



DEVELOPMENT SERVICES DEPARTMENT
ENVIRONMENTAL COORDINATOR
450 110th Ave NE., P.O. BOX 90012
BELLEVUE, WA 98009-9012

OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 15-118259-LA and 15-118261-LS

Project Name/Address: Horizon View Reservoir and Pump Station Reconstruction at
4610 Highland Dr.

Planner: Reilly Pittman

Phone Number: 425-452-4350

Minimum Comment Period: August 6, 2015

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other:

OTHERS TO RECEIVE THIS DOCUMENT:

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Description of Proposal and Design Intent

Horizon View #1 Reservoir/Pump Station

July 7, 2015

Description of Proposal and Design Intent

The Horizon View #1 Reservoir/Pump Station project will replace the aging 0.2 million gallon (MG) reservoir and booster pump station. The current reservoir provides domestic water service and fire protection to the Horizon View 700 Pressure Zone. The water booster pump station supplies the Somerset/Horizon View/Cougar Mountain 850 Pressure Zone. This project is being conducted as part of the City's ongoing Structural/Seismic Reservoir Rehabilitation program and Water Pump Station Rehabilitation program. The project is needed to avoid or minimize earthquake damage; to ensure that the reservoir can maintain at least a minimal level of system functionality following a seismic event, and maintain water supply reliability for domestic use and fire suppression. The existing reservoir will be demolished and removed and replaced with a new 0.3 MG welded steel reservoir.

Reservoir: The new reservoir would be located on the same site as the existing reservoir (in the middle of the property). It would be larger, 41 foot diameter and 43 feet tall to the center of the tank, and 46.5 feet tall to the top of the handrails versus the existing reservoir which is approximately 31 feet in diameter and 33 feet tall. The new reservoir would be constructed out of welded steel and bolted to a concrete ringwall foundation.

Pump Station: The new 1,800 gpm at-grade pump station would be located in the northeast corner of the property. It would be an L-shaped building approximately 34 x 34 feet, on the longest walls (925 square feet), and 16 feet tall. The existing (19 x 15 feet) pump station and an adjacent concrete slab (265 square feet) would be demolished and removed after the installation of the new pump station. The proposed pump station will have a split-face CMU block exterior with architectural treatment. The roof will have a gable end and colored standing seam metal material (Murray, Smith & Associates, Inc., 2014).

Site Clearing. The proposed action will require some vegetation clearing, largely limited to lawn grasses, ivy, and some small shrubs. Eight evergreen trees (cedar and fir) ranging from 12 to 34 inches diameter at breast height (dbh) and six deciduous trees (primarily black cottonwood) ranging from 6 to 40 inches dbh will be removed to accommodate the new reservoir and pump station.

Building Materials and Color Samples

Building materials and colors will be determined later in design.

Amenity Plans/Elevations/Proposed Amenity Chart

No amenities are planned for this site.

City of Bellevue, WA

Horizon View #1 Reservoir/Pump Station

SEPA Environmental Checklist

July 2015



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Figure 1: Vicinity Map

Attachment A: Preliminary Design Plans

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of the proposed project:

Horizon View #1 Reservoir/Pump Station

2. Applicant:

City of Bellevue
450 110th Ave. NE
P.O. Box 90012
Bellevue, WA 98009

3. Address and telephone number of applicant and contact person:

Jim Nicolls, P.E., Senior Engineer
Utilities Department
City of Bellevue
450 110th Ave. NE
P.O. Box 90012
Bellevue, WA 98009

Phone: 425-452-2869
Email: JBNicolls@Bellevuewa.gov

4. Date checklist prepared:

July 7, 2015

5. Agency requesting checklist:

City of Bellevue
Development Services Department
450 110th Ave. NE
P.O. Box 90012
Bellevue, WA 98009

6. Proposed timing or schedule (including phasing, if applicable):

Replacement of the facilities is scheduled to occur in 2016 and would take 12 to 15 months.

7. Plans for future additions, expansion, or further activity related to or connected with this proposal:

The project will provide all necessary improvements; there are no plans for future activity related to this project.

8. Environmental information that has been prepared, or will be prepared, directly related to this project:

Documents that have been prepared related to this project include:

- Technical Memorandum, Horizon View #1 Reservoir/Pump Station Predesign (W-85 & W-91) (MSA, 2014)
- Preliminary Geotechnical Engineering Considerations Memorandum (GeoEngineers, 2015)
- Bellevue Horizon View #1 Reservoir and Pump Station Seismic Improvements - Evaluation and Recommendation Report, (Peterson Structural Engineers, 2014)
- Tree Protection Plan (to be developed)
- Preliminary Landscape Plan (in development)
- Construction Stormwater Pollution Prevention Plan (CSWPPP) (to be developed)

9. Applications that are pending for governmental approvals or other projects directly affecting the property covered by the proposal:

There are no pending governmental approvals or other projects that would directly affect this project or the property covered by the proposal.

10. List of governmental approvals or permits that will be needed for this proposal:

The following permits/approvals may be required for this project:

- Boundary Line Adjustment; City of Bellevue
- Clearing and Grading Permit; City of Bellevue
- Tree Protection Plan; City of Bellevue
- Administrative Conditional Use Approval; City of Bellevue
- Variance (building height), City of Bellevue

- Building Permit, City of Bellevue
- Demolition Permit, City of Bellevue
- Right of Way Street Use Permit, City of Bellevue
- Mechanical Permit, City of Bellevue
- Electrical Permit, City of Bellevue
- Plumbing Permit, City of Bellevue

11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:

The Horizon View #1 Reservoir/Pump Station project will replace the aging 0.2 million gallon (MG) reservoir and booster pump station. The current reservoir provides domestic water service and fire protection to the Horizon View 700 Pressure Zone. The water booster pump station supplies the Sumerset/Horizon View/Cougar Mountain 850 Pressure Zone. This project is being conducted as part of the City's ongoing Structural/Seismic Reservoir Rehabilitation program and Water Pump Station Rehabilitation program. The project is needed to avoid or minimize earthquake damage; to ensure that the reservoir can maintain at least a minimal level of system functionality following a seismic event, and maintain water supply reliability for domestic use and fire suppression. The existing reservoir will be demolished and removed and replaced with a new 0.3 MG welded steel reservoir. Parksite Pump Station, located on SE Newport Way adjacent to Eastgate Park, will be used to supply the 700 Zone while Horizon View #1 will continue to supply the 850 Zone while the new reservoir is being constructed. No construction will occur at the Parksite Pump Station.

Reservoir:

The new reservoir would be located on the same site as the existing reservoir (in the middle of the property). It would be larger, 41 foot diameter and 43 feet tall to the center of the tank, and 46.5 feet tall to the top of the handrails versus the existing reservoir which is approximately 31 feet in diameter and 33 feet tall. The new reservoir would be constructed out of welded steel and bolted to a concrete ringwall foundation (Attachment A, Sheet C-13).

Pump Station: The new 1,800 gpm at-grade pump station would be located in the northeast corner of the property. It would be an L-shaped building approximately 34 x 34 feet, on the longest walls (925 square feet), and 16 feet tall. The existing (19 x 15 feet) pump station and an adjacent concrete slab (265 square feet) would be demolished and removed after the installation of the new pump station (Attachment A, Sheets C-14, A-2, A-3). The proposed pump station will be constructed with materials that provide a long service life and low maintenance. The proposed pump station will have a split-face CMU block exterior with architectural treatment. The roof will have a gable end and colored standing seam metal material (Murray, Smith & Associates, Inc. [MSA], 2014).

Site Clearing. The proposed action will require some vegetation clearing, largely limited to lawn grasses, ivy, and some small shrubs. Eight evergreen trees (cedar and fir) ranging from 12 to 34 inches diameter at breast height (dbh) and six deciduous trees (primarily black cottonwood ranging from 6 to 40 inches dbh) will be removed to accommodate the new reservoir and pump station.

12. Location of the proposal, including street address, if any, and section, township and range; legal description, site plan; vicinity map, and topographical map, if reasonably available:

The proposed reservoir and pump station would be located at 4610 Highland Drive, in Bellevue, WA, in parcel 152405-9109 where the existing reservoir and pump station are located; this parcel is 0.3 acre. Work would also occur in the adjacent parcel, 345960-0620, on which there is an existing access road with a water main under the road. Parcel 345960-0620 is 0.25 acre. Both parcels are owned by the City of Bellevue (King County, 2014) (Figure 1). The project is located in a residential neighborhood and the adjacent properties are residential.

The project is located in the southeast quarter of Township 24 North, Range 5 East, Section 15.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (underline):

flat, rolling, hilly, steep slopes (behind reservoir), mountainous, other

b. What is the steepest slope on the site (approximate percent slope)?

The site is at elevation 670 feet and located in a hilly area, but the site is relatively flat. Preliminary geotechnical studies indicate that the site was likely graded up to about 8 feet to create a level area for the reservoir (GeoEngineers, 2015). The steepest slopes are located south and south west of the reservoir (approximately 10 feet behind the existing reservoir). A circular rockery was constructed at the base of the slope. The slopes are designated as steep slopes by the City of Bellevue as they are greater than 40 percent. However, they are less than 1,000 square feet and thus are not designated as critical areas (Bellevue City Code [BCC] 20.25H.120).

c. What general types of soils are found on the site (for example clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The Natural Resources Conservation Service (NRCS) (2011) indicates Arents, Alderwood material, with 6 to 15 percent slopes are mapped in the project area. There is approximately 5 to 7 feet of loose to dense fill overlying glacial till on the site. The till is underlain by weathered sandstone bedrock. Glacial till typically consists of a heterogeneous mixture of sand, gravel, cobbles and occasional boulders in a silt and clay matrix (GeoEngineers, 2015). There are no agricultural lands or soils in the project area.

d. Are there any surface indications or a history of unstable soils in the immediate vicinity? If so, describe.

There is no indication of a history of unstable soils in the vicinity, despite the hilly nature of the area (GeoEngineers, 2013).

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate the source of the fill.

Some site grading and excavation will be required for installation of the new reservoir and pumping station. Excavation quantities are estimated as follows:

- Cut = 4,000 cubic yards
- Fill = 3,500 cubic yards

Site clearing will occur over the majority of the site (Attachment A, Sheet C-7).

f. Could erosion occur as a result of clearing, construction, or use?

As with all construction projects, erosion could occur as a result of construction activities, particularly earthwork. The potential for erosion would be minimized with adherence to best management practices (BMPs) (refer to question 1.h. below).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example buildings or asphalt)?

The current site has 4,135 square feet of impervious surface area from the existing reservoir, pump station, and other site improvements. When completed, the new improvements will create a total of 10,027 square feet of impervious surface area (Table 1).

Table 1: Impervious Surface Area Summary

Feature Description	Existing Impervious Surface Area (sq feet)	Proposed Impervious Surface Area (sq feet)
Reservoir (tank + foundation)	871	1,662
Pump Station (including roof)	510	1,213
Concrete Pad for Equipment	264	0
Gravel Access Drive	2,155	2,256
Onsite Asphalt Surfacing	0	4,525
Miscellaneous Improvements	335	371
Total Impervious Area	4,135	10,027

The existing site is covered by approximately 17% impervious surface area. The proposed site will be covered by approximately 42% impervious surface area.

h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.

Best management practices (BMPs) are physical, structural, and/or managerial practices that can prevent or reduce the erosion and pollution of water caused by construction activities. The following mitigation measures and BMPs would be incorporated during construction to minimize the potential for erosion:

- Construction of the proposed project, including all staging areas, would be restricted to the project site.
- All debris and spoil material would be transported off-site to an appropriate disposal facility.
- A Stormwater Pollution Prevention Plan (SWPPP), which includes a Temporary Erosion and Sediment Control (TESC) Plan, would be required to prevent sediment transport from the project site.
- Other erosion control measures would be incorporated, as necessary, in accordance with City of Bellevue requirements.
- Erosion control measures could include use of silt fencing, catch basin inlet protection, stabilized construction entrance, and other measures as specified in the SWPPP.
- Refueling will take place more than 100 feet from surface waters.

2. Air

- a. What types of emissions to the air would result from the proposal during construction, operation and maintenance when the project is completed? If any, generally describe and give approximate quantities, if known.**

During construction activities, there may be a small increase in exhaust emissions from construction vehicles and equipment, and a temporary increase in fugitive dust due to sediment removal. This increase in dust would be localized and temporary.

Emissions from construction vehicles, as well as emissions from construction workers' vehicles, would contribute greenhouse gases to the atmosphere during this period.

There will be no emissions as a result of operation of the project. Minor emissions will occur from periodic maintenance vehicles and equipment visiting the site. An emergency diesel generator would produce some emissions during periodic testing and if used in an electrical outage.

- b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.**

There are no off-site sources of emissions or odor that would affect the project.

- c. Describe proposed measures to reduce or control emissions or other impacts to air, if any.**

Measures that could be incorporated during construction to minimize impacts to air quality include:

- Spray exposed soil and storage areas with water during dry periods.
- Comply with the Puget Sound Clean Air Agency (PSCAA) regulations to control odorous emissions so as to prevent undue interference with nearby uses.
- Remove particulate matter deposited on paved, public roads and sidewalks to reduce mud and dust; sweep and wash streets frequently to reduce emissions.
- Equip construction equipment with appropriate emission controls.

3. Water

a. Surface:

- 1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, and wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

The project will occur approximately 0.2 mile southeast of Sunset Creek and approximately 0.3 mile west of Vasa (Squibbs) Creek (Figure 1). There are no wetlands present on the project site nor within 0.5 mile (Natural Resources Conservation Service [NRCS], 2014).

- 2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

There are no waters within 200 feet of the proposed project.

- 3. Estimate the amount of fill and dredge material that could be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill materials.**

No fill or dredge material would be placed in or removed from surface waters or wetlands.

- 4. Will the proposal require surface water withdrawals or diversion? Give general description, purpose, and approximate quantities, if known.**

No surface water withdrawals or diversions would be required for the proposed project.

- 5. Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.**

According to FEMA's Flood Insurance Rate Map this project is not located in a 100 year flood plain (FEMA, 1995).

- 6. Does the proposal involve discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No. It is not anticipated that the proposed improvements will change the daily operational conditions of the existing pump station.

No waste materials will be discharged to surface waters as a result of construction or operation of this project.

b. Ground

- 1. Will ground water be withdrawn from a drinking water well for other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

No water will be withdrawn from a drinking water well. The project does not require the withdrawal of, or discharge to, groundwater.

