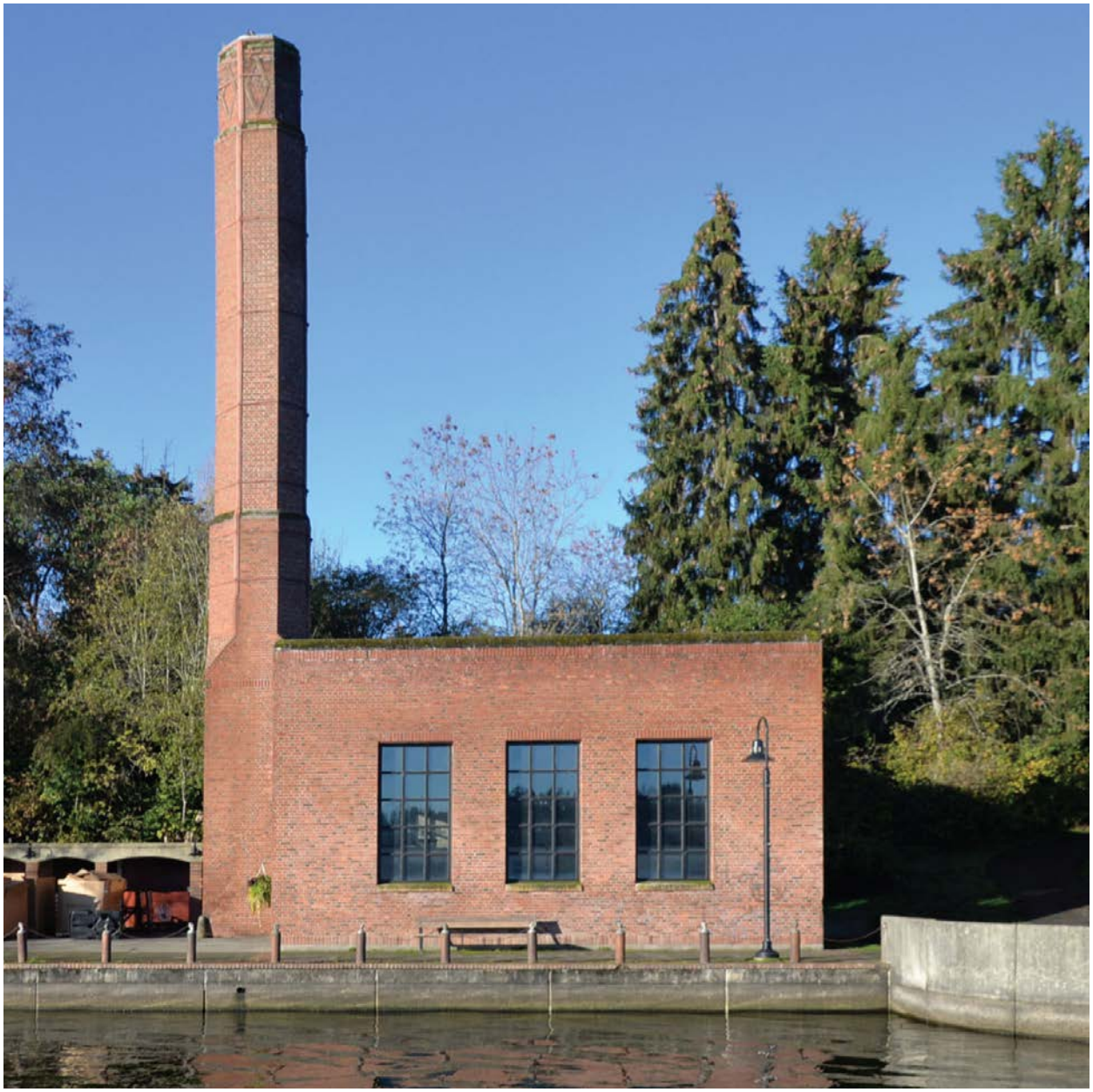


Luther Burbank Park Boiler Building Study

28 February 2017

Luther Burbank Park
2040 84th AV. SE
Mercer Island, WA 98040

CARDINAL ARCHITECTURE PC

1326 5th Avenue #440
Seattle WA 98101
206 624-2365

LUTHER BURBANK PARK BOILER STUDY TABLE OF CONTENTS

1) SUMMARY

The City of Mercer Island engaged Cardinal Architecture to study the existing Boiler Building located on the east shore of Luther Burbank Park. The Boiler Building was built in 1928 to supply steam heat for the adjacent school. It was designed by FA Naramore Architect of Seattle, and is a 1,672 SF one story building with an 80 foot chimney. In 1974, a 520 SF one story structure was added to the south side of the original building, and the addition contains both men's and women's toilet rooms and a room to sell concessions. The buildings are concrete structures with brick veneer, and the chimney is a combination of concrete and brick. The Boiler Building has been used recently to support non-motorized boating classes. The classes are taught during summers at the adjacent Lake Washington docks and shoreline.

The purpose of the study was to evaluate the existing structure for safety, evaluate options for repairs and renovation, and to estimate construction and project costs. In addition, the study was to review options for expanding summer boating programs.

The current and proposed use of the Boiler Building for non-motorized boating instruction is the direction intended in the 2006 Luther Burbank Park Master Plan.

Steering Committee members:

Bruce Fletcher	Parks and Recreation Director
Diane Mortenson	Recreation Superintendent
Paul West	Parks Operations Superintendent
Ken Brooks	Parks Manager
Marcy Olson	Facilities Project Manager
Alex Harvey	Parks Team Member/Luther Burbank Park
Myra Lupton	Community member
Kate Lamperti	Friends of Luther Burbank Park

The consultants who worked on the study include:

Jim Cary & Jesse Belknap	Architects	Cardinal Architecture PC, Seattle
Greg Coons	Structural Engineer	SSF Engineers, Seattle
Trish Drew	Cost Estimator	DCW Collaborative Works, Seattle

Building Code Summary

The Boiler Building is currently permitted as a storage building with accessory toilet rooms and concessions space. As long as the current uses are maintained, the building is not required to upgrade to current building code requirements. If the uses are changed, from storage to meeting room for instance, or if major construction improvements are proposed, then building code compliant improvements will be required. Repairs, such as seismic repairs and building repairs are not considered major construction improvements or change of use.

Greg Coons, structural engineer at SSF Engineers of Seattle, reviewed the Boiler Building and the following is his report:

This report presents the results of our structural assessment study of the Luther Burbank Park Boiler Building located in Luther Burbank Park, Mercer Island Washington. The purpose of this assessment was to evaluate the general structural condition of the building in general accordance with ASCE 11-99, "Structural Condition Assessment of Existing Buildings", and the condition of the lateral force resisting system of the building and Chimney to identify deficiencies in accordance with ASCE/SEI 41-13 "Seismic Evaluation and Retrofit of Existing Buildings". Our conclusions are based on our site visit, the original architectural and structural drawings, our calculations, and our experience with other buildings of this age and construction.

We evaluated the overall structural condition in general accordance with ASCE 11-99 using the loading requirements of ASCE 7-10. Although, we observed cracking in some of the exterior concrete walls and roof, the cracks do not represent a life-safety hazard. In general, we found that the building is in good structural condition, and found no structural reason the building could undergo the proposed adaptive reuse. We also evaluated the reinforced concrete bathroom building roof structure and determined that the existing structure could support an assembly area occupancy.

Our seismic assessment was performed using the Tier 1 and Tier 2 procedures in accordance with ASCE 41-13. The Tier 1 procedure of ASCE 41 provides a method for visual screening using checklists to identify structural deficiencies related to seismic safety. Tier 1 visual screening is combined with a Tier 2 analytic evaluation for those elements identified as deficient during the screening process. Where new structural elements are recommended, they are designed to meet ASCE 41 strength requirements, and to meet new building code detailing. Performance objectives and seismic hazard were selected in accordance with the International Existing Building Code. Specifically, a Life-Safety performance objective was used with a BSE-1E seismic hazard. We found that although the building structure, by itself, meets the Life Safety performance objective, portions of the non-structural veneer and parapet caps do not. We recommend anchoring the brick veneer to the concrete backing walls, with Helifix, or equivalent, wall anchors adjacent to the primary building exits. In addition, we recommend anchoring the parapet caps to their supporting concrete walls below. Finally, we found that the chimney would be unstable during a seismic event and is a collapse hazard. We recommend a combination of height reduction, strengthening, and tying the chimney into the existing building structure.

In addition to the structural improvements, we recommend replacing the roofing and upgrading the toilet rooms.

Accessibility Summary

The existing Boiler Building was evaluated for accessibility based on use. The storage portion of the building is not a public space and accessibility is not required. The existing entry doors do not meet accessibility standards and the existing flooring is very uneven and is also not compliant. The toilet rooms do not meet current accessibility standards based on entry doors, room access, plumbing fixture access, and accessories.

The location of the Boiler Building is on the shoreline, and downhill from the main parking lot. The current path from the parking lot is paved and in good shape. It passes the Administration Building, then continues down a steep hill to the shore and the north side of the Boiler Building. Because of the steep slope, however, the path exceeds the minimum required slope to meet current pedestrian access requirements.

Boating Instruction Summary

At the beginning of the study, we met with Nino Johnson of Sail Sand Point and Barbara Gronseth of Kayak Academy to discuss their current summer youth programs and their future needs. Summaries of both meetings are included in the document section of this report. Both programs use the Boiler Building for storage during their summer programs, and they share the storage space when both programs are operating at the same time. Currently the large boiler space is only used for storage. The toilet rooms are open to the public. Both Sail Sand Point and Kayak Academy said they would be interested in expanding their programs with more classes, more vessels, and even longer seasons that include rentals if there was more storage and the building was better outfitted to meet their needs. Additional needs include better toilet rooms, an indoor classroom, better storage organization, more storage and a concessions office to rent equipment. Kayak Academy also expressed interest in running a food concessions from the Boiler Building.

Sail Sand Point uses the floating dock on the south west end of the existing docks. Kayak Academy uses the rocky beach at the north end of the Boiler Building for launching. Neither program uses the extensive stationary docks, except to access the floating dock. Sail Sand Point expressed interest in modifying the dock area to include more floating docks. The docks were not included in this study, but the information is useful relative to the expanded use of the Boiler Building for instructional use.

2) PROJECT PHASE DESCRIPTIONS

The potential projects are separated into two phases. Phase I includes repair scope that also addresses seismic repair. This scope can be constructed without changing the use of the building or requiring that the entire building is improved to current building code requirements.

Phase II are construction projects that provide substantial improvements to the structure and site, and also change the building use from storage to public occupation. Phase II A creates a new path from the parking lot down to the Boiler Building and also converts the existing toilet room roof to an outdoor deck/ classroom. Phase II B changes the use of the storage area to new classroom space, new offices, and maintains boat storage below.

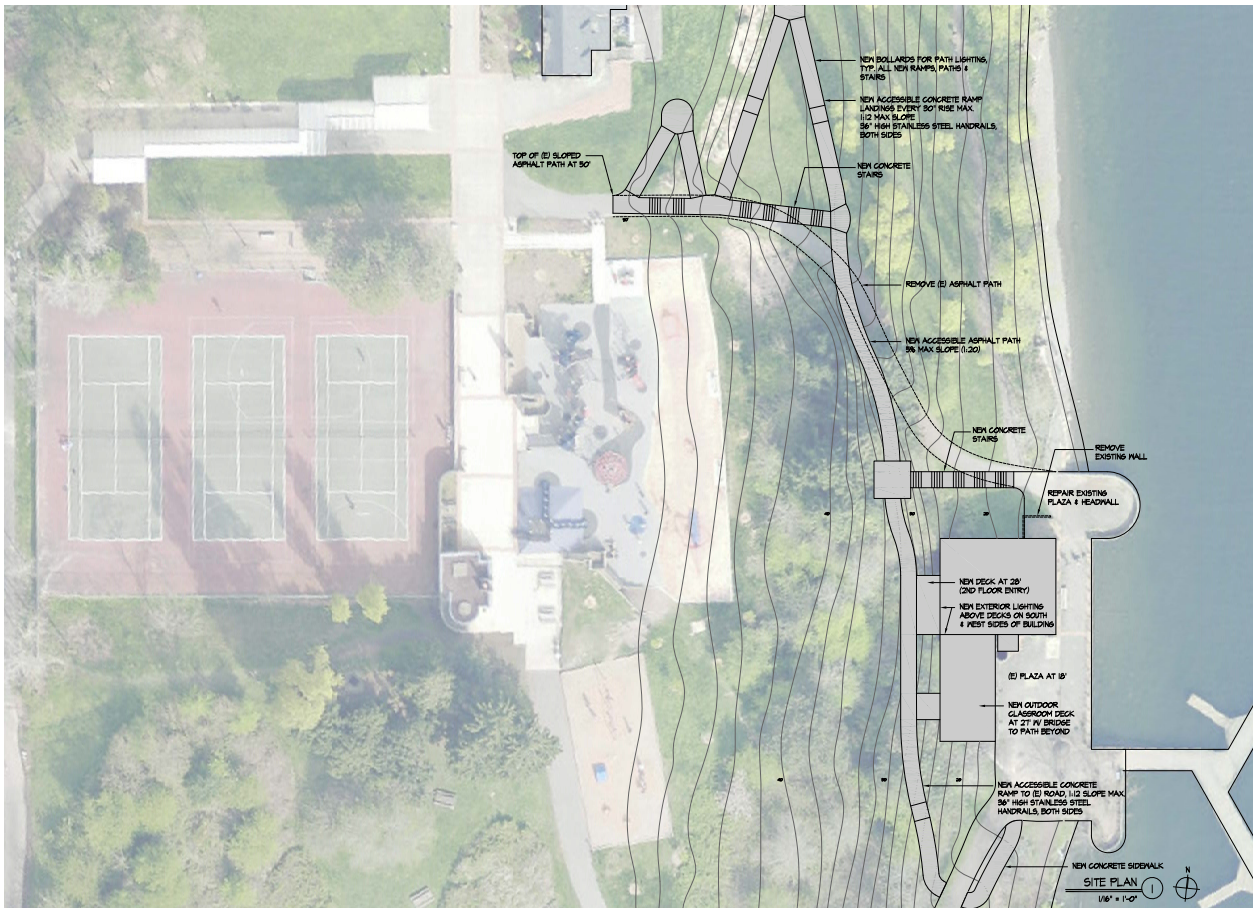
After the completion of both phases of construction, the boiler building will be seismically repaired, will have upgraded systems, and will also provide new program space for the City of Mercer Island Parks and Recreation Department.

PHASE I REPAIR PROJECT DESCRIPTION

- Install new foundation drainage at bottom of footings and connect to (E) site drainage.
- Remodel (E) bathrooms for accessibility and improved fixtures.
- Replace (E) framed walls in concession buildings with new concrete walls.
- Remove portion of (E) chimney. See options on sheet A4-31
- Remove existing boiler buildings roofing and install new built-up roofing
- Repair and reinforce (E) brick cladding and stone parapet cap on boiler building

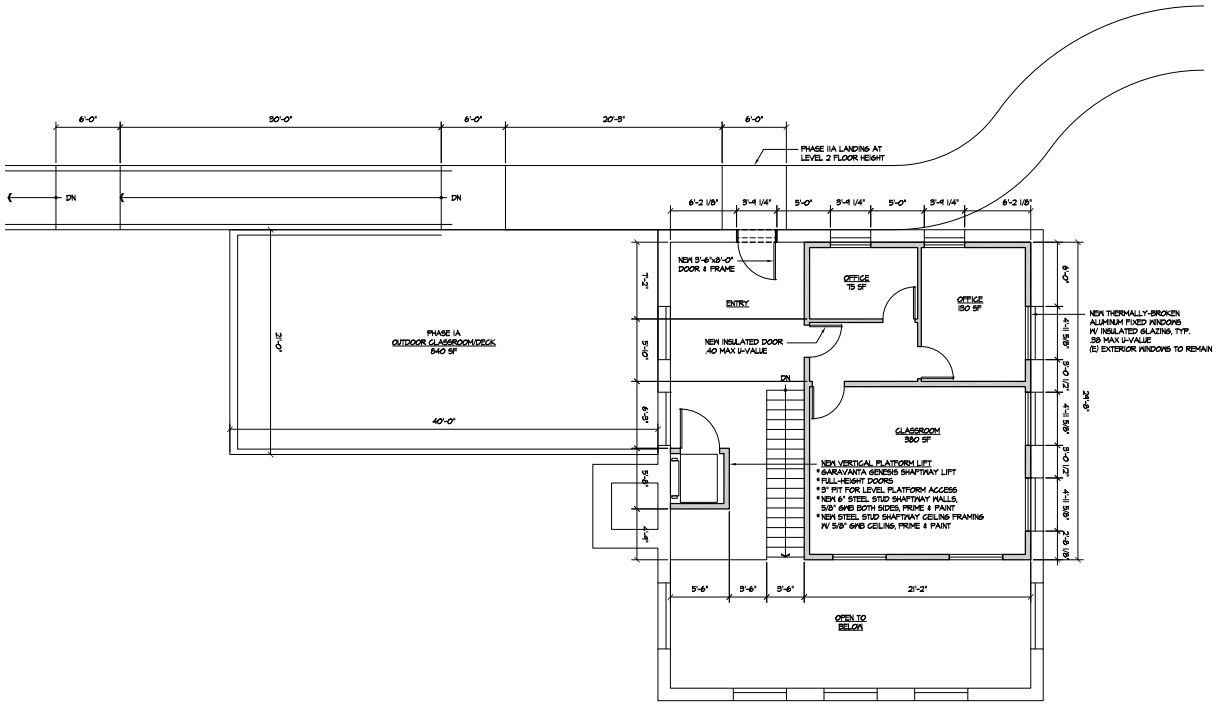
PHASE IIA PROJECT DESCRIPTION

- New accessible path and stairs from top of hill to shoreline, including concrete ramps and stairs, asphalt paths and boardwalk
- New outdoor classroom deck on roof of (E) bathroom building



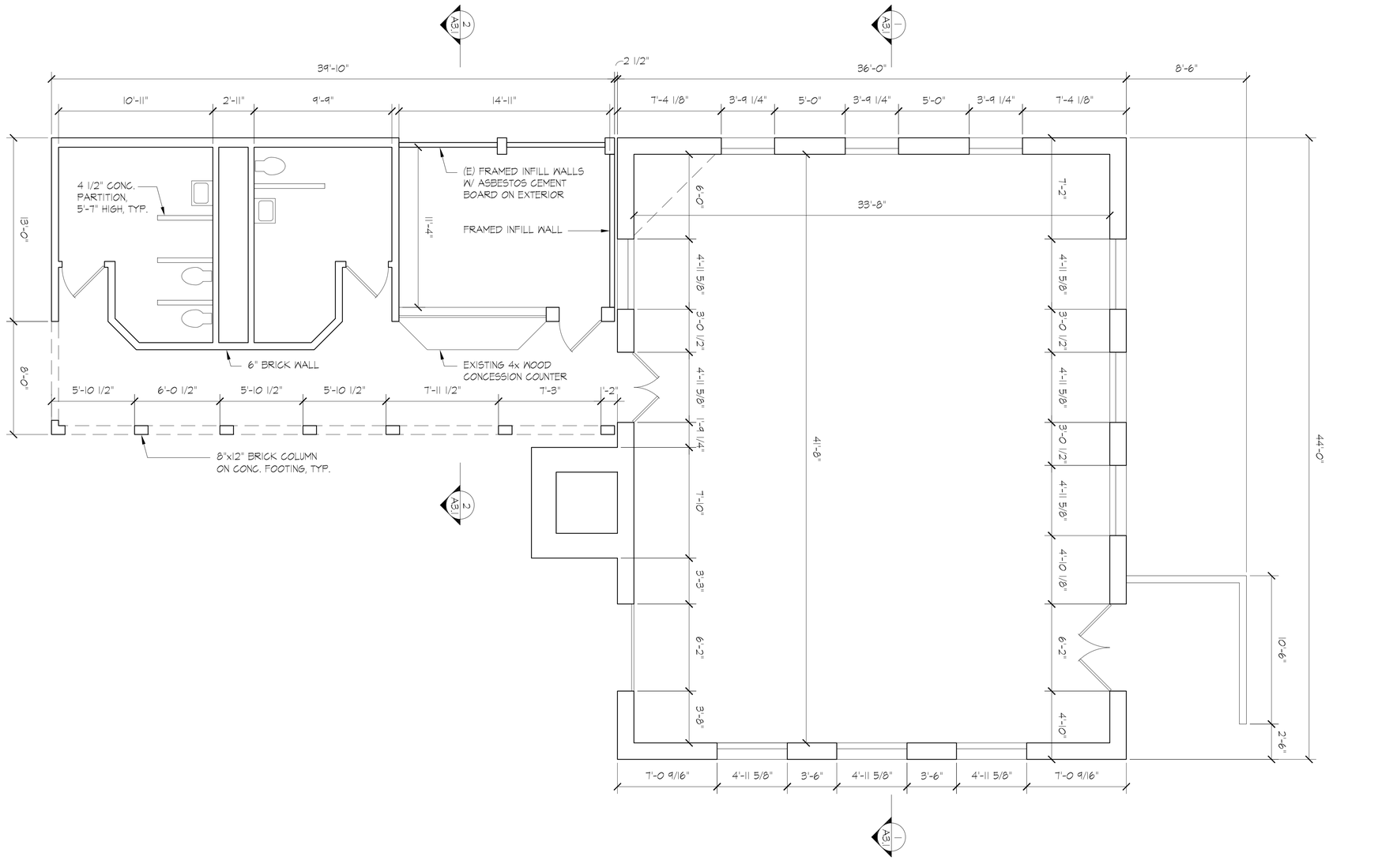
PHASE IIB PROJECT DESCRIPTION

- New second floor in boiler building with new entry, classroom and (2) offices
- New interior stairs and enclosed platform lift in boiler building
- New second floor entry on uphill (West) side of boiler building, connecting to phase IIA accessible route to top of hill
- Reinforce (E) brick cladding at new second floor entry.
- Remodel (E) concession area in bathroom building



3) STUDY DOCUMENTS

The following documents were produced during the study. They include Existing Drawings, Phase I & II Drawings, Construction & Project Cost Estimates, and Meeting Notes.



PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY

2040 84TH AVENUE SE
MERCER ISLAND, WA 98040

CARDINAL
ARCHITECTURE PC

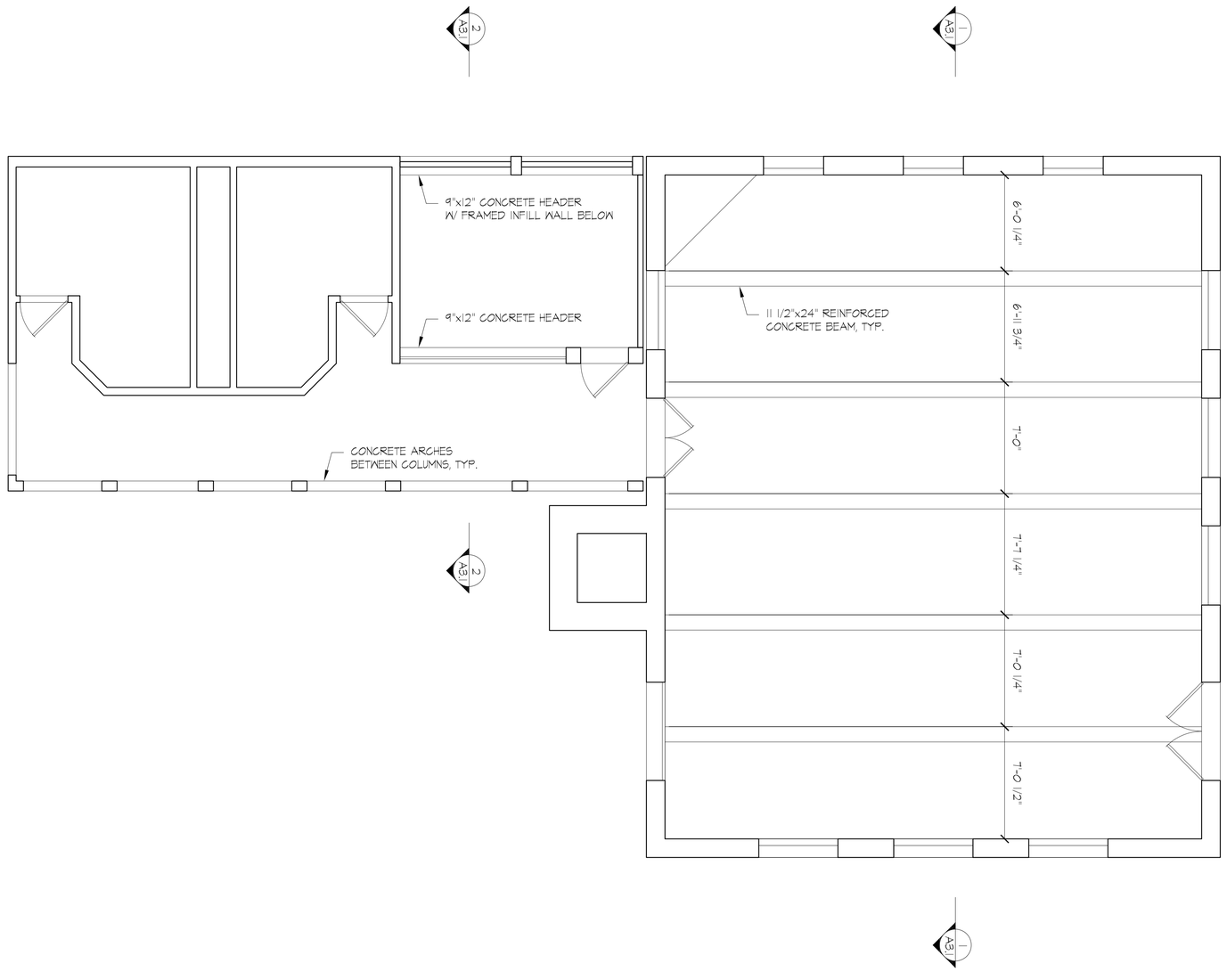
1326 5TH AVENUE #440
SEATTLE WA 98101
206-624-2365 T

#1634

15 NOVEMBER 2016

EXISTING
FLOOR PLAN

A2.1



REFLECTED CEILING PLAN 1
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

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BOILER BUILDING STUDY

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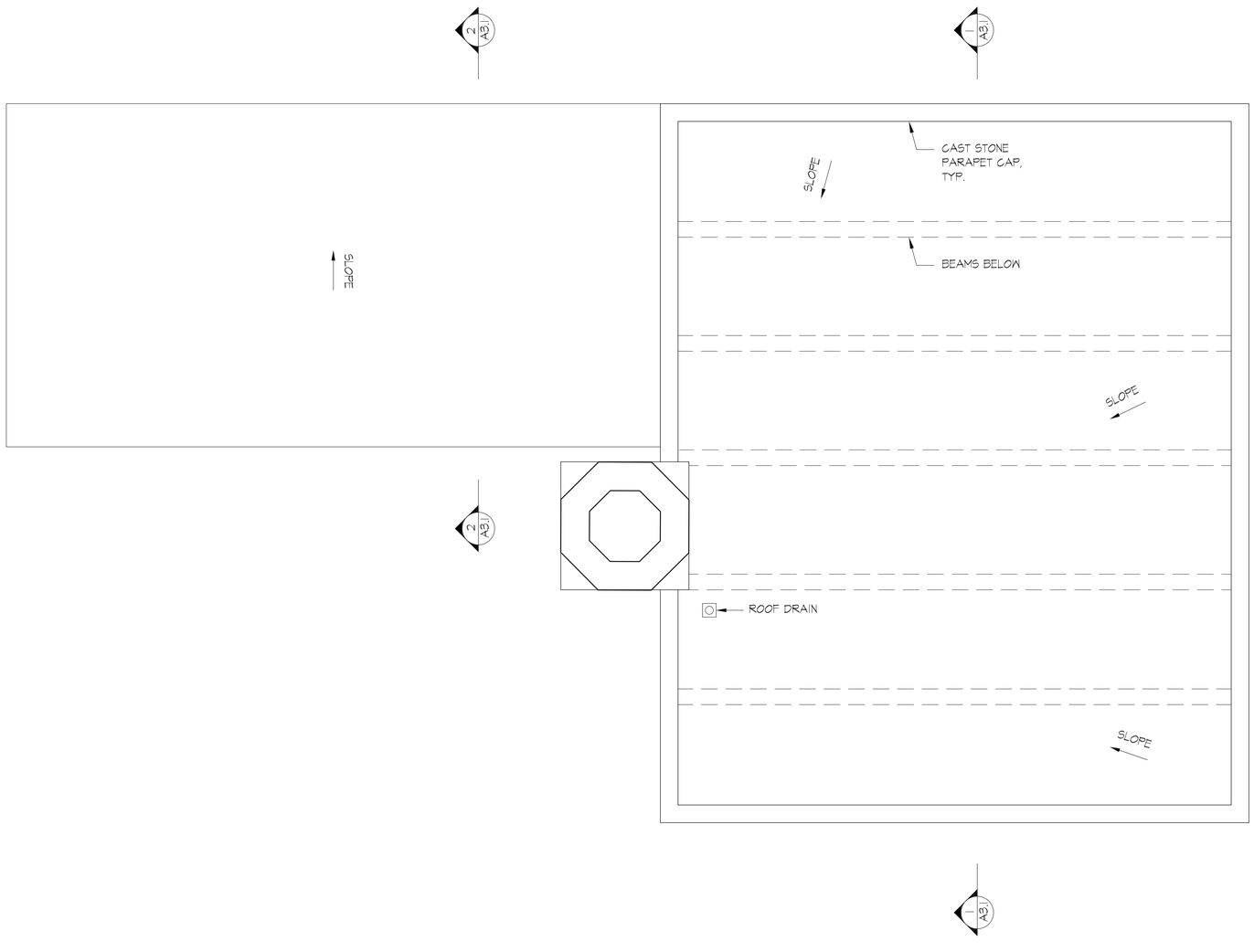
206-624-2365 T

#1634

15 NOVEMBER 2016

EXISTING
REFLECTED
CEILING PLAN

A2.2



EXISTING ROOF PLAN
1/4" = 1'-0"

N

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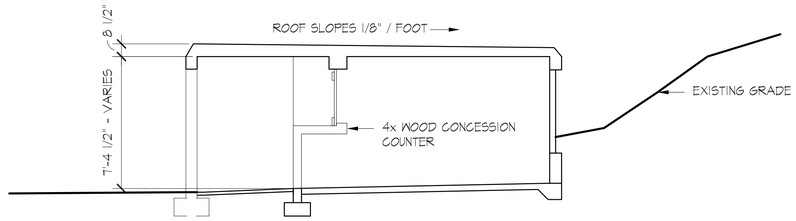
15 NOVEMBER 2016

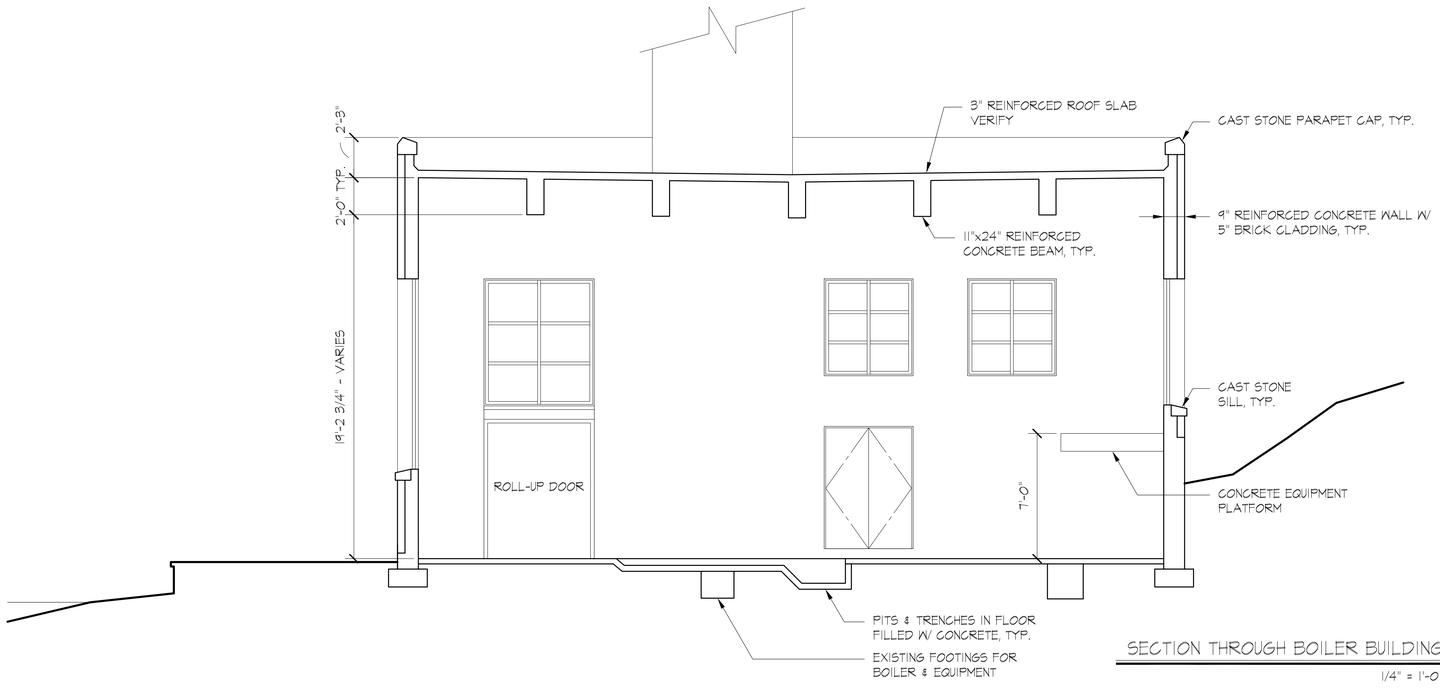
EXISTING
ROOF PLAN

A2.3



SECTION THROUGH BATHROOM BUILDING 2

1/4" = 1'-0"



SECTION THROUGH BOILER BUILDING 1

1/4" = 1'-0"

PRELIMINARY
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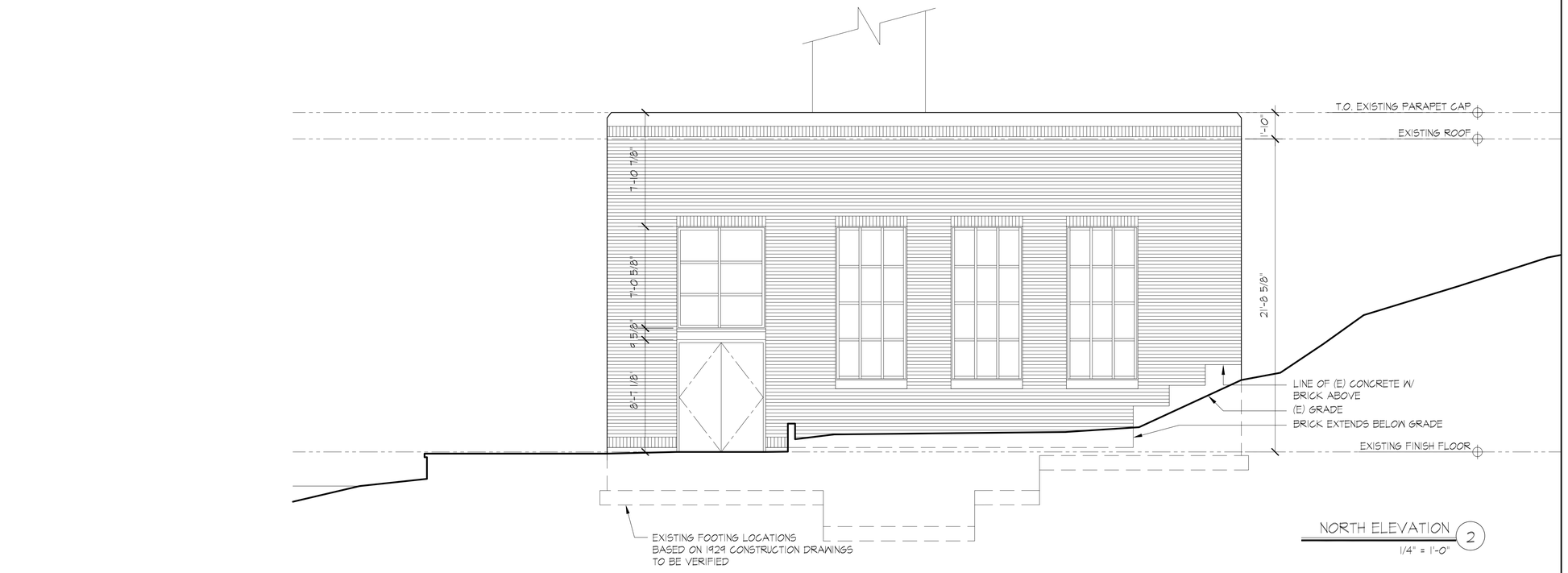
15 NOVEMBER 2016

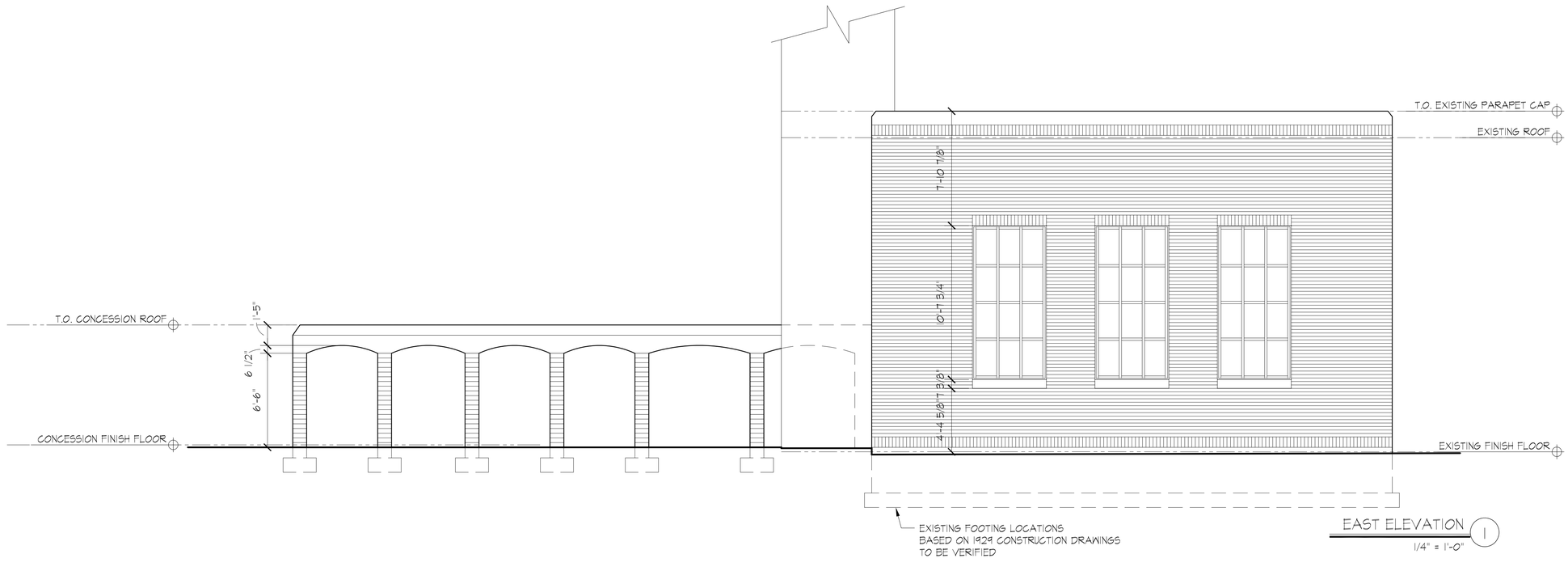
EXISTING
BUILDING SECTIONS

A3.1



NORTH ELEVATION 2

1/4" = 1'-0"



EAST ELEVATION 1

1/4" = 1'-0"

PRELIMINARY
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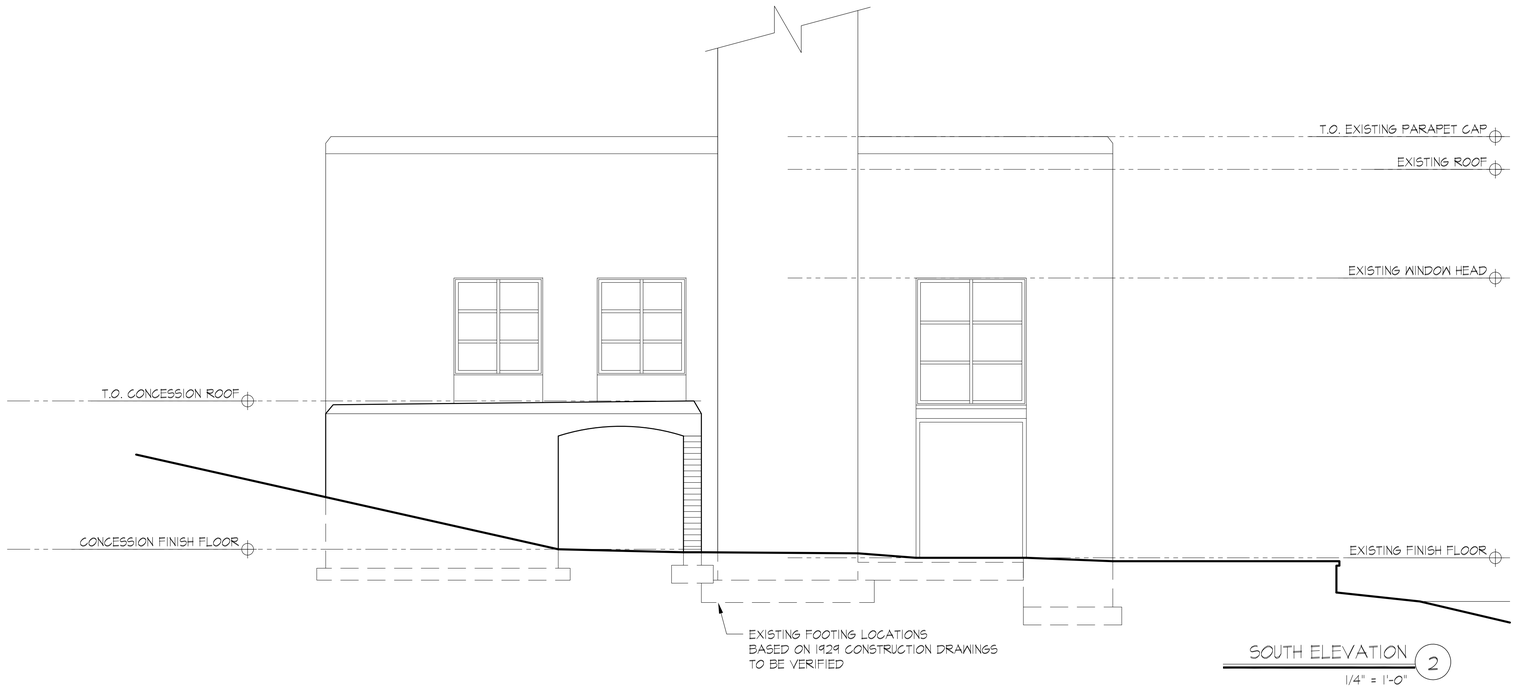
15 NOVEMBER 2016

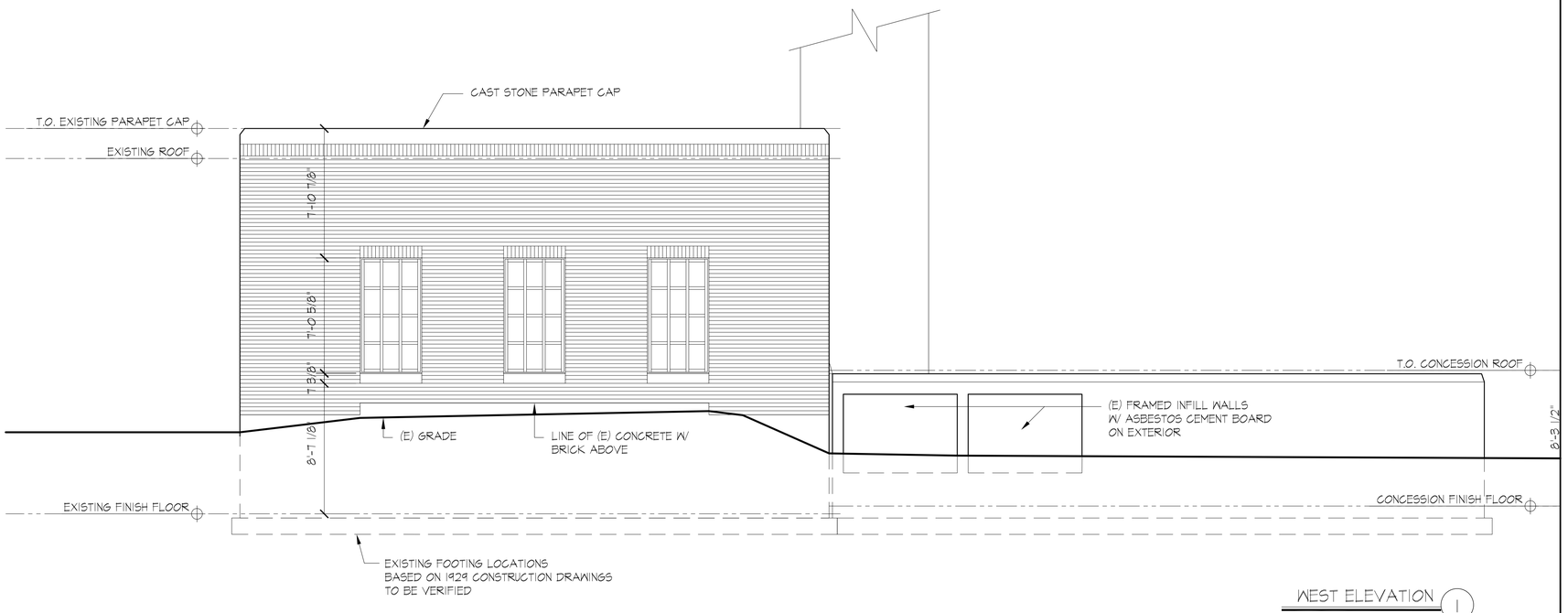
EXISTING BUILDING ELEVATIONS

A4.1



SOUTH ELEVATION 2

1/4" = 1'-0"



WEST ELEVATION 1

1/4" = 1'-0"

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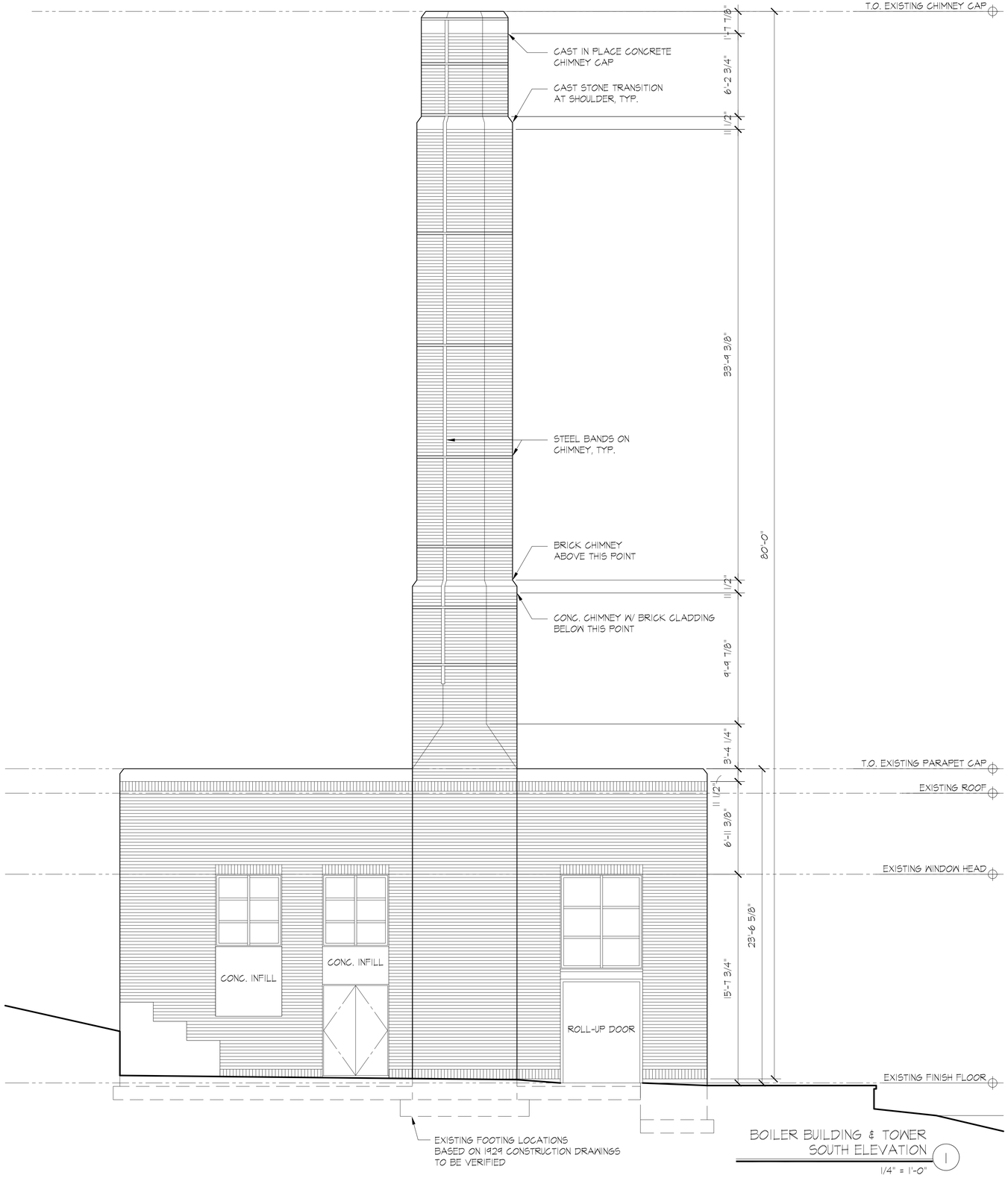
15 NOVEMBER 2016

