



**NOTICE AND AGENDA
BRIGHAM CITY COUNCIL MEETING**

Thursday, February 19, 2026 6:00 PM
City Council Chambers, 20 North Main

To View Live Meeting Visit:

<https://www.bcutah.gov/mayor-and-city-council.htm> or
www.youtube.com/brighamcitycorp

6:00 REGULAR COUNCIL MEETING

Thought, Reading, or Invocation: Bishop Nathan Hall, 1st Ward Bishop
Pledge of Allegiance

6:03 CONFLICT OF INTEREST AND ETHICS STATEMENT TRAINING

6:15 SCHEDULED DELEGATION

1. Presentation of Good Deed Award By The American Legion Auxiliary Department of Utah

6:20 CONSENT

1. Appointment to the Planning Commission
2. Approval of February 5, 2026 Work Session and City Council Meeting Minutes
3. Request to Write Off Utility Accounts Due to Bankruptcy or Being Sent to Collections

6:23 EMPLOYEE RECOGNITION

1. New Hires in The Fire/AMET Department and Recreation
2. Oath of Office and Appointments of Finance Director, Public Power Director, Public Works Director and Assistant Public Works Director

6:35 PUBLIC COMMENTS ¹ (Per Utah Code, Council will receive input only, no decision can be made)

6:40 COUNCILMEMBER COMMENTS

6:45 CITY ADMINISTRATOR COMMENTS

6:50 ACTION ITEMS

1. Consideration of Approval of Updates to the Power Standards Manual – Derek Oyler
2. Consideration of Approval of UAMPS Pooling Agreement – Derek Oyler and Mason Baker, UAMPS

7:15 DISCUSSION ITEM

1. Electric Rate Study Updates – Tom Kotter and Dave Berg, Power Consultant
2. Golf Course Annual Update – Chris Marx

8:00 CLOSED SESSION

Consideration to enter a closed session to discuss: purchase/exchange/lease of real property; pending litigation; cyber security; or character/professional competence or physical/mental health of an individual.

Assigned times may vary depending on discussion length or agenda alteration. ADA Notice: Individuals needing special accommodations should contact the City Recorder at 435-734-6621 at least 48 hours before the meeting. Councilmembers may participate electronically.

CERTIFICATE OF POSTING

The undersigned duly appointed City Recorder certifies the above notice was posted in three public places within the Brigham City limits, and on the City and State Public Meeting Notice websites on February 12, 2026. A copy was also provided to the Box Elder New Journal.

Kristina Rasmussen, City Recorder

¹ Each individual is limited to three minutes. Total input period is limited to 15 minutes.

**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

- 1. INITIATED BY: Mayor Bott

- 2. DEPARTMENT OR DIVISION: Mayor's Office

- 3. DATE INITIATED: 2/9/26

- 4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
Presentation of Good Deed Award to Tate Keesler by Cary Fisher of the American Legion Auxiliary Department of Utah.

- 5. ESTIMATED TIME NEEDED: 5 min

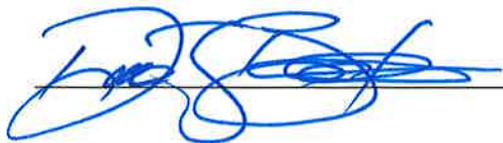
- 6. PROPOSED DATE FOR COUNCIL ACTION: 2/19/26

- 7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Attachment</u>
_____	_____	_____	_____
_____	_____	_____	_____

9. MAYOR'S SIGNATURE:



**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

1. INITIATED BY: Donna

2. DEPARTMENT OR DIVISION: Mayor's Office

3. DATE INITIATED: 2/3/26

4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
Appointment of Wayne McConkie to the Planning Commission

5. ESTIMATED TIME NEEDED: 2min

6. PROPOSED DATE FOR COUNCIL ACTION: 2/19/26

7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Attachment</u>
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_____	_____	_____	_____

9. MAYOR'S SIGNATURE:



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**WORK SESSION OF THE
BRIGHAM CITY COUNCIL
FEBRUARY 5, 2026
5:30 p.m.**

5 **PRESENT:** DJ Bott Mayor
6 Dave Hipp Councilmember
7 Dave Jeffries Councilmember
8 Matthew Jensen Councilmember
9 Ryan Smith Councilmember
10 Robin Troxell Councilmember

11 **ALSO PRESENT:** Nicole Cottle City Attorney –
12 Tom Kotter Community and Economic Development Director
13 Derek Oyler City Administrator
14 Kristina Rasmussen City Recorder
15 Royce Wilkerson IT Director

16 Mayor Bott called the work session to order at 5:30 p.m. He stated that this will be a work session on
17 annual training the council is required to receive on Open and Public Meetings, Network Security,
18 Conflict of Interest and Ethics Statement. He turned the time over to Royce Wilkerson to start the
19 training.

20 Mr. Wilkerson presented annual training on internet security awareness, including:

- 21 • The purpose of security awareness training and user responsibility as the “first line of defense”
22 against cybercrime, cyberattacks, and scams.
23 • Common cybercrime methods, including phishing (email/phone/text/social media), ransomware,
24 identity theft, and financial scams.
25 • General trends in cybercrime and examples of how attacks are organized, including online
26 marketplaces offering hacking tools/services.
27 • Statistics and organizational impacts related to phishing, malware, hacked accounts, and the costs
28 associated with data breaches.
29 • Practical steps to reduce risk, including recognizing phishing attempts, verifying unusual
30 requests, safe browsing habits, keeping software updated, strong passwords, and use of multi-
31 factor authentication.
32 • Examples of phishing indicators (e.g., generic greetings, scare tactics, suspicious link
33 destinations) and city safeguards (link scanning).
34 • A local example of a spoofed email attempt and the importance of checking for external sender
35 indicators.

36 Council Questions / Discussion

37 A councilmember asked how to verify link destinations on a mobile phone compared to hovering over
38 links on a desktop. Mr. Wilkerson responded that mobile devices can be more difficult, and he described
39 available settings (including iPhone options) that may allow link preview without opening a link.

40 City Attorney Nicole Cottle stated the City is required to complete annual Open and Public Meetings Act
41 training and that the City uses a format that allows reporting to the State. She indicated the Council would
42 watch a short training video produced by the State Auditor’s Office. Following completion of the Open
43 and Public Meetings Act training, it was suggested that the remaining portion of the conflict of interest
44 and ethics statement training be deferred to a future meeting, as it was not time-sensitive.

45 Councilmembers indicated no objection to continuing the conflict of interest and ethics training at the
46 next council meeting.

47 *The undersigned duly appointed Recorder for Brigham City Corporation hereby certifies that the*
48 *foregoing is a true, accurate and complete record of the February 5, 2026 City Council Work Session.*

49
50 *Dated this 20th of February, 2026.*

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Kristina Rasmussen, City Recorder

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**REGULAR SESSION OF THE
BRIGHAM CITY COUNCIL
FEBRUARY 5, 2026
6:00 p.m.**

5 **PRESENT:** DJ Bott Mayor
6 Dave Hipp Councilmember
7 Dave Jeffries Councilmember
8 Matthew Jensen Councilmember
9 Ryan Smith Councilmember
10 Robin Troxell Councilmember

11 **ALSO PRESENT:** Nicole Cottle City Attorney
12 Tom Kotter Community and Economic Development Director
13 Derek Oyler City Administrator
14 Tyler Pugsley Assistant City Administrator
15 Kristina Rasmussen City Recorder
16 Chief Reyes Police Chief
17 Chief Thueson Fire Chief
18

19 Mayor Bott called the meeting to order at 6:00 p.m. The invocation was offered by Bishop Eric
20 Olsen of the Brigham City 21st Ward. The Pledge of Allegiance followed.

21 **CONSENT AGENDA**

22 Mayor Bott introduced two consent items:

- 23 1. Approval of the January 15, 2026 City Council Meeting Minutes.
24 2. Appointment of Garl Waldron as Vice Chair of the Planning Commission and as a
25 member of the Joint Advisory Board.

26 Councilmember Troxell made a motion to approve the consent items as presented.
27 Councilmember Hipp seconded the motion. The vote was unanimous in favor.

28 **EMPLOYEE RECOGNITION**

29 Mayor Bott recognized Braxton Wood as the new Electronic Metering Technician in the Power
30 Department.

31 **PUBLIC COMMENT**

32 **Cathy Wood** - addressed the Council regarding Brigham City Cemetery matters. Ms. Wood
33 shared her background working for the City Cemetery, involvement with cemetery systems and
34 statewide cemetery associations, and expressed concerns related to cemetery planning,
35 preservation of lilac plantings, and long-term cemetery capacity. She encouraged consideration
36 of alternative approaches, including mausoleums, replanting lilacs, and forming a committee
37 with experienced cemetery professionals.

38

COUNCILMEMBER COMMENTS

39 **Councilmember Jeffries** – Encouraged attendance at the Boys and Girls Club Casino Night.

40 **Councilmember Smith** – Shared information regarding the Chamber of Commerce March
41 business summit and encouraged small business participation.

42

ACTION ITEMS

Consideration of Approval of Updates to the Power Standards Manual

44 This item was tabled until the next meeting on February 19, 2026.

45 **MOTION:** Councilmember Jensen made a motion to table the updates to the Power
46 Standards Manual. Councilmember Jeffries seconded the motion. The motion passed
47 unanimously.

Consideration of Resolution Declaring Certain Two-Way Radio Equipment Surplus and 49 Authorizing Donation to Box Elder County

50 Tom Kotter presented the item to the Council. He explained that, pursuant to the City's
51 procurement and surplus property policies, staff is requesting Council authorization to declare
52 certain two-way radio equipment surplus and donate the equipment to Box Elder County, a
53 governmental entity.

54 Mr. Kotter stated that the City has approximately 30 radios that are no longer in use. These
55 radios became surplus following the City's acquisition of new radios through a state grant
56 program. The radios are encrypted and compatible with law enforcement communications, which
57 would allow improved interoperability between City and County personnel.

58 Mr. Kotter further explained that donating the radios would allow Box Elder County to avoid an
59 estimated \$18,000 expenditure for similar equipment and would support coordinated
60 communication between County deputies and City officers.

61 In response to a Council question, Mr. Kotter stated that if the radios were sold rather than
62 donated, the approximate resale value would be about \$200 per unit, based on recent listings
63 observed on government surplus sales platforms. He noted that the total resale value would not
64 represent a significant financial return to the City.

65 **MOTION:** Councilmember Smith made a motion to approve the Resolution declaring
66 certain two-way radio equipment surplus and authorizing donation to Box Elder County
67 as presented. Councilmember Jeffries seconded the motion. The motion passed
68 unanimously.

69 At 6:15 PM Councilmember Jensen made a motion to proceed into closed session to
70 discuss the purchase/exchange/lease of real property and Character/professional
71 competence or physical/mental health of an individual. The motion was seconded by
72 Councilmember Hipp.

73 **Roll Call:**
74 Councilmember Hipp – Aye; Councilmember Jensen – Aye; Councilmember Smith –
75 Aye; Councilmember Troxell– Aye; Councilmember Jeffries – Aye

76 At 8:11 PM The council returned to opened and a motion was made by Councilmember Jeffries
77 to adjourn. Seconded by Councilmember Smith and approved unanimously.

78 *The undersigned duly appointed Recorder for Brigham City Corporation hereby certifies that the*
79 *foregoing is a true, accurate and complete record of the February 5, 2026 City Council Meeting.*

80
81 *Dated this 20th of February, 2026.*

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85 *Kristina Rasmussen, City Recorder*

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**CLOSED SESSION
OF THE BRIGHAM CITY COUNCIL
February 5, 2026
6:15 P.M.**

PRESENT:	D.J. Bott	Mayor
	Dave Hipp	Councilmember
	Dave Jeffries	Councilmember
	Matthew Jensen	Councilmember
	Ryan Smith	Councilmember
	Robin Troxell	Councilmember

ALSO PRESENT:	Derek Oyler	City Administrator
	Kristina Rasmussen	City Recorder
	Nicole Cottle	City Attorney
	Chad Reyes	Police Chief
	Brandon Thueson	Fire Chief
	Tyler Pugsley	Assistant City Administrator
	Tom Kotter	Economic Development Director

I, D.J. Bott, Mayor of Brigham City, do hereby affirm that one of the purposes for closing the meeting and adjourning to a Closed Session on Thursday, February 5, 2026, was to discuss the character, professional competence, or physical or mental health of an individual. Therefore, no recording of this portion of the closed session meeting was performed.

This statement is signed in accordance with Utah Code, Section 52-4-206(6)(a) of the Open and Public Meetings Law.

The closed session was recorded for remaining items and adjourned to an open meeting at 8:11 p.m.


D.J. Bott, Mayor

ATTEST:


Kristina Rasmussen, City Recorder



BRIGHAM CITY AGENDA ITEM FOR CITY COUNCIL MEETING

1. INITIATED BY: Tom Kotter

2. DEPARTMENT OR DIVISION: Administration

3. DATE INITIATED: February 11, 2026

4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):

Attached is a list of customers that have either been sent to the Collection Agency for nonpayment or have taken out bankruptcy.

I am requesting Council's permission to have these accounts removed from the City's computer system.

5. ESTIMATED TIME NEEDED: 5 minutes

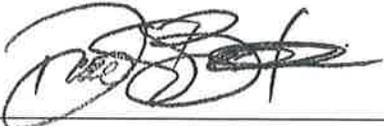
6. PROPOSED DATE FOR COUNCIL ACTION: February 19, 2026

7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

Date	Name	Signature	Attachment
02.11.2026	Tom Kotter		xx

9. MAYOR'S SIGNATURE:



ACCOUNTS TO BE WRITTEN OFF

Feb-26

Account Number	Final Balance
57042353	\$357.95
76006876	\$114.47
59037053	\$491.77
190006014	\$97.19
63041305	\$213.96
75049832	\$1,149.92
7051043	\$208.98
76008184	\$140.75
78020913	\$532.96
81055633	\$41.93
57118032	\$239.83
78022415	\$507.95
1017021	\$63.91
53042073	\$376.96
84120539	\$155.13
5114130	\$266.30
7076050	\$54.13

\$5,014.09

**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

1. INITIATED BY: Angie Johnsen

2. DEPARTMENT OR DIVISION: Human Resources

3. DATE INITIATED: February 10, 2026

4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
New Hires:

Fire Department
Aspyn Stevens - Firefighter/AMET
Carsen Maxfield - Firefighter/AMET

Recreation
Hallie Ogden - Recreation Coordinator

5. ESTIMATED TIME NEEDED: 3-5 minutes

6. PROPOSED DATE FOR COUNCIL ACTION: February 19, 2026

7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Attachment</u>
February 10, 2026	Angie Johnsen	 <small>eSigned via DocuSign.com Key: 323521e4-7128-4d25-b69a-e3d50f4e102c</small>	

9. MAYOR'S SIGNATURE:


eSigned via DocuSign.com
Key: 00516e0c-e803-440c-bd19-7708b4e1102c

**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

1. INITIATED BY: Lisa Scott

2. DEPARTMENT OR DIVISION: Public Power

3. DATE INITIATED: February 11, 2026

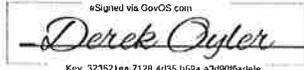
4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
Public Power Standards Manual approval

5. ESTIMATED TIME NEEDED: 10 mins.

6. PROPOSED DATE FOR COUNCIL ACTION: February 19, 2026

7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Attachment</u>
<u>February 11, 2026</u>	<u>Derek Oyler</u>	 <small>eSigned via GovOS.com Key: 323521en71284d35b69a a3d90f6ade1e</small>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

9. MAYOR'S SIGNATURE:


eSigned via GovOS.com
Key: 605b1e0c-e0b3-440c-bd99-27081b4ef02c



**CITY ATTORNEY
LEGAL DOCUMENT REVIEW**

Document Name: Public Power Standards Manual

Name of Person Requesting Legal Review: Tom Cooper

Date Sent: 2/3/2026 Review Date Deadline: 2/3/26

Reviewed by Attorney: [Signature] Date: 2/3/26

Reviewed and acceptable as submitted

See suggested changes:

Returned to: Tom Cooper Date: 2/3/26

Accepted as Received

Submitted to Mayor's Office By: _____ Date: _____

Reviewed by Mayor's Office: _____

[Signature]
Derek Oyler, City Administrator

BRIGHAM CITY PUBLIC POWER
ELECTRICAL REQUIREMENTS
AND
STANDARDS MANUAL



FEBRUARY 2026

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GENERAL

SECTION 1 GENERAL

1.01 Ordinances Govern

Nothing in this document shall be construed to be contrary to Brigham City Ordinances. Should a conflict exist between this document and the Ordinances, the Ordinances shall govern.

1.02 Conformance with Federal, State, and Local Laws

Nothing in this document shall relieve the Developer, Engineer, or Contractor from abiding by any and all Federal, State and local laws

1.03 Definitions

- A. APWA. The American Public Works Association
- B. City. The City of Brigham City, Utah.
- C. County. Box Elder County, Utah
- D. Construction Plans. Construction plans include drawings showing all required improvements for a development showing their location, size, grade, and elevations.
- E. Customer. A person or company receiving service from any City utilities
- F. Contractor. A person or company hired by the city or a Developer to perform construction in or for the city, having appropriate state licenses to perform said work.
- G. Council or City Council. The governing body of the city.
- H. Development Review Team. The Review Team (DRT) of Brigham City.
- I. Developer. Person, persons, partnership or corporations developing residential, commercial or industrial property.
- J. Improvements. Includes roads, streets, curbs, gutters, sidewalks, grading, landscaping, water and sanitary sewer systems, irrigation systems, drainage systems, power systems, fences, public facilities, trees or other requirements by this chapter or by the city.
- K. Land Surveyor. A person licensed with the State of Utah to practice as a licensed land surveyor.
- L. Lot. A parcel or tract of land within a subdivision.
- M. MUE. A Municipal Utility Easement acquired by the city for city utilities.
- N. MUTCD. Manual on Uniform Traffic Control Devices.
- O. NEC. The National Electrical Code is a United States standard for the safe installation of electrical wiring and equipment.
- P. NEMA. National Electrical Manufacturers' Association
- Q. NESC. The National Electrical Safety Code
- R. Net billing. A debit and credit metering process in an account.
- S. Offsite Facilities. Facilities outside of the boundaries of the subdivision or development.

- T. Onsite Facilities. Facilities installed within or on the perimeter of the subdivision or development site.
- U. OSHA. The Occupational Safety and Health Administration.
- V. Power Department. The division of City government responsible for the city owned Electric utilities.
- W. Public Power Director. The Public Power Director for Brigham City or authorized representative.
- X. Public Utility Easements. The easements required to place public utilities across any privately owned property.
- Y. ROW. Right of Way

1.04 Easements

Developers shall provide municipal utility easements (MUEs) for all utility extensions through private property and for 10 feet along public rights-of-way. Developments other than single family home developments shall provide 10-foot MUEs along all property lines. If setbacks are less than 10 feet, then MUEs shall be the extent of the setback. Single family lots shall have 10-foot MUEs along public rights-of-way or streets and not necessarily along the other property lines unless a utility is planned there. Developer shall not be allowed to nor shall they include any type of protection easement intended to provide exclusivity to their development.

1.05 Traffic Control

A traffic control plan shall be submitted to the City prior to construction in or along public streets. All traffic control shall comply with APWA 01 55 26 (Traffic Control) and the MUTCD.

1.06 Survey

The alignment of the side property lines for each lot in a subdivision shall be marked in the top back of curb with a lot line witness marker that meets the requirements and specifications of APWA 31 05 10 (Boundary Markers and Survey Monuments). Developers shall provide survey benchmarks and monuments as required by the Public Power Director.

1.07 Temporary Controls

Temporary controls such as noise, dust, mud, surface water, ground water, pollution and erosion controls shall be made. Controls shall meet the requirements and specifications of APWA 01 57 00 (Temporary Controls). Pumping groundwater into the sanitary sewer system is prohibited. Ground water and/or surface water must be kept on the construction site. If either leave the site by any manner, additional temporary controls must be implemented to protect the storm water drain system. A Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) may also be required. See Brigham City's SWPPP Requirements on the public website for more information.

SECTION 2 IMPROVEMENT REQUIREMENTS

2.01 General

This policy defines the general requirements for improvements to be built by the Developer, sub-divider, owner, or Contractor for all types of construction (including residential, commercial, industrial, institutional, governmental and professional office). All improvements which are in areas that are or will become public rights-of-way and/or easements, or that will be under the responsibility of a homeowner's association, shall meet the requirements of these specifications.

2.02 Variations, Substitutions, Exceptions and Changes

Any variation, substitution or exception from the standards in this policy must be authorized in writing by the Public Power Director. Product options and substitutions must meet the requirements of APWA 01 25 00 (Product Options and Substitutions). Any item of construction not covered in these standards must have plans and specifications approved by the Public Power Director. Requests for changes to the Construction Standards shall be made in writing to the Public Power Director. These requests will be reviewed during the revision process conducted in conjunction with the APWA, NESC and NEC revisions. There is no appeal from the decision of the Public Power Director.

2.03 Protection of Existing Improvements

The Contractor shall be responsible for the protection of any existing improvements on public or private property at the start of work or placed there during the progress of the work. Existing improvements shall include but are not limited to permanent surfacing, curbs, ditches, driveways, culverts, fences, walls and landscaping. Any surface improvements damaged because of construction shall be restored or replaced to an equal or better condition than before. This shall be accomplished in a timely manner.

2.04 New Materials

Only new materials may be used during construction unless otherwise authorized by the Public Power Director.

2.05 City Furnished Products

If the City furnishes any products the Contractor shall conform to requirements and specifications of APWA 01 64 00 (Owner-furnished Products), NESC and NEC.

2.06 Product Delivery and Handling

The Contractor shall conform to requirements and specifications of APWA 01 65 00 (Product Delivery and Handling), NESC and NEC.

2.07 Product Storage and Protection

The Contractor shall conform to requirements and specifications of APWA 01 66 00 (Product Storage and Protection), NESC and NEC.

2.08 Other Specifications and Standards

City standards and ordinances shall supersede all other Standards whenever they conflict.

SECTION 3 SPECIALIZED ENGINEERING

3.01 General

Any specialized engineering beyond the expertise of city staff such as, but not limited to, geotechnical, traffic, environmental, hillside, floodplain, bank stabilization and erosion control will require the review of qualified consultants. All review costs shall be paid by the property owner/developer.

Locate utilities within areas of explorations by notifying the appropriate local one-call state utility locate service (Blue Stakes). Independent private utility locates may be required for utilities not identified by the local one-call service. Complete subsurface explorations in accordance with the minimum requirements outlined in this section.

SECTION 4 CONSTRUCTION PLANS

4.01 General

The following instructions are for the purpose of standardizing the preparation of construction plans to obtain uniformity in appearance, clarity, size, and style. Plans and designs shall meet the standards defined in the specifications and drawings hereinafter outlined. All drawings and/or prints shall be clear and legible and conform to good engineering and drafting room practice.

Include the following in construction plans for all developments:

1. A copy of the proposed final plat or site plan.
2. A plan view of the entire project showing all utilities, roads, and appurtenances.
3. Plan and profiles of all storm, land and groundwater drains, sanitary sewer, curb, gutter, and irrigation.
4. Detail drawings of street cross sections according to the standard drawings and other detail drawings only for items not found in the city standard drawings. Detail drawings shall be to scale and completely dimensioned and described. All items shall be designed in accordance with minimum requirements established by the Public Works Standards.
5. Complete plans for all off-site work to be done in conjunction with the project.
6. A stamp and signature of a Civil Engineer licensed in the state of Utah on each plan sheet, detail drawing, and design sheet.

4.02 Electric Plans

Construction plans must include the location of all existing poles, transformers, secondary junction boxes, sectionalizers, and overhead electrical wire. After plans

are updated to meet the approval of the DRT, the Developer shall submit a computer aided design (CAD) file of the plans to the Power Department. CAD file must be in a .dwg or .dxf format. Thereafter the Power Department will design and make available plans for the proposed electric lines for the development. City electrical utility design shall supersede any design provided by developer.

SECTION 5 POWER UTILITY IMPROVEMENTS

5.01 General

It shall be the responsibility of the Developer to connect to existing utilities or improvements wherever they are located and extend those improvements to and through the development. This requirement includes hooking up existing homes within the development to all utilities. Existing buildings impacted by development which are currently fed overhead shall be required to be rerouted and metering directly connected to new underground electrical grid at developer's expense. Workmanship and details of construction shall be in accordance with the Public Power Standards and/or other codes adopted by the City. All work shall be done under the supervision of the Public Power Director.

5.02 Electric

Electrical lines shall be underground except when the Public Power Director feels that such underground lines are not in the best interest of the City.

SECTION 6 INSPECTION AND TESTING

6.01 Quality Control

The following work shall be subject to the inspection and testing requirements of this chapter:

1. Work on existing or proposed City property.
2. Work on property that will be owned by a property owners association.
3. Work on existing or proposed streets, easements, or rights-of-way.
4. Work on existing or proposed City utilities.

The Contractor is responsible for performing all inspection and testing required to verify installed materials meet these standards and must verify the materials are accepted by the Public Power Director. The Contractor must also ensure that any additional inspection and testing required by the city or a testing company is performed and accepted by the City.

6.02 Inspection and Testing Notification

The City may contract with a private company to conduct any inspections or testing specified to be performed by the City. All inspections and tests must be scheduled with the City or company contracted by the City a minimum of 1 full business day before needed. Requests for inspection on work requiring continuous inspection shall be made 3 full business days prior to commencing the work.

6.03 Work Without Required Inspection and Testing

Failure to provide proper notification or to perform work without inspection will result in rejected material. Rejected material will be subject to additional verification requirements including, but not limited to, post-placement sampling and laboratory testing for material conformance, in-place testing for concrete strength and air content. All post-placement testing for uninspected work will be at no additional cost to the city.

Additionally, any work performed without required inspection or testing will give the city the option to hold the bond covering that portion of the improvements in violation, or require the removal and replacement of the uninspected work. The City shall have the option of retaining part or all the bond for up to 10 years after installation of improvements constructed without required inspection or testing. The Public Power Director may also accept the work at a reduced price.

6.04 Inspection and Testing Fees

Connection fees required shall be paid and permits required shall be obtained prior to the preconstruction meeting.

6.05 Weekly Progress Meetings

The City may require, at their discretion, construction projects in the City to have a weekly progress meeting at the Public Power office. The Public Power Director, City inspectors, the Contractor, and subcontractors shall be in attendance.

6.06 As-Built Survey

The Contractor shall notify the City to survey all underground utilities either installed or uncovered during construction. Contractor shall give the City 24-hour notice to survey utilities.

6.07 Earthwork: Compaction and Moisture Content Tests (Refer to Sheet E10)

The city will test all sub-grade and fill material for compaction and moisture content. Test locations shall be determined by the city.

6.08 Inspections

6.08.1 Conduit Inspections

The Public Power Director must inspect all conduit before backfilled.

6.08.2 Service Stub Inspections

The Public Power Director must inspect all service stubs before backfilled.

6.08.3 Street Light Base Inspections

The Public Power Director must inspect all street light bases prior to concrete placement and before they are backfilled around.

6.08.4 Bedding Inspections

The Public Power Director must inspect the bedding in all electrical trenches.

6.08.5 Final Electrical Inspection

Once all electrical work for a development is completed to City standards, a final electrical inspection must be done by the Public Power Director prior to permanent power installation.

SECTION 7 PORTLAND CEMENT CONCRETE WORK (Refer to Sheets E5-E9, E12-E14 and E16)

7.01 General

All materials and processes involved in concrete work shall be subject to inspection and testing as detailed in general compliance with ASTM E105-54T. For additional information refer to the Public Works Standards manual.

SECTION 8 EARTHWORK AND TRENCHES (Refer to Sheets E4 and E5)

8.01 Excavation

8.01.1 General

Excavation shall meet the requirements and specifications of APWA 31 23 16 (Excavation) unless otherwise indicated.

8.01.2 Safety

All construction shall be done in accordance with the provisions of the Utah State Industrial Commission, OSHA regulations and APWA 31 23 16 (Excavation). No trenches deeper than 4 feet shall be left open at any time unless construction is in process. When construction is in process only 200 feet of trench may be open at one time and must be completely backfilled before proceeding. Any variation will require the approval of the Public Power Director. No trenches shall be left open at any time unless guarded with adequate barricades, warning lamps and signs.

Any injury or damage resulting from lack of adequate bracing and shoring shall be the responsibility of the Developer/Contractor and the Developer/Contractor shall, at his/her own expense, affect all necessary repairs or reconstruction resulting from such damage. No inspections will be done in unsafe trenches and will be the cause for immediate shutdown of the project until the trench is deemed to be safe by the Public Power Director.

8.02 Subsurface Pipe Installation

8.02.1 General

Pipes, conduits or casings, 4 inches in diameter or less, may be bored, jacked, augured or jetted under sidewalk, curb, gutter if authorized by the

Public Power Director. The resulting hole diameter shall not exceed 1 inch plus the outside diameter of the pipe or sleeve installed.

8.02.2 Boring or Jacking

Boring or jacking work shall meet the requirements and specifications of APWA 33 05 23 (Trenchless Utility Installation).

8.02.3 Tunneling

Where sidewalk, curb, and gutter exist, excavation may be made by tunneling provided the following requirements are met:

1. Excavation shall be vertical and as near to the curb or sidewalk as possible.
2. The length of the tunnel shall not exceed the width of the sidewalk, curb, and gutter.
3. Where a separate sidewalk and curb exist, an excavation shall be made between the sidewalk and the curb.
4. At least three feet of undisturbed earth shall be left under the sidewalk or curb; and
5. Where the sidewalk has been tunneled, the hole shall be filled from each end with flowable fill. Where the excavation cannot meet these requirements, a section of sidewalk, curb, or gutter, from joint to joint shall be removed and replaced.

8.03 Fill Material

8.03.1 General

All fill material shall be placed on sub-grade prepared according to the specifications of this chapter. All fill material shall be compacted according to the specifications of this chapter.

All fill material under and within a foot of electrical boxes shall be untreated base course. In other areas native excavated material may normally be used unless such material cannot be properly compacted according to specifications in this chapter. All fill material, including native fill material, must be free from debris, organic material, and rocks larger than 6 inches in diameter.

8.03.2 Bedding Material

Use sand as a bedding material for electrical conduit. Bedding sand must compact sufficiently to support the pipe and shall meet the following gradation:

Sand Gradation

Sieve/Screen Size	% Passing
No. 4	100
No. 200	10 to 20

8.04 Installation and Compaction of Earth Materials

8.04.1 General

The installation of all fill material shall meet the requirements and specifications of APWA 33 05 20 (Backfilling Trenches), APWA 31 23 23 (Backfilling Structures), APWA 32 05 10 (Backfilling Roadways) and APWA 31 23 26 (Compaction). Fill material outside of pavement areas, as defined by APWA 32 05 10 (Backfilling Roadways), and more than 24 inches from any utility box shall be compacted to not less than 90% of the maximum dry density.

8.04.2 Backfill in Trenches

Backfill shall be carefully placed around and over pipes and shall not be permitted to fall directly on a pipe from such a height or in such a manner as to cause damage.

8.04.3 Conduit Zone (Refer to Sheet E11)

The conduit zone includes the full width of trench from 3 inches below the conduit to 12 inches above the conduit for all conduit. Electrical conduit may be placed to 3" off the sides of trenches. Trenches shall be wide enough to compact fill material according to the specifications in this chapter.

ELECTRICAL SERVICE

SECTION 9 GENERAL

9.01 Standards and Specifications

All electrical work shall be installed in accordance with these development standards, the most current edition of the National Electrical Code (NEC) and the National Electric Safety Code (NESC), and applicable State, County and OSHA codes and ordinances.

These specifications cover the installation of the electrical system. See Section 2 for improvement and design requirements, Section 6 for inspection and testing requirements, and Section 8 for earthwork and trench requirements. See standard drawings related to electrical system.

9.02 Construction Costs

All costs to install or relocate facilities to provide electrical service shall be paid by the Customer.

If a temporary electrical service is needed the contractor/developer is responsible for providing and installing the required conduit, grounding, transformer pad, and metering equipment as directed by the City. There will be a rental fee for the transformer needed that will be determined based off of the length of time the unit is needed. Brigham City Power will provide and install all primary wiring and transformer at the developers/contractor's expense. Any fees paid to the City for these purposes will not be refundable or be applied to any other electrical fees.

9.03 Attaching to Existing City Facilities Prohibited

Customer shall install no wiring or attachments on poles or other equipment of the City unless specifically authorized, in writing, by the City.

9.04 Unusual Service Extensions

Special and unusual service extension requirements for equipment or structures are treated as separate items and are not included in these standards.

9.05 Permits and Inspections

Service will not be established until all necessary permits have been obtained and not until Customer's wiring installation has been inspected and approved by the Public Power Director. Any variations of this must be preapproved by the Public Power Director. The City reserves the right to inspect wiring and to refuse service to any installation that is, in the opinion of the Public Power Director, unsafe or if the operation of same may be detrimental to the service furnished to other Customers or the City. All conduits shall be inspected prior to backfilling. All concrete street light bases, concrete transformer pads and other required concrete shall be inspected prior to pouring concrete. A compaction test shall be taken by the City or

an approved engineering firm prior to setting any electrical enclosures, cabinets, or other structures. In addition, a test shall be taken on the concrete used for electrical pole bases, and pads.

9.06 Access to Premises

Any properly identified representative of the City shall, at all hours, have free access to and from the premises of the Customer for the purpose of inspecting Customer's installations and electric equipment and for the purpose of reading, repairing, testing, or removing the City's meter or its other property. When, as declared by the Public Power Director, emergency conditions exist with respect to City's service, City's representative shall have immediate and free access to Customer's premises.

9.07 Electrical Plan Drawings

Brigham City Public Power shall design the electrical system and provide approved electrical plan drawings. Requests for any changes to these drawings can be made by contacting Brigham City Public Power with a proposal. Approved electrical drawings must be initialed by an approved electrical division supervisor and signed by Brigham City Public Power to be valid for construction of the electrical system improvements. Photocopies of approved drawings will not be considered valid. Revisions, if needed, must also include the date the revision was approved.

9.08 Electrical Box Clearance

All electrical boxes shall have 12 feet clearance to the front and 3 feet clearance to the back and on either side. Secondary pedestals shall only require 3 feet of clearance on all sides. Switchgears shall have 12 feet clearance in front of the doors and 3 feet of clearance on the sides. Meters, metering cabinets & enclosures, service disconnect cabinets & enclosures, & CT cabinets, shall have a minimum of 8 feet of clearance in front of said cabinets & enclosures. All electrical sectionalizers, transformers, switchgear, etc. shall have a clear and level working space around them. The area shall be backfilled and leveled a minimum of 12 feet in all directions from the respective electrical device.

Meters, meter cabinets, services and related electrical cabinets shall not be enclosed by carports, sheds, out buildings, additions or remodels or other such buildings. Brigham City Public Power shall have ready access to such equipment for safety & maintenance. The City reserves the right to disconnect the City electrical service to meter bases, services, etc. if in the opinion of the City the service is inaccessible or unsafe until the service & safety issues are resolved to the City's satisfaction. This may include, but is not limited to relocating the service, or upgrading the service to meet current City codes.

9.09 Overhead Electrical Power Line Clearances (Refer to Sheet E21)

As set forth in Section 54-8c-1 through Section 54-8c-7 of the Utah Code, no person or thing may be brought within 15 feet of any high voltage overhead power line unless:

The responsible party has notified Brigham City Public Power of the intended activity; and

The responsible party and Brigham City Public Power have completed mutually satisfactory safety precautions for the activity; and

The responsible party has made prior arrangements to pay Brigham City Public Power for the mutually satisfactory safety precautions (if applicable).

No building, dwelling, sign, bridge, antennae, or structure shall be constructed, or placed underneath any overhead electrical power lines, and shall meet current NESC/NEC and City clearance requirements, both vertically and horizontally, from said power lines. Variances shall only be allowed at the City’s discretion.

If existing buildings or structures exist under power lines, those same buildings or structures shall not be modified, remodeled or constructed to further encroach upon the clearances from said power lines.

In general, for overhead high voltage open supply conductors operating from 750 volts to 22,000 volts nominal, the space extending from grade level to the height of the conductor vertically and 15 feet horizontally from the further most outside conductor from the pole shall be kept clear from the power lines. Furthermore, for overhead high voltage open supply conductors operating from 22,001 volts to 138,000 volts nominal, the space extending from grade level to the height of the conductor vertically, and 30 feet horizontally from the further most outside conductor from the pole shall be kept clear from the power lines. Open water, swimming pools, combustible materials or hazardous locations may have additional clearances required.

Additional clearances may be required depending on the installation or application.

SECTION 10 VOLTAGE AND ENERGY REGULATION (Refer to E19)

10.01 Available Voltages

Standard Electrical Services

Residential	Commercial and Industrial
1 Phase	3 Phase
3 Wire	4 Wire
120/240 Volts	208Y/120 or 480Y/277 Volts

Developers must contact the Public Power Director regarding the availability of other service options.

The Public Power Director reserves the right to deny a customer 3-phase service if the Public Power Director determines that single-phase service will adequately supply Customer's load requirements. The Public Power Director reserves the right to deny a customer single phase service if the Public Power Director determines 3-phase service is in the best interest and beneficial to the City's electrical system.

10.02 Phase Service

3 phase service may, at the City's option, be furnished where 3 phase facilities of adequate capacity are already installed immediately adjacent to the point where service is to be delivered to Customer, or where, as determined by the City, it is economically feasible to extend such 3 phase facilities.

The City reserves the right to refuse to extend or install 3 phase facilities to serve motors individually rated at 20 HP or less and to furnish only single-phase service for such motors. In such an event, Customer may elect to install single- phase to 3 phase conversion equipment to operate 3 phase motors.

10.03 Power Factor Correction

The City reserves the right to require the Customer to install power factor corrective equipment. This equipment shall maintain the power factor on all of Customers electric power meters to not less than 95% lagging at all times.

10.04 Load Control

The Public Power Director reserves the right to require developers to install equipment to limit load and reduce voltage fluctuations.

10.05 Voltage Control

Where Customer installs power factor corrective equipment, the City reserves the right to require Customer to install controls and equipment to prevent voltage, frequency, and/or harmonics problems that may be detrimental to other Customers or the City.

10.06 Fluctuating Load Limitations

Where large fluctuating single-phase loads, such as spot welders, are involved, the City reserves the right to require such loads to be supplied by means of a 3 phase to a single-phase converter or other similar equipment. All conversion equipment shall be installed, owned, operated and maintained by the Customer.

In the event a separate service or transformer installation or additional transformer capacity is required to adequately serve fluctuating loads (such as X-ray equipment, welders, etc.). Such equipment costs and installations shall be the responsibility of the Customer.

10.07 Penalties

If, such voltage control equipment is not installed by Customer, Customer may be required to pay a power factor penalty and/or all electric service shall be subject to

disconnection as provided by Title 50 of the Brigham City Public Power Municipal Code. Customer's wiring used to supply such fluctuating loads shall be installed in a continuous run of rigid conduit and cable as approved by the City.

SECTION 11 MATERIALS

11.01 Materials

Only electrical grade materials and apparatus shall be used. The materials and apparatus shall be UL Listed and designed for their purpose.

11.02 Conduit

All conduits shall be electrical grade conduit. Conduit shall be Schedule 40 PVC unless otherwise specified by the Public Power Director. Electrical grade Schedule 40 fiberglass and/or PVC conduit shall be used under collector and arterial streets and for all sweeps. Fiberglass conduits shall not be used for riser poles. All conduits extending out of the ground outside of an enclosure shall be rigid metal and the elbows attaching to those risers shall be either rigid metal or fiberglass. All conduits entering any cabinet, enclosure, vault, or ground sleeve shall have end bells attached to the ends of conduits to protect wire from damage. All buried metal conduit shall be coated with anti-corrosion tape. Tape shall be a minimum of 2 inches wide. Tape shall extend 6 inches above finished grade.

11.03 Enclosures (Refer to Sheets E5-E9 and Sheets E12-E14)

All enclosures, including primary and secondary junction boxes, shall be level. Opening mechanisms and locking devices on all transformer equipment shall be 4 to 6 inches above final grade. Opening mechanisms and locking devices on all primary sectionalizers, switchgear and secondary junction boxes shall be 10 inches above final grade. Only approved enclosures, pads, and vaults shall be used.

11.04 Soils & Compaction (Refer to Sheet E10)

All soils under enclosures shall be approved road base and be compacted to 95% of dry density. The compaction area must extend at least 1 foot past the enclosure in all directions and be a minimum of 1 foot in depth under the enclosure. A compaction test shall be required before any enclosure, box, sleeve, or pad is set into place. The compaction test shall be taken by the City or by the City's approved engineering firm. If ground sleeves or pads settle, Developer shall be required to re-level to the above specifications. If primary enclosures or transformers settle after being energized, the City shall re-level the equipment at the Developer's expense.

SECTION 12 INSTALLATION (Refer to Sheets E5 – E9 and Sheets E12-E14)

12.01 General

All electrical facilities shall be installed under the supervision of a licensed electrical contractor or journeyman lineman. **A certified journeyman electrician or lineman shall be on site during all conduit installation, cable pulling and**

connecting of electrical wiring. All electrical installation & equipment shall be installed in a neat and workmanlike manner.

Curb & gutter shall be installed before excavation of electrical trenches. The curb should have property corners pinned in the top of the curb by approved methods. The curb will give reference for proper conduit depths & locations, and proper placement of electrical and communications boxes. Developer required to notify communication company and give up to 1 week to install communication lines. Open trench will be backfilled up to communication lift during waiting period.

Contractor shall construct all electrical facilities in a development except for the following which shall be completed by the Utility:

1. Pulling high voltage underground cable.
2. Installing high voltage cable terminations.
3. Setting transformers and switch gears (contractor shall furnish & install sectionalizers).
4. Secondary connections shall be connected in transformers (exception: contractors shall connect secondary connectors in 3 phase transformers);
5. All overhead facilities, including extension of risers as shown in the standard drawings. (Refer to Sheet E20)

12.02 Underground Lines

All new facilities shall be constructed underground unless otherwise authorized by the City. Existing buildings & facilities that have a change of use, or extensive remodeling, may, at the Public Power Director's discretion, be required to install underground power lines. No overhead power will be allowed unless required or approved by the Utility.

12.03 Conduit Depths

High voltage (12.47kV) primary conduits shall always be installed below secondary (600 volts or less) conduits & communications conduits if installed in a joint trench application. No primary high voltage conduits shall be installed at less than 4 feet in depth to top of conduits unless otherwise approved.

In general, the following table of depths shall be used for electrical conduit: (Note: depths are to the top of conduits)

Table 12.03.A
Electrical Conduit Depths

Conduit Size	Depth to Top of Conduit
1" Street Light	2 Feet
2" Secondary	2 Feet
3" & 4" Secondary	2 Feet
4" Primary	4 Feet
6" Primary	4 Feet*

*Depths may increase depending upon application.

12.04 Pull Strings

All primary conduits shall have 1,350 lb. mule tape in the conduit securely tied off in each pad or enclosure.

12.05 Identification Tape and Stub Markers

All conduits shall have a caution tape buried 12 inches below grade directly above conduit. Tape shall meet the requirements and specifications of APWA 23 20. The end of each stubbed conduit, including service laterals, shall be marked to the surface according to the standard drawings.

12.06 Underground Metal Conduit

If underground metal conduit were allowed, all buried metal conduit shall be coated with anti-corrosion protective tape. Tape shall extend 6 inches above finished grade.

12.07 Road Crossings

Conduit shall be schedule 80 gray PVC or rigid fiberglass conduit. Shadow conduit shall be installed at road crossings at Public Power Director's discretion.

12.08 Berms, Slopes, and Hillside Conditions

For installation instructions around berms, slopes, and hillsides contact Brigham City Public Power.

12.09 Labels

A label shall be securely taped to the end of each conduit run where it emerges into any cabinet or enclosure. The label shall indicate whether the conduit run is primary or secondary and the direction & footage of conduit.

SECTION 13 SYSTEM REQUIREMENTS

13.01 Additional Capacity Requirements

In the event a Customer makes application for additional capacity, subject to provisions of the applicable rate schedule, Customer shall install the necessary transformer capacity, service wires and other equipment required to adequately serve Customer's requirements. Customer will be required to submit a Brigham City Load Sheet to be completed by electrical engineer, architect, or master electrician. Report shall include all existing and future load.

Customer shall be required to participate in system load study to ensure needed capacity is available through City's transmission system. Customer shall be responsible for all costs associated with said study.

All applications for service involving the furnishing of additional capacity or equipment by the City may be required of the Customer. The application shall state that any service entrance wiring and main switches required for the utilization of such additional capacity to be furnished by Customer, shall be considered as

permanent fixtures belonging to the property being served and property except for replacement or enlargement if necessary.

13.02 Substations

Substation may be required of Customer. The City reserves the right, where unusual substation capacity or voltage is involved, to require the Customer to install the necessary complete substation as provided for in City's rate schedule.

Where the Customer furnished the necessary complete substation equipment to take service at primary service voltage, such equipment shall be owned and maintained by the Customer and shall include the necessary transformers, structure, controls, and protective equipment, and shall be of such quality and construction as meets City approval. Customer shall supply main transmission breaker to City for ownership and operation providing interconnection to transmission system. Operation of said breaker will be controlled by the city.

SECTION 14 SERVICES

14.01 Point of Service

The Public Power Director determines the point of delivery for all developments. Public Power Director reserves the right to meter service at either primary or secondary voltage. For large or unusual loads, Public Power Director reserves the right to require Customer to take service at primary voltage and to require Customer to furnish the necessary complete substation equipment. The Public Power Director will decide if multiple buildings, business and residential, or portions of buildings will be metered from one or from multiple metering points. Each building or structure served shall be supplied by only one service. Multiple services are only allowed at the Public Power Director's discretion.

14.02 Service Entrance Requirements

The service entrance shall be defined as the facilities that consist of approved service entrance conduit and cable enclosing conductors and apparatuses. Said conductors shall extend from the point of contact with the City's secondary point of service and thence to and include Customer's service entrance safety switch or disconnection means.

Customer shall install all conduit and wire from the building to the pole or transformer according to the City standards.

1. Service Entrance Safety Switch or Main Disconnect for new construction and remodel. A residential service safety switch shall be an exterior service combination meter base and main disconnect device. For commercial & industrial installations a service safety switch shall be an exterior service main disconnect device or devices, which will always remain accessible. This device shall be a main breaker, but minimum requirement shall be a safety switch, which will disconnect all service power from the premise

wiring to the entire facility. The location of the main disconnecting device shall be approved by the City.

2. Identification. (Current NEC) Where a building or structure is supplied by more than one service, or any combination of branch circuits, feeders, and services, a permanent plaque or directory shall be installed at each service disconnect location denoting all other services, feeders, and branch circuits supplying that building or structure and the area served by each.
3. Service Entrance Conductors. All service entrance conductors and any conduit enclosure shall be continuous, unbroken, and completely exposed for external inspection throughout their entire length, extending from said point of contact with City's service wires to the meter socket (or meter cabinet if installed) and thence to Customer's service entry safety switch or main disconnecting means. Service entrance conductor type & size shall meet current NEC, NESC, and City Standards. Brigham City Public Power reserves the right to make an allowance as needed.

Underground service lateral conductors from the City's Secondary service point up to the line side of the main disconnecting means shall be installed, maintained, and owned by the Customer. The City assumes no liability for replacement of secondary service lateral conductors.

14.03 Underground Residential Service Requirements (Refer to Sheets E2 and E15)

14.03.1 Conductor,* conduit sizes, & conduit depths

Refer to following table:

Service Size	Service Conductor Size (AWG)	Conduit Size	Conduit Depth
100 amp	2/0 alum.	3"	2'
125 amp	2/0 alum.	3"	2'
150 amp	2/0 alum.	3"	2'
200 amp	2/0 alum.	3"	2'
201-400 amps	Contact Brigham City Public Power	Contact Brigham City Public Power	Contact Brigham City Public Power

*Table 14.03.1.A Note: The current National Electric Code may supersede these conductor sizes based upon service size. Refer to current NEC for service conductor sizes for other types of conductors & installations.

14.03.2 Conduit (Refer to Sheet E11)

Only continuous factory lengths of conduit shall be used. Conduit may be cut or spliced; however the couplers & bends shall not exceed a 360-degree pull on the overall length of the conduit run. Conduit shall be installed in a

neat and workman-line manner. All service lateral conduits shall be inspected prior to backfilling.

14.03.3 Materials

Only electrical grade materials shall be used. Rigid metal conduits (RMC), schedule 40 fiberglass and schedule 40 PVC shall be used for any elbows or bends 45 degrees or greater. RMC shall be coated with an anti-corrosion tape below grade and tape shall extend 6 inches above finished grade. RMC shall be used for all above grade service entrance conduits. Customer shall provide and install service wire from house to junction box, transformer or pole according to City standard drawings. Service wire type shall be approved by Brigham City Public Power.

14.03.4 Trenching

Service lateral trenches shall be 24 inches in depth. Trenches shall be as straight as possible from the secondary service point to the Customer disconnect or meter base. The bottom of the trench shall be as level as possible and free from rocks & debris. Backfill placed directly on conduits shall be free from large rocks.

14.03.5 Service Entrance Conduits Support and Attachments

Service Entrance conduits shall be securely attached to the foundation of house or building by means of unistrut, concrete anchors, and unistrut type clamps. Unistrut shall be securely attached to foundation by a minimum 3/8 inches x 3 inches concrete anchors. Unistrut shall typically be 24 inches. Service entrance conduits shall be one continuous, unbroken conduit from the elbow to the point of attachment at the meter base hub.

14.03.6 Location(s)

Note: Refer to 15.02 Metering for additional requirements. Meter/main disconnect shall be located within the front 6 feet of the side of a residential dwelling. Meter/main disconnect shall always be accessible. Meter/main disconnect shall be kept a minimum of 36 inches from any natural gas meters, window wells, windows, doors, stairs and any material deemed to be combustible or hazardous. For remodels, service upgrades, building additions or other instances or applications affecting the existing electrical service, CT cabinet, meter base, meter and disconnect contact the Brigham City Public Power for requirements. Brigham City Public Power will require a meter main disconnect to be installed anytime electrical upgrade work is performed on the residence. The service, meter, meter base, or disconnect may be required to be relocated to meet current Standards and Codes. Meter/main disconnect shall meet all applicable NEC and NESC codes. The Public Power Director reserves the right to accept or reject any locations of meter base/main disconnects.

14.03.7 Temporary Underground Service (Refer to Sheet E18)

For temporary service furnished to individual small single-phase loads, such as house trailers, small construction projects (such as house and small buildings, portable tools, etc.) City will install a standard temporary service drop, at Customer's expense. City's General Service Rate shall apply.

Where the temporary service installation requires additional facilities more than the previously mentioned standard service drop (such as an extension of the City's primary line), such installation will be at the Customers' expense.

14.04 Overhead Residential Service Requirements (Refer to Sheet E3)

14.04.1 General

Overhead services shall also include mast knob and service grips. Wiring shall meet load and installation requirements as indicated in the NESC/NEC.

14.04.2 Service Drop Support and Attachments

For one story buildings, or where conditions will not permit proper ground clearance to be maintained by City's service wires, Customer shall install, at Customer's expense, suitable conduit or service entrance mast pipe or other structure or support that will properly support the City's service drop conductors and to maintain the minimum ground clearance as required by the NESC/NEC. If clearances cannot be met, the service may be required to be relocated or otherwise rerouted underground.

14.04.3 Service Entrance Weather head Clearance

The service entrance weather head shall be located to meet or to exceed NESC/NEC clearance from readily accessible windows, doors, or porches. The weather head must also be located so that when the service drop conductors are attached to the building structure or other service drop support, adequate clearance will be maintained away from telephone or other wires, windows, awnings, drainpipes, chimneys, or other obstructions.

14.04.4 Service Entrance Mast Pipe

This installation shall be made by Customer, at his/her expense, and shall conform to City's specifications. The service entrance mast pipe shall be of electrical grade galvanized rigid steel of not less than 2 inches inside diameter and shall be attached to the wall of the building by means of an adequate number of approved fastening devices. All service conduits shall be 2 inches in diameter, or larger.

The mast pipe and/or conduit shall be continuous, extending from the service entrance weather head located at the top of the mast pipe to Customer's meter socket base.

The service entrance mast pipe shall extend above the roof surface (through weatherproof roof flashing) so that the point of attachment of City's service wires to the mast pipe will be not less than 18 inches above said roof line, and not to exceed 36 inches without guy support to structural frame plus such additional height as is necessary so that the point of attachment of City's service wires will maintain minimum ground clearance, specified in the NESC/NEC.

14.04.5 Service Drop Attachments to Buildings

The Customer will furnish and the city will install the necessary attachment brackets and apparatuses to attach City's service wires to Customer's service drop termination facilities.

The City further reserves the right to require that the installation of the necessary mast pipe or equivalent facilities required supporting city's service wires, be made by Customer during the course of building construction.

Where the exterior of buildings is finished with brick facing, concrete, plastered metal lathe, sheet iron, stucco, tile or similar material, suitable facilities of adequate strength to hold City's wires and attachments, shall be installed by Customer at Customer's expense.

14.04.6 Service Drop Conductor Ground Clearance

The service drop conductors must be located at such height as will enable adequate clearance to be maintained through the entire service drop length. The minimum ground clearance shall be as specified by the NESC/NEC, but not less than 12 feet over driveways not subject to truck traffic; 16 feet over commercial areas, parking lots and other areas subject to truck traffic; and 22 feet over public streets, alleys and roads. The final height attachment determination shall take into consideration conductor sag due to weather fluctuations & lengths of spans.

14.04.7 Service Entrance Conductor Specifications

The service entrance conductors may be either copper or aluminum, and shall be continuous without any joints, splices or connections, extending from the point of connection with service drop conductors to the termination of same at the meter socket or meter cabinet and thence same shall continue without joints, etc., to Customer's service entrance safety switch.

The Customer shall have electrical Contractor provide at the service entrance weather head, sufficient excess service entrance conductor length or "tails" (18 inch minimum) so that the City can connect directly to the service drop conductors.

The service entrance installation shall conform in every respect to City's specifications, as to conductor connectors, and the method of making connections and all other related matters involved.

The service entrance conductor size for the ampere load to be carried shall be based on a maximum conductor operating temperature of 75°C (type RH, RHW, XHHW, or equivalent.)

Note: Refer to Table 14.03.1.A regarding service conduit & conductor sizes.

14.04.8 Main Breaker or Disconnect

The entrance safety switch or main breaker ampacity shall not be less than the rated ampacity of the service conductors. Other specifications, including conductors, shall conform to the latest edition of the NEC.

Upon special application, City may permit 2 or 3 wire service entrance installations of less than 100 ampere capacity for signs, etc., where the load requirements, as determined by City, justify the same. In no event will 2 wire service be furnished except at city's option.

14.04.9 Temporary Service Drops (Refer to Sheet E18)

For temporary service furnished to individual small single-phase loads, such as house trailers, small construction projects (such as house and small buildings, portable tools, etc.) City will install a standard temporary service drop, at Customer's expense. City's General Service Rate shall apply.

Where the temporary service installation requires additional facilities more than the previously mentioned standard service drop (such as an extension of the city's primary line), such installation will be at the Customers' expense.

14.04.10 Service to Mobile Homes and Trailer Courts through one meter

For service to trailer courts where more than 1 dwelling unit, mobile home, or trailer exists, the campus shall be supplied through 1 meter and the furnishing of such service shall be provided and installed by the facility owner.

14.04.11 Load to be Balanced on Circuits

The Customer shall use reasonable care in designing electric wiring and circuits; also, the connection of the loads to the circuits, so that the loads on the individual phases and circuits of City's service are properly balanced at all times.

14.04.12 Temporary Service to be Installed on Customer's Pole

All such temporary service drops shall be supported on a pole or post as approved by the Public Power Director and shall be installed by Customer at his/her expense.

14.05 Underground Service Requirements for Multi-Family Dwelling Units

14.05.1 General

Service lateral conduits from the City's point of secondary service shall be 4 inches minimum for multi-family dwelling units. A load calculation study shall be performed for multi-family dwellings units and submitted to Brigham City Public Power. All other residential service requirements apply.

14.06 Underground Service Requirements for Commercial & Industrial Applications

14.06.1 General

Service entrance conductors & conduits shall be sized according to applicable NEC and NESC codes. The City shall approve all locations & installations of conduits, service disconnection means, and meters.

- a. All commercial & industrial buildings shall have an accessible, exterior main disconnecting means that is capable of disconnecting (opening) all service entrance conductors from the building or structure premises wiring.
- b. All services rated 801 amps or more supplied by a 4-wire three phase 480Y/277 volt connected system shall have a ground fault test performed for protection of equipment.
- c. All services, equipment, cabinets, conduits, etc. shall be grounded & bonded according to applicable NEC & City codes.
- d. The service disconnecting means shall be identified as suitable for use as service equipment.
- e. A building or structure may only be served by one service lateral or service drop, unless otherwise approved by Brigham City Public Power.
- f. There shall not be more than 6 service disconnects for each service. Each service disconnect shall be permanently marked to identify it as part of the service disconnecting means. All service disconnecting means for each service shall be grouped together.
- g. The center of the operating handle of switch or breaker, when in its highest position, shall not be more than 5 feet and not less than 4 feet above finished grade.

14.06.2 Materials

Only electrical grade & UL listed materials shall be used. Rigid metal conduits (RMC), schedule 40 fiberglass and schedule 40 PVC shall be used for any elbows or bends 45 degrees or greater. RMC shall be coated with an anti-corrosion tape below grade and tape shall extend 6 inches above finished grade. RMC shall be used for all above grade service entrance conduits. Customer shall provide service wire from building to utility transformer or pole. All electrical equipment, cabinets, panels, etc. shall be UL listed and approved for the installation.

14.06.3 Trenching

Service lateral trenches shall be 2 feet in depth. Trenches shall be as straight as possible from the secondary service point to the Customer disconnect or meter base. The bottom of the trench shall be as level as possible and free from large rocks & debris

14.06.4 Service Entrance Conduits Support and Attachments

Service Entrance conduits shall be securely attached to the foundation of building by means of unistrut concrete anchors, unistrut type clamps or other approved methods. Unistrut shall be securely attached to the foundation by a minimum 3/8 inches x 3 inches concrete anchors. Service entrance conduits shall be one continuous, unbroken conduit from the elbow to the point of attachment at the meter base, CT cabinet, or main disconnect cabinet. Service lateral conduits shall be installed at a depth of 2 feet to top of conduits. All installations shall be installed in a neat and workman-like manner.

14.06.5 Locations

Locations of service lateral conduits shall be approved by the Public Power Director. Locations of outside main disconnecting equipment shall be approved by the Public Power Director. Meter/main disconnect shall always be accessible. Meter/main disconnect shall be kept a minimum of 36 inches away from any natural gas meters, window wells, windows, doors, stairs and any material deemed to be combustible. Meter/main disconnect shall meet all applicable NEC and NESC codes. The Public Power Director reserves the right to accept or reject any locations of meter base main disconnects. If the Public Power Director determines the service location is inaccessible or otherwise unsafe, the Customer shall relocate or upgrade service to City standards at Customer's expense. The Public Power Director further reserves the right to disconnect electrical power to the Customer's service until the service is brought into compliance.

14.06.6 Ownership of Conductors

For commercial underground installations the secondary service conductors and conduit paths shall be owned & maintained by the Customer from the secondary connections inside the transformer up to the termination point of the service disconnect. For commercial overhead installations the secondary service conductors shall be owned & maintained up to the overhead secondary connection point. City shall own the overhead drop up to the connections at the service mast.

14.06.7 Energizing Development

Developments may be energized when the following is completed and accepted by the city.

1. Curb, gutter and an all-weather road surface.
2. Electric conduit.
3. Electrical boxes and proper access to the boxes.
4. Secondary wiring, except that required for street lighting.

SECTION 15 METERING (Refer to Sheet E22)

15.01 General

The city will furnish and install all electric revenue meters. Normally outdoor socket-mounted meters will be used by the city whenever practical. The meter base will be furnished and installed by Customer's electrical contractor for all normal residential installations. The meter base with test switch shall be provided by the City and installed by Customer's electrical contractor for commercial or industrial applications.

If instrument transformers are required, the City reserves the right to require customers to furnish and install a suitable steel cabinet to house City's instrument transformers and accessories. Said cabinet shall contain only the City's metering equipment and shall be equipped so that it can be sealed and locked by the City. The City shall have sole access to this cabinet.