- 2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) is expected to serve.**

Not applicable. No waste materials will be discharged into the ground as a result of this project.

c. Water Runoff (including storm water)

- 1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

The current site has 4,135 square feet of impervious surface area from the existing reservoir and pump station. When completed, there would be approximately 10,027 square feet of impervious surface. The whole site would generate storm water runoff; the largest sources contributing to runoff would be reservoir and pump station roof drainage, onsite asphalt surfacing, and the gravel access drive. The majority, and potentially all, of the site runoff will be routed to the existing storm system. Stormwater BMPs are designed per the Bellevue Surface Water Engineering Standards and the 2005 Ecology Stormwater Management Manual. The

pump station roof runoff would be collected and dispersed onsite via a downspout dispersion trench and/or splash blocks. Flow control for the new impervious surface runoff will likely be a below-grade detention facility. The reservoir roof runoff will sheet flow into a collection system and be routed to the below-grade detention facility.

The rate of discharge from the proposed site into the City's storm drainage system will be maintained to not exceed the existing rate of discharge as much as possible. The most significant change to the existing facilities will be providing an air gap for the reservoir drain and overflow system. The largest potential flow rate through the drainage system at the current site would be from an emergency reservoir overflow event, which is also expected to be the largest flow rate through the site drainage system upon completion of the proposed improvements.

2. Could waste materials enter ground or surface waters? If so, generally describe.

Runoff from the construction site has the potential to contain sediment and small amounts of equipment-related materials (motor oil, diesel fuel, hydraulic fluid). Best Management Practices (BMPs) (i.e., installation of temporary filter fabric in the existing catch basins) would be implemented to minimize equipment-related materials and sediment from leaving the site and potentially entering surface and ground waters.

3. Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No, drainage patterns in the vicinity would not be affected by the proposed project.

d. Describe proposed measures to reduce or control surface, ground, runoff water, and drainage pattern impacts, if any.

The project will be constructed in accordance with applicable state and City of Bellevue permits, which will specify a range of best management practices (BMPs) and temporary erosion and sedimentation control (TESC) measures designed to reduce or control potential surface, ground, or runoff water impacts. BMPs may include installation of catch basin filters and/or other appropriate cover measures. BMPs and TESC measures specific to the site and project will be specified by the City in the construction contract documents, and the construction contractor will be required to implement them.

Flow control for the new impervious surface runoff will be used to mitigate the discharge rate from the proposed site to not exceed the existing rate of discharge as much as possible.

4. Plants

a. List types of vegetation found on site:

Deciduous trees: cottonwood, big leaf maple

Evergreen tree: Western red cedar, Douglas-fir

Shrubs: sword fern, non-native ornamentals

Grass: maintained lawn

Pasture: none

Crop or grain: none

Orchards, vineyards or other permanent crops: none

Wet soil plants: buttercup

Water plants: none

Other types of vegetation: English ivy

b. What kind and amount of vegetation will be removed or altered?

The proposed action will require vegetation clearing from roughly three-quarters of the site; most vegetation clearing would be lawn grasses, ivy, and some small shrubs. Eight evergreen trees (cedar and fir) ranging from 12 to 34 inches diameter at breast height (dbh) and five black cottonwood trees, 18 to 40 inches dbh, and one 6-inch maple will be removed to accommodate the new reservoir and pump station. Trees greater than 8 inches dbh are considered Significant Trees according to (Bellevue Land Use Code [BLUC] 20.50.046).

c. List threatened and endangered species or critical habitat known to be on or near the site.

The project occurs within an urbanized area with no threatened or endangered plant species or critical habitat known to be on or near the site (WDFW, 2014 and USFWS, 2014).

d. Describe proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on site.

The removal of Significant Trees is within the permitted amount and thus no compensation for their removal is required. However, following the completion of construction, the City of Bellevue will landscape in

accordance with the requirements outlined in the (BLUC 20.20.520). The existing poplars may have provided some necessary screening of the height and bulk of the structure. As part of the Administrative Conditional Use, City of Bellevue staff will analyze the degree to which screening exists and how it might best be supplemented given the proposed tree loss on the site.

- e. **List all noxious weeds and invasive species known to be on or near the site.**

English ivy and Himalayan blackberry were identified on the project site and are listed as a noxious weeds by the Washington State Noxious Weed Control Board.

5. Animals

- a. **List any birds and animals which have been observed on or near the site or are known to be on or near the site:**

Amphibians: Pacific chorus frog

Reptiles: garter snake

Birds: American crow, bald eagle, songbirds and gulls are likely found in the area. Approximately 0.3 mile north of the site is a biodiversity area and corridor according to the Priority Habitat (PHS) Species Database (WDFW, 2014).

Mammals: raccoon and rodents

- b. **List any threatened and endangered species or critical habitat known to be on or near the site.**

There are no listed species on or near the project site according to the PHS Database (WDFW, 2014).

- c. **Is the site part of a migratory route? If so, explain.**

The project site, along with the entire Puget Sound region, is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other birds. The Pacific Flyway extends south from Alaska to Mexico and South America.

- d. **Proposed measures to preserve or enhance wildlife, if any.**

Impacts to wildlife are not anticipated as a result of the project; therefore, measures have not been proposed.

- e. **List any invasive animal species known to be on or near the site.**

Rodents are likely present in the project area.

6. Energy and Natural Resources

- a. **What kinds of energy (electric, natural gas, oil, wood, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Electrical energy will be needed for the pump station operation. Energy requirements would be greater than existing energy use (an estimate of how much more, will be available at the 80% design phase). The increase in energy will be due to the increased pump station capacity (1,250 gpm to 1,800 gpm) and improved operation capabilities. Total runtime of the pumps is currently 16 hours per day.

- b. **Would the project affect the potential use of solar energy by adjacent properties? If so, explain.**

The project would not require the use of solar energy and would not affect solar energy use by adjacent properties.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.**

The pump station has been designed to be energy efficient by installing pumps that are operating near their best efficiency point, sky lights for the pump room, and energy efficient LED lights. The pump station will be in compliance with the Washington State Energy Code.

7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.**

With any construction project, there is the risk of potential construction related spills or leaks. This project would face similar risks, but all risks would be well within the range of typical construction projects. No toxic chemicals would be used or stored at the construction sites, other than fuels and other construction-related fluids. Existing information does not indicate the presence of contaminated soils in the project area (Ecology, 2014).

(1) Describe any known or possible contamination at the site from present or past land uses.

A water reservoir has been located on this site since 1963 and the pump station was added in 1964. There is a minor risk of contamination at the site is from access vehicles and maintenance activities; however, no contamination is known to occur.

(2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquids and gas transmission pipelines located within the project area and in the vicinity.

There are no known hazardous chemicals or conditions present in the area that would affect the project development or design.

(3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

The proposed project will not store, use, or produce toxic or hazardous chemicals.

(4) Describe special emergency services that might be required.

Construction and operation of the facilities will comply with all applicable fire codes and Occupational Safety and Health Administration (OSHA) regulations. Special emergency services beyond those currently employed at the site would not be required.

The proposed project would result in minimal traffic disruption, for the majority of the project disruption will be limited to vehicles entering and exiting the site. For approximately one month, Highland Drive may be restricted to one-lane traffic through the project area for driveway improvements and replacement of a catch basin. Should closures occur, close coordination will be conducted with local emergency service providers.

(5) Proposed measures to reduce or control environmental health hazards, if any.

Measures to reduce or control environmental health impacts are not proposed because impacts are not anticipated to occur as part of this project.

b. Noise

(1) What types of noise exist in the area which may affect your project (for example: traffic, equipment operation, other)?

Vehicular traffic along area roadways and airplane traffic above the site are the major noise sources in the area. There are no existing sources of noise in the area that would adversely affect the proposal.

(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?

Construction of the project can be expected to cause short-term noise impacts in areas directly adjacent to construction activity. Noise impacts are only anticipated to occur during the 12-15 month construction period. There are no sensitive noise receptors near the pump station location. Construction would occur within the designated hours according to BCC 9.18.040.A.4 and thus no impact would occur.

Per BCC 9.18.025, the site is located within a residential land use district, Class A Environmental Designation for Noise Abatement (EDNA). The maximum permissible sound levels by a receiving Class A produced by a Class A noise source shall not exceed 55 decibel A-weighting (dBA). Operation of the new pump station may create noise; however, it will be housed in a concrete structure. Noise levels are not expected to be greater than existing conditions. The current pump runs approximately 16 hours a day, makes very little noise, and is not considered disruptive. No noise complaints have ever been filed from the operation of the pump station.

The part of the pump station that produces the most sound is a stationary emergency generator that is needed to operate the pump station during power outages. The stationary emergency generator would be installed within the pump station building so that it would exceed sound attenuation requirements of 75 dBA for testing emergency generators (BCC 9.18.020A). The generator is tested on a periodic basis, during working hours, and in emergency electrical outage situations to maintain water pressure and fire flow capacity.

Parkside Pump station, located on SE Newport Way adjacent to Eastgate Park, will be used to supply continuous water while the new reservoir is being constructed. This increased use at Parkside Pump station is not anticipated to create noise over existing conditions.

(3) Describe proposed measures to reduce or control noise impacts, if any.

To reduce noise impacts during construction, contractors would comply with all local and state noise regulations. Contractors may also implement the following measures to reduce or control noise impacts:

- Per BCC 9.18, the hours of construction will be between 7am – 6pm, Monday – Friday; 9am – 6pm Saturday; and no construction site noise is permitted Sunday or legal holidays.
- Minimize the idling time of equipment and vehicle operation.
- Operate equipment only during hours approved by the City of Bellevue.
- Use well-maintained and properly-functioning equipment and vehicles.
- Locate stationary equipment away from receiving properties.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The properties are owned by the City Bellevue and are currently used for a reservoir and pump station, the same as the proposed use. The adjacent properties are residential. The project will not affect the nearby or adjacent properties.

b. Has the project site been used as working farmland or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been

designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

The site has not been used for agriculture.

(1) **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversized equipment access, the application of pesticides, tilling, or harvesting? If so, how?**

There are no working farm or forest land businesses in the project vicinity.

c. Describe any structures on the site.

The existing pump station is 19 x 15 feet and approximately 8 feet high; it was constructed in 1964 and is non-reinforced concrete masonry with a relatively flat wood roof. The existing reservoir is approximately 33 feet tall and 31 feet in diameter, resting on a concrete ring footing with limited anchorage. It was constructed in 1963.

d. Will any structures be demolished? If so, what?

Yes, both the existing pump station and reservoir will be demolished, and replaced with new facilities.

e. What is the current zoning classification of the site?

The proposed site is currently zoned Single-Family Residential (R-3.5; 3.5 dwellings per acre) (City of Bellevue, 2014).

f. What is the current comprehensive plan designation of the site?

The comp plan designator of the property is Single-Family Medium Density (SF-M)

In the City's Comprehensive Plan, this site is mapped as a Major Water Facility (City of Bellevue, 2008).

g. If applicable, what is the current shoreline master program designation of the site?

The site is not within a regulated shoreline.

h. Has any part of the site been classified as a critical area? If so, specify.

No applicable, the site is not classified as a critical area.

i. Approximately how many people would reside or work in the completed project?

No people would reside or work in the completed project. Workers would visit the site to perform regular maintenance and checks.

j. Approximately how many people would the completed project displace?

The completed project would not displace any people.

k. Describe proposed measures to avoid or reduce displacement impacts, if any.

Displacement would not occur as a result of this project; therefore, mitigation measures have not been developed.

l. Describe proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

The use is not permitted outright and requires a ACUP to replace the facility. The facility will be required to meet all current code requirements and comprehensive plan policies.

The proposed pump station and reservoir will replace an existing pump station and reservoir and thus will not change the existing land use. The facilities are consistent with City's existing and projected land use requirements and plans for the site. An Administrative Conditional Use Approval will be needed from the City of Bellevue.

m. Describe proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any.

There are no agricultural or forest lands in the project vicinity.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units will be provided by this project.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing units will be eliminated by this project.

c. Describe proposed measures to reduce or control housing impacts, if any.

Not applicable.

10. Aesthetics

- a. What is the tallest height of any of the proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?**

The proposed reservoir will be 43 feet tall to the center of the tank (and 46.5 feet tall to the top of the handrails), 10 feet taller than the existing reservoir (33 feet) (Attachment A, Sheet C-13). It will be constructed out of welded steel and painted. The proposed pump station will be 16 feet tall, 8 feet taller than the existing station (Attachment A, Sheet A-2). It will be constructed of split face concrete masonry unit (CMU) blocks and the roof will have a gable end and colored standing seam metal material. Following construction, the area will be replanted with trees, shrubs and groundcovers per landscaping requirements outlined in (BLUC 20.20.520).

The proposed reservoir's maximum building height allows for non-structural elements to exceed the maximum height by no more than 15 feet. The reservoir will exceed the additional 15-foot allowance and as a consequence a variance for height will be required by the City of Bellevue.

- b. What views in the immediate vicinity would be altered or obstructed?**

Construction equipment and personnel would temporarily obstruct views of the roadway and immediate areas during construction. Persons to be affected include adjacent property owners and drivers. Following construction the views would be similar to existing conditions. The reservoir will be painted to blend into the landscape. The significant trees removed on the north sides of the property will likely be visible from adjacent properties or Highland Drive. However, the change will be minimal as there are other large trees in the immediate vicinity. Further, as part of the Conditional Use Approval, City staff will analyze the degree to which screening exists and how it might best be supplemented given the proposed tree removal.

- c. Describe proposed measures to reduce aesthetic impacts, if any.**

Aesthetic impacts are not anticipated as a result of the project. The reservoir and pump station may be minimally visible following construction, but only slightly more than existing conditions. Following construction, the area will be replanted with trees, shrubs and groundcovers to the extent possible.

11. Light and Glare

- a. **What type of light and glare will the proposal produce? What time of day would it mainly occur?**

Lighting fixtures are required to be shielded to conceal light sources and avoid off-site light spillover per LUC 20.20.522.

There will be motion sensor security lighting inside the fenced area for the pump station and reservoir. There will also likely be some constantly on LED photocell lighting near the pump station entrance. More specifics on the lighting design and operation will be determined during final design. Currently there are a couple lights on the existing pump station near the entrance; it is not anticipated that the new lighting will introduce significant glare. Lighting will be designed according to BLUC 20.20.522.

- b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

The project would not generate significant light or glare.

- c. **What existing off-site sources of light or glare may affect your proposal?**

There are no existing sources of light or glare that would impact the project.

- d. **Describe the proposed measures to reduce or control light and glare impacts, if any.**

Light and glare impacts are not anticipated; therefore, mitigation measures have not been developed.

12. Recreation

- a. **What designated and informal recreational opportunities are in the immediate vicinity?**

The City of Bellevue *City & Community Facilities Map* (2012) was used to determine the following designated recreational areas within a 0.5 mile radius of the proposed project site:

- Eastgate Park
- Horizon Highlands Open Space
- Horizon Heights Open Space
- Lattawood Park

- The Heights Open Space
- Heights Trail
- Eaglesmere Open Space
- Somerset East Open Space
- Somerset Highlands Open Space

Highland Drive is a designated bike route. Parcel number 345960-0620, on which the access road is located, also has a small park-like area containing two benches and trees adjacent to Highland Drive. This is not a designated park and the property is owned by the City.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The benches on parcel 345960-0620, may not be accessible during construction but will be fully functional following completion of construction. Operation of the proposed project would not displace any existing recreational uses.

c. Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.

