CHAPTER G34

UTILITY RELOCATION

PERFORMANCE

A. Basic Function:

1. The University of Washington (University) and Seattle Department of Transportation (SDOT) have identified possible Utility conflicts with the Project that may require relocation and Utilities that will require protection in place, or adjustment, and coordination with respective Utility Purveyors. Conflicts were identified where existing Utilities present possible conflict with the design presented in the 50% Schematic Design and Conceptual Documents.

   a. The following provides a brief description of the known Utilities within or that cross the Site. This is not a complete description of all Utilities in the area and does not supersede Design-Builder’s obligations under this Chapter to locate all Utility services within or that cross the Site.

   1) University: owns and operates water lines, combined sewer lines, a storm drain conveyance system, and a Utility Tunnel. These include, but are not limited to, an 8-inch waterline (pipe material unknown) located perpendicular to the existing NE Pacific Pl. roadway along the western portion of the existing Rainier Vista Corridor, a 12-inch clay pipe located along the centerline of the existing Rainier Vista Corridor, a storm drain conveyance system of various pipes that runs from the University campus perpendicular to the existing NE Pacific Pl. roadway along the western portion of the existing Rainier Vista Corridor and connects to the existing Metro Regulator Station south of NE Pacific Pl. prior to discharge to Lake Washington via the existing 84-inch combined sewer overflow noted below, and a 7-foot by 10-foot Utility Tunnel made of a concrete culvert aligned oblique to the existing NE Pacific Pl. roadway from north to south. The utility tunnel was constructed in 1949.

   2) King County Metro Utility (KC): KC owns and operates combined sewer mains and the University Regulator Station. These include a 138-inch concrete/concrete brick sewer main located below the existing NE Pacific Pl. roadway, a 96-inch (pipe material unknown) combined sewer located to the west of the existing NE Pacific Pl. roadway within NE Pacific St., a 84-inch concrete/concrete brick combined sewer overflow located along the western edge of the project area that extends into NE Pacific St. (this is a storm only line under normal conditions but acts as an overflow to the lake when King County turns the valves in their adjacent regulator station), and a regulator lift station located in the northwest corner of the existing Montlake triangle.

   3) SDOT: SDOT owns and operates traffic control and Intelligent Transportation System (ITS) facilities, street lights and associated electrical distribution. The electrical distribution includes a 1½-inch conduit distribution to street lighting located along the south side of the existing NE Pacific Pl. roadway and The Design-Builder shall work with SDOT or its contractors to design and construct any required protection, adjustment, or relocation of SDOT traffic control and ITS facilities.

   4) King County Metro Transit (Metro): Metro owns and operates overhead Metro bus transit wires. These include transit wires located along the north and south sides of the existing NE Pacific Pl. roadway. The Design-Builder shall coordinate with Metro or its contractors to design and construct any required protection, adjustment, or relocation of the overhead Metro transit wires.

   5) Seattle City Light (SCL): Seattle City Light owns and operates a power distribution line of unknown size with assumed distribution to existing lighting along the Burke...
Gilman Trail. The distribution includes a vault located along the north edge of the existing Burke Gilman Trail at the west side of the Rainier Vista Corridor. The Design-Builder shall coordinate with SCL and its contractors for any required protection, adjustment, or relocations required for the existing structures and distribution.

6) Puget Sound Energy (PSE): PSE owns and operates a major distribution, high pressure gas (HPG) main that includes a 12-inch welded steel pipe. The gas main is located along the existing Burke Gilman Trail, except at the Rainier Vista Corridor where the alignment shifts northwest and drops below the existing roadway in the Rainier Vista Corridor. An abandoned 8-inch gas main is located adjacent and north of the existing NE Pacific Place roadway pavement and follows the same alignment as NE Pacific Place from NE Pacific St to Montlake Boulevard. Maps of the existing gas main location are available upon request from PSE. The Design-Builder shall coordinate with PSE and its contractors for proposed utility relocations. The alignment of the utility relocation shall be reviewed and approved by PSE prior to construction.

7) Telephone/Communication (Qwest): Qwest owns and operates a telephone/communication distribution line that includes a distribution line located along the south edge of the existing Burke Gilman Trail alignment. The Design-Builder shall verify the Utility Purveyor.

b. Unless expressly stated otherwise, the specific descriptions of existing Utilities in this chapter or elsewhere in the RFP or Conceptual Documents do not limit or replace Design-Builder’s general obligations under this chapter.

