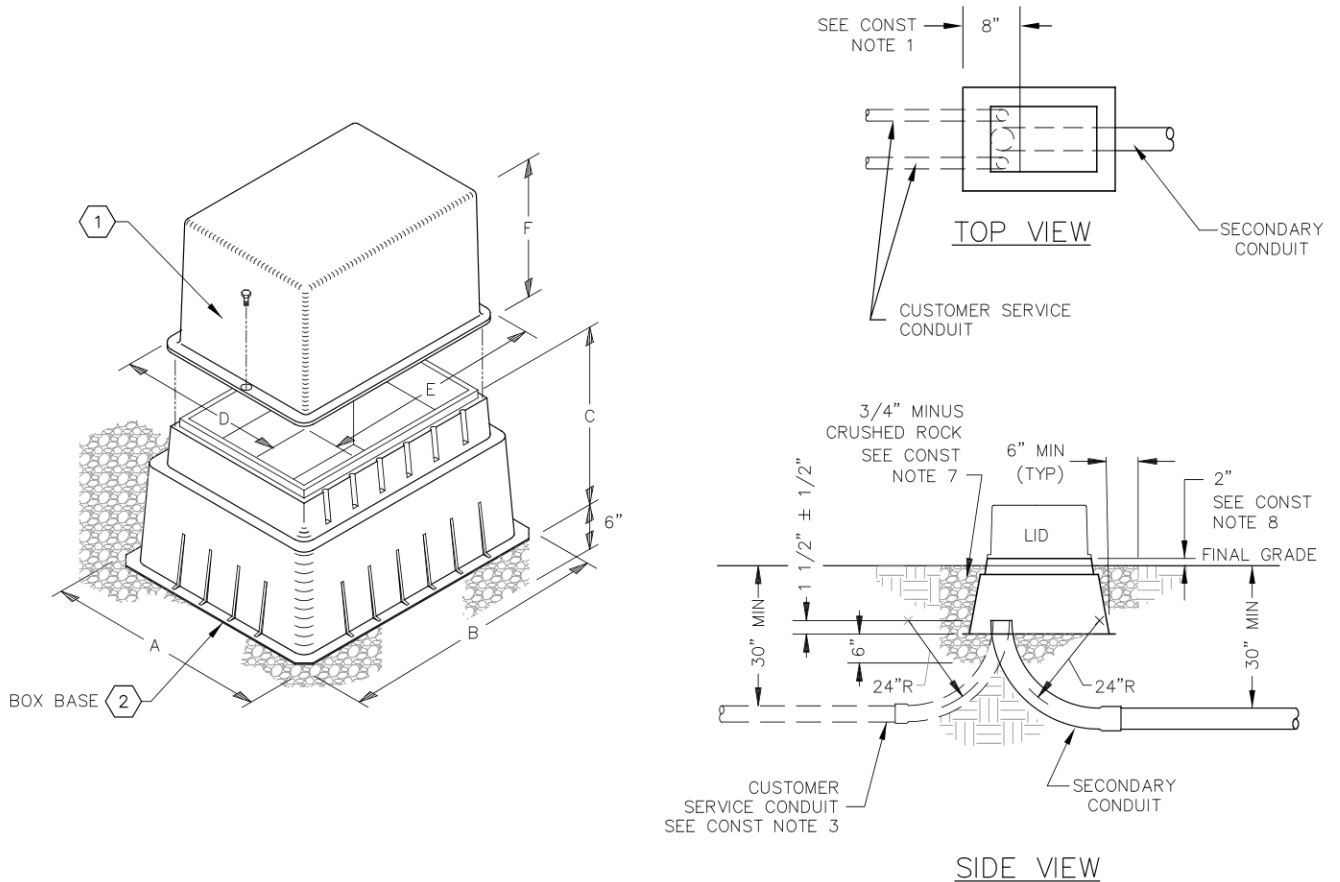


ASSEMBLY	MAXIMUM NUMBER AND SIZE OF CONDUITS	THREE PHASE CIRCUITS ALLOWED
EC5-2.0401	4-2" OR 3"	NO
EC5-2.0406	6-2" OR 3"	NO
	2-3", 4" OR 5"	YES
EC5-2.0411	6 CONDUITS, 4 OF WHICH CAN BE 4" OR 5"	YES

(SEE DESIGN NOTES 1, 2 & 3)

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 May 09, 2023

EC5-2.0400

Page 1 of 3

REV.  
10

**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. Maximum allowed conductor size for residential applications shall not exceed 500 KCM.
3. 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. Maximum allowed conductor size shall not exceed 500 KCM.
3. 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. Install secondary moles with (2) open secondary mole positions, (1) for future temporary service and (1) for street lighting. See EC5-2.1100 for secondary mole sizes.
2. When the number of permanent conduits, (excluding street lighting) exceed the allowed secondary conduit box capacity, a larger secondary box and/or change of the size and number of conduit SHALL be required.
3. See EC5-8.0800 for conduit size requirements.

**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.
- I) Refer to standard EC5-8.0800 for Secondary conductor and conduit size requirements.