Carroll Electric
Cooperative Corporation

Development Extension Standard

January 2026

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1. Purpose

The *Development* Extension Standard is intended for use by property *Developer*s who request the installation of an electric distribution system to serve a *Development* (see section 2 for definition). The *Developer* should contact Carroll Electric Cooperative Corporation (*CECC*) as early as possible in their project planning process to obtain and provide this standard to any engineers or contractors utilized to plan and/or construct their development.

This standard does not provide for individual metered electrical services to be connected from the installed electrical distribution system within the *Development*. An *Application for Membership and/or Electrical Service* must be completed, and all applicable fees paid to start the installation process for a metered electrical service under the rates and tariffs of *CECC* approved by the Arkansas Public Service Commission. A sample of this form is attached and included for reference as Appendix D. Please contact CECC for the form and checklist of other requirements for your location.

2. Definitions

Application for Development - The document when completed by the *Developer* and submitted to *CECC* provides all the information needed to begin and complete the process of designing and preparing associated costs for the installation of electrical facilities in the *Development*. This form is included as Appendix A.

Application for Membership and/or Electric Service - The document a person or other entity desiring metered electric service from *CECC* must submit in order to first obtain membership and then metered electric service, or if already a member to obtain an additional metered electric service. A sample of this form is included for reference as Appendix D.

Application for Changes to Street Lighting - The document an entity must submit to *CECC* in order to obtain electric service for street lights to ultimately be billed to a city or property owners association. A sample of this form is included for reference as Appendix C.

Cost Schedule - *CECC's* opinion of likely cost given the information (including current pricing) available at the time the schedule is prepared. Changes to information or plans after schedules are prepared may cause costs to change.

Developer - The person or entity responsible for the *Development*. They may be the owner of the property or have a contractual agreement to act on behalf of the property owner.

Development - A group of five or more contiguous land parcels of size and condition to accommodate qualified services or an area planned for a qualified service or services of sufficient concentrated load where planning and installation of electrical facilities is required prior to the planned building construction will be considered a development. Campgrounds and RV parks are typically classified as non-qualified services and therefore may not be considered *Development*s.

Development Installation Agreement – The document *CECC* will prepare for the *Developer's* review and acceptance that details the conditions, requirements, and estimated costs for *CECC* to construct

and install electric facilities in the *Development*. A sample of this form is included for reference as Appendix B.

3. Standard Procedure

3.1 Application for *Development*

Any *Developer* desiring to have *CECC* extend electrical facilities into their *Development* must first complete the *Application for Development*. This form is attached to and included as Appendix A for the *Developer's* use. For the application to be considered complete, all of the following list of items shall be included:

- ❒ *Application for Development* form signed and dated with all questions appropriately answered
- ❒ Attachment A - Overall Development plan showing all phases (if applicable)
- ❒ Attachment B - Timeline for construction - including all phases (if applicable)
- ❒ Attachment C - Plat of Development including easement language (See section 4.4 for *CECC* plat and drawing requirements and section 4.6 for easement requirements)
- ❒ Attachment D - If three-phase power is required, a detailed description of the specific power requirements, including the type of the electrical load, motor size, voltage, and location
- ❒ Attachment E - If there are other service requirements for amenities such as motor-operated gates, public use areas, lighting, etc., provide a load description and location for each planned service
- ❒ Attachment F - Copy of the *Development* bill of assurance or protective covenants (See section 4.7), where applicable.
- ❒ Attachment G - Completed IRS form W-9 for business entities
- ❒ Attachment H - $ 5,000.00 non-refundable deposit

CECC shall make no field investigations nor prepare preliminary designs or cost estimates prior to the submittal of the completed Application for Development, including the $5,000.00 non-refundable deposit.

Along with the non-refundable deposit, the applicant shall pay any previous debts owed to CECC before CECC shall be obligated to begin any work under this agreement.

The completed *Application for Development* along with all attachments may be submitted in one of the following ways:

Delivered via US Mail or delivery service to:

Carroll Electric Cooperative Corp.
Attention: Engineering
P.O. Box 400
920 Highway 62 Spur
Berryville AR 72616

Electronically via e-mail to: developments@carrollecc.com

Delivered in person to one of the *CECC* office locations listed below:

920 Highway 62 Spur
Berryville AR 72616

707 SE Walton Boulevard
Bentonville AR 72712

5056 Highway 412B
Huntsville AR 72740

511 East Court Street
Jasper AR 72641

3.2 Electrical Distribution Facilities Design and Cost Schedules

Upon receipt of the completed *Application for Development*, *CECC* will contact the *Developer* or their designee to confirm receipt and clarify any questions. Based on workload at time of submittal, *CECC* will provide an estimate of the time it will take to prepare and deliver the design of electric grid facilities, associated *Cost Schedule,* and the *Development Installation Agreement*.

The *Developer* may request to directly utilize an approved *CECC* design contractor to perform the preliminary electrical design and layout in accordance with *CECC* specifications. In cases where this is approved by CECC, the drawings showing the preliminary design shall be submitted to *CECC* for review and approval and for compilation of cost estimates and the *Development Installation Agreement*.

See Section 4.22 for instructions to submit changes to the information or plats initially submitted for the *Development*.

3.3 Development Installation Agreement

After the proposed design and associated *Cost Schedule* are complete, *CECC* will prepare and send to the *Developer* for review, a *Development Installation Agreement. A* sample of this form is included for reference as Appendix B.

The *Developer* will review the proposed design along with the associated *Cost Schedule* and advise *CECC* of any issues or concerns needing to be addressed. If none, the proposed plans and *Cost Schedule* should be signed by the *Developer* and submitted back to *CECC* as detailed below. If there are revisions made to the proposed design, the resulting revisions to the associated *Cost Schedule* and a reissue of the *Development Installation Agreement* for the *Developer* to review shall be required. The reissue of the *Development Installation Agreement* shall show a revision number, date, and explanation of the revision noted in the "Revisions" section at the end of the form. Furthermore, if revisions to the preliminary design are based on changes or revisions to

the information or plans originally submitted to *CECC* by the *Developer*, Section 4.22 should be followed for updating the *Application for Development*.

After any issues with the proposed design have been addressed, the *Developer* may submit the completed *Development Installation Agreement* to *CECC* who will consider it complete when all of the following items are included:

- ✓ Latest revision of *Development Installation Agreement* signed by *Developer*
- ✓ Latest revision of Proposed Design signed by *Developer*
- ✓ Latest revision of *Cost Schedule* signed by *Developer*
- ✓ Performance Bond for the amount specified (See Section 4.20)
- ✓ Payment of costs (See Section 4.21)

CECC shall perform no field staking nor schedule any installation of facilities prior to the submittal of the completed *Development Installation Agreement*.

The completed *Development Installation Agreement* form along with all attachments, bonds, and payments listed above must be mailed or delivered to one of the *CECC* office locations listed in Section 3.1. No electronic submittals are presently accepted for the *Development Installation Agreement*.

3.4 Construction of Electrical Distribution Facilities within the Development

Upon receipt of the completed *Development Installation Agreement*, *CECC* will contact the *Developer* or their designee to confirm receipt and begin coordination of the field staking and installation of the facilities. Based on present construction workloads, *CECC* will also provide an estimate of the time *CECC* will begin working on the installation and an estimate of the time to complete the installation. See Section 5 for coordination, inspection, construction, and installation requirements.

See Section 4.22 for instructions to submit changes to the information or plats initially submitted for the *Development*.

4. Electric System Design Requirements

4.1 *Application for Development*

The *Developer* must submit a signed and completed *Application for Development* as detailed in Section 3.1 for *CECC* to begin preparing preliminary design, *Cost Schedules*, and the *Development Installation Agreement*.

4.2 Relocation and Removal of Existing Facilities

It is the policy of *CECC* to relocate or remove existing facilities at the request of a member or others if such relocation or removal is deemed by *CECC* to not significantly impact operations, reliability, or maintenance of the facility or that of any associated facilities or members. In instances where the *Developer* requests existing facilities be removed or relocated (including being relocated underground) and *CECC* consents to the request to relocate or remove the facilities, the *Developer* understands and agrees to pay for all costs for relocation or removal of such facilities.

4.3 Placing New Lines Underground

Normally line extensions provided by *CECC* shall be overhead; however, lines may be extended underground through agreement with an individual member or *Developer* only if in *CECC's* judgement, placing of the line underground does not significantly impact operations or maintenance of the facility or that of any associated facilities or the reliability of other members. *CECC* does not offer submerged electrical distribution transformers or equipment; therefore, any transformers or equipment associated with underground lines shall be interpreted to be pad or vault mounted. In the case of underground residential developments, the *Developer* shall have the responsibility of opening and closing all ditches, installing conduit, transformer pads, sleeves, and vaults. In addition, the *Developer* shall provide a performance bond totaling the cost of electrical facilities as a guarantee of future qualified loads.

4.4 Plat Drawings

The *Developer* must provide a plat drawing in digital file format to *CECC* before electrical design work can begin. File format and drawing requirements are as follows:

4.4.1 Acceptable file types:

Auto Cad drawings (.dwg)

4.4.2 Use of a Projected Coordinate System is required

The preferred Projected Coordinate System is NAD 1983 State Plane Arkansas North FIPS 0301 (feet). If another coordinate system is used, the drawing shall contain:

1. Identification of the coordinate system used within the digital map file
2. The defined datum point
3. The defined scale and unit of linear measurement

4.4.3 The plat drawing shall include the final and complete property description. Any changes of the plat drawing will require a resubmittal of information, see section 4.22. The following information shall be included in the plat drawing:

1. The *Development* name
2. Street names and in their final location including back of curb and sidewalks
3. Property lots in the correct location with referenced coordinate corresponding with submitted datum and coordinate system
4. Correct and final lot numbers along with 911 addresses where available
5. Easements and setbacks
6. Existing buildings

7. Utility plan detailing the location, size, and type of all utilities being constructed to service the *Development*. The utility plan must detail both existing and proposed of the following information:
   - ❒ Water lines including meters and fire hydrants
   - ❒ Gas lines
   - ❒ Sanitary sewer lines
   - ❒ Storm sewers and inlets
   - ❒ Storm water drainage and detention/retention areas
   - ❒ Telephone, communication, and CATV cable routes and equipment locations.
   - ❒ Other utility lines

4.4.4 Drawing files containing electrical design and layout shall conform to the format of *CECC's* "Development Design Template.dwg" file. Please contact *CECC* for details or a copy of the template drawing.

4.5 Electric Load Information

The *Developer* shall provide information concerning expected dwelling size, planned use of natural gas or liquid petroleum gas for heating or water heating, and other information or restrictions that may affect residential energy requirements. Also include information regarding voltage and load requirements for any non-qualified facilities, such as sewer lift stations, swimming pools, community buildings, etc.

4.6 Easement Language Requirements

The *Developer* shall provide easements for electric service platted adjacent to lot lines and to permanently platted, maintained, hard-surfaced roads, and must include the following easement language on the plat:

For overhead facilities, *CECC*'s standard easement language shall be used. Contact *CECC* for a copy of the standard easement form.

For underground cables and pad-mounted equipment, the following easement language shall be used:

"We, {DEVELOPER NAME} _____, owners of the real estate shown and described herein, on this date, _____, _____, do hereby dedicate the public streets and easements shown upon this plat. Said public streets and easements shall be for the benefit of the City of CITY NAME, Arkansas and its Franchise Utilities, a perpetual easement right, privilege, and authority to enter upon the lands of the undersigned grantor, and to place, construct, reconstruct, erect, excavate, add to, relocate, rebuild, modify, change operative voltage level, repair, replace, patrol, operate and maintain on, over, and under the described lands, and in and upon all streets, roads, highways, and other rights of way abutting said premises, underground pipelines, cables of one or more circuits to serve as service, distribution, or transmission lines, or combinations of all, to transmit gas, water, sewer, drainage (excluding detention ponds), electrical energy and communications, including but not limited to buried pipelines or buried

or above ground pipeline appurtenances, cable, transformers, junction cabinets, vaults, and other appurtenances necessary thereto, together with the right of ingress and egress to and from the lines of the City and Franchise Utilities over the lands of the grantors for the purpose of installing, repairing, replacing, upgrading or otherwise accessing the utility systems to be installed in the easement, which said lands are described under the legal description on this plat.

Grantors do also hereby grant and convey to the City and Franchise Utilities the perpetual right to clear and keep clear by cutting, trimming, spraying, or removing by any other manner all brush, trees, timber, and vegetation within the defined easement. All parties agree that no structures shall be constructed within the said easement, or any shrubs, trees, or fences be planted or constructed that may interfere or endanger said utilities.

Grantors agree to make no use of, nor permit others to make any use of said easement that would reduce in clearance or in any other way interfere with the proper and safe operation and or maintenance of the utility facilities."

4.6.1 Covenant Requirements

Insert the following language in the restrictive covenants covering this *Development*:

"Developer has requested, and Carroll Electric Cooperative Corporation has agreed to provide electrical distribution facilities, with Developer having approved the system design. Any request to subsequently relocate any portion of the facilities shall be consistent with the Cooperative's design and operating practices and the requesting party shall bear all costs associated with such relocation. All poles shall have no less than seven (7) feet of unencumbered space around them and all pad-mounted equipment shall have no less than fifteen (15) feet of unencumbered space in front of the doors for operation and maintenance of the equipment. Any alteration to final grade within the defined right of way or utility easement shall be pre-approved by the Cooperative and should not reduce in clearance or in any other way interfere with the proper and safe operation and/or maintenance of Cooperative facilities. Cooperative is hereby granted access across property as necessary for maintenance and/or replacement of poles, anchors, guys, lines, and equipment. Cooperative shall only be required to fill, grade, and restore ground cover back to original grade as a result of any excavation. Cooperative shall not be liable for payment or for repair of any damage to landscaping, shrubbery, fence, walk, patio, or driveway in connection with the installation, maintenance, or relocation of the electric system."

4.7 Voltage, Metering, and Protection Requirements

CECC should be consulted regarding the type of service and the associated metering which can be furnished at a particular location before service equipment is purchased or wiring is installed. The voltage and number of phases which will be supplied will depend on the type, size, and location of the load, as well as the nature of any existing facilities.

4.7.1 The secondary service voltages and size limits listed below are standard. Contact CECC for primary service voltages which will vary by geographic location.

Single-Phase Pole-Mounted Transformer – 120/240 Volt, 3-wire up to 100 kVA

Three-Phase Pole-Mounted Transformer – 120/240 Volt, 4-wire DELTA up to 75 kVA
120/208 Volt, 4-Wire WYE up to 150 kVA
277/480 Volt, 4-Wire WYI up to 150 kVA

Single-Phase Pad-Mounted Transformer – 120/240 Volt, 3-wire up to 167 kVA

Three-Phase Pad-Mounted Transformer – 120/208 Volt, 4-wire WYE up to 1000 kVA
277/480 Volt, 4-wire WYE up to 2500 kVA

No 120/240 Volt, 4-wire DELTA service will be provided where the service is from a pad-mounted transformer or where the surrounding area is supplied by underground primary. All WYE services require a neutral conductor.

4.7.2 The metering type for service voltages and anticipated peak load sizes listed below are standard. The transformer size to support the anticipated peak load shall be determined by CECC and may not be consistent with secondary main breaker size. Contact CECC prior to purchasing or installing any service equipment or wiring. CECC will determine the type and location for all metering.

Self-contained metering shall be used for the following regardless of transformer size:

Single-Phase, 120/240 Volt, 3-wire up to 76.8 kW
Three-Phase, 120/240 Volt, 4-wire DELTA up to 75 kW
Three-Phase, 120/208 Volt, 4-wire WYE up to 115.2 kW
Three-Phase, 277/480 Volt, 4-wire WYE up to 265.9 kW

CT metering shall be used for the following regardless of transformer size:
Single-Phase, 120/240 Volt, 3-wire above 76.8 kW
Three-Phase, 120/208 Volt, 4-wire WYE above 115.2 kW Three-Phase, 277/480 Volt, 4-wire WYE above 265.9 kW

All current transformer metering installations are required to have a customer furnished and installed service disconnect that is external, accessible, lockable, and

visible from the meter.

4.7.3 The customer is responsible for providing and installing the necessary equipment and devices to protect any wiring or equipment from damage due to conditions that may occur on CECC's system.

4.8 Street or Area Lighting

If street lighting and/or area lighting layouts are required, they shall be designed concurrently with project layout, and installation coordinated with other trenching. Street lighting inside municipal limits may need approval by the appropriate city official and comply with any applicable local ordinance. All lights not billed to a local governing body shall be billed to the legally incorporated property owners' association.

Where street lighting is desired or required within a *Development* and the *Developer* chooses to use one of the street lighting options provided by *CECC*, an *Application for Changes to Street Lighting* must be completed by *CECC* and submitted to the municipality or entity for approval. A sample of this form is included for reference as Appendix C.

In instances where street lighting will be accomplished outside of the options provided by *CECC*, the lighting circuits will not be installed, owned, or maintained by *CECC* but will instead be supplied electricity through a meter. Meters for street lighting require a completed *Application for Membership and/or Electrical Service*. (See section 5.8)

4.9 Final Plat and Bill of Assurance

The *Developer* agrees to the following:

4.9.1 Prior to submitting the plat to the governing planning jurisdiction for final acceptance, *CECC* must approve and sign the final plat acknowledging that *CECC* requirements have been met.

4.9.2 Furnish to *CECC* a copy of the executed, recorded final plat (in PDF or JPEG format) showing detailed layout including property and lot lines, street names, buildings, dedicated easements, water, sewage, drainage and any other underground facilities.

4.9.3 Furnish to *CECC* a copy of the recorded bill of assurance detailing all restrictive covenants, which must include the language as shown in Section 4.7 above.

4.10 Project Development

If the *Development* is to be completed in phases, the *Developer* shall cause it to be built in contiguous locations that allow economic expansion of the electric system between the developed areas. Phases built in non-contiguous locations may require additional cost to be paid by the *Developer*.

4.11 Property Corners

The *Developer* shall identify, install, and maintain permanent property corners with lot numbers identified on stakes in advance of any design.

4.12 Layout and Design

CECC will determine the type of construction and location of line routes and locations of electrical lines, transformers, pedestals, and switchgear. *CECC* will work with the *Developer* when practicable, to locate such routes and equipment in a manner acceptable to both parties. In instances where the *Developer* utilizes an approved contractor to do the layout and design, the *Developer* has the responsibility to make sure *CECC* has reviewed and approved layouts and designs prior to any construction.

Underground systems for *Developments* will be of a looped design and where single-phase loads are to be served along the route of three-phase lines, a separate single-phase line shall be provided from three-phase junction cans to provide for adequate diagnosis and restoration times. All normal open points shall be located in junction cans and protected with lightning arresters. If the underground system is served from overhead lines, the *Developer* will provide space for overhead structures for the purpose of entering the subterranean system in the *Development* at points specified by *CECC*.

For extensions to a single service, the meter base or pedestal shall be located near the transformer on the lot line unless otherwise agreed to by *CECC.* In cases where CECC agrees it is not feasible, the meter base may be attached to the outside of a dwelling; however, all meter locations shall have a direct line of site and unobstructed access from their source transformer.

The *Developer* shall have the responsibility to install the equipment pads and vaults according to *CECC's* specifications and as outlined on the approved electrical layout plan.

4.13 Environmental Considerations

Electric facilities shall be routed so as to avoid open drainage ditches, creeks and marsh areas, or other areas that are environmentally sensitive, historically significant, or may hinder construction or operation of the electric system. Costs associated with areas requiring trench stabilization (retaining walls, concrete encasement, pipe sleeves, riprap, etc.) or any required environmental studies shall be paid by the *Developer.*

4.14 Location of Cables and Equipment

The underground electrical system will be located adjacent to lot lines fronting permanently platted and maintained, hard-surfaced roads within the utility easement. Pad-mounted transformers, secondary pedestals and switchgear normally will be located on front lot lines in areas accessible for operation and repairs. Pad-mounted transformers will be placed to allow energized switching operations. The front (lock side) of the equipment shall face the street and requires 15 feet clearance to obstacles.

4.15 Use of Overhead Facilities

Lots adjacent to overhead lines may be served from pole-mounted transformers with underground service lines. For commercial services, a pole-mounted transformer will not be suitable for all service sizes. CECC to determine which transformer type shall be utilized.

4.16 Other Utilities

The *Developer* must provide *CECC* with any easement or separation requirements that other utilities require be maintained. *CECC* will not be responsible for spatial design conflicts if created by unknown third-party agreements. Additionally, *Developer* shall strictly enforce *CECC's* separation requirements from other utilities as stated below:

4.16.1 Water, sewer, or gas lines shall not share the ditch with *CECC* primary or secondary distribution lines and shall maintain five feet of horizontal clearance. Separation from deeper sewer lines shall be increased to allow access to the sewer line without disturbance of the power conduit ditch.

4.16.2 Telephone, cable TV, or communications lines may share *CECC's* primary or secondary distribution ditch and shall be separated as shown in drawings included in Appendix E.

4.16.3 Gas meters, communication pedestals, fire hydrants, or other obstacles or structures shall not be placed within seven feet of poles or within 15 feet of the front (lock) side and five feet of the other sides of pad-mounted electrical equipment.

4.17 Sewer Lift Stations, Wells, and Other Non-Qualified Loads

Electrical facilities required for sewer lift stations, wells, signs, irrigation, fountains, fire pumps, or other non-qualified loads within a *Development* shall be installed at the expense of the *Developer*.

4.18 Temporary Builder's Service

Temporary service may be furnished from overhead facilities or from pad-mounted transformers and requires an *Application for Membership and/or Electrical Service* to be completed (See section 5.8). Reasonable time must be allowed for construction of the needed temporary facilities. Temporary facilities will be installed and removed at the *Developer's* expense, and will not always be available.

4.19 Service to Residences and Buildings

Underground service routes will be run as short and straight as possible from *CECC's* secondary source to the service meter. For underground systems, service conduit shall be furnished and installed by the Builder/Developer and shall extend from the meter to *CECC's* secondary source. See Appendix E for specific requirements.

4.20 *Development* Performance Bonding

The *Developer* shall issue a performance bond and submit it along with the completed *Development Installation Agreement* to provide *CECC* assurance that the number of residences, or the electrical usage of qualified services, constructed and connected to the electric distribution system within the *Development* will support the investment made by *CECC* in a reasonable amount of time. *CECC* will determine the amount of the performance bond based on the amount of its investment and will include the amount in the provided *Development Installation Agreement*. The initial performance bond will be required for three years and may be released or partially released annually based on the development type:

Residential: The percentage to be released will be determined by taking the number of residences constructed and connected to the electric distribution system within the *Development* multiplied

by CECC's latest average investment per member service extension and divided by CECC's investment in the *Development*.

Commercial: The percentage to be released shall be determined by taking the electrical usage of qualified services constructed and connected to the electric distribution system within the *Development* divided by the total kilowatt hour usage requirement as stated in the *Development* Installation Agreement.

;The bond may be extended for an additional three years if the performance requirement has not been met.

The *Developer* may request at the end of each year the proportional amount of the performance bond be released. **After six years, any amount remaining on the performance bond will be collected either from the *Developer* paying the remaining amount or from collection against the bond.**

CECC will also accept a cash deposit, or an irrevocable letter of credit in lieu of a performance bond.

4.21 Cost Schedule

CECC will prepare a cost schedule itemized as shown in the list below and will include it with the *Development Installation Agreement.* Prior to construction, the *Developer* will have to pay for the installation of street lights, removal and relocation of existing facilities, extension of facilities to non-qualified loads, inspection and testing costs, meter bases, and pads and vault costs. If *CECC* has agreed to perform the conduit, pad, and vault installation work, the amount would also be included in cost to be paid prior to construction. The performance bond or payment amount referenced in Section 4.20 will be based on the amount of *CECC*'s investment in the *Development*.

- ✓ Cost to design (to determine the amount of the performance bond)
- ✓ Cost to inspect (amount to be paid prior to construction)
- ✓ Cost to perform acceptance test (amount to be paid prior to construction)
- ✓ Cost for meter bases (amount to be paid prior to construction)
- ✓ Cost for removal or relocation (amount to be paid prior to construction)
- ✓ Cost for line extended to non-qualified load (amount to be paid prior to construction)
- ✓ Cost to install street lighting (amount to be paid prior to construction)
- ✓ Cost to trench and install conduit (to determine the amount of the maintenance bond)
- ✓ Cost to install cable, terminations, grounding, and sleeves (to determine the amount of the performance bond)
- ✓ Cost to purchase and install pads and vaults (amount to be paid prior to construction)

4.22 Revisions to Submitted Information or Plats

In the event information changes after submittal of the *Application for Development* but prior to the *Developer* receiving the *Development Installation Agreement*, the revised information should be submitted along with a copy of the original *Application for Development* form signed and

dated with an explanation of the modification noted in the "Modifications" section of the application. If the information change is on the application form itself, the copy of the application should show the original information marked through (do not erase) and the new information written near that marked through and the change initialed. The form should also be signed and dated with an explanation of the modification noted in the "Modifications" section of the application.