15.02 Location

The City shall approve the location of service entrance and meter. The following conditions must be met for the location of all meters & services:

1. Visibility. All entrance wiring connections shall not be concealed and shall always be in plain view for inspection by the City.
2. Residential properties shall have the point of service externally installed on the primary residence of the property. If a residential property needs multiple services the amount of services must be approved by the City and be contained in one location inside one meter base that is located on the exterior of the primary residence. Any variation of this may be approved by the Public Power Director.
3. Industrial/Commercial businesses are allowed to have up to two points of service with multiple meters at each location. If more than two points of service are required due to the original design of the property or the property is expanded, then the campus will be required to install a primary metering cabinet. Electrical service to the property will be delivered at the City's distribution voltage. The location of the primary metering cabinet will be determined by the city. The City will maintain ownership and control of the metering cabinet but all conductors feeding out of the metering cabinet will be owned and maintained by the property owner.
4. A property that is undergoing renovation and has pulled a building permit or new construction will be required to relocate the electrical meter and main disconnect point (MDP) of the building to the outside of the building. The metering equipment and MDP shall be mounted to the building if under 801

amps. If service is 801 amps or greater than a freestanding MDP switchgear cabinet will be required. The MDP switchgear cabinet will need to be approved by the Public Power Director before equipment order is placed by the contractor.

5. Protection. No meter or service equipment shall be installed in any location where it may be unnecessarily exposed to heat, cold, dampness or other cause of damage, or in any unduly dirty or inaccessible location.
6. Height. The meter socket shall be mounted at a height of not less than 4½ feet, no more than 6 feet above finished grade, as the case may be. Where multiple meters are installed, care shall be taken to ensure the lowest meter is no less than 4 ½ feet and no higher than 6 feet from finished grade.

When a combination 3 phase and single-phase service is supplied to the same premises, all meters and service entrance switches shall be at the same location.

15.03 Meter Base

Residential meter bases shall be furnished and installed by the Contractor according to City standard drawings. No smaller than a 100-amp service entrance will be accepted other than by approval from the Public Power Director. The meter base shall always be kept sealed and under the control of the City.

15.04 Commercial Meters

Single-phase and three-phase self-contained meter bases shall be installed by the Developer and shall have bypass capability in the meter base. For details and specific information regarding this requirement, please contact Brigham City Public Power. For services rated 200 amps up to 800 amps, the Brigham City Public Power will supply the meter base & test switch for contractor to install at Customer's expense. No smaller than a 200-amp 3 phase service entrance will be accepted unless otherwise approved by the Public Power Director. For services rated over 800 amps, a manufacturer's shop drawing of the MDP switchgear cabinet with main disconnect and adequate metering provisions will need to be provided for approval. Contact Brigham City Public Power for specific requirements and submission details.

The Contractor's portion shall be completely installed, inspected, and the electrical hook-up fee paid before the City will complete the final electrical hookup.

15.05 Location of Multiple Meters

Where more than one meter is required for a building, such as an apartment complex, all meter sockets shall be located side by side at an outside location as determined by the Public Power Director.

15.06 Meter Location Regarding Remodeling

When remodeling, where 2 or more houses or dwelling units are combined to form one building, the meter socket shall be moved to a single location. Meter and service locations shall first be approved by Brigham City Public Power. Existing

meters and services may require relocation to meet current City standards. In all remodeling where the meter is changed or moved, or wiring changes made, outdoor meter sockets and an approved new service entrance shall be installed by Customer at Customer's expense.

15.07 Meter Accessibility

In the event a structural change is made by the owner that results, in the opinion of the Public Power Director, to be an undesirable meter location, the meter socket, meter cabinet, and/or service entrance installation shall be moved by the Customer at his/her expense to an accessible location as determined by the City.

Whenever the construction of a building on an adjacent lot prevents proper access to any meter, or access to the point of attachment of service drop conductors, or results in inadequate service drop clearance, the Customer shall move, at Customer's expense, the meter socket and service entrance to a location that is acceptable to City. The meter shall not be enclosed by any portion of a building. The meter shall not be placed under carports or enclosed by sheds, garages, outbuildings or other buildings. The meter shall always remain readily accessible to the City.

15.08 Outdoor Meters for Non-Residential General Service

All single-phase meters installed for non-residential use shall be socket type. The meter base shall have bypass links installed. The meter socket shall be furnished and installed by Customer at Customer's expense.

15.09 Instrument Transformer for Metering

In all outdoor installations requiring current transformers, whether single phase or 3 phase, the Customer shall provide an approved meter loop for meter connections. The City shall furnish any instrument transformers, meter bases, or other devices required, to properly meter the Customer's electrical needs at the Customer's expense. Such instrument transformers and devices shall be installed by the City.

15.10 Current Transformer Cabinet (Refer to Sheet E19)

Any cabinets required to house said instrument transformers and accessory equipment shall be furnished and installed by Customer at Customer's expense. This requirement applies to all installations. All cabinets shall be approved by the City.

Such metering or instrument cabinets are for the exclusive use of City, and shall always be under the control of, and kept sealed by City.

15.11 Unacceptable Meter Locations

For reasons of public safety, maintenance of service equipment, and reliability of metering, meters shall not be installed in any of the following locations:

1. Inside any building, unless located within an acceptable meter room.
2. In any location that is not readily accessible.

3. Directly over any stairway, ramp or steps.
4. In any substation or transformer vault.
5. Accessible only by a trap door or in any location which may be hazardous to personnel.
6. On any surface subject to excessive vibration.
7. In or accessed through any rest, bath, shower, powder, or toilet room.
8. In any elevated area.
9. In any location not providing a clear and continuously unobstructed working space extending a minimum of eight (8) feet from the face of the meter panel and having a width to permit ready access to the complete metering installation.
10. In any location where moisture, fumes, or dust may interfere with the operation of the meter or damage it.
11. In any location giving less than three feet clearance to any property line, or with less than three feet clearance to any sidewalk, alley or driveway giving access to non-residential or industrial property.
12. In any basement or depressed area.
13. Within carport or patio areas which are or can become enclosed, when served overhead or underground.
14. Mounted on BCPP poles.
15. In a room containing mechanical equipment.
16. In any elevator shaft or hatchway.
17. Mounted on any trees.
18. In any unsanitary areas in reference to farm animals and products.
19. In a plenum or any portion of a return or supply air ducting system.
20. Areas where entry may be restricted or controlled because of medical, health, environmental or other safety-related issues.

SECTION 16 LIGHTING AND SIGNAL POLES (Refer to Sheets E16-E17)

16.01 General

The City shall provide the street light poles, fixtures & associated parts to install the streetlights. The contractor is responsible for transport of the streetlights from the Public Power Department to their respective developments. Furthermore, the contractor shall be responsible for pouring the concrete bases, assembling and erecting the streetlights.

All local streets, minor & major collectors, and arterial streets shall have the decorative streetlight as shown in the standard drawings or as designed. 25-foot steel galvanized poles with a 6-foot arm, and either a 100-watt or a 250-watt equivalent LED cobra head type fixture may be used or substituted for a decorative type pole & fixture at the City's discretion. All fixture types will be of the Luminaire type with 90-degree cutoff lens.

All traffic signal poles shall be powder coated black.

16.02 Dark Sky

All street and parking lot lighting shall meet the IDA (International Dark-Sky Association) recommendation and City ordinance for dark sky compliance. This will require that all lighting, streetlight, parking lot lighting, walkway lighting, etc., cannot broadcast light above 180° from the parallel ground surface. It is advised that all lighting on buildings, such as security lighting, also meets this requirement.

16.03 Location

In general, streetlights will be installed at all intersections except where a four-way intersection has an offset of less than 100 feet from another intersection. Streetlights shall be installed on the top of all traffic signal poles. Streetlights for local streets will be installed with a maximum spacing of 400 feet between lights. All mid-block streetlights shall be installed 18 inches from a property line. Collector and arterial streets shall have lights spaced at 175 feet apart on alternating sides of the street. In addition to the typical location design and layout, street light locations may also be designed by Brigham City Public Power. Commercial right-of-way lighting needs to be staggered 125 feet with a maximum of 250 feet of spacing on each side of the ROW.

Each streetlight will be installed so that the street light pole is centered in the planter strip or within 18 inches of the sidewalk if no planter strip exists.

16.04 Orientation

Streetlights at intersections of local streets shall aim at the center of the intersection. On collector or arterial streets streetlights shall be set at a 90-degree angle at regular intervals determined by the City.

16.05 Grounding & Bonding

A bonding wire shall be connected from the rebar “Ufer” rings in the concrete pole base to the street light pole grounding/bonding screw or termination point using NEC approved methods and a separate grounding wire will be installed from the pole to the closest secondary pedestal or transformer. The grounding conductor shall be terminated with the neutral conductor.

16.06 Wiring & Fusing

A 10-amp in-line fuse & fuse holder shall be installed in the junction box on the 120/240-volt ungrounded conductors.

VEGETATION MANAGEMENT

SECTION 17 VEGETATION MANAGEMENT

17.01 Overview

When feasible, BCPP prioritizes the removal of tall-growing trees and vegetation to prevent future conflicts with overhead power lines, while supporting the establishment of low-growing species that will never interfere with the high-voltage lines. Considering the interests of property owners and other land use objectives, it is not always possible to remove incompatible trees.

Tall-growing trees that cannot be removed must be pruned to maintain clearance around power lines through use of arboriculturally sound pruning practices.

17.02 Professionalism

In accordance with ANSI Z133, all personnel working in proximity to overhead conductors at any time are required to hold one of the following designations: Qualified Line Clearance Arborist or Qualified Line Clearance Arborist Trainee.

17.03 Safety

The safety of workers and the public should always be given the highest priority. Federal and state requirements governing vegetation management activities shall always be followed, including all OSHA requirements. ANSI Z133 (2107 or most current) and OSHA 1910.269 are examples of these requirements. Activities shall be conducted to minimize tree crew and public safety risks.

Table 17.03.A Minimum approach distances for Qualified Line Clearance Arborists and Qualified Line Clearance Arborist Trainees.

Voltage (kV) (Phase-to-Phase)	Minimum Approach Distance Sea Level to 5,000 ft.	Minimum Approach Distance 5,000 to 10,000 ft.	Minimum Approach Distance 10,000 to 14,000 ft.	Source*
0.05-0.300	Avoid contact	Avoid contact	Avoid contact	APM/Z133
0.301-0.750	1' - 6"	1' - 7"	1' - 7"	APM/Z133
0.751-15.0	2' - 6"	2' - 7"	2' - 10"	APM/Z133
15.1-46.0	3' - 6"	3' - 7"	3' - 8"	APM/Z133
46.1-72.5	3' - 6"	4' - 0"	4' - 4"	Z133
72.0-121.0	3' - 11"	4' - 6"	4' - 10"	Z133
121.1-145.0	4' - 6"	5' - 2"	5' - 7"	Z133
145.1-169.0	5' - 1"	5' - 9"	6' - 3"	Z133
169.1-242.0	7' - 0"	7' - 11"	8' - 7"	Z133
242.1-362.0	11' - 9"	13' - 6"	14' - 7"	Z133
362.1-420.0	14' - 8"	16' - 9"	18' - 2"	Z133
420.1-550.0	17' - 6"	20' - 0"	21' - 8"	Z133
550.1-800.0	23' - 9"	27' - 2"	29' - 5"	Z133

17.04 Fire Protection

Federal, state, and local fire protection laws and regulations shall be followed, and the Tree Crew Foreman performing the work must obtain necessary work permits. Crews shall have all fire suppression tools and equipment required by the governmental agency responsible. Tree Crew Foreman shall also adhere to fire restrictions concerning work hours, fire watch following work, and other policies of the pertinent jurisdiction. Tree Crew Foreman with crews working in fire-prone rural areas shall provide basic fire prevention and suppression training to their crews annually. Documentation of this training shall be submitted annually to the BCPP Director July 1st.

17.05 Species of concerns

Vegetation maintenance shall not disturb or harm any rare, threatened, endangered, or protected plant or animal species. Nesting season work restrictions exemplify important scheduling considerations necessary to accommodate protected species. If there are rare, threatened, endangered, or protected plant or animal species present at a location where work is planned, the Tree Crew Foreman must stop work and immediately inform the BCPP Director.

17.06 Bird Protection

Migratory birds are protected by the Migratory Bird Treaty Act of 1918 (16 USC 703-712) (MBTA). Most bird species are protected under the MBTA; therefore, in an abundance of caution, all bird species should be considered subject to the law's provisions. The Tree Crew Foreman shall conduct vegetation maintenance consistent with the MBTA.

The MBTA prohibits removal of bird nests that have eggs or chicks and killing any birds which are members of any protected species. Active nests may not be disturbed unless the BCPP Director, after consultation with U.S. Wildlife Services has provided authorization. If tree crews identify a possible immediate risk (e.g., active nest in the vicinity of vegetation listed for work), the Tree Crew Foreman shall contact the BCPP Director. The Director will consult with U.S. Wildlife Services regarding whether work may proceed. If work is postponed until after young have left the nest, the location must be recorded and tracked to ensure completion at the appropriate time.

The nests of eagles threatened and endangered species, and colonial waterbird nests (such as those of herons) may not be disturbed – whether or not they are active. Eagles are subject to additional protection; it is illegal to disturb them near their nests or winter roosting sites. If large stick nests, suspected to be protected nests, are in vegetation identified for removal, the Tree Crew Foreman must contact the BCPP Director who will consult with the U.S. Wildlife Services.

Raptors (birds of prey) and herons require buffers around active nests to prevent them from being disturbed, unless instructed otherwise by U.S. Wildlife Services or applicable regulatory authority.

Table 17.06.A Work buffers around active nests of eagles, hawks, and herons.

Species	Work buffer
Bald Eagles (Jan 1-Aug 31)	660 feet
Bald Eagle roosts (Nov 1-Mar 31)	0.25 mile
Golden Eagles (Jan 1-Aug 31)	0.25 mile
Hawks (exceptions below)	600 feet
Ferruginous hawk	0.5 mile
Northern goshawk (Mar 1-Aug 31)	0.5 mile
Swainsons hawk	0.25 mile
Owls	300 feet
Great Gray Owl	0.25 mile
Northern Spotted Owl	0.25 mile
Osprey	600 feet
Herons/Colonial Nesters	600 feet
Songbirds	50 feet

In general, if a bird leaves a nest and does not return within an hour, it is being disturbed, and the buffer should be increased. In these cases, U.S Wildlife Services should be contacted within 24 hours to monitor the nest and respond appropriately if the adults fail to return.

Active bird nests and inactive bird nests should be reported to the BCPP Director and U.S. Wildlife Services.

17.07 Tree Removal

In certain circumstances, it is necessary or appropriate to remove trees (i.e., removed the threat posed to electrical infrastructure or remove the tree from the “inventory” of future work). When a tree is removed, the stump shall be cut to within 6 inches of the ground or as close to it as practical (for example, at the top of a barbed wire fence that has become imbedded in the trunk).

Stumps of all deciduous trees, brushes, and vines that are removed shall be treated with an approved herbicide, unless otherwise indicated by landowner or restricted by the land managing agency. Tree removal may be discretionary or necessitated by the presence of Hazard Trees.

17.07.1 Hazard Trees

“Hazard Trees” are defined as a tree in whole or in part, that might fail, and which is identified as a likely source of harm. Trees that are dead, dying, diseased, deformed, or unstable, which have a high likelihood of falling and contacting a specific target (electrical infrastructure) should be assessed for removal. The Tree Crew Foreman shall conduct a visual assessment, consistent with ANSI A300. Hazard Trees pose a safety and reliability risk and must be removed (or pruned to the extent that the tree is no longer a

Hazard Tree). BCPP reserves the right to deny chipping of any dead wood and will leave the dead wood on property for customer to clear. Federal and state agencies sometimes request that trees subject to removal be topped to create “wildlife trees.” BCPP may honor such requests, provided the safety of the tree workers or the integrity of facilities are not compromised. Any Hazard Trees removed to accommodate this request should be reduced to a height so that the tree would never contact any BCPP Facilities should it fall.

17.07.2 Discretionary Tree Removal

Discretionary tree removal reduces the total tree inventory and can, therefore, reduce long-term risks to safety and reliability; improve access to facilities, clear lines of sight, and moderate future workloads. In general, removal of trees near power lines are encouraged and are to be pursued by the Tree Crew Foreman.

17.08 Debris Disposal

Before leaving a particular worksite, all debris must be brought to ground, with no severed limbs left in the tree canopy (hangers). Work locations shall be left in a safe and orderly condition at the end of the workday. “Debris” is cut vegetation remaining after maintenance operations.

Debris is typically disposed of in multiple ways. First, debris may be chipped using a mechanical chipper and then transported off-site. Second, debris may be chipped using a mechanical chipper and then broadcast on-site. Third, debris may be lopped into maximum lengths of 3 feet and scattered (if necessary to pile debris, piles shall be no more than 18 inches high). The appropriate method of disposal depends on the area where vegetation maintenance is being performed. Additional debris management requirements may be identified by land managing agencies.

17.08.1 Inaccessible Areas

In remote off-road areas without reasonable vehicle access, debris can be disposed of on-site. Use the lop and scatter method mentioned above.

17.09 Directional Pruning

Directional pruning is a natural target pruning applied to redirect tree growth away from utility lines (Gilman 2012). ANSI A300 and ISA’s best management practices (Kempton 2004) instruct that pruning to clear the utility space involves thinning cuts: removing at natural targets entire branches that are growing toward (or once cut will produce sprouts that will grow toward) the power lines.

While heading cuts produce sprouts that grow quickly back into the power lines, branch removal and reduction promote growth away from conductors. Because one objective of utility pruning is to train trees away from power lines wherever practical, branches growing away from the electric facility should not be pruned. Instead, these stems should be allowed to develop to their natural height or length,

provide that growth does not create unreasonable safety risks. This cannot be accomplished with strongly excurrent trees trapped directly beneath conductors.

Topping, round-overs, flush cuts, branch tipping, and rip cuts are improper as they result in damage to the trees. Directional pruning is consistent with natural tree structure. Remaining branches retain their taper, strong attachments, growth regulators, and spacing. They continue to grow and function normally, allowing the tree to reach its natural height.

“V” shapes often result in properly pruned trees growing under power lines, particularly on decurrent, deciduous trees (Gilman 2012; Kempter 2004; Miller 1998; Shigo 1990). Limbs growing upward and toward the facility should be cut back to the trunk or to limbs growing away from the conductors. Remaining branches should have sufficient clearance, so they do not damage the conductors in inclement weather common for the locality (high wind, freezing rain, snow, or other conditions). Excurrent trees (such as main conifers) are more problematic but should be reduced to appropriate laterals or whorls. “L” or one-sided shapes often result in properly pruned trees to the side of conductors (Shigo 1990; Gilman 2012). Limbs on the wire side of trees located adjacent to facilities should be cut back to the trunk; or to limbs growing vertically, sideways or downward; depending on the distance to the line or available natural target.

17.10 Tree Houses

Tree houses built in trees growing near power lines present electric safety risks. Children or others may contact the line, either directly or indirectly, if a tree house is built too close to conductors. Indirect contact may occur through any conductive object, including a tree or tree parts that are contacting power lines. Minimum tree house distances are set at twice the “Minimum approach distances to energized conductors for arborists not qualified by training and experience to work within 10 feet of electrical conductors” as established in Table 1 of ANSI Z133.

17.11 Distribution Cycle Maintenance

Trees and vegetation are pruned from distribution facilities on scheduled cycles. Facilities are worked systematically, either by circuit or grid. The duration of a cycle is dependent on local conditions, as determined by BCPP. BCPP typically schedules distribution cycle maintenance work on a three-year cycle for most circuits in BCPP service territories.

Refer to Sheet V-1.

In performing distribution cycle maintenance, the Tree Crew Foreman is required to:

- Systematically prune and remove trees and other vegetation at a specified distance from all primary conductors and non-primary conductors, consistent with this section,
- Comply with all other specifications generally applicable to all vegetation maintenance under these SOPs, including without limitation

- Identify and remove (or remediate) Hazard Trees and discretionary tree removals.
- Identify and correct readily climbable trees that are too close to power lines.
- Identify and remedy or remove tree houses violating the criteria.
- Remove all brush, which include volunteer trees (naturally seeded, non-landscaped trees) and woody plants (including vines).

17.11.1 Distribution Cycle Maintenance - Clearance Distances – Primary (Refer to sheets V-1 and V-2)

Each work cycle, trees and other vegetation are pruned or removed to achieve clearance distances to comply with the NESC, state regulation clearance requirements, and BCPP guidelines.

Specified vegetation clearance distances from primary conductors in the distribution system should allow sufficient space to prevent contact with primary conductors or regulatory mandated clearance distances throughout the cycle.

The Tree Crew Foreman is responsible for identifying all vegetation that would encroach upon conductors, BCPP required distances, or regulatory mandated minimum clearance distances throughout the cycle.

Neutral conductors in a raised position, which includes above or on a crossarm, are treated as primary-conductors for purposes of this section. Low neutral position is treated as a hot conductor.

17.11.2 Distribution Cycle Maintenance – Clearance Distances – Non-Primary

17.11.2.1 A secondary line is a line typically energized to less than 750 volts. Specified distances from secondary conductors in the distribution system are designed to prevent strain (severe deflection) or abrasion. The “Work Threshold,” which is the point at which action must be taken) and Post Work Clearance distances for non-primary are set forth as follows:

Table 17.11.2.A Non-primary wire vegetation clearance distances.

Line Type	Work Threshold	Minimum Post-Work Clearance
Non-insulated wire pole-to-pole secondary	N/A	3 feet
Neutral low position	Contact	2 feet
Insulated pole-to-pole secondary	Deflection or abrasion	2 feet
Non-insulated secondary service line/streetlight	N/A	1 foot
Insulated secondary service/streetlight	Deflection or abrasion	1 foot
Guy wire	2-inch or graded diameter limb applying pressure	Relieve pressure

These practices can be changed at any time at the discretion of the BCPP Director.

In addition to the specification clearances (Table 17.11.2.A), the following requirements also apply to distribution cycle maintenance work on distribution non-primary.

17.11.2.2 Tree Limbs Between Conductors. Any tree limbs between a primary conductor and any secondary conductor, regardless of type, shall be removed or pruned to Post-Work Clearances for primary.

17.11.2.3 Customer Work. If a customer expresses a desire to remove other limbs or trees around any non-primary, in addition to the work to complete under these specifications, vegetation maintenance workers should inform the customer to call BCPP to arrange for a temporary disconnection of the facilities to allow safe completion of the desired tree work, as required by law.

17.11.3 Distribution Cycle Maintenance – Other Facility Clearances

In addition to pruning trees to maintain clearances, certain vegetation maintenance is required on utility poles (and supporting guy wires) as part of distribution cycle maintenance work. One-third of the circumference around poles shall be cleared of vegetation to 5 feet from the pole to allow linemen a climbing path. The remaining two-thirds of the pole circumference should be cleared of all vegetation 1 foot from the pole.

Vines growing on poles and guy wires shall be:

- Cut at ground level
- Treated with an approved herbicide
- Removed from the bottom 5 feet of the pole or guy wire
- Reported as brush or tree removed

Vines clearly part of a landscape and rooted well away from the pole may be:

- Pruned to provide sufficient climbing path and 5 feet of separation (e.g., 5 feet of separation between the top of a fence and facility)
- Reported as brush pruned (not to exceed 100 brush ft. pruned)

Where vines remain on facilities after work is completed, the Tree Crew Foreman will document the exception and report it to BCPP Director to clear the remainder of the pole.

17.12 Transmission procedures

Transmission facilities are overhead lines energized at a higher voltage. Typical transmission voltages on BCPP's system are 46kV and 138kV. Facility voltage and type determine the amount of transmission clearance needed.

Vegetation maintenance performed on transmission lines shall comply with ANSI A300. In addition, vegetation maintenance performed on transmission lines shall conform with the NERC Reliability Standard FAC-003-5. Consistent with requirement R4 of NERC Standard FAC-003-5 and the procedures set forth in BCPP transmission grid operations. BCPP line patrolmen are responsible to complete inspections on certain transmission lines. When doing their inspections, line patrolmen will identify any vegetation that poses a threat of causing a transmission outage. In addition, BCPP vegetation management department completes vegetation inspections of the Right of Way for transmission lines. BCPP vegetation management completes an annual vegetation inspection on main grid transmission lines. All other transmission lines are inspected at least once every year. Vegetation maintenance on transmission lines is then scheduled according to the results of those inspections.

17.12.1 Transmission Clearances

The objective of systematic transmission work is to safeguard the reliability of BCPP transmission system by preventing outages from contact with vegetation. Clearance work on a transmission line is guided by three concepts: Minimum Vegetation Clearance Distances, Action Thresholds, and Minimum Clearances Following Work.

Minimum Vegetation Clearance Distance (MBVCD) represents radial distances from the conductors inside of which trees shall not encroach.

17.13 Chemical Procedures

Herbicides and tree growth regulators (TGR) are an important part of BCPP Vegetation Management Program. Herbicides are chemicals used to manipulate or

control undesirable vegetation. When safely used, herbicides are effective and efficient, minimize soil disturbance, and enhance plant and wildlife diversity. Herbicide applications can benefit wildlife by improving forage as well as escape and nesting cover. In some instances, noxious weed control is a desirable objective in utility ROW that can be accomplished through herbicide treatment. Herbicide use can control individual plants that are prone to resprout or sucker after removal. When trees that resprout or sucker are removed without herbicide treatment, dense thickets develop, impeding access, swelling workloads, increasing costs, blocking lines-of-site, and deteriorating wildlife habitat (Yahner and Hutnik 2004). Treating suckering plants allows early successional, compatible species to dominate the ROW and out-compete incompatible species, reducing work.

“Tree growth regulators” refers to chemical treatments that slow the growth of some tree species.

Chemical applications shall always be performed according to federal, state, and local regulations and consistent with all labeling requirements.

17.13.1 Notification to Property Owners

Before chemical use on a property, Tree Crew Foreman shall give notice to the property owner(s). Notice shall be provided at least five days before work but no more than six weeks in advance, whenever chemicals are to be used on their property.

17.13.2 Licensed Applicators

Crew members in Brigham City service territory shall hold a valid Commercial pesticide applicator License. The Tree Crew Foreman performing work is always responsible to ensure that any application of chemicals is performed by an applicator with a valid applicator’s license, as required by state law where the property is located.

17.13.3 Closed Chain of Custody

The Tree Crew Foreman making the application is responsible for chemical purchase, storage, and container disposal. Closed chain of custody is required, including the use of returnable, reusable supply containers.

17.13.4 Chemical Reporting

All chemical applications shall be documented as required by law for a licensed applicator. In addition, chemical applications shall be documented as instructed by BCPP. The Tree Crew Foreman making the application shall be responsible for maintaining reports and shall produce reports for review by the state departments of agriculture upon request.

17.13.5 Herbicide Application Efficiency

Ninety-five percent control shall be assumed on all herbicide applications to be considered effective.

17.13.6 Wetland and Waterbodies

Product label shall be followed and approved for use near wetlands and waterbodies.

17.13.7 Spills

Applicator is responsible for preventing any chemical spills from occurring. Special attention should be made while mixing, loading, and cleaning equipment, which are activities that carry more risk for accidents or spills. Spills can be avoided by using closed chain of custody best management practices. Spill kits are required on every truck when any herbicide is used or being transported.

In the event of a spill:

1. Stop, contain and isolate the spill
2. Report the spill to the BCPP Director, who will notify the environmental services; the following information must be provided to the TREE CREW FOREMAN:
 - a. Caller and manager
 - b. Name
 - c. Date and time of spill
 - d. Location (address or longitude and latitude)
 - e. EPA number (product spilled)
 - f. Cause of spill
 - g. Amount of spill
 - h. Types of surfaces contaminated
 - i. Containment and/or clean-up activities performed so far
3. Remediate the spill
4. Cleanup at or near BCPP generating sites or substations must comply with site-specific spill prevention and remediation plans.

17.14 Approved Herbicides

In all circumstances, the licensed applicator is responsible for following label requirements. In addition, specific chemical products must be approved by the BCPP Director, based on pre-approved chemical products. Any approved chemical products must be based on one or a combination of the following active ingredients:

Stump Application	2, 4-D Glyphosate Picloram Triclopyr
Foliar Application	2, 4-D Aminopyralid Fosamine ammonium Glyphosate Imazapyr

	Metasulfuron methyl Picloram Sulfometuron methyl Triclopyr
Tree Growth Regulators	Fluprimidol Paclobutrazol
Soil Application	Diuron Indaziflam Imazapyr Picloram Sulfentrazone Tebuthiuron
Low Volume Basal Application	Imazapyr Triclopyr

17.14.1 Substations Herbicide Treatment

Substations will be sprayed and treated multiple times throughout the year.

GENERAL INFORMATION

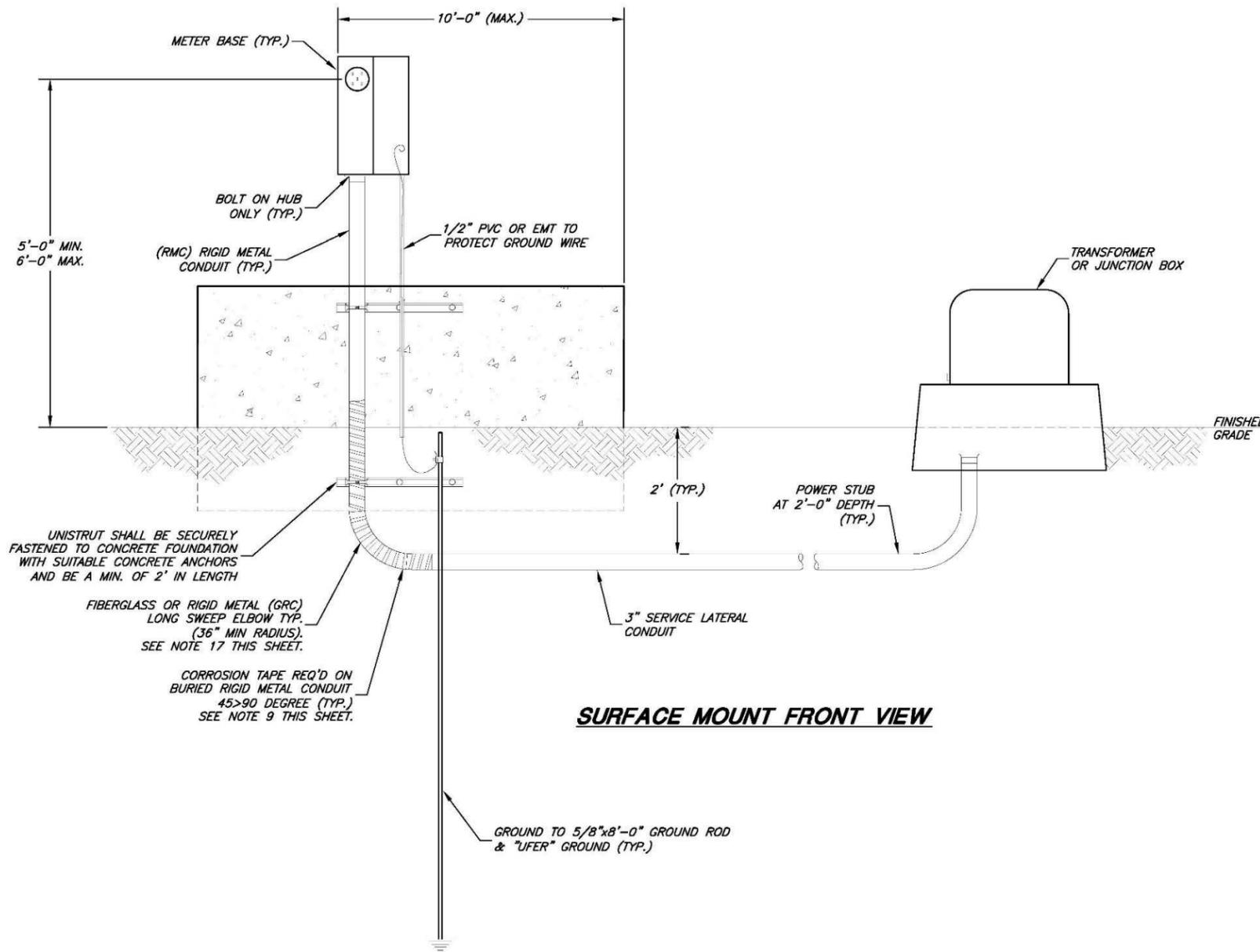
PURPOSE

THE PURPOSE OF THE ELECTRICAL CONSTRUCTION DRAWINGS IS TO AID CUSTOMERS, CONTRACTORS, DEVELOPERS, AND ENGINEERS, IN CONSTRUCTION AND INSTALLATION OF ELECTRICAL SYSTEMS AND SERVICES TO NEW AND REMODELED STRUCTURES, AND NEW RESIDENTIAL, COMMERCIAL AND INDUSTRIAL DEVELOPMENTS. IT IS THE INTENT AND DESIRE, WITH THE AID OF THE CONSTRUCTION STANDARDS AND DRAWINGS, OF BRIGHAM CITY PUBLIC POWER TO PROVIDE SAFE, EFFICIENT, AND RELIABLE ELECTRICAL SERVICE TO ALL CUSTOMERS.

GENERAL GUIDELINES AND RULES

1. CURB & GUTTER SHALL BE INSTALLED ON ANY PROJECT BEFORE THE MAIN ELECTRICAL TRENCH IS EXCAVATED. THE CURB SHOULD HAVE PROPERTY CORNERS MARKED AND PINNED IN THE CURB BY APPROVED METHODS. THE CURB WILL GIVE REFERENCE TO THE ELECTRICAL CONDUIT DEPTHS, ELECTRICAL BOX PLACEMENT AND OTHER LOCATIONS IMPORTANT FOR ELECTRICAL INSTALLATION.
2. IF THE ELECTRICAL INSTALLATION, APPLICATIONS, OR OTHER MATTERS ARE NOT COVERED IN THIS BOOK, THEN IN GENERAL, THE INSTALLATION, APPLICATION, OR MATTER IS NOT APPROVED.
3. ALL ELECTRICAL CONSTRUCTION, AND INSTALLATION SHALL CONFORM TO APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE (NEC), OSHA, STATE, COUNTY, AND CITY ORDINANCES, STANDARDS, AND CODES.
4. ANY AND ALL WORK IN THE VICINITY OF OVERHEAD POWER LINES SHALL NOT BE ALLOWED UNLESS THE RESPONSIBLE PARTY FIRST NOTIFIES BRIGHAM CITY PUBLIC POWER OF THE INTENDED WORK OR ACTIVITY. NO PERSON OR THING SHALL BE BROUGHT WITHIN 10 FEET OF ANY HIGH VOLTAGE OVERHEAD POWER LINES, UNLESS THE PROPER STEPS ARE TAKEN TO INSURE THE SAFETY OF THE PUBLIC, AND POWER DEPARTMENT PERSONNEL. THE POWER DEPARTMENT RECOMMENDS A MINIMUM OF 3 BUSINESS DAYS NOTICE BE GIVEN BEFORE ANY WORK NEAR ITS OVERHEAD POWER LINES IS SCHEDULED TO BEGIN.
5. THE NATIONAL ELECTRICAL SAFETY CODE AND BRIGHAM CITY PUBLIC POWER CODE REQUIRES THAT HOMES, BUILDINGS, SIGNS, BRIDGES, ANTENNAS, ETC, HAVE SUFFICIENT HORIZONTAL AND VERTICAL CLEARANCES TO OVERHEAD POWER LINES. CONSULT WITH THE POWER DEPARTMENT FOR APPLICABLE DISTANCES AND CLEARANCES.
6. CALL BLUE STAKES BEFORE YOU DIG! UTAH LAW SECTION 54-8A-1 THROUGH 54-8A-11 REQUIRES THE BLUE STAKES ONE CALL LOCATION CENTER BE NOTIFIED AT LEAST TWO BUSINESS DAYS PRIOR TO EXCAVATION. THE EXCAVATION SHALL NOT BE STARTED UNTIL LOCATIONS HAVE BEEN MADE.
7. IN GENERAL, JOINT TRENCHING OF POWER AND COMMUNICATIONS IS ALLOWED AS LONG AS THE INSTALLATION CONFORMS TO THE CONSTRUCTION STANDARDS.
8. ALL ELECTRICAL CONDUITS SHALL BE INSTALLED A MINIMUM OF 4 FEET TO TOP OF CONDUIT FROM FINISHED GRADE. ADDITIONAL DEPTHS MAY BE REQUIRED IF HIGH VOLTAGE PRIMARY (12.47kV) CABLES ARE INSTALLED IN A JOINT TRENCH WITH LOW VOLTAGE (600V OR LESS) CABLES, AND COMMUNICATIONS CABLES. IN GENERAL, HIGH VOLTAGE PRIMARY (12.47kV) CONDUITS SHALL BE INSTALLED 1 FOOT IN DEPTH FOR EVERY 1 INCH IN CONDUIT SIZE, (example 6 inch conduit shall be 6 feet in depth), BUT IN NO CASE SHALL PRIMARY CONDUITS BE INSTALLED LESS THAN THE MINIMUM OF 4 FEET IN DEPTH, UNLESS APPROVED BY THE POWER DEPARTMENT.
9. THE ELECTRICAL DISTRIBUTION SYSTEM FOR ALL NEW CONSTRUCTION OF RESIDENTIAL, COMMERCIAL, INDUSTRIAL, DEVELOPMENTS SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE APPROVED BY THE BRIGHAM CITY PUBLIC POWER DEPARTMENT. REMODELING, CHANGES IN USE, ADDITIONS, ALTERATIONS, AND OTHER CHANGES THAT EFFECT THE ELECTRICAL SYSTEM, MAY REQUIRE THAT THE ELECTRICAL SYSTEM BE REROUTED, OR UPGRADED UNDERGROUND, AND/OR BE BROUGHT UP TO CURRENT NEC, NESC, AND CITY PUBLIC POWER STANDARDS. ADDITIONAL REQUIREMENTS MAY APPLY.
10. THE DEVELOPER IS TO PROVIDE THE TRENCH FOR ALL REQUIRED CONDUIT SYSTEMS, AND FOLLOWING THE INSTALLATION OF THE CONDUITS BY THE DEVELOPER, PROVIDE SAND AND BACKFILL TO MEET THE CONSTRUCTION STANDARDS. ALL TRENCHES SHALL BE COMPACTED TO 95% AND PASS THE COMPACTION TEST BEFORE THE TRENCH WILL BE ACCEPTED. ALL CONDUITS SHALL BE INSPECTED BEFORE ANY SAND OR BACKFILL IS APPLIED. TO INSURE FINAL GRADE HAS BEEN ESTABLISHED, THE CURB & GUTTER SHALL BE INSTALLED BEFORE THE ELECTRICAL TRENCH IS STARTED.
11. PRIOR TO BACKFILLING ANY CONDUITS, THE DEVELOPER SHALL SCHEDULE AND REQUEST AN INSPECTION FROM THE BRIGHAM CITY PUBLIC POWER DEPARTMENT. FOLLOWING THE INSPECTION THE POWER DEPARTMENT WILL ISSUE A "PASSED" OR "FAILED" SLIP TO PROCEED BACKFILLING OR NOT TO PROCEED.
12. STATE SPECIFIED ROAD BASE SHALL BE USED UNDER ALL ELECTRICAL BOXES, ENCLOSURES, PADS, OR VAULTS. THE ROAD BASE SHALL BE COMPACTED TO 95% MINIMUM AND PASS A COMPACTION TEST BEFORE ANY BOXES, ENCLOSURES, PADS OR VAULTS ARE SET. THE ROAD BASE SHALL BE A MINIMUM OF 1 FOOT IN DEPTH AND EXTEND A MINIMUM OF 1 FOOT PAST ALL SIDES OF THE BOXES, ENCLOSURES, PADS OR VAULTS. ADDITIONAL REQUIREMENTS MAY APPLY.
13. IN GENERAL, ALL ELECTRICAL BOXES SHALL BE PLACED A MINIMUM OF 18 INCHES FROM A PROPERTY LINE AND SET BACK 6 INCHES TO 1 FOOT BEHIND SIDEWALKS.

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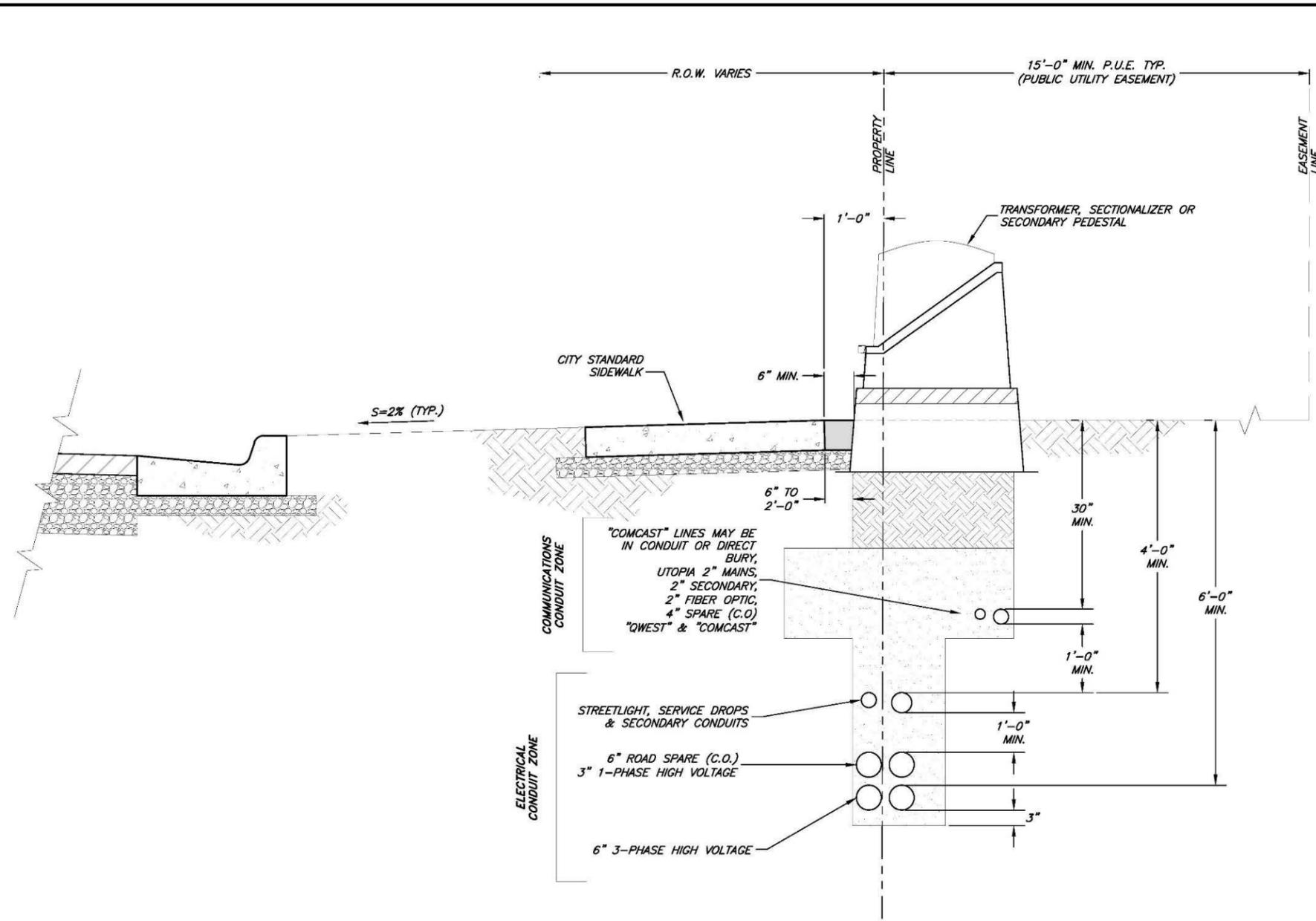


SURFACE MOUNT FRONT VIEW

NOTES:

1. ALL MATERIALS TO BE SUPPLIED BY CUSTOMER EXCEPT METER.
2. ALL TEMPORARY/PERMANENT EQUIPMENT SHALL COMPLY WITH CURRENT N.E.C., N.E.S.C. AND CITY PUBLIC POWER STANDARDS.
3. BRIGHAM CITY PUBLIC POWER WILL FURNISH AND INSTALL METER AND CONNECT SERVICE IN TRANSFORMER OR JUNCTION BOX.
4. SERVICE CONDUCTORS SHALL MEET CURRENT NATIONAL ELECTRIC CODE AND BRIGHAM CITY PUBLIC POWER REQUIREMENTS.
5. CORROSION INHIBITING COMPOUND SHALL BE USED ON ALL ELECTRICAL WIRE CONNECTIONS INSIDE METER BASE.
6. GROUND ROD TO BE DRIVEN A MINIMUM OF 6'-0" IN UNDISTURBED SOIL. GROUNDING CONDUCTOR CONNECTED TO GROUND ROD SHALL BE MINIMUM OF #6 COPPER. IF UPDATED SERVICE (2) GROUND RODS SHALL BE INSTALLED AT LEAST 10' APART.
7. UNISTRUT TO BE OF ONE PIECE AND OF 2'-0" IN LENGTH.
8. ENOUGH WIRE SHALL BE PROVIDED TO EXTEND A MINIMUM OF 4' PAST THE TRANSFORMER OR SECONDARY PEDESTAL GROUND SLEEVE.
9. ALL RIGID METAL CONDUIT INSTALLED BELOW GRADE SHALL BE WRAPPED WITH 10-MIL CORROSION-RESISTANT TAPE. TAPE SHALL EXTEND 6" MIN. ABOVE FINISH GRADE.
10. ALL POWER SERVICE LATERAL CONDUITS SHALL BE 3".
11. METER BASE SHALL BE LOCATED WITHIN THE FRONT 10'-0" OF THE SIDE OF THE HOUSE. OTHER LOCATIONS SHALL BE AS APPROVED BY BRIGHAM CITY PUBLIC POWER.
12. METER SOCKET SHALL BE PLACED A MINIMUM OF 5'-0" AND A MAXIMUM OF 6'-0" TO CENTER OF SOCKET FROM FINISHED GRADE.
13. CONTACT BRIGHAM CITY PUBLIC POWER TO SCHEDULE APPOINTMENT FOR ASSISTANCE IN PULLING IN URD WIRE INTO ENERGIZED TRANSFORMERS.
14. MAIN DISCONNECT BREAKER TO BE INSTALLED AT TIME OF INSPECTION.
15. IN GENERAL ONLY CONTINUOUS LENGTHS OF CONDUIT SHALL BE USED. NO JOINTS OR COUPLERS ARE PERMITTED IN SERVICE CONDUITS UNLESS OTHERWISE APPROVED.
16. ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED PRIOR TO FINAL POWER INSPECTION.
17. FIBERGLASS OR GALVANIZED RIGID STEEL CONDUIT (GRC) SHALL BE USED FOR BENDS 45 DEGREES AND GREATER ON ALL CONDUITS EXTENDING OUT OF THE GROUND OUTSIDE OF AN ENCLOSURE.

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TYPE OF CONDUIT	CONDUIT SIZE	MIN. DEPTH TO TOP OF CONDUIT
STREET LIGHT	2" SECONDARY	2'-0"
ELECTRICAL SERVICE	3" SECONDARY	2'-0"
SECONDARY	1"	2'-0"
	2"	2'-0"
	3"	2'-0"
	4"	2'-0"
PRIMARY	4"	4'-0"
	6"	4'-0"

ALL POWER CONDUIT SHALL BE BURIED A MINIMUM OF 4' IN DEPTH TO TOP OF CONDUIT. IF HIGH VOLTAGE (12KV) CONDUITS & LOW VOLTAGE (600 VOLT) POWER CONDUITS ARE INSTALLED IN THE SAME TRENCH, THE HIGH VOLTAGE POWER SHALL ALWAYS BE INSTALLED BELOW LOW VOLTAGE POWER CONDUITS. IF THERE ARE MULTIPLE HIGH VOLTAGE CONDUITS (3" 1PHASE, 6" 3PHASE) IN THE SAME TRENCH, ALL HIGH VOLTAGE CONDUITS MAY BE INSTALLED AT THE DEPTH OF THE LARGEST CONDUIT (6")

- NOTES:
- HIGH VOLTAGE PRIMARY CONDUITS SHALL ALWAYS BE BELOW SECONDARY CONDUITS.
 - REBAR SHALL BE CAPPED UNTIL BACKFILLED.
 - BACKFILL SHALL MEET THE REQUIREMENTS OF EARTHWORK AND TRENCHES AND OTHER STANDARDS IN THE CONSTRUCTION AND DEVELOPMENT STANDARDS.
 - ALL CONDUITS SHALL BE INSPECTED AT EACH "LIFT", AT THE COMPACTION LEVEL, AND FOR A FINAL INSPECTION.
 - A CAUTION TAPE SHALL BE PLACED DIRECTLY ON CONDUIT, AND A CAUTION TAPE SHALL BE PLACED 1" BELOW GRADE FOR CITY POWER.
 - ONLY CONTINUOUS CONDUIT RUNS ARE PERMITTED. FACTORY JOINTS SHALL BE USED FOR ATTACHING FULL LENGTH CONDUITS TOGETHER UNLESS OTHERWISE APPROVED.

TYPICAL JOINT TRENCH OF HIGH VOLTAGE, LOW VOLTAGE, & COMMUNICATIONS CONDUITS

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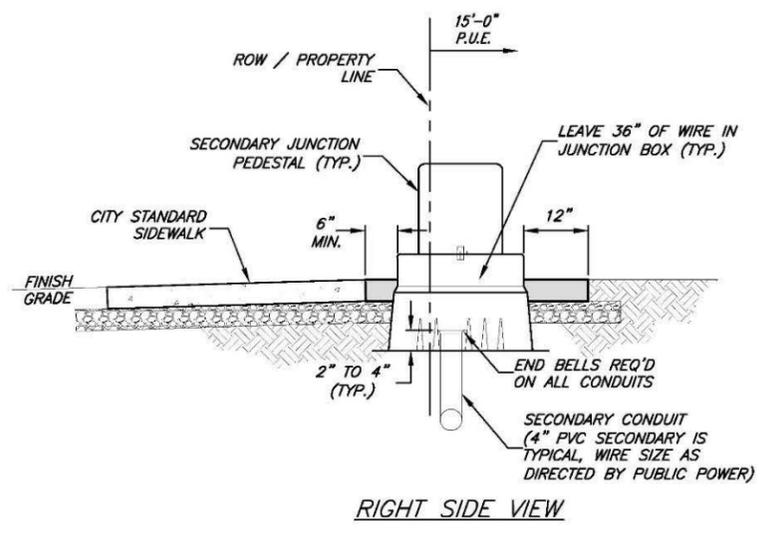
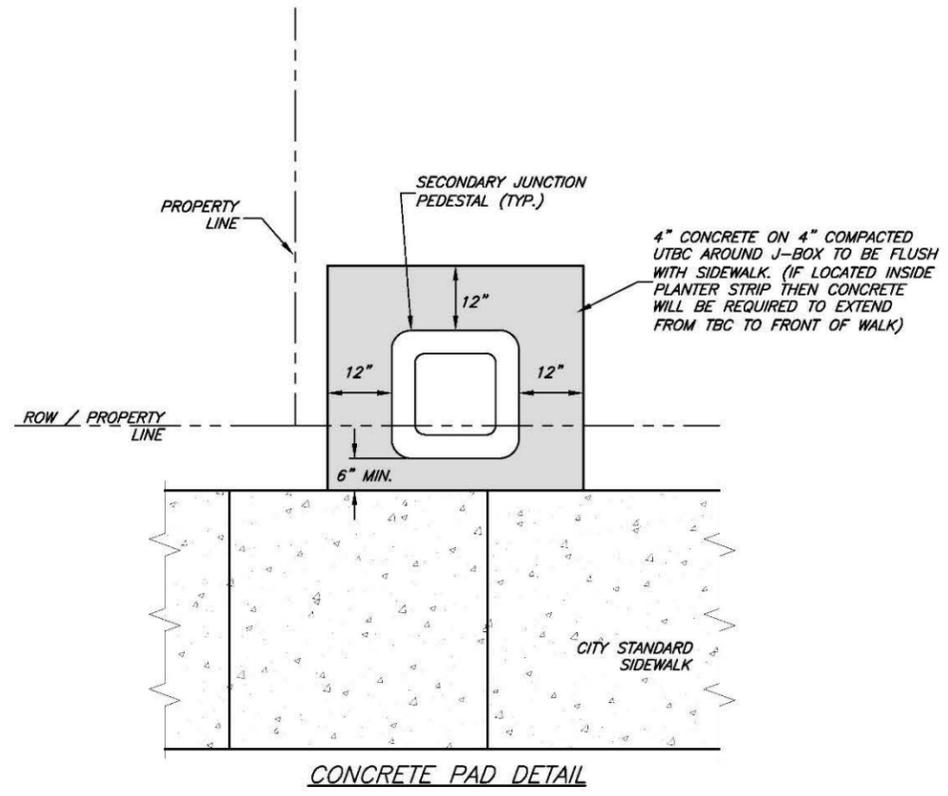
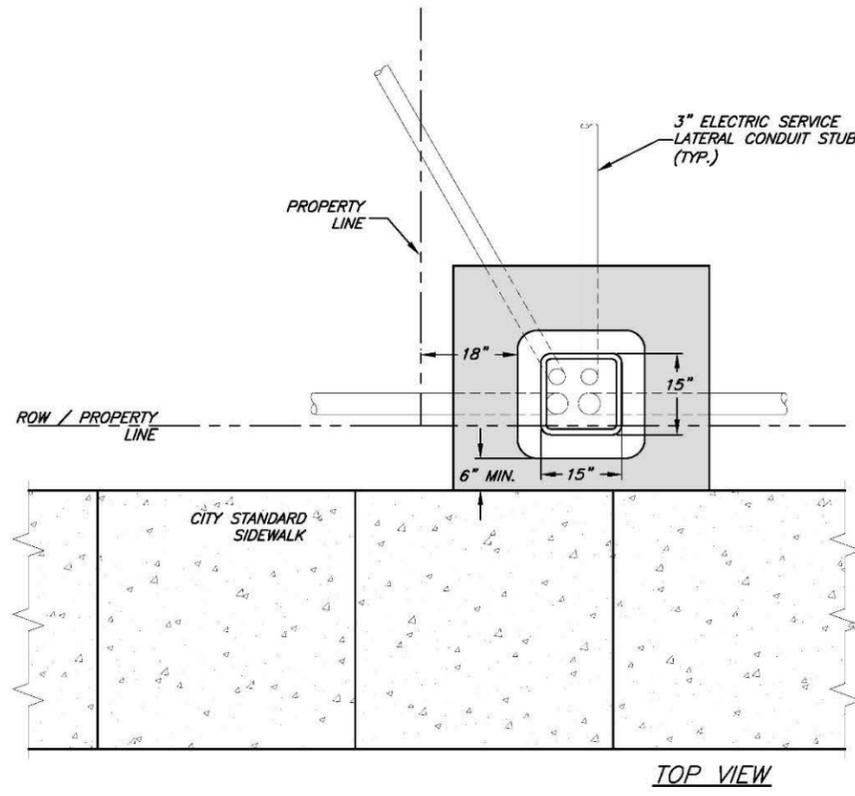
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 20 North Main Street
 Brigham City, UT 84302
 Tel: (435) 734-6600
 www.bculah.gov



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 1455 East Power Plant Road
 Brigham City, UT 84302
 Tel: (435) 734-6624
 Utility Emergency: (435) 723-6888

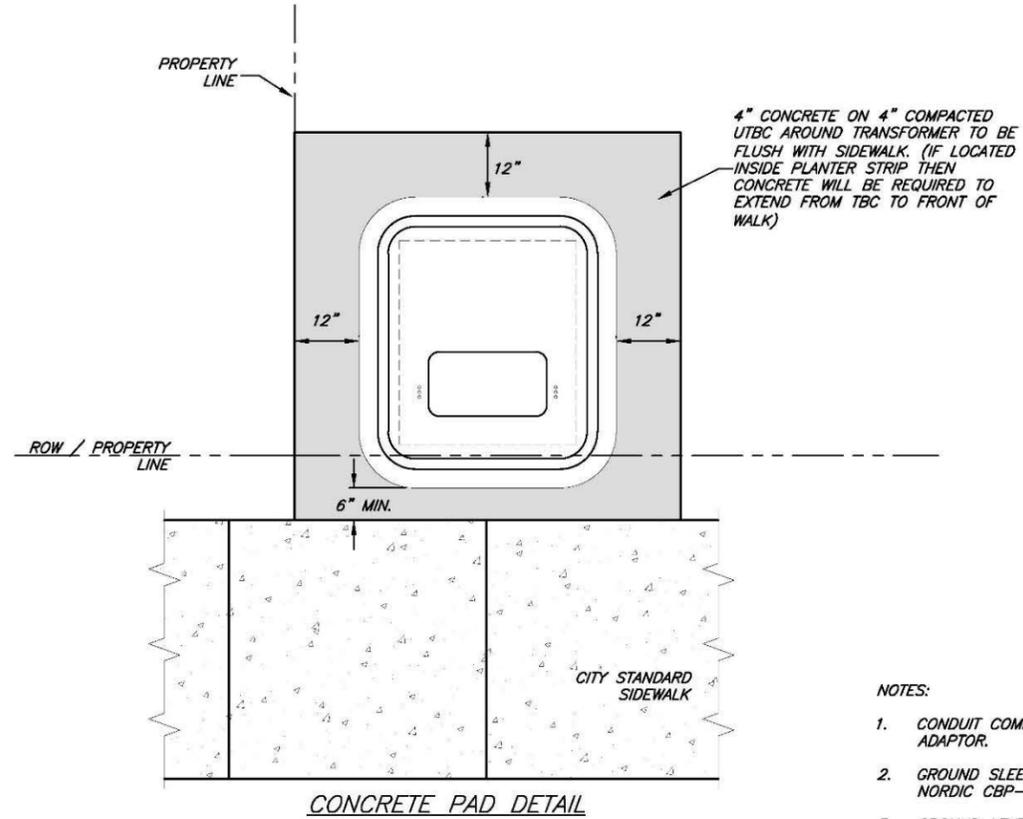
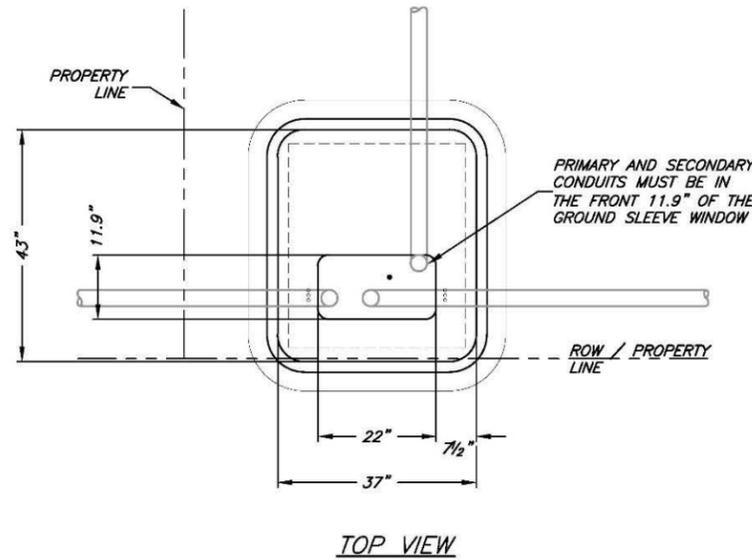
BRIGHAM CITY PUBLIC POWER
ELECTRICAL CONSTRUCTION STANDARDS
ELECTRIC CONDUIT TRENCH DETAIL

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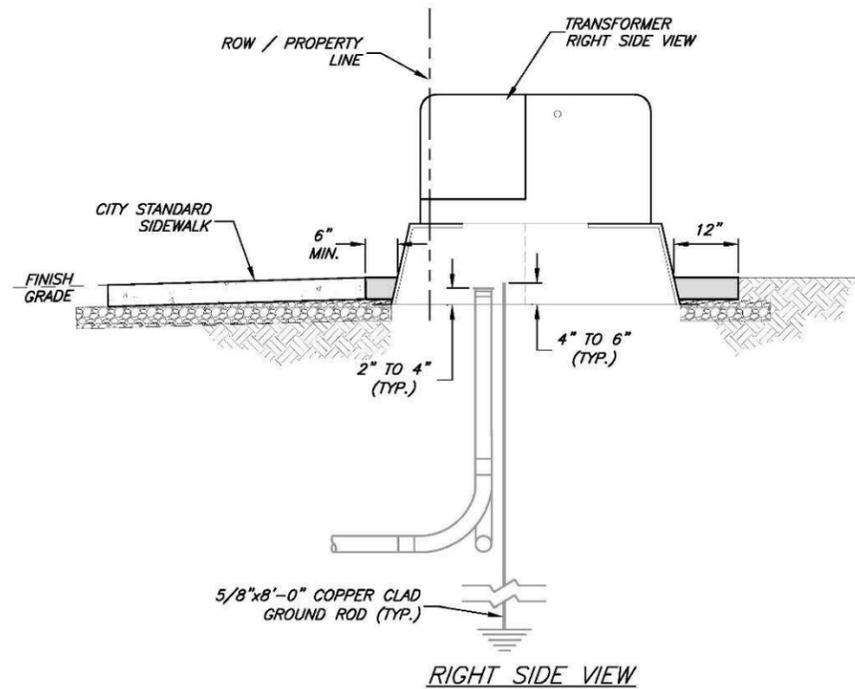
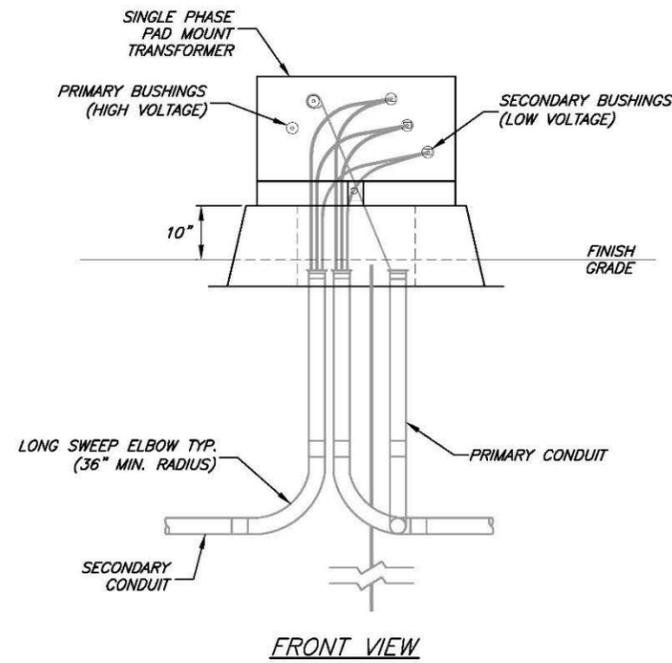
- NOTES:
1. CONDUITS ENTERING ANY JUNCTION BOX SHALL HAVE END BELLS TO PROTECT WIRE FROM DAMAGE.
 2. SECONDARY WIRE SHALL BE RATED FOR 600 VOLTS AND BE THE URD TYPE. CARE SHALL BE TAKEN IN INSTALLATION AS NOT TO DAMAGE WIRE INSULATION.
 3. ALL SECONDARY WIRE SHALL EXTEND A MINIMUM OF 36" & A MAXIMUM OF 48" FROM TOP OF BOX (WITHOUT THE LID).
 4. SECONDARY PEDESTALS SHALL FACE TOWARDS THE STREET AND SHALL BE LEVEL.
 5. ROADBASE SHALL BE USED UNDER ALL PEDESTALS. ROADBASE SHALL BE COMPACTED TO 95% OF DRY DENSITY. COMPACTION TESTS SHALL BE TAKEN PRIOR TO ANY PEDESTALS BEING SET INTO PLACE.
 6. CONDUITS SHALL BE 2" TO 4" HIGHER THAN INSIDE GRADE OF PEDESTAL. (INSIDE GRADE IS THE BOTTOM OF THE PEDESTAL)
 7. LOCKING MECHANISM SHALL BE 10" FROM FINISHED GRADE.
 8. USE ONLY APPROVED JUNCTION PEDESTALS: PENCELL AG20HDXCL-NL & NORDIC PSP-15-15-30-MG OR APPROVED EQUIVALENT.
 9. SECONDARY SERVICE LATERAL CONDUITS SHALL BE SEPARATED HORIZONTALLY IN THE TRENCH FROM COMMUNICATIONS CONDUITS.

