

## **Section 7 – Utilities**

### **General Utility Work Obligations**

This Section addresses the Utility Company (or Utility Owner) requirements. It does not apply to existing stormwater facilities, irrigation ditches, Intelligent Transportation Systems, video and video detection systems, traffic signals, or street lighting, all of which shall be installed, removed, relocated and/or protected in place by the Contractor and/or the Utility Owners pursuant to other sections of the Contract Documents.

The Project will have impacts to existing utilities within the Project limits. The Contractor shall coordinate and cooperate with CDOT and the Utility Owners to ensure that all Utility Work (whether performed or furnished by the Utility Owners or by the Contractor) is performed in accordance with the executed Utility Relocation Agreements (URA). The physical limits of the Contractor's obligation for the performance of Utility Work shall extend as far as is necessary to permit construction of the Project (taking into account the requirements of the Utility Owners, Governmental Persons with jurisdiction, and adjacent property owners), whether inside or outside the ROW.

The Contractor shall use reasonable efforts to anticipate and avoid Utilities, and to otherwise minimize and/or mitigate the consequences of the Utility Relocations.

The Contractor shall provide traffic control for any utility work expected to be coordinated with construction operations as directed by the Engineer.

The work described in these plans and specifications requires full cooperation between the Contractor and the Utility Owners in accordance with subsection 105.11 in conducting their respective operations so the utility work can be completed with minimum delay to all parties concerned.

### **Performance Standards**

#### **Utility Owners**

All Utility Relocation designs and construction of relocations furnished or performed by the Contractor shall be consistent with the Utility Owner's written specifications, standards of practice (which may include design format), and construction methods that are current at the Proposal Due Date, except as otherwise provided in the Utility Relocation Agreements. The Contractor shall obtain all such written specifications, standards of practice, and construction methods from the Utility Owners. In the event of a conflict between the requirements of the Utility Owner and the requirements of the Contract Documents, CDOT in its sole discretion will determine which shall govern. The Contractor shall be responsible for resolution of any unresolved ambiguity prior to proceeding with any Utility Work.

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Replacements for any existing Utilities shall be designed and constructed to provide service at least equal to that offered by the existing Utility, unless the Utility Owner approves a lesser replacement.

In performing the Utility Work, the Contractor shall ensure that all Utility Work results in Utilities being located in a manner to allow future Utility maintenance to be performed by the relevant Utility Owners without disruption to the operation or maintenance within the completed Project limits.

### Identification of Utilities

CDOT has completed an initial utility investigation and has identified all known Utilities that may be impacted by the Project. CDOT has not performed a complete investigation of service lines. The results of CDOT’s investigations are shown in the Reference Documents.

### Known Utilities

Utility Company	Contact Name/Email Address	Telephone/ Address
AT&T	Tom Jakse <a href="mailto:tjakse@clearwaterconsulting.net">tjakse@clearwaterconsulting.net</a>	720-289-5471 6510 S. Quebec St. Englewood, CO 80111
Centurylink (CTL)	Jodie Leonard <a href="mailto:Jodie.leonard@centurylink.com">Jodie.leonard@centurylink.com</a>	303-451-2379 5325 Zuni St., STE 728 Denver, CO 80221
City of Lakewood (COL) – Sanitary	Duane Rivard <a href="mailto:duariv@lakewood.org">duariv@lakewood.org</a>	303-987-7965 850 Parfet St. Lakewood, CO 80215-5599
City of Lakewood (COL) – Storm	A.J. Sandoval <a href="mailto:artsan@lakewood.org">artsan@lakewood.org</a>	303-987-7956 850 Parfet St. Lakewood, CO 80215-5599
City of Lakewood (COL) – Traffic	John Padon <a href="mailto:johpad@lakewood.org">johpad@lakewood.org</a>	303-987-7986 480 S. Allison Parkway Lakewood, CO 80226
Colorado Dept. of Transportation (CDOT) ITS	Jill Scott <a href="mailto:Jill.Scott@state.co.us">Jill.Scott@state.co.us</a>	303-512-5805 425 C Corporate Circle, Rm 156 Golden, CO 80401
Comcast Communications (Comcast)	Patrick Peak <a href="mailto:Pat_Peck@cable.comcast.com">Pat_Peck@cable.comcast.com</a>	303-603-5441 6850 S. Tucson Way Englewood, CO 80112
Consolidated Mutual Water (CMW)	Andy Rogers <a href="mailto:arogers@cmwc.net">arogers@cmwc.net</a>	303-238-0451 12700 W. 27 <sup>th</sup> Ave.