EXISTING
BUILDING
ELEVATIONS

A4.2



BOILER BUILDING & TOWER
SOUTH ELEVATION 1

1/4" = 1'-0"

PRELIMINARY
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BOILER BUILDING STUDY

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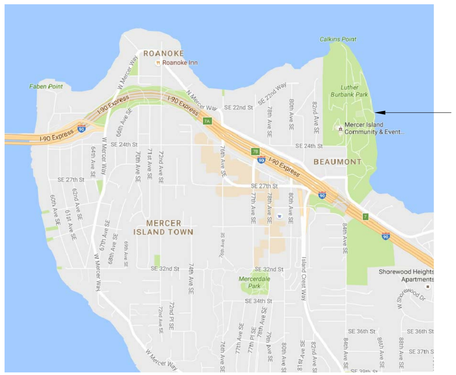
15 NOVEMBER 2016

EXISTING
TOWER ELEVATION

A4.3

PHASE I REPAIR PROJECT DESCRIPTION

* INSTALL NEW FOUNDATION DRAINAGE AT BOTTOM OF FOOTINGS & CONNECT TO (E) SITE DRAINAGE
* REMODEL (E) BATHROOMS FOR ACCESSIBILITY & IMPROVED FIXTURES
* REPLACE (E) FRAMED WALLS IN CONCESSION BUILDING W/ NEW CONCRETE WALLS
* REMOVE PORTION OF (E) CHIMNEY & REINFORCE REMAINING CHIMNEY. SEE OPTIONS ON SHEET A4.3-1
* REMOVE EXISTING BOILER BUILDING ROOFING & INSTALL NEW BUILT-UP ROOFING
* REPAIR & REINFORCE (E) BRICK CLADDING & STONE PARAPET CAP ON BOILER BUILDING



PROJECT LOCATION IN LUTHER BURBANK PARK

LOCATION PLAN 1
NO SCALE

N

PROPERTY & LAND USE INFORMATION

LOCATION: LUTHER BURBANK PARK
2040 8TH AVENUE

PROPERTY OWNER: CITY OF MERCER ISLAND

LEGAL DESCRIPTION: GL 6 LESS THE S 30 FT DEEDED TO KC FOR RD UNDER AUD FILE NO 1092750

APN: 0624059014
ZONING: R-15
PARCEL SIZE: 995,782 SF (22.86 ACRES)

LAND USE INFORMATION

19.02.010 USES PERMITTED IN SINGLE-FAMILY ZONE R-15
A.6 - PUBLIC PARKS PERMITTED
A. ACCESS TO LOCAL AND/OR ARTERIAL THOROUGHFARES SHALL BE REASONABLY PROVIDED.
B. OUTDOOR LIGHTING SHALL BE LOCATED TO MINIMIZE GLARE UPON ABUTTING PROPERTY AND STREETS.
C. MAJOR STRUCTURES, BALLFIELDS AND SPORT COURTS SHALL BE LOCATED AT LEAST 20 FEET FROM ANY ABUTTING PROPERTY.
D. IF A PERMIT IS REQUIRED FOR A PROPOSED IMPROVEMENT, A PLOT, LANDSCAPE AND BUILDING PLAN SHOWING COMPLIANCE WITH THESE CONDITIONS SHALL BE FILED WITH THE CITY DEVELOPMENT SERVICES GROUP (DSG) FOR ITS APPROVAL.

CURRENT USE IS "STORAGE ACCESSORY TO PARK"

19.07.110 SHORELINE MASTER PROGRAM
B.1 - LEGAL NONCONFORMING USES & STRUCTURES MAY CONTINUE
C.1 - SITE IS IN URBAN PARK ENVIRONMENT
GOVERNMENT SERVICES, PUBLIC FACILITIES, PARKS & OPEN SPACE PERMITTED (TABLE A)
E.1 - SHORELAND DEVELOPMENT STANDARDS LANDWARD OF OHWM:
SETBACK FOR ALL STRUCTURES & PARKING: 25' FROM OHWM
MAXIMUM IMPERVIOUS SURFACE COVERAGE: 10% BETWEEN 0' & 25' FROM OHWM
30% BETWEEN 25' & 50' FROM OHWM
ORDINARY HIGH WATER MARK IS 18'-6"

BUILDING CODE INFORMATION

APPLICABLE CODE: 2015 INTERNATIONAL BUILDING CODE W/ W/ WASHINGTON STATE AMMENDMENTS

CONSTRUCTION TYPE: CHAPTER 6
CURRENT STRUCTURE IS TYPE IA, NON-SPRINKLED
PROPOSED PHASE IIB RENOVATIONS TO BE TYPE IIB, SPRINKLED
NONCOMBUSTIBLE CONSTRUCTION
PRIMARY FRAME: NO RATING REQUIRED
BEARING WALLS: NO RATING REQUIRED
FLOOR STRUCTURE: NO RATING REQUIRED
ROOF STRUCTURE: NO RATING REQUIRED

OCCUPANCY TYPE: CHAPTER 3
CURRENT OCCUPANCY IS S-1 STORAGE
PROPOSED OCCUPANCY FOR PHASE IIB RENOVATIONS TO BE S-1 STORAGE & B BUSINESS

HEIGHTS & AREAS: CHAPTER 5
EXISTING BUILDING HEIGHTS & AREAS:
BOILER BUILDING: (1) STORY, 24' HIGH, 1600 SF
CONCESSIONS BUILDING: (1) STORY, 24' HIGH, 835 SF

ALLOWABLE HEIGHTS & AREAS
TYPE IIB CONSTRUCTION, SPRINKLED, B&S OCCUPANCY:
(3) STORIES, 65' HIGH, 52,000 SF PER STORY

OCCUPANT LOADS: TABLE 1004.1.2
CURRENT OCCUPANT LOAD (STORAGE): 1600 SF/300 = (6) OCCUPANTS
(1) EXIT REQUIRED
PROPOSED BOILER BUILDING OCCUPANT LOAD:
LEVEL 1 (STORAGE): 1600 SF/300 = (6) OCCUPANTS
LEVEL 2 (CLASSROOMS): 380 SF/20 = (19) OCCUPANTS
LEVEL 2 (OFFICES): 205 SF/100 = (3) OCCUPANTS
LEVEL 2 TOTAL: (21) OCCUPANTS
(1) EXIT REQUIRED

ACCESSIBILITY: CHAPTER 11, ANSI A117.1
NO ACCESSIBLE ROUTE TO THE BUILDING CURRENTLY EXISTS
BATHROOMS TO BE REMODELED FOR ACCESSIBILITY IN PHASE I.
FOR CHANGE OF USE (PHASE II), ACCESSIBLE ROUTE WILL BE PROVIDED FROM TOP OF HILL TO ENTRANCES AT LEVELS 1 & 2 AND BATHROOMS.

DRAWING INDEX

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE I REPAIR

2040 84TH AVENUE SE
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CARDINAL ARCHITECTURE PC

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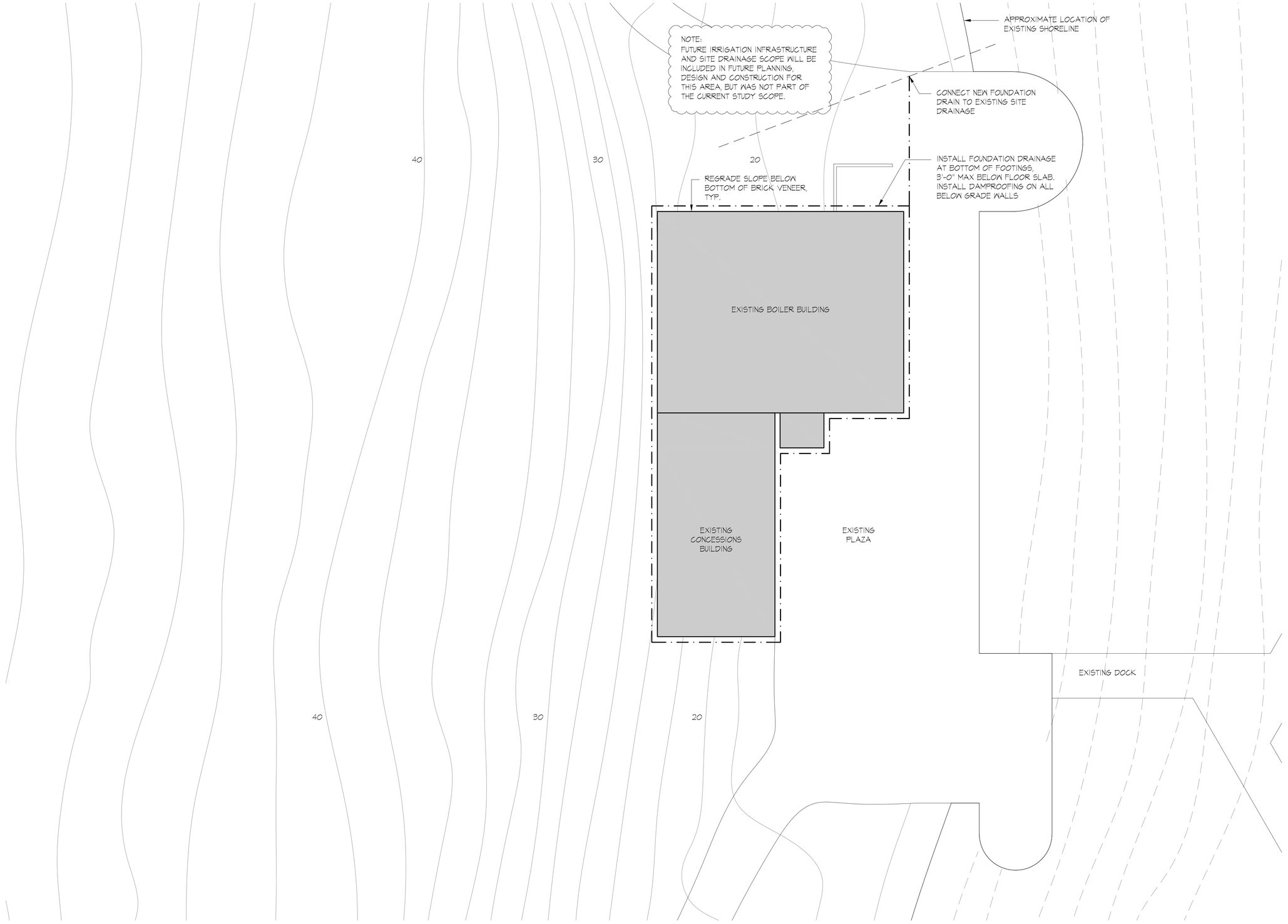
#1634
5 JANUARY 2017

PROJECT INFORMATION

T1-1



SITE PLAN 1
1/8" = 1'-0"

N

PRELIMINARY
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5 JANUARY 2017

SITE PLAN

A1-I

PLUMBING FIXTURE REQUIREMENTS:
TOTAL BUILDING OCCUPANT LOAD: 86
43 M/43 W

2015 IBC W/ WA STATE AMMENDMENTS
REQUIREMENTS FOR EDUCATIONAL USE:
1 WC PER 35 M, 1 LAV PER 85 M
1 WC PER 25 W, 1 LAV PER 50 W

TOTAL REQUIRED FIXTURES:
MEN: 2 WC, 1 LAV
WOMEN: 2 WC, 2 LAV

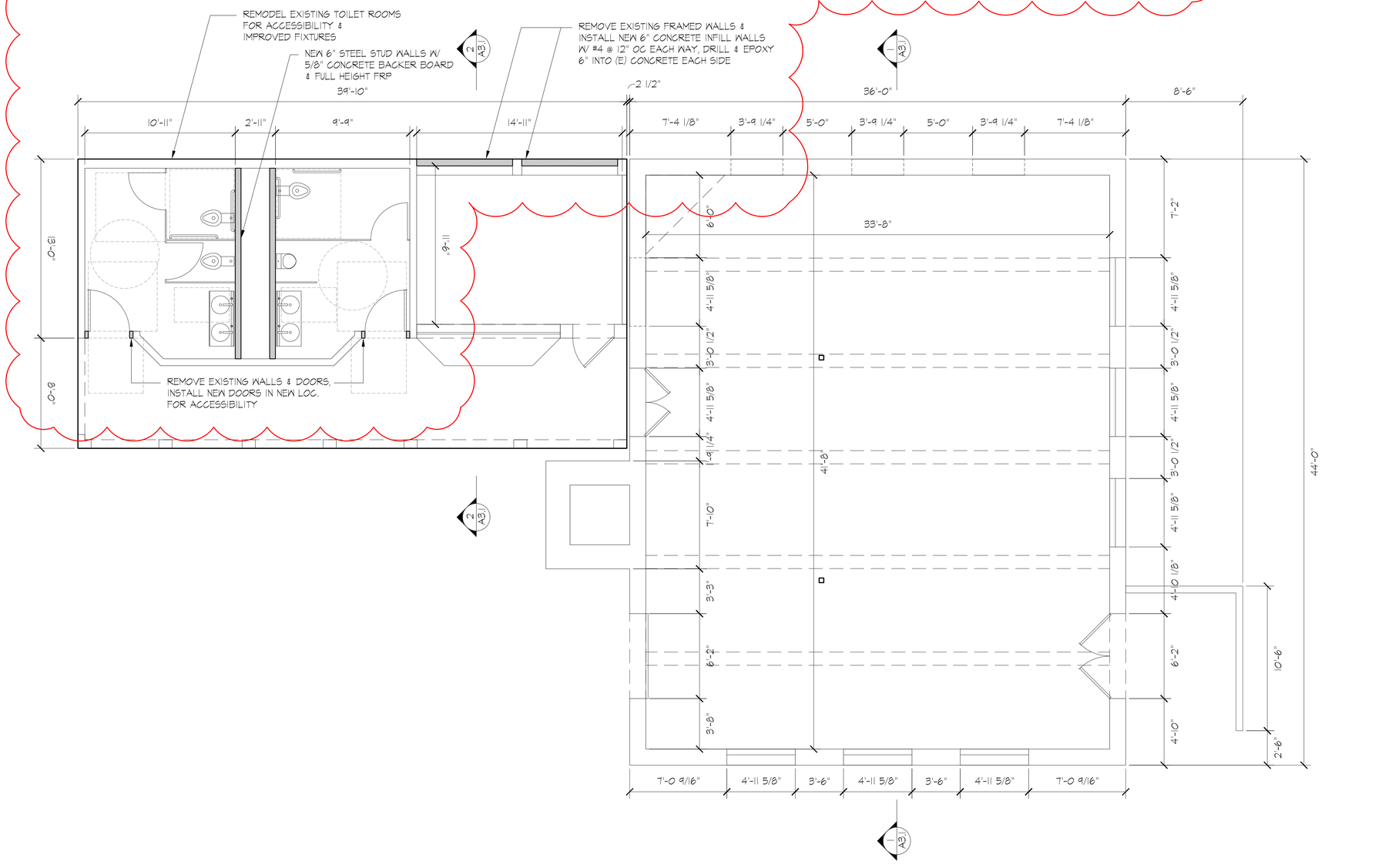
TOTAL PROVIDED FIXTURES:
MEN: 2 WC, 2 LAV (URINALS MAY REPLACE 1 OF 2 REQUIRED WC)
WOMEN: 2 WC, 2 LAV

NEW PLUMBING FIXTURES:
WC: ACORN MERIDIAN 2141 WALL-MOUNT SS TOILET
W/ SLOAN ROYAL FLUSH VALVE & VACUUM BREAKER TRAP PRIMER
& BEMIS ELONGATED OPEN-FRONT SEAT
MOUNT W/ CONCEALED MOUNTING CARRIER
URINAL: ACORN 2158 WALL-MOUNT ADA SS HIGH EFFICIENCY URINAL
W/ SLOAN ROYAL FLUSH VALVE & VACUUM BREAKER TRAP PRIMER
MOUNT W/ JAY R SMITH CONCEALED SUPPORT
LAV: ACORN MERIDIAN 3712 WALL-MOUNT SS 2-STATION WASH BASIN
W/ INTEGRATED FAUCET, MOUNT W/ JAY R SMITH CONCEALED SUPPORT

NEW PARTITIONS:
NEW BRADLEY SERIES 600 CEILING HUNG STAINLESS STEEL RESTROOM
PARTITIONS & WALL MOUNTED STAINLESS STEEL URINAL SCREEN

NEW TOILET ROOM ACCESSORIES:
GRAB BARS - BOBRICK B6086, (3) EACH ADA COMPARTMENT
MIRRORS - BOBRICK B-290 2436 WELDED FRAME, (1) PER TOILET ROOM
WALL-MOUNTED WASTE BASKET - (1) PER TOILET ROOM
PAPER TOWEL DISPENSER - (1) PER TOILET ROOM
SOAP DISPENSER - (1) PER TOILET ROOM
TOILET PAPER DISPENSER - (1) PER STALL
TOILET SEAT COVER DISPENSER - (1) PER STALL
SANITARY NAPKIN DISPENSER - (1) PER WOMEN'S STALL
SANITARY NAPKIN DISPOSAL BIN - (1) PER WOMEN'S STALL

NEW TOILET FINISHES:
WALLS: FULL-HEIGHT NUDO FIBER-LITE PANELS, SMOOTH EXTERIOR GEL COAT
CEILING: CLEAN (E) CEILING, PRIME & (2) COATS PAINT
FLOORS: CLEAN & RESEAL (E) CONCRETE FLOORS



FLOOR PLAN
1/4" = 1'-0"

N

PRELIMINARY
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BOILER BUILDING STUDY
PHASE I REPAIR

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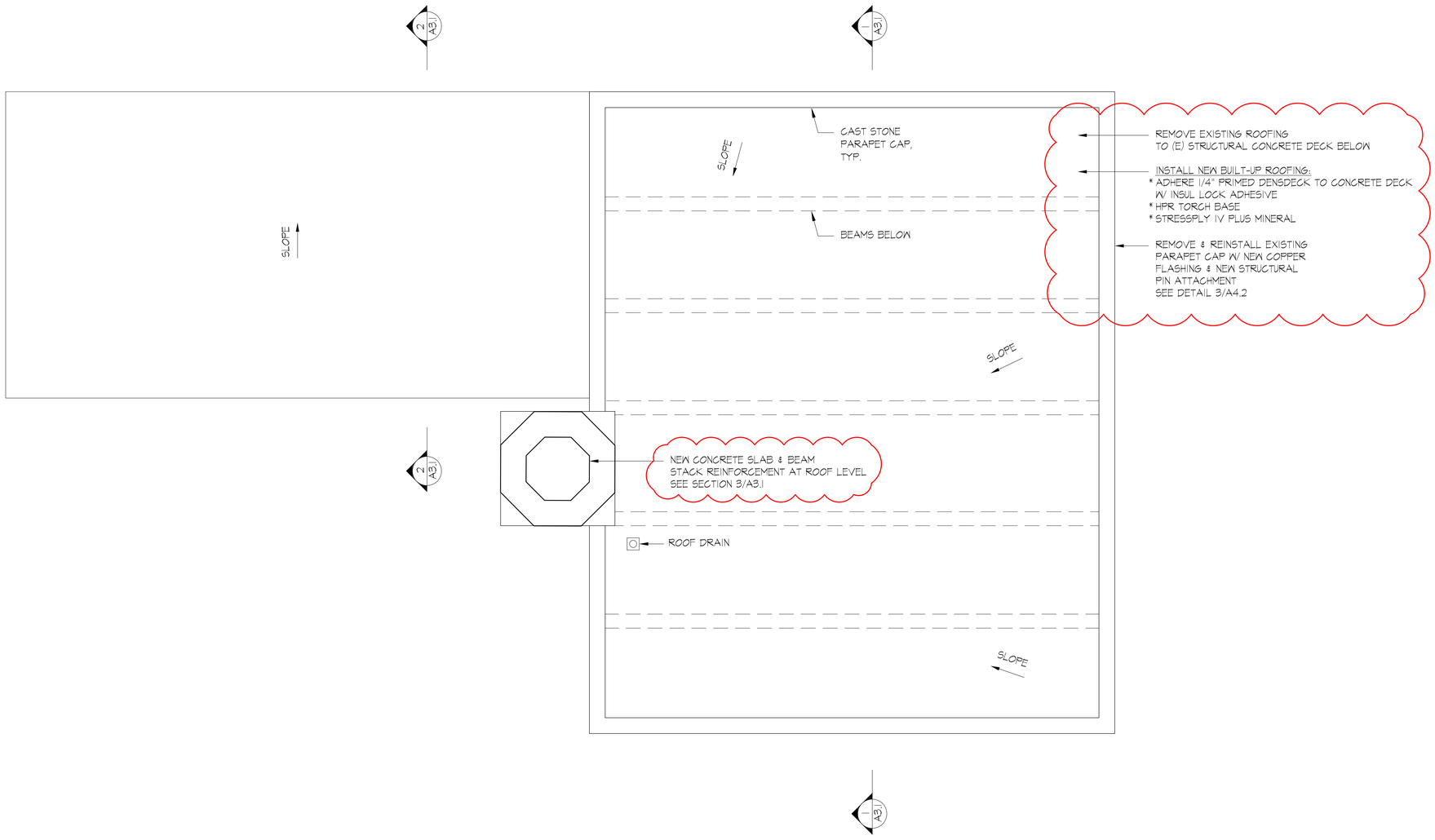
5 JANUARY 2017

FLOOR PLAN

A2.1-I



ROOF PLAN
1/4" = 1'-0"

N

PRELIMINARY
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2040 84TH AVENUE SE
MERCER ISLAND, WA 98040

