APPENDIX D

Winters House Construction Minimization and Avoidance Technical Memorandum and Landscape Report

APPENDIX D1

Winters House Construction Minimization and Avoidance Technical Memorandum

M E M O R A N D U M

Sound Transit, East Link Project

Construction of Transit Corridor in Proximity to Winters House Foundation

TO:	Jodi Ketelsen/CH2M HILL
FROM:	Green, Ken/CH2M HILL
DATE:	November 23, 2010

The B2M preferred alternative route is designed as a lidded, retained cut that would be below ground and out of visual sight from the front of the Winters House, a public building listed on the National Historic Register. This memorandum describes the construction sequence, monitoring program, and minimization and avoidance techniques that have been incorporated into the project and would prevent damage or limit impacts to minor cosmetic damage. If any cosmetic damage occurs, ST will make repair in accordance with the Secretary of Interior's Standards for Treatment of Historic Properties.

Background

Description of Winters House. The Winters House was constructed in the late 1920's by Frederick and Cecelia Winters, prominent early Bellevue citizens. The house utilizes concrete foundations and basement walls and is finished with Spanish architecture, including stucco siding and extensive use of tile. The property was purchased by the City of Bellevue and the house was restored to its present condition in about 1988. The structure is currently used by the City as a cultural and natural interpretive center, community meeting space, and the home of the Bellevue Historical Society.

The structure contains three floors: a main level at street grade, a lower basement, and an upper level. The upper structure is believed to be a wood frame building with stucco (mortar) siding. The lower level is constructed with concrete basement foundation walls extending to about 9 feet or more below grade at the west side and day-lighting at the east. It is not known if or how extensively the structure's concrete foundation walls are reinforced. Given the age of the structure, it is likely however, that the reinforcing in the basement walls and floor is minimal.

Description of Project Next to the Winters House. The new transit corridor will be constructed in a lidded retained cut in the area next to the Winters House. This lidded segment will extend from station 2067+19 to 2068+89, a distance of 170 feet. The Winters House is near the center of this segment.

The lidded transit facility in this 170 foot long segment will consist of a heavily braced excavation with massive secant pile walls along both sides of the retained cut. At its closest point to the Winters House, the outside edge of the secant pile wall will be approximately 9 feet from the main foundation walls of the Winters House. A front porch on the house extends from the main structure and would be about 4.5 to 5 feet from the outside walls of the transit corridor along a short distance (about 15 feet).

A concrete lid will be used to cover and span between the two secant pile walls and will serve as a lateral brace to support a portion of the lateral loads carried by the transit structure walls. Permanent bracing will also be used at rail grade to provide additional lateral support near the base of the transit corridor excavation. The combination of the concrete lid, the permanent bracing at the track grade, and the thick (estimated 4-foot diameter) secant pile walls will result in a very rigid structure that limits lateral ground movement outside the walls to essential zero.

It is important that the Winters house structure be preserved and protected from damage as a result of construction and operation of the new light rail system. This includes protection from lateral movement and control of construction vibrations and vibrations during operation of the facility. Vibrations during operation of the system will be controlled by use of elastomeric pads and special fixation methods intended to reduce vibrations in adjacent structures to levels that will not cause either structural or cosmetic damage to the structure.

Figures, Photos, and Other Attachments. Key features of the house and the planned project are shown in the following figures:

- Attached Figure 1 illustrates the existing floor plans for both the main level and lower levels of the Winters House. Attached photos and figures show a porch that extends about 4.5 feet from the west side of the house towards the street.
- Figure 2 provides a structural cross section of the transit corridor illustrating the elements of this structure and its approximate setting in relation to the Winters House. In this figure, the approximate location of the Winters house foundation walls and footings are shown. The secant pile walls near the house are shown where they will extend below the basement of the house. This figure also illustrates the approximate subsurface strata and groundwater location as measured in nearby soil borings.
- Figure 3 provides a longitudinal profile of the transit facility grade at the Winters House segment. It illustrates the soil types and groundwater conditions in the vicinity of the Winters House.

A package of twelve 11 x17 inch preliminary design drawings is also attached in the appendix of this report showing the alignment and design details in the vicinity of the Winters House. Drawing No. L65-SD010 illustrates the anticipated design configuration of the secant pile wall section.

Finally, selected photos are provided in the appendix illustrating the conditions inside and outside of the Winters House in the vicinity of the proposed construction.

Measures for Minimizing and Avoiding Impacts to Winters House

A number of measures would be used during construction to minimize or avoid the potential impacts of construction on the Winters House. These measures would be included in contract documents to assure that the measures are appropriately implemented. Sound Transit's construction inspectors would provide construction oversight to confirm that the measures are being followed.

1. **Preconstruction Assessment of Winters House and Installation of Monitoring Devices.** Prior to any construction activities at the site, the Winters House will be carefully evaluated to document its condition prior to any construction. Careful observation of existing conditions and close monitoring during construction will assure that construction techniques are controlled as the work approaches the vicinity of the Winters House.

The preconstruction assessment will include inspection of all existing cracks and other existing defects inside and outside of the entire house. These observations will be documented with photos and written description. Selected areas will be prepared by installation of monitoring devices across cracks to precisely monitor additional future movement during or following construction. Settlement plates and benchmarks will be located on and adjacent to the Winters House to allow accurate monitoring of settlement before, during, and following construction. Vibration monitoring equipment will be positioned in the house, including on its foundation, to monitor for vibration during all construction activities in the vicinity of the house.

2. **Choice of Construction Techniques.** Potential project impacts from construction vibration and movement come from the method of design, construction approach, and the machines required for installing the system. These impacts can be minimized by careful selection of the best construction methods and techniques and proper choice of tools and equipment so that vibrations and impacts can be minimized. The most sensitive vibration generating activity associated with the new construction occurs with the installation of the wall system in the segment adjacent to the Winters House. A secant pile wall system has been identified as the best wall type for the particular location. The selection, design, and construction of a secant type pile support system provides the following advantages: 1) secant piles provide a locally common construction method that is widely used by local foundation contractors at sites having similar construction limitations, 2) the secant piles can be installed in a manner that minimizes potential disturbance to nearby facilities, 3) the secant pile system provides a very stiff wall system capable of lateral support with little or no lateral deflection and continuous support of the external soils adjacent to the walls and, 4) the secant pile system allows the transit corridor excavation to be accomplished with only limited need for external control of groundwater. Control of groundwater is important, because changes in water table location can result in settlement of soil, which could damage the house.

3. **Control Construction Vibration and Movement.** Movement within adjacent soil zones and levels of vibration will likely be equipment and site dependent. For this project, the construction approach and equipment is designed to minimize this potential impact:

- The construction work will begin at locations several hundred feet distant from the Winters House. The work would be allowed to advance closer to the Winters House only after the vibration limits are shown to be within tolerable limits and proven excavation and construction methods are achieved as evidenced by controlling vibrations and movements at the house and adjacent to the work. The Contractor will be required to employ alternate excavation techniques if required to control vibrations or prevent damage. The construction procedures and equipment and tools used to conduct the work will be changed at any time that it is necessary to further control vibrations or movement at the house.

- Conservative vibration limits will be established for construction activities occurring near the structure. Experience in the construction industry has shown that anticipated structure damage levels can be correlated to peak particle velocity of structure vibrations. A criterion often used to limit vibration levels to avoid structural damage to residential buildings requires limiting vibration levels to less than 50 mm/sec (about 2 inch/sec) peak particle velocity in the frequency range of 3–100 Hz. In this context, structural damage refers to damage to components of the structure that are used for structural support. Cosmetic or architectural damage, such as cracking of plaster typically occurs at much lower levels of vibration.

- For historic and fragile structures, the limiting level of vibration is normally further reduced to control damage such as cracking of plaster. In severe conditions vibration limits may be controlled to 2.5 mm/sec (about 0.1 inch/sec) peak particle velocity or less. It is important to set realistic criteria for limiting vibration so that damage is avoided to the structure while at the same time, not overly constraining the ability to perform construction activities.

4. **Selection of Pile Installation Methods.** Use of auger drilling methods for installation of the secant piles will limit vibration-induced impacts.

   - In order to limit the vibration associated with installation of secant pile foundations, drilling equipment and excavation methods would be utilized to remove soils from within holes cased with steel pipe.

   - The sidewalls of the secant piles would remain fully supported with steel casings while drilling within the upper zone that extends to a safe depth below the foundation level and footings of the Winters House, extending to dense self-supporting granular soils. Care would be taken to assure that the soil surrounding the casing is not “over-mined” or removed during installation of the casing.

   - Steel casing would extend to the full depth of the piles; however, if insertion of the casing to the full depth of the pile is not possible because of high friction or obstruction, then slurry confinement may be needed to support the deepest portions of the excavation extending below the sensitive foundation zone for house.

     It is important that the casing be installed in a manner that does not disturb or cause movement or excessive vibration in the adjacent soils. The drill bit and maximum depth of excavation for each pile should not be extended below the bottom of the steel casing until the excavation reaches a safe depth below the bottom of the Winters House foundation and the tip of the steel casing pipe is founded in dense self-supporting soils. The casing pipe should be inserted by methods other than vibration or impact that could result in damaging vibration. One method of accomplishing the installation would be by application of down-pressure and use of twisting slots and cutting teeth. Use of heavy equipment capable of applying sufficient down force and lubrication of the sidewalls of the casing may be also be required to achieve this requirement.

If soil conditions suggest that there could be concern for encountering boulders, woody debris (logs), or other foundation conditions that could result in disruption or vibration to adjacent soils, smaller excavation equipment can be utilized within the casing pipe. A "toolbox" of specialized techniques could include such equipment as clams, small diameter flight and bucket augers, coring tools, and/or hand operated jackhammers or other mining equipment that will allow the controlled excavation and removal of soils to safe depths below the base of the facilities to be projected.

Backfilling of each pier with concrete and installation of reinforcing steel should occur immediately upon completion of drilling to the required depth. The steel support casing for pier should be removed as the pier is backfilled. Concrete should be maintained a minimum of about 5 feet above the base of the steel casing pipe at all times as the steel casing is extracted and removed to assure that concrete under controlled head is forced to fill all void space left as the steel casing is withdrawn.

5. **Continuous Monitoring of Winters House.** The protection of Winters House can be assured by performing continuous monitoring of the house, walls, existing cracks, and vibration levels at and surrounding the house. The structure is further protected by monitoring of vibration levels and construction techniques directly adjacent to the work, but in distant segments prior to advancing close to the Winters House. The work will be controlled and limited as needed during construction to avoid disturbance and damage to the house.

   Vibration monitoring will also include monitoring the background vibration levels generated by traffic and existing activities normally occurring in the vicinity of the structure. This includes measurements of vibrations from trucks and other large vehicles travelling on Bellevue Way SE. These background vibration levels will be noted and triggering levels will be identified that are above background vibration levels but below levels that could cause damage to the house.

6. **Construction Settlement from Vibration**. Another consideration for damage is vibration-induced settlement of foundations. Standard penetration test (SPT) blow counts near the Winters House range from 5 to 13 blows per foot within the upper 20 to 24 feet of soil near the Winters House, making soil in this depth interval slightly susceptible to severe-vibration induced settlement, which could potentially lead to settlement of the foundation. Monitoring and controlling the levels of vibration as recommended above, will control the potential for vibration-induced settlement of the foundations.

7. **Construction Settlement from dewatering activities.** It is possible to cause minor settlement of the foundation soils under the house as a result of dewatering activities.

Lowering the groundwater table increases the vertical load on the soils that support the foundation of the Winters House.

Analyses of the movement associated with construction activities, including excavation of the transit corridor and dewatering, were analyzed. The analyses suggest that almost immeasurable settlement could occur (0.1 inch) if the zone surrounding the corridor were to be completely dewatered. The analysis shows that a similar magnitude of movement in the way of rebound (upward movement) could occur as the corridor soils are excavated. These considerations are beyond the ability to accurately predict using geomechanic analyses and are small enough to be non-significant in consideration of these issues.

8. **Lateral Deflection of Piles.** The most likely cause of damage that could occur to the Winters House would likely result from lateral deflection of the walls of the transit corridor during construction. Lateral (horizontal) movement of the corridor secant wall next to the house could result in an approximately equal amount of vertical settlement of the slab-supported porch along the west side of the Winters House.

   To avoid this condition, a conservative approach has been selected for design and construction of the walls. The secant pile wall consists of a massive 4-foot thick concrete reinforced continuous wall. The wall will be capable of conservatively supporting large lateral soil loads with minimal or no deflection. The walls will be constructed by following a sequence that will prevent lateral movement at all times. The sequence of construction is outlined in the section that follows titled "sequence of construction".

   Construction using large diameter secant piles must assure that the piles have sufficient diameter, depth, and reinforcement to provide lateral capacity to control lateral movement of adjacent ground during construction. The concrete piles will be designed to develop sufficient strength and capacity prior to beginning the excavation of interior soils for the transit corridor.

9. **Support of porch along the west side of Winters House**. Based on the configuration shown in Figure 2, and further investigation and verification of shape, configuration, and depth of supporting slab, it may be helpful to provide small piles (referred to as pin piles) or other shallow temporary supporting system or walls to provide increased support and assurance that the soil next to this foundation is not disturbed. Final evaluations of the foundation conditions will be verified during the final design process. Permanent supports will be designed to fully support the soils and footings of the porch.

Monitoring Program

Careful monitoring of the Winters House and selected elements of the new construction would be required as outlined above. Surface monuments would be established at selected points on the walls and foundations of the house in advance of any construction work to observe lateral and vertical movements. Observable cracks in stucco and concrete would be taped or coated in spots at monitoring locations to allow future observation of movements during construction. A complete inventory of the house condition would be thoroughly established prior to beginning the construction work on or near the property.

Monuments would be established on the tops of selected secant piles immediately after completion of pile installation at each monitoring location. All monitoring piles would be monitored for lateral and vertical movement on a daily basis as the construction proceeds. If potentially damaging movement is detected, additional measures would be required to further limit the potential for further movement. Monitoring would begin in areas distant from the Winters House to verify suitable performance prior to the work advancing close to the Winters House.

Monuments established for measurement of movements on the transit corridor facilities and on the Winters House would continue to be read and monitored for a minimum of 6 months or as needed to assure that no additional movement is occurring.