2. The Design-Builder shall conduct all work necessary to locate and relocate all Utility services as required for construction of the Project. Elements of this Work shall include, but are not limited to:

a. All investigative work necessary to confirm the exact location, size and type of each Utility located within or adjacent to the Site.

b. Coordinate with University and Utility Purveyors with respect to the relocation of existing Utility services and/or installation of new Utility services as required for the Project and for compliance with University standards and City of Seattle codes.

c. For relocations of existing utilities, the Design-Builder shall initiate contact with the Utility Purveyor at the earliest possible time in order to begin working with the Utility Purveyor to develop an agreed relocation that meets the Project design and schedule.

3. In addition to the requirements of this chapter, Design-Builder shall comply with all applicable requirements of all other Chapters.

4. Where Utilities also must function as elements defined within another element group, they shall meet the requirements of both element groups.

5. Based on Utility information, the 50% Schematic Design and Conceptual Documents, and Design-Builder’s performance of its obligations with respect to the Project, additional Utility relocation Work may be necessary. The Design-Builder shall be responsible for determining what, if any, additional Utility relocations will be required to accommodate the Project; and shall work with Utility Purveyors to design and construct such relocations.

6. The Design-Builder is responsible for coordinating with Utility Purveyors and ensuring that Utilities that will be relocated are consistent with the Design-Builder’s commitment to the schedule.

B. Health and Safety:

1. The University and Fire Marshall shall be notified in advance of all water shutdowns and street
closures.

2. Access to Existing Utilities: any authorized agent of the University, the City of Seattle, or a Utility Purveyor may enter the Site to inspect, repair, maintain, rearrange, alter, or connect Utility facilities and equipment. The Design-Build shall cooperate with such efforts and shall avoid creating delays or hindrances to those doing such work. If the Design-Build determines, or if Utility Purveyor requests, that it or its representative must be onsite to protect its facility, the Design-Build shall give at least 14 Calendar Days advance notice to the Utility Purveyor prior to commencing any Work that impacts that Utility.

3. Physical security
   a. Provide clearance and security for temporarily relocated Utilities to reduce possible tampering and vandalism during Utility relocation. Provide minimum clearances for service and use.
   b. Prevent access by unauthorized persons to temporary facilities.

C. The Design-Build shall ensure that appropriate Best Management Practices (BMP) and Temporary Erosion and Sediment Control (TESC) measures are followed in the performance of all Utility Work and in accordance with the requirements of Chapter G2 Site Improvements.

D. Structures:
   1. Concealed or buried piping components: Design cover or concealment so that piping is not subjected to damaging stresses due to applied loads.
   2. Supports for Temporary Piping and Components: Support piping and components using the following:
      a. Supports that allow movement of the pipe without undue stress on the piping, tubes, fittings, components, or foundations.
      b. Substantiation: Details of supports, including engineering analysis.
   3. Structural Design of Components and Their Supports: In accordance with code.
      a. Safety Factor for Component Structural Elements: Two, based on weight of component.
      b. Anchors: Securely and positively attach piping to supports.

E. Durability:

F. Amenity and Comfort:
   1. Public Amenity: Conduct operations so as to cause minimum disturbance to users of the right-of-way and adjacent property Owners.
   2. Conceal unsightly temporary Utilities and facilities from public view.

G. Operations and Maintenance
   1. Maintenance of Utility Service: Maintain services as specified in Chapter G3 and Chapter 00830 Design and Construction Procedures, including periodic inspections, routing maintenance recommended by manufacturers, and repair and replacement of defective elements. All Utilities shall remain operational during all phases of construction, except as specifically allowed and approved in writing by the Utility Purveyor. The Design-Build shall obtain the Utility Purveyor’s approval in writing prior to any temporary diversion or interruption of service of any Utility facilities.

H. Substantiation
1. The Design-Builder shall maintain construction and inspection records in order to ascertain that the work is accomplished in accordance with the terms and in the manner proposed on the approved plans and otherwise in accordance with the requirements of the Contract documents.

2. Utility As-Built Plans: Upon Closeout, Design-Builder shall deliver to the City of Seattle and University a complete set of Utility as-buil t plans and design files that incorporate all changes and details of the relocation work. All as-built plans shall be of a quality and format acceptable to City of Seattle and University, showing the location of all Utilities within the Limits of Work and within the Project’s right of way.

METHODS OF CONSTRUCTION

A. All utility Work (whether performed by the Design-Builder or by the Utility Purveyor) shall comply with all applicable federal, state and local rules and regulations and any applicable permits or franchises, in addition to the standards provided below. The Design-Builder’s performance of the Utility Work shall comply with all applicable requirements of the Contract Documents. The Design-Builder is responsible for obtaining all Utility standards from the Utility Purveyors, and for obtaining all other standards relating to the Utility Work that will impact the Utility facilities.