In the event information changes after the *Development Installation Agreement* has been received by the *Developer*, the revised information should be submitted along with a copy of the original *Application for Development* form signed and dated with an explanation of the modification noted in the "Modifications" section of the application. If the information change is on the application form itself, the copy of the application should show the original information marked through (do not erase) and the new information written near that marked through and the change initialed. The form should also be signed and dated with an explanation of the modification noted in the "Modifications" section of the application. A new *Development Installation Agreement* will be prepared and submitted to the *Developer* accounting for the revisions.

The return of the *Development Installation Agreement* signed by the *Developer* shall serve as a statement of agreement by the *Developer* as to the final design and *Cost Schedule* being based on the development plans as they were originally submitted and may have been subsequently revised and are accurate as to how the *Development* will be constructed. Any information or plan changes made after the submission of the *Development Installation Agreement* by the *Developer* that result in additional costs to *CECC* will be at the *Developer*'s expense.

5. Construction and Installation Requirements

5.1 *Development Installation Agreement*

A *Development Installation Agreement* must be executed as detailed in Section 3.3 for *CECC* to begin field staking or installation of facilities. A sample of this form is included for reference as Appendix B.

5.2 Marking of Property Corners, Lots, and Other Features

The *Developer* shall identify, install, and maintain permanent property corners with lot numbers identified on stakes. The *Developer* will also provide for the marking of other necessary features such as back-of-curb and easement alignment as may be required in advance of any staking, construction, or installation work to be performed by *CECC*.

5.3 Locating Underground Facilities

If *CECC* agrees to install the conduit, pads, and vaults, the *Developer* must provide information and arrange field spotting of gas, water, sewer, drainage, and other underground facilities when requested. *CECC* will assume no responsibility for damage to facilities not marked.

5.4 Installation, Removal, and Relocation of Overhead Electric System Facilities

Where the electric system for a development is to be built using overhead lines or where overhead line are to be removed or relocated as part of a development approved for underground lines, *CECC* will perform the installation, removal, or relocation of all poles, anchors, guys, conductors, and other necessary appurtenances to the pole. The *Developer* will be responsible for all cost associated with this work.

5.5 Installation of Conduits and Equipment Pads and Vaults

Where a development is approved for underground lines, the *Developer* shall be responsible for the opening of all trenches, leveling of equipment pads, excavating for pedestals and vaults if required, installing conduits and warning tape in the trench, and after approval by a *CECC* inspector, backfilling all trenches. All work shall be performed in accordance with *CECC* specifications (see Appendix E). All permits or notifications required for excavation are the responsibility of the *Developer* as well as the installation and maintenance of any required erosion or storm water controls. If *CECC* has agreed to install conduits, pads, and vaults, the installation will not proceed until any site grading work is to a point within six inches of final grade.

5.5.1 Coordination and Inspection

The *Developer* or his designee shall schedule and coordinate conduit installation activity with *CECC* in order to make the most efficient use of both the excavation crew and inspector. The *CECC* inspector must see and inspect all conduits prior to backfilling. Any sections of conduit not seen and approved for backfilling shall not have cable installed until they have been uncovered for inspection and approved for backfilling. Approval for backfilling by the inspector does not constitute transfer of ownership, final approval, or relieve the *Developer* of responsibility for defects in the installation that may be discovered later. See Sections 5.5.2 and 5.5.3 for further information.

All inspection costs are the responsibility of the *Developer*. The *Cost Schedule* shall show the inspection costs which must be paid before installation may begin. Presently, the cost for inspection of *Developments* is $1.00 per horizontal foot of trench.

5.5.2 Conduit System Acceptance

After the installation of conduit is completed, *CECC* will perform acceptance testing to confirm the following:

- ✓ Conduit has the specified cover depth from final grade
- ✓ Conduit has the specified horizontal separation from other underground structures
- ✓ Conduit is type specified
- ✓ Conduit is size specified
- ✓ Conduit is marked and has pull string installed consisting of locatable 2,500 lb. mule tape or equivalent shall be installed inside each conduit at the time of installation with a minimum of four feet (4') excess coiled and secured on each end.
- ✓ Conduit joints are glued

- ✓ Conduit sweeps are of radius specified
- ✓ Conduit run total length is within limits
- ✓ Conduit run total angle is within limits
- ✓ Conduit passes mandrel test
- ✓ Conduit configuration is correct into pads and vaults
- ✓ Conduit extension above grade is as specified
- ✓ Conduit stub outs are marked
- ✓ Equipment pads and vaults are level
- ✓ Equipment pads and vaults are sized and oriented as specified
- ✓ Equipment pads and vaults have specified horizontal separation from other structures or obstacles
- ✓ Equipment pads and vaults are ready to accept their equipment.

NOTICE: The cover depth must be from final grade for all areas including where future changes in grade may occur such as cuts for driveways. The *Developer* shall anticipate future cuts and make accommodations when installing the conduits. The maintenance bond may be used to correct conduits with less than specified cover (See Section 5.5.3). *CECC* will not install any facilities if the minimum cover depth is less than required by Section 2.1 of the attached Underground Conduit Installation Specification and Drawings (see Appendix E). At no time will a swell or mound be included in the required cover depth.

No cables will be installed in the conduit until all acceptance testing is completed and any deficiencies are corrected to *CECC's* satisfaction and a maintenance bond is provided as specified in Section 5.5.3 below. Acceptance of the installation does not relieve responsibility for defects in the installation discovered within the bonding period.

All acceptance testing costs are the responsibility of the *Developer*. The *Development Installation Agreement* shall show the acceptance testing costs which must be paid before installation may begin. Presently the cost for acceptance testing of *Development*s is $1.00 per horizontal foot of trench.

5.5.3 Conduit System Maintenance Bonding

The *Developer* shall provide a maintenance bond in the amount of fifty percent (50%) of the estimated cost provided by *CECC* for the conduit installation. The life of the bond shall be two (2) years. The *Developer* shall issue the bond as a condition of final acceptance of the conduit, pads, and vaults; however, the ownership and responsibility for the conduit, pads, and vaults does not transfer from the *Developer* to *CECC* until cables are installed in the conduit and equipment is set on the pad or vault. A cash deposit or irrevocable letter of credit may be submitted in lieu of the maintenance bond. The developer will be responsible for ANY cost associated with damage to CECC facilities during the entirety of the two-year maintenance term.

5.5.4 Installation of Cable and Equipment

CECC will schedule installation of cables in conduit, setting equipment on vaults and pads, and connecting the system for energization once the acceptance testing is completed, any deficiencies are corrected, and the maintenance bond is submitted. Based on present installation workload, *CECC* will also provide the *Developer* with an estimate of when the installation will begin and the estimated time it will take to complete the installation. The developer will be responsible for the repair or cost of repair, at CECC's sole discretion, for any of *Developer's* facilities that CECC deems unfit for or incompatible with the installation of CECC's facilities.

5.5.5 Alternate Installation of Conduits and Equipment Pads and Vaults

The *Developer* may request *CECC* to make the arrangements with a contractor to install the conduit, pads, and vaults. If *CECC* elects to arrange for a contractor to perform the installation of the conduit, pads, and vaults, the *Development Installation Agreement* will designate *CECC* as the installer for these items and associated costs shown on the *Cost Schedule* must be submitted by the *Developer* prior to any staking or construction. Any rock trenching, compaction, or boring costs incurred by *CECC* during installation of conduits will be in addition to the estimates shown in the *Development Installation Agreement* and will be payable before any cables are installed. All other requirements remain the responsibility of the *Developer* including costs for inspection and acceptance testing as specified in Sections 5.5.1 and 5.5.2.

5.5.5.1 Road Crossings

In the event *CECC* is to arrange for the conduit to be installed, the *Developer* shall install any required road crossing sleeves prior to the completion of the roadways. The *Developer* shall install road crossing conduit as specified by *CECC* on the design. Ends of conduit shall be sealed to prevent entry of materials and shall be marked clearly using stakes or posts to enable *CECC* to locate both ends of the conduit during subsequent conduit installation activity.

5.5.5.2 Equipment Locations

In the event *CECC* is to arrange for the pads and vaults to be installed, the *Developer* shall provide a reasonably flat, adequately sized area at final grade for pad-mounted equipment locations. See Appendix E for typical equipment pad or vault details.

5.5.5.3 Work Scheduling

In the event *CECC* is to arrange for the conduit, pads, and vaults to be installed, the *Developer* or their designee shall coordinate and schedule construction and installation with other facilities in the *Development*.

5.6 Right of Way

The *Developer* is responsible for the clearing of any right of way as may be required by *CECC*; and, in developments approved for underground lines, for establishing final grade along the

underground line route before the start of any excavation. Any changes in grade that require changes or relocation of *CECC's* electrical facilities shall be at *Developer's* expense.

5.7 Changes to Approved Plans

Immediately notify *CECC* of any changes to the original approved plat of lot lines, easements, or roadway layout, or any changes involving the relocation of *CECC* or other utilities' facilities. The *Developer* shall be responsible to pay the total cost of relocation of *CECC's* facilities (including engineering costs) due to field changes after submittal of the completed *Development Installation Agreement*.

5.8 Service Installations

Any temporary or permanent electrical service installations requested by the *Developer* shall require a completed *Application for Membership and/or Electrical Service,* the form of which is attached to and included for reference as Appendix D. Additionally, the payment of all applicable fees and any locational requirements must be completed to start the installation process. Contact *CECC* for a copy of the application, amount of fees, and other requirements for the specific location.

5.9 Damages to Cooperative Facilities

The *Developer* will reimburse *CECC* for any relocation of, or damages to *CECC's* conduit system, transformers, pedestals, or other distribution equipment caused by actions of the *Developer* or the *Developer's* contractors or agents.

Carroll Electric
Cooperative Corporation

Application for Development

Before the design of the electric system can proceed, this form must be completed by the Developer and returned with the application and deposit.

This application for design of electric facilities in a *Development* is made by the *Developer* to Carroll Electric Cooperative Corporation (*CECC*). Once the completed application and fee is submitted to *CECC*, a *Development Installation Agreement* including preliminary design and associated *Cost Schedule* for electric facilities will be prepared and provided to the *Developer* with reasonable diligence. This application, the *Development Installation Agreement*, and *Cost Schedule* expire one (1) year from the initial application date. Changes by the *Developer* to the *Development* plan may result in additional design fees.

Provide the following information:

1. Development Name ("*Development*"): _____
2. Development Location (City and County): _____
3. *Developer* Name ("*Owner/Developer*"): _____
   Mailing Address: _____
   City/State/Zip: _____
   Phone: _____ Email: _____
4. Is the *Developer* a corporation, LLC, or other entity? ❒ Yes ❒ No
   If "yes" please provide the name and title of all owners or officers of the entity, as well as a completed IRS form W-9 (a copy of which is attached to this application):

Name	Title

5. Provide the name and contact information for the *Development* representatives who have decision-making authority.

Name	Phone Number	E-mail

6. Is the *Development* subject to a planning jurisdiction? ❒Yes ❒ No

   If "yes" please provide:

   Name of Jurisdiction: _____

   Contact Person: _____

   Telephone: _____

   Email: _____

7. Is the *Development* going to be constructed in phases? ❒Yes ❒ No

   If "yes" attach a copy of the overall *Development* plan including all proposed phases.

8. How many lots/units are planned for this phase of the *Development?* _____

9. What is the expected range of living area (sq. ft.) of the homes in the *Development*?

   Single Family _____ Multi-family _____ Mixed Use _____

   What is the expected square footage and type of commercial use planned in the *Development* (e.g. Office, Restaurant, Retail, etc.)?

   Sq. Ft._____ Type_____

10. Will natural gas be available to the *Development*? ❒Yes ❒ No

11. Is equipment being installed that requires three-phase power? ❒Yes ❒ No

    If "yes" attach a detailed description of the specific power requirements for each load, include the type of the electrical load, motor horsepower, locked rotor current, full load current, voltage, and location within the *Development*.

12. Will there be a power requirement for amenities such as:

    ❒ Motor-Operated Gates ❒ Public Use Areas ❒ Signage ❒ Pond Aerators
    ❒ Landscape ❒ Other (Please Specify): _____

    If "yes" attach a detailed description of the specific power requirements and the locations within the *Development*.

13. Is the *Developer* proposing to use *CECC* streetlights in the *Development*? ❒Yes ❒ No

    The *Developer* is responsible for obtaining approval from the planning jurisdiction for the streetlights.

14. Will the streets located within the development be considered public or private? ❒Public ❒ Private

    If private, the developer/POA will need to establish an account with CECC prior to the lights being energized.

15. Is the *Developer* proposing to relocate or remove any of Carroll Electric's existing electric distribution facilities? ❒Yes ❒ No

16. Submit the following to complete the application:

    ❒ Overall *Development* plan showing all proposed phases.

    ❒ Timeline for construction – including all phases (if applicable).

    ❒ Approved plat drawing of *Development* in an AutoCAD format including plans for other utilities and easement language (see Section 4.4 and 4.6 of the "*Development Extension Standard*").

    ❒ Detailed description of specific power requirements if three-phase power is required, including the type of electrical load, motor size, voltage, and location.

❒ Load description for and location of additional service requirements for amenities such as motor-operated gates, public use areas, etc.

❒ A copy of the *Development* bill of assurance (protective covenants) (see Section 4.7 of the "*Development Extension Standard*").

❒ A copy of a completed IRS form W-9.

❒ *$5,000.00* non-refundable deposit.

NOTE: Typically, Carroll Electric will provide the initial electrical design for the *Development* at no charge. However, if the *Developer* desires to use an outside engineering contractor to design the underground electrical facilities within the *Development*, they should contact CECC for a list of approved engineering contractors, as well as design guidelines.

By signing below, the *Developer* agrees they have received a copy of the *CECC* "*Development Extension Standard*," which is also available from a *CECC* representative, or at www.carrollecc.com, and understands and agrees to the requirements and conditions set forth therein. The *Developer* further agrees that all electric facility extensions shall be in accordance with the *CECC* line extension tariffs and the *CECC* "*Development Extension Standard"* that are in effect on the date hereof or as they may be modified thereafter; and agrees to provide such to its engineers and contractors in order to avoid delays or additional costs during the construction of their development.

The *Developer* further agrees that the Cooperative shall not be held liable for any losses, damages, penalties, or expenses for any delay in delivery, including any delay at any point in the supply chain, of materials of any nature necessary for this project. If for any reason, the quantities of any such materials available to the Cooperative are less than its total needs, the Cooperative may allocate its available supply of materials among its members and/or itself, for any use whatsoever, in such a manner the Cooperative deems proper in its sole discretion, without thereby incurring liability on account of the method of allocation or its implementation. In no event shall the Cooperative be liable for any incidental, consequential, punitive, or any other damages, expenses, or costs of any kind, including, but not limited to, lost profits, loss of use, loss of time, shutdown, or slowdown costs, inconvenience, lost business opportunities, damage to goodwill or reputation, or other economic loss, regardless of whether such liability is based on breach of contract, tort, strict liability or otherwise, and even if advised of the possibility of such damages or such damages could have been reasonably foreseen.

Developer further agrees CECC may share relevant information with *Developer*'s engineers, designers, banks, insurance/bonding agencies, and others relative to the *Development*.

Owner/*Developer*'s Printed Name	Title	Date

Owner/*Developer*'s Signature

MODIFIED

	Date:	Signature:	Explanation:
Revision 1			
Revision 2			

Form **W-9**
(Rev. March 2024)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give form to the requester. Do not send to the IRS.

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See *Specific Instructions* on page 3.

1 Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)

2 Business name/disregarded entity name, if different from above.

3a Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor ☐ C corporation ☐ S corporation ☐ Partnership ☐ Trust/estate

☐ LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) . . . . .

Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner.

☐ Other (see instructions)

3b If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions . . . . . ☐

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any)

Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any)

(Applies to accounts maintained outside the United States.)

5 Address (number, street, and apt. or suite no.). See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I **Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Social security number

or

Employer identification number

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Part II **Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	**Signature of U.S. person**	**Date**

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9*.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

Cat. No. 10231X

Form **W-9** (Rev. 3-2024)

Carroll Electric
Cooperative Corporation

Development Installation Agreement

With Preliminary Design and Cost Schedule

This agreement is made this _____ day of _____, 20__ between Carroll Electric Cooperative Corporation (hereinafter called the *Cooperative*) and _____ (hereafter called *Developer*).

A preliminary design and associated *Cost Schedule* is attached to, and incorporated into, this agreement showing Facilities the *Developer* wishes to have installed to serve the property designated on the plans and to be known as _____ in _____ County, Arkansas.

OVERVIEW

Having completed an *Application for Development* on _____, 20__, the *Developer* agrees to pay, before installation of line, a total charge of $_____ and provide bonds in the amounts specified below.

THE PARTIES AGREE as follows:

1. The total cost to be paid to the *Cooperative* by the *Developer* is $ _____
(See attached cost schedule.)

2. The *Developer* will provide, and maintain for the duration of this agreement, a performance bond in the amount of $ _____, which shall be released upon the connection of metered electric service within the *Development,* meeting one of the following conditions:
• For **Residential**: connection of electric service to _____ qualified loads (meters); **or**
• For **Commercial**: connection of electric service with an average monthly usage of _____ kilowatt-hours (kWh).

3. The *Developer* will provide a maintenance bond in the amount of $ _____

4. The Agreement between the *Cooperative* and the *Developer* consists of this Agreement, the *Application for Development*, the *CECC Development* Extension Standard, and Cost Schedule, and comes into effect upon signature.

5. ☐*Developer* ☐*Cooperative* will install conduit, vaults, meter base mounts, and transformer pads.

If the *Cooperative* is to install conduit, transformer pads, and vaults, the *Developer* understands and agrees any cost for rock encountered during this work is not included in the estimated amounts above and any costs incurred due to soil compaction or boring requirements may not be included; but, in either case any amount not included in the estimate will be added after the installation and shall be paid prior to the *Cooperative* installing any cables.

6. ☐*Developer* to install Developer-owned lighting and metering point(s).

   ☐Developer to install conduit only for *Cooperative* owned lighting.

   ☐Cooperative to install conduit for *Cooperative* owned lighting.

   See section 4.8 of *Development Extension Standard*

7. The *Cooperative* shall not be liable as a result of the *Developer* or any of his agent's work in connection with opening or closing of the trench or performing any other work in connection with the installation of any electrical facilities or the operation of the same except by the *Cooperative's* own personnel or authorized representative.

8. ☐*Developer* to furnish and install meter bases.

   ☐*Cooperative* to furnish and install meter bases.

   Meter Base Release

   I hereby acknowledge receipt of and accept full ownership of the following described material(s) from Carroll Electric Cooperative Corporation
   (the "Cooperative") upon the following terms and conditions:
   Upon installation by the Cooperative, I assume full responsibility and control of all material(s) obtained hereunder. Any costs for repair, replacement,
   or removal of the material(s) shall be at my expense. I understand that a licensed electrician should be the only party who repairs, replaces, or
   removes the materials. If the materials are installed in an area where an official inspection is required by any government agency, or any county,
   city, or other controlling entity, I agree that I am completely responsible for having the materials and/or installation inspected by an appropriate
   expert. The Cooperative will work with local inspectors or officials to ensure proper installation.
   I agree to indemnify and save all of the Cooperative harmless from any liability from any cause whatsoever that might be claimed by me,
   any subsequent owner, or any person or entity, claiming damages by virtue of or in any manner arising out of a defect in the material(s), the use
   or condition of the material(s), or any other function or circumstances relating to the material(s). In the event any legal action is brought against
   the Cooperative by any party for any reason regarding a defect in the material(s), the use or condition of the material(s), or any other function
   or circumstances relating to the material(s), the undersigned agrees to reimburse the Cooperative for any and all costs, charges, expenses,
   judgments, or otherwise, together with its attorney's fees and costs, to investigate and/or defend such claims.
   I agree that the Cooperative shall not be held liable by me or any other party for any losses, damages, penalties, or expenses for any delay in
   delivery, including any delay at any point in the supply chain, of the materials referenced herein. If for any reason, the quantities of any materials
   available to the Cooperative are less than the Cooperative's total needs, the Cooperative may allocate its available supply of products among its
   existing or prospective purchasers and/or itself, for any use whatsoever, in such manner the Cooperative deems proper in the Cooperative's sole
   discretion, without thereby incurring liability on account of the method of allocation or its implementation. In no event shall the Cooperative be
   liable for any incidental, consequential, indirect, statutory, special, exemplary or punitive damages,

including, but not limited to, lost profits, loss of
use, loss of time, shutdown or slowdown costs, inconvenience, lost business opportunities, damage to goodwill or reputation, or other economic
loss, regardless of whether such liability is based on breach of contract, tort, strict liability or otherwise, and even if advised of the possibility of
such damages or such damages could have been reasonably foreseen. The liability of the Cooperative, and my sole and exclusive remedy for
damages for any claim of any kind whatsoever under this agreement, regardless of legal theory, shall not be greater than the actual purchase price
of those materials with respect to which such claim is made. I further agree that it is my sole obligation and responsibility to make inquiries as to
the availability of said materials well in advance of my need for those materials and that the Cooperative is under no obligation, whatsoever, to alert
me that it does not, or will not, have the materials requested herein at such time as they are needed, nor does the Cooperative have any duty to
alert me to any delays it may encounter or has encountered in obtaining the materials.

9. All communication should be directed to:

Carroll Electric Cooperative Corporation
Attn: Engineering
P.O. Box 4000
Berryville AR 72616

Attn: _____

This is an agreement for the installation of Facilities in a *Development* and is not a contract for electric service. *Developer* acknowledges electric service will be provided to Members who enter into a separate member and/or electric service agreement with the Cooperative. In the event the *Developer* requires a source of electrical energy for power supply, such energy will be supplied by the Cooperative in accordance with provisions of its standard service extension policies and approved rates and tariffs.

SIGNED by or on behalf of the *Developer* and the Cooperative on the date specified above.

For Developer

_____
Signature

_____
Printed Name

for Carroll Electric Cooperative Corporation

_____
Signature

_____
Printed Name

MODIFIED

	Date:	Signature:	Explanation:
Revision 1			
Revision 2			
Revision 3			

Carroll Electric Cooperative Corporation

Work Order: XXXXXX
Revision Number: 0

Cost Schedule

ITEM	ESTIMATED COST	INSTALLATION RESPONSIBILITY	COST RESPONSIBILITY	NOTES
Design, Testing, & Maintenance				
Initial Design	$ -	CECC	CECC	Subject to performance bond as guarantee of loads
Inspection, Testing, and Additional Design	$ -	CECC	Developer	Via payment to CECC
Less $5,000 Deposit	$ (5,000.00)	CECC	Developer	Via payment to CECC
Sub Total	$ (5,000.00)			
Relocation and/or Removal of Existing Facilities				
Sub Total	$ -	CECC	Developer	Via payment to CECC
Cash Required for Insufficient Meter Requirements				
Sub Total	$ -	CECC	Developer	Via payment to CECC
New Services to Non-Qualified Loads				
Sub Total	$ -	CECC	Developer	Via payment to CECC
Street Lighting Installation				
Lighting Trench and Conduit	$ -	Developer	Developer	Subject to maintenance bond
Lighting Cable	$ -	CECC	Developer	Via payment to CECC
Lighting Poles	$ -	CECC	Developer	Via payment to CECC
Lighting Heads Deposits	$ -	CECC	Developer	Via payment to CECC
Lighting Heads Material	$ -	CECC	CECC	CECC provided
Additional Charges	$ -	CECC	Developer	Via payment to CECC
Sub Total	$ -			
Primary/Secondary System Installation				
New Overhead Line	$ -	CECC	CECC	Subject to performance bond as guarantee of loads
Trench and Conduit	$ -	Developer	Developer	Subject to maintenance bond
Cable, Terminations, Switching, and Grounding	$ -	CECC	CECC	Subject to performance bond as guarantee of loads
Junction Cans	$ -	CECC	CECC	Subject to performance bond as guarantee of loads
Equipment Pads and Vaults	$ -	Developer	Developer	Subject to maintenance bond. Via payment to CECC
Equipment Pads and Vaults Installation	$ -	Developer	Developer	Subject to maintenance bond
Transformers	$ -	CECC	CECC	CECC Provided
Meter Bases	$ -	Developer	Developer	Via payment to CECC
Underground Surcharge	$ -	Developer	Developer	Via payment to CECC
Sub Total	$ -			

TOTAL $ (5,000.00)

$	(5,000.00)	**Amount Payable by Developer to CECC**
$	-	**Amount of Contribution by CECC**
TOTAL $	(5,000.00)	**(Excluding Developer Installed Ditch, Conduit, Pads, & Vaults)**

Number of Qualified Meter Locations Required for Performance Bond Release - 0

$	-	**Amount of Performance Bond by Developer*** (3 yr hold)**
$	-	**Amount of Maintenance Bond by Developer**** (2 yr hold)**

Developer's Signature

Date

In instances where CECC has agreed to install conduits, pads, and vaults, the cost for rock, boring, and compaction encountered is not included in estimates. In instances where CECC has agreed to install conduits, minimum conduit stabilization cost is included; however, field conditions may require additional stabilization which is not included in this estimate

***Performance Bonding is based on CECC's Contribution toward development less the cost of transformers.
****Maintenance Bond is 50% of ditch and conduit value plus equipment pads and vault cost.

