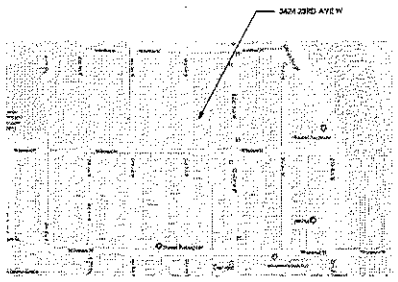
ATTACHMENT '4'



1 VICINITY MAP LOT B

ARCHITECTURAL NOTES:

[THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE PLANS]

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL RESIDENTIAL CODE (2015 EDITION) WITH SEATTLE AMENDMENTS.

2. CONTRACTOR: SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.

3. CONTRACTOR: SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

4. CONTRACTOR: SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

5. DRAWINGS: INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT/DESIGNER.

6. ALL WOOD PLATES: IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE. PROVIDE 2 LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER BETWEEN UNTREATED LEDGERS, BLOCKING, ETC., AND CONCRETE OR MASONRY.

7. PRESSURE TREATED LUMBER: ALL FASTENERS AND CONNECTORS THAT ARE IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED WITH A MINIMUM COATING OF C90 (.90oz/sf) PER ASTM A153 AND/OR ASTM A153. 304 OR 316 STAINLESS STEEL MAY BE SUBSTITUTED IN LIEU OF GALVANIZED PRODUCTS. NO STAINLESS STEEL PRODUCTS SHALL COME IN CONTACT WITH GALVANIZED PRODUCTS.

8. ALL MATERIALS AND CONSTRUCTION SHALL CONFOPM TO WASHINGTON STATE ENERGY CODE (2015 EDITION) WITH SEATTLE AMENDMENTS.

* ALL INTERIOR WALLS TO BE 2x4 @ 24" O.C. (U.N.O.)
* ALL EXTERIOR WALLS 2x6 PER STRUCTURAL
* HEADERS PER STRUCTURAL
* WINDOW SIZES ARE NOMINAL ROUGH OPENING, WIDTH AND HEIGHT.
* PROVIDE FIREBLOCKING AT ALL PLUMBING OPENINGS.
* PROVIDE SOLID BLOCKING OVER SUPPORTS.
* IN SEISMIC ZONES D0, D1 & D2, WATER HEATERS SHALL BE ANCHORED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD AND LOWER ONE-THIRD OF ITS VERTICAL DIMENSIONS PER SRC P802.11
* PROVIDE OUTDOOR COMBUSTION AIR FOR FURNACE AND WATER HEATER PER SRC G2407.6.

"CONSTRUCTION EROSION CONTROL MEASURES MUST BE IN PLACE AND APPROVED BY SDCI PRIOR TO ANY EARTH DISTURBANCE. CALL 684-8860 TO SCHEDULE AN INSPECTION APPOINTMENT"
NO SEDIMENT SHALL BE TRACKED INTO THE STREET OR ONTO PAVED SURFACES. SEDIMENT SHALL BE REMOVED FROM TRUCKS AND EQUIPMENT PRIOR TO LEAVING THE SITE. IN THE EVENT OF FAILURE OF EROSION CONTROL SYSTEM RESULTING IN SEDIMENT BEING TRACKED ONTO PAVED SURFACES, THE CONTRACTOR SHALL IMMEDIATELY IMPLEMENT MEASURES TO CORRECT THE SITUATION, AND STREET SWEEPING SHALL BE EMPLOYED ON AN EMERGENCY BASIS. IF STREET SWEEPING VEHICLES ARE UTILIZED, THEY SHALL BE OF THE TYPE THAT ACTUALLY REMOVES SEDIMENT FROM THE PAVEMENT.

SMC 23.45.534 LIGHT AND GLARE STANDARDS
A. EXTERIOR LIGHTING SHALL BE SHIELDED AND DIRECTED AWAY FROM ADJACENT PROPERTIES.

Seattle Department of Construction & Inspections

Green Building Standards Commitment Form
Director's Rule 20-2017

SDCI Project Number	6668712-CN
Project Address	3424 23rd Ave W, Seattle
Property Owner or Financially Responsible Party - Name	Brooke Friedlander
Property Owner or Financially Responsible Party - Business Name	Mirra 111, LLC
Address	11624 SE 5th St, Suite 210
City/State/Zip	Bellevue WA 98005
Email	brooke.friedlander@mirrahomes.com

Part A - Prior to issuance of Master Use Permit or Building Permit

I agree to meet the green building standards pursuant to SMC 23.58D and Director's Rule 20-2017 by certifying the project under the selected building industry certification programs and designing the proposed project to achieve an annual energy use of at least 15 percent lower than the standard reference design calculated in the 2015 Seattle Energy Code.

Select one building industry certification program:
- ○ Leadership in Energy and Environmental Design (LEED) for Building Design and Construction Gold, version 4
- ○ LEED for Homes, Gold, version 4
- ◎ Built Green 4 Star, single family new construction checklist WSEC 2015 (6/19/2017)
- ○ Built Green 4 Star, multifamily new construction checklist 2017
- ○ Passive House Institute (PHI), Passive House Planning Package (PHPP) version 9.5 or 9 (2015)
- ○ Passive House Institute US (PHIUS), version PHIUS + 2015
- ○ Living Building Challenge (LBC) - Zero Energy Certification
- ○ LBC Living Certification version 3.1
- ○ Evergreen Sustainable Development Standard (ESDS), version 3.0

I acknowledge the compliance requirements in SMC 23.58D.004, and shall submit documentation from the selected certification program within 180 days from the issuance of the final certificate of occupancy (COO) or final inspection, if no COO is required. I acknowledge the requirements in SMC 23.58D.006, that failure to submit the certification report within 180 days, or by such later date as may be allowed by the director, shall result in penalties of $500 per day and up to a maximum penalty of 2 percent of construction value.

Part B - Prior to issuance of Building Permit

To ensure compliance with the selected building industry certification program, the referenced project has been registered or enrolled. The registration number or enrollment ID is 20198HA422_1_20198HP422_2

11/6/2018 2:58:36 PM PST

Property Owner or Financially Responsible Party Signature | Date

Green Building Standards Commitment Form - Director's Rule 20-2017

LOT B SHEET LIST	
Sheet Number	Sheet Name
GENERAL	
A-0.0	NOTES PROJECT DATA VICINITY MAP
A-1.0	SITE PLAN
SURVEY	
V1	TOPOGRAPHIC SURVEY
V2	SHORT SUBDIVISION
V3	SHORT SUBDIVISION
V4	SHORT SUBDIVISION
V5	SHORT SUBDIVISION
V6	SHORT SUBDIVISION
SIP	
SIP01	COVERSHEET
SIP02	FRONTAGE PLAN
SIP03	ALLEY GRADING PLAN & PROFILE
SIP04	DETAILS
SIP05	SURVEY CONTROL DIAGRAM
LANDSCAPE	
L1	LANDSCAPE PLAN
L2	LANDSCAPE REQUIREMENTS
ARCHITECTURAL	
A-1.1	HEIGHT CALC & AMENITY AREA
A-1.2	RENDERINGS
A-2.0	FAR DIAGRAMS
A-2.1	FLOOR PLANS
A-2.2	FLOOR PLANS
A-2.3	FLOOR PLANS
A-3.1	ELEVATIONS
A-3.2	ELEVATIONS
A-4.0	GLAZING SCHEDULE & WSEC NOTES
A-4.2	BUILDING SECTIONS
STRUCTURAL	
S1.0	GENERAL STRUCTURAL NOTES
S2.0	PIN PILE PLAN
S2.1	FOUNDATION PLAN
S2.2	LEVEL 1 FLOOR FRAMING PLAN
S2.3	LEVEL 2 FLOOR FRAMING PLAN
S2.4	LEVEL 3 FLOOR FRAMING PLAN
S2.5	ROOF DECK FRAMING PLAN
S3.0	TYPICAL CONCRETE DETAILS
S3.1	CONCRETE DETAILS
S3.2	CONCRETE DETAILS
S4.0	TYPICAL WOOD FRAMING DETAILS
S4.1	WOOD FRAMINGDETAILS
S4.2	WOOD FRAMINGDETAILS
S4.3	WOOD FRAMINGDETAILS
SH1.0	SHORING GENERAL NOTES AND DETAILS
SH2.0	SHORING PLAN
SH3.0	SHORING DETAILS

3420 23rd Ave W

3420 23rd Ave W, Seattle WA 98199

PROJECT INFORMATION

SDCI PROJECT #:
SP # 6668712 MUP # 3022941

PROJECT DESCRIPTION:
SEPA REVIEW, CONSTRUCT (2) TOWNHOUSES WITH (2) OPEN PARKING STALLS, FUTURE UNIT LOT SUBDIVISION, FUNCTIONALLY RELATED TO #3022976-LU, OFFSITE PARKING FOR 3420 23RD AVE WEST LOCATED ON 3424 23RD AVE WEST

LEGAL DESCRIPTION:

LOT 6, BLOCK 11 GILMANS ADDITION TO THE CITY OF SEATTLE ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON.

EXCEPT THE WEST 60.00 FEET THEREOF

TOGETHER WITH AND SUBJECT TO EASEMENT NUMBER 2, SHOWN AND DESCRIBED HEREON:

SUBJECT TO EASEMENTS NUMBERED 1 AND 3, SHOWN AND DESCRIBED HEREON.

AKA PARCEL B OF SHORT SUBDIVISION NO. 3022957-LU

TAX # :
#2770600-1470

PROJECT TEAM

OWNER/ APPLICANT:
MIRRA HOMES
11624 SE 5TH ST, SUITE 210
BELLEVUE, WA 98005
P 206.383.7095

STRUCTURAL ENGINEER:
MALSAM TSANG STRUCTURAL ENGINEERING
MARC MALSAM, PE, SE
1525 E JEFFERSON ST, SUITE 210
SEATTLE, WA 98104
P 206.498.2674
Marc@MalsamTsang.com

SURVEYOR:
ANDY MCSHERRENS
10801 MAIN STREET, SUITE 102
BELLEVUE, WA 98004
P 425.450.4469
andy@mcsherrens.net

ARCHITECT/PROJECT CONTACT:
JULIAN WEBER ARCHITECTS, LTD
1257 S KING ST
SEATTLE, WA 98144
P 206.903.1305
dpc@jwarseattle.com

LANDSCAPE ARCHITECT:
DEVIN PERRIGO
ROOT OF DESIGN, LLC
7104 26TH ST NW, SUITE #218
GIG HARBOR, WA 98335
P 206.491.9542

CIVIL ENGINEER:
TIM CARLSEN, PE
9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
P 206.525.9024 X105
mv@davidsongroup.com
DAVIDSON CONSULTING GROUP, INC.

PROJECT DATA

ZONE: LR1

URBAN VILLAGE: NO

LOT AREA: 2,999 SF

FLOOR AREA RATIO:
(CALCULATED TO INSIDE FACE OF WALL STRUCTURE)
SEE SHEET A2.0 FOR DIAGRAM

FAR AREA SUMMARY (ALLOWED) LOT B		
LOT AREA	FAR ALLOWED PER SDCI SPC A1.1	FAR PROPOSED
2,999 SF	2,799.9 SF	2,700.0 SF

PARKING: 1 PARKING STALL PER UNIT REQUIRED. (2) OPEN PARKING STALLS PROVIDED

DENSITY LIMIT PER SMC 23.45.512:
2,999 X 1 UNIT/ 1,600 SF = 1.87 (2) UNITS

SETBACKS PER SMC 23.45.518:

	REQUIRED:	ACTUAL:
SIDE NORTH	5.0' SIDE SETBACK	5.0'
SIDE SOUTH	5.0' SIDE SETBACK	5.0'
REAR EAST	7.0' AVERAGE, 5.0' MINIMUM REAR SETBACK (ALLEY)	21'-11"
FRONT WEST	5.0' MINIMUM FRONT SETBACK, 7.0 AVERAGE	10'-0"

STRUCTURE HEIGHT LIMIT PER PER SMC 23.45.514:
30' TOP OF ROOF, 4' PARAPET, 10' PENTHOUSE SCHEME
(SEE SHEET A1.1 FOR HEIGHT CALCULATION)

STRUCTURE FACADE LENGTH < 1 IP OF PROPERTY LINE PER SMC 23.45.527:
(65% PROPERTY LENGTH)

NORTH: 40.0' X .65= 26.0' ALLOWED FACADE LENTH. 24.0' PROVIDED

SOUTH: 40.0' X .65= 26.0' ALLOWED FACADE LENTH. 24.0' PROVIDED

AMENITY AREA PER SMC 23.45.522:
25% LOT AREA REQUIRED, 50% GROUND RELATED
(SEE SHEET A1.1 FOR AMENITY AREA DIAGRAM)

LOT B - REQUIRED AMENITY		
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Amenity Area Summary-TH	
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

N

JULIAN WEBER ARCHITECTS, LTD
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Seattle WA 98144
206.903.1305
www.jwarseattle.com

REGISTERED ARCHITECT JULIAN R. WEBER STATE OF WASHINGTON

MIRRA HOMES
11624 SE 5TH ST, SUITE 210
BELLEVUE, WA 98005
P 206.383.7095

3420 23rd Ave W
3420 23rd Ave W
Seattle, WA 98199

SDCI APPROVAL STAMP HERE

MUP # 3022941-LU

No.	Date	Description
	10.16.2018	MUP SUBMITTAL
	11.16.2018	SP SUBMITTAL
1	02.07.2019	MUP CORRECTIONS 1
2	03.13.2019	SP CORRECTIONS 1

NOTES
PROJECT
DATA
VICINITY MAP

Scale: As indicated
Date: 10/16/2018

A-0.0

Project Number: JWA0495

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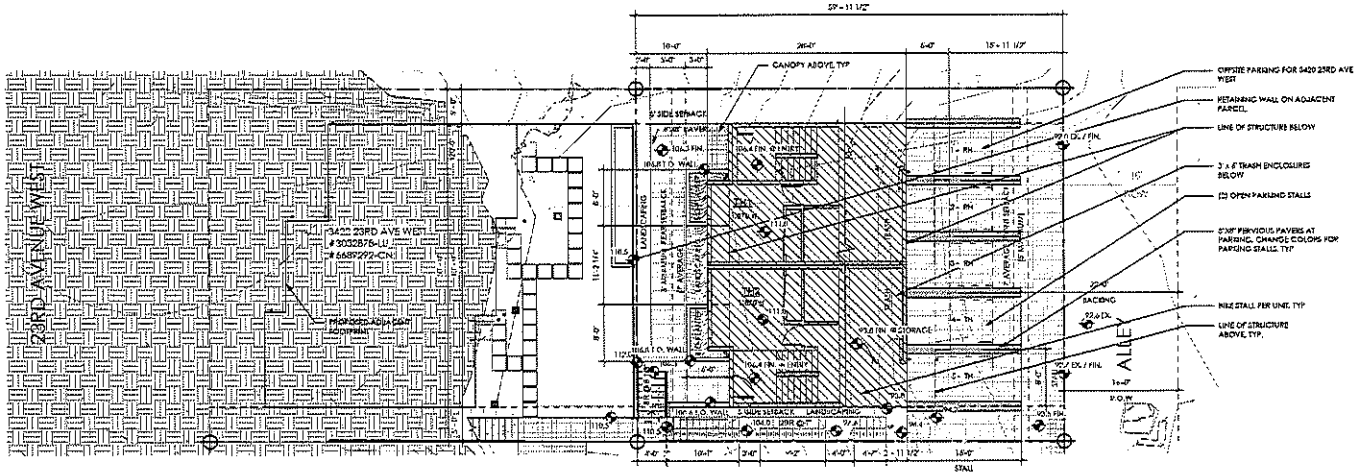
SIZE THRESHOLDS FOR COMMON AND NATIVE SEATTLE TREES TO BE CONSIDERED FOR EXCEPTIONAL STATUS, PER DPD DIRECTOR'S RULE 16-2008

NATIVE SPECIES	
SPECIES	THRESHOLD DIAMETER
Red ALDER – Alnus rubra	Not Exceptional except in groves
Pacific ALDER – Alnus tenuifolia	18 in
Oregon ASH – Fraxinus latifolia	24
Quaking ASPEN – Populus tremuloides	17
Paper BIRCH – Betula papyrifera	11.5 in
DOGWOOD – Cornus nuttallii	20 in
Western HEMLOCK – Tsuga heterophylla	27.5 in
Pacific CRABAPPLE – Malus fusca	8 in
Black COTTONWOOD – Populus balsamifera ssp. trichocarpa (P. trichocarpa)	Not Exceptional except in groves
PACIFIC CHERRY – Prunus emarginata	11 in
Pacific DOGWOOD – Cornus nuttallii	15 in
Douglas FIR – Pseudotsuga menziesii	27.5 in
Grand FIR – Abies grandis	25
Black HAWTHORN – Crataegus douglasii	9 in
Western HEMLOCK – Tsuga heterophylla	25
MADRONE – Arbutus menziesii	9 in
Bigleaf MAPLE – Acer macrophyllum	27.5 in
Vine MAPLE – Acer circinatum	8 in
Oregon White or Garry Oak – Quercus garryana	17 in
Lodgepole PINE – Pinus contorta	9 in
Ponderosa PINE – Pinus ponderosa	18
Shore PINE – Pinus contorta	12
Western RED CEDAR – Thuja plicata	25
Sitka SPRUCE – Picea sitchensis	8 in
WILLOW (All native species) – Salix sp. (Salix lasiandra var. lasiandra, scouleriana, sitchensis, hookeriana, Pacific Willow, Sitka willow)	8 in
Pacific YEW – Taxus brevifolia	4in
NON-NATIVE SPECIES	
SPECIES	THRESHOLD DIAMETER
Crabapple (Ornamental) APPLE – Malus sp.	19.5 in
Hornbeam ASH – Fraxinus excelsior	15.5 in
Green ASH – Fraxinus pennsylvanica	25.5 in
Raywood ASH – Fraxinus oxycarpa	25
Hornbeam BIRCH – Betula lenta	25.5 in
European White BIRCH – Betula pendula	25
Alder CEDAR – Cedrus deodara	25 in
Deodar CEDAR – Cedrus deodara	25.5 in
Incense CEDAR – Calocedrus decurrens	
Flowering CHERRY – Prunus sp. (serrulata, serrulata, sargentii, subhirtella, yedoensis)	11, 11in
Japanese CHERRY – Cerasus/Prunus jamasakura	25.5 in
Kwanzan CHERRY – Cerasus/Prunus serrulata	11
Cedar DOGWOOD – Cornus florida	15
American ELM – Ulmus americana	25.5 in
English ELM – Ulmus procera	25.5 in
GINKGO – Ginkgo biloba	25
Cockspur HAWTHORN Crataegus lavallei	15 in
Washington HAWTHORN – Crataegus phaenopyrum	9 in
European HORNBEAM – Carpinus betulus	25.5 in
Common HORSE CHESTNUT – Aesculus hippocastanum	25.5 in
Red HORSE CHESTNUT – Aesculus x carnea	25.5 in
KATSURA – Cercidiphyllum japonicum	25.5 in
Littleleaf LINDEN – Tilia cordata	25.5in
Honey LOCUST – Gleditsia triacanthos	15.5 in
Northern WALNUT – Juglans regia/nigra	17.5 in
Paperbark MAPLE – Acer griseum	15
Japanese MAPLE – Acer palmatum	15
Norway MAPLE – Acer platanoides	25.5 in
Red MAPLE – Acer rubrum	25.5 in
Sugar MAPLE – Acer saccharum	25.5 in
Striped MAPLE – Acer pensylvanicum	15
MONKEY PUZZLE TREE – Araucaria araucana	15.5 in
Mount Atlas ash – Fraxinus angustifolia	25.5 in
Pin OAK – Quercus palustris	25.5 in
Red OAK – Quercus rubra	25.5 in
Liberty PEAR – Pyrus calleryana	17.5 in
Aristocrat PEAR Pyrus – Pyrus calleryana	15
Portuguese PEAR – Pyrus lusitanica	25.5 in
Bosc PEAR – Pyrus communis	25
London PLANE – Platanus x hispanica	25.5 in
Flowering PLUM – Prunus cerasifera	15.5 in
Cherry PLUM – Prunus cerasifera	15.5 in
Colorado SPRUCE – Picea pungens glauca	25.5 in
Japanese PAGODA TREE – Sophora japonica	15
Amur MAPLE – Acer ginnala	15
TULIP TREE – Liriodendron tulipifera	25.5 in
WILLOW (All alternative species)	25

NOTE: NO TREES ON THIS SITE MEET THE REQUIREMENTS FOR "EXCEPTIONAL TREES"

POTENTIAL LANDSLIDE
FOR SDCI, THIS PROPERTY IS DESIGNATED AS A POTENTIAL LANDSLIDE AREA DUE TO GEOLOGIC CONDITIONS AND STEEP SLOPES (FWO DESIGNATIONS).



1 LOT B Site Plan
SCALE: 1/8" = 1'-0"

N

JULIAN WEBER ARCHITECTS, LTD
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Seattle, WA 98144
206.430.1255
www.jwarchitects.com

REGISTERED ARCHITECT
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STATE OF WASHINGTON

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3420 23rd Ave W
3420 23rd Ave W
Seattle, WA 98199

SDCI APPROVAL STAMP HERE

MUP # 3032876-LU

No.	Date	Description
	10.16.2018	MUP SUBMITTAL
	11.19.2018	EDG SUBMITTAL
1	10.07.2019	MUP CORRECTIONS 1

SITE PLAN

Scale: As indicated
Date: 10/16/2018

A-1.0

Project Number: JWA#473

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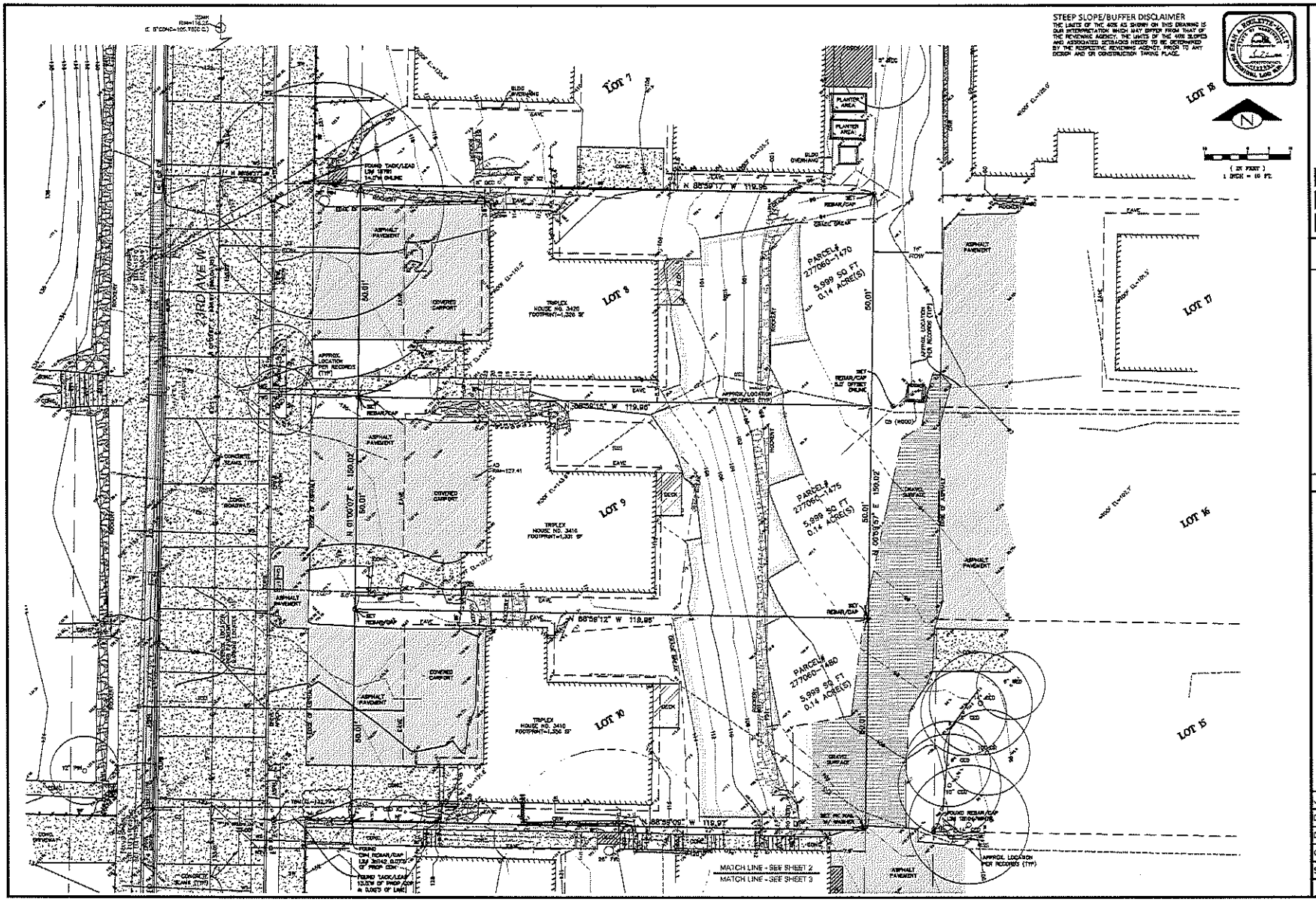


Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

		DATE
		REVISION
		NO

TOPOGRAPHIC & BOUNDARY SURVEY
NW 1/4, SE 1/4 SEC 14, TWP. 25N., RGE 03E., W.M.
MGT – 23rd Ave W
3410, 3416, 3420 23rd Ave W
SEATTLE, WASHINGTON

JOB NO.:	161111
DATE:	06/27/18
DRAFTED BY:	JJK
CHECKED BY:	SRM
SCALE:	1" = 10'
	2 OF 3

CITY OF SEATTLE
SHORT SUBDIVISION NO. 3032857-LU

MIRRA 111, LLC SHORT PLAT

RECORDING NO.	VOL./PAGE

GRANTOR: MIRRA 111, LLC
11624 SE 5TH ST. SUITE 210
BELLEVUE, WA 98005

GRANTEE: CITY OF SEATTLE
KING COUNTY, WA

CONTACT PERSON: ANDY McANDREWS
TERRANE, INC
10801 MAIN STREET, SUITE 102
BELLEVUE, WA 98004
(425) 458-4488
AndyM@Terrane.net

8	11	GILMAN'S ADD.	5/93
LOT(S)	BLOCK	SUBDIVISION	VOL/PG

TAX PARCEL NO. 277060-1470

ADDRESS: 3422 23rd Ave W
SEATTLE, WA 98199

REFERENCE NO. FOR RELATED PROJECTS: 6688960-CN

APPROVAL:

CITY OF SEATTLE
SEATTLE DEPARTMENT OF CONSTRUCTION AND INSPECTIONS (SDCI)
NATHAN TORGELSON, DIRECTOR

EXAMINED AND APPROVED THIS _____ DAY OF _____ 20__

BY: _____ DIRECTOR, SEATTLE DEPARTMENT OF CONSTRUCTION AND INSPECTIONS

NOTE: APPROVAL OF THIS SHORT SUBDIVISION BY THE DIRECTOR OF THE SEATTLE DEPARTMENT OF CONSTRUCTION AND INSPECTIONS UNDER CHAPTER 23.24 OF THE SEATTLE MUNICIPAL CODE, AS AMENDED, IS NOT TO BE CONSTRUED AS SATISFACTION OF ANY OTHER APPLICABLE LEGISLATION OR REGULATIONS.

KING COUNTY DEPT. OF ASSESSMENTS:

EXAMINED AND APPROVED THIS _____ DAY OF _____ 20__

_____
ASSESSOR:

ORIGINAL LEGAL DESCRIPTION:

PARCEL NO. 277060-1470
LOT 8, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON.

SURVEYOR'S NOTES:

1) ORIGINAL PROPERTY AREA 5,999 SQ. FT.
2) ZONED LR1 PER CITY OF SEATTLE.
3) PROPOSED 2 LOT SHORT PLAT.
4) SEWER AND WATER UTILITY FROM PUBLIC SERVICE.
5) THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN JUNE OF 2018. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST.
6) THE FOUND MONUMENTS WERE FIELD VISITED ON JUNE 22, 2018.

CONDITIONS OF APPROVAL:

1. ALL FACILITIES, BUILDINGS OR PORTIONS OF BUILDINGS HEREAFTER CONSTRUCTED OR MOVED ONTO ANY OF THESE PROPOSED PARCELS MUST COMPLY WITH THE THEN CURRENT SEATTLE FIRE CODE CHAPTER 5 AND REFERENCED APPENDICES, DEPENDING ON LOCATION OF FUTURE STRUCTURES ON THE LOTS. THESE PROVISIONS MAY REQUIRE APPROVED FIRE DEPARTMENT VEHICLE ACCESS ROADS, TURNAROUNDS, WATER SUPPLIES FOR FIRE PROTECTION, AND OTHER POSSIBLE FIRE PROTECTION RELATED ITEMS PRIOR TO APPROVAL OF BUILDING PERMIT.
2. THE SUBDIVISION OF THE PROPERTY WILL NOT REDUCE THE REQUIREMENTS OF THE CITY OF SEATTLE STORMWATER CODE AND THE CITY OF SEATTLE SIDE SEWER CODE. FOR THE PURPOSES OF ENSURING COMPLIANCE WITH THE INTENT OF THE CITY OF SEATTLE STORMWATER CODE AND THE CITY OF SEATTLE SIDE SEWER CODE, THE PROPOSED PARCELS WITHIN THIS SHORT PLAT WILL MEET THE STANDARDS REQUIRED BY THE HIGHER AREA THRESHOLD OF THE ENTIRE PROPERTY BEING SUBDIVIDED, RATHER THAN THE STANDARDS REQUIRED FOR EACH OF THE PROPOSED PARCELS INDIVIDUALLY.

DECLARATION:

WE THE UNDERSIGNED, OWNER (S) IN FEE SIMPLE OF THE LAND HEREIN DESCRIBED DO HEREBY MAKE A SHORT SUBDIVISION THEREOF PURSUANT TO RCW 58.17.060 AND DECLARE THIS SHORT SUBDIVISION TO BE THE GRAPHIC REPRESENTATION OF SAME, AND THAT SAID SHORT SUBDIVISION IS MADE WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRE OF THE OWNER(S). IN WITNESS WHEREOF WE HAVE SET OUR HANDS AND SEALS.

_____
MIRRA 111, LLC ITS. DATE

ACKNOWLEDGMENT:

STATE OF WASHINGTON)
)SS
COUNTY OF KING)

I CERTIFY THAT I KNOW OR HAVE SATISFACTORY EVIDENCE THAT _____ THE _____ OF MIRRA 111, LLC IS THE PERSON WHO APPEARED BEFORE ME, AND SAID PERSON ACKNOWLEDGED THAT THEY SIGNED THIS INSTRUMENT, AND ACKNOWLEDGED IT AS THEIR FREE AND VOLUNTARY ACT FOR THE USES AND PURPOSES MENTIONED IN THE INSTRUMENT.

GIVEN UNDER MY HAND AND OFFICIAL SEAL
THIS ____ DAY OF _____ 20__

_____
NOTARY PUBLIC IN AND FOR THE STATE
RESIDING AT: _____
MY COMMISSION EXPIRES: _____
PRINT NAME: _____

RECORDER'S CERTIFICATE

FILED FOR RECORD THIS_____ DAY OF_____, 20____ AT M.
IN BOOK_____ OF SURVEYS, AT PAGE_____ AT THE REQUEST
OF TERRANE, INC.

_____
MANAGER SUPT. OF RECORDS

SURVEYOR'S CERTIFICATE

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT AT THE REQUEST OF MIRRA 111, LLC.

_____
SEAN A. ROULETTE-MILLER CERTIFICATE NO. 51600 DATE

REFERENCES

R1. SHORT SUBDIVISION NO. 3015065, REC. NO. 20140313900005
RECORD OF SURVEY, VOL. 307, PG.(S) 254-256.
RECORDS OF KING COUNTY, WASHINGTON.

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
phone 425.458.4488 support@terrane.net
www.terrane.net

CITY OF SEATTLE SHORT SUBDIVISION
NW 1/4, SE 1/4, SEC. 14, T. 25N., R. 03E., W.M.
MIRRA 111, LLC
PARCEL NO. 277060-1470
3422 23rd Ave W
SEATTLE WA

JOB NO.:	181111
DATE:	1/14/19
DRAFTED BY:	JJK
CHECKED BY:	SRM
SCALE:	N. T. S.

CITY OF SEATTLE
SHORT SUBDIVISION NO. 3032857-LU

SURVEY CONTROL

LEGEND

- BRASS DISC (FOUND)
- BENCHMARK
- AREA DRAIN
- BOLLARD
- BUILDING
- CENTERLINE ROW
- CO CLEANOUT
- RETAINING WALL
- FENCE LINE (CHAIN LINK)
- FENCE LINE (WOOD)
- FIRE HYDRANT
- GAS LINE
- GUY ANCHOR
- INLET (TYPE 1)
- LUM LUMINAIRE
- NAIL AS NOTED
- MAILBOX (RESIDENTIAL)
- MONUMENT IN CASE (FOUND)
- PST POST
- HH POWER HAND HOLE
- P POWER METER
- POWER (OVERHEAD)
- POWER POLE W/ LIGHT
- REBAR & CAP
- ROCKERY
- SEWER LINE
- SEWER MANHOLE
- STEEP SLOPE AREA
- STORM DRAIN LINE
- TELEPHONE (OVERHEAD)
- SIZE TYPE TREE (AS NOTED)
- WATER LINE
- WM WATER METER

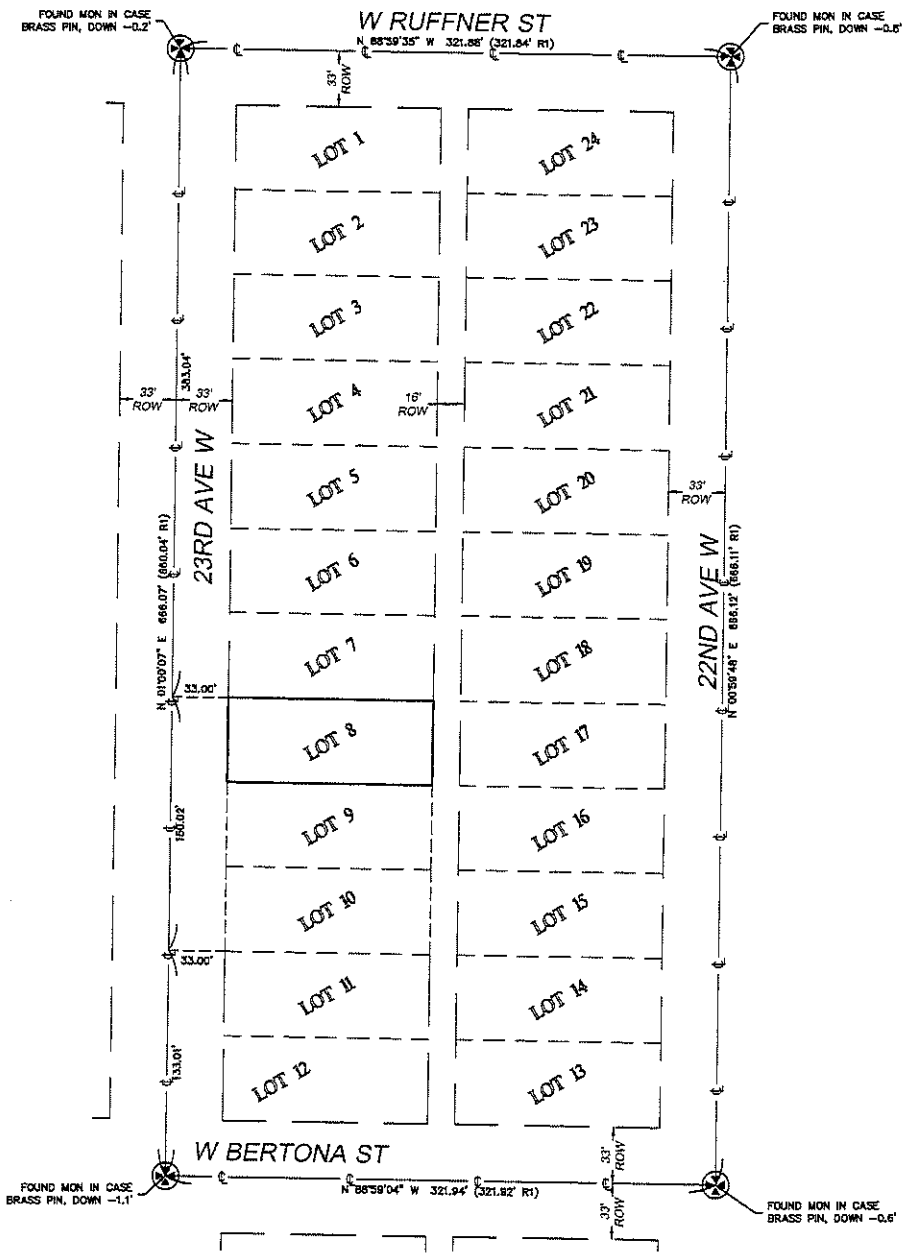
APPROX	APPROXIMATE
ASPH	ASPHALT
BLDG	BUILDING
C.C.	CENTER CHANNEL
CALC'D	CALCULATED
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
CRW	CONCRETE RETAINING WALL
COS	CITY OF SEATTLE
CONC	CONCRETE
COR	CORNER
DEC	DECIDUOUS
ELEV	ELEVATION
FF	FINISH FLOOR
G	GAS
GVL	GRAVEL
HSE	HOUSE
LS#	LAND SURVEYOR NUMBER
MEAS	MEASURED
MON	MONUMENT
OHP	OVERHEAD POWER
OHT	OVERHEAD TELEPHONE
PP	POWER POLE
PROP	PROPERTY
PSC	PIPE SEWER COMBINED
PSD	PIPE STORM DRAIN
(R)	RECORD DATA
RET	RETAINING
ROS	RECORD OF SURVEY
SD	SERVICE DRAIN
SNS	STREET NAME SIGN
SSMH	SANITARY SEWER MANHOLE
SSS	SANITARY SIDE SEWER
SF	SQUARE FEET
SW	SIDEWALK
W	WATER
WF	WOOD FENCE
WS	WATER SERVICE

BASIS OF BEARINGS:
NAD 83(2011) WASHINGTON NORTH STATE PLANE COORDINATES PER GPS OBSERVATIONS.