Sequence of Construction

Sequence of construction of the transit corridor is important in controlling the disturbance and lateral movement of adjacent soils. The following construction sequence is anticipated:

1. Begin construction at location distant to the Winters House to verify all construction techniques and performance
2. Set guide beams for control of alignment of secant piles. Accurately drill each secant pile to the required depth using a steel casing to fully support adjacent soils at all times while performing the work. Install steel casing using "oscillator" equipment and down pressure in a manner that minimizes disturbance to adjacent soils. Do not drill below the tip of the casing pipe until the tip of the casing is founded in dense, self-supporting granular soils.
3. Place steel reinforcing cage and backfill each secant pile with concrete. Extract the casing pipe as the concrete is placed, keeping the backfill level of the concrete well above the tip of the steel casing at all times.
4. Construct each secant pile to the required top elevation and form and pour the pile cap.
5. Construct secant pile walls on both sides of transit corridor and complete pile caps prior to beginning corridor excavation.
6. Allow the secant piles to achieve full design strength prior to beginning corridor excavation.
7. Perform limited depth of corridor excavation as limited by design and then install temporary lateral supports at or near the top of the secant pile walls. Provide jackable struts or otherwise shim and support each brace to assure that no movement occurs at the tops of secant pile walls.
8. Install intermediate jackable struts or braces as dictated by final design of the corridor excavation requirements.
9. Control ground water inside the corridor excavation as necessary to perform the work.
10. Excavate to the required base elevation and install granular foundation support materials.
11. Construction permanent concrete base support slab that supports rails.

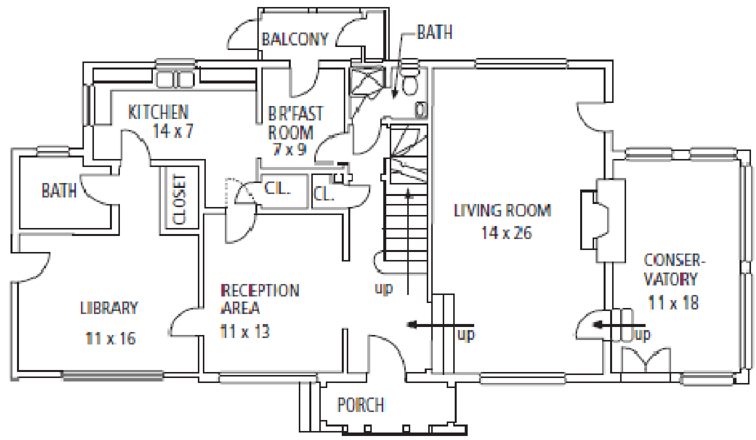
12. Install permanent lid and remove internal braces and struts in a sequence and manner dictated by final design of the corridor. As necessary, do not remove or release temporary supports until the concrete lid is placed, has achieved full design strength, and is capable of fully supporting the secant pile walls.

Operation of Light Rail

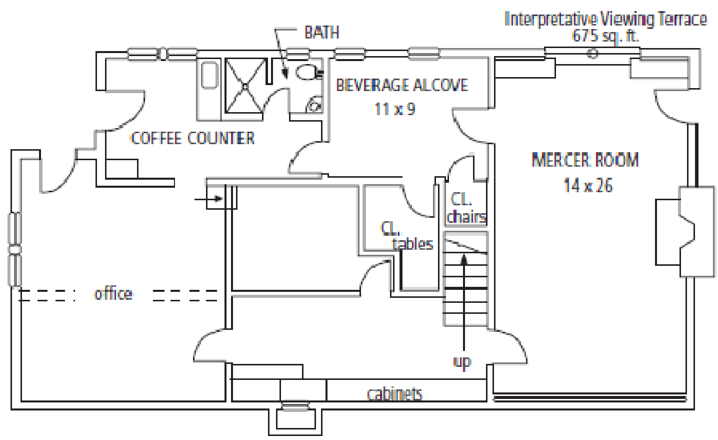
During operation, ground-borne noise impact is projected at the House. Standard methods of vibration reduction, such as resilient fasteners or ballast mats will be incorporated in the project. These measures will reduce the level of ground-borne noise but might not eliminate the impact. Using a floating slab, if necessary, would eliminate the ground-borne noise impacts. Vibration levels during operation are expected to be below the FTA impact criteria.

Entire House
Capacity: 75 persons
Includes: The Main Floor, The Lower Level

The Main Floor
Capacity: 15 at tables
25 theater style
25-60 standing
Includes: Living Room, Conservatory, Kitchen, Breakfast Nook, Reception Area, and Library



The Lower Level
Capacity: 15 at tables
25 theater style
35 standing
Includes: Mercer Room, Food and Beverage Alcove, and Coffee Counter



Interpretive Viewing Terrace
Capacity: approximately 40 standing
Includes: 1.5' wide seating wall along outside edge

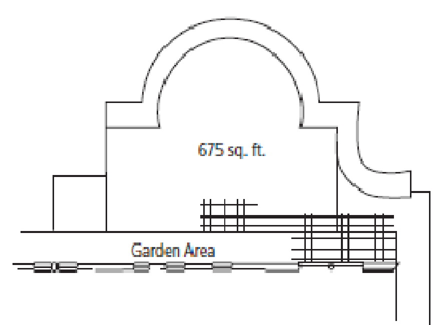


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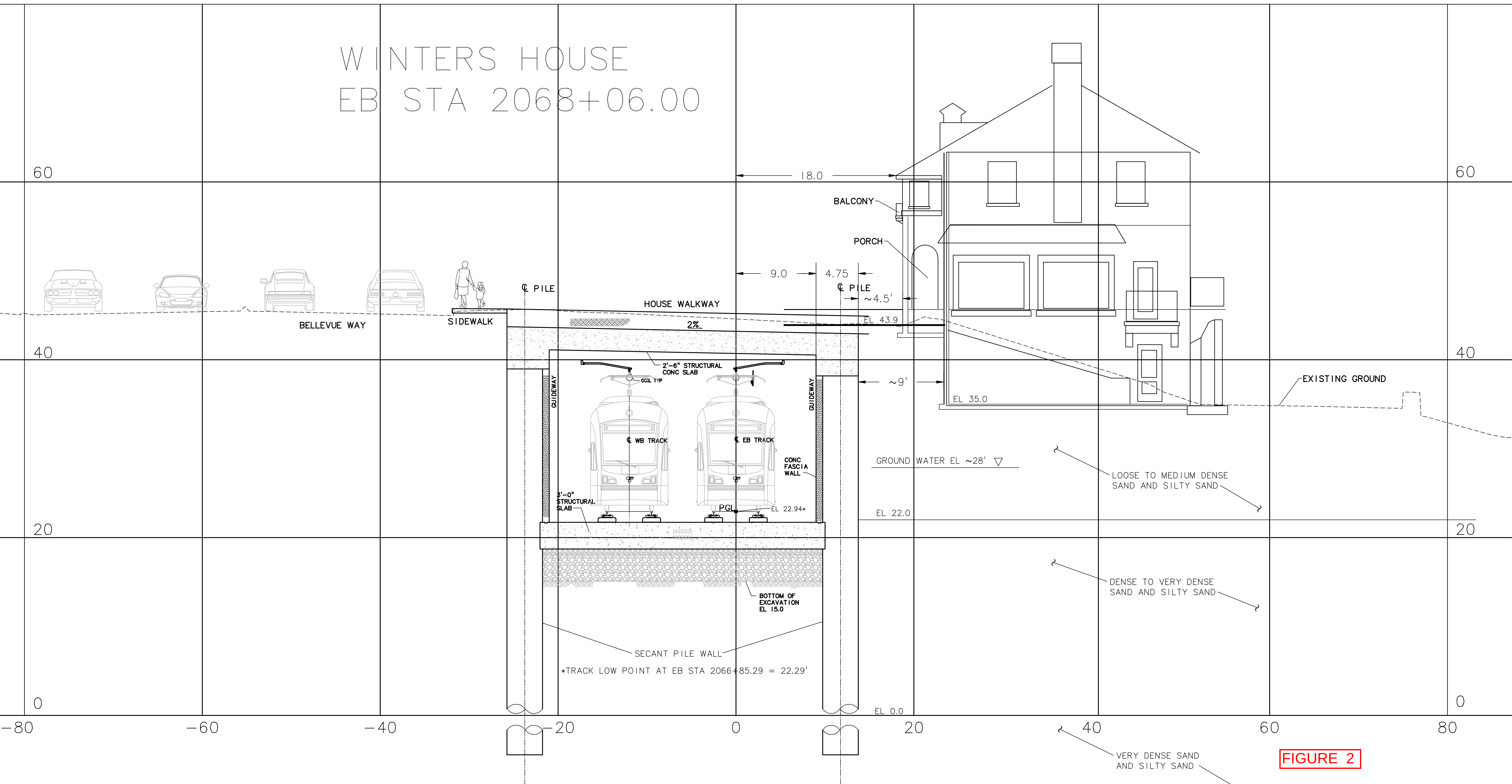
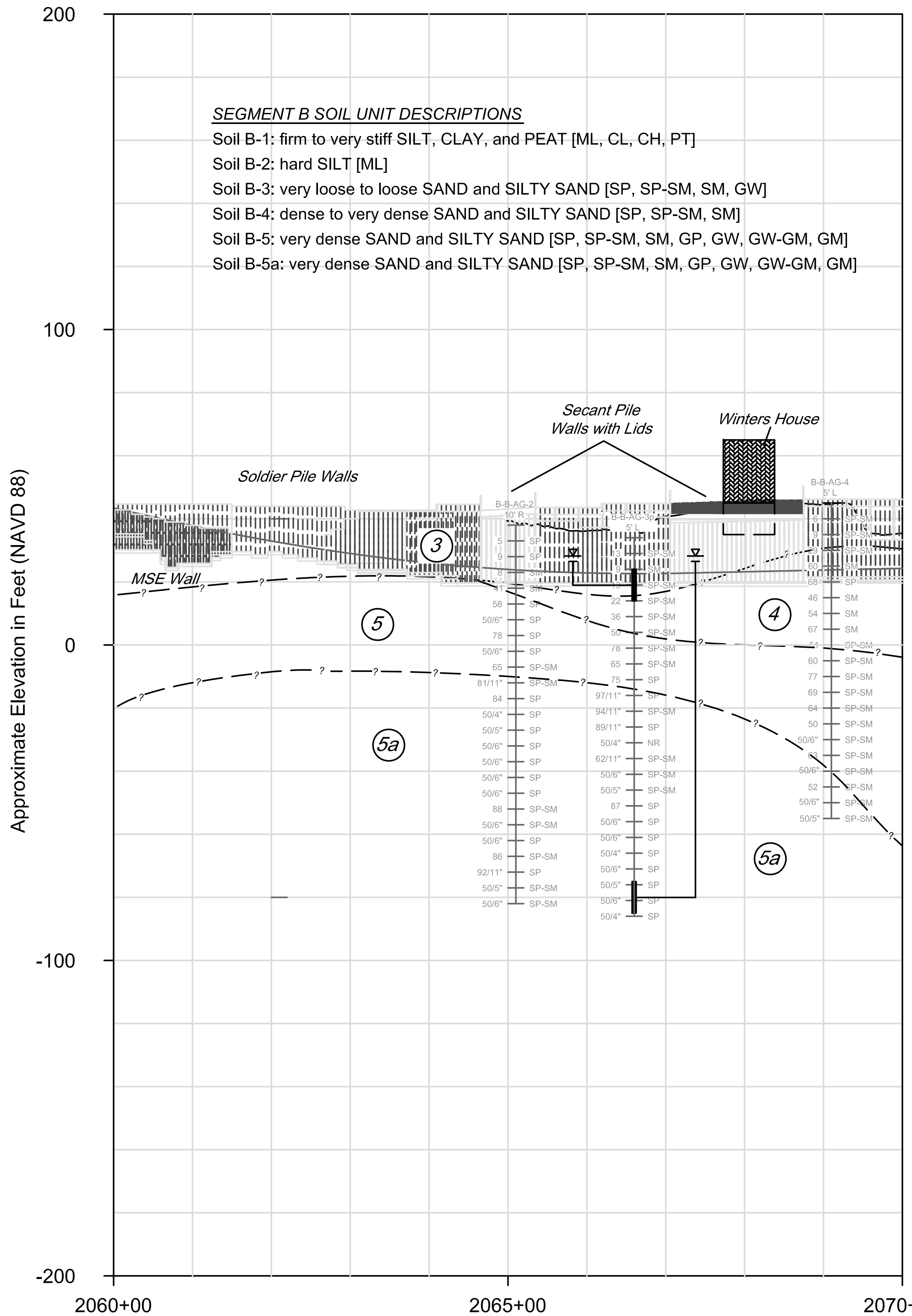
FIGURE 1



WINTERS HOUSE
EB STA 2068+06.00
60
40
20
0
-80
-60
-40
-20
0
20
40
60
80
18.0
BALCONY
PORCH
9.0
4.75
℄ PILE
℄ PILE
~4.5'
HOUSE WALKWAY
EL 43.9
BELLEVUE WAY
SIDEWALK
2%
2'-6" STRUCTURAL CONC SLAB
~9'
EL 35.0
EXISTING GROUND
GUIDEWAY
GUIDEWAY
℄ WB TRACK
℄ EB TRACK
CONC FASCIA WALL
GROUND WATER EL ~28'
LOOSE TO MEDIUM DENSE SAND AND SILTY SAND
3'-0" STRUCTURAL SLAB
PGL
EL 22.94*
EL 22.0
DENSE TO VERY DENSE SAND AND SILTY SAND
BOTTOM OF EXCAVATION EL 15.0
SECANT PILE WALL
*TRACK LOW POINT AT EB STA 2066+85.29 = 22.29'
EL 0.0
VERY DENSE SAND AND SILTY SAND

FIGURE 2



LEGEND

- APPROXIMATE WATER BODY LEVEL
- *ATD* AT TIME OF DRILLING
- *NR* NO RECOVERY
- *PR* POOR RECOVERY
- *FL* FLUID LOSS WHILE DRILLING
- *TBD* TO BE DETERMINED
- —?—?— ASSUMED SOIL LAYER BOUNDARY
- ACTUAL BORING LOCATION
- 5 SOIL LAYER NUMBER - SEE MEMORANDUM FOR DETAILED DESCRIPTION

BORING NUMBER
OFFSET
SPT N VALUE
USCS SYMBOL
BORING WATER LEVEL
SAND SCREEN SHOWN, IF KNOWN

NOTE:
The depth and thickness of the subsurface strata indicated on the section (profile) were generalized from and interpolated between test locations. Information on actual subsurface conditions exist only at the specific locations at the time of the explorations. Subsurface conditions and water levels at other locations may differ from conditions occurring at the indicated locations. Also, the passage of time may result in a change in the conditions at these locations. See boring logs for more detailed information.