Carroll Electric Cooperative Corporation

Reliable | Affordable | Local

Application for Changes to Street Lighting

Municipality/Entity _____ Requisition No._____

Address _____ Date _____

City/State/Zip _____ WO No._____

Installation of _____street light(s) is hereby requested at the location(s) listed below in accordance with Carroll Electric's rate schedule number 5, which is on file with the Arkansas Public Service Commission.

Location or Description:

_____

NOTE: Carroll Electric no longer provides High Pressure Sodium lights, except for the 250 Watt type. Future light maintenance will involve a replacement with a comparable LED light and corresponding rate.

_____ _____

Member/Owner Carroll Electric Cooperative Corporation

_____ _____

Title Title

Perpetual Inventory of Lights

Wattage Size	MV 175	HPS 100	MV 250	HPS 150	MV 400	MH 400	HPS 250	MH 1000	LED 70C	LED 70R	LED 70D	LED 129	LED 266
Added													
Removed													

Main Account Number _____ Member Sep Number _____

Fixture Account No.(s)

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

Carroll Electric Cooperative Corporation
Reliable | Affordable | Local

CECC USE ONLY
Account Location No. _____
Member Sep. _____ Member No. _____

COMMERCIAL APPLICATION FOR SERVICE

Application Date | Requested Service Start Date | Service Location Physical Address (Street, City, State, Zip) | Apt. / Suite

Company Legal Name | D.B.A.

Federal Tax ID | Company Phone Number | Additional Phone Number

If there is a **SECURITY LIGHT** at this location, would you like to keep it? ☐ Yes ☐ No

Type of Business
☐ Sole Proprietorship ☐ LLC
☐ Partnership ☐ Corporation

Primary Contact | Title | Contact Phone Number

Are you the owner of this business? ☐ Yes ☐ No

Billing Address (Street, City, State, Zip) | Email Address

Does this property have multiple meters? ☐ Yes ☐ No

*Please list the meter number(s) or describe the [illegible] that will be served at this location.

Has there ever been electric service at this location? ☐ Yes ☐ No (If no, complete the Construction section on page 2.)

Comments

SAMPLE

For Reference Purposes Only. CECC will provide a complete agreement for signature upon completion of design and cost estimates.

eSERVICES

☐ Please enroll me in eBILLING
Must establish myAccount ID and password to view bills. See myaccount.carrollecc.com for details.

eBilling Email Address

☐ Please enroll me in eDRAFT

I authorize Carroll Electric to electronically debit my account monthly, for the amount stated on my bill(s) and if necessary, electronically credit my account to correct erroneous debits. I understand this authorization remains in full force and effect until I notify Carroll Electric in writing, at least five days before the due date. Cancellation instructions are available at carrollecc.com or by calling 1-800-432-9720.

☐ Checking ☐ Savings | Name(s) on Bank Account | Bank Name | Bank City, State

Bank Routing Number (max 9 numbers) | Bank Account Number (max 15 numbers)

☐ Use the information above to electronically debit my existing accounts (existing members only.)

112022

CONTINUED ON NEXT PAGE

COMPLETE THIS SECTION ONLY IF APPLYING FOR SERVICE AT A NEW CONSTRUCTION SITE

Property Description (Lot, Block, Phase, Subdivision, etc.)

Do you need single-phase or three-phase power?
(If three-phase, additional costs apply.)

What secondary voltage is needed at this site?

Will this structure have provisions for the following? (***If No, additional costs apply for an unqualified load.***)

Sanitation System	Pressurized Water System	Permanent Foundation
☐ Sanitary Sewer	☐ City	☐ Yes
☐ Septic	☐ Well	☐ No
☐ No	☐ No	

The Applicant, whose signature appears below, applies to the CARROLL ELECTRIC COOPERATIVE CORPORATION of Berryville, Arkansas, (hereinafter called the "Cooperative") for membership and/or electric service to be supplied at the location herein described and, upon request, at any other location within the area served by this Cooperative. This agreement shall supersede and replace any previous agreement and shall apply to each location the Cooperative furnishes electric service to the applicant.

The Applicant agrees to be bound by and to comply with all Rules of the Arkansas Public Service Commission (APSC), other applicable laws and regulations, as well as the Cooperative's approved tariffs, Articles of Incorporation, Bylaws, consumer classifications, rates, charges, and service rules and regulations and all other applicable terms and conditions set by the Cooperative, both as the same now exists or may hereafter be adopted, repealed, amended, or supplemented; to pay all fees, deposits, and charges in accordance with the rates, rules, and regulations as now exist or as may hereafter be adopted; and authorizes the Cooperative to verify information provided, including the use of any credit reporting agency to verify identity.

The Cooperative shall operate on a not-for-profit basis as defined by law. As such all patronage capital, if any, shall be held by the Cooperative in accordance with Ark. Code Ann. §23-18-327 until such time as determined by the Cooperative. In the event the Cooperative retires patronage capital, it shall remain the Applicant's responsibility to keep the Cooperative informed of Applicant's mailing address.

In the event the Applicant's account becomes delinquent, the Cooperative shall follow the rules and tariffs approved by APSC, and thereafter, the Applicant agrees to surrender the membership fee, deposit, and future patronage capital to extinguish such indebtedness plus any accumulated late charges and interest. Further, the Applicant agrees to pay all costs of collection including attorney's fees, collection fees, and any other related fees and costs.

The Applicant will cause and keep his premises to be wired in accordance with wiring specifications of the appropriate governing jurisdiction and the Cooperative assumes no responsibility for loss or damage due to defective wiring and/or equipment located on the Applicant's side of the meter installation or other agreed to point of delivery.

The applicant understands that the Cooperative shall use reasonable diligence to provide a constant and uninterrupted supply of electric power and energy hereunder. If the supply of electric power and energy shall fail or be interrupted, or become defective through acts of God, governmental authority, action of the elements, public enemy, epidemic/pandemic, cyber-attack, accident, strikes, labor troubles, required maintenance work, inability to serve right-of-way, equipment failure, or any cause beyond the reasonable control of the Cooperative, the Cooperative shall not be liable therefore or for damages caused thereby.

Electric service shall be supplied within the voltage range prescribed by Arkansas Public Service Commission's Special Rules - Electric. The Cooperative's standard service voltage will be 120/240 volts, AC, unless otherwise stated in accordance with the approved schedules, rules, regulations, or by mutual agreement. However, in all cases, the voltage supplied to the Applicant may vary by ± 5 percent measured at the meter. Voltage variations in excess of those specified shall not be considered a violation if variations are caused by:

(1) The operation of [illegible]

(2) The [illegible]

The Applicant hereby acknowledges the Cooperative's obligation and right to maintain its facilities. Applicant agrees to provide the Cooperative access to Applicant's premises [illegible] acknowledges existing easements on Applicant's property, whether recorded, written, or prescriptive.

The Applicant agrees SECURITY DEPOSITS are subject to the rules of the APSC and are subject to the following conditions:

(1) Residential or personal deposits shall be waived or refunded based on the Applicant's timely payment history defined by the APSC and evidenced by a certification letter from a previous utility, a third-party personal guarantee from another qualifying individual, or other personal credit measurements determined by the Cooperative.

(2) Commercial deposits, surety bonds, or irrevocable letters of credit shall be provided by the Applicant to the Cooperative and shall remain in effect for the duration of service. Should a commercial account not have a corporate taxpayer identification number issued by the Internal Revenue Service, the Cooperative shall also require a personal guarantee from the Applicant's principal business owner(s).

The Applicant agrees that the Cooperative shall not be held liable for any losses, damages, penalties, or expenses for any delay in delivery, including any delay at any point in the supply chain, of materials of any nature necessary for this project. If for any reason, the quantities of any such materials available to the Cooperative are less than its total needs, the Cooperative may allocate its available supply of materials among its members and/or itself, for any use whatsoever, in such a manner the Cooperative deems proper in its sole discretion, without thereby incurring liability on account of the method of allocation or its implementation. In no event shall the Cooperative be liable for any incidental, consequential, punitive, or any other damages, expenses, or costs of any kind, including, but not limited to, lost profits, loss of use, loss of time, shutdown, or slowdown costs, inconvenience, lost business opportunities, damage to goodwill or reputation, or other economic loss, regardless of whether such liability is based on breach of contract, tort, strict liability or otherwise, and even if advised of the possibility of such damages or [illegible] could have been reasonably foreseen.

I [illegible] that information on this application may be [illegible] for the purpose of a credit check and depending on the results of that credit check, I may be required to pay a deposit in full prior to electric service being connected. I hereby authorize the Cooperative along with the Cooperative's affiliates and/or service providers to obtain a credit report from any reputable credit reporting agency.

A [illegible] valid phone number will help both members and the Cooperative in reporting and restoring outages. Further, it may be necessary at times to contact members by phone electronically or otherwise regarding your account. In keeping with the provisions of the Telephone Consumer Protection Act (TCPA), 47 U.S.C. § 227, the Cooperative requires your express written consent prior to contacting you by telephone, facsimile, or text message for any non-emergency purpose using any automated telephone dialing system (ATDS) or artificial or prerecorded voice (each, an "Automated Method"). Your rights under the TCPA can be found at www.carrollecc.com/tcpa-rights or upon request. Should you choose to withhold or subsequently revoke your consent pursuant to the TCPA, or otherwise refuse to provide a valid phone number, it is with the understanding that we might not be able to reach you regarding important information about your electric service. By signing where indicated below, I authorize the Cooperative, along with the Cooperative's affiliates and/or service providers, to contact me using email and/or any Automated Method of the Cooperative's choosing, at the phone number and/or email address provided by me.

I HEREBY APPLY TO THE CARROLL ELECTRIC COOPERATIVE CORPORATION FOR MEMBERSHIP AND/OR ELECTRIC SERVICE IN ACCORDANCE WITH THE TERMS AND CONDITIONS APPEARING ABOVE.

Applicant Signature: _____ Date: _____

Co-Applicant Signature: _____ Date: _____

112022

CARROLL ELECTRIC COOPERATIVE CORPORATION
BUSINESS AFFIDAVIT

STATE OF _____)

COUNTY OF _____)

Member No._____

Date: _____

Comes now _____, and being first duly sworn on oath
(printed name of affiant)

states the following statements are factual and correct:

1. That the undersigned affiant is the _____
(position in company or corporation, i.e., owner, president, etc.)

of _____.
(name of company)

2. That the affiant has the legal capacity and authority on behalf of _____ in all respects
(name of company)

regarding the establishment of electric service and membership with Carroll Electric

Cooperative Corporation, including the authority to financially bind the said company in all respects

related to said membership and application for electric service.

3. That the list of individuals and/or *Utility Management Company* listed on page 2 of this affidavit has the authority of the affiant and company to conduct business with Carroll Electric Cooperative Corporation on behalf of the affiant and company.

4. That the affiant has full authority to execute this Affidavit on behalf of

_____.
(name of company)

_____	_____	_____
Affiant Signature	**Affiant Phone Number**	**Affiant email address**

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public on this _____ day of _____, 20_____.

_____
Notary Public

My Commission Expires: _____.

Carroll Electric
Cooperative Corporation

Underground Conduit Installation Specifications and Drawings

(Sections 2 and 7 including associated drawings)

The following specifications and drawings are typical requirements for construction of *CECC's* primary underground distribution system. In cases where an issue arises not covered by the included specifications and drawings, the *Developer* or his representatives shall contact *CECC* for clarification prior to installation.

1. INSTALLATION OF CONDUIT

2.1 The minimum depth for installation of both primary and secondary conduit from final grade (including rock trench) is specified in tables below:

Minimum Primary Conduit Installation Depths

Conduit Size *Schedule 40*	**Bottom of Trench** *from final grade*	**Top of Conduit** *from final grade*	**Typical Use**
2"	38"	36"	1 Ø
3"	39"	36"	3 Ø
4"	40"	36"	600 A
6"	42"	36"	600 A

Minimum Secondary Conduit Installation Depths

Conduit Size *Schedule 40*	**Bottom of Trench** *from final grade*	**Top of Conduit** *from final grade*	**Typical Use**
1"	25"	24"	LT Repair
1.25”	26”	24”	Metering/Grounding
1.5”	26”	24”	Lighting
2"	26"	24"	100 AMP
3"	27"	24"	200 AMP
4"	28"	24"	>200 AMP
6”	30”	24”	As needed

On sloping ground, the depth of the trench shall be measured from the low side of the trench. Upon Engineering approval, where required depths cannot be obtained, a concrete encasement may be used. A typical encasement shall consist of 3500 psi concrete dyed red. The encasement shall be capped with an eight-inch (8”) thick concrete layer reinforced with #3 or 3/8-inch rebar tied on one-foot squares, with a minimum three-inch (3”) cover. The encasement shall extend a minimum of eight inches (8”) on each side of the outer most conduits and be poured to depth.

2.2 All trenches shall follow straight lines between staked points to the greatest extent possible. Secondary and service trenches shall extend in a straight line between takeoff points wherever possible, while maintaining a minimum distance of five feet (5’) of horizontal clearance from any building or permanent structure.

The point of termination for secondary conduit shall be within direct line of sight of the source power supply.

2.3 Water, sewer, or gas lines shall not share the ditch with CECC primary or secondary distribution lines and shall maintain a minimum of five feet (5') of horizontal clearance. Perpendicular crossings shall maintain a minimum of 18 inches (18") of vertical clearance. Separation from deeper sewer lines shall be increased to allow access to the sewer line without disturbance of the power conduit ditch. Telephone, cable, and/or other communication lines may share CECC primary or secondary ditch and shall be separated as shown in CECC's Joint Trench Guide drawing.

2.4 The trenches shall be dug so that the bottom has a smooth grade. Large rocks, stones and gravel in excess of one inch (1") shall be removed from the bottom of the trench. Where this cannot be accomplished, a two-inch (2") bed of sand or clean soil shall be placed in the bottom of the trench. The minimum cover above the conduit must be maintained per section 2.1.

2.5 If rock or other difficult digging is encountered, the nature and extent of the difficulty shall be determined, and the designer shall determine whether rerouting, rock trenching or other changes are necessary.

2.6 Trench widths specified are a minimum and shall be increased as necessary to obtain the required depths in loose soils.

2.7 Construction shall be arranged so that trenches may be left open for the shortest practical time to avoid creating a hazard to the public and to minimize the likelihood of the trench collapsing due to other construction activity, rain, accumulation of water in the trench, etc. If this occurs, the trench shall be cleared to the specified depth before installing the conduit.

2.8 All conduit shall be stick gray electrical PVC schedule 40 unless otherwise approved. Continuous conduit shall only be allowed with engineering approval. When approved, continuous conduit shall be black (with red stripe) electrical HDPE schedule 40 unless otherwise specified. Continuous (HDPE) conduit shall not be allowed in any above ground installations. Steel sleeves may be required under street, highway, and railroad crossings.

2.9 Where more than one conduit is to be placed in a common trench, the spacing shown on the specification drawings shall be observed. Conduits shall be placed flat and parallel to one another. Rolling, crossing, or stacking of conduit within the ditch shall be pre-approved by the designer.

2.9.1 Single-phase shall be installed in two-inch (2") conduit.

2.9.2 Three-phase shall be installed in a minimum three-inch (3") conduit.

2.9.3 600 Amp underground circuits shall be installed in a minimum four-inch (4") conduit with additional four-inch (4") spare conduits for each conductor along with an additional two-inch (2") conduit installed for CECC communications.

2.9.4 Appropriately sized spare conduits shall be installed alongside all conduit installed beneath hard surfaces such as, but not limited to roadways, parking lots, and driveways.

2.10 All conduit/cable runs shall not exceed the maximum length shown below.

Maximum Primary Conductor Run Length

Conduit Size *Schedule 40*	**Cable Size** *25 KV*	***Length of Run** *Feet*
2"	1/0	600
2"	4/0	600
3"	1/0	600
3"	4/0	900
3"	500	500
4"	4/0	900
4"	500	500
4"	1000	300

*Note: Maximum conduit lengths are limited by sidewall pressure for three (3) sweeps. Contact CECC Engineering for other variations.

2.11 Conduit runs for secondary are generally limited to 125’ for voltage considerations and constructability. Longer runs shall be approved by Engineering Manager after consideration of load and constructability.

2.12 All conduit runs shall contain no more than 270 degrees of total angle. Minimum requirements for primary and secondary sweeps are specified in the table below.

Minimum Primary Conduit Sweep Size
(Long Sweeps)

Size *Schedule 40*	**Radius** *Centerline*	**Length** *Centerline*
2"	36.00"	60.000"
3"	36.00"	62.125"
4"	36.00"	63.125"
6"	36.00"	65.250"

Minimum Secondary Conduit Sweep Size
(Short Sweeps)

Size *Schedule 40*	**Radius** *Centerline*	**Length** *Centerline*
1"	05.75"	09.000"
1.5”	08.25”	13.000”
2"	09.50"	15.000”
3"	13.00"	25.125"
4"	16.00"	30.250"

2.13 Sweeps shall be oriented to allow appropriate orientation of underground equipment and/or

enclosures. Proper example: When equipment is installed on front of lot it shall open toward the road.

2.14 All exposed ends of conduit shall be plugged or capped during construction to prevent the entrance of foreign matter and moisture into the conduit. At the time of installation, each end of the conduit shall be marked with marking tape to distinguish individual conduits. Burrs or sharp projections that might injure the cable shall be removed.

2.15 Proper fittings shall be used on all transitions. All joints shall be glued together with the proper adhesive. When using continuous (HDPE) conduit, appropriate rigid sweeps shall be used for risers and/or entering equipment and/or enclosures.

2.16 A pull string consisting of locatable 2,500 lb mule tape or equivalent shall be installed inside each conduit at time of installation with a minimum of four feet (4') excess coiled and secured on each end.

2.17 The first six inches (6") of trench backfill shall be free from large rock or other material which might damage the conduit. This soil layer shall be carefully compacted so that the conduit shall not be damaged. If native backfill is unacceptable, imported backfill shall be required (5/8-inch crushed rock, fines, or sand). Backfilling shall be completed in such a manner that voids shall be minimized. Excess soil shall be piled on top and should be well tamped.

2.18 Road crossing backfill and compaction, or boring requirements shall be as required by the governing road district.

2.19 Electrical Warning Tape (Red) shall be installed 12 inches (12") above primary electrical conduits.

2.20 All rock and debris shall be removed from the site, and any damage to the premises repaired immediately. Pieces of scrap cable or other material remaining after installation shall not be buried in the trench as a means of disposal.

7. EQUIPMENT AND ENCLOSURES

7.1 Equipment shall be handled carefully to avoid damage. Only qualified and experienced personnel shall be allowed to make connections and cable terminations.

7.2 Vaults shall be required in areas where final grade is subject to change, to accommodate grade differentials, there is the possibility of undermining equipment stability, or to provide for excess secondary runs as determined by CECC.

7.3 Transformers shall be installed on undisturbed earth adjacent to but not over the trench and shall be positioned in accordance with the staking sheets and the plans and specifications. The site shall be cleared of all debris and excavated to final grade. Gravel shall be added to the site and thoroughly compacted. The pad or vault shall be installed level at the specified elevation.

7.4 Equipment location and orientation shall be positioned to allow for at least 15 feet (15') of working access and 5 feet (5') of non-working access. Equipment shall be a minimum of 15 feet (15') away from buildings, and shall not be located under any overhangs or awnings.

7.5 Bollards shall be required when equipment is located closer than 5 feet (5') from parking lots,

driveways, or other areas subject to vehicular traffic or damage.

7.6 Equipment shall be installed in such a manner to allow unobstructed access. Obstacles such as fire hydrants, gas meters, phone pedestals, fences, landscaping, etc., shall not impede ability to access and/or maintain equipment.

7.7 Lifting lugs shall be removed once equipment is in place and all “warning” and “danger” signs shall be installed.

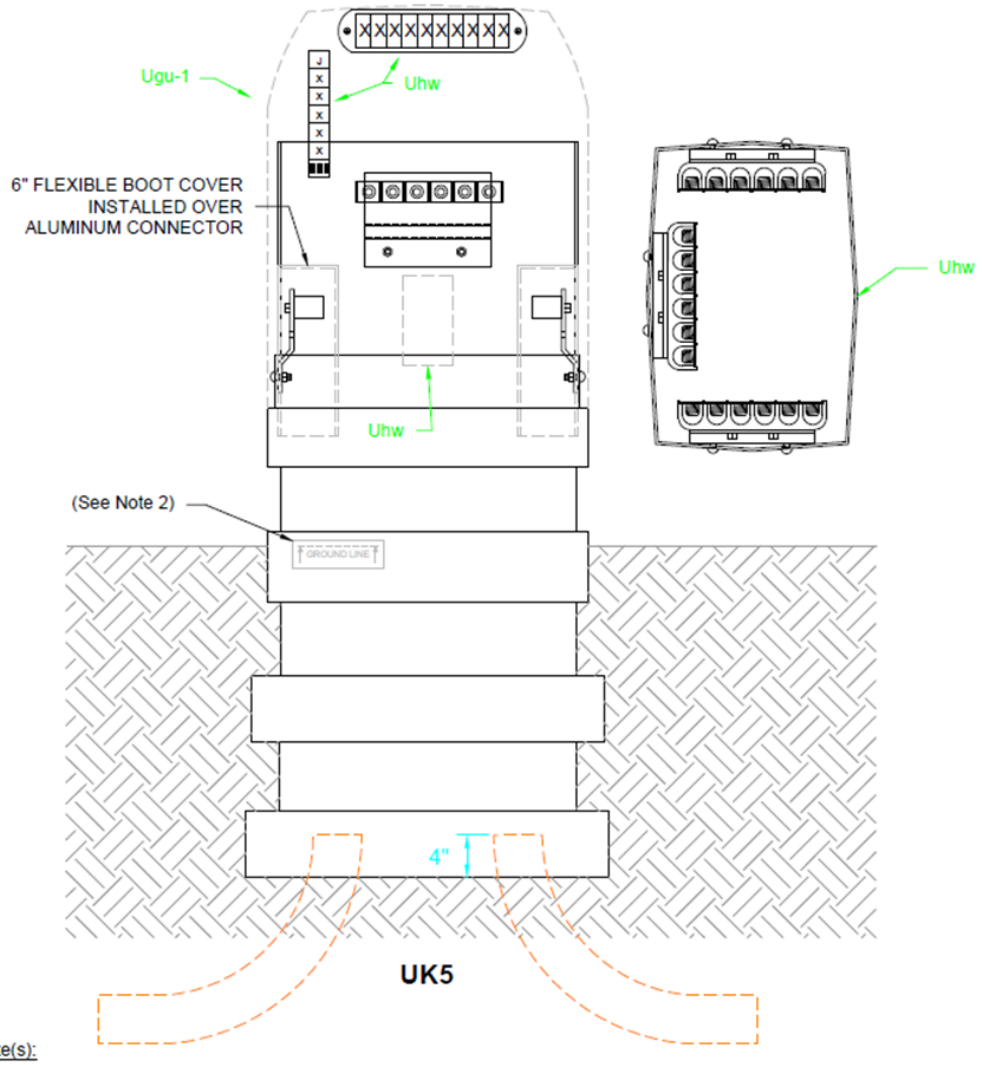
7.8 Enclosures shall be installed with side walls plumb. The surrounding earth shall be disturbed as little as possible when installing vaults and other below-grade enclosures. When enclosures are of fiberglass, plastic, or other semi-flexible material, backfilling shall be done with covers in place and with careful tamping so as to avoid distortion of the enclosure. When installation is complete, the cover of the enclosure shall not be lower than, and not more than two inches (2”) higher than the final grade, measured on the high side of grade. Soil in the immediate vicinity shall be tamped and sloped away from the enclosure. Excess soil shall be removed from the site or spread evenly over the surface of the ground.

7.9 Secondary conduits within a pad mounted transformer shall be limited to three (3) four-inch (4”) conduits for single phase units and eight (8) four-inch (4”) conduits inside the secondary compartment of a three-phase pad mounted transformer. Exceptions may be considered with the use of a vault.

7.10 Conduit stub-ups into equipment shall be installed per drawing specifications to ensure proper orientation. Conduit stub-outs shall be installed for future installations where practical to avoid digging under the pad or vault later.

7.11 Underground sectionalizing cabinets and pad mounted transformers at dead-ends or with opening points shall have an elbow surge arrester installed (per phase) at each primary cable termination point.

7.12 Enclosures containing 600A elbows with the capability to accept a 200A elbows shall be utilized for grounding purposes only and shall not be utilized to carry load through a 200A elbow. A 200A elbow shall not be installed on a 600A elbow, unless used for grounding purposes by Operations personnel.