VERTICAL DATUM:
NAVD 88 PER CITY OF SEATTLE BENCHMARK NO. SNV-5169.

2 INCH BRASS CAP SET 0.5FT S OF THE INT. BK CW IN THE NW COR INT. GILMAN AVE W AND W RUFFNER ST.

ELEV.=34.320'



CONTROL MAP
SCALE: 1" = 50'
(IN FEET)
1 INCH = 50 FT.

Terrane
10801 Main Street, Suite 102, Bellevue, WA 98004
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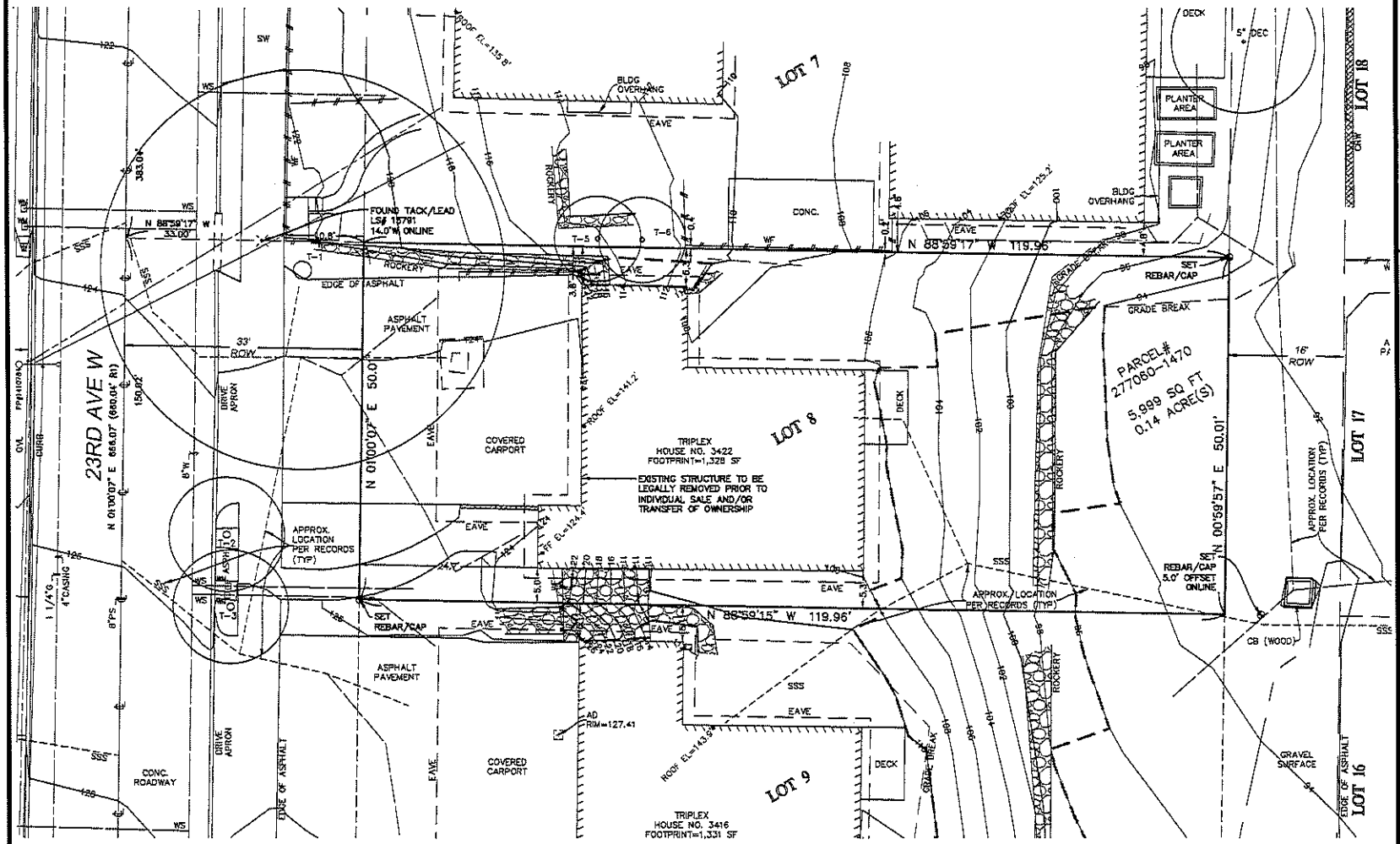
SURVEY NOTE:
ORIGINAL SITE SURVEY WAS COMPLETED IN JUNE OF 2018, NO ADDITIONAL FIELDWORK WAS PERFORMED IN PREPARATION OF THIS SHORT SUBDIVISION.

TOPOGRAPHIC SURVEY



TREE INVENTORY
PER ARBORIST INVENTORY REPORT BY
SHOFFNER CONSULTING DATED AUGUST 6, 2018

T-1	38" SCOT'S PINE	(PINUS SYLVESTRIS)	*EXCEPTIONAL
T-2	8" CHERRY	(PRUNUS SERRULATA)	
T-3	8" CHERRY	(PRUNUS SERRULATA)	
T-5	8" WESTERN RED CEDAR	(THUJA PLICATA)	

(IN FEET)
1 INCH = 10 FT.

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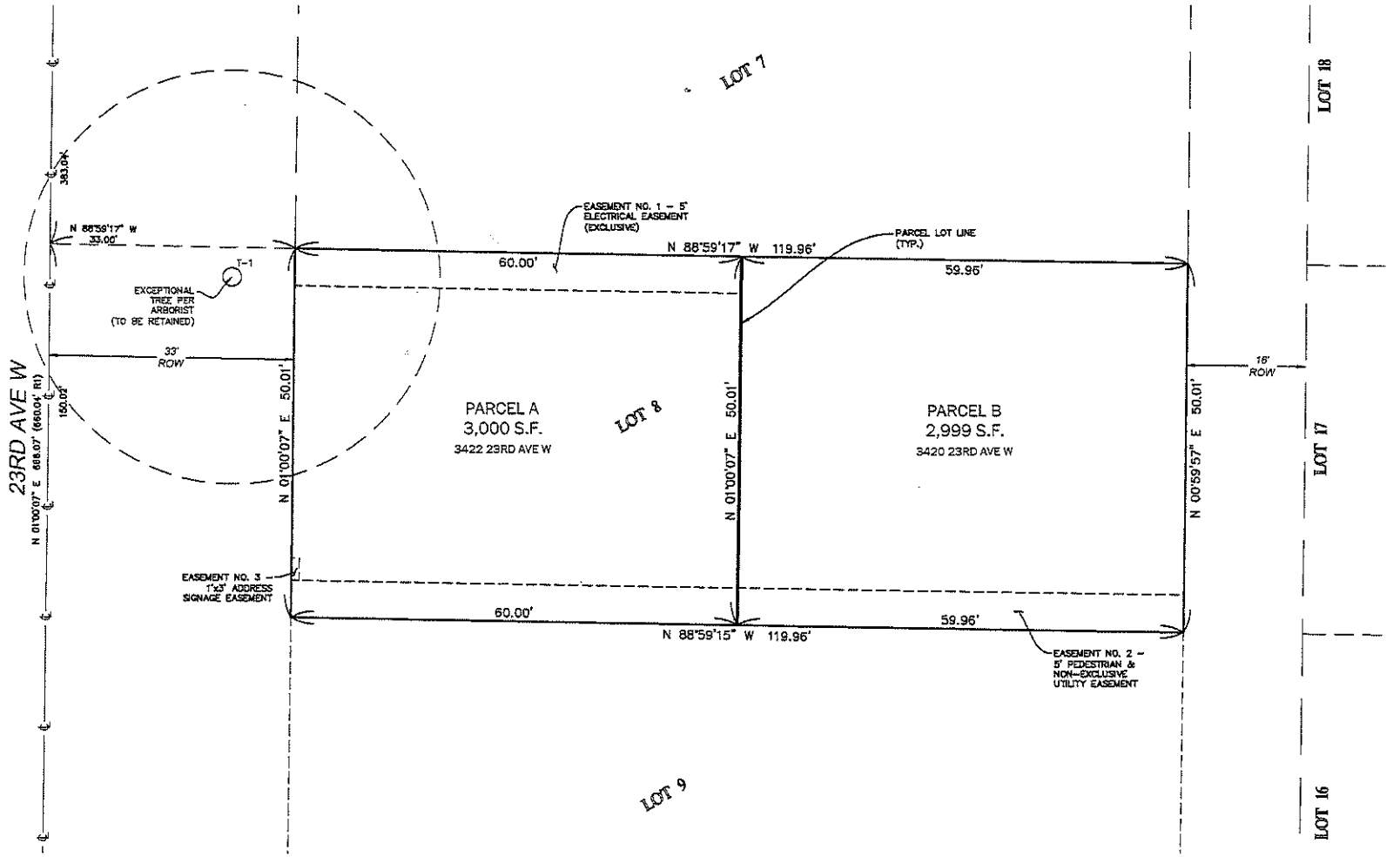
SITE PLAN



NEW PARCEL LEGAL DESCRIPTIONS

PARCEL A

THE WEST 60.00 FEET OF LOT 8, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON;

TOGETHER WITH AND SUBJECT TO EASEMENT NUMBER 2, SHOWN AND DESCRIBED HEREON;

SUBJECT TO EASEMENTS NUMBERED 1 AND 3, SHOWN AND DESCRIBED HEREON.

PARCEL B

LOT 8, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS. PAGE 93, IN KING COUNTY. WASHINGTON;

EXCEPT THE WEST 60.00 FEET THEREOF.

TOGETHER WITH AND SUBJECT TO EASEMENT NUMBER 2, SHOWN AND DESCRIBED HEREON;

TOGETHER WITH EASEMENTS NUMBERED 1 AND 3, SHOWN AND DESCRIBED HEREON.

(IN FEET)
1 INCH = 10 FT.

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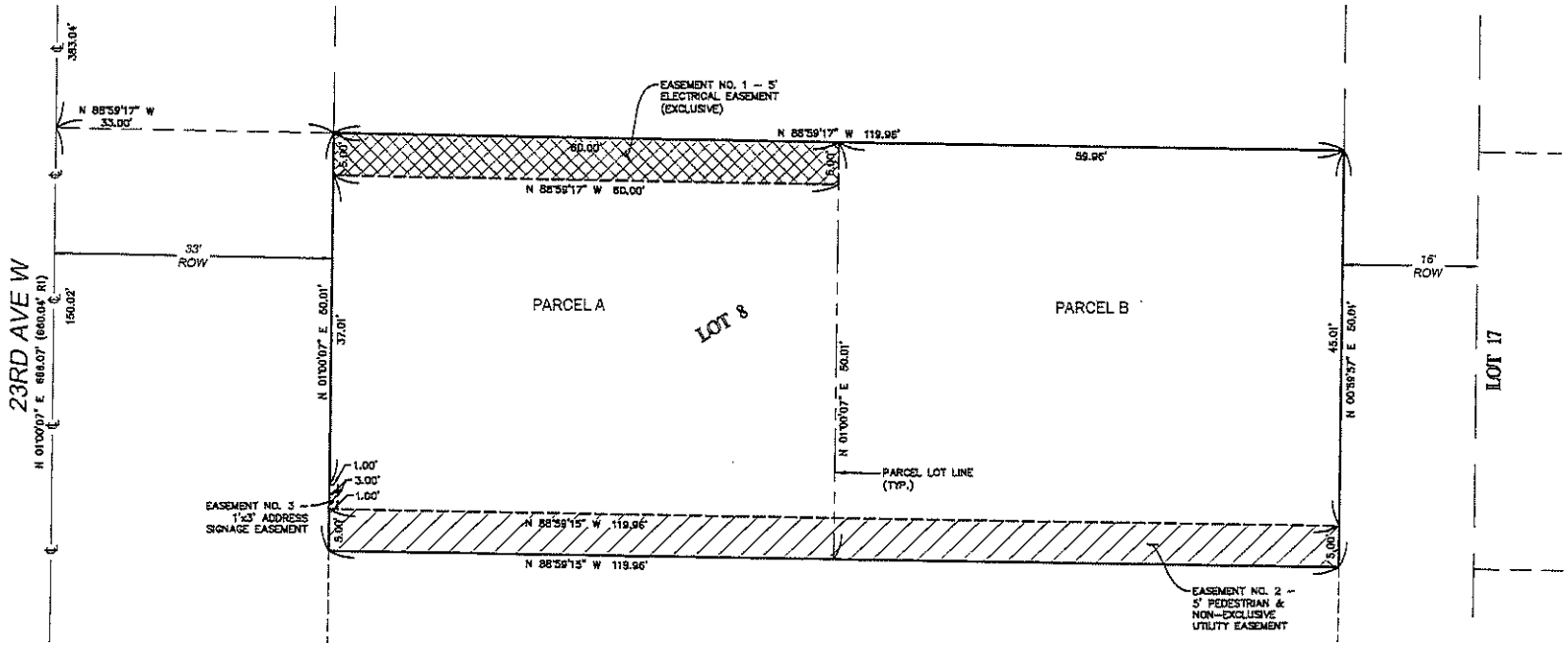
CITY OF SEATTLE
SHORT SUBDIVISION NO. 3032857-LU

DETAILS



NEW EASEMENT LEGAL DESCRIPTIONS

EASEMENT NO. 1 – 5' ELECTRICAL EASEMENT (EXCLUSIVE)

THE NORTH 5.00 FEET OF THE WEST 60.00 FEET OF LOT 8, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON.

EASEMENT NO. 2 – 5' PEDESTRIAN & NON-EXCLUSIVE UTILITY EASEMENT

THE SOUTH 5.00 FEET OF LOT 8, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON.

EASEMENT NO. 3 – 1'X3' ADDRESS SIGNAGE EASEMENT

THE NORTH 3.00 FEET OF THE SOUTH 8.00 FEET OF THE WEST 1.00 FOOT OF LOT 8, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON.

SEATTLE CITY LIGHT EASEMENT

CITY OF SEATTLE LAND USE ACTION NO. 3032857-LU
EASEMENT (OVERHEAD AND UNDERGROUND)
KING COUNTY ASSESSOR/S TAX PARCEL NO. 277060-1470

THE OWNER OF THE REAL PROPERTY THAT IS THE SUBJECT OF THIS LAND USE ACTION ("GRANTOR") HEREBY GRANTS TO THE CITY OF SEATTLE ("GRANTEE") AND THE RIGHT, PRIVILEGE AND AUTHORITY (AN "EASEMENT") TO INSTALL, CONSTRUCT, ERECT, RECONSTRUCT, ALTER, IMPROVE, REMOVE, REPAIR, REPLACE, ENERGIZE, OPERATE, AND MAINTAIN OVERHEAD AND UNDERGROUND ELECTRIC DISTRIBUTION FACILITIES, WHICH MAY CONSIST OF, BUT ARE NOT LIMITED TO: POLES WITH BRACES, GUY WIRES AND ANCHORS, CROSS ARMS, TRANSFORMERS, DUCTS, VAULTS, MANHOLES, SWITCHES, CABINETS, CONTAINERS, CONDUITS, WIRES AND OTHER CONVENIENT APPURTENANCES NECESSARY TO MAKE SAID OVERHEAD AND UNDERGROUND DISTRIBUTION FACILITIES AN INTEGRATED ELECTRIC SYSTEM ("ELECTRIC SYSTEM"). ALL SUCH ELECTRIC SYSTEM SHALL BE LOCATED ACROSS, OVER, UPON AND UNDER THE REAL PROPERTY DESCRIBED WITHIN THIS LAND USE ACTION ("PROPERTY") SITUATED IN THE COUNTY OF KING, STATE OF WASHINGTON, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE 5' ELECTRICAL (EXCLUSIVE) EASEMENT NO. 1 LYING WITHIN PARCEL A OF THIS CITY OF SEATTLE SHORT PLAT NO. 3032857-LU WHICH SHALL BE OCCUPIED AND CONTROLLED EXCLUSIVELY BY SEATTLE CITY LIGHT, A DEPARTMENT OF THE CITY OF SEATTLE.

TOGETHER WITH GRANTEE'S AND ITS ASSIGNS' UNRESTRICTED RIGHT OF ACCESS TO AND FROM THE PROPERTY FOR THE PURPOSES OF EXERCISING ITS RIGHTS GRANTED HEREIN.

TOGETHER WITH GRANTEE'S AND ITS ASSIGNS' RIGHT TO CUT AND TRIM BRUSH, TREES OR OTHER PLANTS STANDING OR GROWING UPON THE PROPERTY WHICH, IN THE OPINION OF THE GRANTEE, INTERFERE WITH THE MAINTENANCE OR OPERATION OF, OR CONSTITUTE A MENACE OR DANGER TO, THE ELECTRIC SYSTEM.

GRANTOR, ITS SUCCESSORS AND ASSIGNS, COVENANTS AND AGREES THAT NO STRUCTURE OR FIRE HAZARDS WILL BE BUILT OR PERMITTED WITHIN THE EASEMENT AREA(S) DESCRIBED ABOVE; THAT NO DIGGING WILL BE DONE OR PERMITTED WITHIN THE PROPERTY WHICH WILL IN ANY MANNER DISTURB GRANTEE'S ELECTRIC SYSTEM OR ITS SOLIDITY OR UNEARTH ANY PORTION THEREOF; AND THAT NO BLASTING OR DISCHARGE OF ANY EXPLOSIVES WILL BE PERMITTED WITHIN FIFTY (50) FEET OF THE ELECTRIC SYSTEM.

THE CITY OF SEATTLE SHALL BE RESPONSIBLE, AS PROVIDED BY LAW, FOR ANY DAMAGE TO THE GRANTOR THROUGH ITS NEGLIGENCE IN THE CONSTRUCTION, MAINTENANCE AND OPERATION OF THE ELECTRIC SYSTEM.

THE RIGHTS, TITLE, PRIVILEGES AND AUTHORITY HEREBY GRANTED SHALL CONTINUE AND BE IN FORCE UNTIL THE GRANTEE PERMANENTLY REMOVES ITS ELECTRIC SYSTEM FROM THE PROPERTY OR PERMANENTLY ABANDONS THE ELECTRIC SYSTEM, AT WHICH TIME ALL SUCH RIGHTS, TITLE, PRIVILEGES AND AUTHORITY HEREBY GRANTED SHALL TERMINATE.

ADDRESS SIGN MAINTENANCE AGREEMENT:

ANY PARCEL BENEFITING FROM THE POSTING OF THE ADDRESS SIGN WITHIN THE EASEMENT AS DEPICTED AND DESCRIBED HEREIN IS RESPONSIBLE FOR THE MAINTENANCE THEREOF, SHARING EQUALLY IN THE COST OF MAINTENANCE, REPAIR AND/OR REPLACEMENT TO SAID ADDRESS SIGN.

EASEMENT MAINTENANCE AGREEMENT:

SAID EASEMENTS OF THIS SHORT PLAT ARE TO BE EQUALLY MAINTAINED, REPAIRED AND/OR REBUILT BY THE OWNERS OF ALL PARCELS HAVING LEGAL ACCESS AND UTILITY SERVICE THEREFROM AND THEIR HEIRS, ASSIGNS AND SUCCESSORS.

INDIVIDUAL UTILITY SERVICE LINES, INCLUDING STORM AND SANITARY SIDE SEWER LINES AND STORM DRAINAGE FACILITIES, ARE THE SOLE RESPONSIBILITY OF THE OWNERS OF THE PARCEL THAT IS SERVED BY SAID INDIVIDUAL SERVICE LINE/FACILITIES. UTILITY SERVICE LINES OR FACILITIES WHICH SERVE MORE THAN ONE PARCEL SHALL BE EQUALLY MAINTAINED, REPAIRED AND/OR REBUILT BY THE OWNERS OF ALL PARCELS SERVICED. EXCEPT THAT, NO PARCEL SHALL BE RESPONSIBLE FOR REPAIRS UPSTREAM OF THE CONNECTION POINT OF SAID PARCEL.

THIS MAINTENANCE AGREEMENT COVERS NORMAL USAGE, WEAR AND TEAR, AND LIFE EXPECTANCY OF MATERIALS. ANY DAMAGE INCURRED BY AN INDIVIDUAL OWNER SHALL BE REPAIRED AND/OR RESTORED TO PRE DAMAGED CONDITIONS WITHIN 30 DAYS. THE OWNER WHICH INCURRED THE DAMAGE SHALL BE SOLELY RESPONSIBLE FOR THE COST OF REPAIR OR REPLACEMENT OF THE MATERIALS. IN NO EVENT SHALL ACCESS OR UTILITY SERVICE BE DENIED OTHER PROPERTY OWNERS OF SAID EASEMENTS FOR MORE THAN 24 HOURS.

10 0 5 10
(IN FEET)
1 INCH = 10 FT.

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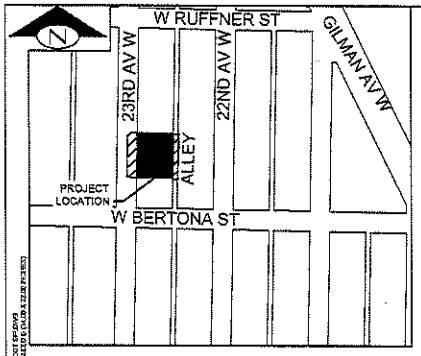


60% COMPLETE STREET IMPROVEMENT PLAN

NOT FOR CONSTRUCTION

CONTACTS:

APPLICANT:
MIRRA HOMES, LLC
11624 SE 5TH ST, SUITE 210
BELLVUE, WA 98005
PHONE (425) 241-6332

ENGINEER:
DAVIDO CONSULTING GROUP, INC.
9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
PHONE (206) 523-0024
ATTN. TIM GABELEIN, P.E.

SURVEYOR:
TERRANE
10801 MAIN ST, SUITE 102
BELLEVUE, WA 98004
PHONE (425) 458-4488

ABBREVIATIONS:

AIC	AERIAL INTERCONNECT CABLE
BOC	BEGINNING OF CURB
BOW	BACK OF SIDEWALK
BM	BENCHMARK
CB	CATCH BASIN
CL	CENTER LINE
CONC	CONCRETE
COS	CITY OF SEATTLE
CW	CONCRETE WALK
DCI	DEPARTMENT OF CONSTRUCTION & INSPECTION
EG	EXISTING GRADE
EL/ELEV	ELEVATION
EOC	END OF CURB
EOP	EDGE OF PAVEMENT
ESC	EROSION & SEDIMENTATION CONTROL
EX	EXISTING
FF	FINISHED FLOOR, FILTER FENCE
FFE	FINISHED FLOOR ELEVATION
FG	FINISH GRADE
FL	FLOWLINE
IE	INVERT ELEVATION
LSCAPE	LANDSCAPING
LT	LEFT
MIC	MONUMENT IN CASE/CONCRETE
NO	NUMBER
PC	POINT OF CURVE
PT	POINT OF TANGENT
RT	RIGHT
SD	STORM DRAIN
SDFM	STORM DRAIN FORCE MAIN
SDOT	SEATTLE DEPARTMENT OF TRANSPORTATION
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSFM	SANITARY SEWER FORCE MAIN
SSMH	SANITARY SEWER MANHOLE
SSS	SANITARY SIDE SEWER
STA	STATION
STD	STANDARD
TOC	TOP OF CURB
TOEW	TOE OF WALL
TOP	TOP OF PAVEMENT
TOPW	TOP OF WALL
TYP	TYPICAL
UIC	UNDERGROUND INTERCONNECT CABLE
W	WATER
W/	WITH
WM	WATER METER

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE 2017 EDITION OF CITY OF SEATTLE STANDARD SPECIFICATIONS, THE 2017 EDITION OF THE CITY OF SEATTLE STANDARD PLANS; AND SEATTLE DEPARTMENT OF TRANSPORTATION DIRECTOR'S RULE 01-2017 FOR RIGHT-OF-WAY OPENING AND RESTORATION RULE. A COPY OF THESE DOCUMENTS SHALL BE ON SITE DURING CONSTRUCTION.
2. A COPY OF THE APPROVED PLAN MUST BE ON SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
3. ERRORS AND OMISSIONS ON THE PERMITTED PLANS MUST BE CORRECTED BY THE ENGINEER AND APPROVED BY THE CITY OF SEATTLE.
4. ALL PERMITS REQUIRED FOR WORK WITHIN THE PUBLIC RIGHT OF WAY MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.
5. PRIOR TO THE START OF CONSTRUCTION WITHIN THE RIGHT OF WAY, THE PERMITTEE SHALL SCHEDULE AND ATTEND A PRECONSTRUCTION MEETING WITH THE CITY OF SEATTLE DEPARTMENT OF TRANSPORTATION.
6. PERMITTEE SHALL CONTACT SEATTLE DEPARTMENT OF TRANSPORTATION, STREET USE INSPECTOR A MINIMUM OF 2 BUSINESS DAYS PRIOR TO NEEDING AN INSPECTION.
7. ALL DAMAGE TO CITY INFRASTRUCTURE CAUSED BY THE CONSTRUCTION SHALL BE REPAIRED AS REQUIRED BY THE SEATTLE DEPARTMENT OF TRANSPORTATION. TO REPORT DAMAGE TO SPU INFRASTRUCTURE, INCLUDING SEWAGE RELEASE OR BLOCKAGE, CALL 206-386-1800.
8. THE APPROVED PLANS SHOW THE APPROXIMATE AREA OF PAVEMENT RESTORATION BASED ON THE DEPTH OF UTILITY CUTS AND/OR THE AREA OF CURB AND/OR PAVEMENT TO BE REMOVED AND REPLACED. THE ACTUAL LIMITS OF THE PAVEMENT RESTORATION SHALL BE PER THE RIGHT OF WAY OPENING AND RESTORATION DIRECTOR'S RULE 01-2017 AND WILL BE DETERMINED IN THE FIELD BY THE SEATTLE DEPARTMENT OF TRANSPORTATION STREET USE INSPECTOR PRIOR TO THE PAVEMENT RESTORATION.
9. DATUM: NAVD 88 AND NAD83 (1991).
10. SURVEYING AND STAKING OF ALL IMPROVEMENTS IN THE PUBLIC RIGHT OF WAY SHALL BE COMPLETED PRIOR TO CONSTRUCTION. SURVEY CUT SHEETS MUST BE SUBMITTED AND APPROVED BY THE SEATTLE DEPARTMENT OF TRANSPORTATION AT LEAST 5 DAYS PRIOR TO CONSTRUCTION.
11. IF AN EXISTING CURB IS TO BE REMOVED AND REPLACED IN THE SAME LOCATION THE PERMITTEE SHALL PROVIDE THE STREET USE INSPECTOR A PLAN WITH EXISTING FLOW LINE AND TOP OF CURB ELEVATIONS IDENTIFIED. PERMITTEE TO STAKE THE LOCATION OF THE EXISTING CURB PRIOR TO DEMOLITION.
12. THE PERMITTEE SHALL BE RESPONSIBLE FOR REFERENCING AND REPLACING ALL MONUMENTS THAT MAY BE DISTURBED, DESTROYED OR REMOVED BY THE PROJECT AND SHALL FILE AN APPLICATION FOR PERMIT TO REMOVE OR DESTROY A SURVEY MONUMENT WITH THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, PURSUANT TO RCW 58.24.040(8).
13. THE PERMITTEE SHALL SUBMIT ALL APPLICABLE DOCUMENTS REQUIRED UNDER SECTION 1-05.3 OF THE STANDARD SPECIFICATIONS PRIOR TO CONSTRUCTION. A MATERIAL SOURCE FORM FOR ALL MATERIALS TO BE PLACED IN THE RIGHT OF WAY AND MIX DESIGNS FOR ALL ASPHALT, CONCRETE AND AGGREGATES TO BE PLACED IN THE RIGHT OF WAY MUST BE SUBMITTED TO THE SEATTLE DEPARTMENT OF TRANSPORTATION FOR REVIEW AND APPROVAL PRIOR TO BEGINNING CONSTRUCTION. A REVISED MATERIAL SOURCE FORM AND MIX DESIGNS MUST BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF ANY SUBSTITUTE MATERIALS.
14. THE PERMITTEE SHALL NOTIFY THE SEATTLE FIRE DEPARTMENT DISPATCHER (206-386-1495) AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL WATER SERVICE INTERRUPTIONS, HYDRANT SHUTOFFS, AND STREET CLOSURES OR OTHER ACCESS BLOCKAGE. THE PERMITTEE SHALL ALSO NOTIFY THE DISPATCHER OF ALL NEW, RELOCATED, OR ELIMINATED HYDRANTS RESULTING FROM THIS WORK.
15. THE PERMITTEE SHALL LOCATE AND PROTECT ALL CASTINGS AND UTILITIES DURING CONSTRUCTION. MAINTAIN A 12-IN VERTICAL CLEARANCE WHEN CROSSING EXISTING FACILITIES AND SERVICES. FIELD VERIFY THE DEPTH AND LOCATION OF EXISTING WATER, GAS, AND SIDE SEWER FACILITIES AT THESE CROSSING POINTS.
16. THE PERMITTEE SHALL CONTACT THE UNDERGROUND UTILITIES LOCATOR SERVICE (1-800-424-5555) AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.
17. IT IS THE SOLE RESPONSIBILITY OF THE PERMITTEE TO VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS SHOWN AND TO FURTHER DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.
18. THE PERMITTEE SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURE LIDS, VALVE BOXES, AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY THE PROPOSED IMPROVEMENTS.
19. SPU-DWW MUST PERFORM ALL CORE DRILL OPERATIONS INTO EXISTING MAINS OR STRUCTURES. CONTRACTORS ARE NOT ALLOWED TO CORE INTO MAINS OR STRUCTURES WITHOUT PRIOR APPROVAL FROM SPU-DWW. TO SCHEDULE CORE CUTS CONTACT SPU-DWW AT 206-615-0511 A MINIMUM OF 48 HOURS IN ADVANCE.
20. UTILITY SERVICE CONNECTIONS SHOWN ON THIS PLAN REQUIRE SEPARATE PERMITS AND ARE TO BE MAINTAINED PRIVATELY AND NOT BY THE CITY OF SEATTLE.
21. THE PERMITTEE SHALL PROVIDE FOR ALL TESTING AS REQUIRED BY THE STREET USE INSPECTOR.
22. BACKFILL MATERIAL USED IN PUBLIC RIGHT-OF-WAY SHALL MEET STANDARD SPECIFICATIONS AND SHALL BE APPROVED BY SEATTLE DEPARTMENT OF TRANSPORTATION.
23. INSPECTION AND ACCEPTANCE OF ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE DONE BY REPRESENTATIVES OF THE CITY OF SEATTLE. IT SHALL BE THE PERMITTEE'S RESPONSIBILITY TO COORDINATE AND SCHEDULE APPROPRIATE INSPECTIONS ALLOWING FOR PROPER ADVANCE NOTICE. THE SEATTLE DEPARTMENT OF TRANSPORTATION STREET USE INSPECTOR MAY REQUIRE REMOVAL AND RECONSTRUCTION OF ANY ITEMS PLACED IN THE RIGHT OF WAY THAT DO NOT MEET CITY STANDARDS OR THAT WERE CONSTRUCTED WITHOUT APPROPRIATE INSPECTIONS.
24. THE PERMITTEE SHALL PROVIDE AND MAINTAIN TEMPORARY EROSION CONTROL AND SEDIMENTATION COLLECTION FACILITIES TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE NATURAL OR PUBLIC DRAINAGE SYSTEM PER SECTION 8-01. AS CONSTRUCTION PROGRESSES AND UNEXPECTED (SEASONAL) CONDITIONS DICTATE, ADDITIONAL CONTROL FACILITIES MAY BE REQUIRED. DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY THE PERMITTEE'S ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES THAT MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES.
25. THE PERMITTEE SHALL KEEP ALL PAVED SURFACES IN THE RIGHT OF WAY CLEAN BY SWEEPING PER SECTION 8-01.3(16).
26. ALL DISTURBED SOILS MUST BE AMENDED PER STANDARD PLAN 142 AND SECTION 8-02 OF THE STANDARD SPECIFICATIONS UNLESS WITHIN ONE FOOT OF A CURB OR SIDEWALK, THREE FEET OF A UTILITY STRUCTURE (E.G. WATER METER, UTILITY POLE, HAND HOLE, ETC.), OR THE DRIPLINE OF AN EXISTING TREE.
27. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CITY OF SEATTLE TRAFFIC CONTROL MANUAL FOR IN-STREET WORK. AN APPROVED TRAFFIC CONTROL PLAN WILL BE REQUIRED FOR ALL ARTERIAL STREETS PRIOR TO BEGINNING CONSTRUCTION.
28. PERMITTEE SHALL NOTIFY KING COUNTY METRO AT 206-477-1140 FOURTEEN DAYS IN ADVANCE OF ANY IMPACT TO TRANSIT OPERATIONS.
29. COORDINATE SIGN AND PAY STATION AND/OR PARKING METER HEAD REMOVAL AND INSTALLATION WITH SEATTLE DEPARTMENT OF TRANSPORTATION AT 684-5370. SIGNPOSTS ARE TO BE INSTALLED IN ACCORDANCE WITH STANDARD PLANS 618, 620, 621A, 621B, 625, & 626.
30. ALL STREET NAME SIGNS MUST BE INSTALLED BY SEATTLE DEPARTMENT OF TRANSPORTATION AT THE PERMITTEE'S EXPENSE.
31. ALL WORK PERFORMED BY SEATTLE CITY LIGHT, SEATTLE PUBLIC UTILITIES, AND OTHER UTILITIES TO REPAIR, REMOVE OR RELOCATE EXISTING UTILITIES SHALL BE DONE AT THE PERMITTEE'S EXPENSE.
32. PERMITTEE MUST CONTACT THE SEATTLE DEPARTMENT OF PARKS AND RECREATION TO APPLY FOR A SEPARATE PERMIT IF WORKING WITHIN A DESIGNATED PARK BOULEVARD.
33. CARE SHALL BE EXERCISED WHEN EXCAVATING NEAR EXISTING CHARGED WATER MAINS.
34. PERMITTEE SHALL CONTACT SEATTLE DEPARTMENT OF TRANSPORTATION, STREET USE INSPECTOR A MINIMUM OF 2 BUSINESS DAYS PRIOR TO PLANTING FOR INSPECTION OF STREET TREES AND LANDSCAPING.

DRAINAGE CB & INLET NOTES:

UNLESS OTHERWISE NOTED:

1. CATCH BASIN CONNECTIONS AND INLET CONNECTIONS SHALL BE 8" DIAMETER. PIPE SHALL BE CEMENT MORTAR LINED DUCTILE IRON CLASS 50 (MIN) PER SPECIFICATION 9-05.2. FITTINGS SHALL BE CEMENT MORTAR LINED DUCTILE IRON. JOINTS SHALL BE RUBBER GASKET, PUSH-ON OR MECHANICAL.
2. BEDDING SHALL BE CLASS D WITH SELECT NATIVE MATERIAL.
3. CATCH BASIN CONNECTIONS SHALL BE PLACED AT A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 100% PER STANDARD PLAN NO. 261 AND SPECIFICATION 7-08.3(4).
4. INLET CONNECTIONS SHALL BE PLACED AT A MINIMUM SLOPE OF 5% AND A MAXIMUM SLOPE OF 50% PER SPECIFICATION 7-08.3(5).
5. CATCH BASINS AND INLETS SHALL BE LOCATED PER STANDARD PLAN NO. 260A AND 260B.
6. TELEVISION INSPECTION OF CATCH BASIN CONNECTIONS SHALL BE PER SPECIFICATION 7-17.3(4)I.
7. CONTRACTORS ARE NOT ALLOWED TO CORE INTO MAINS OR STRUCTURES WITHOUT PRIOR APPROVAL FROM SPU. TO SCHEDULE CORE TAPS, CONTACT SPU AT 206-615-0511 A MINIMUM OF 48 HOURS IN ADVANCE. SPU SHALL BE ON SITE PRIOR TO THE START OF CONTRACTOR PERFORMED CORE TAP. CONTRACTORS PERFORMING CORE TAPS SHALL PROVIDE THE COUPON OF REMOVED MATERIAL TO SPU.
8. PROVIDE A WATERMAIN SUPPORT PLAN TO SPU PRIOR TO THE REMOVAL AND INSTALLATION OF THE NEW CATCH BASIN ADJACENT TO THE EX. WATERMAIN. CONTACT STEVE FRIEND FROM SPU AT 206-423-2610 48 HOURS PRIOR TO DEMO.
9. PROVIDE ETHAFOAM BLOCKING BETWEEN THE WATER MAIN AND THE INLET/CB PIPE AT THE CROSSING.

