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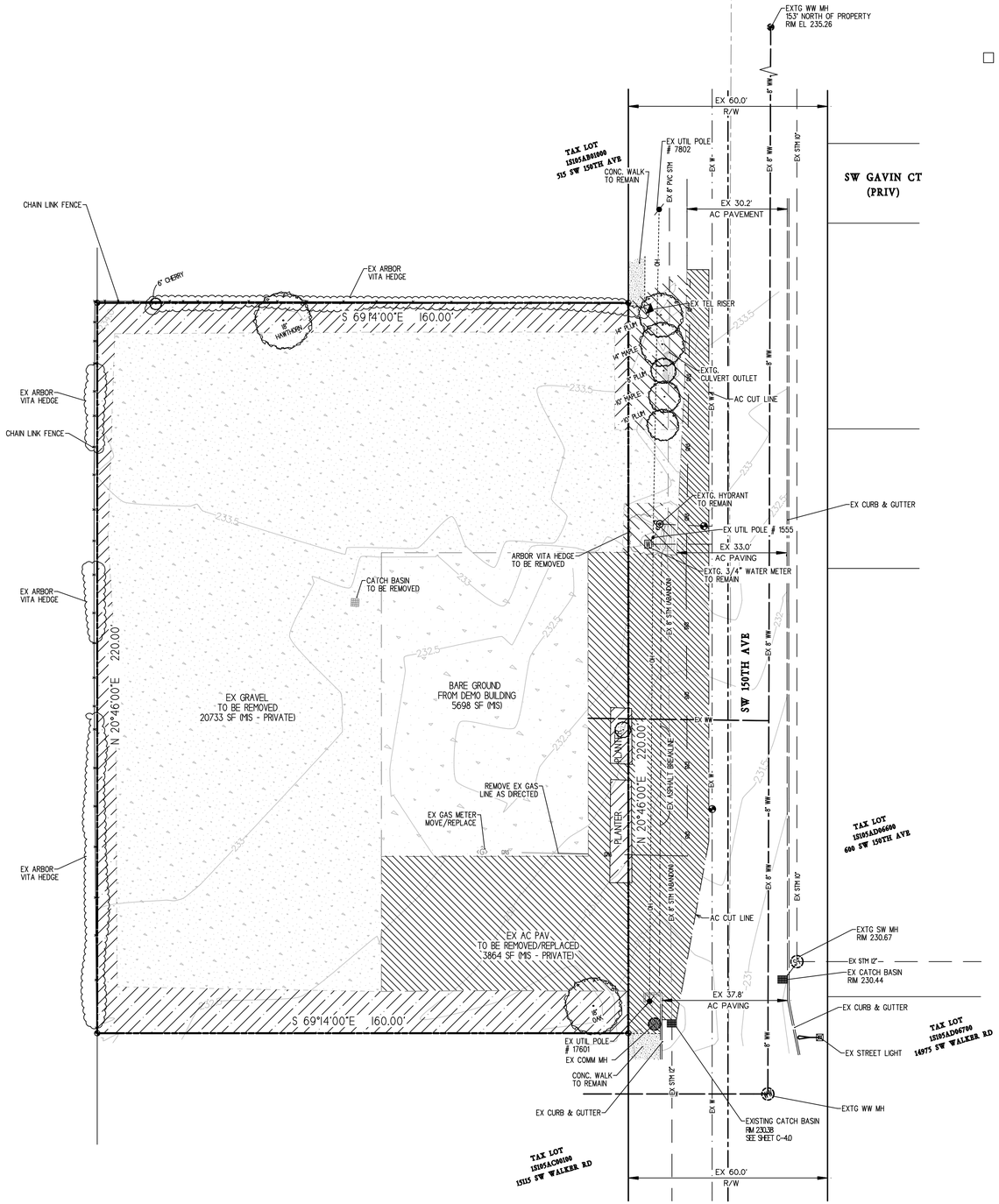
04/08/2021
City of Beaverton
Site Development Division

COB Revision/Tracking #:
REV 21-136
T X
RECEIVED
06/02/2021
CITY OF BEAVERTON
BUILDING DIVISION



1" = 20'

SCALE IS IN FEET

LEGEND

- SUBJECT PROPERTY BOUNDARY
- EXISTING CURB & GUTTER
- PROPOSED CURB
- WW — EXISTING WASTEWATER SEWER
- WW — PROPOSED WASTEWATER SEWER
- STM — EXISTING STORM SEWER
- STM — PROPOSED STORM PERFORATED PIPE
- STM — PROPOSED STORM SEWER
- EAC — EDGE EXISTING ASPHALT
- EXISTING WASTEWATER SEWER MANHOLE
- EXISTING CLEANOUT
- EXISTING STORMWATER MANHOLE
- PROPOSED STORMWATER MANHOLE
- EXISTING CATCH BASIN
- EXISTING CURB INLET
- PROPOSED CATCH BASIN
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING ELEC VAULT
- EX TELECOMM. ACCESS CABINET
- EXISTING UTILITY VAULT
- EXISTING GAS VALVE
- EXISTING GAS METER
- EXISTING UTILITY POLE
- OH — EXISTING OVERHEAD UTILITIES
- UTIL — EXISTING UNDERGROUND UTILITY
- EX-W — EXISTING WATER
- EXISTING FENCE (SIZE & TYPE NOTED)
- EXISTING GRAVEL SURFACE
- EXISTING PAVING BE REMOVED OR REPLACED

EX SITE SOILS = ALOHA SILT LOAM
(WASHINGTON CO. SCS#1)
HYDROLOGIC GROUP C/D
PRE-DEVELOPED CONDITION - OPEN SPACE
POOR CONDITION (GRASS COVER < 50%)
PER NRCS TR-55, TABLE 2-2A, CN = 86-89
USE CN = 87 FOR ALL PRE-DEVELOPED
NON-MODIFIED IMPERVIOUS

PRE-DEVELOPED
CN=87
4905 SF

EX PRIV MODIFIED
IMPERVIOUS
30,295 SF
CN = 75

EX AC PAV
EX GRAVEL
REMOVED BLDG FOOTPRINT

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
06/11/2021

APPROVAL

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	SITE DEVELOPMENT PERMIT SET	MJK	12-28-20
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JOB NO.: 4737
DWG. NAME: 4737_SDP-PLANS
SCALE: SEE BAR SCALE
DESIGNED: DBM/MJK
DRAWN BY: FS/MJK
CHECKED: DBM
DWG. DATE: 11/20/19
FLAT FILE:

POAGE
ENGINEERING & SURVEYING, INC.
(PH) 541/485-4505 (FAX) 541/485-5624
P.O. BOX 25 EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSOR'S MAP No. 1S105AB TAX LOT No.(s) 1100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

SHEET TITLE: EXISTING CONDITIONS & DEMOLITION PLAN

REGISTERED PROFESSIONAL ENGINEER
17255
OREGON
JULY 19, 1977
DONOVAN B. MOSSTAD

EXPIRES: 12-31-2022

SHEET No. C-1.0

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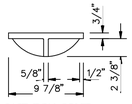
GENERAL NOTES:

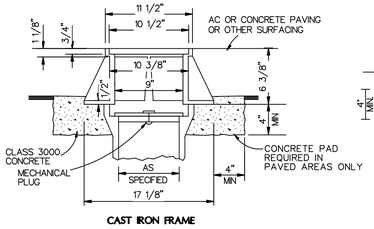
1. THIS GRADING PLAN IS INTENDED TO INCORPORATE ALL REQUIRED EXCAVATIONS AND GRADING RELATING TO THE CONSTRUCTION OF THE ACCESS DRIVES, PARKING AREAS, SIDEWALKS, UNDERGROUND UTILITIES, BUILDING ENVELOPES AND LANDSCAPING AREA, WITHIN THE PROJECT BOUNDARIES.
2. SLOPES FOR ADA ACCESSIBLE WALKWAYS AND PARKING SPACES SHALL COMPLY WITH OSSC AND OTC REQUIREMENTS.
3. ALL CURBS SHALL BE 6" HIGH UNLESS OTHERWISE NOTED.
4. ALL FILL MATERIAL WITHIN LANDSCAPE AREAS TO CONFORM TO THE SOIL SPECIFICATIONS OUTLINED IN THE LANDSCAPE PLANS.
5. EXISTING FLOWLINE ELEVATIONS AT UTILITY CONNECTION POINTS ARE BASED ON ELEVATIONS SURVEYED AT MANHOLE LOCATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO POTHOLE AND VERIFY THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO LAYING ANY PIPE ON THAT SYSTEM.
6. PRIOR TO PLACING THE CRUSHED ROCK BASE FOR DRIVEWAYS AND PARKING AREAS, THE PREPARED SUBGRADE SHALL BE TESTED AND APPROVED BY A FIRM LICENSED TO DO SO. ANY IDENTIFIED SOFT SPOTS SHALL BE OVER-EXCAVATED AND BACKFILLED WITH COMPACTED CRUSHED ROCK AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
7. AS APPLICABLE, MATERIALS & WORKMANSHIP FOR PRIVATE UTILITY PIPING & FITTINGS (WATER, WASTEWATER AND STORM SEWER) SHALL CONFORM TO THE OREGON PLUMBING SPECIALTY CODE (OPSC), OR OREGON STRUCTURAL SPECIALTY CODE (OSSC). ALL PUBLIC IMPROVEMENTS SHALL COMPLY WITH CITY OF GLADSTONE DESIGN AND CONSTRUCTION STANDARDS.
8. EXISTING CONTOURS AND ELEVATIONS SHOWN HEREON ARE BASED ON ASSUMED ELEVATIONS. A TBM WAS ESTABLISHED ON THE EASTERLY SIDE OF SW 150TH ST...A SPIKE WITH AN ELEVATION = 231.81
9. AN EROSION CONTROL PERMIT SHALL BE REQUIRED FOR THIS PROJECT.

