

REVISION: New Standard

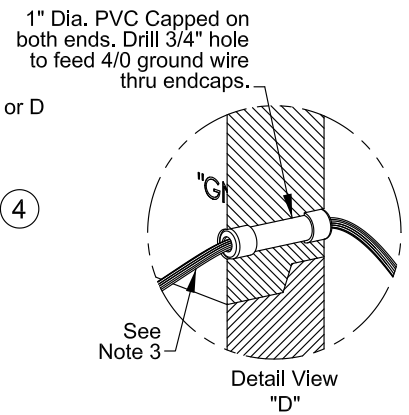
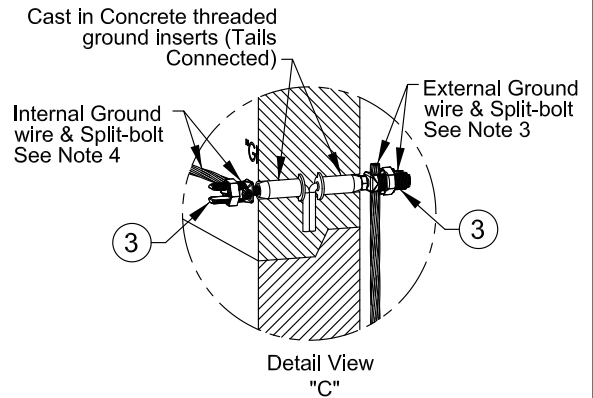
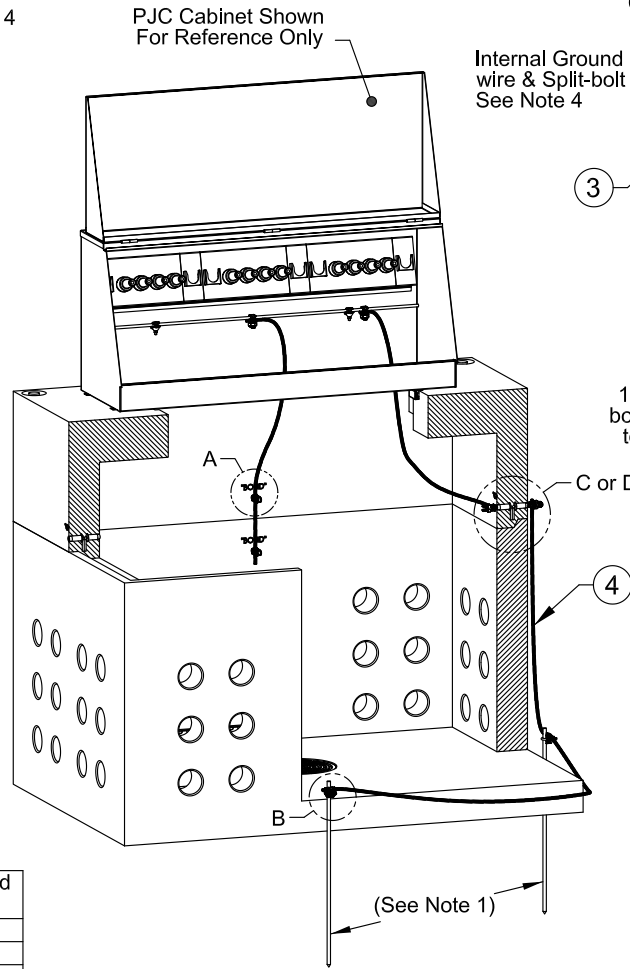
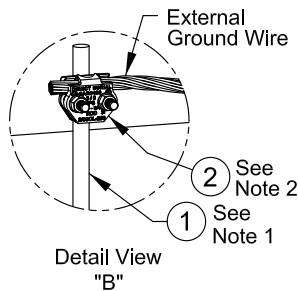
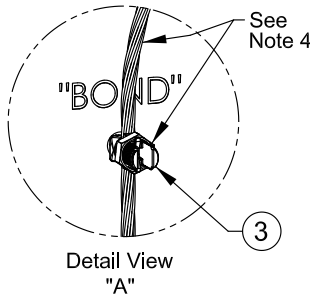
CHECKED BY (ENGINEERING): SJ

DATE: 09/08/16

CHECKED BY (FIELD): GY

PREPARED BY: SJR

APPROVED BY: *Stephen E. Sanford*



Concrete Structure	Ground Wire
PJC	4/0
BTE	4/0
TP	4/0
Primary Pull Box	4/0
Slab Box	4/0
CST	4/0
Manhole	4/0
Vault	4/0

Typical Concrete Structure Grounding
 See Structure Installation for Detailed Grounding Practices