No measures to control impacts on recreation have been proposed because no impacts are anticipated.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites located on or near the site that are over 45 years old or listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.

Both the existing reservoir and pump station are over 45 years old. The reservoir was constructed in 1958 and moved to the current location in 1963; the pump station was built in 1964 (MSA, 2014).

While over 45 years in age, there is no indication that the reservoir or pump station embodies unique construction methods or design elements that would support a determination of eligibility for listing on national, state, or local preservation registers.

A review of historic registers indicates that there are no properties listed on or determined eligible for listing on the National Register of Historic Places or Washington Heritage Register within one mile of the project area (DAHP, 2014). The City of Bellevue does not have a local preservation register and there are no King County Landmarks on or near the project area.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation. This may include human burials or old cemeteries. Are there any material evidence artifacts or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.**

There are no recorded cultural resources within one mile of the project area. No previous professional cultural resource studies have been conducted on or within one mile of the project area. DAHP's Statewide Predictive Model classifies the project area as High Risk – Survey Highly Advised (DAHP, 2014). Further review of historic maps, aerial photographs, and published Native American ethnographic studies do not suggest a high probability for encountering cultural resources in the project area beyond the reservoir and pump stations (Anderson Map Company, 1907; Hilbert et al., 2001; King County, 1954; King County, 1965; Kroll Map Company, 1912; Kroll Map Company, 1926; Metsker Map Company, 1936; Pacific Aerial Surveys, 1936; USGS, 1950; USGS, 1968; USGS, 1973; US Surveyor General 1864). No cemeteries or ethnographic place names were recorded on or near the project area. During the majority of 20th century the project area was under the ownership of the Weyerhaeuser Timber Company and used for logging. A housing development was built around the project area in 1978.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the Department of Archaeology and Historic Preservation, archaeological surveys, historic maps, GIS data, etc.**

As cited in response to questions 13a and 13b above, the following types of documents were reviewed in order to identify any potential cultural resources in the project vicinity: the DAHP for any recorded cultural resources, cemeteries, national, state, or local register-listed historic properties, and previous studies on or near the project area; DAHP's Statewide Predictive Model; historic maps of the project area dated 1864, 1907, 1912, 1926, 1936, 1950, 1968, 1973, aerial photographs of the project area taken 1937, 1954, 1965; and ethnographic studies.

- d. Describe proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

Potential impacts to cultural resources have been identified on or near the project area. The potential impacts would be demolition of the historic-aged reservoir and pump station.

Should cultural resources be inadvertently identified during the project, the City will comply with state laws requiring the protection of cultural resources and human remains (RCW 27.53, RCW 27.44, RCW 68.50, and RCW 68.60). The City will temporarily halt work in the immediate vicinity of the identified resources and notify the City, DAHP, and Affected Tribes to negotiate mitigation and/or avoidance measures.

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area, and describe proposed access to the existing street system. Show on site plans, if any.**

The proposed project is adjacent to Highland Drive, approximately 1 mile south of I-90. There is a short access road to Highland Drive from the pump station and reservoir site. The existing road infrastructure would not be altered as a result of this project (Figure 1).

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

King County Transit Route 246 runs north and southwest along Highland Drive/148th Place SE. There is a stop at Highland Drive and 147th Place SE (Figure 1).

- c. How many additional parking spaces would the completed project or nonproject proposal have? How many would the project or proposal eliminate?**

No change in parking spaces is planned as a result of this project.

- d. Will the proposal require any new improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

No changes in roads or streets are planned as a result of this project. The sidewalk will be disturbed during construction but will be replaced in-kind.

- e. **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The project would not use, nor interfere with, water, rail, or air transportation.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur and what percentage of the volume would be from trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

No new traffic would result from the completed project.

- g. **Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

The project is located in a residential area of Bellevue. There are no agricultural or forest practice areas in the vicinity. The project will not affect the movement of products through the project area.

- h. **Describe proposed measures to reduce or control transportation impacts, if any.**

Since no new traffic would be generated by the completed project, no mitigation measures are proposed.

15. Public Services

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally explain.**

The proposed project would not result in the need for any additional public services.

- b. **Describe proposed measures to reduce or control direct impacts on public services.**

Impacts to public services are not anticipated; therefore, mitigation measures have not been developed.

16. Utilities

a. Underline utilities currently available at the site:

What utilities are available on site? Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic systems, other: fiber optic, storm sewer

Most utilities, while available to parcels adjacent to the project, do not serve the site but run through the project area within existing right-of-way and utility easements. A water main runs from the pump station to Highland Drive under the access road (Figure 1), and electricity and telephone are on overhead lines from the pump station to the utility pole east of the access road.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Electricity will be required for the operation of the proposed pump station. In order to mitigate the existing risk of trees falling on the overhead power lines serving the pump station and improve site access, the existing overhead electrical and telephone service will be upgraded and placed in an underground duct system from the east side of the building to the utility pole. The water main under the access road will be replaced (Attachment A, Sheets C-4, C-7, C-14).

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: James B Niall

Date Submitted: 7/9/2015

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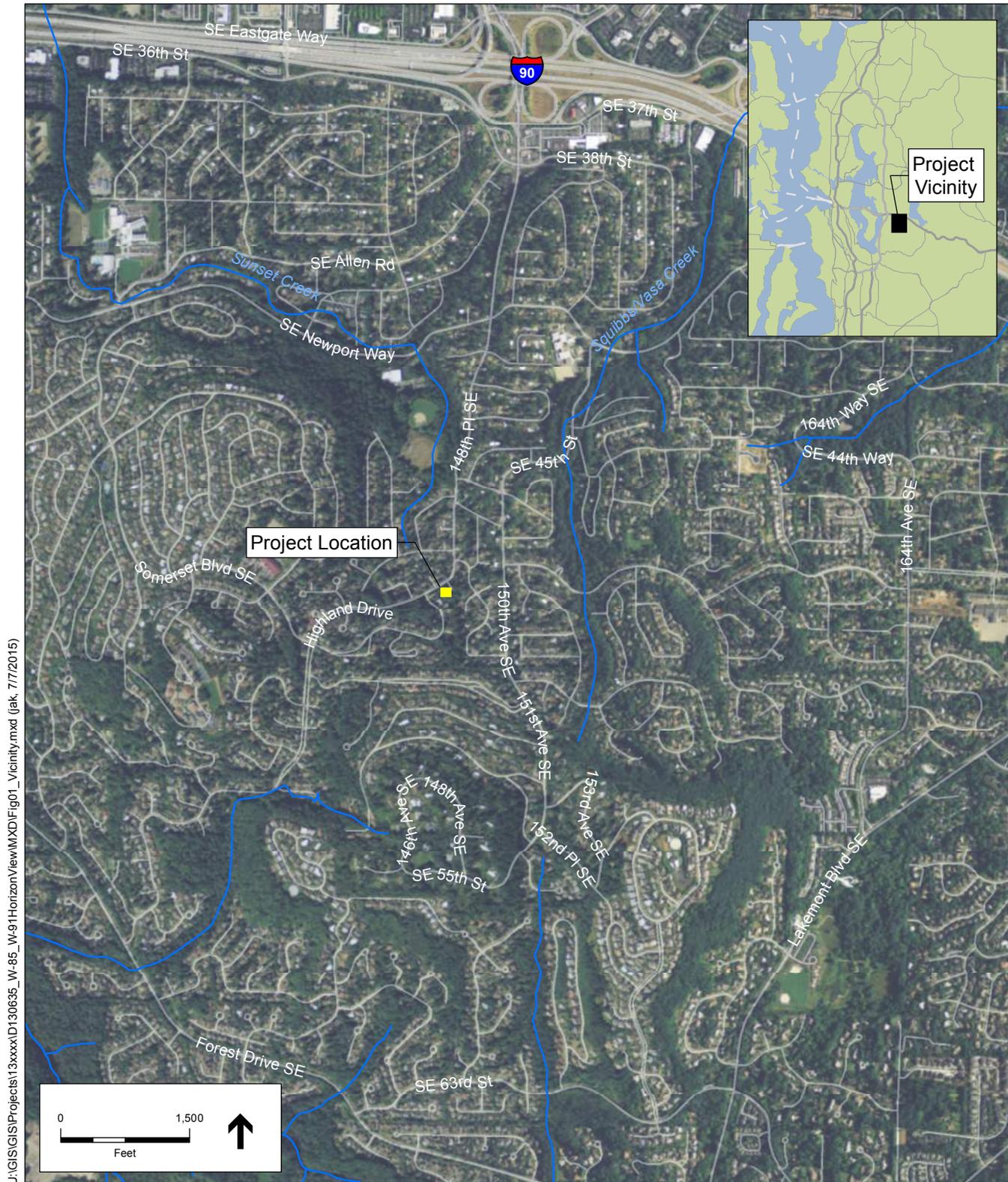
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E. FIGURES

Figure 1: Vicinity Map

Attachment A: Preliminary Design Plans



SOURCE:
 ESA 2015; King County 2014;
 OSM 2013; NAIP 2013

Horizon View Reservoir . 130635x
Figure 1
 Horizon View #1 Reservoir
 and Pump Station Vicinity



CITY OF BELLEVUE UTILITIES DEPARTMENT

HORIZON VIEW #1 RESERVOIR / PUMP STATION

C.I.P. W-85, W-91

BID NO. XXXXX

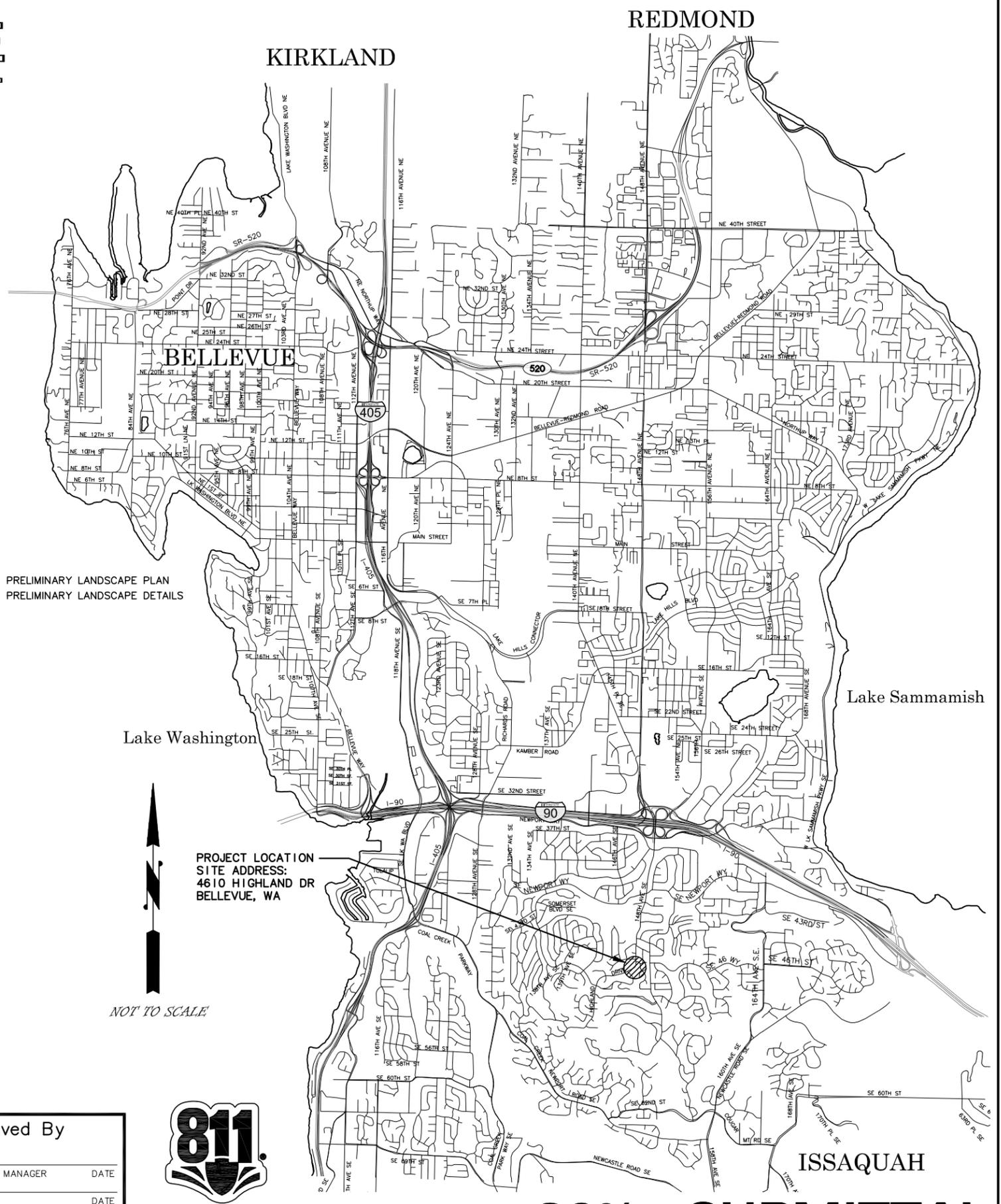
MAYOR
CLAUDIA BALDUCCI

DEPUTY MAYOR
KEVIN WALLACE

CITY MANAGER
BRAD MIYAKE

DIRECTOR OF UTILITIES
NAV OTAL

CITY COUNCIL
JOHN STOKES
CONRAD LEE
JOHN CHELMINIAK
LYNNE ROBINSON
JENNIFER ROBERTSON



GENERAL		
1	G-1	TITLE SHEET, VICINITY MAP AND INDEX OF DRAWINGS
2	G-2	SYMBOLS AND LEGEND
3	G-3	ABBREVIATIONS
4	G-4	GENERAL AND EROSION CONTROL NOTES
CIVIL		
5	C-1	EXISTING CONDITIONS, EROSION CONTROL & SITE PREPARATION PLAN
6	C-2	EROSION CONTROL DETAILS
7	C-3	0.2 MG RESERVOIR & PUMP STATION ABANDONMENT AND PROJECT SEQUENCING PLAN
8	C-4	SITE LAYOUT PLAN AND SURVEY CONTROL
9	C-5	SITE DETAILS - 1
10	C-6	SITE DETAILS - 2
11	C-7	GRADING AND DRAINAGE PLAN
12	C-8	GRADING AND DRAINAGE PROFILES - 1
13	C-9	GRADING AND DRAINAGE PROFILES - 2
14	C-10	TANK MONITORING AND AIR GAP MH DETAILS
15	C-11	GRADING AND DRAINAGE DETAILS - 1
16	C-12	GRADING AND DRAINAGE DETAILS - 2
17	C-13	RESERVOIR SECTION AND DETAILS
18	C-14	SITE PIPING PLAN
19	C-15	SITE PIPING PROFILES
20	C-16	STORMWATER VAULT PLANS, SECTIONS, AND DETAILS
21	C-17	PIPING DETAILS - 1
22	C-18	PIPING DETAILS - 2
23	C-19	CITY STANDARD DETAILS - 1
24	C-20	CITY STANDARD DETAILS - 2
STRUCTURAL-RESERVOIR		
25	S-1	GENERAL RESERVOIR STRUCTURAL NOTES
26	S-2	RESERVOIR QUALITY ASSURANCE PLAN NOTES
27	S-3	RESERVOIR ELEVATION AND ANCHORAGE PLAN
28	S-4	RESERVOIR FOUNDATION, ANCHORAGE AND PIPE BLOCK DETAILS
29	S-5	RESERVOIR ELEVATION, PLAN AND DETAILS
30	S-6	RESERVOIR PIPING ENTRANCE/EXIT PLAN AND SECTIONS
31	S-7	RESERVOIR LADDER AND HATCH DETAILS
32	S-8	RESERVOIR OVERFLOW PIPING SECTIONS AND DETAILS
33	S-9	RESERVOIR ROOF VENT DETAILS