CONSTRUCTION NOTES

(401) CONSTRUCT VEGETATED BASIN AND INFILTRATION FACILITY PER DETAIL SHEET C-2.1.
(411) INSTALL 12" TRAPPED GIBSON STEEL CATCH BASIN OR APPROVED EQUAL - SEE DETAIL SHEET C-2.1
(412) INSTALL 24" TRAPPED GIBSON STEEL CATCH BASIN OR APPROVED EQUAL - SEE DETAIL SHEET C-2.1
(413) INSTALL SPECIAL SYSTEM OUTLET CONTROL STRUCTURE - SEE DETAILS SHEET C-2.1
(427) INSTALL CLEANOUT WITH TRAFFIC BEARING COVER PER DETAIL THIS SHEET
(428) INSTALL CLEANOUT WITH NON-TRAFFIC BEARING COVER PER DETAIL ON THIS SHEET
(435) INSTALL BEND AS NOTED
(439) INSTALL TEE-WYE
(442) CONNECT DOWNSPOUTS TO STORM DRAIN PIPE USING APPROVED FITTING
(448) CAP END
(480) INSTALL SCHED 40 PVC DWV STORM SEWER PIPE OR APPROVED EQUAL - SIZE AS NOTED.
(481) INSTALL ASTM 3034 SDR 35 PVC STORM SEWER PIPE OR APPROVED EQUAL - SIZE AS NOTED
(487) INSTALL ADS HDPE PERFORATED STORM SEWER PIPE OR APPROVED EQUAL - SIZE AS NOTED
(490) INSTALL ADS HDPE ACCESS/INSPECTION PORT 24 x 8 TEE WITH 8" RISER & CAP, SEE DETAIL SHEET C-2.1
(495) INSTALL APPROVED SPLASH PAD/ENERGY DISSIPATER - 6" DEPTH OF 4-1/2" - 2-1/2" RIVER ROCK. SEE DETAIL SHEET C-2.1

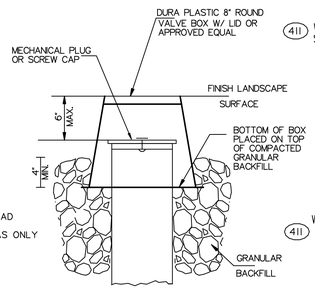


CAST IRON COVER

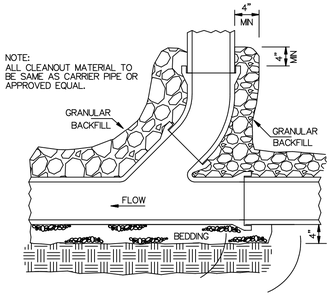


CAST IRON FRAME

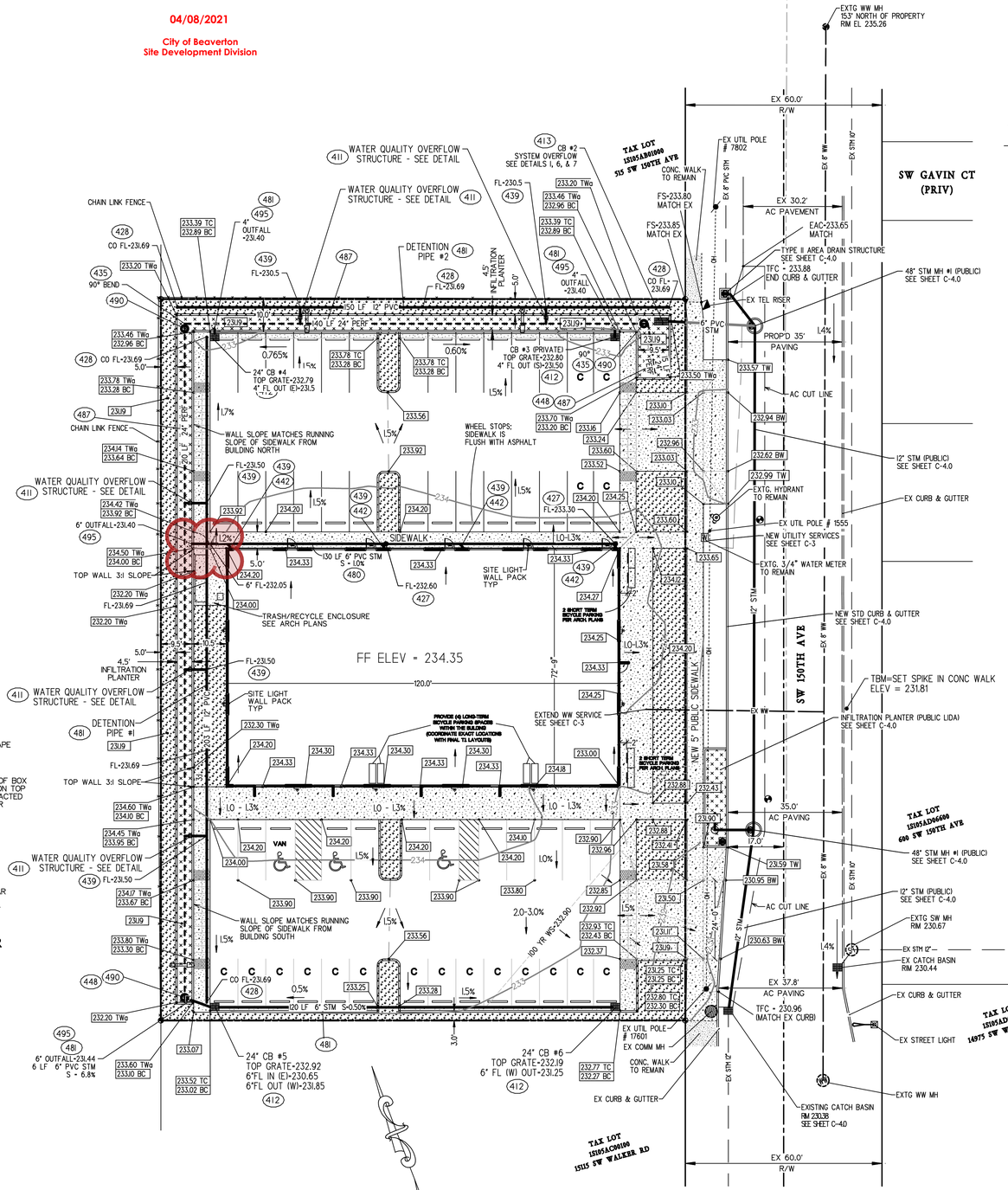
TRAFFIC AREA CLEANOUT COVER



LANDSCAPE AREA CLEANOUT COVER



(1) CLEAN-OUT DETAIL, TYPICAL
NOT TO SCALE



LEGEND

- SUBJECT PROPERTY BOUNDARY
- EXISTING CURB & GUTTER
- PROPOSED CURB
- EX WW — EXISTING WASTEWATER SEWER
- WW — PROPOSED WASTEWATER SEWER
- EX STM — EXISTING STORM SEWER
- STM — PROPOSED STORM PERFORATED PIPE
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- EXISTING CLEANOUT
- EXISTING STORMWATER MANHOLE
- PROPOSED STORMWATER MANHOLE
- EXISTING CATCH BASIN
- EXISTING CURB INLET
- PROPOSED CATCH BASIN
- 100 YEAR FLOOD OVERFLOW (SE CORNER OF SITE - OVERFLOWS OVER SOUTH PORTION OF SOUTHERLY DRIVEWAY)
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING ELEC VAULT
- EX TELECOMM. ACCESS CABINET
- EX UTILITY VAULT
- EXISTING GAS VALVE
- EXISTING GAS METER
- EX UTILITY POLE
- PROPOSED SITE LIGHT - SEE ELECTRICAL PLANS BY OTHERS
- PROPOSED WALL PACK LIGHT - SEE ELECTRICAL PLANS BY OTHERS
- OH — EXISTING OVERHEAD UTILITIES
- UTL — EXISTING UNDERGROUND UTILITY
- EX-W — EXISTING WATER
- EXISTING FENCE (SIZE & TYPE NOTED)
- PROPOSED LANDSCAPE AREA SEE LANDSCAPE PLAN
- PROPOSED STORMWATER TREATMENT FACILITY
- 299.37 XX — PROPOSED GRADE AT FINISHED SURFACE. REFERENCED "XX" LOCATION NOTED WHERE APPROPRIATE PER GRADE PLAN ABBREVIATION LEGEND BELOW.
- 234 — FINISHED GRADE CONTOUR (1 FT CONTOURS)

