

Sewall Wetland Consulting, Inc.

PO Box 880 Fall City, WA 98024 Phone: 253-859-0515

July 28, 2020

Sean Northrop City Heights Holdings LLC 116 ½ Washington Street Seattle, Washington 98104

RE: City Heights Phase I Summit View Road – Critical Areas Report & Improvement Impacts Analysis SWC Job #A9-121

Dear Sean,

This report is a description of the critical areas in the areas of the proposed impacts from the re-alignment of Summit Road through the City Heights Phase I project in the City of Cle Elum, Washington.



Above: Vicinity Map of approximate area of site

Specifically, this report addresses the portion of the project depicted on the Blueline plans titles "Critical Area Crossing- City Heights Phase I (PDDS B7 & C)" dated 7-28-20. This report is an update to portions of the Sewall Wetland Consulting, Inc. October 26, 2009 "City Heights – City of Cle Elum – Wetlands and Wildlife Habitat Report". This report was reviewed and approved as part of the EIS process at that time. In the approved City Heights Annexation and Development Agreement (see attached), the buffers and classifications of the wetlands and streams were vested at that time.

City Heights is an approved Planned Mixed Use development that is approved to be built out in phases. City Ordinance 1353 (Planned Action Ordinance-November 8, 2011) and the November 2011 City Heights Annexation and Development Agreement (DA) include parameters for vesting, development standards, and project options and obligations among other things. The DA vests the project to code in effect as of November 8, 2011. Per DA Appendix B, Critical Areas (Title 18).1 "The critical area designations and delineations set forth in the EIS shall be deemed the final determination of the identification, designation, and extent of critical areas and boundaries for purposes of applying and implementing the provisions of city the City's critical area ordinance(s) set forth in Title 18 of CEMC." An excerpt from Appendix B has been attached to this letter for reference.



Above: Aerial photograph from Kittitas Mapsifter website.

METHODOLOGY

Ed Sewall of Sewall Wetland Consulting, Inc. inspected the site and areas within 200' of the site in June and July of 2009, as well as on June 2, 2020. The site was reviewed for the presence of wetlands and streams. The site was reviewed using methodology described in the **Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)** (USACOE September 2008) as required by the US Army Corps of Engineers starting in June of 2009. This is the methodology currently recognized by the Kittitas County for wetland determinations and delineations. The site was also reviewed using methodology described in Soil colors were identified using the 1990 Edited and Revised Edition of the **Munsell Soil Color Charts** (Kollmorgen Instruments Corp. 1990.

OBSERVATIONS

Existing Site Documentation.

Prior to visiting the site, a review of several natural resource inventory maps was conducted. Resources reviewed included the National Wetland Inventory Map, WA DNR Fpasr stream mapping website, and the Kittitas County Taxsifter website and the NRCS Soil Survey online mapping and Data.

WADNR Fpars stream Typing Website

The WADNR Fpars Stream Typing website depicts a Type F stream passing through the site at both crossings. Note, many of these streams in this inventory are interpolated from aerial photographs and topographical mapping with no field verification.



Above: WADNR Fpars Stream mapping of the site.

National Wetlands Inventory (NWI)

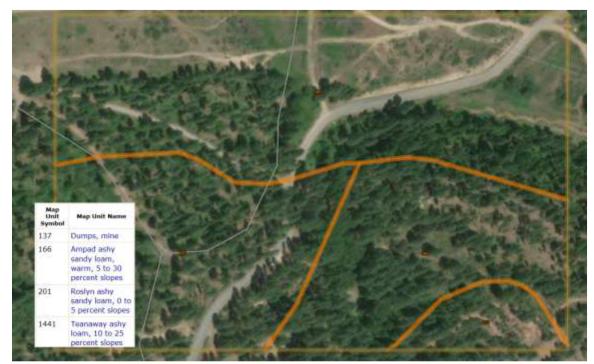
The NWI map depicts streams as shown on the WADNR Fpars mapping and is a carryover from that inventory. As detail in the online data, this mapping was done through "photointerpretation" using a 1:50,000 scale color infrared photograph taken in 1983. No field verification was done for this inventory area.



Above: NWI map of the area of the site

Soil Survey

According to the NRCS Soil Mapper website, the areas of the crossings area mapped as Teanaway ashy loam, 10%-25% slopes, and Roslyn ashy loam, 0%-5% slopes. Neither of these soils types are considered a wetland soil according to the publication Hydric Soils of the United States (USDA NTCHS Pub No.1491, 1991).