UK5

Note(s):

1. Pedestal should be installed a minimum distance of 7' from any other electric structures.
2. Pedestal ground line mark shall be installed at final grade.
3. Install insulating boots over phase connector blocks.
4. Install "DANGER" sign on J-Can inside enclosure. Install "WARNING" including ONE CALL sign, account location tag, and J-Numbers on outside surface of enclosure.
5. Conduit turn-ups shall be cut to proper length prior to installing ground sleeve.
6. No more than 2 UK5 units will be allowed in series.

		ASSEMBLY:	UK5			ASSEMBLY:	UK5
ITEM #	REF	MATERIAL	QTY	ITEM #	REF	MATERIAL	QTY
9200002	Ugu-1	Power Pedestal	1	900277	Uhw	Sign, "WARNING"	1
900276	Uhw	Sign, "DANGER"	1				

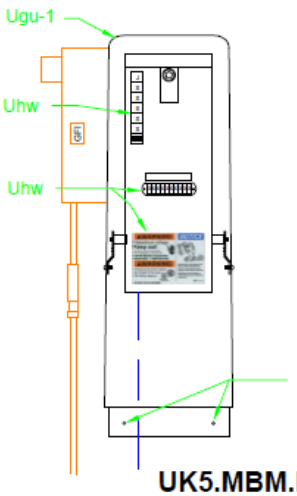
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

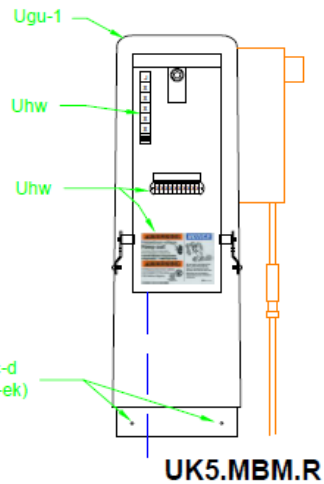
SECONDARY PEDESTAL

Issue: 2026
Revision: B

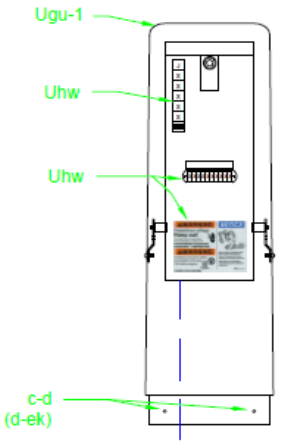
UK5



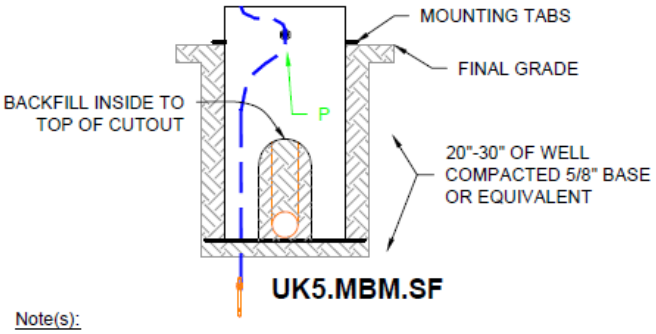
UK5.MBM.L (SINGLE)



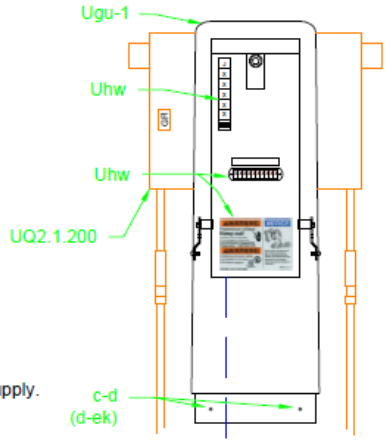
UK5.MBM.R (SINGLE)



UK5.MBM.1



UK5.MBM.SF



UK5.MBM.D (DOUBLE)

Note(s):

1. Designate UK5.MBM.L, .R, .1, or .D such that the door faces the source power supply. Where access is limited due to spacing between pedestal and the source power supply, designate UK5.MBM.L, .R, .1, or .D such that the door opens away from source supply (i.e. subdivisions).
2. Install "DANGER" sign on J-Can inside enclosure. Install "WARNING" including ONE CALL sign, account location tag, and J-Numbers on outside surface of enclosure.
3. Cap all conduits to prevent entry of moisture or other foreign materials.
4. Conduit sweeps shall be stabilized by compacted fill or 5/8" base.
5. Sub-grade soil shall be well compacted.
6. 6" minimum compacted 5/8" base to be placed under junction can sleeve.
7. Lightly compact backfill material around ground sleeve, heave remainder.
8. Extensions shall be added to sweeps to attain specified conduit height.
9. Install with UM6.6.
10. All source conductor shall be #350 MCM.
11. No more than 2 UK5 units will be allowed in series.

		ASSEMBLY: UK5.MBM.	.L	.R	.1	.D	.SF
ITEM #	REF	MATERIAL	QTY	QTY	QTY	QTY	QTY
900017	c	Bolt, SS 1" X 3/8"	4	4	4	4	
53000207	p	Connector, Tank Ground					1
16900072	cj	Ground Wire, #2 copper	6	6	6	6	
9200140	Ugu-1	Meter Ped, Secondary, For SF	1	1	1	1	
900166	ek	Nut, 3/8" SS	4	4	4	4	
900276	Uhw	Sign, "DANGER"	1	1	1	1	
900277	Uhw	Sign, "WARNING"	1	1	1	1	
900357	d	Washer, Round 3/8" SS	8	8	8	8	
900358		Washer, Lock 3/8" SS	4	4	4	4	
9200055		Sleeve, Secondary MBM					1

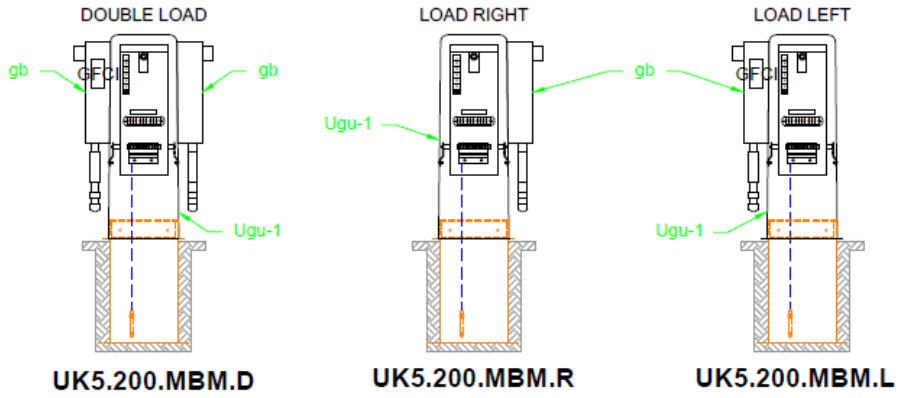
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

METER BASE MOUNT/PEDESTAL

Issue: 2026
Revision: A

UK5.MBM.L/R/D, UK5.MBM.1, UK5.MBM.SF



UK5.200.MBM.D **UK5.200.MBM.R** **UK5.200.MBM.L**

Note(s):

1. See master material list for approved material. Any material substitutions must be approved by CECC prior to assembly.
2. Designate UK5.200.MBM.D, R, or L such that the door faces the source power supply. Where access is limited due to spacing between pedestal and the source power supply, designate UK5.200.MBM.D, R, or L such that the door opens away from source supply (i.e. subdivisions).
3. Install with UM6.6.
4. All source conductor shall be #350 MCM.
5. No more than 2 UK5 units will be allowed in series.
6. Install "DANGER" sign on J-Can inside enclosure. Install "WARNING" including ONE CALL sign, account location tag, and J-Numbers on outside surface of enclosure.

		ASSEMBLY: UK5/UQ2.1	200.MBM.D	200.MBM.R	200.MBM.L
ITEM #	REF	MATERIAL	QTY	QTY	QTY
9200143		MBM, Double load, 200A, Assembled	1		
9200145		MBM, Load Right, 200A, Assembled		1	
9200144		MBM, Load Left, 200A, Assembled			1

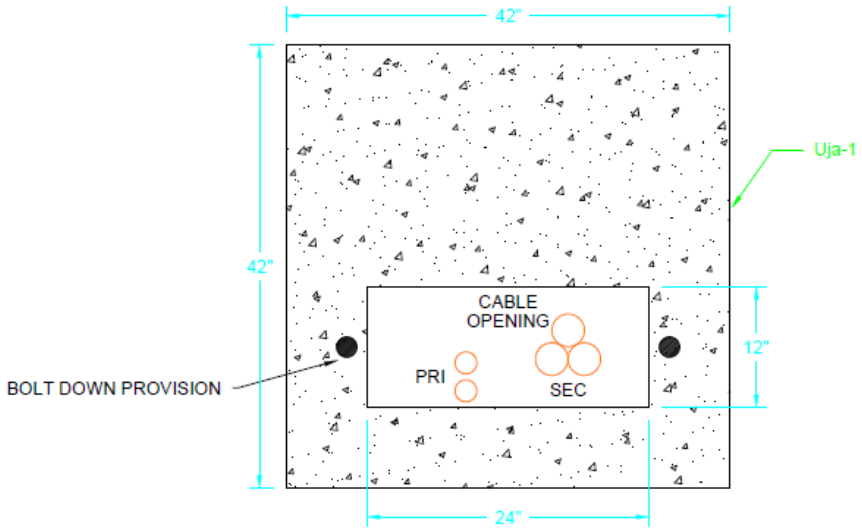
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

CECC SUPPLIED AND INSTALLED METER BASE COMBO

Issue: 2026
Revision: A

UK5.200.MBM.D,
UK5.200.MBM.R,
UK5.200.MBM.L,



UM1.5C

Note(s):

1. Pad assemblies include site preparation, bedding and drainage.
2. Equipment shall be secured to pad in accordance with manufacturers instructions.
3. Conduit shall front the cable opening area. See "UM1.5G" for conduit detail.
4. No more than three secondary conduits shall be allowed in a single phase enclosure without the use of a vault.
5. See written specifications for conduit size.
6. Where more than 3 secondary conduits (excluding street lights) are needed, install "UK5".
7. Designate "UM1.5C" for concrete, "UM1.5NC" for non-concrete, and a UM1.5CR for a resale ticket item.
8. Specify UM1.44CL when placing a UG7.167, or when used with any vault.

		ASSEMBLY: UM1	.5C
ITEM #	REF	MATERIAL	QTY
900004242	Uja-1	Pad, Transformer 42" X 46"	1

DESIGN PARAMETERS:

NOT FOR USE ON VAULT.

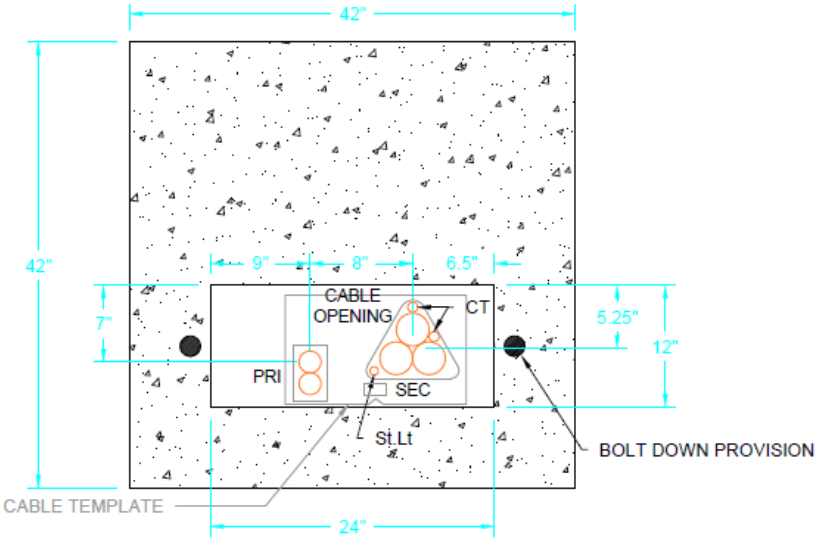
Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

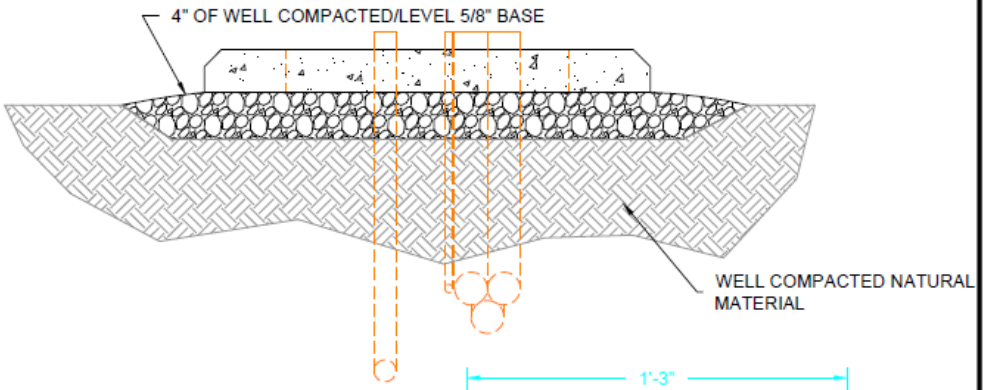
PAD ASSEMBLIES

Issue: 2026
Revision: A

UM1.5C, UM1.5NC

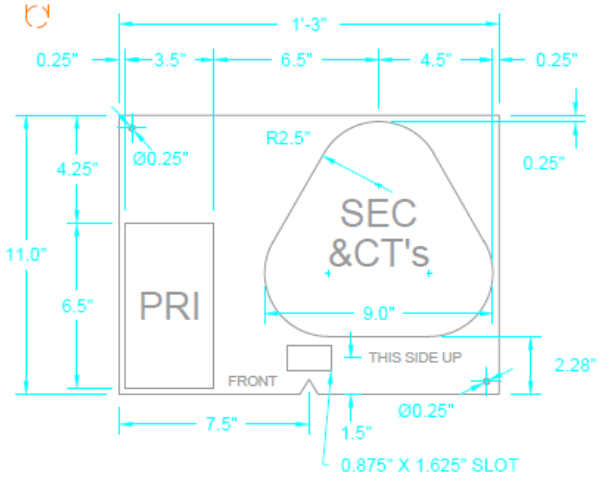
221





Note(s):

1. Pad assemblies include site preparation, bedding and drainage.
2. V-NOTCH on conduit template shall face reference stake.
3. 4" minimum compacted 5/8" base shall be placed under transformer pad.
4. Sub-grade soils shall be well compacted.
5. Secondary conduits shall have a minimum diameter of 3".
6. Primary conduits shall have a minimum diameter of 2".
7. When installing additional conduits for lighting and/or metering (1.25"), they shall be placed within the SEC opening.



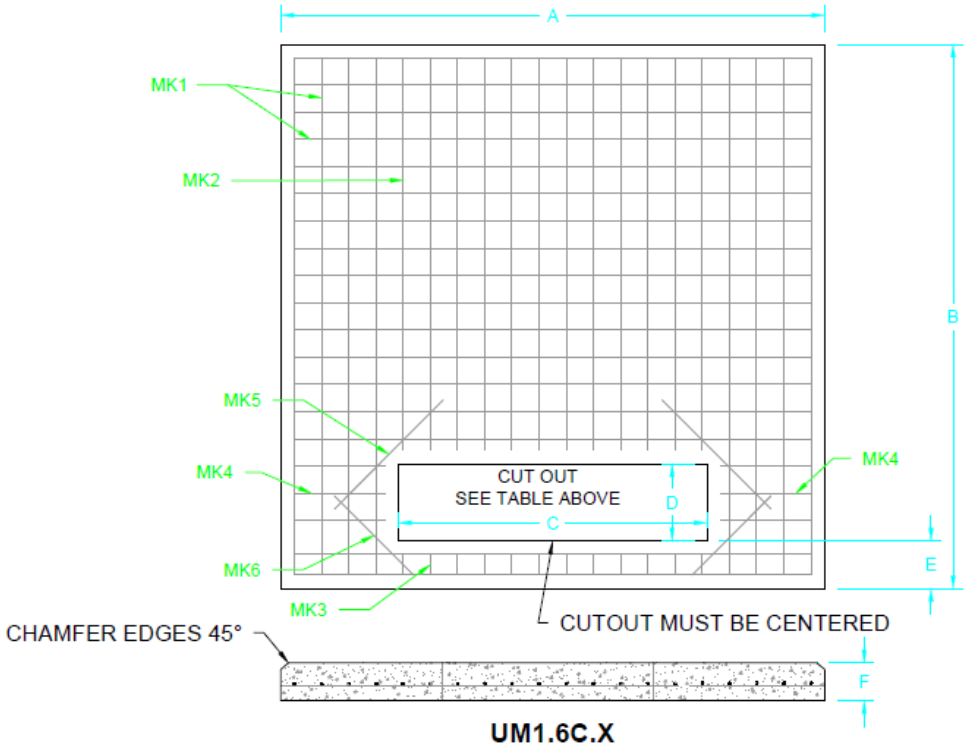
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PAD ASSEMBLY GUIDE

Issue:		
2026		UM1.5G
Revision: B		

PAD	3-PHASE TRANSF. kVA	PAD DIMENSIONS IN INCHES						CONDUIT DIMENSIONS IN INCHES				REINFORCING BARS					
		"A"	"B"	"C"	"D"	"E"	"F"	PRI.	SEC.	CT.	GRD.	MK1	MK2	MK3	MK4	MK5	MK6
#1	45, 75, 112.5, 150, 225, 300	70	70	44	11	7.5	5	4 MAX	4 MAX	1.25 MIN	1 MIN	SEE NOTE 9					
#2	500, 750, 1000, 1500	90	80	52	18	8	8	4 MAX	4 MAX	1.25 MIN	1 MIN	SEE NOTE 9					
#3	2000, 2500	120	120	68	26	11	8	4 MAX	4 MAX	1.25 MIN	1 MIN	25 #4 114"	12 #4 77"	12 #4 4.5"	6 #4 20"	2 #4 34"	2 #4 24"



UM1.6C.X

Note(s):

1. Concrete specifications: 3500 psi. minimum, 4%-6% entrained air, maximum slump 6", 3/4" maximum size aggregate. Independent concrete testing shall be required to confirm specifications.
2. Reinforcing steel: ATSM-A615 Grade 60, place approx. 6" O.C. each way and securely tied together.
3. Minimum concrete cover over reinforcing steel 3" unless noted.
4. Wood float finish leaving no depressions.
5. Sub-grade soils shall be well compacted as to provide appropriate distribution of loads.
6. Maximum of (8) 4" conduits on the secondary side of the transformer; where more are required install "UK5.3". If (8) 4" conduits will not fit into the opening as specified above a vault or secondary enclosure will be required.
7. Secondary wire smaller than 350 MCM shall be installed in 3" conduit. Wire sizes 350 and above require 4" conduit.
8. 2000 kVA and above transformer sizes shall be placed on a cast-inplace pad.
9. Replace "X" with 1, 2 or 3 to specify required pad.

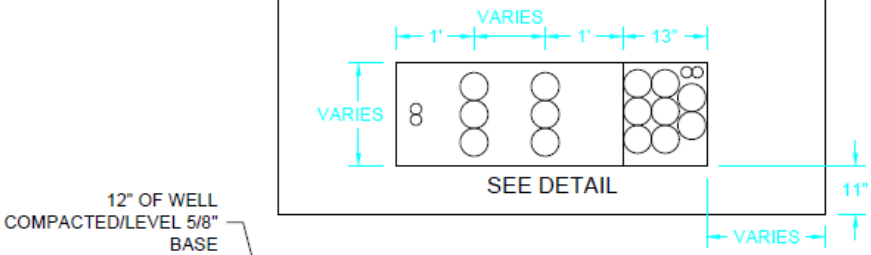
DESIGN PARAMETERS:

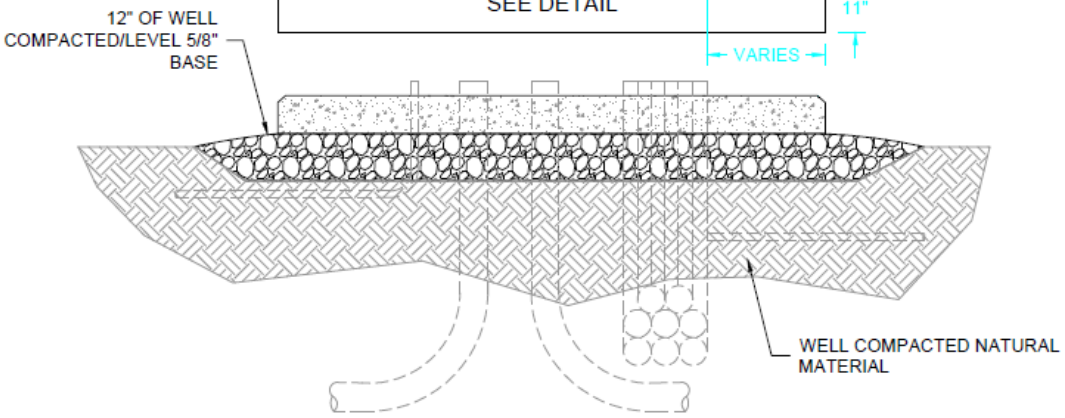
Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

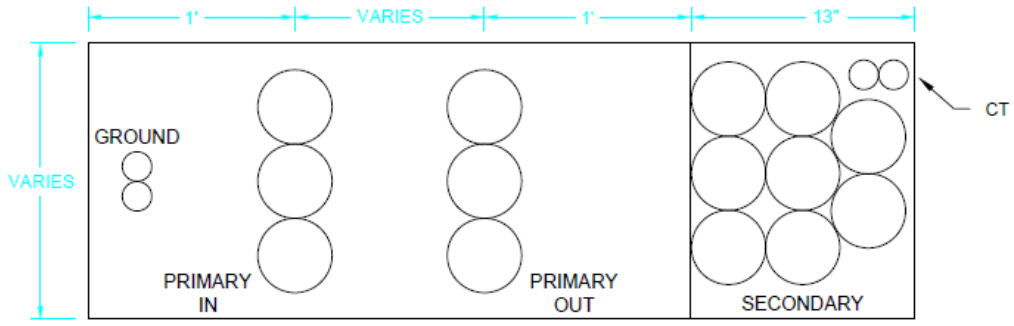
THREE PHASE TRANSFORMER PAD
CONCRETE

Issue:		
2026		UM1.6C.X
Revision: C		

PAD	3-PHASE TRANSF. kVA	CONDUIT DIMENSIONS IN INCHES			
		PRI.	SEC.	CT.	GRD.
#1	45, 75, 112.5, 150, 225, 300	4 MAX	4 MAX	1.25 MIN	1 MIN
#2	500, 750, 1000, 1500	4 MAX	4 MAX	1.25 MIN	1 MIN
#3	2000, 2500	4 MAX	4 MAX	1.25 MIN	1 MIN







PAD OPENING DETAIL

Note(s):

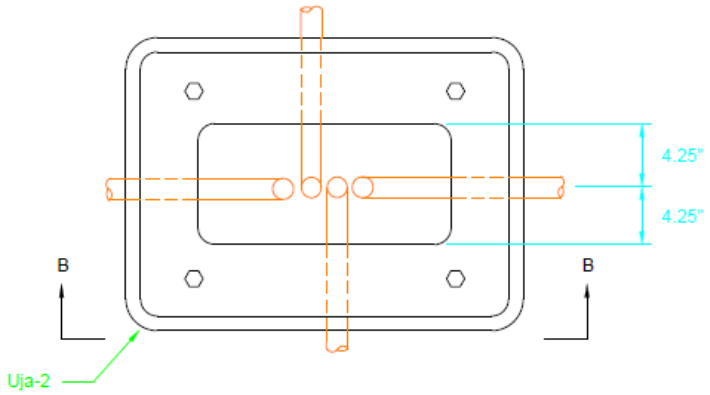
1. Maximum of (8) 4" conduits on the secondary side of the transformer; where more than 8 are required install "UK5.3". If (8) 4" conduits will not fit into the opening as specified above a vault or secondary enclosure will be required.

