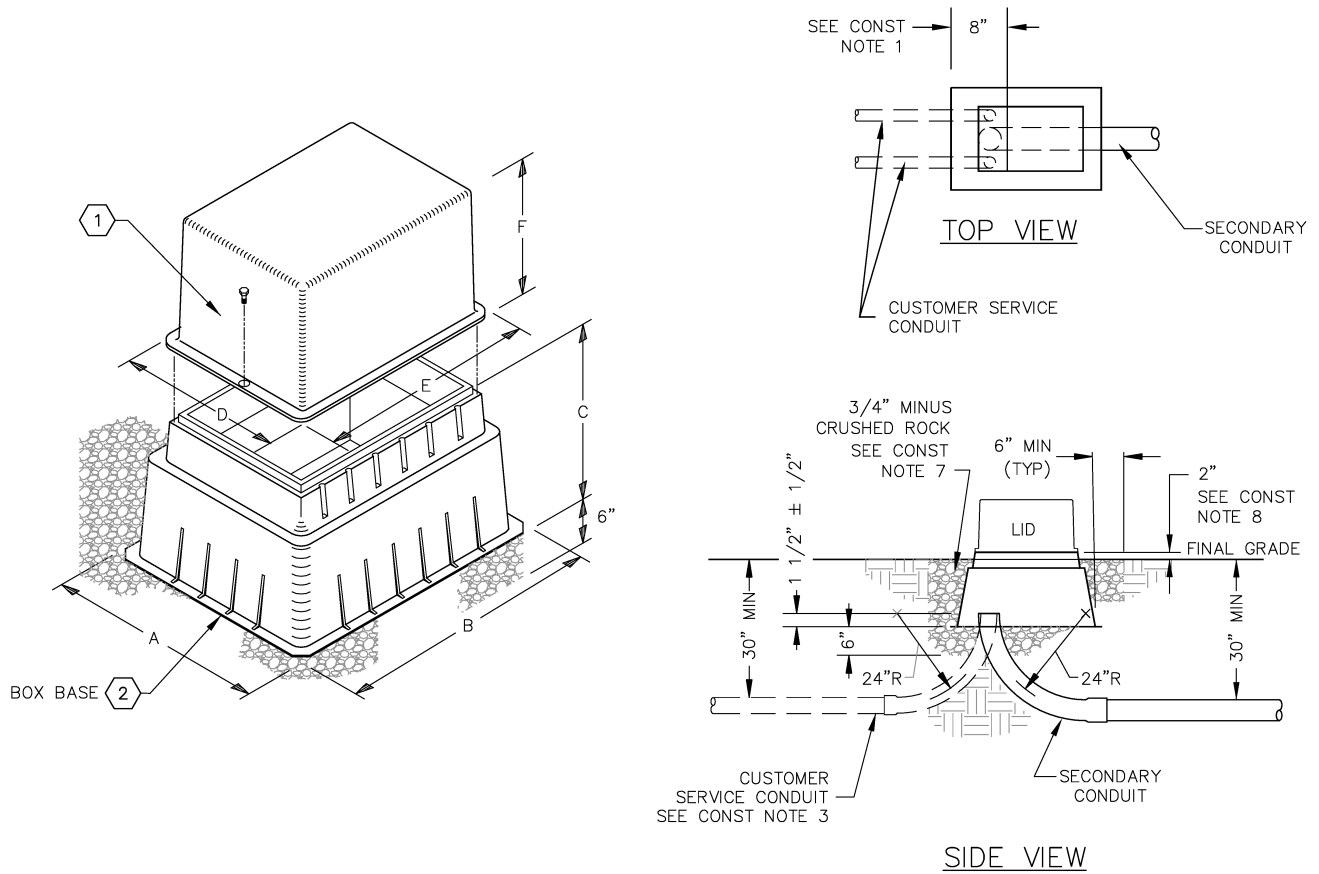


MAXIMUM CONDUCTOR SIZE	NUMBER AND SIZE OF SECONDARY MOLES	NUMBER OF TOTAL PERMANENT CONDUCTORS	ASSEMBLY
SINGLE PHASE - 4/0	3-6 POSITIONS	12	EC5-2.0401
SINGLE PHASE - 500 KCM	3-6 POSITIONS	12	EC5-2.0406
SINGLE PHASE - 350 KCM	3-8 POSITIONS	18	EC5-2.0406
SINGLE PHASE - 350 KCM	3-8 POSITIONS	18	EC5-2.0411
THREE PHASE - 500 KCM	4-6 POSITIONS	16	EC5-2.0411
THREE PHASE - 350 KCM	4-8 POSITIONS	24	EC5-2.0411

(SEE DESIGN NOTES 1 & 2)

MEASUREMENTS						ASSEMBLY
A	B	C	D	E	F	
19"	23.5"	12"	9.75"	14"	18"	EC5-2.0401
24"	30"	15"	12"	20"	15"	EC5-2.0406
29.25"	41"	16.25"	20.50"	33.50"	18"	EC5-2.0411



EC5-2.0401 - EC5-2.0413

DISTRIBUTION CONSTRUCTION STANDARD
EUGENE WATER & ELECTRIC BOARD - EUGENE, OREGON

ABOVE GRADE SECONDARY BOX AND LID

Approved Oct 31, 2016
EC5-2.0400
 Page 1 of 3

REV.
9

ASSEMBLY EC5-2.0401

19" X 23" SECONDARY J-BOX WITH PLASTIC ABOVE GRADE LID

- | | | | |
|----|-------------|------|------------------------------|
| 1. | 348-0000521 | 1 EA | ENCLDOME CA14"X9"X18"H GREEN |
| 2. | 348-0000525 | 1 EA | BXPUL19X23X12"PLST GREEN |

ASSEMBLY NOTES:

1. Assembly EC5-2.0401 to be used primarily as a retrofit for existing residential service boxes that require a small box as a replacement due to space restrictions.