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		Lakewood, CO 80125
Denver Water Department (DWD)	Don Wyman <a href="mailto:don.wyman@denverwater.org">don.wyman@denverwater.org</a>	303-628-6628 1600 W. 12 <sup>th</sup> Ave. Denver, CO 80204
XCEL Energy-Electric Distribution	Brandon Allen <a href="mailto:Jonathan.b.allen@xcelenergy.com">Jonathan.b.allen@xcelenergy.com</a>	303-592-2748 555 Zang Street, Suite 250 Lakewood CO 80228
XCEL Energy-Gas	Brandon Allen <a href="mailto:Jonathan.b.allen@xcelenergy.com">Jonathan.b.allen@xcelenergy.com</a>	303-592-2748 555 Zang Street, Suite 250 Lakewood CO 80228

See Reference Documents (Utility Sheets) for approximate locations

**Unknown Utilities**

Unknown utilities not shown on the plans and discovered during construction that require relocation will be paid for by Change Order per section 109.04 of the Standard Specifications.

**Abandoned Utilities**

All abandoned public utility materials within the project limits will become property of the Contractor. All abandoned private utility materials within the project limits will be removed the private utility owner and coordinated with Contractors work. The Contractor shall verify with the utility owner that the utility material is abandoned before removal. The Contractor shall be responsible for removal and disposal of the materials for public utilities. The cost for removal and disposal of the abandoned public utility materials shall not be paid for separately but shall be included in the work.

**Contractors Investigations**

The Contractor shall take all actions reasonably practicable to identify and confirm the existence, exact location, size, and type of all Utilities within the Project limits or otherwise potentially impacted by the Project, whether or not such Utilities are shown in the Utility Data, including all potentially impacted service lines, without limiting its ability to negotiate a Change Order with respect to any Unidentified Utility. Such actions shall include making diligent inquiry at the offices of the Utility Owners, consulting public records, and conducting field studies (such as subsurface utility engineering, potholing), as appropriate, taking into consideration the possibility that Utility Owners may provide inaccurate or inexact information with regard to their Utilities. If the Contractor's investigations identify Unidentified Utilities, the Contractor shall notify CDOT and the relevant Utility Owner immediately upon discovery.

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Thereafter, CDOT, the Contractor, and the relevant Utility Owner shall execute a Utility No Conflict Close-Out Form, or pursuant to a Utility Work Authorization treat an Unidentified Utility as either a Contractor-Relocated Utility or an Owner-Relocated Utility.

### **Damage to Utilities Caused by the Contractor**

The Contractor shall be responsible for any damage caused by the Contractor or its Subcontractors, employees, or agents to property, Utilities, Structures, or Subcontractors, employees, or agents of the Utility Owners. The Contractor shall immediately notify the affected Utility Owner of any utility damaged by the Contractor during performance of the Work.

Promptly after the Contractor's discovery of such damage, or the Contractor's receipt of notice of any such damage from the Utility Owner or from any other source: (a) the Contractor shall repair the damage to the Utility Owner's satisfaction; or (b) at the Utility Owner's election, the Utility Owner may make such repairs at the Contractor's expense. The Contractor shall make payment to a Utility Owner within 60 Days of receipt of the Owner's invoice.

### **Multiple Moves**

The Contractor shall be responsible for all costs incurred by CDOT, the Contractor, or the Utility Owner to subsequently relocate any Utility already Relocated to accommodate the Project.