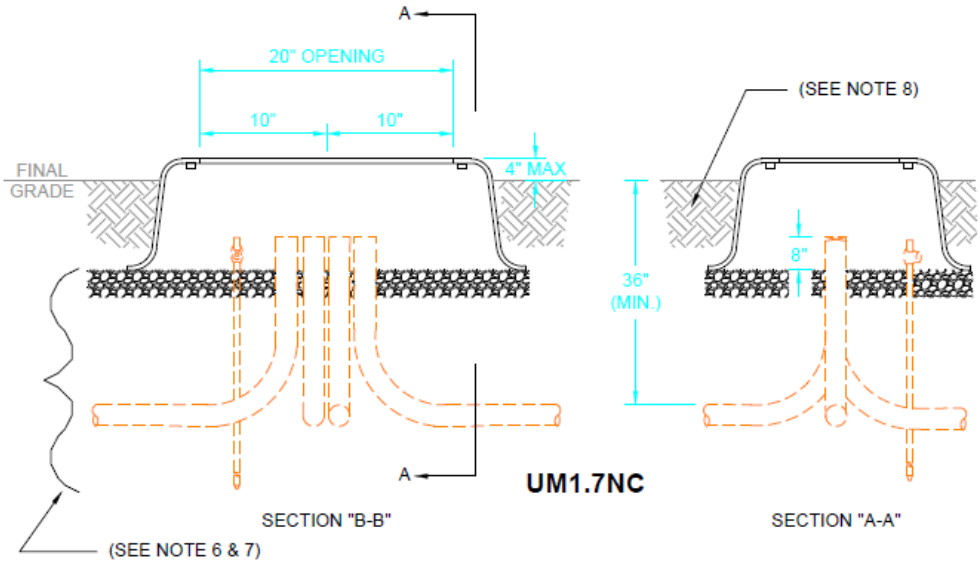
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

THREE PHASE TRANSFORMER PAD
INSTALLATION GUIDE

Issue:	Revision:	
2026	C	UM1.6G





UM1.7NC

SECTION "B-B"

SECTION "A-A"

Note(s):

1. All conduit sweeps shall be Gray Electrical PVC SCH 40 unless otherwise specified.
2. Cap all conduits to prevent entry of moisture or other foreign material.
3. See written specifications for acceptable sweep dimensions.
4. Install conduits plumb and DO NOT BUNCH.
5. Conduit sweeps shall be stabilized by compacted fill or 5/8" base.
6. Sub-grade soil shall be well compacted.
7. 6" minimum compacted 5/8" base shall be placed under junction can sleeve.
8. DO NOT compact backfill material around ground sleeve.
9. Extensions shall be added to sweeps to attain specified conduit height.

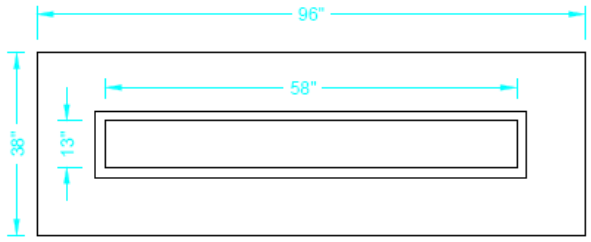
ASSEMBLY: UM1	.7NC	
ITEM #	REF	MATERIAL	QTY
9200000	Uja-2	Sleeve, Ground Assembly 1Ph	1

DESIGN PARAMETERS:

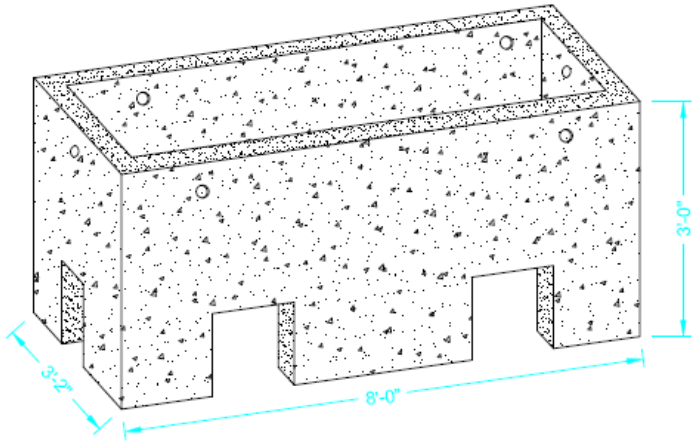
Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

GROUND SLEEVE
SINGLE PHASE ASSEMBLY

Issue:	2026		UM1.7NC
Revision:	B		



UM1.38CL
Approx. 1,050lbs



UM1.38C
Approx. 2,525lbs

Note(s):

1. Vault shall be placed on well compacted soil with at least 6" of compacted 5/8" base.
2. Backfill shall consist of clean soil, carefully compacted with no solid material larger than 3".
3. Top of vault shall be placed flush with final grade prior to adding pad.
4. Grounding installation shall be based on equipment mounted on vault.
5. Extension shall be added to sweeps to obtain specified conduit heights.
6. Cutouts in vault shall not be used for primary conduit.
7. All conduit openings weather 45° or 90° shall be visible and accessible from the opening of the equipment that will be mounted on the vault lid.
8. Replace "XX" with the appropriate vault or lid unit.
9. Specify UM1.38UST for mounting junction can.

ASSEMBLY: UM1.38			C	CL	UST		ASSEMBLY: UM1.38			C	CL	UST
ITEM #	REF	MATERIAL	QTY	QTY	QTY		ITEM #	REF	MATERIAL	QTY	QTY	QTY
16001207		Bolt, Machine 1/2 X 7"			4		900421		Unistrut, 1 5/8 X 1 5/8"			y
00155139		Pad, Concrete 38"X96" W/15"X61" Hole		1			00155138		Vault, Concrete 38"X96"X36"H	1		

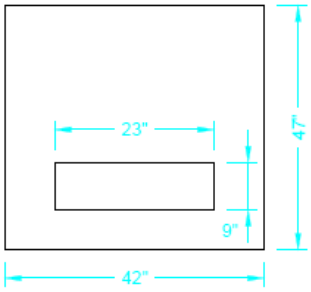
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PRECAST CONCRETE VAULT
FOR PAD MOUNT EQUIPMENT

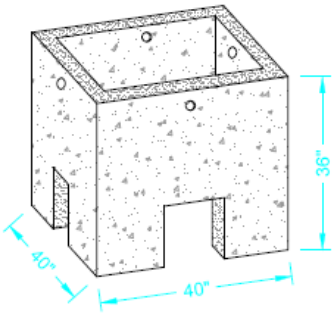
Issue: 2026
Revision: A

UM1.38XX



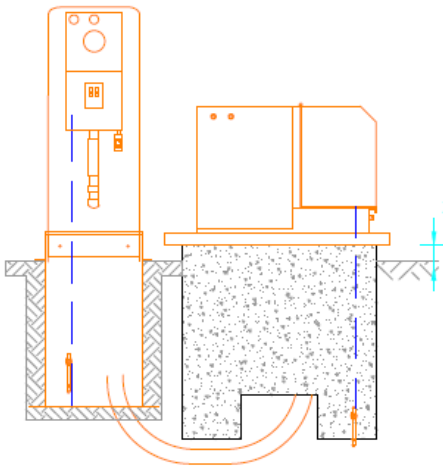
Approx. 580lbs

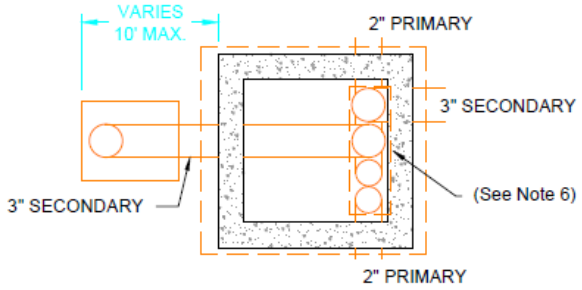
UM1.44CL



Approx. 1,125lbs

UM1.44C





Note(s):

1. Vault shall be placed on well compacted soil with at least 6" of compacted 5/8" base.
2. Backfill shall consist of clean soil, carefully compacted with no solid material larger than 3".
3. Grounding installation shall be based on equipment mounted on vault.
4. Conduit sweeps when entering or leaving the vault may be 45's.
5. Specify UM1.44CL with UM1.44C or when placing a UG7.167.
6. Conduit terminations shall be directly beneath the vault lid opening.
7. Cutouts in vault shall not be used for primary conduit.
8. All conduit openings weather 45° or 90° shall be visible and accessible from the opening of the equipment that will be mounted on the vault lid.
9. Replace "XX" with the appropriate vault lid unit.
10. Specify UM1.44UST for mounting junction can.

ASSEMBLY: UM1.44			C	CL	UST		ASSEMBLY: UM1.44			C	CL	UST
ITEM #	REF	MATERIAL	QTY	QTY	QTY		ITEM #	REF	MATERIAL	QTY	QTY	QTY
16001207		Bolt, Machine 1/2 X 7"			4		900421		Unistrut, 1 5/8 X 1 5/8"			y
00155141		Pad, Concrete 42"X47" W/12"X24" Hole		1			00155140		Vault, Concrete 40"X40"X36"H	1		

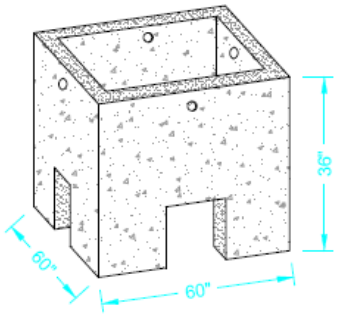
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PRECAST CONCRETE VAULT
PRECAST CONCRETE LID
FOR PAD MOUNT EQUIPMENT

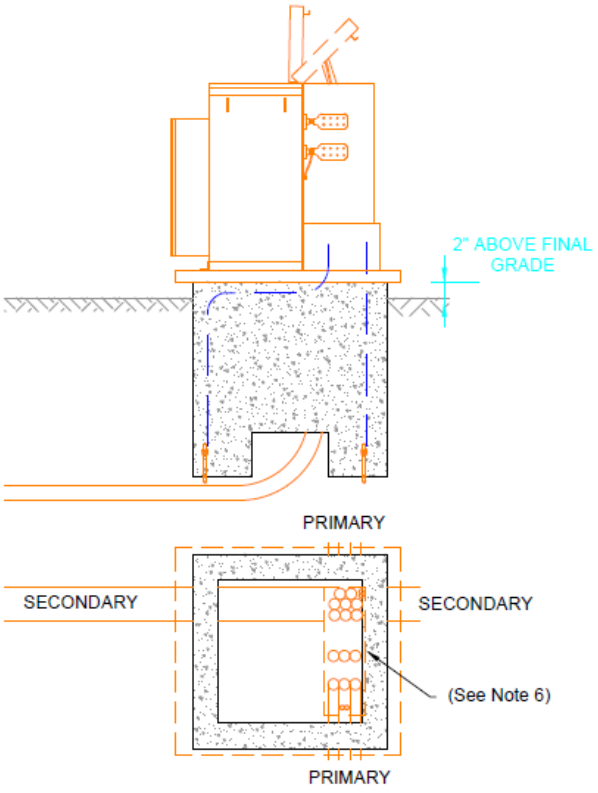
Issue: 2026
Revision: B

UM1.44XX



Approx. 2,150lbs

UM1.55C



Note(s):

1. Vault shall be placed on well compacted soil with at least 6" of compacted 5/8" base.
2. Backfill shall consist of clean soil, carefully compacted with no solid material larger than 3".
3. Grounding installation shall be based on equipment mounted on vault.
4. Conduit sweeps when entering or leaving the vault may be 45's.
5. Conduit terminations shall be directly beneath the vault lid opening.
6. Cutouts in vault shall not be used for primary conduit.
7. All conduit openings whether 45° or 90° shall be visible and accessible from the opening of the equipment that will be mounted on the vault lid.

PAD 5" THICKNESS	3-PHASE TRANSF. kVA
UM1.6C.1	45, 75, 112.5, 150, 225, 300
UM1.6C.2	500, 750, 1000, 1500

ASSEMBLY: UM1.55			C	ASSEMBLY: UM1.55			C
ITEM #	REF	MATERIAL	QTY	ITEM #	REF	MATERIAL	QTY
00155143		Vault, Concrete 60"X60"X36"H	1				

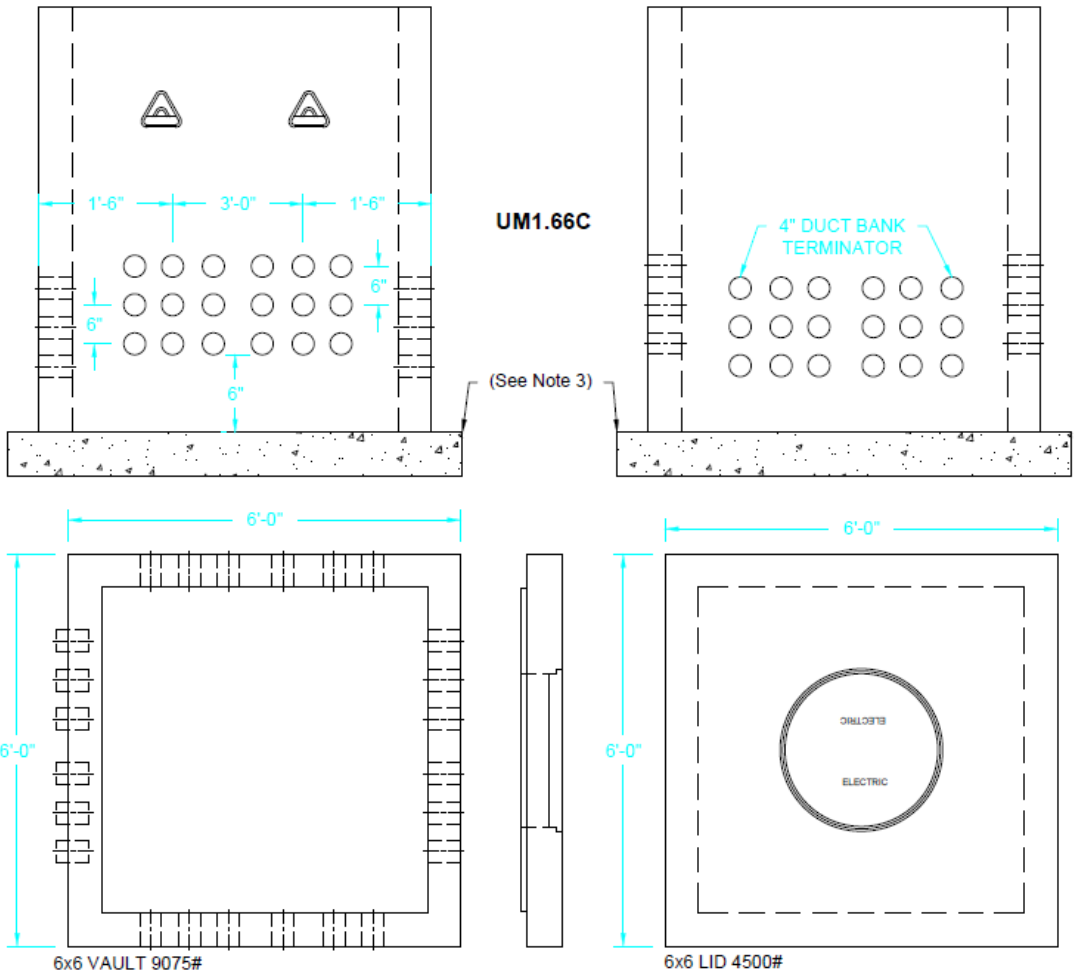
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PRECAST CONCRETE VAULT
FOR PAD MOUNT EQUIPMENT

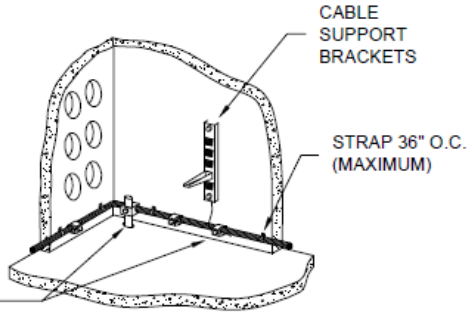
ISSUE: 2026
Revision: B

UM1.55C



Note(s):

1. If metallic cable racks are used, they shall be grounded as shown. Horizontal brackets shall be bonded to vertical brackets with #6 AWG copper.
2. Carefully compact all backfill materials or use imported backfill.
3. 8" layer of compacted crushed rock beneath vault shall be 5/8" base.
4. Specify UM1.66CL for lid.
5. Foam fill all voids once in place.



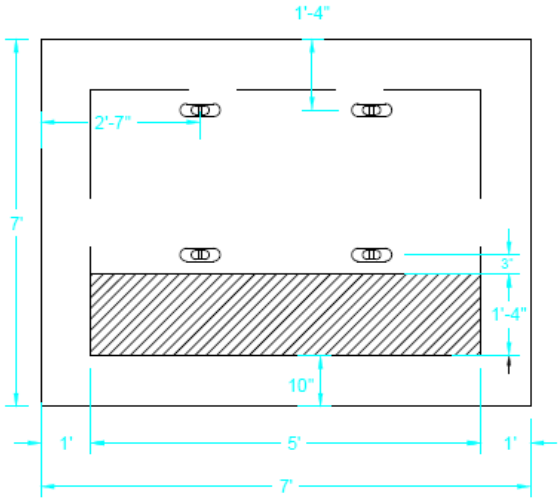
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PRECAST VAULT
6x6 WITH MANHOLE ACCESS CONFIGURATION

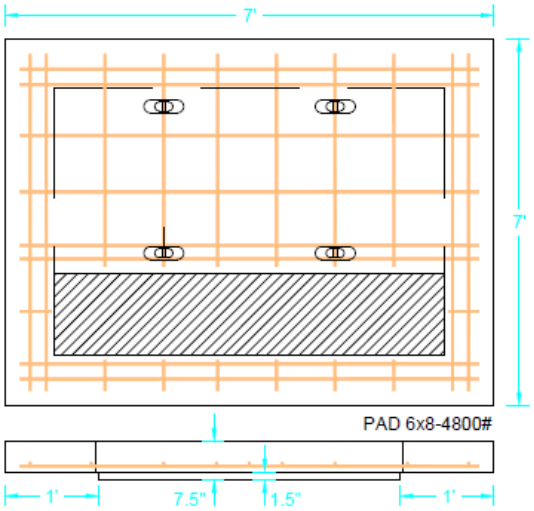
Issue:		
2026	3 - PHASE PRIMARY VAULT	UM1.66C, UM1.66CL
Revision: A		

230



PAD 6x8-4800#

UM1.66CL.2

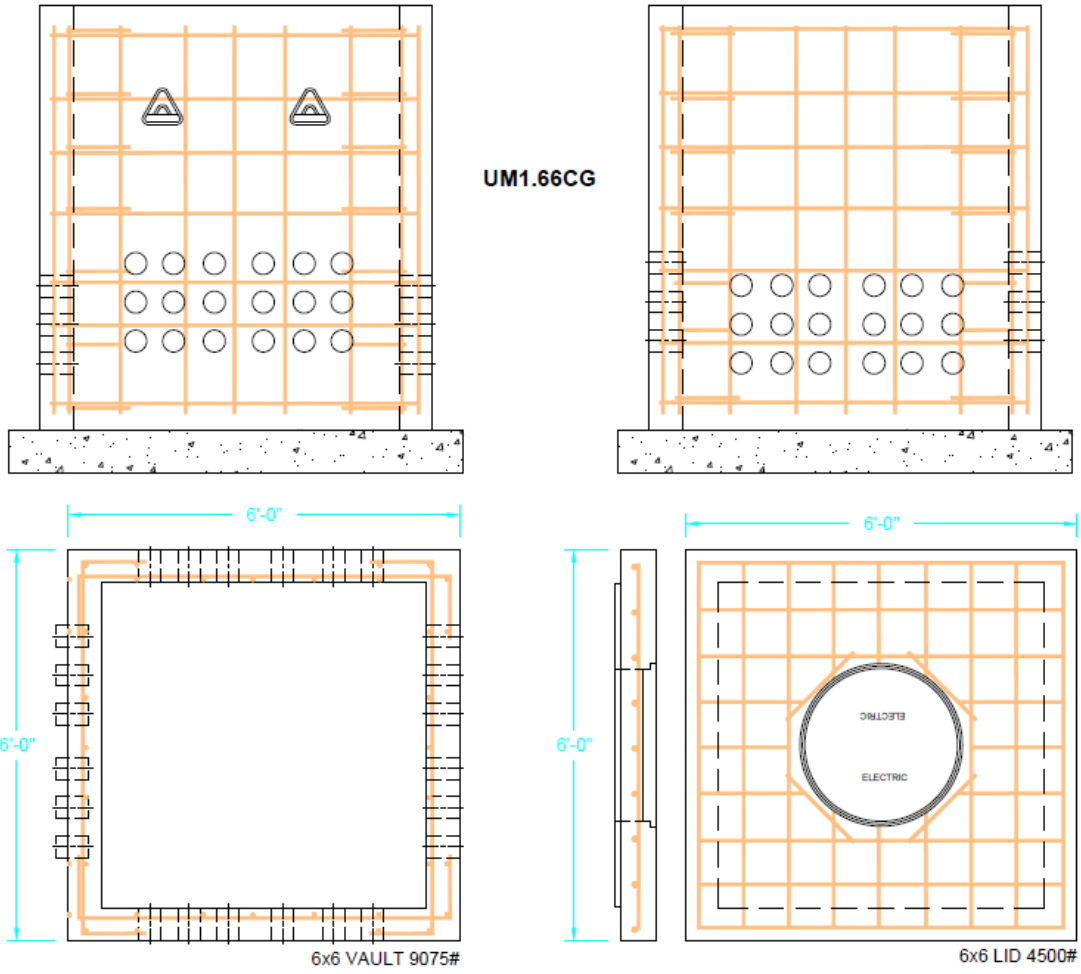


PAD 6x8:
(4) 6'-6" #4 BAR
(6) 4'-4" #4 BAR
(6) 0'-7" #4 BAR
} LATERAL BARS 12" ON CENTER APPROX.

(8) 6'-6" #4 BAR
(2) 0'-6" #4 BAR
} TRANSVERSE BARS 12" ON CENTER APPROX.

PRECAST WITH 3500# TEST CONCRETE REINFORCE WITH 60 KSI STEEL PLACE BARS 12" CENTER APPROXIMATE. ADJUST TO PROVIDE MINIMUM 3" CLEARANCE TO EXTERNAL SURFACES OF CONCRETE.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	6X6 VAULT LID FOR UNDERGROUND PRIMARY METERING REINFORCEMENT GUIDE	
	Issue: 2026 Revision: A	3 - PHASE PRIMARY VAULT LID	UM1.66CL.2



UM1.66CG

VAULT 6x6:
(28) 7'-10" #5 BAR } HORIZONTAL BARS 12" ON CENTER APPROX.

(36) 6'-6" #4 BAR } VERTICAL BARS 10" ON CENTER APPROX.

5'10"
1' 1'

UM1.66CLG

PAD 6x6:
(9) 5'-6" #8 BAR } LATERAL BARS 8.5" ON CENTER APPROX.

(9) 5'-6" #8 BAR } TRANSVERSE BARS 8.5" ON CENTER APPROX.

(4) 3'-0" #8 BAR } ACCESS SUPPORT BARS

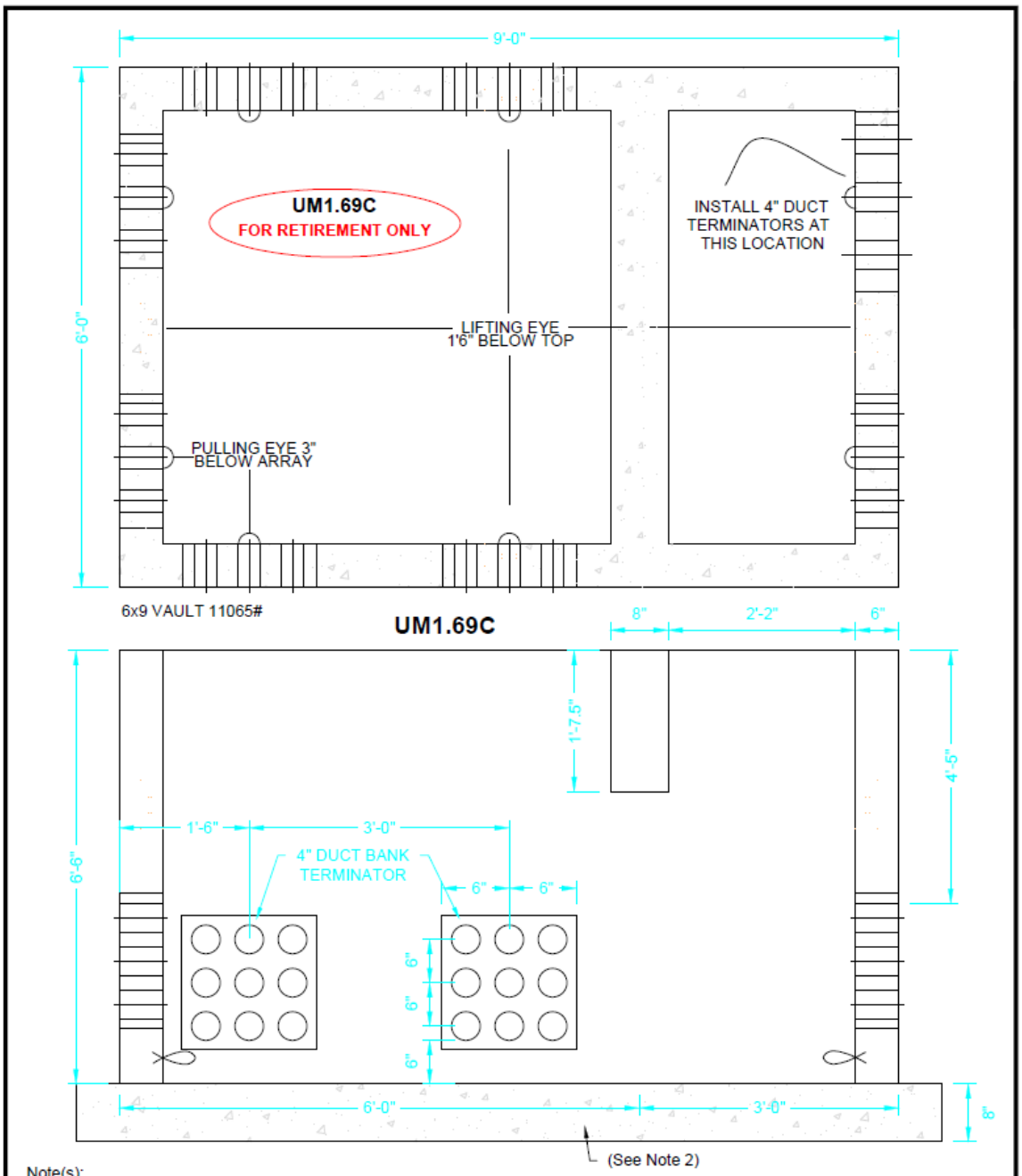
Note(s):
1. All rebar minimum 3" clearance to surface of concrete.
2. Precast with 3500# test concrete.
3. Reinforce with 60 ksi steel.

DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PRECAST VAULT AND LID
6x6 WITH MANHOLE ACCESS
REINFORCEMENT GUIDE

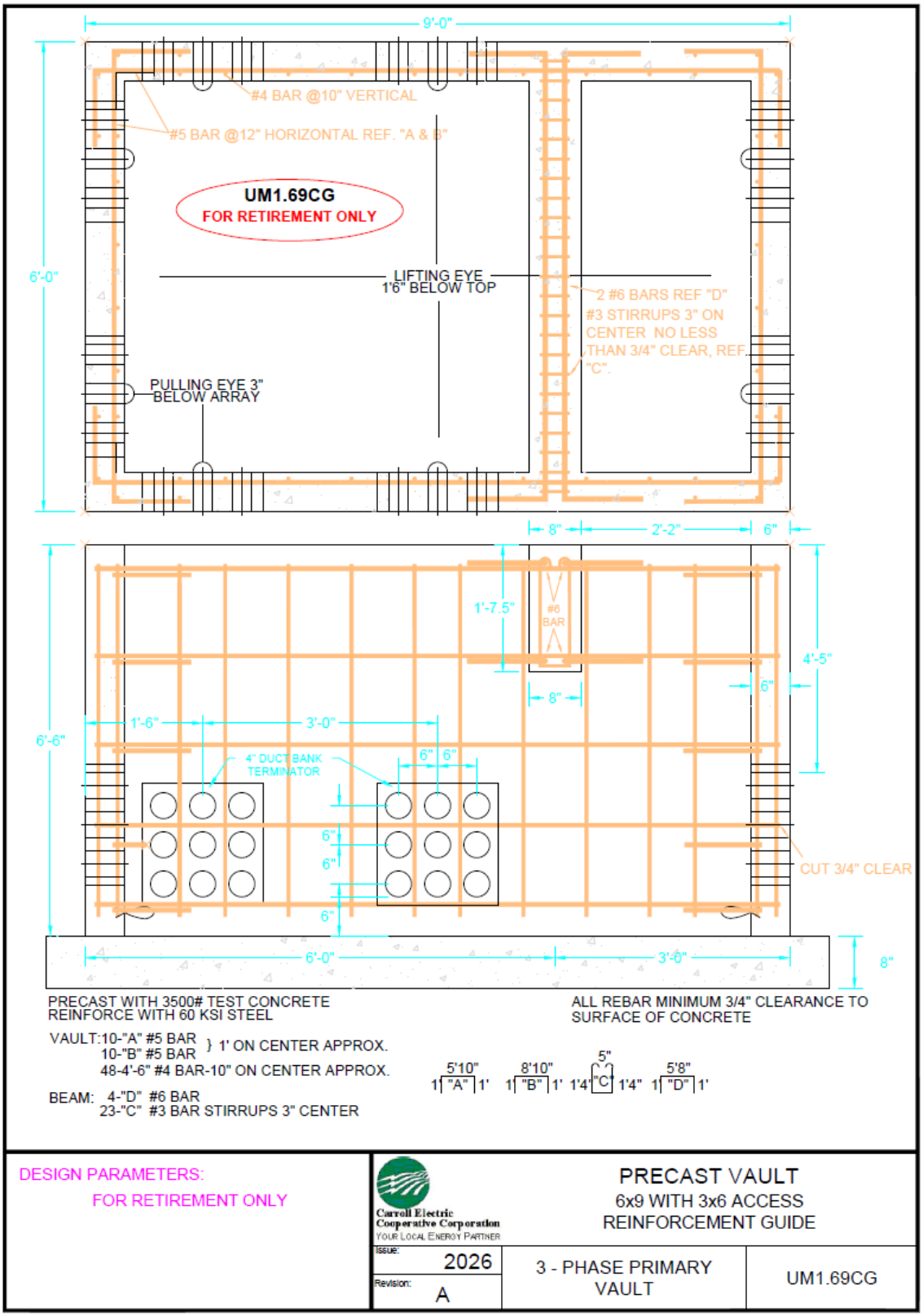
Issue: 2026	3 - PHASE PRIMARY VAULT	UM1.66CG, UM1.66CLG
Revision: A		



Note(s):

1. Carefully compact all backfill materials or use imported backfill.
2. 8" layer of compacted crushed rock beneath vault shall be 5/8" base.
3. Specify "UM1.69CL.1" (6X8) and/or "UM1.69CL.2" (3X8) for lids.

DESIGN PARAMETERS: FOR RETIREMENT ONLY	Carroll Electric Cooperative Corporation — Your Local Energy Partner	PRECAST VAULT 6x9 WITH 3x6 ACCESS CONFIGURATION	
	Issue: 2026 / Revision: A	3 - PHASE PRIMARY VAULT	UM1.69C



PRECAST WITH 3500# TEST CONCRETE
REINFORCE WITH 60 KSI STEEL

ALL REBAR MINIMUM 3/4" CLEARANCE TO SURFACE OF CONCRETE

VAULT:10-"A" #5 BAR } 1' ON CENTER APPROX.
10-"B" #5 BAR
48-4'-6" #4 BAR-10" ON CENTER APPROX.

BEAM: 4-"D" #6 BAR
23-"C" #3 BAR STIRRUPS 3" CENTER

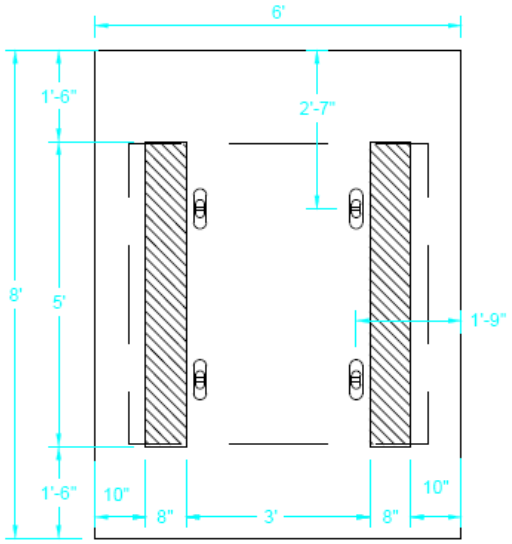
5'10" 1 "A" 1' | 8'10" 1 "B" 1' | 1'4" 5" "C" 1'4" | 5'8" 1 "D" 1'

DESIGN PARAMETERS:
FOR RETIREMENT ONLY

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

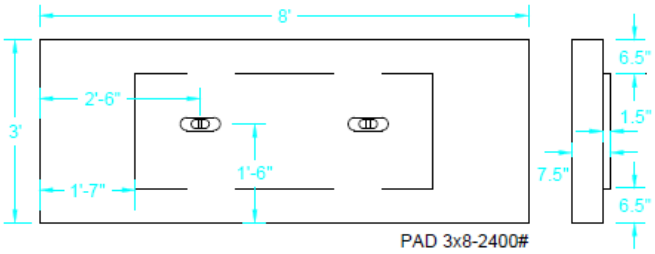
PRECAST VAULT
6x9 WITH 3x6 ACCESS
REINFORCEMENT GUIDE

Issue:	2026	3 - PHASE PRIMARY VAULT	UM1.69CG
Revision:	A		



PAD 6x8-4800#

UM1.69CL.1



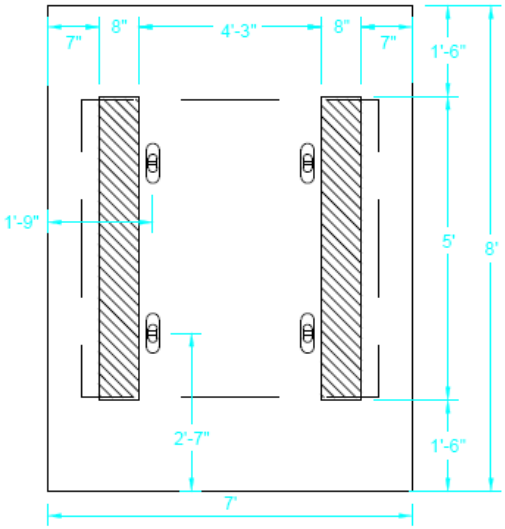
PAD 3x8-2400#

UM1.69CL.2

Note(s):

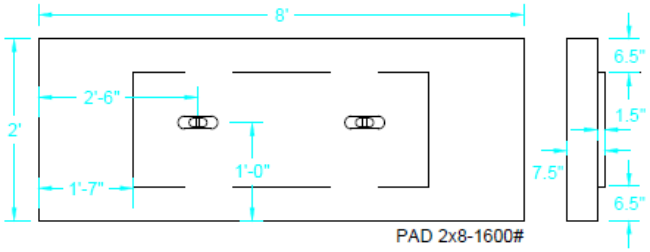
1. Foam fill all voids once in place.
2. Proper lifting eyes and lifting methods shall be used when lifting/moving.
3. UM1.69CL.1 and UM1.69CL.2 are for use with a PMH unit.
4. When equipment is not installed at the time of construction, a UM1.911DP (Diamond Plate) shall be used to cover holes. Note, this must be retired when installing equipment.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	PRECAST LID FOR 6X9 VAULT FOR PMH UNIT	
	Issue: 2026 Revision: C	3 - PHASE PRIMARY VAULT LID	UM1.69CL.1, UM1.69CL.2



PAD 7x8-5400#

UM1.69CL.3



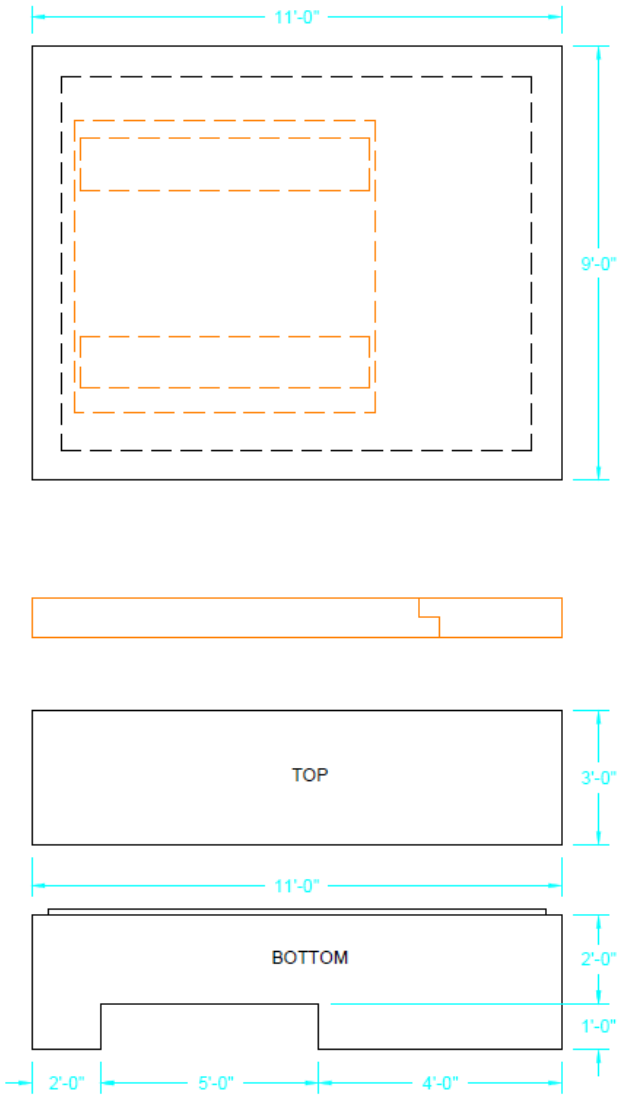
PAD 2x8-1600#

UM1.69CL.4

Note(s):

1. Foam fill all voids once in place.
2. Proper lifting eyes and lifting methods shall be used when lifting/moving.
3. UM1.69CL.3 and UM1.69CL.4 are for use with a PME unit.
4. When equipment is not installed at the time of construction, a UM1.911DP (Diamond Plate) shall be used to cover holes. Note, this must be retired when installing equipment.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	PRECAST LID FOR 6X9 VAULT FOR PME UNIT	
	Issue: 2026 Revision: B	3 - PHASE PRIMARY VAULT LID	UM1.69CL.3, UM1.69CL.4



UM1.911.C

Note(s):

1. Foam fill all voids once in place.
2. Proper lifting eyes and lifting methods shall be used when lifting/moving.

ASSEMBLY: UM1.911			C	---	ASSEMBLY:			---	---
ITEM #	REF	MATERIAL	QTY	QTY	ITEM #	REF	MATERIAL	QTY	QTY
00155200		Vault, Precast 9X11 W/T 3X9	1						

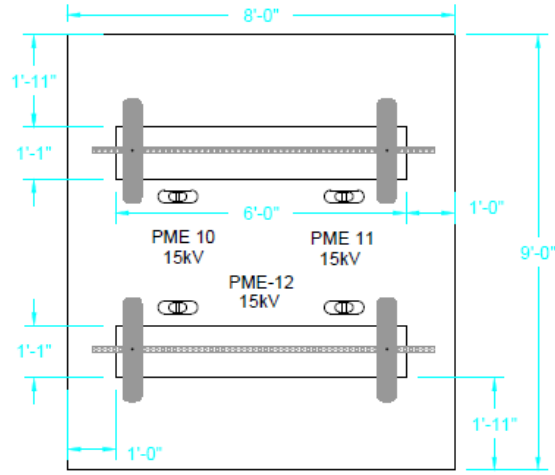
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

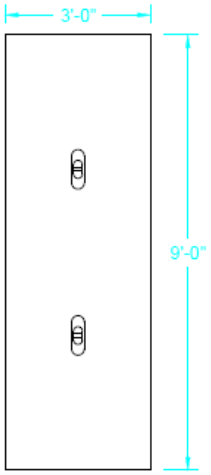
PRECAST VAULT
9X11 WITH 3X9 ACCESS

Issue: 2026
Revision: A

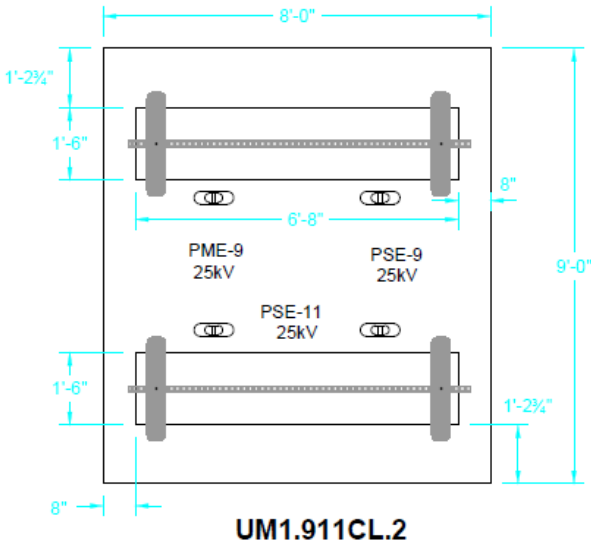
UM1.911C



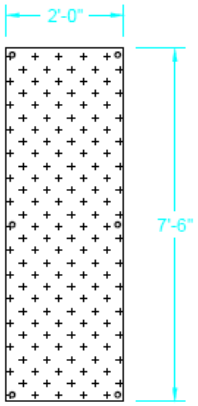
UM1.911CL.1



UM1.911CL.3



UM1.911CL.2



UM1.911DP

Note(s):

1. Foam fill all voids once in place.
2. Proper lifting eyes and lifting methods shall be used when lifting/moving.
3. When equipment is not installed at the time of construction, a UM1.911DP (Diamond Plate) shall be used to cover holes. Note, this must be retired when installing equipment.
4. Replace "XX" with the appropriate vault lid unit.
5. Specify UM1.911UST for additional cable support at each opening.

		ASSEMBLY: UM1.911	CL.1	CL.2	CL.3	UST
ITEM #	REF	MATERIAL	QTY	QTY	QTY	QTY
16001207		Bolt, Machine 1/2 X 7"				4
900421		Unistrut, 1 5/8 X 1 5/8"				y
00155205		Vault Lid, Precast 9X11 for 15kV	1			
00155210		Vault Lid, Precast 9X11 for 25kV		1		
00155215		Vault Lid, Precast 9X11 for 3X9			1	

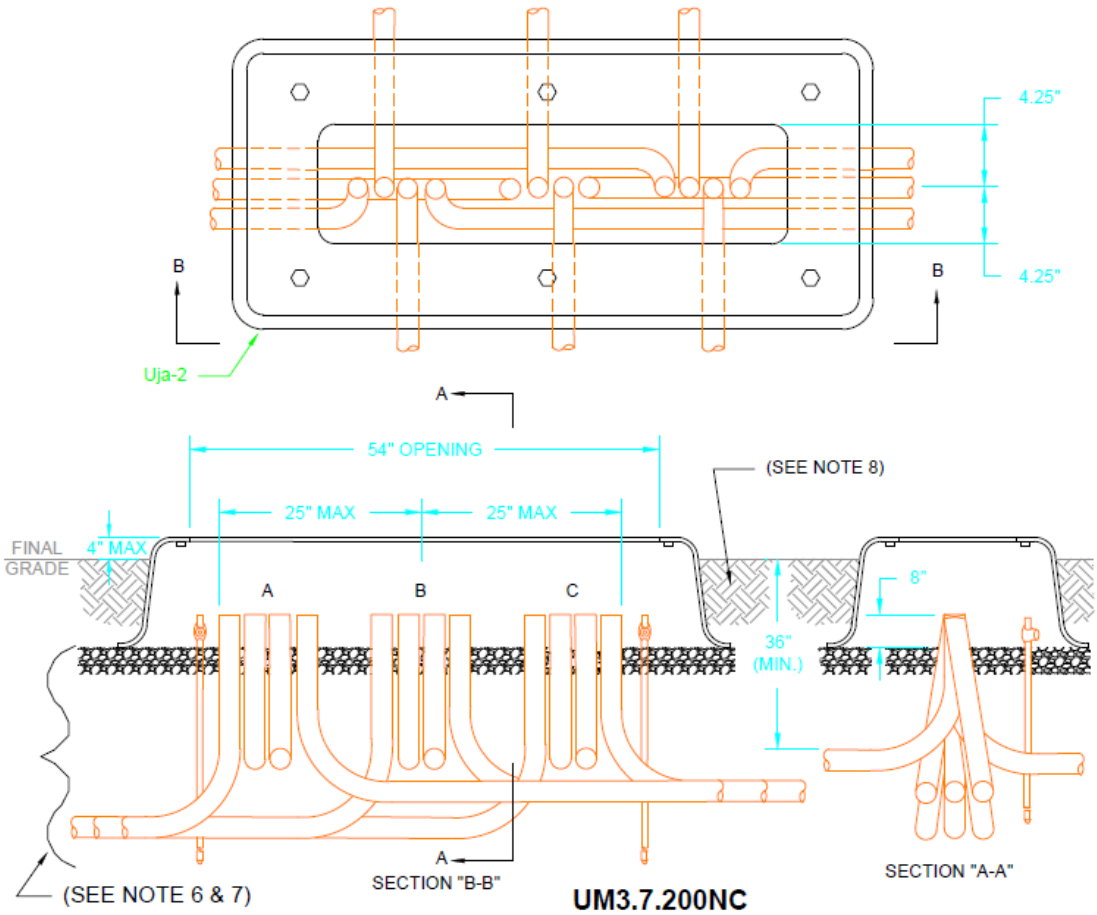
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

PRECAST LID
FOR 9X11 VAULT FOR
PME\PSE UNITS

Issue: 2026
Revision: B

UM1.911XX.X



UM3.7.200NC

Note(s):

1. All conduit sweeps shall be gray electrical PVC SCH 40 unless otherwise specified.
2. Cap all conduits to prevent entry of moisture or other foreign material.
3. See written specifications for acceptable sweep dimensions.
4. Install conduits plumb and grouped by phase - all "A" phase together, all "B" phase together, and all "C" phase together - DO NOT BUNCH.
5. Conduit sweeps shall be stabilized by compacted fill or 5/8" base.
6. Sub-grade soil shall be well compacted.
7. 6" Minimum compacted 5/8" base to be place under junction can sleeve.
8. DO NOT compact backfill material around ground sleeve.
9. Extensions shall be added to sweeps to attain specified conduit height.
10. Opening and spacing dimensions shown are for "UM3.7.200". Dimensions for "UM3.7.600" will vary.
11. UM3.7.600EXT shall be used in new applications when mounting a 600 amp junction on a vault.

		ASSEMBLY: UM3.7.	200NC	600NC	600EXT
ITEM #	REF	MATERIAL	QTY	QTY	QTY
15700600	Uja-2	Sleeve, Ground Assembly 3Ph 60"	1		
15700840	Uja-2	Sleeve, Ground Assembly 3Ph 84"		1	
15700842	Uja-2	Sleeve, Metal Ground Assembly 3Ph 84"			1

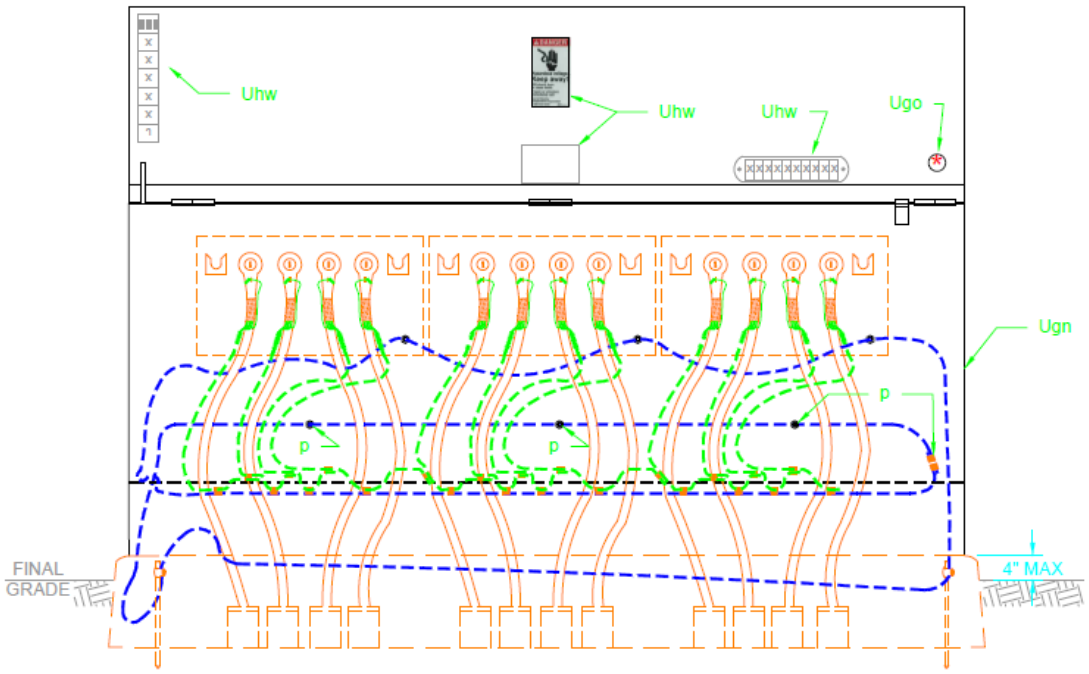
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

THREE PHASE JCT BOX
GROUND SLEEVE

Issue: 2026
Revision: B

UM3.7.200NC,
UM3.7.600NC,
UM3.7.600EXT



UM33.200/UM33.600

Note(s):

1. The following units/assemblies are not part of this unit. Specify separately:
   - A. Multipoint termination and other accessories
   - B. Loadbreak elbows
   - C. Grounding assembly "UM48.2" or other
   - D. Pad or sleeve (if required)
   - E. Place "dummy caps" "UM6.10" over any open bushings and tie tail to ground.
2. Install "DANGER" sign on J-Can inside enclosure. Install "WARNING" including ONE CALL sign, account location tag, account location stickers and J-Numbers on outside surface of enclosure.
3. Where applicable, indicator light shall be placed as shown or adjusted to make visible for patrol.
4. Provide sufficient primary neutral pigtail and cable slack to permit ready disconnection of elbow for mounting on parking stand.
5. Rodent deterrent shall be placed inside all enclosures.