STRUCTURAL-PUMP STATION		
34	SP-1	GENERAL STRUCTURAL NOTES
35	SP-2	QUALITY ASSURANCE PLAN AND NOTES
36	SP-3	PLANS AND TRANSVERSE SECTIONS
37	SP-4	LONGITUDINAL SECTIONS
38	SP-5	FOUNDATION DETAILS - SHEET 1
39	SP-6	FOUNDATION DETAILS - SHEET 2
40	SP-7	CMU DETAILS
41	SP-8	ROOF DETAILS
42	SP-9	CRANE DETAILS
ARCHITECTURAL-PUMP STATION		
43	A-1	CODE SUMMARY & ARCHITECTURAL SCHEDULES
44	A-2	PUMP STATION ELEVATIONS
45	A-3	PUMP STATION PLAN
46	A-4	PUMP STATION SECTIONS
47	A-5	ARCHITECTURAL DETAILS
48	A-6	ARCHITECTURAL DETAILS
MECHANICAL-PUMP STATION		
49	M-1	MECHANICAL EQUIPMENT LIST
50	M-2	PUMP AND PIPING FLOOR PLAN
51	M-3	PUMP AND PIPING SECTIONS
52	M-4	HVAC AND PLUMBING PLAN
53	M-5	MISCELLANEOUS MECHANICAL DETAILS - 1
54	M-6	MISCELLANEOUS MECHANICAL DETAILS - 2
ELECTRICAL		
55	E-1	ELECTRICAL LEGEND & ABBREVIATIONS
56	E-2	ELECTRICAL ONE-LINE DIAGRAM
57	E-3	ELECTRICAL SITE PLAN
58	E-4	ELECTRICAL FLOOR PLAN - POWER
59	E-5	ELECTRICAL FLOOR PLAN - SIGNAL
60	E-6	ELECTRICAL FLOOR PLAN - FACILITIES
61	E-7	DETAIL & SCHEDULES
62	E-8	RTU PANEL LAYOUT
63	E-9	RTU PANEL SCHEMATIC
64	PID-1	PID - LEGEND AND ABBREVIATIONS
65	PID-2	PID
CATHODIC PROTECTION		
66	CP-1	CATHODIC PROTECTION SYSTEM DETAILS - 1
67	CP-2	CATHODIC PROTECTION SYSTEM DETAILS - 2

PLANTING	
68	L-1 PRELIMINARY LANDSCAPE PLAN
69	L-2 PRELIMINARY LANDSCAPE DETAILS

PROJECT LOCATION
SITE ADDRESS:
4610 HIGHLAND DR
BELLEVUE, WA

NOT TO SCALE



PRELIMINARY ONLY
DO NOT USE FOR CONSTRUCTION

JULY 2015
MURRAY, SMITH & ASSOCIATES, INC.
Engineers/Planners

Approved By

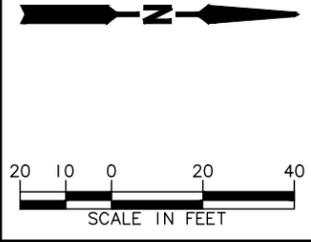
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PROJECT MANAGER DATE

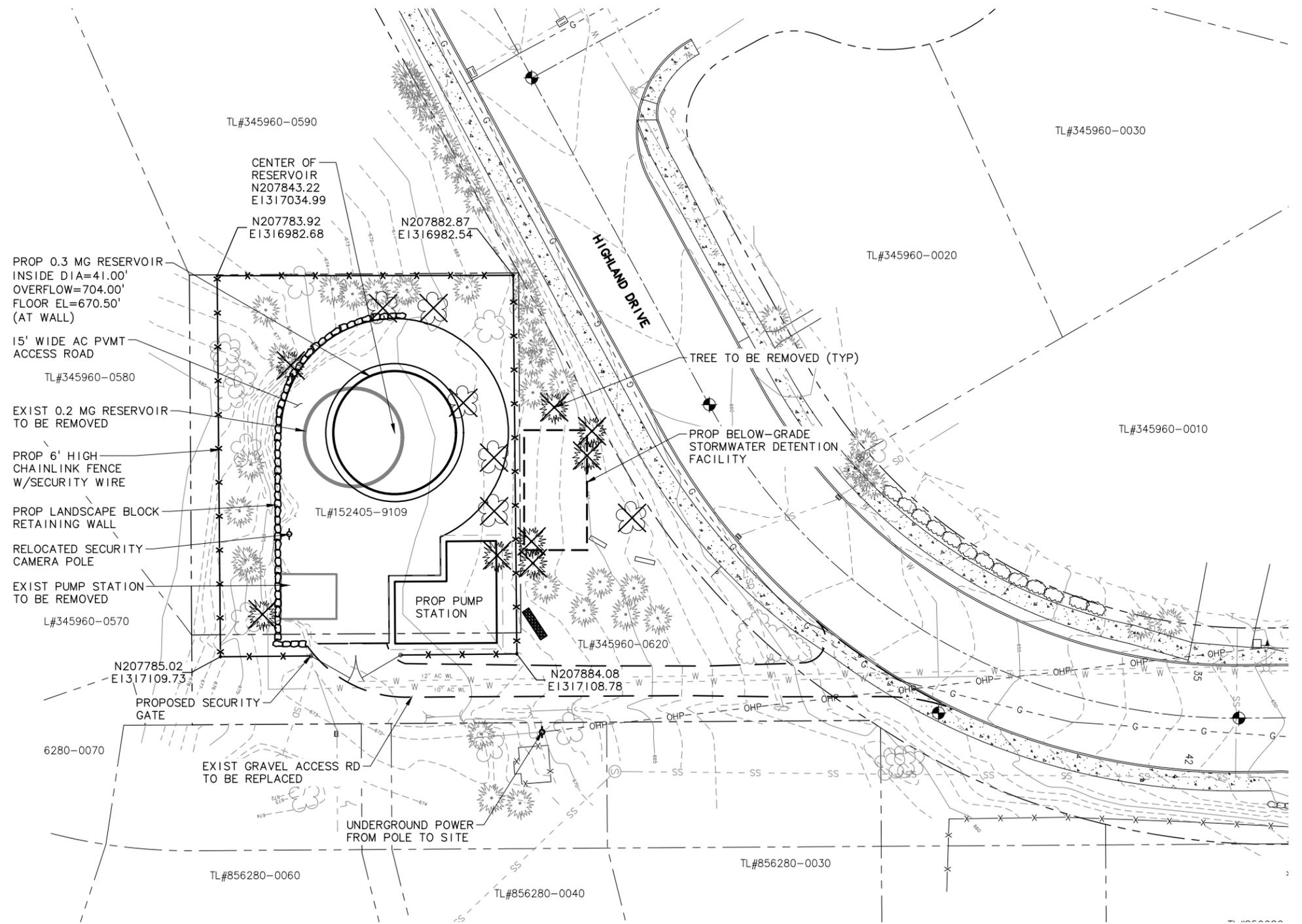


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METHOD USED: FIELD TRAVERSE W/ACTUAL FIELD MEASUREMENTS AND ANGLES WAC 332-130-090
DATE OF SURVEY: OCTOBER 2014
BASIS OF BEARING: PLAT OF HORIZON HIGHLANDS VOLUME 102, PAGES 84-85
BENCHMARK: CITY OF BELLEVUE MON #204A PC MON 148TH AVE SE 75' 1/2" SOUTH OF 148TH AVE SE AND SE 46TH PL ELEVATION=650.144' (NAVD88)



30% SUBMITTAL

NO	DATE	BY	APPR	REVISIONS

MSA
Murray Smith & Associates, Inc.
Engineers/Planners
2707 Colby Avenue, Suite 1110 PHOEN 425.252.9003
Everett, Washington 98201-3566 FAX 425.252.8853

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JULY 2015
MURRAY, SMITH & ASSOCIATES, INC.
Engineers/Planners

Approved By
UTILITIES ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
RP

SSA 7/7/15
DESIGNED BY DATE
BAW 7/7/15
DRAWN BY DATE
JLTA 7/7/15
CHECKED BY DATE

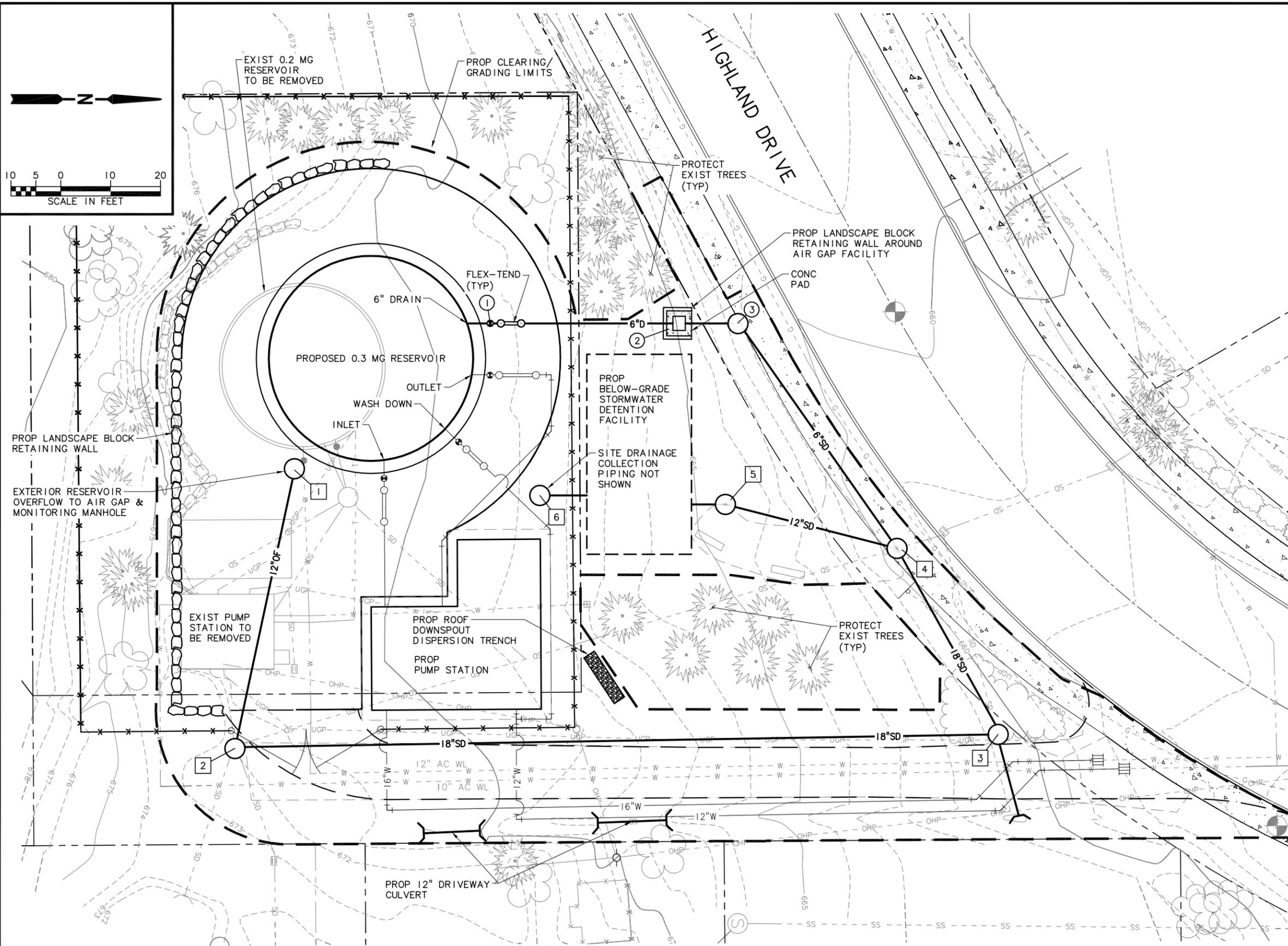


City of Bellevue
UTILITIES DEPARTMENT

HORIZON VIEW #1
RESERVOIR / PUMP STATION
SITE LAYOUT PLAN AND
SURVEY CONTROL
SEC 15 TWP 24 RGE 5 SHT C-4 OF X

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H:_Projects\14\1587_HV\CAD\Sheets\14-1587-WA-C.dwg C-7 Plot Date: 7/7/2015 2:21 PM Plotted by: BRETT WILLIAMS



NO	DATE	BY	APPR	REVISIONS

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PRELIMINARY ONLY
 DO NOT USE FOR CONSTRUCTION

JULY 2015

MURRAY, SMITH & ASSOCIATES, INC.
 Engineers/Planners

Approved By _____
 UTILITIES ENGINEERING MANAGER DATE _____
 PROJECT MANAGER DATE _____

SSA 7/7/15
 DESIGNED BY DATE
 BAW 7/7/15
 DRAWN BY DATE
 JLTA 7/7/15
 CHECKED BY DATE



City of Bellevue
 UTILITIES DEPARTMENT

HORIZON VIEW #1
 RESERVOIR / PUMP STATION

GRADING AND DRAINAGE PLAN

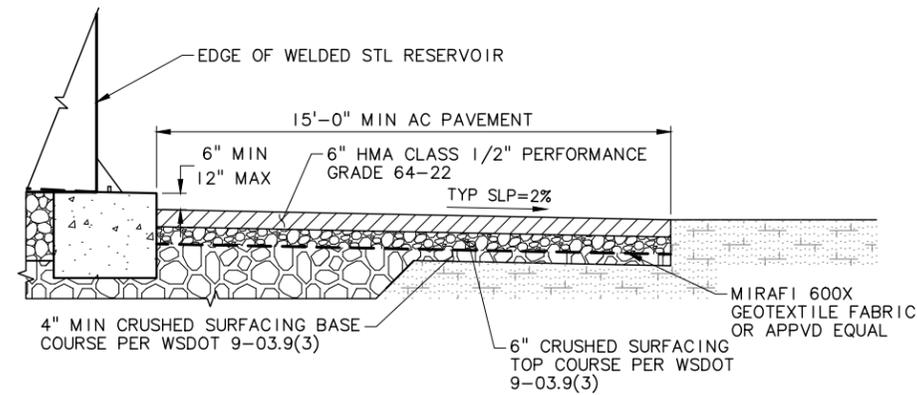
SEC. 15 TWP 24 RGE. 5 SHT C-7 OF X

- RESERVOIR DRAIN TO STORM DRAIN SCHEDULE:**
- N20786714, E1317027.99
 FURNISH & INSTALL:
 1-6" GV
 1-6" FLEX-TEND
 SEE SHT S-X FOR CONNECTION TO RESERVOIR
 - N207905.07, E1317028.01
 FURNISH & INSTALL:
 1-TYPE I CB FOR AIR GAP
 RIM=
 IE 6" IN(S)=
 IE 6" OUT(N)=
 - N207916.80, E1317027.99
 FURNISH & INSTALL:
 DECHLORINATION STRUCTURE, SEE DET X, SHT C-X
 RIM=
 IE 6" IN(S)=
 IE 6" OUT(NE)=