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NOTES:

1. CONDUIT COMING INTO ANY TRANSFORMER MUST ONLY USE AN END BELL ADAPTOR.
2. GROUND SLEEVE FOR 100 KVA TRANSFORMER OR LESS SHALL BE NORDIC CBP-37-43-15C-AB2MG21X12 OR APPROVED EQUIVALENT.
3. GROUND LEVEL INSIDE THE GROUND SLEEVE IS THE BOTTOM OF THE GROUND SLEEVE.
4. ALL SECONDARY CABLE TO BE URD SELF-HEALING TYPE.
5. PULLING MULE TAPE MUST BE SECURELY TIED TO THE GROUND SLEEVE OR CONDUIT.



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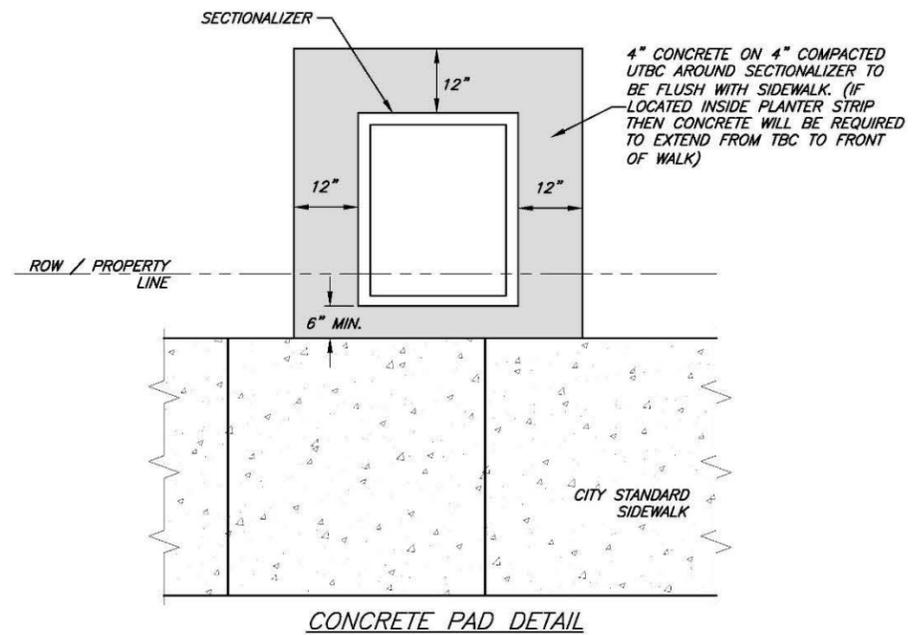
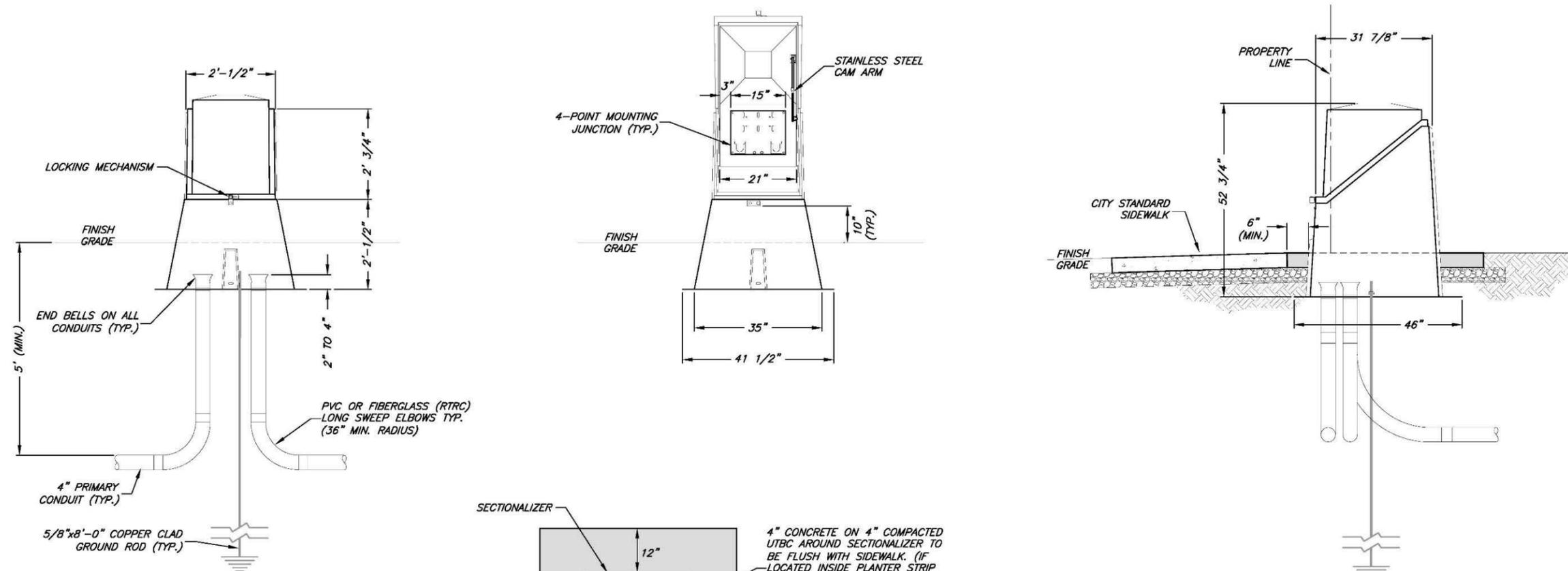
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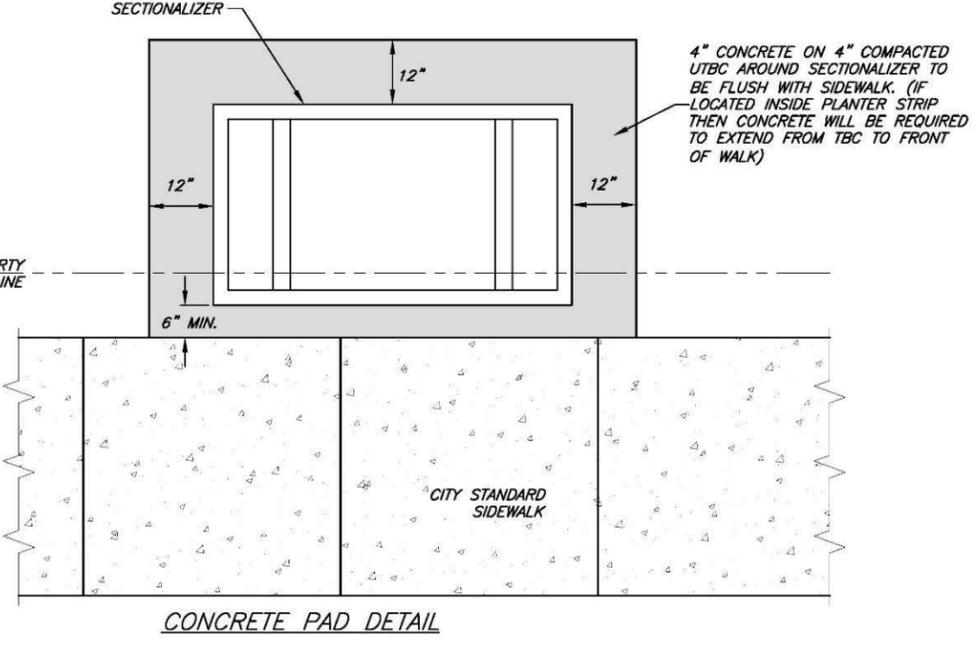
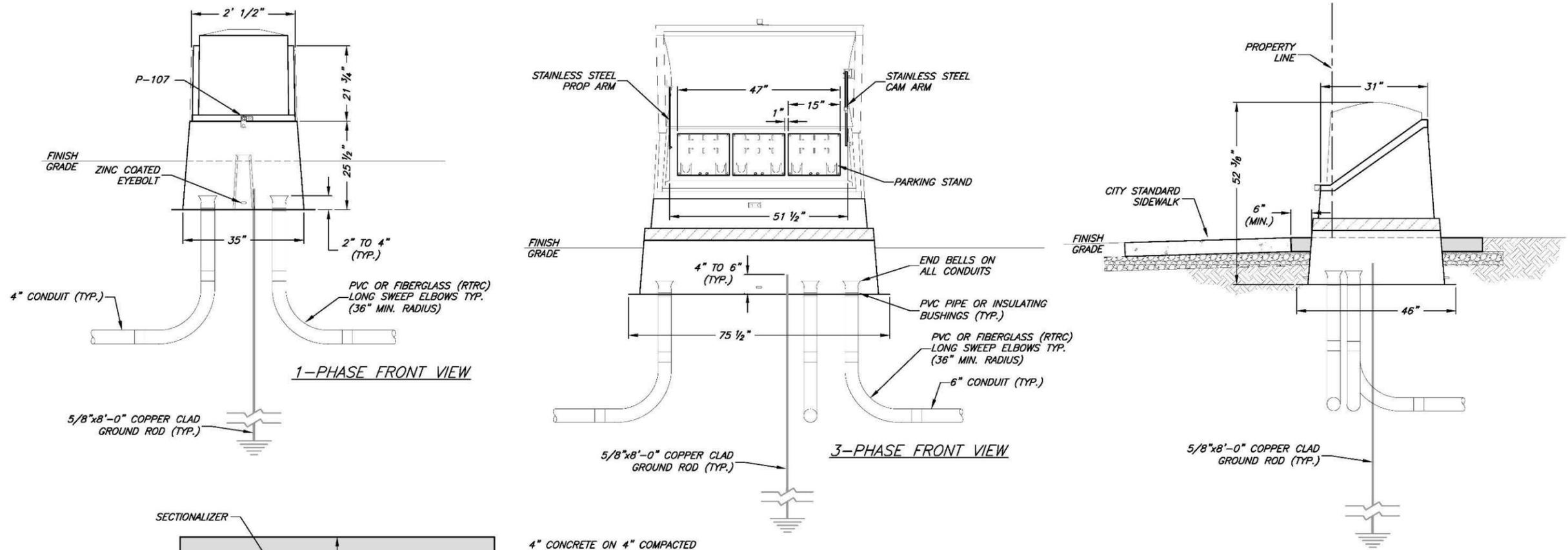
BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS	
SINGLE PHASE PAD MOUNT TRANSFORMER	

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- NOTES:
1. SECTIONALIZER CABINET UNITS FOR 200 AMP 1-PHASE ARE TO BE FABRICATED FROM FIBERGLASS COMPOSITE & MEET BRIGHAM CITY PUBLIC POWER SPECIFICATIONS. CONDUIT OPENINGS MUST BE WITHIN THE GROUND SLEEVE WINDOW OF THE SECTIONALIZER.
 2. BLOW IN 1250 LB. MULE TAPE IN ALL CONDUITS AND TIE SECURELY TO 4 POINT MOUNTING PLATE.
 3. 200 AMP 1-PHASE SECTIONALIZER P/N: NORDIC ND-150-MG-101-X-X, HUBBLE P/N P134254BMDL OR AN APPROVED EQUIVALENT.
 4. CONTRACTOR TO FURNISH & INSTALL 200-AMP 4-POINT MOUNTING JUNCTION PLATES & 4 POINT JUNCTIONS. P/N: COOPER-LJ215C4U OR HUBBLE-215J4U.
 5. PVC OR FIBERGLASS (RTRC) ELBOWS SHALL BE USED FOR BENDS 45 DEGREES OR GREATER.
 6. SECTIONALIZER SHALL BE SET A MINIMUM OF 6" BEHIND SIDEWALK
 7. CONCRETE SHALL BE POURED IN FRONT OF THE SECTIONALIZER IN BETWEEN THE SECTIONALIZER & SIDEWALK.
 8. AREA AROUND SECTIONALIZER SHALL BE BACKFILLED AND LEVELED A MINIMUM OF 12' IN ALL DIRECTIONS AROUND THE SECTIONALIZER TO PROVIDE A SAFE WORKING AREA FOR THE ELECTRIC DEPARTMENT.

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- NOTES:
1. SECTIONALIZER CABINET UNITS FOR 200 AMP 1-PHASE AND 3-PHASE ARE TO BE FABRICATED FROM FIBERGLASS COMPOSITE. CONDUIT OPENINGS MUST BE WITHIN THE GROUND SLEEVE WINDOW OF THE SECTIONALIZER. USE MANUFACTURER'S APPROVED GROUND SLEEVE FOR EACH SECTIONALIZER.
 2. BLOW IN 1250 LB MULE TAPE IN ALL CONDUITS AND TIE SECURELY TO 4 POINT MOUNTING PLATE.
 3. CONTRACTOR TO FURNISH & INSTALL 200-AMP 4-POINT MOUNTING JUNCTION AND PLATES & 4-POINT JUNCTIONS. P/N: COOPER-LJ215C4U OR HUBBLE-215J4U.
 4. 200 AMP 1-PHASE SECTIONALIZER P/N: NORDIC ND-150-MG-101-X-X OR HUBBEL P/N P1342548MDL
 5. 200 AMP 3-PHASE SECTIONALIZER P/N: NORDIC ND-350-MG-101-X-X OR HUBBEL P/N P2582548MDM

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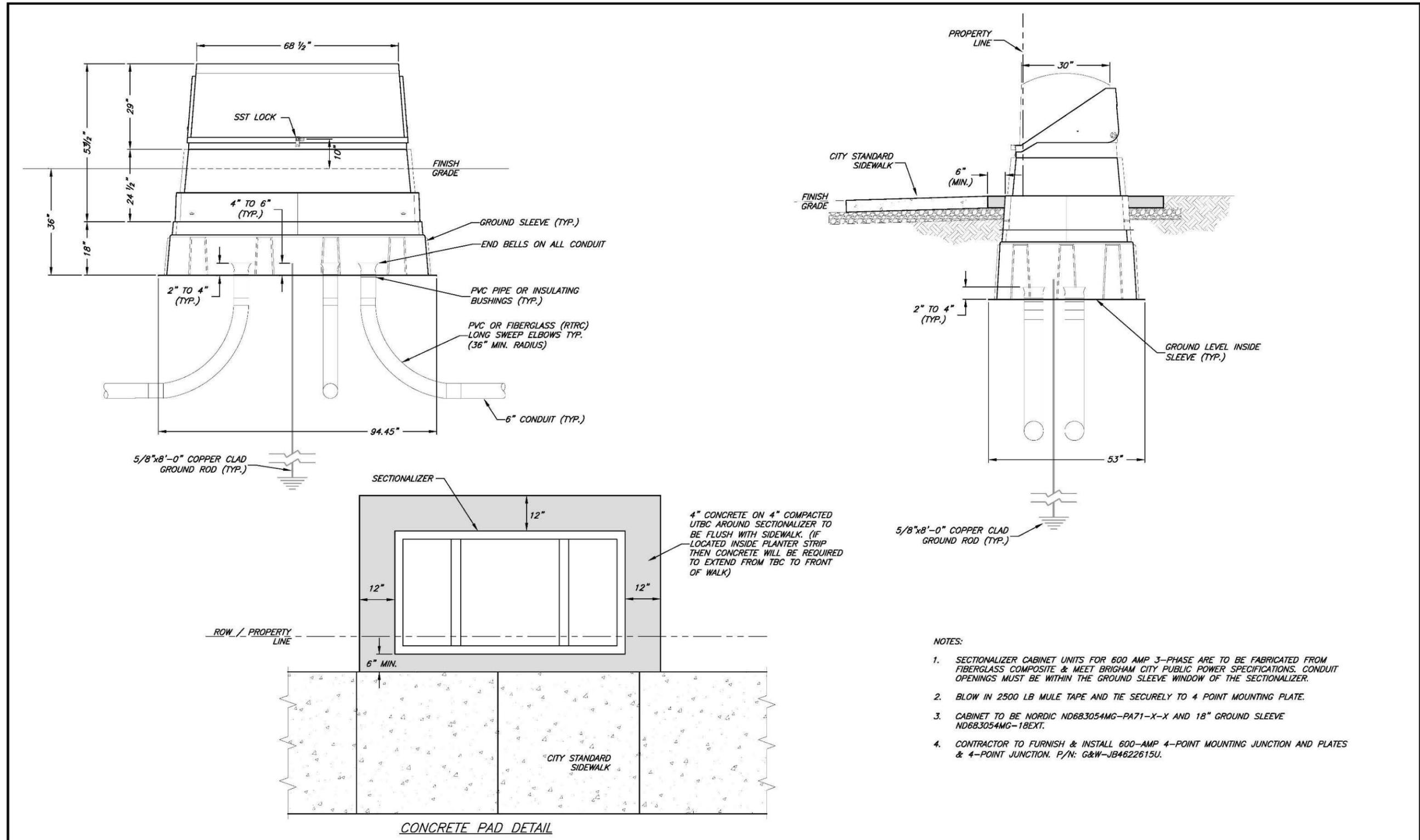
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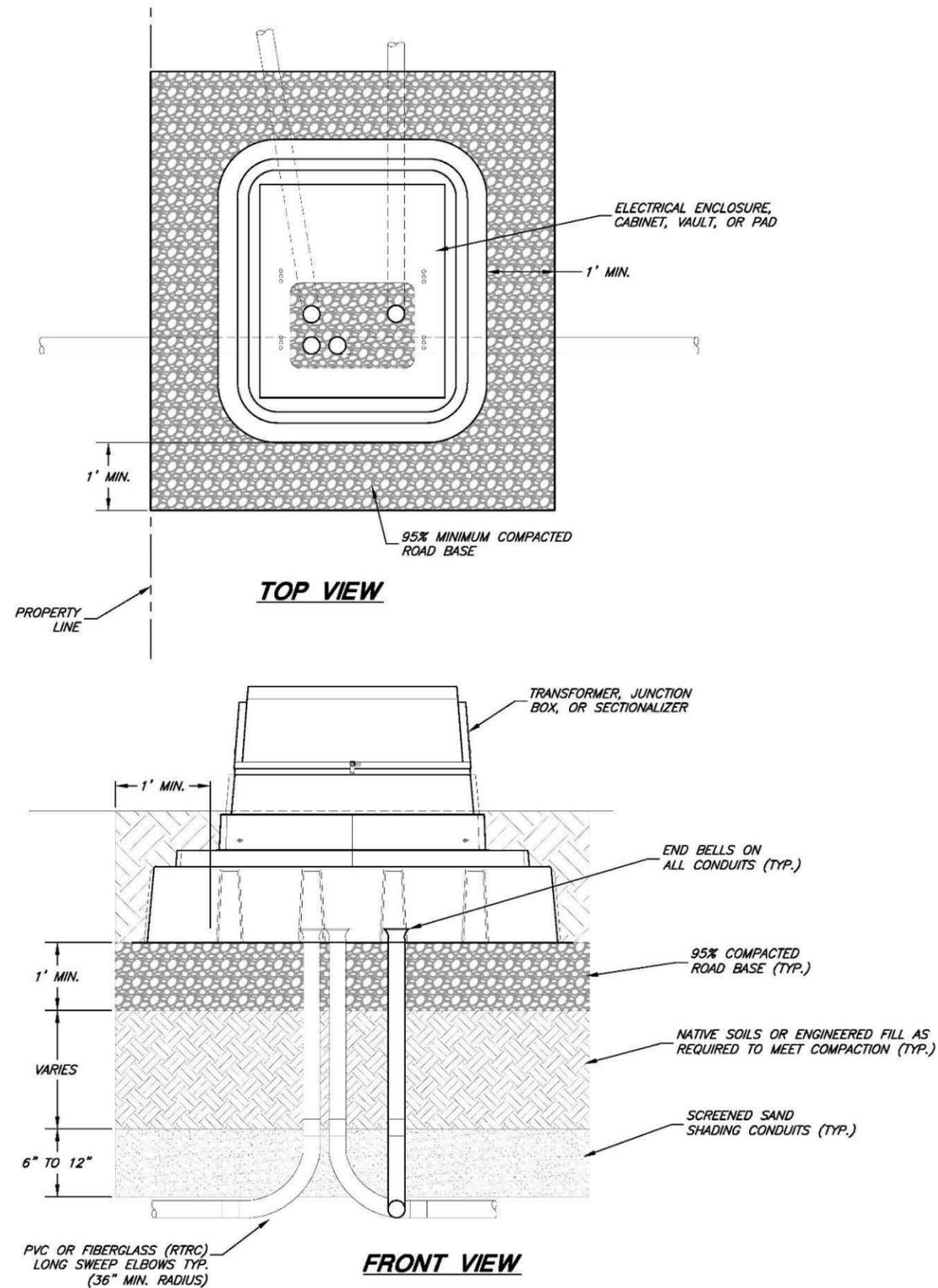
BRIGHAM CITY PUBLIC POWER
ELECTRICAL CONSTRUCTION STANDARDS

200-AMP 1 AND 3-PHASE FIBERGLASS SECTIONALIZER



- NOTES:
1. SECTIONALIZER CABINET UNITS FOR 600 AMP 3-PHASE ARE TO BE FABRICATED FROM FIBERGLASS COMPOSITE & MEET BRIGHAM CITY PUBLIC POWER SPECIFICATIONS. CONDUIT OPENINGS MUST BE WITHIN THE GROUND SLEEVE WINDOW OF THE SECTIONALIZER.
 2. BLOW IN 2500 LB MULE TAPE AND TIE SECURELY TO 4 POINT MOUNTING PLATE.
 3. CABINET TO BE NORDIC ND683054MG-PA71-X-X AND 18" GROUND SLEEVE ND683054MG-18EXT.
 4. CONTRACTOR TO FURNISH & INSTALL 600-AMP 4-POINT MOUNTING JUNCTION AND PLATES & 4-POINT JUNCTION. P/N: G&W-JB4622615U.

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NOTES:

1. ALL ELECTRICAL BOXES INCLUDING, BUT NOT LIMITED TO, SECTIONALIZERS, SECONDARY JUNCTION BOXES, TRANSFORMERS AND TRANSFORMER CONCRETE PADS SHALL HAVE UNTREATED BASE COURSE COMPACTED TO A MINIMUM OF 95% UNDER ALL BOXES. FILL SHALL BE A MINIMUM OF 1' IN DEPTH, AND SHALL EXTEND A MINIMUM OF 1' PAST ALL SIDES AND BACK AND 1' IN FRONT (6" IF A SIDEWALK IS PRESENT) OF ALL BOXES OR PADS.
2. ALL COMPACTION TESTS SHALL BE TAKEN BEFORE ELECTRICAL BOXES ARE SET INTO PLACE.
3. ALL SAND, ROADBASE AND ENGINEERED FILL SHALL MEET BRIGHAM CITY PUBLIC POWER STANDARDS.
4. REFER TO "EARTHWORK AND TRENCHES" SECTION IN THE CONSTRUCTION STANDARDS FOR ADDITIONAL REQUIREMENTS FOR BACKFILL, TRENCHING AND COMPACTION.
5. AREA AROUND ELECTRICAL BOXES SHALL BE BACKFILLED & LEVELED A MINIMUM OF 12" IN ALL DIRECTIONS TO PROVIDE A SAFE WORKING ARE FOR THE ELECTRIC DEPARTMENT.

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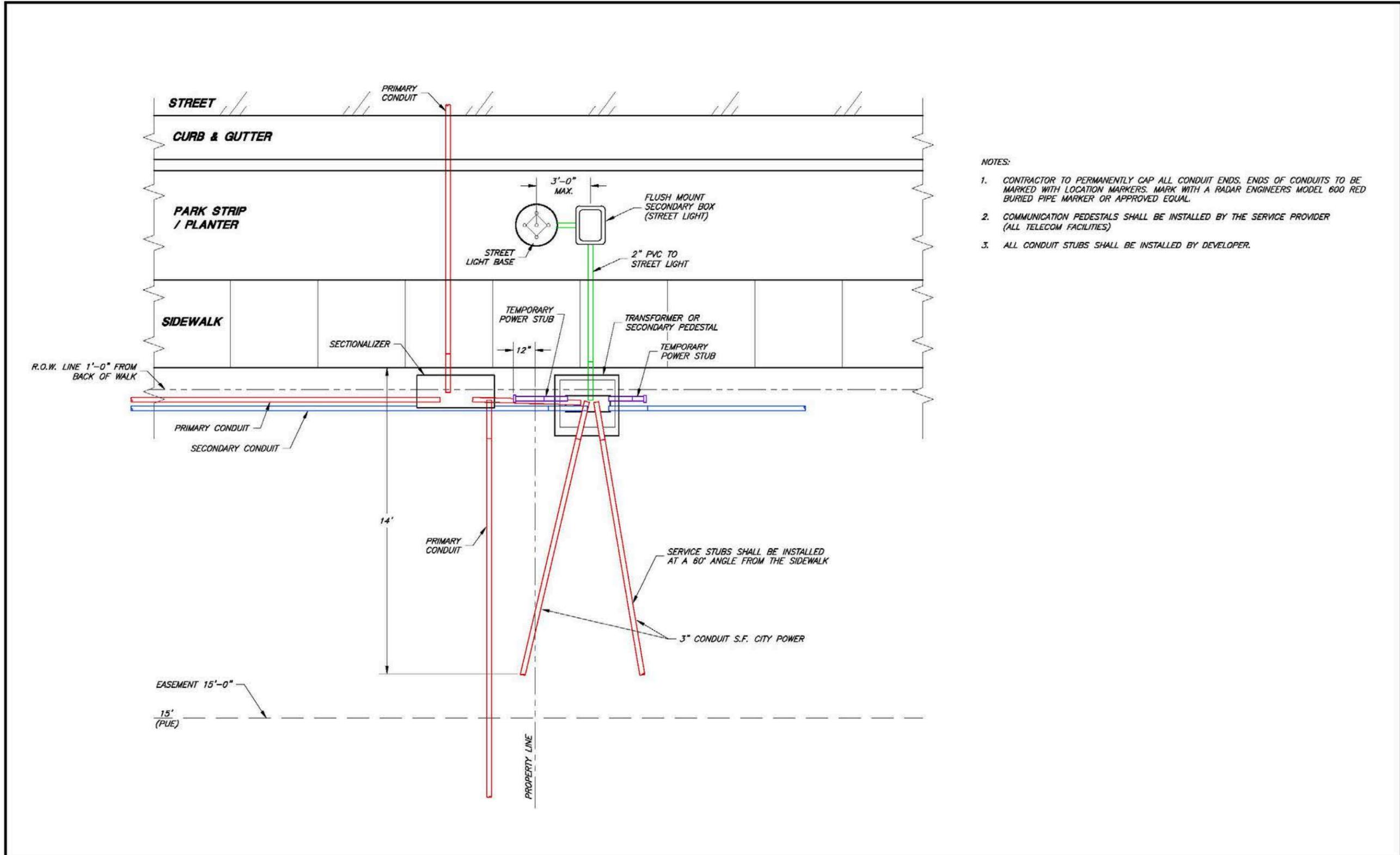
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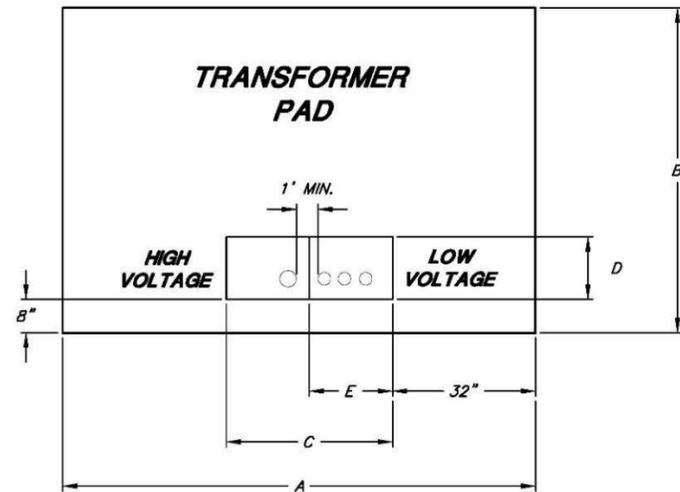
BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS ELECTRICAL BOX BACKFILL & COMPACTION

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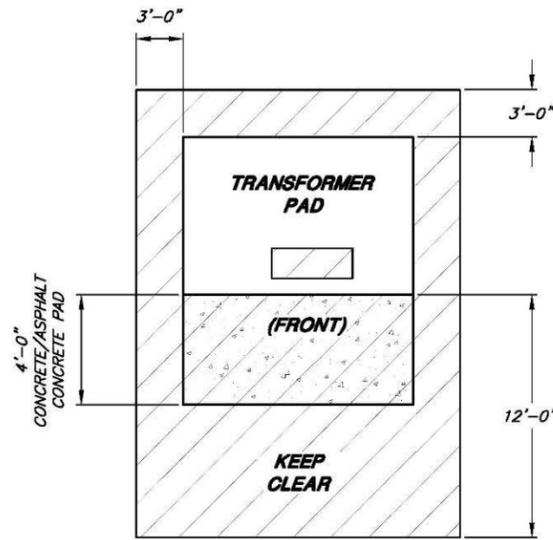


- NOTES:
1. CONTRACTOR TO PERMANENTLY CAP ALL CONDUIT ENDS. ENDS OF CONDUITS TO BE MARKED WITH LOCATION MARKERS. MARK WITH A RADAR ENGINEERS MODEL 600 RED BURIED PIPE MARKER OR APPROVED EQUAL.
 2. COMMUNICATION PEDESTALS SHALL BE INSTALLED BY THE SERVICE PROVIDER (ALL TELECOM FACILITIES)
 3. ALL CONDUIT STUBS SHALL BE INSTALLED BY DEVELOPER.

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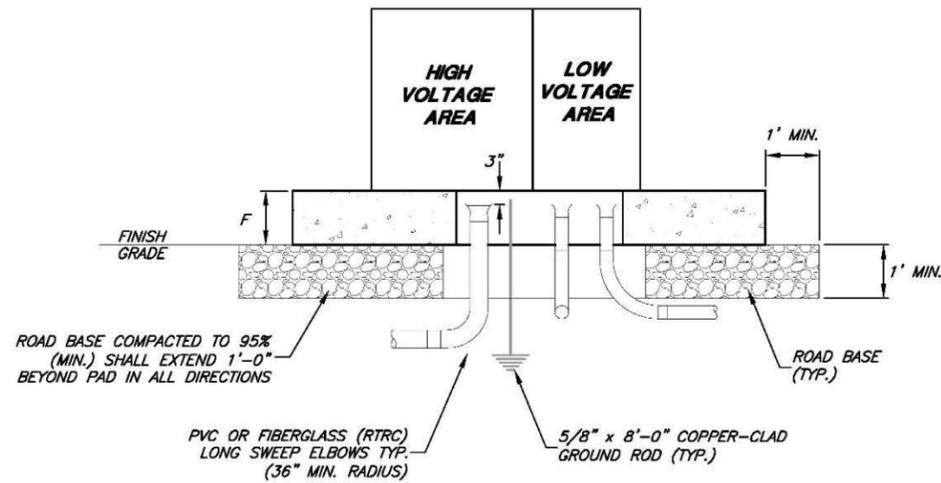


GENERAL TRANSFORMER CLEARANCES



NOTES:

- SITE PREPARATION & INSPECTIONS.** AFTER EXCAVATION, ALL EXCAVATED AREA 1' PAST PAD SHALL BE BACK FILLED WITH ROAD BASE AND MUST BE COMPACTED TO 95%. THE GROUND MUST BE LEVEL AN ADDITIONAL 12' PAST THE EDGE OF THE PAD ON ALL SIDES AND THEN TAPER OFF. ALL PADS SHALL BE INSPECTED PRIOR TO POURING CONCRETE, AND THE GROUND SHALL HAVE A COMPACTION TEST DONE PRIOR TO THE FORM BEING CONSTRUCTED.
- CONCRETE.** CONCRETE SHALL BE IN ACCORDANCE WITH BRIGHAM CITY PUBLIC POWER STANDARD 4.39.65.040. STEEL REINFORCEMENT SHALL BE #4 BARS PLACED AT 12" CENTERS THROUGHOUT THE PAD. THE PAD MUST BE POURED AT LEAST SEVEN FULL DAYS PRIOR TO SETTING THE TRANSFORMER. THE FINISHED SURFACE MUST BE COMPLETELY FLAT AND LEVEL. CONCRETE SHALL BE TESTED BY THE CITY OR THE CITY'S ENGINEERING FIRM PRIOR TO POURING CONCRETE. CONCRETE SHALL CONFORM TO CITY STANDARDS.
- FABRICATION.** THE PAD SHALL BE CONSTRUCTED ON THE SITE ACCORDING TO THE SPECIFICATIONS.
- CONDUIT WINDOW LAYOUT.** LOW VOLTAGE CONDUITS SHALL BE FORMED AS TIGHTLY AS POSSIBLE AGAINST THE RIGHT SIDE OF THE OPENING AND SHALL IN NO CASE EXTEND FURTHER THAN 20" FROM THE RIGHT SIDE OF THE CONDUIT WINDOW ON THE SMALL PAD OR 30" ON THE LARGE PADS. NO MORE THAN EIGHT CONDUITS WILL BE USED ON THE LOW VOLTAGE SIDE. ON 2000 KVA PADS, NO MORE THAN 12 SECONDARY CONDUITS WILL BE USED. DO NOT PUT ANY CONCRETE IN OR UNDER THE CONDUIT WINDOW. USE SOIL TO SEPARATE CONDUITS. ALL CONDUITS ENTERING THE PAD SHALL BE SCHEDULE 40 PVC WITH PVC OR FIBERGLASS (RTRC) ELBOWS.
- GROUNDING.** A 5/8" X 8' GROUND ROD SHALL BE USED ON THE SMALL PAD AND A 3/4" X 10' ROD ON THE LARGE PADS. THE GROUND ROD SHALL BE INSTALLED ON THE PRIMARY SIDE OF TRANSFORMER.
- CLEARANCES.** THE FRONT OF THE PAD SHOULD ALWAYS FACE AWAY FROM ADJACENT STRUCTURES AND BE FREE OF OBSTRUCTIONS. AT LEAST THREE FEET MUST SEPARATE THE EDGES OF THE PAD FROM ANY ADJACENT STRUCTURE. THE EDGES OF THE PAD MUST BE AT LEAST TEN FEET FROM ANY COMBUSTIBLE STRUCTURE. IF AN ADJACENT STRUCTURE HAS ANY OVERHANG OR EAVE WITHIN 27 VERTICAL FEET OF THE TOP OF THE PAD, CLEARANCE MUST BE MEASURED FROM THE OUTSIDE OF THE OVERHANG. THE PAD MUST NOT BE PLACED IN AN AREA TEN FEET IN LINE WITH OR THREE FEET TO EITHER SIDE OF ANY WINDOW IN AN ADJACENT STRUCTURE.
- CLEARANCE FOR A DOOR.** MUST BE TWENTY FEET IN LINE WITH IT AND TEN FEET ON EITHER SIDE. PADS MUST NOT BE PLACED WITHIN FIFTEEN FEET OF ANY VALVE OR WITHIN TWENTY FEET OF ANY PUMPING OR STORAGE FACILITY CONTAINING FLAMMABLE MATERIAL. NO WALLS, FENCES, OR ANY OTHER OBSTRUCTIONS WILL BE PLACED WITHIN THREE FEET OF THE SIDES OR BACK OF THE PAD, OR WITHIN TWELVE FEET OF THE FRONT OF THE PAD. THE AREA SURROUNDING THE PAD MUST HAVE TWELVE FEET OF CLEAR, LEVEL WORKING AREA FOR MAINTENANCE OF THE TRANSFORMER. THE PAD MAY NOT BE PLACED IN LINE WITH AN AIR INTAKE WITHIN 32 VERTICAL FEET OF THE SURFACE OF THE PAD. ALSO, IT MUST NOT BE PLACED WITHIN 12 FEET VERTICALLY OF A DOOR OR WINDOW.
- BARRIERS.** IF THE TRANSFORMER PAD IS TO BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC, (PARKING LOTS, DRIVEWAYS, ETC.) CONTACT BRIGHAM CITY PUBLIC POWER FOR PROTECTIVE BARRIER REQUIREMENTS.
- METERING.** IN GENERAL, THE METERING SHALL BE PLACED ON BUILDINGS OR STRUCTURES.
- CONNECTIONS.** ALL SECONDARY (LOW VOLTAGE) CABLES & SECONDARY CONNECTIONS ARE THE CONTRACTOR'S RESPONSIBILITY. BRIGHAM CITY PUBLIC POWER WILL INSTALL & TERMINATE PRIMARY CABLES & CONNECTIONS ONLY.
- ANCHORING.** CONTRACTOR TO ANCHOR TRANSFORMER TO PAD WITH MINIMUM OF TWO ANCHOR POINTS.
- PRECAST TRANSFORMER PADS MUST BE APPROVED BY THE PUBLIC POWER DEPARTMENT.**



TRANSFORMER KVA RATING	DIMENSIONS					
	A	B	C	D	E	F
75-500 KVA	114"	78"	36"	15"	18"	9"
750-1500 KVA	118"	105"	52"	16"	20"	11"
2000 KVA	CONTACT POWER DEPT.					

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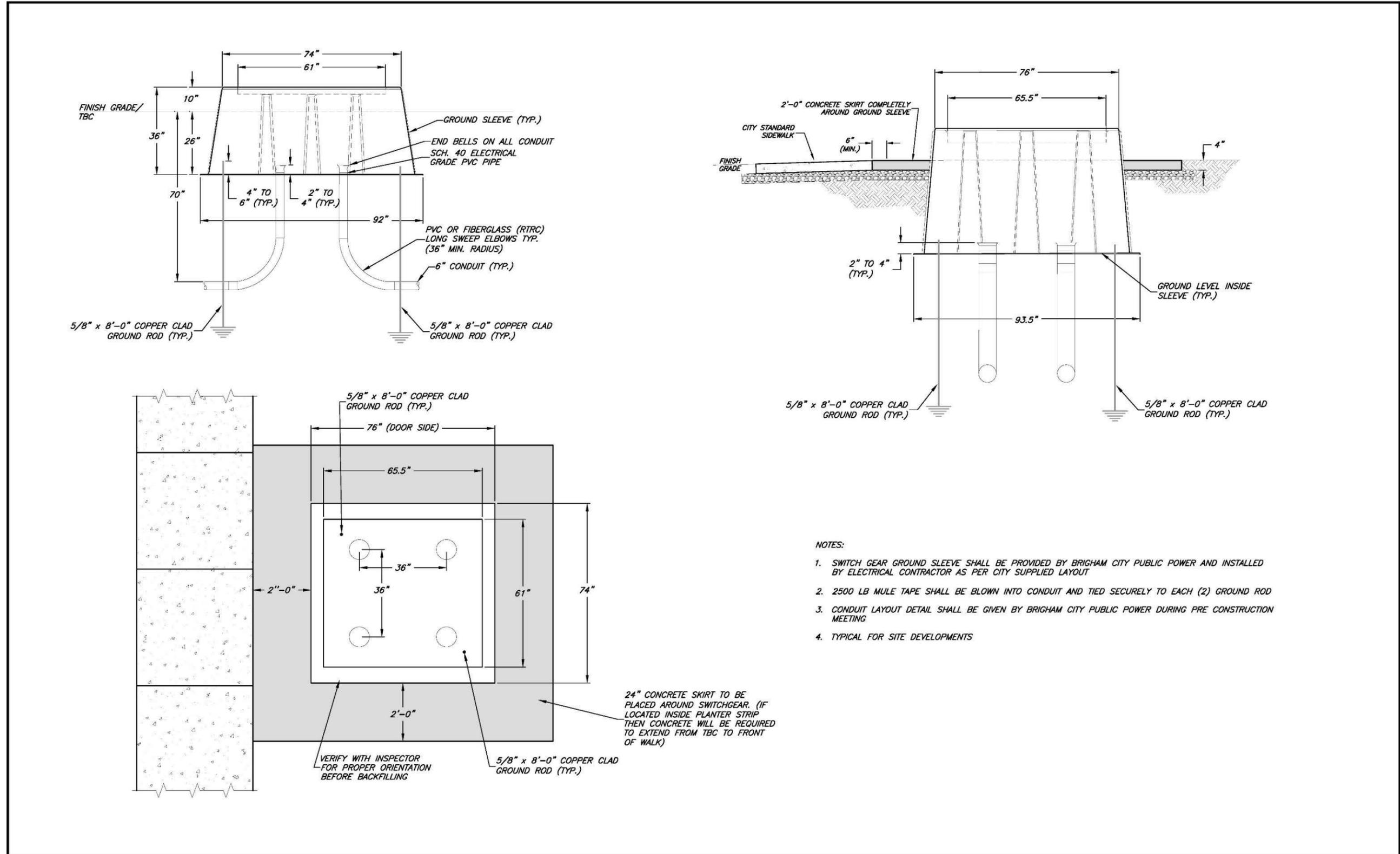
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BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS	
3-PHASE TRANSFORMER & CONCRETE PAD	

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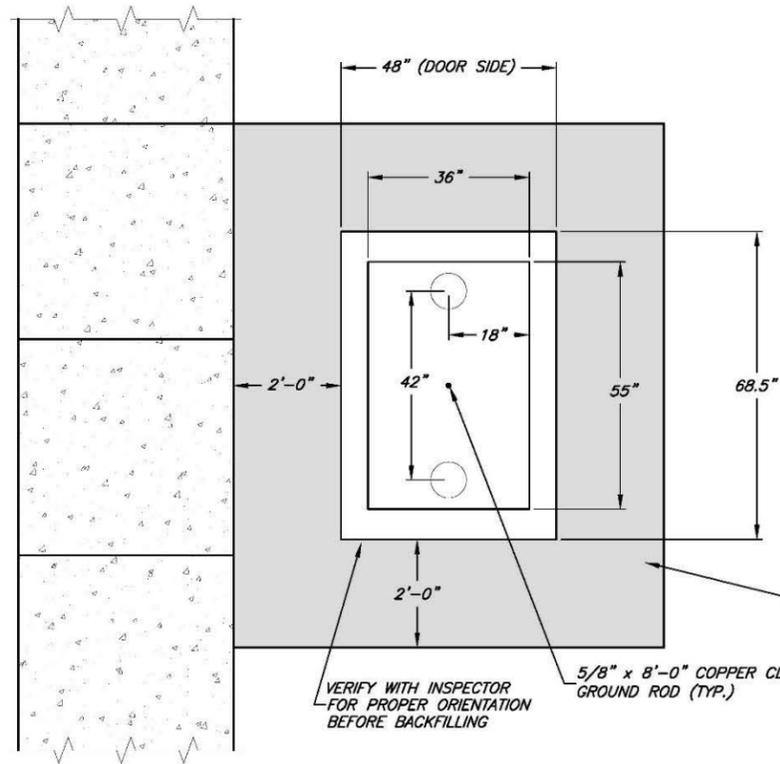
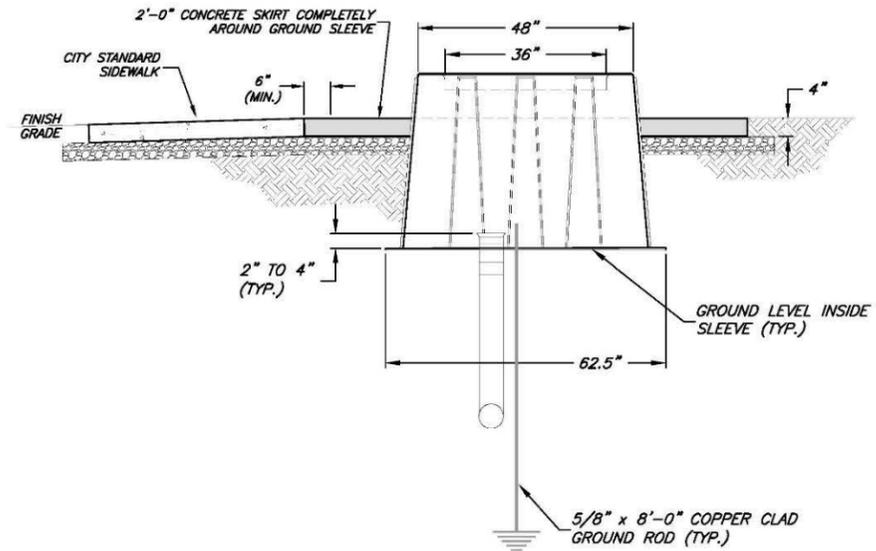
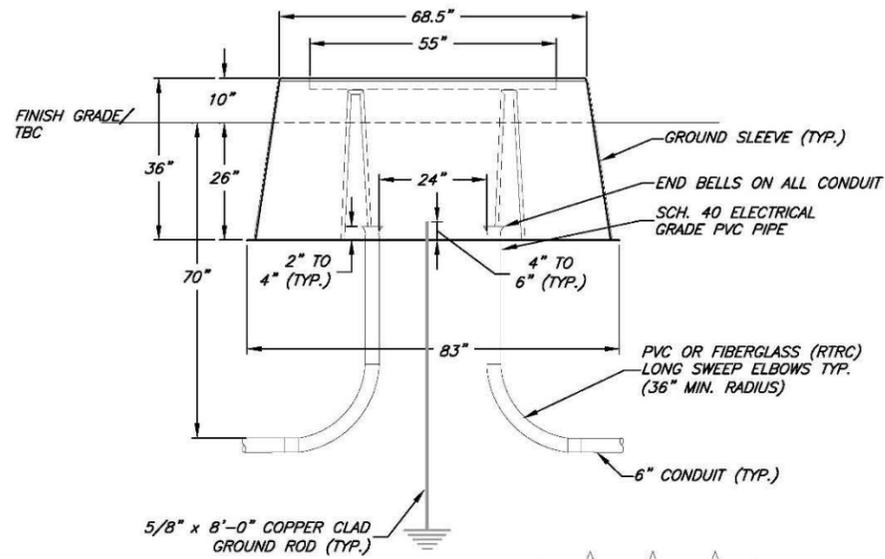


- NOTES:
1. SWITCH GEAR GROUND SLEEVE SHALL BE PROVIDED BY BRIGHAM CITY PUBLIC POWER AND INSTALLED BY ELECTRICAL CONTRACTOR AS PER CITY SUPPLIED LAYOUT
 2. 2500 LB MULE TAPE SHALL BE BLOWN INTO CONDUIT AND TIED SECURELY TO EACH (2) GROUND ROD
 3. CONDUIT LAYOUT DETAIL SHALL BE GIVEN BY BRIGHAM CITY PUBLIC POWER DURING PRE CONSTRUCTION MEETING
 4. TYPICAL FOR SITE DEVELOPMENTS

24" CONCRETE SKIRT TO BE PLACED AROUND SWITCHGEAR. (IF LOCATED INSIDE PLANTER STRIP THEN CONCRETE WILL BE REQUIRED TO EXTEND FROM TBC TO FRONT OF WALK)

VERIFY WITH INSPECTOR FOR PROPER ORIENTATION BEFORE BACKFILLING

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1. SWITCH GEAR GROUND SLEEVE SHALL BE PROVIDED BY BRIGHAM CITY PUBLIC POWER AND INSTALLED BY ELECTRICAL CONTRACTOR AS PER CITY SUPPLIED LAYOUT
 2. 2500 LB MULE TAPE SHALL BE BLOWN INTO CONDUIT AND TIED SECURELY TO GROUND ROD
 3. CONDUIT LAYOUT DETAIL SHALL BE GIVEN BY BRIGHAM CITY PUBLIC POWER DURING PRE CONSTRUCTION MEETING
 4. TYPICAL FOR COMMERCIAL TRANSFORMER PROTECTION FOR 750KVA AND LARGER

24\"/>

VERIFY WITH INSPECTOR FOR PROPER ORIENTATION BEFORE BACKFILLING

REV.	DATE	DESCRIPTION
R1		
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R4		

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DRAWN:	BEB
DESIGN:	TD & CS
CHECK:	TC

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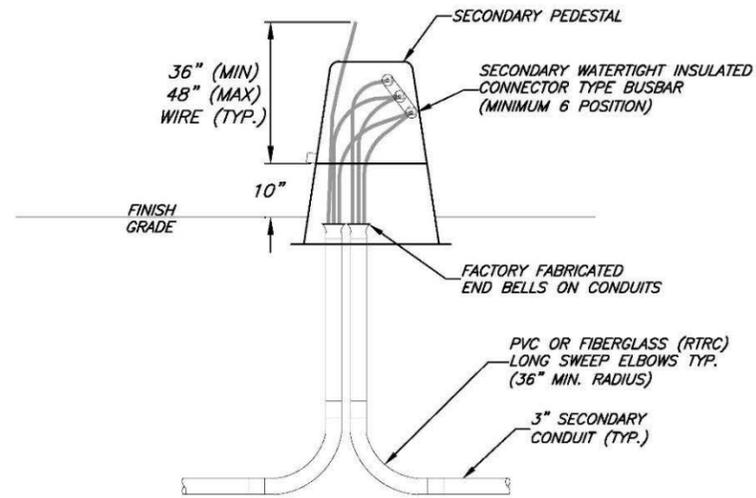
Brigham City Corporation
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 Brigham City, UT 84302
 Tel: (435) 734-6600
 www.boutah.gov



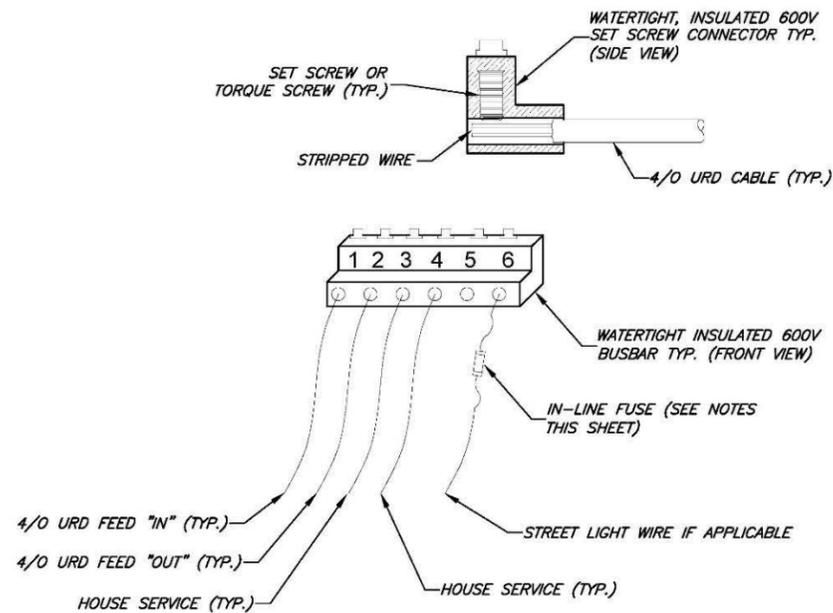
Brigham City Public Power
 1455 East Power Plant Road
 Brigham City, UT 84302
 Tel: (435) 734-6624
 Utility Emergency: (435) 723-6868

BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS 600 AMP PSE 3/5 SWITCHGEAR

SHEET:	E14
OF 1 SHEETS	0



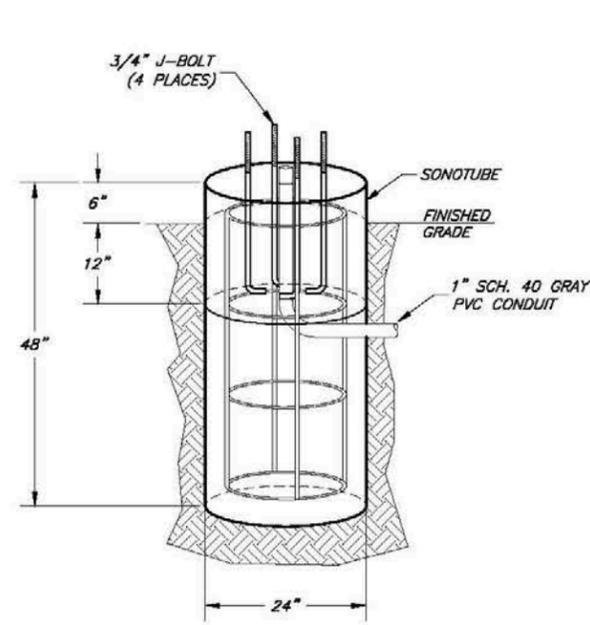
SECONDARY CONNECTIONS



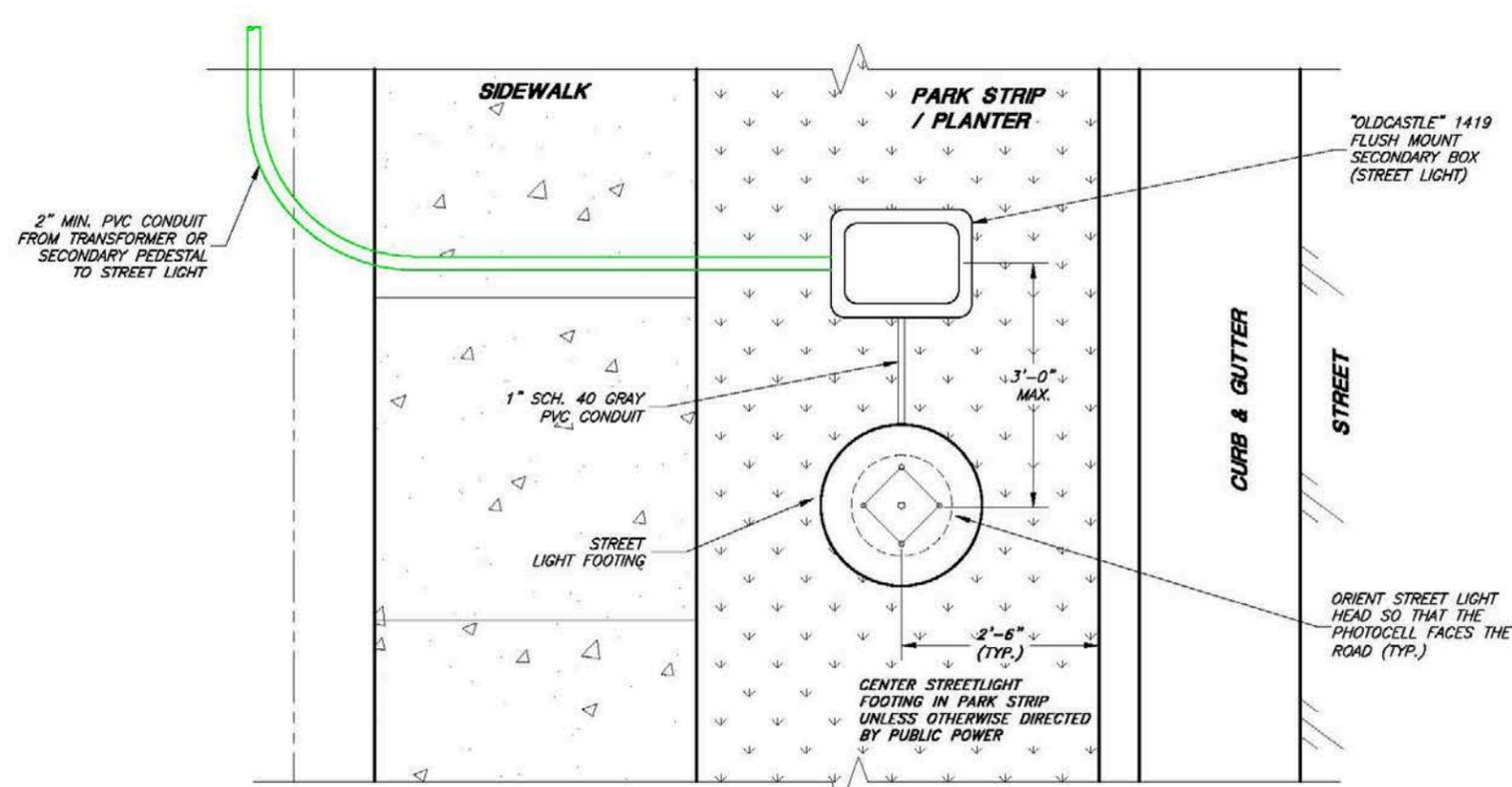
NOTES:

1. INSTALL AN IN-LINE 10 AMP FUSE & FUSE HOLDER ON THE UNGROUNDED 120/240V STREET LIGHT CONDUCTOR(S) IN JUNCTION BOX.
2. CONDUIT ENTERING INTO ANY SECONDARY PEDESTAL MUST HAVE A FABRICATED BELL END.
3. SECONDARY PEDESTAL SHALL BE NORDIC PSP-15-15-30-MG OR PENCELL AG20HDXCL-NL APPROVED EQUIVALENT.
4. GROUND LEVEL INSIDE THE GROUND SLEEVE IS THE BOTTOM OF THE GROUND SLEEVE.
5. ALL SECONDARY CABLE SHALL EXTEND A MINIMUM OF 36" & A MAXIMUM OF 48" FROM TOP OF SECONDARY BOX (WITHOUT LID) AND SHALL BE THE URD TYPE CABLE.
6. ROAD BASE SHALL BE USED UNDER SECONDARY BOXES. ROAD BASE SHALL BE COMPACTED TO 95% AND BE TESTED PRIOR TO BOX BEING SET INTO PLACE.
7. ALL SERVICE STUBS SHALL EXTEND 10' PAST PROPERTY LINE.
8. SECONDARY WATERTIGHT, INSULATED SET SCREW CONNECTORS (RAYCHEM GPRT-350-6P-C(B6) OR EQUIVALENT) SHALL ACCEPT A MINIMUM OF SIX INDIVIDUAL WIRES, UNLESS OTHERWISE APPROVED BY ELECTRICAL DEPARTMENT.