		ASSEMBLY: UM33	.200	.600
ITEM #	REF	MATERIAL	QTY	QTY
53000207	p	Connector, Tank Ground	6	6
15700601	Ugn	Enclosure	1	
15700841	Ugn	Enclosure		1
900276	Uhw	Sign, "DANGER"	1	1
900277	Uhw	Sign, "WARNING"	1	1

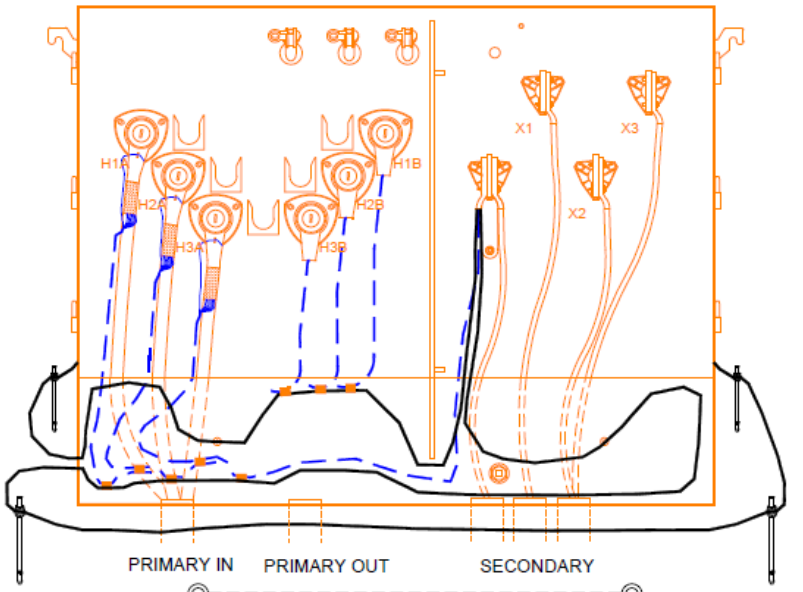
DESIGN PARAMETERS:

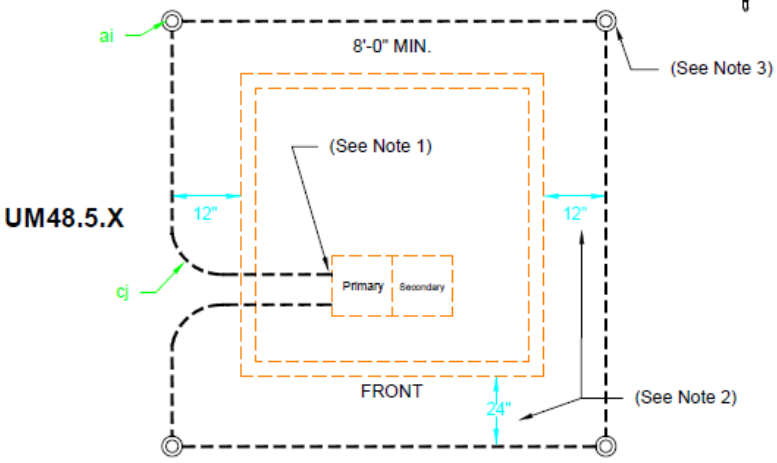
Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

MULTI PHASE
SECTIONALIZING ENCLOSURE

Issue: 2026
Revision: C

UM33.200, UM33.600





Note(s):

1. Grounding grid to be one continuous run of stranded bare copper buried 12" below ground; run wire into primary opening & allow two 12' tails for grounding live front enclosures.
2. Place ground wire a minimum of 24" away from front edge of the pad and 12" from all other sides.
3. Ground rod connections shall be exothermic welds UM48.5.4.
4. For three phase pad mounted enclosures 300kVA or smaller use "UM48.5.1" (#1/0 stranded copper)
5. For three phase pad mounted enclosures 500kVA or larger use "UM48.5.4" (#4/0 stranded copper)

		ASSEMBLY: UM48	.5.1	.5.4
ITEM #	REF	MATERIAL	QTY	QTY
50905002	p	Connector, 2 Hole bolted spade	2	2
Varies	p	Connector, Ground to Neutral	6	6
13200001	ai	Rod, Ground, 5/8" X 8' Copper Clad	4	4
1700000010	cj	Wire, Ground wire, #1/0 copper	64	
1700000040	cj	Wire, Ground wire, #4/0 copper		64

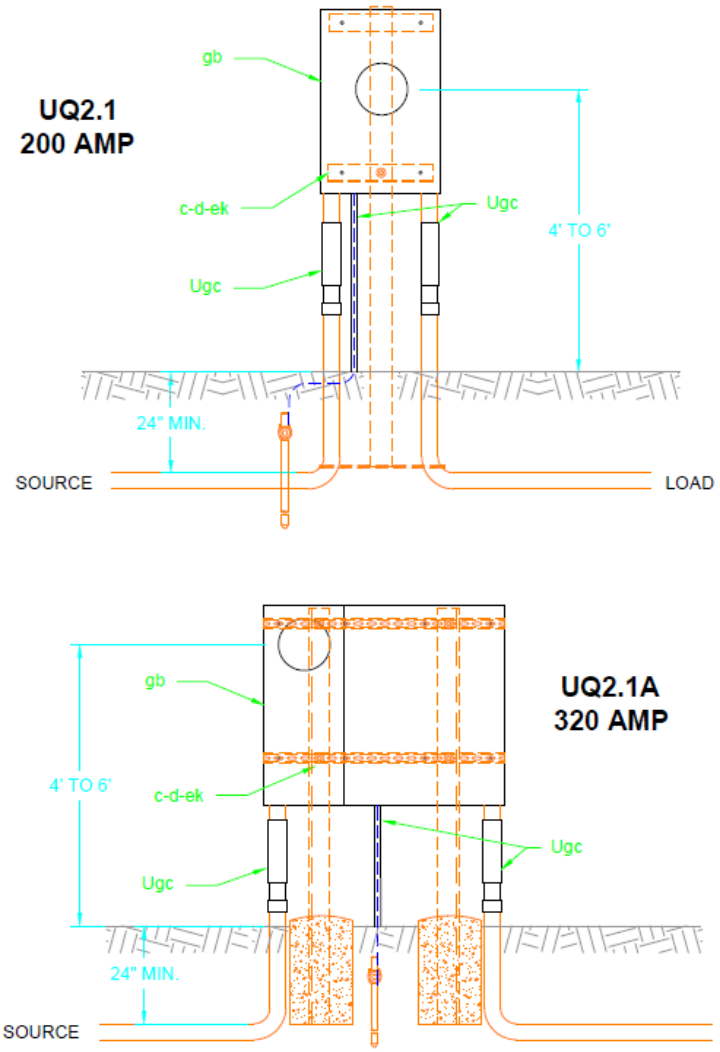
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

GROUNDING GRID
THREE PHASE PAD MOUNTED EQUIPMENT

Issue: 2026
Revision: A

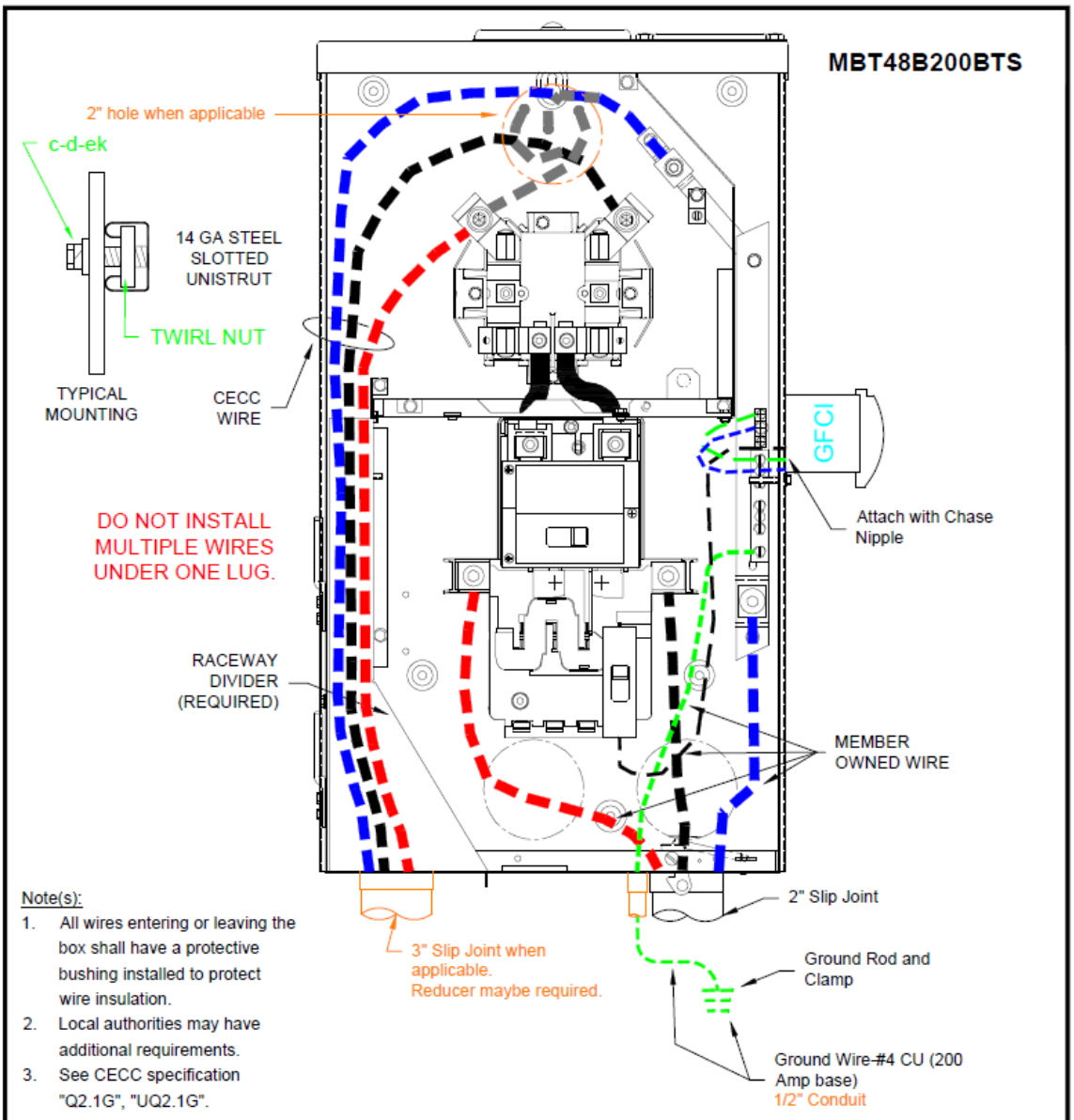
UM48.5.1, UM48.5.4



Note(s):

1. See "Q2.1G", "Q2.1WG" and "UQ2.1WG" for installation details.
2. UQ2.1A is shown with (2) standard 3" X 3" X 1/4" angle iron posts embedded in concrete a min. of 2 feet with 3" unistrut cross-bracing. This can be substituted with two UQ2.MBM units.
3. Install expansion fittings on conduit when entering and leaving meter.
4. See CECC specification "Q2.1G", "UQ2.1G" page 2of2.
5. Expansion fitting shall NOT extend more than 1/2 its maximum length when installed below meter.
6. UQ2.1, UQ2.1A installation will be subject to inspection and other member expenses.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	MEMBER SUPPLIED AND INSTALLED METER BASE COMBO UNDERGROUND SOURCE	
	Issue: 2026 Revision: C		UQ2.1, UQ2.1A



Note(s):

1. All wires entering or leaving the box shall have a protective bushing installed to protect wire insulation.
2. Local authorities may have additional requirements.
3. See CECC specification "Q2.1G", "UQ2.1G".

ITEM #	REF	ASSEMBLY: UQ2	.1.W	ITEM #	REF	ASSEMBLY: UQ2	.1.W
		MATERIAL PROVIDED BY MEMBER	QTY			MATERIAL PROVIDED BY MEMBER	QTY
92000200		200A Meter Base	1			Nipple, Chase 1/2"	1
		Bolt, 3/8"x 3/4" SS	4			Nut, 3/8" SS	4
		Box, Outdoor GFCI Box	1			Outlet, GFCI WR	1
		Breaker, 20 Amp Single	1			Red NEC Sticker	1
		Bushing 2" Plastic	2			Washer, Lock 3/8" SS	4
		Cover, Weatherproof In-Use	1			Wire, #12 THHN White	2
16800004		Ground Wire, #4 Copper	9			Wire, #12 THHN Black	3
		Lock Ring 2"	1			Wire, #12 THHN Green	2

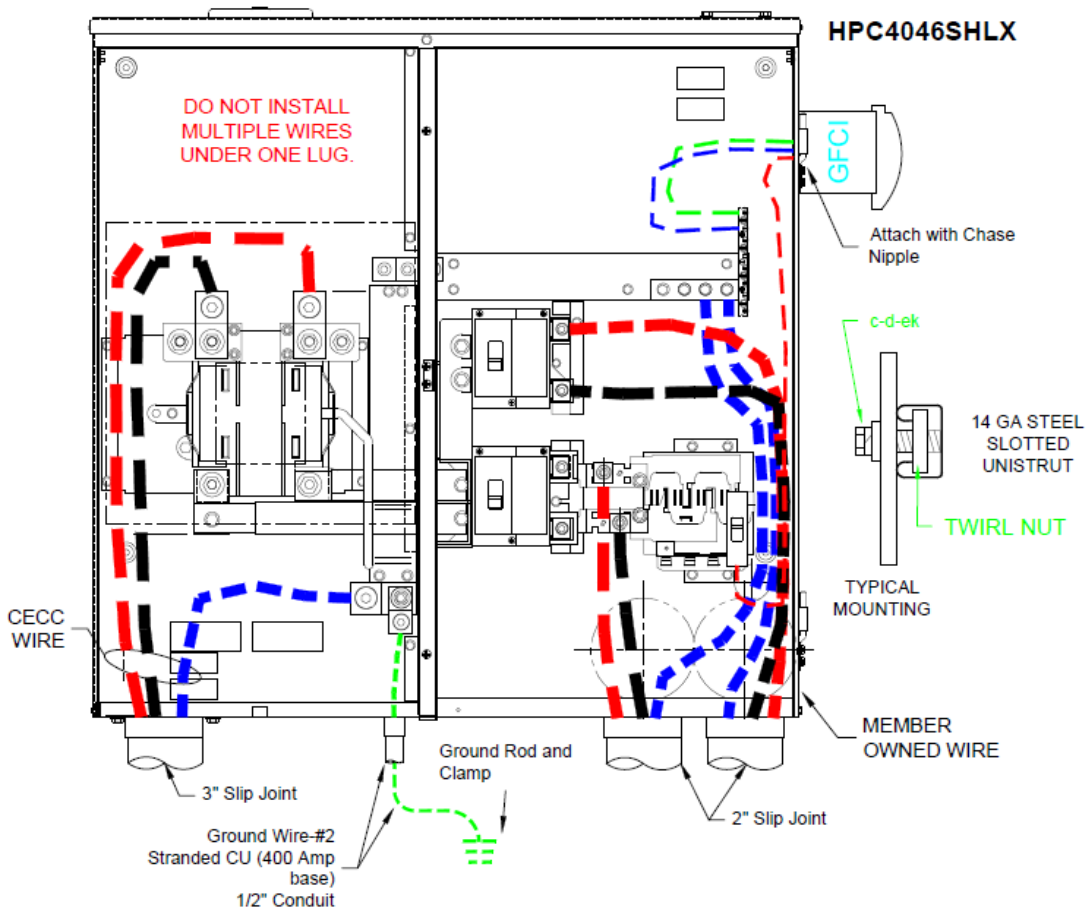
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

COMBINATION METER SOCKET
UNDERGROUND FEED
200 AMP

Issue: 2026
Revision: B

UQ2.1.W



Note(s):

1. All wires entering or leaving the box shall have a protective bushing installed to protect wire insulation.
2. Local authorities may have additional requirements.
3. See CECC specification "Q2.1G", "UQ2.1G".

ITEM #	REF	ASSEMBLY: UQ2.1	.A.W	ITEM #	REF	ASSEMBLY: UQ2.1	.A.W
		MATERIAL PROVIDED BY MEMBER	QTY			MATERIAL PROVIDED BY MEMBER	QTY
92000400		400A Meter Base	1			Lock Ring 3"	1
		Bolt, 3/8"x3/4" SS	4			Meter Riser W/TA, Slip Over 2" PVC	2
		Box, Outdoor GFCI Box	1			Meter Riser W/TA, Slip Over 3" PVC	1
		Breaker, 20 Amp Single	1			Outlet, GFCI WR	1
		Bushing 2" Plastic	2			Red NEC Sticker	2
		Bushing 3" Plastic	1			Terminal Adapter 1/2" PVC	1
51000012		Conduit, 1/2" PVC	5			Washer, Lock 3/8" SS	4
		Cover, Weatherproof In-Use	1			Washer, Round 3/8" SS	4
16900072		Ground Wire, #2 Copper	12			Wire, #12 THHN White	2
		Lock Ring 1/2"	1			Wire, #12 THHN Black	3
		Lock Ring 2"	2			Wire, #12 THHN Green	2

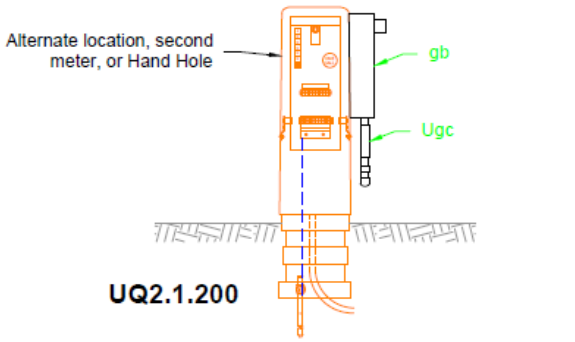
DESIGN PARAMETERS:

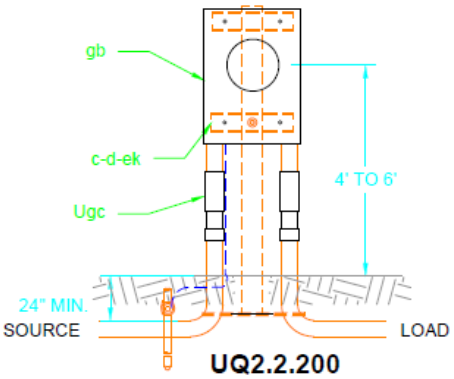
Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

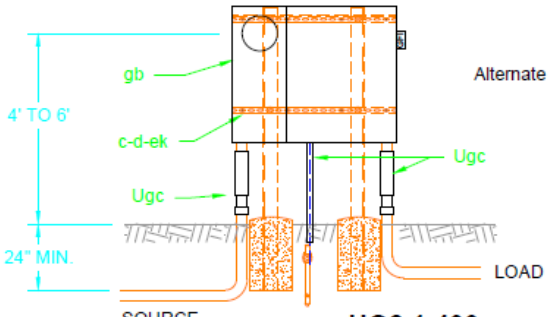
COMBINATION METER SOCKET
UNDERGROUND FEED
320 AMP

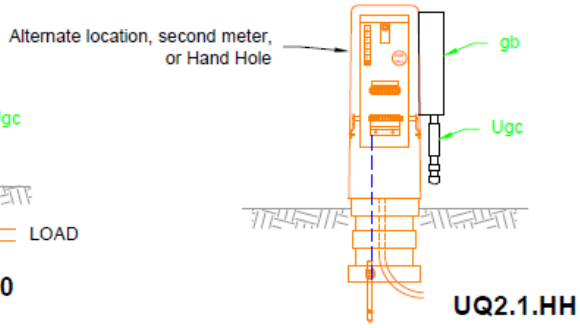
Issue: 2026
Revision: A

UQ2.1.A.W









Note(s):

1. See "Q2.1G" (1of2) and "UQ2.1WG" for installation details.
2. UQ2.1.400 is shown with (2) standard 3" X 3" X 1/4" angle iron posts embedded in concrete a min. of 2 feet with 3" unistrut cross-bracing (installed by member). This may be substituted with two UQ2.MBM units.
3. Install expansion fittings on conduit when entering and leaving meter.
4. Expansion fitting shall NOT extend more than 1/2 its maximum length when installed below meter.
5. UQ2.1.HH (Hand Hole) shall be used when meter is to be installed on member owned facilities.
6. UQ2.1.400 has (2) 2" Conduit assemblies supplied by CECC, however, this maybe subsituted for (1) 3".
7. UQ2.1.HH needs to have #6 cu ground connected to neutral bar & ground lug.
8. Pre sold units shall be designated with the suffix "PS".
9. Install UQ2.1.400 and UQ2.2.200 with UM6.6.

		ASSEMBLY: UQ2.	1.200	2.200	.400	.HH			ASSEMBLY: UQ2.	1.200	2.200	.400	.HH
ITEM #	REF	MATERIAL	QTY	QTY	QTY	QTY	ITEM #	REF	MATERIAL	QTY	QTY	QTY	QTY
Varies		Breaker, 20 Amp single	1	1	1		9202948	gb	Hand Hole Box				1
900017	c	Bolt, 3/8" x 1" S.S.	4	4	4	4	900133		Lock Ring, 2"		1		
900039		Bushing, 2" Plastic	1				9200146	gb	Meterbase Combo w/200 Amp Breaker	1			
900052		Conduit, 1/2" Chase Steel Nipple	1	1	1		9200147	gb	Meterbase Combo w/200 Amp Breaker		1		
51000012	Ugc	Conduit, 1/2" Schedule 40 PVC gray	4	4	4		9200400	gb	Meterbase Combo w/400 Amp Breaker			1	
51000002	Ugc	Conduit, 2" Cap Schedule 40 PVC gray	1	1			900166	gb	Nut, Lock 3/8"	4	4	4	4
900154	Ugc	Conduit, 2" Expansion fitting	1	1	2			uhw	Sticker, NEC req'd	1	1	2	1
51000002	Ugc	Conduit, 2" Schedule 40 PVC gray	y	y	y		900357	d	Washer, Flat 3/8" SS	4	4	4	4
900322	Ugc	Conduit, 2" Terminal Adapter gray	1	1	1		900358	ek	Washer, Locking 3/8" SS	4	4	4	4
51000003	Ugc	Conduit, 3" Cap Schedule 40 PVC gray			2	1	900191		Weatherproof In-Use Recp. Cover	1	1	1	
900155	Ugc	Conduit, 3" Expansion fitting			2	1	900178		Weatherproof gang Recp. Box	1	1	1	
51000003	Ugc	Conduit, 3" Schedule 40 PVC gray			1	1	20500122	cj	Wire, Jumper, 12/2 w/ground	y	y	y	
900323	Ugc	Conduit, 3" Terminal Adapter gray			2	1	20400040	cj	Wire, Jumper #4/0 TPX	y	y	y	
900190		GFCI Receptical	1	1	1								

DESIGN PARAMETERS:

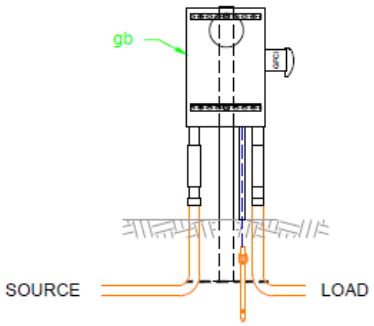
Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

CECC SUPPLIED AND INSTALLED METER BASE COMBO & HAND HOLE

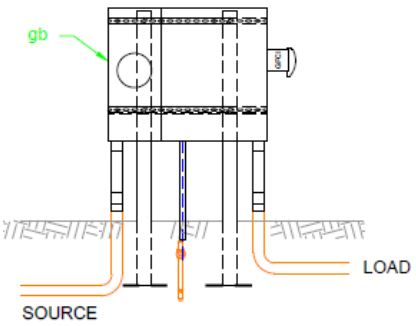
Issue: 2026

Revision: B

UQ2.1.200, UQ2.2.200, UQ2.1.400, UQ2.1.HH



UQ2.1.200.MBM



UQ2.1.400.MBM

Note(s):

1. See master material list for approved material. Any material substitutions must be approved by CECC prior to assembly.
2. On the UQ2.1.400.MBM the distance between the poles can be adjusted to accommodate terrain or other buried utilities.
3. Install with UM6.6.