0 200 400
Horizontal Scale in Feet

0 50 100
Vertical Scale in Feet

Vertical Exaggeration = 4 x

DATUM
VERTICAL DATUM: (NAVD) 88

FIGURE 3

Draft Subject to Revison

Sound Transit East Link Project
Preliminary Engineering

SOIL PROFILE
SEGMENT B

CH2MHILL | Oct 2010 | EXHIBIT 3d

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach:
-Overlay:
ELB_L65_KA
ELB_L65_SP
PE_BORE
REG-SCM
SUB-INTR
Zg-2234h
Zg-g20020
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x0219sf
x0222rx
x0222sf
x0519rx
x0519sf
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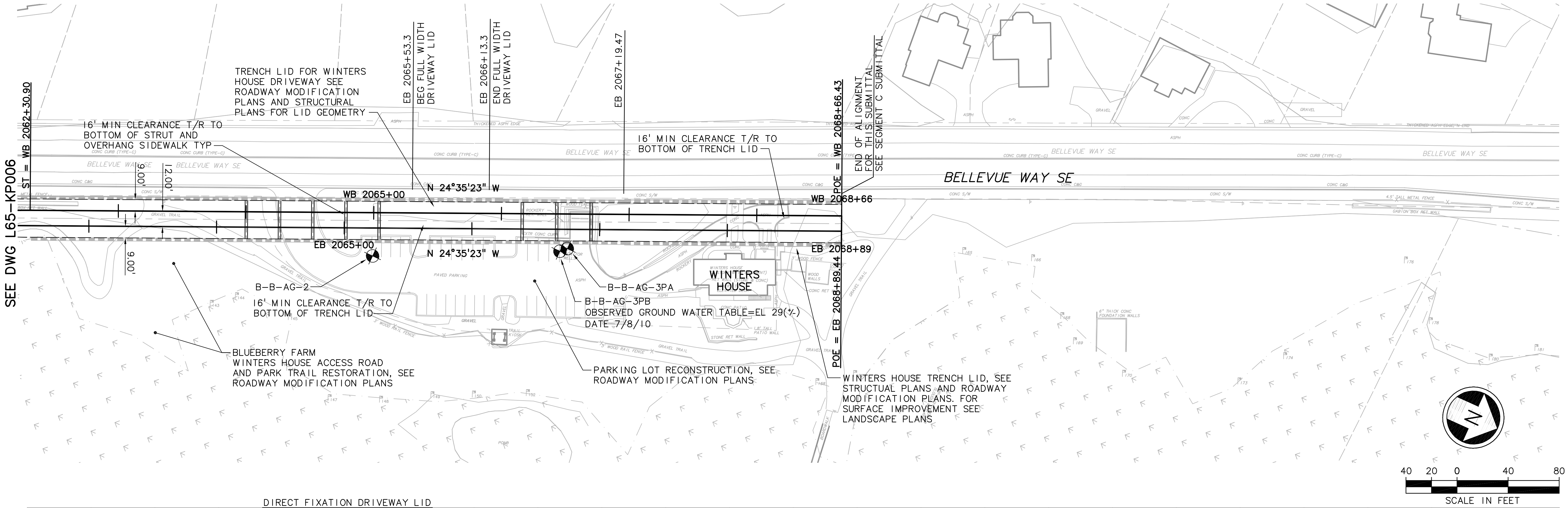

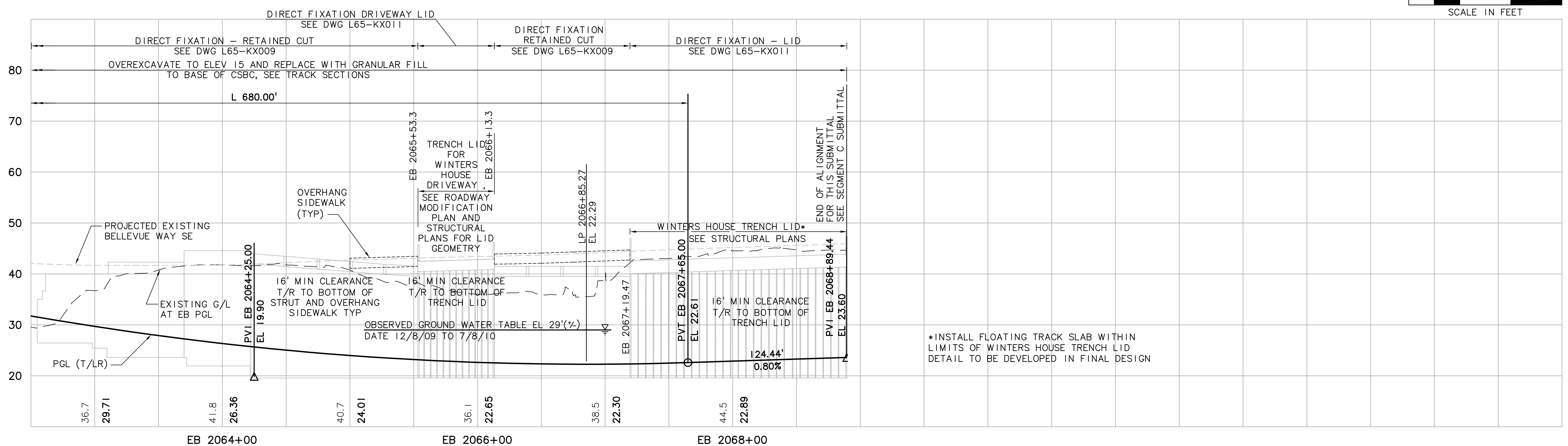

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No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: M. RILLING
Drawn By: F. BOLIMA
Checked By: D. TREADWELL
Approved By: S. MAK

STEPHEN C. MAK, STATE OF WASHINGTON, 35797, REGISTERED PROFESSIONAL ENGINEER
FINAL PE

CH2MHILL
INCA ENGINEERS INC.
BOLIMA DRAFTING & DESIGN INC.
SOUND TRANSIT

Submitted: | Date: | Approved: | Date:

Scale: H: 1"=40'; V: 1"=10'
Filename: ELB_L65_KP007.dwg
Contract No.:
Date: 10/25/10

THIS PRINT REDUCED HALF SCALE

LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
TRACK
PLAN & PROFILE
STA EB 2063+00 TO STA EB 2068+89.44

Drawing No.: L65-KP007
Sheet No.: 40
Rev.:

DWG INFO:
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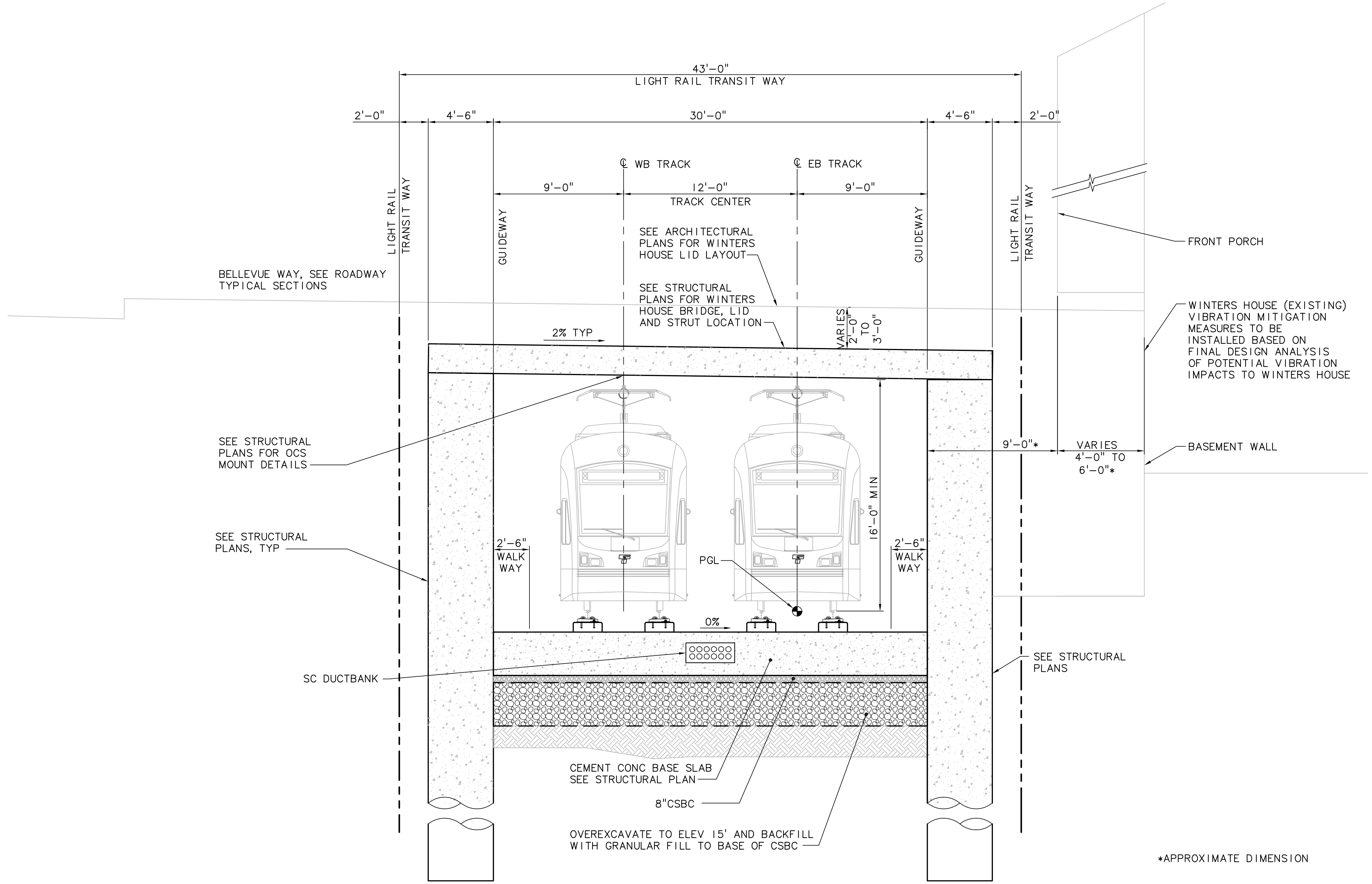
-Overlay: REG-SCM SUB-INTR
-Unresolved:



*APPROXIMATE DIMENSION

NOTES:

1. SEE OCS FOUNDATION LAYOUT PLAN AND PROFILE FOR OCS POLE AND DUCTBANK LOCATIONS.
2. SEE RIGHT OF WAY PLANS FOR LIMITS OF PROPOSED RIGHT OF WAY.
3. SEE ROADWAY MODIFICATION PLANS, PROFILES AND TYPICAL SECTIONS FOR LIMITS OF ROADWAY RECONSTRUCTION.
4. SEE TRACK PLAN AND PROFILE FOR PROPOSED LRT LOCATION.
5. SEE STRUCTURAL PLANS FOR STRUCTURAL DESIGN DETAILS AND LOCATIONS.
6. SEE ARCHITECTURAL PLANS FOR STATION, PARK AND RIDE, PEDESTRIAN PLAZA DETAILS AND LOCATIONS.
7. SEE UTILITY COMPOSITE PLANS FOR DRAINAGE AND UTILITY LOCATIONS.
8. SEE TRACK PLAN AND PROFILE FOR LOCATION AND HEIGHT OF ACOUSTIC BARRIER.
9. SEE STRUCTURAL PLAN FOR CROSS SLOPE ON ELEVATED GUIDEWAY.

WINTERS HOUSE LID
DIRECT FIXATION DOUBLE TRACK

K
L65-KX011
L65-KP007

SCALE: NTS

LIMITS

EB TRACK 2065+53.3 TO 2066+13.3 (DRIVEWAY)
EB TRACK 2067+19.47 TO 2068+89.44 (HOUSE/LID)

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No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: M. RILLING
Drawn By: T. BELIHU
Checked By: D. TREADWELL
Approved By: S. MAK

STEPHEN C. MAK
STATE OF WASHINGTON
35797
REGISTERED PROFESSIONAL ENGINEER
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CH2MHILL

INCA ENGINEERS INC.
BOLIMA DRAFTING & DESIGN INC.

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Approved:
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Contract No.:
Date: 10/25/10

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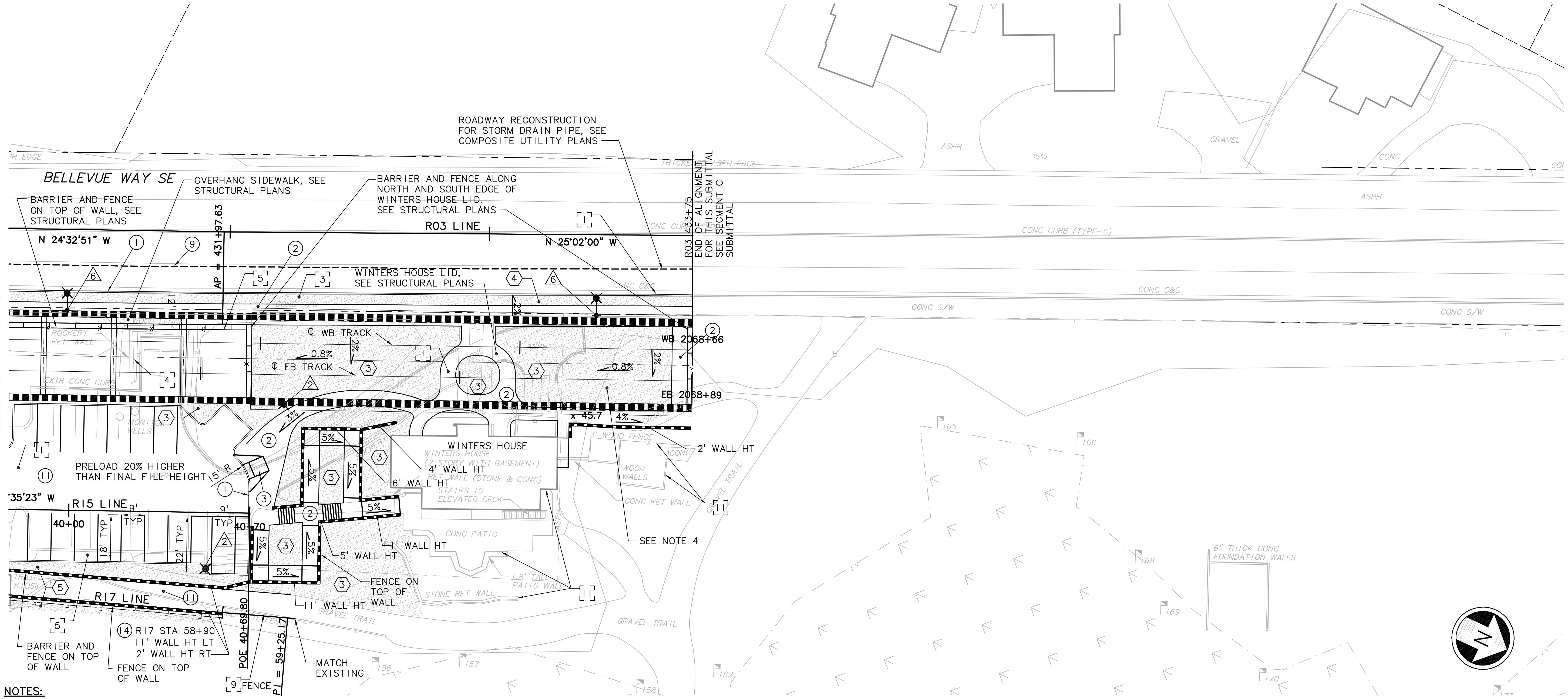
LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
TYPICAL SECTION
WINTERS HOUSE LID

Drawing No.: L65-KX011
Sheet No.: 53
Rev.:



20 10 0 20 40
SCALE IN FEET

NOTES:

1. SEE DWG L65-CZ001 FOR LEGEND.
2. SEE DWG R03-CV002 FOR R15 LINE BLUEBERRY FARM WINTERS HOUSE PROFILE.
3. SEE DWG R03-CV002 FOR R17-LINE LINE BLUEBERRY FARM WINTERS HOUSE PARK TRAIL PROFILE.
4. SEE DWG L65-LX001 FOR TYPICAL LANDSCAPING SECTION AT WINTERS HOUSE LID.