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R2		N.T.S.	DESIGN:				 BRIGHAM CITY		SECONDARY PEDESTAL, WIRE & CONNECTIONS		E15
R3			TD & CS						OF 1 SHEETS		
R4		DATE:	CHECK:						0		
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DECORATIVE STREETLIGHT FOOTING



FOOTING LAYOUT PLAN VIEW

FOOTING NOTES:

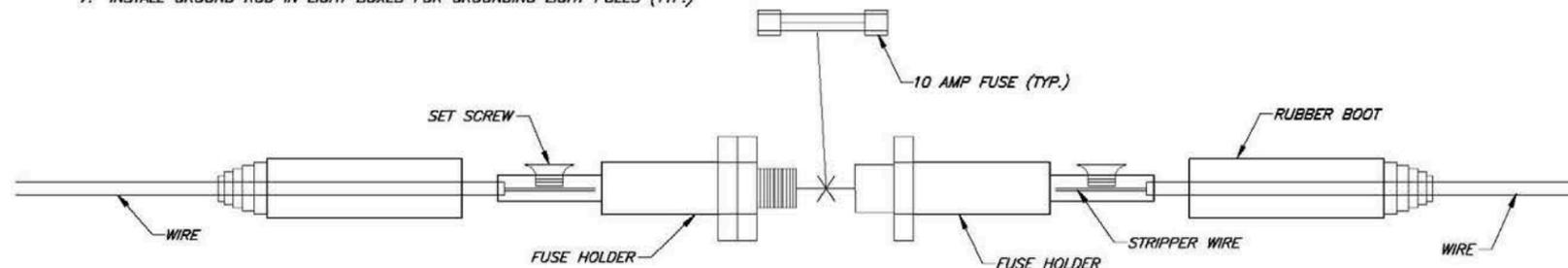
1. J-BOLTS: 4 - 24" x 3/4"
3" L-BEND
6" EXPOSED THREAD
TOP 9" GALVANIZED
2. REBAR: 4 - VERTICAL #4 42" LONG
4 - RINGS #4 18" DIAMETER
1 - 3" FROM TOP OF CONCRETE
1 - 3" FROM BOTTOM OF CONCRETE
2 RINGS BETWEEN EVENLY SPACED

ALL REBAR TO MAINTAIN 3" FROM OUTSIDE OF CONCRETE.
3. CONCRETE: LEVEL SMOOTH FINISH, WITH A CURVED OR CHAMFERED EDGE.
4. SONOTUBE: US3 24" SONOTUBE TOP 18" OF POUR, WITH 6" EXPOSED ABOVE FINAL GRADE.
5. ALL REBAR TIED IN NORMAL FASHION.
6. J-BOLTS NOT TIED TO REBAR CAGE.
7. STREET LIGHT BASES SHALL BE INSPECTED PRIOR TO POURING CONCRETE.
8. STREET LIGHT BASES SHALL BE 2' IN DIAMETER AND 4' IN DEPTH WITH 6" OF BASE EXPOSED ABOVE FINISHED GRADE.

A. ALL STREET LIGHT BASES ALONG STATE ROADS ARE TO BE FLUSH WITH THE T&C.
9. SONOTUBE SHALL BE KEPT DRY AND SHALL NOT BE ALLOWED TO DEFORM IN ANY WAY.
10. CONCRETE COVER OVER REINFORCING STEEL SHALL BE 2" UNLESS OTHERWISE APPROVED.
11. BASES SHALL HAVE A SMOOTH FINISH, FREE FROM HONEYCOMB & CRACKS.

GENERAL NOTES:

1. STREET LIGHT CONDUCTOR(S) SHALL HAVE AN INLINE 10 AMP FUSE & SET SCREW TYPE FUSE HOLDER INSTALLED IN JUNCTION BOX OR TRANSFORMER.
2. 1" PVC CONDUIT WITH PVC ELBOWS TO RUN FROM BASE OF STREET LIGHT TO CLOSEST TRANSFORMER OR SECONDARY PEDESTAL.
3. BOLT PATTERN SHALL BE ON A DIAMOND TO THE CURB UNLESS OTHERWISE SPECIFIED.
4. STREET LIGHT POLE, FIXTURE, LUMINAIRE, PHOTOCELL, BOLTS, NUTS, WASHERS SHALL BE PROVIDED BY THE CITY AND PAID FOR BY THE CONTRACTOR/DEVELOPER. CONTRACTOR/DEVELOPER TO INSTALL STREET LIGHT PER MANUFACTURER SPECIFICATIONS.
5. STREET LIGHT BASE SHALL BE BONDED TO STREET LIGHT POLE BY A "UFER" TYPE #6 CU BONDING CONDUCTOR.
6. THE GROUNDING CONDUCTOR SHALL BE TERMINATED WITH THE GROUNDED (NEUTRAL) CONDUCTOR AT THE SOURCE.
7. INSTALL GROUND ROD IN LIGHT BOXES FOR GROUNDING LIGHT POLES (TYP.)



STREET LIGHT FUSING

REV.	DATE	DESCRIPTION

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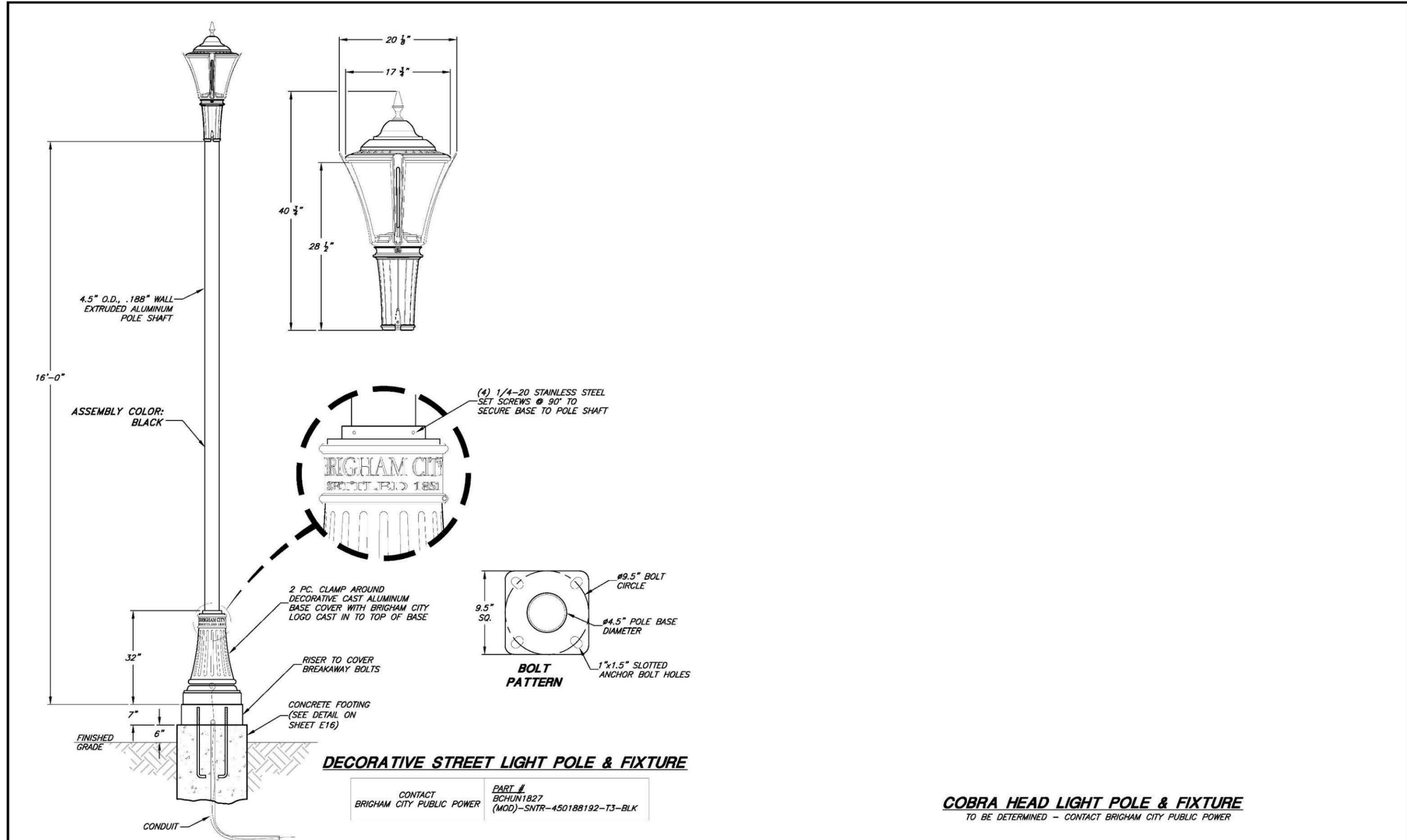


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BRIGHAM CITY PUBLIC POWER
ELECTRICAL CONSTRUCTION STANDARDS

DECORATIVE STREET LIGHT POLE FOOTING DETAIL

SHEET:	E16
OF 1 SHEETS	0



REV.	DATE	DESCRIPTION
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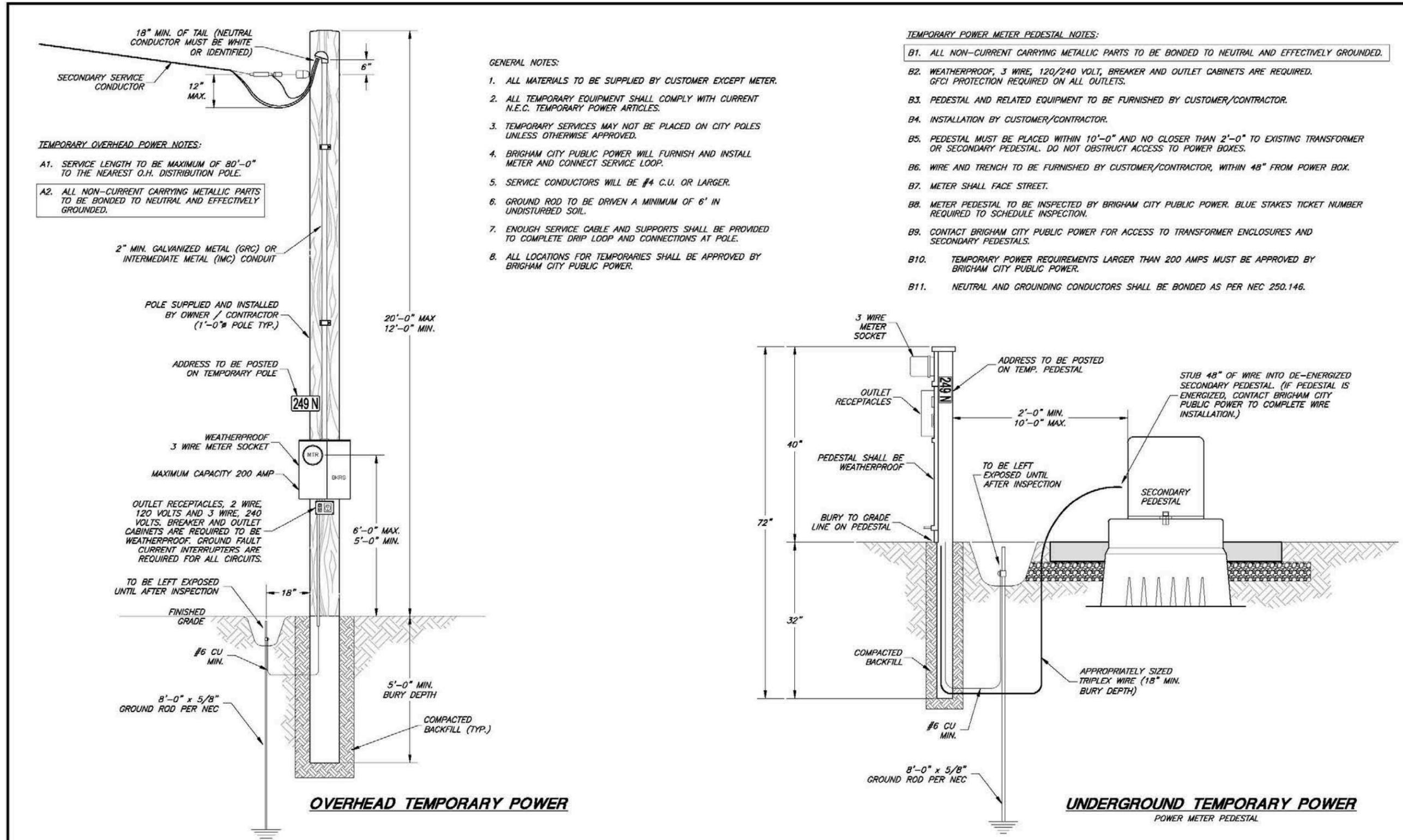
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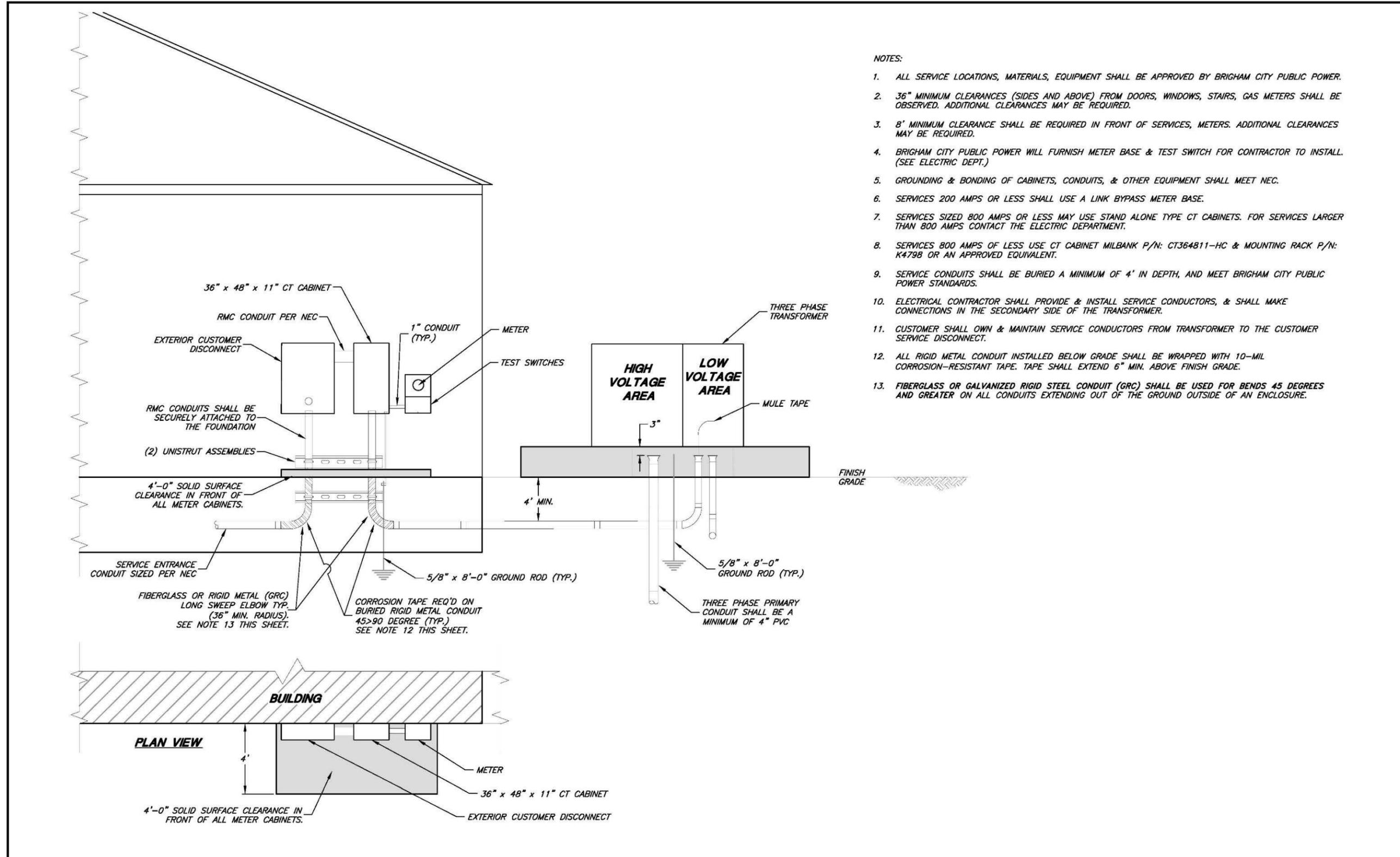
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BRIGHAM CITY PUBLIC POWER	
ELECTRICAL CONSTRUCTION STANDARDS	
STREET LIGHT POLES AND FIXTURES	

SHEET:	E17
OF 1 SHEETS	0

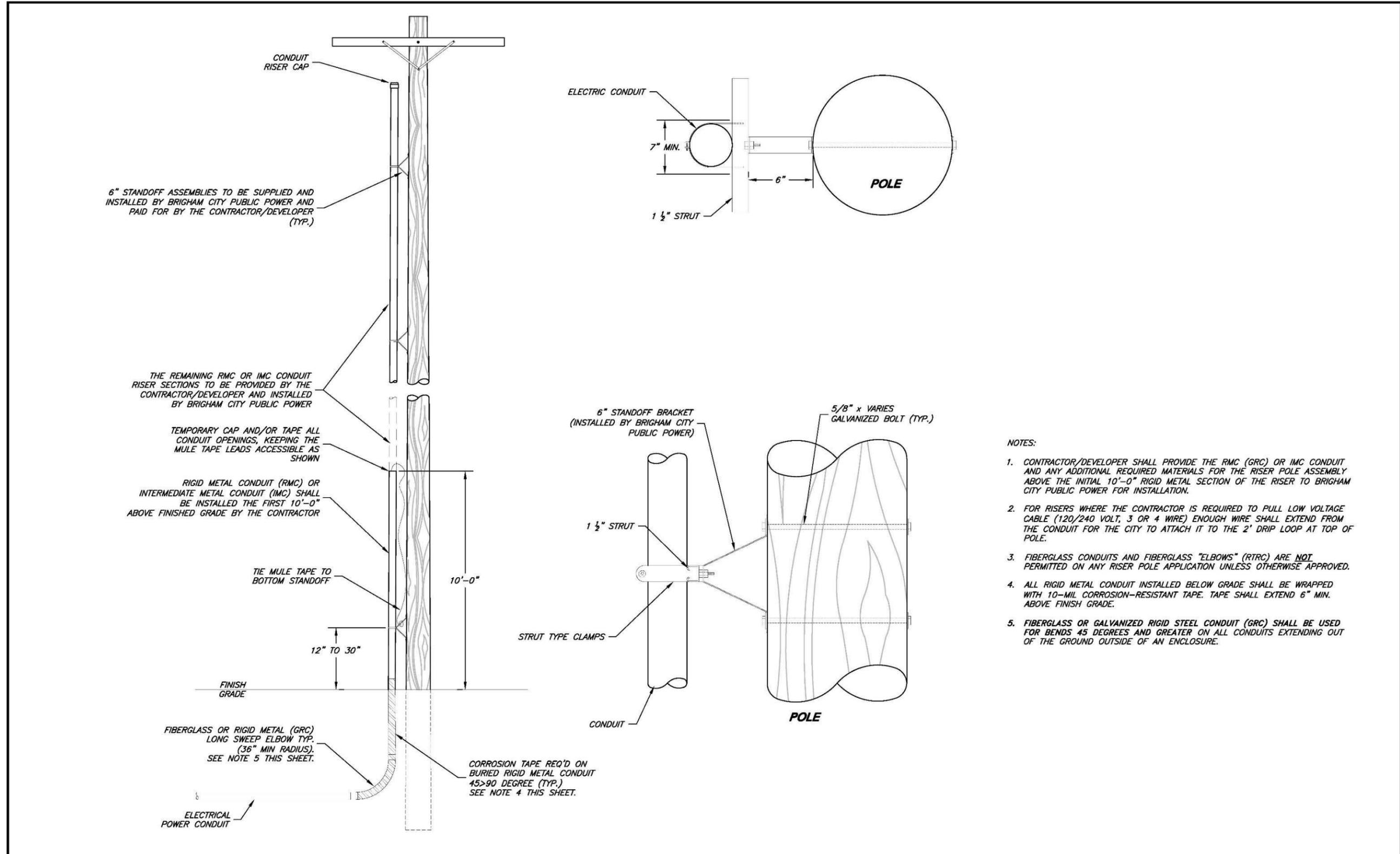


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REV.	DATE	DESCRIPTION																		



- NOTES:
1. ALL SERVICE LOCATIONS, MATERIALS, EQUIPMENT SHALL BE APPROVED BY BRIGHAM CITY PUBLIC POWER.
 2. 36" MINIMUM CLEARANCES (SIDES AND ABOVE) FROM DOORS, WINDOWS, STAIRS, GAS METERS SHALL BE OBSERVED. ADDITIONAL CLEARANCES MAY BE REQUIRED.
 3. 8' MINIMUM CLEARANCE SHALL BE REQUIRED IN FRONT OF SERVICES, METERS. ADDITIONAL CLEARANCES MAY BE REQUIRED.
 4. BRIGHAM CITY PUBLIC POWER WILL FURNISH METER BASE & TEST SWITCH FOR CONTRACTOR TO INSTALL. (SEE ELECTRIC DEPT.)
 5. GROUNDING & BONDING OF CABINETS, CONDUITS, & OTHER EQUIPMENT SHALL MEET NEC.
 6. SERVICES 200 AMPS OR LESS SHALL USE A LINK BYPASS METER BASE.
 7. SERVICES SIZED 800 AMPS OR LESS MAY USE STAND ALONE TYPE CT CABINETS. FOR SERVICES LARGER THAN 800 AMPS CONTACT THE ELECTRIC DEPARTMENT.
 8. SERVICES 800 AMPS OF LESS USE CT CABINET MILBANK P/N: CT364811-HC & MOUNTING RACK P/N: K4798 OR AN APPROVED EQUIVALENT.
 9. SERVICE CONDUITS SHALL BE BURIED A MINIMUM OF 4' IN DEPTH, AND MEET BRIGHAM CITY PUBLIC POWER STANDARDS.
 10. ELECTRICAL CONTRACTOR SHALL PROVIDE & INSTALL SERVICE CONDUCTORS, & SHALL MAKE CONNECTIONS IN THE SECONDARY SIDE OF THE TRANSFORMER.
 11. CUSTOMER SHALL OWN & MAINTAIN SERVICE CONDUCTORS FROM TRANSFORMER TO THE CUSTOMER SERVICE DISCONNECT.
 12. ALL RIGID METAL CONDUIT INSTALLED BELOW GRADE SHALL BE WRAPPED WITH 10-MIL CORROSION-RESISTANT TAPE. TAPE SHALL EXTEND 6" MIN. ABOVE FINISH GRADE.
 13. FIBERGLASS OR GALVANIZED RIGID STEEL CONDUIT (GRC) SHALL BE USED FOR BENDS 45 DEGREES AND GREATER ON ALL CONDUITS EXTENDING OUT OF THE GROUND OUTSIDE OF AN ENCLOSURE.

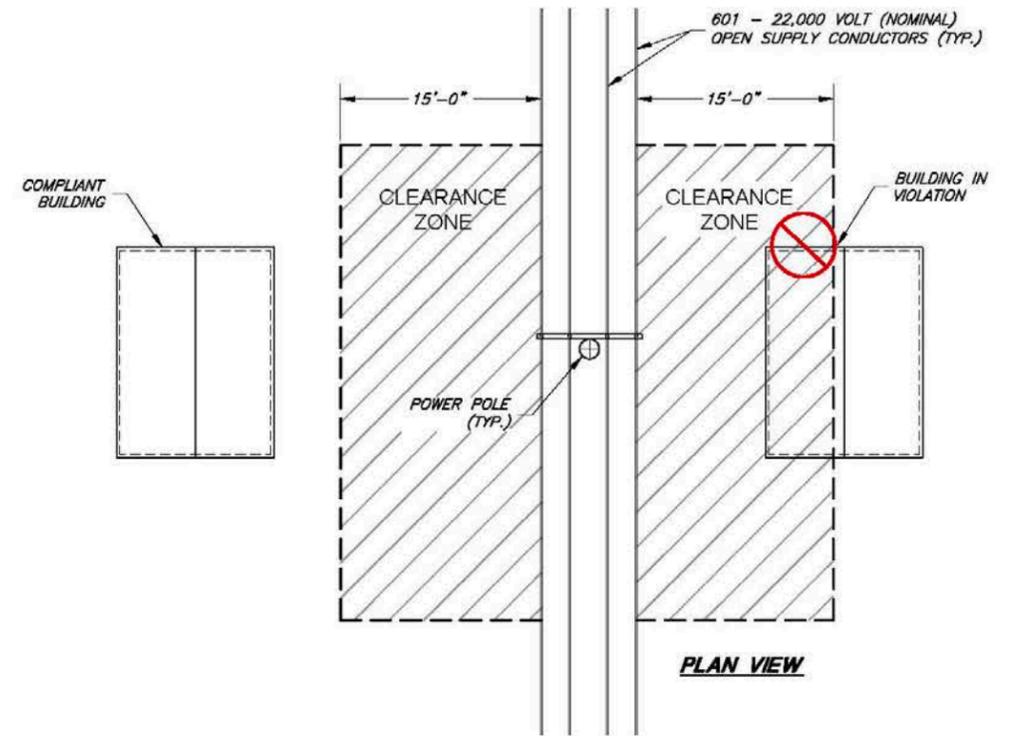
R1		DRAWING SCALE:	N.T.S.	DRAWN:	BEB	BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR DIRECT, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THESE ELECTRICAL STANDARDS DRAWINGS OR ANY INFORMATION CONTAINED HEREIN. BRIGHAM CITY PUBLIC POWER DISCLAIMS ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE ELECTRICAL STANDARDS WITHOUT THEIR CONSENT.	Brigham City Corporation 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.boutah.gov	 Brigham City Public Power 1455 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6624 Utility Emergency: (435) 723-8888	BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS		SHEET:
R2		DATE:	01/09/2026	DESIGN:	TD & CS		3-PHASE UNDERGROUND SERVICE 201-800 AMPS			E19	
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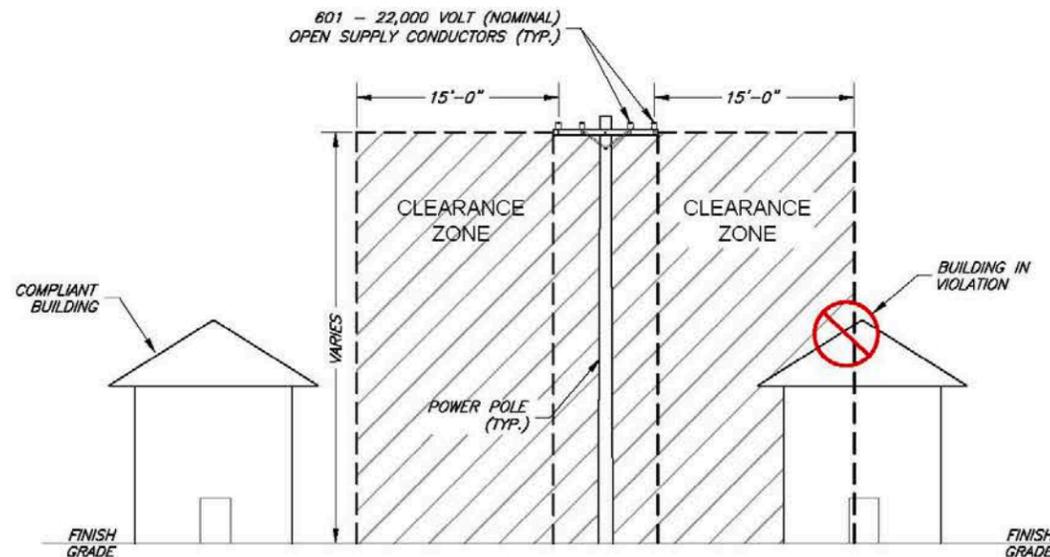
NOTES:

1. CONTRACTOR/DEVELOPER SHALL PROVIDE THE RMC (GRC) OR IMC CONDUIT AND ANY ADDITIONAL REQUIRED MATERIALS FOR THE RISER POLE ASSEMBLY ABOVE THE INITIAL 10'-0" RIGID METAL SECTION OF THE RISER TO BRIGHAM CITY PUBLIC POWER FOR INSTALLATION.
2. FOR RISERS WHERE THE CONTRACTOR IS REQUIRED TO PULL LOW VOLTAGE CABLE (120/240 VOLT, 3 OR 4 WIRE) ENOUGH WIRE SHALL EXTEND FROM THE CONDUIT FOR THE CITY TO ATTACH IT TO THE 2' DRIP LOOP AT TOP OF POLE.
3. FIBERGLASS CONDUITS AND FIBERGLASS "ELBOWS" (RTRC) ARE **NOT** PERMITTED ON ANY RISER POLE APPLICATION UNLESS OTHERWISE APPROVED.
4. ALL RIGID METAL CONDUIT INSTALLED BELOW GRADE SHALL BE WRAPPED WITH 10-MIL CORROSION-RESISTANT TAPE. TAPE SHALL EXTEND 6" ABOVE FINISH GRADE.
5. FIBERGLASS OR GALVANIZED RIGID STEEL CONDUIT (GRC) SHALL BE USED FOR BENDS 45 DEGREES AND GREATER ON ALL CONDUITS EXTENDING OUT OF THE GROUND OUTSIDE OF AN ENCLOSURE.

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R3																		
R4																		
REV.	DATE DESCRIPTION																	



PLAN VIEW



ELEVATION VIEW

NOTES:

1. NO BUILDING OR STRUCTURE SHALL BE PLACED, OR CONSTRUCTED IN THE POWER LINE CLEARANCE ZONE.
2. CLEARANCES GIVEN ARE TYPICAL AND APPLY TO OPEN SUPPLY PRIMARY CIRCUITS OPERATING AT OVER 600 VOLTS UP TO 22,000 VOLTS, AND MAY NOT APPLY TO ALL CASES OR CIRCUMSTANCES.
3. CLEARANCES DO NOT APPLY TO SECONDARY INSULATED SERVICE CIRCUITS OPERATING AT 600 VOLTS OR LESS.
4. TYPICAL CLEARANCES INCLUDE THE COMPLETE VERTICAL & HORIZONTAL SPACE AROUND POWER LINES FROM THE OUTSIDE CONDUCTOR TO ANY BUILDING, SIGN, OR STRUCTURE.
5. TYPICAL CLEARANCES FOR 12KV PRIMARY OVERHEAD DISTRIBUTION CIRCUITS ARE 15' FROM THE OUTSIDE CONDUCTOR IN ANY DIRECTION FROM ANY BUILDING, SIGN, OR STRUCTURE.
6. TYPICAL CLEARANCES FOR 48KV PRIMARY OVERHEAD TRANSMISSION CIRCUITS ARE 30' FROM THE OUTSIDE CONDUCTOR IN ANY DIRECTION FROM ANY BUILDING, SIGN, OR STRUCTURE.
7. SPECIAL APPLICATIONS, HIGHER VOLTAGES, RAILROAD TRACKS, SWIMMING POOLS, AND OPEN WATER MAY RESULT IN ADDITIONAL CLEARANCES AND SHALL BE APPROVED BY BRIGHAM CITY PUBLIC POWER.
8. ANY VARIANCE TO THESE STANDARDS SHALL BE AS APPROVED BY THE PUBLIC POWER DIRECTOR ON A CASE-BY-CASE BASIS.

REV.	DATE	DESCRIPTION
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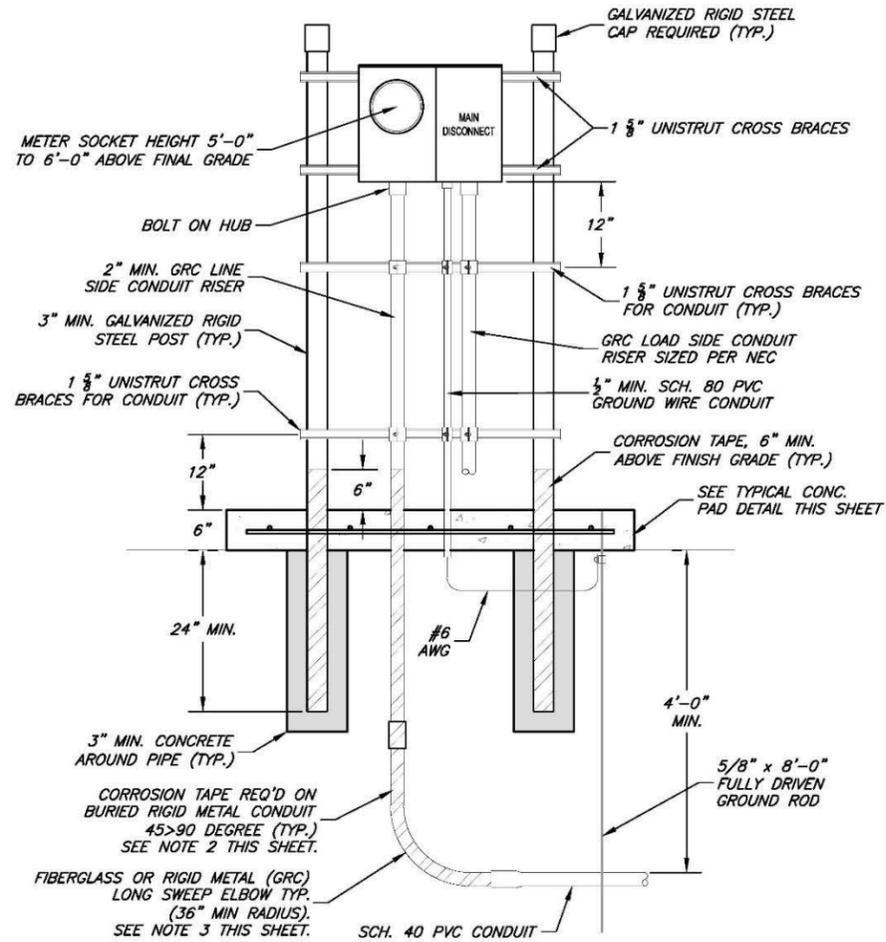
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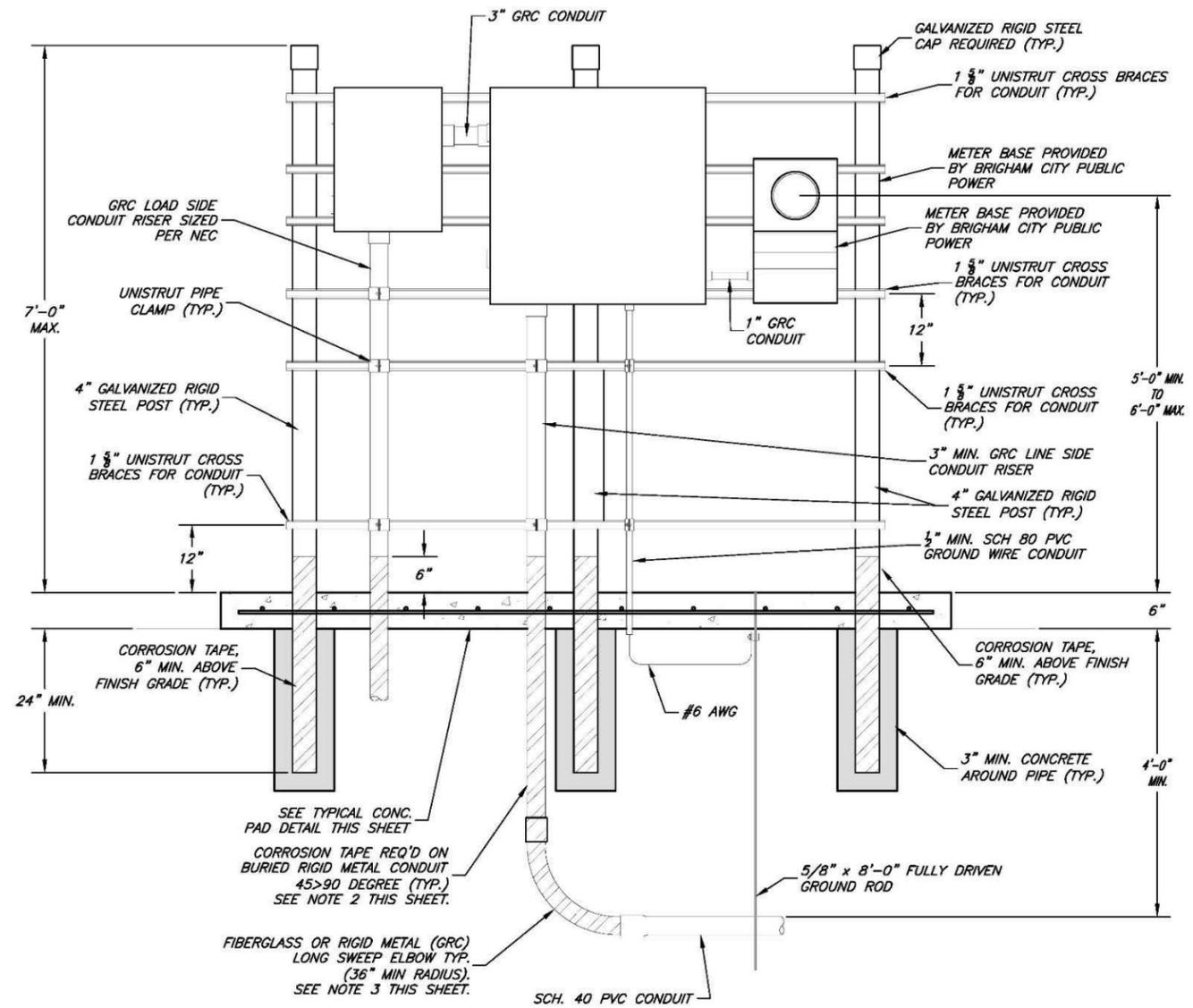
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BRIGHAM CITY PUBLIC POWER
ELECTRICAL CONSTRUCTION STANDARDS
OVERHEAD POWER LINE CLEARANCES
OVER 600 VOLTS TO 22,000 VOLTS

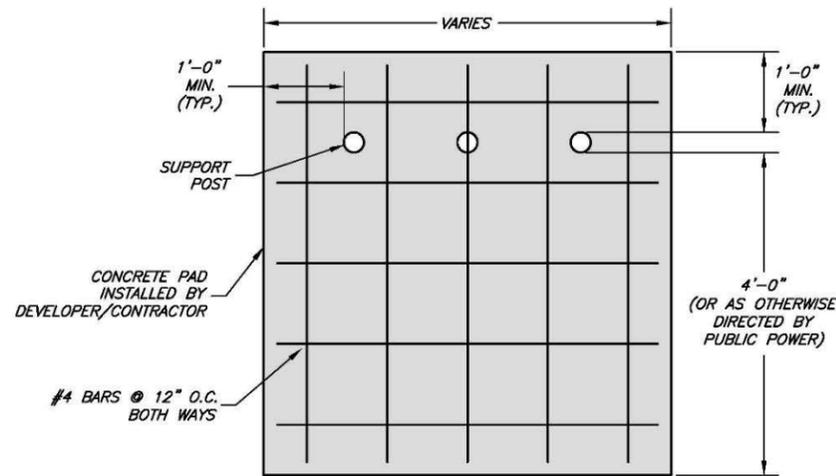
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1-PHASE FREE STANDING METER BASE DETAIL



3-PHASE FREE STANDING METER BASE DETAIL



TYPICAL CONCRETE PAD DETAIL

NOTES:

1. ALL NON-CURRENT CARRYING METALLIC PARTS TO BE BONDED TO NEUTRAL AND EFFECTIVELY GROUNDED.
2. ALL RIGID METAL CONDUIT INSTALLED BELOW GRADE SHALL BE WRAPPED WITH 10-MIL CORROSION-RESISTANT TAPE. TAPE SHALL EXTEND 6\"/>
- 3. FIBERGLASS OR GALVANIZED RIGID STEEL CONDUIT (GRC) SHALL BE USED FOR BENDS 45 DEGREES AND GREATER ON ALL CONDUITS EXTENDING OUT OF THE GROUND OUTSIDE OF AN ENCLOSURE.

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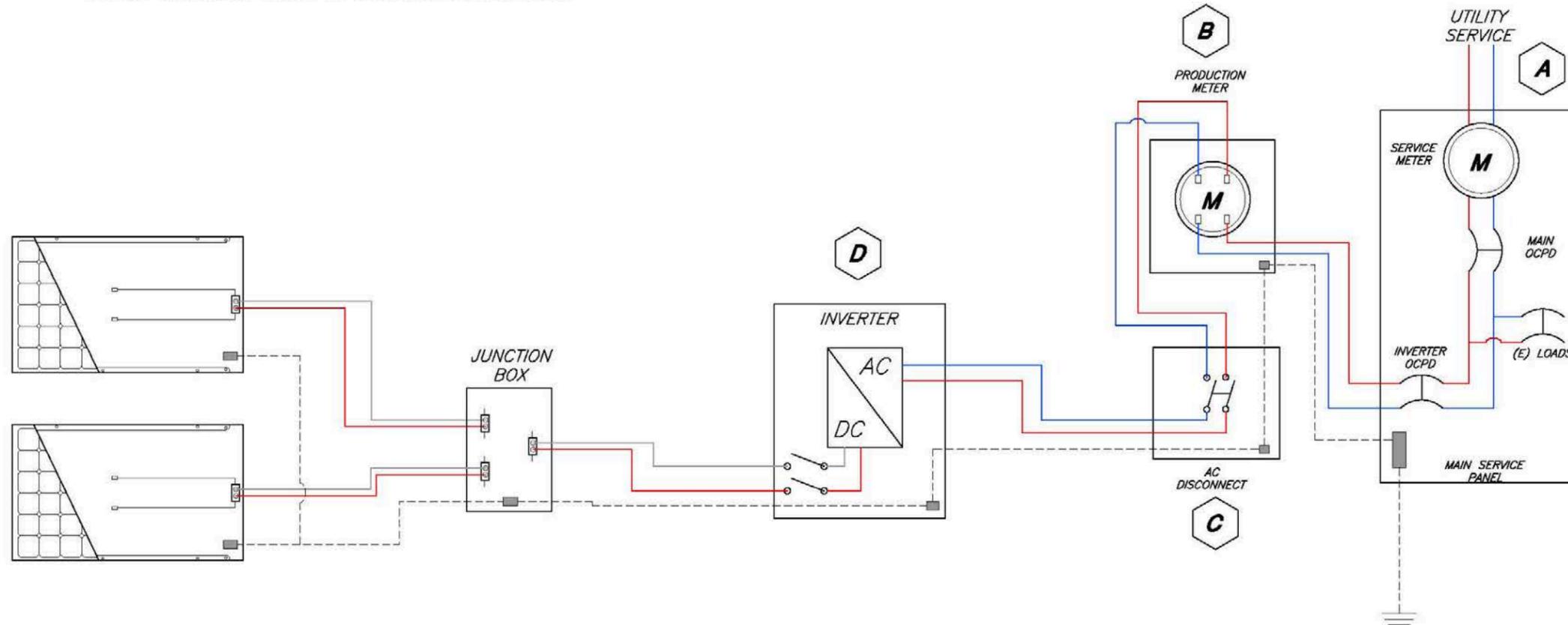


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BRIGHAM CITY PUBLIC POWER
ELECTRICAL CONSTRUCTION STANDARDS
1-PHASE FREE STANDING METER BASE &
3-PHASE FREE STANDING METER BASE DETAILS

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THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC SINGLE-PHASE BASIC SYSTEM WITH A CENTRAL INVERTER

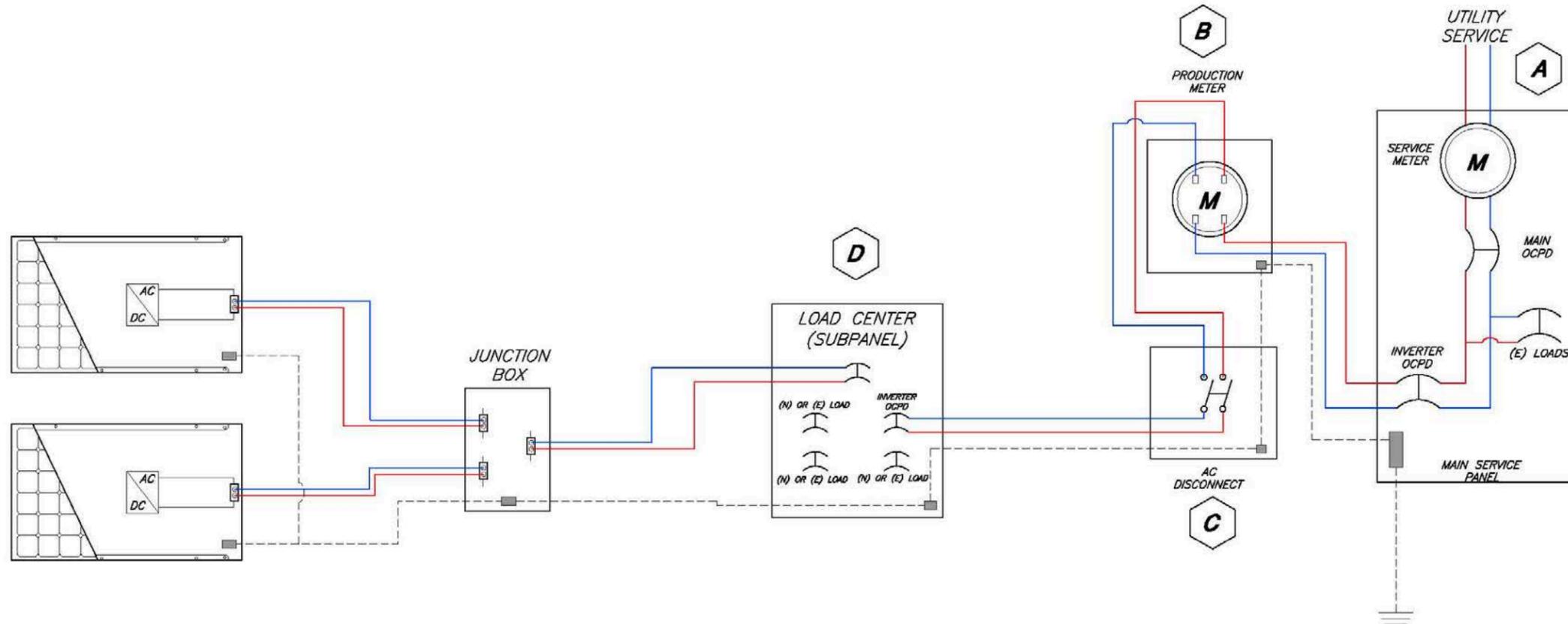


NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION AND OPERATE IN A SAFE MANNER.
 - 1. BRIGHAM CITY PUBLIC POWER WILL NOT ALLOW INTERCONNECTIONS WITH ANY UNSAFE CONDITIONS.
 - B. PRODUCTION METER TO BE PROVIDED AND INSTALLED BY BRIGHAM CITY PUBLIC POWER AT CUSTOMERS EXPENSE, METER SOCKET TO BE PROVIDED BY INSTALLER. BRIGHAM CITY PUBLIC POWER WILL ACTIVATE THE PV SYSTEM AFTER IT MEETS ALL REQUIREMENTS, AND PASSES ALL INSPECTIONS.
 - 1. CENTER OF METER MUST BE INSTALLED BETWEEN 4'-0" AND 6'-3" ABOVE FINAL GRADE.
 - C. LOCKABLE KNIFE-BLADE UTILITY A.C. DISCONNECT TO BE LOCATED WITHIN 10'-0" AND LINE OF SIGHT OF SERVICE PANEL AND MUST COMPLY WITH EUSERC DWG 501.
 - D. INVERTER MUST COMPLY WITH UL1741 REQUIREMENTS. GROUNDING ELECTRODE SYSTEM MUST COMPLY WITH LATEST REVISION OF CEC ARTICLE 890.47.
 - 1. SEPARATE D.C. DISCONNECT AT GRADE LEVEL REQUIRED ONLY IF INVERTER DOES NOT HAVE AN INTEGRATED D.C. DISCONNECT
- NOTE. A LEASED SYSTEM MAY INCLUDE A SEPARATE METER PROVIDED AND INSTALLED BY THE LEASING COMPANY.
- 1. LEASED METER WILL NOT BE INSTALLED BETWEEN PRODUCTION METER AND MAIN SERVICE PANEL.
- ALL PV SYSTEMS MUST COMPLY WITH THE LATEST REVISION TO CEC ARTICLES 690 AND 705.
 - ALL NECESSARY CLEARANCES SHALL COMPLY WITH CEC ARTICLE 110.26.
 - ALL SIGNS OR DIRECTORIES SHALL BE ATTACHED TO THE ELECTRIC EQUIPMENT OR LOCATED ADJACENT TO THE IDENTIFIED EQUIPMENT (AS APPROVED BY THE AHJ).
 - ALL SIGNS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT.
 - ALL SIGNS SHALL BE PERMANENTLY ATTACHED BY MEANS OF EPOXY OR EQUIVALENT SUITABLE FOR THE ENVIRONMENT (SCREWS OR RIVETS ARE NOT ALLOWED).
 - ALL SIGNS SHALL BE EITHER METAL OR PLASTIC WITH ENGRAVED LETTERS, MACHINE PRINTED LETTERS, OR ELECTRO-PHOTO PLATING LETTERS IN RED WITH WHITE LETTERING.

REV.	DATE	DESCRIPTION	DRAWING SCALE: N.T.S.	DRAWN: BEB	DESIGN: TD & CS	CHECK: TC	DATE: 01/09/2026	BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THESE ELECTRICAL STANDARDS DRAWINGS OR ANY INFORMATION CONTAINED HEREIN. BRIGHAM CITY PUBLIC POWER DISCLAIMS ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE ELECTRICAL STANDARDS WITHOUT THEIR CONSENT.	Brigham City Corporation 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bcutah.gov	Brigham City Public Power 1455 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6624 Utility Emergency: (435) 723-8868	BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM CENTRAL INVERTER (RESIDENTIAL)	SHEET: E23 OF 1 SHEETS 0
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THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC SINGLE-PHASE BASIC SYSTEM WITH MICRO INVERTERS

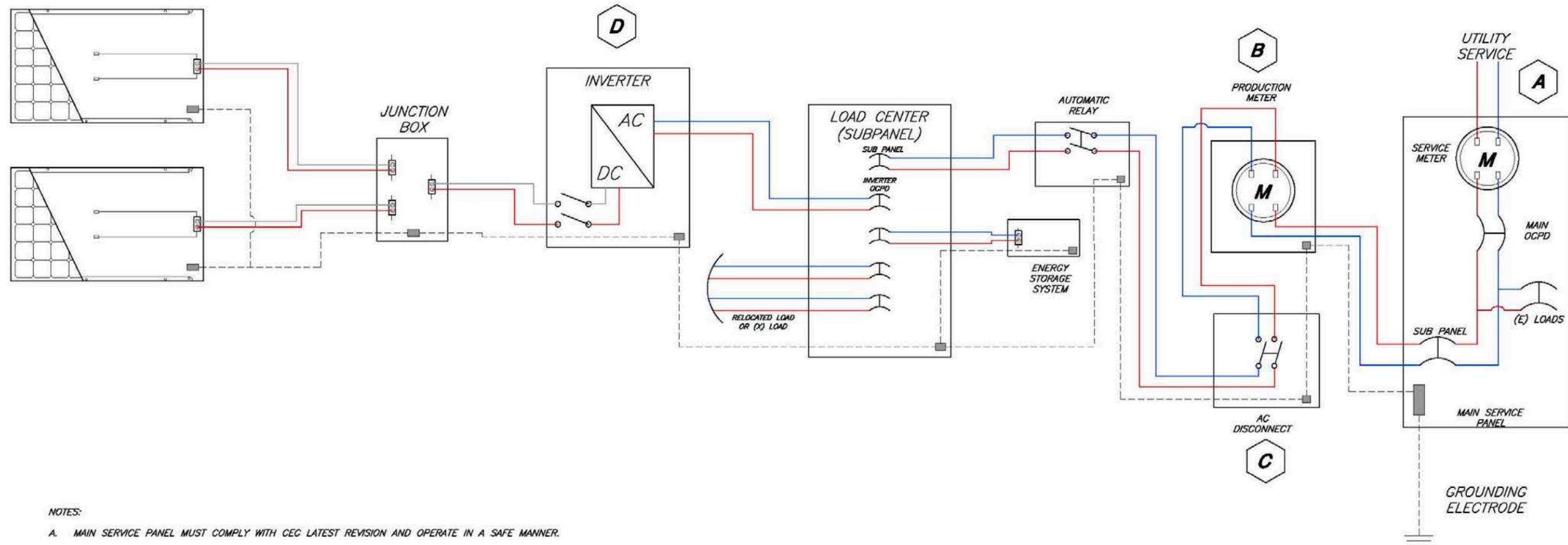


NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION AND OPERATE IN A SAFE MANNER.
 - 1. BRIGHAM CITY PUBLIC POWER WILL NOT ALLOW INTERCONNECTIONS WITH ANY UNSAFE CONDITIONS.
 - B. PRODUCTION METER TO BE PROVIDED AND INSTALLED BY BRIGHAM CITY PUBLIC POWER AT CUSTOMERS EXPENSE, METER SOCKET TO BE PROVIDED BY INSTALLER. BRIGHAM CITY PUBLIC POWER WILL ACTIVATE THE PV SYSTEM AFTER IT MEETS ALL REQUIREMENTS, AND PASSES ALL INSPECTIONS.
 - 1. CENTER OF METER MUST BE INSTALLED BETWEEN 4'-0" AND 6'-3" ABOVE FINAL GRADE.
 - C. LOCKABLE KNIFE-BLADE UTILITY A.C. DISCONNECT TO BE LOCATED WITHIN 10'-0" AND LINE OF SIGHT OF SERVICE PANEL AND MUST COMPLY WITH EUSERC DWG 501.
 - D. INVERTER MUST COMPLY WITH UL1741 REQUIREMENTS. GROUNDING ELECTRODE SYSTEM MUST COMPLY WITH LATEST REVISION OF CEC ARTICLE 690.47.
 - 1. SEPARATE D.C. DISCONNECT AT GRADE LEVEL REQUIRED ONLY IF INVERTER DOES NOT HAVE AN INTEGRATED D.C. DISCONNECT
- NOTE. A LEASED SYSTEM MAY INCLUDE A SEPARATE METER PROVIDED AND INSTALLED BY THE LEASING COMPANY.
- 1. LEASED METER WILL NOT BE INSTALLED BETWEEN PRODUCTION METER AND MAIN SERVICE PANEL.
- ALL PV SYSTEMS MUST COMPLY WITH THE LATEST REVISION TO CEC ARTICLES 690 AND 705.
 - ALL NECESSARY CLEARANCES SHALL COMPLY WITH CEC ARTICLE 110.26.
 - ALL SIGNS OR DIRECTORIES SHALL BE ATTACHED TO THE ELECTRIC EQUIPMENT OR LOCATED ADJACENT TO THE IDENTIFIED EQUIPMENT (AS APPROVED BY THE AHJ).
 - ALL SIGNS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT.
 - ALL SIGNS SHALL BE PERMANENTLY ATTACHED BY MEANS OF EPOXY OR EQUIVALENT SUITABLE FOR THE ENVIRONMENT (SCREWS OR RIVETS ARE NOT ALLOWED).
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REV.	DATE	DESCRIPTION																					

THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC SINGLE-PHASE SYSTEM WITH ENERGY STORAGE (CENTRAL INVERTER)

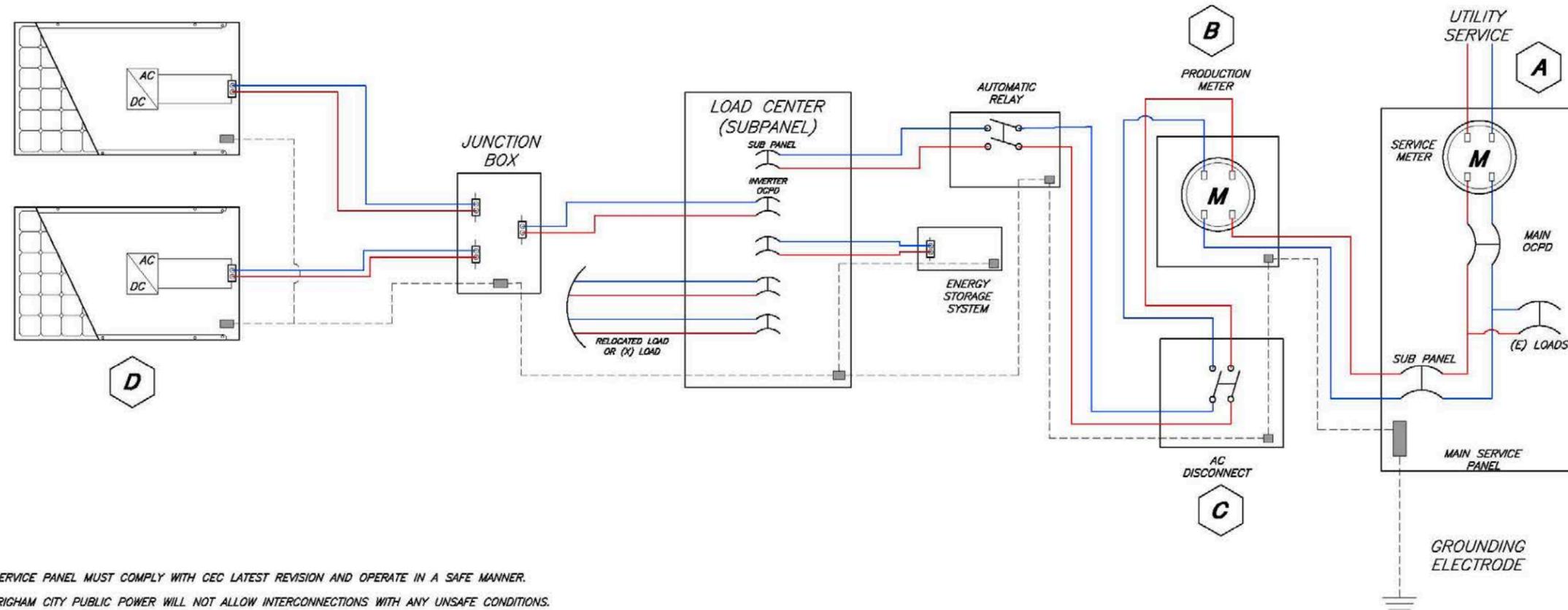


NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION AND OPERATE IN A SAFE MANNER.
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R1		DRAWING SCALE:	N.T.S.	DRAWN:	BEB	BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THESE ELECTRICAL STANDARDS DRAWINGS OR ANY INFORMATION CONTAINED HEREIN. BRIGHAM CITY PUBLIC POWER DISCLAIMS ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE ELECTRICAL STANDARDS WITHOUT THEIR CONSENT.	Brigham City Corporation 20 North Main Street Brigham City, UT 84302	Brigham City Public Power 1455 East Power Plant Road Brigham City, UT 84302	BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS		SHEET:
R2		DATE:	01/09/2026	DESIGN:	TD & CS		Tel: (435) 734-6600 www.bcpulab.gov	Tel: (435) 734-6624 Utility Emergency: (435) 723-8888	PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM ENERGY STORAGE - CENTRAL INVERTER (RESIDENTIAL)		E25
R3		CHECK:	TC								OF 1 SHEETS
R4											0

THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC SINGLE-PHASE SYSTEM WITH ENERGY STORAGE (MICRO INVERTER)