Above: NRCS soil map of the site.

Field observations

Stream C, Wetland C

Stream C

Stream C is an intermittent stream channel which passes under Summit Road in two locations. This stream has had substantial modification/alteration as it passes through the site.

The upper, north end of the stream under the power line is a diffuse meandering channel that passes through Wetland B with no well-defined channel except where it exists a culvert under a power line access road at the north edge of the site. This area has been disturbed by clearing as well as off-road vehicle disturbance consisting of tire ruts. Water sheet flows through Wetland B and enters a large, sand filled culvert under Summit View Road before discharging into Wetland C. There is no defined channel through Wetland C although water ponds and follows tire ruts in the wetland to a defined channel outlet at the south end of the wetland. At the south end of Wetland C, a ditched channel funnels flow to the southwest. The OHWM of the channel was flagged in 2009

with flags OHWM NC1-NC33 and OHWM SC1-SC33. The stream passes back under Summit View and then travels in a deeply dug and incised ditch, as well as through an old mine control structure, to the southwest. The channel then appears to spread out and follow an old road bed and most likely infiltrate in this area. Past this diffuse area with no apparent channel, a stream bed becomes visible again as a narrow (18") channel before passing back though an 18"-24" culvert under a gravel driveway to the south. The stream then appears to sheet flow into a meadow with no apparent defined stream bed before appearing to enter Crystal Creek near the Coal Mine trail. The channel is highly modified and doesn't appear that fish could possibly utilize the diffuse and narrow channel heih appears to be primarily a channel that flows only during snow melt Conversations with a neighbor in 2009 also indicate that in the sprint. much of the water that discharges from this channel infiltrates under the gravel driveway near its southwest end migrating south under the roadbed into the meadow below. He stated little flow actually goes through the culvert.

Historically this channel appears to have gone south from Wetland C and down through the ravine and stream channel near Stafford Street.

The WADNR Fpars Maps indicate this is a Type F water, which indicates some use by fish. However, this seems to be a mapping error as it does not seem possible for fish to pass through the flat areas with no defined channel and the blockages throughout this feature. This stream is dry in the summer and appears more appropriately identified as a Type 4 water as identified under the Code which this project is vested. Typically, Type 4 streams have a 25' buffer in the City of Cle Elum measured from the OHWM under the 2009 vested Code.

Wetland C

Wetland C is a forested wetland located in the Steam C riparian corridor at the north edge of the limits of this Phase of the project. This wetland is an apparent historic excavation presumably related to past mining operations. The wetland is defined by steep sides and a large fill berm at its south end. The bottom of the wetland is flat and has been disturbed by trucks "mudding" in the bottom creating ruts and bare—This wetland was flagged in 2009 with pink flags labeled C1-C18. The wetland edge remains the same as observed in 2009.

This wetland appears to have a very short seasonally flooded period which creates wetland conditions. The wetland get its hydrology primarily from the discharge of Stream C, which enters the wetland on the north at Summit Road from Wetland B (located outside the limits of this Phase) and spreads out through the bottom of the wetland.

The wetland is vegetated with an overstory of cottonwood with a sparse understory of willow, and red-osier dogwood with little in the herb strata other than quackgrass around the perimeter.

Soil pits excavated within the wetland revealed a mix of laminar silts indicating significant recent soil migration into the area. The soil was found to be saturated at a depth of -6" from the surface. Soils were found to have a matrix color of 10YR 3/2 with few, fine faint redoximorphic concentrations.

Using the vested City of Cle Elum Code from 2009, which utilizes the older 1991 Washington Department of Ecology Wetland Rating System. Wetland C received a total score of 22 points indicating a Category II wetland. According to the vested Chapter 18.01.460 of City Code, Category II wetlands have a 100' buffer measured from the wetland edge.

Proposed Project

The proposed realignment of Summit View Road will occur starting at West 6th Street near its intersection of Reed Street and reconnect to the existing Summit View Road Alignment to the north.

There are three (3) impacts to critical areas/buffers from this proposed road re-alignment;

- 1) Proposed Crossing of Stream C with an arch pipe culvert.
- 2) Proposed Crossing of Stream C with a small footbridge and hanging utilities.
- 3) Proposed Stormwater outfall to buffer of Stream C.