- RESERVOIR OVERFLOW/STORM SCHEDULE:**
- N207827.87, E1317057.06
 FURNISH & INSTALL:
 1-48" AIR GAP & MONITORING MH
 RIM=
 IE 12" IN(ABOVE)=
 IE 12" OUT(SE)=
 - N207815.94, E1317113.01
 FURNISH & INSTALL:
 1-48" SDM W/ SOLID COVER
 RIM=
 IE 12" IN(W)=
 IE 18" IN(SE)=665.68 (EXIST)
 IE 12" IN(NE)=669.43 (EXIST)
 IE 18" OUT(N)=
 - N207968.70, E1317110.04
 FURNISH & INSTALL:
 1-48" SDM W/ SOLID COVER
 RIM=
 IE 18" IN(S)=
 IE 12" IN(E)=
 IE 18" OUT(W)=
 - N207958.19, E1317069.61
 FURNISH & INSTALL:
 1-CB TYPE II W/ SOLID COVER
 RIM=
 IE 6" IN(SW)=
 IE 18" IN(E)=
 IE 12" IN(SW)=
 IE 18" OUT(N)=655.5% (EXIST)
 - N207921.14, E1317059.15
 FURNISH & INSTALL:
 FLOW CONTROL STRUCTURE, SEE DET X, SHT C-X
 RIM=
 IE 12" IN(S)=
 IE 12" OUT(N)=
 - N207877.09, E1317062.41
 FURNISH & INSTALL:
 1-48" CB TYPE II W/ SOLID COVER
 RIM=
 IE IN=
 IE 12" OUT(N)=

30% SUBMITTAL

KEYED NOTES:

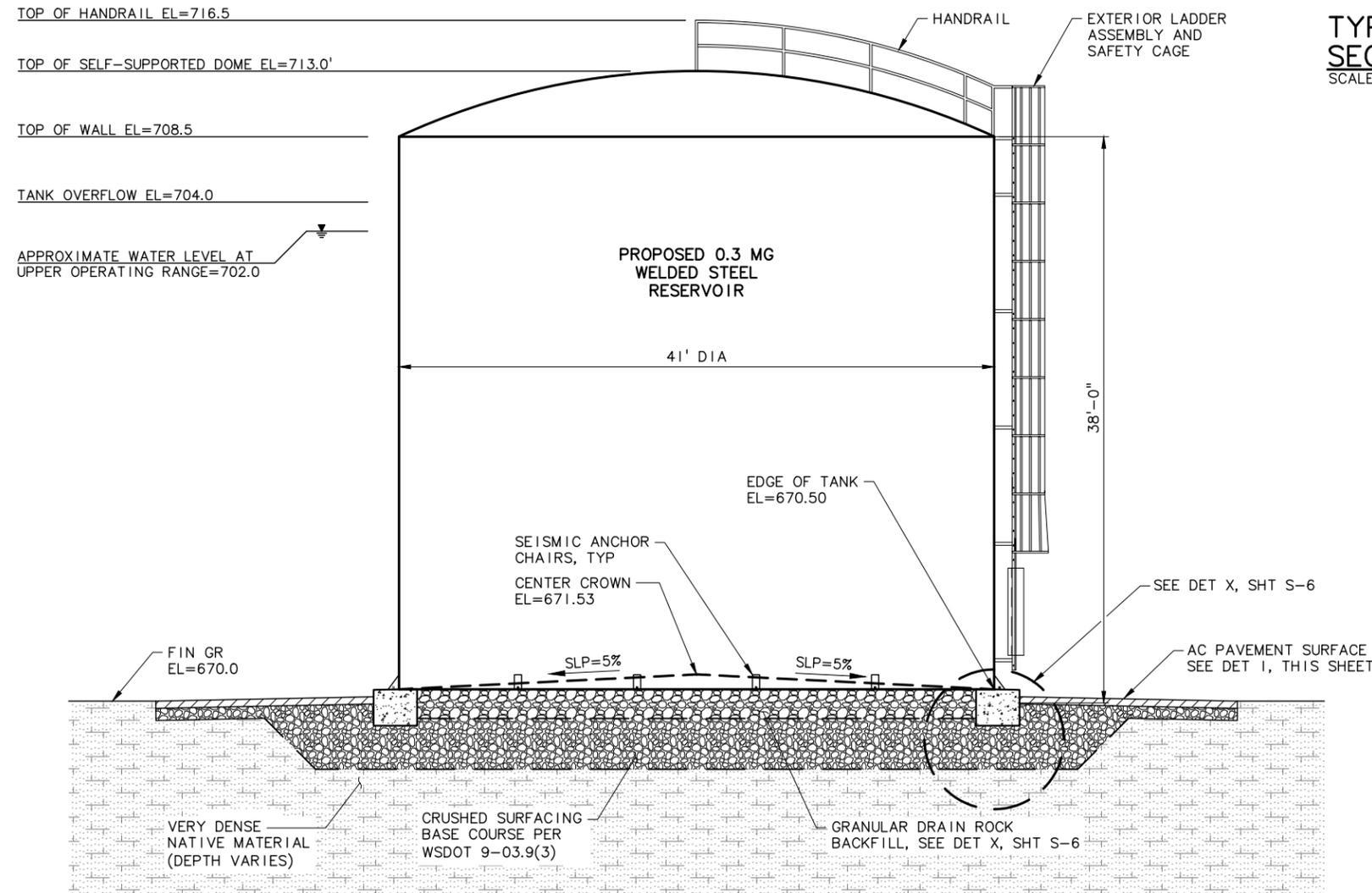


NOTES:

1. MINIMUM PAVEMENT THICKNESS SHALL BE 2-INCHES OF HOT MIX ASPHALT CLASS 1/2" PG 64.22 OVER 4 INCHES OF HOT MIX ASPHALT CLASS 1/2" OR 1" PG 64-22. IF REQUIRED, ADDITIONAL PAVEMENT THICKNESS WILL BE SPECIFIED BY THE ENGINEER.
2. ROAD SURFACING DEPTHS TYPICAL OF ALL PAVED SURFACES.

TYPICAL AC PAVEMENT SURFACE SECTION AROUND RESERVOIR

SCALE: 3/8"=1'-0"



RESERVOIR SECTION A-C-X
SCALE: 3/16"=1'-0"

30% SUBMITTAL

H:\EVT_Projects\14\1587_HV\CAD\Sheets\14-1587-WA-RES_DET.dwg C-13 Plot Date: 6/11/2015 4:25 PM Plotted by: HCM

NO	DATE	BY	APPR	REVISIONS

MSA Murray Smith & Associates, Inc.
Engineers/Planners
2707 Colby Avenue, Suite 1110 PHONE 425.252.9003
Everett, Washington 98201-3566 FAX 425.252.8853

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JULY 2015
MURRAY, SMITH & ASSOCIATES, INC.
Engineers/Planners

Approved By
UTILITIES ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
RP

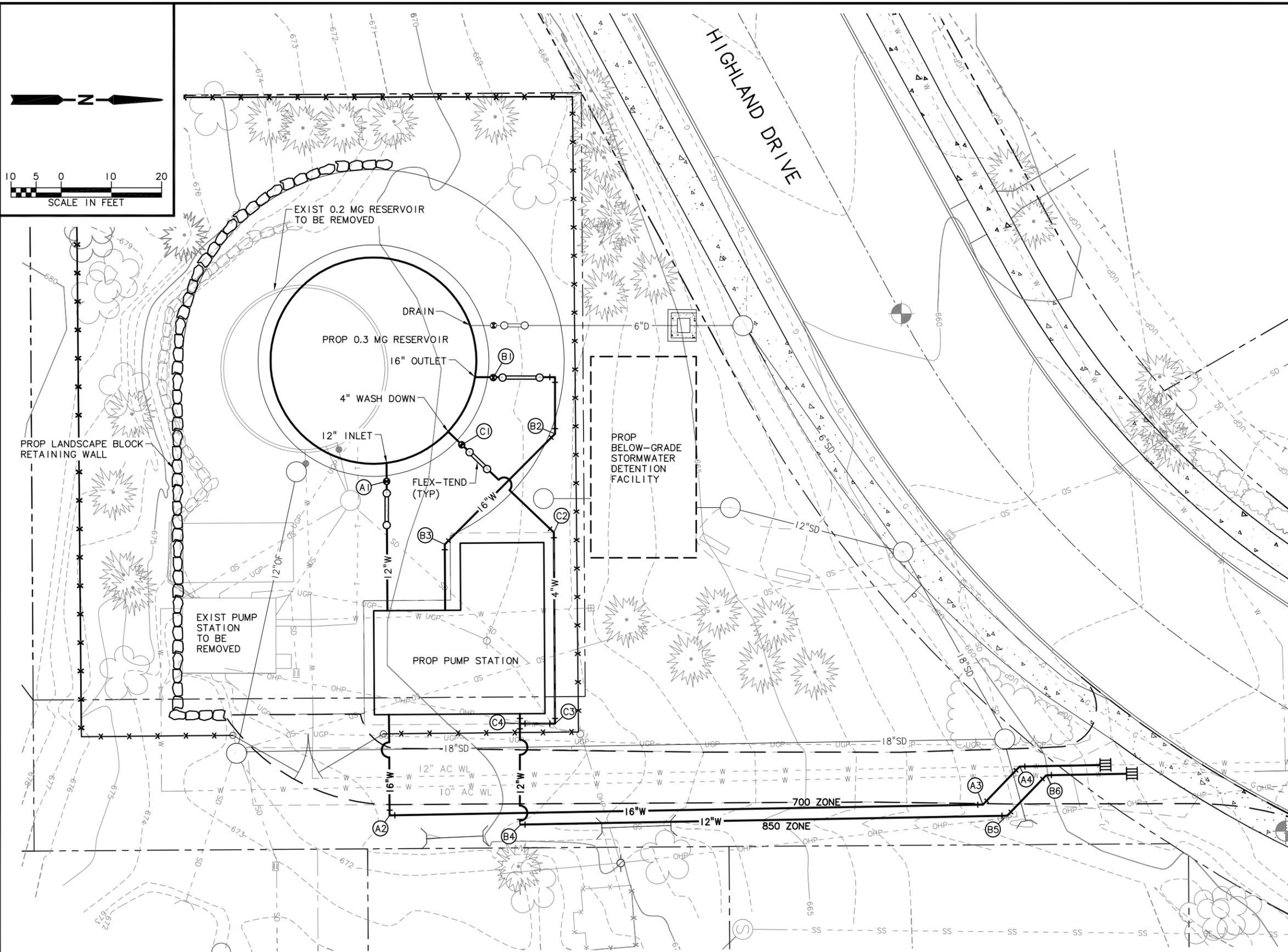
JAG 6/9/15
DESIGNED BY DATE
BAW 6/9/15
DRAWN BY DATE
TCL 6/9/15
CHECKED BY DATE



City of Bellevue
UTILITIES DEPARTMENT

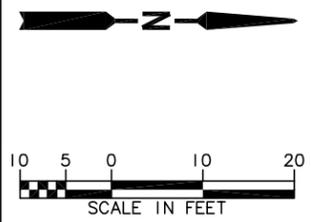
HORIZON VIEW #1
RESERVOIR / PUMP STATION
RESERVOIR SECTION
AND DETAILS
SEC. 15, TWP. 24, RGE. 5 SHT C-13 OF X

H:\EVT_Projects\14\1587_HV\CAD\Sheets\14-1587-WA-C.dwg C-14 Plot Date: 7/7/2015 2:23 PM Plotted by: BRETT.WILLIAMS



WATER PIPING SCHEDULE:

- (A1) N207845.85, E1317058.48
FURNISH & INSTALL:
1-12" GV
1-12" FLEX-TEND
SEE SHT S-X FOR
CONNECTION TO
RESERVOIR
- (A2) STA AX+XX
N207846.45, E1317125.37
FURNISH & INSTALL:
1-16" 90° BEND
SEE SHT M-X FOR
CONNECTION TO PUMP
STATION, SEE SHT C-X
FOR PROFILE
- (A3) STA AX+XX
N207964.66, E1317123.23
FURNISH & INSTALL:
1-16" 45° BEND
- (A4) STA AX+XX
N207971.98, E1317115.65
CONNECT TO EXIST 700
ZONE 12" AC WATER
MAIN,
SEE DET X, SHT X
POTHOLE TO CONFIRM
LOCATION AND ELEV,
END PROFILE, SEE SHT
C-X
- (B1) N207864.55, E1317038.27
FURNISH & INSTALL:
1-16" GV
1-16" FLEX-TEND
1-16" 90° BEND
SEE SHT S-X FOR
CONNECTION TO
RESERVOIR
- (B2) N207876.40, E1317052.54
FURNISH & INSTALL:
1-16" 45° BEND
- (B3) N207857.43, E1317071.51
FURNISH & INSTALL:
1-16" 45° BEND
- (B4) STA BX+XX
N207872.40, E1317127.20
FURNISH & INSTALL:
1-12" 90° BEND
SEE SHT C-X FOR
PROFILE
- (B5) STA BX+XX
N207969.50, E1317125.42
FURNISH & INSTALL:
1-12" 45° BEND
SEE SHT
- (B6) STA BX+XX
N207977.25, E1317117.38
CONNECT TO EXIST 850
ZONE 10" AC
WATER MAIN,
SEE DET X, SHT X
POTHOLE TO CONFIRM
LOCATION AND ELEV
END PROFILE, SEE SHT
C-X
- (C1) STA CX+XX
N207860.82, E1317051.71
FURNISH & INSTALL:
1-4" GV
1-4" FLEX-TEND, SEE
SHT S-X FOR
CONNECTION TO
RESERVOIR
- (C2) STA CX+XX
N207879.17, E1317069.13
FURNISH & INSTALL:
1-4" 45° BEND
- (C3) STA CX+XX
N207879.41, E1317107.13
FURNISH & INSTALL:
1-4" 90° BEND
- (C4) STA CX+XX
N207872.40, E1317107.13
FURNISH & INSTALL:
1-12"x4" TEE
SEE SHT M-X FOR
CONNECTION TO PUMP
STATION