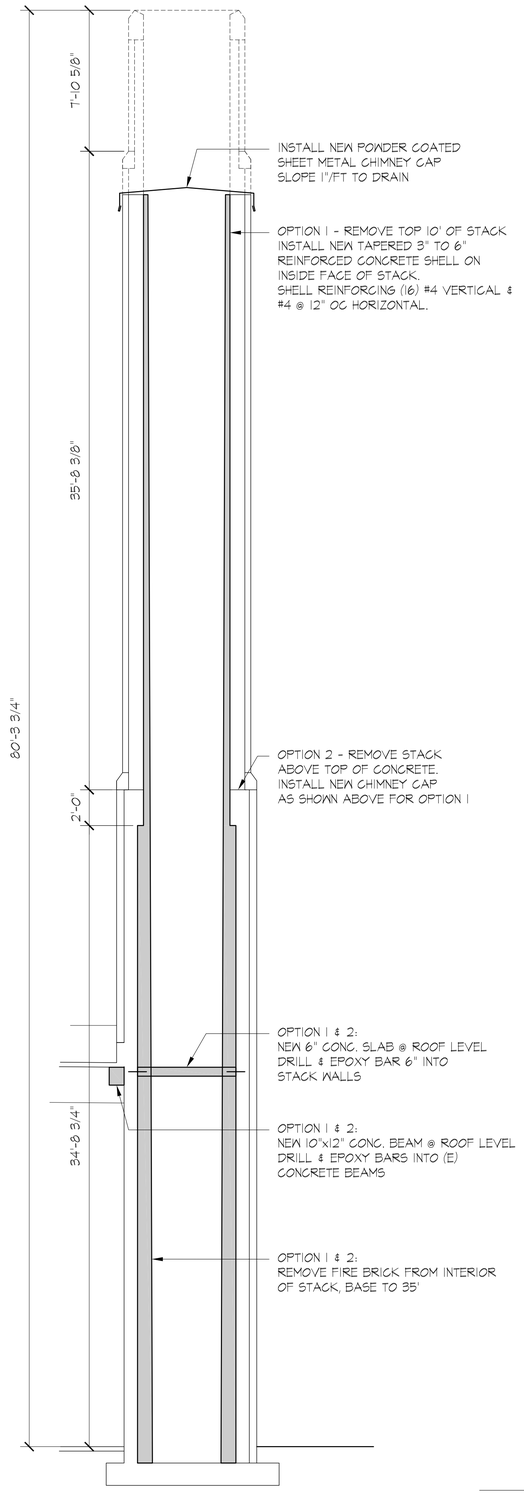
CARDINAL
ARCHITECTURE PC

1326 5TH AVENUE #440
SEATTLE WA 98101
206-624-2365 T

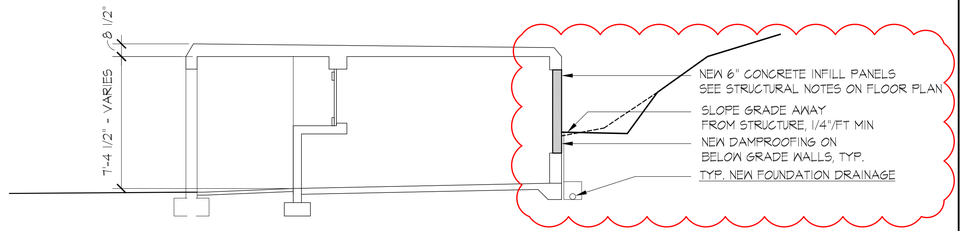
#1634
5 JANUARY 2017

ROOF PLAN

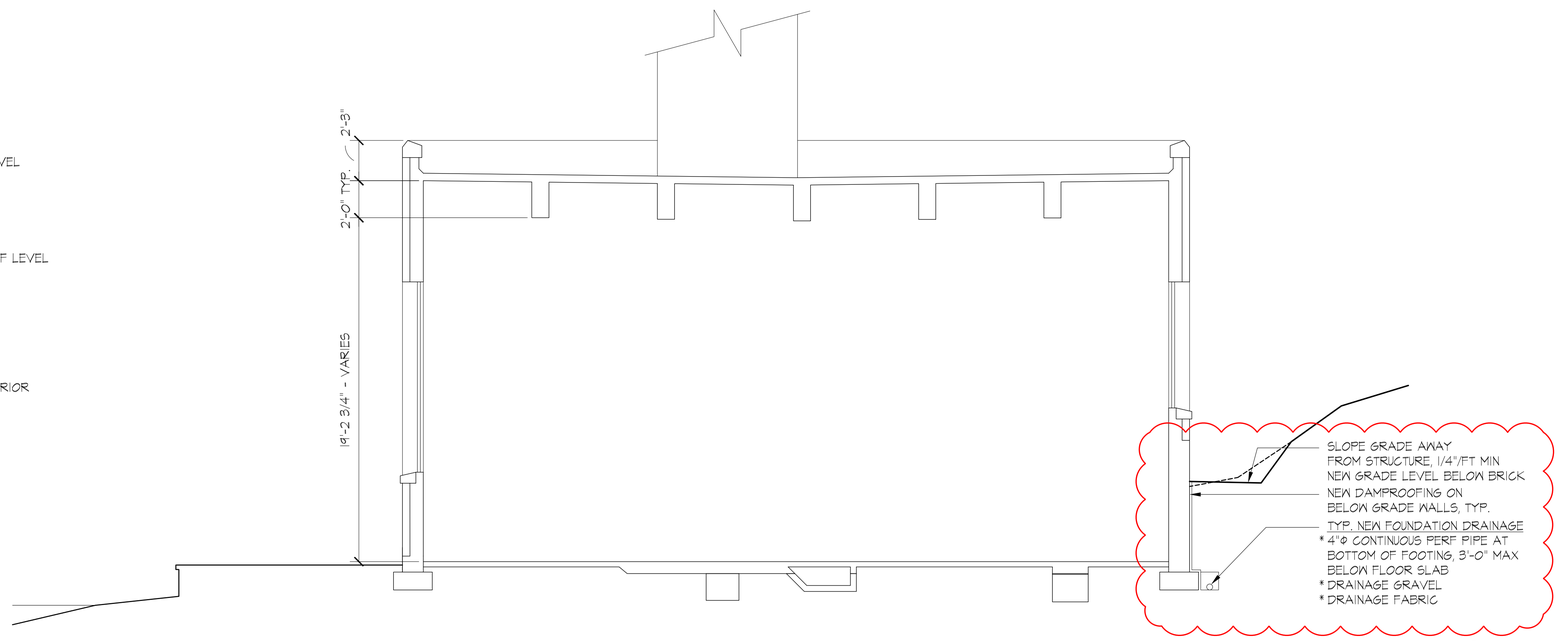
A2.4-I



SECTION THROUGH STACK 3
1/4" = 1'-0"



SECTION THROUGH BATHROOM BUILDING 2
1/4" = 1'-0"



SECTION THROUGH BOILER BUILDING 1
1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING PHASE I REPAIR

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ARCHITECTURE PC

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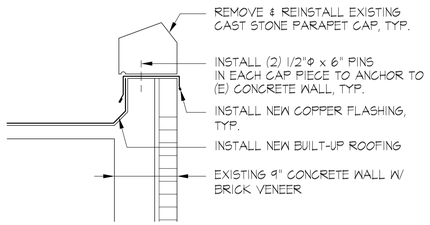
5 JANUARY 2017

BUILDING SECTIONS

A3.1-I

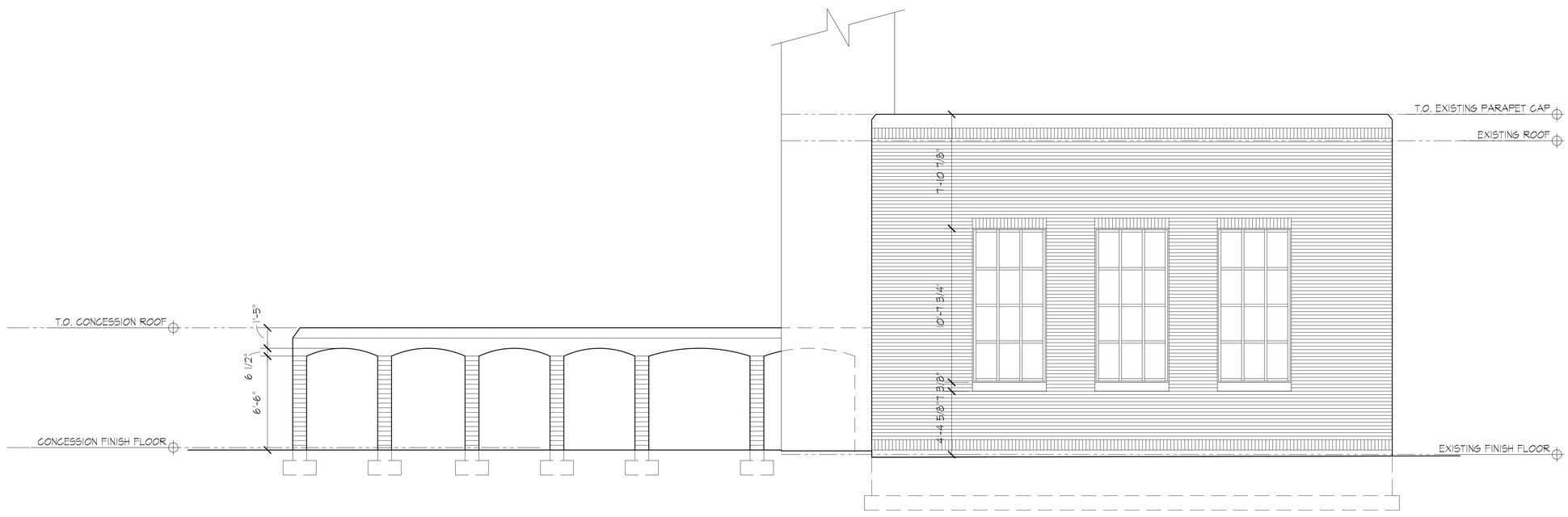


PARAPET CAP REPAIR DETAIL 3

3/4" = 1'-0"

NORTH ELEVATION 2

1/4" = 1'-0"



EAST ELEVATION 1

1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE I REPAIR

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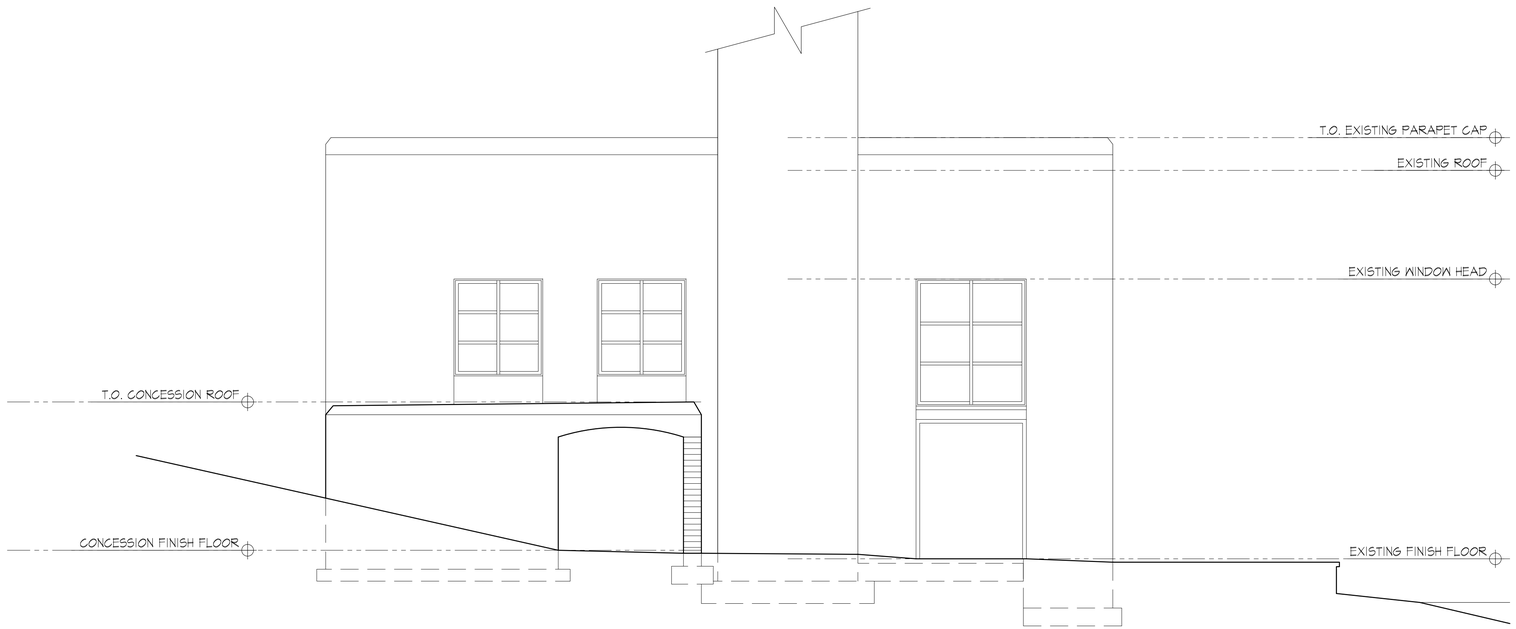
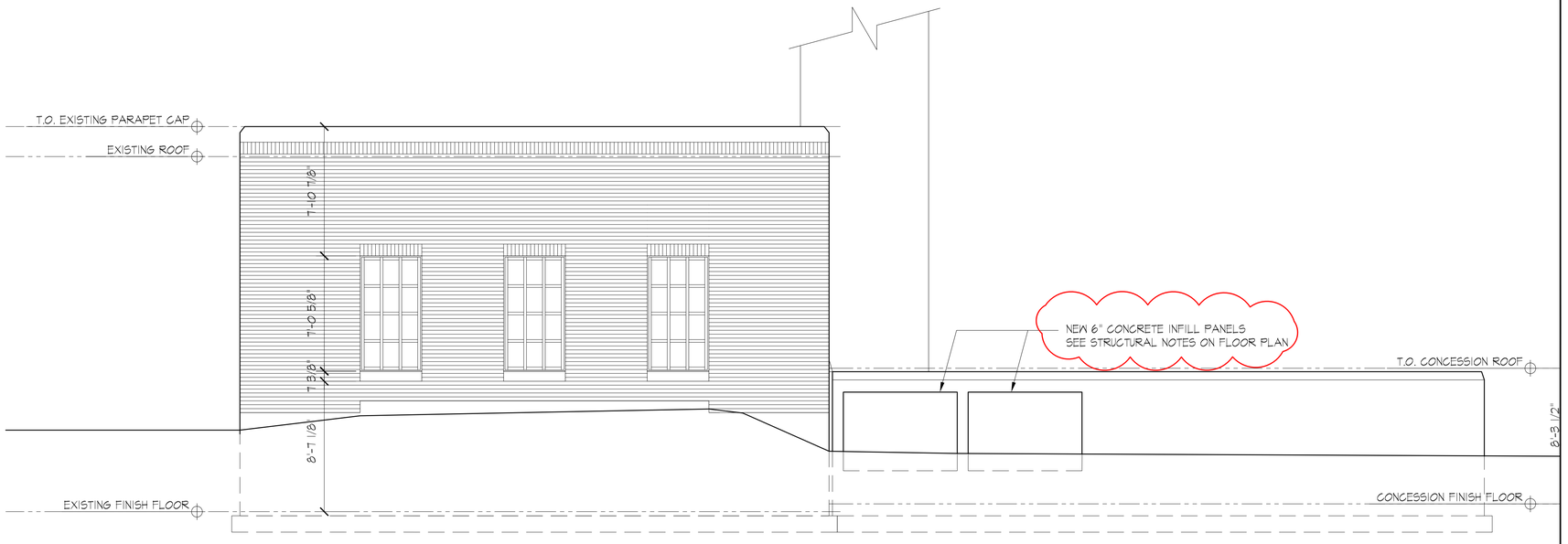
BUILDING ELEVATIONS

A4.1-I



SOUTH ELEVATION 2

1/4" = 1'-0"



WEST ELEVATION 1

1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

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BUILDING ELEVATIONS

A4.2-I

BOILER BUILDING W/ STACK REPAIR OPTION 2 (4)

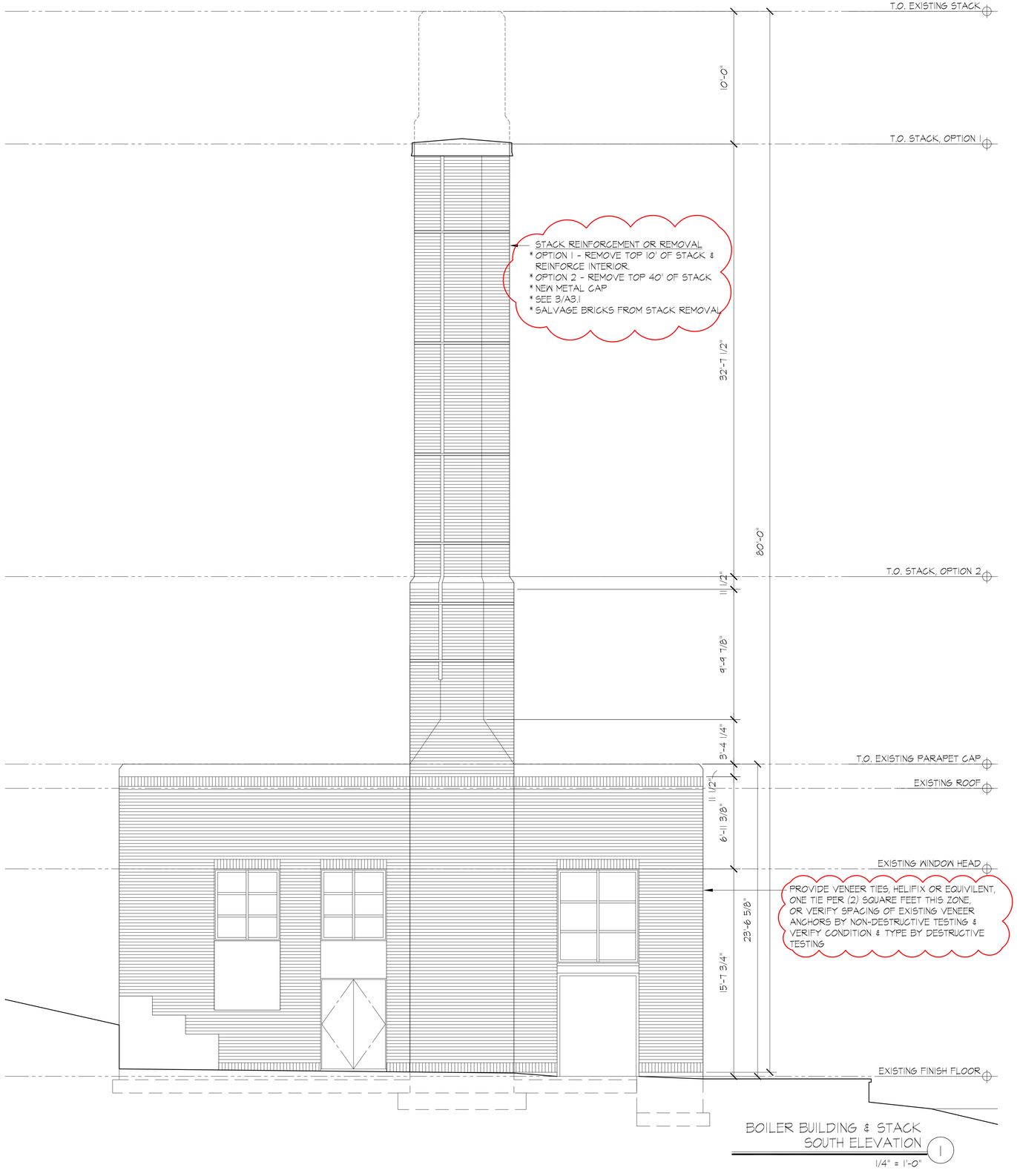
NO SCALE

BOILER BUILDING W/ STACK REPAIR OPTION 1 (3)

NO SCALE

EXISTING BOILER BUILDING & STACK (2)

NO SCALE



BOILER BUILDING & STACK SOUTH ELEVATION (1)

1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING PHASE I REPAIR

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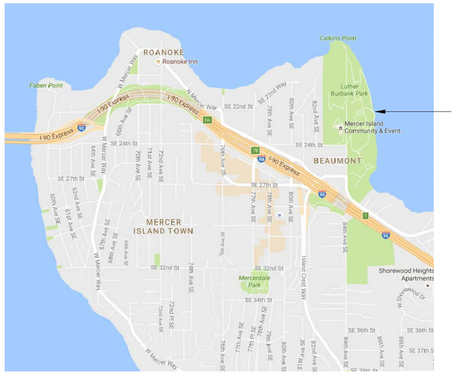
STACK ELEVATION

A4.3-I

PHASE IIA PROJECT DESCRIPTION

* NEW ACCESSIBLE PATH & STAIRS FROM TOP OF HILL TO SHORELINE, INCLUDING CONCRETE RAMPS & STAIRS, ASPHALT PATHS & BOARDWALK
* NEW OUTDOOR CLASSROOM DECK ON ROOF OF (E) BATHROOM BUILDING



PROJECT LOCATION IN LUTHER BURBANK PARK

LOCATION PLAN
NO SCALE

PROPERTY & LAND USE INFORMATION

LOCATION: LUTHER BURBANK PARK
2040 84TH AVENUE

PROPERTY OWNER: CITY OF MERCER ISLAND

LEGAL DESCRIPTION: GL 6 LESS THE S 30 FT DEEDED TO KC FOR RD UNDER AUD FILE NO 1092750

APN: 0624059014
ZONING: R-15
PARCEL SIZE: 995,782 SF (22.86 ACRES)

LAND USE INFORMATION

19.02.010 USES PERMITTED IN SINGLE-FAMILY ZONE R-15
A.6 - PUBLIC PARKS PERMITTED
A. ACCESS TO LOCAL AND/OR ARTERIAL THOROUGHFARES SHALL BE REASONABLY PROVIDED.
B. OUTDOOR LIGHTING SHALL BE LOCATED TO MINIMIZE GLARE UPON ABUTTING PROPERTY AND STREETS.
C. MAJOR STRUCTURES, BALLFIELDS AND SPORT COURTS SHALL BE LOCATED AT LEAST 20 FEET FROM ANY ABUTTING PROPERTY.
D. IF A PERMIT IS REQUIRED FOR A PROPOSED IMPROVEMENT, A PLOT, LANDSCAPE AND BUILDING PLAN SHOWING COMPLIANCE WITH THESE CONDITIONS SHALL BE FILED WITH THE CITY DEVELOPMENT SERVICES GROUP (DSG) FOR ITS APPROVAL.

CURRENT USE IS "STORAGE ACCESSORY TO PARK"

19.07.110 SHORELINE MASTER PROGRAM
B.1 - LEGAL NONCONFORMING USES & STRUCTURES MAY CONTINUE
C.1 - SITE IS IN URBAN PARK ENVIRONMENT
GOVERNMENT SERVICES, PUBLIC FACILITIES, PARKS & OPEN SPACE PERMITTED (TABLE A)
E.1 - SHORELAND DEVELOPMENT STANDARDS LANDWARD OF OHWM:
SETBACK FOR ALL STRUCTURES & PARKING: 25' FROM OHWM
MAXIMUM IMPERVIOUS SURFACE COVERAGE: 10% BETWEEN 0' & 25' FROM OHWM
30% BETWEEN 25' & 50' FROM OHWM
ORDINARY HIGH WATER MARK IS 18'-6"

BUILDING CODE INFORMATION

APPLICABLE CODE: 2015 INTERNATIONAL BUILDING CODE W/ W/ WASHINGTON STATE AMMENDMENTS

CONSTRUCTION TYPE: CHAPTER 6
CURRENT STRUCTURE IS TYPE IA, NON-SPRINKLED

PROPOSED PHASE IIB RENOVATIONS TO BE TYPE IIB, SPRINKLED
NONCOMBUSTIBLE CONSTRUCTION
PRIMARY FRAME: NO RATING REQUIRED
BEARING WALLS: NO RATING REQUIRED
FLOOR STRUCTURE: NO RATING REQUIRED
ROOF STRUCTURE: NO RATING REQUIRED

OCCUPANCY TYPE: CHAPTER 3
CURRENT OCCUPANCY IS S-1 STORAGE
PROPOSED OCCUPANCY FOR PHASE IIB RENOVATIONS TO BE S-1 STORAGE & B BUSINESS

HEIGHTS & AREAS: CHAPTER 5
EXISTING BUILDING HEIGHTS & AREAS:
BOILER BUILDING: (1) STORY, 24' HIGH, 1600 SF
CONCESSIONS BUILDING: (1) STORY, 24' HIGH, 835 SF

ALLOWABLE HEIGHTS & AREAS
TYPE IIB CONSTRUCTION, SPRINKLED, B&S OCCUPANCY:
(3) STORIES, 65' HIGH, 52,000 SF PER STORY

OCCUPANT LOADS: TABLE 1004.1.2
CURRENT OCCUPANT LOAD (STORAGE): 1600 SF/300 = (6) OCCUPANTS
(1) EXIT REQUIRED
PROPOSED BOILER BUILDING OCCUPANT LOAD:
LEVEL 1 (STORAGE): 1600 SF/300 = (6) OCCUPANTS
LEVEL 2 (CLASSROOMS): 380 SF/20 = (19) OCCUPANTS
LEVEL 2 (OFFICES): 205 SF/100 = (3) OCCUPANTS
LEVEL 2 TOTAL: (21) OCCUPANTS
(1) EXIT REQUIRED

ACCESSIBILITY: CHAPTER 11, ANSI A117.1
NO ACCESSIBLE ROUTE TO THE BUILDING CURRENTLY EXISTS
BATHROOMS TO BE REMODELED FOR ACCESSIBILITY IN PHASE 1.
FOR CHANGE OF USE (PHASE II), ACCESSIBLE ROUTE WILL BE PROVIDED FROM TOP OF HILL TO ENTRANCES AT LEVELS 1 & 2 AND BATHROOMS.