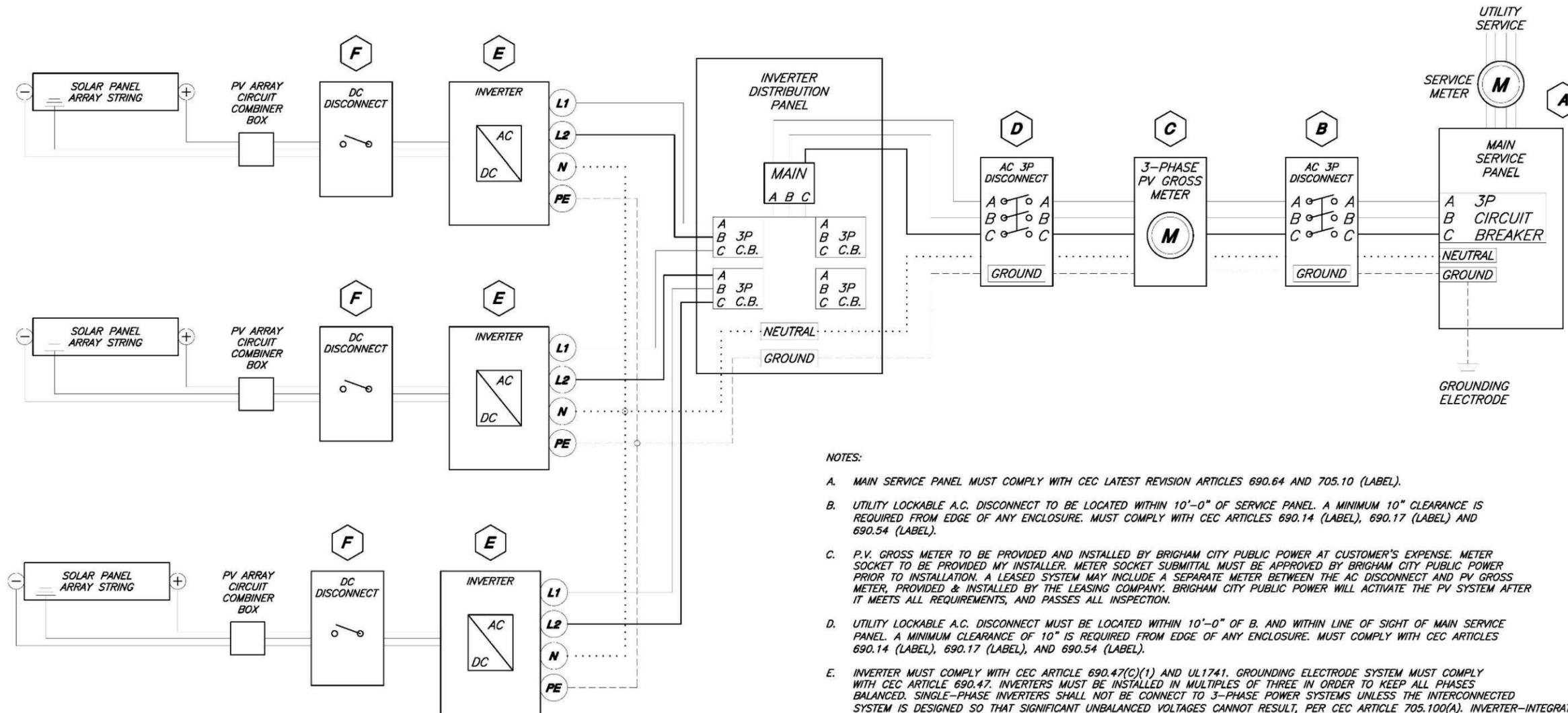


NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION AND OPERATE IN A SAFE MANNER.
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THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC THREE-PHASE SYSTEM USING MULTIPLE 2-LINE 1-PHASE INVERTERS WITH A NEUTRAL CONNECTION

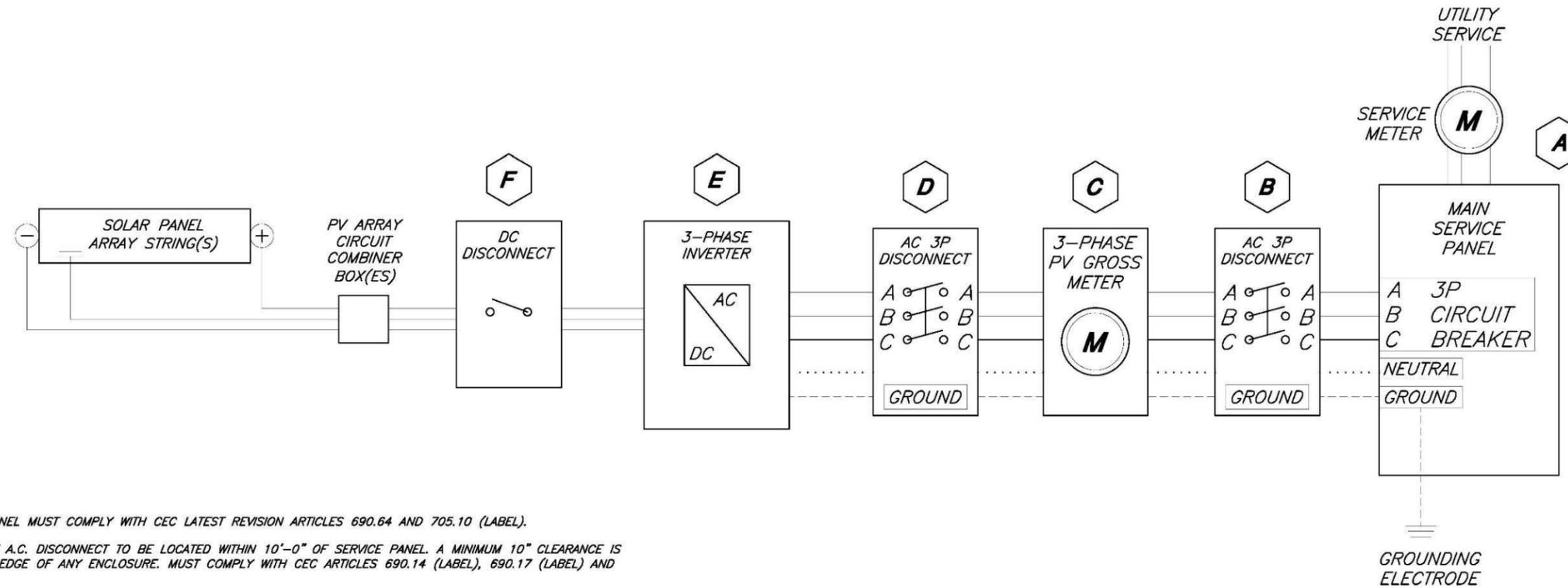


NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION ARTICLES 690.64 AND 705.10 (LABEL).
 - B. UTILITY LOCKABLE A.C. DISCONNECT TO BE LOCATED WITHIN 10'-0" OF SERVICE PANEL. A MINIMUM 10" CLEARANCE IS REQUIRED FROM EDGE OF ANY ENCLOSURE. MUST COMPLY WITH CEC ARTICLES 690.14 (LABEL), 690.17 (LABEL) AND 690.54 (LABEL).
 - C. P.V. GROSS METER TO BE PROVIDED AND INSTALLED BY BRIGHAM CITY PUBLIC POWER AT CUSTOMER'S EXPENSE. METER SOCKET TO BE PROVIDED BY INSTALLER. METER SOCKET SUBMITTAL MUST BE APPROVED BY BRIGHAM CITY PUBLIC POWER PRIOR TO INSTALLATION. A LEASED SYSTEM MAY INCLUDE A SEPARATE METER BETWEEN THE AC DISCONNECT AND PV GROSS METER, PROVIDED & INSTALLED BY THE LEASING COMPANY. BRIGHAM CITY PUBLIC POWER WILL ACTIVATE THE PV SYSTEM AFTER IT MEETS ALL REQUIREMENTS, AND PASSES ALL INSPECTION.
 - D. UTILITY LOCKABLE A.C. DISCONNECT MUST BE LOCATED WITHIN 10'-0" OF B. AND WITHIN LINE OF SIGHT OF MAIN SERVICE PANEL. A MINIMUM CLEARANCE OF 10" IS REQUIRED FROM EDGE OF ANY ENCLOSURE. MUST COMPLY WITH CEC ARTICLES 690.14 (LABEL), 690.17 (LABEL), AND 690.54 (LABEL).
 - E. INVERTER MUST COMPLY WITH CEC ARTICLE 690.47(C)(1) AND UL1741. GROUNDING ELECTRODE SYSTEM MUST COMPLY WITH CEC ARTICLE 690.47. INVERTERS MUST BE INSTALLED IN MULTIPLES OF THREE IN ORDER TO KEEP ALL PHASES BALANCED. SINGLE-PHASE INVERTERS SHALL NOT BE CONNECT TO 3-PHASE POWER SYSTEMS UNLESS THE INTERCONNECTED SYSTEM IS DESIGNED SO THAT SIGNIFICANT UNBALANCED VOLTAGES CANNOT RESULT, PER CEC ARTICLE 705.100(A). INVERTER-INTEGRATED PROTECTION MUST INCLUDE THE FOLLOWING MINIMUM PROTECTIVE FUNCTIONS: PHASE OVERCURRENT, OVERVOLTAGE, UNDERVOLTAGE, OVERFREQUENCY, AND AC GND FAULT.
 - F. D.C. DISCONNECT MUST COMPLY WITH CEC ARTICLES 690.14(A-D), 690.53 (LABEL), 690.7 (LABEL) AND 690.8.
- SEPARATE DC DISCONNECT IS REQUIRED ONLY IF INVERTER HAS AN INTEGRATED (BUT NOT SEPARATED) DC DISCONNECT.
- SIGNS OR DIRECTORIES SHALL BE ATTACHED TO THE ELECTRIC EQUIPMENT OR LOCATED ADJACENT TO THE IDENTIFIED EQUIPMENT. SIGNS SHOULD BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT. ALL PLAQUES SHALL BE PERMANENTLY ATTACHED TO SURFACE OR ELECTRICAL EQUIPMENT BY MEANS OF EPOXY, SCREWS, OR RIVETS. OUTDOOR SIGNS SHALL BE EITHER METAL OR PLASTIC WITH ENGRAVED OR MACHINE PRINTED LETTERS, OR ELECTRO-PHOTO PLATING, IN A CONTRASTING COLOR TO THE SIGN BACKGROUND. SPACE REQUIREMENTS FOR ELECTRIC EQUIPMENT SHALL COMPLY WITH CEC ARTICLE 110.26.

<table border="1"> <tr> <td>REV.</td> <td>DATE</td> <td>DESCRIPTION</td> </tr> <tr> <td>R1</td> <td></td> <td></td> </tr> <tr> <td>R2</td> <td></td> <td></td> </tr> <tr> <td>R3</td> <td></td> <td></td> </tr> <tr> <td>R4</td> <td></td> <td></td> </tr> </table>	REV.	DATE	DESCRIPTION	R1			R2			R3			R4			DRAWING SCALE: N.T.S. DATE: 01/09/2026	DRAWN: BEB DESIGN: TD & CS CHECK: TC	BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR DIRECT, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THESE ELECTRICAL STANDARDS DRAWINGS OR ANY INFORMATION CONTAINED HEREIN. BRIGHAM CITY PUBLIC POWER DISCLAIMS ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE ELECTRICAL STANDARDS WITHOUT THEIR CONSENT.	Brigham City Corporation 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bcpower.gov	Brigham City Public Power 1465 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6624 Utility Emergency: (435) 723-6868	BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS PHOTOVOLTAIC THREE-PHASE SYSTEM DIAGRAM USING MULTIPLE TWO-LINE SINGLE-PHASE INVERTERS WITH NEUTRAL CONNECTION	SHEET: E27 OF 1 SHEETS 0
REV.	DATE	DESCRIPTION																				
R1																						
R2																						
R3																						
R4																						

THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC THREE-PHASE SYSTEM USING A SINGLE THREE-PHASE INVERTER



NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION ARTICLES 690.64 AND 705.10 (LABEL).
 - B. UTILITY LOCKABLE A.C. DISCONNECT TO BE LOCATED WITHIN 10'-0" OF SERVICE PANEL. A MINIMUM 10" CLEARANCE IS REQUIRED FROM EDGE OF ANY ENCLOSURE. MUST COMPLY WITH CEC ARTICLES 690.14 (LABEL), 690.17 (LABEL) AND 690.54 (LABEL).
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<table border="1"> <tr> <td>R1</td> <td></td> <td></td> <td></td> </tr> <tr> <td>R2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>R3</td> <td></td> <td></td> <td></td> </tr> <tr> <td>R4</td> <td></td> <td></td> <td></td> </tr> <tr> <td>REV.</td> <td>DATE</td> <td>DESCRIPTION</td> <td></td> </tr> </table>	R1				R2				R3				R4				REV.	DATE	DESCRIPTION		DRAWING SCALE: N.T.S. DATE: 01/09/2026	DRAWN: BEB DESIGN: TD & CS CHECK: TC	BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR DIRECT, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR MISUSE OF THESE ELECTRICAL STANDARDS DRAWINGS OR ANY INFORMATION CONTAINED HEREIN. BRIGHAM CITY PUBLIC POWER DISCLAIMS ANY LIABILITY FOR ANY CHANGES OR MODIFICATIONS MADE TO THESE ELECTRICAL STANDARDS WITHOUT THEIR CONSENT. Brigham City Corporation 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.boutah.gov	Brigham City Public Power 1455 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6624 Utility Emergency: (435) 723-6868	BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM USING A SINGLE THREE-PHASE INVERTER	SHEET: E28 OF 1 SHEETS 0
R1																										
R2																										
R3																										
R4																										
REV.	DATE	DESCRIPTION																								

THIS DETAIL SHOWS THE LABELING REQUIREMENTS FOR A PHOTOVOLTAIC SYSTEM'S AC AND DC DISCONNECT DEVICES

**UTILITY INTERACTION POINT
AC DISCONNECT**

RATED AC OUTPUT CURRENT =
NOMINAL OPERATING AC VOLTAGE =

**PV POWER SOURCE
DC DISCONNECT**

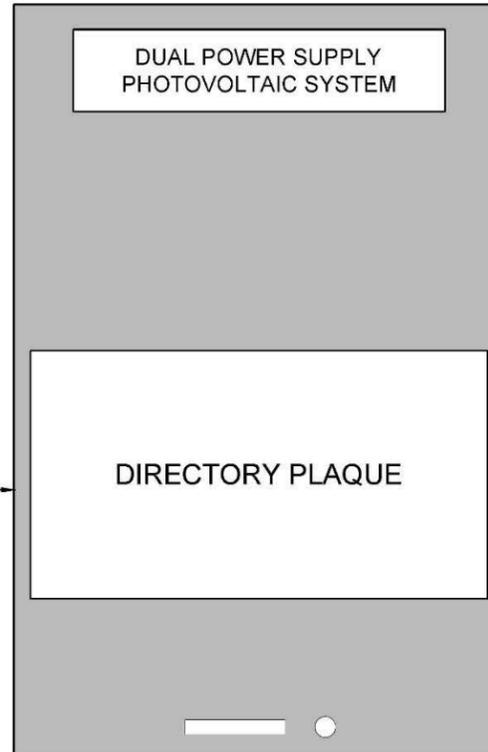
RATED MAXIMUM POWER-POINT CURRENT =
RATED MAXIMUM POWER-POINT VOLTAGE =
MAXIMUM SYSTEM VOLTAGE =
SHORT-CIRCUIT CURRENT =

NOTES:

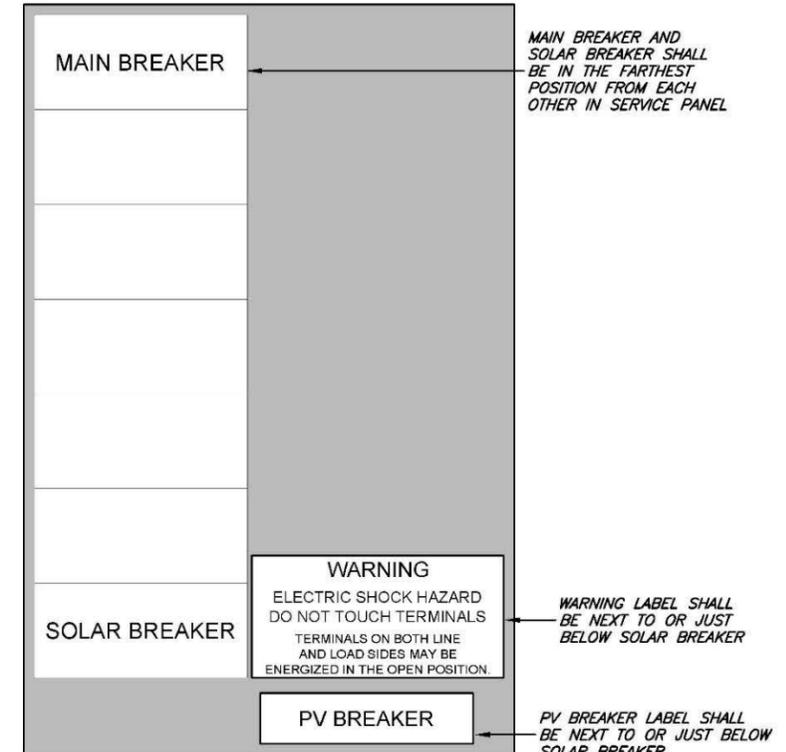
- A. REQUIRED PLACARDS SHALL BE ATTACHED TO THE ELECTRIC EQUIPMENT WITHOUT COVERING MANUFACTURER LABELING OR LOCATED ADJACENT TO THE IDENTIFIED EQUIPMENT (PER AHJ APPROVAL)
 - 1. ALL PLACARDS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT.
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 - 3. ALL PLACARDS SHALL BE EITHER METAL OR PLASTIC WITH ENGRAVED OR MACHINE PRINTED LETTERS OR ELECTRO-PHOTO PLATING IN RED WITH WHITE LETTERING.
 - 4. ALL PLACARDS SHALL NOT BE SMALLER THAN 2"x5" AND NO LARGER THAN 3"x6" (WITH THE EXCEPTION OF THE DIRECTORY PLACARD)
 - 5. ALL PLACARDS FONT STYLE SHALL BE ARIAL WITH THE FONT SIZE NO SMALLER THAN SIZE 12 OR NO LARGER THAN SIZE 28.
- B. EACH A.C. DISCONNECT SHALL HAVE ITS OWN PLACARD AND MUST COMPLY WITH NEC 690.15(A), CEC ARTICLES 690.13, 690.17, AND 690.54
- C. EACH D.C. DISCONNECT SHALL HAVE ITS OWN PLACARD AND MUST COMPLY WITH CEC ARTICLES 690.53, AND 690.7

THIS DETAIL SHOWS THE WARNING LABEL REQUIREMENTS FOR THE PV SERVICE PANEL

SERVICE PANEL COVER



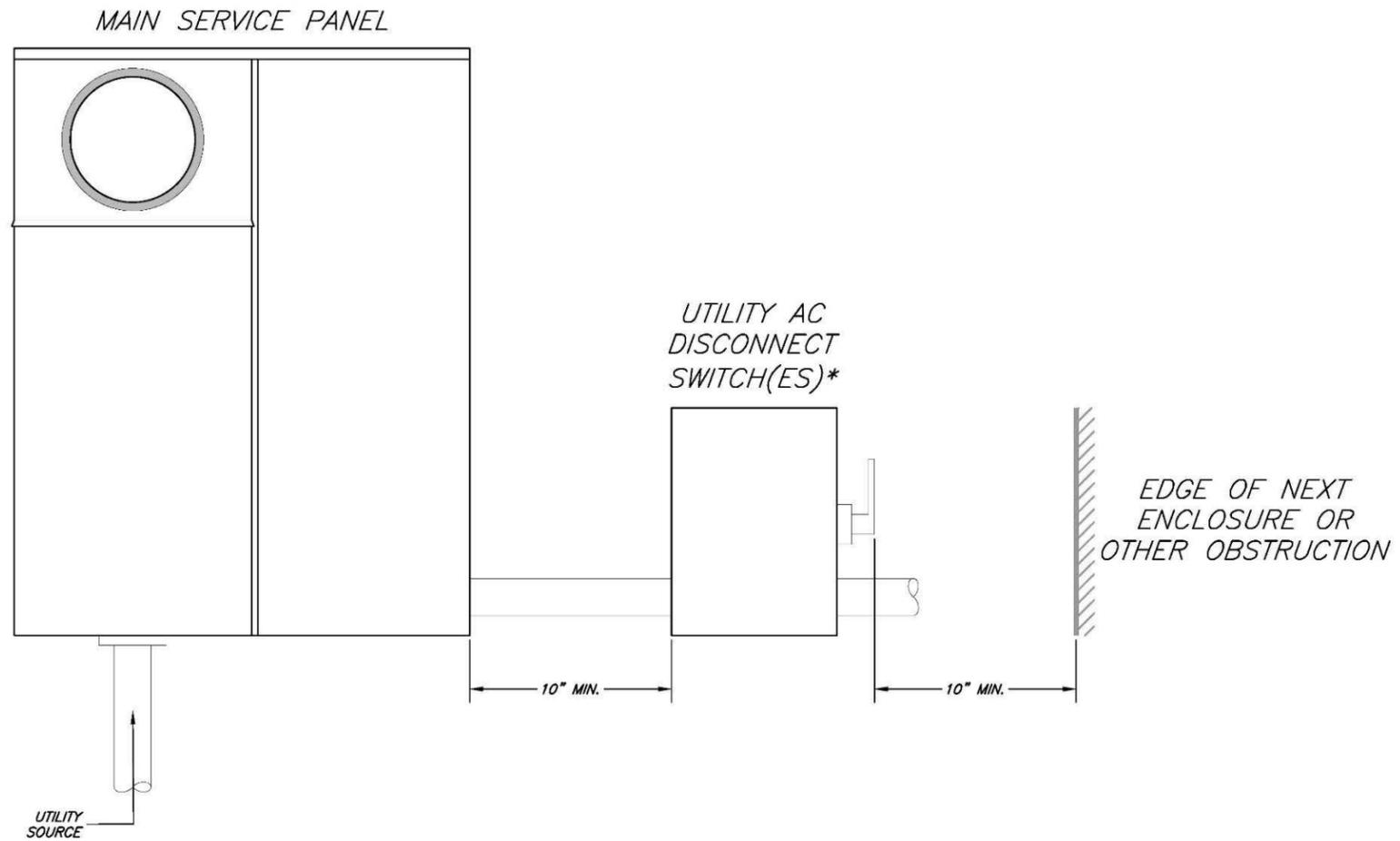
INSIDE SERVICE PANEL



NOTES:

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 - 4. ALL PLACARDS SHALL NOT BE SMALLER THAN 2"x5" AND NO LARGER THAN 3"x6" (WITH THE EXCEPTION OF THE DIRECTORY PLACARD)
 - 5. ALL PLACARDS FONT STYLE SHALL BE ARIAL WITH THE FONT SIZE NO SMALLER THAN SIZE 12 OR NO LARGER THAN SIZE 28.

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REV.	DATE	DESCRIPTION																	

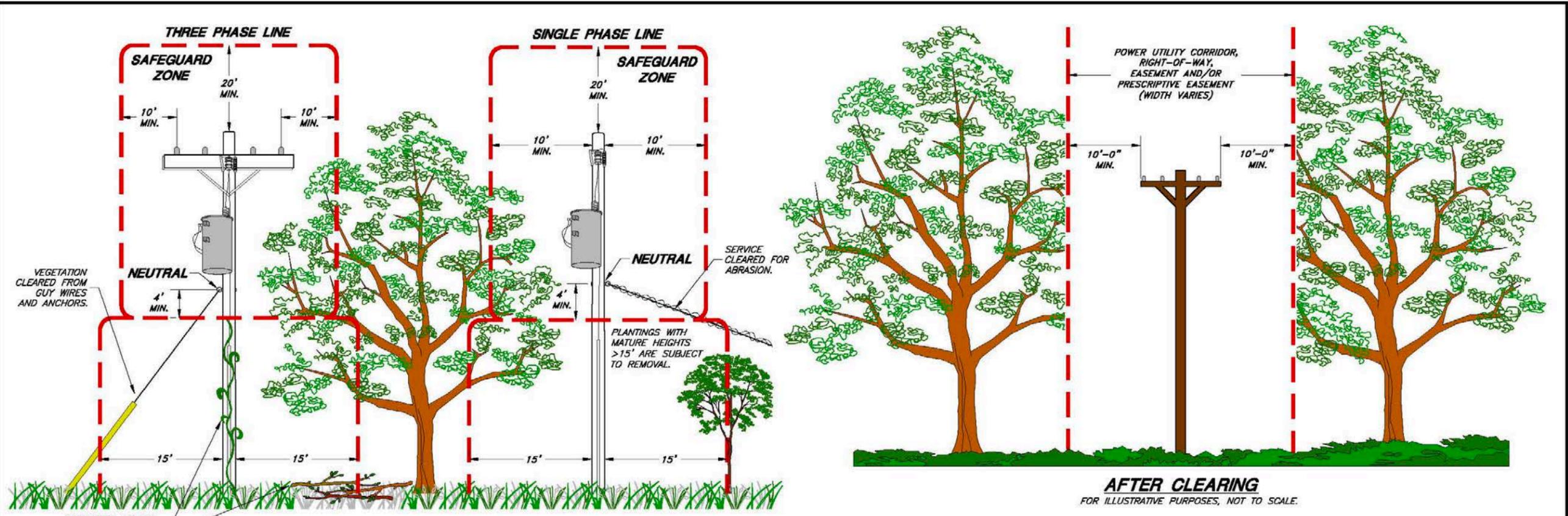


EUSERC DWG NO. 501

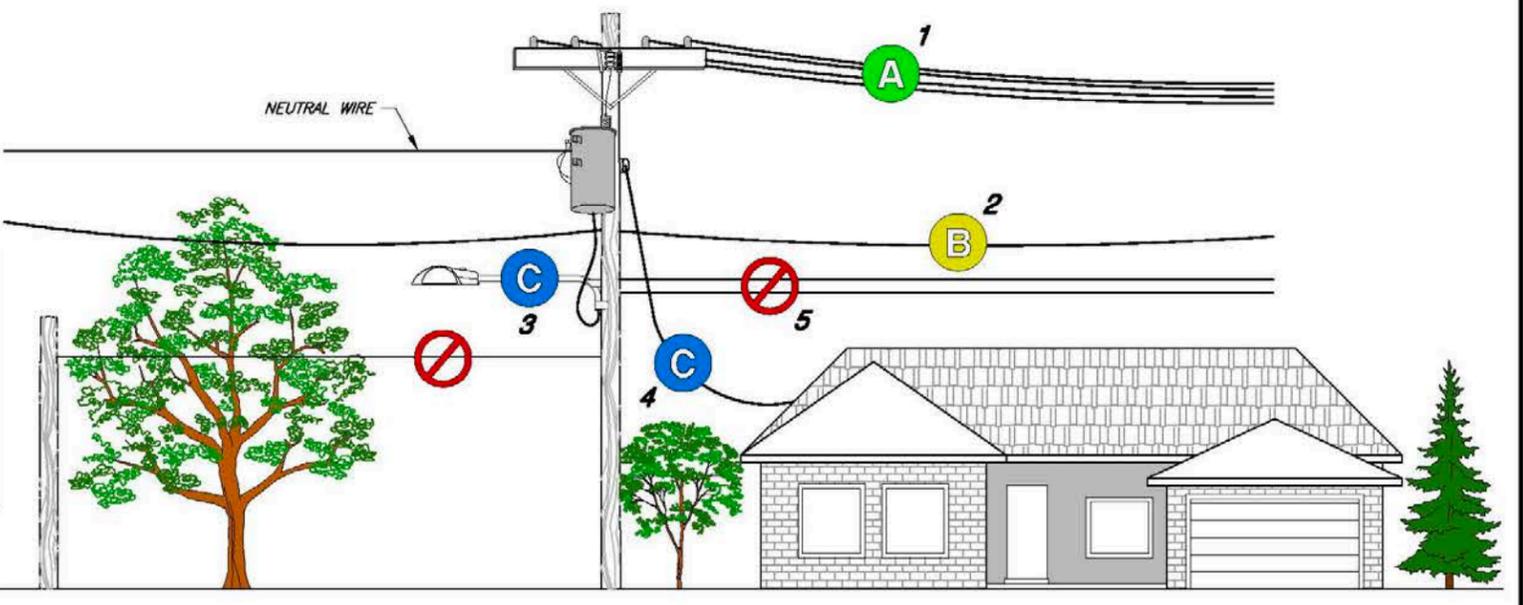
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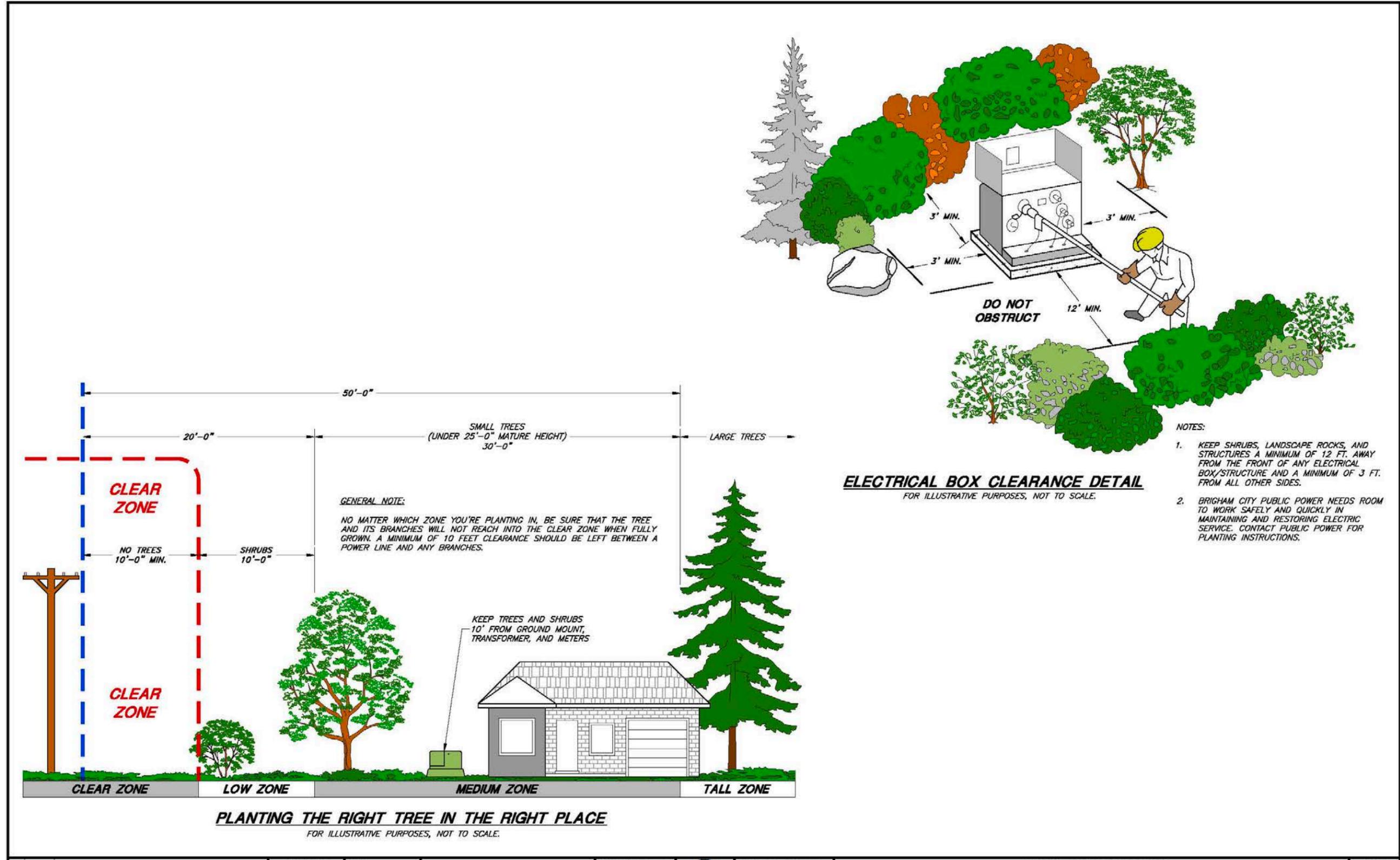
1. * CHECK THE ACCEPTABILITY TABLES FOR UTILITY REQUIREMENTS.
2. THE AC DISCONNECT SWITCH MAY BE FUSED OR UNFUSED.
3. THE AC DISCONNECT SWITCH SHALL BE LOCATED WITHIN 10'-0" OF THE MAIN SERVICE PANEL AND WITHIN LINE OF SIGHT.
4. A MINIMUM 10" CLEARANCE IS REQUIRED FROM THE EDGE OF ANY ENCLOSURE.

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ID NUMBER	WIRE DESCRIPTION	TRIMMING PRIORITY
1	PRIMARY LINES (HIGH VOLTAGE)	A PRIORITY 1 (HIGHEST)
2	SECONDARY LINES	B PRIORITY 2
3	STREET LIGHTS	C PRIORITY 3
4	POWER SERVICE DROP	C PRIORITY 3
5	COMMUNICATION LINES (TELEPHONE, CABLE, FIBER, INTERNET)	NO NOT MAINTAINED BY PUBLIC POWER





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BRIGHAM CITY PUBLIC POWER
ELECTRICAL REQUIREMENTS
AND
STANDARDS MANUAL



FEBRUARY 2026~~AUGUST 2025~~

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GENERAL

SECTION 1 GENERAL

1.01 Ordinances Govern

Nothing in this document shall be construed to be contrary to Brigham City Ordinances. Should a conflict exist between this document and the Ordinances, the Ordinances shall govern.

1.02 Conformance with Federal, State, and Local Laws

Nothing in this document shall relieve the Developer, Engineer, or Contractor from abiding by any and all Federal, State and local laws

1.03 Definitions

- A. APWA. The American Public Works Association
- B. City. The City of Brigham City, Utah.
- C. County. Box Elder County, Utah
- D. Construction Plans. Construction plans include drawings showing all required improvements for a development showing their location, size, grade, and elevations.
- E. Customer. A person or company receiving service from any City utilities
- F. Contractor. A person or company hired by the city or a Developer to perform construction in or for the city, having appropriate state licenses to perform said work.
- G. Council or City Council. The governing body of the city.
- H. Development Review Team. The Review Team (DRT) of Brigham City.
- I. Developer. Person, persons, partnership or corporations developing residential, commercial or industrial property.
- J. Improvements. Includes roads, streets, curbs, gutters, sidewalks, grading, landscaping, water and sanitary sewer systems, irrigation systems, drainage systems, power systems, fences, public facilities, trees or other requirements by this chapter or by the city.
- K. Land Surveyor. A person licensed with the State of Utah to practice as a licensed land surveyor.
- L. Lot. A parcel or tract of land within a subdivision.
- M. MUE. A Municipal Utility Easement acquired by the city for city utilities.
- N. MUTCD. Manual on Uniform Traffic Control Devices.
- O. NEC. The National Electrical Code is a United States standard for the safe installation of electrical wiring and equipment.
- P. NEMA. National Electrical Manufacturers' Association
- Q. NESC. The National Electrical Safety Code
- R. Net billing. A debit and credit metering process in an account.
- S. Offsite Facilities. Facilities outside of the boundaries of the subdivision or development.

- T. Onsite Facilities. Facilities installed within or on the perimeter of the subdivision or development site.
- U. OSHA. The Occupational Safety and Health Administration.
- V. Power Department. The division of City government responsible for the city owned Electric utilities.
- W. Public Power Director. The Public Power Director for Brigham City or authorized representative.
- X. Public Utility Easements. The easements required to place public utilities across any privately owned property.
- Y. ROW. Right of Way

1.04 Easements

Developers shall provide municipal utility easements (MUEs) for all utility extensions through private property and for 10 feet along public right-of-ways. Developments other than single family home developments shall provide 10-foot MUEs along all property lines. If setbacks are less than 10 feet, then MUEs shall be the extent of the setback. Single family lots shall have 10-foot MUEs along public right-of-ways or streets and not necessarily along the other property lines unless a utility is planned there. Developer shall not be allowed to nor shall they include any type of protection easement intended to provide exclusivity to their development.

1.05 Traffic Control

A traffic control plan shall be submitted to the City prior to construction in or along public streets. All traffic control shall comply with APWA 01 55 26 (Traffic Control) and the MUTCD.

1.06 Survey

The alignment of the side property lines for each lot in a subdivision shall be marked in the top back of curb with a lot line witness marker that meets the requirements and specifications of APWA 31 05 10 (Boundary Markers and Survey Monuments). Developers shall provide survey benchmarks and monuments as required by the Public Power Director.

1.07 Temporary Controls

Temporary controls such as noise, dust, mud, surface water, ground water, pollution and erosion controls shall be made. Controls shall meet the requirements and specifications of APWA 01 57 00 (Temporary Controls). Pumping groundwater into the sanitary sewer system is prohibited. Ground water and/or surface water must be kept on the construction site. If either leave the site by any manner, additional temporary controls must be implemented to protect the storm water drain system. A Storm Water Pollution Prevention Plan (SWPPP) and Notice of Intent (NOI) may also be required. See Brigham City's SWPPP Requirements on the public website for more information.

SECTION 2 IMPROVEMENT REQUIREMENTS**2.01 General**

This policy defines the general requirements for improvements to be built by the Developer, sub-divider, owner, or Contractor for all types of construction (including residential, commercial, industrial, institutional, governmental and professional office). All improvements which are in areas that are or will become public rights-of-way and/or easements, or that will be under the responsibility of a homeowner's association, shall meet the requirements of these specifications.

2.02 Variations, Substitutions, Exceptions and Changes

Any variation, substitution or exception from the standards in this policy must be authorized in writing by the Public Power Director. Product options and substitutions must meet the requirements of APWA 01 25 00 (Product Options and Substitutions). Any item of construction not covered in these standards must have plans and specifications approved by the Public Power Director. Requests for changes to the Construction Standards shall be made in writing to the Public Power Director. These requests will be reviewed during the revision process conducted in conjunction with the APWA, NESC and NEC revisions. There is no appeal from the decision of the Public Power Director.

2.03 Protection of Existing Improvements

The Contractor shall be responsible for the protection of any existing improvements on public or private property at the start of work or placed there during the progress of the work. Existing improvements shall include but are not limited to permanent surfacing, curbs, ditches, driveways, culverts, fences, walls and landscaping. Any surface improvements damaged because of construction shall be restored or replaced to an equal or better condition than before. This shall be accomplished in a timely manner.

2.04 New Materials

Only new materials may be used during construction unless otherwise authorized by the Public Power Director.

2.05 City Furnished Products

If the City furnishes any products the Contractor shall conform to requirements and specifications of APWA 01 64 00 (Owner-furnished Products), NESC and NEC.

2.06 Product Delivery and Handling

The Contractor shall conform to requirements and specifications of APWA 01 65 00 (Product Delivery and Handling), NESC and NEC.

2.07 Product Storage and Protection

The Contractor shall conform to requirements and specifications of APWA 01 66 00 (Product Storage and Protection), NESC and NEC.

2.08 Other Specifications and Standards

City standards and ordinances shall supersede all other Standards whenever they conflict.

SECTION 3 SPECIALIZED ENGINEERING

3.01 General

Any specialized engineering beyond the expertise of city staff such as, but not limited to, geotechnical, traffic, environmental, hillside, floodplain, bank stabilization and erosion control will require the review of qualified consultants. All review costs shall be paid by the property owner/developer.

Locate utilities within areas of explorations by notifying the appropriate local one-call state utility locate service (Blue Stakes). Independent private utility locates may be required for utilities not identified by the local one-call service. Complete subsurface explorations in accordance with the minimum requirements outlined in this section.

SECTION 4 CONSTRUCTION PLANS

4.01 General

The following instructions are for the purpose of standardizing the preparation of construction plans to obtain uniformity in appearance, clarity, size, and style. Plans and designs shall meet the standards defined in the specifications and drawings hereinafter outlined. All drawings and/or prints shall be clear and legible and conform to good engineering and drafting room practice.

Include the following in construction plans for all developments:

1. A copy of the proposed final plat or site plan.
2. A plan view of the entire project showing all utilities, roads, and appurtenances.
3. Plan and profiles of all storm, land and groundwater drains, sanitary sewer, curb, gutter, and irrigation.
4. Detail drawings of street cross sections according to the standard drawings and other detail drawings only for items not found in the city standard drawings. Detail drawings shall be to scale and completely dimensioned and described. All items shall be designed in accordance with minimum requirements established by the Public Works Standards.
5. Complete plans for all off-site work to be done in conjunction with the project.
6. A stamp and signature of a Civil Engineer licensed in the state of Utah on each plan sheet, detail drawing, and design sheet.

4.02 Electric Plans

Construction plans must include the location of all existing poles, transformers, secondary junction boxes, sectionalizers, and overhead electrical wire. After plans

are updated to meet the approval of the DRT, the Developer shall submit a computer aided design (CAD) file of the plans to the Power Department. CAD file must be in a .dwg or .dxf format. Thereafter the Power Department will design and make available plans for the proposed electric lines for the development. City electrical utility design shall supersede any design provided by developer.

SECTION 5 POWER UTILITY IMPROVEMENTS

5.01 General

It shall be the responsibility of the Developer to connect to existing utilities or improvements wherever they are located and extend those improvements to and through the development. This requirement includes hooking up existing homes within the development to all utilities. Existing buildings impacted by development which are currently fed overhead shall be required to be rerouted and metering directly connected to new underground electrical grid at developer's expense. Workmanship and details of construction shall be in accordance with the Public Power Standards and/or other codes adopted by the City. All work shall be done under the supervision of the Public Power Director.

5.02 Electric

Electrical lines shall be underground except when the Public Power Director feels that such underground lines are not in the best interest of the City.

SECTION 6 INSPECTION AND TESTING

6.01 Quality Control

The following work shall be subject to the inspection and testing requirements of this chapter:

1. Work on existing or proposed City property.
2. Work on property that will be owned by a property owners association.
3. Work on existing or proposed streets, easements, or right-of-ways.
4. Work on existing or proposed City utilities.

The Contractor is responsible for performing all inspection and testing required to verify installed materials meet these standards and must verify the materials are accepted by the Public Power Director. The Contractor must also ensure that any additional inspection and testing required by the city or a testing company is performed and accepted by the City.

6.02 Inspection and Testing Notification

The City may contract with a private company to conduct any inspections or testing specified to be performed by the City. All inspections and tests must be scheduled with the City or company contracted by the City a minimum of 1 full business day

before needed. Requests for inspection on work requiring continuous inspection shall be made 3 full business days prior to commencing the work.

6.03 Work Without Required Inspection and Testing

Failure to provide proper notification or to perform work without inspection will result in rejected material. Rejected material will be subject to additional verification requirements including, but not limited to, post-placement sampling and laboratory testing for material conformance, in-place testing for concrete strength and air content. All post-placement testing for uninspected work will be at no additional cost to the city.

Additionally, any work performed without required inspection or testing will give the city the option to hold the bond covering that portion of the improvements in violation, or require the removal and replacement of the uninspected work. The City shall have the option of retaining part or all the bond for up to 10 years after installation of improvements constructed without required inspection or testing. The Public Power Director may also accept the work at a reduced price.

6.04 Inspection and Testing Fees

Connection fees required shall be paid and permits required shall be obtained prior to the preconstruction meeting.

6.05 Weekly Progress Meetings

The City may require, at their discretion, construction projects in the City to have a weekly progress meeting at the Public Power office. The Public Power Director, City inspectors, the Contractor, and subcontractors shall be in attendance.

6.06 As-Built Survey

The Contractor shall notify the City to survey all underground utilities either installed or uncovered during construction. Contractor shall give the City 24-hour notice to survey utilities.

6.07 Earthwork: Compaction and Moisture Content Tests (Refer to Sheet E10)

The city will test all sub-grade and fill material for compaction and moisture content. Test locations shall be determined by the city.

6.08 Inspections

6.08.1 Conduit Inspections

The Public Power Director must inspect all conduit before backfilled.

6.08.2 Service Stub Inspections

The Public Power Director must inspect all service stubs before backfilled.

6.08.3 Street Light Base Inspections

The Public Power Director must inspect all street light bases prior to concrete placement and before they are backfilled around.

6.08.4 Bedding Inspections

The Public Power Director must inspect the bedding in all electrical trenches.

6.08.5 Final Electrical Inspection

Once all electrical work for a development is completed to City standards, a final electrical inspection must be done by the Public Power Director prior to permanent power installation.

SECTION 7 PORTLAND CEMENT CONCRETE WORK (Refer to Sheets E5-E9, E12-E14 and E16)

7.01 General

All materials and processes involved in concrete work shall be subject to inspection and testing as detailed in general compliance with ASTM E105-54T. For additional information refer to the Public Works Standards manual.

SECTION 8 EARTHWORK AND TRENCHES (Refer to Sheets E4 and E5)

8.01 Excavation

8.01.1 General

Excavation shall meet the requirements and specifications of APWA 31 23 16 (Excavation) unless otherwise indicated.

8.01.2 Safety

All construction shall be done in accordance with the provisions of the Utah State Industrial Commission, OSHA regulations and APWA 31 23 16 (Excavation). No trenches deeper than 4 feet shall be left open at any time unless construction is in process. When construction is in process only 200 feet of trench may be open at one time and must be completely backfilled before proceeding. Any variation will require the approval of the Public Power Director. No trenches shall be left open at any time unless guarded with adequate barricades, warning lamps and signs.

Any injury or damage resulting from lack of adequate bracing and shoring shall be the responsibility of the Developer/Contractor and the Developer/Contractor shall, at his/her own expense, affect all necessary repairs or reconstruction resulting from such damage. No inspections will be done in unsafe trenches and will be the cause for immediate shutdown of the project until the trench is deemed to be safe by the Public Power Director.

8.02 Subsurface Pipe Installation

8.02.1 General

Pipes, conduits or casings, 4 inches in diameter or less, may be bored, jacked, augured or jetted under sidewalk, curb, gutter if authorized by the Public Power Director. The resulting hole diameter shall not exceed 1 inch plus the outside diameter of the pipe or sleeve installed.

8.02.2 Boring or Jacking

Boring or jacking work shall meet the requirements and specifications of APWA 33 05 23 (Trenchless Utility Installation).

8.02.3 Tunneling

Where sidewalk, curb, and gutter exist, excavation may be made by tunneling provided the following requirements are met:

1. Excavation shall be vertical and as near to the curb or sidewalk as possible.
2. The length of the tunnel shall not exceed the width of the sidewalk, curb, and gutter.
3. Where a separate sidewalk and curb exist, an excavation shall be made between the sidewalk and the curb.
4. At least three feet of undisturbed earth shall be left under the sidewalk or curb; and
5. Where the sidewalk has been tunneled, the hole shall be filled from each end with flowable fill. Where the excavation cannot meet these requirements, a section of sidewalk, curb, or gutter, from joint to joint shall be removed and replaced.

8.03 Fill Material

8.03.1 General

All fill material shall be placed on sub-grade prepared according to the specifications of this chapter. All fill material shall be compacted according to the specifications of this chapter.

All fill material under and within a foot of electrical boxes shall be untreated base course. In other areas native excavated material may normally be used unless such material cannot be properly compacted according to specifications in this chapter. All fill material, including native fill material, must be free from debris, organic material, and rocks larger than 6 inches in diameter.

8.03.2 Bedding Material

Use sand as a bedding material for electrical conduit. Bedding sand must compact sufficiently to support the pipe and shall meet the following gradation:

Sand Gradation

Sieve/Screen Size	% Passing
No. 4	100
No. 200	10 to 20

8.04 Installation and Compaction of Earth Materials

8.04.1 General

The installation of all fill material shall meet the requirements and specifications of APWA 33 05 20 (Backfilling Trenches), APWA 31 23 23 (Backfilling Structures), APWA 32 05 10 (Backfilling Roadways) and APWA 31 23 26 (Compaction). Fill material outside of pavement areas, as defined by APWA 32 05 10 (Backfilling Roadways), and more than 24 inches from any utility box shall be compacted to not less than 90% of the maximum dry density.

8.04.2 Backfill in Trenches

Backfill shall be carefully placed around and over pipes and shall not be permitted to fall directly on a pipe from such a height or in such a manner as to cause damage.

8.04.3 Conduit Zone (Refer to Sheet E11)

The conduit zone includes the full width of trench from 3 inches below the conduit to 12 inches above the conduit for all conduit. Electrical conduit may be placed to 3" off the sides of trenches. Trenches shall be wide enough to compact fill material according to the specifications in this chapter.

Electrical Service

SECTION 9 GENERAL

9.01 Standards and Specifications

All electrical work shall be installed in accordance with these development standards, the most current edition of the National Electrical Code (NEC) and the National Electric Safety Code (NESC), and applicable State, County and OSHA codes and ordinances.

These specifications cover the installation of the electrical system. See Section 2 for improvement and design requirements, Section 6 for inspection and testing requirements, and Section 8 for earthwork and trench requirements. See standard drawings related to electrical system.

9.02 Construction Costs

All costs to install or relocate facilities to provide electrical service shall be paid by the Customer.

If a temporary electrical service is needed the contractor/developer is responsible for providing and installing the required conduit, grounding, transformer pad, and metering equipment as directed by the City. There will be a rental fee for the transformer needed that will be determined based off of the length of time the unit is needed. Brigham City Power will provide and install all primary wiring and transformer at the developers/contractor's expense. Any fees paid to the City for these purposes will not be refundable or be applied to any other electrical fees.

9.03 Attaching to Existing City Facilities Prohibited

Customer shall install no wiring or attachments on poles or other equipment of the City unless specifically authorized, in writing, by the City.

9.04 Unusual Service Extensions

Special and unusual service extension requirements for equipment or structures are treated as separate items and are not included in these standards.

9.05 Permits and Inspections

Service will not be established until all necessary permits have been obtained and not until Customer's wiring installation has been inspected and approved by the Public Power Director. Any variations of this must be preapproved by the Public Power Director. The City reserves the right to inspect wiring and to refuse service to any installation that is, in the opinion

of the Public Power Director, unsafe or if the operation of same may be detrimental to the service furnished to other Customers or the City. All conduits shall be inspected prior to backfilling. All concrete street light bases, concrete transformer pads and other required concrete shall be inspected prior to pouring concrete. A compaction test shall be taken by the City or an approved engineering firm prior to setting any electrical enclosures, cabinets, or other structures. In addition, a test shall be taken on the concrete used for electrical pole bases, and pads.

9.06 Access to Premises

Any properly identified representative of the City shall, at all hours, have free access to and from the premises of the Customer for the purpose of inspecting Customer's installations and electric equipment and for the purpose of reading, repairing, testing, or removing the City's meter or its other property. When, as declared by the Public Power Director, emergency conditions exist with respect to City's service, City's representative shall have immediate and free access to Customer's premises.

9.07 Electrical Plan Drawings

Brigham City Public Power shall design the electrical system and provide approved electrical plan drawings. Requests for any changes to these drawings can be made by contacting Brigham City Public Power with a proposal. Approved electrical drawings must be initialed by an approved electrical division supervisor and signed by Brigham City Public Power to be valid for construction of the electrical system improvements. Photocopies of approved drawings will not be considered valid. Revisions, if needed, must also include the date the revision was approved.

9.08 Electrical Box Clearance

All electrical boxes shall have 12 feet clearance to the front and 3 feet clearance to the back and on either side. Secondary pedestals shall only require 3 feet of clearance on all sides. Switchgears shall have 12 feet clearance in front of the doors and 3 feet of clearance on the sides. Meters, metering cabinets & enclosures, service disconnect cabinets & enclosures, & CT cabinets, shall have a minimum of 8 feet of clearance in front of said cabinets & enclosures. All electrical sectionalizers, transformers, switchgear, etc. shall have a clear and level working space around them. The area shall be backfilled and leveled a minimum of 12 feet in all directions from the respective electrical device.

Meters, meter cabinets, services and related electrical cabinets shall not be enclosed by carports, sheds, out buildings, additions or remodels or other such buildings. Brigham City Public Power shall have ready access to such equipment for safety & maintenance. The City reserves the right to

disconnect the City electrical service to meter bases, services, etc. if in the opinion of the City the service is inaccessible or unsafe until the service & safety issues are resolved to the City's satisfaction. This may include, but is not limited to relocating the service, or upgrading the service to meet current City codes.

9.09 Overhead Electrical Power Line Clearances (Refer to Sheet E21)

As set forth in Section 54-8c-1 through Section 54-8c-7 of the Utah Code, no person or thing may be brought within 15 feet of any high voltage overhead power line unless:

The responsible party has notified Brigham City Public Power of the intended activity; and

The responsible party and Brigham City Public Power have completed mutually satisfactory safety precautions for the activity; and

The responsible party has made prior arrangements to pay Brigham City Public Power for the mutually satisfactory safety precautions (if applicable).

No building, dwelling, sign, bridge, antennae, or structure shall be constructed, or placed underneath any overhead electrical power lines, and shall meet current NESC/NEC and City clearance requirements, both vertically and horizontally, from said power lines. Variances shall only be allowed at the City's discretion.

If existing buildings or structures exist under power lines, those same buildings or structures shall not be modified, remodeled or constructed to further encroach upon the clearances from said power lines.

In general, for overhead high voltage open supply conductors operating from 750 volts to 22,000 volts nominal, the space extending from grade level to the height of the conductor vertically and 15 feet horizontally from the further most outside conductor from the pole shall be kept clear from the power lines. Furthermore, for overhead high voltage open supply conductors operating from 22,001 volts to 138,000 volts nominal, the space extending from grade level to the height of the conductor vertically, and 30 feet horizontally from the further most outside conductor from the pole shall be kept clear from the power lines. Open water, swimming pools, combustible materials or hazardous locations may have additional clearances required.

Additional clearances may be required depending on the installation or application.

SECTION 10 VOLTAGE AND ENERGY REGULATION (Refer to E19)

10.01 Available Voltages

Standard Electrical Services

Residential	Commercial and Industrial
1 Phase	3 Phase
3 Wire	4 Wire
120/240 Volts	208Y/120 or 480Y/277 Volts

Developers must contact the Public Power Director regarding the availability of other service options.

The Public Power Director reserves the right to deny a customer 3-phase service if the Public Power Director determines that single-phase service will adequately supply Customer's load requirements. The Public Power Director reserves the right to deny a customer single phase service if the Public Power Director determines 3-phase service is in the best interest and beneficial to the City's electrical system.

10.02 Phase Service

3 phase service may, at the City's option, be furnished where 3 phase facilities of adequate capacity are already installed immediately adjacent to the point where service is to be delivered to Customer, or where, as determined by the City, it is economically feasible to extend such 3 phase facilities.

The City reserves the right to refuse to extend or install 3 phase facilities to serve motors individually rated at 20 HP or less and to furnish only single-phase service for such motors. In such an event, Customer may elect to install single- phase to 3 phase conversion equipment to operate 3 phase motors.

10.03 Power Factor Correction

The City reserves the right to require the Customer to install power factor corrective equipment. This equipment shall maintain the power factor on all of Customers electric power meters to not less than 95% lagging at all times.

10.04 Load Control

The Public Power Director reserves the right to require developers to install equipment to limit load and reduce voltage fluctuations.

10.05 Voltage Control

Where Customer installs power factor corrective equipment, the City reserves the right to require Customer to install controls and equipment to prevent voltage, frequency, and/or harmonics problems that may be detrimental to other Customers or the City.

10.06 Fluctuating Load Limitations

Where large fluctuating single-phase loads, such as spot welders, are involved, the City reserves the right to require such loads to be supplied by means of a 3 phase to a single-phase converter or other similar equipment. All conversion equipment shall be installed, owned, operated and maintained by the Customer.

In the event a separate service or transformer installation or additional transformer capacity is required to adequately serve fluctuating loads (such as X-ray equipment, welders, etc.). Such equipment costs and installations shall be the responsibility of the Customer.

10.07 Penalties

If, such voltage control equipment is not installed by Customer, Customer may be required to pay a power factor penalty and/or all electric service shall be subject to disconnection as provided by Title 50 of the Brigham City Public Power Municipal Code. Customer's wiring used to supply such fluctuating loads shall be installed in a continuous run of rigid conduit and cable as approved by the City.

SECTION 11 MATERIALS

11.01 Materials

Only electrical grade materials and apparatus shall be used. The materials and apparatus shall be UL Listed and designed for their purpose.

11.02 Conduit

All conduits shall be electrical grade conduit. Conduit shall be Schedule 40 PVC unless otherwise specified by the Public Power Director. Electrical grade Schedule 40 fiberglass and/or PVC conduit shall be used under collector and arterial streets and for all sweeps. Fiberglass conduits shall not be used for riser poles. All conduits extending out of the ground outside of an enclosure shall be rigid metal ~~and the elbows attaching to those risers shall be either rigid metal or fiberglass~~. All conduits entering any cabinet,

enclosure, vault, or ground sleeve shall have end bells attached to the ends of conduits to protect wire from damage. All buried metal conduit shall be coated with anti-corrosion tape. Tape shall be a minimum of 2 inches wide. Tape shall extend 6 inches above finished grade.

11.03 Enclosures (Refer to Sheets E5-E9 and Sheets E12-E14)

All enclosures, including primary and secondary junction boxes, shall be level. Opening mechanisms and locking devices on all transformer equipment shall be 4 to 6 inches above final grade. Opening mechanisms and locking devices on all primary sectionalizers, switchgear and secondary junction boxes shall be 10 inches above final grade. Only approved enclosures, pads, and vaults shall be used.

11.04 Soils & Compaction (Refer to Sheet E10)

All soils under enclosures shall be approved road base and be compacted to 95% of dry density. The compaction area must extend at least 1 foot past the enclosure in all directions and be a minimum of 1 foot in depth under the enclosure. A compaction test shall be required before any enclosure, box, sleeve, or pad is set into place. The compaction test shall be taken by the City or by the City's approved engineering firm. If ground sleeves or pads settle, Developer shall be required to re-level to the above specifications. If primary enclosures or transformers settle after being energized, the City shall re-level the equipment at the Developer's expense.

SECTION 12 INSTALLATION (Refer to Sheets E5 – E9 and Sheets E12-E14)

12.01 General

All electrical facilities shall be installed under the supervision of a licensed electrical contractor or journeyman lineman. **A certified journeyman electrician or lineman shall be on site during all conduit installation, cable pulling and connecting of electrical wiring.** All electrical installation & equipment shall be installed in a neat and workmanlike manner.

Curb & gutter shall be installed before excavation of electrical trenches. The curb should have property corners pinned in the top of the curb by approved methods. The curb will give reference for proper conduit depths & locations, and proper placement of electrical and communications boxes. Developer required to notify communication company and give up to 1 week to install communication lines. Open trench will be backfilled up to communication lift during waiting period.

Contractor shall construct all electrical facilities in a development except for the following which shall be completed by the Utility:

1. Pulling high voltage underground cable.
2. Installing high voltage cable terminations.

3. Setting transformers and switch gears (contractor shall furnish & install sectionalizers).
4. Secondary connections shall be connected in transformers (exception: contractors shall connect secondary connectors in 3 phase transformers);

All overhead facilities, including extension of risers as shown in the standard drawings. (Refer to Sheet E20)

12.02 Underground Lines

All new facilities shall be constructed underground unless otherwise authorized by the City. Existing buildings & facilities that have a change of use, or extensive remodeling, may, at the Public Power Director’s discretion, be required to install underground power lines. No overhead power will be allowed unless required or approved by the Utility.

12.03 Conduit Depths

High voltage (12.47kV) primary conduits shall always be installed below secondary (600 volts or less) conduits & communications conduits if installed in a joint trench application. No primary high voltage conduits shall be installed at less than 4 feet in depth to top of conduits unless otherwise approved.

In general, the following table of depths shall be used for electrical conduit: (Note: depths are to the top of conduits)

Table 12.03.A
Electrical Conduit Depths

Conduit Size	Depth to Top of Conduit
1” Street Light	2 Feet
2” Secondary	2 Feet
3” & 4” Secondary	2 Feet
4” Primary	4 Feet
6” Primary	4 Feet*

*Depths may increase depending upon application.

12.04 Pull Strings

All primary conduits shall have 1,350 lb. mule tape in the conduit securely tied off in each pad or enclosure.

12.05 Identification Tape and Stub Markers

All conduits shall have a caution tape buried 12 inches below grade directly above conduit. Tape shall meet the requirements and specifications of APWA

23 20. The end of each stubbed conduit, including service laterals, shall be marked to the surface according to the standard drawings.

12.06 Underground Metal Conduit

If underground metal conduit were allowed, all buried metal conduit shall be coated with anti-corrosion protective tape. Tape shall extend 6 inches above finished grade.

12.07 Road Crossings

Conduit shall be schedule 80 gray PVC or rigid fiberglass conduit. Shadow conduit shall be installed at road crossings at Public Power Director's discretion.

12.08 Berms, Slopes, and Hillside Conditions

For installation instructions around berms, slopes, and hillsides contact Brigham City Public Power.

12.09 Labels

A label shall be securely taped to the end of each conduit run where it emerges into any cabinet or enclosure. The label shall indicate whether the conduit run is primary or secondary and the direction & footage of conduit.