30% SUBMITTAL

NO	DATE	BY	APPR	REVISIONS

MSA Murray Smith & Associates, Inc.
Engineers/Planners
2707 Colby Avenue, Suite 1110 PHOEN 425.252.9003
Everett, Washington 98201-3566 FAX 425.252.8853

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UTILITIES ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
RP

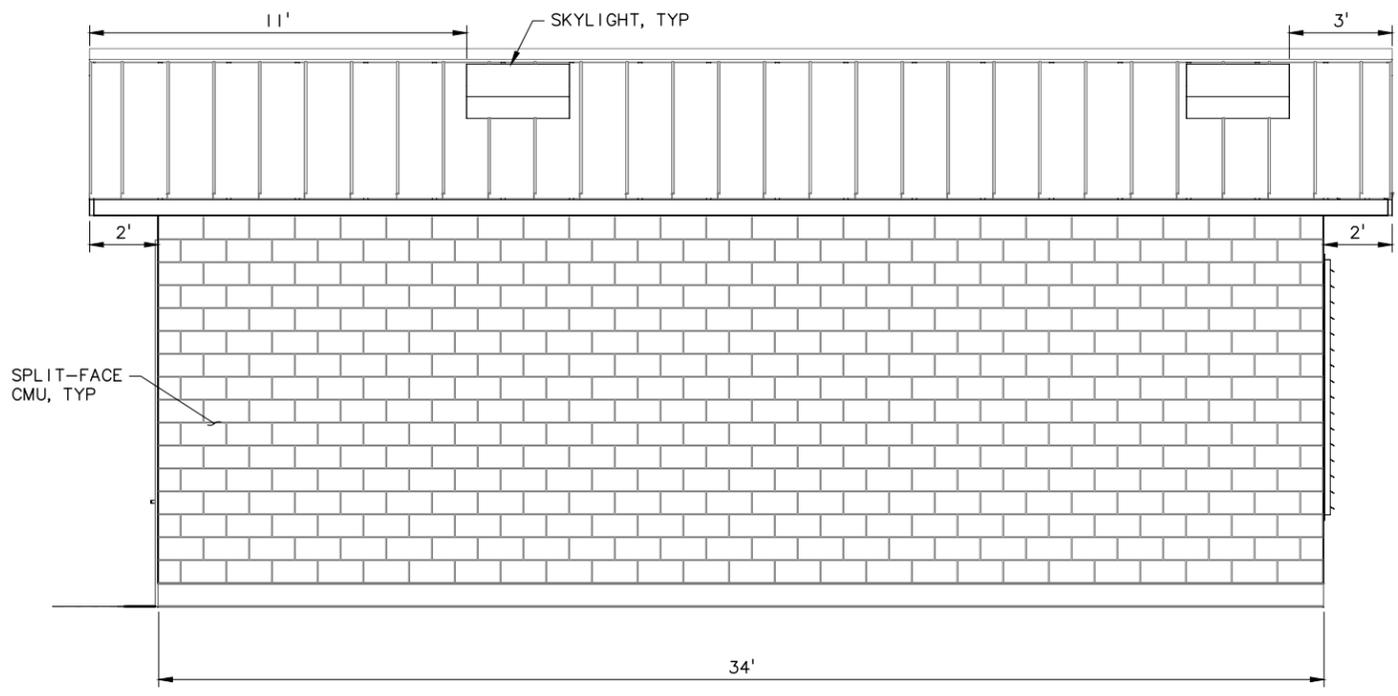
SSA 7/7/15
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BAW 7/7/15
DRAWN BY DATE
JLTA 7/7/15
CHECKED BY DATE



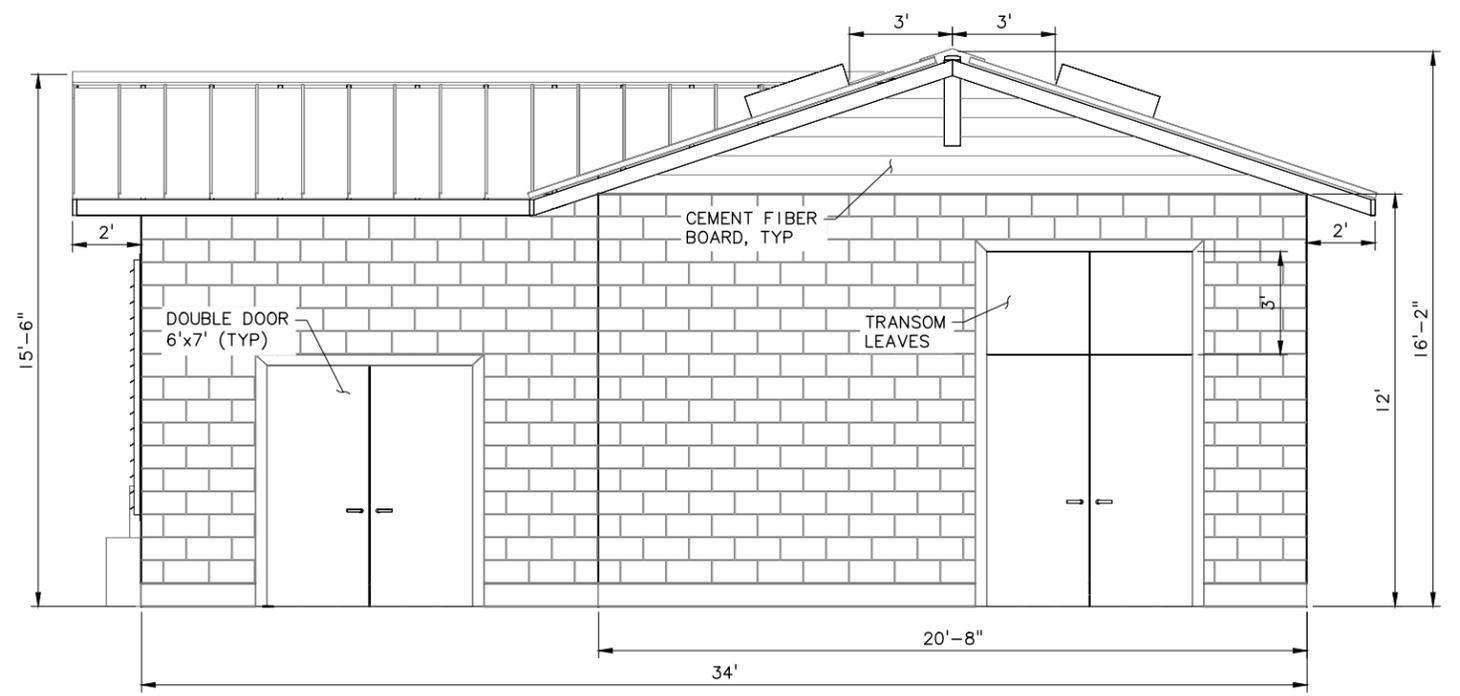
City of
Bellevue
UTILITIES DEPARTMENT

HORIZON VIEW #1
RESERVOIR / PUMP STATION
SITE PIPING PLAN
SEC. 15 TWP 24 RGE. 5 SHT C-14 OF X

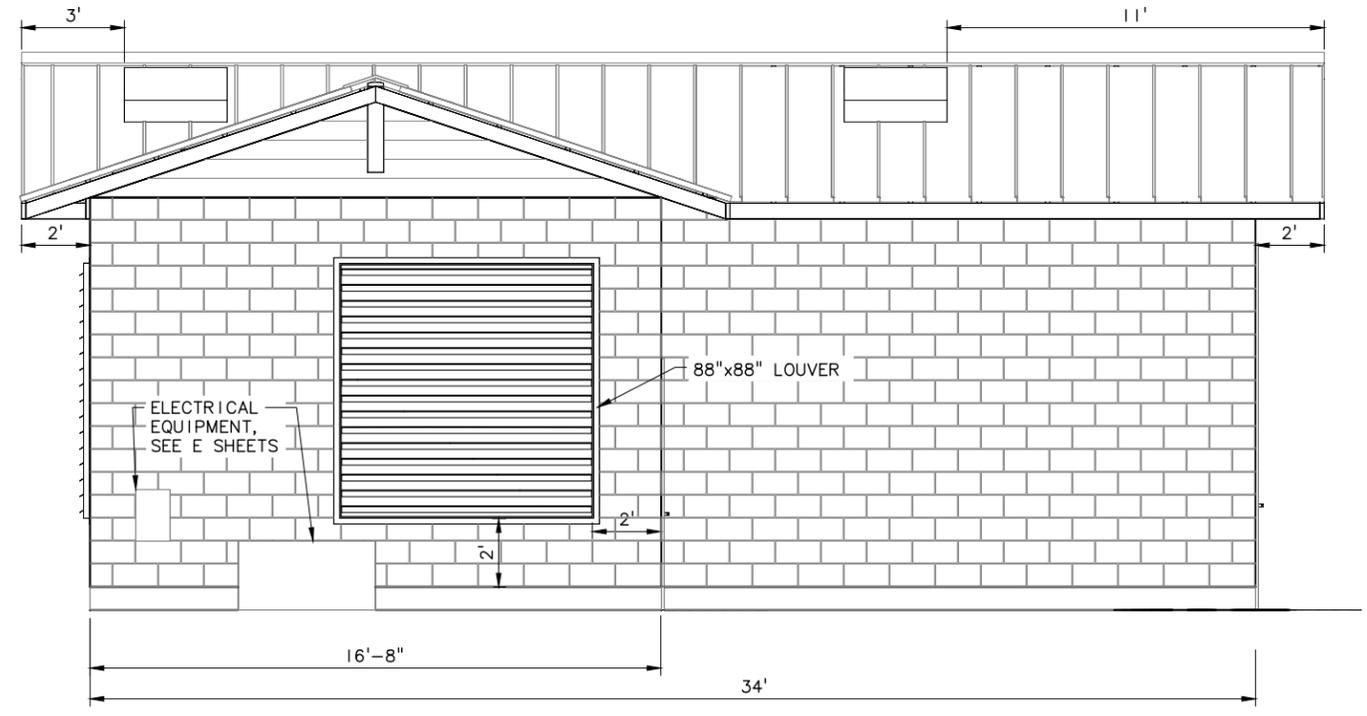
H:\EVT_Projects\14\1587_HV\CAD\Sheets\14-1587-WA-Arch.dwg A-2 Plot Date: 7/7/2015 1:14 PM Plotted by: BRETT.WILLIAMS



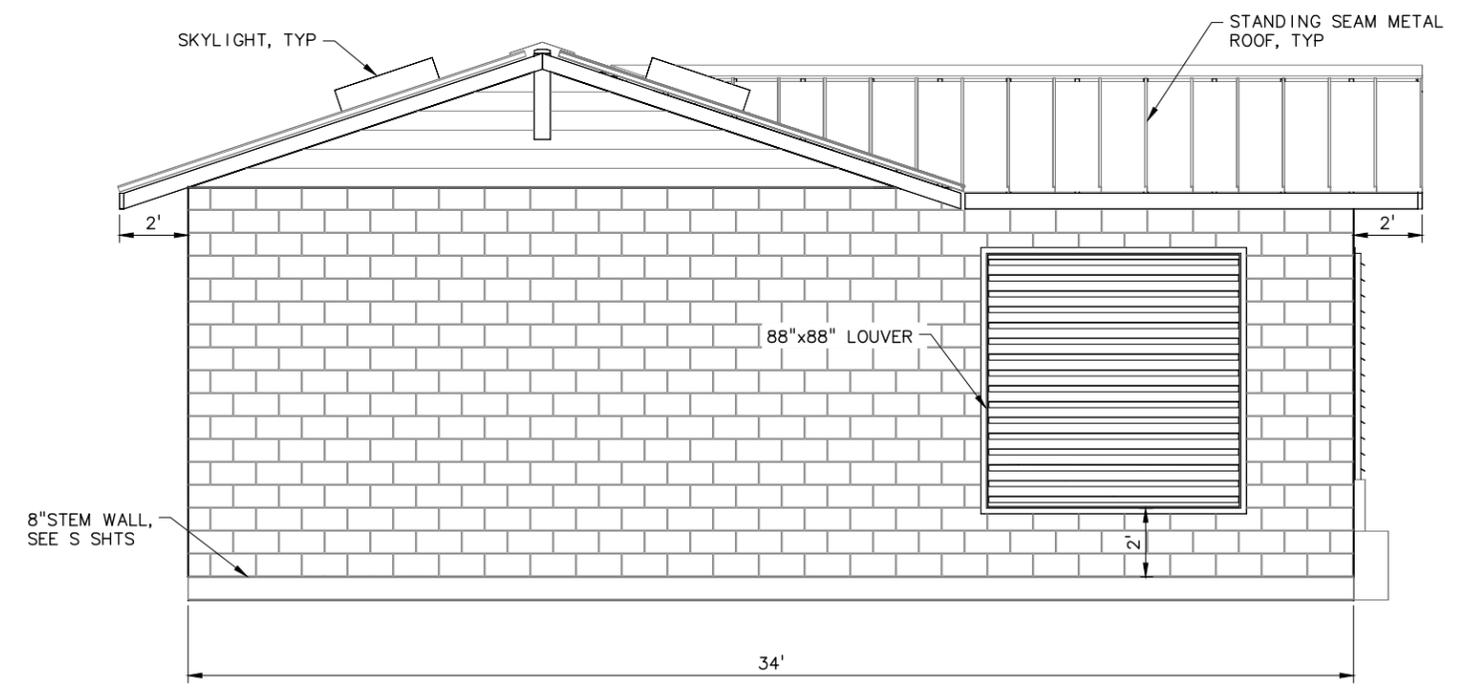
EAST ELEVATION
SCALE: 3/8" = 1'-0"



SOUTH ELEVATION
SCALE: 3/8" = 1'-0"



WEST ELEVATION
SCALE: 3/8" = 1'-0"



NORTH ELEVATION
SCALE: 3/8" = 1'-0"

30% SUBMITTAL

NO	DATE	BY	APPR	REVISIONS

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Engineers/Planners
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Everett, Washington 98201-3566 FAX 425.252.8853

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UTILITIES ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
RP