DRAWING INDEX

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE II A

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MERCER ISLAND, WA 98040

CARDINAL ARCHITECTURE PC
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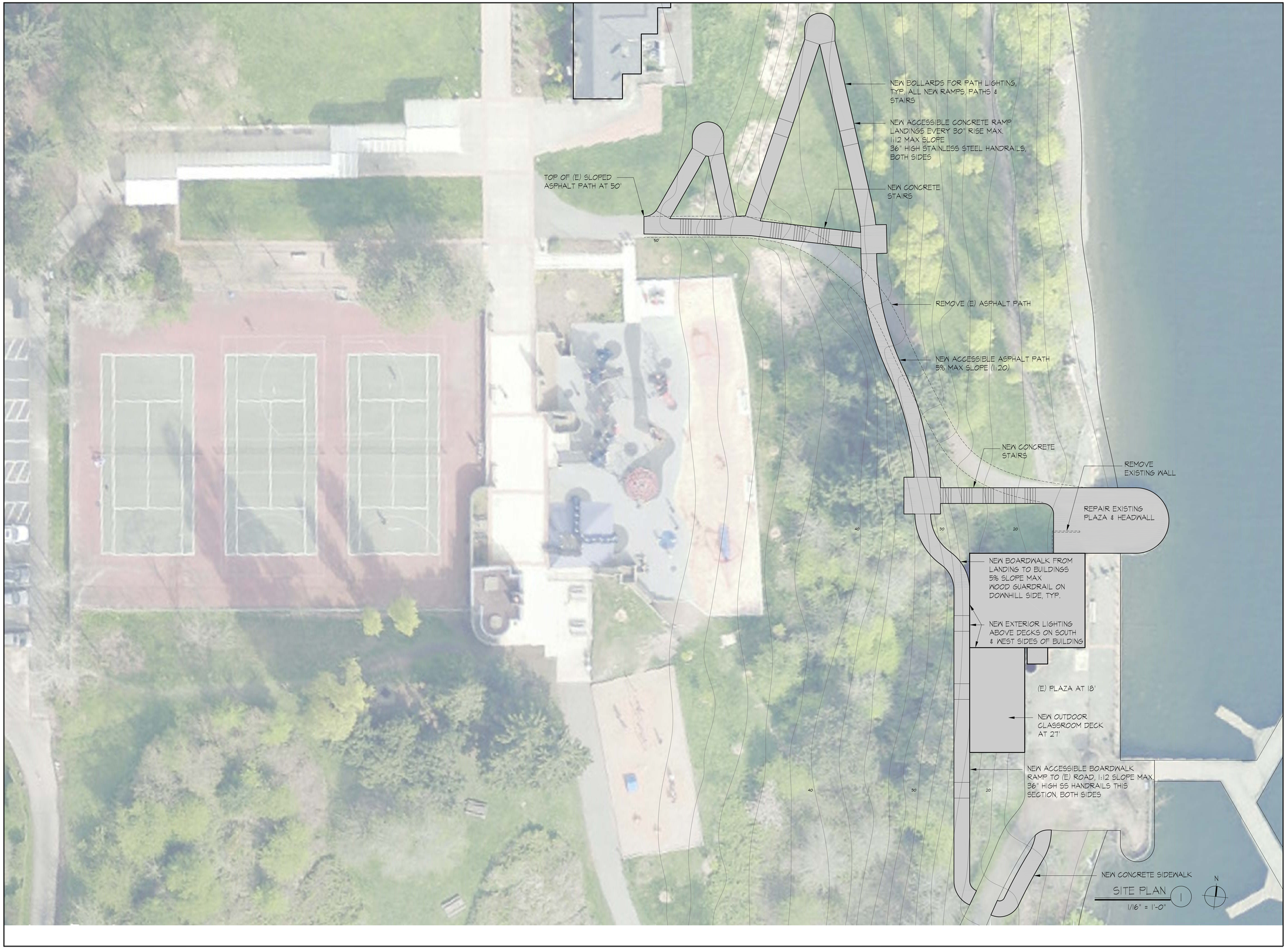
206-624-2365 T

#1634
5 JANUARY 2016

PROJECT INFORMATION

T1-IIA



SITE PLAN
1/16" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE II A

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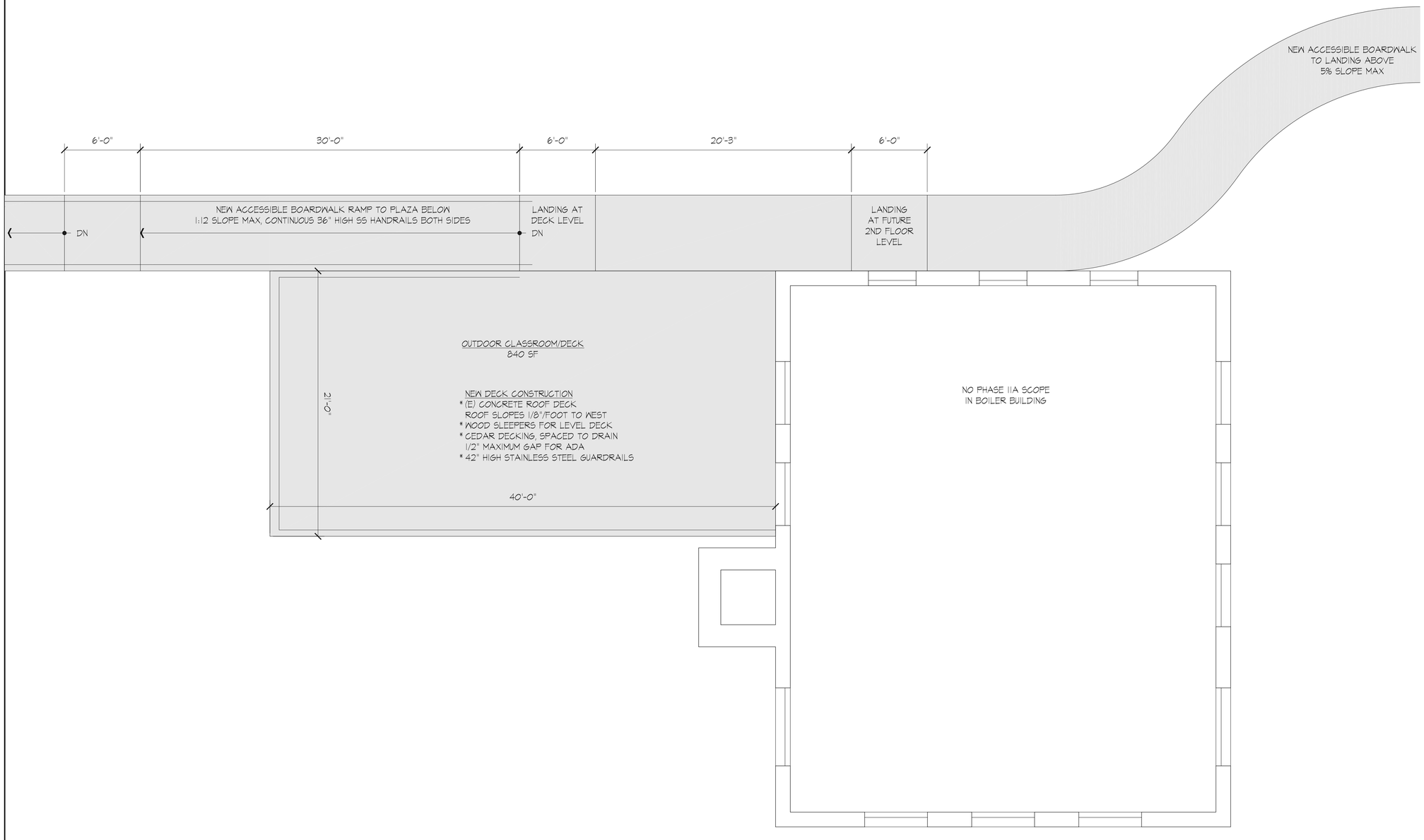
#1634
5 JANUARY 2016

PHASE 2A
SITE PLAN

A1-IIA



NEW ROOF DECK PLAN 1
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II A

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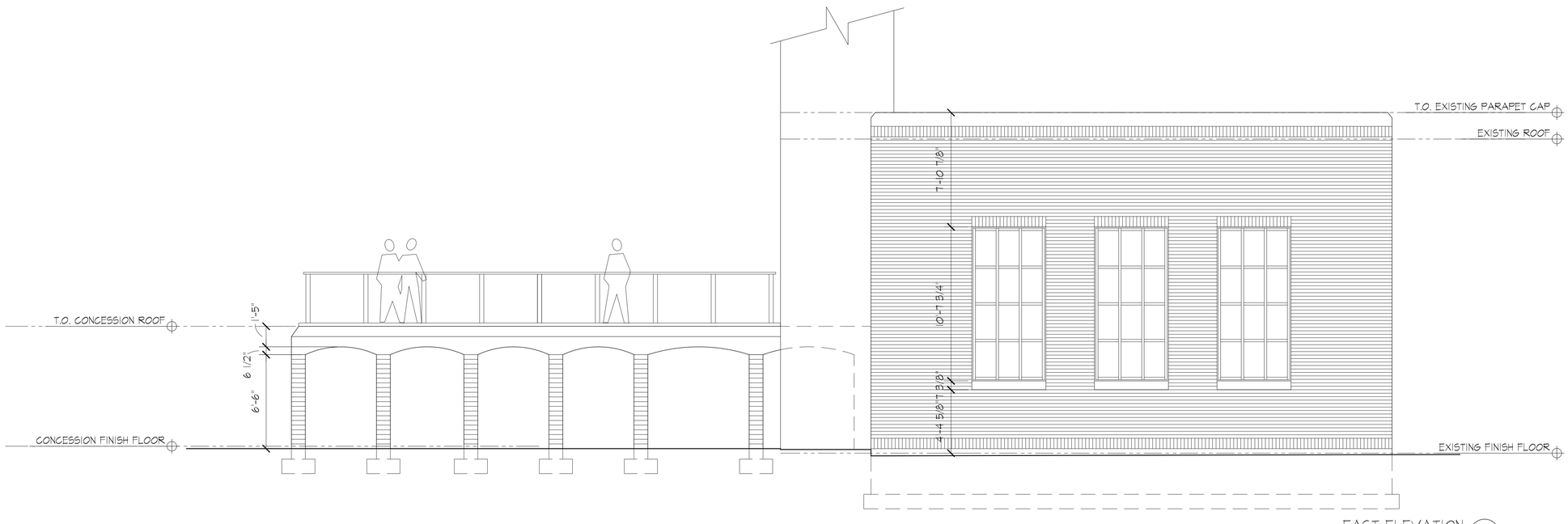
#1634

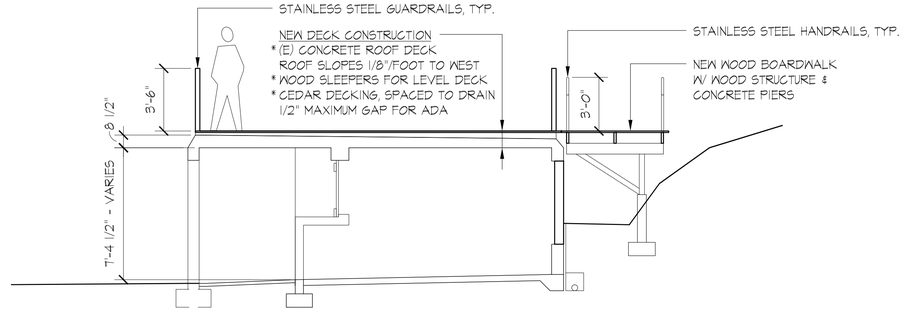
5 JANUARY 2016

NEW
ROOF DECK
PLAN

A2.2-IIA



EAST ELEVATION 2
1/4" = 1'-0"



SECTION THROUGH CONCESSION BUILDING & NEW OUTDOOR CLASSROOM 1
1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE II A

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#1634

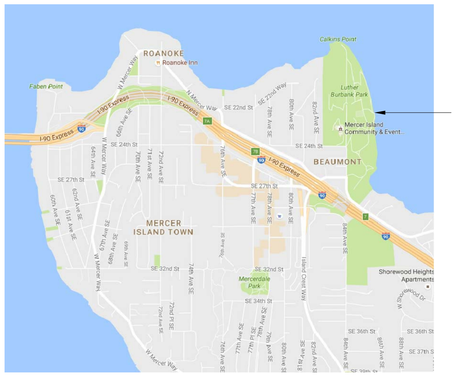
5 JANUARY 2016

BUILDING SECTION & ELEVATION

A3.1-IIA

PHASE IIB PROJECT DESCRIPTION

* NEW SECOND FLOOR IN BOILER BUILDING W/ NEW ENTRY, CLASSROOM & (2) OFFICES
* NEW INTERIOR STAIRS & ENCLOSED PLATFORM LIFT IN BOILER BUILDING
* NEW SECOND FLOOR ENTRY ON UPHILL (WEST) SIDE OF BOILER BUILDING, CONNECTING TO PHASE IIA ACCESSIBLE ROUTE TO TOP OF HILL
* REINFORCE (E) BRICK CLADDING AT NEW SECOND FLOOR ENTRY
* REMODEL (E) CONCESSION AREA IN BATHROOM BUILDING



PROJECT LOCATION IN LUTHER BURBANK PARK

LOCATION PLAN 1
NO SCALE

N

PROPERTY & LAND USE INFORMATION

LOCATION: LUTHER BURBANK PARK
2040 8TH AVENUE

PROPERTY OWNER: CITY OF MERCER ISLAND

LEGAL DESCRIPTION: GL 6 LESS THE S 30 FT DEEDED TO KC FOR RD UNDER AUD FILE NO 1092750

APN: 0624059014
ZONING: R-15
PARCEL SIZE: 995,782 SF (22.86 ACRES)

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DRAWING INDEX

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II B

2040 84TH AVENUE SE
MERCER ISLAND, WA 98040

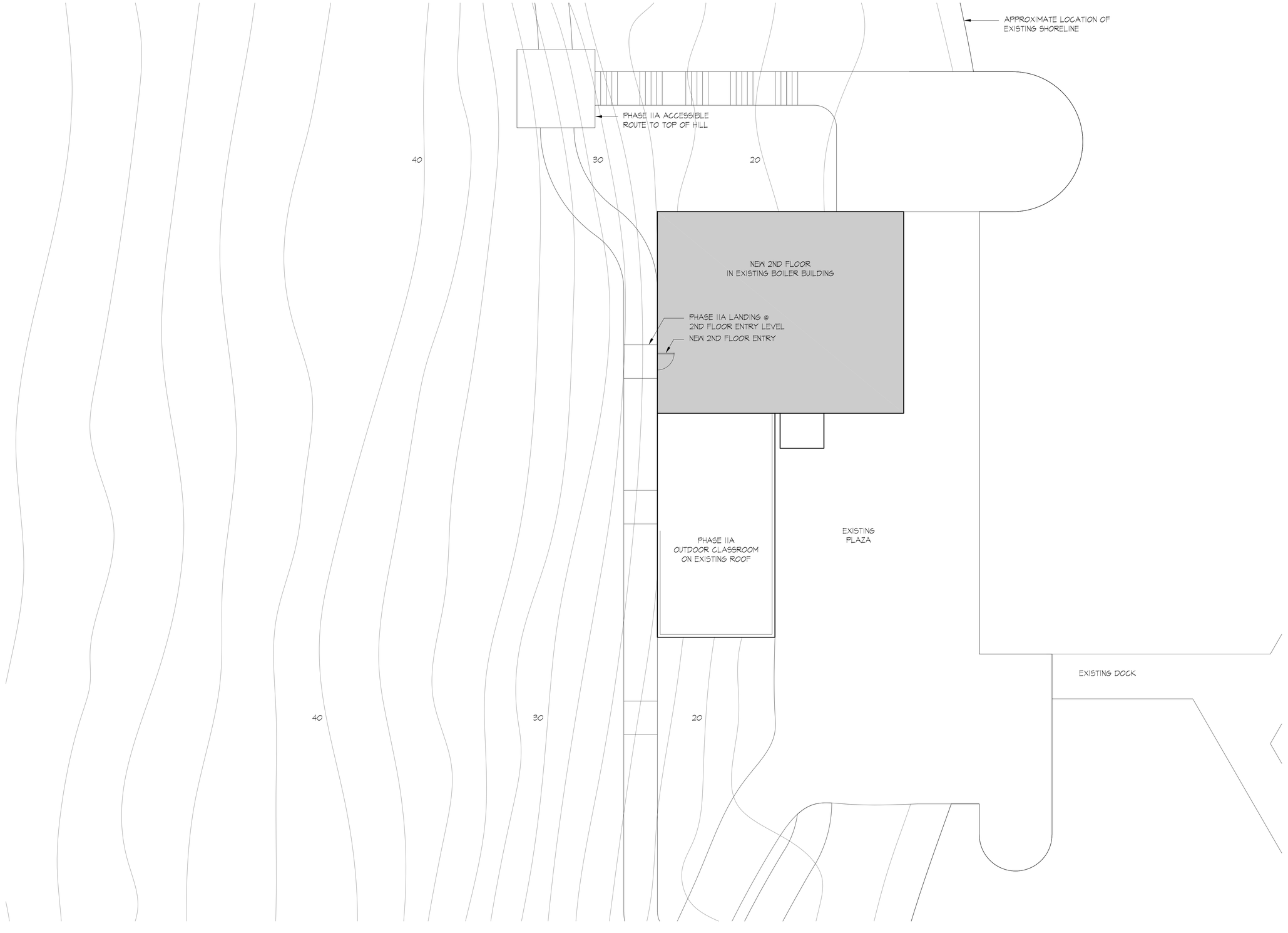
CARDINAL
ARCHITECTURE PC

1326 5TH AVENUE #440
SEATTLE WA 98101
206-624-2365 T

#1634
5 JANUARY 2016

PROJECT INFORMATION

T1-IIB



SITE PLAN
1/8" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II B

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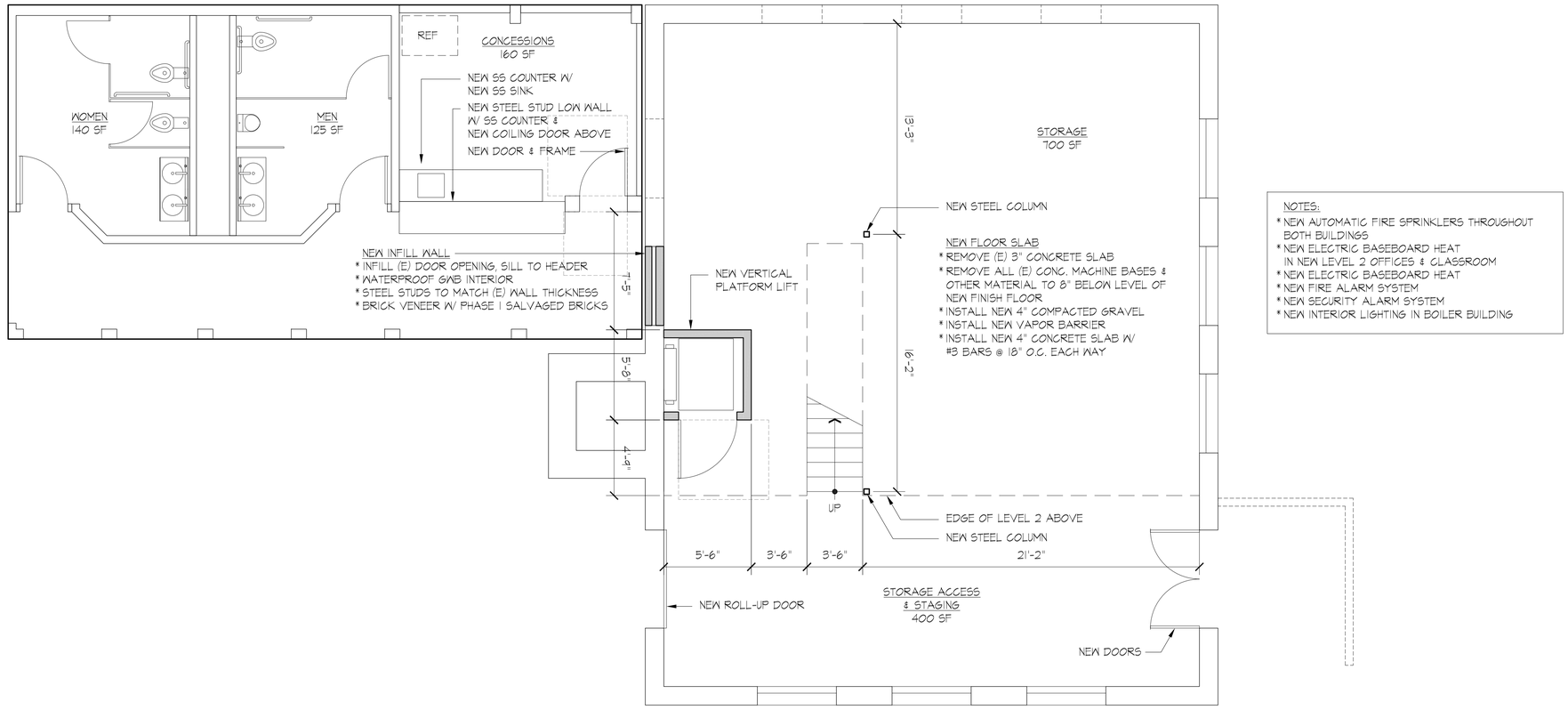
5 JANUARY 2016

SITE PLAN

A1-IIB



NOTES:

* NEW AUTOMATIC FIRE SPRINKLERS THROUGHOUT BOTH BUILDINGS
* NEW ELECTRIC BASEBOARD HEAT IN NEW LEVEL 2 OFFICES & CLASSROOM
* NEW ELECTRIC BASEBOARD HEAT
* NEW FIRE ALARM SYSTEM
* NEW SECURITY ALARM SYSTEM
* NEW INTERIOR LIGHTING IN BOILER BUILDING

FLOOR PLAN 1
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE II B

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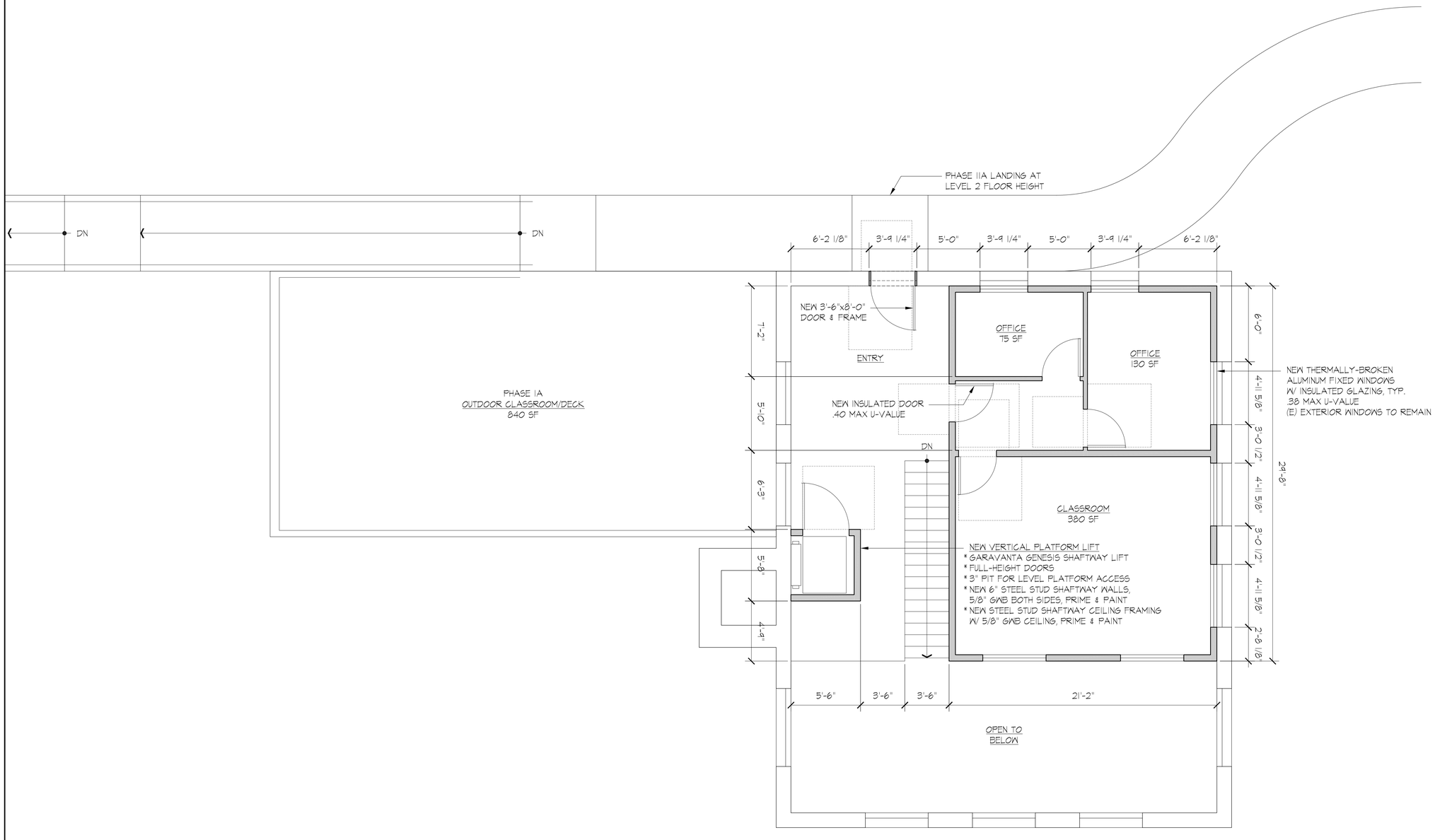
FIRST FLOOR PLAN