SEE SHEET C-1 (EX CONDITIONS PLAN) FOR EXISTING CONTOURS

GRADING PLAN ABBREVIATION

AC - ASPHALTIC CONCRETE SURFACE
TC - TOP OF CURB
ME - MATCH EXISTING
TW - TOP OF CURB AT TOP OF WING
TWo - TOP OF WALL
BC - BOTTOM OF CURB (GUTTER)

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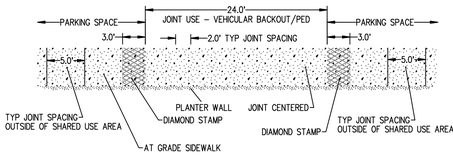
100 YEAR WS - OVERFLOW

AT A WS ELEVATION OF 232.90, THE ONSITE SWALES WILL HOLD 1726 CF BEFORE OVERFLOWING TO ADJACENT PROPERTIES TO THE WEST. HOWEVER, THE SITE WILL OVERFLOW ON THE EAST SIDE AT 232.43 VIA THE SOUTHERLY DRIVEWAY. ONLY NEED TO STORE 1504 CF TO ACCOMMODATE THE 100 YEAR STORM.

FILTRATION PLANTER NOTES:

- PLANTED PER LANDSCAPE PLANS.
- DRAIN ROCK TO BE WRAPPED WITH GEOTEXTILE FABRIC.
- TYPICAL OUTLET FROM CONVEYANCE PIPES SHALL BE A 24" SQUARE CONC PAD (ENERGY DISSIPATORS) OR APPROVED EQUAL.
- WATER QUALITY OVERFLOW STRUCTURE TO BE A 12" SQUARE BASIN WITH SLOPED TOP (GIBSON STEEL OR APPROVED EQUAL - AS SHOWN)

ALL DETENTION/INFILTRATION FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO MEET ALL APPLICABLE CRITERIA OF THE CWS R&O 19-5 (DEC. 2019) AND OTHER APPLICABLE CITY OF BEAVERTON STANDARDS.



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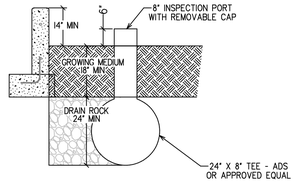
ASSESSOR'S MAP No. 1S05AB TAX LOT No.s) 1100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

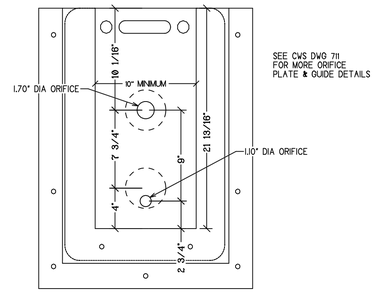
SHEET TITLE: GRADING & STORMWATER MANAGMENT PLAN

REGISTERED PROFESSIONAL ENGINEER 17255 OREGON JULY 19, 2013 DONOVAN B. MUGSTRAD
EXPIRES: 12-31-2022

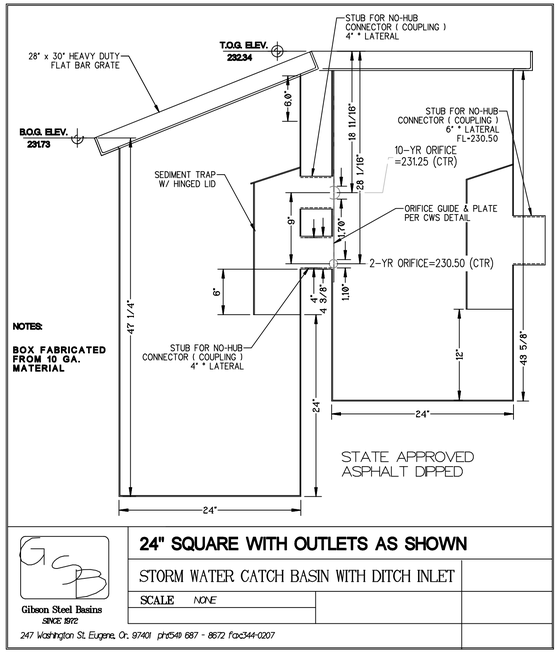
SHEET No. C-2.0



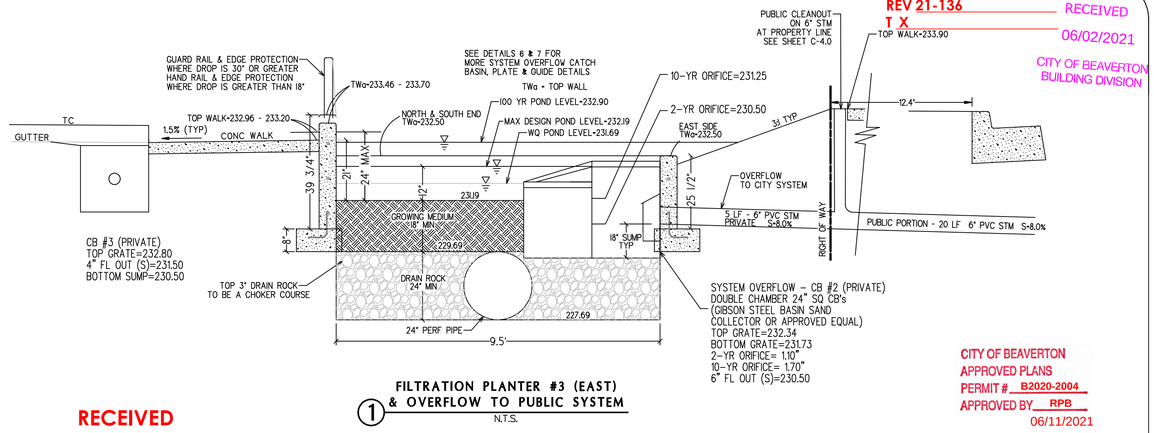
7 **PERF PIPE INSPECTION PORT**
N.T.S.



7 **ORIFICE PLATE & GUIDE**
N.T.S.



6 **SYSTEM OVERFLOW DETAIL**
N.T.S.



1 **FILTRATION PLANTER #3 (EAST) & OVERFLOW TO PUBLIC SYSTEM**
N.T.S.

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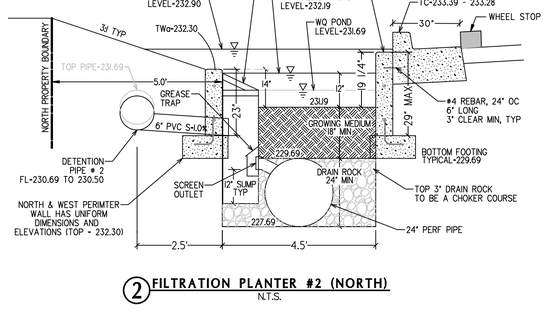
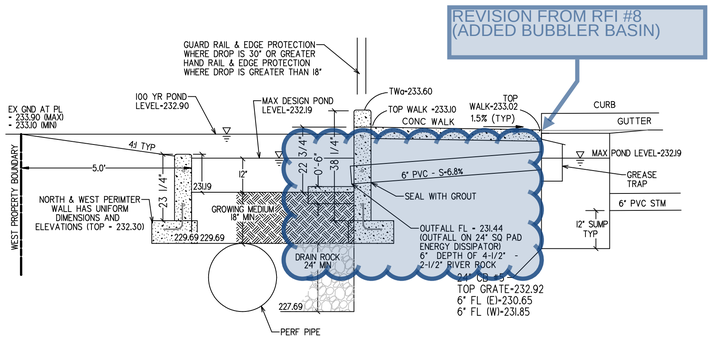
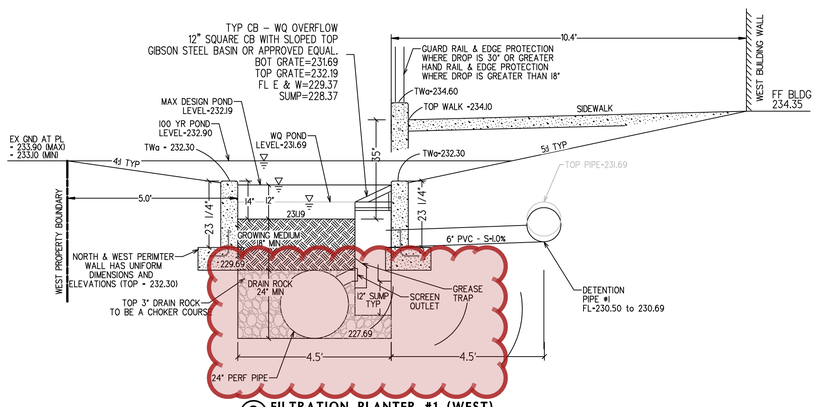


2 **FILTRATION PLANTER #2 (NORTH)**
N.T.S.