		ASSEMBLY: UQ2.1	.200.MBM	.400.MBM			
ITEM #	REF	MATERIAL	QTY	QTY			
9200141		MBM, Single Pole, 200A, Assembled	1				
9200142		MBM, Double Pole, 400A, Assembled		1			

DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

CECC SUPPLIED AND INSTALLED METER BASE COMBO

Issue: 2026
Revision: A

UQ2.1.200.MBM, UQ2.1.400.MBM

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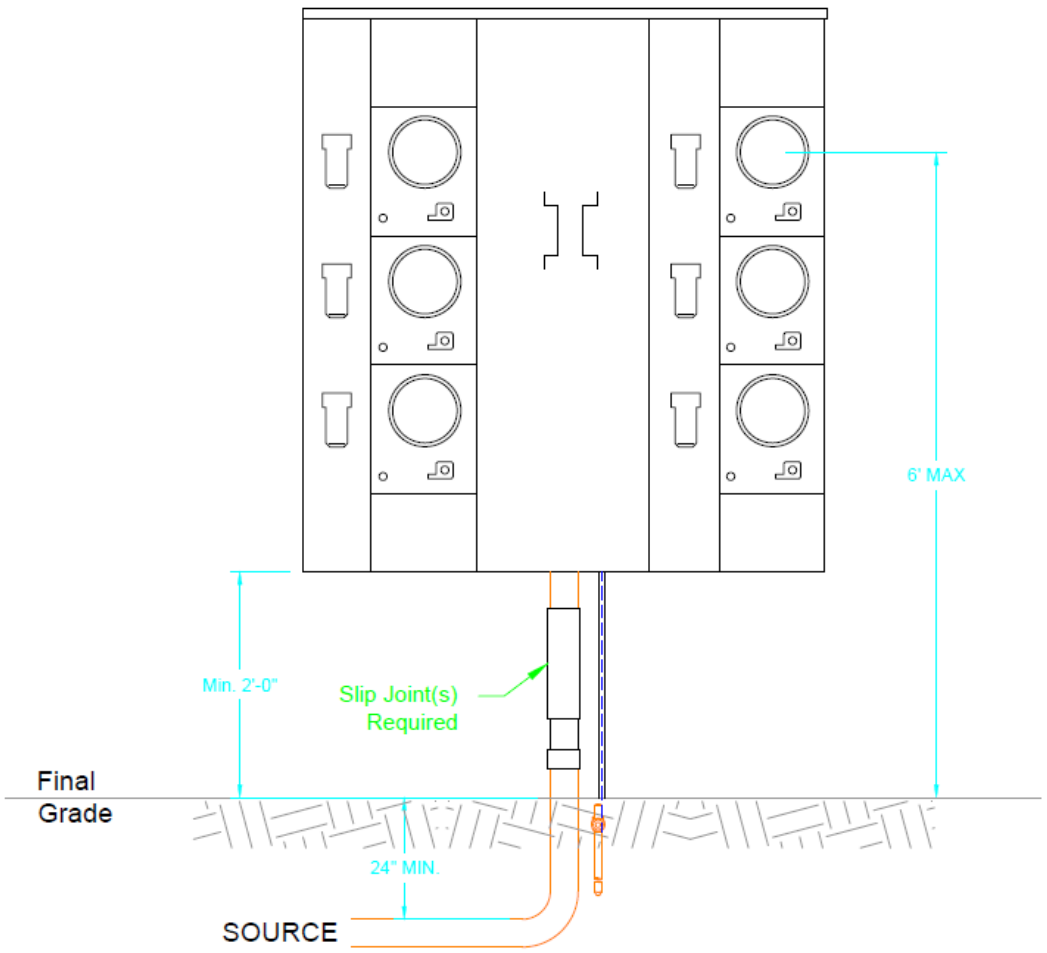

Note(s):

1. Installation can have no more than 6 meters with individual disconnect, and must be approved by CECC prior to installation.
2. Member facilities shall comply with CECC Standards, current NEC standards, and any other authorities having jurisdiction. All material shall be suitable for outdoor use.
3. Equipment to be installed at a location designated by CECC.
4. No troughs or wireways allowed. Bus system only.
5. Refer to NEC for grounding provisions.
6. Meter bases shall be tagged with corresponding apartment/unit/suite number.
7. Meter bases shall be lockable for use of CECC meter seals.
8. Ringless meter bases are required on all new installations.
9. Meters shall be directly adjacent to disconnects and located outside of building (NO EXCEPTIONS).
10. CECC ownership stops at the connection end of source conductors.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	MULTIPLE METER GUIDE	
	Issue: 2026 Revision: A		UQ2.6G

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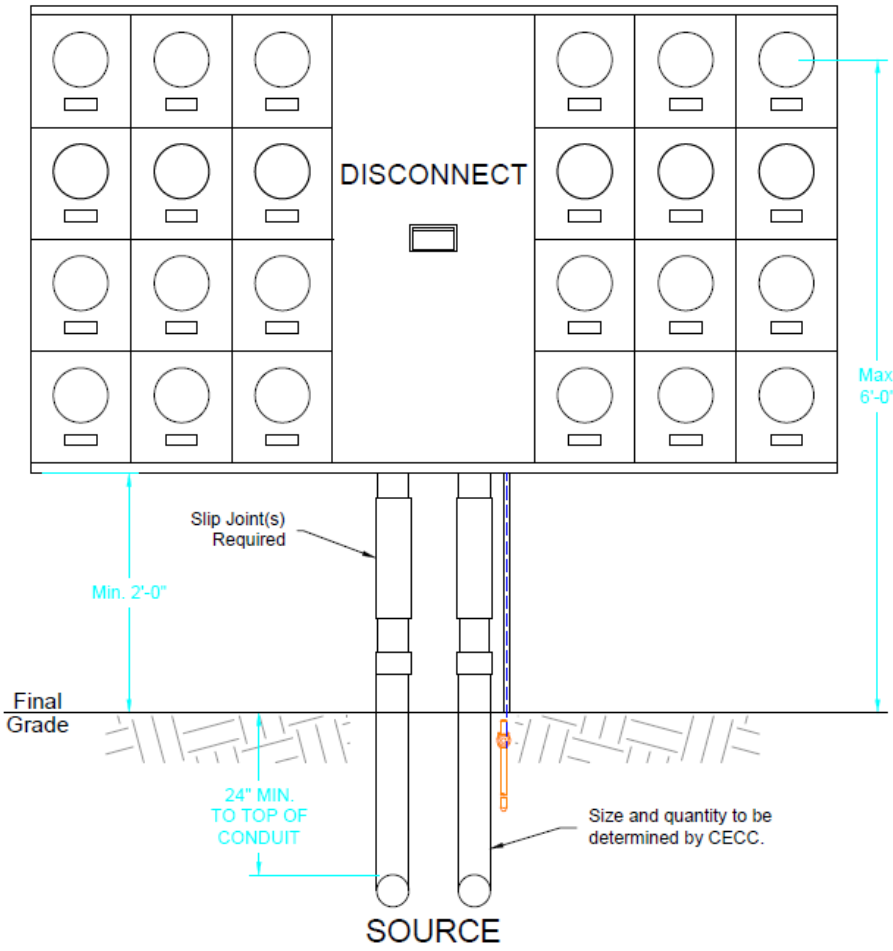

Note(s):

1. Main disconnect size shall be a minimum of 600 Amps, lockable, and must be approved by CECC prior to installation.
2. Member facilities shall comply with CECC Standards, current NEC standards, and any other authorities having jurisdiction. All material shall be suitable for outdoor use.
3. Equipment to be installed at a location designated by CECC.
4. No troughs or wireways allowed. Bus system only.
5. Installation of 30 or more meters at any single point may require three phase facilities.
6. Refer to NEC for grounding provisions.
7. Meter bases shall be tagged with corresponding apartment/unit/suite number.
8. Meter bases shall be lockable for use of CECC meter seals.
9. Ringless meter bases are required on all new installations.
10. Meters shall be directly adjacent to main disconnect and located outside of building (NO EXCEPTIONS).
11. CECC ownership stops at the connection end of source conductors.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	MULTIPLE METER GUIDE W/SINGLE SOURCE DISCONNECT	
	Issue: 2026 Revision: A		UQ2.7G

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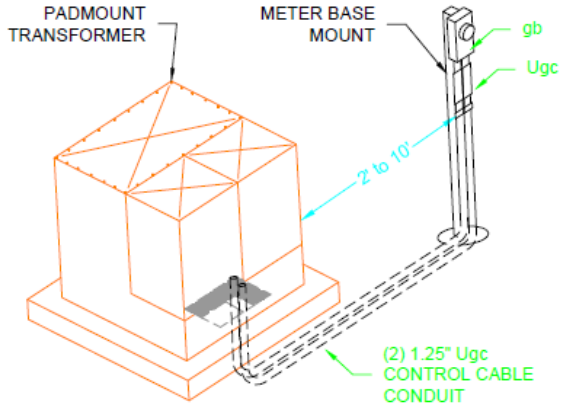
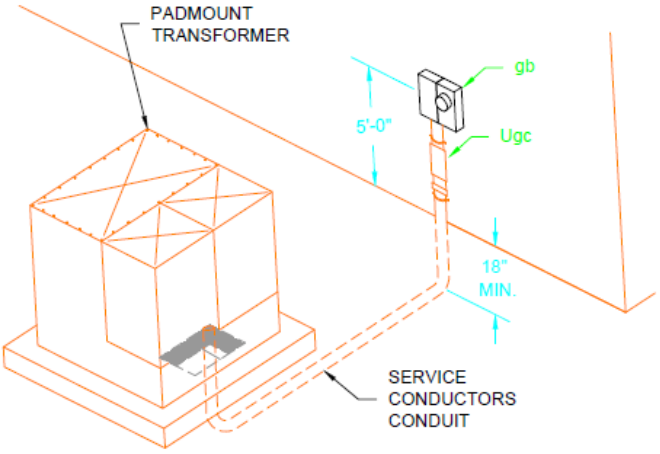


UQ2.7, UQ2.17

CT'S mounted inside transformer. (Materials supplied by CECC)

Note(s):

1. Meter base must be mounted free standing.
2. Meter socket must not be attached directly to pad-mounted transformer.
3. 4'-0" minimum & 6'-0" maximum height to center of meter.
4. Conduit shall be used for secondary control wires to meter socket.
5. Meter base shall be supported per nec requirements.
6. Secondary conductors supplied by member.
7. UQ2.7 designates single phase applications and UQ2.17 to designate three phase.
8. Replace "XXX" with .7, .17 accordingly.
9. Point of demarcation is the secondary lugs of transformer.



UQ2.7A, UQ2.17A

CT'S mounted on structure. (Materials supplied by the member)

Note(s):

1. Meter base must be mounted beside CT cabinet.
2. 4'-0" minimum & 6'-0" maximum height to center of meter.
3. Meter base shall be supported per NEC requirements.
4. Secondary conductors supplied by member.
5. UQ2.7A designates single phase applications and UQ2.17A to designate three phase.
6. Replace "XXX" with .7A, .17A accordingly.
7. Transformer must be located a min. of 15' away from any buildings.
8. Point of demarcation is the secondary lugs of transformer.

		ASSEMBLY:UQ	2.7	2.7A	2.17	2.17A
ITEM #	REF	MATERIAL	QTY	QTY	QTY	QTY
5100000x	Ugc	Conduit, as required	As REQ	As REQ	As REQ	As REQ
Varies	Ugc	Conduit, Expansion Fitting	2	1	2	1
		Control cable, as required	As REQ	As REQ	As REQ	As REQ
	Usd	Current transformer, as required	As REQ	As REQ	As REQ	As REQ
92000141		Meter Base Mount	1		1	
	gb	Meter socket as Specified	1	1	1	1
Varies		Pipe strap, as required	As REQ	As REQ	As REQ	As REQ
	se	Potential transformer, as required		As REQ		As REQ

General Note:

1. No CT meter shall be placed for a residential application without engineering approval.

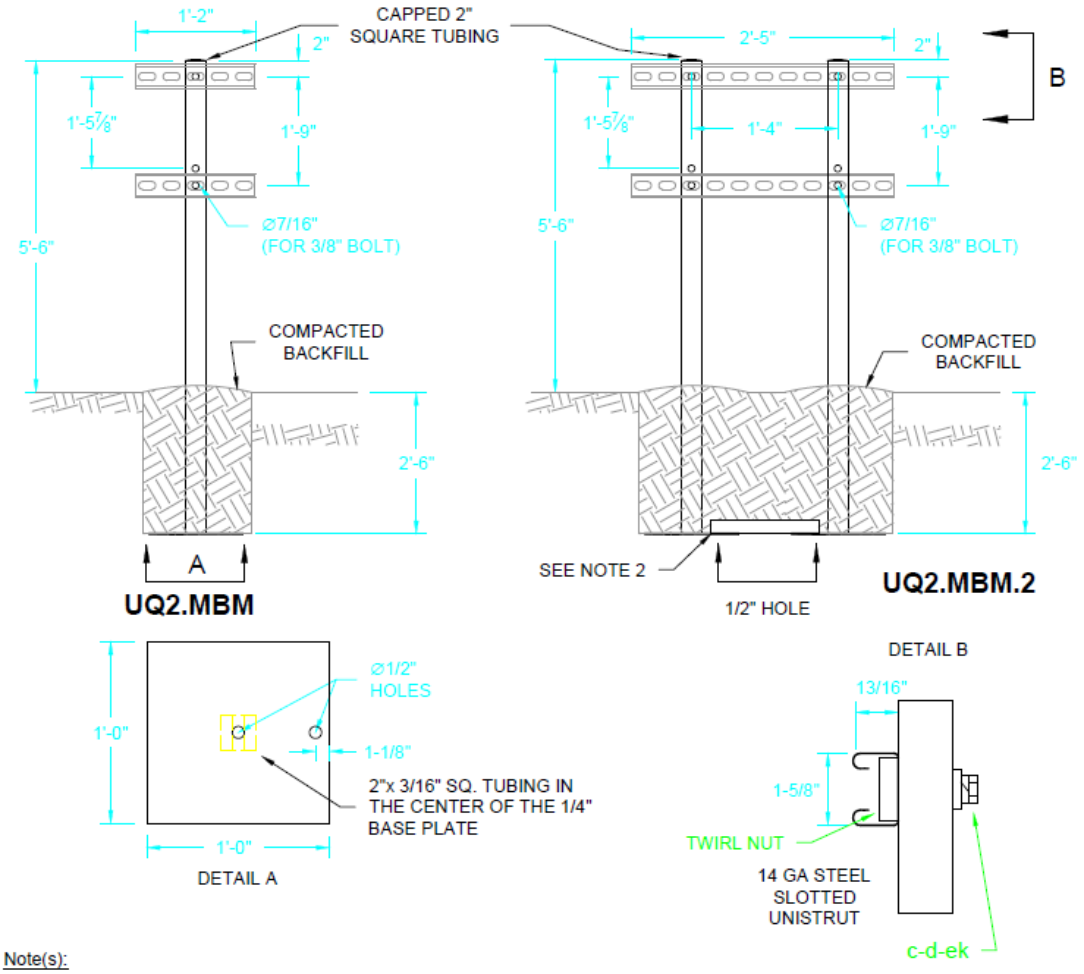
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

C.T. METER BASE INSTALLATION
SINGLE/THREE PHASE

Issue: 2026
Revision: C

UQ2.XXX



Note(s):

1. Compact soil around base plate to full depth.
2. For UQ2.1.MBM.2, utilize 1/2" hanger holes in base plate to attach 8" shipping strap. (Unistrut or equivalent) as shown.
3. Base plate and 2" square tubing shall have black powder coating. Unistrut shall have gray powder coating. All powder coating shall consist of a minimum 1.5 mil thickness.
4. On the UQ2.1.400.MBM the distance between the poles can be adjusted to accommodate terrain or other buried utilities.

		ASSEMBLY: UQ2	.MBM	.MBM.2			ASSEMBLY: UQ2	.MBM	.MBM.2
ITEM #	REF	MATERIAL	QTY	QTY	ITEM #	REF	MATERIAL	QTY	QTY
	c	Bolt, 3/8" x 3/4" SS		2	900134		Lock Ring 3"	1	
400020	c	Bolt, 3/8" x 2-3/4" SS	2	4	900155		Meter Riser W/TA, Slip Over 3" PVC	1	
400036		Bushing 3" Plastic	1		900167		Nut, Twirl 3/8"	6	10
900420		Channel, Slotted 13/16" x 1/5/8" (8" Long)		1	9200096		Pole, Powder Coated Steel	1	2
900420		Channel, Slotted 13/16" x 1/5/8" (14" Long)	2		900317		Terminal Adapter 1/2" PVC	1	
900420		Channel, Slotted 13/16" x 1/5/8" (29" Long)		2	900358	ek	Washer, Lock 3/8" SS	2	4
51000012		Conduit, 1/2" PVC	5		900357	d	Washer, Round 3/8" SS	2	4
900131		Lock Ring 1/2"	1						

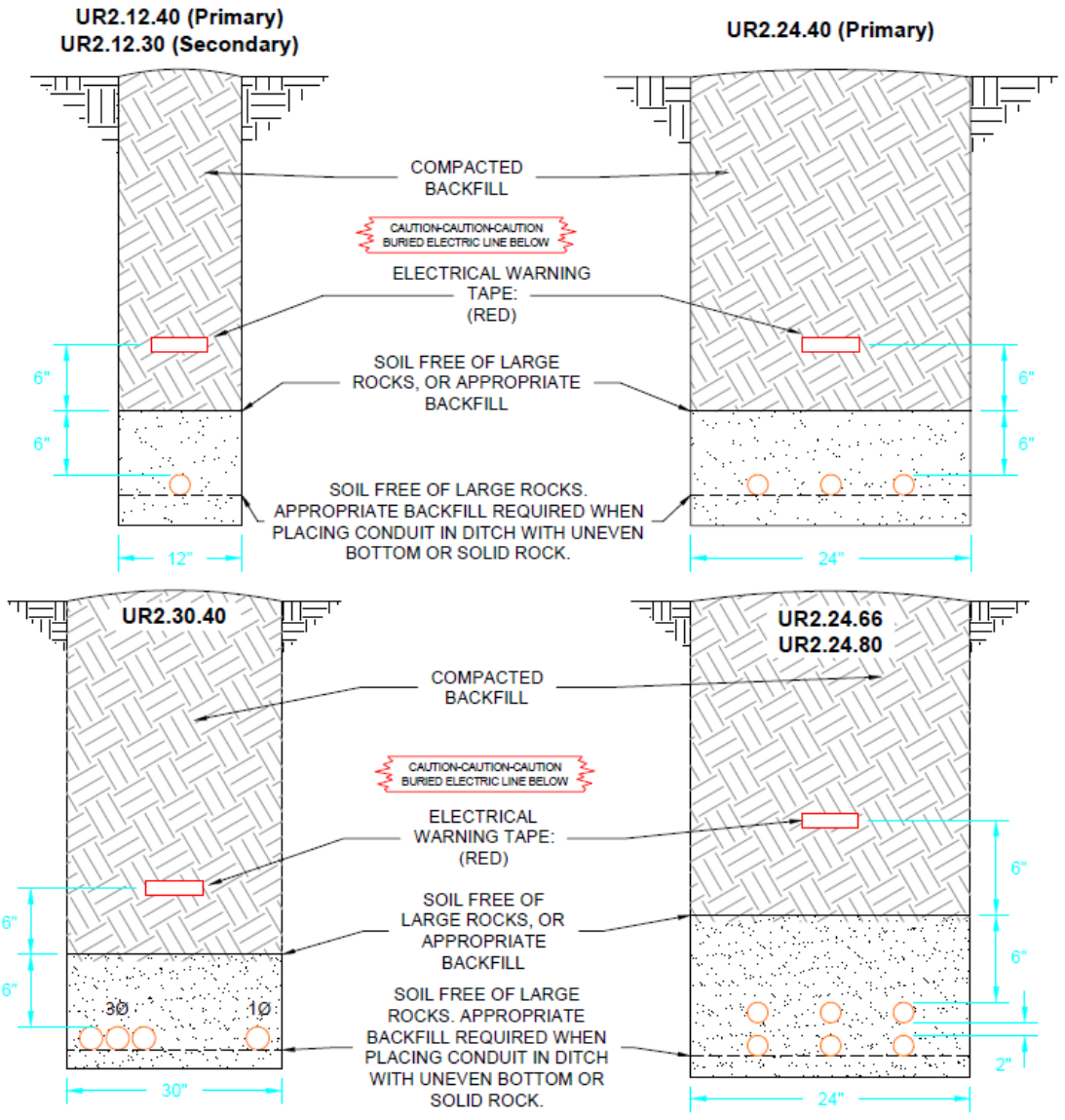
DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

METER BASE MOUNT ASSEMBLY

Issue: 2026
Revision: C

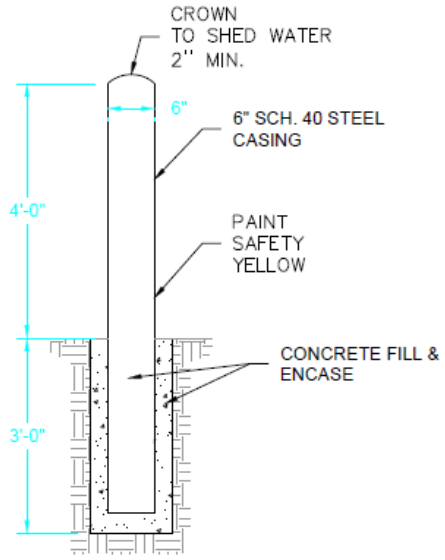
UQ2.MBM, UQ2.MBM.2



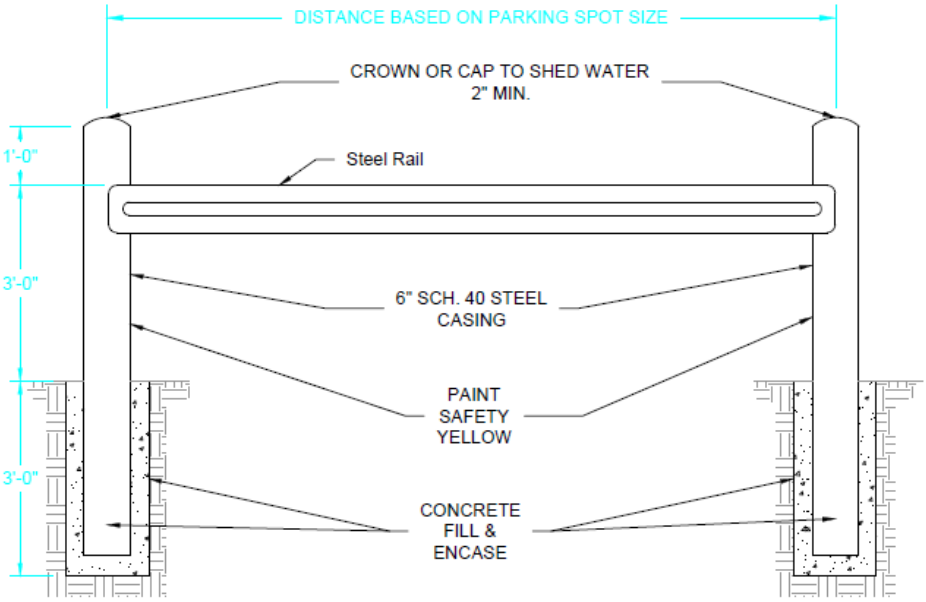
Note(s):

1. Replace first "XX" with required WIDTH of ditch. Replace last "XX" with required DEPTH of ditch. Add "R" as a unit suffix for rock installation.
2. Ditch backfill shall be compacted full depth.
3. See Min. Primary/Secondary Conduit installation depth table. (CECC written specifications)
4. Unit is per linear foot.
5. For conduit call for unit "UM50.P".
6. Water, sewer, or gas lines shall not share a common ditch with CECC facilities and shall maintain a minimum horizontal separation of 5'. Separation from deeper utilities shall be increased to allow access to the utility line without disturbance of CECC facilities.

DESIGN PARAMETERS:	Carroll Electric Cooperative Corporation YOUR LOCAL ENERGY PARTNER	TRENCHING AND BACKFILL CONDUIT ORIENTATION	
	Issue: 2026 Revision: B		UR2.XX.XX, UR2.XX.XXR



BOLLARD.1



BOLLARD.2

Note(s):

1. Placement of bollards shall be in such a manner as to not obstruct operations of electrical equipment.
2. Paint bollards Safety yellow.

DESIGN PARAMETERS:

Carroll Electric Cooperative Corporation
YOUR LOCAL ENERGY PARTNER

BOLLARD, BOLLARD AND RAIL DESIGN

Issue:		
2026		BOLLARD.1 BOLLARD.2
Revision: A		

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