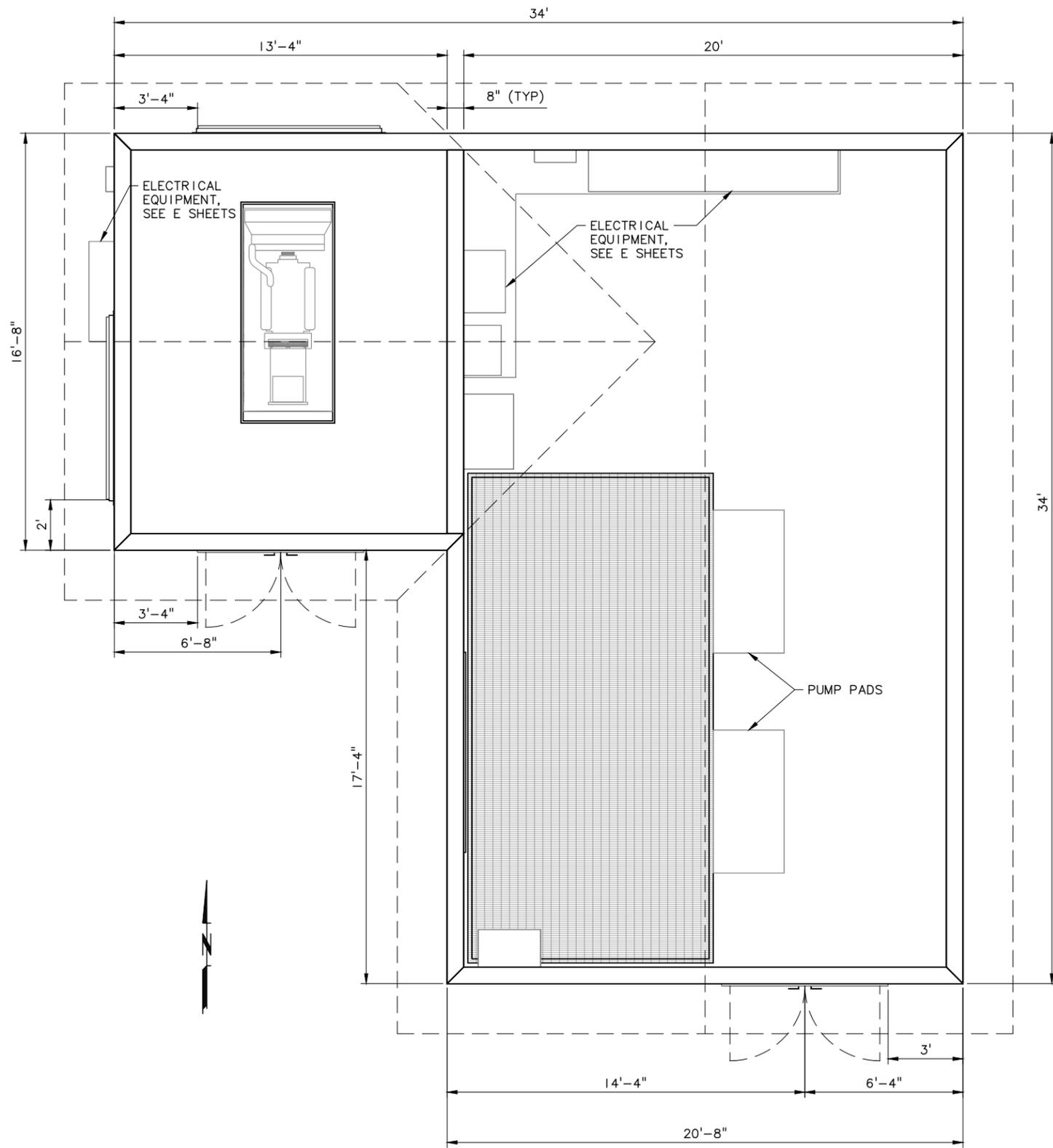
CEH 7/7/15
DESIGNED BY DATE
HCM
DRAWN BY DATE
CEH 7/7/15
CHECKED BY DATE



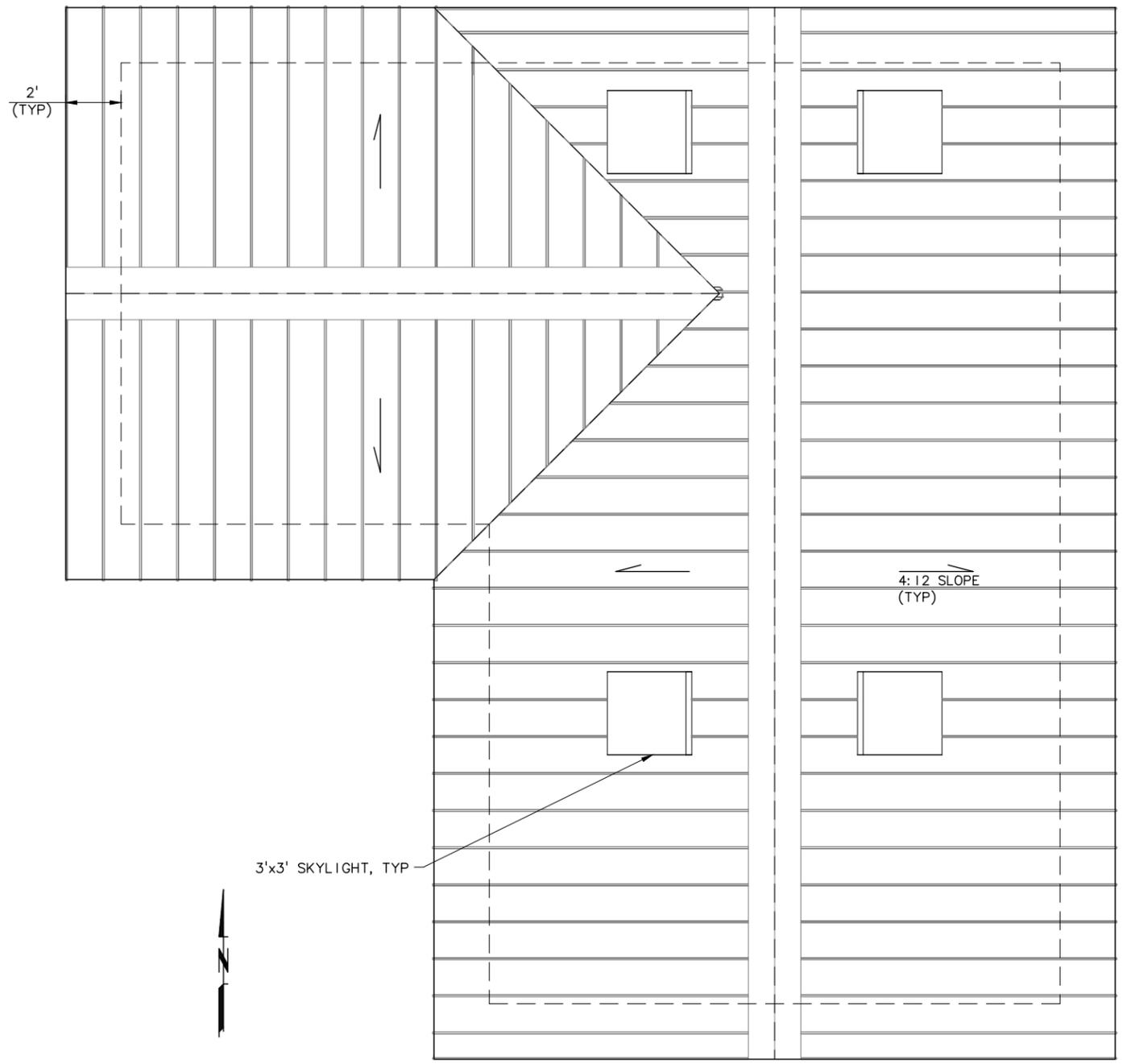
City of Bellevue
UTILITIES DEPARTMENT

HORIZON VIEW #1
RESERVOIR / PUMP STATION
PUMP STATION ELEVATIONS
SEC 15 TWP 24 RGE 5 SHT A-2 OF X

H:\EVT_Projects\14\1587_HV\1\CAD\Sheets\14-1587-WA-Arch.dwg A-3 Plot Date: 7/7/2015 1:14 PM Plotted by: BRETT.WILLIAMS



FLOOR PLAN
SCALE: 3/8"=1'-0"



ROOF PLAN
SCALE: 3/8"=1'-0"

SHEET NOTES:

- 1. PUMP ROOM VENTILATION TO BE INCLUDED AT 80% DESIGN.

30% SUBMITTAL

NO	DATE	BY	APPR	REVISIONS

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Engineers/Planners
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Everett, Washington 98201-3566 FAX 425.252.8853

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UTILITIES ENGINEERING MANAGER DATE
PROJECT MANAGER DATE
RP

CEH 7/7/15
DESIGNED BY DATE
HCM
DRAWN BY DATE
CEH 7/7/15
CHECKED BY DATE



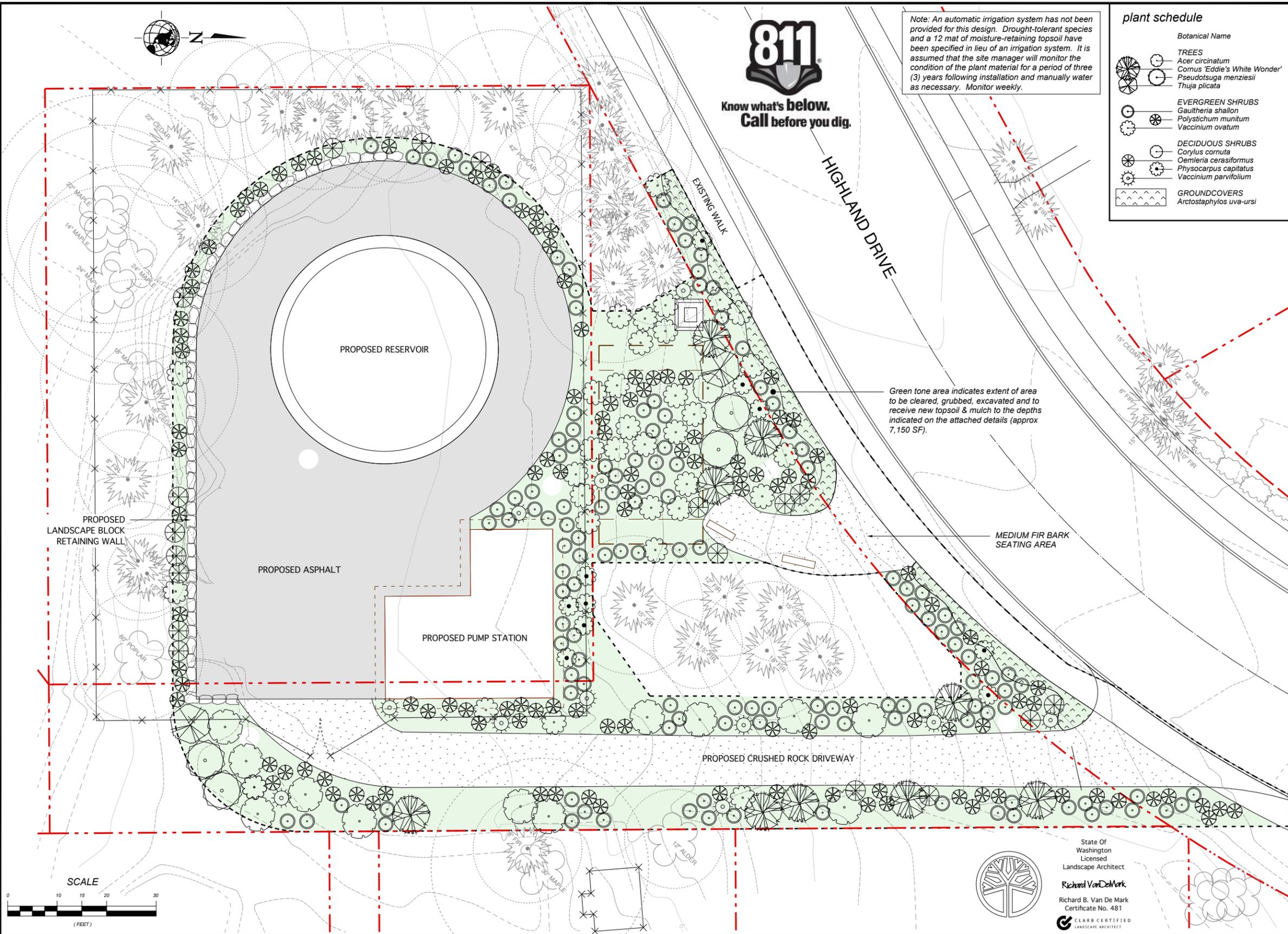
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Bellevue
UTILITIES DEPARTMENT

HORIZON VIEW #1
RESERVOIR / PUMP STATION
PUMP STATION PLAN
SEC 15 TWP 24 RGE 5 SHT A-3 OF X

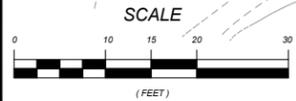


Note: An automatic irrigation system has not been provided for this design. Drought-tolerant species and a 12 mat of moisture-retaining topsoil have been specified in lieu of an irrigation system. It is assumed that the site manager will monitor the condition of the plant material for a period of three (3) years following installation and manually water as necessary. Monitor weekly.

Botanical Name	Common Name	Size	Notes	Quantity
TREES				
Acer circinatum	Vine Maple	5 gal.	min. 3' tall, multi trunk	11
Cornus 'Eddie's White Wonder'	Eddie's White Wonder Dogwood	3'-4'	single trunk, B&B	9
Pseudotsuga menziesii	Douglas Fir	5 gal.	min. 6' tall, B&B	4
Thuja plicata	Western Red Cedar	5 gal.	min. 6' tall, B&B	2
EVERGREEN SHRUBS				
Gaultheria shallon	Salal	1 gal.		137
Polystichum munitum	Sword Fern	1 gal.		118
Vaccinium ovatum	Evergreen Huckleberry	1 gal.		34
DECIDUOUS SHRUBS				
Corylus cornuta	Beaked Hazel	2 gal.		2
Oemleria cerasiformis	Indian Plum	1 gal.		18
Physocarpus capitatus	Common Ninebark	1 gal.		10
Vaccinium parvifolium	Red Huckleberry	1 gal.		11
GROUNDCOVERS				
Arctostaphylos uva-ursi	Bearberry	4" pot	18" O.C.	165



Green tone area indicates extent of area to be cleared, grubbed, excavated and to receive new topsoil & mulch to the depths indicated on the attached details (approx 7,150 SF).