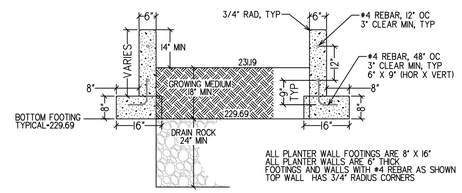
REVISION FROM RFI #8
(ADDED BUBBLER BASIN)



5 **FILTRATION PLANTER #1 (WEST) AND CB #5**
N.T.S.



3 **FILTRATION PLANTER #1 (WEST)**
N.T.S.



4 **TYPICAL PLANTER WALLS**
N.T.S.

3.0 PIPED UTILITIES:

1. Contractor shall coordinate connections to existing water, wastewater and storm sewer facilities. Any extraneous fees required to make the connections will be paid by the OWNER.
2. As applicable, materials & workmanship for private utility piping & fittings (water, wastewater and storm sewer) shall conform to the Oregon Plumbing Specialty Code (OPSC), or Oregon Structural Specialty Code (OSSC). All public improvements shall comply with City of Beaverton Design and Construction Standards.
3. All storm and wastewater piping shall have cleanouts installed within 5 feet of the building connection, at minimum 100 foot intervals and for every 135 degrees of bend as per the uniform plumbing code (OSSC 1101.4.4, 1101.11.3.1 & OSPC 707.0, 719.0).
4. Bedding and Backfill: Unless specified otherwise, all pipes in the street right of way shall be bedded with a minimum 2 inch depth of 3/4" minus crushed rock bedding and backfilled with compacted 3/4" minus crushed rock in the pipe zone (crushed rock shall extend a minimum of 12 inches over the top of the pipe in all cases). Crushed rock trench backfill shall be used under all improved areas, including sidewalks. Granular trench backfill shall be compacted to 92% of the maximum dry density per AASHTO T- 180 test method (Modified Proctor).
5. The Contractor shall have appropriate equipment on site to produce a firm, smooth, undisturbed subgrade at the trench bottom, true to grade. The bottom of the trench excavation shall be smooth and free of loose materials for the entire width of the trench prior to placing the granular bedding material.
6. Contractor shall provide all materials, equipment and facilities required for testing all utility piping.
7. Tracer Wire. All non-metallic water, wastewater and storm sewer piping located outside of the public right-of-way or not laid in straight lines between structures shall have an electrically conductive insulated 12 gauge copper tracer wire the full length of the installed pipe using blue wire for water and green for storm and wastewater piping. Tracer wire shall be extended up into all valve boxes, and manholes and catch basins. Tracer wire penetrations into manholes shall be within 18-inches of the rim elevation. The tracer wire shall be tied to the manhole frame to allow retrieval from the outside of the manhole.
8. Warning Tape. Detectable or non-detectable acid and alkali resistant safety warning tape shall be provided along the full length of all wastewater and storm drain service laterals and along all water, wastewater and storm drain mainline segments not located under sidewalks or paved portions of public streets, Underground warning tape shall be continuous the entire length of service laterals installed from the mainline to the back of the PUE.

4.0 WASTEWATER:

1. All pipe materials and construction shall comply with APWA, and OPSC standards. Unless otherwise shown, all gravity wastewater pipe shall be PVC in conformance with ASTM D-3034, SDR 35. Pipe within five feet of buildings shall be schedule 40 PVC, ABS. All other appurtenances and installation to conform to OPSC specifications. All pressure pipe shall be HDPE Pressure Pipe (ASTM D3035 DR11), Schedule 40 PVC, OR approved equal.
2. Cleaning. Prior to leakage testing, mandrel testing and/or TV inspection, flush & clean all wastewater mains & laterals, & remove all foreign material from the mainlines & manholes. Failure to clean all dirt, rock & debris from pipelines prior to TV inspection will require them to be re-cleaned and re-TV'd.
3. Leakage Testing. Wastewater pressure line and appurtenances shall be tested for leakage. Leakage tests shall include an air test of the 2" pressure main prior to paving. Air test shall be performed on the system using 100 psi. The pump vault shall be pressure tested per the manufacturers specifications.

5.0 STORM DRAIN:

1. All storm pipe materials and construction shall comply with CITY, APWA and OPSC standards. Unless otherwise noted on the plans, storm drain pipe shall be PVC in conformance with ASTM D-3034, SDR 35. Pipe within five feet of buildings shall be schedule 40 PVC, DWV. Contractor shall use uniform pipe material on each pipe run between structures unless otherwise directed or approved. Jointed HDPE pipe shall not be used for slopes exceeding ten percent (10%).
2. Catch basins and junction boxes shall be set square with buildings or with the edge of the parking lot or street wherein they lie. Storm drain inlet structures and paving shall be adjusted so water flows into the structure without ponding water. All catch basins shall be Gibson Steel Basins with bike proof, heavy duty traffic grate (supports H25 loads) or approved equal.
3. Unless otherwise approved by the Engineer, all storm drain connections shall be by manufactured tees or saddles.
4. Sweep storm drain pipe into catch basins and manholes as required. Cleanouts shall be provided per OSPC.
5. Unless otherwise specified or directed, install storm drain pipe in accordance with manufacturer's installation guidelines.
6. Cleaning. Upon completion of installation of the storm pipe system, and prior to mandrel testing, flush and clean all storm drains, and remove all foreign material from mainlines, manholes and catch basins.
7. Mandrel Testing. Contractor shall conduct deflection test of flexible storm sewer pipes (10" dia. and larger) by pulling an approved mandrel through the completed pipe line following trench compaction. The diameter of the mandrel shall be 95% of the initial pipe diameter. Test shall be conducted not more than 30 days after the trench backfilling and compaction has been completed.

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POAGE

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ASSESSORS MAP No. 1S105AB TAX LOT No.(s) 1100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

SHEET TITLE: DETAILS AND SPECIFICATIONS

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 19, 1977
DONOVAN B. MOGSTAD
EXPIRES: 12-31-2022

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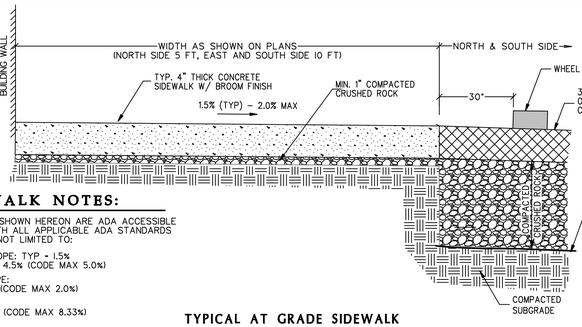
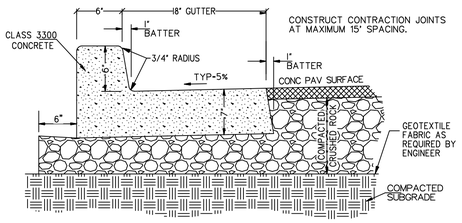


SIDEWALK NOTES:

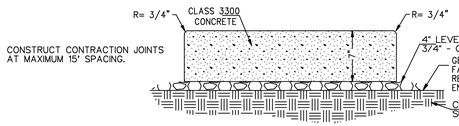
ALL SIDEWALKS SHOWN HEREON ARE ADA ACCESSIBLE AND COMPLY WITH ALL APPLICABLE ADA STANDARDS INCLUDING, BUT NOT LIMITED TO:

- RUNNING SLOPE: TYP – 1.5% DESIGN MAX 4.5% (CODE MAX 5.0%)
- CROSS SLOPE: DESIGN 1.5% (CODE MAX 2.0%)
- RAMP: DESIGN 7.5% (CODE MAX 8.33%)
- LANDINGS: DESIGN 1.5% (CODE MAX 2.0%) (ALL DIRECTIONS)