A2.1-IIB



NEW SECOND FLOOR PLAN
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II B

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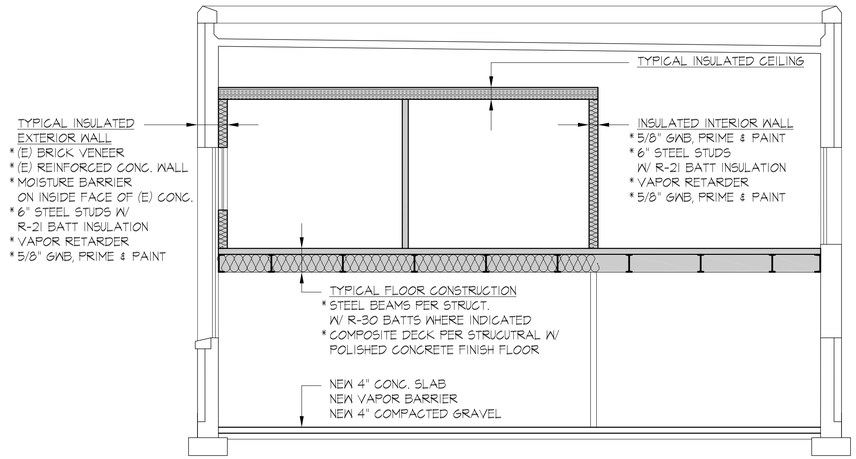
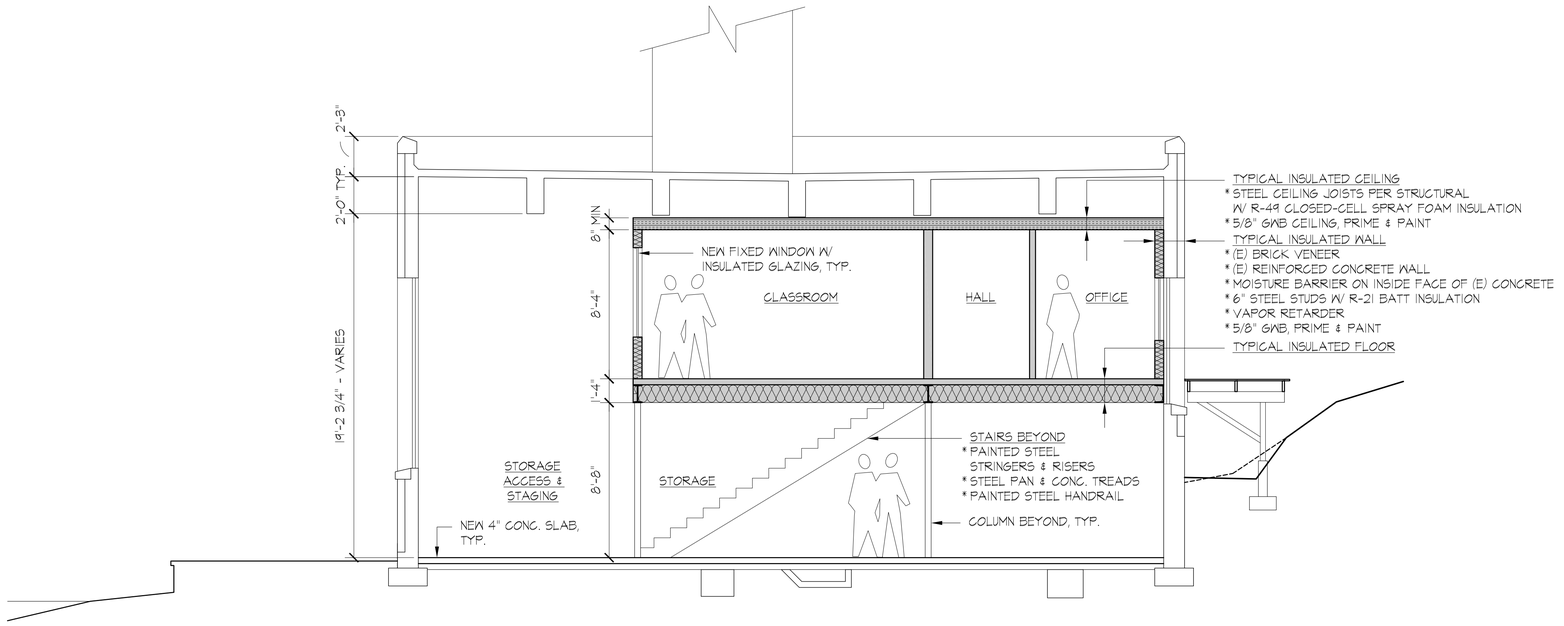
2ND FLOOR PLAN

A2.2-IIB



SECTION THROUGH BOILER BUILDING (2)

1/4" = 1'-0"



SECTION THROUGH BOILER BUILDING (1)

1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING PHASE II B

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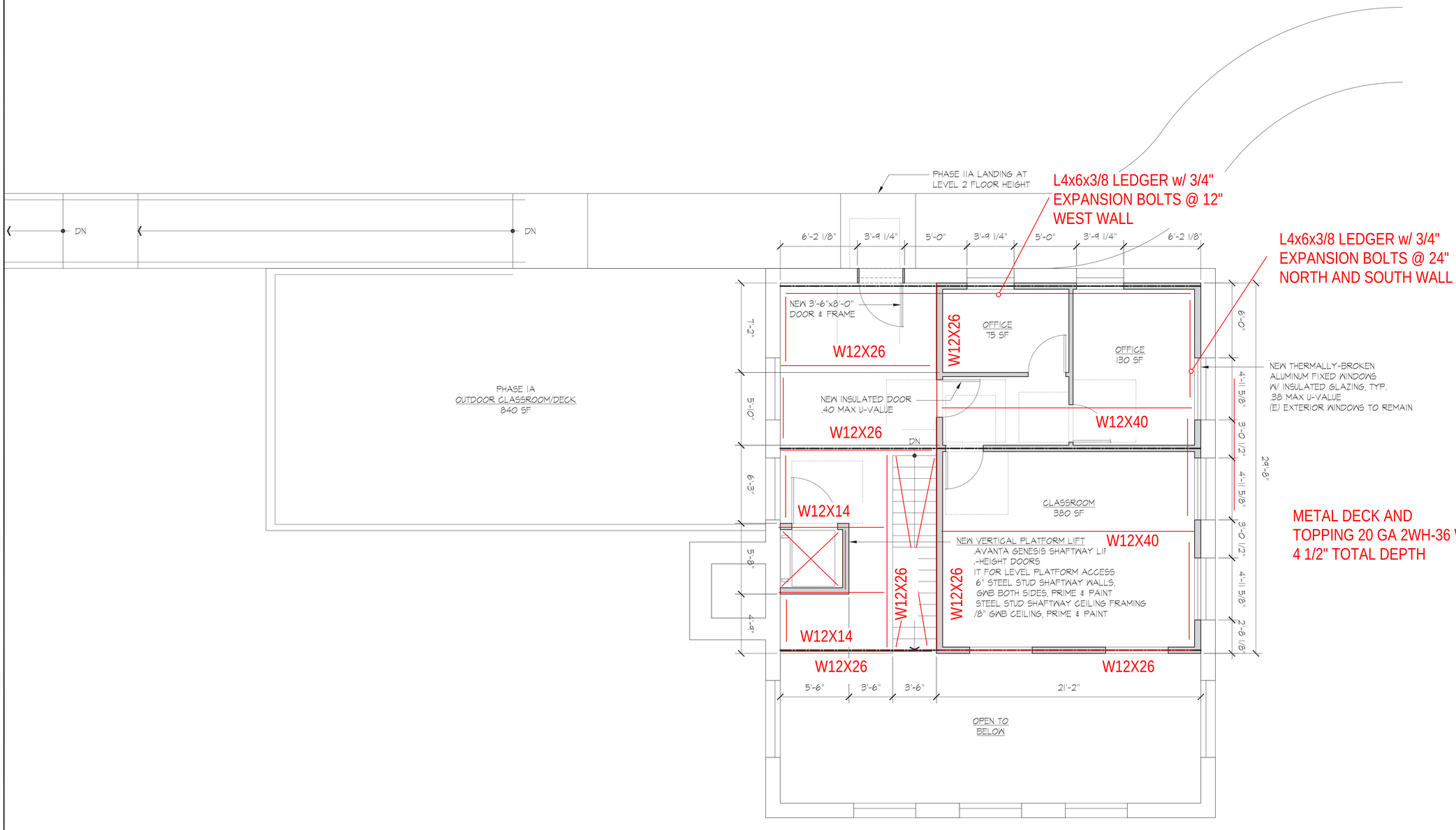
BUILDING SECTIONS

A3.1-IIB



METAL DECK AND
TOPPING 20 GA 2WH-36 W/
4 1/2" TOTAL DEPTH

NEW SECOND FLOOR PLAN 1
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II B

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5 JANUARY 2016

STRUCTURAL PLAN

S2.2-IIB

Existing Chimney for Reference -
No Modifications

Phase 1 Chimney Modifications -
Remove 10 Feet & Reinforce Remaining
Chimney & Structure


Chimney Modifications Option
Not Selected - Remove 34 feet &
Reinforce Remaining Chimney & Structure

Luther Burbank Park
Boiler Building Repair + Remodel Study

Prepared for:

Cardinal Architecture
1326 5th Avenue
#440
Seattle WA 98101

Prepared by:

Trish Drew
DCW Cost Management
500 Yale Avenue North
Suite 100
Seattle WA 98105
206-718-2840

Project Reference: 00001634.100

Luther Burbank Park
Boiler Building Repair + Remodel Study

Contents

Luther Burbank Park
Boiler Building Repair + Remodel Study

Overall Summary

	TOTAL
PH 1 Repair	254,051
PH 2A Pathways and Outdoor Classroom Deck	1,127,278
PH 2B Interior improvements and Second Floor Build out	681,656
TOTAL BUILDING CONSTRUCTION	2,062,985
RECOMMENDED BUDGET	**2,062,985**
Add Option 1: Alternative Chimney modifications	17,610

Luther Burbank Park
Boiler Building Repair + Remodel Study

Scope of Work

Project Scope Description

The project consists of a preliminary design for the Luther Burbank Boiler Room building, and joined concessions/restroom facility. The project includes renovation and repair of the existing structure in Phase 1 including the removal of 10' of the smoke stack and reinforcement. Phase 2A consists of demolition of existing pathway to be replaced with new stairs, ramps, and new deck connected to the 2nd floor of the Boiler building. Phase 2B includes interior enhancements of the building, including new lift, new doors, concession room improvements, creation of second floor with connecting stairs, new floors, and thermal and moisture barrier enhancements to the walls and windows. An alternate Chimney Stack modification option is provided.

Project Design

Preliminary Plans dated December 16, 2016, and redline structural comments from SSF. Costs are based on elements from similar projects, local sub market, and directives from the design team.

Procurement

The costs provided herein are based on the assumption that the project will be delivered as design, bid, build. If CM GC deliver is considered, additional cost for pre-construction may be required.

Site Conditions and Constraints

It is expected that the work will be performed during regular working hours. The site is located near Lake Washington, but none of the labor or delivery of materials is expected to be provided water-side. If there are access constraints that prohibit land-side delivery, significant cost increases would be anticipated for water-side work or be provided at contractors expense.

Luther Burbank Park
Boiler Building Repair + Remodel Study

Basis of Estimate

Assumptions and Clarifications

This estimate is based on the following assumptions and clarifications:

1. Hazardous materials abatement is anticipated.
2. The majority of work will be performed during regular business hours
3. **Excludes** soft costs, permits, and taxes
4. Site work is limited to work detailed in Phase IIA.

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 1 Summary

			%	$/SF	TOTAL
		Gross Area:		2,472 SF	
01	Foundations		6%	5.69	14,056
03	Floor and Roof Structure		43%	43.72	108,077
1	Shell		54%	56.00	138,440
06	Interior Partitions		6%	6.17	15,256
07	Interior Finishes		7%	6.68	16,515
2	Interiors		13%	12.85	31,771
10	Plumbing		7%	7.37	18,220
11	HVAC		0%	0.40	1,000
12	Electrical		0%	0.40	1,000
13	Fire Protection		0%	0.00	0
4	Mechanical & Electrical		8%	8.18	20,220
BUILDING CONSTRUCTION			75%	77.03	190,430
17	General Conditions	12.00%	9%	9.24	22,852
18	Contractor's Overhead & Profit or Fee	5.00%	4%	4.31	10,664
PLANNED CONSTRUCTION COST			88%	90.59	223,946
19	Contingency for Development of Design	10.00%	9%	9.06	22,395
CONSTRUCTION COST BEFORE ESCALATION			97%	99.65	246,341
20	Escalation to Start Date (Mar 2018)	3.13%	3%	3.12	7,710
RECOMMENDED BUDGET			100%	102.77	254,051

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 1

	Quantity	Unit	Rate	Total
1 Shell				
01 Foundations				
Expose area for foundation drain- 2.5'	271	LF	6.70	1,816
Place footing drain, drain sock, connect, bedding / cover	271	LF	18.50	5,014
Regrade slope	161	CY	45.00	7,227
				14,056
03 Floor and Roof Structure				
Demolition				
Temp area protection	1	LS	1,000.00	1,000
Sawcut and core drill for new plumbing locations	50	LF	8.00	400
Demolition to restroom walls, doors and fixtures	310	SF	8.00	2,480
Demolition to framed walls at concession	66	SF	5.50	363
Demolition to parapet cap	160	LF	3.30	528
Demolition to existing roof to structure	1,584	SF	6.50	10,296
Build Back				
Repair Slab at areas where plumbing was removed	310	SF	4.00	1,240
				16,307
04 External Cladding				
Clean and repaint steel window ledgers	4	LOC	400.00	1,600
Brick tie-backs	311	LOC	55.00	17,078
Chimney Modifications				
Sheet metal chimney cap	1	EA	2,800.00	2,800
Remove top 10' of stack	10	LF	550.00	5,500
Install reinforced concrete shell	10	LF	380.00	3,800
Install new reinforced concrete slab (roof level)	61	SF	70.00	4,270
10'x12" Concrete Beam	8	LF	210.00	1,680
Drill and install epoxy reinforcing bar to € beams	1	LS	3,000.00	3,000
Remove fire brick from stack to 35'	385	SF	16.00	6,160
				45,888

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 1

	Quantity	Unit	Rate	Total
05 Roofing and Waterproofing				
Install new Built-up roof system- Sloped to drain	1,584	SF	22.00	34,848
Install new parapet cap (pinned)	160	LF	26.25	4,200
Sealants to roof drains and stacks	1	LS	2,500.00	2,500
Dampproofing foundation	516	SF	8.40	4,334
				45,882
2 Interiors				
06 Interior Partitions				
Metal stud and Concrete backer bd partitions -shaft walls	224	SF	12.50	2,800
Metal stud and gyp partitions w/cladding- Entry	184	SF	10.90	2,006
Reinforced concrete infill walls at concessions	66	SF	55.00	3,630
Gyp ceiling- Restroom	310	SF	12.00	3,720
Door, frame and hardware	2	EA	1,550.00	3,100
				15,256
07 Interior Finishes				
Toilet Partitions- Std.	1	EA	1,280.00	1,280
Toilet Partitions- ADA	2	EA	1,550.00	3,100
Urinal Screen	1	EA	800.00	800
Accessories	1	LS	5,500.00	5,500
Mirrors	28	SF	90.00	2,520
Vanity Tops	8	LF	120.00	960
Nudo panels- Restroom Walls	224	SF	1.50	336
Prep and paint-ceiling	1	LS	1,200.00	1,200
Seal Floors Restroom	117	SF	7.00	819
				16,515
4 Mechanical & Electrical				
10 Plumbing				
Relocation of Sanitary Connection	8	EA	1,200.00	9,600
Toilet	3	EA	1,200.00	3,600

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 1

	Quantity	Unit	Rate	Total
Urinal	1	EA	1,100.00	1,100
Sink and faucets	4	EA	980.00	3,920
				18,220
11 HVAC				
Minor adjustments	1	LS	1,000.00	1,000
				1,000
12 Electrical				
Electrical adjustments	1	LS	1,000.00	1,000
				1,000
13 Fire Sprinklers				
Fire sprinklers				*NIC*

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2A Area

	SF	SF	SF
Areas			
Net Site Areas			
Site Demolition	1,659		
Pedestrian Paving and Hardscape	4,111		
Landscaping and Softscape	3,526		
Other Features	1,634		
Net Site Area		10,930	
TOTAL SITE AREA			**10,930**

Control Quantities			Ratio to Site
Pedestrian Paving and Hardscape	4,111	SF	0.376
Concrete Pathways and Ramps	2,181	SF	
Concrete Sidewalk	226	SF	
Asphalt Pathway	532	SF	
Boardwalk	908	SF	
Steps	264	SF	
Landscaping and Softscape	3,526	SF	0.323
Other Features	1,634	SF	0.149
Classroom Deck, cedar	560	SF	
Plaza and Headwall Repair	1,074	SF	
Built Areas	0	SF	-

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2A Summary

			%	$/SF	TOTAL
			Gross Area:	10,930 SF	
14	Site Preparation & Demolition		19%	19.73	215,658
15	Site Paving, Structure & Landscaping		42%	43.54	475,890
16	Site Utilities		14%	14.04	153,432
6	Site Contruction		75%	77.31	844,979
SITE CONSTRUCTION			75%	77.31	844,979
17	General Conditions	12.00%	9%	9.28	101,398
18	Contractor's Overhead & Profit or Fee	5.00%	4%	4.33	47,319
PLANNED SITE CONSTRUCTION COST			88%	90.91	993,696
19	Contingency for Development of Design	10.00%	9%	9.09	99,370
CONSTRUCTION COST BEFORE ESCALATION			97%	100.01	1,093,065
20	Escalation to Start Date (Mar 2018)	3.13%	3%	3.13	34,213
RECOMMENDED BUDGET			100%	103.14	1,127,278

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2A Detail

Item Description	Quantity	Unit	Rate	Total
6 Site Contruction				
14 Site Preparation & Demolition	**10,930**	**SF**	**19.73**	**215,658**
Construction entrances, wheel wash	1	EA	5,500.00	5,500
Construction fencing and maintenance	500	LF	10.00	5,000
Tree protection, allow	1	LS	1,200.00	1,200
Site signage and pedestrian protection	1	LS	4,000.00	4,000
Allowance for Erosion control-dewatering	10,930	SF	1.60	17,488
Demolition to site asphalt	1,659	SF	3.22	5,342
Demolition of subsurface elements	1	ALW	80,000.00	80,000
Clear and grub	10,930	SF	0.55	6,012
Site excavation and haul	152	CY	22.00	3,350
Shoring and tie backs as required	1	LS	30,000.00	30,000
Structural fill- granular	332	CY	45.00	14,940
Backfill	292	CY	8.00	2,336
Aggregates- general purpose	76	CY	40.00	3,045
Footing drainage and connections	486	LF	26.00	12,636
Final Grading	10,930	SF	0.44	4,809
Survey	1	LS	20,000.00	20,000
15 Site Paving, Structure & Landscaping	**10,930**	**SF**	**43.54**	**475,890**
Pedestrian Paving				
Concrete Pathways and Ramps	2,181	SF	10.50	22,901
6" compacted base course	57	TN	38.00	2,149
Concrete Sidewalk	226	SF	10.50	2,373
6" compacted base course	6	TN	38.00	223
Curb	74	LF	22.50	1,665
Asphalt Pathway	532	SF	5.25	2,793
6" compacted base course	14	TN	38.00	524
Boardwalk	908	SF	15.00	13,620
Concrete footings, assumed 6' spacing	17	CY	250.00	4,222
Concrete structural walls	12	CY	250.00	2,963
Reinforcement	1,351	LB	1.19	1,608
Timber substructure	253	LF	38.00	9,627
Steps	264	SF	55.00	14,520
Handrails - timber	32	LF	125.00	4,000
Handrails - stainless steel	697	LF	280.00	195,160

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2A Detail

Item Description	Quantity	Unit	Rate	Total
Site features				
Classroom Deck, cedar	560	SF	88.00	49,280
Existing substructure, prep	560	SF	1.50	840
Plaza and Headwall repair - allow	1	LS	10,203.00	10,203
Standard bench	4	EA	2,500.00	10,000
Trash receptacles	8	EA	1,100.00	8,800
Bollards - path lighting	33	EA	1,550.00	51,460
Landscape				
Landscape restoration	3,250	SF		
Top soil, pit planting	22	CY	46.00	1,021
Mulch, 3" deep - assumed	33	CY	59.00	1,926
Trees, allow	20	EA	450.00	9,000
Irrigation including controllers and meters	3,250	SF	2.00	6,500
Native planting restoration	3,526	SF	6.50	22,919
16 Site Utilities	**10,930**	**SF**	**14.04**	**153,432**
Exterior Lighting, wiring and conduit				*NIC*
Trenching and conduit, site electrical	664	LF	88.00	58,432
Site lighting	1	LS	95,000.00	95,000

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2B Areas & Control Quantities

	SF		SF
Areas			
Enclosed Areas			
Level 1	1,583		
Level 2	911		
TOTAL GROSS FLOOR AREA	**2,494**		

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2B Summary

			%	$/SF	TOTAL
		Gross Area:		2,494 SF	
01	Foundations		3%	7.02	17,501
02	Vertical Structure		2%	6.70	16,709
03	Floor and Roof Structure		18%	50.23	125,270
04	External Cladding		8%	23.10	57,613
05	Roofing and Waterproofing		0%	0.00	0
1	Shell		32%	87.05	217,092
06	Interior Partitions		9%	23.76	59,260
07	Interior Finishes		3%	7.95	19,819
2	Interiors		12%	31.71	79,079
08	Equipment and Specialties		4%	9.94	24,800
09	Vertical Transportation		7%	18.74	46,750
3	Equipment & Vertical Transportation		10%	28.69	71,550
10	Plumbing		1%	1.84	4,600
11	HVAC		4%	9.66	24,092
12	Electrical		15%	40.13	100,074
13	Fire Protection		2%	5.80	14,465
4	Mechanical & Electrical		21%	57.43	143,231
BUILDING CONSTRUCTION			75%	204.87	510,952
17	General Conditions	12.00%	9%	24.58	61,314
18	Contractor's Overhead & Profit or Fee	5.00%	4%	11.47	28,613
PLANNED CONSTRUCTION COST			88%	240.93	600,880
19	Contingency for Development of Design	10.00%	9%	24.09	60,088
CONSTRUCTION COST BEFORE ESCALATION			97%	265.02	660,967
20	Escalation to Start Date (Mar 2018)	3.13%	3%	8.30	20,688
RECOMMENDED BUDGET			100%	273.32	681,656

Luther Burbank Park
Boiler Building Repair + Remodel Study

Phase 2B

	Quantity	Unit	Rate	Total
01 Foundations				
Demolition to 3" concrete slab inside bldg footprint	1,583	SF	3.65	5,778
Demolition to existing machine bases-Allow	1	LS	6,500.00	6,500
Building Excavation w/ over excavation and haul	59	CY	28.00	1,642
Base aggregates- 4" depth	20	CY	40.00	781
Lift pit	1	LS	2,800.00	2,800
				17,501
02 Vertical Structure				
Waterproofing, incl (E) 2nd floor	1,212	SF	9.00	10,909
Infill door opening - steel framing	75	SF	45.00	3,375
8" HSS Structural columns	0.3	TN	6,500.00	2,236
Lift Shaft				*See Int. Partitions*
Fireproofing	0.3	TNs	550.00	189
				16,709
03 Floor and Roof Structure				
4" Reinforced slab on grade, w/VB	1,583	SF	10.25	16,226
Structural steel framing Vert and Horz- Lvl 2	4.4	TN	7,000.00	30,800
3" 20 g Type W composite decking	911	SF	8.00	7,288
3" Concrete topping slab	8	CY	450.00	3,796
Reinforcing	3,741	LB	0.81	3,030
Fireproofing	4.4	TN	550.00	2,420
				125,270
04 External Cladding				
Existing Brick Veneer - reinstall	75	SF	15.50	1,163
TB windows at north elevation	3	EA	1,550.00	4,650
Hollow metal exterior doors- single	1	EA	1,100.00	1,100
Hollow metal exterior doors- single	1	EA	2,200.00	2,200
Glazed entry doors- single	1	EA	4,500.00	4,500

Coiling door - concessions	1	EA	18,500.00	18,500
Roll up doors- storage access	1	EA	25,500.00	25,500
				57,613

