



MUSCLE SHOALS ELECTRIC BOARD

P.O. BOX 2547
MUSCLE SHOALS, AL 35662

1015 AVALON AVE.
MUSCLE SHOALS, AL 35661

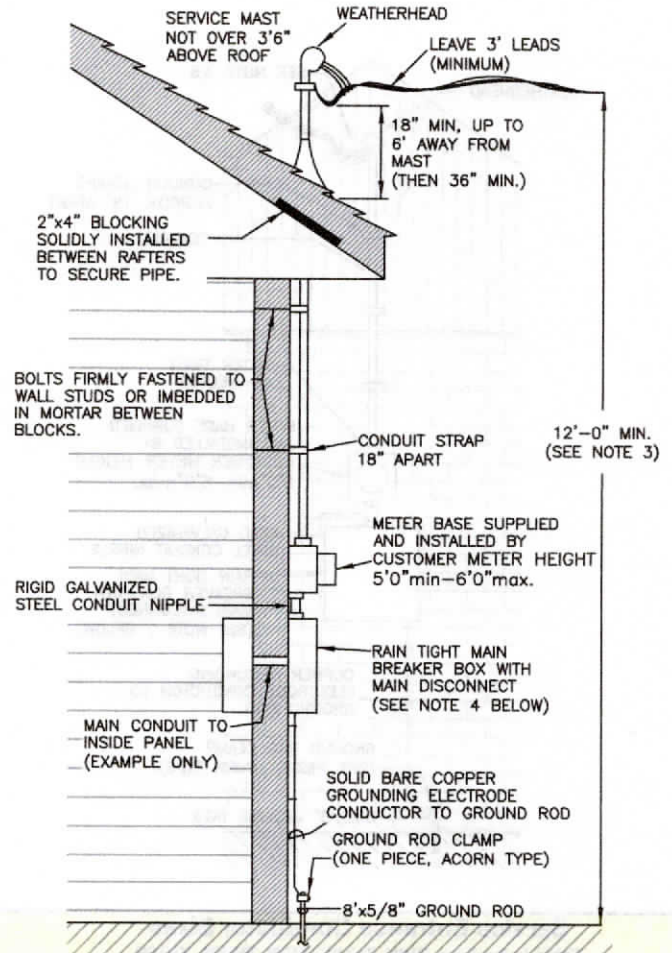
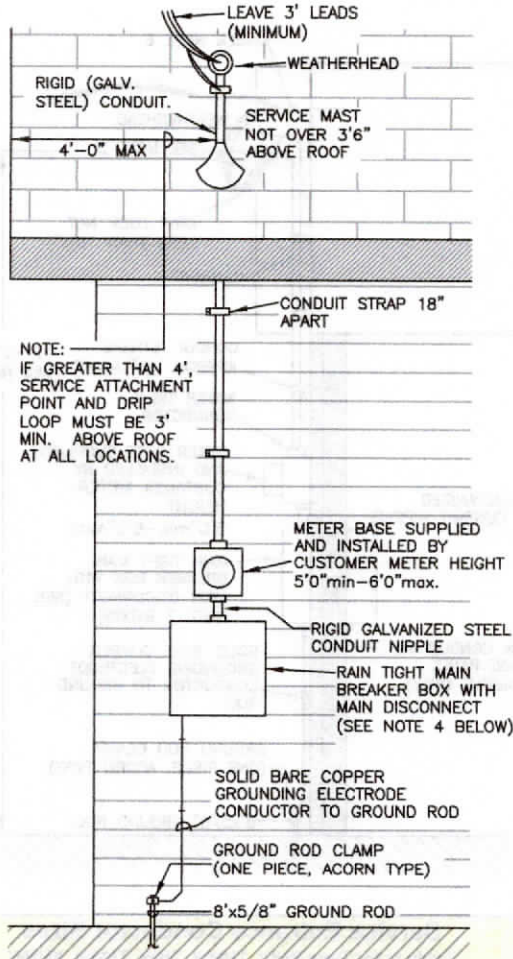
PH. 256-386-9290