Table of Contents

Sheet Number	Sheet Title
1	COVER SHEET
2	FRONTAGE PLAN
3	ALLEY GRADING PLAN & PROFILE
4	DETAILS
5	SURVEY CONTROL DIAGRAM

SDOT APPROVAL BLOCK

60% SIP APPROVAL REVIEW GROUPS	NAME	DATE
KING COUNTY METRO		
NEIGHBORHOOD TRAFFIC		
PARKS		
PAVEMENT MANAGEMENT		
PED & BIKE		
ROADWAY STRUCTURES		
SCL ENGINEERING (PRT)		
SCL STREET LIGHTING		
SIGNAL OPERATIONS		
SIGNAL OPERATIONS INSPECTIONS		
SIP PROJECT MANAGER		
SPU REAL ESTATE SERVICES		
SPU SEWER/DRAINAGE		
SPU WATER		
STREET LIGHTING & SIGNAL DESIGN		
TRAFFIC OPERATIONS		
URBAN FORESTRY		

MARK	DATE	DESCRIPTION	BY	CHKD

BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, AND ALL OTHER EXISTING FEATURES AND CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN AND/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

CALL 811
2 BUSINESS DAYS
BEFORE YOU DIG
(UNDERGROUND UTILITY LOCATIONS ARE APPROX.)

PRELIMINARY

DCG civil structural
DAVIDO CONSULTING GROUP, INC.
9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
206.523.0024

REVIEWED BY SPU/WATER ENGINEERING	20....
REVIEWED BY SPU/DRAINAGE	20....
APPROVED BY SDOT STREET IMPROVEMENT PERMITTING	20....

NAME OR INITIALS AND DATE	INITIALS AND DATE
DESIGNED	PROJECT MANAGER
DRAWN	
CHECKED	
DESIGN MANAGER	

City of Seattle
Seattle Department of Transportation

23RD AVE W

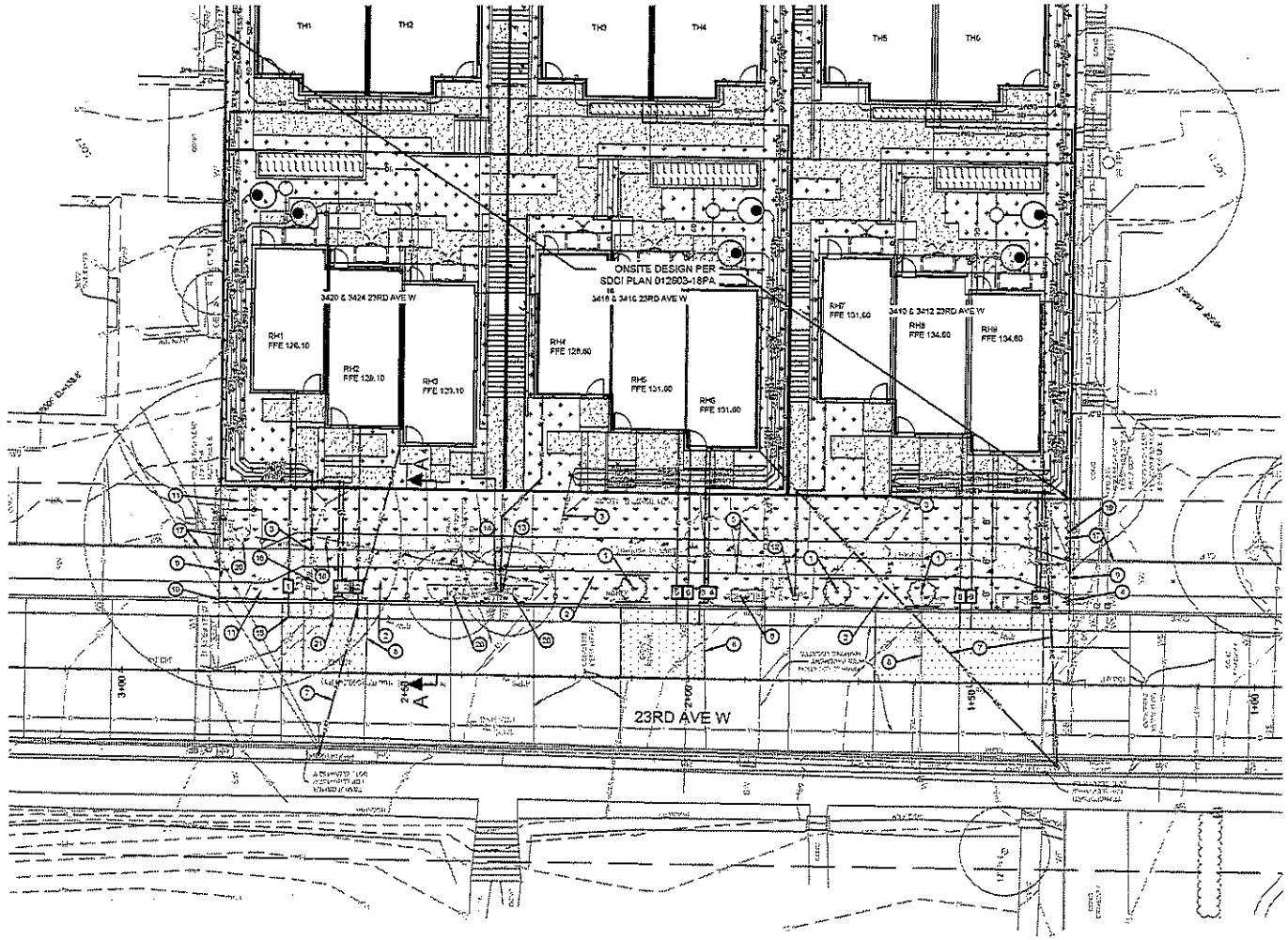
23RD AVE W
CURB, CW, LANDSCAPE, PAVING, ETC.
COVER SHEET

SDCI PROJECT # 012598-18PA

SDOT PROJECT NO. 398337
WBS PLAN NO.
WBS SERIAL NO.
SHEET 1 OF 5

KEY NOTES

SYM	NOTE	DETAIL/ SHEET
1	NEW 2" MIN CALIPER STREET TREE WITH 16" X 2' ROOT BARRIERS CENTERED ON TREE. SPU UP TO ADVISE ON SPECIES. (TYP.)	CDS STD PLAN 100A, 142
2	EX DWY TO BE REPLACED WITH NEW CURB, LANDSCAPE STRIP AND SIDEWALK. ALL SITE PARKING WILL BE OFF OF ALLEY, SEE SHEET C03.	-
3	DISCHARGE POINT FOR ONSITE STORMWATER AND WASTEWATER (UNDER SEPARATE PERMIT)	-
4	CONTRACTOR TO PROTECT POWER POLE DURING CONSTRUCTION	-
5	NEW 6' SIDEWALK	CDS STD PLAN 420
6	PROTECT EXISTING UTILITIES AND FEATURES	-
7	PROPOSED ELECTRICAL SERVICES FROM EXISTING PP (UNDER SEPARATE PERMIT) FINAL SERVICE LOCATION TBD BE SCL BASED ON REVIEW OF ELECTRICAL SERVICE APPLICATION.	-
8	PATCH RIGID PAVEMENT ROADWAY (NON-ARTERIAL, NON-TRANSIT) ON 23RD AVE W SURFACING: 6" ROADWAY CEMENT CONC OR MATCH EX IF GREATER BASE: COMPACTED SUBGRADE	D24
9	RESTORE SIDEWALK TO NEAREST JOINT, MATCH EO	CDS STD PLAN 420
10	INSTALL NEW 310C CONC CURB ALONG ENTIRE FRONTAGE	CDS STD PLAN 310C
11	NEW LANDSCAPING WITH AMMENDED SOIL (TYP)	CDS STD PLAN 142
12	EX WATER METER TO BE REUSED FOR UNIT 3410 RH1 (UNDER SEPARATE PERMIT)	-
13	EX WATER METER TO BE REUSED FOR UNIT 3418 RH1 (UNDER SEPARATE PERMIT)	-
14	EX WATER METER TO BE REUSED FOR UNIT 3420 RH1 (UNDER SEPARATE PERMIT)	-
15	NEW 3/4" DOMESTIC WATER SERVICE CONNECTION TO MAIN INSTALLED BY SPU (UNDER SEPARATE PERMIT) SIZE TO BE CONFIRMED BY MEP (TYP).	-
16	NEW 3/4" WATER METER AND OLYMPIC FOUNDRY 6M29 METER BOX TO BE FURNISHED AND INSTALLED BY SPU (UNDER SEPARATE PERMIT). SIZE TO BE CONFIRMED BY MEP (TYP).	-
17	EX FENCE TO BE PROTECTED	-
18	SSS TO BE CAPPED AND ABANDONED DOWNSTREAM OF SDSSS INTERSECTION.	-
19	EX HEDGE TO BE REMOVED	-
20	EX TREES TO BE PROTECTED	-
21	NEW 1" DOMESTIC WATER SERVICE CONNECTION TO MAIN INSTALLED BY SPU (UNDER SEPARATE PERMIT) SIZE TO BE CONFIRMED BY MEP (TYP.)	-



LEGEND:

- ONSITE PERMEABLE PAVEMENT SURFACE
- CONCRETE ROADWAY
- CONCRETE WALKWAY
- LANDSCAPE
- TREE PROTECTION FENCING

BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, AND ALL OTHER EXISTING FEATURES AND CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN AND/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

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FRONTAGE PLAN

SCALE: 1" = 10'

23RD AVE W

SDCI PROJECT # 012598-18PA

DATE	MARK	REVISIONS	MADE BY	CHK'D

DAVIDO CONSULTING GROUP, INC.
9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
206.523.0024

REVIEWED BY SPU/WATER ENGINEERING ..... 20.....
REVIEWED BY SPU/DRAINAGE ..... 20.....
APPROVED BY SDOT STREET IMPROVEMENT PERMITTING ..... 20.....

NAME OR INITIALS AND DATE	INITIALS AND DATE
DESIGNED	REVIEWED
CHECKED	PROJECT MANAGER
DRAWN	
CHECKED	REVIEWED AS-BUILT
DESIGN REVIEW	

City of Seattle
Seattle Department of Transportation

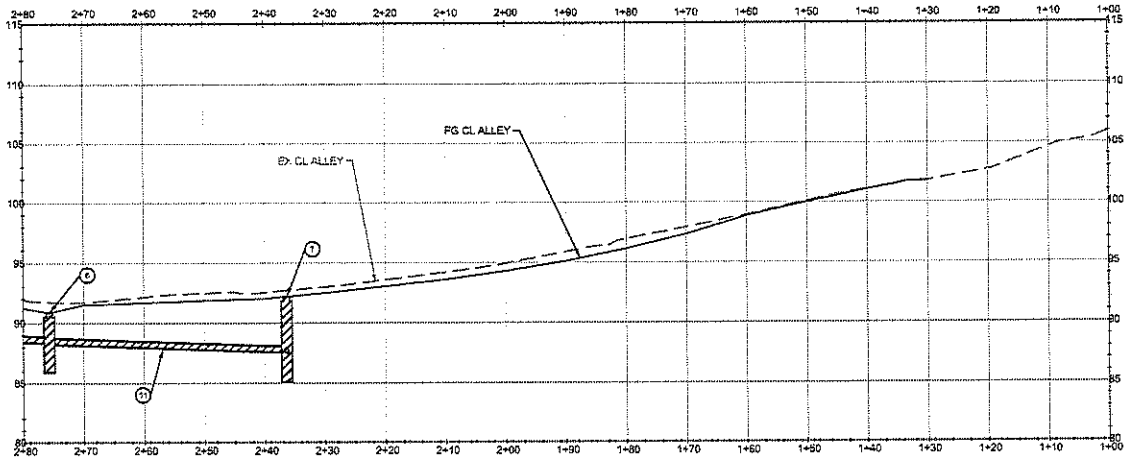
SCALE: H. 1"=10' V. INSPECTOR'S BOOK

23RD AVE W
CURB, CW, LANDSCAPE, PAVING, ETC.
FRONTAGE PLAN

SDOT PROJECT NO. 398337
VAULT PLAN NO.
VAULT SERIAL NO.
SHEET 2 OF 5

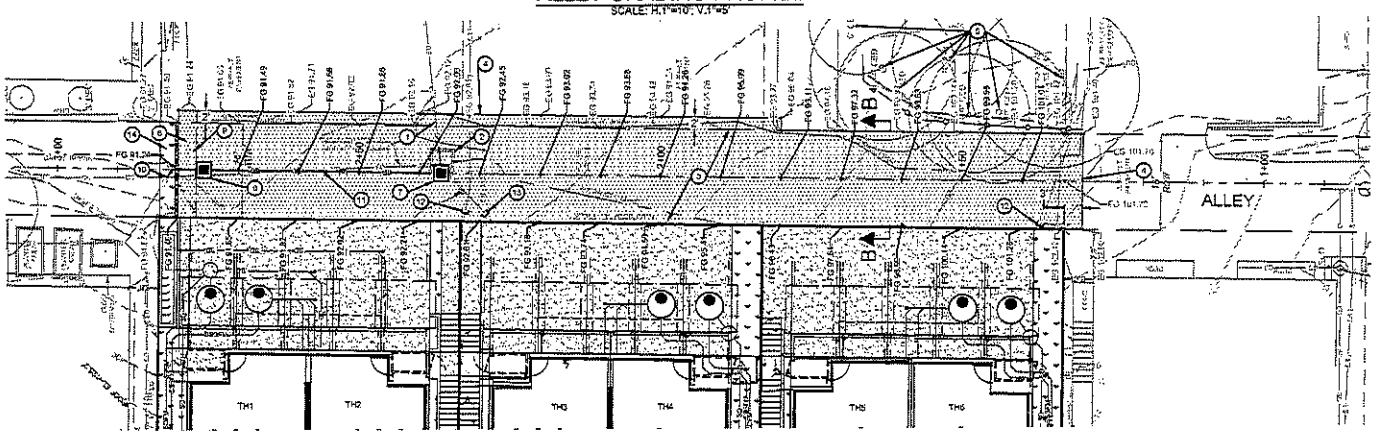
KEY NOTES

SYM	NOTE	DETAIL/ SHEET
1	EX CB OUTLET PIPE TO BE REUSED (UNDER SEPARATE PERMIT) WELL AS EVALUATION AND CERTIFICATION SIGNED BY PROFESSIONAL ENGINEER PRIOR TO CONNECTION AND REUSE.	-
2	EXISTING CB TO BE REMOVED AND REPLACED WITH 241A CB ALONG CL OF ALLEY. CB OUTLET PIPE TO TIE-INTO EX SD PIPE. RIM: 92.30 ±	-
3	NEW ALLEY PAVEMENT. SURFACING: 2" HMA CLASS 1/2" BASE: 5" HMA CLASS 1" SUBBASE: 6" COMPACTED CRUSHED ROCK OR COMPACTED SUBGRADE	-
4	SAWCUT EX ASPHALT AND TIE-IN NEW ASPHALT PAVEMENT TO MATCH EX GRADE.	-
5	EX TREES TO BE PROTECTED	-
6	NEW 241A CB RIM 90.80 ± 6" IE (E4) MATCH EX IE 6" IE (E6) 88.20	-
7	NEW 241A CB RIM 92.16 ± 6" IE (N) 87.54 6" (?) IE (E) 87.44	-
8	GRADE LOCALLY TO DIRECT ALL ALLEY DRAINAGE TO CB	-
9	ASPHALT THICKENED EDGE	C/C04
10	ALL EX INLET PIPES TO BE RE-CONNECTED TO NEW CB AT EX IE	-
11	30 LF 6" SD @ 2.00% SLOPE WITH 2' MIN COVER	-
12	EX SSS TO BE CAPPED AND ABANDONDED	-
13	EX SD TO BE REMOVED BACK TO EX CB	-
14	GRADE FROM END TO ALLEY PAVEMENT TO MEET EX GRADE AT PL EXTENSION. GRASS TO BE RE-ESTABLISHED.	-



ALLEY GRADING PROFILE

SCALE: H.1"=10'; V.1"=5'



ALLEY GRADING PLAN

SCALE: 1" = 10'

N

10 5 0 10 20

SCALE IN FEET

LEGEND:

- PERMEABLE PAVEMENT SURFACE
- ASPHALT
- GRAVEL
- CONCRETE WALKWAY
- LANDSCAPE
- TREE PROTECTION FENCING

BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS. DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, AND ALL OTHER EXISTING FEATURED AND CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN AND/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

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23RD AVE W

SDCI PROJECT # 012598-15PA

DATE | WORK | NATURE REVISIONS | REV.

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9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
206.523.0024

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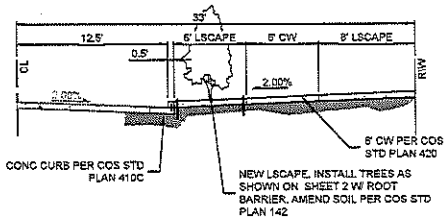
NAME OR INITIALS AND DATE | INITIALS AND DATE
DESIGNED / CHECKED / DRAWN / CHECKED / DESIGN REVIEW / REVIEWER / PROJECT MANAGER / REVISED AS-BUILT

City of Seattle
Seattle Department of Transportation

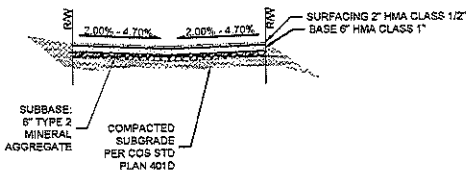
SCALE: H. 1"=10' V. 1"=5' INSPECTOR'S BOOK

23RD AVE W
CURB, CW, LANDSCAPE, PAVING, ETC.
ALLEY GRADING PLAN & PROFILE

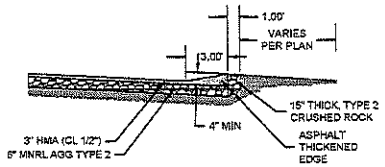
SDOT PROJECT NO. 398537
VAULT PLAN NO.
VAULT SIGNAL NO.
SHEET 3 OF 5



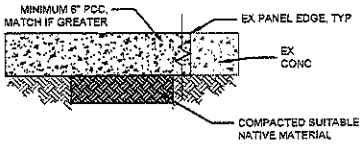
TYPICAL ROAD CROSS SECTION - 23RD AVE W (A/2)
PER STD PLAN 401A
NTS



TYPICAL ROAD CROSS SECTION - ALLEY (B/3)
NTS



ASPHALT THICKENED EDGE (C/3)
NTS



PAVEMENT RESTORATION DETAIL - 23RD AVE W (D/2)
NTS

LEGEND:

- CONCRETE ROADWAY
- ASPHALT
- GRAVEL
- CONCRETE WALKWAY
- LANDSCAPE

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DATE	MARK	NATURE	REVISIONS	MADE BY	REVD

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9706 4TH AVE NE, SUITE 300
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206.523.0024

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NAME OR INITIALS AND DATE	INITIALS AND DATE
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CHECKED	PROJECT MANAGER
DRAWN	ISSUED AS-BUILT
CHECKED	
DESIGN REVIEW	

City of Seattle
Seattle Department of Transportation

SCALE H. V. SUPERVISOR'S BOOK

23RD AVE W

SDCI PROJECT # 012598-18PA

23RD AVE W
CURB, CW, LANDSCAPE, PAVING, ETC.
DETAILS

SDOT PROJECT NO. 398337
VAULT PLAN NO.
VAULT SERIAL NO.
SHEET 4 OF 5

LEGAL DESCRIPTION:

LOTS 8, 9 AND 10, BLOCK 11 GILMAN'S ADDITION TO THE CITY OF SEATTLE, ACCORDING TO THE PLAT RECORDED IN VOLUME 5 OF PLATS, PAGE 93, IN KING COUNTY, WASHINGTON.

DATUM & BENCHMARK:

MONUMENT #1
OWNER: CITY OF SEATTLE
ID: N/A
DESCRIPTION: BRASS PIN, DOWN -0.2'
LOCATION: INTX OF W RUFFNER ST & 23RD AVE W
N:241744.930
E:1257783.878

MONUMENT #2
OWNER: CITY OF SEATTLE
ID: N/A
DESCRIPTION: BRASS PIN, DOWN -1.1'
LOCATION: INTX OF 23RD AVE W & W BERTONA ST
N:241076.661
E:1257752.032

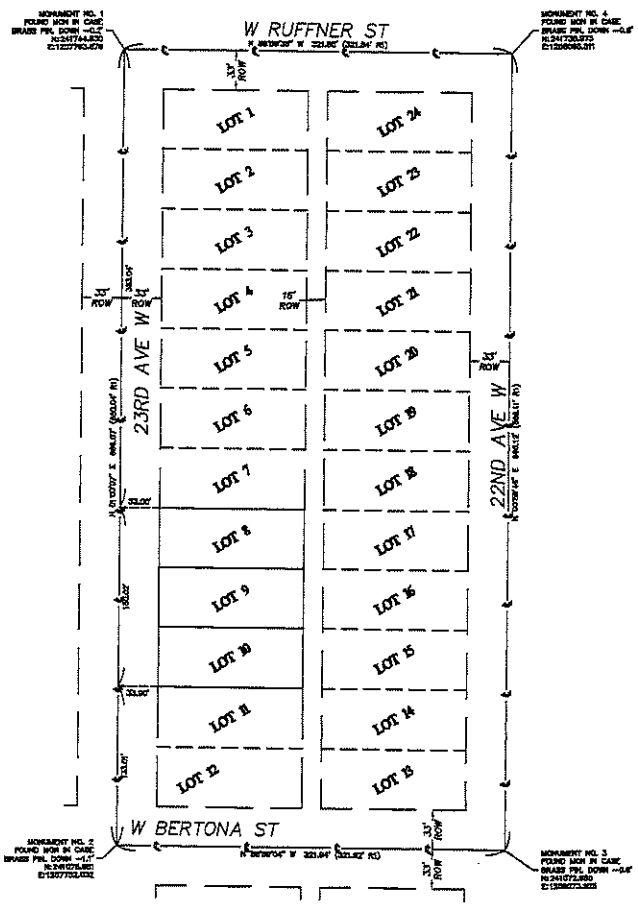
MONUMENT #3
OWNER: CITY OF SEATTLE
ID: N/A
DESCRIPTION: BRASS PIN, DOWN -0.6'
LOCATION: INTX OF W BERTONA ST & 22ND AVE W
N:241072.955
E:1256073.925

MONUMENT #4
OWNER: CITY OF SEATTLE
ID: N/A
DESCRIPTION: BRASS PIN, DOWN -0.8'
LOCATION: INTX OF W RUFFNER ST & 22ND AVE W
N:241738.973
E:1256088.511

VERTICAL BENCHMARK #1
SOURCE: CITY OF SEATTLE
ID: SNV-5159
DESCRIPTION: BRASS CAP
LOCATION: 0.8FT S OF THE INT. BK CW IN THE NW COR INT GILMAN AVE W AND W RUFFNER ST.
ELEVATION: 94.320'

VERTICAL BENCHMARK #2
SOURCE: CITY OF SEATTLE
ID: N/A
DESCRIPTION: SITE TBM, RR SPIKE IN PP
LOCATION: SW COR OF SITE
ELEVATION: 102.794'

VERTICAL BENCHMARK #3
SOURCE: TERRANE OBSERVATION
ID: N/A
DESCRIPTION: PUNCHED "X" S SIDE OF MANHOLE LID
LOCATION: CENTER OF ALLEY ON NORTH SIDE OF W RUFFNER ST
ELEVATION: 79.92'



CONTROL MAP
SCALE: 1" = 50'

SURVEYOR'S NOTES

1. THE TOPOGRAPHIC SURVEY SHOWN HEREON WAS PERFORMED IN JUNE OF 2018 AND JANUARY OF 2019. THE FIELD DATA WAS COLLECTED AND RECORDED ON MAGNETIC MEDIA THROUGH AN ELECTRONIC THEODOLITE. THE DATA FILE IS ARCHIVED ON DISC OR CD. WRITTEN FIELD NOTES MAY NOT EXIST. CONTOURS ARE SHOWN FOR CONVENIENCE ONLY. DESIGN SHOULD RELY ON SPOT ELEVATIONS.
2. ALL MONUMENTS SHOWN HEREON WERE LOCATED DURING THE COURSE OF THIS SURVEY UNLESS OTHERWISE NOTED.
3. BURIED UTILITIES SHOWN BASED ON RECORDS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE IN THE FIELD. TERRANE ASSUMES NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS OR ACCEPT RESPONSIBILITY FOR UNDERGROUND LINES WHICH ARE NOT MADE PUBLIC RECORD. FOR THE FINAL LOCATION OF EXISTING UTILITIES IN AREAS CRITICAL TO DESIGN CONTACT THE UTILITY OWNER/AGENCY. AS ALWAYS, CALL 1-800-424-5555 BEFORE CONSTRUCTION.
4. SUBJECT PROPERTY TAX PARCEL NO. 277060-1480, 277060-1475 & 277060-1470
5. SUBJECT PROPERTY AREA PER THIS SURVEY IS 17,997± S.F. (0.41± ACRES)
6. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.
7. FIELD DATA FOR THIS SURVEY WAS OBTAINED BY DIRECT FIELD MEASUREMENTS WITH A CALIBRATED ELECTRONIC 5-SECOND TOTAL STATION AND/OR SURVEY GRADE GPS OBSERVATIONS. ALL ANGULAR AND LINEAR RELATIONSHIPS ARE ACCURATE AND MEET THE STANDARDS SET BY WAC 332-130-090.

BASE MAP/TOPOGRAPHY PROVIDED BY OTHERS, DCG CANNOT BE HELD LIABLE FOR ACCURACY. CONTRACTOR SHALL FIELD VERIFY GRADES, UTILITIES, AND ALL OTHER EXISTING FEATURES AND CONDITIONS. IF CONDITIONS ARE NOT AS SHOWN AND/OR PLANS CANNOT BE CONSTRUCTED AS SHOWN, CONTACT DCG PRIOR TO CONSTRUCTION.

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2 BUSINESS DAYS
BEFORE YOU DIG
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SURVEY CONTROL DIAGRAM

NTS

23RD AVE W

SDCI PROJECT # 012598-18PA

DATE	MARK	NATURE	REVISIONS

PRELIMINARY

DCG civil structural

DAVIDO CONSULTING GROUP, INC.
9706 4TH AVE NE, SUITE 300
SEATTLE, WA 98115
206.523.0024

REVIEWED BY SPU/WATER ENGINEERING ..... 20....
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NAME OR INITIALS AND DATE	INITIALS AND DATE
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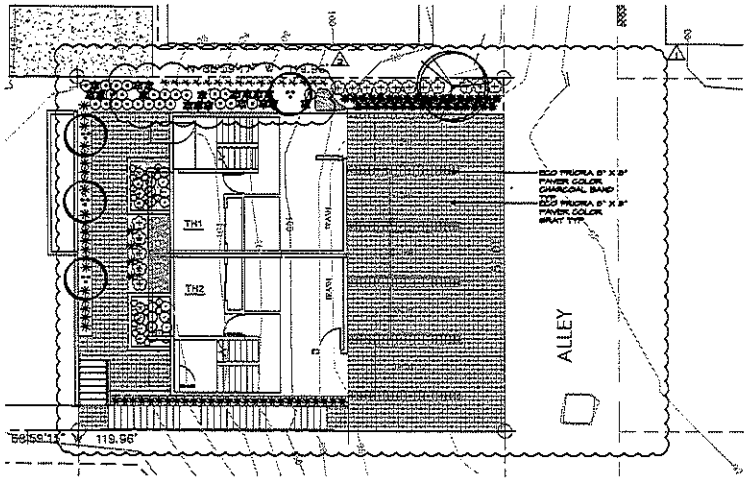
CHECKED	PROJECT MANAGER
DRAWN	REVIEWED AS-BUILT
CHECKED	
DESIGN REVIEW	

City of Seattle
Seattle Department of Transportation

SCALE: H. V. SHEETCOUNTER BOOK

23RD AVE W
CURB, CW, LANDSCAPE, PAVING, ETC.
SURVEY CONTROL DIAGRAM

SDOT PROJECT NO. 398337
VAULT PLAN NO.
VAULT SHEET NO.
SHEET 5 OF 5



LANDSCAPE PLAN

PLANT SCHEDULE *

TREES	BOTANICAL / COMMON NAME	SIZE	DROUGHT TOLERANT	NATIVE	QTY
	Acer circinatum / Vine Maple	5 stem min. 6' ht.	Yes	Yes	4
	Acer nitrum 'Bonhall' / Bonhall Maple	1.5"Cal	No	No	1

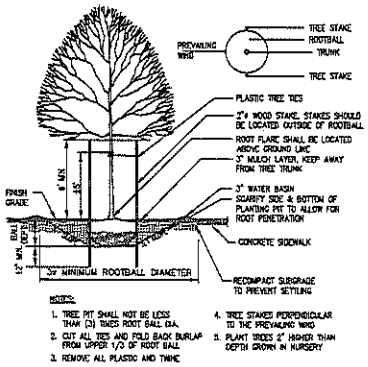
SHRUBS	BOTANICAL / COMMON NAME	SIZE	DROUGHT TOLERANT	NATIVE	QTY
	Acorus gramineus 'Ogon' / Golden Variegated Sweetflag	1 gal	Yes	No	25
	Blechnum spicant / Deer Fern	1 gal	Yes	Yes	16
	Carex oshimensis 'Everillo' / Everillo Japanese Sedge	1 gal	Yes	No	27
	Epimedium x rubrum / Red Barrenwort	1 gal	Yes	No	24
	Liriope muscari 'Big Blue' / Big Blue Lilyturf	1 gal	Yes	No	34
	Nandina domestica 'Gulf Stream' TM / Heavenly Bamboo	2 gal	Yes	No	16
	Polystichum munitum / Western Sword Fern	1 gal	Yes	Yes	16

BIORETENTION	BOTANICAL / COMMON NAME	SIZE	DROUGHT TOLERANT	NATIVE	QTY
	Acorus gramineus 'Ogon' / Golden Variegated Sweetflag	1 gal	Yes	No	6
	Carex stipata / Slough Sedge	1 gal	Yes	Yes	15
	Cornus sericea 'Kelseyi' / Kelseyi Dogwood	1 gal	Yes	Yes	15

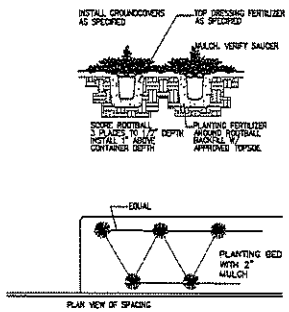
GROUND COVERS	BOTANICAL / COMMON NAME	SIZE	DROUGHT TOLERANT	NATIVE	SPACING	QTY
	Vinca minor 'Bowles Blue' / Dwarf Periwinkle	4"pot	Yes	No	24" o.c.	3

MULCH	BOTANICAL / COMMON NAME	SIZE	DROUGHT TOLERANT	NATIVE	SPACING	QTY
	1/2" Drain Rock	N/A				34 s.f

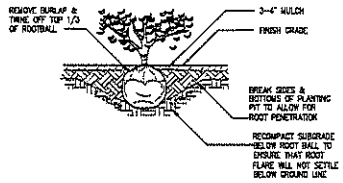
NOTES:
-See soil amendment detail for soil specifications COS plan 142.
-See bioretention planter detail for bioretention specifications.
-All planting beds to receive minimum 3-4" of mulch.
-Contractor shall be responsible for providing the quantities of plants that are represented by symbols on the drawings.
-Street Tree required. Plant Street Tree per COS Plan 100a. Water Tree for 3 growing seasons after planting.
-For all Vegetated Walls, train vines to adjacent green wall facade. Do not allow vines to grow on siding of buildings. Annual maintenance may be necessary as vines mature and spread.
-All plantings and landscape elements required as part of this building permit must be maintained for the minimum required planting area or Green Factor score, new features must be added to compensate. This requirement also applies to landscape improvements in the right-of-way if used to meet Green Factor requirements (DR 30-2015).



1 TYPICAL DECIDUOUS TREE PLANTING DETAIL
NTS



2 TYPICAL GROUNDCOVER PLANTING DETAIL
NTS



3 TYPICAL SHRUB PLANTING DETAIL
NTS

Root of Design
206.441.4343
7104 26th St NW #216
Stanwood, WA 98292

PROJECT TITLE

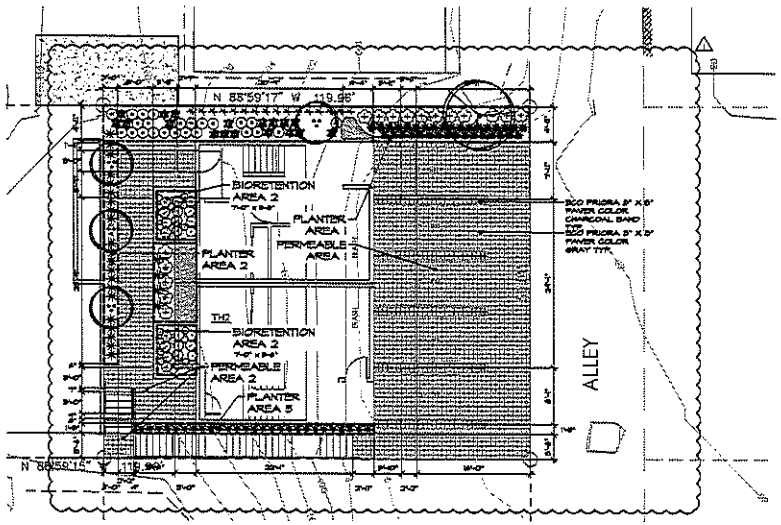
LANDSCAPE PLAN

3300 - 3RD AVE W SEATTLE, WA

DRAWN EK	DATE 10.10.18
REVISED BLK/NH	DATE 04.10.19
DP	08.19.19

1/8" = 1'-0"

L1



NORTH

GREEN FACTOR PLAN

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

Green Factor Score Sheet

SEATTLE green factor

Project title:

Number area (enter this value first): 3 bath

Landscape Elements*	Square feet or quantity	Factor	Total
A. Landscaped areas (total) area at the following for each area:			
1 Landscaped areas with a soil depth of less than 24"	square feet 0	0.1	-
2 Landscaped areas with a soil depth of 24" or greater	square feet 473	0.6	283.8
3 Bioretention facilities	square feet 113	1.0	113.0
B. Plantings (credit for plants in landscaped areas from Section A)			
1 Mulch, grass and groundcover, or other plants less than 2' tall at maturity	square feet 88	0.1	8.8
2 Shrubs at approximately 2'+ at maturity - calculated at 12' sq ft per plant (typically planted no closer than 18" on center)	number of shrubs 22 2644	0.3	793.2
3 Tree canopy for "small trees" or equivalent (canopy spread 8' to 15') - calculated at 75 sq ft per tree	number of trees 3 225	0.3	67.5
4 Tree canopy for "medium/medium trees" or equivalent (canopy spread 15' to 25') - calculated at 153 sq ft per tree	number of trees 0 0	0.3	-
5 Tree canopy for "medium/large trees" or equivalent (canopy spread of 21' to 35') - calculated at 330 sq ft per tree	number of trees 0 0	0.4	-
6 Tree canopy for "large trees" or equivalent (canopy spread of 26' to 35') - calculated at 530 sq ft per tree	number of trees 0 0	0.4	-
7 Tree canopy for preservation of large existing trees with trunks 6"+ in diameter - calculated at 20 sq ft per inch diameter	number of trees 0 0	0.3	-
C. Green walls			
1 Over at least 2" and less than 4" of growth medium	square feet 0	0.4	-
2 Over at least 4" of growth medium	square feet 0	0.7	-
D. Vegetated walls	square feet 0	0.7	-
E. Approved water features	square feet 0	0.7	-
F. Permeable paving			
1 Permeable paving over at least 6" and less than 24" of soil or gravel	square feet 0	0.2	-
2 Permeable paving over at least 24" of soil or gravel	square feet 1424	0.3	427.2
G. Stormwater reuse systems	square feet 0	0.7	-
H. Bonuses	subtotal of A-G =	2,377	
1 Drought-tolerant or native plant species	square feet 2,247	0.1	224.7
2 Landscaping where at least 50% of ground-supplied water are met through the use of harvested rainwater	square feet 0	0.2	-
3 Landscaping within 10 perimeter from adjacent (within right of way or public open space)	square feet 575	0.1	58
4 Landscaping in food cultivation	square feet 0	0.1	-
		Urban Forest subscore**	2,441

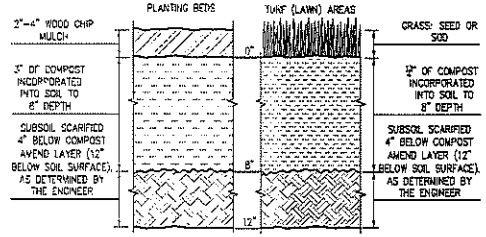
* Do not count plants right-of-way or public open space.

** This four point landscape improvement in rights-of-way contiguous with the parcel. All landscaping on private and public property must comply with the Landscape Standards Director's Rule (DR 5-2009).