SECTION 13 SYSTEM REQUIREMENTS

13.01 Additional Capacity Requirements

In the event a Customer makes application for additional capacity, subject to provisions of the applicable rate schedule, Customer shall install the necessary transformer capacity, service wires and other equipment required to adequately serve Customer's requirements. Customer will be required to submit a Brigham City Load Sheet to be completed by electrical engineer, architect, or master electrician. Report shall include all existing and future load.

Customer shall be required to participate in system load study to ensure needed capacity is available through City's transmission system. Customer shall be responsible for all costs associated with said study.

All applications for service involving the furnishing of additional capacity or equipment by the City may be required of the Customer. The application shall state that any service entrance wiring and main switches required for the utilization of such additional capacity to be furnished by Customer, shall be considered as permanent fixtures belonging to the property being served and property except for replacement or enlargement if necessary.

13.02 Substations

Substation may be required of Customer. The City reserves the right, where unusual substation capacity or voltage is involved, to require the Customer to install the necessary complete substation as provided for in City's rate schedule.

Where the Customer furnished the necessary complete substation equipment to take service at primary service voltage, such equipment shall be owned and maintained by the Customer and shall include the necessary transformers, structure, controls, and protective equipment, and shall be of such quality and construction as meets City approval. Customer shall supply main transmission breaker to City for ownership and operation providing interconnection to transmission system. Operation of said breaker will be controlled by the city.

SECTION 14 SERVICES

14.01 Point of Service

The Public Power Director determines the point of delivery for all developments. Public Power Director reserves the right to meter service at either primary or secondary voltage. For large or unusual loads, Public Power Director reserves the right to require Customer to take service at primary voltage and to require Customer to furnish the necessary complete substation equipment. The Public Power Director will decide if multiple buildings, business and residential, or portions of buildings will be metered from one or from multiple metering points. Each building or structure served shall be supplied by only one service. Multiple services are only allowed at the Public Power Director's discretion.

14.02 Service Entrance Requirements

The service entrance shall be defined as the facilities that consist of approved service entrance conduit and cable enclosing conductors and apparatuses. Said conductors shall extend from the point of contact with the City's secondary point of service and thence to and include Customer's service entrance safety switch or disconnection means.

Customer shall install all conduit and wire from the building to the pole or transformer according to the City standards.

1. Service Entrance Safety Switch or Main Disconnect for new construction and remodel. A residential service safety switch shall be an exterior service combination meter base and main disconnect device. For commercial & industrial installations a service safety switch shall be an exterior service main disconnect device or devices, which will always

remain accessible. This device shall be a main breaker, but minimum requirement shall be a safety switch, which will disconnect all service power from the premise wiring to the entire facility. The location of the main disconnecting device shall be approved by the City.

2. Identification. (Current NEC) Where a building or structure is supplied by more than one service, or any combination of branch circuits, feeders, and services, a permanent plaque or directory shall be installed at each service disconnect location denoting all other services, feeders, and branch circuits supplying that building or structure and the area served by each.
3. Service Entrance Conductors. All service entrance conductors and any conduit enclosure shall be continuous, unbroken, and completely exposed for external inspection throughout their entire length, extending from said point of contact with City's service wires to the meter socket (or meter cabinet if installed) and thence to Customer's service entry safety switch or main disconnecting means. Service entrance conductor type & size shall meet current NEC, NESC, and City Standards. Brigham City Public Power reserves the right to make an allowance as needed.

Underground service lateral conductors from the City's Secondary service point up to the line side of the main disconnecting means shall be installed, maintained, and owned by the Customer. The City assumes no liability for replacement of secondary service lateral conductors.

14.03 Underground Residential Service Requirements (Refer to Sheets E2 and E15)

14.03.1 Conductor,* conduit sizes, & conduit depths

Refer to following table:

Service Size	Service Conductor Size (AWG)	Conduit Size	Conduit Depth
100 amp	2/0 alum.	3"	2'
125 amp	2/0 alum.	3"	2'
150 amp	2/0 alum.	3"	2'
200 amp	2/0 alum.	3"	2'
201-400 amps	Contact Brigham City Public Power	Contact Brigham City Public Power	Contact Brigham City Public Power

*Table 14.03.1.A Note: The current National Electric Code may supersede these conductor sizes based upon service size. Refer to current NEC for service conductor sizes for other types of conductors & installations.

- 14.03.2 **Conduit (Refer to Sheet E11)**
- Only continuous factory lengths of conduit shall be used. Conduit may be cut or spliced; however the couplers & bends shall not exceed a 360-degree pull on the overall length of the conduit run. Conduit shall be installed in a neat and workman-line manner. All service lateral conduits shall be inspected prior to backfilling.
- 14.03.3 **Materials**
- Only electrical grade materials shall be used. Rigid metal conduits (RMC), schedule 40 fiberglass and schedule 40 PVC shall be used for any elbows or bends 45 degrees or greater. RMC shall be coated with an anti-corrosion tape below grade and tape shall extend 6 inches above finished grade. RMC shall be used for all above grade service entrance conduits. Customer shall provide and install service wire from house to junction box, transformer or pole according to City standard drawings. Service wire type shall be approved by Brigham City Public Power.
- 14.03.4 **Trenching**
- Service lateral trenches shall be 24 inches in depth. Trenches shall be as straight as possible from the secondary service point to the Customer disconnect or meter base. The bottom of the trench shall be as level as possible and free from rocks & debris. Backfill placed directly on conduits shall be free from large rocks.
- 14.03.5 **Service Entrance Conduits Support and Attachments**
- Service Entrance conduits shall be securely attached to the foundation of house or building by means of unistrut, concrete anchors, and unistrut type clamps. Unistrut shall be securely attached to foundation by a minimum 3/8 inches x 3 inches concrete anchors. Unistrut shall typically be 24 inches. Service entrance conduits shall be one continuous, unbroken conduit from the elbow to the point of attachment at the meter base hub.
- 14.03.6 **Location(s)**
- Note: Refer to 15.02 Metering for additional requirements. Meter/main disconnect shall be located within the front 6 feet of the side of a residential dwelling. Meter/main disconnect shall always be accessible. Meter/main disconnect shall be kept a minimum of 36 inches from any natural gas meters, window wells, windows, doors, stairs and any material deemed

to be combustible or hazardous. For remodels, service upgrades, building additions or other instances or applications affecting the existing electrical service, **CT cabinet**, meter base, meter and disconnect contact the Brigham City Public Power for requirements. Brigham City Public Power will require a meter main disconnect to be installed anytime electrical upgrade work is performed on the residence. The service, meter, meter base, or disconnect may be required to be relocated to meet current Standards and Codes. Meter/main disconnect shall meet all applicable NEC and NESC codes. The Public Power Director reserves the right to accept or reject any locations of meter base/main disconnects.

14.03.7 Temporary Underground Service (Refer to Sheet E18)

For temporary service furnished to individual small single-phase loads, such as house trailers, small construction projects (such as house and small buildings, portable tools, etc.) City will install a standard temporary service drop, at Customer's expense. City's General Service Rate shall apply.

Where the temporary service installation requires additional facilities more than the previously mentioned standard service drop (such as an extension of the City's primary line), such installation will be at the Customers' expense.

14.04 Overhead Residential Service Requirements (Refer to Sheet E3)

14.04.1 General

Overhead services shall also include mast knob and service grips. Wiring shall meet load and installation requirements as indicated in the NESC/NEC.

14.04.2 Service Drop Support and Attachments

For one story buildings, or where conditions will not permit proper ground clearance to be maintained by City's service wires, Customer shall install, at Customer's expense, suitable conduit or service entrance mast pipe or other structure or support that will properly support the City's service drop conductors and to maintain the minimum ground clearance as required by the NESC/NEC. If clearances cannot be met, the service may be required to be relocated or otherwise rerouted underground.

14.04.3 Service Entrance Weather head Clearance

The service entrance weather head shall be located to meet or to exceed NESC/NEC clearance from readily accessible

windows, doors, or porches. The weather head must also be located so that when the service drop conductors are attached to the building structure or other service drop support, adequate clearance will be maintained away from telephone or other wires, windows, awnings, drainpipes, chimneys, or other obstructions.

14.04.4 Service Entrance Mast Pipe

This installation shall be made by Customer, at his/her expense, and shall conform to City's specifications. The service entrance mast pipe shall be of electrical grade galvanized rigid steel of not less than 2 inches inside diameter and shall be attached to the wall of the building by means of an adequate number of approved fastening devices. All service conduits shall be 2 inches in diameter, or larger.

The mast pipe and/or conduit shall be continuous, extending from the service entrance weather head located at the top of the mast pipe to Customer's meter socket base.

The service entrance mast pipe shall extend above the roof surface (through weatherproof roof flashing) so that the point of attachment of City's service wires to the mast pipe will be not less than 18 inches above said roof line, and not to exceed 36 inches without guy support to structural frame plus such additional height as is necessary so that the point of attachment of City's service wires will maintain minimum ground clearance, specified in the NESC/NEC.

14.04.5 Service Drop Attachments to Buildings

The Customer will furnish and the city will install the necessary attachment brackets and apparatuses to attach City's service wires to Customer's service drop termination facilities.

The City further reserves the right to require that the installation of the necessary mast pipe or equivalent facilities required supporting city's service wires, be made by Customer during the course of building construction.

Where the exterior of buildings is finished with brick facing, concrete, plastered metal lathe, sheet iron, stucco, tile or similar material, suitable facilities of adequate strength to hold City's wires and attachments, shall be installed by Customer at Customer's expense.

14.04.6 Service Drop Conductor Ground Clearance

The service drop conductors must be located at such height as will enable adequate clearance to be maintained through the entire service drop length. The minimum ground clearance shall be as specified by the NESC/NEC, but not less than 12 feet over driveways not subject to truck traffic; 16 feet over commercial areas, parking lots and other areas subject to truck traffic; and 22 feet over public streets, alleys and roads. The final height attachment determination shall take into consideration conductor sag due to weather fluctuations & lengths of spans.

14.04.7 Service Entrance Conductor Specifications

The service entrance conductors may be either copper or aluminum, and shall be continuous without any joints, splices or connections, extending from the point of connection with service drop conductors to the termination of same at the meter socket or meter cabinet and thence same shall continue without joints, etc., to Customer's service entrance safety switch.

The Customer shall have electrical Contractor provide at the service entrance weather head, sufficient excess service entrance conductor length or "tails" (18 inch minimum) so that the City can connect directly to the service drop conductors. The service entrance installation shall conform in every respect to City's specifications, as to conductor connectors, and the method of making connections and all other related matters involved.

The service entrance conductor size for the ampere load to be carried shall be based on a maximum conductor operating temperature of 75°C (type RH, RHW, XHHW, or equivalent.)
Note: Refer to Table 14.03.1.A regarding service conduit & conductor sizes.

14.04.8 Main Breaker or Disconnect

The entrance safety switch or main breaker ampacity shall not be less than the rated ampacity of the service conductors. Other specifications, including conductors, shall conform to the latest edition of the NEC.

Upon special application, City may permit 2 or 3 wire service entrance installations of less than 100 ampere capacity for signs, etc., where the load requirements, as determined by

City, justify the same. In no event will 2 wire service be furnished except at city's option.

14.04.9 Temporary Service Drops (Refer to Sheet E18)

For temporary service furnished to individual small single-phase loads, such as house trailers, small construction projects (such as house and small buildings, portable tools, etc.) City will install a standard temporary service drop, at Customer's expense. City's General Service Rate shall apply.

Where the temporary service installation requires additional facilities more than the previously mentioned standard service drop (such as an extension of the city's primary line), such installation will be at the Customers' expense.

14.04.10 Service to Mobile Homes and Trailer Courts through one meter

For service to trailer courts where more than 1 dwelling unit, mobile home, or trailer exists, the campus shall be supplied through 1 meter and the furnishing of such service shall be provided and installed by the facility owner.

14.04.11 Load to be Balanced on Circuits

The Customer shall use reasonable care in designing electric wiring and circuits; also, the connection of the loads to the circuits, so that the loads on the individual phases and circuits of City's service are properly balanced at all times.

14.04.12 Temporary Service to be Installed on Customer's Pole

All such temporary service drops shall be supported on a pole or post as approved by the Public Power Director and shall be installed by Customer at his/her expense.

14.05 Underground Service Requirements for Multi-Family Dwelling Units

14.05.1 General

Service lateral conduits from the City's point of secondary service shall be 4 inches minimum for multi-family dwelling units. A load calculation study shall be performed for multi-family dwellings units and submitted to Brigham City Public Power. All other residential service requirements apply.

14.06 Underground Service Requirements for Commercial & Industrial Applications

14.06.1 General

Service entrance conductors & conduits shall be sized according to applicable NEC and NESC codes. The City shall

approve all locations & installations of conduits, service disconnection means, and meters.

- a. All commercial & industrial buildings shall have an accessible, exterior main disconnecting means that is capable of disconnecting (opening) all service entrance conductors from the building or structure premises wiring.
- b. All services rated 801 amps or more supplied by a 4-wire three phase 480Y/277 volt connected system shall have a ground fault test performed for protection of equipment.
- c. All services, equipment, cabinets, conduits, etc. shall be grounded & bonded according to applicable NEC & City codes.
- d. The service disconnecting means shall be identified as suitable for use as service equipment.
- e. A building or structure may only be served by one service lateral or service drop, unless otherwise approved by Brigham City Public Power.
- f. There shall not be more than 6 service disconnects for each service. Each service disconnect shall be permanently marked to identify it as part of the service disconnecting means. All service disconnecting means for each service shall be grouped together.
- g. The center of the operating handle of switch or breaker, when in its highest position, shall not be more than 5 feet and not less than 4 feet above finished grade.

14.06.2 Materials

Only electrical grade & UL listed materials shall be used. Rigid metal conduits (RMC), schedule 40 fiberglass and schedule 40 PVC shall be used for any elbows or bends 45 degrees or greater. RMC shall be coated with an anti-corrosion tape below grade and tape shall extend 6 inches above finished grade. RMC shall be used for all above grade service entrance conduits. Customer shall provide service wire from building to utility transformer or pole. All electrical equipment, cabinets, panels, etc. shall be UL listed and approved for the installation.

14.06.3 Trenching

Service lateral trenches shall be 2 feet in depth. Trenches shall be as straight as possible from the secondary service point to the Customer disconnect or meter base. The bottom of the trench shall be as level as possible and free from large rocks & debris

14.06.4 Service Entrance Conduits Support and Attachments

Service Entrance conduits shall be securely attached to the foundation of building by means of unistrut concrete anchors, unistrut type clamps or other approved methods. Unistrut shall be securely attached to the foundation by a minimum 3/8 inches x 3 inches concrete anchors. Service entrance conduits shall be one continuous, unbroken conduit from the elbow to the point of attachment at the meter base, CT cabinet, or main disconnect cabinet. Service lateral conduits shall be installed at a depth of 2 feet to top of conduits. All installations shall be installed in a neat and workman-like manner.

14.06.5 Locations

Locations of service lateral conduits shall be approved by the Public Power Director. Locations of outside main disconnecting equipment shall be approved by the Public Power Director. Meter/main disconnect shall always be accessible. Meter/main disconnect shall be kept a minimum of 36 inches away from any natural gas meters, window wells, windows, doors, stairs and any material deemed to be combustible. Meter/main disconnect shall meet all applicable NEC and NESC codes. The Public Power Director reserves the right to accept or reject any locations of meter base main disconnects. If the Public Power Director determines the service location is inaccessible or otherwise unsafe, the Customer shall relocate or upgrade service to City standards at Customer's expense. The Public Power Director further reserves the right to disconnect electrical power to the Customer's service until the service is brought into compliance.

14.06.6 Ownership of Conductors

For commercial underground installations the secondary service conductors and conduit paths shall be owned & maintained by the Customer from the secondary connections inside the transformer up to the termination point of the service disconnect. For commercial overhead installations the secondary service conductors shall be owned & maintained up to the overhead secondary connection point. City shall own the overhead drop up to the connections at the service mast.

14.06.7 Energizing Development

Developments may be energized when the following is completed and accepted by the city.

1. Curb, gutter and an all-weather road surface.
2. Electric conduit.
3. Electrical boxes and proper access to the boxes.
4. Secondary wiring, except that required for street lighting.

SECTION 15 METERING (Refer to Sheet E22)

15.01 General

The city will furnish and install all electric revenue meters. Normally outdoor socket-mounted meters will be used by the city whenever practical. The meter base will be furnished and installed by Customer's electrical contractor for all normal residential installations. The meter base with test switch shall be provided by the City and installed by Customer's electrical contractor for commercial or industrial applications.

If instrument transformers are required, the City reserves the right to require customers to furnish and install a suitable steel cabinet to house City's instrument transformers and accessories. Said cabinet shall contain only the City's metering equipment and shall be equipped so that it can be sealed and locked by the City. The City shall have sole access to this cabinet.

15.02 Location

The City shall approve the location of service entrance and meter. The following conditions must be met for the location of all meters & services:

1. **Visibility.** All entrance wiring connections shall not be concealed and shall always be in plain view for inspection by the City.
2. Residential properties shall have the point of service externally installed on the primary residence of the property. If a residential property needs multiple services the amount of services must be approved by the City and be contained in one location inside one meter base that is located on the exterior of the primary residence. Any variation of this may be approved by the Public Power Director.
3. Industrial/Commercial businesses are allowed to have up to two points of service with multiple meters at each location. If more than two points of service are required due to the original design of the property or the property is expanded, then the campus will be required to install a primary metering cabinet. Electrical service to the property will be delivered at the City's distribution voltage. The location of the primary metering cabinet will be determined by the city. The City will maintain ownership and control of the metering cabinet but all conductors feeding out of the metering cabinet will be owned and maintained by the property owner.

4. A property that is undergoing renovation and has pulled a building permit or new construction will be required to relocate the electrical meter and main disconnect point (MDP) of the building to the outside of the building. The metering equipment and MDP shall be mounted to the building if under 801 amps. If service is 801 amps or greater than a freestanding MDP switchgear cabinet will be required. The MDP switchgear cabinet will need to be approved by the Public Power Director before equipment order is placed by the contractor.
5. Protection. No meter or service equipment shall be installed in any location where it may be unnecessarily exposed to heat, cold, dampness or other cause of damage, or in any unduly dirty or inaccessible location.
6. Height. The meter socket shall be mounted at a height of not less than 4½ feet, no more than 6 feet above finished grade, as the case may be. Where multiple meters are installed, care shall be taken to ensure the lowest meter is no less than 4 ½ feet and no higher than 6 feet from finished grade.

When a combination 3 phase and single-phase service is supplied to the same premises, all meters and service entrance switches shall be at the same location.

15.03 Meter Base

Residential meter bases shall be furnished and installed by the Contractor according to City standard drawings. No smaller than a 100-amp service entrance will be accepted other than by approval from the Public Power Director. The meter base shall always be kept sealed and under the control of the City.

15.04 Commercial Meters

Single-phase and three-phase self-contained meter bases shall be installed by the Developer and shall have bypass capability in the meter base. For details and specific information regarding this requirement, please contact Brigham City Public Power. For services rated 200 amps up to 800 amps, the Brigham City Public Power will supply the meter base & test switch for contractor to install at Customer's expense. No smaller than a 200-amp 3 phase service entrance will be accepted unless otherwise approved by the Public Power Director. For services rated over 800 amps, a manufacturer's shop drawing of the MDP switchgear cabinet with main disconnect and adequate metering provisions will need to be provided for approval. Contact Brigham City Public Power for specific requirements and submission details.

The Contractor's portion shall be completely installed, inspected, and the electrical hook-up fee paid before the City will complete the final electrical hookup.

15.05 Location of Multiple Meters

Where more than one meter is required for a building, such as an apartment complex, all meter sockets shall be located side by side at an outside location as determined by the Public Power Director.

15.06 Meter Location Regarding Remodeling

When remodeling, where 2 or more houses or dwelling units are combined to form one building, the meter socket shall be moved to a single location. Meter and service locations shall first be approved by Brigham City Public Power. Existing meters and services may require relocation to meet current City standards. In all remodeling where the meter is changed or moved, or wiring changes made, outdoor meter sockets and an approved new service entrance shall be installed by Customer at Customer's expense.

15.07 Meter Accessibility

In the event a structural change is made by the owner that results, in the opinion of the Public Power Director, to be an undesirable meter location, the meter socket, meter cabinet, and/or service entrance installation shall be moved by the Customer at his/her expense to an accessible location as determined by the City.

Whenever the construction of a building on an adjacent lot prevents proper access to any meter, or access to the point of attachment of service drop conductors, or results in inadequate service drop clearance, the Customer shall move, at Customer's expense, the meter socket and service entrance to a location that is acceptable to City. The meter shall not be enclosed by any portion of a building. The meter shall not be placed under carports or enclosed by sheds, garages, outbuildings or other buildings. The meter shall always remain readily accessible to the City.

15.08 Outdoor Meters for Non-Residential General Service

All single-phase meters installed for non-residential use shall be socket type. The meter base shall have bypass links installed. The meter socket shall be furnished and installed by Customer at Customer's expense.

15.09 Instrument Transformer for Metering

In all outdoor installations requiring current transformers, whether single phase or 3 phase, the Customer shall provide an approved meter loop for meter connections. The City shall furnish any instrument transformers, meter bases, or other devices required, to properly meter the Customer's electrical needs at the Customer's expense. Such instrument transformers and devices shall be installed by the City.

15.10 Current Transformer Cabinet (Refer to Sheet E19)

Any cabinets required to house said instrument transformers and accessory equipment shall be furnished and installed by Customer at Customer's expense. This requirement applies to all installations. All cabinets shall be approved by the City.

Such metering or instrument cabinets are for the exclusive use of City, and shall always be under the control of, and kept sealed by City.

15.11 Unacceptable Meter Locations

For reasons of public safety, maintenance of service equipment, and reliability of metering, meters shall not be installed in any of the following locations:

1. Inside any building, unless located within an acceptable meter room.
2. In any location that is not readily accessible.
3. Directly over any stairway, ramp or steps.
4. In any substation or transformer vault.
5. Accessible only by a trap door or in any location which may be hazardous to personnel.
6. On any surface subject to excessive vibration.
7. In or accessed through any rest, bath, shower, powder, or toilet room.
8. In any elevated area.
9. In any location not providing a clear and continuously unobstructed working space extending a minimum of eight (8) feet from the face of the meter panel and having a width to permit ready access to the complete metering installation.
10. In any location where moisture, fumes, or dust may interfere with the operation of the meter or damage it.
11. In any location giving less than three feet clearance to any property line, or with less than three feet clearance to any sidewalk, alley or driveway giving access to non-residential or industrial property.
12. In any basement or depressed area.
13. Within carport or patio areas which are or can become enclosed, when served overhead or underground.
14. Mounted on BCPP poles.
15. In a room containing mechanical equipment.
16. In any elevator shaft or hatchway.
17. Mounted on any trees.
18. In any unsanitary areas in reference to farm animals and products.
19. In a plenum or any portion of a return or supply air ducting system.
20. Areas where entry may be restricted or controlled because of medical, health, environmental or other safety-related issues.

SECTION 16 LIGHTING AND SIGNAL POLES (Refer to Sheets E16-E17)

16.01 General

The City shall provide the street light poles, fixtures & associated parts to install the streetlights. The contractor is responsible for transport of the streetlights from the Public Power Department to their respective developments. Furthermore, the contractor shall be responsible for pouring the concrete bases, assembling and erecting the streetlights.

All local streets, minor & major collectors, and arterial streets shall have the decorative streetlight as shown in the standard drawings or as designed. 25-foot steel galvanized poles with a 6-foot arm, and either a 100-watt or a 250-watt equivalent LED cobra head type fixture may be used or substituted for a decorative type pole & fixture at the City's discretion. All fixture types will be of the Luminaire type with 90-degree cutoff lens.

All traffic signal poles shall be powder coated black.

16.02 Dark Sky

All street and parking lot lighting shall meet the IDA (International Dark-Sky Association) recommendation and City ordinance for dark sky compliance. This will require that all lighting, streetlight, parking lot lighting, walkway lighting, etc., cannot broadcast light above 180° from the parallel ground surface. It is advised that all lighting on buildings, such as security lighting, also meets this requirement.

16.03 Location

In general, streetlights will be installed at all intersections except where a four-way intersection has an offset of less than 100 feet from another intersection. Streetlights shall be installed on the top of all traffic signal poles. Streetlights for local streets will be installed with a maximum spacing of 400 feet between lights. All mid-block streetlights shall be installed 18 inches from a property line. Collector and arterial streets shall have lights spaced at 175 feet apart on alternating sides of the street. In addition to the typical location design and layout, street light locations may also be designed by Brigham City Public Power. Commercial right-of-way lighting needs to be staggered 125 feet with a maximum of 250 feet of spacing on each side of the ROW.

Each streetlight will be installed so that the street light pole is centered in the planter strip or within 18 inches of the sidewalk if no planter strip exists.

16.04 Orientation

Streetlights at intersections of local streets shall aim at the center of the intersection. On collector or arterial streets streetlights shall be set at a 90-degree angle at regular intervals determined by the City.

16.05 Grounding & Bonding

A bonding wire shall be connected from the rebar “Ufer” rings in the concrete pole base to the street light pole grounding/bonding screw or termination point using NEC approved methods and a separate grounding wire will be installed from the pole to the closest secondary pedestal or transformer. The grounding conductor shall be terminated with the neutral conductor.

16.06 Wiring & Fusing

A 10-amp in-line fuse & fuse holder shall be installed in the junction box on the 120/240-volt ungrounded conductors.

VEGETATION MANAGEMENT

SECTION 17 VEGETATION MANAGEMENT

17.01 Overview

When feasible, BCPP prioritizes the removal of tall-growing trees and vegetation to prevent future conflicts with overhead power lines, while supporting the establishment of low-growing species that will never interfere with the high-voltage lines. Considering the interests of property owners and other land use objectives, it is not always possible to remove incompatible trees.

Tall-growing trees that cannot be removed must be pruned to maintain clearance around power lines through use of arboriculturally sound pruning practices.

17.02 Professionalism

In accordance with ANSI Z133, all personnel working in proximity to overhead conductors at any time are required to hold one of the following designations: Qualified Line Clearance Arborist or Qualified Line Clearance Arborist Trainee.

17.03 Safety

The safety of workers and the public should always be given the highest priority. Federal and state requirements governing vegetation management activities shall always be followed, including all OSHA requirements. ANSI Z133 (2107 or most current) and OSHA 1910.269 are examples of these requirements. Activities shall be conducted to minimize tree crew and public safety risks.

Table 17.03.A Minimum approach distances for Qualified Line Clearance Arborists and Qualified Line Clearance Arborist Trainees.

Voltage (kV) (Phase-to-Phase)	Minimum Approach Distance Sea Level to 5,000 ft.	Minimum Approach Distance 5,000 to 10,000 ft.	Minimum Approach Distance 10,000 to 14,000 ft.	Source*
0.05-0.300	Avoid contact	Avoid contact	Avoid contact	APM/Z133
0.301-0.750	1' - 6"	1' - 7"	1' - 7"	APM/Z133
0.751-15.0	2' - 6"	2' - 7"	2' - 10"	APM/Z133
15.1-46.0	3' - 6"	3' - 7"	3' - 8"	APM/Z133
46.1-72.5	3' - 6"	4' - 0"	4' - 4"	Z133
72.0-121.0	3' - 11"	4' - 6"	4' - 10"	Z133
121.1-145.0	4' - 6"	5' - 2"	5' - 7"	Z133
145.1-169.0	5' - 1"	5' - 9"	6' - 3"	Z133
169.1-242.0	7' - 0"	7' - 11"	8' - 7"	Z133
242.1-362.0	11' - 9"	13' - 6"	14' - 7"	Z133
362.1-420.0	14' - 8"	16' - 9"	18' - 2"	Z133
420.1-550.0	17' - 6"	20' - 0"	21' - 8"	Z133
550.1-800.0	23' - 9"	27' - 2"	29' - 5"	Z133

17.04 Fire Protection

Federal, state, and local fire protection laws and regulations shall be followed, and the Tree Crew Foreman performing the work must obtain necessary work permits. Crews shall have all fire suppression tools and equipment required by the governmental agency responsible. Tree Crew Foreman shall also adhere to fire restrictions concerning work hours, fire watch following work, and other policies of the pertinent jurisdiction. Tree Crew Foreman with crews working in fire-prone rural areas shall provide basic fire prevention and suppression training to their crews annually. Documentation of this training shall be submitted annually to the BCPP Director July 1st.

17.05 Species of concerns

Vegetation maintenance shall not disturb or harm any rare, threatened, endangered, or protected plant or animal species. Nesting season work restrictions exemplify important scheduling considerations necessary to accommodate protected species. If there are rare, threatened, endangered, or protected plant or animal species present at a location where work is planned, the Tree Crew Foreman must stop work and immediately inform the BCPP Director.

17.06 Bird Protection

Migratory birds are protected by the Migratory Bird Treaty Act of 1918 (16 USC 703-712) (MBTA). Most bird species are protected under the MBTA; therefore, in an abundance of caution, all bird species should be considered subject to

the law's provisions. The Tree Crew Foreman shall conduct vegetation maintenance consistent with the MBTA.

The MBTA prohibits removal of bird nests that have eggs or chicks and killing any birds which are members of any protected species. Active nests may not be disturbed unless the BCPP Director, after consultation with U.S. Wildlife Services has provided authorization. If tree crews identify a possible immediate risk (e.g., active nest in the vicinity of vegetation listed for work), the Tree Crew Foreman shall contact the BCPP Director. The Director will consult with U.S. Wildlife Services regarding whether work may proceed. If work is postponed until after young have left the nest, the location must be recorded and tracked to ensure completion at the appropriate time.

The nests of eagles threatened and endangered species, and colonial waterbird nests (such as those of herons) may not be disturbed – whether or not they are active. Eagles are subject to additional protection; it is illegal to disturb them near their nests or winter roosting sites. If large stick nests, suspected to be protected nests, are in vegetation identified for removal, the Tree Crew Foreman must contact the BCPP Director who will consult with the U.S. Wildlife Services.

Raptors (birds of prey) and herons require buffers around active nests to prevent them from being disturbed, unless instructed otherwise by U.S. Wildlife Services or applicable regulatory authority.

Table 17.06.A Work buffers around active nests of eagles, hawks, and herons.

Species	Work buffer
Bald Eagles (Jan 1-Aug 31)	660 feet
Bald Eagle roosts (Nov 1-Mar 31)	0.25 mile
Golden Eagles (Jan 1-Aug 31)	0.25 mile
Hawks (exceptions below)	600 feet
Ferruginous hawk	0.5 mile
Northern goshawk (Mar 1-Aug 31)	0.5 mile
Swainsons hawk	0.25 mile
Owls	300 feet
Great Gray Owl	0.25 mile
Northern Spotted Owl	0.25 mile
Osprey	600 feet
Herons/Colonial Nesters	600 feet
Songbirds	50 feet

In general, if a bird leaves a nest and does not return within an hour, it is being disturbed, and the buffer should be increased. In these cases, U.S.

Wildlife Services should be contacted within 24 hours to monitor the nest and respond appropriately if the adults fail to return.

Active bird nests and inactive bird nests should be reported to the BCPP Director and U.S. Wildlife Services.

17.07 Tree Removal

In certain circumstances, it is necessary or appropriate to remove trees (i.e., removed the threat posed to electrical infrastructure or remove the tree from the “inventory” of future work). When a tree is removed, the stump shall be cut to within 6 inches of the ground or as close to it as practical (for example, at the top of a barbed wire fence that has become imbedded in the trunk). Stumps of all deciduous trees, brushes, and vines that are removed shall be treated with an approved herbicide, unless otherwise indicated by landowner or restricted by the land managing agency. Tree removal may be discretionary or necessitated by the presence of Hazard Trees.

17.07.1 Hazard Trees

“Hazard Trees” are defined as a tree in whole or in part, that might fail, and which is identified as a likely source of harm. Trees that are dead, dying, diseased, deformed, or unstable, which have a high likelihood of falling and contacting a specific target (electrical infrastructure) should be assessed for removal. The Tree Crew Foreman shall conduct a visual assessment, consistent with ANSI A300. Hazard Trees pose a safety and reliability risk and must be removed (or pruned to the extent that the tree is no longer a Hazard Tree). BCPP reserves the right to deny chipping of any dead wood and will leave the dead wood on property for customer to clear. Federal and state agencies sometimes request that trees subject to removal be topped to create “wildlife trees.” BCPP may honor such requests, provided the safety of the tree workers or the integrity of facilities are not compromised. Any Hazard Trees removed to accommodate this request should be reduced to a height so that the tree would never contact any BCPP Facilities should it fall.

17.07.2 Discretionary Tree Removal

Discretionary tree removal reduces the total tree inventory and can, therefore, reduce long-term risks to safety and reliability; improve access to facilities, clear lines of sight, and moderate future workloads. In general, removal of trees near power lines are encouraged and are to be pursued by the Tree Crew Foreman.

17.08 Debris Disposal

Before leaving a particular worksite, all debris must be brought to ground, with no severed limbs left in the tree canopy (hangers). Work locations shall be left in a safe and orderly condition at the end of the workday. “Debris” is cut vegetation remaining after maintenance operations.

Debris is typically disposed of in multiple ways. First, debris may be chipped using a mechanical chipper and then transported off-site. Second, debris may be chipped using a mechanical chipper and then broadcast on-site. Third, debris may be lopped into maximum lengths of 3 feet and scattered (if necessary to pile debris, piles shall be no more than 18 inches high). The appropriate method of disposal depends on the area where vegetation maintenance is being performed. Additional debris management requirements may be identified by land managing agencies.

17.08.1 Inaccessible Areas

In remote off-road areas without reasonable vehicle access, debris can be disposed of on-site. Use the lop and scatter method mentioned above.

17.09 Directional Pruning

Directional pruning is a natural target pruning applied to redirect tree growth away from utility lines (Gilman 2012). ANSI A300 and ISA’s best management practices (Kempton 2004) instruct that pruning to clear the utility space involves thinning cuts: removing at natural targets entire branches that are growing toward (or once cut will produce sprouts that will grow toward) the power lines.

While heading cuts produce sprouts that grow quickly back into the power lines, branch removal and reduction promote growth away from conductors. Because one objective of utility pruning is to train trees away from power lines wherever practical, branches growing away from the electric facility should not be pruned. Instead, these stems should be allowed to develop to their natural height or length, provide that growth does not create unreasonable safety risks. This cannot be accomplished with strongly excurrent trees trapped directly beneath conductors.

Topping, round-overs, flush cuts, branch tipping, and rip cuts are improper as they result in damage to the trees. Directional pruning is consistent with natural tree structure. Remaining branches retain their taper, strong attachments, growth regulators, and spacing. They continue to grow and function normally, allowing the tree to reach its natural height.

“V” shapes often result in properly pruned trees growing under power lines, particularly on decurrent, deciduous trees (Gilman 2012; Kempton 2004;

Miller 1998; Shigo 1990). Limbs growing upward and toward the facility should be cut back to the trunk or to limbs growing away from the conductors. Remaining branches should have sufficient clearance, so they do not damage the conductors in inclement weather common for the locality (high wind, freezing rain, snow, or other conditions). Excurrent trees (such as main conifers) are more problematic but should be reduced to appropriate laterals or whorls. “L” or one-sided shapes often result in properly pruned trees to the side of conductors (Shigo 1990; Gilman 2012). Limbs on the wire side of trees located adjacent to facilities should be cut back to the trunk; or to limbs growing vertically, sideways or downward; depending on the distance to the line or available natural target.

17.10 Tree Houses

Tree houses built in trees growing near power lines present electric safety risks. Children or others may contact the line, either directly or indirectly, if a tree house is built too close to conductors. Indirect contact may occur through any conductive object, including a tree or tree parts that are contacting power lines. Minimum tree house distances are set at twice the “Minimum approach distances to energized conductors for arborists not qualified by training and experience to work within 10 feet of electrical conductors” as established in Table 1 of ANSI Z133.

17.11 Distribution Cycle Maintenance

Trees and vegetation are pruned from distribution facilities on scheduled cycles. Facilities are worked systematically, either by circuit or grid. The duration of a cycle is dependent on local conditions, as determined by BCPP. BCPP typically schedules distribution cycle maintenance work on a three-year cycle for most circuits in BCPP service territories.

Refer to Sheet V-1.

In performing distribution cycle maintenance, the Tree Crew Foreman is required to:

- Systematically prune and remove trees and other vegetation at a specified distance from all primary conductors and non-primary conductors, consistent with this section,

- Comply with all other specifications generally applicable to all vegetation maintenance under these SOPs, including without limitation

- Identify and remove (or remediate) Hazard Trees and discretionary tree removals.

- Identify and correct readily climbable trees that are too close to power lines.

Identify and remedy or remove tree houses violating the criteria.

Remove all brush, which include volunteer trees (naturally seeded, non-landscaped trees) and woody plants (including vines).

17.11.1 Distribution Cycle Maintenance - Clearance Distances – Primary (Refer to sheets V-1 and V-2)

Each work cycle, trees and other vegetation are pruned or removed to achieve clearance distances to comply with the NESC, state regulation clearance requirements, and BCPP guidelines.

Specified vegetation clearance distances from primary conductors in the distribution system should allow sufficient space to prevent contact with primary conductors or regulatory mandated clearance distances throughout the cycle.

The Tree Crew Foreman is responsible for identifying all vegetation that would encroach upon conductors, BCPP required distances, or regulatory mandated minimum clearance distances throughout the cycle.

Neutral conductors in a raised position, which includes above or on a crossarm, are treated as primary-conductors for purposes of this section. Low neutral position is treated as a hot conductor.

17.11.2 Distribution Cycle Maintenance – Clearance Distances – Non-Primary

17.11.2.1 A secondary line is a line typically energized to less than 750 volts. Specified distances from secondary conductors in the distribution system are designed to prevent strain (severe deflection) or abrasion. The “Work Threshold,” which is the point at which action must be taken) and Post Work Clearance distances for non-primary are set forth as follows:

Table 17.11.2. A non-primary wire vegetation clearance distances.

Line Type	Work Threshold	Minimum Post-Work Clearance
Non-insulated wire pole-to-pole secondary	N/A	3 feet
Neutral low position	Contact	2 feet
Insulated pole-to-pole secondary	Deflection or abrasion	2 feet
Non-insulated secondary service line/streetlight	N/A	1 foot
Insulated secondary service/streetlight	Deflection or abrasion	1 foot
Guy wire	2-inch or graded diameter limb applying pressure	Relieve pressure

These practices can be changed at any time at the discretion of the BCPP Director.

In addition to the specification clearances (Table 17.11.2.A), the following requirements also apply to distribution cycle maintenance work on distribution non-primary.

17.11.2.2 Tree Limbs Between Conductors. Any tree limbs between a primary conductor and any secondary conductor, regardless of type, shall be removed or pruned to Post-Work Clearances for primary.

17.11.2.3 Customer Work. If a customer expresses a desire to remove other limbs or trees around any non-primary, in addition to the work to complete under these specifications, vegetation maintenance workers should inform the customer to call BCPP to arrange for a temporary disconnection of the facilities to allow safe completion of the desired tree work, as required by law.

17.11.3 Distribution Cycle Maintenance – Other Facility Clearances

In addition to pruning trees to maintain clearances, certain vegetation maintenance is required on utility poles (and supporting guy wires) as part of distribution cycle maintenance work. One-third of the circumference around poles shall be cleared of vegetation to 5 feet from the pole to allow linemen a climbing path. The remaining two-thirds of the pole circumference should be cleared of all vegetation 1 foot from the pole.

Vines growing on poles and guy wires shall be:

Cut at ground level

Treated with an approved herbicide

Removed from the bottom 5 feet of the pole or guy wire

Reported as brush or tree removed

Vines clearly part of a landscape and rooted well away from the pole may be:

Pruned to provide sufficient climbing path and 5 feet of separation (e.g., 5 feet of separation between the top of a fence and facility)

Reported as brush pruned (not to exceed 100 brush ft. pruned)

Where vines remain on facilities after work is completed, the Tree Crew Foreman will document the exception and report it to BCPP Director to clear the remainder of the pole.

17.12 Transmission procedures

Transmission facilities are overhead lines energized at a higher voltage. Typical transmission voltages on BCPP's system are 46kV and 138kV. Facility voltage and type determine the amount of transmission clearance needed. Vegetation maintenance performed on transmission lines shall comply with ANSI A300. In addition, vegetation maintenance performed on transmission lines shall conform with the NERC Reliability Standard FAC-003-5. Consistent with requirement R4 of NERC Standard FAC-003-5 and the procedures set forth in BCPP transmission grid operations. BCPP line patrolmen are responsible to complete inspections on certain transmission lines. When doing their inspections, line patrolmen will identify any vegetation that poses a threat of causing a transmission outage. In addition, BCPP vegetation management department completes vegetation inspections of the Right of Way for transmission lines. BCPP vegetation management completes an annual vegetation inspection on main grid transmission lines. All other transmission lines are inspected at least once

every year. Vegetation maintenance on transmission lines is then scheduled according to the results of those inspections.

17.12.1 Transmission Clearances

The objective of systematic transmission work is to safeguard the reliability of BCPP transmission system by preventing outages from contact with vegetation. Clearance work on a transmission line is guided by three concepts: Minimum Vegetation Clearance Distances, Action Thresholds, and Minimum Clearances Following Work.

Minimum Vegetation Clearance Distance (MBVCD) represents radial distances from the conductors inside of which trees shall not encroach.

17.13 Chemical Procedures

Herbicides and tree growth regulators (TGR) are an important part of BCPP Vegetation Management Program. Herbicides are chemicals used to manipulate or control undesirable vegetation. When safely used, herbicides are effective and efficient, minimize soil disturbance, and enhance plant and wildlife diversity. Herbicide applications can benefit wildlife by improving forage as well as escape and nesting cover. In some instances, noxious weed control is a desirable objective in utility ROW that can be accomplished through herbicide treatment. Herbicide use can control individual plants that are prone to resprout or sucker after removal. When trees that resprout or sucker are removed without herbicide treatment, dense thickets develop, impeding access, swelling workloads, increasing costs, blocking lines-of-site, and deteriorating wildlife habitat (Yahner and Hutnik 2004). Treating suckering plants allows early successional, compatible species to dominate the ROW and out-compete incompatible species, reducing work. “Tree growth regulators” refers to chemical treatments that slow the growth of some tree species.

Chemical applications shall always be performed according to federal, state, and local regulations and consistent with all labeling requirements.

17.13.1 Notification to Property Owners

Before chemical use on a property, Tree Crew Foreman shall give notice to the property owner(s). Notice shall be provided at least five days before work but no more than six weeks in advance, whenever chemicals are to be used on their property.

17.13.2 Licensed Applicators

Crew members in Brigham City service territory shall hold a valid Commercial pesticide applicator License. The Tree Crew

Foreman performing work is always responsible to ensure that any application of chemicals is performed by an applicator with a valid applicator's license, as required by state law where the property is located.

17.13.3 Closed Chain of Custody

The Tree Crew Foreman making the application is responsible for chemical purchase, storage, and container disposal. Closed chain of custody is required, including the use of returnable, reusable supply containers.

17.13.4 Chemical Reporting

All chemical applications shall be documented as required by law for a licensed applicator. In addition, chemical applications shall be documented as instructed by BCPP. The Tree Crew Foreman making the application shall be responsible for maintaining reports and shall produce reports for review by the state departments of agriculture upon request.

17.13.5 Herbicide Application Efficiency

Ninety-five percent control shall be assumed on all herbicide applications to be considered effective.

17.13.6 Wetland and Waterbodies

Product label shall be followed and approved for use near wetlands and waterbodies.

17.13.7 Spills

Applicator is responsible for preventing any chemical spills from occurring. Special attention should be made while mixing, loading, and cleaning equipment, which are activities that carry more risk for accidents or spills. Spills can be avoided by using closed chain of custody best management practices. Spill kits are required on every truck when any herbicide is used or being transported.

In the event of a spill:

1. Stop, contain and isolate the spill
2. Report the spill to the BCPP Director, who will notify the environmental services; the following information must be provided to the TREE CREW FOREMAN:
 - a. Caller and manager
 - b. Name
 - c. Date and time of spill

- d. Location (address or longitude and latitude)
 - e. EPA number (product spilled)
 - f. Cause of spill
 - g. Amount of spill
 - h. Types of surfaces contaminated
 - i. Containment and/or clean-up activities performed so far
3. Remediate the spill
 4. Cleanup at or near BCPP generating sites or substations must comply with site-specific spill prevention and remediation plans.

17.14 Approved Herbicides

In all circumstances, the licensed applicator is responsible for following label requirements. In addition, specific chemical products must be approved by the BCPP Director, based on pre-approved chemical products. Any approved chemical products must be based on one or a combination of the following active ingredients:

<p>Stump Application</p> <ul style="list-style-type: none"> 2, 4-D Glyphosate Picloram Triclopyr <p>Foliar Application</p> <ul style="list-style-type: none"> 2, 4-D Aminopyralid Fosamine ammonium Glyphosate Imazapyr Metasulfuron methyl Picloram Sulfometuron methyl Triclopyr <p>Tree Growth Regulators (TGR)</p> <ul style="list-style-type: none"> Fluprimidol Paclobutrazol 	<p>Low Volume Basal Application</p> <ul style="list-style-type: none"> Imazapyr Triclopyr <p>Soil Application</p> <ul style="list-style-type: none"> Diuron Indaziflam Imazapyr Picloram Sulfentrazone Tebuthiuron
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17.14.1 Substations Herbicide Treatment

Substations will be sprayed and treated multiple times throughout the year.

BRIGHAM CITY PUBLIC POWER DEPARTMENT ELECTRICAL CONSTRUCTION STANDARD DRAWINGS

Index of Drawings (32 Sheets)

SUBMITTED & RECOMMENDED

ENGINEER

APPROVAL

TOM COOPER
PUBLIC POWER DIRECTOR

DATE

TROY DAHLGREN
PUBLIC POWER SUPERINTENDENT

DATE

CASEY SMITH
PUBLIC POWER SUPERINTENDENT

DATE

KRISTINA BASMUSSEN
ATTEST, CITY RECORDER

DATE

ELECTRICAL CONSTRUCTION STANDARDS

- E1.....ELECTRIC FRONT PAGE-INFORMATION
- E2.....RESIDENTIAL UNDERGROUND SERVICE 200 AMPS OR LESS
- E3.....RESIDENTIAL OVERHEAD SERVICE 200 AMPS OR LESS
- E4.....ELECTRIC CONDUIT TRENCH DETAIL
- E5.....SECONDARY JUNCTION PEDESTAL
- E6.....SINGLE PHASE PAD MOUNT TRANSFORMER
- E7.....200-AMP 1-PHASE SECTIONALIZER
- E8.....200-AMP 1 AND 3-PHASE FIBERGLASS SECTIONALIZER
- E9.....600-AMP 3-PHASE FIBERGLASS SECTIONALIZER
- E10.....ELECTRICAL BOX BACKFILL & COMPACTION
- E11.....CONDUIT ROUTING
- E12.....3-PHASE TRANSFORMER & CONCRETE PAD
- E13.....600 AMP PSE 9/11 SWITCHGEAR
- E14.....600 AMP PSE 3/5 SWITCHGEAR
- E15.....SECONDARY PEDESTAL, WIRE & CONNECTIONS
- E16.....DECORATIVE STREET LIGHT POLE FOOTING DETAIL
- E17.....STREET LIGHT POLES AND FIXTURES
- E18.....TEMPORARY SERVICE FOR OVERHEAD & UNDERGROUND LINES
- E19.....3-PHASE UNDERGROUND SERVICE 201-800 AMPS
- E20.....TYPICAL RISER POLE
- E21.....OVERHEAD POWER LINE CLEARANCES OVER 600 VOLTS TO 22,000 VOLTS
- E22.....1-PHASE FREE STANDING METER BASE & 3-PHASE FREE STANDING METER BASE
- E23.....PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM CENTRAL INVERTER (RESIDENTIAL)
- E24.....PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM MICRO INVERTER (RESIDENTIAL)
- E25.....PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM ENERGY STORAGE - CENTRAL INVERTER (RESIDENTIAL)
- E26.....PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM ENERGY STORAGE - MICRO INVERTER (RESIDENTIAL)
- E27.....PHOTOVOLTAIC THREE-PHASE SYSTEM DIAGRAM USING MULTIPLE TWO-LINE SINGLE-PHASE INVERTERS WITH NEUTRAL CONNECTION
- E28.....PHOTOVOLTAIC SINGLE-PHASE SYSTEM DIAGRAM USING A SINGLE THREE-PHASE INVERTER
- E29.....PV DISCONNECT LABELS & PV SERVICE PANEL WARNING LABELS
- E30.....EUSERC DWG NO. 501 - AC DISCONNECT GUIDELINES

ELECTRICAL - VEGETATION MANAGEMENT STANDARDS

- V1.....TREE AND VEGETATION TRIMMING AND CLEARING DETAILS
- V2.....TREE PLANTING AND ELECTRICAL BOX CLEARANCE DETAILS



BRIGHAM CITY

SPECIAL STANDARD NOTES:

- A. AT THE BRIGHAM CITY PUBLIC POWER'S SOLE DISCRETION, ALTERNATE METHODS OF CONSTRUCTION OR DEVIATIONS FROM THESE STANDARDS MAY BE REQUIRED OR APPROVED BY THE CITY PUBLIC POWER DIRECTOR AND PUBLIC POWER SUPERINTENDENT (OR THEIR DESIGNEE), WHEN SUCH ARE NECESSARY TO MEET THE BEST INTERESTS OF THE CITY.
- B. WHEN BRIGHAM CITY PUBLIC POWER APPROVAL IS REQUIRED, IT SHALL MEAN APPROVAL FROM THE CITY PUBLIC POWER DIRECTOR, PUBLIC POWER SUPERINTENDENT, CITY ENGINEER, OR THEIR DESIGNEE.
- C. ANY VARIANCE, DEVIATION, OR WAIVER TO THE CITY ELECTRICAL STANDARDS SHALL BE AS APPROVED BY THE PUBLIC POWER DIRECTOR OR SUPERINTENDENT.

FEBRUARY 2026

GENERAL INFORMATION

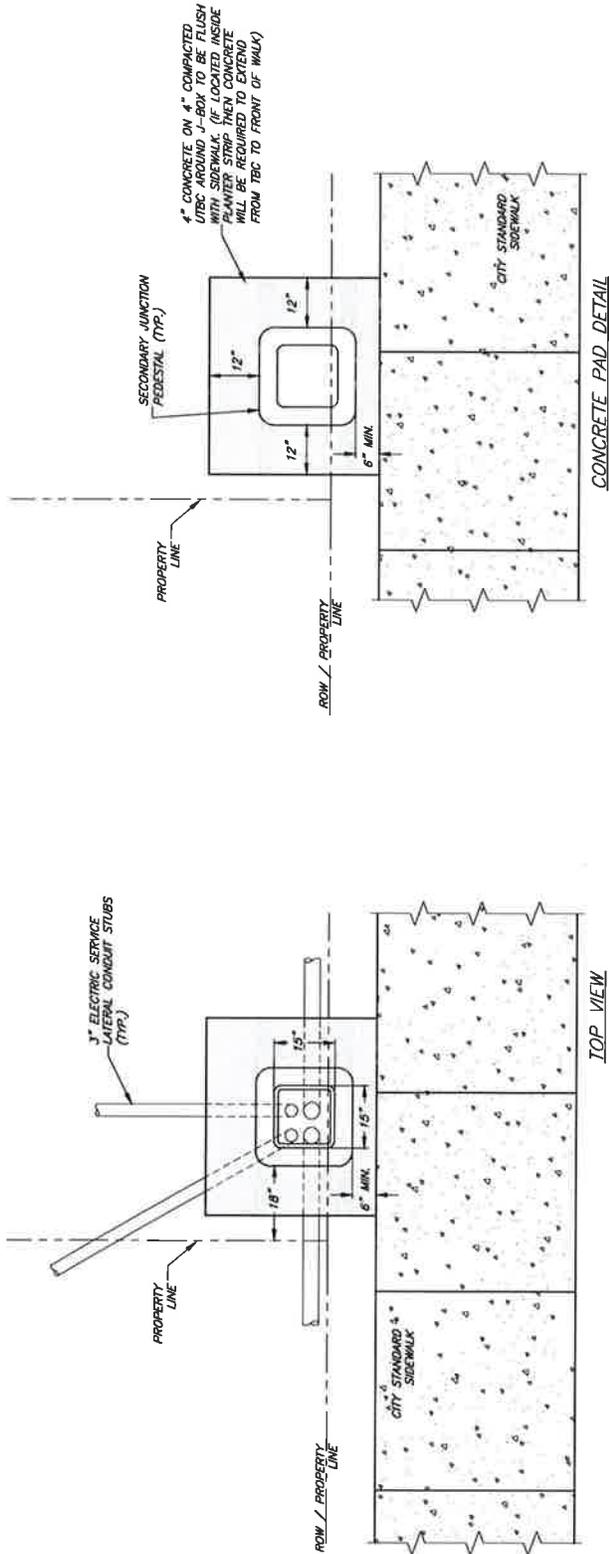
PURPOSE

THE PURPOSE OF THE ELECTRICAL CONSTRUCTION DRAWINGS IS TO AID CUSTOMERS, CONTRACTORS, DEVELOPERS, ENGINEERS, IN CONSTRUCTION AND INSTALLATION OF ELECTRICAL SYSTEMS AND SERVICES TO NEW AND REMODELED BUILDINGS, AND NEW RESIDENTIAL, COMMERCIAL AND INDUSTRIAL DEVELOPMENTS. IT IS THE INTENT AND DESIRE, WITH THE COOPERATION AND ASSISTANCE OF THE BRIGHAM CITY UTILITIES DEPARTMENT, TO PROVIDE A SAFE, EFFICIENT, AND RELIABLE ELECTRICAL SERVICE TO ALL CUSTOMERS.

GENERAL GUIDELINES AND RULES

1. CURBS & GUTTER SHALL BE INSTALLED ON ANY PROJECT BEFORE THE MAIN ELECTRICAL TRENCH IS EXCAVATED. THE CURB SHOULD HAVE PROPERTY CORNERS MARKED AND FINISHED IN THE CURB BY APPROVED METHODS. THE CURB SHOULD BE INSTALLED TO THE ELECTRICAL CONDUIT DEPTHS, ELECTRICAL BOX PLACEMENT AND OTHER LOCATIONS IMPORTANT FOR ELECTRICAL INSTALLATION.
2. IF THE ELECTRICAL INSTALLATION, APPLICATION, OR MATTER IS NOT COVERED IN THIS BOOK, THEN IN GENERAL, THE INSTALLATION, APPLICATION, OR MATTER IS NOT APPROVED.
3. ALL ELECTRICAL CONSTRUCTION AND INSTALLATION SHALL CONFORM TO APPLICABLE PROVISIONS OF THE NATIONAL ELECTRICAL CODE (NEC), THE NATIONAL ELECTRICAL SAFETY CODE (NESC), OSHA, STATE, COUNTY, AND CITY ORDINANCES, STANDARDS, AND CODES.
4. ANY AND ALL WORK IN THE VICINITY OF OVERHEAD POWER LINES SHALL NOT BE ALLOWED UNLESS THE RESPONSIBLE PERSON HAS BEEN PROVIDED WITH THE NECESSARY SAFETY TRAINING AND EQUIPMENT. NO PERSON OR THING SHALL BE BROUGHT WITHIN 10 FEET OF ANY POWER LINE OR EQUIPMENT UNLESS THE PROPER STEPS ARE TAKEN TO INSURE THE SAFETY OF THE PUBLIC, AND POWER DEPARTMENT PERSONNEL. THE POWER DEPARTMENT RECOMMENDS A MINIMUM OF 3 BUSINESS DAYS NOTICE BE GIVEN BEFORE ANY WORK NEAR ITS OVERHEAD POWER LINES IS SCHEDULED TO BEGIN.
5. THE NATIONAL ELECTRICAL SAFETY CODE AND BRIGHAM CITY PUBLIC POWER CODE REQUIRES THAT HOMES, BUILDINGS, SIGNS, BRIDGES, ANTENNAS, ETC. HAVE SUFFICIENT HORIZONTAL AND VERTICAL CLEARANCES TO OVERHEAD POWER LINES. CONSULT WITH THE POWER DEPARTMENT FOR APPLICABLE DISTANCES AND CLEARANCES.
6. CALL BLUE STAKES BEFORE YOU DIG! UTAH LAW SECTION 54-8A-1 THROUGH 54-8A-11 REQUIRES THE BLUE STAKES BE CALLED 72 HOURS BEFORE ANY EXCAVATION. BUSINESS DAYS PRIOR TO EXCAVATION. THE EXCAVATION SHALL NOT BE STARTED UNTIL LOCATIONS HAVE BEEN MADE.
7. IN GENERAL, JOINT TRENCHING OF POWER AND COMMUNICATIONS IS ALLOWED AS LONG AS THE INSTALLATION CONFORMS TO THE CONSTRUCTION STANDARDS.
8. ALL ELECTRICAL CONDUITS SHALL BE INSTALLED A MINIMUM OF 4 FEET TO TOP OF CONDUIT FROM FINISHED GRADE. ADDITIONAL DEPTHS MAY BE REQUIRED IF HIGH VOLTAGE PRIMARY (12.47KV) CABLES ARE INSTALLED IN A JOINT TRENCH WITH LOW VOLTAGE (600V OR LESS) CABLES, AND COMMUNICATIONS CABLES. IN GENERAL, HIGH VOLTAGE PRIMARY (12.47KV) CONDUITS SHALL BE INSTALLED 1 FOOT IN DEPTH FOR EVERY 1 INCH IN CONDUIT SIZE. (example 6 inch conduit shall be 6 feet in depth), BUT IN NO CASE SHALL PRIMARY CONDUITS BE INSTALLED LESS THAN THE MINIMUM OF 4 FEET IN DEPTH, UNLESS APPROVED BY THE POWER DEPARTMENT.
9. THE ELECTRICAL DISTRIBUTION SYSTEM FOR ALL NEW CONSTRUCTION OF RESIDENTIAL, COMMERCIAL, INDUSTRIAL DEVELOPMENTS SHALL BE INSTALLED UNDERGROUND UNLESS OTHERWISE APPROVED BY THE BRIGHAM CITY PUBLIC POWER DEPARTMENT. REMODELING, CHANGES IN USE, ADDITIONS, ALTERATIONS, AND OTHER CHANGES THAT EFFECT THE ELECTRICAL SYSTEM, MAY REQUIRE THAT THE ELECTRICAL SYSTEM BE REROUTED, OR UPGRADED UNDERGROUND, AND/OR BE BROUGHT UP TO CURRENT NEC, NESC, AND CITY PUBLIC POWER STANDARDS. ADDITIONAL REQUIREMENTS MAY APPLY.
10. THE DEVELOPER IS TO PROVIDE THE TRENCH FOR ALL REQUIRED CONDUIT SYSTEMS, AND FOLLOWING THE INSTALLATION OF THE CONDUITS BY THE DEVELOPER, PROVIDE SAND AND BACKFILL TO MEET THE CONSTRUCTION STANDARDS. ALL TRENCHES SHALL BE COMPACTED TO 95% AND PASS THE COMPACTION TEST BEFORE THE TRENCH IS BACKFILLED. THE TRENCHES SHALL BE BACKFILLED WITH THE SPECIFIED MATERIAL AND OR BACKFILL IS APPLIED. TO INSURE FINAL GRADE HAS BEEN ESTABLISHED, THE CURB & GUTTER SHALL BE INSTALLED BEFORE THE ELECTRICAL TRENCH IS STARTED.
11. PRIOR TO BACKFILLING ANY CONDUITS, THE DEVELOPER SHALL SCHEDULE AND REQUEST AN INSPECTION FROM THE BRIGHAM CITY PUBLIC POWER DEPARTMENT. FOLLOWING THE INSPECTION THE POWER DEPARTMENT WILL ISSUE A "PASS" OR "FAILED" SIGN TO PROCEED BACKFILLING OR NOT TO PROCEED.
12. STATE SPECIFIED ROAD BASE SHALL BE USED UNDER ALL ELECTRICAL BOXES, ENCLOSURES, PADS, OR VAULTS. THE ROAD BASE SHALL BE COMPACTED TO 95% MINIMUM AND PASS A COMPACTION TEST BEFORE ANY BOXES, ENCLOSURES, PADS OR VAULTS ARE SET. THE ROAD BASE SHALL BE A MINIMUM OF 1 FOOT IN DEPTH AND EXTEND 1 FOOT PAST ALL SIDES OF THE BOXES, ENCLOSURES, PADS OR VAULTS. ADDITIONAL REQUIREMENTS MAY APPLY.
13. IN GENERAL, ALL ELECTRICAL BOXES SHALL BE PLACED A MINIMUM OF 18 INCHES FROM A PROPERTY LINE AND SET BACK 6 INCHES TO 1 FOOT BEHIND SIDEWALKS.