EXHIBIT 1

PAGE 1 OF 4

DATE: 7-22-2024

OVERHEAD SERVICE - SINGLE METER SOFFIT WALL MOUNTED METER BASE



Service Entrance Conductor Sizes

Table is for Type RHW, THHW, THW, THWN, XHHW
Insulated Conductors Rated at 75°C

RESIDENTIAL - SINGLE PHASE SERVICE IN CONDUIT 2 CONDUCTORS, PLUS 1 NEUTRAL

COPPER CONDUCTORS			
Size Entrance Switch	Min. Conductor Size	Min. Conduit Size	Size Of Grounding Electrode Conductor COPPER ONLY (SOLID OR STRANDED)
200	3 #2/0	2"	#2
400	3 #500 MCM	3"	#1/0
400	2 runs 3 #3/0	2 @ 3"	#1/0
600	2 runs 3 #350 MCM	2 @ 3"	#2/0

Service Entrance Conductor Sizes

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400	2 runs 3 #3/0	2 @ 3"	#1/0
600	2 runs 3 #350 MCM	2 @ 3"	#2/0

COMMERCIAL - THREE PHASE SERVICE IN CONDUIT 3 CONDUCTORS, PLUS 1 NEUTRAL

200	4 #3/0	3"	#2
400	4 #500 MCM	4"	#1/0
600	2 runs 4 #350 MCM	2 @ 3"	#2/0

NOTES:

- THIS DIAGRAM IS INTENDED FOR USE AS A GUIDE. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE NESC AND NEC, EXCEPT THAT LOCAL CODES AND REGULATIONS HAVING JURISDICTION SHALL TAKE PRECEDENCE.
- ALL CLEARANCES TO BE IN CONFORMANCE TO THE MOST STRINGENT REQUIREMENTS OF THE CURRENT EDITION OF EITHER THE NESC, NEC, OR OTHER CODES OF GOVERNMENTAL OR REGULATING AUTHORITIES AS APPLICABLE.
- IF LENGTH OF CONDUIT EXCEEDS 10', COUPLING IS PERMITTED ON END ADJACENT TO METER.
- BREAKER BOX WITH MAIN DISCONNECT (RATED FOR SERVICE ENTRANCE EQUIPMENT) IS OPTIONAL UNLESS OVER 3' TO PANEL INSIDE HOUSE.
- ROD-TYPE ELECTRODES OF STAINLESS STEEL AND COPPER, OR ZINC COATED STEEL SHALL BE AT LEAST 5/8" IN DIAMETER. RODS SHALL BE NOT LESS THAN 8' LENGTH.
- GROUND CLAMPS SHALL BE LISTED FOR THE MATERIALS OF THE GROUNDING ELECTRODE AND THE GROUNDING ELECTRODE CONDUCTOR, AND SHALL ALSO BE LISTED FOR DIRECT SOIL BURIED OR CONCRETE ENCASMENT.
- THE GROUNDING ELECTRODE CONDUCTOR SHALL BE RUN TO THE SERVICE NEUTRAL.



