**SPECIFICATIONS:**  
MEETS ASTM A-615  
5000 PSI CONCRETE MEETS  
ASTM C-890  
MEETS ASTM C 478

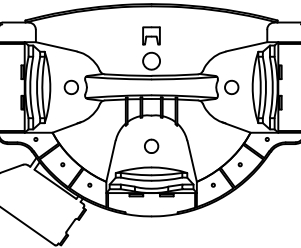
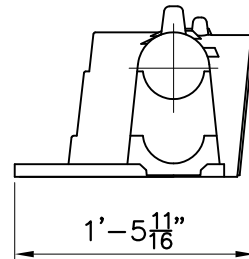
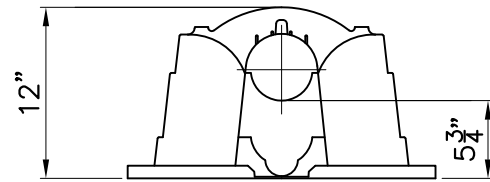
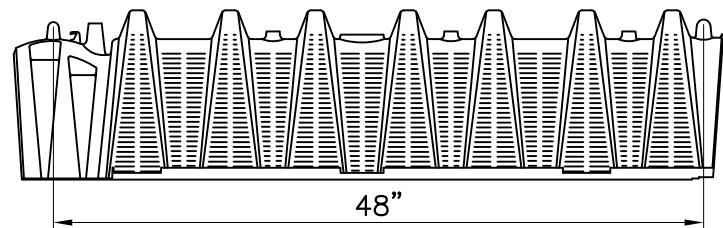
**WEIGHT:**  
\* BODY: 104.2 LBS. [.06 TON]  
\* COVER: 35 LBS. [.02 TON]  
\* RISER: 78 LBS. [.04 TON]

6 OUTLET BAFFLED D-BOX  
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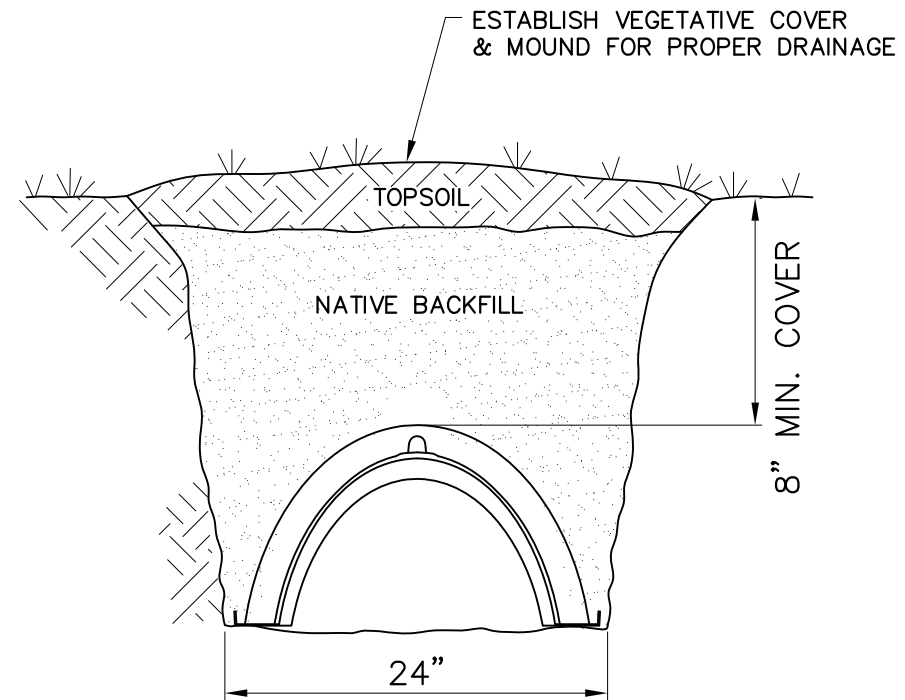


EQUALIZER 36 CHAMBER

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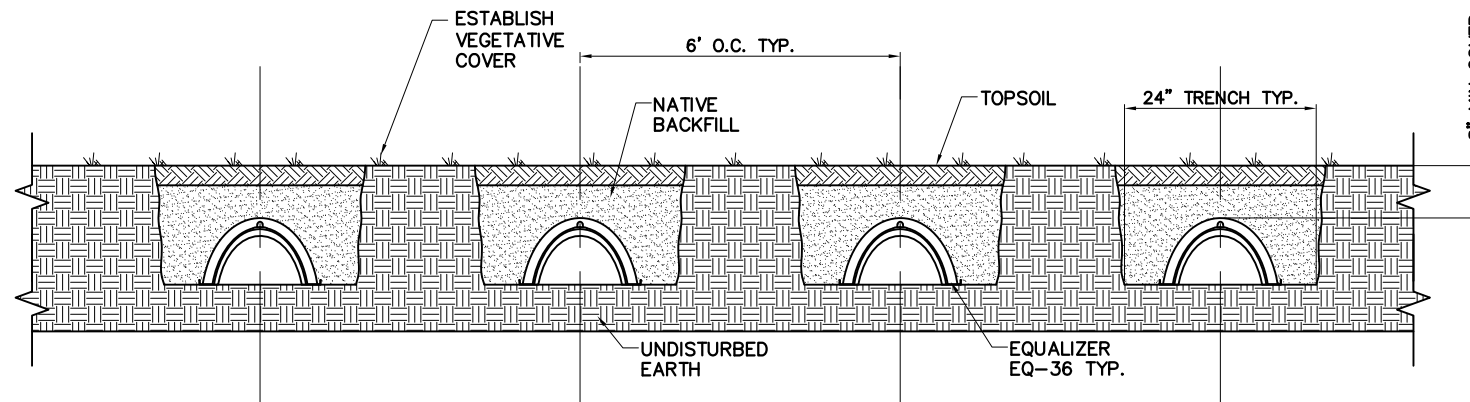


QUICK4 EQUALIZER 36  
MULTI-PORT END CAP



EQUALIZER 36 TRENCH DETAIL

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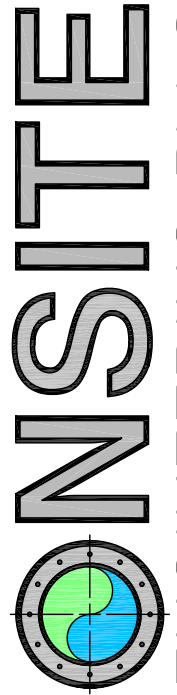


NOTES:

1. SEE PLANS AND SPECS FOR NUMBER, LOCATION, AND LENGTH OF RUNS
2. INDIVIDUAL TRENCH BOTTOMS SHALL BE LEVEL END TO END. TRENCHES MAY BE TERRACED.
3. MAINTAIN A MINIMUM OF 24" VERTICAL SEPARATION BETWEEN TRENCH BOTTOM AND GROUNDWATER, BEDROCK OR IMPERMEABLE STRATA.

TYPICAL EQUALIZER 36 INSTALLATION DETAIL

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ENGINEERING PLLC  
(315) 254-6891 - www.onsite-engineering.us

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