Green Factor Worksheet

SEATTLE green factor

		Planting Area 1	2	3	TOTAL**
A1	square feet				0
A2	square feet	100	326	48	473
A3	square feet	37	76		113
B1	square feet	146	706	40	886
B2	# of plants	62	140	25	227
B3	# of trees	1	4		5
B4	# of trees				0
B5	# of trees				0
B6	# of trees				0
B7	# of trees				0
C1	square feet				0
C2	square feet				0
D	square feet				0
E	square feet				0
F1	square feet				0
F2	square feet	732	942		1674
G	square feet				0
H1	square feet	828	1178	324	2340
H2	square feet				0
H3	square feet	879			879
H4	square feet				0



NOTES:

1. ALL SOIL AREAS DISTURBED OR COMPACTED DURING CONSTRUCTION, AND NOT COVERED BY BUILDINGS OR PAVEMENT, SHALL BE AMENDED WITH COMPOST AS DESCRIBED BELOW.
2. SUBSOIL SHOULD BE SCARIFIED (LOOSENED) 4 INCHES BELOW AMENDED LAYER, TO PRODUCE 12-INCH DEPTH OF UN-COMPACTED SOIL, EXCEPT WHERE SCARIFICATION WOULD DAMAGE TREE ROOTS OR AS DETERMINED BY THE ENGINEER.
3. COMPOST SHALL BE TILLED IN TO 8 INCH DEPTH INTO EXISTING SOIL, OR PLACE 8 INCHES OF COMPOST-AMENDED SOIL, PER SOIL SPECIFICATION.
4. TURF AREAS SHALL RECEIVE 1.75 INCHES OF COMPOST TILLED IN TO 8-IN DEPTH, OR MAY SUBSTITUTE 8" OF IMPORTED SOIL CONTAINING 20-25% COMPOST BY VOLUME. THEN PLANT GRASS SEED OR SOD PER SPECIFICATION.
5. PLANTING BEDS SHALL RECEIVE 3 INCHES OF COMPOST TILLED INTO 8-INCH DEPTH, OR MAY SUBSTITUTE 8" OF IMPORTED SOIL CONTAINING 35-40% COMPOST BY VOLUME. MULCH AFTER PLANTING WITH 2-4 INCHES OF ARBORIST WOOD CHIP OR APPROVED EQUAL.
6. SETBACKS, TO PREVENT UNEVEN SETTLING, DO NOT COMPOST-AMEND SOILS WITHIN 3 FEET OF UTILITY INFRASTRUCTURES (POLES, VAULTS, METERS, ETC.). WITHIN ONE FOOT OF PAVEMENT EDGE, CURBS AND SIDEWALKS SHOULD BE COMPACTED TO APPROXIMATELY 90% PROCTOR TO ENSURE A FIRM SURFACE.

1 SOIL AMENDMENT AND DEPTH

NTS

STANDARD PLAN NO 142, CITY OF SEATTLE

Root of Design
206.441.9949
1104 26th St NW #2B
Ravenwood, WA 98342

PROJECT TITLE

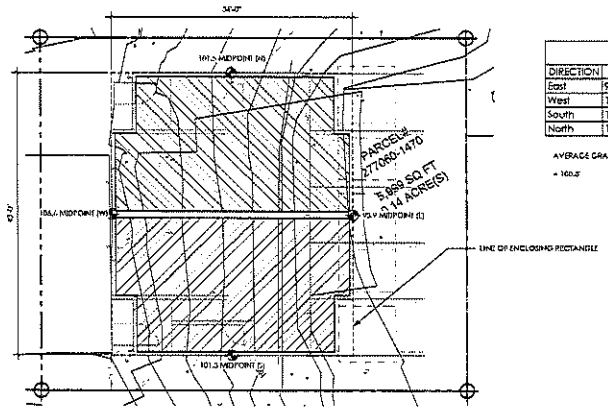
LANDSCAPE REQUIREMENTS SUMMARY PLAN

6320 23RD AVE W SEATTLE, WA

DRAWN	DATE
EK	10.10.18
REVISED	DATE
ELK/NH	04.10.19
DP	08.13.19

1/8" = 1'-0"

L2



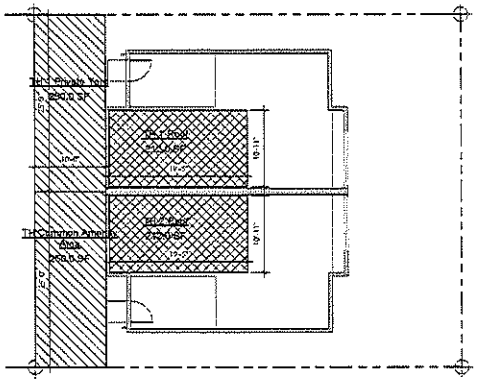
Lot B AGP Calc			
DIRECTION	AGP ELEVATION	AGP BUILDING LENGTH	PRODUCT
East	93.90	40.00	3756.00 SF
West	106.60	40.00	4264.00 SF
South	101.30	34.00	3444.20 SF
North	101.50	34.00	3451.00 SF
		148.00	14915.20 SF

AVERAGE GRADE = 14915.20/ 148.00

= 100.8'

1 HEIGHT CALCULATION PLAN

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

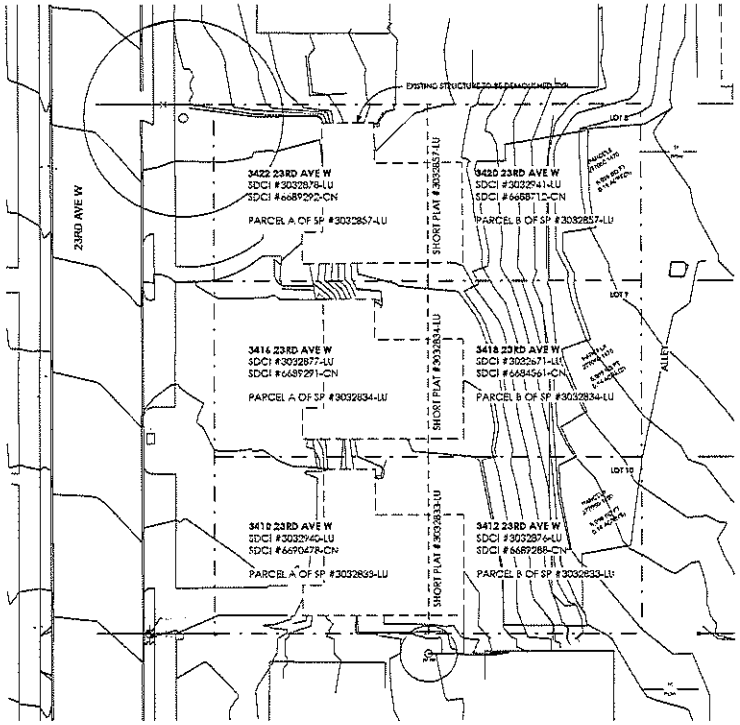


LOT B REQUIRED AMENITY		
[illegible]	[illegible]	[illegible]

Amenity Area Summary-TH	
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

2 AMENITY AREA DIAGRAM

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



3 COMPREHENSIVE SITE PLAN

SCALE: 1/16" = 1'-0"

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MUP # 3032941-LU

No.	Date	Description
	10.12.2018	MUP SUBMITTAL
	11.29.2018	RFI SUBMITTAL
1	05.29.2019	MUP CORRECTIONS 1

HEIGHT CALC & AMENITY AREA

Scale: As indicated

Date: 10/16/2018

A-1.1

Project Number: JWA#495

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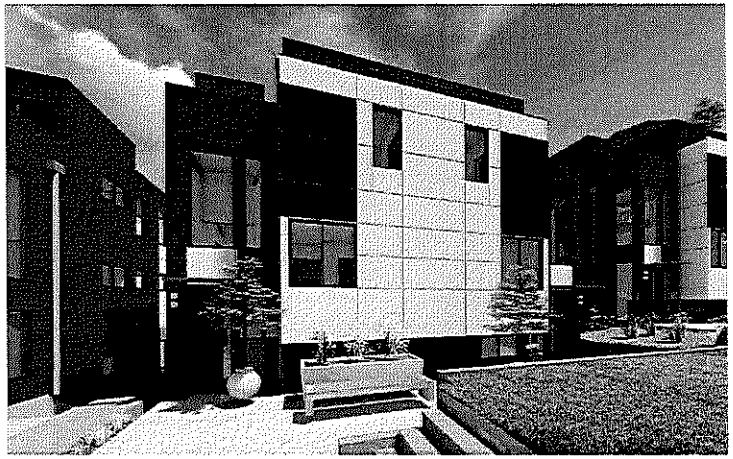

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MUP # 3022941-LU

No.	Date	Description
	10.16.2018	MUP SUBMITTAL
	11.16.2018	RFI SUBMITTAL

RENDERINGS

Scale

Date 10/16/2018

A-1.2

Project Number JWA0493

8/15/2019 5:55:55 PM

GROSS FLOOR AREA MEASURED TO THE INTERIOR FACE OF SUPPORTING STRUCTURAL MEMBERS. NOMINAL DIMENSIONS OF STRUCTURAL MEMBERS ARE UNDERSTOOD TO INCLUDE UP TO 1/2" OF GYPSUM BOARD IN MOST CASES.

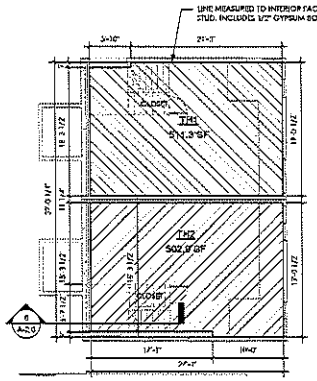
FLOOR AREA RATIO (FAR) TABLE LOT B

FLOOR AREA LABEL	Category	GROSS FLOOR AREA	CHARGEABLE FLOOR AREA	CODE REFERENCE (EXEMPT FAR)
TH1	Level 1	511.3 SF	511.3 SF	
TH1	Level 2	587.4 SF	587.4 SF	
TH1	Level 3	546.9 SF	546.9 SF	
TH2	Level 1	502.9 SF	502.9 SF	
TH2	Level 2	587.3 SF	587.3 SF	
TH2	Level 3	542.7 SF	542.7 SF	
TOTAL		3,278.5 SF	3,278.5 SF	

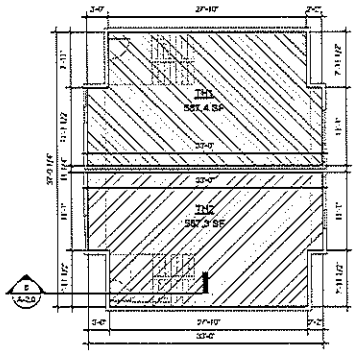
FAR AREA SUMMARY (ALLOWED) LOT B

LOT AREA	FAR ALLOWED (LOT SIZE X 1.1)	FAR PROPOSED
2,999.0 SF	3,298.9 SF	3,278.5 SF

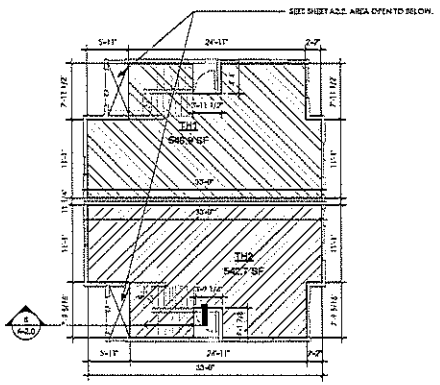
LOT AREA 2	CHARGEABLE AREA	PROPOSED FAR
2,999.0 SF	3,278.5 SF	1.09:1.0



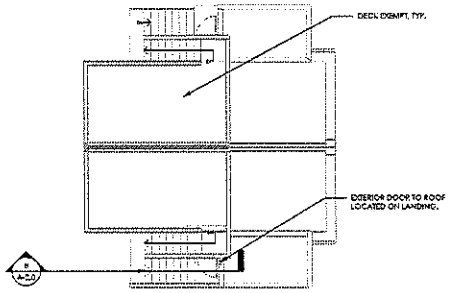
1 LOT B Level 1
SCALE: 1/8" = 1'-0"



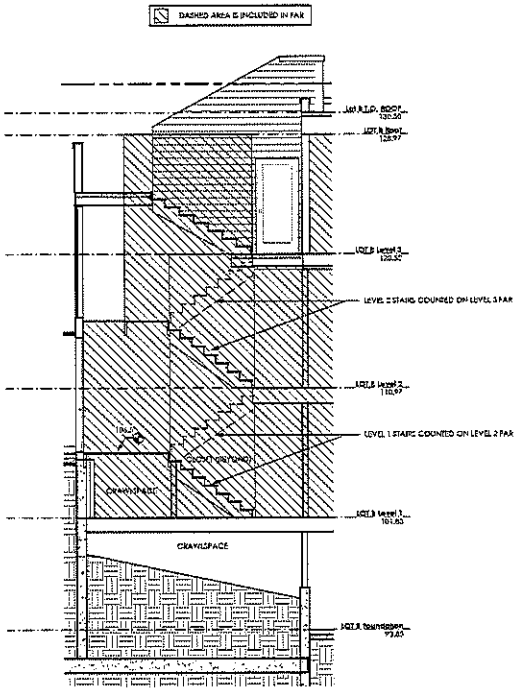
2 LOT B Level 2
SCALE: 1/8" = 1'-0"



3 LOT B Level 3
SCALE: 1/8" = 1'-0"



4 LOT B Roof
SCALE: 1/8" = 1'-0"



6 SECTION STUDY N-S - FAR
SCALE: 1/4" = 1'-0"

N

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MUP # 3035941-LU

No.	Date	Description
	10.12.2018	MUP SUBMITTAL
	11.27.2018	MP SUBMITTAL
3	08.15.2019	MUP CORRECTIONS 1

FAR DIAGRAMS

Scale: As indicated
Date: 10/16/2018

A-2.0

Project Number: JWA4493

01/15/2019 5:33:39 PM

CRAWLSPACE VENTILATION - TH1

WHOLE HOUSE VENTILATION TO CONFORM TO SMC 403.5

CRAWLSPACE AREA: 14'-3" x 16'-10" = 309.81 SF
VENTILATION REQUIRED: (309.81 SF / 300) X 144 SIN/SF = 148.70 SI

16" X 18" CRAWLSPACE VENT: 129 SI EA. - 25% REDUCTION = 96.5 SI each
TOTAL VENTILATION REQUIRED: 148.70 SI / 96 SI = 1.54 VENTS

PROVIDE: (2) 16" X 18" CRAWLSPACE VENTS

REQUIRED OPENINGS SHALL BE EVENLY SPACED TO PROVIDE CROSS VENTILATION OF THE SPACE EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS.

POWERED VENTILATION REQUIRES MINIMUM 1 CFM PER 50 SF OF CRAWLSPACE.

CFM REQUIRED: (309.81 SF / 50 SF) = 6.19 CFM MINIMUM

PROVIDE: 10 CFM POWERED CRAWLSPACE FANS

CRAWLSPACE VENTILATION - TH2

WHOLE HOUSE VENTILATION TO CONFORM TO SMC 403.5

CRAWLSPACE AREA: 14'-3" x 16'-10" = 309.81 SF
VENTILATION REQUIRED: (309.81 SF / 300) X 144 SI/SF = 148.70 SI

16" X 18" CRAWLSPACE VENT: 129 SI EA. - 25% REDUCTION = 96.5 SI each
TOTAL VENTILATION REQUIRED: 148.70 SI / 96 SI = 1.54 VENTS

PROVIDE: (2) 16" X 18" CRAWLSPACE VENTS

REQUIRED OPENINGS SHALL BE EVENLY SPACED TO PROVIDE CROSS VENTILATION OF THE SPACE EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS.

POWERED VENTILATION REQUIRES MINIMUM 1 CFM PER 50 SF OF CRAWLSPACE.

CFM REQUIRED: (309.81 SF / 50 SF) = 6.19 CFM MINIMUM

PROVIDE: 10 CFM POWERED CRAWLSPACE FANS

FLOOR PLAN NOTES:

* ALL INTERIOR WALLS TO BE 2x4 @ 24" O.C. (U.N.O.)
* ALL EXTERIOR WALLS 2x6 PER STRUCTURAL
* HEADERS PER STRUCTURAL
* WINDOW SIZES ARE NOMINAL ROUGH OPENING WIDTH AND HEIGHT
* ALL EGRESS WINDOWS SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CLEAR OPENING.
* PROVIDE INTERCONNECTED HARDWIRED SMOKE DETECTORS
* PROVIDE SOLID BLOCKING OVER SUPPORTS.
* IN SEISMIC ZONES D0, D1 & D2, WATER HEATERS SHALL BE ANCHORED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINT WITHIN THE UPPER ONE-THIRD AND LOWER ONE-THIRD OF ITS VERTICAL DIMENSIONS PER SMC R302.11
* PROVIDE OUTDOOR COMBUSTION AIR FOR FURNACE AND WATER HEATER PER SMC 02.07.a.

Area Summary TH1

Level	Name	Area
LOT B Level 1	TH1	580.7 SF
LOT B Level 2	TH1	642.3 SF
LOT B Level 3	TH1	647.6 SF
		1,870.6 SF

Area Summary TH2

Level	Name	Area
LOT B Level 1	TH2	583.1 SF
LOT B Level 2	TH2	642.3 SF
LOT B Level 3	TH2	644.1 SF
		1,869.6 SF

VENTILATION SCHEDULE

WHOLE HOUSE VENTILATION TO CONFORM TO SMC SECTION 403.4.

- 100 CFM ON SWITCH
- 50 CFM ON SWITCH
- 60 CFM CONTINUOUSLY OPERATING WHOLE HOUSE FAN, SIZED PER TABLE SMC 403.4.1
- 50 CFM ON INTERMITTENT SWITCH, PER SMC TABLE 403.5.1.1
- CRAWLSPACE POWER VENT CONTINUOUSLY OPERATING

MECHANICAL VENTILATING SYSTEMS IN BATHROOMS, LAUNDRY ROOMS, AND SIMILAR ROOMS SHOULD EXHAUST DIRECTLY TO THE OUTSIDE. THE POINT OF DISCHARGE OF EXHAUST AIR SHALL BE AT LEAST THREE FEET FROM ANY OPENING INTO THE BUILDING PER SMC 403.4.2.

CRAWLSPACE POWER VENT CONTINUOUSLY OPERATING

PER SMC 403.4.5.1, OUTDOOR AIR MAY BE DRAWN IN THROUGH OPERABLE OPENINGS TO THE OUTDOORS.

OUTDOOR AIR INTAKE AND EXHAUST OPENINGS SHALL MEET THE REQUIREMENTS OF SMC 403.4.3 AND 403.4.4.2; EACH HABITABLE SPACE TO BE PROVIDED WITH OPERABLE OPENING OF MIN. 4 SQUARE INCHES NET FREE AREA PER 10 CFM OUTDOOR AIR REQUIRED. REFER TO AIR INLET CALCULATION ON GLAZING SCHEDULE, SHEET A4.0.

WHOLE HOUSE EXHAUST FANS SHALL HAVE A SONE RATING OF 1.0 OR LESS WHEN LOCATED 4' OR LESS FROM THE INTERIOR GRILLE PER SMC 403.6.6.3.

SMOKE DETECTORS

SMC R314.3 SMOKE ALARMS

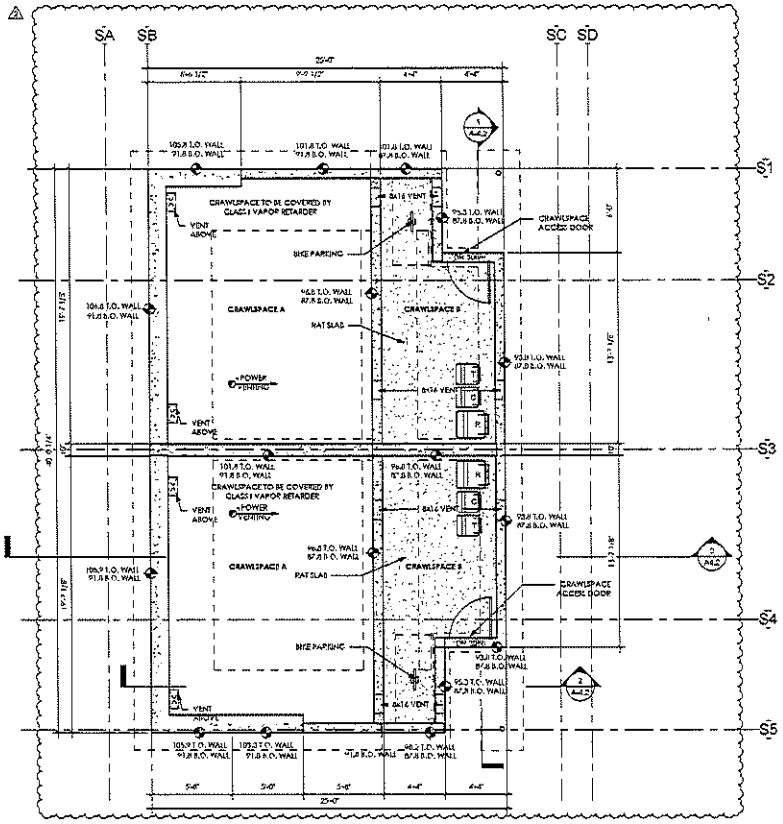
SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS
1. IN EACH SLEEPING ROOM.
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENT, BUT NOT INCLUDING CRAWLSPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER FLOOR SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL, PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

SMOKE DETECTORS TO BE HARDWIRED, INTERCONNECTED, WITH BATTERY BACKUP PER SMC R314.4.

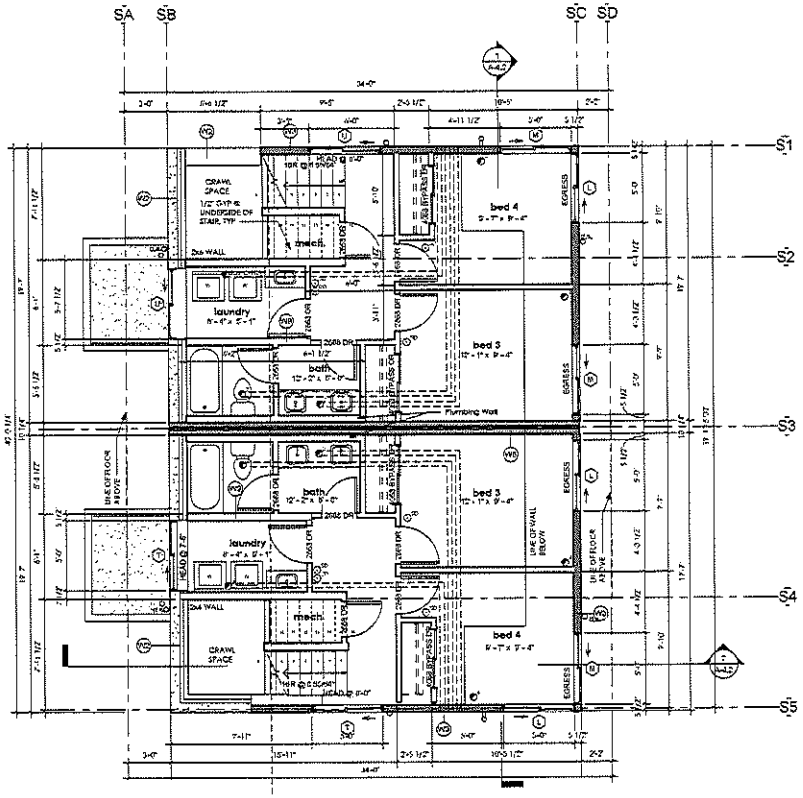
CARBON MONOXIDE DETECTORS

SMC R315.1 CARBON MONOXIDE ALARMS.

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATELY VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING AND IN ACCORDANCE WITH THE MANUFACTURERS' DIRECTIONS.



1 **Foundation Plan**
SCALE: 1/4" = 1'-0"



2 **Level 1**
SCALE: 1/4" = 1'-0"

N

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Seattle, WA 98199

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MUP # 3032941-LU

No.	Date	Description
	10.17.2018	MUP SUBMITTAL
	11.14.2018	MUP SUBMITTAL
1	10.10.2019	MP CORRECTIONS 1

FLOOR PLANS

Scale 1/4" = 1'-0"
Date 10/16/2018

A-2.1

Project number JWA#493

FLOOR PLAN NOTES:

* ALL INTERIOR WALLS TO BE 2x4 @ 16 24" O.C. (U.N.O.)
* ALL EXTERIOR WALLS 2x6 PER STRUCTURAL
* HEADERS PER STRUCTURAL
* WINDOW SIZE ARE NOMINAL ROUGH OPENING WIDTH AND HEIGHT.
* WELL SIZES WINDOWS SHALL HAVE SILL HEIGHT OF NOT MORE THAN 44 INCHES MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CLEAR OPENING. PROVIDE FINISHED STAIRS AT EACH DWELLING UNIT ENTRANCE.
* PROVIDE SOLID BLOCKING OVER SUPPORTS.
* IN SEISMIC ZONES D0, D1 & D2, WATER HEATERS SHALL BE ANCHORED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-THIRD AND LOWER ONE-THIRD OF ITS VERTICAL DIMENSIONS PER SRC R502.11
* PROVIDE OUTDOOR COMBUSTION AIR FOR FURNACE AND WATER HEATER PER SRC G2407.6.

VENTILATION SCHEDULE

WHOLE HOUSE VENTILATION TO CONFORM TO SMC SECTION 403.4.

- 100 CFM ON SWITCH
- 50 CFM ON SWITCH
- 50 CFM CONTINUOUSLY OPERATING WHOLE HOUSE FAN, SIZED PER TABLE SMC 403.4.1
- 50 CFM ON INTERMITTENT SWITCH, PER SMC TABLE 403.5.1.3
- CRAWLSPACE POWER VENT CONTINUOUSLY OPERATING

MECHANICAL VENTILATING SYSTEMS IN BATHROOMS, LAUNDRY ROOMS, AND SIMILAR ROOMS SHOULD EXHAUST DIRECTLY TO THE OUTSIDE. THE POINT OF DISCHARGE OF EXHAUST AIR SHALL BE AT LEAST THREE FEET FROM ANY OPENING INTO THE BUILDING PER SMC 403.4.3.

PER SMC 403.4.6.1, OUTDOOR AIR MAY BE DRAWN IN THROUGH OPERABLE OPENINGS TO THE OUTDOORS.

OUTDOOR AIR INTAKE AND EXHAUST OPENINGS SHALL MEET THE REQUIREMENTS OF SMC 403.4.3 AND 403.4.4.2. EACH HABITABLE SPACE TO BE PROVIDED WITH OPERABLE OPENING OF MIN. 4 SQUARE INCHES NET FREE AREA PER 10 CFM OUTDOOR AIR REQUIRED. REFER TO AIR INLET CALCULATION ON GLAZING SCHEDULE, SHEET A4.0.

WHOLE HOUSE EXHAUST FAN SHALL HAVE A SONE RATING OF 1.0 OR LESS WHEN LOCATED 4' OR LESS FROM THE INTERIOR GRILLE PER SMC 403.5.5.3.

SMOKE DETECTORS

SRC R314.3 SMOKE ALARMS

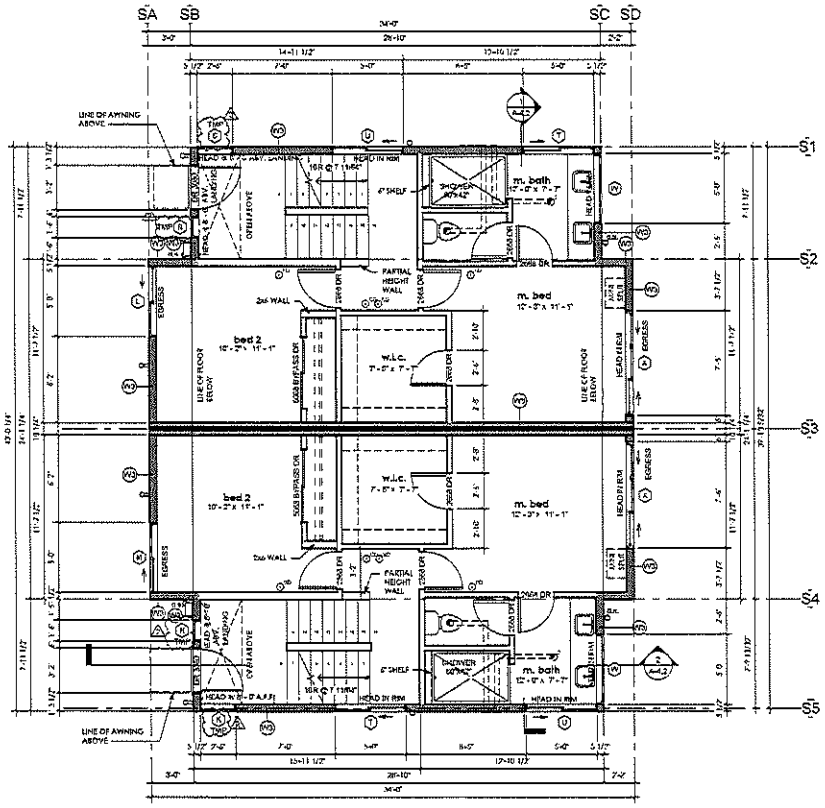
SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS, BUT NOT INCLUDING CRAWLSPACES AND UNINHABITABLE ATTICS. IF DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN ADJACENT LEVELS. A SMOKE ALARM INSTALLED ON THE UPPER FLOOR SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

SMOKE DETECTORS TO BE HARDWIRED, INTERCONNECTED, WITH BATTERY BACKUP PER SRC R314.4.

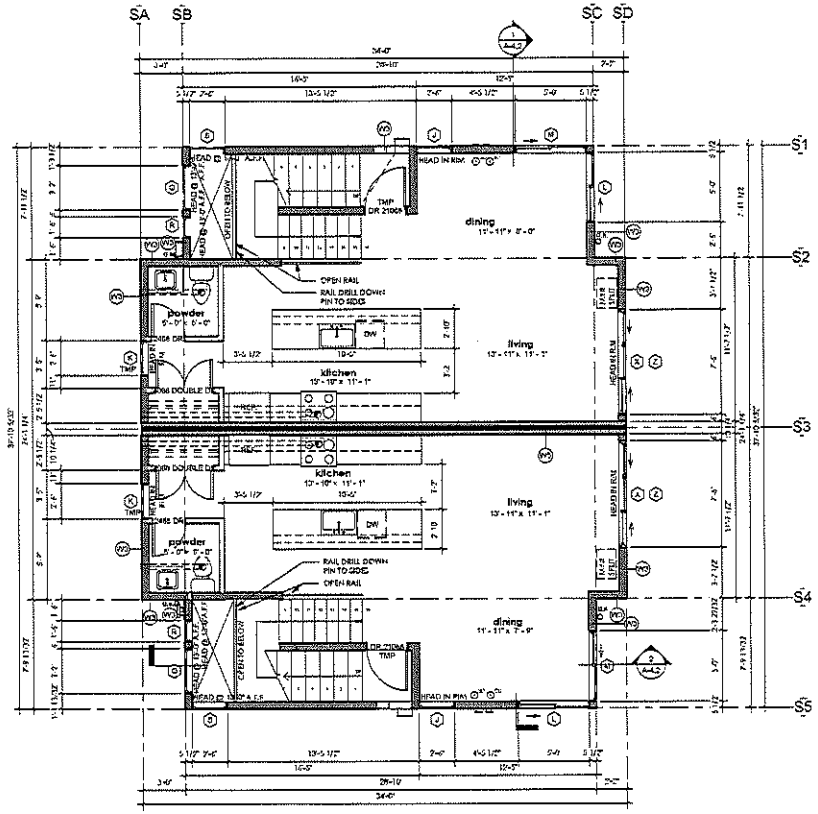
CARBON MONOXIDE DETECTORS

SRC R315.1 CARBON MONOXIDE ALARMS.

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATELY VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING AND IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.



1 **Level 2**
SCALE: 1/4" = 1'-0"



2 **Level 3**
SCALE: 1/4" = 1'-0"

N

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MUP # 3032943-LU

No.	Date	Description
	10.10.2018	MUP SUBMITTAL
	11.07.2018	RP SUBMITTAL
2	05.10.2019	RP C OPER CORRC 1

FLOOR PLANS

Scale 1/4" = 1'-0"
Date 10/16/2018

A-2.2

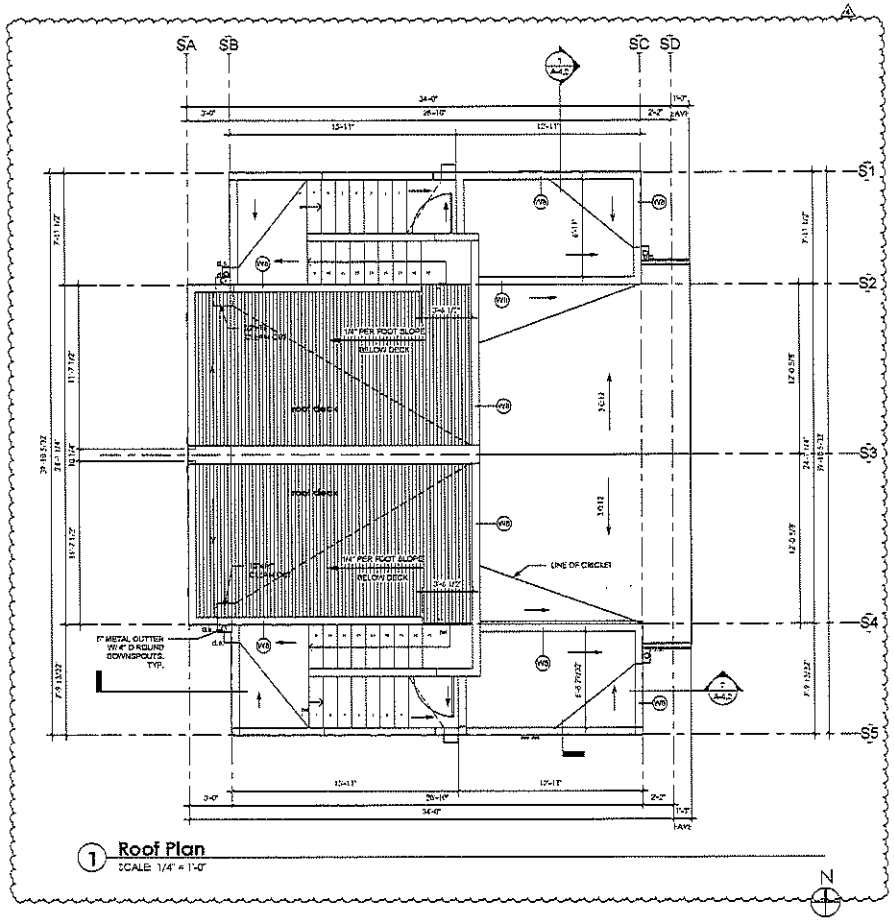
Project Number JWA#475

8/16/2019 5:51:48 PM

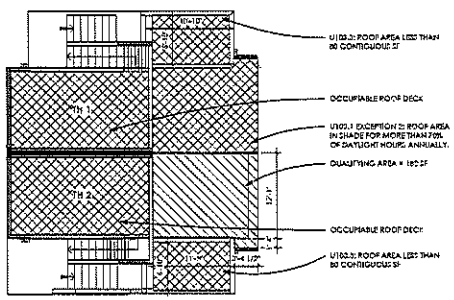
ROOF DECK VENTILATION
UNVENTED ASSEMBLY TO COMPLY WITH SRC R 806.5

PENTHOUSE AREA CALCULATION SUMMARY LOT B	
TOTAL ROOF AREA	ALLOWED AREA PER SMC 23.42.051
1,298.0 SF	192.2 SF

PENTHOUSE AREA LOT B (PROPOSED)	
Name	Area
TH 2	67.0 SF
TH 1	57.0 SF
TOTAL	124.0 SF



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



3 LOT B Solar Ready Diagram
SCALE: 1/8" = 1'-0"

SOLAR READY ZONE:
PER SRC APPENDIX SECTION U101, THE FOLLOWING TOWNHOMES DO NOT REQUIRE SOLAR-READY ZONES BECAUSE THERE IS LESS THAN 500 SF OF QUALIFYING ROOF AREA AND LESS THAN 500 SF PER UNIT. THE QUALIFYING AREAS ARE:
TH #1: 0 SF TH #2: 180 SF

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MUP # 3032941-LU

No.	Date	Description
	10.16.2018	MUP SUBMITTAL
	11.07.2018	RFI SUBMITTAL
2	03.10.2019	RFI CORRECTIONS 1
4	08.JAN.2019	RFI CORRECTIONS 2