SIGNAL & ILLUMINATION NOTES:

X SEE LEGEND, DWG L65-CZ001

ROADWAY MODIFICATION NOTES:

1. CEMENT CONCRETE CURB AND GUTTER
2. CONCRETE SIDEWALK
3. CURB RAMP TYPE 1
4. CURB RAMP TYPE 2 – DEPRESSED
5. DRIVEWAY APPROACH – COMMERCIAL

ROADWAY MODIFICATION NOTES (CONT):

6. CAST-IN-PLACE CONCRETE RETAINING WALL.
7. SOLDIER PILE RETAINING WALL.
8. SEE STRUCTURAL DRAWINGS FOR ALL GUIDEWAY RETAINING WALLS.
9. SAWCUT, MATCH EXISTING.
10. TRAFFIC CURB
11. ASPHALT CONCRETE PAVEMENT
12. PORTLAND CEMENT CONCRETE PAVEMENT
13. ROCKERY RETAINING WALL
14. RETAINING WALL
15. DRIVEWAY APPROACH – RESIDENTIAL
16. CONCRETE TRAFFIC DOWELED CURB
17. EXTRUDED CURB

DEMO CONSTRUCTION NOTES:

1. REMOVE PAVEMENT, ASPHALT
2. REMOVE PAVEMENT, CONCRETE
3. REMOVE SIDEWALK
4. REMOVE RETAINING WALL
5. REMOVE FENCE
6. REMOVE MISCELLANEOUS ITEM
7. REMOVE (BY OTHERS)
8. REMOVE AND REPLACE
9. REMOVE RESET
10. REMOVE AND RELOCATE
11. PROTECT AND PRESERVE
12. REMOVE BUILDING AND BUILDING FOUNDATION

CONSTRUCTION NOTES, LANDSCAPE TYPES:

1. RAIN GARDENS
2. LANDSCAPE BUFFER
3. WINTERS HOUSE
4. STREET LANDSCAPE
5. RESTORATION – GROUNDCOVER, SHRUBS, TREES
6. STATION LANDSCAPE
7. FREEWAY LANDSCAPE
8. RESTORATION – SEEDING
9. GRAVEL

WINTERS HOUSE:

PARKING STALL COUNT
EXISTING = 33 STANDARD STALLS
1 ADA STALLS
PROPOSED = 34 STANDARD STALLS
1 ADA STALL

CURVE DATA

P.I. STA.	DELTA	RADIUS	TANGENT	LENGTH
R03 431+97.63	0°29'09.50" LT	ANGLE PT	–	–

DWG INFO:
LTSCALE: 1=1
XREFs:
–Attach:
–Overlay:
ELB_L65_CA
ELB_L65_CG
ELB_L65_CM
ELB_L65_CS
ELB_L65_KA
ELB_L65_LP
ELB_L65_SP
REG–SCM
SUB–INTR
Zg–2234h
x0219rx
x0219sf
x0222rx
x0222sf
x0519rx
x0519sf
x0522rx
x0522sf
x0525rx
x0525sf
–Unresolved:

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10/22/10 11:20 : bolimaf 0E6504

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: M. RILLING
Drawn By: A. BYERS
Checked By: R. McKELVY
Approved By: S. MAK

STEPHEN C. MAK, STATE OF WASHINGTON, 35797, REGISTERED PROFESSIONAL ENGINEER
FINAL PE

CH2MHILL
INCA ENGINEERS INC.
BOLIMA DRAFTING & DESIGN INC.
NAKANO ASSOCIATES LLC
SOUND TRANSIT

Submitted:
Date:
Approved:
Date:

Scale: 1"=20'
Filename: ELB_R03_CP015.dwg
Contract No.:
Date: 10/25/10

THIS PRINT REDUCED HALF SCALE

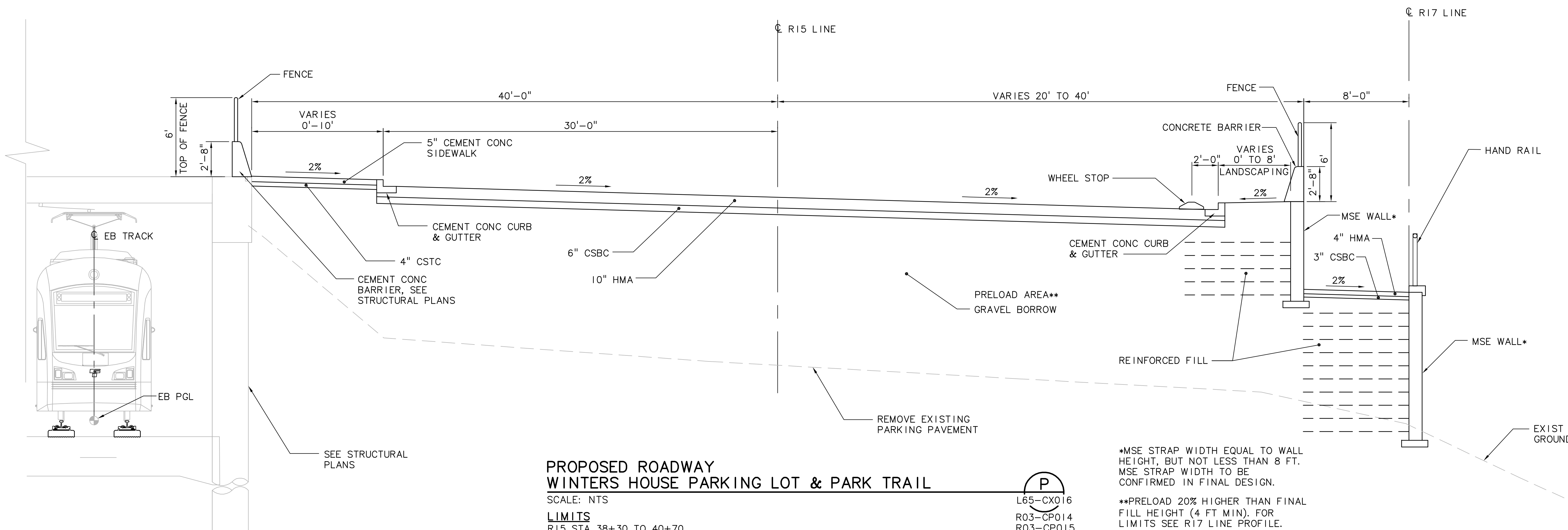
LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
ROADWAY MODIFICATION PLAN
BELLEVUE WAY SE
STA R03 431+25 TO STA R03 433+75

Drawing No.: R03-CP015
Sheet No.: 72
Rev.:

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach:
-Overlay:
REG-SCM
SUB-INTR
ZG-2234H
-Unresolved:

NOTES:

1. ROADWAY PROFILES WILL BE SHOWN FOR THE PGL POINTS AS SHOWN FOR F-LINE, EN3-LINE, EN-LINE, R07-LINE, R09-LINE, R11-LINE R15-LINE AND R17-LINE.
2. SEE ROADWAY MODIFICATION PLANS FOR ROAD PLAN AND PROFILES; LIMITS OF ROADWAY WIDENING; LIMITS OF PAVEMENT, CURB AND SIDEWALK MODIFICATIONS; LIMITS OF RETAINING WALLS LOCATIONS RELATING TO ROADWAY RETAINED FILL AND CUT SECTIONS; AND ROADWAY PAVEMENT MARKINGS.
3. FOR DRIVEWAY RECONSTRUCTION/RELOCATIONS SEE ROADWAY MODIFICATION PLANS. DRIVEWAY PROFILES ARE SHOWN ON SEPARATE SHEET.
4. SEE TRACK TYPICAL SECTION SHEETS FOR TRACK SECTION DETAILS.
5. SEE TRACK PLAN AND PROFILE SHEETS FOR LIMITS OF PROPOSED LRT LOCATION.
6. SEE RIGHT OF WAY PLANS FOR LIMITS OF PROPOSED RIGHT OF WAY.
7. SEE CITY OF BELLEVUE STANDARD PLAN NUMBERS: DEV-9, TE-10, TE-6 , TE-11, & DEV-6 FOR PUBLIC STREET DESIGN STANDARDS.
8. SEE STRUCTURAL PLANS AND TYPICAL SECTIONS FOR STRUCTURAL DESIGN DETAILS AND LOCATIONS.
9. SEE ARCHITECTURAL PLANS FOR STATION, PARK AND RIDE, PEDESTRIAN PLAZA DETAILS AND LOCATIONS.
10. ALL SURFACING DEPTHS SHOWN ARE COMPACTED DEPTH.
11. NO PAVEMENT DESIGN HAS BEEN PERFORMED IN PRELIMINARY DESIGN. ASPHALT PAVEMENT DEPTH SHOWN IS PER CITY OF BELLEVUE DEPARTMENT OF TRANSPORTATION DESIGN MANUAL DWG NO. DEV-9(1/08).



PROPOSED ROADWAY
WINTERS HOUSE PARKING LOT & PARK TRAIL

SCALE: NTS

P
L65-CX016
R03-CP014
R03-CP015

LIMITS
R15 STA 38+30 TO 40+70
COINCIDENT WITH R17 STA 56+50 TO 59+30

*MSE STRAP WIDTH EQUAL TO WALL HEIGHT, BUT NOT LESS THAN 8 FT. MSE STRAP WIDTH TO BE CONFIRMED IN FINAL DESIGN.

**PRELOAD 20% HIGHER THAN FINAL FILL HEIGHT (4 FT MIN). FOR LIMITS SEE R17 LINE PROFILE. PRELOAD INCLUDES PARKING AREA TO MSE WALL.

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10/22/10 09:48 : bolimaf OE6504

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: M. RILLING
Drawn By: D. DE LA CRUZ
Checked By: M. JOHNSON
Approved By: S. MAK

STEPHEN C. MAK
STATE OF WASHINGTON
35797
REGISTERED PROFESSIONAL ENGINEER
FINAL PE

CH2MHILL
INCA ENGINEERS INC.
BOLIMA DRAFTING & DESIGN INC.
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Date:

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Filename: ELB_L65_CX016.dwg
Contract No.:
Date: 10/25/10

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LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B

ROADWAY TYPICAL SECTION
WINTERS HOUSE PARKING LOT & LOWER TRAIL
R15 STA 38+30 TO 40+70

Drawing No.: L65-CX016
Sheet No.: 94
Rev.:

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach:
-Overlay:
REG-SCM
SUB-INTR
ZG-2234H
-Unresolved:

NOTES:

1. ROADWAY PROFILES WILL BE SHOWN FOR THE PGL POINTS AS SHOWN FOR F-LINE, EN3-LINE, EN-LINE, R07-LINE, R09-LINE, R11-LINE, R15-LINE AND R17-LINE.
2. SEE ROADWAY MODIFICATION PLANS FOR ROAD PLAN AND PROFILES; LIMITS OF ROADWAY WIDENING; LIMITS OF PAVEMENT, CURB AND SIDEWALK MODIFICATIONS; LIMITS OF RETAINING WALLS LOCATIONS RELATING TO ROADWAY RETAINED FILL AND CUT SECTIONS; AND ROADWAY PAVEMENT MARKINGS.
3. FOR DRIVEWAY RECONSTRUCTION/RELOCATIONS SEE ROADWAY MODIFICATION PLANS. DRIVEWAY PROFILES ARE SHOWN ON SEPARATE SHEET.
4. SEE TRACK TYPICAL SECTION SHEETS FOR TRACK SECTION DETAILS.
5. SEE TRACK PLAN AND PROFILE SHEETS FOR LIMITS OF PROPOSED LRT LOCATION.
6. SEE RIGHT OF WAY PLANS FOR LIMITS OF PROPOSED RIGHT OF WAY.
7. SEE CITY OF BELLEVUE STANDARD PLAN NUMBERS: DEV-9, TE-10, TE-6, TE-11, & DEV-6 FOR PUBLIC STREET DESIGN STANDARDS.
8. SEE STRUCTURAL PLANS AND TYPICAL SECTIONS FOR STRUCTURAL DESIGN DETAILS AND LOCATIONS.
9. SEE ARCHITECTURAL PLANS FOR STATION, PARK AND RIDE, PEDESTRIAN PLAZA DETAILS AND LOCATIONS.
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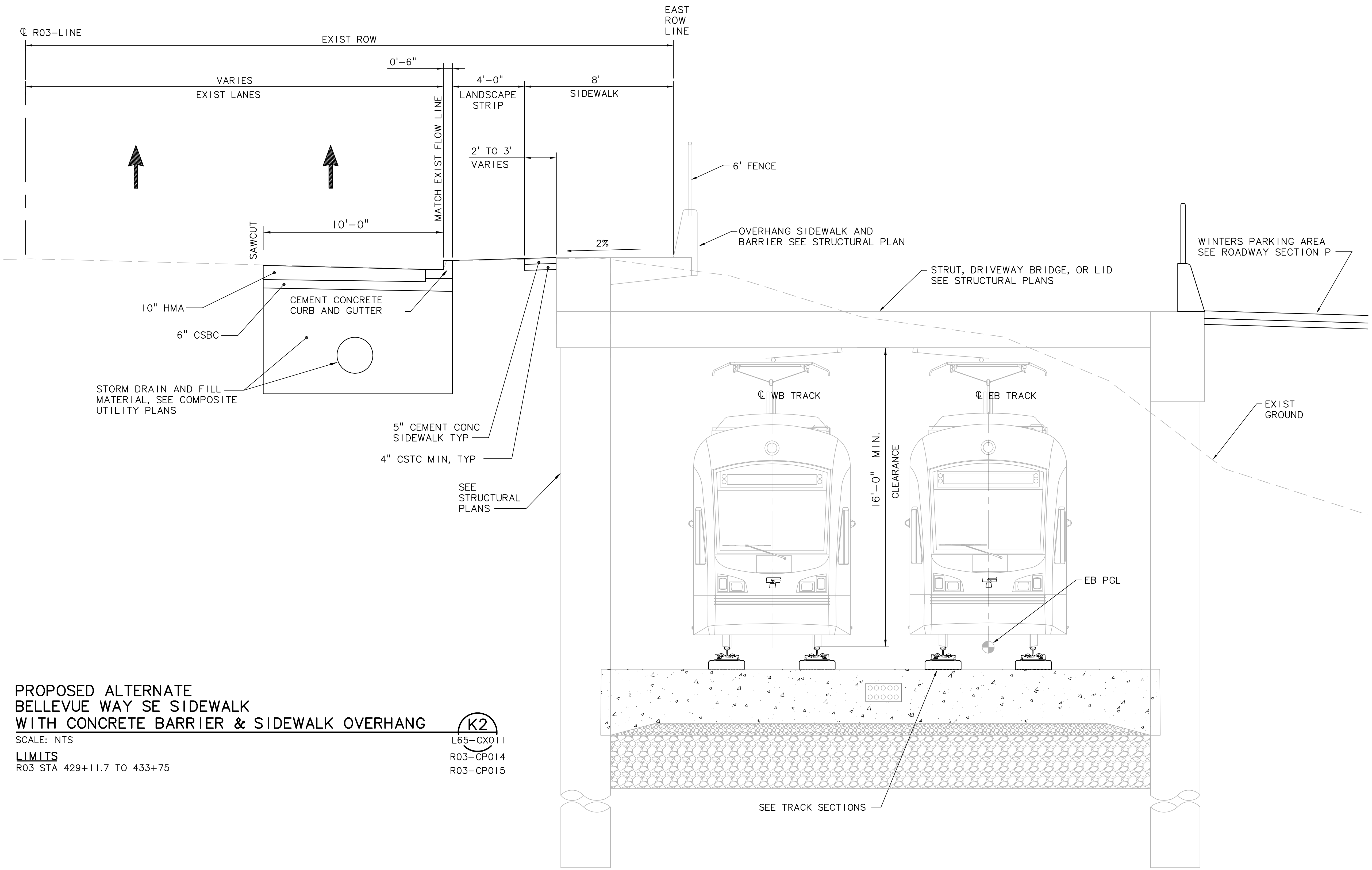