### **Utility Coordination**

#### **General**

The Contractor shall be responsible for all coordination with the affected Utility Owners to accomplish each Utility Relocation in accordance with the applicable Utility Relocation Agreements. In the discharge of its coordination responsibilities, the Contractor shall:

1. Keep Utility Owners fully informed of schedules with regard to Utility Work. The Contractor shall provide to the Utility Owners, as soon as practicable, an estimated schedule for their respective Utility Work and shall notify the Utility Owners of any significant changes to the schedule as soon as practicable.
2. Keep Utility Owners fully informed of changes that affect their Utilities.
3. Consider, to the extent practicable, Utility Owners' needs for the allocation of resources to perform their respective Utility Work in a timely manner.
4. Keep Utility Owners involved in making decisions that affect their Utilities so Utility Owners are able to provide uninterrupted service to their customers, or to be subject to the least interruption practicable as approved by the Utility Owner.
5. Avoid multiple Relocations of the same Private Utility, in accordance with the Contract Documents.

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### **Known Utility Coordination:**

- **DENVER WATER**

Denver Water has a 60 inch water line crossing 6<sup>th</sup> Ave west of Garrison Street. The water line was installed in approximately 1957 and is a pre stressed wire wound conduit with a steel cylinder and concrete wrap that should not be day lighted to avoid damaging it. The proposed construction may impact the cover over this line. Denver Water shall be notified and approve changes to the proposed grade of more than 2 feet plus or 1 foot minus from the existing grade over the existing 60 inch water line.

Denver Water is considering installing a 90” steel sleeve for future replacement of the existing water line. If Denver Water determines they want to include this work, a separate utility agreement between the Contractor and CDOT will be executed. CDOT will execute an agreement with Denver Water.

Contractor Responsibilities –

The Contractor shall be responsible for any impacts to the existing 60 inch water line, including costs, associated with the Contractor’s work.

Utility Company Responsibilities –

Denver Water Department shall review the proposed design over the water line. Denver Water Department shall inspect utility work performed by Contractor.

- **CENTURY LINK**

Century Link’s facilities crossing 6<sup>th</sup> Ave west of Garrison are believed to be abandoned.

Contractor Responsibilities –

The Contractor shall confirm with Century Link that the facilities are abandoned prior to any construction activities that impact these facilities.

Utility Company Responsibilities –

Century Link will determine if their facilities are abandoned.

- **CITY of LAKEWOOD – SANITARY SEWER**

The City of Lakewood has numerous sanitary sewer facilities within the limits of the project which may be impacted by construction.

Contractor Responsibilities –

Contractor shall coordinate with the City of Lakewood on all impacts to sanitary sewer facilities.

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Construction may impact the sanitary sewer line along the northeast side of the 6<sup>th</sup> Ave Garrison intersection and other manholes within the project limits. A minimum of 18 inches of vertical separation will be required between any wall footing and the existing sanitary sewer line. If this separation is not possible a minimum of 12 inches of vertical separation will be allowed if the pipe is replaced with new C900 PVC pipe with approved couplings. Any manhole relocations, modifications or adjustments shall meet the City of Lakewood standards. Access to manholes shall be provided as required by the City of Lakewood.

All proposed changes to the City of Lakewood sanitary sewer facilities shall be design in accordance with the City of Lakewood's Water and Sewer Rules and Regulations (latest version). Proposed changes will be submitted to the City for review and approval prior to Construction. The Contractor shall include review time in the Project schedule for review and approval by Lakewood.

### Utility Company Responsibilities –

- The City of Lakewood shall review and approve impacts to their facilities.
- The City will assist with determining the locations of their facilities.
- The City of Lakewood shall inspect utility work performed by the Contractor.

- **CITY of LAKEWOOD – TRAFFIC**

The Contractor shall coordinate any traffic signal and street lighting impacts with the City of Lakewood. See Section 14 for additional requirements.

- **XCEL –ELECTRIC**

Xcel has overhead electrical lines crossing 6<sup>th</sup> Ave just east of Garrison. Xcel will underground the overhead lines from pole to pole on the north east corner of the frontage road to the south east corner of the frontage road. The lines will be relocated underground in Garrison St. Comcast also has facilities on the existing poles that will be relocated.

Other overhead and electrical lines provide service to the traffic signal and street lighting. These will be impacted as determine by the Contractors design.

Electrical power is required for street lights and traffic signals.