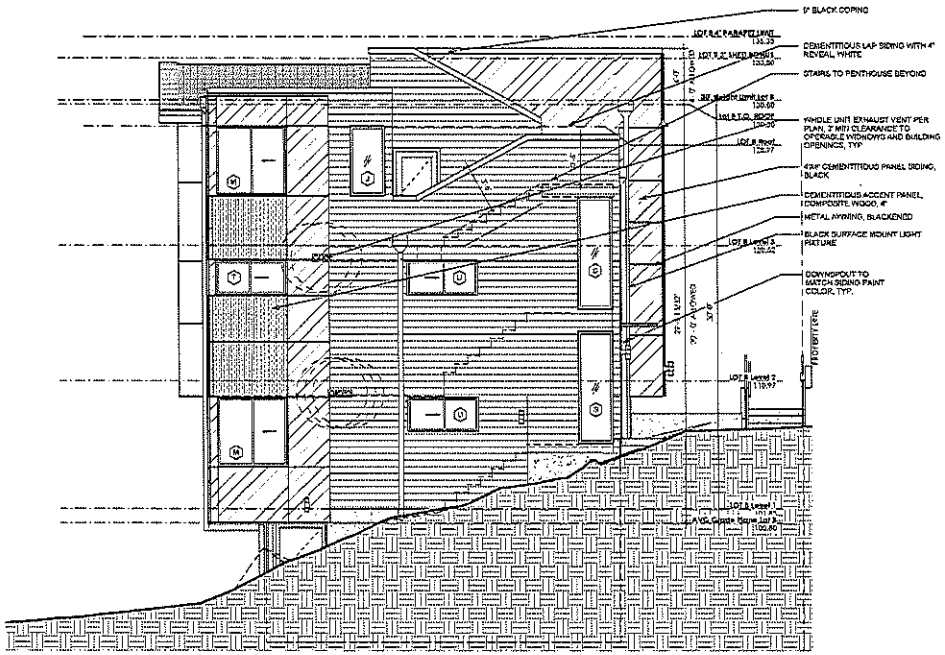
FLOOR PLANS

Scale: As indicated
Date: 10/16/2018

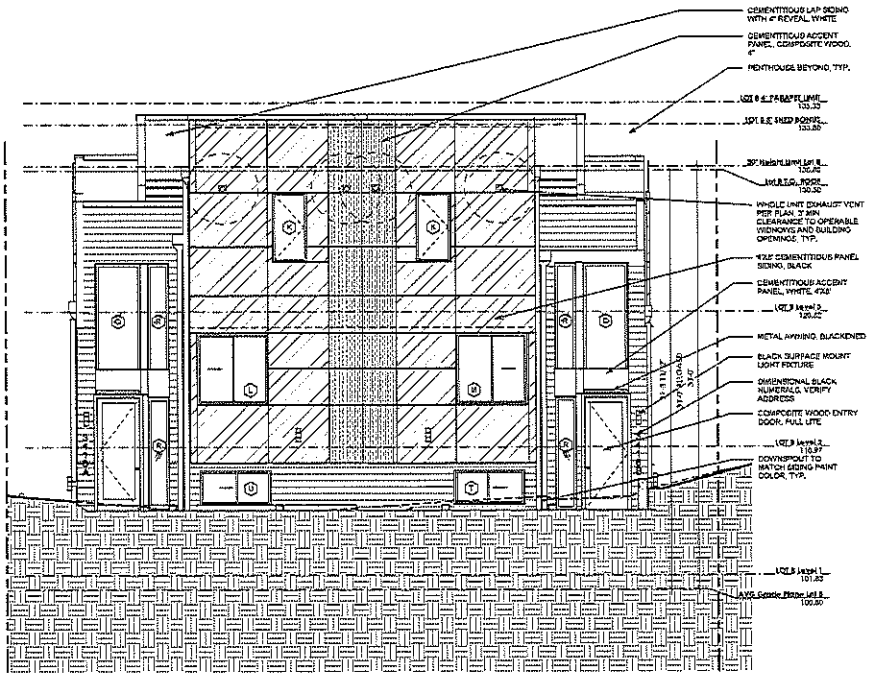
A-2.3

Project Number: JWA#498

8/15/2019 5:57:43 PM



2 Lot B North Elevation
SCALE: 1/4" = 1'-0"



1 Lot B West Elevation
SCALE: 1/4" = 1'-0"

MATERIAL KEY

- CEMENTITIOUS PANEL, WHITE, 4X8'
- CEMENTITIOUS ACCENT PANEL, BLACK, 4X8'
- COMPOSITE WOOD SHINGLE, DARK GREY
- COMPOSITE WOOD PANEL 4"
- CEMENTITIOUS LAP SIDING WITH 4" REVEAL WHITE

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MUP # 3032941-LU

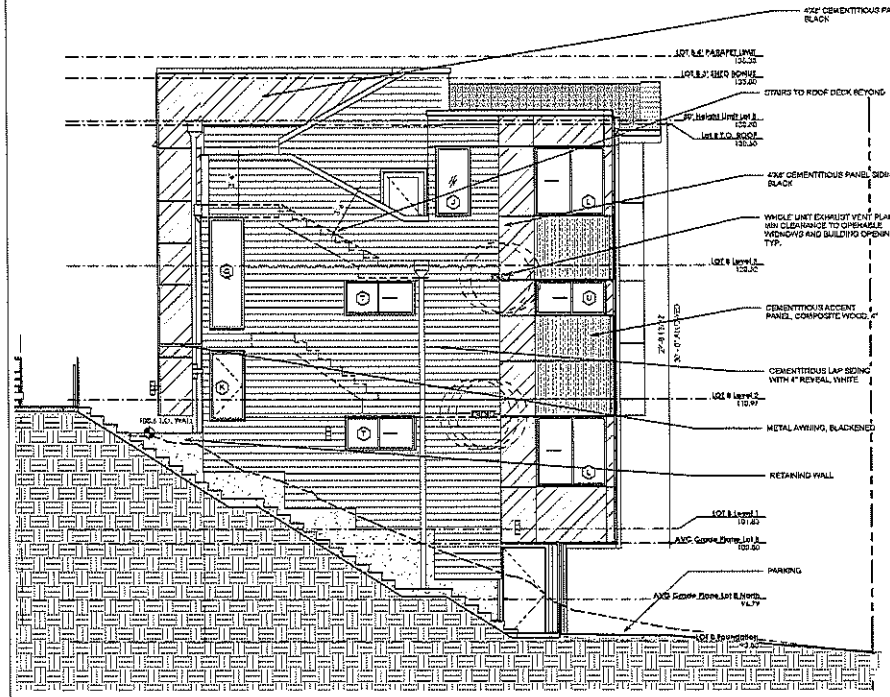
Rev.	Date	Description
	02.12.2018	MUP SUBMITTAL
	11.26.2018	BP SUBMITTAL

ELEVATIONS

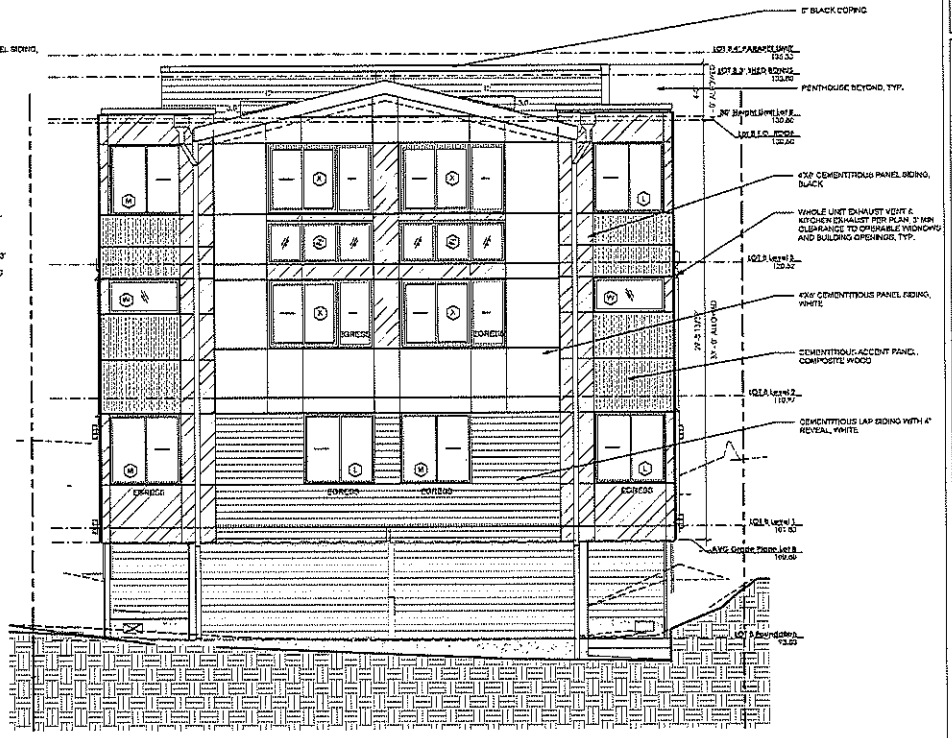
Scale 1/4" = 1'-0"
Date 10/16/2018

A-3.1

Project Number JWA1419



1 Lot B South Elevation
SCALE: 1/4" = 1'-0"



2 Lot B East Elevation
SCALE: 1/4" = 1'-0"

MATERIAL KEY

- CEMENTITIOUS PANEL, WHITE, 4X8"
- CEMENTITIOUS ACCENT PANEL, BLACK, 4X8"
- COMPOSITE WOOD SHINGLE, DARK GREY
- COMPOSITE WOOD PANEL, 4"
- CEMENTITIOUS LAP SIDING WITH 4" REVEAL, WHITE

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MUP #

No.	Date	Description
1	10/16/2018	MUP SUBMITTAL
2	11/30/2018	2ND SUBMITTAL

ELEVATIONS

Scale 1/4" = 1'-0"
Date 10/16/2018

A-3.2

Project number JWA493

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2015 WASHINGTON STATE ENERGY CODE (WSEC) NOTES

USE (1A, 3D, 5A, & 5C) OPTIONS FROM TABLE 406.2 FOR 3.5 CREDITS

SELECTED OPTION 1A: EFFICIENT BUILDING ENVELOPE. U-0.28 WINDOWS, R-10 FULL SLAB FOAM, AND/OR R-38 FLOORS

SELECTED OPTION 3D: HIGH EFFICIENCY HVAC EQUIPMENT, DUCTLESS SPLIT AC PRIMARY HEAT SOURCE TO PROVIDE HEATING TO THE LARGEST ZONE OF THE HOUSING UNIT

SELECTED OPTION 5A: EFFICIENT WATER HEATING, SHOWERS AND SINKS 1.75 GMP OR LESS, LAV FAUCETS 1.0GMP OR LESS

SELECTED OPTION 5C: EFFICIENT WATER HEATING, WATER HEATING SYSTEM - TANKLESS WATER HEATER EF 0.91 OR HIGHER

A RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE COMPLYING WITH R401.3 IS REQUIRED TO BE COMPLETED BY THE DESIGN PROFESSIONAL OR BUILDER AND PERMANENTLY POSTED WITHIN 3' OF THE ELECTRICAL PANEL PRIOR TO FINAL INSPECTION. A SAMPLE CERTIFICATE IS AVAILABLE AT:
http://www.energy.wsu.edu/Documents/WSEC-2012-Avery-6573_2_Per_Sheet.pdf

EACH DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR THE REGULATION OF TEMPERATURE PER WSEC 403.1.1

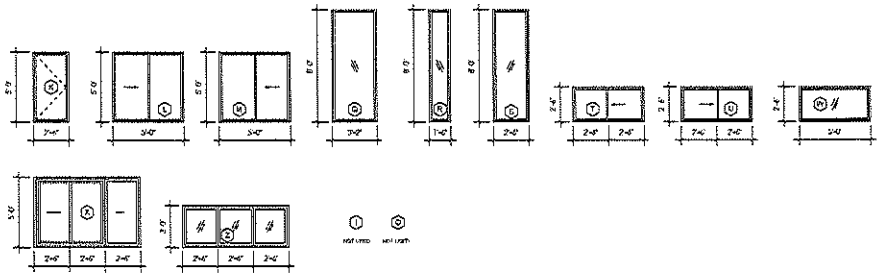
DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. DUCT LEAKAGE SHALL BE LEAK TESTED IN ACCORDANCE WITH WSU R5-33 PER WSEC 403.2.2.

MECHANICAL SYSTEM PIPING CABLE OF CARRYING FLUIDS ABOVE 100 DEGREES FAHRENHEIT OR BELOW 55 DEGREES FAHRENHEIT SHALL BE INSULATED TO A MINIMUM OF R-6 PER WSEC R403.3.

A MINIMUM OF 75 PERCENT OF PERMANENTLY INSTALLED LAMPS IN LIGHTING FIXTURES SHALL BE HIGH-EFFICACY PER WSEC R404.1.

ALL NEW FENESTRATION TO BE NFRC CERTIFIED.

NOTE: ALL FENESTRATION TO BE NFRC CERTIFIED. ALL U-VALUES SHOWN AS DEFAULT PER TABLE R301.1.3.



1 GLAZING KEY LOT B

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

TOTAL WINDOW COUNT LOT B

Type Mark	Family and Type	Count
A	Operable: Casement: Vinyl	16
		16
J	Fixed: 2650	12
		2
K	Casement: 2620 WN R	3
		3
L	Slider - Right Handed: 5050	6
		6
M	Slider - Left Handed: 5050	6
		6
N	Fixed: 2750	7
		7
R	Fixed: 1642	4
		4
S	Fixed: 2660	3
		3
T	Slider: 5026	14
		4
U	Slider: 5026 REVERSE	14
		4
W	Fixed: 5026	7
		2
X	Split 3 Horizontal Sliders: 5076 Fixed	4
		4
Y	Split Horizontal - Throw: 12030	2
		2
Sum of Vertical Fenestration Area and UA		56

GLAZING SCHEDULE - TH1

Type Mark	Family and Type	Count	Location	Width	Height	U (BTU/h-ft²-°F)	Area	UA	Comments
J	Fixed: 2650	1	dining	2'-6"	5'-0"	0.28	12.5 SF	3.50	
		1					12.5 SF	3.50	
K	Casement: 2620 WN R	1	kitchen	2'-6"	5'-0"	0.28	12.5 SF	3.50	IMP
		1					12.5 SF	3.50	
L	Slider - Right Handed: 5050	1	bed 4	5'-0"	5'-0"	0.28	25.0 SF	7.00	LOWE
L	Slider - Right Handed: 5050	1	bed 2	5'-0"	5'-0"	0.28	25.0 SF	7.00	LOWE
L	Slider - Right Handed: 5050	1	dining	5'-0"	5'-0"	0.28	25.0 SF	7.00	
		3					75.0 SF	21.00	
M	Slider - Left Handed: 5050	1	bed 2	5'-0"	5'-0"	0.28	25.0 SF	7.00	HARDES
M	Slider - Left Handed: 5050	1	bed 4	5'-0"	5'-0"	0.28	25.0 SF	7.00	
M	Slider - Left Handed: 5050	1	dining	5'-0"	5'-0"	0.28	25.0 SF	7.00	
		3					75.0 SF	21.00	
G	Fixed: 2650	1	entry	2'-6"	8'-0"	0.28	20.0 SF	5.60	
		1					20.0 SF	5.60	
R	Fixed: 1642	2	entry	1'-6"	8'-0"	0.28	24.0 SF	6.72	IMP
		2					24.0 SF	6.72	
S	Fixed: 2660	2	entry	2'-6"	8'-0"	0.28	40.0 SF	11.20	IMP
		2					40.0 SF	11.20	
T	Slider: 5026	1	rm. bath	5'-0"	2'-6"	0.28	12.5 SF	3.50	
		1					12.5 SF	3.50	
U	Slider: 5026 REVERSE	1	clos.	5'-0"	2'-6"	0.28	12.5 SF	3.50	
U	Slider: 5026 REVERSE	1	laundry	5'-0"	2'-6"	0.28	12.5 SF	3.50	
U	Slider: 5026 REVERSE	1	entry	5'-0"	2'-6"	0.28	12.5 SF	3.50	
		3					37.5 SF	10.50	
W	Fixed: 5026	1	rm. bath	5'-0"	2'-6"	0.28	12.5 SF	3.50	
		1					12.5 SF	3.50	
X	Split 3 Horizontal Sliders: 5076 Fixed	1	rm. bed	7'-6"	5'-0"	0.28	37.5 SF	10.50	HARDES
X	Split 3 Horizontal Sliders: 5076 Fixed	1	living	7'-6"	5'-0"	0.28	37.5 SF	10.50	
		2					75.0 SF	21.00	
Y	Split Horizontal - Throw: 12030	1	entry	2'-6"	8'-0"	0.28	20.0 SF	5.60	
Sum of Vertical Fenestration Area and UA		21					404.0 SF	113.61	

GLAZING SCHEDULE - TH 2

Type Mark	Family and Type	Count	Location	Width	Height	U (BTU/h-ft²-°F)	Area	UA	Comments
J	Fixed: 2650	1	dining	2'-6"	5'-0"	0.28	12.5 SF	3.50	
		1					12.5 SF	3.50	
K	Casement: 2620 WN R	1	entry	2'-6"	5'-0"	0.28	12.5 SF	3.50	IMP
K	Casement: 2620 WN R	1	kitchen	2'-6"	5'-0"	0.28	12.5 SF	3.50	IMP
		2					25.0 SF	7.00	
L	Slider - Right Handed: 5050	1	bed 3	5'-0"	5'-0"	0.28	25.0 SF	7.00	HARDES
L	Slider - Right Handed: 5050	1	bed 4	5'-0"	5'-0"	0.28	25.0 SF	7.00	
L	Slider - Right Handed: 5050	1	dining	5'-0"	5'-0"	0.28	25.0 SF	7.00	
		3					75.0 SF	21.00	
M	Slider - Left Handed: 5050	1	Bed 4	5'-0"	5'-0"	0.28	25.0 SF	7.00	LOWE 366
M	Slider - Left Handed: 5050	1	Bed 2	5'-0"	5'-0"	0.28	25.0 SF	7.00	LOWE 366
M	Slider - Left Handed: 5050	1	dining	5'-0"	5'-0"	0.28	25.0 SF	7.00	
		3					75.0 SF	21.00	
TO	Fixed: 2050	1	entry	2'-6"	8'-0"	0.28	20.0 SF	5.60	
		1					20.0 SF	5.60	
R	Fixed: 1642	1	entry	1'-6"	8'-0"	0.28	12.0 SF	3.36	
		1					12.0 SF	3.36	
S	Fixed: 2660	1	entry	2'-6"	8'-0"	0.28	20.0 SF	5.60	
		1					20.0 SF	5.60	
T	Slider: 5026	1	clos.	5'-0"	2'-6"	0.28	12.5 SF	3.50	
T	Slider: 5026	1	laundry	5'-0"	2'-6"	0.28	12.5 SF	3.50	
T	Slider: 5026	1	entry	5'-0"	2'-6"	0.28	12.5 SF	3.50	
		3					37.5 SF	10.50	
U	Slider: 5026 REVERSE	1	rm. bath	5'-0"	2'-6"	0.28	12.5 SF	3.50	
		1					12.5 SF	3.50	
W	Fixed: 5026	1	rm. bath	5'-0"	2'-6"	0.28	12.5 SF	3.50	
		1					12.5 SF	3.50	
X	Split 3 Horizontal Sliders: 5076 Fixed	1	rm. bed	7'-6"	5'-0"	0.28	37.5 SF	10.50	LOWE
X	Split 3 Horizontal Sliders: 5076 Fixed	1	living	7'-6"	5'-0"	0.28	37.5 SF	10.50	
		2					75.0 SF	21.00	
Y	Split Horizontal - Throw: 12030	1	entry	2'-6"	8'-0"	0.28	20.0 SF	5.60	
		1					20.0 SF	5.60	
Sum of Vertical Fenestration Area and UA		20					404.0 SF	113.23	

SLIDING DOOR SCHEDULE - TH 2

Type Mark	Family and Type	Count	Location	Width	Height	U (BTU/h-ft²-°F)	Area	UA	Comments

SLIDING DOOR SCHEDULE - TH 1

Type Mark	Family and Type	Count	Location	Width	Height	U (BTU/h-ft²-°F)	Area	UA	Comments

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MUP #

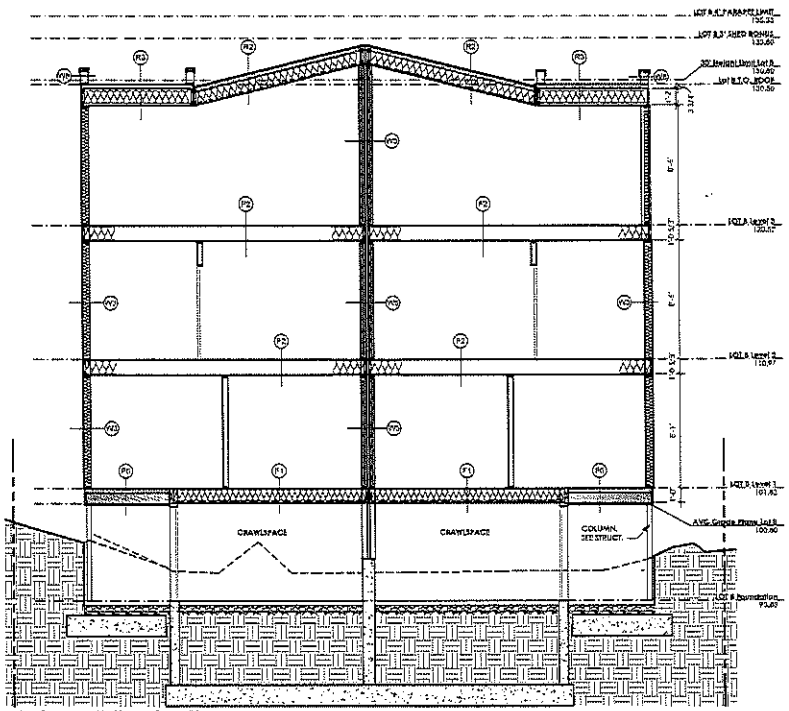
No.	Date	Description
	10.16.2018	MUP SUBMITTAL
	11.20.2018	RP SUBMITTAL
1	05.10.2019	RP CORRECTIONS 1

GLAZING SCHEDULE & WSEC NOTES

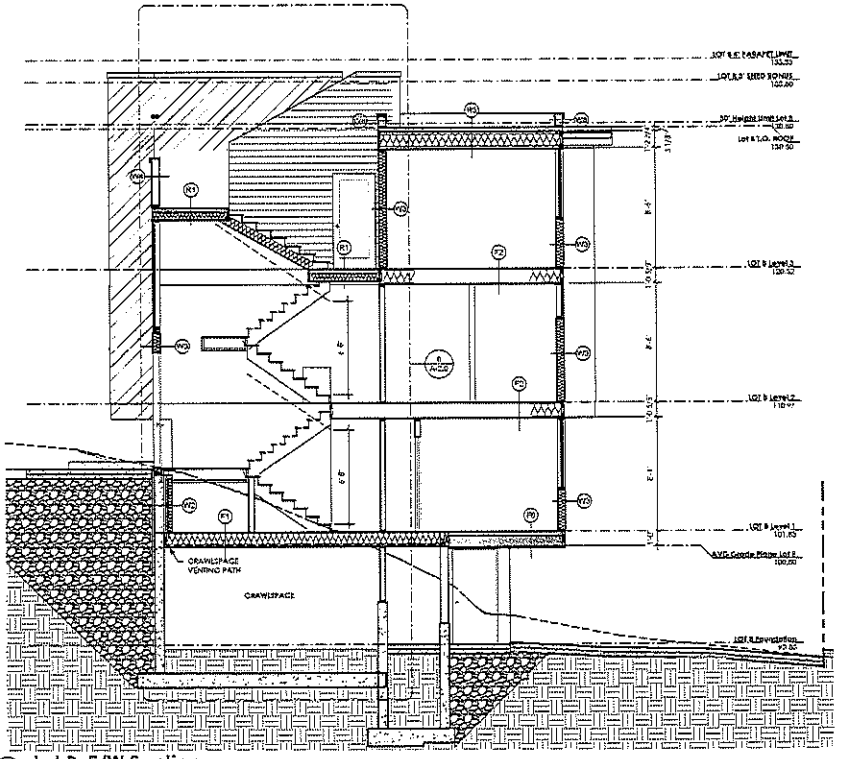
Scale 1/4" = 1'-0"
Date 10/16/2018

A-4.0

Project Number JWA#473



1 Lot B Building Section
SCALE: 1/4" = 1'-0"



2 Lot B E/W Section
SCALE: 1/4" = 1'-0"

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MUP #: 3020941-LU

No.	Date	Description
	10.15.2018	MUP SUBMITTAL
	11.28.2018	RP SUBMITTAL

BUILDING SECTIONS

Scale: 1/4" = 1'-0"
Date: 10/14/2018

A-4.2

Project number: JWA4493

GENERAL STRUCTURAL NOTES

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE INTERNATIONAL BUILDING CODE (IBC) 2015 EDITION, AND SEATTLE BUILDING CODE (SBC) MODIFICATIONS TO THE IBC.

2. DESIGN LOADING CRITERIA

FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF
FLOOR LIVE LOAD (RESIDENTIAL DECKS AND BALCONIES)	60 PSF
SNOW	25 PSF
WIND	METHOD - DIRECTIONAL PROCEDURE I_{ew}=1.0, C_p=0.18, 110 MPH (RISK CATEGORY II), EXPOSURE "B"
EARTHQUAKE	ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS 2DC D, SITE CLASS E, I_{ew}=1.0, S_{DS}=1.318, S_{D1}=0.912, S_{dS}=0.791, S_{d1}=0.819, C_s=0.122, R=6.5, SEISMIC DESIGN BASE SHEAR V=W=18.79 KIPS

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTIONS, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION."

6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTOR'S WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITION AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

7. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

GEOTECHNICAL

10. SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILL/BC REQUIREMENTS SHALL CONFORM STRICTLY WITH RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS ENGINEER. FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH AT LEAST 18" BELOW LOWEST ADJACENT FINISHED GRADE. FOOTING DEPTHS/ELEVATIONS SHOWN ON PLANS (OR IN DETAILS) ARE MINIMUM AND FOR GUIDANCE ONLY; THE ACTUAL ELEVATIONS OF FOOTINGS MUST BE ESTABLISHED BY THE CONTRACTOR IN THE FIELD WORKING WITH THE TESTING LAB AND SOILS ENGINEER. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE SOILS REPORT.

LATERAL EARTH PRESSURE (RESTRAINED/UNRESTRAINED)	45 PCF/35 PCF
TRAFFIC SURCHARGE	60 PSF
SEISMIC SURCHARGE	8H
PASSIVE PRESSURE	250 PCF
COEFFICIENT OF FRICTION	0.35
4" DIAMETER STANDARD WEIGHT PIPE PILE CAPACITY	10 TONS

SOILS REPORT REFERENCE: GEOTECHNICAL REPORT, PROPOSED DEVELOPMENT, 3410 - 3420 23RD AVE WEST, SEATTLE, WA, PREPARED BY PANGEO, INC. ON SEPTEMBER 28, 2018, REVISED ON OCTOBER 29, 2018, FILE NO. 18-243.

11. 4" DIAMETER STANDARD WEIGHT PIPE PILES SHALL BE DRIVEN TO REFUSAL WITH A MINIMUM HYDRAULIC 18425 HAMMER MODEL WEIGHING 3100 LBS WITH 900 BLOWS PER MINUTE AT 10 SECONDS PER INCH OF PENETRATION PER GEOTECHNICAL REPORT. ANY DEVIATION FROM THE LISTED EQUIPMENT AND DRIVING CRITERIA SHALL BE SUBJECT TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. THE DRIVING CRITERIA WILL BE DETERMINED BASED ON THE ACTUAL HAMMER USE SELECTED BY THE CONTRACTOR AND THE STATIC LOAD TEST PROGRAM. PIPE PILES SHALL BE INSTALLED IN STRICT CONFORMANCE TO SDCI DIRECTOR'S RULE 10-2009 AND THE SOILS ENGINEER'S RECOMMENDATIONS. IT IS RECOGNIZED THAT SEATTLE BUILDING CODE REQUIRES 8" MINIMUM DIAMETER PIPE FOR PILE INSTALLATION. THE APPROPRIATE ANALYSIS/EVALUATION AND TESTING REQUIREMENTS IN CONFORMANCE WITH SDCI DIRECTOR'S RULE 10-2009 ARE PROVIDED TO ALLOW FOR USE OF 4" PIPE PILES. THE DIAMETER OF PILES IS DEFINED BY SECTION 104.10 OF THE SBC. GEOTECHNICAL SPECIAL INSPECTOR SHALL BE CONTINUOUSLY PRESENT DURING PIPE PILE INSTALLATION. SDCI DIRECTOR'S RULE 10-2009 REQUIRES TESTING OF PILES IN ACCORDANCE WITH ASTM STANDARD D1143-81 FOR A MINIMUM OF (1) PILE OR 3% OF 4" DIAMETER PILES UP TO (50) PILES. OF EACH SIZE MAXIMUM USE OF THE QUICK LOAD TEST METHOD BY THE STANDARD IS THE MINIMUM REQUIRED. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE A OR B, Fy = 35 KSI. PILES SHALL BE DRIVEN IN NOMINAL SECTIONS AND CONNECTED WITH COMPRESSION FITTED SLEEVE COUPLERS. PIPE JOINTS SHOULD NOT BE WELDED TOGETHER. PILES SHALL BE PLACED WITHIN 3" OF SPECIFIED LOCATION. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRIVING PILES. PIPE PILES SHALL BE DRIVEN TO A MINIMUM EMBEDMENT OF 20'. REFER TO THE REFERENCED GEOTECHNICAL REPORT FOR ANY FURTHER INFORMATION.

CONCRETE

12. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318 AND ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 2500 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 2" OR LESS. STRUCTURAL DESIGN IS BASED ON A CONCRETE STRENGTH OF f'c = 2500 PSI. THEREFORE NO CONCRETE STRENGTH TESTING REQUIRED. CONCRETE EXPOSURE CATEGORIES ARE F1, S0, W0, AND C1.

13. THE MINIMUM AMOUNTS OF CEMENT MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL (2) WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 318-14 SECTION 26.12. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

14. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, fy = 60 KSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, fy = 40 KSI. WELDED WIRE WIRE FABRIC SHALL CONFORM TO ASTM A1064. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, fy = 60 KSI.

FOR REFERENCE ONLY

15. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 318-14. LAP ALL CONTINUOUS REINFORCEMENT #6 AND SMALLER 48 BAR DIAMETERS OR 2-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS, OR 2-0" MINIMUM. LAP #5 OR LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-14, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

16. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER)	2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER)	1-1/2"
COLUMN TIES OR SPIRALS AND BEAM STIRRUPS	1-1/2"
SLABS AND WALLS (INT FACE)	GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

ANCHORAGE

17. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-XP" EPOXY ADHESIVE AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-2508. SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH CURRENT ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED. RODS SHALL BE ASTM A36, UNO.

18. HEAVY DUTY THREADED CONCRETE ANCHORS SPECIFIED ON THE DRAWINGS SHALL BE "TITEN HD SCREW ANCHOR" AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-2713 AND ESR-1056, INCLUDING MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS. SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH CURRENT ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES.

19. EXPANSION BOLTS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "STRONG-BOLT 2" ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT CONFORMANCE TO ICC-ES REPORT ESR-3037 AND IAPMO-ER REPORT ER-240, INCLUDING MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS. SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH CURRENT ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED.

20. DRIVE PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE (PDPW1-300MG, 0.145" DIAMETER, UNO) AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-2138. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1", UNO. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE EDGE.

WOOD

21. ALL 2x LUMBER SHALL BE KILN DRIED OR MC-19, AND ALL LUMBER SHALL BE GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING RULES FOR WEST COAST LUMBER NO 17. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS	(2x AND 3x MEMBERS)	HEM-FIR NO 2 OR SPRUCE-PINE-FIR NO 2 MINIMUM BASE VALUE: Fb = 850 PSI
	(4x MEMBERS)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE: Fb = 900 PSI
BEAMS	(6x AND LARGER)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE: Fb = 875 PSI
POSTS	(4x MEMBERS)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE: Fc = 1350 PSI
	(6x AND LARGER)	DOUGLAS FIR-LARCH NO 2 MINIMUM BASE VALUE: Fc = 600 PSI
STUDS, PLATES AND MISC FRAMING		HEM-FIR NO 2 OR SPRUCE-PINE-FIR NO 2

22. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA-EWS IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA-EWS CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN GLULAM BEAMS SHALL BE DOUGLAS FIR COMBINATION DAF-V4, Fb = 2400 PSI, Fv = 265 PSI, E = 1800 KSI, UNO. ALL CANTILEVER GLULAM BEAMS SHALL BE DOUGLAS FIR COMBINATION DAF-V6, Fb = 2400 PSI, Fv = 265 PSI, E = 1800 KSI, UNO. GLUED LAMINATED COLUMNS SHALL BE DOUGLAS FIR COMBINATION 3, 120 GRADE, Fc = 2300 PSI, Fb = 2000 PSI, E = 1900 KSI.

23. MANUFACTURED LUMBER, PSL, LVL AND LSL, SHALL BE MANUFACTURED UNDER A PROCESS APPROVED BY THE NATIONAL RESEARCH BOARD. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE NATIONAL RESEARCH BOARD NUMBER, AND THE QUALITY CONTROL AGENCY. ALL PSL, LVL, AND LSL LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH ICC-ES REPORT ESR-1387 USING DOUGLAS FIR VENEER, GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. THE MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.0E)	Fb = 2900 PSI	E = 2000 KSI	Fv = 290 PSI
LVL (2.0E)	Fb = 2600 PSI	E = 2000 KSI	Fv = 285 PSI
LSL (1.55E)	Fb = 2325 PSI	E = 1550 KSI	Fv = 310 PSI
PSL COLUMN (1.8E)	Fc = 2500 PSI	E = 1800 KSI	Fv = 190 PSI

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

24. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

25. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II EXTERIOR GLUE IN CONFORMANCE WITH DOC PS-1 OR PS-2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

WALL SHEATHING SHALL BE 7/16" or 1/2" (NOMINAL) WITH SPAN RATING 24/0

FLOOR SHEATHING SHALL BE 3/4" T&G (NOMINAL) WITH SPAN RATING 48/24

WATERPROOF DECK SHEATHING SHALL BE 3/4" T&G (NOMINAL) WITH SPAN RATING 48/24

FLAT ROOF SHEATHING SHALL BE 3/4" T&G (NOMINAL) WITH SPAN RATING 48/24

ROOF SHEATHING SHALL BE 1/2" or 7/16" (NOMINAL) WITH SPAN RATING 32/16 FOR ROOFS WITH A PITCH GREATER THAN 2:12

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

26. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR COLLAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

27. PRESSURE TREATED WOOD (INCLUDES PRESERVATIVE AND FIRE TREATED) SHALL BE TREATED PER AWPA STANDARDS. PRESSURE TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO RETENTION OF 0.25 PCF. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO A RETENTION OF 0.40 PCF. SODIUM BORATE (SBX) TREATED WOOD SHALL NOT BE USED WHERE EXPOSED TO WEATHER. FASTENERS AND TIMBER CONNECTORS WITHOUT AMMONIA IN DIRECT CONTACT WITH ACQ-A TO A RETENTION LEVEL OF 0.40 PCF), CBA-A (UP TO A RETENTION LEVEL OF 0.41 PCF), CA-B (UP TO A RETENTION LEVEL OF 0.21 PCF), SHALL BE G-185 OR A185 HOT DIPPED OR CONTINUOUS HOT-DALVANIZED PER ASTM A653. FASTENERS AND TIMBER CONNECTORS WITH AMMONIA IN DIRECT CONTACT WITH ACQ-A (OVER A RETENTION LEVEL OF 0.40 PCF), CBA-A (OVER A RETENTION LEVEL OF 0.41 PCF), CA-B (OVER A RETENTION LEVEL OF 0.21 PCF), OR WITH ACZA TREATED WOOD SHALL BE TYPE 304 OR 316 STAINLESS STEEL.

28. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2017. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2x JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "IUS" SERIES JOIST HANGERS. ALL DOUBLE-JOISTS BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "HIU" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT DIMENSIONS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHEAR SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

29. WOOD FASTENERS

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	TYPE	LENGTH	DIAMETER
8d	COMMON	2-1/2"	0.131"
10d	GUN	3"	0.131"
12d	GUN	3-1/4"	0.131"
16d	GUN	3-1/2"	0.131"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED

B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG SCREWS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2015 EDITION) WITH A LEAD HOLE HOLE OF 60-70% OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS. BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. HOLES SHALL BE ACCURATELY ALIGNED IN MAIN MEMBERS AND SIDE PLATES/MEMBERS. BOLTS SHALL NOT BE FORCIBLY DRIVEN.

C. SDS SERIES WOOD SCREWS CALLED OUT ON PLAN SHALL BE "SIMPSON STRONG-DRIVE" WOOD SCREWS BY SIMPSON COMPANY, AND INSTALLED IN STRICT ACCORDANCE TO ICC-ES REPORT ESR-2236. EQUIVALENT SCREWS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. LAG SCREWS ARE NOT AN EQUIVALENT SUBSTITUTION

30. WOOD FRAMING NOTES - THE FOLLOWING APPLY UNLESS NOTED OTHERWISE ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE IBC, THE AITC TIMBER CONSTRUCTION MANUAL, AND THE AF&PA "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, SHALL CONFORM TO TABLE 2304.10.1 OF THE IBC, UNO. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.

B. WALL FRAMING: REFER TO ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16"oc. UNO. (2) STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. (2)2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS IN STRUCTURAL WALLS, UNO. NAIL MULTI-MEMBER HEADERS WITH (2)ROWS 10d AT 12"oc. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MIDHEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT

ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE AND BOTTOM PLATE TO EACH STUD WITH (3) 10d NAILS. FACE NAIL DOUBLE TOP PLATES WITH 10d AT 12"oc AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE (12) 10d NAILS AT 4"oc EACH SIDE OF JOINT. AT TOP PLATE INTERSECTIONS PROVIDE (3) 10d FACE NAILS.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH (2)ROWS OF 16d NAILS AT 16"oc. OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS AT 4'-0"oc EMBEDDED 7" MINIMUM, UNO. THERE SHALL BE A MINIMUM OF (2)BOLTS PER PLATE SECTION WITH (1)BOLT LOCATED NOT MORE THAN 12" OR LESS THAN 4-1/2" FROM EACH END OF THE PLATE SECTION. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH (2)ROWS OF 10d AT 16"oc. UNLESS NOTED OTHERWISE, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH #6 x 1-1/4" TYPE S OR W SCREWS AT 12"oc. UNLESS NOTED OTHERWISE, 7/16" OR 1/2" (NOMINAL) APA RATED SHEATHING SPAN RATING 24/0 SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS AT 6"oc AT PANEL EDGES AND TOP AND BOTTOM PLATE (BLOCK UNSUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS AT 12"oc. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS, UNO. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL TIMBER JOISTS TO SUPPORTS WITH (3)10d NAILS AND NAIL TJI JOISTS TO SUPPORTS WITH (2) 10d NAILS. ATTACH JOISTS TO BEAMS WITH SIMPSON JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH (2)ROWS 10d AT 12"oc. TOENAIL RIM JOIST TO TOP PLATE WITH 10d AT 6"oc. TOENAIL BLOCKING BETWEEN JOISTS TO TOP PLATE WITH (2)10d NAILS.