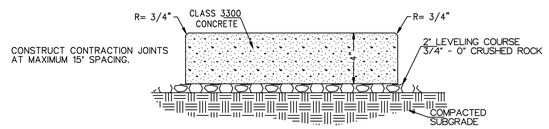
TYPICAL AT GRADE SIDEWALK & PAVING SECTION
NOT TO SCALE



TYPICAL CURB & GUTTER
NOT TO SCALE



TYPICAL CONCRETE SLAB (VEHICULAR)
NOT TO SCALE

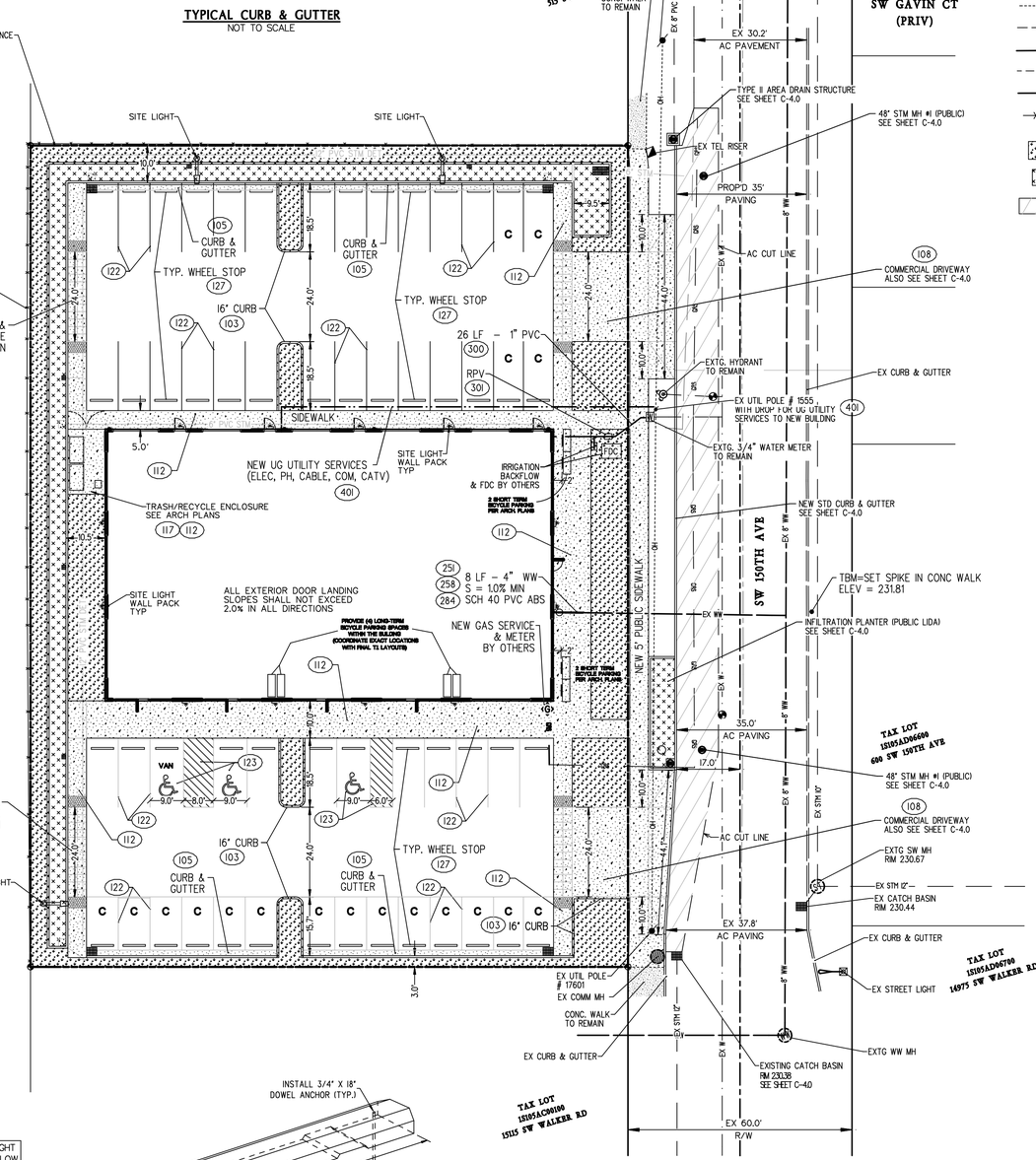


TYPICAL CONCRETE SLAB (NON-VEHICULAR)
NOT TO SCALE

STANDARD STRAIGHT CURB DETAIL
NOT TO SCALE

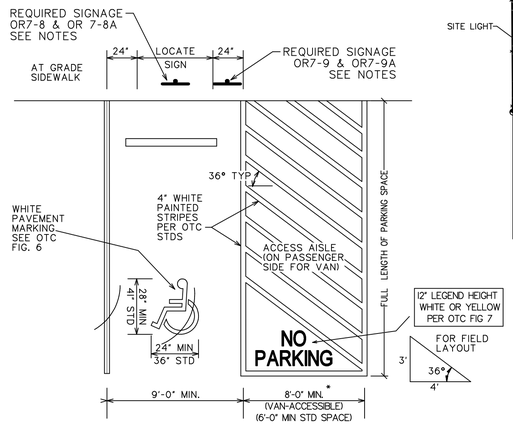
1" = 20'

0 10 20 40
SCALE IS IN FEET

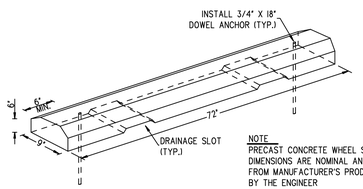


NOTES:

1) ALL ACCESSIBLE PARKING SPACES SHALL BE STRIPED & SIGNED ACCORDING TO STATE AND LOCAL STANDARDS - SEE OREGON TRANSPORTATION COMMISSION "STANDARDS FOR ACCESSIBLE PARKING SPACES" - LATEST EDITION (OTC STDS).
2) ALL STANDARD ACCESSIBLE PARKING SPACES SHALL HAVE PARKING SIGN "OR 7-8" LOCATED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS ON POLE OR ADJACENT BUILDING. (SEE OTC FIG 8)
3) VAN-ACCESSIBLE SPACES SHALL HAVE AN ADDITIONAL SIGN "OR 7-8P" MOUNTED BELOW THE STANDARD SPACE PARKING SIGN (OR 7-8).
4) ALL ACCESS AISLES SHALL BE LOCATED ON PASSENGER SIDE UNLESS SHARED AND HAVE SIGNAGE (OR7-9) CENTERED AT FRONT OF AISLE. IF OR7-9 IS PLACED TO SIDE OF THE AISLE AN ADDITIONAL SIGN (OR7-9A) SHALL BE USED (SEE FIGURE 5 OF OTC).
5) POST-MOUNTED SIGNS SHALL BE INSTALLED WITH A VERTICAL CLEARANCE OF 7 (+3) BETWEEN THE BOTTOM OF THE SIGN TO THE GROUND LINE. (PER OTC).
6) PARKING STALL & ACCESS AISLE: DESIGN SLOPE 1.5% (MAX 2.0%) IN ALL DIRECTIONS.
7) ADA ROUTE REQUIREMENTS: RUNNING SLOPE: DESIGN 4.5% (MAX 5.0%) CROSS SLOPE: DESIGN 1.5% (MAX 2.0%) RAMP: DESIGN 7.5% (MAX 8.33%) LANDINGS: DESIGN 1.5% (MAX 2.0%) (ALL DIRECTIONS)



TYPICAL ACCESSIBLE PARKING SPACE LAYOUT, STRIPING, & SIGNAGE
NOT TO SCALE



NOTE
PRECAST CONCRETE WHEEL STOP DIMENSIONS ARE NOMINAL AND COULD VARY FROM MANUFACTURER'S PRODUCTS APPROVED BY THE ENGINEER

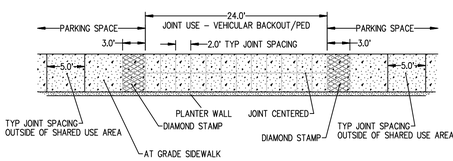
CONCRETE WHEEL STOP DETAIL
NOT TO SCALE

LEGEND

- SUBJECT PROPERTY BOUNDARY
- EXISTING CURB & GUTTER
- PROPOSED CURB
- EXISTING WASTEWATER SEWER
- PROPOSED WASTEWATER SEWER
- EXISTING STORM SEWER
- PROPOSED STORM PERFORATED PIPE
- PROPOSED STORM SEWER
- EDGE EXISTING ASPHALT
- EXISTING OVERHEAD UTILITIES
- EXISTING UNDERGROUND UTILITY
- PROPOSED UNDERGROUND UTILITY
- EXISTING WATER
- PROPOSED WATER SERVICE
- EXISTING FENCE (SIZE & TYPE NOTED)
- PROPOSED LANDSCAPE AREA SEE LANDSCAPE PLAN
- PROPOSED STORMWATER TREATMENT FACILITY
- NEW & MODIFIED AC PAV - STREET
- EXISTING WASTEWATER SEWER MANHOLE
- EXISTING CLEANOUT
- EXISTING STORMWATER MANHOLE
- PROPOSED STORMWATER MANHOLE
- EXISTING CATCH BASIN
- EXISTING CURB INLET
- PROPOSED CATCH BASIN
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING ELEC VAULT
- EX TELECOMM. ACCESS CABINET
- EX UTILITY VAULT
- EXISTING GAS VALVE
- EXISTING GAS METER
- EX UTILITY POLE
- PROPOSED SITE LIGHT - SEE ELECTRICAL PLANS BY OTHERS
- PROPOSED WALL PACK LIGHT - SEE ELECTRICAL PLANS BY OTHERS