Impact 1. Proposed Crossing of Stream C with an arch pipe culvert.

The proposed alignment would cross Stream C, a previously identified Type 4 stream with a 25' buffer, to the east of the current crossing. As described above, the project is currently grandfathered under the old

Code rating and buffers approved in the EIS process. This stream under current WDFW nomenclature would now be classified as a Type Ns stream.

The proposed crossing would be accomplished with an 11' wide bottomless culvert or as permitted by WDFW through the HPA process (see attached drawing – Blueline Group Sheets CA-01-CA-03). Though the project is vested to prior City Code, the HPA is reviewed under current state regulation under the purview of WDFW.

This crossing is in an area of an informal mountain bike park and is a heavily disturbed area. The channel is a well-defined dug ditch in the crossing area that is dry most of the year except in the spring when snow melt occurs. To minimize impacts to the stream corridor the proposed arched culvert will span the OHWM of the stream. Proposed underground utilities which cannot fit over the culvert will be installed at the existing stream crossing which is already culverted.

The existing stream crossing is located 150 downstream of the proposed new culvert and consists of a 4' plastic pipe under the existing paved Summit View Road. This existing crossing will remain as it allows proposed utilities to be installed beneath the culvert without adversely impacting an open channel. The roadway will be converted from its current 18' full time paved roadway to a 12' gravel path that will double as a service road subject to only occasional use by City personnel as needed to inspect and maintain underground utilities in the corridor.

The new road crossing will impact 2,394sf of stream buffer. There will also be 553sf of temporary buffer impacts that result from grading.

Proposed Mitigation

This buffer impact will be mitigated through "averaging" the buffer and adding an additional area of equal size to the buffer in the vicinity of the crossing (see Sheet CA-01 of the Blueline Plan set).

The 553sf of area that will be temporality impacted will be restored with native plantings to include 15 snowberry plants in 2 gallon containers.

The removal of asphalt along the existing stream crossing will include decompaction of the soils and seeding with a native grass seed mix.

Impact 2. Proposed Crossing of Stream C with a small footbridge and hanging utilities.

The proposed footbridge crossing the Type 4 stream will impact 374sf of buffer, as well as have 248sf of temporary impact for grading for utility installation.

Proposed Mitigation

This buffer impact will be mitigated through "averaging" the buffer and adding an additional area of equal size to the buffer in the vicinity of the crossing (see Sheet CA-03 of the Blueline Plan set).

The 248sf of area that will be temporality impacted will be restored with native plantings to include 7 snowberry plants in 2 gallon containers.

Impact 3. Proposed Stormwater outfall to buffer of Stream C.

The proposed stormwater outfall will be located within the 25' buffer of Stream C. The permanent impact to the buffer from the outfall structure is 720sf. This will be mitigated by averaging a slightly larger area (766sf) to the east of the impact along the stream buffer (see Sheet CA-03 of the Blueline Plan set).

If you have any questions in regards to this report or need additional information, please feel free to contact me at (253) 859-0515 or at esewall@sewallwc.com.

Sincerely,

Sewall Wetland Consulting, Inc.

Ed Sewall

Senior Wetlands Ecologist PWS #212

Attached – Critical Areas Crossing Plan Sheets CA-01 through CA-03 Blueline Group dated 7-28-20

REFERENCES

Cowardin, L., V. Carter, F. Golet, and E. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, FWS/OBS-79-31, Washington, D. C.

Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1. U. S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, Mississippi.

Muller-Dombois, D. and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. John Wiley & Sons, Inc. New York, New York.