2. The use of (4) position moles is allowed for existing residential service.

ASSEMBLY EC5-2.0402

14" X 9" X 18"H PLASTIC ABOVE GRADE DOME LID

- | | | | |
|----|-------------|------|------------------------------|
| 1. | 348-0000521 | 1 EA | ENCLDOME CA14"X9"X18"H GREEN |
|----|-------------|------|------------------------------|

ASSEMBLY EC5-2.0403

19" X 23" SECONDARY J-BOX, PLASTIC

- | | | | |
|----|-------------|------|--------------------------|
| 2. | 348-0000525 | 1 EA | BXPUL19X23X12"PLST GREEN |
|----|-------------|------|--------------------------|

ASSEMBLY EC5-2.0406

24" X 30" SECONDARY J-BOX WITH PLASTIC ABOVE GRADE LID

- | | | | |
|----|-------------|------|-------------------------------|
| 1. | 348-0000522 | 1 EA | ENCLDOMECA.12"X20"X15"H GREEN |
| 2. | 348-0000528 | 1 EA | BXPUL24X30X15"PLST GREEN |

ASSEMBLY NOTES:

1. Assembly EC5-2.0406 is the standard box used for residential applications.
2. Assembly EC5-2.0406 SHALL NOT be installed for use in apt's, townhouse or multi housing applications, refer to assembly EC5-2.0411 for the minimum secondary box size required for this installation.
3. Maximum allowed conductor size for residential applications shall not exceed 350 KCM.
4. The use of (4) position moles is allowed in "rural areas" only.