CONSTRUCTION NOTES

(103) CONSTRUCT STD STRAIGHT CURB PER DETAIL HEREON.
(104) CONSTRUCT REINFORCED CONCRETE WALL PER DETAIL ON SHEET C-2.1.
(105) CONSTRUCT CONCRETE CURB & GUTTER PER DETAIL HEREON.
(108) CONSTRUCT 7" CONCRETE COMMERCIAL DRIVEWAY (WITH 6" X 6" X 10 GA MESH) PER STD CITY OF BEAVERTON DETAIL 210
(112) CONSTRUCT 4" THICK CONCRETE ON MINIMUM 2" CRUSHED ROCK LEVELING COURSE BASE. INSTALL 1-1/2" DEEP TOOLED CONTROL JOINT AT MAX. 5' O.C.
(117) CONSTRUCT TRASH ENCLOSURE (WALLS, SURFACING, GRADING, ETC.) PER DETAILS AND SPECIFICATIONS IN ARCHITECTURAL PLAN SHEETS.
(122) PROVIDE PARKING SPACE STRIPING AS SHOWN (4" WIDE WHITE STRIPES)
(123) PROVIDE ADA ACCESSIBLE PARKING SPACE STRIPING AND SIGNING IN ACCORDANCE WITH OTC & IBC REQUIREMENTS. SEE DETAIL THIS SHEET FOR ACCESSIBLE PARKING SPACE LAYOUT, STRIPING, AND SIGNAGE
(127) INSTALL PRECAST CONCRETE WHEEL STOP PER DETAIL THIS SHEET.
(251) INSTALL CLEANOUT AND CONNECT TO BUILDING DRAIN PER OSPC. PRESSURE TEST PER CITY AND OSPC STDS PRIOR TO USE.
(258) CONNECT TO EXISTING WW SERVICE USING APPROVED FITTER PER OSPC AND CITY STDS
(284) INSTALL WASTEWATER PIPE, SIZE AS NOTED (ABS DWV OR APPROVED EQUAL).
(300) CONNECT TO WATER LINE AT METER AND INSTALL 1" SCHED 40 PVC WATER SERVICE TO BUILDING PER AWWA & CITY STDS.
(301) INSTALL CITY APPROVED REDUCED PRESSURE VALVE BACKFLOW ASSEMBLY (RPV) PER CITY DETAIL 690-6. FDC AND IRRIGATION BACKFLOW BY OTHERS
(401) COORDINATE UTILITY SERVICES (CONDUIT SIZE, NUMBER, & LOCATION) WITH UTILITY PROVIDER AND BUILDING CONTRACTOR. ALL UTILITY SERVICES TO BE UNDERGROUND PER CITY STDS.



TYP JOINT USE PEDESTRIAN WAY/VEHICULAR BACKOUT SPACE
NOT TO SCALE

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
06/11/2021

GENERAL PAVING NOTES

1. A.C. PAVING LIFTS SHALL BE AS FOLLOWS:
   TOP LIFT - 1.5" - 2" OF LEVEL 2 OR 3 (1/2" DENSE GRADED ACP - WEARING COURSE)
   BASE LIFT - 1.5" - 2" OF LEVEL 2, (3/4" DENSE GRADED ACP - BASE COURSE)
2. WOVEN GEOTEXTILE FABRIC, MARAFI 500X OR APPROVED EQUAL, SHALL BE USED UNDER ALL NEW PAVING AS SPECIFIED BY THE ENGINEER DURING SUBGRADE INSPECTION.
3. CONCRETE AND JOINT SPACING TO CONFORM TO ODOT SPECIFICATIONS.
4. SEE TABLE THIS SHEET FOR COMPACTION REQUIREMENTS.

COMPACTION REQUIREMENTS:

LAYER	RATE	TEST
SUBGRADE	95%	T99
CRUSHED ROCK	95%	T180
ASPHALT (LOCAL)	90%	RICE

CONCRETE COMPRESSIVE STRENGTH REQUIREMENTS (PSI):

CONCRETE USE	FIELD	LABORATORY
SIDEWALK/ADA RAMPS	3000	3450
CURBS/GUTTERS	3300	4025
DRIVEWAYS	3500	4025

APPROVAL

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	SITE DEVELOPMENT PERMIT SET	MJK	12-28-20
2	SITE DEV PERMIT SET - REV 1 PER 2/12/21 CITY REVIEW	MJK	03-10-21
3	SITE DEV PERMIT SET - REV 2 PER 4/01/21 CITY REVIEW	MJK	04-05-21
4			
5			
6			
7			

JOB NO.: 4737
DWG. NAME: 4737_SDP-PLANS
SCALE: SEE BAR SCALE
DESIGNED: DBM/MJK
DRAWN BY: FS/MJK
CHECKED: DBM
DWG. DATE: 11/20/19
FLAT FILE:

ENGINEERING & SURVEYING, INC.
(PH) 541/485-1141 (FAX) 541/485-5624
P.O. BOX 23025 EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

POAGE

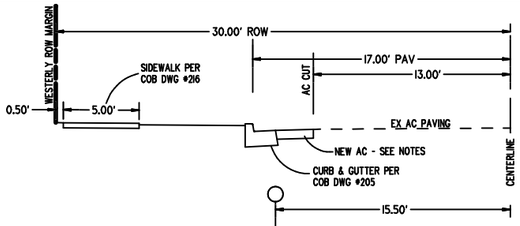
PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSOR'S MAP No 1S105AB TAX LOT No.s) 100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

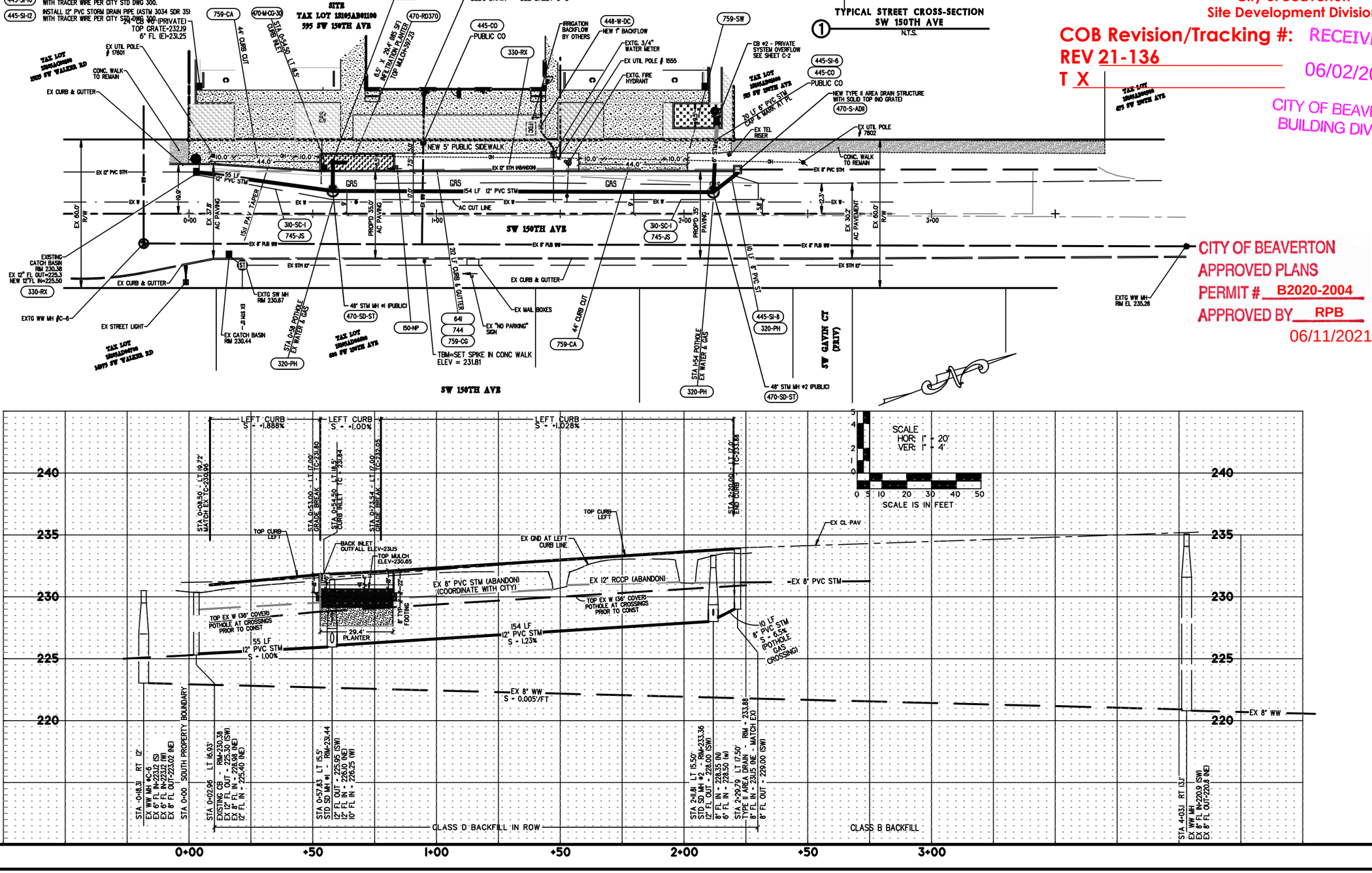
SHEET TITLE: PAVING AND UTILITY PLAN

REGISTERED PROFESSIONAL ENGINEER
17255
OREGON
JULY 19, 1977
DONOVAN B. MOSSMAN

EXPIRES: 12-31-2022

SHEET No. C-3.0





CONSTRUCTION NOTES:

150-NP	INSTALL STD "NO PARKING" SIGN PER STD COB DWG# 405 & 407 WITH DIRECTIONAL ARROW AS NOTED.
310-SC-1	REMOVE & REPLACE A.C. TO SAW CUT LINE PER COB DWG #305; .
320-PH	POTHOLE EXISTING UTILITIES (GAS & WATER) PRIOR TO CONSTRUCTION TO VERIFIY CLEARANCES
330-RX	COORDINATE REMOVAL OF STORM PIPES AND CONNECTION OF STORM TO EXISTING CATCH BASIN WITH CITY INSPECTOR.
445-CO	INSTALL CLEAN-OUT ON 6" SERVICE LATERAL PER COB DWG. #340 (AS REQUIRED).
445-SI-6	INSTALL 6" PVC STORM DRAIN PIPE (ASTM 3034 SDR 35) WITH TRACER WIRE PER CITY STD DWG 300.
445-SI-8	INSTALL 8" PVC STORM DRAIN PIPE (ASTM 3034 SDR 35) WITH TRACER WIRE PER CITY STD DWG 300.
445-SI-10	INSTALL 10" PVC STORM DRAIN PIPE (ASTM 3034 SDR 35) WITH TRACER WIRE PER CITY STD DWG 300.
445-SI-12	INSTALL 12" PVC STORM DRAIN PIPE (ASTM 3034 SDR 35) WITH TRACER WIRE PER CITY STD DWG 300.
448-W-DC	INSTALL 1" REDUCED PRESSURE BACKFLOW VALVE ON DOMESTIC WATER SERVICE PER COB DWG #690-3A
470-S-BHI	INSTALL STORM PLANTER OVERFLOW 18" DIA BEEHIVE INLET PER CWS DWG #758/760 - INCLUDE 8 LF OF 8" PVC PERF PIPE
470-SD-ST	INSTALL STANDARD 48" STORM DRAIN MANHOLE PER COB DWG #330/331
470-M-CG-30	INSTALL MODIFIED CG-30 PER STD CWS DWG 755.
470-S-ADII	INSTALL TYPE II AREA DRAIN PER CWS DWG #380 (WITH SOLID TOP)
470-RD370	CONSTRUCT CWS STREETSIDE LIDA PLANTER WITHOUT STREET PARKING PER COB DWG #370. PLANT PER COB EDM CHAP 4.
641	CONST AGGREGATE BASE FOR ROAD PER TYPICAL THIS SHEET
744	CONST HMAC PER TYPICAL SECTION THIS SHEET
745-JS	FILL PAVEMENT JOINTS WITH COB APPROVED JOINT SEAL
759-CA	CONST COMMERCIAL DRIVEWAY PER STD DWG #210
759-CG	CONST MONOLITHIC CURB & GUTTER PER STD DWG #205
759-SW	CONST STD CITY SIDEWALK - SEE TYPICAL SECTION THIS SHEET

PAVING NOTES:

PAVING TO MATCH EXISTING OR AS FOLLOWS
(WHICHEVER IS GREATER)

HMAC:
2" OF 1/2" DENSE GRADED (WEARING COURSE)
2" OF 3/4" DENSE GRADED (BASE COURSE)
(COMPACT AC IN 2" LIFTS)

CRUSHED ROCK:
2" OF 3/4"-0" LEVELING COURSE
8" OF 1-1/2" - 0" BASE COURSE

RECEIVED

04/08/2021

City of Beaverton
Site Development Division

COB Revision/Tracking #: RECEIVED
REV 21-136 06/02/2021
T X

CITY OF BEAVERTON
BUILDING DIVISION

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
06/11/2021

CITY APPROVAL

NO.	DESCRIPTION	BY	DATE
1	PER 07-12-2020 DEV REVIEW	MJK	08-17-20
2	ADDED 3 FT SOUTH PLANTER	MJK	11-05-20
3	11/20 Plan review (ADA Parking revision)	MJK	11-18-20
4	SITE DEVELOPMENT PERMIT SET	MJK	12-28-20
5	REV 1 PER 2/12/21 CITY REVIEW	MJK	03-10-21
6	REV 2 PER 4/1/21 CITY REVIEW	MJK	04-01-21
7			

JOB NO.: 4737
DWG. NAME: 4737_SDP-PLANS.GXD
SCALE: SEE BAR SCALE
DESIGNED: MJK
DRAWN BY: MJK
CHECKED: DBM
DWG. DATE: 08/03/17
FLAT FILE:

POAGE ENGINEERING & SURVEYING, INC.
(PH) 541/485-4505 (FAX) 541/485-5624
P.O. BOX 2527, EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSOR'S MAP No. 1S105AB TAX LOT No.(s) 1100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

SHEET TITLE: PUBLIC IMPROVEMENT CONSTRUCTION PLAN

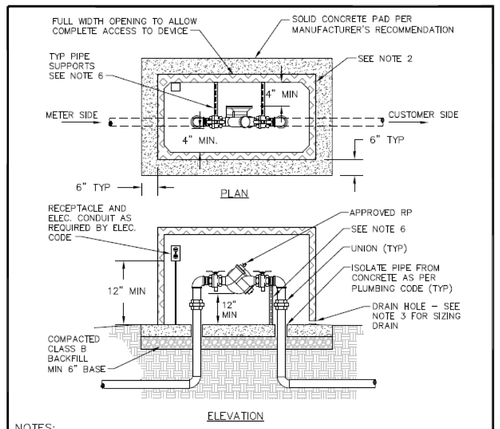
REGISTERED PROFESSIONAL ENGINEER 17255 OREGON JULY 19, DONOVAN B. MOGSTAD
EXPIRES: 12-31-2022

SHEET No. C-4.0

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
06/11/2021

COB Revision/Tracking #:
REV 21-136
T X

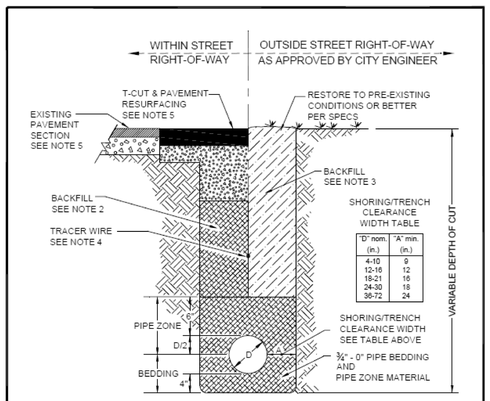
RECEIVED
06/02/2021
CITY OF BEAVERTON
BUILDING DIVISION



NOTES:
1. PLACE RP WITHIN PROPERTY LINE AS CLOSE TO METER AS POSSIBLE WITH NO CONNECTIONS OR TEES BETWEEN METER AND RP.
2. PROVIDE ADEQUATE PROTECTION AGAINST FREEZING
3. PROVIDE A SCREENED DRAIN CAPABLE OF PASSING A FULL RELIEF DISCHARGE (SEE DRAWING 690-10 FOR GUIDANCE ON DRAIN SIZING).
4. ALL PRE-MANUFACTURED ENCLOSURES SHALL COMPLY WITH ASSE1060, CLASS III.
5. CONCRETE PAD MUST BE SET AT OR ABOVE SURROUNDING FINISH GRADE AND/OR MAXIMUM FLOOD ELEVATION.
6. DEVICE IS TO BE SUPPORTED BY SUBSTANTIAL MATERIAL SUCH AS UNISTRUT TO RESIST RUST AND DECAY. SUPPORTS ARE TO BE INSTALLED TO PREVENT UNDUE STRESS OR STRAIN ON THE DEVICE AND ITS SERVICE PIPING.
7. AS A PRIVATE FACILITY, THE INSTALLATION IS GOVERNED BY THE OPSC AND OREGON HEALTH AUTHORITY, AS APPLICABLE.
8. CONSULT WITH BUILDING DEPARTMENT FOR PROPER SIZING OF RP.

Beaverton Engineering	¾" TO 2" REDUCED PRESSURE BACKFLOW ASSEMBLY (RP) ABOVE GROUND	SCALE: NONE	DATE: JUNE 2018	690-6

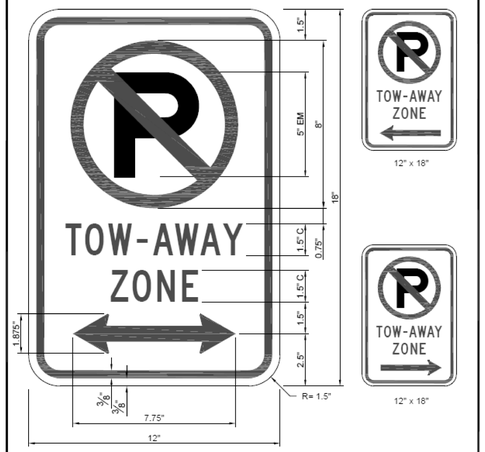
FILENAME: 690-6.dwg



NOTES:
1. These trench backfill requirements apply to all public utility pipes. For additional requirements, see *CWS Design and Construction Standards* and City's *Engineering Design Manual* section 211.
2. For trenches 12" wide or less in streets with classifications higher than Residential, use controlled density fill (CDF) as per sec 210.19. For all other trenches, use 3/4" - 0" aggregate compacted to 95% of max density per *AASHTO* t-99 and *ODOT/APWA spec* 00405.
3. Use class 'A' backfill compacted to 90% of max density per *AASHTO* t-99 and *ODOT/APWA spec* 00405.
4. Tracer wire shall be placed above non-metallic pipe and 2 feet below finished grade when required by Oregon State Plumbing code. Reference City's EDM section 211.1.4.o. Storm and sanitary sewer services shall be marked with magnetic tape per CWS D&C section 5.09.4.c
5. Restore to original conditions or better. See specifications and drawing 302.
6. For conduit trench requirements see drawing 301.
7. The City reserves the right to require compaction testing of the bedding material when it exceeds the 4-inch base section beneath the pipe.