PROPOSED ALTERNATE
BELLEVUE WAY SE SIDEWALK
WITH CONCRETE BARRIER & SIDEWALK OVERHANG

SCALE: NTS

K2
L65-CX011
R03-CP014
R03-CP015

LIMITS
R03 STA 429+11.7 TO 433+75

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: M. RILLING
Drawn By: F. BOLIMA
Checked By: M. JOHNSON
Approved By: S. MAK

STEPHEN C. MAK, STATE OF WASHINGTON, 35797, REGISTERED PROFESSIONAL ENGINEER

FINAL PE

CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

Submitted:
Date:
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Scale: NTS
Filename: ELB_L65_CX011.dwg
Contract No.:
Date: 10/25/10

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LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
ROADWAY TYPICAL SECTION
BELLEVUE WAY SE

Drawing No.: L65-CX011
Sheet No.: 89
Rev.:

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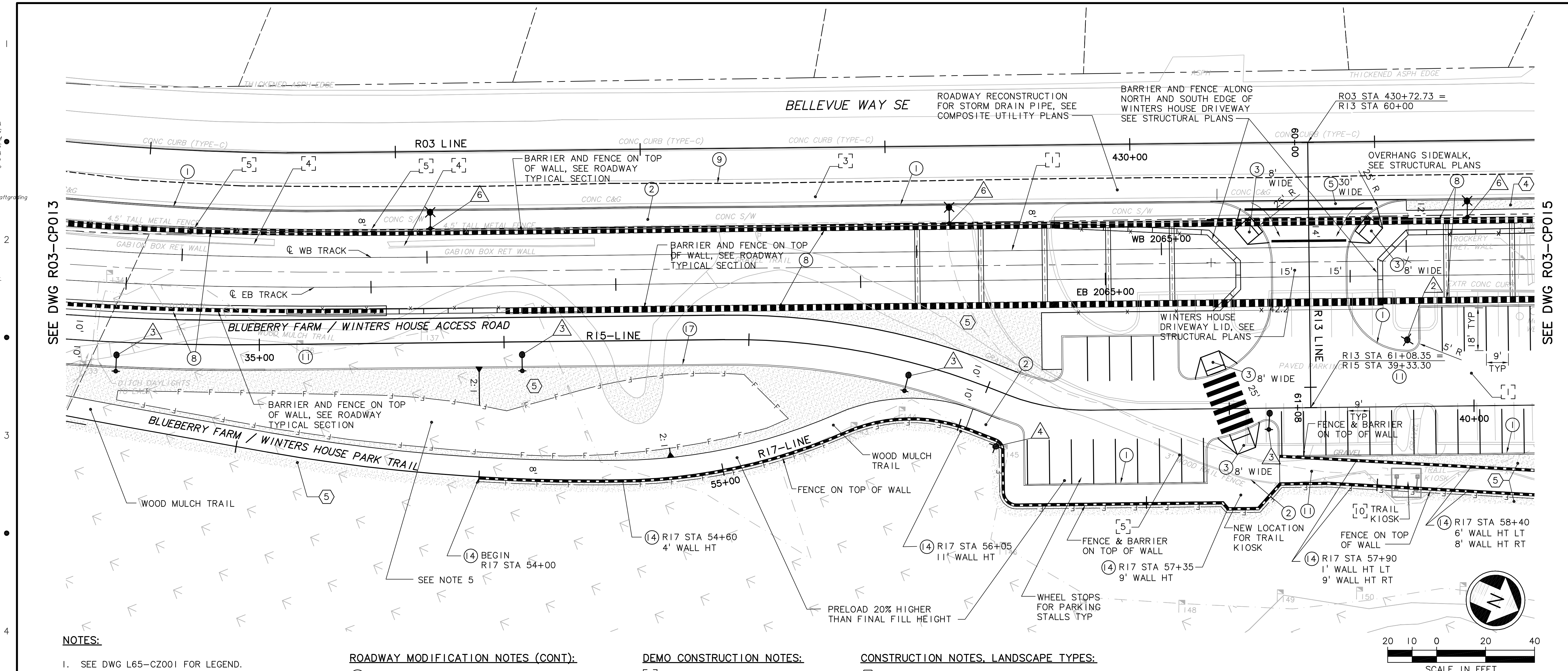
10/22/10 09:47 : bolimaf OE6504



NOTES:

1. SEE DWG L65-CZ001 FOR LEGEND.
2. SEE DWG R03-CV001 FOR R13-LINE WINTERS HOUSE DRIVEWAY PROFILE.
3. SEE DWG R03-CV002 FOR R15-LINE BLUEBERRY FARM WINTERS HOUSE ACCESS PROFILE.
4. SEE DWG R03-CV002 FOR R17-LINE BLUEBERRY FARM WINTERS HOUSE PARK TRAIL PROFILE.
5. PROTECT EXISTING VEGETATION DURING CONSTRUCTION.

SIGNAL & ILLUMINATION NOTES:

(X) SEE LEGEND, DWG L65-CZ001

ROADWAY MODIFICATION NOTES:

1. CEMENT CONCRETE CURB AND GUTTER
2. CONCRETE SIDEWALK
3. CURB RAMP TYPE 1
4. CURB RAMP TYPE 2 – DEPRESSED
5. DRIVEWAY APPROACH – COMMERCIAL

ROADWAY MODIFICATION NOTES (CONT):

6. CAST-IN-PLACE CONCRETE RETAINING WALL.
7. SOLDIER PILE RETAINING WALL.
8. SEE STRUCTURAL DRAWINGS FOR ALL GUIDEWAY RETAINING WALLS.
9. SAWCUT, MATCH EXISTING.
10. TRAFFIC CURB
11. ASPHALT CONCRETE PAVEMENT
12. PORTLAND CEMENT CONCRETE PAVEMENT
13. ROCKERY RETAINING WALL
14. RETAINING WALL
15. DRIVEWAY APPROACH – RESIDENTIAL
16. CONCRETE TRAFFIC DOWELED CURB
17. EXTRUDED CURB

DEMO CONSTRUCTION NOTES:

1. REMOVE PAVEMENT, ASPHALT
2. REMOVE PAVEMENT, CONCRETE
3. REMOVE SIDEWALK
4. REMOVE RETAINING WALL
5. REMOVE FENCE
6. REMOVE MISCELLANEOUS ITEM
7. REMOVE (BY OTHERS)
8. REMOVE AND REPLACE
9. REMOVE RESET
10. REMOVE AND RELOCATE
11. PROTECT AND PRESERVE
12. REMOVE BUILDING AND BUILDING FOUNDATION

CONSTRUCTION NOTES, LANDSCAPE TYPES:

1. RAIN GARDEN
2. LANDSCAPE BUFFER
3. WINTERS HOUSE
4. STREET LANDSCAPE
5. RESTORATION – GROUNDCOVER, SHRUBS, TREES
6. STATION LANDSCAPE
7. FREEWAY LANDSCAPE
8. RESTORATION – SEEDING
9. GRAVEL

CENTERLINE DATA:

POINT	STA	NORTHING	EASTING
POB	R13 60+00.00	546603.42	1633004.94
POE	R13 61+08.35	546648.51	1633103.46

CURVE DATA

P.I. STA.	DELTA	RADIUS	TANGENT	LENGTH
R03 425+56.06	13°23'34.13" LT	1000.00	117.41	233.75
R15 37+45.87	21°48'05.07" RT	289.50	55.75	110.16
R15 38+26.63	21°48'05.07" LT	90.00	17.33	34.25

DWG INFO:
LTSCALE: 1=1
XREFs: –Attach: –Overlay: ELB_L65_CA ELB_L65_CG ELB_L65_CM ELB_L65_CS ELB_L65_KA ELB_L65_LP ELB_L65_SP REG-SCM SUB-INTR Zg-2234h blue-win_draftgrading x0219rx x0219sf x0222rx x0222sf x0519rx x0519sf x0522rx x0522sf x0525rx x0525sf –Unresolved:

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Designed By: M. RILLING
Drawn By: A. BYERS
Checked By: R. McKELVY
Approved By: S. MAK

STEPHEN C. MAK, STATE OF WASHINGTON, 35797, REGISTERED PROFESSIONAL ENGINEER

FINAL PE

CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

NAKANO ASSOCIATES LLC

SOUNDTRANSIT

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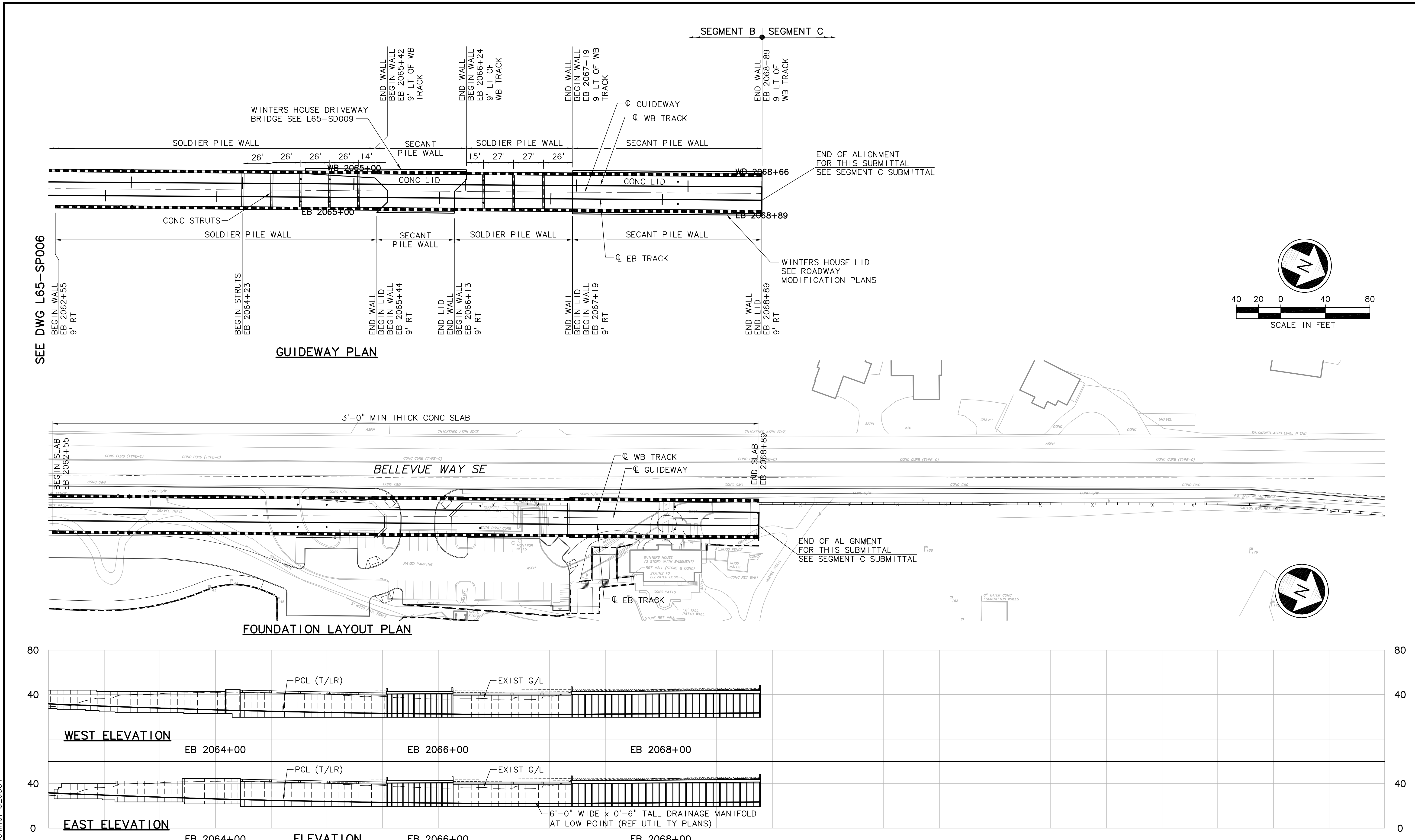
Date:

Scale: 1"=20'
Filename: ELB_R03_CP014.dwg
Contract No.:
Date: 10/25/10

THIS PRINT REDUCED HALF SCALE

LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
ROADWAY MODIFICATION PLAN
BELLEVUE WAY SE
STA R03 426+00 TO STA R03 431+25

Drawing No.: R03-CP014
Sheet No.: 71
Rev.:



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10/22/10 10:31 : bolimaf OE6504

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: S. KASHANI
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN, STATE OF WASHINGTON, 43003, REGISTERED PROFESSIONAL ENGINEER
FINAL PE

CH2MHILL

INCA ENGINEERS INC.
BOLIMA DRAFTING & DESIGN INC.