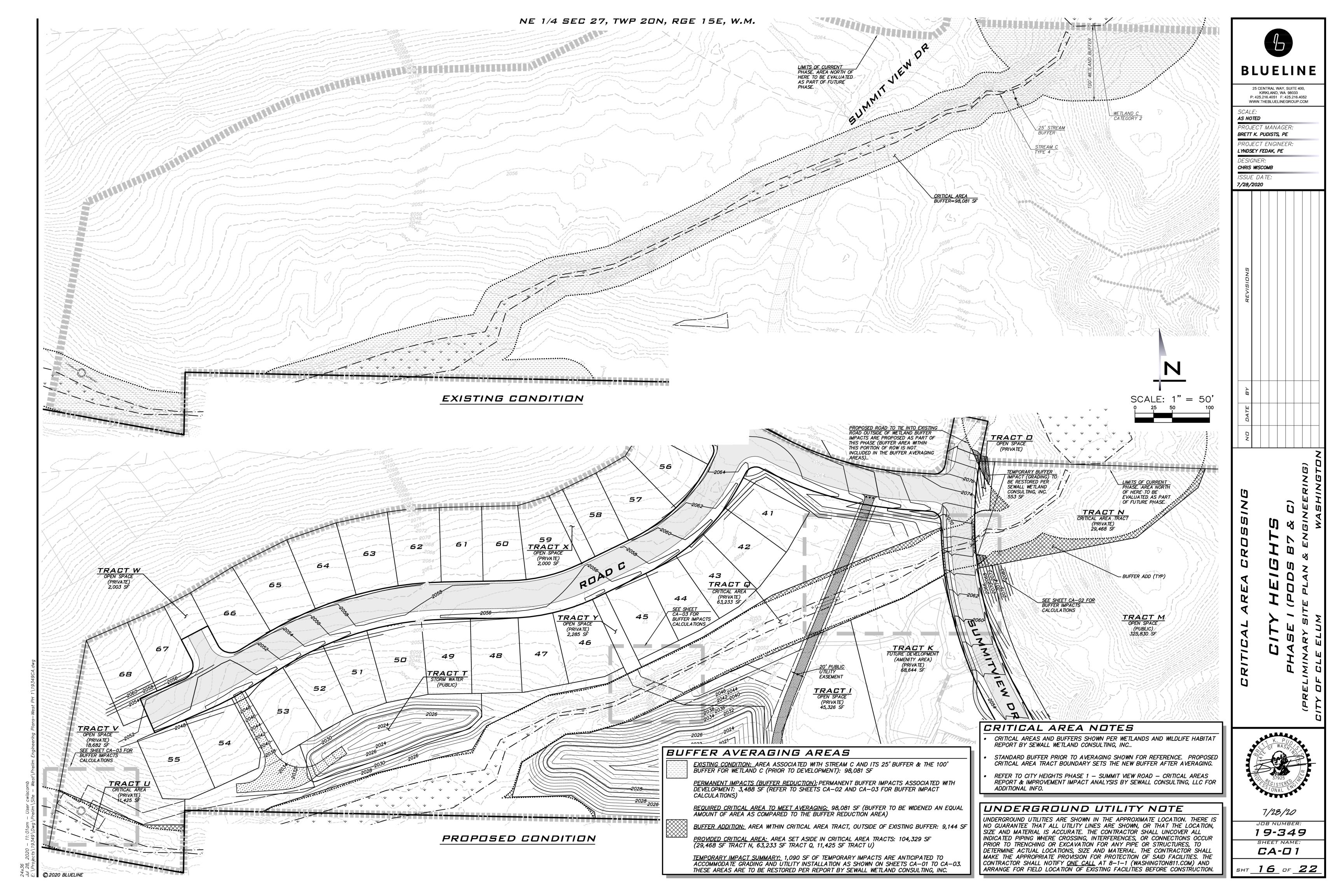
Munsell Color. 1988. Munsell Soil Color Charts. Kollmorgen Instruments Corp., Baltimore, Maryland.