Item No.	Ground Wire	Stock Code
1	Rod, Ground, 5/8" X 8', Copperbonded(Without Ground Clamp)	25976
2	Clamp, Ground, Bronze, for 5/8" Ground Rod, Range 2/0 Sol. - 250 str; Burndy GAR #6429	10011924
3	Connector, Split Bolt with Male Servit Post, 4/0, 1/2"-13 Male Stud & Nut	21410
4	Wire, 4/0 Bare Copper, 19 Strand, Soft Drawn	23028

Notes:

- Ground rods to be spaced 6' minimum apart in undisturbed soil; max. 12" exposed ground rod above undisturbed soil (for ground clamp & wire connection). Increase distance of ground rods or other means necessary to achieve effective grounding (25 Ohms or less). At the discretion of the inspector. For rocky / dense soils & at the discretion of RPU Inspector 60' of 4/0 soft drawn bare copper may be placed along bottom surface of trench in lieu of ground rods; wire is to be laid spread out for maximum earth surface contact.
- Mechanical ground connector shall be Burndy GAR 6429 (2/0 Sol. - 250) or approved Department equal.
- Prior to backfilling structure:
 - Exterior ground wire shall be installed using split bolt connector mounted to grounding inserts (See Detail C).
 - Ground wire entering from outside through 1" PVC shall be continuous from ground rods and be able to extend 3' above slab when connecting to sub surface equipment (See Detail D).
 - RPU Inspector to verify installation & grounding insert location prior to backfilling.
- At time of setting equipment or installing cable splice:
 - Internal ground wire & split bolt to be installed at time of equipment installation or cable splicing (See Detail C) by RPU Crews.
 - Ground leads shall be connected to structure bonding insert when required on plans or by RPU Inspector. Structure that require an extension section in addition to the top/bottom and require structure bonding install ground wire thru the top section bond split bolt connector, extension split bolt connector and bottom section split bolt connector, See Detail A & Page 2 for details..
 - Leave enough ground wire to wrap the interior perimeter of the structure grounding halo bus when require (See Page 2).

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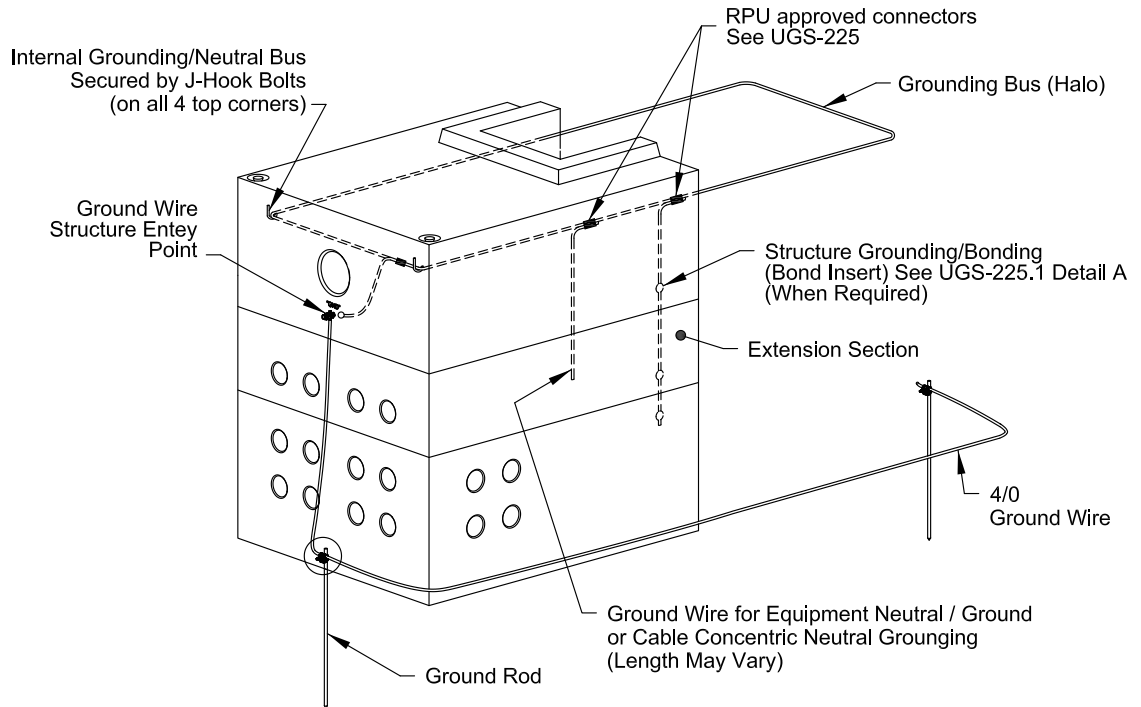
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Typical Vault / Manhole / Underground Equipment
 Structure Grounding