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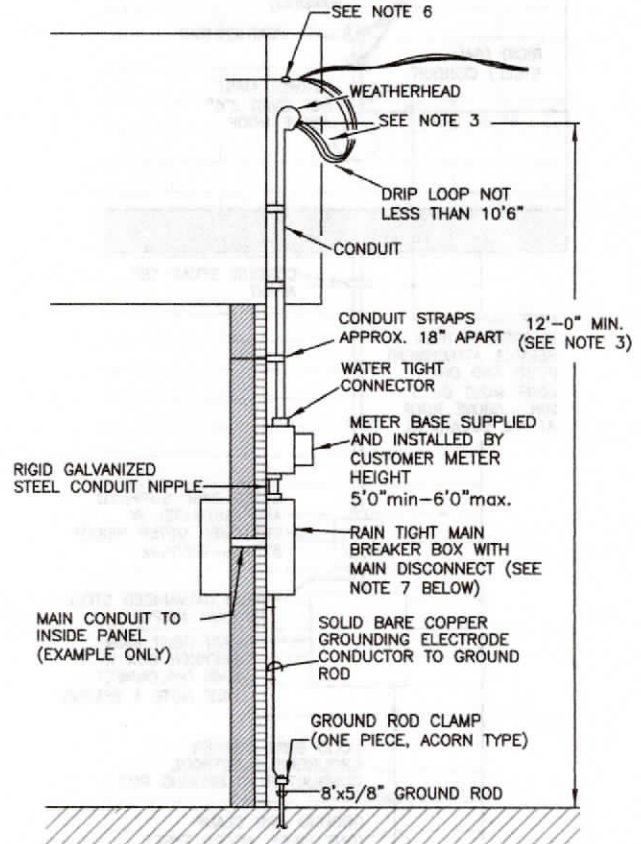
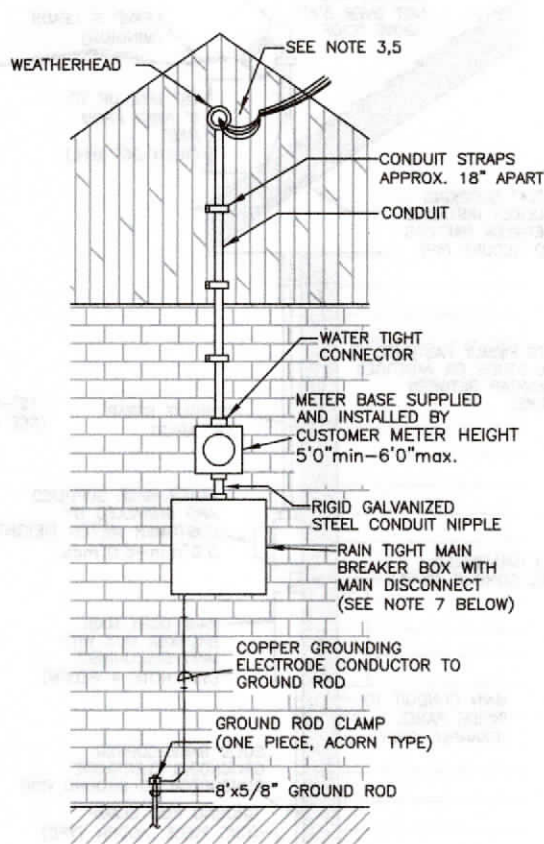
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PAGE 2 OF 4

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OVERHEAD SERVICE - SINGLE METER GABLE WALL MOUNTED METER BASE



Service Entrance Conductor Sizes

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Insulated Conductors Rated at 75°C

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Service Entrance Conductor Sizes

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- LEAVE 36" MIN. PIGTAIL ON ENTRANCE CONDUCTOR.
- MSEB WILL DETERMINE POINT OF ATTACHMENT TO BUILDING.
- CUSTOMER SUPPLY EYEBOLT FOR MOUNTING TO BRICK, BLOCK ROCK, OR STUCCO WALLS. CUSTOMER RESPONSIBLE FOR INSTALLING.
- LEAD PLUGS SHALL BE USED ON ALL MASONRY TYPE CONSTRUCTION TO SECURE CONDUIT STRAPS.
- BREAKER BOX WITH MAIN DISCONNECT (RATED FOR SERVICE ENTRANCE EQUIPMENT) IS OPTIONAL UNLESS OVER 3' TO PANEL INSIDE HOUSE.
- ROD-TYPE ELECTRODES OF STAINLESS STEEL AND COPPER, OR ZINC COATED STEEL SHALL BE AT LEAST 5/8" IN DIAMETER. RODS SHALL BE NOT LESS THAN 8' LENGTH.
- GROUND CLAMPS SHALL BE LISTED FOR THE MATERIALS OF THE GROUNDING ELECTRODE AND THE GROUNDING ELECTRODE CONDUCTOR, AND SHALL ALSO BE LISTED FOR DIRECT SOIL BURIED OR CONCRETE ENCASMENT.
- THE GROUNDING ELECTRODE CONDUCTOR SHALL BE RUN TO THE SERVICE NEUTRAL.