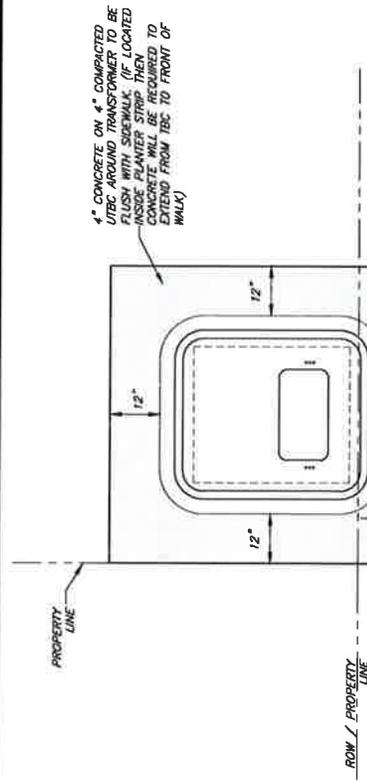
E1	BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS		E1	OF 1 SHEETS
ELECTRIC FRONT PAGE INFORMATION				
BRIGHAM CITY CORPORATION 10 North Main Street Brigham City, UT 84302 Tel: (435) 734-6500 www.bccah.gov				
BRIGHAM CITY PUBLIC POWER 1455 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6824 Utility Emergency: (435) 732-0868				
DATE:	DRAWN:	CHECKED:	DATE:	DATE:
N.T.S.	E.E.P.	J.D. & C.S.	01/09/2026	TC
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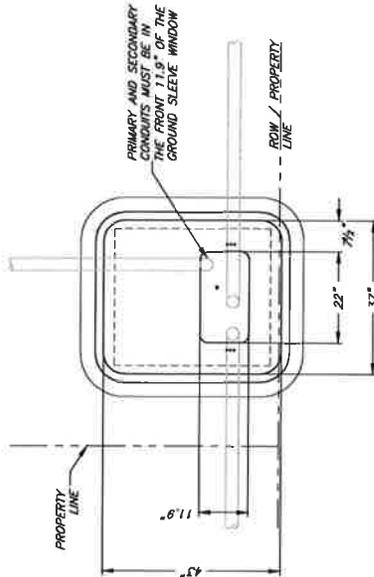
NOTES:

1. CONDUITS ENTERING ANY JUNCTION BOX SHALL HAVE END BELLS TO PROTECT WIRE FROM DAMAGE.
2. SECONDARY WIRE SHALL BE RATED FOR 600 VOLTS AND BE THE URD TYPE. CARE SHALL BE TAKEN IN INSTALLATION AS NOT TO DAMAGE WIRE INSULATION.
3. ALL SECONDARY WIRE SHALL EXTEND A MINIMUM OF 36" & A MAXIMUM OF 48" FROM TOP OF BOX (WITHOUT THE LID).
4. SECONDARY PEDESTALS SHALL FACE TOWARDS THE STREET AND SHALL BE LEVEL.
5. ROADBASE SHALL BE USED UNDER ALL PEDESTALS. ROADBASE SHALL BE COMPACTED TO 95% OF DRY DENSITY. COMPACTION TESTS SHALL BE TAKEN PRIOR TO ANY PEDESTALS BEING SET INTO PLACE.
6. CONDUITS SHALL BE 2" TO 4" HIGHER THAN INSIDE GRADE OF PEDESTAL. (INSIDE GRADE IS THE BOTTOM OF THE PEDESTAL)
7. LOCKING MECHANISM SHALL BE 10" FROM FINISHED GRADE.
8. USE ONLY APPROVED JUNCTION PEDESTALS: PENCELL AG20HXDL-NL & NORDIC P55-15-15-30-80 OR APPROVED EQUIVALENT.
9. SECONDARY SERVICE LATERAL CONDUITS SHALL BE SEPARATED HORIZONTALLY IN THE TRENCH FROM COMMUNICATIONS CONDUITS.

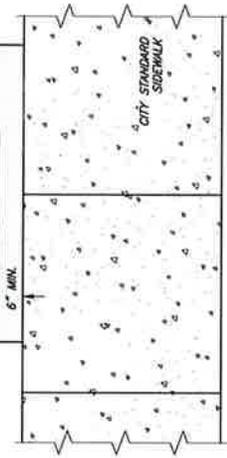
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PROJECT:	TC
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BRIGHAM CITY PUBLIC POWER	
ELECTRICAL CONSTRUCTION STANDARDS	
SECONDARY JUNCTION PEDESTAL	
BRIGHAM CITY PUBLIC POWER 145 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6624 JMW Emergency: (435) 733-6886	
BRIGHAM CITY	
BRIGHAM CITY COMMUNITY DEVELOPMENT 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bccdh.gov	
BRIGHAM CITY PUBLIC POWER AGREES TO LIABILITY FOR ANY DAMAGE TO PROPERTY OR PERSONS OR DAMAGE TO ANY ELECTRICAL EQUIPMENT OR PROPERTY CAUSED BY ANY CHANGES OR MODIFICATIONS MADE TO THESE STANDARDS.	



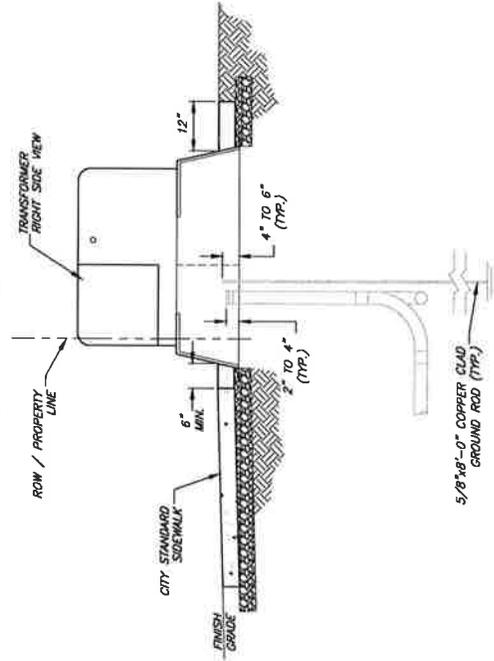
TOP VIEW



FRONT VIEW



CONCRETE PAD DETAIL

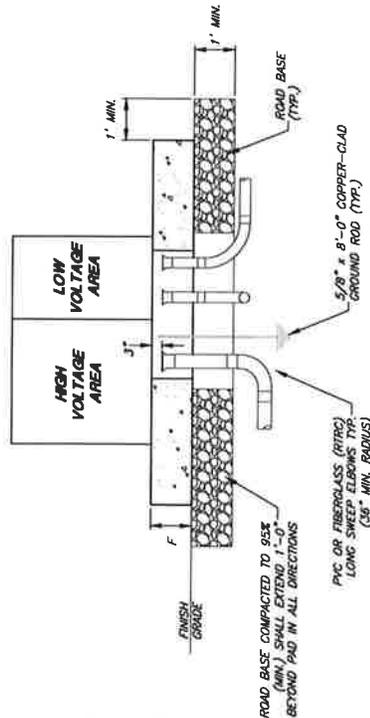
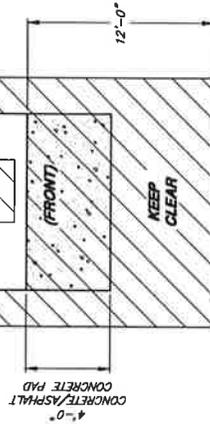
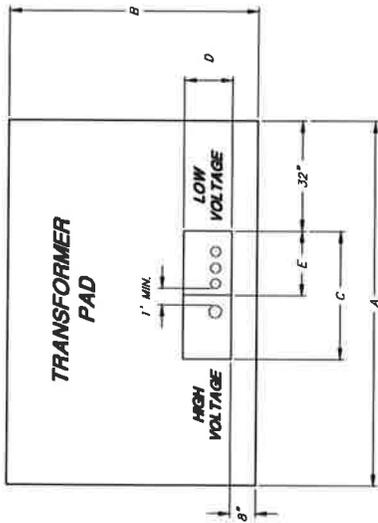


RIGHT SIDE VIEW

NOTES:

1. CONDUIT COMING INTO ANY TRANSFORMER MUST ONLY USE AN END BELL ADAPTOR.
2. GROUND SLEEVE FOR 100 KVA TRANSFORMER OR LESS SHALL BE NORDIC CBP-37-A3-15C-AB2M621M12 OR APPROVED EQUIVALENT.
3. GROUND LEVEL INSIDE THE GROUND SLEEVE IS THE BOTTOM OF THE GROUND SLEEVE.
4. ALL SECONDARY CABLE TO BE URD SELF-HEALING TYPE.
5. PULLING MULE TAPE MUST BE SECURELY TIED TO THE GROUND SLEEVE OR CONDUIT.

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NO.	1	DESCRIPTION	SINGLE PHASE PAD MOUNT TRANSFORMER												
<p>BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS</p> <p>BRIGHAM CITY CONSTRUCTION 33 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bccwh.gov</p> <p>BRIGHAM CITY CITY</p> <p>BRIGHAM CITY PUBLIC POWER 140 South Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bccwh.gov</p> <p>BRIGHAM CITY PUBLIC POWER 140 South Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bccwh.gov</p>															



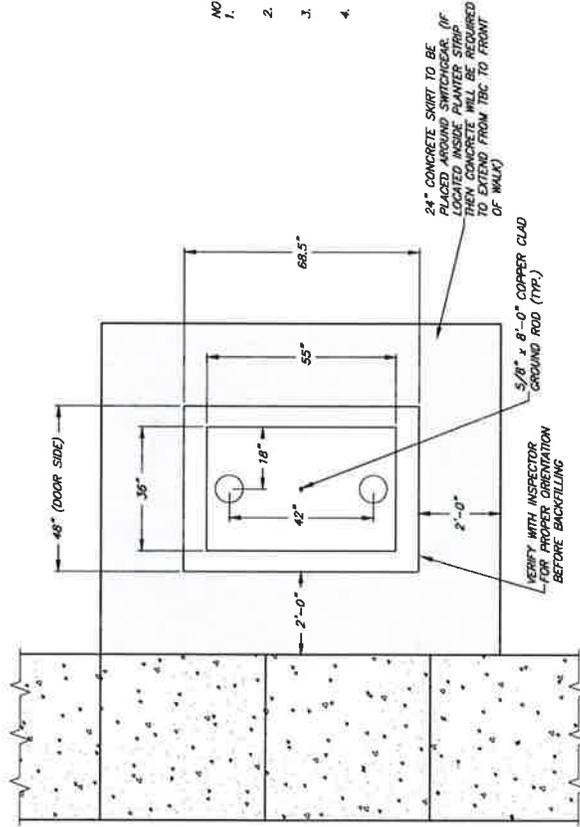
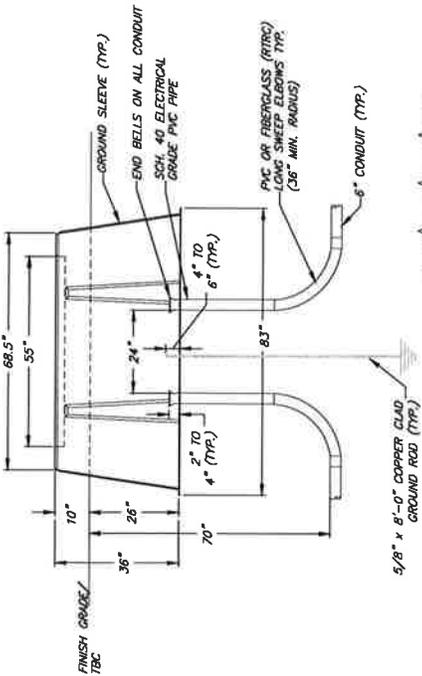
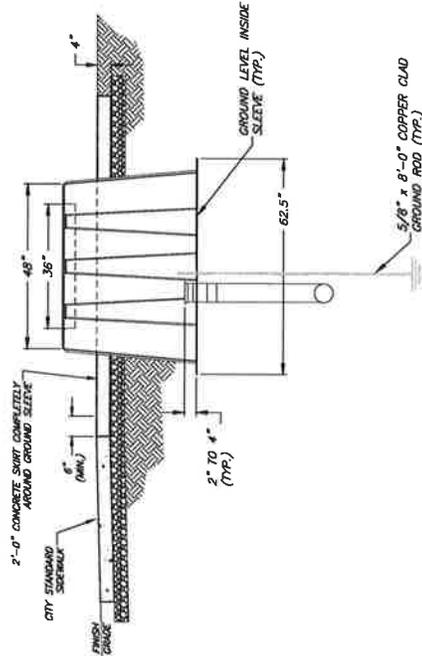
TRANSFORMER KVA RATING	DIMENSIONS					CONTACT POWER DEPT.
	A	B	C	D	E	
75-500 KVA	114"	78"	36"	15"	19"	9"
750-1500 KVA	118"	105"	52"	16"	20"	11"
2000 KVA						

NOTES:

- SITE PREPARATION & INSERCTIONS:** AFTER EXCAVATION, ALL EXCAVATED AREA 1" PAST PAD SHALL BE BACKFILLED WITH 3/4" SAND. THE PAD MUST BE COMPACTED TO 95%. THE GROUND MUST BE LEVEL IN ALL DIRECTIONS TO THE CENTER OF THE PAD. THE GROUND SURFACE OF ALL PADS SHALL BE INSPECTED PRIOR TO POURING CONCRETE, AND THE GROUND SHALL PASS A COMPACTION TEST DONE PRIOR TO THE FORM BEING CONSTRUCTED.
- CONCRETE:** CONCRETE SHALL BE IN ACCORDANCE WITH BRIGHAM CITY PUBLIC POWER STANDARD SPECIFICATIONS. ALL REINFORCING BARS SHALL BE #4 BARS PLACED AT 12" CENTERS THROUGHOUT THE PAD. THE PAD MUST BE POURED AT LEAST 3" ABOVE FINISH GRADE. THE CONCRETE FINISHED SURFACE MUST BE COMPLETELY FLAT AND LEVEL. CONCRETE SHALL BE CURED BY THE CITY OR THE CITY'S ENGINEERING FIRM PRIOR TO POURING CONCRETE. CONCRETE SHALL CONFORM TO CITY STANDARDS.
- LABORATION:** THE PAD SHALL BE CONSTRUCTED ON THE SITE ACCORDING TO THE SPECIFICATIONS.
- CONDUIT WINDOW LAYOUT:** LOW VOLTAGE CONDUITS SHALL BE FORMED AS TIGHTLY AS POSSIBLE AGAINST THE RIGHT SIDE OF THE OPENING AND SHALL IN NO CASE EXTEND FURTHER THAN 20" FROM THE RIGHT SIDE OF THE CONDUIT WINDOW ON THE SMALL PAD OR 30" ON THE LARGE PADS. NO MORE THAN EIGHT CONDUITS WILL BE USED ON THE LOW VOLTAGE SIDE. ON 2000 KVA PADS, UNDER THE CONDUIT WINDOW USE SMALL REINFORCING CONDUITS ENTERING THE PAD SHALL BE SCHEDULE 40 PVC WITH PVC OR FIBERGLASS (FRFC) ELBOWS.
- GROUNDING:** A 5/8" X 8' GROUND ROD SHALL BE USED ON THE SMALL PAD AND A 3/4" X 10' ROD ON THE LARGE PADS. THE GROUND ROD SHALL BE INSTALLED ON THE PRIMARY SIDE OF THE TRANSFORMER.
- CLEARANCES:** THE FRONT OF THE PAD SHOULD ALWAYS FACE AWAY FROM ADJACENT STRUCTURES AND BE FREE OF OBSTRUCTIONS. AT LEAST THREE FEET MUST SEPARATE THE EDGES OF THE PAD FROM ANY ADJACENT STRUCTURE. THE EDGES OF THE PAD MUST BE AT LEAST TEN FEET FROM ANY COMBUSTIBLE STRUCTURE. IF AN ADJACENT STRUCTURE HAS ANY OVERHANG OR EAVE WITHIN TEN FEET OF THE PAD, THE PAD MUST NOT BE PLACED IN AN AREA WITHIN TEN FEET OF THE OVERHANG. THE PAD MUST NOT BE PLACED IN AN AREA WITHIN TEN FEET TO EITHER SIDE OF ANY WINDOW IN AN ADJACENT STRUCTURE.
- ELBOWS FOR A DOOR:** MUST BE TWENTY FEET IN LINE WITH IT AND TEN FEET ON EITHER SIDE. PADS MUST BE PLACED AT LEAST TEN FEET FROM ANY WALL, WINDOW, DOOR, OR OTHER OBSTRUCTION. PUMPING OR STORAGE FACILITY CONTAINING FLAMMABLE MATERIALS. OTHER OBSTRUCTIONS WILL BE PLACED WITHIN THREE FEET OF THE SIDES OR BACK OF THE PAD, OR WITHIN TWELVE FEET OF THE FRONT OF THE PAD. THE AREA SURROUNDING THE PAD MUST HAVE TWELVE FEET OF CLEAR LEVEL WORKING AREA FOR MAINTENANCE OF THE TRANSFORMER. ANY WINDOW PLACED IN LINE WITH AN AIR INTAKE WITHIN 32" VERTICAL FEET OF THE SURFACE OF THE PAD. ALSO, IT MUST NOT BE PLACED WITHIN 12" VERTICAL FEET OF A DOOR OR WINDOW.
- BARRIERS:** IF THE TRANSFORMER PAD IS TO BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC, (PARKING LOTS, DRIVEWAYS, ETC.) CONTACT BRIGHAM CITY PUBLIC POWER FOR PROTECTIVE BARRIER REQUIREMENTS.
- METERING:** IN GENERAL, THE METERING SHALL BE PLACED ON BUILDINGS OR STRUCTURES.
- CONNECTIONS:** ALL SECONDARY (LOW VOLTAGE) CABLES & SECONDARY CONNECTIONS ARE THE CONTRACTOR'S RESPONSIBILITY. BRIGHAM CITY PUBLIC POWER WILL INSTALL & TERMINATE PRIMARY CABLES & CONNECTIONS ONLY.
- ANCHORING:** CONTRACTOR TO ANCHOR TRANSFORMER TO PAD WITH MINIMUM OF TWO ANCHOR POINTS.
- PRECAST TRANSFORMER PADS** MUST BE APPROVED BY THE PUBLIC POWER DEPARTMENT.

GENERAL TRANSFORMER CLEARANCES

BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS		BRIGHAM CITY PUBLIC POWER 1445 East Power Street Brigham City, UT 84302 Tel: (435) 734-6200 www.bppwr.com	
BRIGHAM CITY 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6500 www.bccp.com		BRIGHAM CITY The City Engineer 1445 East Power Street Brigham City, UT 84302 Tel: (435) 734-6200 www.bppwr.com	
DATE	DESCRIPTION	SCALE	DATE
		N.T.S.	01/09/2026
BY		DESIGN	
BY		BEY	
BY		TD & CS	
BY		SCALE	TC



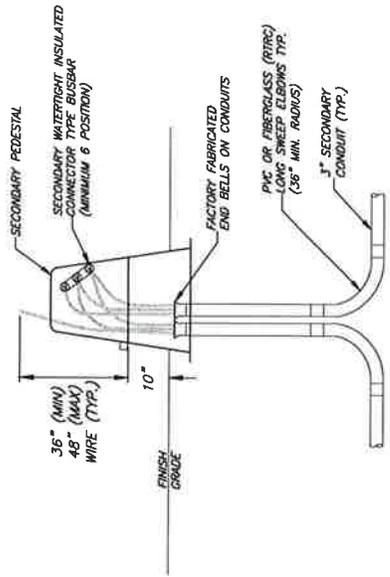
- NOTES:
1. SWITCH GEAR GROUND SLEEVE SHALL BE PROVIDED BY BRIGHAM CITY PUBLIC POWER AND INSTALLED BY ELECTRICAL CONTRACTOR AS PER CITY SUPPLIED LAYOUT
 2. 2500 LB MULE TAPE SHALL BE BLOWN INTO CONDUIT AND TIED SECURELY TO GROUND ROD
 3. CONDUIT LAYOUT DETAIL SHALL BE GIVEN BY BRIGHAM CITY PUBLIC POWER DURING PRE CONSTRUCTION MEETING
 4. TYPICAL FOR COMMERCIAL TRANSFORMER PROTECTION FOR 750KVIA AND LARGER

REVISIONS	DATE	BY	DESCRIPTION
01			
02			
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04			
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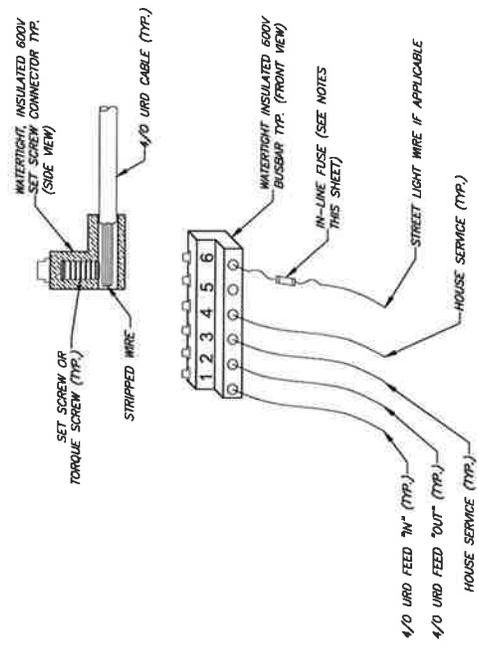
DATE	01/09/2026
SCALE	1:1
PROJECT	TD & CS
DESIGNER	N.T.S.
CHECKER	
DATE	
BY	
DESCRIPTION	

BRIGHAM CITY PUBLIC POWER	BRIGHAM CITY CORPORATION
ELECTRICAL CONSTRUCTION STANDARDS	20 North Main Street Brigham City, UT 84302 Tel: (435) 734-5600 www.bcpwr.com
600 AMP PSE 3/5 SWITCHGEAR	BRIGHAM CITY

BRIGHAM CITY PUBLIC POWER	1655 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-4824 Lobby: (435) 734-9848
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SECONDARY CONNECTIONS

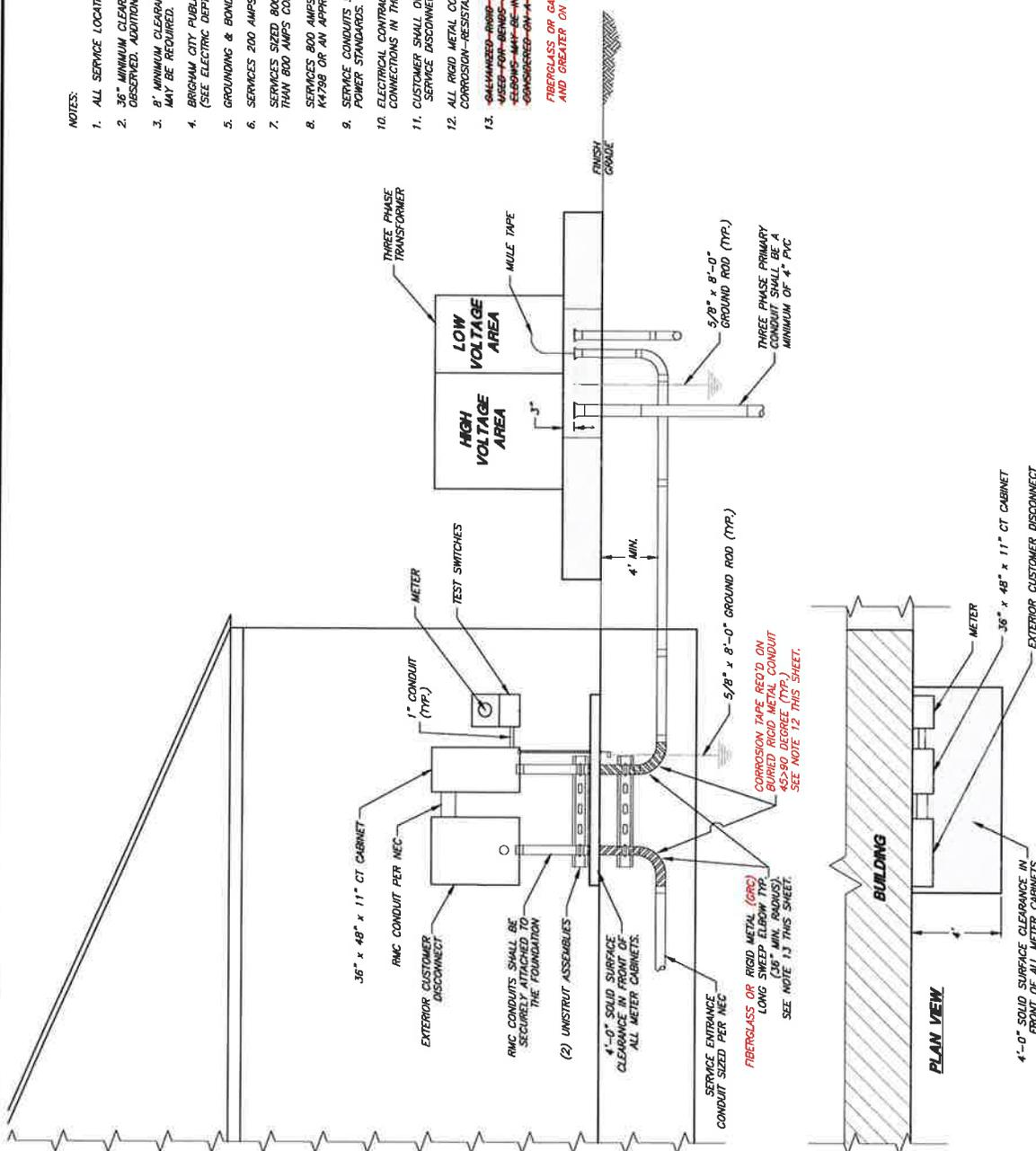


- NOTES:**
1. INSTALL AN IN-LINE 10 AMP FUSE & FUSE HOLDER ON THE UNGROUNDED 120/240V STREET LIGHT CONDUCTOR(S) IN JUNCTION BOX.
 2. CONDUIT ENTERING INTO ANY SECONDARY PEDESTAL MUST HAVE A FABRICATED BELL END.
 3. SECONDARY PEDESTAL SHALL BE NORDIC PSP-15-15-30-MG OR PENCELL AG2HDVCL-ML APPROVED EQUIVALENT.
 4. GROUND LEVEL INSIDE THE GROUND SLEEVE IS THE BOTTOM OF THE GROUND SLEEVE.
 5. ALL SECONDARY CABLE SHALL EXTEND A MINIMUM OF 36" & A MAXIMUM OF 48" FROM TOP OF SECONDARY BOX (WITHOUT LID) AND SHALL BE THE URD TYPE CABLE.
 6. ROAD BASE SHALL BE USED UNDER SECONDARY BOXES. ROAD BASE SHALL BE COMPACTED TO 95% AND BE TESTED PRIOR TO BOX BEING SET INTO PLACE.
 7. ALL SERVICE STUBS SHALL EXTEND 10' PAST PROPERTY LINE.
 8. SECONDARY WATERTIGHT INSULATED SET SCREW CONNECTORS (RYOCHUM GRIT-360-65 C186) OR EQUIVALENT SHALL ACCEPT A MINIMUM OF SIX INDIVIDUAL WIRES, UNLESS OTHERWISE APPROVED BY ELECTRICAL DEPARTMENT.

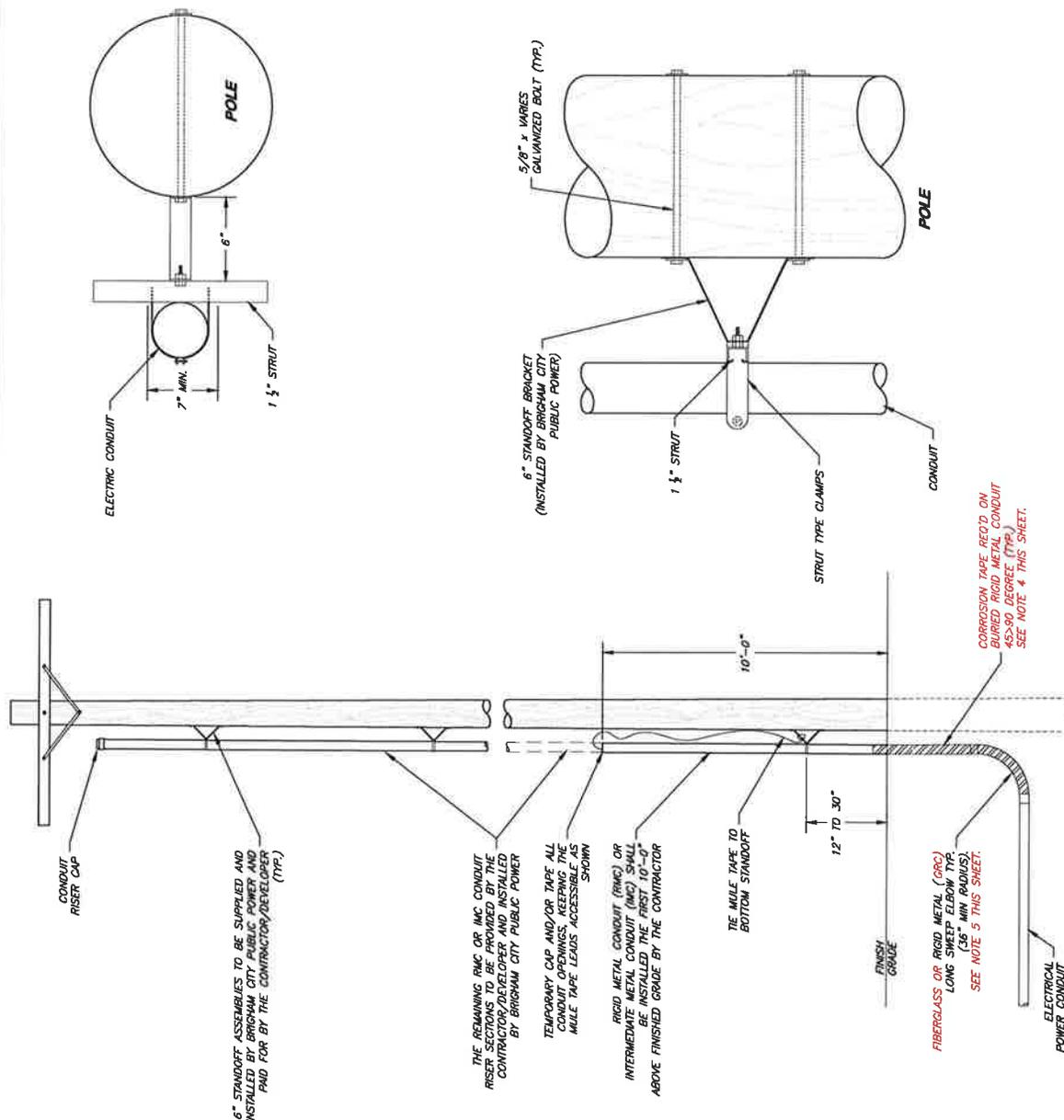
REV	DATE	DESCRIPTION	SCALE	DATE	BY	CHK	APP
			N.T.S.	01/09/2026			
			TD & CS				
			TC				
BRIGHAM CITY PUBLIC POWER ELECTRICAL CONSTRUCTION STANDARDS SECONDARY PEDESTAL, WIRE & CONNECTIONS			BRIGHAM CITY CORPORATION 20 North Main Street Brigham City, UT 84302 Tel: (435) 724-6600 www.bccorpn.com				
BRIGHAM CITY PUBLIC POWER 1455 East Power Plant Road Brigham City, UT 84302 Tel: (435) 724-6624 Utility Emergency: (435) 724-6669			BRIGHAM CITY				
SHEET: E15 OF 1 SHEETS							

NOTES:

1. ALL SERVICE LOCATIONS, MATERIALS, EQUIPMENT SHALL BE APPROVED BY BRIGHAM CITY PUBLIC POWER.
2. 36" MINIMUM CLEARANCES (SIDES AND ABOVE) FROM DOORS, WINDOWS, STAIRS, GAS METERS SHALL BE OBSERVED. ADDITIONAL CLEARANCES MAY BE REQUIRED.
3. 8' MINIMUM CLEARANCE SHALL BE REQUIRED IN FRONT OF SERVICES, METERS, ADDITIONAL CLEARANCES MAY BE REQUIRED.
4. BRIGHAM CITY PUBLIC POWER WILL FURNISH METER BASE & TEST SWITCH FOR CONTRACTOR TO INSTALL (SEE ELECTRIC DEPT.)
5. GROUNDING & BONDING OF CABINETS, CONDUITS, & OTHER EQUIPMENT SHALL MEET NEC.
6. SERVICES 200 AMPS OR LESS SHALL USE A LINK BYPASS METER BASE.
7. SERVICES SIZED 800 AMPS OR LESS MAY USE STAND ALONE TYPE CT CABINETS. FOR SERVICES LARGER THAN 800 AMPS CONTACT THE ELECTRIC DEPARTMENT.
8. SERVICES 800 AMPS OF LESS USE CT CABINET MILBANK P/N: CT364811-HC & MOUNTING RACK P/N: K4798 OR AN APPROVED EQUIVALENT.
9. SERVICE CONDUITS SHALL BE BURIED A MINIMUM OF 4' IN DEPTH, AND MEET BRIGHAM CITY PUBLIC POWER STANDARDS.
10. ELECTRICAL CONTRACTOR SHALL PROVIDE & INSTALL SERVICE CONDUCTORS, & SHALL MAKE CONNECTIONS IN THE SECONDARY SIDE OF THE TRANSFORMER.
11. CUSTOMER SHALL OWN & MAINTAIN SERVICE CONDUCTORS FROM TRANSFORMER TO THE CUSTOMER SERVICE DISCONNECT.
12. ALL RIGID METAL CONDUIT INSTALLED BELOW GRADE SHALL BE INSULATED WITH 10-MIL CORROSION-RESISTANT TAPE. TAPE SHALL EXTEND 6" MIN. ABOVE FINISH GRADE.
13. ~~GALVANIZED RIGID STEEL CONDUIT (GRSC) OR INTERMEDIATE METAL CONDUIT (IMC) ELBOWS SHALL BE USED FOR BENDS 45 DEGREES AND GREATER UNDER CERTAIN CIRCUMSTANCES. FIBERGLASS (FRG) ELBOWS SHALL BE USED FOR BENDS 45 DEGREES AND GREATER UNDER CERTAIN CIRCUMSTANCES. FIBERGLASS (FRG) ELBOWS MAY BE INSTALLED WHEN APPROVED BY BRIGHAM CITY PUBLIC POWER. APPROVAL WILL BE CONSIDERED ON A CASE-BY-CASE BASIS.~~
FIBERGLASS OR GALVANIZED RIGID STEEL CONDUIT (GRSC) SHALL BE USED FOR BENDS 45 DEGREES AND GREATER ON ALL CONDUITS EXTENDING OUT OF THE GROUND OUTSIDE OF AN ENCLOSURE.



BRIGHAM CITY PUBLIC POWER		ELECTRICAL CONSTRUCTION STANDARDS		E19	
BRIGHAM CITY		BRIGHAM CITY		OF 1 SHEETS	
BRIGHAM CITY PUBLIC POWER		BRIGHAM CITY		3-PHASE UNDERGROUND SERVICE 201-800 AMPS	
1455 East Power Blvd Road Brigham City, UT 84302 Tel: (435) 734-6924 John.Emer@bcpw.com (435) 734-6949		20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bcpw.com		REVISIONS	
DATE	BY	CHKD	APP'D	DATE	DESCRIPTION
	RED	TD & CS		01/09/2026	



6" STANDOFF ASSEMBLIES TO BE SUPPLIED AND INSTALLED BY BRIGHAM CITY PUBLIC POWER AND PAID FOR BY THE CONTRACTOR/DEVELOPER (TYP.)

THE REMAINING RMC OR IMC CONDUIT RISER SHALL BE SUPPLIED AND INSTALLED BY BRIGHAM CITY PUBLIC POWER

TEMPORARY CAP AND/OR TAPE ALL CONDUIT OPENINGS KEEPING THE MILE TAPE LEADS ACCESSIBLE AS SHOWN

RIGID METAL CONDUIT (RMC) OR INTERMEDIATE METAL CONDUIT (IMC) SHALL BE INSTALLED THE FIRST 10'-0" ABOVE FINISHED GRADE BY THE CONTRACTOR

THE MILE TAPE TO BOTTOM STANDOFF

12" TO 30"

FIBERGLASS OR RIGID METAL (RMC) LONG SWEEP ELBOW TYP. (36" MIN RADIUS). SEE NOTE 5 THIS SHEET.

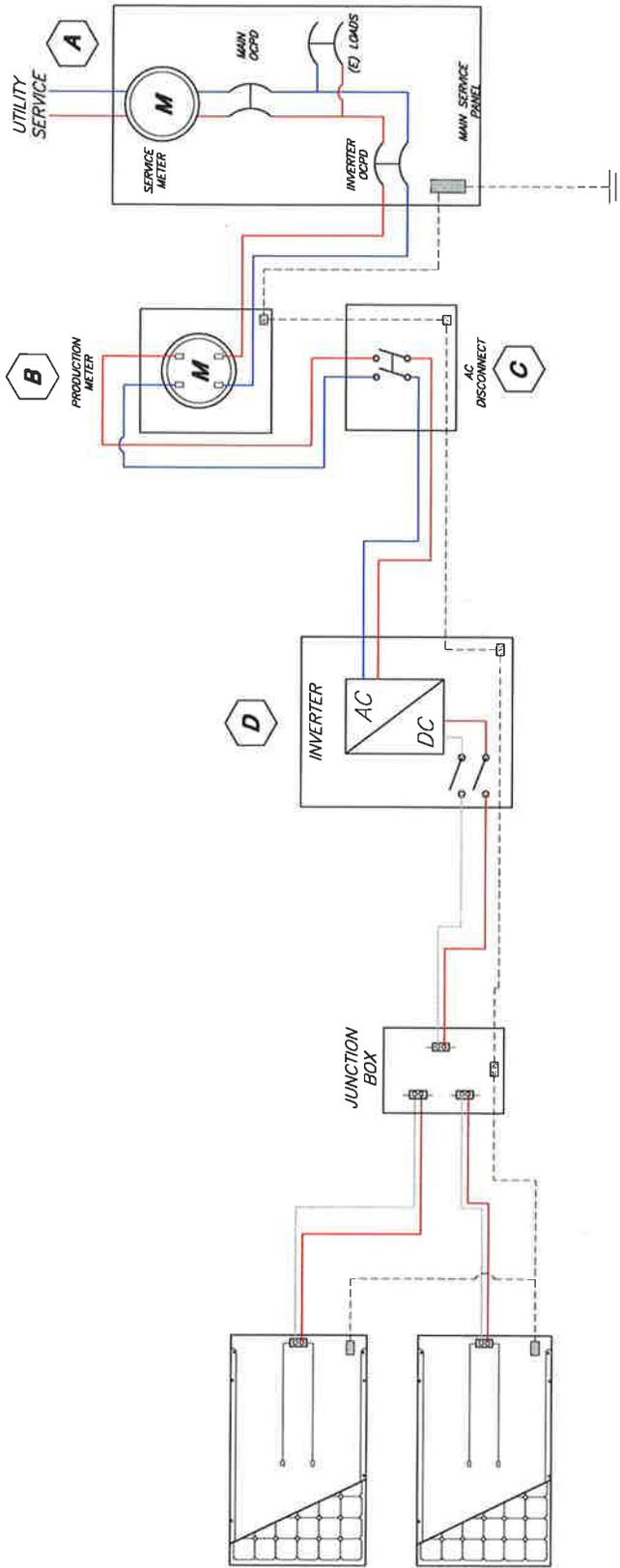
CORROSION TAPE REQ'D ON BURIED RIGID METAL CONDUIT 45-90 DEGREE (TYP.) SEE NOTE 4 THIS SHEET.

NOTES:

- CONTRACTOR/DEVELOPER SHALL PROVIDE THE RMC (RMC) OR IMC CONDUIT AND ANY ADDITIONAL SECURED MATERIALS FOR THE RISER POLE ASSEMBLY ABOVE THE INITIAL 10'-0" RIGID METAL SECTION OF THE RISER TO BRIGHAM CITY PUBLIC POWER FOR INSTALLATION.
- FOR RISERS WHERE THE CONTRACTOR IS REQUIRED TO PULL LOW VOLTAGE CABLE (120/240 VOLT, 3 OR 4 WIRE) ENOUGH WIRE SHALL EXTEND FROM THE CONDUIT FOR THE CITY TO ATTACH IT TO THE 2 DWP LOOP AT TOP OF POLE.
- FIBERGLASS CONDUITS AND FIBERGLASS "ELBOWS" (FRIC) ARE NOT PERMITTED ON ANY RISER POLE APPLICATION UNLESS OTHERWISE APPROVED.
- ALL RIGID METAL CONDUIT INSTALLED BELOW GRADE SHALL BE WRAPPED WITH 10-MIL CORROSION-RESISTANT TAPE. TAPE SHALL EXTEND 6" MIN. ABOVE FINISH GRADE.
- FIBERGLASS OR GALVANIZED RIGID STEEL CONDUIT (RMC) SHALL BE USED FOR BENDS 45 DEGREES AND GREATER ON ALL CONDUITS EXTENDING OUT OF THE GROUND OUTSIDE OF AN ENCLOSURE.

DATE	01/09/2026	SCALE	N.T.S.	REVISION	DESCRIPTION
BY	BEP	DATE	TD & CS	BY	TC
CHKD		DATE		BY	
APP'D		DATE		BY	
SCALE	BRIGHAM CITY PUBLIC POWER				
DESCRIPTION	ELECTRICAL CONSTRUCTION STANDARDS				
PROJECT	TYPICAL RISER POLE				
DATE	BRIGHAM CITY PUBLIC POWER				
SCALE	1:50				
PROJECT	1455 East Power Plant Road Brigham City, UT 84302				
DATE	Tel: (435) 734-6600 Job/Emergency: (435) 734-6600				
SCALE	BRIGHAM CITY				
DESCRIPTION	BRIGHAM CITY CORPORATION 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6600 www.bccorp.gov				
DATE	BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR OVERT, UNDER, EXCESSIVE, OR CONSTRUCTIONAL DAMAGES. ELECTRICAL ESTIMATES AND WORKS ON ANY POWER ASSEMBLY ARE SUBJECT TO ANY CHANGES OR MODIFICATIONS WITHOUT NOTICE.				

THIS DETAIL SHOWS THE REQUIREMENTS FOR A PHOTOVOLTAIC SINGLE-PHASE BASIC SYSTEM WITH A CENTRAL INVERTER

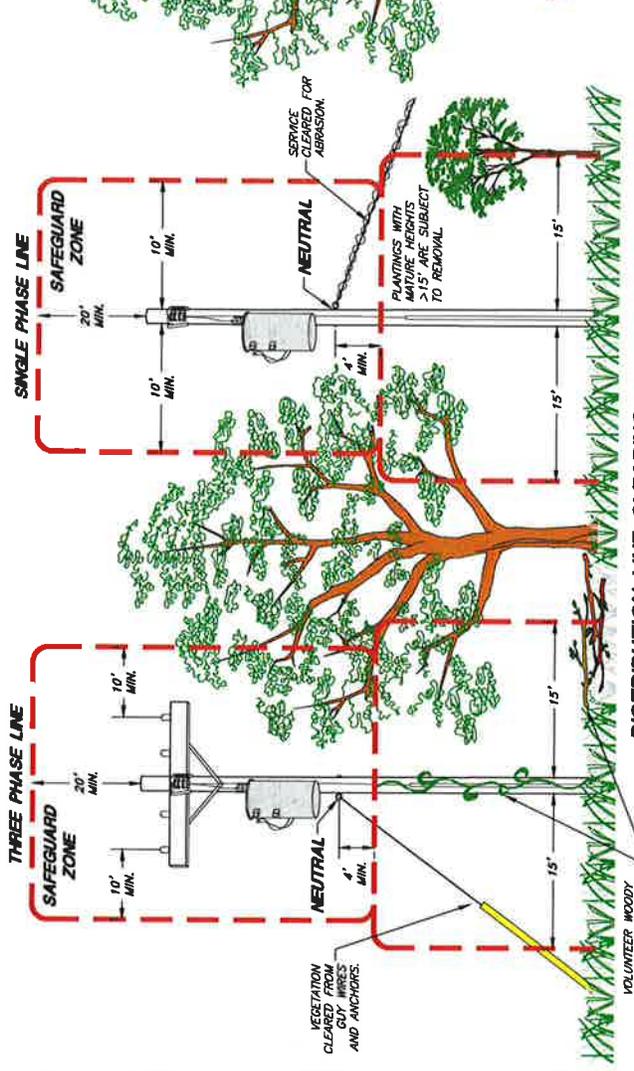
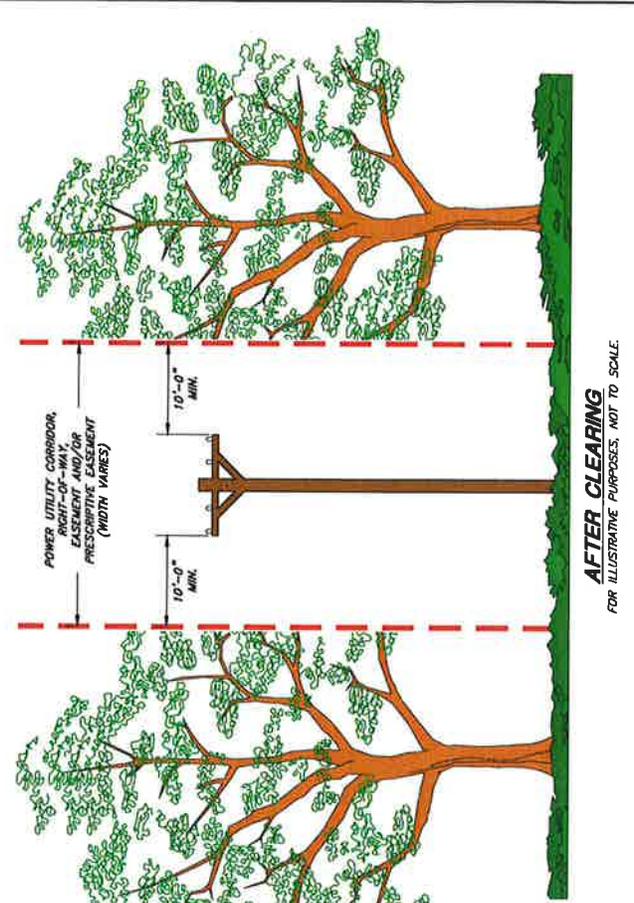


NOTES:

- A. MAIN SERVICE PANEL MUST COMPLY WITH CEC LATEST REVISION AND OPERATE IN A SAFE MANNER.
1. BRIGHAM CITY PUBLIC POWER WILL NOT ALLOW INTERCONNECTIONS WITH ANY UNSAFE CONDITIONS.
- B. PRODUCTION METER TO BE PROVIDED AND INSTALLED BY BRIGHAM CITY PUBLIC POWER AT CUSTOMERS EXPENSE. METER SOCKET TO BE PROVIDED BY INSTALLER. BRIGHAM CITY PUBLIC POWER WILL ACTIVATE THE PV SYSTEM AFTER IT MEETS ALL REQUIREMENTS, AND PASSES ALL INSPECTIONS.
- C. CENTER OF METER MUST BE INSTALLED BETWEEN 4'-0" AND 6'-3" ABOVE FINIAL GRADE.
- D. LOCKABLE KNIFE-BLADE UTILITY A.C. DISCONNECT TO BE LOCATED WITHIN 10'-0" AND LINE OF SIGHT OF SERVICE PANEL AND MUST COMPLY WITH ELSERC DMG 501.
- INVERTER MUST COMPLY WITH UL1741 REQUIREMENTS. GROUNDING ELECTRODE SYSTEM MUST COMPLY WITH LATEST REVISION OF CEC ARTICLE 690.47.
- SEPARATE D.C. DISCONNECT AT GRADE LEVEL REQUIRED ONLY IF INVERTER DOES NOT HAVE AN INTEGRATED D.C. DISCONNECT
- NOTE: A LEASED SYSTEM MAY INCLUDE A SEPARATE METER PROVIDED AND INSTALLED BY THE LEASING COMPANY.
1. LEASED METER WILL NOT BE INSTALLED BETWEEN PRODUCTION METER AND MAIN SERVICE PANEL.

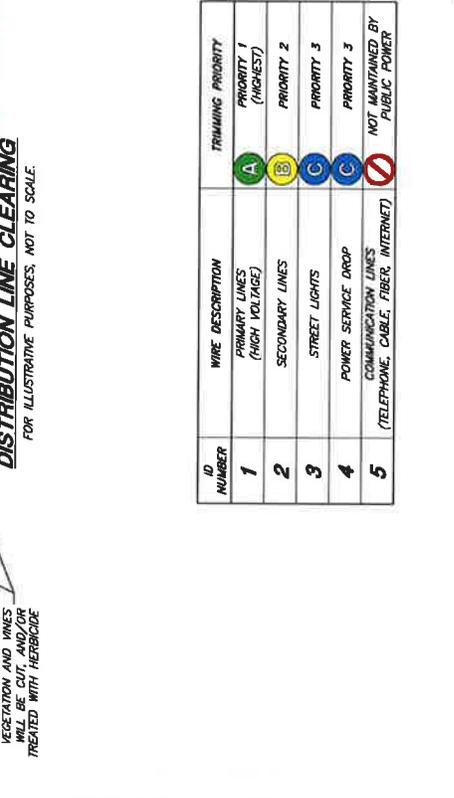
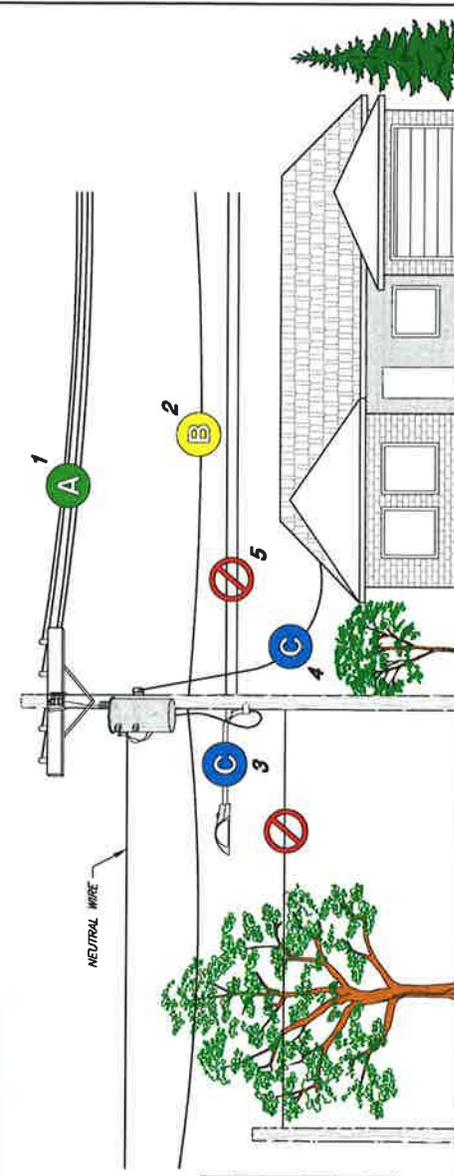
- ALL PV SYSTEMS MUST COMPLY WITH THE LATEST REVISION TO CEC ARTICLES 690 AND 705.
- ALL SYSTEMS MUST COMPLY WITH CEC ARTICLE 110.26.
- ALL SIGNS OR IDENTIFICATION SHALL BE PERMANENTLY DURABLE TO WITHSTAND THE ENVIRONMENT, OR LOCATED ADJACENT TO THE IDENTIFIED EQUIPMENT (AS APPROVED BY THE AMI).
- ALL SIGNS SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT.
- ALL SIGNS SHALL BE PERMANENTLY ATTACHED BY MEANS OF ENGRAVED LETTERS, MACHINE PRINTED LETTERS, OR ELECTRO-PHOTO PLATING LETTERS IN RED WITH WHITE LETTERING.
- ALL SIGNS SHALL BE EITHER METAL OR PLASTIC WITH ENGRAVED LETTERS, MACHINE PRINTED LETTERS, OR ELECTRO-PHOTO PLATING LETTERS IN RED WITH WHITE LETTERING.

REV	DATE	DESCRIPTION	SCALE	DRAWN	DATE	BY	DATE	BY
01			N.T.S.	EEB	01/09/2026	TD & CS		
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AFTER CLEARING
FOR ILLUSTRATIVE PURPOSES, NOT TO SCALE.

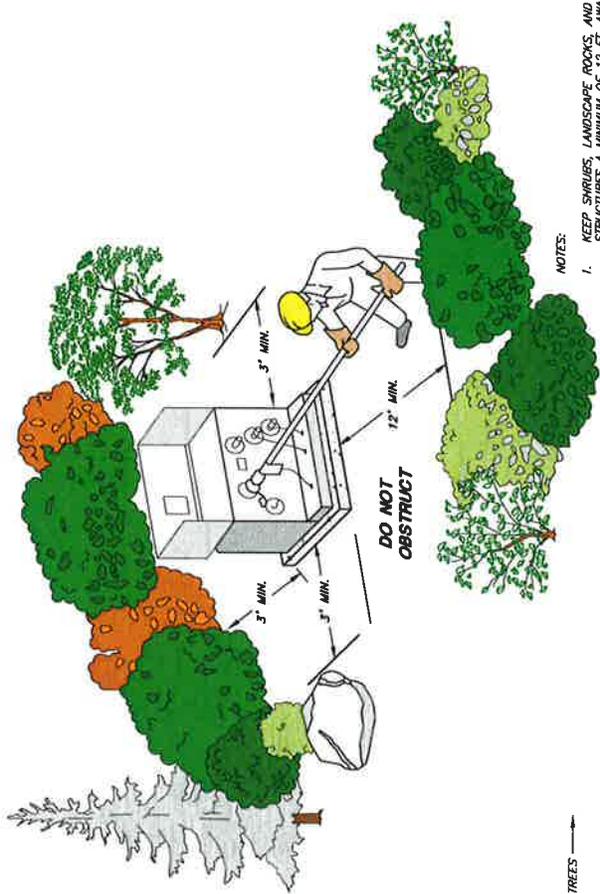
DISTRIBUTION LINE CLEARING
FOR ILLUSTRATIVE PURPOSES, NOT TO SCALE.



ID NUMBER	WIRE DESCRIPTION	TRIMMING PRIORITY
1	PRIMARY LINES (HIGH VOLTAGE)	PRIORITY 1 (HIGHEST)
2	SECONDARY LINES	PRIORITY 2
3	STREET LIGHTS	PRIORITY 3
4	POWER SERVICE DROP	PRIORITY 3
5	COMMUNICATION LINES (TELEPHONE, CABLE, FIBER, INTERNET)	NOT MAINTAINED BY PUBLIC POWER

TRIMMING SCHEDULE
FOR ILLUSTRATIVE PURPOSES, NOT TO SCALE.

PROJECT:	BRIGHAM CITY PUBLIC POWER
DATE:	01/09/2026
SCALE:	N.T.S.
DRAWN BY:	BEB
CHECKED BY:	TD & CS
DATE:	01/09/2026
SCALE:	TC
PROJECT:	BRIGHAM CITY PUBLIC POWER
DATE:	01/09/2026
SCALE:	N.T.S.
DRAWN BY:	BEB
CHECKED BY:	TD & CS
DATE:	01/09/2026
SCALE:	TC
<p>BRIGHAM CITY PUBLIC POWER, BRIGHAM CITY, UTAH, IS THE OWNER OF THE UTILITY AND THE PUBLIC UTILITY CORRIDOR. THE CITY OF BRIGHAM CITY, UTAH, IS THE OWNER OF THE PUBLIC UTILITY CORRIDOR. THE CITY OF BRIGHAM CITY, UTAH, IS THE OWNER OF THE PUBLIC UTILITY CORRIDOR. THE CITY OF BRIGHAM CITY, UTAH, IS THE OWNER OF THE PUBLIC UTILITY CORRIDOR.</p>	
<p>BRIGHAM CITY PUBLIC POWER 1445 East Power Street Brigham City, UT 84302 Tel: (435) 734-6000 www.bcp.com</p>	
<p>BRIGHAM CITY CORPORATION 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6000 www.bcc.com</p>	
<p>BRIGHAM CITY ELECTRICAL - VEGETATION MANAGEMENT STANDARDS</p>	
<p>TREE AND VEGETATION TRIMMING AND CLEARING DETAILS</p>	
<p>BRIGHAM CITY PUBLIC POWER ELECTRICAL - VEGETATION MANAGEMENT STANDARDS</p>	
<p>TREE AND VEGETATION TRIMMING AND CLEARING DETAILS</p>	

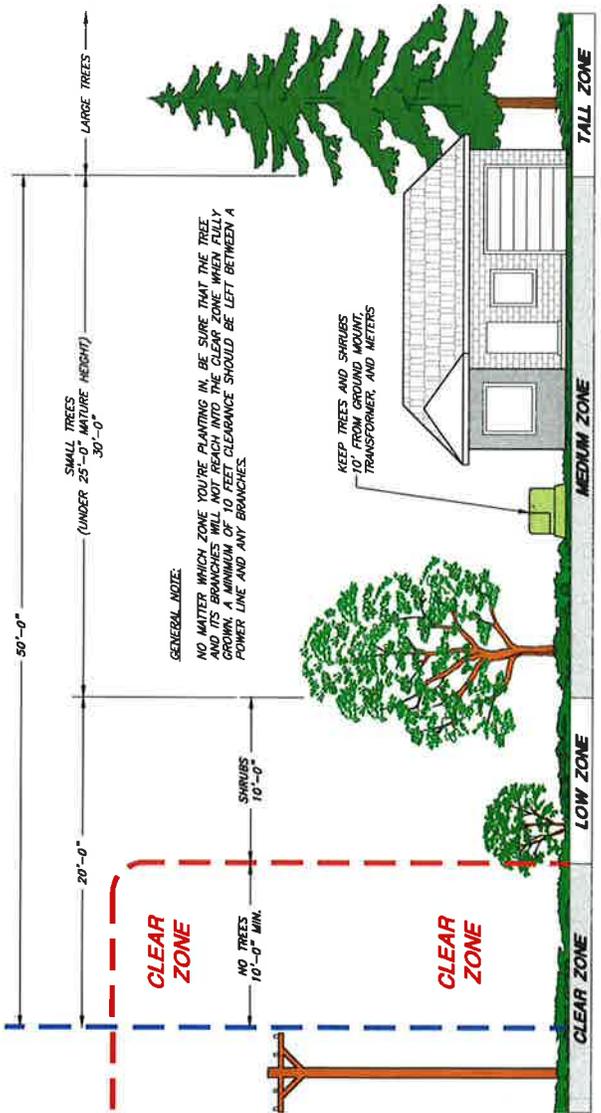


NOTES:

1. KEEP SHRUBS, LANDSCAPE ROCKS, AND STRUCTURES A MINIMUM OF 12 FT. AWAY FROM THE FRONT OF ANY ELECTRICAL BOX/STRUCTURE AND A MINIMUM OF 3 FT. FROM ALL OTHER SIDES.
2. BRIGHAM CITY PUBLIC POWER NEEDS ROOM TO WORK SAFELY AND QUICKLY IN MAINTAINING AND RESTORING ELECTRIC SERVICE. PUBLIC POWER FOR PLANTING INSTRUCTIONS.

ELECTRICAL BOX CLEARANCE DETAIL

FOR ILLUSTRATIVE PURPOSES. NOT TO SCALE.



GENERAL NOTE:

NO MATTER WHICH ZONE YOU'RE PLANTING IN, BE SURE THAT THE TREE AND ITS BRANCHES WILL NOT REACH INTO THE CLEAR ZONE WHEN FULLY GROWN. A MINIMUM OF 10 FEET CLEARANCE SHOULD BE LEFT BETWEEN A POWER LINE AND ANY BRANCHES.

PLANTING THE RIGHT TREE IN THE RIGHT PLACE

FOR ILLUSTRATIVE PURPOSES. NOT TO SCALE.