SOUNDTRANSIT

Submitted:
Date:
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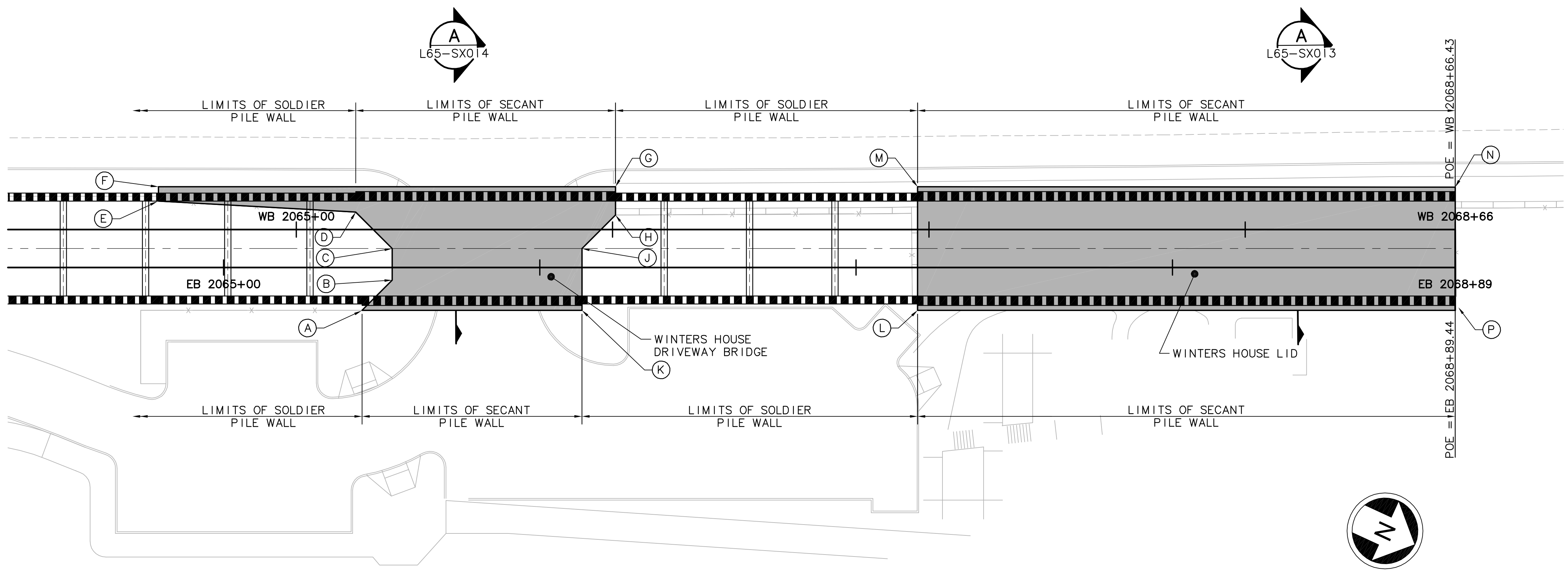
Date:

Scale: 1"=40'
Filename: ELB_L65_SP007.dwg
Contract No.:
Date: 10/25/10

THIS PRINT REDUCED HALF SCALE

LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
GENERAL LAYOUT
PLAN & PROFILE
EB STA 2063+00 TO EB STA 2068+89

Drawing No.: L65-SP007
Sheet No.: 131
Rev.:



PLAN – WINTERS HOUSE DRIVEWAY BRIDGE AND WINTERS HOUSE LID

SCALE: 1"=20'-0"

- (A) STA EB 2065+43.79 13'-6"R
- (B) STA EB 2065+53.30 4'-0"R
- (C) STA EB 2065+53.30 6'-0"L
- (D) STA EB 2065+41.76 17'-6"L
- (E) STA EB 2064+79.44 21'-0"L
- (F) STA EB 2064+79.39 25'-6"L
- (G) STA EB 2066+23.91 25'-6"L
- (H) STA ED 2066+23.91 16'-7"L
- (J) STA EB 2066+13.30 6'-0"L
- (K) STA EB 2066+13.30 13'-6"R

DESIGN LOADS		
STRUCTURE	LIVE	DEAD
WINTERS HOUSE DRIVEWAY LID WINTERS HOUSE LID	HL-93 100 PSF	WEIGHT 360 PSF (SUPERIMPOSED)

- (L) STA EB 2067+19.43 13'-6"R
- (M) STA EB 2067+19.43 25'-6"L
- (N) STA EB 2068+89.00 25'-6"L
- (P) STA EB 2068+89.00 13'-6"R

NOTES:

1. SEE SHEET L65-SD010 FOR SOLDIER PILE TO SECANT WALL TRANSITION.

DWG INFO: LTSCALE: 1=1 XREFs: -Attach: ZG-2234H -Overlay: ELB_L65_CA ELB_L65_KA ELB_L65_SP REG-ASO SUB-INTR -Unresolved:

c:\work\seg_b\ELB_L65_SD009.dwg 10/22/10 10:28 : bolimaf OE6504

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: W. KHALID
Drawn By: J. MATTHEWS
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN STATE OF WASHINGTON 43003 REGISTERED PROFESSIONAL ENGINEER

FINAL PE

CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

SOUNDTRANSIT

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Scale: AS NOTED
Filename: ELB_L65_SD009.dwg
Contract No.:
Date: 10/25/10

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LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
WINTERS HOUSE
LID AND DRIVEWAY BRIDGE

Drawing No.: L65-SD009
Sheet No.: 178
Rev.:

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach: ZG-2234H
-Overlay: REG-ASO SUB-INTR
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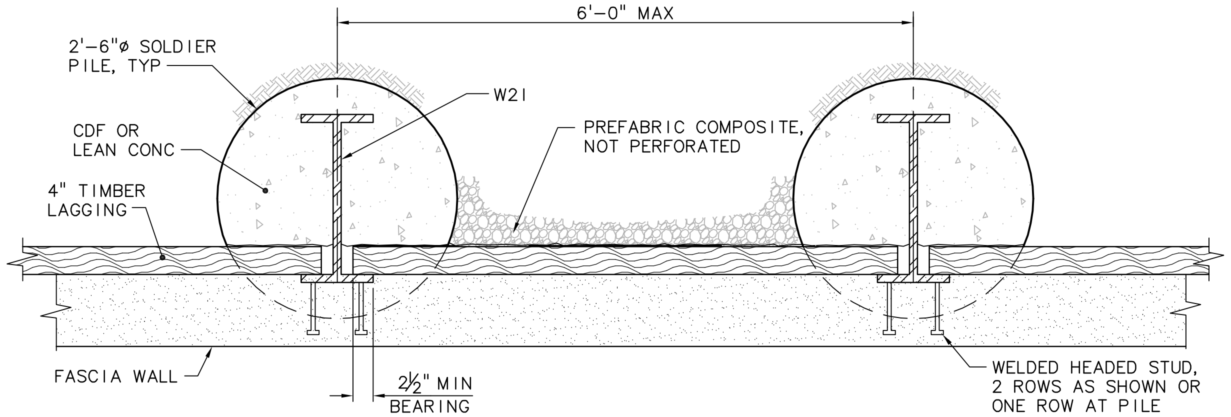
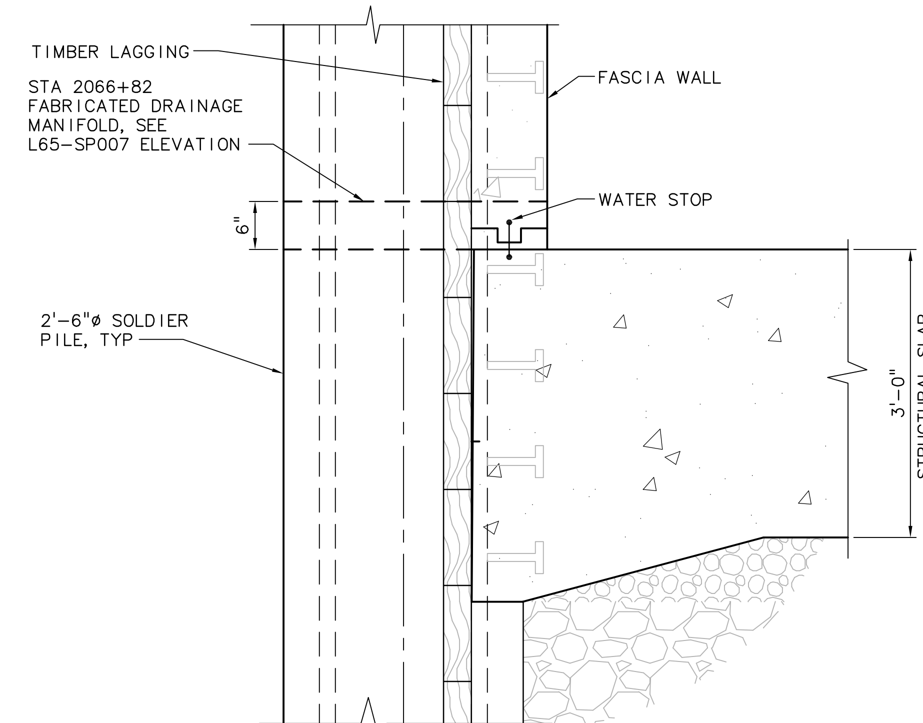
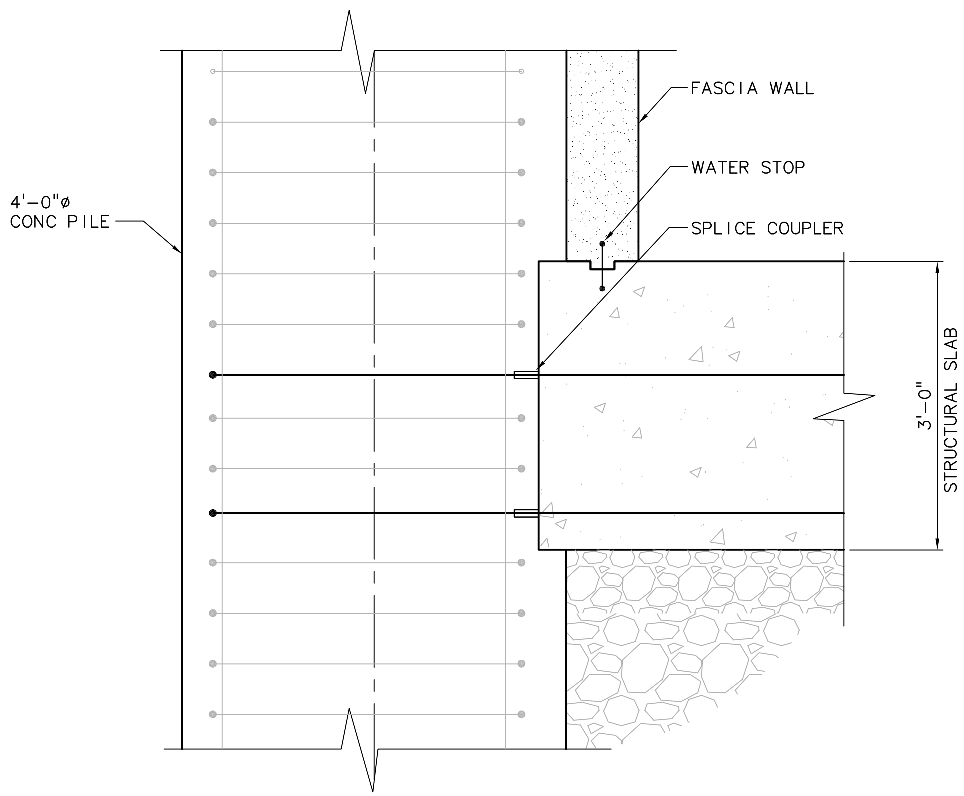


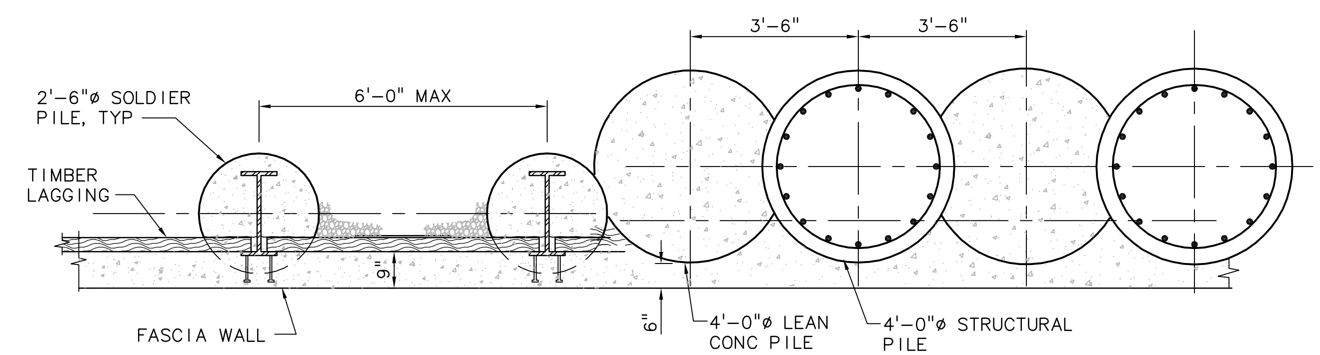
TYPICAL WALL PLAN SECTION A
SCALE: 1" = 1'-0"
L65-SD010
L65-SX012



BASE SLAB AT SOLDIER PILE WALL B
SCALE: 1" = 1'-0"
L65-SD010
L65-SX012



BASE SLAB AT SECANT WALL C
SCALE: 1" = 1'-0"
L65-SD010
L65-SX013



SOLDIER PILE TO SECANT PILE WALL TRANSITION PLAN
EXAMPLE AT STA EB 2065+53.3 AND STA EB 2067+19.47
SCALE: 1/2" = 1'-0"

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10/22/10 10:28 : bolimaf OE6504

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: J. MATTHEWS
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN, STATE OF WASHINGTON, 43003, REGISTERED PROFESSIONAL ENGINEER
FINAL PE

CH2MHILL
INCA ENGINEERS INC.
BOLIMA DRAFTING & DESIGN INC.
SOUNDTRANSIT

Submitted:
Date:
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Date:

Scale: AS NOTED
Filename: ELB_L65_SD010.dwg
Contract No.:
Date: 10/25/10

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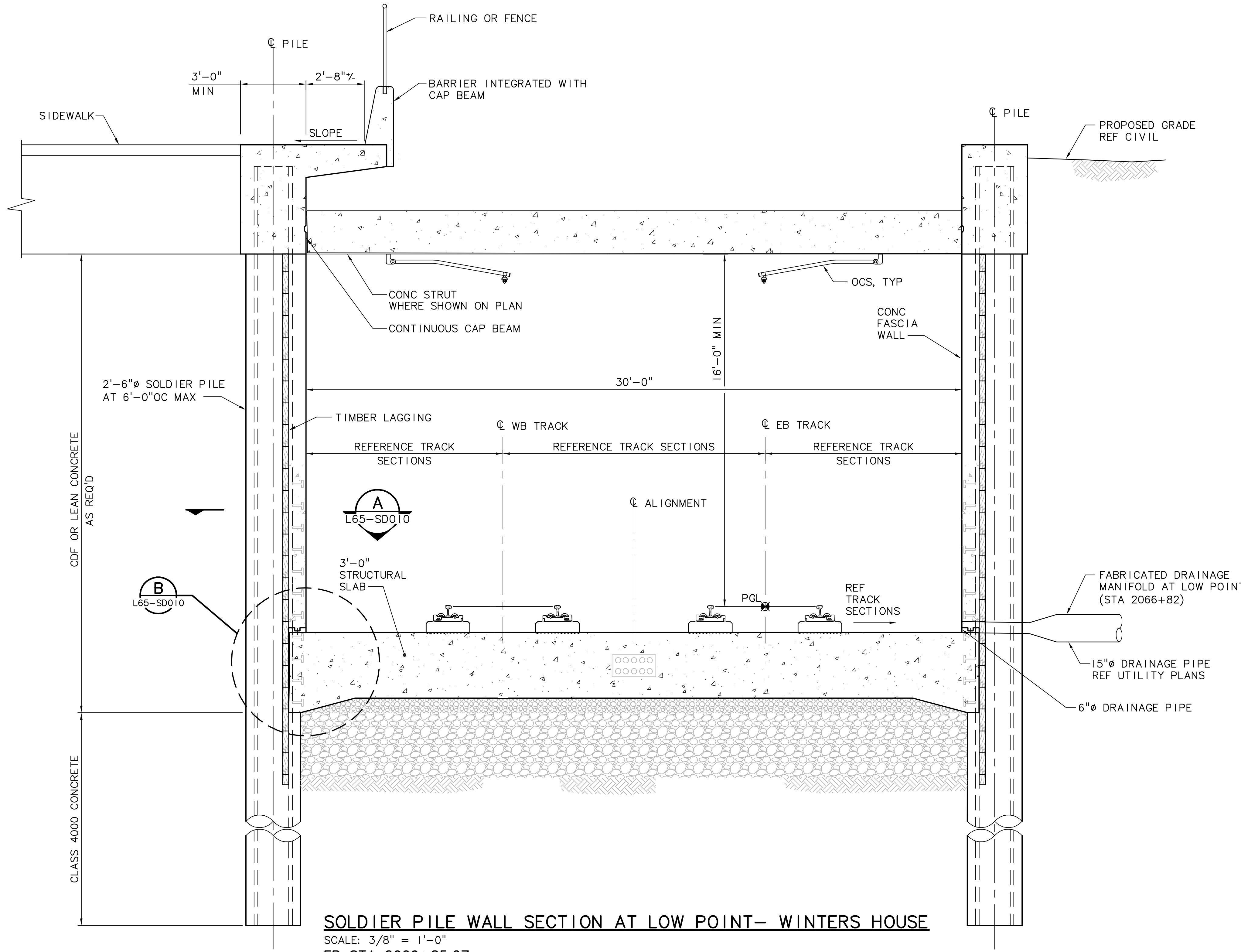
LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B
SOLDIER PILE WALL AND SECANT AND RETAINING WALL DETAILS

Drawing No.: L65-SD010
Sheet No.: 179
Rev.:



SOLDIER PILE WALL SECTION AT LOW POINT– WINTERS HOUSE

SCALE: 3/8" = 1'-0"
EB STA 2066+85.27

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: E. MILLER
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN, STATE OF WASHINGTON, 43003, REGISTERED PROFESSIONAL ENGINEER

FINAL PE

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Date:

Scale: AS NOTED
Filename: ELB_L65_SX009.dwg
Contract No.:
Date: 10/25/10

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LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B

GUIDEWAY TYPICAL SECTIONS
SOLDIER PILE WALL LOW POINT–WINTERS HOUSE
DIRECT FIXATION DOUBLE TRACK

Drawing No.: L65-SX009
Sheet No.: 188
Rev.:

DWG INFO:
LTSCALE: 1=1
XREFs:
–Attach:
–Overlay:
REG–ASO
SUB–INTR
Zg–2234h
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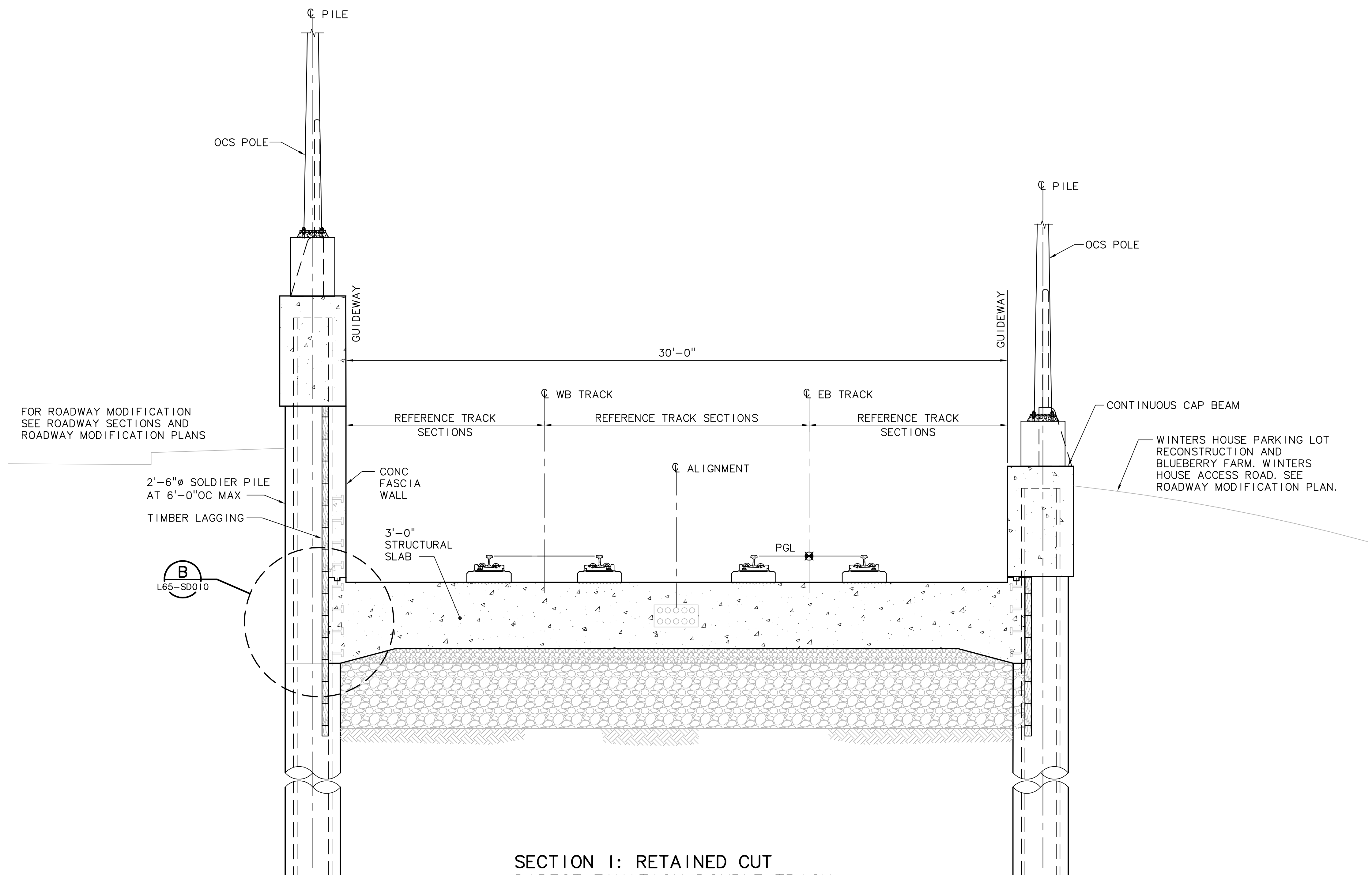
10/22/10 10:41 : bolimaf OE6504



SECTION 1: RETAINED CUT DIRECT FIXATION DOUBLE TRACK

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

LIMITS

EB STA 2060+14.47 TO EB STA 2065+53.3
EB STA 2066+13.3 TO EB STA 2067+19.47
SEE SHEET L65-SX011 FOR SECTION 1 ALTERNATE SECTION

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach:
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REG-ASO
SUB-INTR
Zg-2234h
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No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: E. MILLER
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN — STATE OF WASHINGTON — 43003 — REGISTERED PROFESSIONAL ENGINEER

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CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

SOUNDTRANSIT

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Scale: AS NOTED
Filename: ELB_L65_SX010.dwg
Contract No.:
Date: 10/25/10

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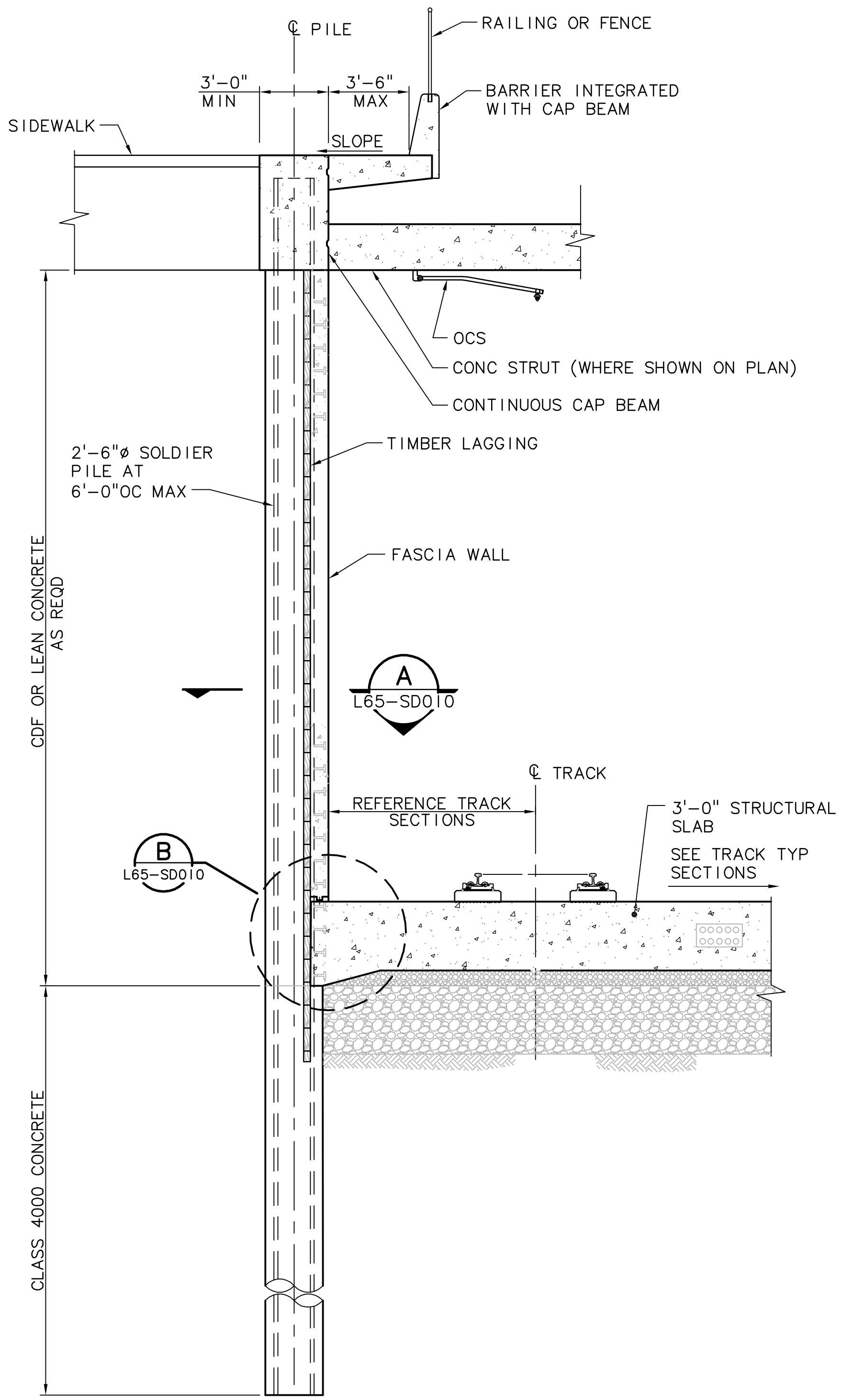
LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B

GUIDEWAY TYPICAL SECTIONS
RETAINED CUT
DIRECT FIXATION DOUBLE TRACK

Drawing No.: L65-SX010
Sheet No.: 189
Rev.:

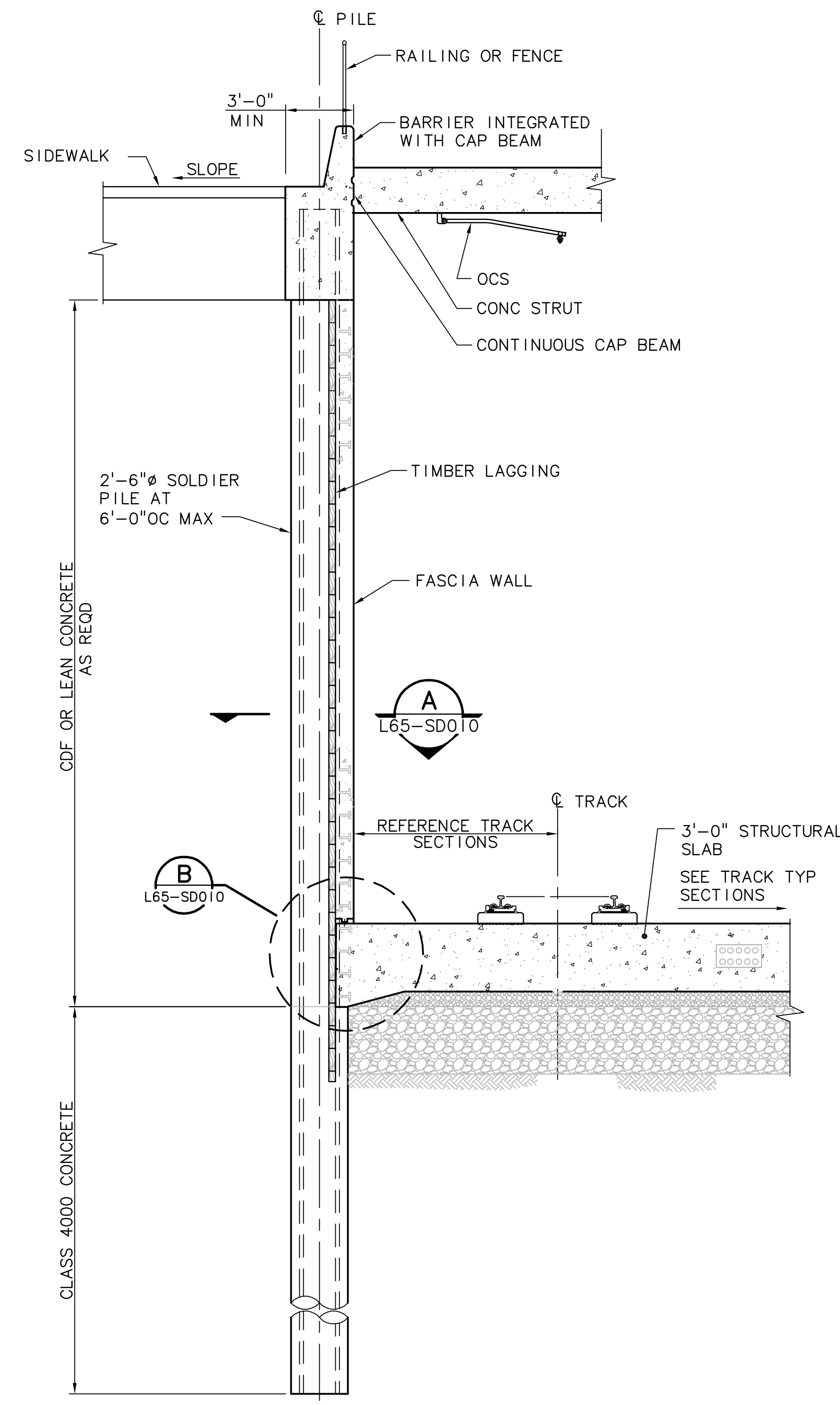
NOTES:
1. SEE L65-KX SERIES DRAWINGS FOR INFORMATION NOT SHOWN INCLUDING GROUND IMPROVEMENT MEASURES.