05 Roofing and Waterproofing

No Work				*NIC*

06 Interior Partitions

Standard partitions	619	SF	10.50	6,502
Std insulated ext walls	1,137	SF	9.60	10,916
Lift partition	146	SF	12.20	1,784
Partial walls - concessions	40	SF	8.80	352
Railings at 2nd floor	25	LF	102.00	2,550
Interior Glazing	60	SF	72.00	4,320
Floors				
Insulated composite deck	911	SF	18.55	16,899
Polished concrete infill	911	SF	10.25	9,338
Doors, frames and hardware				
Wood Doors- Single	4	EA	1,650.00	6,600
				59,260

07 Interior Finishes

Floors				
Sealed concrete	1,583	SF	1.78	2,818
Walls				
Painted walls	3,793	SF	1.36	5,158
Ceilings				
Gyp ceiling- painted	1,822	SF	6.50	11,843
				19,819

08 Equipment and Specialties

Signage and display				
Building signage	1	LS	2,300.00	2,300
Casework and fit outs				
Concessions counter top	10	LF	250.00	2,500

Classroom Casework and shelving- general	20	LF	400.00	8,000
Window treatments	1	LS	7,200.00	7,200
Fire extinguisher cabinets	4	EA	450.00	1,800
Entrance mats and frames	100	SF	30.00	3,000
Moveable furnishing by owner				*NIC*
				24,800

09 Vertical Transportation

Gravatanta Genesis Shaftway Lift	1	EA	25,000.00	25,000
Stair and rail- Painted Steel	1	FLT	21,750.00	21,750
				46,750

10 Plumbing

Sanitary fixtures- low flow connections and piping

Concessions sink	1	EA	2,000.00	2,000

Sanitary waste, vent and service piping

Cafe equipment connections	1	EA	2,600.00	2,600
				4,600

11 HVAC

Heat Generation and cooling

Baseboard Heat and controls	2,494	SF	9.66	24,092
				24,092

12 Electrical

Primary Power

Existing power is sufficient				*NIC*

Lighting and Branch wiring

Lighting fixtures including conduit and wire	2,494	SF	14.00	34,916

Lighting and power specialties

Lighting controls including occupancy sensors	2,494	SF	6.50	16,211

Telephone and communications systems

Telephone and data	2,494	SF	2.50	6,235

Alarm and security systems				
Fire alarm control and annunciator panels	1	LS	30,000.00	30,000
Fire alarm terminal cabinets	2	EA	1,550.00	3,100
Fire alarm devices including conduit and wire	7	EA	550.00	3,919
User convenience power				
Receptacles including conduit and wire	7	EA	420.00	2,993
Wiremold including devices	150	LF	18.00	2,700
				100,074
13 Fire Protection				
Wet pipe system	2,494	SF	5.80	14,465
				14,465

Luther Burbank Park
Boiler Building Repair + Remodel Study

Stack Option

Item Description	Quantity	Unit	Rate	Total
Add Option 1: Alternative Chimney modifications				
Cost for modification included in base costs	1	LS	(27,210.00)	(27,210)
Sheet metal chimney cap	1	EA	2,800.00	2,800
Remove top 34' of stack	34	LF	550.00	18,700
Install reinforced concrete shell	10	LF	380.00	3,800
Install new reinforced concrete slab (roof level)	61	SF	70.00	4,270
10'x12" Concrete Beam	8	LF	210.00	1,680
Drill and install epoxy reinforcing bar to € beams	1	LS	3,000.00	3,000
Remove fire brick from stack to 35'	385	SF	16.00	6,160
Alternate Cost Before Markups				**13,200**
17 General Conditions	12.00%			1,584
18 Contractor's Overhead & Profit or Fee	5.00%			739
19 Contingency for Development of Design	10.00%			1,552
20 Escalation to Start Date (Mar 2018)	3.13%			534
				17,610

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LUTHER BURBANK PARK - BOILER BUILDING
PHASE 1 REPAIR PROJECT BUDGET

8 February 2017

Building Construction Cost	
Construction Cost	$223,946.00
Owner Construction Contingency (10% of Construction Budget)	$22,394.60
Escalation to Construction Start Date of March 2018	$7,710.46
Building Construction Cost Subtotal	$254,051.06
Soft Costs	
Architect basic fees (15% of construction cost)	$38,107.66
Structural Engineer	
Mechanical Engineer	
Additoinal Services Consultants	
Civil Engineer	$5,500.00
Waterproofing Consultant	$5,500.00
Construction cost sales tax (9.5% of construction cost)	$24,134.85
Master Use Permit & Construction Permit Fees (4% of Construction Costs)	$10,162.04
Construction testing (2.5% of Construction Costs)	$6,351.28
Reimbursable items	
Document Reproduction	$500.00
Items not in Construction Contract	
CoMI Project Management (12 weeks @ 10 hrs / week @ $100/ hr)	$12,000.00
Environmental Materials Consulting During Project	$2,500.00
Construction scope by owner	$0.00
Accommodations during construction (current mortgage or rent)	$0.00
Furniture, Fixtures & Equipment	$0.00
Total Project Cost	**$358,806.89**

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LUTHER BURBANK PARK - BOILER BUILDING
PHASE 2A REPAIR PROJECT BUDGET

8 February 2017

Building Construction Cost	
Construction Cost	$993,696.00
Owner Construction Contingency (10% of Construction Budget)	$99,369.60
Escalation to Construction Start Date of March 2018	$34,212.95
Building Construction Cost Subtotal	$1,127,278.55
Soft Costs	
Architect basic fees (15% of construction cost)	$169,091.78
Structural Engineer	
Additoinal Services Consultants	
Civil Engineer (5% of construction cost)	$56,363.93
Landscape Architect (5% of construction cost)	$56,363.93
Waterproofing Consultant	$5,500.00
Construction cost sales tax (9.5% of construction cost)	$107,091.46
Master Use Permit & Construction Permit Fees (4% of Construction Costs)	$45,091.14
Construction testing (2.5% of Construction Costs)	$28,181.96
Geotechnical Consultant	$28,181.96
Reimbursable items	
Document Reproduction	$500.00
Items not in Construction Contract	
CoMI Project Management (20 weeks @ 10 hrs / week @ $100/ hr)	$20,000.00
Environmental Materials Consulting During Project	$2,500.00
Construction scope by owner	$0.00
Accommodations during construction (current mortgage or rent)	$0.00
Furniture, Fixtures & Equipment	$50,000.00
Total Project Cost	**$1,696,144.72**

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LUTHER BURBANK PARK - BOILER BUILDING
PHASE 2B REPAIR PROJECT BUDGET

8 February 2017

Building Construction Cost	
Construction Cost	$600,880.00
Owner Construction Contingency (10% of Construction Budget)	$60,088.00
Escalation to Construction Start Date of March 2018	$20,688.30
Building Construction Cost Subtotal	$681,656.30
Soft Costs	
Architect basic fees (15% of construction cost)	$102,248.44
Structural Engineer	
Mechanical Engineer	
Electrical Engineer	
Additoinal Services Consultants	
Waterproofing Consultant	$5,500.00
Construction cost sales tax (9.5% of construction cost)	$64,757.35
Master Use Permit & Construction Permit Fees (4% of Construction Costs)	$27,266.25
Construction testing (2.5% of Construction Costs)	$17,041.41
Reimbursable items	
Document Reproduction	$500.00
Items not in Construction Contract	
CoMI Project Management (20 weeks @ 10 hrs / week @ $100/ hr)	$20,000.00
Environmental Materials Consulting During Project	$2,500.00
Construction scope by owner	$0.00
Accommodations during construction (current mortgage or rent)	$0.00
Furniture, Fixtures & Equipment	$75,000.00
Total Project Cost	**$996,469.75**

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Luther Burbank Park Boiler Building Feasibility Study
Kickoff Meeting Notes

Date: Thursday, 3 November 2016
Location: Aljoya House, Mercer Island WA
Attending: Bruce Fletcher, Parks & Recreation Director
Paul West, Park Operations Superintendent
Marcy Olson, Facility Project Manager
Diane Mortenson, Recreation Superintendent
Alex Harvey, Parks Maintenance
Myra Lupton, Community Representative
Jim Cary, Cardinal Architecture
Jesse Belknap, Cardinal Architecture

Purpose: Kickoff Meeting

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1) Introductions

2) Project Overview
   - 2006 Luther Burbank Park Master Plan identifies the boiler building and adjacent docks as the location for human-powered boating activities.
   - Feasibility Study to determine the condition and usability of the 1928 boiler building, and create a plan for implementing the Master Plan uses.
   - Will review program, options and cost to provide information for decision-making.
   - Boiler building is a nice, attractive building, and hope is that building can be repurposed, with necessary improvements, to meet needs of human-powered boating activities.
   - Feasibility study to be complete by the end of January 2017.

3) Scope of Study
   - The Master Plan will direct the study as the team prepares development proposals.
   - The study will develop proposals to a conceptual level, and will prepare construction cost and project cost estimates for fundraising.

4) Process & Timing
   - Work will be performed by Cardinal Architecture (prime consultant, architect), Swenson Say Faget (structural engineer) and DCW Cost Management (cost estimating).
   - Existing evaluation will take place next week.
   - Meeting with City of Mercer Island Building, Planning, and Fire officials to take place next week, to review land use, shoreline, building code, accessibility, and fire requirements.
   - Meeting with potential boating concessionaires during this week and the next to develop building program requirements.
   - Team will first analyze the boiler building, determine needs, consider program options, and evaluate costs.
   - If the building is suitable for development, then the team will prepare options for site and building development. If the building is not suitable for development, then the team will propose options for replacement.

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- The design team will prepare a final report to inform future fundraising for developing the boiler building area into a human-powered boating facility.

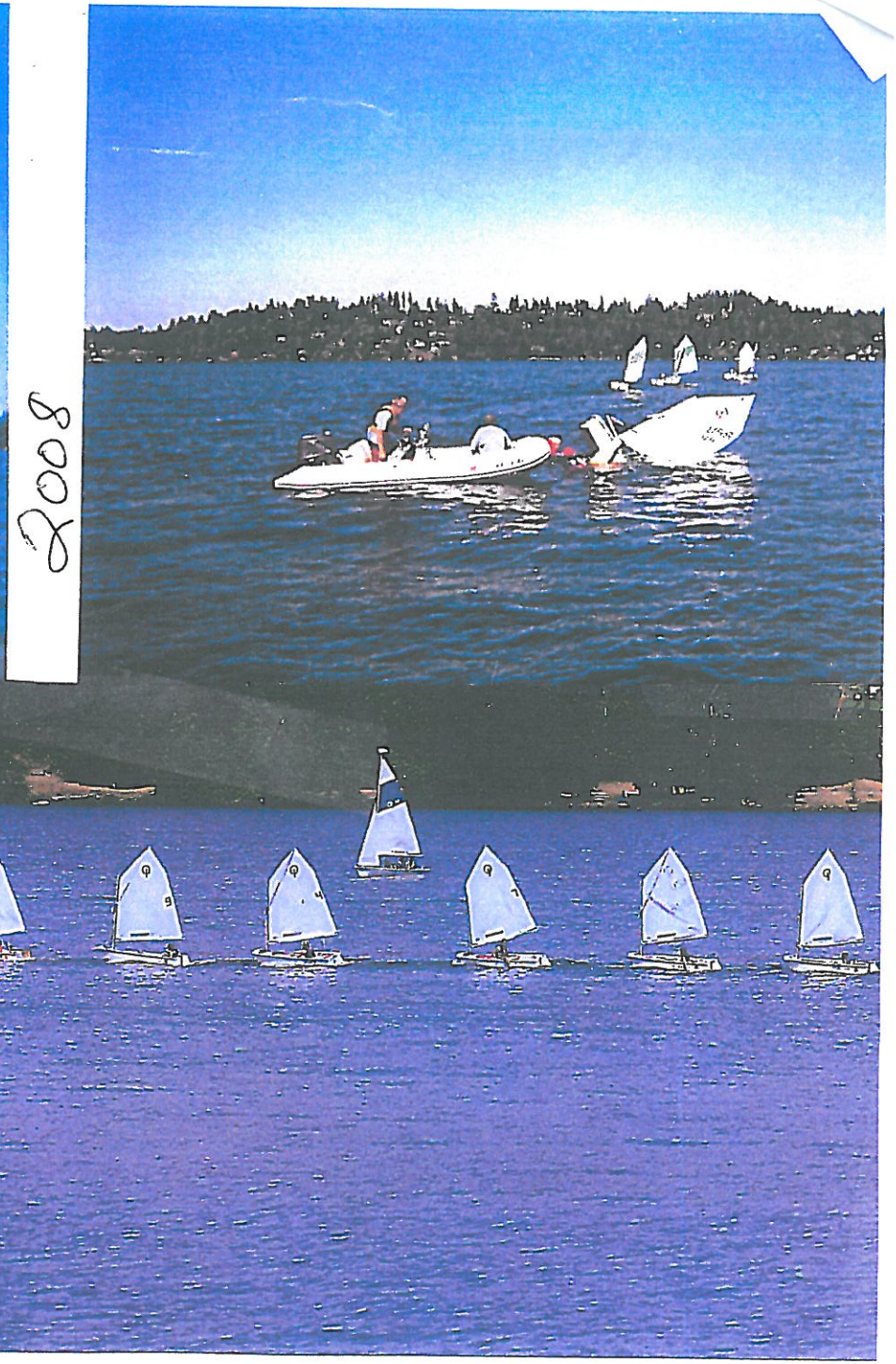
5) Goals & Priorities, Around the Table
    - Bruce – beautiful, under-utilized structure into year-round park facility with concessions, storage, events, meeting rooms; follow the master plan; beautiful building just the way it is, improve for safety
    - Alex – usable cool building; too nice for storage, simple and open; weddings; event space; concerned about water running through the site
    - Diane – expand current successful boating program; kayaks and sailboats; add food and drinks; concerned about site accessibility; take advantage of natural classroom setting; tiny trees preschool program
    - Paul – building must stay; no potential to replace building there; $5K per year to DNR just for shoreline use, would like to show return for investment
    - Myra – started children's sailing program with Homer; expand program to include long waiting lists; expand the handkerchief fleet

6) Additional Discussion
    - Public and concessionaire interested in utilizing boiler building and protected boating area.
    - Kayaks, SUPs, Canoes, Sailboats, and Rowing all popular and interested in utilizing boiler building area.
    - Concern about the existing docks, too tall for most small boat use. Unlikely that docks can be expanded, but likely that existing dock space could be changed to be more effective for small boats. Possibly swap floating platforms for existing docks.

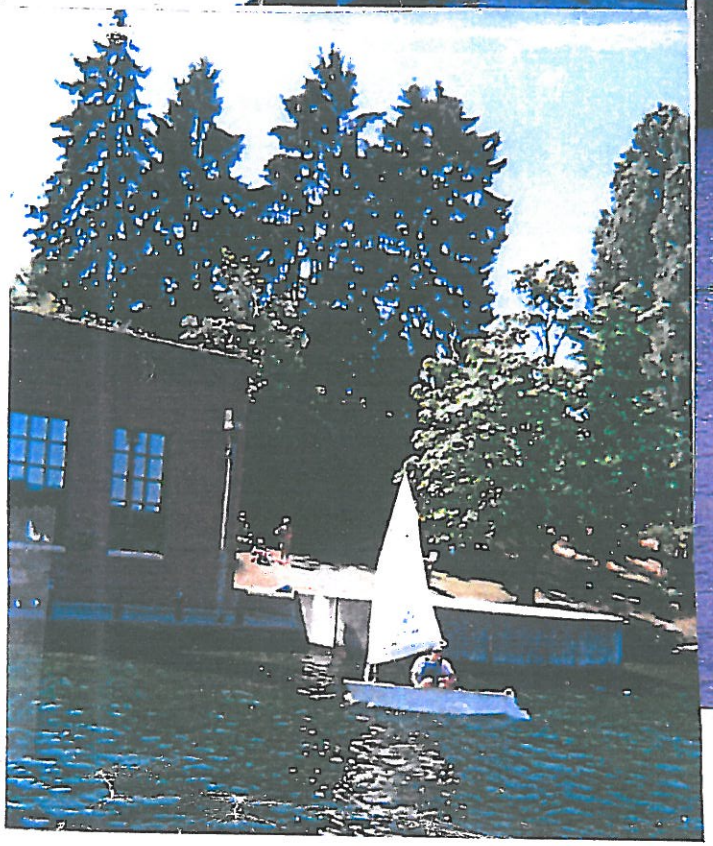
7) Action Items
    - Paul will schedule subsequent meetings for this group for the first week of December and the first week of January.
    - Cardinal and design team to begin work later today, with site and building survey next Tuesday.

Meeting notes will be sent by Cardinal Architecture to Paul West, Parks & Rec, who will distribute to the project team.

Attached: 2008 Sailing Camp Photos shared by Myra Lupton



2008



Due in large part to the lobbying efforts of citizen activist Myra Lupton, the city of Mercer Island began offering a sailing camp for kids at Luther Burbank Park in 2008. Here six boats in the "handkerchief fleet" catch the wind.

Mercer Island Reporter

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Luther Burbank Park Boiler Building Feasibility Study
Kayak Academy Meeting Notes

Date: Thursday, 3 November 2016
Location: Boiler Building, Luther Burbank Park, Mercer Island WA
Attending: Barbara Gronseth, Kayak Academy
Paul West, Park Operations Superintendent
Jim Cary, Cardinal Architecture
Jesse Belknap, Cardinal Architecture

Purpose: Kayak Concessionaire Meeting

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1) Great location for teaching kayaking, teach summer programs at Luther Burbank Park for 10 years.
2) Use the gravel beach to the north, and the best sheltered kayaking is to the north. Kayaks and swimmers are separated for safety. Do not use the docks as they are too tall and not the right conditions for kayak boarding and takeoff.
3) Parking is very important, have similar parking conditions at Lake Sammamish State Park.
4) Mercer Island Parks is also developing the South Parking Lot Boat Launch, which will have only a 200' walk from parking to a new gravel beach.
5) Would consider replacing finger docks with floating platforms.
6) Running current program at Lake Sammamish State Park, most equipment in containers which stay there all year, some equipment in open storage with locks.
7) Would like food concession as well, lots of traffic from beach, playground, walkers, boaters.
8) Boats typically stored on racks. Have made rolling racks that can be pushed outside during the day.
9) Constant boat usage would be great for KA, not just classes and lessons.
10) Have used a covered outdoor space, such as a tent, for setup and classes. Also prefer that their students get used to getting wet.
11) Would like to have 75-80 boats (kayaks and SUPs) on hand to make concessions most effective. Not just classes and lessons, but also rental as well.
12) Store boats, paddles, personal floatation devices.
13) Good relationship to Enatai Beach Park, east across the water beneath I-90 bridges.
14) Could promote use with Washington Water Trails and Lakes to Locks.

Meeting notes will be sent by Cardinal Architecture to Paul West, Parks & Rec, who will distribute to the project team.

Attached: none

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Luther Burbank Park Boiler Building Feasibility Study
City of Mercer Island Pre App Meeting Notes

Date: Tuesday, 8 November 2016
Location: City Hall, Mercer Island WA
Attending: Holly Mercier, Permit Coordinator
Evan Maxim, Planning Manager
Will Piro, Planner
Don Cole, Building Official
Hershel Rostov, Fire Marshal
Ruji Ding, Senior Development Engineer
Paul West, Park Operations Superintendent
Jim Cary, Cardinal Architecture

Purpose: Pre App Meeting, 2048 84th Avenue Southeast

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1) Project Introduction - Proposed project is a renovation to the 1928 Boiler Building located in Luther Burbank Park on the shore of Lake Washington. Current scope is a feasibility study to review the condition and safety of the existing structure and to prepare options for redeveloping the building to support the direction of the 2006 Luther Burbank Park Master Plan. The plan show that the boiler building will be upgraded to support human-powered boating. Initial project might include repairing existing toilet rooms, concessions, & storage area to make building safe and dry. Future project may include renovation of storage area to include classrooms, offices and additional toilet rooms.
2) Land Use
    - Luther Burbank Park is identified to be R-15 Residential 15,000 SF which allows for public park use.
    - Public Parks is addressed in 1902.010/A/6 which reads:
        6. Public park subject to the following conditions:
            a. Access to local and/or arterial thoroughfares shall be reasonably provided.
            b. Outdoor lighting shall be located to minimize glare upon abutting property and streets.
            c. Major structures, ballfields and sport courts shall be located at least 20 feet from any abutting property.

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d. If a permit is required for a proposed improvement, a plot, landscape and building plan showing compliance with these conditions shall be filed with the city development services group (DSG) for its approval.

- Future project may be reviewed under Shoreline Master Program. Future project may require a substantial development permit and/or SEPA review. Additional parking may also be required.
- Ordinary High Water Mark is 18.6 feet.
- Future project likely to be reviewed by Design Commission as a major capital improvement, as capital funds would be used for the construction project.
- Boiler Building is not a landmark structure. There is no landmark review requirement for COMI, and no desire or need to designate the structure as a landmark.
- Current use is defined as “storage accessory to park.”
- The City’s shoreline master program and shoreline environmental designation for Luther Burbank park designates this stretch of shoreline for public access and active and passive public recreation. (MICC 19.07.110(C))
- While not part of the current feasibility scope, Parks is reviewing renovations of the dock area to convert the tall, stationary docks with floating platforms.
- Any work associated with bulkhead would be reviewed by State of Washington Fish & Wildlife.
- Location is not specifically identified as wetlands, but there are wetlands nearby. Recommend wetland identification and analysis.

3) Building Code
   - Current structure is approximately 2,300 SF.
   - Accessibility – building code requirement is that owner is required to spend 20% minimum of construction value on accessibility improvements. Priorities for accessibility include accessible path from parking to structure, accessible entry, and accessible toilet rooms.
   - Accessibility, per chapter 11 of the building code, will be reviewed and enforced from the parking lot to the structure. There are not trail or path allowances that deviate from chapter 11.
   - Location is identified as a landslide area on nwmaps.net. Location is also identified as a seismic hazard area.
   -
4) Fire Code
   - Existing docks are grandfathered as is. Change of use or extensive renovations may trigger Fire Code 17.01.020 which increases the design load and requires standpipe service for docks for more than 5 vessels.
   - Existing building is grandfathered as is. Repairs to the existing building are not considered renovations. New or renovated commercial building is required to have sprinklers when greater than 5,000 SF. New or renovated commercial is required to have a fire alarm when greater than 3,000 SF. It is unlikely that the renovated boiler building would exceed these thresholds. It is likely that the City of Mercer Island will desire or require both sprinklers and fire alarm for the building renovation, regardless.
   - Access road for fire truck access should be provided all the way to building, to fire hydrant, and to fire department supplemental pump connection. There are many requirements for the road and turnaround, most of which are impractical due to the boiler building’s shoreline and park location. The addition of sprinklers and fire alarm can be used to negotiate fire truck access requirements. A fire truck turnaround may be provided at the top of the hill. Ultimately, the project must have a safe building condition and an appropriate level of fire department access.
   - Fire sprinklers require a 4” minimum service.
5) Utilities

- Water main located north of building and stops at hydrant just north of structure. There is relatively good flow and pressure documented for existing water service.
- Side sewer leaves building to east to vault, then is pumped up hill to meet sewer main in existing playground area above boiler building.
- Electric power is buried service that connects to building in southwest corner.
- Roof drainage and site drainage are piped directly to lake and exit above high water mark.

6) Permitting Path
   - Permitting Path will be determined by scope of work. Repairs would be reviewed by the Building Department only. Change of Use to include classrooms and meeting rooms might trigger Shoreline Substantial Development Permit and SEPA review. Construction Permit would be required, and the addition of conditioned space would likely trigger requirements to meet accessibility, structural, and energy code requirements.
7) General Notes
   - Boiler Building Value on King County website is $0, which is standard for public structures. Actual value can be determined by contacting King County Assessor's Office. Soon, value will be determined by a $/SF calculation. The building value is how some requirements are enforced during the permitting process, and a higher existing building value gives the building owner more flexibility.

Meeting notes will be sent by Cardinal Architecture to Paul West, Parks & Rec and to Holly Mercier, Permit Coordinator, who will distribute to the city review team.