B. Construct using the following practices and procedures:
   3. Construction involving University utilities will be coordinated with the University and constructed using guidelines founding the Facilities Services Design Guide.
   4. Other construction standards of Utility Purveyors encountered within or adjacent to the Site., current edition

C. The Design-Builder shall obtain, or ensure that the Utility Purveyor obtains, all governmental approvals and other clearances, permits, approvals and agreements necessary for a relocation, and shall verify that the same have been obtained prior to commencing or permitting the commencement of any construction affected thereby. The Design-Builder shall verify that the Work performed (whether by the Design-Builder or by or on behalf of the Utility Purveyor) complies with the requirements of such governmental approvals and other clearances, permits, approvals and agreements.

D. The Design-Builder shall perform all Work that will impact Utilities, and shall support, secure, and exercise care with respect to Utilities to avoid damage to them. The Design-Builder shall ensure continuity of all existing Utility services to all users except when the Utility Purveyor determines that temporary interruption is necessary and acceptable. The Design-Builder shall not move or remove any Utility without the written consent of the Utility Purveyor, unless otherwise directed by University. All costs required to protect Utilities during the course of the work shall be the Design-Builder’s responsibility.

E. The Design-Builder shall comply with all applicable governmental rules relating to grading or excavation in the area of underground Utilities. Before starting construction that may affect any Utilities in a particular area (whether underground or overhead), the Design-Builder shall notify the affected Utility Purveyors in writing at least 30 Calendar Days prior to the start of the work. It is the responsibility of the Design-Builder to contact the Utility One-Call Locate Center at 1-800-424-5555 prior to performing any excavation. The Design-Builder is responsible for maintaining all appropriate clearances and setbacks from active power lines per SCL Construction Guidelines.

F. If any Utilities are damaged by Design-Builder activities, the Design-Builder shall immediately notify
the affected Utility Purveyor, the Utility One-Call Locate Center, and University. The Design-Build
shall bear all costs associated with damage caused by the Design-Build, including Utility downtime,
reconstruction, all remediation of hazards, litigation, loss of product, Utility start up, and delay
costs. At the Utility Purveyor’s request, the Design-Build shall repair the damage; or the Utility
Purveyor may choose to repair the damage at the Design-Build’s expense. All repairs by the
Design-Build shall be performed to the reasonable satisfaction of the Utility Purveyor. The Design-
Builder shall pay any reimbursement due pursuant to this paragraph within 30 Calendar Days after
receipt of the Utility Purveyor’s invoice, therefore, unless otherwise provided in an applicable
relocation agreement.

G. The Design-Build shall perform all inspection, sampling, and testing of the Utility Purveyors’ and the
Design-Build’s relocation work necessary to comply with its obligations under the Contract
Documents. The Design-Build shall immediately notify the University and the Utility Purveyor
regarding any noncompliance. Each Utility Purveyor shall have the right to inspect construction
performed on its Utilities by the Design-Build. The Design-Build shall not unreasonably refuse
such inspection requests and shall coordinate the schedule and scope of such inspections with the
Utility Purveyor. The Design-Build shall obtain the Utility Purveyor’s written acceptance of each
Utility for which Design-Build performs the construction relocation work promptly upon completion of
the work.

H. The Design-Build shall remove any permanently out of service Utility facility from the Site unless the
University and the City of Seattle approve abandonment of the facility in place; this includes existing
abandoned Utilities. Abandonment in place shall mean allowing elements of the Utility facility to
remain in the project site following flushing, capping, grouting, and other work required to meet Utility
standards and/or applicable law (whichever is more stringent).

I. The Design-Build shall be responsible for all Work associated with the removal and disposal of
permanently out of service Utility facilities. If the University and the City of Seattle approves
abandonment of a Utility, the Design-Build shall make all arrangements and perform all Work
necessary for any proposed abandonment including design, construction, and in each instance,
obtaining consent from affected Utility Purveyors and any affected landowner(s), as well as any
necessary governmental approvals, University approvals, City of Seattle approvals, and/or permits (or
the Design-Build shall confirm that the Utility Purveyor has performed the same). The Design-
Builder shall notify the University of any Utilities that will be abandoned or removed.

J. The Design-Build shall be responsible for ensuring the continued safe operation and structural
integrity of all Utilities by protecting in place those Utilities not requiring or allowing relocation in order
to construct the Project. The protection in place requirements in this Chapter shall apply to any
Utilities that will remain in place, and Utilities newly reinstalled as part of the relocation work and prior
relocations. The Design-Build will be responsible for identifying Utilities affected by their design,
determining if Utility relocations will be required, and managing the relocation process. Protection in
place may be permanent or temporary, depending upon the types of measures that are necessary to
satisfy the specified requirements of a particular Utility.

END OF CHAPTER G34
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