REV	DATE	OCCUPATION	DATE	01/09/2026	DESIGNER	TC	SCALE	N.T.S.	DRAWN	BEB	BRIGHAM CITY PUBLIC POWER	PROJECT	TD & CS	PROJECT NO.	1455
1											BRIGHAM CITY PUBLIC POWER	ELECTRICAL - VEGETATION MANAGEMENT STANDARDS			
<p>BRIGHAM CITY CORPORATION 20 North Main Street Brigham City, UT 84302 Tel: (435) 734-6900 www.bcpower.gov</p>															
<p>BRIGHAM CITY PUBLIC POWER 1455 East Power Plant Road Brigham City, UT 84302 Tel: (435) 734-6624 Public Emergency: (435) 732-6888</p>															
<p>BRIGHAM CITY ELECTRICAL - VEGETATION MANAGEMENT STANDARDS TREE PLANTING AND ELECTRICAL BOX CLEARANCE DETAILS</p>															
<p>REVISIONS</p>															
<p>DATE: 01/09/2026</p>															
<p>SCALE: N.T.S.</p>															
<p>DRAWN: BEB</p>															
<p>PROJECT: TD & CS</p>															
<p>DESIGNER: TC</p>															
<p>BRIGHAM CITY PUBLIC POWER ASSUMES NO LIABILITY FOR ANY DAMAGE TO PROPERTY OR PERSONS OR ANY ELECTRICAL EQUIPMENT OR ANY OTHER DAMAGE CAUSED BY ANY PLANTING OR MAINTENANCE WORK PERFORMED WITHOUT THESE CONDITIONS.</p>															
<p>KEEP TREES AND SHRUBS 10' FROM GROUND MOUNT, TRANSFORMER, AND METERS</p>															
<p>NO TREES 10'-0" MIN.</p>															
<p>SHRUBS 10'-0"</p>															
<p>SMALL TREES (UNDER 25'-0" MATURE HEIGHT) 30'-0"</p>															
<p>LARGE TREES 50'-0"</p>															
<p>CLEAR ZONE</p>															
<p>CLEAR ZONE</p>															
<p>LOW ZONE</p>															
<p>MEDIUM ZONE</p>															
<p>TALL ZONE</p>															

**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

- 1. INITIATED BY: Derek Oylar

- 2. DEPARTMENT OR DIVISION: Mayor's Office

- 3. DATE INITIATED: 2/12/26

- 4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
UAMPS Pooling Agreement - Mason Baker

- 5. ESTIMATED TIME NEEDED: 5 min

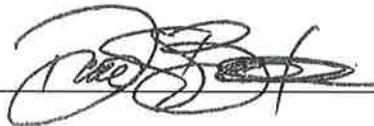
- 6. PROPOSED DATE FOR COUNCIL ACTION: 2/19/26

- 7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

Date	Name	Signature	Attachment
_____	_____	_____	_____
_____	_____	_____	_____

9. MAYOR'S SIGNATURE:





**CITY ATTORNEY
LEGAL DOCUMENT REVIEW**

Document Name: UAMPS Pooling Agreement

Name of Person Requesting Legal Review: Tom Kotter

Date Sent: 02.11.2026 Review Date Deadline: 02.12.2026

Reviewed by Attorney:  Date: 2/12/26

Reviewed and acceptable as submitted

See suggested changes:

Returned to: Tom Kotter Date: 2/12/26

Accepted as Received

Submitted to Mayor's Office By: _____ Date: _____

Reviewed by Mayor's Office: 
Derek Oyler, City Administrator

**Amended & Restated Pooling Agreement
Governing Board Talking Points
February 2026**

Purpose

- Update the 1980 Pooling Agreement to support mandatory participation in organized wholesale power markets.
- Align UAMPS operations with PacifiCorp's entry into the Extended Day-Ahead Market (EDAM) effective May 2026.
- Provide a clear, modern framework for governance, planning, cost allocation, and risk management.

Why This Is Needed Now

- PacifiCorp's participation in EDAM requires UAMPS and its members to comply with centralized market rules.
- The current Pooling Agreement was designed for a bilateral market and does not address today's market complexity.
- The amended agreement ensures continued, compliant participation while preserving UAMPS' agency role.

Key Changes

- Obligates Participants to purchase power and resource sufficiency requirements in excess of owned resources through UAMPS.
- Establishes formal market planning tools, including:
 - Annual Purchase Plan
 - Load and Resource Forecasts
 - Resource Sufficiency Obligations
- Authorizes UAMPS to make market purchases on behalf of Participants under an approved plan.

Governance & Oversight

- Creates a Project Management Committee (PMC), consistent with other UAMPS projects.
- One voting representative per Participant; PMC actions require board ratification.
- Establishes an advisory committee to support policy development and operational practices.
- Requires an annual internal audit of market operations and settlements.

Cost Allocation & Financial Protections

- Costs and revenues directly attributable to a Participant are allocated to that Participant.
- Shared costs are allocated based on Load Ratio Share or another PMC-approved method.
- Incorporates payment obligations, rate covenant, audit rights, and transparency provisions that support credit strength.

Term & Effectiveness

- Effective May 1, 2026.
- Replaces the existing Pooling Agreement in its entirety.
- Remains in effect unless terminated with five years' notice (shorter period requires PMC approval).

Participants Governing Board Approval

- Approve authorizing resolution approving the execution of the Amended and Restated Pooling Agreement
- Seek approval 30 days prior to the effective date of May 1, 2026

COMPARISON OF TERMS IN THE CURRENT VS THE REVISED POOLING AGREEMENT

Terms	Original Pooling Agreement and current practices	Amended Pooling Agreement
Termination	Termination requires 5-years written notice	Termination requires 5-years written notice or earlier upon approval of the PMC
Financing	Silent (authority unclear)	Allows UAMPS to enter Credit Agreements with PMC approval
Load Forecasts	Silent (UAMPS performs annually but not required by contract)	Annual Purchase Plan based on Load and Resource Forecasts informs purchasing
Purchase and Sale Authorization	Unplanned Purchases without authorization; advanced purchases (more than day ahead) require authorization	Resource sufficiency purchases without authorization; advanced purchases based on Annual Purchase Plan without further authorization unless Participant has opted out
Consignment (UAMPS dispatches Participant resources per pooling appendix)	Agreement allows consignment; practice requires Participants to consign all resources pursuant to pooling appendix except for Limited Participants	Participants required to consign all resources pursuant to a pooling appendix except for Limited Participants
Cost Causation	Members pay other members in the pool for resources used to serve their loads; other costs not addressed in the agreement	Market settlements, charges, and revenues, are allocated by Load Ratio Share; some costs allocated by historical average; resource costs allocated by generator ownership
Governance	Silent	Consistent with UAMPS JAA, Bylaws and power sales contracts
Billing and Billing Disputes	Silent; subject to UAMPS procedures	Consistent with other power sales contracts
Other Legal Provisions	Silent	Consistent with other power sales contracts

OPINION OF COUNSEL TO THE PARTICIPANT

_____, 2026

Utah Associated Municipal Power Systems
155 North 400 West, Suite 480
Salt Lake City, UT 84103

Ladies and Gentlemen:

I have acted as counsel to Brigham City, Utah (the "*Participant*") in connection with the Amended and Restated Power Pooling Agreement, dated as of May 1, 2026 (the "*Agreement*"), between the Participant and Utah Associated Municipal Power Systems ("*UAMPS*").

In connection with the opinions set forth herein, I have examined (i) the resolution adopted by the Participant's governing body authorizing the execution and delivery of the Agreement, (ii) an executed counterpart of the Agreement, and (iii) such other documents, information, facts and matters of law as are necessary for me to render the opinions contained herein.

Based upon the foregoing, I am of the opinion that:

1. The Participant has full legal right, power and authority to enter into the Agreement and to perform its obligations thereunder.
2. The Agreement has been duly authorized, executed and delivered by the Participant and constitutes its legal, valid and binding obligation and is enforceable in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency, moratorium, reorganization or other laws affecting creditors' rights generally or usual equity principles in the event equitable remedies should be sought.
3. There is no pending or, to my knowledge, threatened, action or proceeding affecting the Participant (nor to my knowledge is there any basis therefor), which purports to affect the authorization, legality, validity or enforceability of the Agreement.
4. The execution, delivery and performance by the Participant of the Agreement will not conflict with or constitute a breach of or default under any agreement, indenture, bond, note, resolution or other instrument to which the Participant or any applicable law, ruling, regulation, ordinance, judgment, order or decree to which the Participant (or any of its officers in their respective capacities as such) or its properties is subject.

Respectfully submitted,

CERTIFICATE OF PARTICIPANT

The undersigned hereby certify that they are the Mayor and City Recorder of Brigham City, Utah (the "*Participant*"), a member of Utah Associated Municipal Power Systems ("*UAMPS*"), and that as such they are authorized to execute this Certificate on behalf of the Participant and hereby certify as follows:

1. This Certificate is delivered in connection with the execution and delivery of the Amended and Restated Power Pooling Agreement, dated as of May 1, 2026 (the "*Agreement*"), between the Participant and UAMPS. Capitalized terms used and not otherwise defined herein have the meanings assigned to them in the Agreement.

2. The Participant is a political subdivision of the State of Utah (the "*State*") and is governed by a City Council (the "*Governing Body*").

3. Attached hereto as *Exhibit A* is a true, complete and correct copy of a resolution authorizing the execution and delivery of the Agreement and (the "*Contract Resolution*"). The Contract Resolution was duly adopted by a majority of the Governing Body present and voting at a public meeting of the Governing Body at which a quorum was present and acted throughout.

4. The meeting of the Governing Body at which the Contract Resolution was adopted was duly called, noticed and held in conformity with applicable laws of the State and procedural rules of the Governing Body. The Contract Resolution is in full force and effect and has not been amended, modified, repealed or supplemented.

5. The names of the Mayor and the City Recorder authorized to execute and deliver the Agreement on behalf of the Participant are as follows:

NAME	OFFICE
Dennis "DJ" Bott	Mayor
Kristina Rasmussen	City Recorder

6. (a) No petition was filed with the Participant or any of its officers seeking to refer the Contract Resolution to the electors of the Participant in accordance with the provisions of State law; and (b) no litigation has been instituted, is pending or has been threatened to require a referendum election on the Contract Resolution.

7. The Participant owns and operates an electric utility system (the "*System*") that distributes and furnishes electric energy to consumers located within the established service area of the System. Under the Agreement, the Participant agrees to use all of the electric energy from its Entitlement Share to serve retail customers located in the established service area of the System and to meet its own requirements.

8. The Participant has previously executed the Utah Associated Municipal Power Systems Amended and Restated Agreement for Joint and Cooperative Action dated as of March 20, 2009, and all amendments thereof and supplements thereto (the "*Joint Action Agreement*") and that certain Power Pooling Agreement (the "*Pooling Agreement*") between the Participant and UAMPS relating to the power pool administered by UAMPS. The Joint Action Agreement and the Pooling Agreement are each in full force and effect and constitute the legal, valid and binding agreements of the Participant.

9. The representations and warranties of the Participant in Section 8 of the Agreement are true and correct on and as of the date of this certificate.

Dated: _____, 2026.

BRIGHAM CITY, UTAH

By _____
Mayor

By _____
City Recorder

[SEAL]

[ATTACH CONTRACT RESOLUTION]

RESOLUTION NO. _____

A RESOLUTION AUTHORIZING AND APPROVING THE AMENDED AND RESTATED POWER POOLING AGREEMENT WITH THE UTAH ASSOCIATED MUNICIPAL POWER SYSTEMS FOR THE POOL PROJECT; AUTHORIZING EXECUTION AND DELIVERY THEREOF; AND RELATED MATTERS.

***** ***** *****

WHEREAS, Brigham City (the "*Member*") is a member of Utah Associated Municipal Power Systems ("*UAMPS*") pursuant to the provisions of the Utah Associated Municipal Power Systems Amended and Restated Agreement for Joint and Cooperative Action, as amended (the "*Joint Action Agreement*");

WHEREAS, one of the purposes of UAMPS under the Joint Action Agreement is assisting its members in providing reliable, competitive, supplies of electric power and energy and related services through joint and cooperative action;

WHEREAS, UAMPS has developed and administers a power pooling project, known as the "Pool Project," pursuant to which UAMPS procures, schedules, dispatches, and sells electric power and electric energy, including participation in organized wholesale electric markets for the collective benefit of participating members;

WHEREAS, the Member is currently a party to a prior power pooling agreement with UAMPS governing its participation in the Pool Project;

WHEREAS, UAMPS has presented to the Member an Amended and Restated Power Pooling Agreement (the "*Amended Pooling Agreement*"), which amends and restates the Prior Pooling Agreement in its entirety and updates the terms and conditions governing participation in the Pool Project, including provisions relating to market participation, allocation of costs and revenues, governance through a project management committee, payment obligations, and related matters;

WHEREAS, the governing board of the Member ("*Governing Body*") has reviewed, or caused to be reviewed on its behalf, the Amended Pooling Agreement and related materials provided by UAMPS, has had the opportunity to ask questions and receive additional information, and has determined that entering into the Amended Pooling Agreement is in the best interests of the Member and the efficient, reliable, and economical operation of its electric system; and

WHEREAS, the Member now desires to authorize and approve the Amended Pooling Agreement and its execution and delivery by the Member;

NOW, THEREFORE, BE IT RESOLVED by the Governing Body of Brigham City, as follows:

Section 1. Approval of the Amended Pooling Agreement. The Amended and Restated Power Pooling Agreement, in substantially the form presented to the Governing Body and attached hereto as EXHIBIT A, is hereby authorized and approved. The Mayor is hereby authorized, empowered, and directed to execute and deliver the Amended Pooling Agreement on behalf of the Member, and the City Recorder is hereby authorized to attest and countersign such execution and affix the corporate seal of the Member, with such changes therein as shall be approved by the Mayor, such approval to be conclusively evidenced by execution thereof.

Section 2. Participant's Representative. (a) The appointment of Tom Cooper as the Participant's Representative to UAMPS and of Casey Smith and Troy Dahlgren as alternate Representatives is hereby confirmed.

(b) Such Representative (or, in his or her absence, such alternate(s)) is hereby delegated full authority to (i) approve any appendix to the Amended Pooling Agreement between UAMPS and the Participant that may be necessary or desirable in connection with the Amended Pooling Agreement, and (ii) act on all matters that may come before the Project Management Committee established by the Amended Pooling Agreement, and shall be responsible for reporting regularly to the Governing Body regarding the activities of the Project Management Committee

Section 3. Further Authority. The Mayor, City Recorder and other appropriate officers and employees of the Member are hereby authorized and directed to execute and deliver such certificates and additional undertakings of the Member as shall be necessary in connection with financing related to the Amended Pooling Agreement. Legal counsel for the Member is hereby authorized to provide an approving opinion with respect to the authorization, execution and enforceability of the Amended Pooling Agreement.

Section 4. Miscellaneous; Effective Date. (a) This resolution shall be and remain irrevocable until the expiration or termination of the Amended Pooling Agreement in accordance with its terms.

(b) All previous acts and resolutions in conflict with this resolution or any part hereof are hereby repealed to the extent of such conflict.

(c) In case any provision in this resolution shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

(d) This resolution shall take effect immediately upon its adoption and approval.

ADOPTED AND APPROVED this ___ day of _____, 2026.

BRIGHAM CITY

By _____
Mayor

ATTEST:

City Recorder

[SEAL]

EXHIBIT A

[AMENDED POOLING AGREEMENT]

**AMENDED AND RESTATED POWER POOLING AGREEMENT
BETWEEN
UTAH ASSOCIATED MUNICIPAL POWER SYSTEMS
AND
BRIGHAM CITY**

This Amended and Restated Power Pooling Agreement made and entered into as of May 1, 2026 (“*Agreement*”), is by and between Utah Associated Municipal Power Systems, a political subdivision of the State of Utah (“*UAMPS*”) and Brigham City (the “*Participant*”).

RECITALS

WHEREAS, UAMPS is a political subdivision of the state of Utah organized under the Interlocal Cooperation Act (the “*Act*”) and the Joint Action Agreement to provide joint and cooperative action, including securing present and future power supply resources for its members;

WHEREAS, UAMPS has the power under the Act and Joint Action Agreement to (i) enter into contracts to obtain a supply of electric power and electric energy and ancillary services and transmission services, (ii) enter into contracts for the sale of wholesale energy services with its Members and others and (iii) adopt and implement risk management policies and enter into related agreements, including but not limited to forward purchase and sale contracts, hedging, tolling and swap agreements, and other instruments;

WHEREAS, balancing areas in the western electric markets, including the PacifiCorp East balancing area where most Members are located, are moving toward mandatory participation in organized markets;

WHEREAS, the Participant has entered into, or contemplates entering into power sales contracts with UAMPS and other instruments for the purchase or sale of electric power and electric energy; and

WHEREAS, subject to the terms and conditions of this Agreement, each Participant desires to appoint UAMPS as such Participant’s agent for (i) scheduling and dispatching electric power; (ii) purchasing power, energy, and related products to meet load and reserve requirements; (iii) selling Participant’s power and energy inside or outside organized markets; (iv) managing transmission rights and services; (v) handling payments/receipts and distributing market revenues; (vi) conducting transmission studies; and (vii) optimizing Participant’s resources and transmission.

NOW THEREFORE, the Participant and UAMPS hereby agree, as follows:

Section 1. Definitions and Rules of Construction.

(a) As used in this Agreement and in the Recitals set out above:

“Act” means the Interlocal Cooperation Act, Title 11, Chapter 13, Utah Code Annotated 1953, as amended.

“Agreement” means this Amended and Restated Power Pooling Agreement as dated above between UAMPS and the Participant and any duly authorized amendments.

“Amended and Restated Power Pooling Agreement” means, collectively, this Agreement and the other Amended and Restated Power Pooling Agreements between UAMPS and the other Participants.

“Annual Purchase Plan” means the plan approved by the Project Management Committee setting forth the projected timing and pricing for market purchases over the fiscal year it is in effect. A form of the Annual Purchase Plan is attached to this Agreement as Exhibit 1, which shall be completed for each fiscal year upon the approval of, and may be modified from time to time by, the Project Management Committee.

“Authorized Officer of UAMPS” means the Chairman of the Board of Directors, the Vice Chairman of the Board, the Chairman of the Project Management Committee, the Secretary, the Treasurer and the Chief Executive Officer of UAMPS and any other officer or employee authorized or having delegated authority to perform specific acts or duties under the Amended and Restated Power Pooling Agreement by resolution duly adopted by the Board.

“Billing Period” means such period of time as shall be established from time to time by UAMPS for the preparation, calculation and billing of the amounts payable by the Participant hereunder and includes (i) all charges, credits, settlements, and other amounts attributable in that period of time, and (ii) any resettlements, recalculations, adjustments, or true-ups issued by any applicable organized market and received by UAMPS during that same calendar month, regardless of the market period to which such resettlements or adjustments relate.

“Board” means the Board of Directors of UAMPS or such other governing body of UAMPS as may be established from time to time pursuant to the Joint Action Agreement and the Act.

“Commercially Reasonable” or *“Commercially Reasonable Efforts”* means, with respect to any action required to be made, attempted or taken by a party under this Agreement, such efforts as a reasonably prudent business would undertake, consistent with good industry practice and the past practices of such party, for the protection of its own interest under the conditions affecting such action, including the amount of notice of the need to take such action, the duration and type of the action, the competitive environment in which such action occurs, and the contractual and legal obligations of, and the risk to, such party in connection with such action; *provided, however*, an obligation to act in a “Commercially Reasonable” manner or to exercise “Commercially Reasonable Efforts” does not include taking actions that would, individually or in the aggregate,

cause the party subject to such obligation to incur costs, or suffer any other detriment, that is out of reasonable proportion to the benefits to the other party under this Agreement.

“Cost Causation” means the principle that market charges and revenues should be allocated to the Participants whose actions directly cause such costs to be incurred or revenues to be received, including but not limited to charges and revenues relating to Resource Sufficiency Obligations and congestion charges and revenue.

“Credit Agreement” means (i) lines of credit and other credit arrangements to provide working capital, liquidity and/or reserves in connection with the operation and administration of the Project and (ii) any portion of the borrowing capacity under a line of credit or other credit arrangement that is dedicated, set aside or used to provide working capital, liquidity and/or reserves for the Project.

“Effective Date” means such date as shall be approved by the Project Management Committee as set forth in Section 2 of this Agreement.

“Electric System” means the Participant’s electric utility system as established, maintained and operated pursuant to applicable State and local law. With respect to any Participant that does not own and operate an electric utility system that serves retail customers, the term “Electric System” shall be deemed to refer to the applicable utility system.

“Entitlement Share” means the percentage determined by dividing (i) the sum of the Participant’s purchases through the Project for the previous fiscal year (ii) the sum of the total Project purchases during the previous fiscal year. For the avoidance of doubt, each Participant’s Entitlement Share under this Agreement shall be its Percentage Entitlement Share for purposes of the Joint Action Agreement.

“Forecasted Deficiency” means the forecasted electricity need for each Participant for the following fiscal year taking into account Load and Resource Forecasts as determined in advance of Project Management Committee approval of the Annual Purchase Plan.

“Joint Action Agreement” means the Utah Associated Municipal Power Systems Amended and Restated Agreement for Joint and Cooperative Action dated as of March 20, 2009, as amended and supplemented from time to time.

“Limited Participant” means a Participant that does not use UAMPS to schedule its full load and whose obligations with respect to purchases and sales are governed by a Pooling Appendix.

“Load Ratio Share” means for the applicable Billing Period, the ratio of (i) the total quantity of electric power and electric energy purchased by a Participant through the Project during such Billing Period excluding resources that are not participating in an organized market to (ii) the total quantity of electric power and electric energy purchased by all Participants through the Project during such Billing Period, taking into account any resources excluded from participation in an applicable organized market.

“Load and Resource Forecast” means the forward-looking estimate prepared by UAMPS, in consultation with Participant, of such Participant’s projected electric load and available electric supply resources for a specified planning period, including owned resources, contracted resources, Outside Resources, and applicable regulatory or market obligations. A form of Load and Resource Forecast is attached to this Agreement as Exhibit 2, which shall be approved and may be modified from time to time by the Project Management Committee.

“Members” means, collectively, each entity which has executed the Joint Action Agreement or a supplement thereto.

“Outside Resource” means any Participant resource that is not a UAMPS project, a purchase through a UAMPS project or a market purchase through UAMPS.

“Participant” means the party defined as the Participant in the preamble of this Agreement and its permitted successors and assigns hereunder.

“Participants” means the parties, including the Participant, other than UAMPS, to the Amended and Restated Power Pooling Agreement.

“Participant’s Representative” means (i) the officer, employee or other agent of the Participant designated from time to time by the Participant as the Representative of the Participant for purposes of the Joint Action Agreement, to whom all notices and other communications to be given by UAMPS to the Participant hereunder shall be sent or (ii) in the event that the individual appointed as the Participant’s Representative is unavailable to act on behalf of the Participant, the individual duly appointed or designated by the Participant as its alternate Representative pursuant to the Joint Action Agreement.

“Prior Agreement” means, collectively, the Power Pooling Agreements of various dates between UAMPS and the Members.

“Project” means the UAMPS project created by this Agreement to procure, schedule, dispatch, and sell electric power and energy, including the bidding of such resources into organized markets for the collective benefit of the Participants.

“Project Management Committee” means the committee of the Participants established pursuant to Section 5 which shall make certain decisions and recommendations with respect to the management and acquisition of electric power, electric energy and transmission service as provided herein.

“Pooling Appendix” means an appendix to this agreement that sets forth specific terms relating to the purchase and sale of Participant resources.

“Required Approvals” means all governmental, regulatory and lender approvals, consents and authorizations required or necessary for (i) the execution, delivery and performance of this Agreement (or any amendment hereto) by the Participant and (ii) this Agreement (or any amendment hereto) to be the legal, valid and binding obligation of the Participant.

“Resource Sufficiency Obligation” means a requirement from an organized market that is imposed on UAMPS to demonstrate sufficient supply, flexibility, and reserves to meet its own forecasted demand and uncertainty in advance or during real-time operations.

“UAMPS” means Utah Associated Municipal Power Systems, a political subdivision organized and existing under the laws of the State of Utah, the Act and the Joint Action Agreement, and its successors. All references to UAMPS in this Agreement shall include Authorized Officers of UAMPS and their delegates acting pursuant to specific authorization by the Board.

“Uncontrollable Force” means any cause beyond the control of the party affected, including failure of facilities, flood, earthquake, storm, lightning, fire, explosion, epidemic, pestilence, war, riot, an act of domestic or international terrorism, civil disturbance, labor disturbances, sabotage, or an act of civil or military authorities, including court orders, injunctions, or orders of governmental agencies with proper jurisdiction, which by due diligence and foresight such party could not reasonably have been expected to avoid.

(b) References to Articles, Sections, Schedules and Exhibits are to the Articles and Sections of and Schedules and Exhibits to this Agreement, unless otherwise provided. Article and Section headings are included herein for convenience of reference only and shall not constitute a part of this Agreement for any other purpose or be given any substantive effect. Any of the defined terms may, unless the context otherwise requires, be used in the singular or the plural, depending on the reference. The use of the word “include” or its derivations shall not be construed as language of limitation.

Section 2. Effective Date; Term; and Termination.

(a) The Effective Date of the Amended and Restated Power Pooling Agreement shall be May 1, 2026. As of the Effective Date, the Amended and Restated Power Pooling Agreement shall replace the Prior Agreement in its entirety, except that the Prior Agreement shall remain in effect with respect to any Participants that have not obtained all Required Approvals until such Approvals have been received. Appendices to the Power Pooling Agreement shall become appendices to the Amended and Restated Power Pooling Agreement unless substituted and signed by the affected Participant. A Member of UAMPS becomes a Participant by executing this Agreement as a separate contract from other agreements between UAMPS and the Participant.

(b) The Agreement shall remain in effect from the Effective Date until terminated by written notice by either party served at least five years prior to the stated termination date, unless a shorter notice period is approved by the Project Management Committee, or the date on which the Participant has terminated its participation in all UAMPS projects and completed all associated obligations, whichever is later. However, such termination shall not (i) relieve such Participant or UAMPS of any obligation incurred under or pursuant to this Agreement before such termination or (ii) result in the loss or availability of any right or benefit of such Participant or UAMPS which exists under any agreement or arrangement made hereunder between the Participant and UAMPS before such termination which extends beyond the noticed date of termination.

(c) No Agreement between UAMPS and a Participant may be entered into or amended so as to provide terms and conditions that are substantially and materially different from those herein contained except upon approval of the Project Management Committee, and upon similar amendment being made to the Agreement of any other Participants requesting such amendment after receipt by such Participant of notice of such amendment.

Section 3. Pool Administration

(a) Participants hereby establish the Project Management Committee, which shall consist of one voting representative from each Participant (who shall be the Participant's Representative or in the absence of the Participant's Representative its Alternate Representative) and shall be chaired by a Participant Representative elected by the Project Management Committee. The Participant has delegated full and complete authority to its Participant's Representative to act on all matters and decisions that come before the Project Management Committee. Each Representative appointed by the Participant shall serve on the Project Management Committee until the Participant appoints a successor. An Authorized Officer of UAMPS shall attend all meetings of the Project Management Committee and shall cause minutes to be kept of all such meetings.

(b) The Joint Action Agreement and the bylaws of UAMPS shall govern the procedures for and the voting rights on the Project Management Committee, *provided that*:

(i) The Participant's Representative of any Participant that is in default hereunder (A) shall not be entitled to vote on any matter during the period of such default, and the consent or approval of such Participant or such Participant's Representative shall not be required during the existence of such default and (B) shall be disregarded for purposes of determining whether a quorum of the Project Management Committee is present at any meeting;

(ii) All decisions made by the Project Management Committee shall be made by resolution, order or other appropriate action of the Project Management Committee and, except in those instances when the Project Management Committee is acting pursuant to delegated authority from the Board, before such resolution, order or action of the Project Management Committee shall take effect, the same shall be ratified and approved by resolution, order or action of the Board, acting in accordance with the Joint Action Agreement and the bylaws of UAMPS.

(iii) The Participants acknowledge that the Joint Action Agreement provides, among other things, that decisions of the Board with respect to the Project shall be made only upon the recommendation of the Project Management Committee and that weighted votes may be called for on any recommendation or decision to be made by the Project Management Committee or the Board, respectively, all as more fully provided in the Joint Action Agreement.

(c) The Project Management Committee may from time to time direct UAMPS to commission, obtain and provide such power supply and transmission studies as it deems reasonably necessary or desirable with respect to the Project.

(d) With the approval of the Project Management Committee, UAMPS may enter into Credit Agreements for the Project. UAMPS may require reasonable credit support or adequate assurance of payment from Participants consistent with market or lender requirements.

Section 4. Electric Power and Electric Energy Sales, Purchases and Allocation of Charges and Revenues

(a) UAMPS shall prepare an individual Load and Resource Forecast with each Participant to determine its Forecasted Deficiency. UAMPS and each Participant shall work in good faith to mutually agree upon the Participant's Load and Resource Forecast. Each Participant shall provide UAMPS with such load data, resource information, and other inputs as UAMPS may reasonably request in order to prepare and update such forecasts, including periodic updates as conditions change.

(b) Based on the Forecasted Deficiencies determined pursuant to Section 4(a), UAMPS shall develop, and the Project Management Committee shall approve, an Annual Purchase Plan to meet the aggregate Forecasted Deficiency of the Participants. The individual Participant Forecasted Deficiencies will be aggregated to determine the total UAMPS purchasing need, which will be included in the Annual Purchase Plan.

(c) UAMPS is hereby authorized to make purchases without additional authorization from the Participant

(i) to meet Resource Sufficiency Obligation according to policies adopted by the Project Management Committee. Purchases to meet Resource Sufficiency Obligation shall be allocated to Participants during market settlements based on Participant's contribution to deficiency and

(ii) to meet Forecasted Deficiency, provided that (x) Participants may withdraw UAMPS' authorization to make purchases under this clause (ii) only upon such terms and conditions as shall be approved by the Project Management Committee and (y) UAMPS purchases will be based on the aggregate Forecasted Deficiency of all Participants who have not withdrawn their authorization. Purchases to meet Forecasted Deficiency shall be allocated to Participants at the time the purchase is made.

(d) Except for Limited Participants, each Participant shall be obligated to purchase through the Project all of its electric power and electric power requirements and associated Resource Sufficiency Obligations in excess of its purchased or owned resources. UAMPS may schedule or bid Participant contracted or consigned resources into an organized market and may purchase from the market to meet the load of Participants. Notwithstanding the foregoing, any Outside Resource shall not be scheduled, dispatched, or bid into any organized market by UAMPS unless and until such Resource is expressly declared available for such scheduling or bidding by the

Participant. In addition, UAMPS must relay and not deviate from the schedule provided by the Participant.

(e) Except for Limited Participants, each Participant must consign the output of all Outside Resources to UAMPS pursuant to a Pooling Appendix, a form of which is attached to this Agreement as Exhibit 3, which may be modified from time to time by the Project Management Committee. UAMPS shall act as scheduling agent for consigned Outside Resources. UAMPS shall not be obligated to pay for Outside Resources. Consignment of the output of Outside Resources shall not relieve the Participant of responsibility under any resource-related contracts. Absent approval by the Project Management Committee, a Participant may not consign more resources to UAMPS than is reasonably necessary to meet its forecasted load. With Project Management Committee Approval, UAMPS may impose a scheduling fee for consigned resources to participate in an organized market.

(f) A Limited Participant may recall Outside Resources previously consigned to UAMPS for its own needs upon reasonable notice to UAMPS, taking into account any market scheduling requirements, UAMPS' established schedule, commitments to other Participants, and the needs of the recalling Participant.

(g) UAMPS may offer excess Participant resources that are not Outside Resources for sale to other Participants or may bid such resources into an organized market without additional authorization from the Participant. UAMPS shall prioritize contracted resources for which it has made firm contractual commitments when making bilateral sales.

(h) UAMPS will allocate other charges and revenues incurred or received through participation in an organized market to Participants according to Cost Causation. Charges and revenues directly attributable to a specific Participant's actions, resources or deficiencies shall be allocated to that Participant. Charges and revenues not attributable to a specific Participant will be allocated among the Participants according to the Load Ratio Share, or such other reasonable method as determined by the Project Management Committee

(i) The Project Management Committee shall adopt policies and procedures to govern the allocation charges and revenues consistent with the foregoing principles.

(j) The Project Management Committee may, from time to time and in its discretion, establish one or more advisory committees to assist in the development, review, and recommendation of policies, procedures and related exhibits under this Agreement. Any such advisory committee shall consist of representatives designated by the chair of the Project Management Committee and approved by the Project Management Committee and shall include representatives representing different size and resource composition. The advisory committee shall work in coordination with UAMPS staff and may evaluate and make recommendations regarding, among other matters, forecasting methodologies, billing practices, scheduling procedures, data requirements, reporting formats, and proposed exhibits or amendments to exhibits addressing such matters. Advisory committees shall serve solely in an advisory capacity and shall have not authority to bind UAMPS or the Participants. Any policies, procedures, or exhibits developed by an advisory committee shall be recommended to the Project Management

Committee for consideration in accordance with this agreement. The Project Management Committee may define the scope and duration of any advisory committee and may dissolve such committee at any time.

(k) Nothing in this Agreement shall limit the Participant from contracting for, incurring debt to build or otherwise obtaining an ownership interest in resources for such Participant's own needs. Such additional resources, if any, shall not relieve the Participant of any prior obligations incurred by such Participant to UAMPS.

(l) Unless otherwise approved by UAMPS, the Participant shall use all of the power and energy it purchases under this Agreement to serve retail customers located in the established service area of its electric utility system and to meet its own requirements.

(m) UAMPS shall use Commercially Reasonable Efforts to provide each Participant with timely access to data necessary for operational decision-making to the extent such data is available. The Project Management Committee shall adopt policies specifying data formats, delivery methods, and reporting timelines.

Section 5. Participant Payment Obligations.

(a) Each Participant shall pay UAMPS for all electric power, electric energy, energy capacity, ancillary services, and other electricity-related products or services purchased, scheduled, or otherwise procured by UAMPS on behalf of such Participant to meet such Participant's Forecasted Deficiency or contribution to Resource Sufficiency Obligation deficiency as described in Section 4(c). Such payment obligation shall apply without regard to whether the Participant ultimately uses, resells, or requires such power or energy, and the Participant shall bear all market benefits and detriments associated with such purchases, including price differences, congestion losses, imbalance charge, and settlement adjustments.

(b) In addition to payments for power, energy, and transmission, each Participant shall pay its Entitlement Share of all administrative, general, overhead, and other costs and expenses of UAMPS related to the Project, including but not limited to professional services, software and systems, financing costs, credit support, market participation fees, and other expenses incurred by UAMPS that are not otherwise recovered through market settlements or specific Participant charges relating to market participation. To the extent that revenues received by UAMPS from market settlements, bilateral sales, or other sources are insufficient to fully recover the costs and expenses described in this Section 5, the unrecovered balance shall be billed to Participants in proportion to their respective Entitlement Shares, unless otherwise allocated pursuant to Cost Causation principles approved by the Project Management Committee.

(c) Participant acknowledges and agrees that it is necessary for UAMPS to recover all of the costs and expenses associated with the Project, including the repayment of amounts due under Credit Agreements, through billings to and payments by the Participants under this Agreement.

(d) Payments required to be paid by the Participant to UAMPS shall be due and payable to UAMPS at its principal office or by wire transfer to such account as UAMPS shall designate in

writing to the Participant, on the 10th day of the Month following the Month in which the billing statement was rendered (or if such day is not a business day, the next succeeding business day) or at such other time as may be established by UAMPS through its annual budgeting process. Upon approval of the Project Management Committee, UAMPS may modify the billing schedule, frequency, due date, or other payment terms. Any such modification shall be communicated in writing to Participants and shall thereafter be binding as if originally stated in this Agreement.

(e) If payment in full is not made by the Participant on or before the close of business on the due date, UAMPS shall impose a delayed payment charge on the unpaid amount due for each day overdue at a rate equal to the lesser of one percent per month, compounded monthly, or the maximum rate lawfully payable by the Participant; provided, however, that UAMPS, acting upon the direction of the Project Management Committee, may elect to waive such delayed payment charge (or portion thereof) but only to the extent that any such waiver will not adversely affect the ability of UAMPS to meet its payment obligations under any contract entered into pursuant to this Agreement.

(f) The obligation of the Participant to make the payments under this Agreement is a several obligation and not a joint obligation with those of any other Participant. The obligation of the Participant to make such payments shall constitute a cost of purchased electric power and electric energy. In all cases, the obligation of the Participant to make the payments required by this Section shall be payable as an operating expense and solely from the revenues and other legally available funds of its Electric System. In no event shall the Participant be obligated or required to levy or collect ad valorem property taxes or assessments to meet its payment obligations under this Agreement. Such payments shall be made whether or not any market structure, program, or arrangement is modified, suspended, or terminated, and notwithstanding any interruption, curtailment, or limitation of market access, transmission availability, or other services, for any reason whatsoever, in whole or in part. The obligations of the Participant to make such payments shall not be subject to any reduction, whether by offset, counterclaim, or otherwise, and shall not be conditioned upon the performance by UAMPS under this or any other agreement or instrument

(g) In the event of any dispute as to any portion of the billing statement for such Billing Period, the Participant shall nevertheless pay the full amount of the disputed charges when due and shall give written notice of the dispute to UAMPS not later than the 60th day after such billing statement was submitted. Such notice shall identify the disputed billing statement, state the amount in dispute and set forth a full statement of the grounds for such dispute. No adjustment shall be considered or made for disputed charges unless such notice is given by the Participant. UAMPS shall give consideration to and shall consult with the Project Management Committee with respect to such dispute and shall advise the Participant with regard to its position relative thereto within sixty (60) days following receipt of such written notice. Upon final determination (whether by agreement or determination by the Project Management Committee) of the correct amount, any difference between such correct amount and such full amount shall be accounted for in the billing statement next submitted to the Participant after such determination.

Section 6. Rate Covenant. Each Participant covenants and agrees to establish, maintain, and collect rates, fees, and charges for electric service furnished through its Electric System that are sufficient together with other legally available funds of its Electric System to (1) pay all amounts payable by the Participant to UAMPS under this Agreement, including costs associated with power, energy, capacity, transmission, ancillary services, market settlements, administrative fees, and all other charges allocated pursuant to this Agreement; (2) pay all operation and maintenance expenses of the Participant's Electric System; (3) provide for the payment of principal and interest on any bonds or other indebtedness payable from the revenues of the Participant's Electric System, as and when the same become due and payable; and (4) establish reasonable reserves and margins, consistent with prudent utility practice, to ensure continued financial stability of the Participant's Electric System and compliance with any financial covenants imposed by bond resolutions, ordinances, or other financing agreements. Each Participant shall enforce the collection of such rates, fees, and charges and shall not furnish free electric service to any person, firm, or corporation, except as permitted under applicable law.

Section 7. Audit Rights.

(a) UAMPS shall conduct, or cause to be conducted, an annual review of market operations and settlement activity associated with the Project, settlements received from organized markets and related charge and revenue allocations to Participants. Such review shall be performed for the purpose of verifying the accuracy and consistency of settlement processing and allocation methodologies and evaluating operational decision making in the market for the purposes of improving future market operations. UAMPS shall report the results of such review to the Project Management Committee, including a summary of findings, any identified material discrepancies, and any corrective actions taken or proposed. The Project Management Committee may provide direction regarding follow-up actions or process improvements based on such report. Nothing in this Section shall be construed to expand or limit any audit rights of a Participant under this Agreement, nor to require UAMPS to engage an independent auditor unless otherwise directed by the Project Management Committee.

(b) At its cost, the Participant may, upon the giving of not less than 60 days' prior written notice to UAMPS, but not more often than once during any two-year period, inspect and audit the books and records of UAMPS for the purpose of verifying the amounts payable by the Participant under this Agreement within the three-year period preceding the commencement of the audit. UAMPS agrees to make available to the Participant, to the extent Commercially Reasonable, all relevant records and all requested information relating to the subject matter of any such audit, subject in all cases to any confidentiality restrictions applicable to third-party information or contracts; provided that UAMPS shall make Commercially Reasonable Efforts to obtain a waiver of such restrictions for purposes of the audit and the Participant shall execute such non-disclosure agreements as may be reasonably requested by UAMPS. Any audit shall be conducted during normal business hours, and the Participant will use Commercially Reasonable Efforts to complete any audit within one month, subject to the availability of relevant records and information and the absence of material accounting irregularities

(c) If any audit discloses that an overpayment or underpayment has been made during the three-year period described above, the amount of the overpayment or underpayment will be

promptly paid by the appropriate party, together with interest calculated at an annual rate equal to the Secured Overnight Funding Rate (SOFR) reported on the website of the Federal Reserve Bank of New York, or reported by any successor to the Federal Reserve Bank of New York as administrator of SOFR, plus 100 basis points, compounded daily and on the basis of a 360-day year, from the date or dates of any such overpayment or underpayment through and including the date of the payment correcting the overpayment or underpayment. Any payment made by UAMPS pursuant to this Section shall constitute a cost of electric power and electric energy.

Section 8. Representations and Warranties.

- (a) The Participant represents and warrants to UAMPS as follows:
 - (i) the Participant is a political subdivision, duly created and validly existing under the laws of the State of Utah, and has all corporate power and authority necessary to enter into and perform its obligations under this Agreement;
 - (ii) the Participant has all corporate power and authority necessary to enter into and perform its obligations under this Agreement;
 - (iii) this Agreement has been duly authorized, executed and delivered by the Participant and constitutes its legal, valid and binding obligation enforceable in accordance with its terms;
 - (iv) the execution, delivery and performance by the Participant of this Agreement does not and will not (A) conflict with any constitutional, statutory or regulatory provision, judgment, decree or order applicable to the Participant and (B) constitute a breach of or a default under any bond ordinance, resolution or indenture or any contract or agreement to which the Participant is a party or to which any of the property, assets or revenues of its Electric System is subject;
 - (v) all Required Approvals have been obtained; and
 - (vi) to the Participant's knowledge, there is no pending or threatened action or proceeding affecting the Participant which purports to affect the authorization, legality, validity or enforceability of this Agreement or the Joint Action Agreement.
- (b) UAMPS represents and warrants to the Participant as follows:
 - (i) UAMPS is a political subdivision of the State of Utah and an energy services interlocal entity, duly created and validly existing under the Act and the Joint Action Agreement;
 - (ii) UAMPS has all corporate power and authority necessary to enter into and perform its obligations under this Agreement;

(iii) This Agreement has been duly approved by the Project Management Committee and the Board and has been duly authorized, executed and delivered by UAMPS and constitutes its legal, valid and binding obligation enforceable in accordance with its terms;

(iv) the execution, delivery and performance by UAMPS of this Agreement does not and will not (A) conflict with any constitutional, statutory or regulatory provision, judgment, decree or order applicable to UAMPS and (B) constitute a breach of or a default under any bond ordinance, resolution or indenture or any contract or agreement to which UAMPS is a party or to which any of its property, assets or revenues is subject; and

(v) to UAMPS' knowledge, there is no pending or threatened action or proceeding affecting UAMPS which purports to affect the authorization, legality, validity or enforceability of this Agreement or the Joint Action Agreement.

Section 9. Indemnification and Liability

(a) UAMPS and the Participant shall defend and hold each other harmless from any and all claims, liability, and expense, including attorneys' fees, litigation expenses, and any judgment arising out of any bodily injury, death, or damage to property (other than bodily injury, death, or damage to property proximately caused by the other party or its servants or employees), occurring on their respective properties, including such injury, death, or damage as may be suffered by UAMPS or the Participant or by third parties, except that UAMPS and the Participant shall each be responsible for all claims of its respective employees, agents, and servants under workmen's compensation laws or any similar statutes. In no event shall either UAMPS or the Participant be liable to each other for any indirect, special, incidental, or consequential damages with respect to any claim arising out of this Agreement whether based on contract, tort, strict liability, or otherwise.

(b) The Participant acknowledges that (i) effective performance by UAMPS of its obligations under this Contract will require exercise of business judgment by UAMPS officers, directors, managers, personnel, and consultants on the basis of information available to them, and (ii) while UAMPS' aim will be to enhance value and reduce risk to the Participants, it is not reasonable to expect that value will be ideally maximized or that risk will be fully eliminated. In no event shall a claim of breach or event of default by UAMPS be based on the dissatisfaction of one or more of the Participants with transactions managed or entered into by UAMPS pursuant to this Contract, or with the nature or level of savings, costs, or risks associated therewith, absent a showing of gross negligence or willful misconduct by UAMPS. The sole remedy available to the Participant or another Participant that is dissatisfied with UAMPS' ability to achieve UAMPS' goals is to terminate this Contract in accordance with the Agreement; provided that upon a showing of gross negligence or willful misconduct by UAMPS the Participant may terminate this Agreement upon written notice to UAMPS, notwithstanding the five-year notice period otherwise applicable under Section 2, which notice will not become effective until the date on which the Participant has terminated its participation in all UAMPS projects and completed all associated obligations, and

shall not relieve the Participant or UAMPS of any obligation incurred prior to the effective date of termination.

(c) No member of the Board or the Project Management Committee, no officer or employee of UAMPS, no member of the governing body of the Participant nor any officer or employee of the Participant shall be individually or personally liable for any amount payable under this Power Supply Contract or be subject to any personal liability or accountability by reason of the execution and performance of this Power Supply Contract; *provided, however*, that this Section shall not be construed to relieve any officer or employee of UAMPS or the Participant from the performance of any official duty imposed by law or this Agreement.

Section 10. Uncontrollable Force. Neither UAMPS nor the Participant shall be considered to be in default in respect to any obligation hereunder (other than the obligation of the Participant to pay obligations under Section 5) if prevented from fulfilling such obligations by reason of an Uncontrollable Force. The party claiming an Uncontrollable Force shall give notice and reasonable details of any potential or actual Uncontrollable Force to the other party as soon as is reasonably practicable, shall provide regularly updated information as to the anticipated occurrence or duration of the Uncontrollable Force, and shall provide prompt notice when it is able to resume performance of those obligations that were affected as a result of the Uncontrollable Force. Either party rendered unable to fulfill any obligation by reason of an Uncontrollable Force shall exercise due diligence to remove such inability with all reasonable dispatch.

Section 11. Default; Dispute Resolution

(a) In the event of a failure of the Participant to observe, keep and perform any of the covenants, agreements or obligations on its part contained in the Agreement, UAMPS may, in addition to its other rights hereunder, bring any suit, action, or proceeding in law or in equity, including mandamus, injunction and action for specific performance, as may be necessary or appropriate to enforce any covenant, agreement or obligation of this Agreement against the Participant.

(b) In the event of any default by UAMPS under any covenant, agreement or obligation of this Agreement, the Participant's sole remedy for such default shall be limited to mandamus, injunction, action for specific performance or any other available equitable remedy as may be necessary or appropriate and in no event shall the Participant withhold or offset any payment owed to UAMPS hereunder.

(c) Prior to and as a condition to the filing of any action with respect to this Agreement under paragraph (a) above, the Participant shall first submit the dispute or matter in question to the Project Management Committee for mediation by giving notice in writing to UAMPS and the Chair of the Project Management Committee describing the dispute or matter and the issue or issues to be resolved. The Participant agrees to participate fully and in good faith in all mediation proceedings of the Project Management Committee. In the event that the Project Management Committee is unable to resolve or mediate such dispute or matter within 120 days

after UAMPS has received written notice of the dispute, the Participant shall have the right to initiate such proceedings as it may deem necessary.

(d) No member of the governing body, nor any officer or employee of UAMPS or the Participant shall be individually or personally liable for any payment under this Agreement or be subject to any personal liability or accountability by reason of the execution of this Agreement; *provided, however*, that this Section shall not relieve any officer or employee of UAMPS or the Participant from the performance of any official duty imposed by law or this Agreement.

Section 12. Notices.

(a) All notices, demands or other communications made pursuant to this Contract (each, a "Notice") may be sent by electronic mail, other mutually acceptable electronic means, a nationally recognized overnight courier service, first class mail or hand delivery. Notice shall be deemed given when received by the addressee, unless received on a day that is not a business day or received after 5:00 p.m. (receiving party's local time) on a business day, in which case Notice shall be deemed to have been received on the next following business day. In the absence of proof of the actual receipt date, the following presumptions will apply: (i) Notice sent by electronic mail shall be deemed to have been received upon the sending party's receipt of electronic confirmation of successful transmission; (ii) Notice sent by overnight mail or courier shall be deemed to have been received on the next business day after it was sent or such earlier time as is confirmed by the receiving party; and (iii) Notice sent by first class mail shall be deemed to have been received five business days after mailing.

(b) All Notices shall be sent by UAMPS to the business address or e-mail address of the Participant's Representative. All Notices shall be sent by the Participant to the business address or designated e-mail address of UAMPS. Either party may change its Notice address(es) by Notice to the other party.

Section 13. Miscellaneous.

(a) **Assignment.** This Agreement shall inure to the benefit of and shall be binding upon the respective successors and assigns of the parties to this Agreement; provided, however, that neither this Agreement nor any interest herein shall be transferred or assigned by either party without the prior written consent of the other party.

(b) **Severability.** If any section, paragraph, clause or provision of this Agreement shall be finally adjudicated by a court of competent jurisdiction to be invalid, the remainder of this Agreement shall remain in full force and effect as though such section, paragraph, clause or provision or any part thereof so adjudicated to be invalid had not been included herein.

(c) **No Merger.** This Agreement constitutes the entire and complete agreement of UAMPS and the Participant in respect of the Project and shall not be nor shall it be deemed to be modified, amended or superseded by any other agreement or contract between UAMPS and the Participant in respect of any other project or subject.

- (d) No Waiver. No failure or delay by UAMPS or the Participant in exercising any right, remedy, or power under this Agreement shall operate as a waiver of such right, remedy, or power. No single or partial exercise of any right, remedy, or power shall preclude any other or further exercise thereof or the exercise of any other right, remedy, or power. Any waiver of a provision of this Agreement shall be effective only if made in writing and signed by the party against whom the waiver is asserted, and no such waiver shall be deemed a continuing waiver unless expressly stated.
- (e) Relationship between the Parties. This Contract is not intended to create, nor shall it be deemed to create, any relationship between UAMPS and the Participant other than that of independent parties contracting with one another for the purpose of effectuating the provisions of this Contract.
- (f) Survival. The termination of this Contract shall not discharge either party thereto from any obligation it owes to the other party under this Contract by reason of any transaction, loss, cost, damage, expense, or liability which shall occur or arise (or the circumstances, events, or basis of which shall occur or arise) prior to such termination. It is the intent of the parties hereby that any such obligation owed (whether the same shall be known or unknown at the termination of this Contract or whether the circumstances, events, or basis of the same shall be known or unknown at the termination of this Contract) shall survive the termination of this Contract. Cancellation, expiration, or termination of this Contract shall not relieve the parties of obligations that expressly survive or by their nature should survive such cancellation, expiration, or termination.
- (g) No Third-Party Beneficiary. This Contract is intended solely for the benefit of the parties hereto. Except as necessary to enter into a Credit Agreement, subject to approval by the Project Management Committee, nothing in this Contract shall be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a party to this Contract.
- (h) Governing Law. This Agreement is made under and shall be governed by the law of the State of Utah; provided however, that if the Participant is organized or created pursuant to the laws of another state, then the authority of the Participant to execute and perform its obligations under this Agreement shall be determined under the laws of such state. All judicial proceedings brought against either party arising out of or relating hereto shall be brought exclusively in the courts of the State of Utah or of the United States of America for the District of Utah. By executing and delivering the Agreement, each party irrevocably accepts generally and unconditionally the nonexclusive jurisdiction and venue of such courts, waives any defense of *forum non conveniens*; agrees that service of all process in any such proceeding in any such court may be made by registered or certified mail, return receipt requested, to the party; and agrees that service as provided above is sufficient to confer personal jurisdiction over the party in any such proceeding in any such court, and otherwise constitutes effective and binding service in every respect.
- (i) Entire Agreement. This Contract supersedes all previous representations, understandings, negotiations, and agreements, either written or oral, between the parties or their representatives

with respect to the subject matter hereof and constitutes the entire agreement of the parties with respect to the subject matter hereof.

(j) Counterparts. This Contract may be executed in counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

[Signature Page Follows]

Dated this _____ day of _____, 2026.

BRIGHAM CITY

UTAH ASSOCIATED MUNICIPAL
POWER SYSTEMS

Mayor

Chairman

ATTEST

ATTEST

City Recorder

Secretary

**EXHIBIT 1
FORM OF ANNUAL PURCHASE PLAN**

Plan Information

Fiscal Year	
PMC Approval Date	
Effective Period	

Planning Overview

Aggregate Forecasted Deficiency (MWh)	
Peak Forecasted Deficiency (MW)	
Planning Assumptions / Notes	

Forecasted Deficiency Purchase Targets

Procurement Horizon	Target Coverage
12 months → 1 month ahead	Up to 80%
1 month → 2 days ahead	Up to 100%
Day Ahead / Real-Time	As needed

Planned Purchase Volumes

Month	Forecasted Deficiency	Purchased to Date	Remaining Uncovered
Apr			
May			
Jun			
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			
Jan			
Feb			
Mar			

Resource Sufficiency Evaluation (RSE)

Standard Approach	100% procured Day Ahead
Exceptions / Notes	

Flexible Resource Strategies (if applicable)

Tolling Agreement	<input type="checkbox"/> Yes <input type="checkbox"/> No
Dispatchable Resource	<input type="checkbox"/> Yes <input type="checkbox"/> No
Firm Market Purchase	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other	

Fine-tuned Load-following Purchases

Specific plans for shaping to be added here.

Attribution Statement

Forecasted Deficiency purchases are attributed to Participants at the time of purchase based on forecasted need. RSE purchases are made at the UAMPS level and allocated after-the-fact to Participants with RSE need.

Approval

PMC Chair	
Date	

EXHIBIT 2
FORM OF MEMBER LOAD & RESOURCE FORECAST

Forecast Information

Participant	
Fiscal Year	
Forecast Version	<input type="checkbox"/> Draft <input type="checkbox"/> Final
Date Prepared	

Summary Forecast

Gross Load (MWh)	
Gross Load (MW – Peak)	
Total Resources Capacity (MW)	
Total Resources (MWh)	
Forecasted Deficiency / (Surplus)	

Monthly Energy Summary

Month	Gross Load (MWh)	Resources (MWh)	Deficiency / (Surplus)
Apr			
May			
Jun			
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			
Jan			
Feb			
Mar			

Monthly Peak Summary

Month	Gross Peak Load (MW)	Resources (MW)	Deficiency / (Surplus)
Apr			
May			
Jun			
Jul			
Aug			
Sep			
Oct			
Nov			
Dec			

Jan			
Feb			
Mar			

Resource Detail

Resource Name	Type	Capacity (MW)	Energy (MWh)	Notes

Forecast Assumptions & Notes

Member Review & Confirmation

Approval Status	<input type="checkbox"/> Approved <input type="checkbox"/> Approved with corrections
Member Representative	
Date	

EXHIBIT 3
CONSIGNED RESOURCE [Non-UAMPS RESOURCE]

WHEREAS, [*Participant*] (the “Member”) is a participant of the UAMPS Pool Project;

WHEREAS, in order for the Member to schedule its [*Non-UAMPS Resource*] as part of their resource portfolio, it is necessary for the Member to enter into this Pooling Appendix to provide for responsibilities and authorities of each party and document the procedures to be used, and;

WHEREAS, Member desires that UAMPS act as its scheduling agent for scheduling services (“Scheduling Agent”) for its [*Non-UAMPS Resource*].

NOW, THEREFORE, the Member and UAMPS agree to the following.

SECTION 1. TERM

The term of this Pooling Appendix will begin May 1, 2026 and extends through the earlier of 1) the termination of the Amended and Restated Power Pooling Agreement; or 2) termination at the option of either Party upon the later of 30 days or the end of the scheduling month with written notice to the other Party or as provided for in Section 2 of the Amended and Restated Pooling Agreement and alternative procedures acceptable to UAMPS are in place.

SECTION 2. PURPOSE

This Pooling Appendix specifies the procedures for scheduling [*Non-UAMPS Resource*] as part of its resource portfolio due to the implementation of Extended Day-Ahead Market protocols (“EDAM Protocols”) administered by PacifiCorp in conjunction with the California Independent System Operator (“CAISO”). Member agrees that their scheduling of [*Non-UAMPS Resource*] is subject to the terms and conditions of this Pooling Appendix which may be amended from time to time by the agreement of the parties.

SECTION 3. MEMBER OBLIGATIONS, AUTHORITIES AND LIABILITIES

The Member shall provide preschedules to UAMPS according to the timeline specified in Attachment A hereto. Attachment A may be amended by UAMPS upon written notice to the Member. All scheduling of the [*Non-UAMPS Resource*] by the Member will be submitted through the UAMPS web scheduling interface. Except in instances where the web interface is not available, submittal of schedules by phone, email or other means of communication will not be acceptable.

For the purposes of UAMPS power billing, [*Non-UAMPS Resource*] will be deemed to [*information will be entered here on whether or not the Non-UAMPS Resource is in the CAISO*]

Full Network Model and whether or not the Non-UAMPS Resource incurs transmission costs] and the UAMPS pool will continue to be used to balance the Member's load pursuant to EDAM Protocols or policies established by the Pool Project's Project Management Committee. Differences, if any, between scheduled output that the Member has entered into UAMPS' billing database and the output measured by [*Non-UAMPS Resource*] meter(s) will be invoiced as imbalance energy.

SECTION 4. UAMPS OBLIGATIONS, AUTHORITIES AND LIABILITIES

UAMPS shall use the [*Non-UAMPS Resource*] schedules submitted from the Member according to the timeline specified in Attachment A in integrating and scheduling the Member's resources scheduled and billed by UAMPS to serve the Member's loads.

UAMPS will bid and schedule the Member's [*Non-UAMPS Resource*] in accordance with the Member's specific instructions.

SECTION 5. SCHEDULING AGENT SERVICE CHARGE

The Member will be charged a scheduling fee, transmission fee, and any other fee as adopted by the UAMPS Board of Directors from time to time.

Member also agrees to pay any other costs, if any, and any applicable administrative overheads as approved by the UAMPS Board of Directors that UAMPS may incur in the performance of this Pooling Appendix.

DATED this _____ day of _____, 2026.

[PARTICIPANT]

UAMPS

Attachment A

Duration for 1 Month and Longer (Term) Schedules:

The Member must notify UAMPS by the 19th of the prior month.

Day-Ahead Schedules:

The Member must notify UAMPS by 6:00 AM, 7 business days prior to the trade date. To the extent allowed under WECC and Balancing Authority criteria, UAMPS will accept changes to the 7 day schedule made by 6:00 a.m. [2] business days prior to the trade date.

Notification parties for Term, Balance of the Month, and Day Ahead transactions:

Pre-Scheduler	prescheduling@uamps.com	801-568-0497
Kelton Andersen	kelton@uamps.com	801-214-6406

Notification parties for unplanned outages or emergency situations:

Shift Scheduler	sched@uamps.com	801-568-0496 801-568-0596
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To report scheduling problems:

Jordan Garcia	jordan@uamps.com	385-377-2567
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**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

1. INITIATED BY: Tom Kotter

2. DEPARTMENT OR DIVISION: Administration

3. DATE INITIATED: February 11, 2026

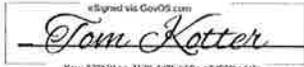
4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
Dave Berg presenting rate study information

5. ESTIMATED TIME NEEDED: 30 mins.

6. PROPOSED DATE FOR COUNCIL ACTION: February 19, 2026

7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Attachment</u>
February 11, 2026	Tom Kotter	 <small>eSigned via Gov035.com Key: 3295216a-7128-4d25-b69a-a3d09ba0c6e</small>	

9. MAYOR'S SIGNATURE:


eSigned via Gov035.com
Key: 005b890c-e6b3-440c-bd09-2f08b4e4e12c

**BRIGHAM CITY
AGENDA ITEM FOR CITY COUNCIL MEETING**

- 1. INITIATED BY: Donna Pett

- 2. DEPARTMENT OR DIVISION: Mayor's Office

- 3. DATE INITIATED: 2/11/26

- 4. BRIEF EXPLANATION OF PROPOSED ACTION (ATTACH OTHER DOCUMENTATION AS NECESSARY):
Annual Eagle Mountain Golf Course Report - Chris Marx

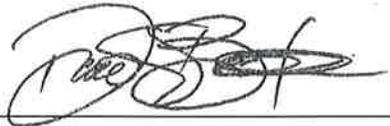
- 5. ESTIMATED TIME NEEDED: 10 min

- 6. PROPOSED DATE FOR COUNCIL ACTION: 2/19/26

- 7. EXPLANATION OF DEADLINE, IF APPLICABLE:

8. REVIEW

<u>Date</u>	<u>Name</u>	<u>Signature</u>	<u>Attachment</u>
_____	_____	_____	_____
_____	_____	_____	_____

9. MAYOR'S SIGNATURE:  _____