ASSEMBLY EC5-2.0407

12" X 20" X 15H PLASTIC ABOVE GRADE DOME LID

- | | | | |
|----|-------------|------|-------------------------------|
| 1. | 348-0000522 | 1 EA | ENCLDOMECA.12"X20"X15"H GREEN |
|----|-------------|------|-------------------------------|

ASSEMBLY EC5-2.0408

24" X 30" SECONDARY J-BOX, PLASTIC

- | | | | |
|----|-------------|------|--------------------------|
| 2. | 348-0000528 | 1 EA | BXPUL24X30X15"PLST GREEN |
|----|-------------|------|--------------------------|

ASSEMBLY EC5-2.0411

30" X 41" SECONDARY J-BOX WITH PLASTIC ABOVE GRADE LID

- | | | | |
|----|-------------|------|-------------------------------|
| 1. | 348-0000523 | 1 EA | ENCL DOME CA 21 X 34 X 18 GRN |
| 2. | 348-0000533 | 1 EA | BOX PUL 30 X 41 X 17 GRN |

ASSEMBLY NOTES:

1. Assembly EC5-2.0411 is to be used primarily for single phase and smaller three phase applications.
2. Assembly EC5-2.0411 SHALL be installed when applicable, for apt's, townhouses and other multi housing applications.
3. Maximum allowed conductor size shall not exceed 500 KCM.
4. Secondary box shall be installed with the 41" side parallel to transformer vault to allow access to lid bolts which are located at each of the 30" sides of the lid.

ASSEMBLY EC5-2.0412

21" X 34" X 18" PLASTIC ABOVE GRADE DOME LID

- | | | | |
|----|-------------|------|-------------------------------|
| 1. | 348-0000523 | 1 EA | ENCL DOME CA 21 X 34 X 18 GRN |
|----|-------------|------|-------------------------------|

ASSEMBLY EC5-2.0413

30" X 41" SECONDARY J-BOX, PLASTIC

- | | | | |
|----|-------------|------|--------------------------|
| 1. | 348-0000533 | 1 EA | BOX PUL 30 X 41 X 17 GRN |
|----|-------------|------|--------------------------|

CONSTRUCTION NOTES:

1. All conduits shall enter the same end of the secondary box a maximum of 8" from the bottom inside edge of the secondary box.
2. Conduits shall not extend more than shown above the crushed rock base.
3. For customer service conduit entering a secondary box, a 90 degree elbow with a 24" radius for conduits smaller than 5" and 48" radius for 5" conduit is required.
4. The exposed ends of all conduits shall be cut off square, chamfered, free of any sharp edges and temporarily sealed to prevent rocks or other materials from entering them after mandreling.
5. Field bending of PVC conduits is not allowed. All sweeps shall be made with manufactured elbows.
6. Base for box shall allow drainage.
7. Provide compacted backfill as shown in excavated area around all vaults and boxes.
8. Top of secondary box base shall be set 2" above the surrounding final grade. If depth of landscaping material is not known at time of secondary box installation, top of box base shall be 4" above surrounding dirt to allow for landscaping material.
9. Secondary service tails shall extend into the secondary box a distance equal to the length of the box (Measurement "B").

DESIGN NOTES:

1. The number of secondary mole positions and conductors (see chart on page 1 of 3) has been revised to provide a minimum of (2) open secondary mole positions for future temporary service. (1) open position is allowed to be used for street lighting.
2. When the number of permanent conductors, (excluding street lighting) exceed the allowed secondary mole or box capacity, a larger secondary box and/or change of the size and number of conductors SHALL be required.

REFERENCE STANDARDS:

- A) Refer to EC5-2.1100 for a larger secondary service box.
- B) Refer to EC5-6.3400 for 350 & 500 KCM urd underground moles.
- C) Refer to EC5-2.0100 for Required minimum feeder, primary and secondary service conductor makeup lengths for vaults and secondary boxes.
- D) Refer to ED5-1.0100 for Electrical Equipment placement clearances at a street corner, maximum size & setback requirements.
- E) Refer to EC5-A.0500 for Customer requirements for vegetation management for underground systems.
- F) Refer to ED5-1.6000 for Low voltage design tool.
- G) Refer to EC5-B.1000 for Underground service conduit and conductor requirements.
- H) Refer to standard EC5-2.9500 for Secondary boxes & lids catalog numbers.