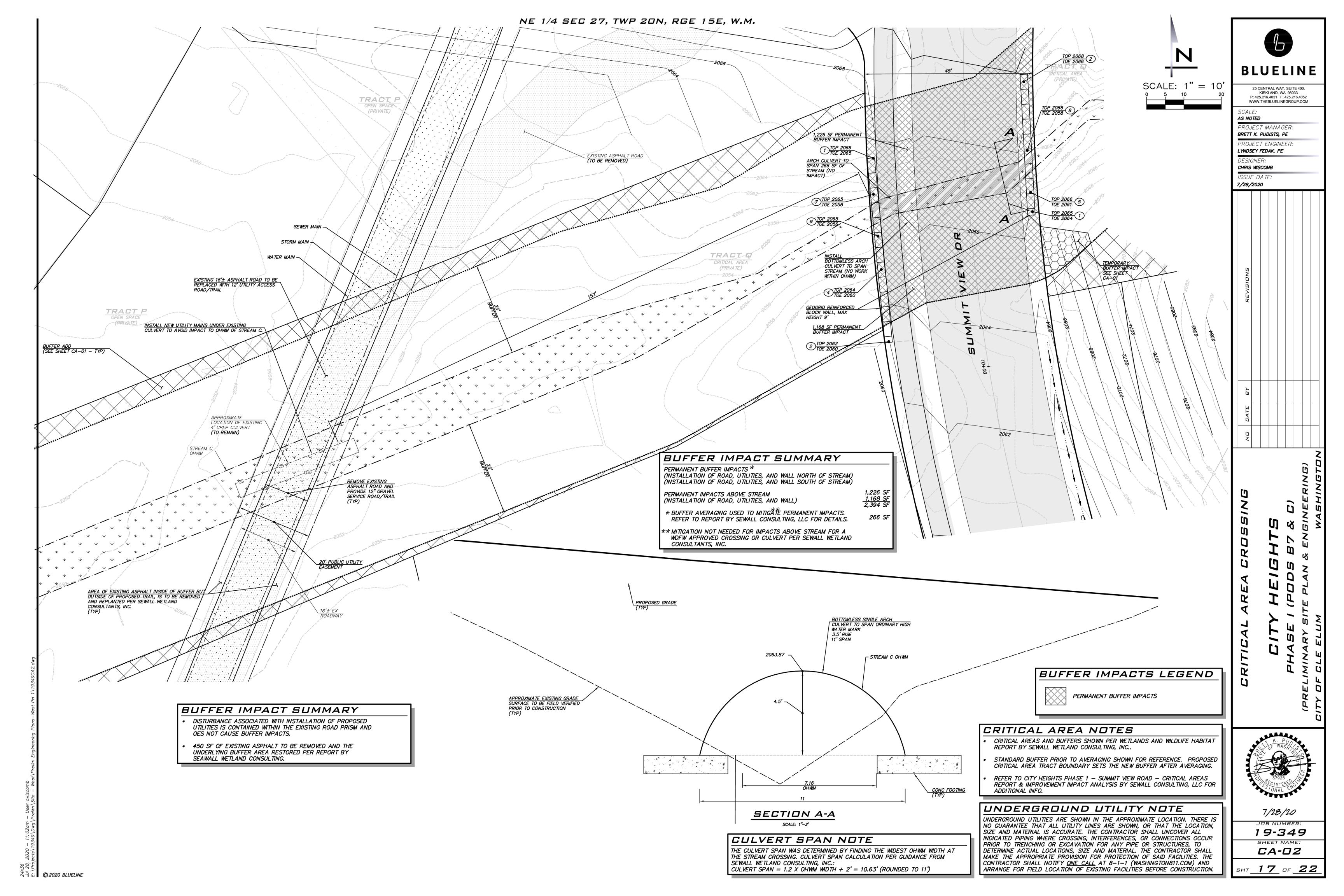
National Technical Committee for Hydric Soils. 1991. Hydric Soils of the United States. USDA Misc. Publ. No. 1491.