UNLESS NOTED OTHERWISE ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS WITH END JOINTS STAGGERED, AND NAILED AT 6"oc WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND AT 12"oc TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH 2x10 BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 10d AT 12"oc. UNO.

31. NOTCHES AND HOLES IN WOOD FRAMING:

A. SAWN LUMBER JOISTS AND RAFTERS: NOTCHES AT THE ENDS OF JOISTS SHALL NOT EXCEED 1/4 THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED 1/6 THE JOIST DEPTH, BE LONGER THAN 1/3 THE JOIST DEPTH, OR BE LOCATED IN THE MIDDLE 1/3 OF THE SPAN. HOLES SHALL NOT BE WITHIN 2" OF THE TOP OR BOTTOM OF THE JOIST AND THE DIAMETER SHALL NOT EXCEED 1/3 THE JOIST DEPTH. SPACING BETWEEN HOLES SHALL BE A MINIMUM OF (3)TIMES THE DIAMETER OF THE LARGEST HOLE OR 2" AND SHALL BE LOCATED A MINIMUM OF 2" FROM ANY NOTCH.

B. EXTERIOR AND BEARING WALLS: WOOD STUDS ARE PERMITTED TO BE NOTCHED TO A DEPTH NOT EXCEEDING 1/4 OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40% OF THE STUD WIDTH IS PERMITTED IN WOOD STUDS. HOLES SHALL NOT BE WITHIN 5/8" TO THE EDGE OF THE STUD. SPACING BETWEEN HOLES SHALL BE A MINIMUM OF (3)TIMES THE DIAMETER OF THE LARGEST HOLE OR 2" AND SHALL NOT BE LOCATED AT THE SAME SECTION AS A NOTCH.

C. CUTS, NOTCHES, AND HOLES IN MANUFACTURED LUMBER, PREFABRICATED PLYWOOD WEB JOISTS, AND PREFABRICATED TRUSSES ARE PROHIBITED EXCEPT WHERE NOTED ON STRUCTURAL PLANS OR PERMITTED BY MANUFACTURER'S RECOMMENDATIONS.

32. ELECTRICAL, MECHANICAL, PLUMBING, AND DRAINAGE SYSTEMS SHALL BE DESIGNED TO ACCOMMODATE THE DIFFERENTIAL SHRINKAGE OR MOVEMENT OF THE WOOD STRUCTURE (3/8" PER FLOOR).

33. DEFLECTION OF CANTILEVERS SHALL BE CLOSELY MONITORED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR TO VERIFY AND ENSURE ALL POST CAPS AND POST BEARING CONDITIONS ARE INSTALL

PIPE PILE NOTES

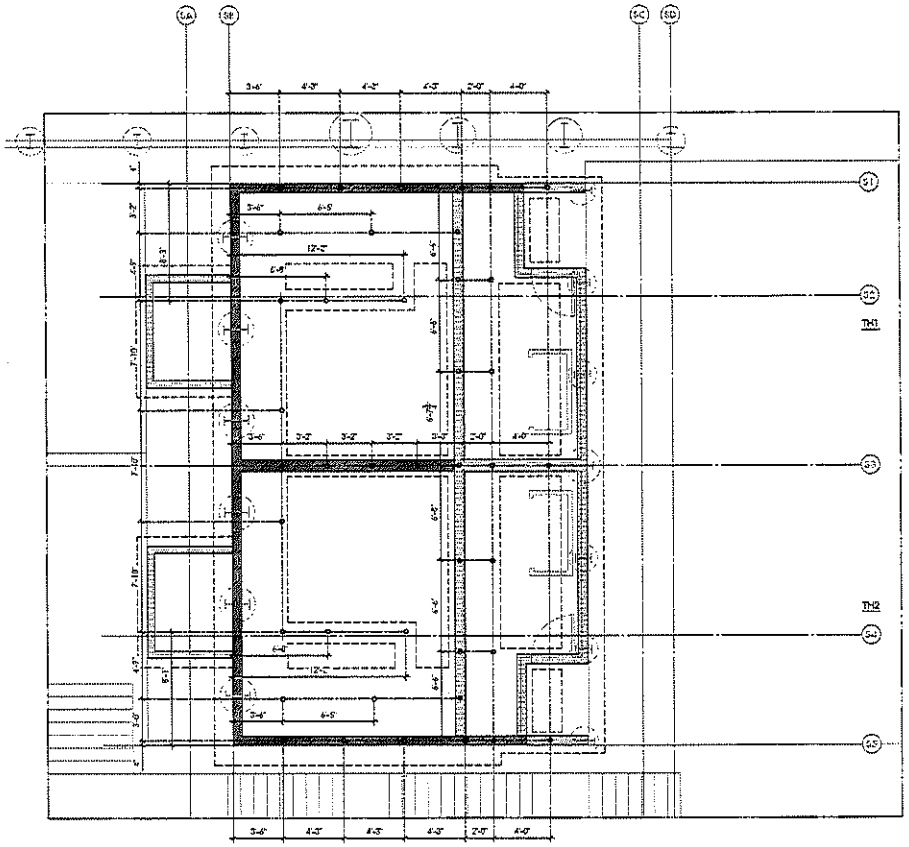
1. REFER TO GENERAL STRUCTURAL NOTES SHEET SN1.0 FOR ADDITIONAL REQUIREMENTS.
2. REFER TO SOILS REPORT FOR ADDITIONAL PILE INSTALLATION REQUIREMENTS
3. CONTRACTOR TO VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS, SURVEY DRAWINGS, AND EXISTING SITE CONDITIONS.
4. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

PILE SPECIFICATIONS

1. 4" DIAMETER STANDARD WEIGHT PIPE PILES SHALL BE DRIVEN TO REFUSAL WITH A MINIMUM HYDRAULIC TR455 HAMMER MODEL WEIGHING 1100 LBS WITH 900 BLOWS PER MINUTE AT 10 SECONDS PER INCH OF PENETRATION PER GEOTECHNICAL REPORT. ANY DEVIATION FROM THE LISTED EQUIPMENT AND DRIVING CRITERIA SHALL BE SUBJECT TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. THE DRIVING CRITERIA WILL BE DETERMINED BASED ON THE ACTUAL HAMMER SIZE SELECTED BY THE CONTRACTOR AND THE STATIC LOAD TEST PROGRAM. REFER TO THE REFERENCED GEOTECHNICAL REPORT FOR ANY FURTHER INFORMATION.
2. PIPE PILES SHALL BE INSTALLED IN STRICT CONFORMANCE TO SDCI DIRECTOR'S RULE 10-2009 AND THE SOILS ENGINEER'S REQUIREMENTS. IT IS RECOGNIZED THAT SEATTLE BUILDING CODE REQUIRES 8" MINIMUM DIAMETER PIPE FOR PILES INSTALLATION. THE APPROPRIATE ANALYSIS/EVALUATION AND TESTING REQUIREMENTS IN CONFORMANCE WITH SDCI DIRECTOR'S RULE 10-2009 ARE PROVIDED TO ALLOW FOR USE OF PILES LESS THAN 8" IN DIAMETER AS REQUIRED BY SECTION 104.10 OF THE SBC.
3. GEOTECHNICAL SPECIAL INSPECTOR SHALL BE CONTINUOUSLY PRESENT DURING PIPE PILE INSTALLATION AND TESTING.
4. SDCI DIRECTOR'S RULE 10-2009 REQUIRES TESTING OF PILES IN ACCORDANCE WITH ASTM STANDARD D1143-81 FOR A MINIMUM OF 1 PILE OR 2% OF PILES UP TO 150 PILES. THE MAXIMUM TEST LOAD SHALL BE 1.5 TIMES THE DESIGN CAPACITY. THE OBJECTIVE OF THE TESTING PROGRAM IS TO VERIFY THE ADEQUACY OF THE DRIVING CRITERIA, AND THE EFFICIENCY OF THE HAMMER USED ON THE PROJECT.
5. AS REQUIRED BY SDCI, THE GEOTECHNICAL ENGINEER OF RECORD OR THEIR REPRESENTATIVE SHALL PROVIDE FULL TIME OBSERVATION OF PILE INSTALLATION AND TESTING.
6. STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE A OR B, F_y = 35 KSI. PILES SHALL BE DRIVEN IN NOMINAL SECTIONS AND CONNECTED WITH COMPRESSION FITTED SLEEVE COUPLERS. PIPE JOINTS ARE NOT ALLOWED TO BE WELDED TOGETHER.
7. PIPE PILES NEED TO BE PLACED WITHIN 2" OF SPECIFIED LOCATION. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRIVING PILES.
8. PIPE PILES SHALL BE DRIVEN TO A MINIMUM EMBEDMENT OF 20'.

LEGEND

- DRILLED SOLDIER PILE PER SH2.0
- CONCRETE FOOTING ABOVE
- CONCRETE WALL BELOW
- FULL HEIGHT CONCRETE WALL
- 4"Ø STANDARD WEIGHT PILE (10-TON CAPACITY) REFER TO 6/S3.6 FOR EMBEDMENT INTO FOOTING



PIN PILE PLAN

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

MARC J. MALSAM
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

PROJECT NO 0370.2018.04.01
PROJECT MANAGER MJC
DRAWN DDI
ENGINEER JESSICA MOORE
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JESSICAM@MALSAM-TSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.19.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH JULIAN WEBER ARCH + DESIGN
206.783.1556

PIN PILE PLAN

S2.0
SCALE = 1/4" = 1'-0"

PLAN NOTES

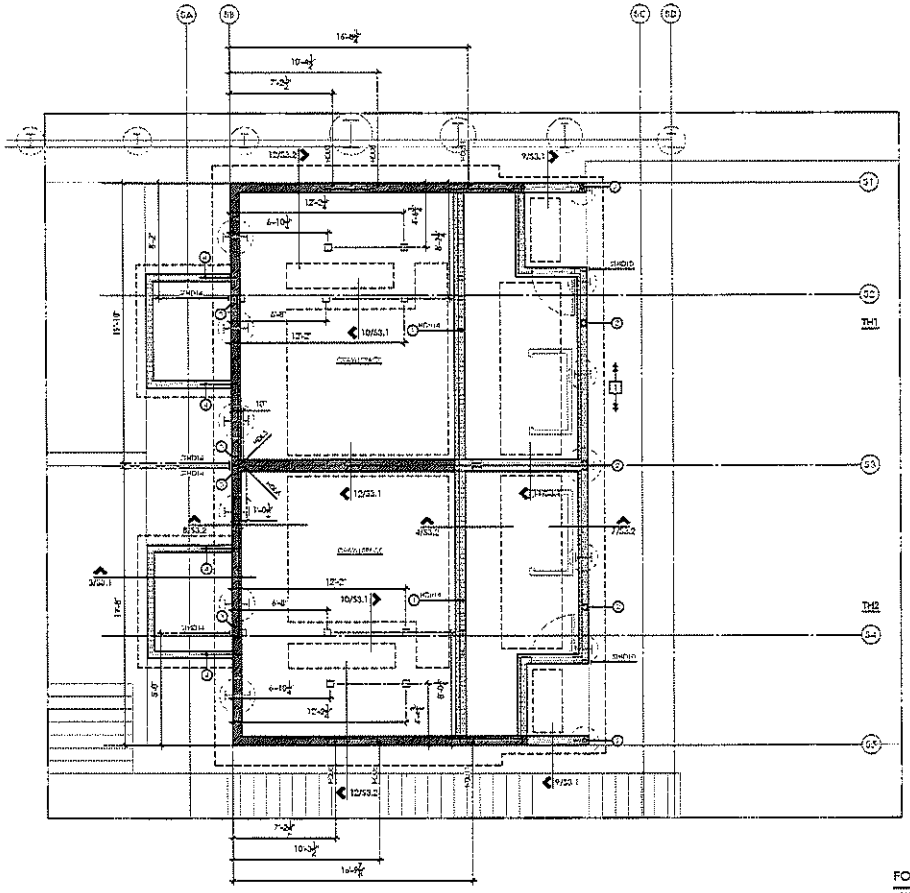
1. BOTTOM OF ALL FOOTINGS SHALL BE 18" MINIMUM BELOW LOWEST ADJACENT GRADE, UNO.
2. REFER TO SHEET S3.0 FOR TYPICAL FOUNDATION AND CONCRETE DETAILS.
3. STHD HOLDOWNS ARE DIMENSIONED TO THE CENTERLINE OF STRAP. HDU HOLDOWNS ARE DIMENSIONED TO THE CENTERLINE OF ANCHOR BOLT. DIMENSIONS ARE BASED OFF OF DRAWINGS PROVIDED BY THE ARCHITECT AND SHOULD BE VERIFIED.
4. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
5. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

FOOTNOTES

1. EMBED HOLDOWN ANCHOR BOLT INTO FOOTING PER 11/S3.0 AND 4/S3.2
2. BEARING LOCATION FOR STEEL POST PER 2/S3.1 OR 3/S3.1
3. POST ABOVE TO BEAR DIRECTLY ON FOUNDATION w/ (2)LAYERS OF BUILDING PAPER AND (2)A35 TO BOTTOM PLATE
4. #4 x 2'-6" DOWELS TO MATCH HORB WALL AND FOOTING REINFORCING - EPOXY GROUT EMBED 4" MIN. NO SPECIAL INSPECTION REQUIRED.

LEGEND

- CONCRETE WALL BELOW
- FULL HEIGHT CONCRETE WALL



FOUNDATION SHALL BE ENTIRELY BACKFILLED AFTER ALL WALLS ARE POURED PRIOR TO FRAMING FIRST FLOOR

FOUNDATION SYSTEM IS DESIGNED AS PILE SUPPORTED - REFER TO S2.0, S5.0 AND OTHER ASSOCIATED DETAILS AS CALLED OUT ON PLAN FOR THE PILE LOCATIONS AND CONNECTION REQUIREMENTS FOR PROVIDING NECESSARY FOUNDATION SUPPORT

FOOTING SCHEDULE

MARK	SIZE	REINFORCING
1	CONT 3'-0"W x 18"DP	REINF PER 7/S3.2

FOUNDATION PLAN

LEVEL 1 WALLS SHOWN DASHED

MALSAM TSANG STRUCTURAL ENGINEERING

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REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH JULIAN WEBER ARCH + DESIGN
206.985.1305

FOUNDATION PLAN

S2.1

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

PLAN NOTES

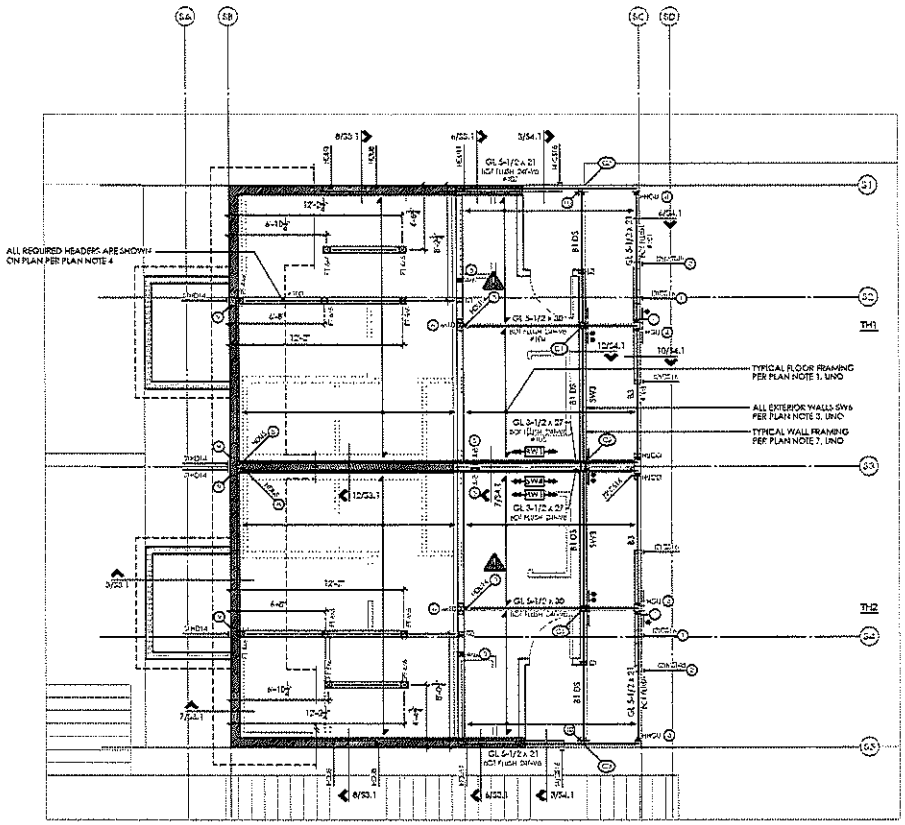
1. TYPICAL FLOOR FRAMING CONSISTS OF 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI 110's AT 16"oc. UNO. PROVIDE DBL JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH
2. GLUE AND NAIL FLOOR SHEATHING w/ 8d AT 6"oc AT FRAMED PANEL EDGES AND OVER SHEAR-WALLS AND AT 12"oc IN FIELD. UNO.
3. "SW_" INDICATES SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 4/S4.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW6. UNO.
4. ALL HEADERS SHALL BE GL 5-1/2 x 9. UNO. PROVIDE PT 6x6 POST AT SPLICES. UNO. REFER TO DETAIL 10/S2.1 FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE (2)BEARING (TRIMMER) STUDS AT EACH END OF ALL HEADERS AND BEAMS 6'-0" IN LENGTH AND OVER. UNO.
6. WHERE POSTS OCCUR, PROVIDE SOLID VERTICAL GRAIN BLOCKING THRU FLOOR TO MATCHING SUPPORTS BELOW. UNO.
7. TYPICAL WALL FRAMING CONSISTS OF 2x6's AT 16"oc AT EXTERIOR WALLS AND 2x4's or 2x6's AT 16"oc AT INTERIOR WALLS PER ARCH DRAWINGS. UNO.
8. REFER TO SHEET S4.0 FOR TYPICAL WOOD FRAMING DETAILS.
9. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
10. DO NOT SCALE DRAWINGS. REFER TO ARCH DRAWINGS FOR ALL DIMENSIONS.

FOOTNOTES

- (1) ALIGN w/ STRAP(S) ABOVE
- (2) INSTALL STRAP TO FACE OF BOTTOM FLUSH BEAM
- (3) INSTALL HOLDOWN UPSIDE DOWN TO BOTTOM FLUSH BEAM ABOVE PER 11/S4.0
- (4) ONE FLANGE CONCEALED
- (5) ALIGN w/ POST ABOVE
- (6) ALIGN POST w/ FACE OF BOTTOM FLUSH BEAM AND POST ABOVE
- (7) BEAM CONNECTION PER 8/S4.2
- (8) INSTALL HOLDOWN AT END OF CANTILEVER BACKSPAN
- (9) POST ABOVE TO BEAR DIRECTLY ON FOUNDATION w/ (2)LAYERS OF BUILDING PAPER AND (2)A35 TO BOTTOM PLATE
- (10) PROVIDE (2)A34 - BEAM TO BOTTOM FLUSH BEAM

LEGEND

- FULL HEIGHT CONCRETE WALL
- STRUCTURAL WALL BELOW
- STRUCTURAL WALL ABOVE
- SPAN AND EXTENTS
- HEADER/BEAM BELOW FRAMING - TYP
- (x) NUMBER OF BUILT UP STUDS
- PLUMBING PENETRATION ABOVE
- HDR2 CS16 x 3'-0" - BEAM TO BEAM
- (2)HDR2 CS16 x 3'-0" - BEAM TO BEAM OR TOP PLATE TO TOP PLATE
- DS DRAG STRUT - NAIL THRU SHEATHING w/ 8d AT 4"oc INTO ENTIRE LENGTH OF MEMBER
- BW3 BEARING WALL CONSISTS OF (2)2M AT 16"oc



FOUNDATION SHALL BE ENTIRELY BACKFILLED AFTER ALL WALLS ARE POURED PRIOR TO FRAMING FIRST FLOOR

COLUMN SCHEDULE

MARK	SIZE AND CONNECTION
C1	HSS 5x4x3/16 TOP CONN PER 6/S4.3 AND BOT CONN PER 2/S3.1
C2	HSS 8x4x1/4 TOP CONN PER 7/S4.3 AND BOT CONN PER 2/S3.1
C3	HSS 4 x 0.237 TOP CONN PER 6/S4.3 AND BOT CONN PER 3/S3.1

FLUSH BEAM SCHEDULE

MARK	SIZE(1)	STUDS	HANGER
B1	LSL 1-3/4 x 11-7/8	2	HUS1.81/10
B2	GL 3-1/2 x 11-7/8 (2) LSL 3-1/2 x 11-7/8	2 2	HHUS410(2) HHUS410
B3	GL 5-1/2 x 11-7/8 (2) PSL 5-1/4 x 11-7/8	3 3	HGUS5.50/10 HGUS5.50/10
B4	PSL 7 x 11-7/8	4	HGUS7.25/10

(1) ALL FLUSH BEAMS ARE DRY-USE UNO
(2) PROVIDE HIGHER WORK PRODUCT - UNO

LEVEL 1 FLOOR FRAMING PLAN

LEVEL 1 WALLS SHOWN DASHED
FOUNDATION/CRAWLSPACE WALLS SHOWN SOLID

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
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MARC J. MALSAM
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PROFESSIONAL ENGINEER

PROJECT NO. 0370.001.06.001
PROJECT MANAGER MJM
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ENGINEER JESSICA MOORE
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REV	DESCRIPTION	DATE
	PERMIT SET	3.17..20
1	PERMIT CORRECTIONS	4.13.20
2	PERMIT CORRECTIONS 2	6.3.20
3	PLAN REVISIONS	8.9.20

ARCH JUNIAN WEBER ARCH + DESIGN
206.933.1306

LEVEL 1 FLOOR FRAMING PLAN

S2.2
SCALE = 1/4" = 1'-0"

PLAN NOTES

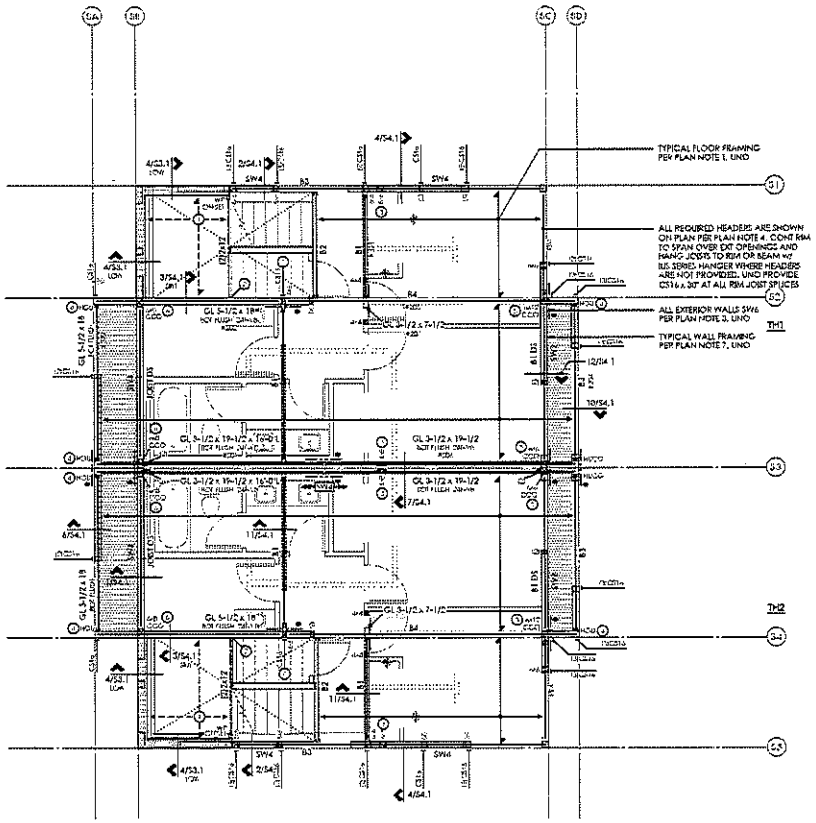
1. TYPICAL FLOOR FRAMING CONSISTS OF 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI 110's AT 16"oc. UNO. PROVIDE DBL JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH
2. GLUE AND NAIL FLOOR SHEATHING w/ 8d AT 6"oc AT FRAMED PANEL EDGES AND OVER SHEAR-WALLS AND AT 12"oc IN FIELD. UNO.
3. "SW_" INDICATES SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 4/S4.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW4. UNO.
4. ALL REQUIRED HEADERS ARE SHOWN ON PLAN AND SHALL BE (2)2x8. UNO REFER TO DETAIL 8/S4.0 FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE (2)BEARING (TRIMMER) STUDS AT EACH END OF ALL HEADERS AND BEAMS (-0" IN LENGTH AND OVER. UNO.
6. WHERE POSTS OCCUR, PROVIDE SOLID VERTICAL GRAIN BLOCKING THRU FLOOR TO MATCHING SUPPORTS BELOW. UNO.
7. TYPICAL WALL FRAMING CONSISTS OF 2x6's AT 16"oc AT EXTERIOR WALLS AND 2x4's or 2x6's AT 16"oc AT INTERIOR WALLS PER ARCH DRAWINGS. UNO.
8. REFER TO SHEET S4.0 FOR TYPICAL WOOD FRAMING DETAILS.
9. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
10. DO NOT SCALE DRAWINGS. REFER TO ARCH DRAWINGS FOR ALL DIMENSIONS.

FOOTNOTES

1. 2x12 LANDING FRAMING AT 16"oc - HANG TO 2x LEDGER w/ LUS HANGERS AND FASTEN LEDGER TO WALL w/ (2)10d INTO EACH STUD AT WOOD WALL - HANG TO SILL PLATE PER 4/S3.1 WHERE LANDING INTERFACES w/ FOUNDATION WALL
2. POCKET BEAM INTO WALL w/ (2)BEARING STUDS AND (1)FULL HEIGHT STUD EACH SIDE
3. ALIGN w/ POST ABOVE
4. ONE FLANGE CONCEALED
5. POST TO BEAR DIRECTLY ON BEAM BELOW - NOTCH BOTTOM PLATE AND SHEATHING AND PROVIDE (2)A35 TO BOTTOM PLATE
6. POST TO BEAR DIRECTLY ON FOUNDATION w/ (2)LAYERS OF BUILDING PAPER AND (2)A35 TO BOTTOM PLATE
7. INSTALL STRAP AT END OF BOTTOM FLUSH CANTILEVER BACKSPAN

LEGEND

- CONCRETE WALL BELOW
- STRUCTURAL WALL BELOW
- STRUCTURAL WALL ABOVE
- SPAN AND EXTENTS
- SPAN AND EXTENTS OF FRAMING BELOW
- HEADER/BEAM BELOW FRAMING - TYP
- (x) NUMBER OF BUILT UP STUDS
- PLUMBING PENETRATION ABOVE
- HDRE GS1 e x 3'-0" - BEAM TO BEAM OR TOP PLATE TO TOP PLATE
- DS DRAG STRUT - NAIL THRU SHEATHING w/ 8d AT 4"oc INTO ENTIRE LENGTH OF MEMBER
- BLOCK DIAPHRAGM - PROVIDE FLAT 2x4 BLKG w/ 8d AT 4"oc AT ALL PANEL EDGES AND 8d AT 12"oc IN THE FIELD



FLUSH BEAM SCHEDULE

MARK	SIZE	END STUDS	HANGER
B1	LSL 1-3/4 x 11-7/8	2	HUS1.81/10
B2	GL 3-1/2 x 11-7/8 DFL LSL 3-1/2 x 11-7/8	2 2	HHUS410 ① HHUS410
B3	GL 5-1/2 x 11-7/8 DFL PSL 5-1/4 x 11-7/8	3 3	HGUS5.50/10 HGUS5.50/10
B4	PSL 7 x 11-7/8	4	HGUS7.25/10

① HG OR SIMILAR FACE MOUNT - TYP
② PROVIDE HUS410 WHERE REQUIRED - TYP

LEVEL 2 FLOOR FRAMING PLAN

LEVEL 2 WALLS SHOWN DASHED
LEVEL 1 WALLS SHOWN SOLID

N

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

NOT APPROVED

PROJECT NO: 0370.2018.06.01
PROJECT MANAGER: WAC
DRAWN: DDK
ENGINEER: JESSICA HOOKY
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REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH: ASIAN WORKS ARCH + DESIGN
206.953.1309

LEVEL 2 FLOOR FRAMING PLAN

S2.3

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

PLAN NOTES

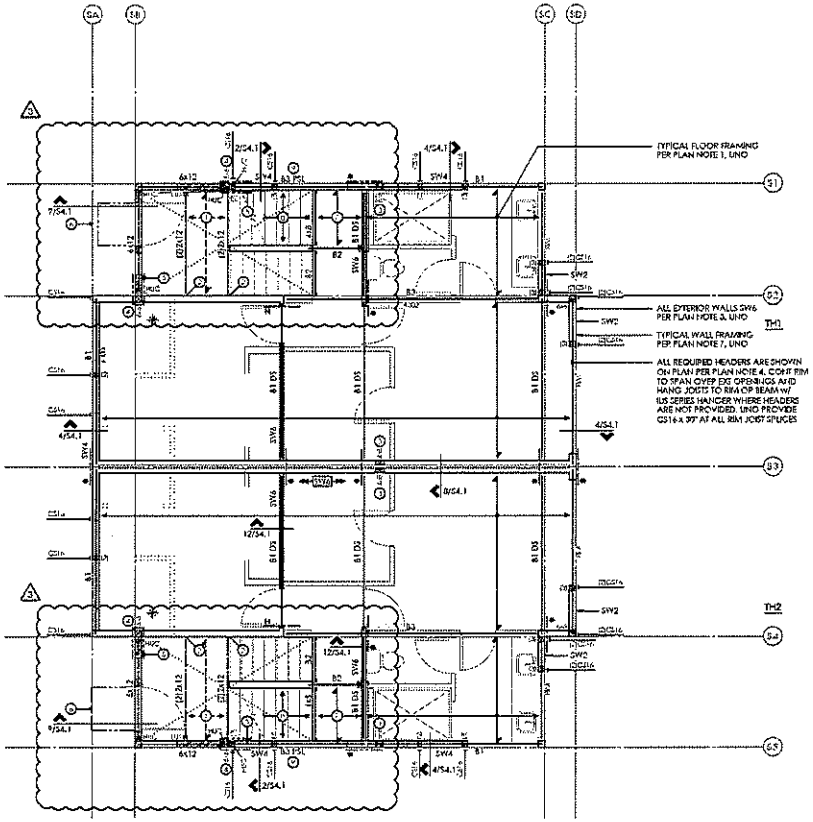
1. TYPICAL FLOOR FRAMING CONSISTS OF 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 11-7/8" TJI 110's AT 16"oc. UNO. PROVIDE DBL JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH
2. GLUE AND NAIL FLOOR SHEATHING w/ 8d AT 6"oc AT FRAMED PANEL EDGES AND OVER SHEAR-WALLS AND AT 12"oc IN FIELD. UNO.
3. "SW_" INDICATES SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 4/S4.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW6. UNO.
4. ALL REQUIRED HEADERS ARE SHOWN ON PLAN AND SHALL BE (2)2x8. UNO. REFER TO DETAIL 8/S4.0 FOR ADDITIONAL REQUIREMENTS.
5. PROVIDE (2)BEARING (TRIMMER) STUDS AT EACH END OF ALL HEADERS AND BEAMS 6'-0" IN LENGTH AND OVER. UNO.
6. WHERE POSTS OCCUR, PROVIDE SOLID VERTICAL GRAIN BLOCKING THRU FLOOR TO MATCHING SUPPORTS BELOW. UNO.
7. TYPICAL WALL FRAMING CONSISTS OF 2x6's AT 16"oc AT EXTERIOR WALLS AND 2x4's or 2x6's AT 16"oc AT INTERIOR WALLS PER ARCH DRAWINGS. UNO.
8. REFER TO SHEET S4.0 FOR TYPICAL WOOD FRAMING DETAILS.
9. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
10. DO NOT SCALE DRAWINGS. REFER TO ARCH DRAWINGS FOR ALL DIMENSIONS.

FOOTNOTES

1. 2x12 LANDING FRAMING AT 16"oc - HANG TO RIM OR 2x LEDGER w/ LUS HANGERS AND FASTEN LEDGER TO WALL w/ (3)16d @ 4"O EACH STUD
2. POCKET BEAM INTO WALL w/ (2)BEARING STUDS AND (1)FULL HEIGHT STUD EACH SIDE
3. ALIGN w/ POST ABOVE
4. PROVIDE HGA10KT TOP AND BOTTOM OF POST
5. INSTALL HDR2 CS16 TO WRAP AROUND POST AND LAP BEAM 1'-6" MIN EACH SIDE
6. PREFABRICATED WOODWORK AT CLIENT
7. LANDING FRAMING CONSISTS OF 2x10's AT 16"oc. JOISTS CAN BE TAPERED TO A MIN DEPTH OF 7-1/4"
8. RAISED 2x6 ROOF FRAMING AT 24"oc w/ LRU2 HANGER EACH END - REFER TO S2.5 FOR CONTINUATION
9. NOTCH AND TAPER BEAM TO MATCH JOIST DEPTH - 7-1/4" MIN. NO OVERCUTS

LEGEND

- STRUCTURAL WALL BELOW
- FRAME WALL FROM FOUNDATION TO LEVEL 2.5
- STRUCTURAL WALL ABOVE
- SPAN AND EXTENTS
- SPAN AND EXTENTS OF FRAMING BELOW
- HEADER/BEAM BELOW FRAMING - TYP
- [2] NUMBER OF BUILT UP STUDS
- PLUMBING PENETRATION ABOVE
- HDR2 CS16 x 3'-0" - BEAM TO BEAM, RIM TO RIM, OR BEAM TO RIM
- H1 HTS20G - BEAM TO TOP PLATE
- DS DRAG STRUT - NAIL THRU SHEATHING w/ 8d AT 4"oc INTO ENTIRE LENGTH OF MEMBER



FLUSH BEAM SCHEDULE

MARK	SIZE①	BRG STUDS	HANGER
B1	LSL 1-3/4 x 11-7/8	2	HUS1.81/10
B2	GL 3-1/2 x 11-7/8 OR LSL 3-1/2 x 11-7/8	2 2	HHUS410② HHUS410
B3	GL 5-1/2 x 11-7/8 OR PSL 5-1/4 x 11-7/8	3 3	HGUS5.50/10 HGUS5.50/10
B4	PSL 7 x 11-7/8	4	HGUS7.25/10

① ALL SCHEDULED BEAMS ARE DF-#2 UNO
② PROVIDE HUS210 IN LIEU REQUIRED UNO

LEVEL 3 FLOOR FRAMING PLAN

LEVEL 3 WALLS SHOWN DASHED
LEVEL 2 WALLS SHOWN SOLID

N

MAL-SAM TSANG STRUCTURAL ENGINEERING

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MARC J. MALSAM
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

PROJECT NO 0070.2018.004.01
PROJECT MANAGER MMC
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ENGINEER JESSICA MOORE
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REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH JULIAN WEBER AIA • DESIGN
206.957.1305

LEVEL 3 FLOOR FRAMING PLAN

S2.4

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

PLAN NOTES

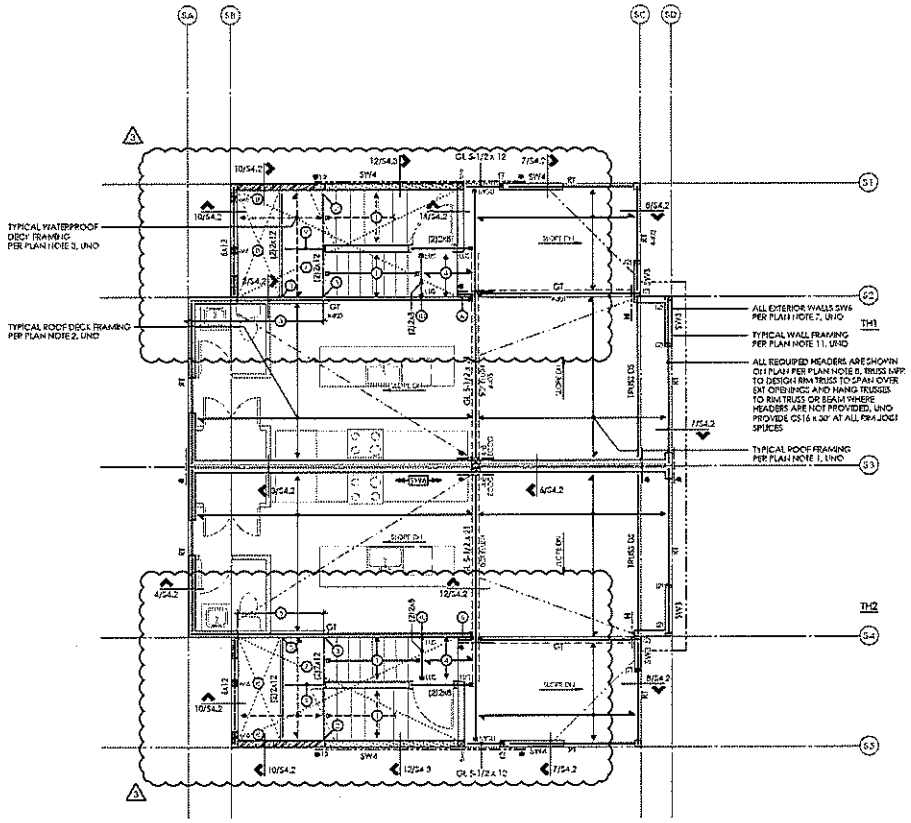
1. TYPICAL ROOF FRAMING CONSISTS OF 3/4" APA RATED SHEATHING (SPAN RATING 48/24) OVER PRE-MANUFACTURED PARALLEL CHORD TRUSSES AT 24"oc. UNO. TRUSSES TO BE A MIN DEPTH OF 14". PROVIDE H2.5A CLIPS EACH END OF ALL TRUSSES, AND H2.5A EACH SIDE OF ALL MULTIPLE TRUSSES, UNO. REFER TO ARCH DRAWINGS FOR TRUSS PROFILE.
2. TYPICAL ROOF DECK FRAMING CONSISTS OF PALLETIZED DECKING PER ARCH (5 PSF MAX) OVER 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER PRE-MANUFACTURED TRUSSES AT 24"oc. TOP CHORD OF TRUSS TO SLOPE A MIN OF 1/4" PER 1'-0". TRUSSES TO BE A MIN DEPTH OF 14". PROVIDE H2.5A CLIPS EACH END OF ALL TRUSSES, AND H2.5A EACH SIDE OF ALL MULTIPLE TRUSSES, UNO. REFER TO ARCH DRAWINGS FOR TRUSS PROFILE.
3. TYPICAL WATERPROOF DECK FRAMING CONSISTS OF 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 2x12's AT 16"oc. UNO. JOISTS CAN BE TAPERED TO A MIN DEPTH OF 8".
4. TYPICAL CRICKET ROOF FRAMING CONSISTS OF 3/4" T&G APA RATED SHEATHING (SPAN RATING 48/24) OVER 2x SLEEPERS AT 24"oc. TO SMALL SLEEPERS w/ (2) 10d AT 24"oc OVER TYPICAL ROOF FRAMING. PROVIDE VENTING HOLES BELOW CRICKET ROOF FRAMING AS REQUIRED.
5. NAIL ROOF SHEATHING w/ 8d AT 6" oc AT FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12"oc IN FIELD, UNO.
6. GLUE AND NAIL FLOOR AND ROOF DECK SHEATHING w/ 8d AT 6"oc AT FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12"oc IN FIELD, UNO.
7. THIN, 2" INDICATED SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE ON 4/S4.0 FOR ADDITIONAL INFORMATION. ALL EXTERIOR WALLS ARE SW6, UNO.
8. ALL REQUIRED HEADERS ARE SHOWN ON PLAN AND SHALL BE (2)2x8, UNO. REFER TO DETAIL 8/S4.0 FOR ADDITIONAL REQUIREMENTS.
9. PROVIDE (2)BEARING (1)PRIMARY STUDS AT EACH END OF ALL HEADERS, BEAMS, AND GIRDER TRUSSES 6'-0" IN LENGTH AND OVER, UNO.
10. WHERE POSTS OCCUR, PROVIDE SOLID VERTICAL GRAIN BLOCKING THRU FLOOR TO MATCHING SUPPORTS BELOW, UNO.
11. TYPICAL WALL FRAMING CONSISTS OF 2x4's AT 16"oc AT EXTERIOR WALLS AND 2x4's or 2x6's AT 16"oc AT INTERIOR WALLS PER ARCH DRAWINGS, UNO.
12. REFER TO SHEET S4.0 FOR TYPICAL WOOD FRAMING DETAILS.
13. REFER TO GENERAL STRUCTURAL NOTES SHEET S1.0 FOR ADDITIONAL REQUIREMENTS.
14. DO NOT SCALE DRAWINGS. REFER TO ARCH DRAWINGS FOR ALL DIMENSIONS.