Attached: none

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Luther Burbank Park Boiler Building Feasibility Study
Sail Sand Point Meeting Notes

Date: 16 November 2016
Location: Boiler Building, Luther Burbank Park, Mercer Island WA
Attending: Nino Johnson, Sail Sand Point
Paul West, Park Operations Superintendent
Diane Mortenson, Recreation Superintendent
CJ Stanford, Recreation Supervisor
Jim Cary, Cardinal Architecture

Purpose: Concessionaire Meeting

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1) Sail Sand Point operates classes from boiler building location every summer. Classes are very popular and are filled very quickly. Classes are for 8-14-year -olds, and are operated in a younger and older group. Taught in 8'-12' dinghies. Classes are taught outdoors, and students are outside most of the time.
2) Equipment includes (6) sailing dinghies and a safety boat with a motor. There are (2) instructors per class.
3) During summer lessons, the boiler building is used to store boats overnight and to store equipment. Currently the instructors motor down from Sand Point to Mercer Island every morning in the safety boat.
4) Future needs include boat storage space for (12) dinghies & rigging (double what they have now), classroom space, equipment storage, secure indoor camper cubbies, and restrooms. Outside storage is ok, but would have to be secure. Storage for the safety boat would be best if secured inside a fence or on top of the dock. Year-round boat storage would be ideal as well.
5) Equipment rental is appealing, but Nino said that rental works best with entry-level equipment like SUPs and kayaks. Easiest entry point.
6) Classes are typically 1 group for a week. Sometimes it's (2) 1/2-days for younger students of full-days for older students.
7) Possibility of storing the safety boat at the boat launch inside of a new fence.
8) From Sail Sand Point perspective, current parking and drop-off were working.
9) Nino to send Jim specifications on SSP's typical dinghy, so that Cardinal can include boat sizes in the floor plans.

Meeting notes will be distributed by Cardinal Architecture.

Attached: none

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Luther Burbank Park Boiler Building Feasibility Study
Meeting Notes

Date: Thursday, 8 December 2016
Location: Aljoya House, Mercer Island WA
Attending: Bruce Fletcher, Parks & Recreation Director
Paul West, Park Operations Superintendent
Marcy Olson, Facility Project Manager
Diane Mortenson, Recreation Superintendent
Ken Brooks, Parks Manager
Alex Harvey, Parks Maintenance
Myra Lupton, Community Representative
Kate Lamperti, Community Representative
Jim Cary, Cardinal Architecture

Purpose: Progress Meeting

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1) Introductions

2) Update – Since our 3 November 2016 Kickoff Meeting
   - Kayak Academy Meeting 3Nov16 – met with Barbara Gronseth to discuss KA's interest & needs; great location; concern about parking & access; would love to operate classes and rent kayaks & SUPs; 75-80 craft storage to be sustainable rental location; use north gravel beach as launch; could use floating platforms but cannot use pier dock
   - Architect & Structural Engineer Review 8Nov16 – design team surveyed structure & site with help of Parks & Rec staff; recorded conditions for as-built documents; reviewed structural condition
   - City of Mercer Island Pre App Meeting 8Nov16 – very useful meeting; met with Planning Department, Building Official, Fire Marshal, & City Utilities to discuss project direction; repairs are encouraged; use changes from current concessions & storage would trigger substantial alterations requirements; substantial alterations requirements include accessibility, fire protection, building structural review & repair; and energy code compliance; substantial alterations would trigger additional review such as Shoreline Substantial Development permit review and State Environmental Policy Act review; biggest challenge for substantial alterations may be fire protection requirements and access
   - Sail Sand Point Meeting 16Nov16 – met with Nino Johnson to discuss SSP's interest & needs; great location; currently teaches classes with (6) Opti sailboats; could expand to (12) sailboats; would bring in kayaks & SUPs for rental concessions (easier as entry level rentals); use floating platform as launch; could use more floating platforms but cannot use pier dock

3) Existing Drawings – Attached to these meeting notes are existing drawings pdf files. They represent the current building conditions and are documented in AutoCAD for future use.

4) Phase I Repair Drawings – Attached to these meeting notes are repair drawings which describe important projects to make the existing building more safe and make the building more functional.

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They describe projects such as foundation drainage, existing wall repair, restroom improvements, brick masonry repair, and chimney changes. Performing these projects will not likely trigger the substantial alterations requirements, and will extend the useful life of the structure. The building is in in need of repair and seismic improvements, but is also in good shape. The design team was asked to determine if the building was in good enough shape to consider continued use. The reasons for replacing the building may be based on the potential construction budget, not because the building is considered beyond repair.

5) Phase II Preliminary Building Program – Attached to these meeting notes is the preliminary building program document that collects and interprets the data from the meetings with Kayak Academy and Sail Sand Point. The program identifies the space needed or provided for various future uses and building functions.

6) Phase II Diagrams – Attached to these meeting notes are drawings that provide an initial planning version of how the Boiler Building might be used in the future. The diagrams show how a 2nd floor could be added to the large, tall Boiler Building room. Based on the review and discussion, Cardinal was asked to look at options where the second floor was not added, however the outdoor classroom on top of the existing toilet rooms could be part of a project. Paul noted that the second floor addition actually reduced storage capacity, after a stair and elevator are included. Cardinal will prepare additional versions to show function and potential cost of each.

7) Action Items
    - Next progress meeting is Thursday 5 January 2017.
    - Cardinal will work with the Structural Engineer and Cost Estimator to document repairs and design options, and apply costs to the options to present at the next progress meeting.

Meeting notes will be sent by Cardinal Architecture to Paul West, Parks & Rec, who will distribute to the project team.

Attached:
Existing Drawings – 8Dec16 - Boiler Building Study
Phase I Repair Drawings – 8Dec16- Boiler Building Study
Phase II Preliminary Building Program – 8Dec16 - Boiler Building Study
Phase II Diagrams – 8Dec16 - Boiler Building Study

Luther Burbank Park Boiler Building

Preliminary Phase II Building Program

8 December 2016

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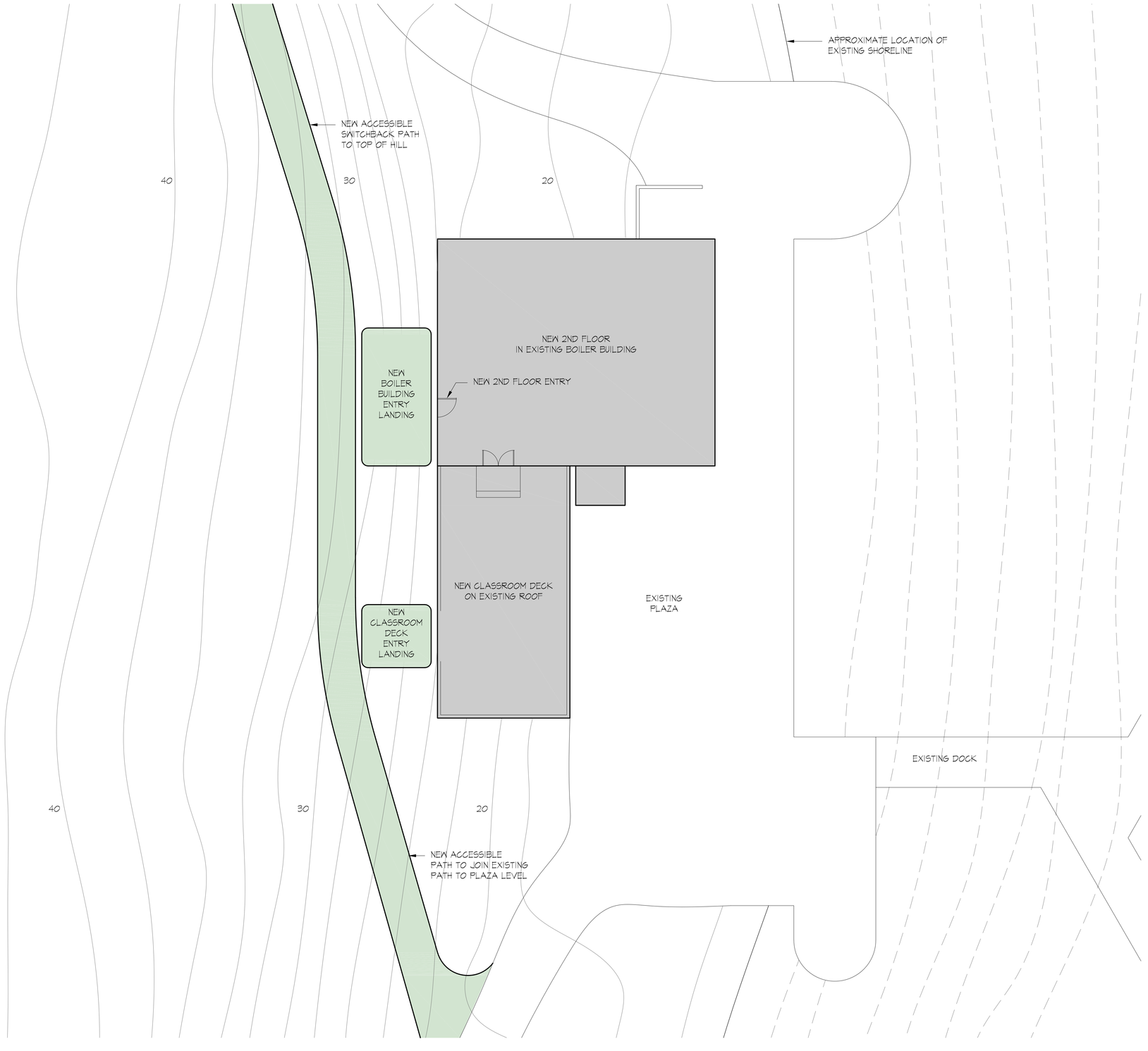
	Use	count	capacity	NSF each	NSF Total	Notes
Kayaks	Kayak & SUP Storage	1		200	800	(75-80) craft, (24) sea kayaks 18' max length x 24" wide, (56) SUPs 12' max length x 36" wide, rack storage
	Kayak General Storage	1		50	50	paddles, PFDs
	Kayak Student Cubbies	1		50	50	small lockers for student belongings during classes
	Outside Teaching/Gathering Space	1	12		0	outside
	Gravel Launch	1			0	gravel launch preferred, floating platform at docks also acceptable
	Kayaks Subtotal				**900**	**NSF**
Sailing	Sailboat Storage	1		200	400	(6) Opti Sailboats, 7'-8" long x 3'-6" wide, rack storage, (6) per rack, could expand to (12) boats for more classes
	Sailboat General Storage	1		50	50	PFDs
	Sailboat Student Cubbies	1		50	50	small lockers for student belongings during classes
	Outside Teaching/Gathering Space	1	16		0	outside
	Sailboat Launch	1			0	floating platform at docks
	Sailboat Safety Boat	1			0	lifted & stored on docks
	Sailing Subtotal				**500**	**NSF**
Shared	Entry	1		100	100	
	Meeting Room or Classroom	1		400	400	20 students x 20 SF ea = 400 SF
	Office	2		100	200	
	Concession Room & Snack Sales	1		150	150	existing concessions & snack space
	Existing Toilet Rooms	2		120	240	existing toilet rooms
	Elevator - (2) level	2		100	200	
	Stairs - (2) level	2		200	400	
	Shared Subtotal				**1,690**	**NSF**
Totals	**Building Program Total**				**3,090**	**NSF**
	Building Program Total with GSF Multiplier				**3,863**	**GSF (+25%)**
	Boiler Building Existing Area				**2,104**	**GSF**
	Boiler Building Future Second Floor				**960**	**GSF**
	Boiler Building Future Total Building Area				**3,064**	**GSF**



SITE PLAN
1/8" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II DIAGRAMS

2040 84TH AVENUE SE
MERCER ISLAND, WA 98040

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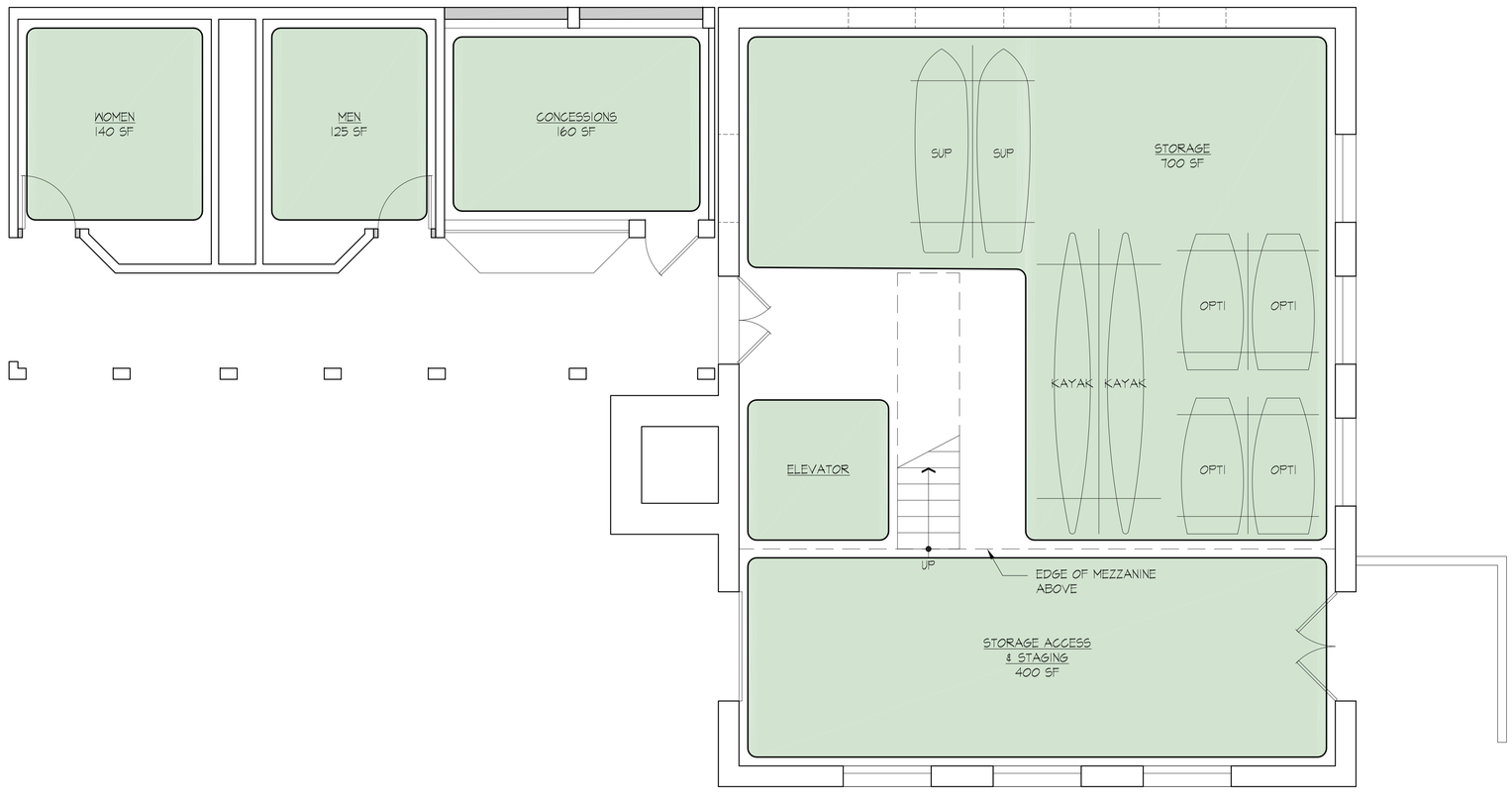
#1634

8 DECEMBER 2016

SITE PLAN

A1



FLOOR PLAN 1
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II DIAGRAMS

2040 84TH AVENUE SE
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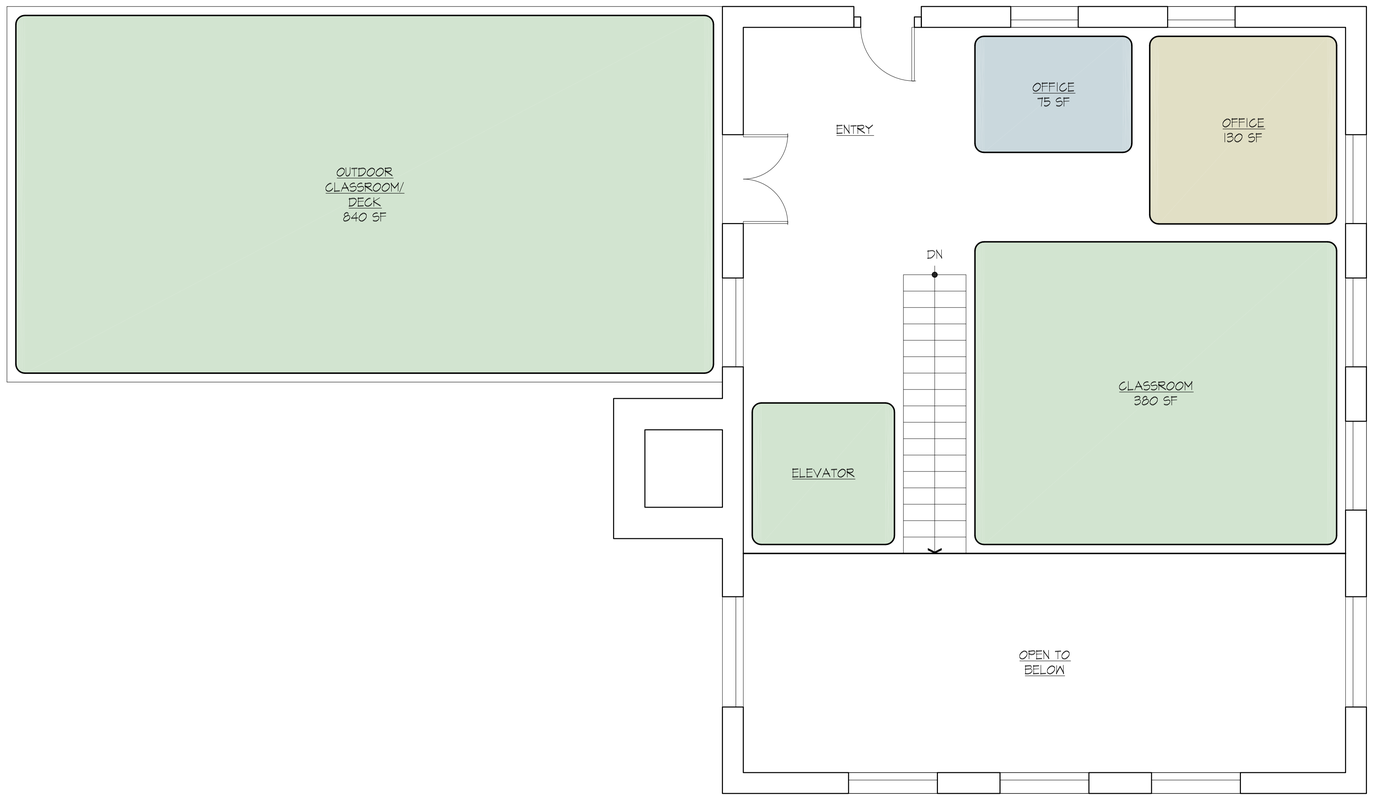
8 DECEMBER 2016

FLOOR PLAN

A2.1



NEW SECOND FLOOR PLAN
1/4" = 1'-0"

N

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK
BOILER BUILDING STUDY
PHASE II DIAGRAMS

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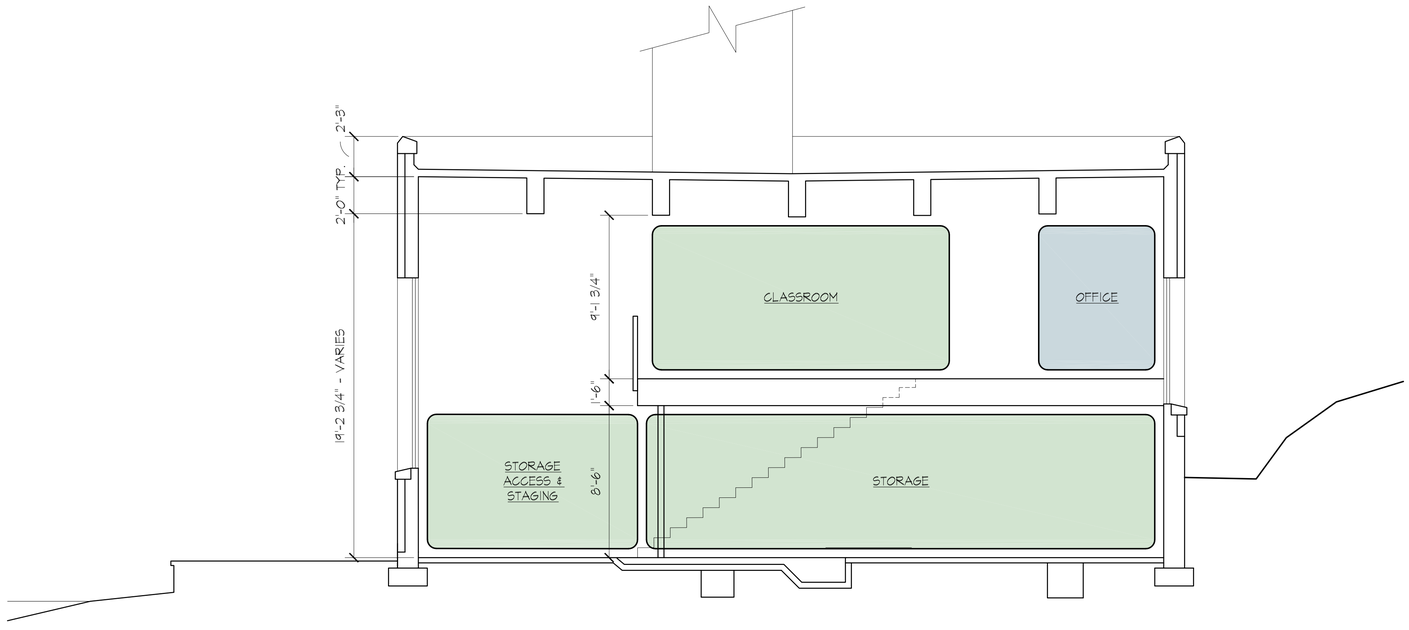
8 DECEMBER 2016

NEW
SECOND
FLOOR PLAN

A2.3



SECTION THROUGH BOILER BUILDING (1)

1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

REVISIONS

LUTHER BURBANK PARK BOILER BUILDING STUDY PHASE II DIAGRAMS

2040 84TH AVENUE SE
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8 DECEMBER 2016

BUILDING SECTIONS

A3.1

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Luther Burbank Park Boiler Building Feasibility Study
Meeting Notes

Date: Thursday, 5 January 2017
Location: Aljoya House, Mercer Island WA
Attending: Bruce Fletcher, Parks & Recreation Director
Paul West, Park Operations Superintendent
Marcy Olson, Facility Project Manager
Diane Mortenson, Recreation Superintendent
Ken Brooks, Parks Manager
Myra Lupton, Community Representative
Jim Cary, Cardinal Architecture
Trish Drew, DCW Cost Management

Purpose: Progress Meeting

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1) Introductions

2) Jim and Trish described the proposed projects identified as Phase I Repair, Phase IIA Site Access and Outdoor Deck, Phase IIB New Classroom & Offices. Trish provided initial cost analysis for the three phases. Her construction budgets are meant to be comprehensive and conservative, and are not meant to be a competitive construction cost bids. The numbers also reflect construction cost only. Construction costs are typically only 65% to 70% of total project costs. Total project cost can be estimated by multiplying the construction cost x 1.54 or 1.43. The project documentation and the cost analysis are attached to these meeting notes. Comments include:
   - Fire sprinklers might be included in Phase 1 Repair. Jim will call the fire marshal to confirm. Fire sprinklers will likely be a dry system, as there is currently no heat in the facility to prevent freezing, and only a portion of the facility is expected to be heated.
   - Adding the exterior deck may trigger substantial alterations, and the scope may be pushed to Phase IIB. Jim will call the building official to confirm.
   - It may be desired to heat the bathrooms, so that the bathrooms and the facility can be used year-round. There were also comments that most use would be planned for spring, summer and fall. The restrooms are currently heated by passive air flow, and they are open to the elements.
   - It may be useful to add a sink and hot water to the classroom area, so that meetings can make coffee. Hot water can be provided with an electric instant hot water heater.
   - There is a concern that there is not enough parking to accommodate the additional use at the Boiler Building. Jim will review the Master Plan to determine if this was anticipated. The P&R staff were certain that no additional parking was desired.
   - Freestanding tents or sunshades may be used on the new outdoor classroom deck.

3) Next steps include:
   - Parks & Rec staff meeting with the Friends of Luther Burbank Park to introduce the research and project planning to date.
   - After the Friends meeting, Parks & Rec staff and Cardinal meeting with Mercer Island City Council Parks Subcommittee to introduce the research and project planning to date.

Meeting notes will be sent by Cardinal Architecture to Paul West, Parks & Rec, who will distribute to the project team.

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Attached:
Phase I Repair Drawings – 5 Jan17
Phase IIA Site Access & Outdoor Deck Drawings - 5Jan17
Phase IIB New Classroom & Offices Drawings - 5Jan17
Preliminary Cost Report Concept - 4Jan17