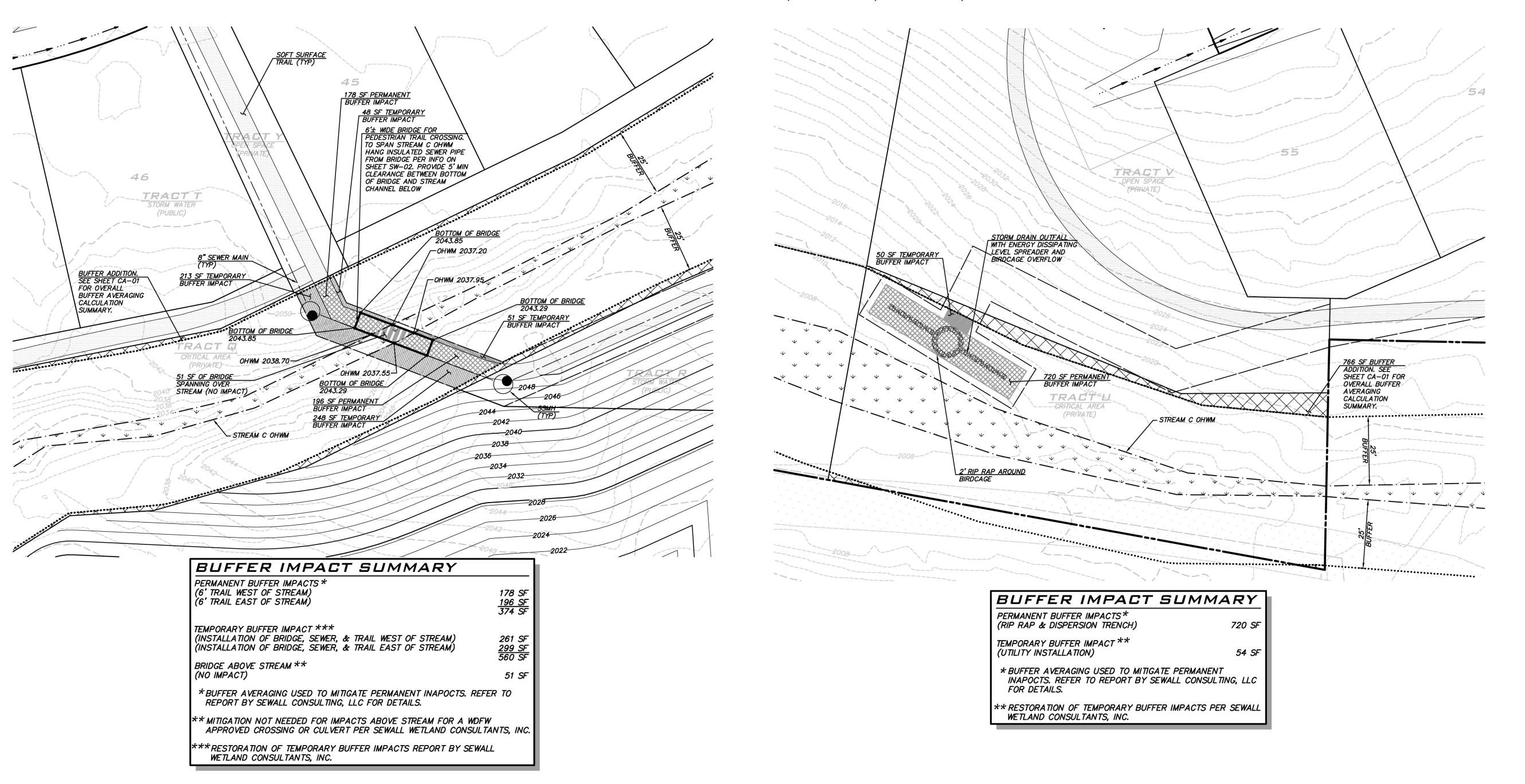
Reed, P., Jr. 1988. National List of Plant Species that Occur in Wetlands: Northwest (Region 9). 1988. U. S. Fish and Wildlife Service, Inland Freshwater Ecology Section, St. Petersburg, Florida.

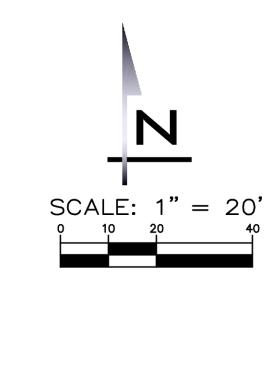
Reed, P.B. Jr. 1993. 1993 Supplement to the list of plant species that occur in wetlands: Northwest (Region 9). USFWS supplement to Biol. Rpt. 88(26.9) May 1988.

USDA NRCS & National Technical Committee for Hydric Soils, September 1995. Field Indicators of Hydric Soils in the United States - Version 2.1











25 CENTRAL WAY, SUITE 400, KIRKLAND, WA 98033 P: 425.216.4051 F: 425.216.4052

WWW.THEBLUELINEGROUP.COM AS NOTED

PROJECT MANAGER: BRETT K. PUDISTS, PE PROJECT ENGINEER:

LYNDSEY FEDAK, PE CHRIS WISCOMB

7/28/2020

BUFFER IMPACTS LEGEND

PERMANENT IMPACTS (ABOVE STREAM)

TEMPORARY IMPACTS (ABOVE STREAM)

PERMANENT BUFFER IMPACTS

TEMPORARY BUFFER IMPACTS

CRITICAL AREAS AND BUFFERS SHOWN PER WETLANDS AND WILDLIFE HABITAT REPORT BY SEWALL WETLAND CONSULTING, INC..

STANDARD BUFFER PRIOR TO AVERAGING SHOWN FOR REFERENCE. PROPOSED CRITICAL AREA TRACT BOUNDARY SETS THE NEW BUFFER AFTER AVERAGING.