State Of Washington
Licensed
Landscape Architect
Richard VanDeMark
Richard B. Van De Mark
Certificate No. 481
CLARB CERTIFIED
LANDSCAPE ARCHITECT

30% SUBMITTAL

NO	DATE	BY	APPR

RVLA, inc., p.s.
33109 SE 110th street
Issaquah, WA 98027
phone • 425 222-7645
e-mail • rvla@comcast.net

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July 2015

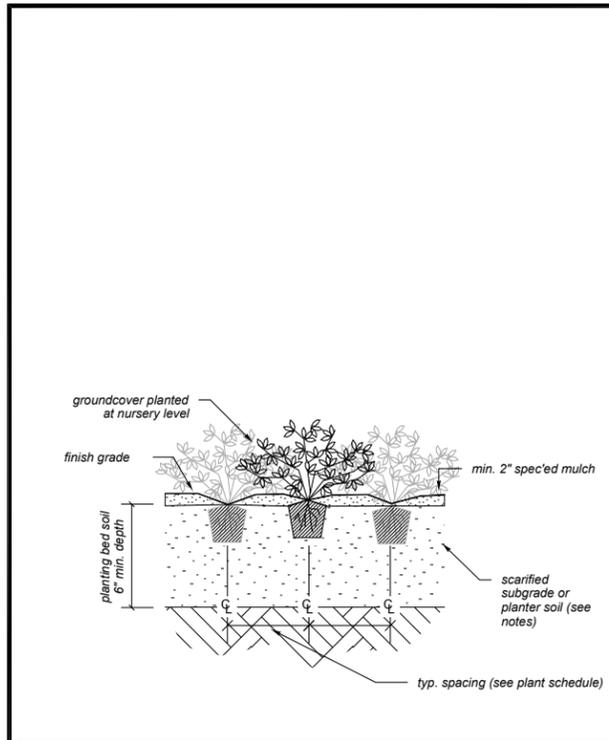
Approved By
UTILITIES ENGINEERING MANAGER DATE
PROJECT MANAGER DATE

RV 6/29/15
DESIGNED BY DATE
RV 6/29/15
DRAWN BY DATE
CHECKED BY DATE

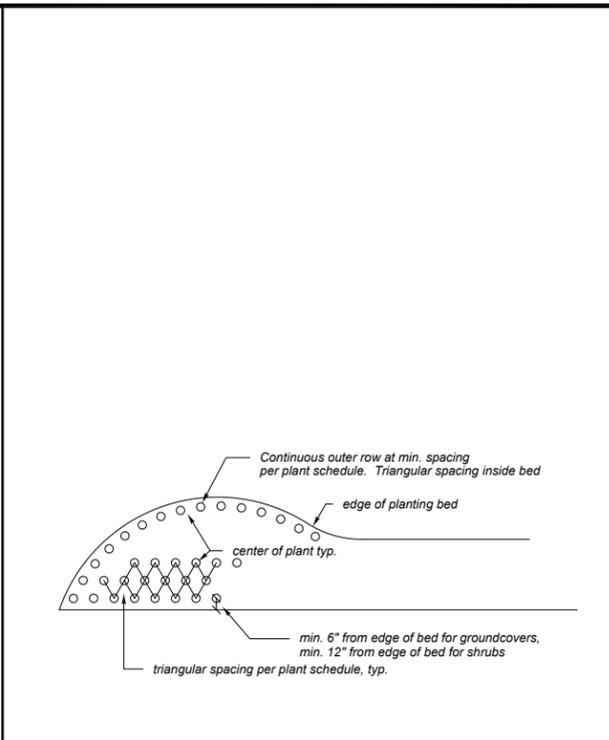


City of Bellevue
UTILITIES DEPARTMENT

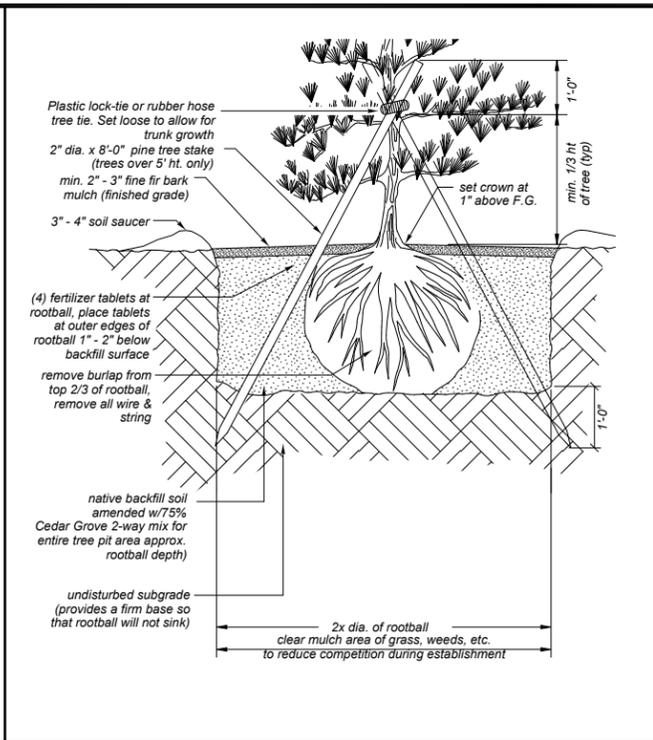
HORIZON VIEW #1
RESERVOIR/PUMP STATION
PRELIMINARY LANDSCAPE PLAN
SEC 15 TWP 24 RGE 5 SHT L-1 OF



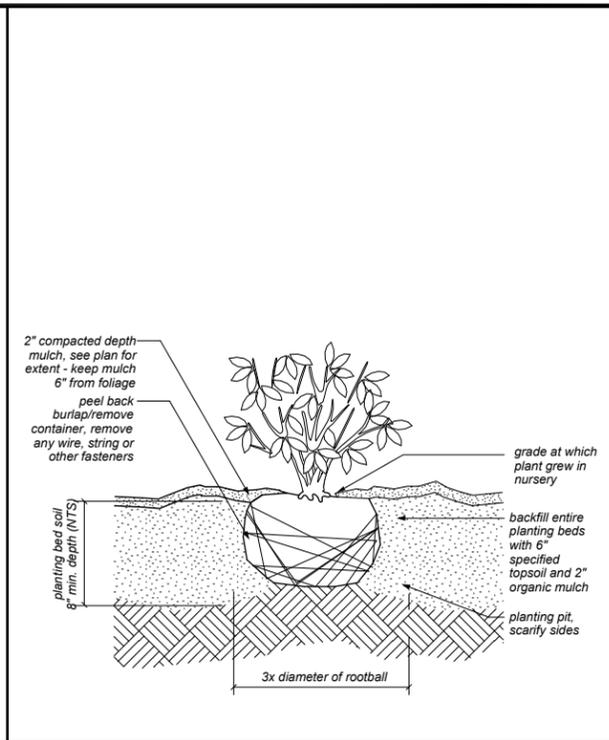
A Groundcover Planting *no scale*



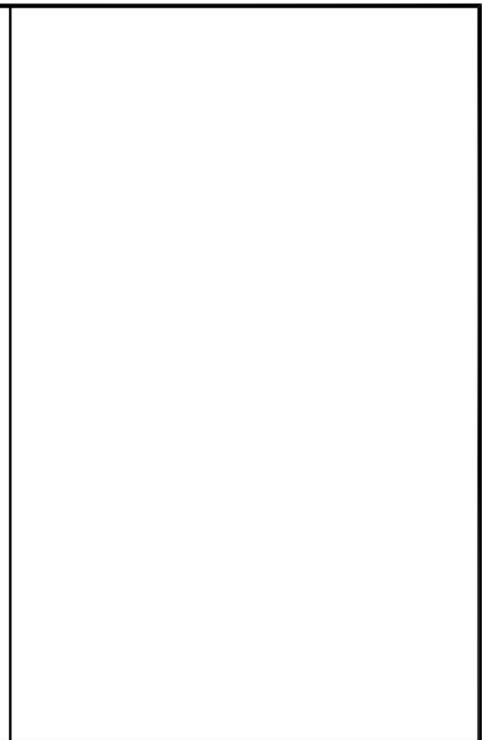
B Groundcover Spacing *no scale*



C Evergreen Tree Planting *no scale*



D Shrub Planting *no scale*



E

LANDSCAPE NOTES:

GENERAL

- PRESERVE AND PROTECT EXISTING VEGETATION. REMOVE ONLY THAT IS NECESSARY TO BUILD AND MAINTAIN SITE.

TOPSOIL

- OVER-EXCAVATE SUBGRADE AS REQUIRED TO PROVIDE FOR 6" COMPACTED DEPTH IMPORTED TOPSOIL AND 2" COMPACTED DEPTH MULCH. SCARIFY OR ROTOTILL SUBGRADE TO A MIN. 4" DEPTH. REMOVE DEBRIS & STONE LARGER THAN 3/4" IN ANY DIMENSION REMAINING ON THE SURFACE AFTER TILLING.
- PLACE IMPORTED SANDY LOAM TOPSOIL IN TWO LIFTS: (1) PLACE MIN 4" DEPTH TOPSOIL AND ROTOTILL TO A DEPTH OF 8 INCHES TO INCORPORATE NEW TOPSOIL WITH SUBSOIL. (2) FOLLOWING TILLING, PLACE MIN. 2-INCH DEPTH TOPSOIL AND COMPACT.

PLANT STANDARDS

- CONFORM TO WASHINGTON STATE DEPT. OF AGRICULTURE (WSDA); WASHINGTON STATE STANDARDS FOR NURSERY STOCK, ORDER NO. 1627.
- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI): ANSI-Z 60.1-1986 AMERICAN STANDARDS FOR NURSERY STOCK.
- AMERICAN JOINT COMMITTEE OF HORTICULTURE NOMENCLATURE: STANDARD PLANT NAMES, CURRENT EDITION.

DELIVERY, STORAGE, AND HANDLING

- PROTECT PLANT FROM HARM AND DAMAGE AT ALL TIMES. PROTECT TREES DURING TRANSPORT BY TYING IN BRANCHES AND COVERING ALL EXPOSED BRANCHES.

JOB CONDITIONS

- PLANT DURING PERIODS NORMAL FOR OPTIMUM GROWTH, AS DETERMINED BY SEASON, WEATHER CONDITIONS, AND ACCEPTED PRACTICE. PLANTING OPERATIONS MAY BE CONDUCTED UNDER UNSEASONABLE CONDITIONS BY ACCEPTING FULL RESPONSIBILITY FOR ANY SUBSEQUENT, RESULTING LOSSES.

UNDERGROUND CONDITIONS

- BE FAMILIAR WITH UTILITY, MECHANICAL, AND ELECTRICAL PLANS SO THAT DIGGING OPERATIONS DO NOT DAMAGE LINES.

WARRANTY

- WARRANT ALL PLANT MATERIAL FOR HEALTHY, THRIVING CONDITIONS FOR THREE (3) YEARS FOLLOWING PLANT INSTALLATION PER WSDOT STANDARDS.
- DURING GUARANTEE PERIOD, IMMEDIATELY REMOVE AND REPLACE ALL DEAD, DISEASED, DYING, BROKEN OR DISAPPEARED PLANT MATERIALS (DUE TO ANY CAUSE, EXCEPT AS NOTED BELOW). USE SPECIFIED PLANTS AND PERFORM AT NO ADDITIONAL COST TO THE OWNER.
- DURING GUARANTEE PERIOD, THE GUARANTOR IS NOT RESPONSIBLE FOR REPLACING PLANTS DESTROYED OR DAMAGED BY VANDALISM, ACCIDENTS CAUSED BY OTHERS, OR ACTS OF NATURE.

PLANT QUALITY

- PLANTS SHALL BE FRESH, WELL FOLIAGED, IN PRIME CONDITION WHEN IN LEAF, AND EXHIBITING NORMAL HABIT OF GROWTH. ALL LEADERS AND BUDS INTACT, FREE OF DISEASE, INJURY, AND ANY SIGN OF INSECTS. FREE OF SEEDS, WEED ROOTS AND OTHER CONTAMINANTS.
- PLANTS ARE TO BE NURSERY GROWN.
- PLANTS TO BE ACCLIMATED TO THE PROJECT SITE ENVIRONMENTAL CONDITIONS. NO COLD STORAGE PLANTS.
- BALL AND BURLAPPED (B&B) STOCK IS REQUIRED TO HAVE A ROOT STRUCTURE SUFFICIENT TO INSURE SURVIVAL AND HEALTHY GROWTH.
- CONTAINER GROWN MATERIALS ARE REQUIRED TO HAVE SUFFICIENT ROOT TO HOLD THE EARTH INTACT WHEN REMOVED FROM THE CONTAINERS BUT NOT BE ROOT BOUND.

FERTILIZER

- FORMULA 4-2-2 "TRANSPLANTER" AS MANUFACTURED BY PACIFIC AGRO CO., APPLY AT RATE AS PER MANUFACTURER'S PRINTED INSTRUCTIONS
- AGRIFORM TABLETS, 21-GRAM SIZE, AS MANUFACTURED BY AGRIFORM INTERNATIONAL CHEMICALS, INC. 20-10-5 ANALYSIS. APPLY AT RATE OF:
TREES: 4 TABLETS
SHRUBS: 1 TABLET

MULCH

- STEERCO, GROCO, OR OTHER APPROVED COMMERCIALY AVAILABLE FERTILE MULCH.

PLANT INSTALLATION

- EXCAVATE PLANTING HOLE.
- PLACE PLANT IN UPRIGHT POSITION IN CENTER OF PIT, REMOVE ANY ROOT COVERING AS DETAILED AND SPREAD ROOTS TO HAVE A NATURAL SPREAD AND DISTRIBUTION.
- BACKFILL WITH EXCAVATED MATERIAL. TAKE CARE NOT TO INJURE ROOT SYSTEM. THOROUGHLY PACK AND PUDDLE SOIL AROUND ROOTS.
- FERTILIZE AS SPECIFIED.
- STAKE AND GUY AS SPECIFIED
- IMMEDIATELY AFTER COMPLETION OF ALL PLANTING, THOROUGHLY WATER PLANTING AREA THEN MULCH ALL PLANTING AREA TO A MINIMUM COMPACTED DEPTH OF 2 INCHES AND AS DETAILED

MAINTENANCE

- MAINTAIN PLANTING AREAS FOR A PERIOD OF ONE YEAR UNTIL THE END OF THE WARRANTY PERIOD.
- WATER PLANTINGS AREAS BY THOROUGH SPRINKLING. PROVIDE AS NEEDED TO KEEP GROUND MOIST AND PLANTS HEALTHY. PREVENT SOIL EROSION.
- PRUNE, CULTIVATE, FERTILIZE, SPRAY AND PERFORM OTHER NECESSARY OPERATIONS TO ENSURE HEALTH OF PLANTINGS.

NO	DATE	BY	APPR


 RVLA, inc., p.s.
 33109 SE 110th street
 Issaquah, WA 98027
 phone • 425 222-7645
 e-mail • rvla@comcast.net

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 July 2015

Approved By
 UTILITIES ENGINEERING MANAGER DATE _____
 PROJECT MANAGER DATE _____


RV 6/29/15
 DESIGNED BY DATE _____
 RV 6/29/15
 DRAWN BY DATE _____
 CHECKED BY DATE _____



City of Bellevue
 UTILITIES DEPARTMENT

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HORIZON VIEW #1
 RESERVOIR/PUMP STATION
 PRELIMINARY LANDSCAPE DETAILS
 SEC 15 TWP 24 RGE 5 SHT L-2 OF _____