FOOTNOTES

1. RAISED 2x8 ROOF FRAMING AT 24"oc w/ LRUZ HANGER EACH END
2. POCKET BEAM INTO WALL w/ (2)BEARING STUDS AND (1)FULL HEIGHT STUD EACH SIDE
3. PROVIDE 4x6 w/ EPC AT PONY WALL TO SUPPORT LANDING BEAM
4. 2x8 AT 16"oc - HANG TO BEAM w/ LUS HANGERS EACH END
5. PROVIDE PONY WALL TO SUPPORT LANDING FRAMING
6. PROVIDE BLOCKING TO ENSURE STRAP DOES NOT BEND - TRUSS MFR TO PROVIDE HEADER TO RECEIVE (8)1/4"x6" x 8" SDS SCREWS EVENLY SPACED OVER 2'-0" LENGTH MIN AT TOP CHORD
7. NOTCH AND TAPER BEAM TO MATCH JOIST DEPTH - 6" MIN. NO OVERCUTS
8. LOCATE POST FOR TIE ROD AND PROVIDE (2)HGA10KT TOP AND BOTTOM OF POST
9. PROVIDE FULL DEPTH 2x BLOCKING BELOW WALL
10. TRUSS MFR TO DESIGN GIRDER TRUSS TO RECEIVE NAILING FOR HANGER PER PLAN AND DESIGN FOR A 1000LB POINT LOAD

LEGEND

- STRUCTURAL WALL BELOW
- BALLOON FRAME WALL w/ (2)2x6 STUDS AT 16"oc - LEVEL 3 TO TOP OF WALL
- FRAME WALL FROM LEVEL 2.5 TO LEVEL 3.5
- STRUCTURAL WALL ABOVE
- SPAN AND EXTENTS
- SPAN AND EXTENTS OF FRAMING BELOW
- HEADER/BEAM BELOW FRAMING - TYP
- SLOPE DN — DIRECTION OF SLOPE
- (x) — NUMBER OF BUILT UP STUDS
- HDPB CS16 x 3'-0" - BEAM TO BEAM, BEAM TO BLOCK PER FOOTNOTE 6 OR TOP PLATE TO TOP PLATE
- HTS30C - BEAM TO TOP PLATE
- HDPB CS16 x X'-0" OVER WALL SHEATHING - LAP RIM/ BEAM 1'-6" AND NAIL REMAINING LENGTH TO SNUG FIT FLAT 2x6 BLOCKING BETWEEN STUDS
- DS — DRAG STRUT - NAIL THRU SHEATHING w/ 8d AT 4"oc INTO ENTIRE LENGTH OF MEMBER
- GT — GIRDER TRUSS
- RT — RIM TRUSS



ROOF DECK FRAMING PLAN

PENTHOUSE WALLS SHOWN DASHED
LEVEL 3 WALLS SHOWN SOLID

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

MARC J. MALSAM
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

PROJECT NO 0370.2018.04.01
PROJECT MANAGER MMC
DRAWN DDT
ENGINEER JESSICA MOORE
JESSICAM@MALSAM-TSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	11.7.19
1	PERMIT CORRECTIONS	4.16.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH: JULIAN VIERES ARCH + DESIGN
206.957.1709

ROOF DECK FRAMING PLAN

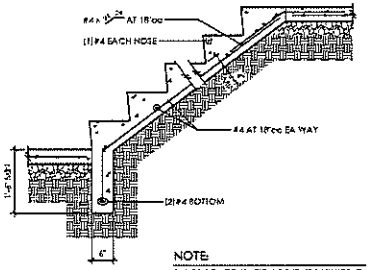
S2.5

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

ABBREVIATIONS

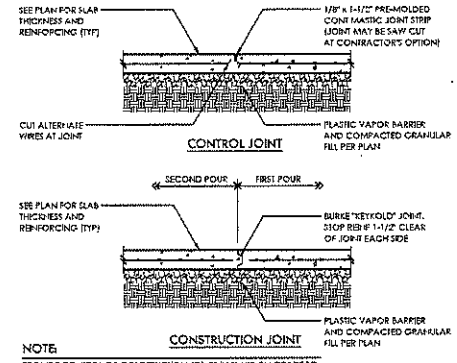
±	PLUS OR MINUS	GL	GLUE LAMINATED	OSB	ORIENTED STRAND BOARD
Ø	DIAMETER		TIMBER		
AB	ANCHOR BOLT	GR	GRADE	PLF	POUNDS PER LINEAR FOOT
ADDL	ADDITIONAL	GT	GIRDER TRUSS		
ALT	ALTERNATE	GWB	GYPSUM WALLBOARD	PLY	PLYWOOD
APPROX	APPROXIMATE	HD	HOLDOWN	PREFAB	PREFABRICATED
ARCH	ARCHITECT, ARCHITECTURAL	HDR	HEADER	PSF	POUNDS PER SQUARE FOOT
		HF	HEM FIR		
BLKG	BLOCKING	HGR	HANGER	PSI	POUNDS PER SQUARE INCH
BM	BEAM	HM	HIP MASTER		
BOE	BOTTOM OF EXCAVATION	HORIZ	HORIZONTAL	PSL	PARALLEL STRAND LUMBER
		HT	HEIGHT		
BOT	BOTTOM	IBC	INTERNATIONAL BUILDING CODE	PT	PRESSURE TREATED LUMBER
℄	CENTERLINE				
CLR	CLEARANCE	INT	INTERIOR	REINF	REINFORCING
CONT	CONTINUOUS	IRC	INTERNATIONAL RESIDENTIAL CODE	REQD	REQUIRED
DBL	DOUBLE			SOG	SLAB ON GRADE
DF	DOUGLAS FIR	JST	JOIST	SQ	SQUARE
DP	DEEP, DEPTH	K	KIPS (1000 LBS)	STD	STANDARD
DN	DOWN	KP	KING POST	SW	SHEARWALL
DS	DRAG STRUT	L	LENGTH	T&G	TONGUE AND GROOVE
DWGS	DRAWINGS	LBS	POUNDS	THRD	THREADED
(E)	EXISTING	LONG	LONGITUDINAL	TPL	TRIPLE
EA	EACH	LSL	LAMINATED STRUCTURAL LUMBER	TRANSV	TRANSVERSE
EMBED	EMBEDMENT			TYP	TYPICAL
EQ	EQUAL	LVL	LAMINATED VENEER LUMBER	UND	UNLESS NOTED OTHERWISE
EQUIV	EQUIVALENT				
EW	EACH WAY	MAX	MAXIMUM	VERT	VERTICAL
EXP	EXPANSION	MB	MACHINE BOLT	W	WIDE OR WIDTH
EXT	EXTERIOR	MFR	MANUFACTURER	w/	WITH
FDN	FOUNDATION	MIN	MINIMUM	w/o	WITHOUT
FRMG	FRAMING	MISC	MISCELLANEOUS	WHS	WELDED HEADED STUD
FT	FEET	NO	NUMBER		
FTG	FOOTING	NTS	NOT TO SCALE	WTS	WELDED THREADED STUD
GA	GAUGE	oc	ON CENTER		
GALV	GALVANIZED	OPP	OPPOSITE	WWM	WELDED WIRE MESH

1



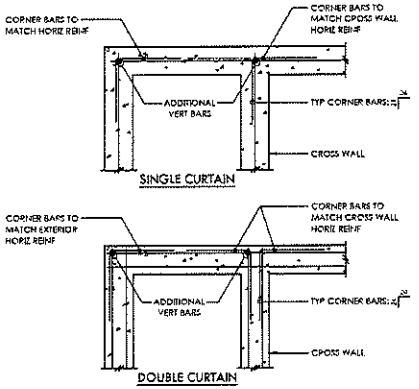
NOTE:
EXACT CONFIGURATION OF STAIR INCLUDING TREAD AND RISER DIMS PER ARCH DRAWINGS

TYPICAL STAIR ON GRADE 2



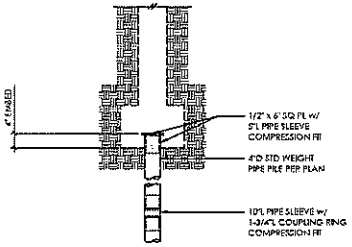
NOTE:
PROVIDE CONTROL OR CONSTRUCTION JOINTS IN SLABS ON GRADE TO BREAK UP SLAB INTO RECTANGULAR AREAS OF 200 SQUARE FEET OR LESS. AREAS TO BE APPROX SQUARE AND HAVE NO ACUTE ANGLES. JOINT LOCATIONS TO BE APPROVED BY THE ARCHITECT.

TYPICAL SLAB JOINTS 3

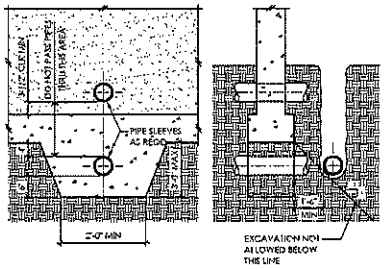


TYP CORNER BARS AT CONCRETE WALLS AND FTGS 4

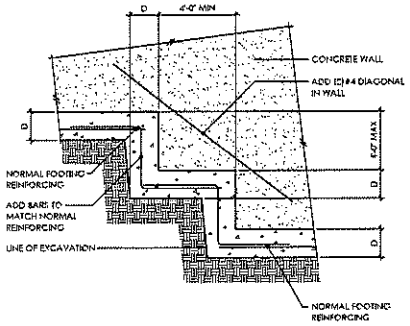
5



4"Ø PILES
TYPICAL PIPE PILE 6

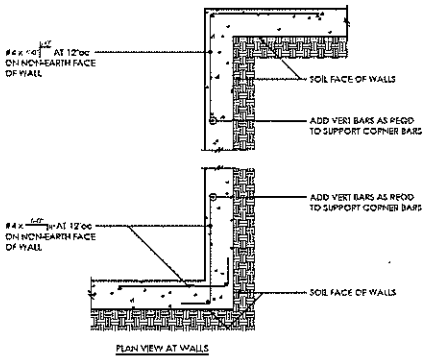


PIPE AND TRENCH LOCATIONS 7



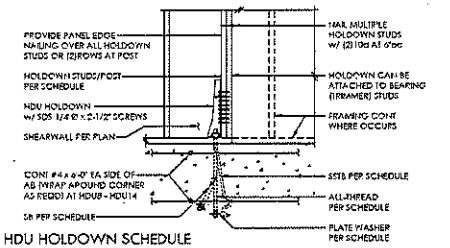
TYPICAL STEPPED FOOTING 8

9



PLAN VIEW AT WALLS

ADDITIONAL REINFORCEMENT AT RETAINING WALLS 10

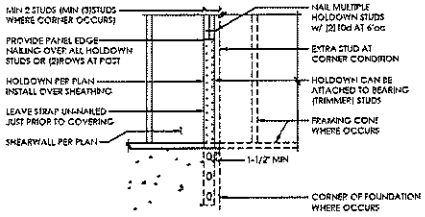


HDU HOLDOWN SCHEDULE

PLAN MARK	AT STEMWALL AB	EMBED	AT FOOTING ① ALL-THREAD	WASHER	EMBED	HD POST ② 4x WALL	6x WALL
HDU2	5/8"Ø - SSTB16(E)	12-5/8"	5/8"Ø	1-3/4"SQ x 1/2	9"	(2)2x4	(2)2x6
HDU4	5/8"Ø - SB5/8 x 24	18"	5/8"Ø	1-3/4"SQ x 1/2	9"	(2)2x4	(2)2x6
HDU5	5/8"Ø - SB5/8 x 24	18"	5/8"Ø	1-3/4"SQ x 1/2	9"	(2)2x4	(2)2x6
HDU8	7/8"Ø - SB7/8 x 24	18"	7/8"Ø	2-1/2"SQ x 1/2	12"	4x6	6x6
HDU11	1"Ø - SB1 x 30 ③	24"	1"Ø	2-3/4"SQ x 5/8	12"	4x8	6x8
HDU14	-	-	1"Ø	2-3/4"SQ x 5/8	12"	4x12	6x8

① A307 ALL-THREAD w/ PLATE WASHER PER SCHEDULE AND DOUBLE NUT BOTTOM OR EQUIVALENT SIMPSON PAB
② MINIMUM SIZE OF POST UND ON FRAMING PLANS
③ REQUIRES MINIMUM 8" THICK CONCRETE WALL

11



LSTHD/STHD HOLDOWN SCHEDULE

PLAN MARK	NAILS ①	HD POST ②
LSTHD8(RJ)	(20)16d SINKERS	DBL STUD
STHD10(RJ)	(28)16d SINKERS	DBL STUD
STHD14(RJ)	(30)16d SINKERS	DBL STUD

① 16d SINKERS = 0.148"Ø x 3-1/4"
② MINIMUM SIZE OF POST U/O ON FRAMING PLANS

12

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

MARC J. MALSAM
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STRUCTURAL ENGINEER

PROJECT NO 0370.001.00
PROJECT MANAGER MJM
DRAWN DPK
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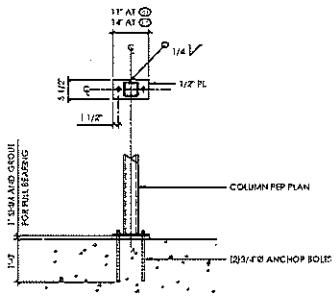
REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.19.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH: JULIAN WEBER ARCH + DESIGN
206.652.1208

TYPICAL CONCRETE DETAILS

S3.0
SCALE: 3/4" = 1'-0"



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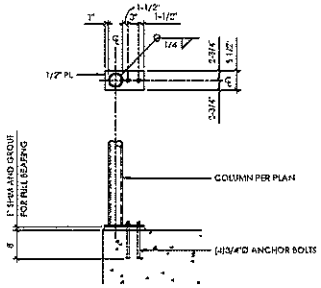
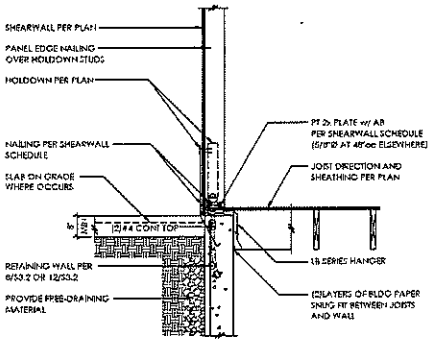


BASEPLATE - HSS COLUMN 2



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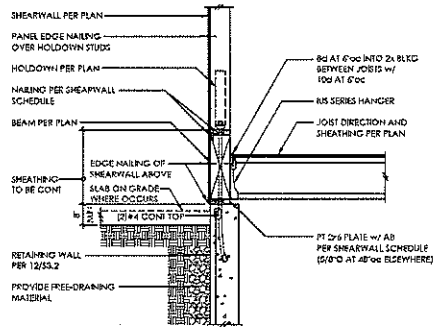

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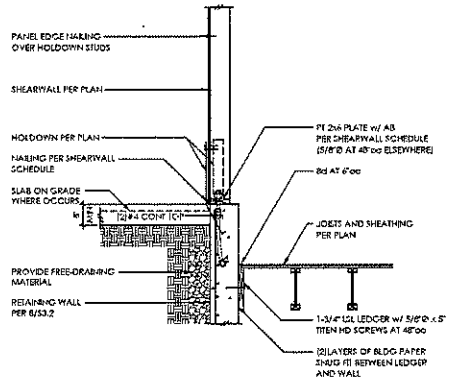

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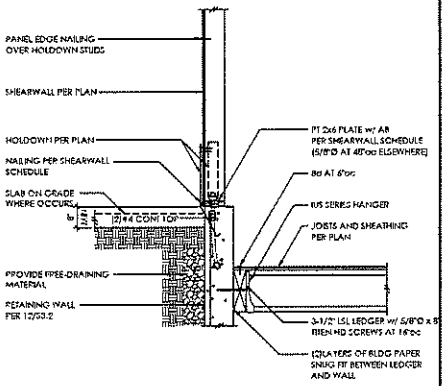

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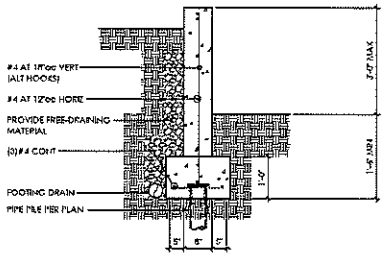

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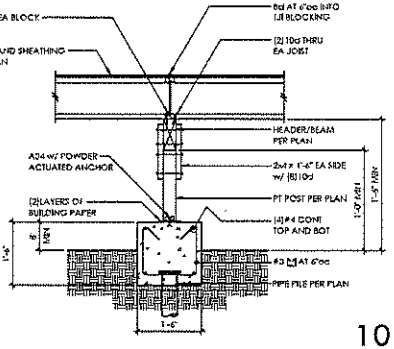

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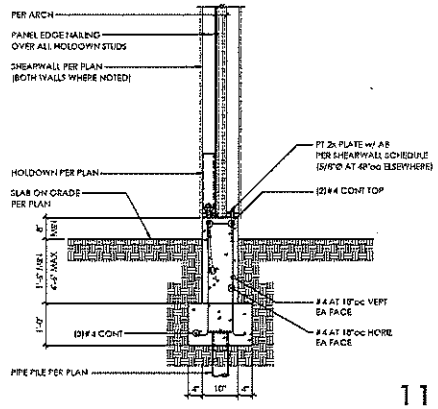

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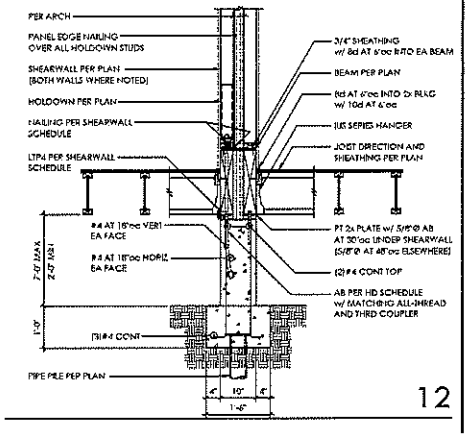

12

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

MARC J. MALSAM
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

PROJECT NO	6379.2014.04.01
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REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.19.19
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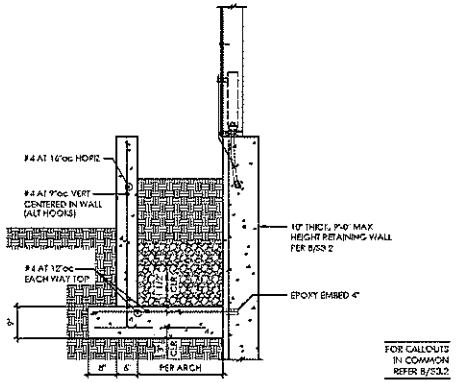
ARCH: JULIAN WEBER ARCH + DESIGN
206.853.1509

CONCRETE DETAILS

S3.1

SCALE - 3/4" = 1'-0"



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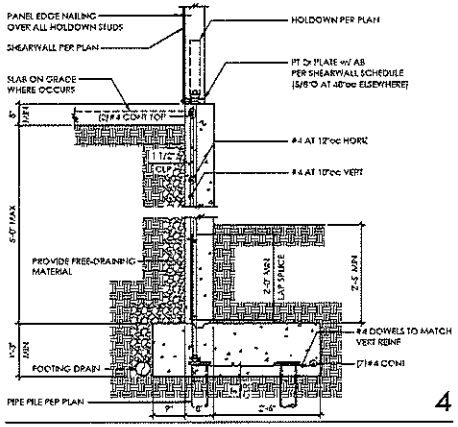
FOR CALLOUTS IN COMMON REFER 8/S3.2

3



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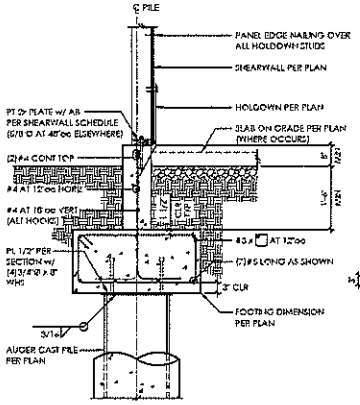

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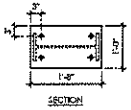

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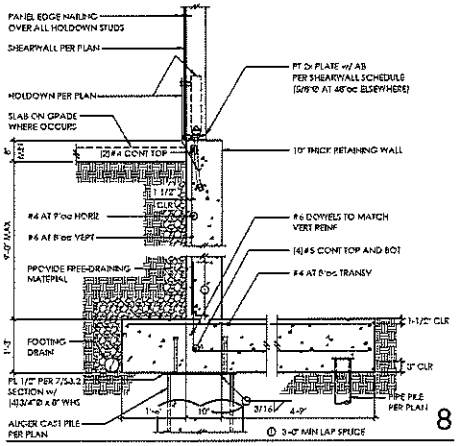

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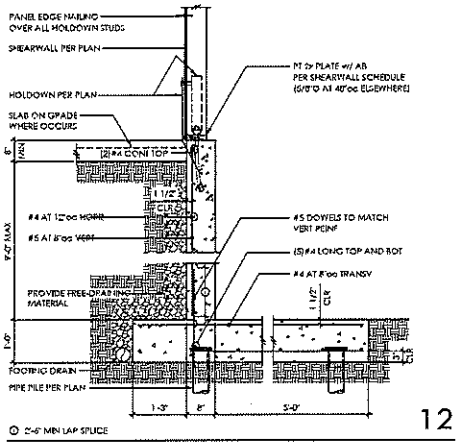

12

1

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9

10

11

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
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3/13/2019 IFC

MARC J. MALSAM
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ARCH JUSAN WEBER ARCH + DESIGN
206.932.1309

CONCRETE DETAILS

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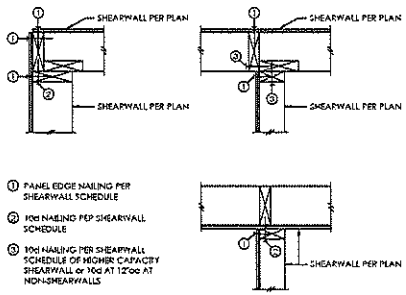
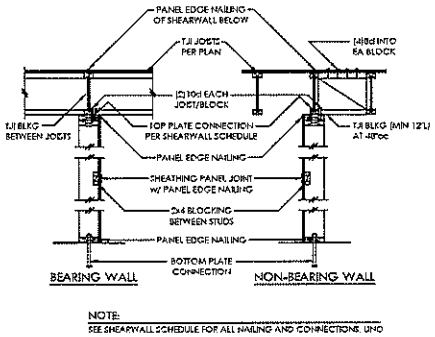


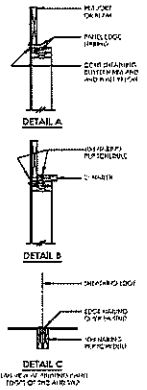
SCALE: 1-1/2" = 1'-0"

TYPICAL SHEARWALL INTERSECTIONS 1



NOTE:
SEE SHEARWALL SCHEDULE FOR ALL NAILING AND CONNECTIONS, UNO

TYPICAL SHEARWALL CONSTRUCTION 2



SHEARWALL SCHEDULE①②③④⑤⑥

MARK	SHEATHING	PANEL EDGE NAILING	TOP PLATE CONNECTION		BASE PLATE CONNECTION	
			TJI	RIM/BEAM⑦⑧	AT WOOD	AT CONCRETE
SW6	1/2" PLY or 7/16" OSB	8d AT 6"oc	10d AT 6"oc	A35 AT 30"oc	10d AT 6"oc	5/8"Ø AB AT 48"oc
SW4	1/2" PLY or 7/16" OSB	8d AT 4"oc	10d AT 4"oc	A35 AT 18"oc	10d AT 4"oc	5/8"Ø AB AT 42"oc
SW3 ⑨	1/2" PLY or 7/16" OSB	8d AT 3"oc	(2)10d AT 6"oc	A35 AT 16"oc	(2)ROWS 12d AT 6 oc	5/8"Ø AB AT 36"oc
SW2 ⑩	1/2" PLY or 7/16" OSB	8d AT 2"oc	(2)ROWS 10d AT 4"oc	A35 AT 12"oc	(2)ROWS 12d AT 4"oc	5/8"Ø AB AT 24"oc

① BLOCK PANEL EDGES WITH 2x4 LAID FLAT AND NAIL PANELS TO INTERMEDIATE SUPPORTS WITH 8d AT 12"oc.

② 8d NAILS SHALL BE 0.131"Ø x 2-1/2", 10d NAILS SHALL BE 0.131"Ø x 3", AND 12d NAILS SHALL BE 0.131"Ø x 3-1/4".

③ EMBED ANCHOR BOLTS AT LEAST 7". ALL BOLTS SHALL HAVE 3" x 3" x 0.229" PLATE WASHERS. THE PLATE WASHER SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE BOTTOM PLATE ON THE SIDE WITH SHEATHING.

④ 3x STUDS OR DBL STUDS NAILED TOGETHER w/ 10d NAILING IS REQD AT ABUTTING PANEL EDGES OF SW3 AND SW2. REFER TO DETAIL C. WHERE 3x STUDS ARE USED, STAGGER NAILS AT ADJOINING PANEL EDGES.

⑤ TWO STUDS MINIMUM OR POST PER PLAN ARE REQUIRED AT EACH END OF ALL SHEARWALLS AND ALL END STUDS SHALL RECEIVE PANEL EDGE NAILING.

⑥ ALL EXTERIOR WALLS SHALL BE SW6, UNLESS NOTED OTHERWISE.

⑦ NAILS SHALL NOT BE SPACED LESS THAN 3/8" FROM EDGES OF SHEATHING. SHEATHING NAILS SHALL BE DRIVEN SO THEIR HEADS ARE FLUSH WITH SHEATHING (NOT COUNTERSUNK).

⑧ LTP4's INSTALLED OVER SHEATHING WITH 8d (0.131"Ø x 2-1/2") NAILS MAY BE SUBSTITUTED FOR A35's AT CONTRACTORS OPTION.

⑨ A35's OR LTP4's MAY BE ELIMINATED PER DETAIL A OR DETAIL B.

4

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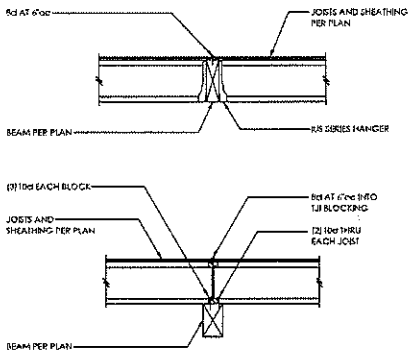
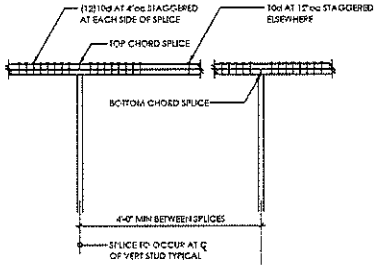
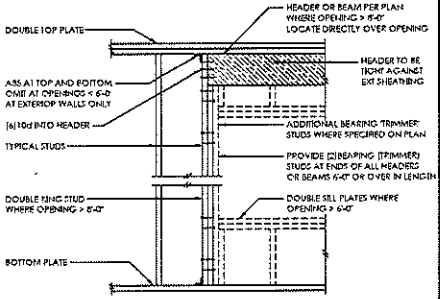


TYPICAL FLUSH AND DROPPED BEAM 6

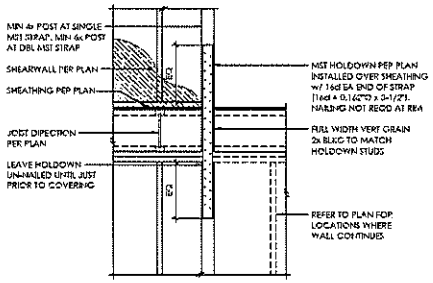


NOTE:
1. NAILING AT TOP PLATE SPLICES MAY BE ELIMINATED w/ CS16 x 30'
2. WHERE VERTICAL PENETRATIONS THRU PLATE EXCEED 1" FOR A 4x WALL OR 3" FOR A 6x WALL - PROVIDE CS16 x 30' AT TOP PLATE
3. MINIMUM EDGE DISTANCE FOR VERTICAL PENETRATIONS THRU TOP PLATE IS 1-1/4"

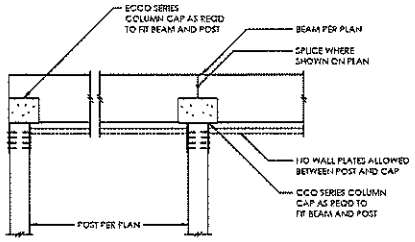
AT SHEARWALLS
TYPICAL TOP PLATE SPLICE 7



TYPICAL HEADER SUPPORT 8



TYPICAL MST HOLDOWN 9



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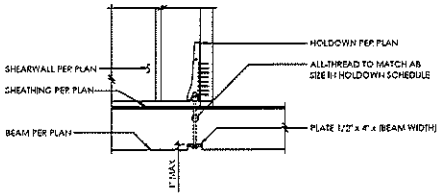

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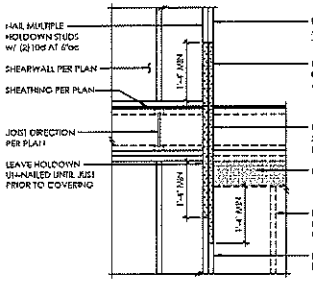


TYPICAL CS16 HOLDOWN 12

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

MARC J. MALSAM STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

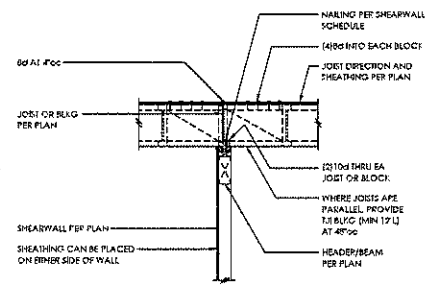
PROJECT NO 0379.2018.0N03
PROJECT MANAGER MMC
DRAWN DDF
ENGINEER JESSICA MOONEY
206.MALSAM
JESSICAM@MALSAM-TSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH: ALBAN WEBER ARCH + DESIGN
206.953.1305

TYPICAL WOOD FRAMING DETAILS

S4.0
SCALE: 3/4" = 1'-0"



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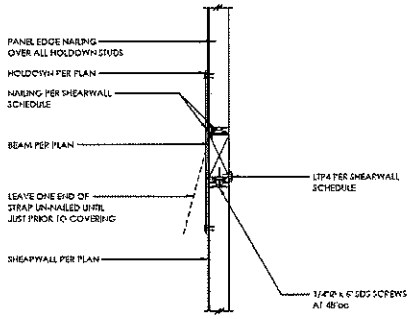

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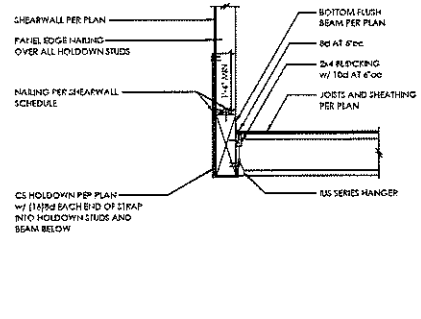

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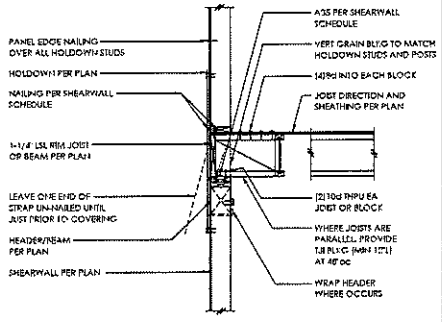

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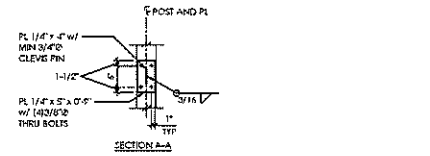

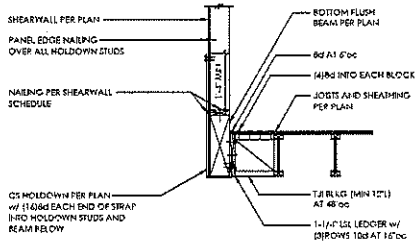

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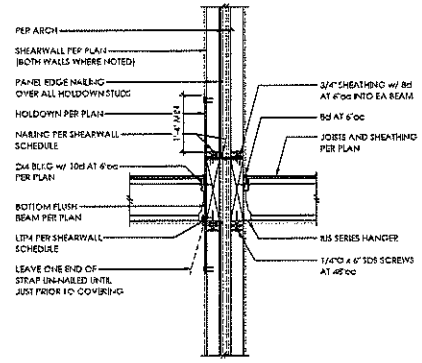

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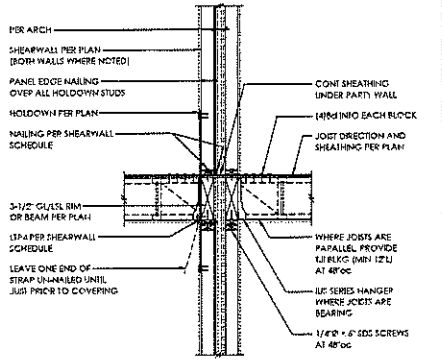

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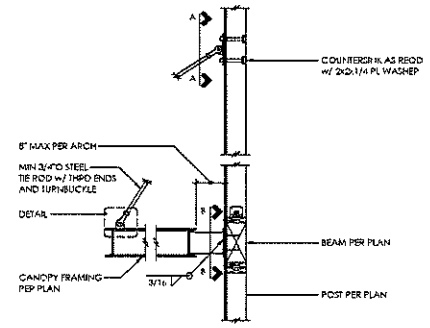

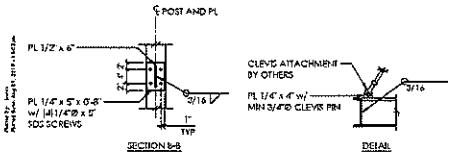

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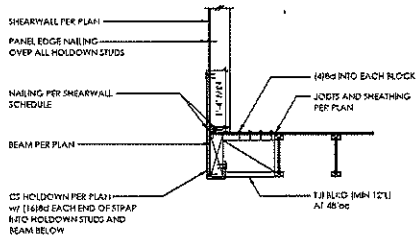