REFER TO CITY HEIGHTS PHASE 1 - SUMMIT VIEW ROAD - CRITICAL AREAS REPORT & IMPROVEMENT IMPACT ANALYSIS BY SEWALL CONSULTING, LLC FOR

UNDERGROUND UTILITIES ARE SHOWN IN THE APPROXIMATE LOCATION. THERE IS NO GUARANTEE THAT ALL UTILITY LINES ARE SHOWN, OR THAT THE LOCATION, SIZE AND MATERIAL IS ACCURATE. THE CONTRACTOR SHALL UNCOVER ALL

INDICATED PIPING WHERE CROSSING, INTERFERENCES, OR CONNECTIONS OCCUR

MAKE THE APPROPRIATE PROVISION FOR PROTECTION OF SAID FACILITIES. THE

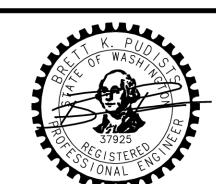
CONTRACTOR SHALL NOTIFY ONE CALL AT 8-1-1 (WASHINGTON811.COM) AND ARRANGE FOR FIELD LOCATION OF EXISTING FACILITIES BEFORE CONSTRUCTION.

PRIOR TO TRENCHING OR EXCAVATION FOR ANY PIPE OR STRUCTURES, TO DETERMINE ACTUAL LOCATIONS, SIZE AND MATERIAL. THE CONTRACTOR SHALL

UNDERGROUND UTILITY NOTE

CRITICAL AREA NOTES

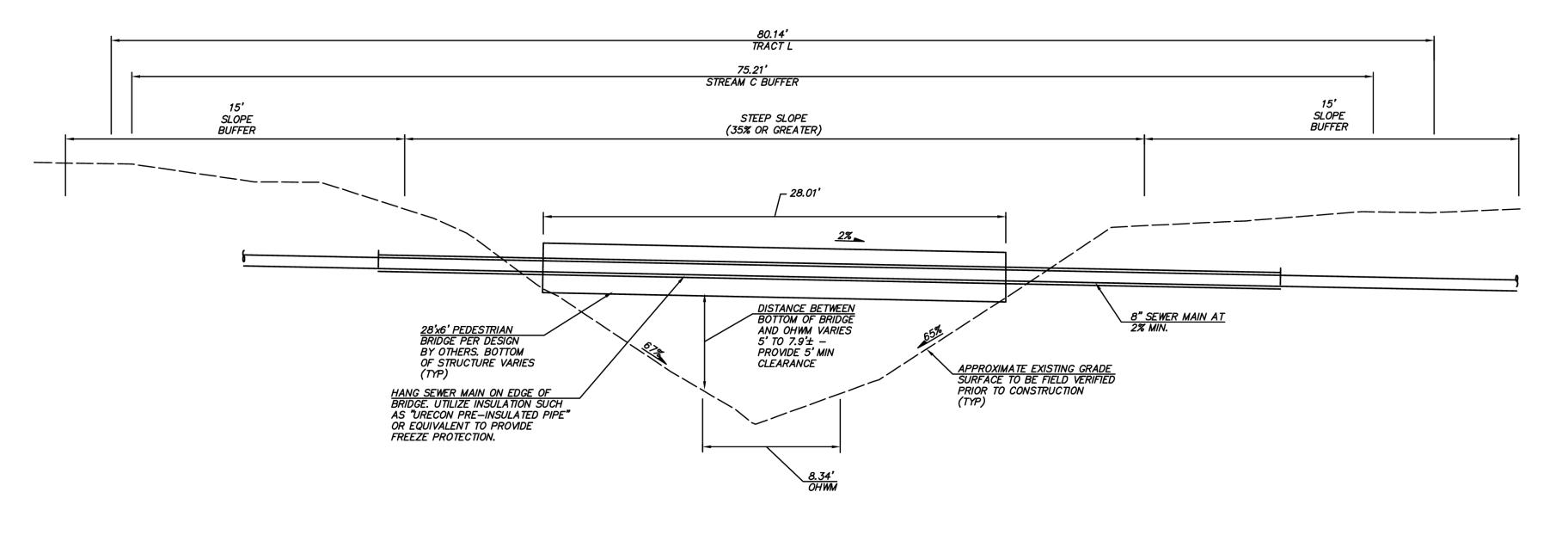
ADDITIONAL INFO.



7/28/20

19-349 SHEET NAME: CA-03

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PEDESTRIAN BRIDGE