### Contractor Responsibilities –

Contractor shall coordinate with Xcel to avoid impacts to any overhead or underground lines. The contractor shall coordinate with Xcel to identify power source locations. New meters will be required for street lights and traffic signals.

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A Builder's Call Line application shall be submitted by the Contractor for power source connections. The Contractor shall contact City of Lakewood Traffic Engineer for addresses for new meters.

### Utility Company Responsibilities –

Xcel will underground their overhead facility prior to the start of construction.

Xcel will identify power sources and meter locations.

Xcel Energy forces shall coordinate this work with Comcast Cable.

- **COMCAST**

COMCAST has overhead lines crossing US 6 under the existing bridge on the east side Garrison. COMCAST will relocate these overhead lines to Garrison Street prior to the start of construction.

### Contractor Responsibilities –

Contractor shall coordinate with Comcast to avoid impacts to any overhead or underground lines.

### Utility Company Responsibilities –

Comcast will relocate their facilities prior to the start of construction.

Comcast forces shall coordinate this work with Xcel Energy.

- **XCEL –GAS**

Xcel Gas has a multiple gas lines within the project limits.

### Contractor Responsibilities –

The Contractor shall provide Xcel with their proposed design and coordinate construction impacts with Xcel –Gas and notify CDOT of any impacts. Xcel shall determine if relocation of their facilities is necessary. The contractor shall include time for Xcel to design and construct new or relocated facilities impacted by the proposed construction.

### Utility Company Responsibilities –

Xcel will determine if proposed construction requires relocation of Xcel's facilities.

Xcel will design and construct any new or relocated gas lines impacted by the project.

- **CONSOLIDATED MUTUAL WATER**

Consolidated Mutual Water has a 6inch line in the north frontage road and other water line in Garrison St.

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### Contractor Responsibilities –

The Contractor shall determine if their proposed design and construction impact the water line. If impacts occur, the Contractor shall coordinate impacts with Consolidated Mutual Water. New water lines will be designed in accordance with Consolidated Mutual Water standards by Consolidated Mutual Water.

### Utility Company Responsibilities –

CMW will determine if proposed construction requires relocation of CMW facilities. CMW will design and construct any new or relocated water lines impacted by the project

## **Utility Meetings**

### **Between the Contractor and Utility Owners**

The Contractor shall schedule regular meetings with the relevant Utility Owners to complete the Utility Work pursuant to the terms of the Utility Work Authorization. The Contractor shall not unreasonably deny any request by a Utility Owner to meet regarding any Utility Work. The Contractor shall provide CDOT with at least 5 Days prior notice of any meeting with a Utility Owner, which CDOT may attend in its discretion, unless a shorter notice period is agreed to by CDOT and is reasonably necessary under the circumstances.

The Contractor shall be required to meet with each utility owner impacted by the work a minimum of thirty (30) days in advance of any construction operations to coordinate required utility work with the construction activity.

### **Between CDOT and the Contractor**

The Contractor and CDOT shall meet as necessary and otherwise as reasonably requested by the other party to discuss and resolve matters relating to the Utility Work.

The party proposing a meeting shall provide the other party with a minimum of 5 Days prior notice of any proposed meetings, unless a shorter notice period is agreed to and reasonably necessary under the circumstances.

### **Meeting Minutes/Correspondence**

The Contractor shall produce meeting minutes of all Utility Work meetings with Utility Owners and/or CDOT and shall distribute copies of the meeting minutes to CDOT for Review and, when such meetings were attended by a Utility Owner, to the relevant Utility Owner, not later than 7 Days after each meeting date. The Contractor shall provide copies of all correspondence between the Contractor and any Utility Owner to CDOT for Review no later than 7 Days after delivery.

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### **Review Schedules**

In developing the Project schedule, the Contractor shall allow appropriate time periods for the performance of all utility work and reviews identified.

The Contractor shall keep each utility owner advised of any work being done to its facility so that each utility owner can coordinate its inspections for final acceptance of the work with the Engineer.

The contractor shall provide written notice to each utility owner, with a copy to the Engineer, immediately prior to each utility work element expected to be coordinated with construction, and shall allow the expected number of working days for utilities to complete necessary work.