TYPICAL SOLDIER PILE WALL SECTION

SCALE: 1/4" = 1'-0"

EB STA 2064+79.4 TO EB STA 2065+41.8



SOLDIER PILE WALL SECTION

SCALE: 1/4" = 1'-0"

EB STA 2064+23.3

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: E. MILLER
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN, STATE OF WASHINGTON, 43003, REGISTERED PROFESSIONAL ENGINEER

FINAL PE

CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

SOUNDTRANSIT

Submitted:
Date:
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Date:

Scale: AS NOTED
Filename: ELB_L65_SX012.dwg
Contract No.:
Date: 10/25/10

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LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B

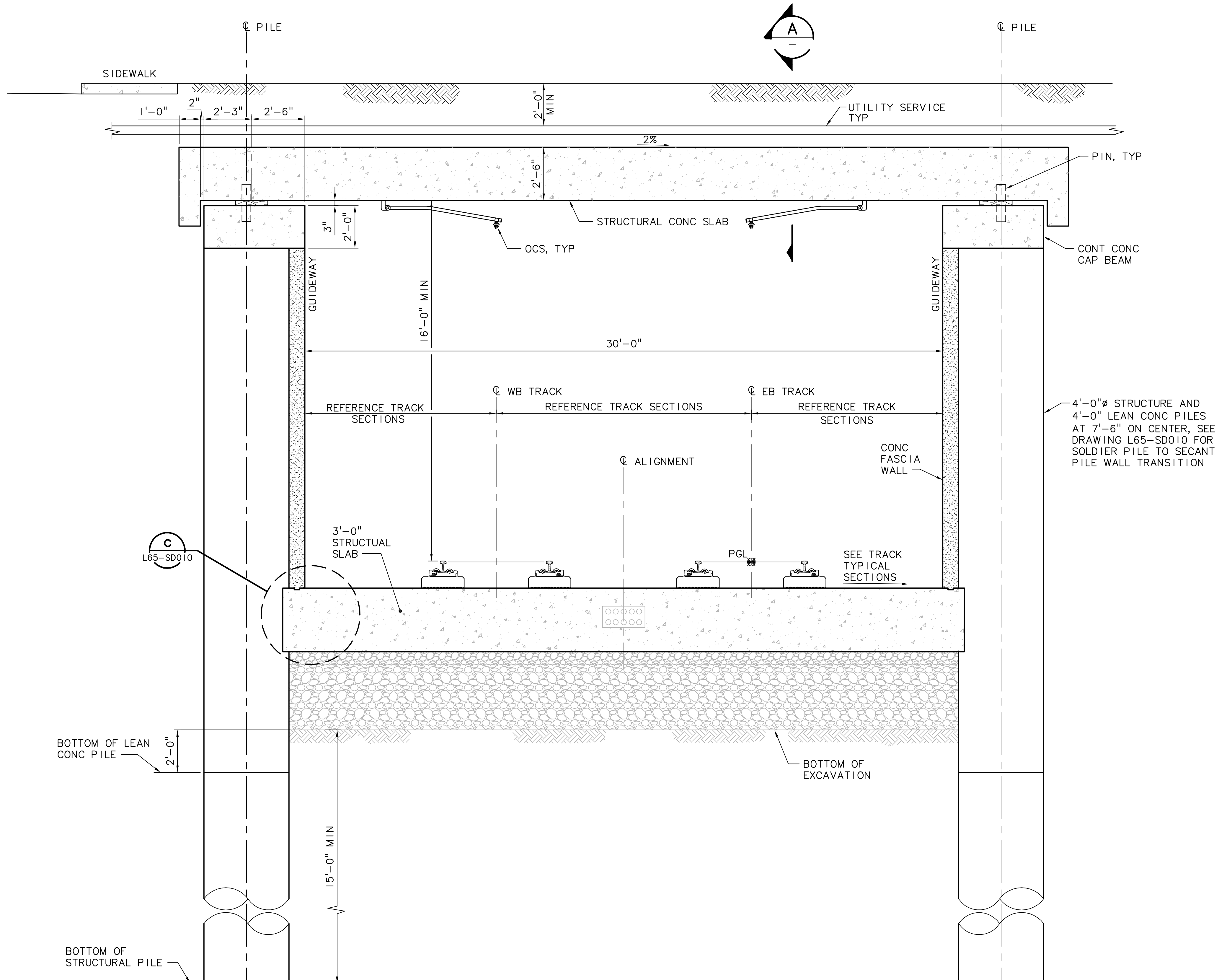
GUIDEWAY TYPICAL SECTIONS
SOLDIER PILE WALL WITH STRUTS
DIRECT FIXATION TRACK

Drawing No.: L65-SX012

Sheet No.: 191

Rev.:

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach:
-Overlay:
REG-ASO
SUB-INTR
Zg-2234h
-Unresolved:



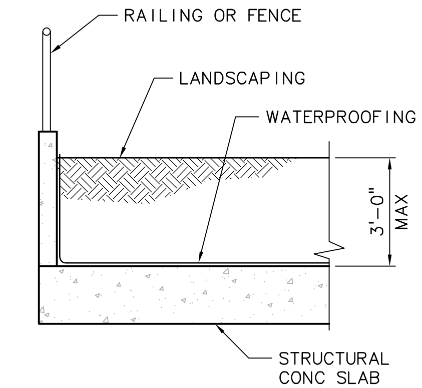
WINTERS HOUSE LID SECTION

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

LIMITS EB STA 2067+19.44 TO EB STA 2068+89.44

NOTES:

1. SEE SHEET L65-SD009 FOR LID AND DRIVEWAY PLAN.
2. SEE L65-KX SERIES DRAWINGS FOR INFORMATION NOT SHOWN INCLUDING GROUND IMPROVEMENT MEASURES.



DETAIL A

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

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: E. MILLER
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN — STATE OF WASHINGTON — 43003 — REGISTERED PROFESSIONAL ENGINEER

FINAL PE

CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

SOUNDTRANSIT

Submitted:
Date:
Approved:
Date:

Scale: AS NOTED
Filename: ELB_L65_SX013.dwg
Contract No.:
Date: 10/25/10

THIS PRINT REDUCED HALF SCALE

LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B

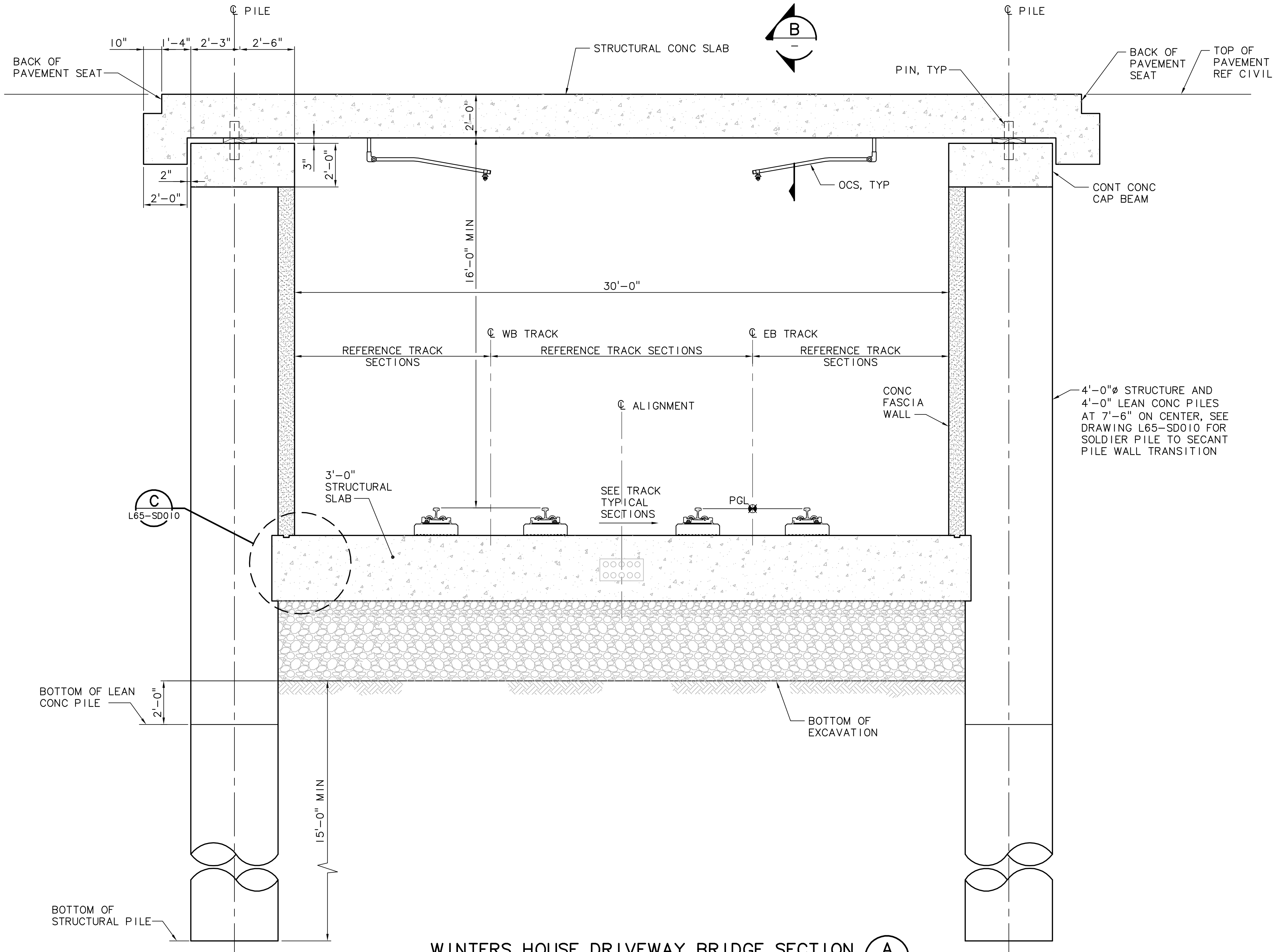
GUIDEWAY TYPICAL SECTIONS
SECANT PILE WALL - WINTERS HOUSE LID
DIRECT FIXATION TRACK

Drawing No.: L65-SX013
Sheet No.: 192
Rev.:

c:\work\seg_b\ELB_L65_SX013.dwg
10/22/10 10:42 : bolimaf OE6504

NOTES:

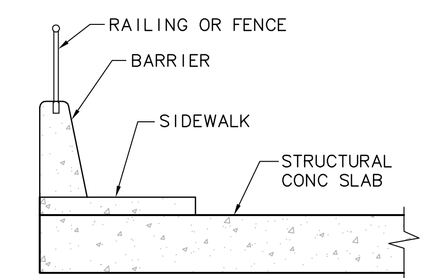
1. SEE SHEET L65-SD009 FOR LID AND DRIVEWAY PLAN.
2. SEE L65-KX SERIES DRAWINGS FOR INFORMATION NOT SHOWN INCLUDING GROUND IMPROVEMENT MEASURES.



WINTERS HOUSE DRIVEWAY BRIDGE SECTION (A)

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

LIMITS EB STA 2065+53.3 TO EB STA 2066+13.3



DETAIL (B)

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

DWG INFO:
LTSCALE: 1=1
XREFs:
-Attach:
-Overlay:
REG-ASO
SUB-INTR
Zg-2234h
-Unresolved:

c:\work\seg_b\ELB_L65_SX014.dwg
10/22/10 10:42 : bolimaf OE6504

No.	Date	Dsn.	Chk.	App.	Revisions

Designed By: N. GALER
Drawn By: E. MILLER
Checked By: A. ASAIDALI
Approved By: A. OZKAN

AHMET S. OZKAN, STATE OF WASHINGTON, 43003, REGISTERED PROFESSIONAL ENGINEER

FINAL PE

CH2MHILL

INCA ENGINEERS INC.

BOLIMA DRAFTING & DESIGN INC.

SOUNDTRANSIT

Submitted:
Date:
Approved:
Date:

Scale: AS NOTED
Filename: ELB_L65_SX014.dwg
Contract No.:
Date: 10/25/10

THIS PRINT REDUCED HALF SCALE

LINK LIGHT RAIL PROJECT
EAST CORRIDOR
SEGMENT B

GUIDEWAY TYPICAL SECTIONS
SOLDIER PILE WALL - WINTERS HOUSE BRIDGE
DIRECT FIXATION TRACK

Drawing No.: L65-SX014
Sheet No.: 193
Rev.:

SELECTED PHOTOS OF THE WINTERS HOUSE


MAIN HOUSE
WEST PORCH


MAIN HOUSE
WEST PORCH
2102
ACCESSIBLE


APPROX
LOCATION OF
OUTSIDE OF
SECANT PILE WALL


Basement
Front Porch
~4'-6"


WEST PORCH


APPROXIMATE OUTSIDE LIMIT
OF SECANT PILE WALL


TYPICAL OF
SMALL EXISTING
CRACKS IN
STUCCO SIDING


EXISTING CRACK WHERE
PORCH ATTACHES TO HOUSE

BASEMENT WINDOW NEXT TO OUTSIDE PORCH STEPS
SHALLOW DEPTH CLOSETS ALONG INSIDE OF BASEMENT WEST WALLS


CLOSETS ALONG
INSIDE OF WEST
BASEMENT WALLS


BASEMENT WINDOW
AND WEST
FOUNDATION WALL

INSIDE OF
WINTERS HOUSE