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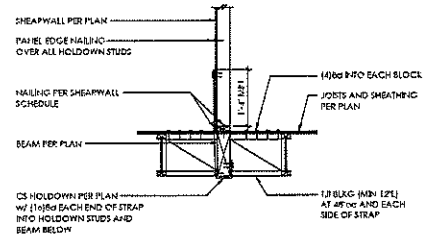

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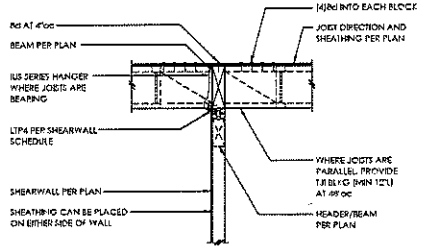


12

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

NOT APPROVED

MARC J. MALSAM
STATE OF WASHINGTON
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

PROJECT NO 0370.2018.0401
PROJECT MANAGER WAC
DRAWN DDR
ENGINEER JESSICA MOORE, PE
JESSICAM@MALSAMTSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	5.5.19
3	PLAN REVISIONS	8.9.19

ARCH: ALLISON WEBER ARCH + DESIGN
206.953.1395

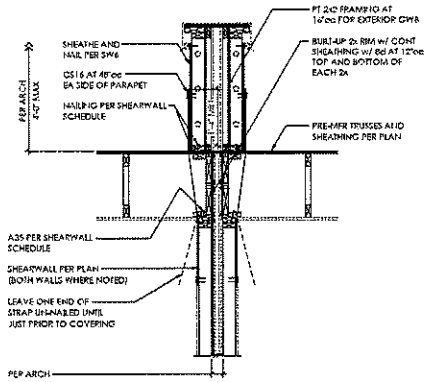
WOOD FRAMING DETAILS

S4.1

SCALE: 3/4" = 1'-0"

1

2



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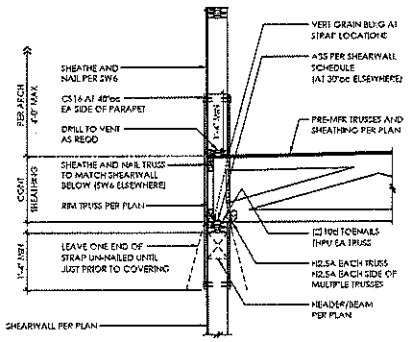

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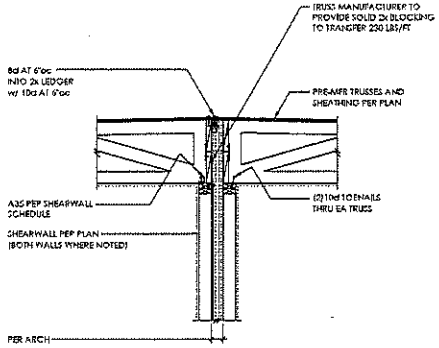

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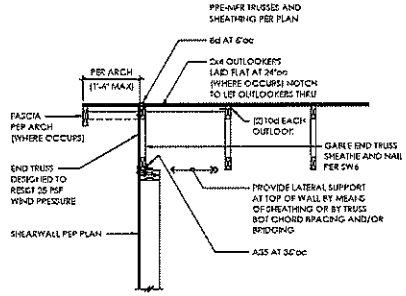

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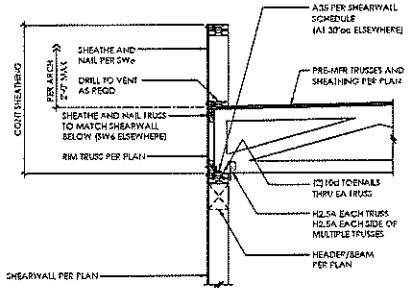

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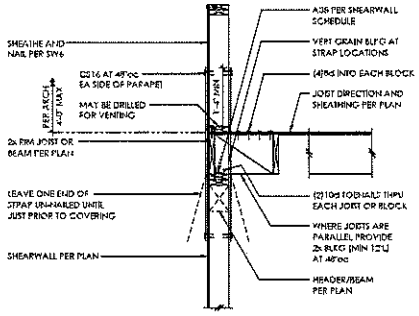

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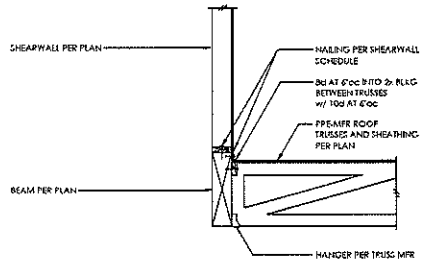

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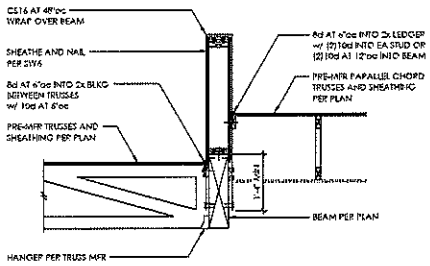


12

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

MARC J. MALSAM
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

PROJECT NO 1937L2016 (PA3)
PROJECT MANAGER MJM
DRAWN CDK
SIGNATE JESSICA MOORE
JESSICAM@MALSAM-TSANG.COM

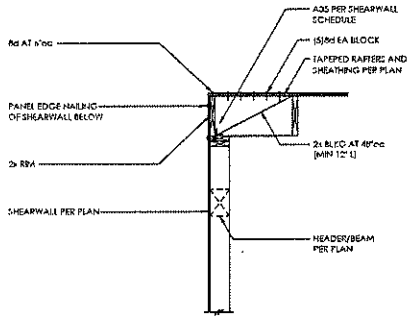
REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH: JOHN WEBB ARCHITECT DESIGN 206.957.1004

WOOD FRAMING DETAILS

S4.2

SCALE - 3/4" = 1'-0"



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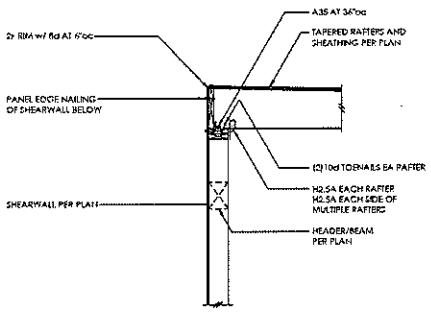

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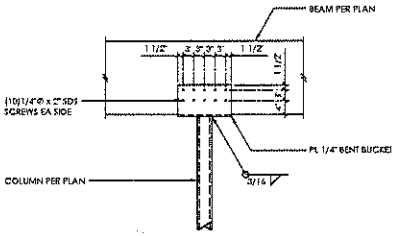

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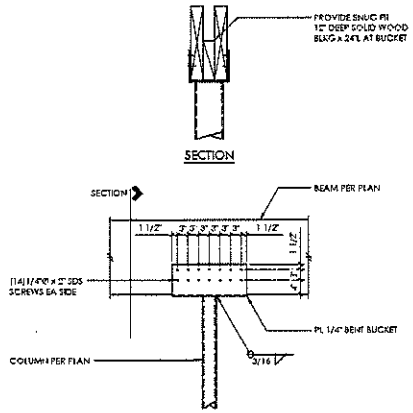

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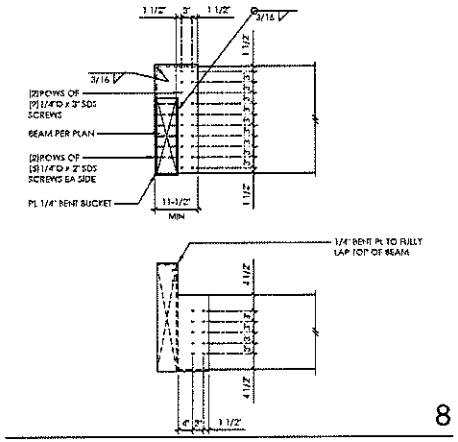

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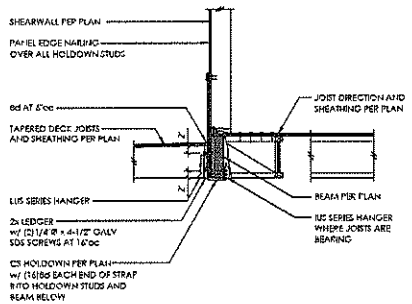

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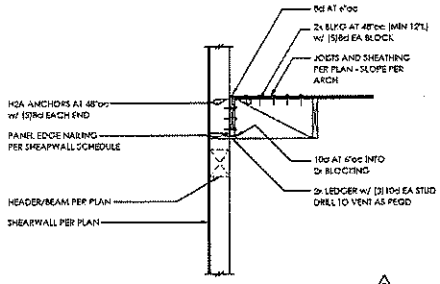


12

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

SEAL APPROVED

MARC J. MALSAM
STATE OF WASHINGTON
PROFESSIONAL ENGINEER

PROJECT NO 0370.2019 B.PALD1
PROJECT MANAGER MJC
DRAWN FDR
ENGINEER JESSICA MOORE
JESSICAM@MALSAM-TSANG.COM

REV.	DESCRIPTION	DATE
	PERMIT SET	11.7.19
1	PERMIT CORRECTIONS	4.13.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.9.19

ARCH JOHAN WEBER ARCH + DESIGN
206.937.1309

WOOD FRAMING DETAILS

S4.3

SCALE - 3/4" = 1'-0"

GENERAL SHORING NOTES

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE INTERNATIONAL BUILDING CODE (IBC) 2015 EDITION, AND SEATTLE BUILDING CODE (SBC) MODIFICATIONS TO THE INTERNATIONAL BUILDING CODE.
2. SOILS REPORT REFERENCE: GEOTECHNICAL REPORT, PROPOSED DEVELOPMENT, 3410 - 3420 23RD AVE WEST, SEATTLE, WA, PREPARED BY PANGEO, INC. ON SEPTEMBER 28, 2018, REVISED ON OCTOBER 29, 2018, FILE NO. 18-245.
3. THE SOIL PRESSURES INDICATED ON THE SOIL PRESSURE DIAGRAM WERE USED FOR DESIGN, IN ADDITION TO THE DEAD AND LIVE LOADS.
4. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO ANY FABRICATION OR CONSTRUCTION FOR ALL STRUCTURAL ITEMS INCLUDING THE FOLLOWING: STRUCTURAL STEEL, MISCELLANEOUS METAL, TENDONS, ANCHORS, REINFORCING STEEL, GROUTS, AND CONCRETES. PROPOSED DEMOLITION AND SHORING SEQUENCE SHALL ALSO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
5. SHOP DRAWING REVIEW OF DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD. THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND 1(1)COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN 2(2)WEEKS OF RECEIPT. ONCE THE DRAWINGS HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE CONTRACT DOCUMENTS THEY WILL BE MARKED WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN INTENT.
6. INSPECTION BY THE SOILS ENGINEER SHALL BE PERFORMED FOR PILE PLACEMENT AND TIEBACK PLACING AND STRESSING. ALL PREPARED SOIL BEARING SURFACES SHALL BE INSPECTED BY THE SOILS ENGINEER PRIOR TO PLACEMENT OF PILE. SOIL COMPACTION SHALL BE SUPERVISED BY AN APPROVED TESTING AGENCY.
7. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110, 1704, AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION SHALL BE PROVIDED ON THE FOLLOWING TYPES OF CONSTRUCTION:

   CONCRETE CONSTRUCTION
   STRUCTURAL STEEL FABRICATION AND ERECTION (INCLUDING FIELD WELDING AND HIGH-STRENGTH FIELD BOLTING)
   AUGERCAST, CAISSON, DRILLED, OR DRIVEN PILE INSTALLATION
8. THE SHORING CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL ADJACENT UNDERGROUND UTILITIES PRIOR TO DRILLING PILE HOLES, TIEBACK ANCHORS, OR CUTTING OR DIGGING IN STREETS OR ALLEYS. THE UTILITIES INFORMATION SHOWN ON THE PLANS MAY BE NOT ACCURATE OR COMPLETE.
9. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXISTING STRUCTURES IN THE FIELD AND SHALL NOTIFY THE ENGINEER OF ALL FIELD CHANGES PRIOR TO FABRICATION AND INSTALLATION.
10. SEE SOILS REPORT FOR MORE COMPLETE INFORMATION INCLUDING RECOMMENDATIONS FOR SHORING IN GENERAL, SHORING MONITORING, EXCAVATION, LAGGING, AND DRAINAGE.
11. CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF CHAPTER 19 OF THE INTERNATIONAL BUILDING CODE. REQUIRED ULTIMATE COMPRESSIVE STRENGTH OF STRUCTURAL GROUT SHALL BE REACHED BY 28-DAY.

	(PSI)	MINIMUM CEMENT PER CUBIC YARD
PILE LEAN CONCRETE	100 PSI	1-1/2 SACKS

12. ALL LUMBER SHALL BE GRADED AND MARKED IN CONFORMANCE WITH W.C.L.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO 17. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

4x12 TIMBER LAGGING	HEM-FIR NO 1 DOUGLAS FIR-LARCH NO 2	Fb = 975 PSI Fb = 900 PSI
6x TIMBER LAGGING	HEM-FIR NO 2 DOUGLAS FIR-LARCH NO 2	Fb = 675 PSI Fb = 875 PSI

13. TIMBER LAGGING SHALL BE TREATED PER AWPA STANDARDS TO A MINIMUM RETENTION OF 0.40 PCF. LAGGING SHALL BE 4x12, UNO.
14. STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON:

   A. AISC 360 AND CHAPTER 22 OF THE INTERNATIONAL BUILDING CODE.

   B. APRIL 14, 2010 AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, AMENDED AS NOTED IN THE CONTRACT DOCUMENTS, BY THE DELETION OF PARAGRAPH 4.4.1, AND REVISE REFERENCE FROM "STRUCTURAL DESIGN DRAWINGS" TO "CONTRACT DOCUMENTS" IN PARAGRAPH 3.1.

   C. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
15. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
A. WIDE FLANGE SHAPES	A992	50 KSI
B. OTHER SHAPES, PLATES, AND RODS	A36	36 KSI
C. HP SHAPES	A572 (GRADE 50)	50 KSI
D. STRUCTURAL PIPE	A53 (GRADE B)	35 KSI
E. HOLLOW STRUCTURAL SECTIONS SQUARE OR RECTANGULAR ROUND	 A500 (GRADE B) A500 (GRADE B)	 46 KSI 42 KSI
F. CONVENTIONAL HIGH-STRENGTH BOLTS (3/4" ROUND, UNO)	A325	
G. COMMON BOLTS (WOOD APPLICATIONS)	A307	
H. ANCHOR BOLTS	F1554, GRADE 36	
I. HEADED SHEAR STUDS	A108	

15. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND AWS STANDARDS AND SHALL BE PERFORMED BY AWS CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT-LBS AT -20 DEGREES(F) AND 40 FT-LBS AT 70 DEGREES(F), AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

SHORING MONITORING

16. A PRE-CONSTRUCTION MEETING WITH SDOT SHORING REVIEW, SEPARATE FROM ANY SDCI PRE-CONSTRUCTION MEETING, SHALL BE SCHEDULED BY THE CONTRACTOR PRIOR TO THE START OF EXCAVATIONS ADJACENT TO THE PUBLIC ROW. ATTENDEES SHALL INCLUDE REPRESENTATIVES OF THE OWNER, GENERAL CONTRACTOR, EXCAVATION AND SHORING SUBCONTRACTORS, THE PROJECT GEOTECHNICAL ENGINEER, PROJECT SURVEYORS, SDOT SHORING REVIEW AND INSPECTION PERSONNEL.

   SURVEY MONITORING OF THE SHORING WALLS SHALL BE PERFORMED TO DETERMINE THE VERTICAL AND HORIZONTAL MOVEMENT OF THE MONITORING POINTS. THE MEASURING SYSTEM SHALL HAVE AN ACCURACY OF AT LEAST 0.01 FEET. THE MONITORING PROGRAM SHALL BE DETERMINED BY THE GEOTECHNICAL SPECIAL INSPECTOR BUT AT A MINIMUM SHALL INCLUDE THE FOLLOWING:

   ESTABLISH SURVEY LINES NEAR THE TOP OF THE WALL ON ADJACENT CRITICAL STRUCTURES OR BUILDINGS WITHIN A DISTANCE EQUAL TO TWO TIMES THE HEIGHT OF THE WALL AND ALONG THE CURB LINE AND CENTERLINE OF ADJACENT ROADWAYS OR ALLEYS. SURVEY POINTS SHOULD BE SPACED NO MORE THAN EVERY 20-40' ALONG THE WALL. AT SOLDIER PILES, PLACE MONITORING POINTS AT THE TOP OF AT LEAST EVERY OTHER SOLDIER PILE. ESTABLISH A BASELINE READING OF MONITORING POINTS ON THE GROUND SURFACE AND SETTLEMENT-SENSITIVE STRUCTURES BEHIND THE SHORING WALL PRIOR TO DEWATERING, EXCAVATION, AND INSTALLATION OF THE SHORING SYSTEM. THE GEOTECHNICAL ENGINEER, CONTRACTOR, AND SURVEYOR SHALL COORDINATE LOCATIONS OF THESE MONITORING POINTS PRIOR TO THE BEGINNING OF EXCAVATION.

   A LICENSED SURVEYOR THAT IS NOT THE CONTRACTOR MUST PERFORM THE SURVEYING AT LEAST TWICE A WEEK DURING SHORING INSTALLATION AND EXCAVATION AND ONCE A WEEK AFTER SHORING INSTALLATION AND EXCAVATION IS COMPLETED. MONITORING POINTS ESTABLISHED ALONG THE CURB LINE AND CENTERLINE OF ADJACENT ROADWAYS NEED TO BE MONITORED WHEN TOTAL WALL MOVEMENTS REACH 0.5" OR AT THE REQUEST OF SDOT.

   THE GEOTECHNICAL ENGINEER SHALL REVIEW SURVEY DATA AND PROVIDE AN EVALUATION OF WALL PERFORMANCE AND THE SURVEY DATA TO THE STRUCTURAL ENGINEER, SHORING DESIGNER, SDCI AND SDOT ON AT LEAST A WEEKLY BASIS. PER SDCI, THE WEEKLY REVIEW MUST CONTAIN A GRAPHICAL PRESENTATION OF THE WALL MOVEMENT VERSUS TIME.

   IMMEDIATELY AND DIRECTLY NOTIFY THE GEOTECHNICAL AND STRUCTURAL ENGINEER, SHORING DESIGNER, SDCI, AND SDOT IF UNUSUAL OR SIGNIFICANTLY INCREASED MOVEMENT OCCURS. IF 0.5" OF MOVEMENT OCCURS BETWEEN 2(TWO)CONSECUTIVE READINGS AND WHEN TOTAL MOVEMENT REACHES 0.5". IF MOVEMENT EXCEEDS 0.5", THE ENGINEERS AND SHORING DESIGNER SHALL DETERMINE THE CAUSE OF DISPLACEMENT AND DEVELOP REMEDIAL MEASURES SUFFICIENT TO LIMIT TOTAL WALL MOVEMENT TO 1". ALL EARTHWORK AND CONSTRUCTION ACTIVITIES MUST BE DIRECTED TOWARD IMMEDIATE IMPLEMENTATION OF REMEDIAL MEASURES NECESSARY TO LIMIT TOTAL WALL MOVEMENT TO WHAT IS CONSIDERED AS ACCEPTABLE BY THE DESIGN TEAM, SDCI, AND SDOT (1" MAXIMUM).

   SURVEY FREQUENCY CAN BE DECREASED AFTER THE SHORING SYSTEM HAS BEEN INSTALLED AND THE EXCAVATION IS COMPLETE IF THE DATA INDICATES LITTLE OR NO ADDITIONAL MOVEMENT. SURVEYING MUST CONTINUE UNTIL THE PERMANENT STRUCTURE (INCLUDING FLOOR SLABS AND BRACES) IS COMPLETED UP TO FINAL AND STREET GRADES. THE SURVEY FREQUENCY SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER, AFTER REVIEW AND APPROVAL BY BOTH SDCI AND SDOT, AND SHALL BE BASED ON THE SHORING PERFORMANCE.

   CONTRACTOR SHALL COMPLETE A PHOTO SURVEY OF ALL STRUCTURES WITHIN A DISTANCE EQUAL TO TWO TIMES THE HEIGHT OF THE WALL PRIOR TO DEWATERING, EXCAVATION, AND INSTALLATION OF THE SHORING SYSTEM. THE PHOTO SURVEY SHALL INCLUDE BUT IS NOT LIMITED TO DOCUMENTING THE NEIGHBORING BUILDINGS, FOUNDATION WALLS, RETAINING WALLS, FREESTANDING WALLS, SIDEWALKS, DRIVE SURFACES, AND THE ENTIRE FACADE OF MASONRY STRUCTURES. ALL EXISTING CRACKS SHOULD BE MEASURED AND DOCUMENTED. PROVIDE VIBRATION MONITORING PER GEOTECHNICAL RECOMMENDATIONS AS REQUIRED.

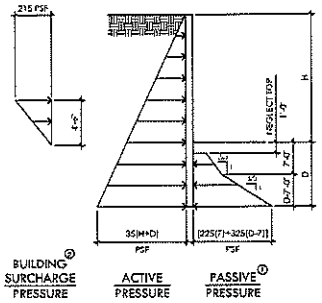
PILE AND LAGGING CONSTRUCTION

17. SHORING AND SOIL EXCAVATION SHALL BE DONE SIMULTANEOUSLY.
18. DIMENSIONS AND LOCATION OF EXISTING STRUCTURES SHALL BE VERIFIED PRIOR TO FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBER. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO FABRICATION.
19. PILE AND ANCHOR HOLES SHALL BE DRILLED WITHOUT LOSS OF GROUND AND WITHOUT ENDANGERING PREVIOUSLY INSTALLED PILES AND ANCHORS. THIS MAY INVOLVE CASING THE HOLES OR OTHER MEANS OF PROTECTION FROM CAVING. REFER TO REPORT OF GEOTECHNICAL INVESTIGATION FOR RECOMMENDED HOLE DIGGING PROCEDURE.
20. STEEL PILE PLACEMENT TOLERANCES:

   1" INSIDE PERPENDICULAR TO SHORING WALL
   1" OUTSIDE PERPENDICULAR TO SHORING WALL
   3" LATERALLY
21. TIMBER LAGGING SHALL BE INSTALLED IN ALL AREAS. VOIDS BETWEEN LAGGING AND SOIL SHALL BE BACKFILLED PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. DRAINAGE BEHIND THE WALL MUST BE MAINTAINED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LIMIT THE AMOUNT OF EXPOSED SOIL WITHOUT LAGGING TO AVOID LOSS OF SOIL. MAXIMUM HEIGHT OF 4-0" IS RECOMMENDED. SPECIAL CARE SHOULD BE TAKEN TO AVOID GROUND LOSS DURING EXCAVATION.

ABBREVIATIONS

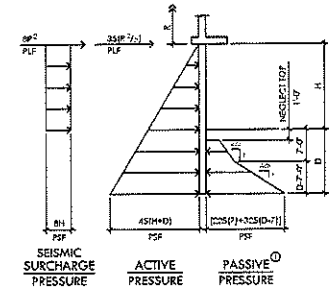
±	PLUS OR MINUS	EMBED	EMBEDMENT	OC	ON CENTER
Ø	DIAMETER	ENGR	ENGINEER	OPP	OPPOSITE
ABV	ABOVE	EQ	EQUAL	PERP	PERPENDICULAR
ADDL	ADDITIONAL	EXT	EXTERIOR	PL	PLATE
APPROX	APPROXIMATE	FDN	FOUNDATION	PL	PROPERTY LINE
ARCH	ARCHITECT, ARCHITECTURAL	FF	FINISHED FLOOR	PSF	POUNDS PER SQUARE FOOT
BLDG	BUILDING	FT	FEET	PSI	POUNDS PER SQUARE INCH
BLW	BELOW	FTG	FOOTING	PT	PRESSURE TREATED LUMBER
BOE	BOTTOM OF EXCAVATION	GALV	GALVANIZED	REQD	REQUIRED
BOT	BOTTOM	GRADE	GRADE	SCHED	SCHEDULE
BTWN	BETWEEN	HF	HEM FIR	SIM	SIMILAR
CL	CENTERLINE	HORIZ	HORIZONTAL	STRUCT	STRUCTURAL
CLR	CLEAR	HSS	HOLLOW STRUCTURAL SECTION	TEMP	TEMPORARY
CONC	CONCRETE	HT	HEIGHT	THRU	THROUGH
CONT	CONTINUOUS	IBC	INTERNATIONAL BUILDING CODE	TOW	TOP OF WALL
CS	CRAWLSPACE	IN	INCH	TYP	TYPICAL
DEMO	DEMOLISH	K	KIPS (1000 POUNDS)	UNO	UNLESS NOTED OTHERWISE
DF	DOUGLAS FIR	KSF	KIPS PER SQ FT	VIF	VERIFY IN FIELD
DIA	DIAMETER	L	ANGLE	W	WIDE OR WIDTH
DIAG	DIAGONAL	L	LENGTH	w/	WITH
DIM	DIMENSION	LBS	POUNDS	w/o	WITHOUT
DO	DITTO	MAX	MAXIMUM	WHS	WELDED HEADED STUD
DP	DEEP/DEPTH	MB	MACHINE BOLT		
DWGS	DRAWINGS	MFR	MANUFACTURER		
(E)	EXISTING	MIN	MINIMUM		
EA	EACH	MISC	MISCELLANEOUS		
EL	ELEVATION	NTS	NOT TO SCALE		



① PASSIVE PRESSURE INCLUDES A FS = 1.5

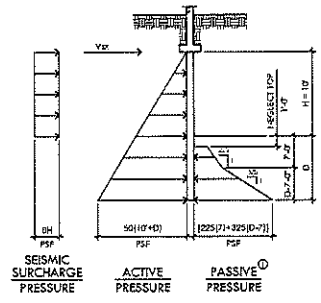
② PRESSURE VARIES WHERE OCCURS SEE APPLICABLE DETAILS FOR ADJACENT FOOTING LOCATIONS

TEMPORARY PILE LOADING DIAGRAM 1



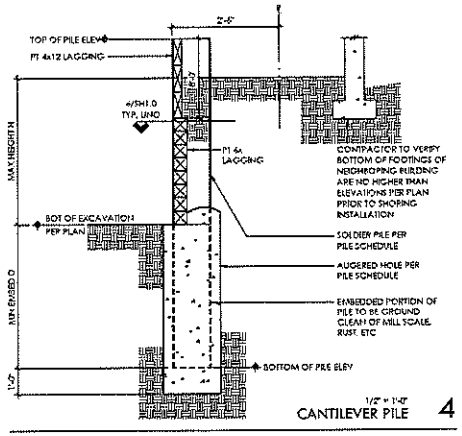
① PASSIVE PRESSURE INCLUDES A FS = 1.5 FOR TEMPORARY (SEISMIC) LOAD CASE A FS = 1.2 HAS BEEN USED

ANCHOR PILE LOADING DIAGRAM 2

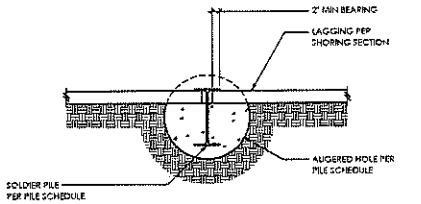


① PASSIVE PRESSURE INCLUDES A FS = 1.5 FOR TEMPORARY (SEISMIC) LOAD CASE A FS = 1.2 HAS BEEN USED

STABILIZATION PILE LOADING DIAGRAM 3



1/2" = 1'-0"
CANTILEVER PILE 4



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6

MALSAM TSANG STRUCTURAL ENGINEERING

3420 23RD AVE W
SEATTLE, WA 98199

SCI APPROVED

MARC J. MALSAM
STATE OF WASHINGTON
46196
REGISTERED PROFESSIONAL ENGINEER

PROJECT NO 0370.2018.0401
PROJECT MANAGER TMC
DRAWN DGK
ENGINEER JESSICA MOORE
206.682.8700
JESSICAM@MALSAM-TSANG.COM

REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.12.19
2	PERMIT CORRECTIONS 2	6.5.19
3	PLAN REVISIONS	8.8.19

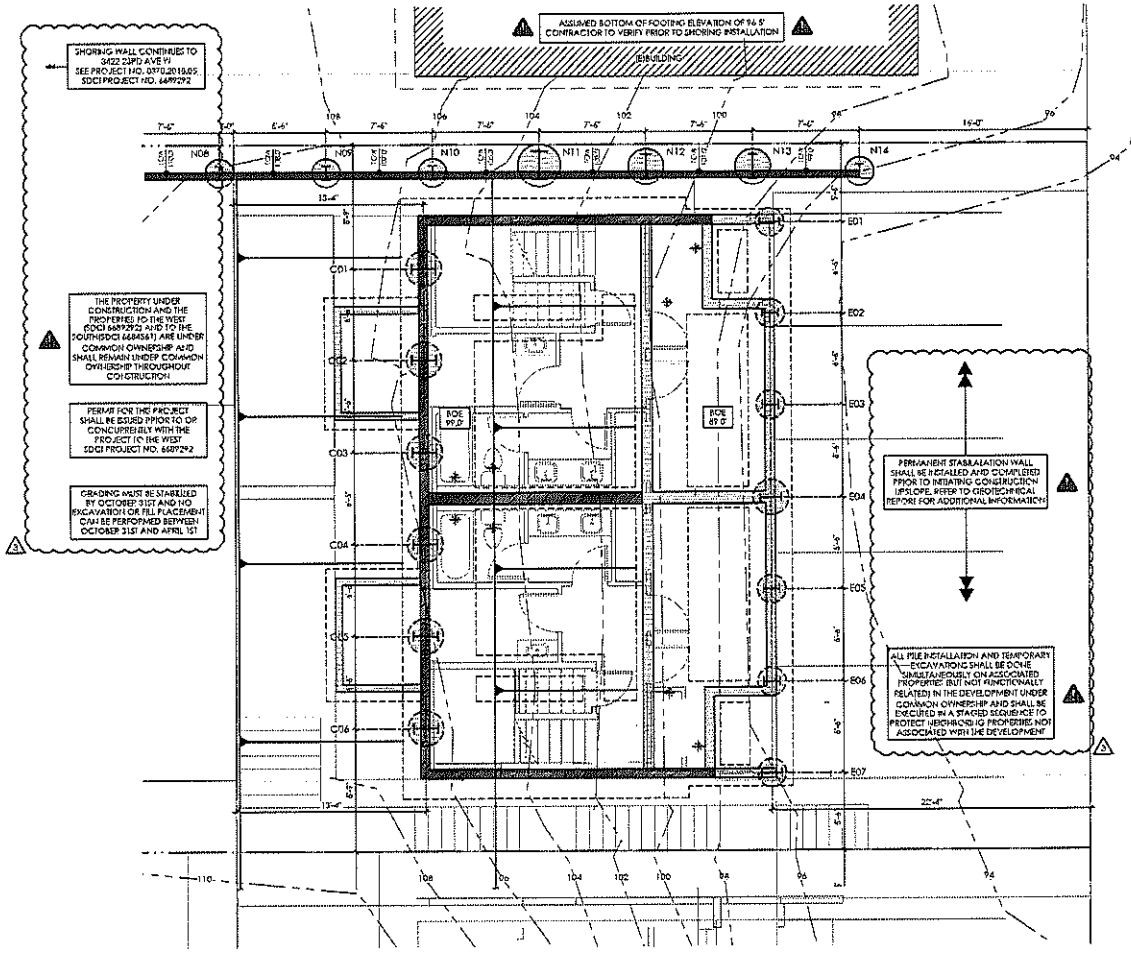
ARCH ALLISON WEBER ARCH + DESIGN
206.953.1909

SHORING GENERAL NOTES AND DETAILS

SH1.0
SCALE - 3/4" = 1'-0"

SHORING PILE SCHEDULE

PILE MARK	AUGER DIA	PILE SIZE	BOT OF PILE ELEV	BOT OF EXCAV	TOP OF PILE ELEV	MAX HEIGHT 'H'	MIN DEPTH 'D'	TYPE	LOADING DIAGRAM	DETAIL
N08	24"	W12x26	95.5'	105.5'	110.0'	4.5	10.0'	TEMPORARY	1/SH1.0	4/SH1.0
N09	24"	W12x30	85.5'	99.0	109.0'	9.0'	13.5	TEMPORARY	1/SH1.0	4/SH1.0
N10	24"	W12x26	87.0'	99.0'	107.0'	8.0	12.0'	TEMPORARY	1/SH1.0	4/SH1.0
N11	36"	W24x117	68.5'	89.0	105.0'	16.0'	20.5	TEMPORARY	1/SH1.0	4/SH1.0
N12	30"	W21x93	69.5'	89.0'	103.0'	14.0'	19.5	TEMPORARY	1/SH1.0	4/SH1.0
N13	36"	W21x50	71.5'	89.0'	101.0'	12.0'	17.5	TEMPORARY	1/SH1.0	4/SH1.0
N14	24"	W12x26	74.0'	89.0'	99.0'	10.0'	13.0	TEMPORARY	1/SH1.0	4/SH1.0
E01	24"	W18x35	64.0'	-	89.0'	10.0'	15.0	STABILIZATION	3/SH1.0	4/SH3.0
E02	24"	W14x39	65.5'	-	89.0'	10.0'	13.5'	STABILIZATION	3/SH1.0	4/SH3.0
E03	24"	W14x39	65.5'	-	89.0'	10.0'	13.0'	STABILIZATION	3/SH1.0	4/SH3.0
E04	30"	W18x46	62.5'	-	89.0'	10.0'	16.5	STABILIZATION	3/SH1.0	4/SH3.0
E05	24"	W14x39	65.5'	-	89.0'	10.0'	13.0'	STABILIZATION	3/SH1.0	4/SH3.0
E06	24"	W14x39	65.5'	-	89.0'	10.0'	13.5	STABILIZATION	3/SH1.0	4/SH3.0
E07	24"	W18x35	64.0'	-	89.0'	10.0'	15.0'	STABILIZATION	3/SH1.0	4/SH3.0
C01	30"	W21x62	70.5'	-	99.0'	10.0'	16.5	ANCHOR	2/SH1.0	8/SH3.0
C02	30"	W21x62	70.5'	-	99.0'	10.0'	16.5	ANCHOR	2/SH1.0	8/SH3.0
C03	30"	W21x62	70.5'	-	99.0'	10.0'	16.5	ANCHOR	2/SH1.0	8/SH3.0
C04	30"	W21x62	70.5'	-	99.0'	10.0'	16.5'	ANCHOR	2/SH1.0	8/SH3.0
C05	30"	W21x62	70.5'	-	99.0'	10.0'	16.5	ANCHOR	2/SH1.0	8/SH3.0
C06	30"	W21x62	70.5'	-	99.0'	10.0'	16.5	ANCHOR	2/SH1.0	8/SH3.0



PLAN NOTES

1. REFER TO GENERAL SHORING NOTES SHEET SH1.0 FOR ADDITIONAL REQUIREMENTS.
2. REFER TO SOILS REPORT FOR ADDITIONAL SHORING INSTALLATION REQUIREMENTS.
3. REFER TO SHEET SH1.0 FOR TYPICAL SHORING DETAILS.
4. CONTRACTOR TO VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS, SURVEY DRAWINGS, AND EXISTING SITE CONDITIONS.
5. DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.

LEGEND

- DRILLED PILE
- P__ PILE MARK
- BOE BOTTOM OF EXCAVATION
- TOW TOP OF WALL
- SLOPING EXCAVATION (1.0H: 1.0V MAX)
- FOOTING STEP

SHORING PLAN

MALSAM TSANG STRUCTURAL ENGINEERING

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MARC J. MALSAM
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PROJECT NO 0370.2018.06.01
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REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
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3	PLAN REVISIONS	8.9.19

JAMON JULIAN WEBB ARCH + DESIGN
206.853.1305

SHORING PLAN

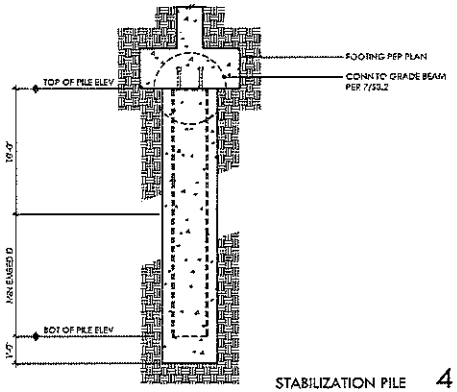
SH2.0

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

1

2

3



STABILIZATION PILE 4

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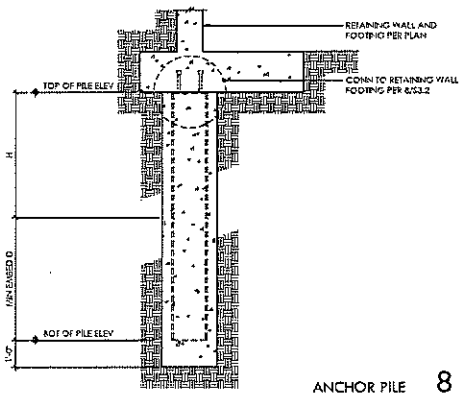

ANCHOR PILE 8

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11

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REV	DESCRIPTION	DATE
	PERMIT SET	11.7.18
1	PERMIT CORRECTIONS	4.15.19
2	PERMIT CORRECTIONS 2	6.21.19
3	PLAN REVISIONS	8.9.19

ARCH: KLEAN WORKS ARCH + DESIGN
206.937.1309

SHORING DETAILS

SH3.0

SCALE = 3/4" = 1'-0"