### **Notices**

#### **UNCC Requirements**

The Contractor shall comply with Article 1.5 of Title 9, CRS ("Excavation Requirements") when excavation or grading is planned in the area of underground utility facilities. The Contractor shall notify all affected utilities at least two (2) business days, (NOT INCLUDING THE DAY OF NOTICE OR THE DAY OF EXCAVATION) prior to commencing such operations. Contact the Utility Notification Center of Colorado (UNCC) at 811 or 1-800-922-1987 to have locations of UNCC registered lines marked by member companies. All other underground facilities shall be located by contacting the respective company. For CDOT owned utility facilities the Contractor shall call Jeff Lancaster of the Region 1 Traffic Section at 303-757-9950 to request locates. CDOT is not contacted when locates are requested through the UNCC. Utility service laterals shall also be located prior to beginning ANY excavation or grading.

#### **Failure of Utility Owner to Cooperate or Timely Perform**

The Contractor shall use reasonable efforts to obtain the cooperation of each Utility Owner as necessary for carrying out the Utility Work. The Contractor shall provide written notice to CDOT immediately for review if:

1. The Contractor becomes aware that any Utility Owner is not cooperating in identifying Utilities, negotiating, performing or approving any Utility Work.
2. A Utility Owner fails to complete design and/or construction work for which it is responsible on or before the deadline established
3. Based on the progress made by the relevant Utility Owner, the Contractor believes that there is a possibility that the Utility Owner will not complete the Relocation of an Owner-Relocated Utility or any other Utility Work as required within the time limits set and
4. In each case (1), (2), or (3) advising CDOT whether the Utility Owner has complied in all respects with the requirements of this Section, including compliance with the applicable and the applicable UWO with respect to the relevant portion of the Utility Work.

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After delivery of such notice, the Contractor shall continue to diligently pursue the Utility Owner's cooperation and shall assist CDOT in any attempts to reach a solution through the dispute resolution procedure outlined in the applicable URA. The Contractor shall document any incurred costs as a direct result of the Utility Owner's failure to cooperate or perform its obligations under the applicable URA in a timely manner.

In the event that CDOT pursues legal action against a Utility Owner pursuant to Section 43-1-1411, Colorado Revised Statutes, the Contractor shall cooperate as reasonably requested by CDOT in connection with such legal actions, including having the Contractor's staff and Subconsultants act as witnesses in such legal actions and providing information, reports, graphs, photos, plans, renderings, and similar materials to CDOT's counsel at the Contractor's expense.

### **Utility Work Procedure**

#### **Utility Agreements**

CDOT is finalizing Utility Relocation Agreement with Utility Owners whose Utilities are, or may be affected by the Project. Final URA's will be provided when complete. URA are expected to generally follow section

#### **Known Utility Coordination.**

If the Contractor identifies Utility Work that is required from a Utility Owner without an agreement, CDOT may enter into an agreement with such Utility Owner. The Contractor shall not be a party to any agreement and shall not be responsible for negotiating such agreement. CDOT will be responsible for drafting and negotiating the agreement. The Contractor shall be responsible to coordinate with such Utility Owner as if it had an executed URA.

#### **Exhibits -None**

#### **Deliverables**

At a minimum, the Contractor shall submit the following for Review, Approval, or Acceptance:

Project: US 6 & Garrison  
Project Sub Acct. No: 19478  
July 10, 2014  
**DRAFT Technical Requirements**

## **Section 7 – Utilities**

<b>Deliverable</b>	<b>Review, Acceptance, or Approval</b>	<b>Schedule</b>
As-Built plans	Acceptance	As required per Section 7.
Meeting minutes	Acceptance	As required per Section 7.
Correspondence between Contractor and any Utility Owner	Review	As required per Section 7.

All deliverables shall also conform to the requirements of Section 3, Quality Management.

The locations of utility facilities as shown on the Reference documents, and/or herein described, were obtained from the best available information.

Project: US 6 & Garrison  
Project Sub Acct. No: 19478  
July 10, 2014  
**DRAFT Technical Requirements**

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### **Project Special Provisions**