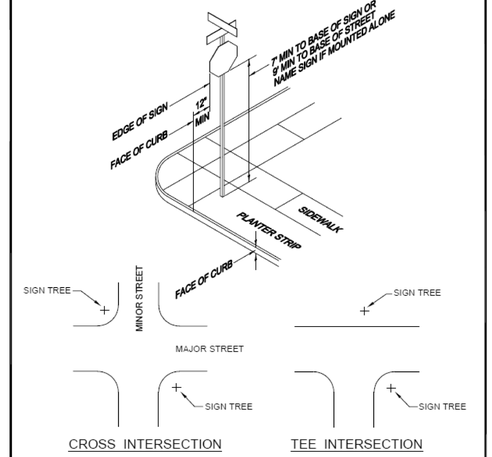
Beaverton Engineering	PIPE TRENCH BACKFILL	SCALE: NONE	DATE: JUNE 2018	300

FILENAME: 300.dwg



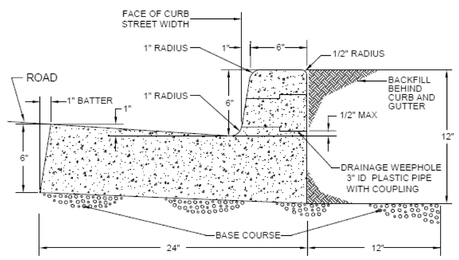
NOTES:
1. Flat blanks shall be 0.080" gauge with 6063 T6 alodine coated aluminum substrate.
2. Background shall be white 3M Scotchlite brand High Intensity Reflective sheeting.
3. Symbol shall be black, 5" EM series
4. Legend text shall be 1.5" C series.
5. Border, legend, circle & diagonal shall be red.
6. For sign mounting, see drawing 400.

Beaverton Engineering	NO PARKING SIGNS	SCALE: NONE	DATE: JUNE 2018	407



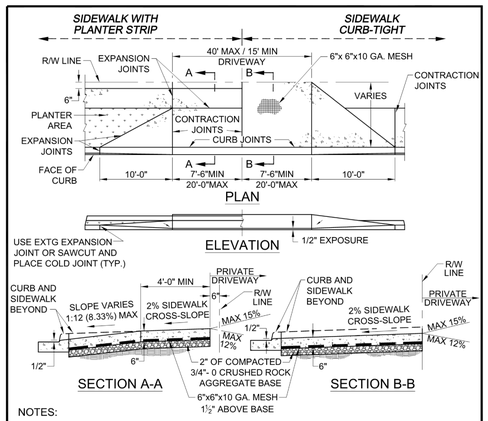
NOTES:
1. Sign locations shall be according to the *MUTCD* and as modified herein.
2. Signs where the sidewalk is curb tight shall be located 6 inches outside the sidewalk to a maximum distance of 7 feet from the face of curb.

Beaverton Engineering	TYPICAL SIGN LOCATIONS	SCALE: NONE	DATE: JUNE 2018	405



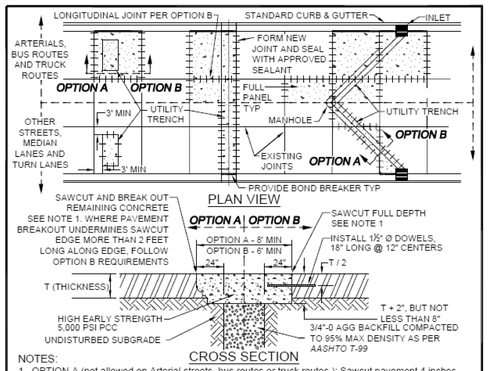
NOTES:
1. For use along medians, gutters may be reduced when preapproved by City Engineer.
2. Concrete to have compressive strength of 4,000 psi at 28 days.
3. Expansion joints to be provided at each:
   a. Point of tangency.
   b. Cold joint.
   c. Side of inlet structures.
   d. Side of driveways.
4. Expansion joint material to be pre-molded, asphalt impregnated, non-extruding, with a thickness of 1/2 inch.
5. Contraction Joints shall have:
   a. Spacing of not more than 15 feet.
   b. Depth of joint of at least 1½ inches.
6. Base rock 1½"-0 or 3/4"-0, 95% (*AASHTO* T-180) compaction. Base rock shall be to subgrade of street structure or 7.5 inches, whichever is greater, and shall extend 12 inches behind the curb.
7. Drainage weephole shall be:
   a. 3-inch diameter I.D. plastic pipe with coupling and beveled outlet end to match face of curb.
   b. Centered with contraction joints.
   c. Core-drilled through existing curbs for drainage access.
8. Proof roll subgrade and base rock section prior to placement of curb.

Beaverton Engineering	STANDARD MONOLITHIC CURB AND GUTTER	SCALE: NONE	DATE: JUNE 2018	205



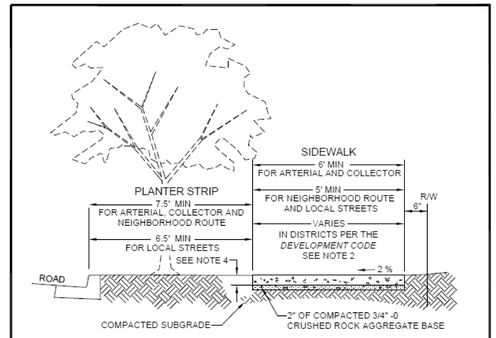
NOTES:
1. Section A-A may be used for curb-tight sidewalk driveway aprons if sidewalk's width is 10' or more.
2. Concrete shall have a minimum breaking strength of 4,000 psi after 28 days.
3. Curb joint shall be a troweled joint with a minimum 1/2 inch radius along back of curb.
4. Expansion joints shall be 1/2 inch pre-molded asphalt impregnated material, cedar or approved equal extending from top of base to finished grade.
5. For driveways 24 feet wide or greater, concrete to be increased to a 7 inch depth.
6. Finish with broom and edge all joints.
7. Weepholes not to be placed in wing.
8. If curbing is being removed to install a driveway and the gutter should become separated from the driving surface in excess of 1/16 inch, then the gutter shall also be removed and replaced.
9. Wings of the commercial driveway which are a portion of the sidewalk shall not exceed 8.333% (1:12).
10. ODOT Standard Drawings for driveways may be used when preapproved by City Engineer.
11. Slope of the driveway may be away from the curb when preapproved by City Engineer.

Beaverton Engineering	STANDARD COMMERCIAL DRIVEWAY	SCALE: NONE	DATE: JUNE 2018	210



NOTES:
1. OPTION A (not allowed on Arterial streets, bus routes or truck routes.): Sawcut pavement 4 inches deep or 1/2 the panel thickness (T), whichever is greater, before removal. Break out with mechanical hammer and carefully remove remaining concrete next to joint so as not to disturb the pavement surface to remain. One side of utility cut is to be along existing joint. OPTION B: Sawcut pavement full depth and install 1½ inch Ø dowels as shown. After drilling holes, place non-shrink grout in back of holes before inserting dowels. (Note: At interfaces of two adjacent new panels, an approved keyway may be substituted for dowels. For sawcuts through existing panel joints, sawcut existing panel joint(s) full depth before removing existing pavement.)
2. Partial panel replacement may be approved by the City Engineer per the *Engineering Design Manual*.
3. If utility trench width is greater than 1/2 of the panel width, then remove pavement to the next joint.
4. If utility trench wall must be closer than 3 feet from the joint, then remove pavement to the joint.
5. When panels are offset or irregular in any manner, the City Engineer shall determine the area of pavement replacement.
6. After placement of pavement, re-sawcut the joints that intersect the trench. The depth of sawcut is to be T/3. Seal the new joints per the *Engineering Design Manual*.
7. If pavement is undermined during repair, sawcut and remove pavement back to undisturbed subgrade.
8. If pavement is damaged during repair, sawcut and remove back to undamaged pavement.

Beaverton Engineering	STREET CUT IN PCC PAVEMENT PERPENDICULAR OR SKEWED TO CENTERLINE	SCALE: NONE	DATE: JUNE 2018	305



NOTES:
1. Concrete shall have a minimum compressive strength of 4,000 psi at 28 days. For slump see specifications.
2. Sidewalk panels shall be square with their length equal to the sidewalk's width, except that sidewalks in the Regional Center, Town Center, Station Area and Station Community districts may be wider than 6 feet, in which cases their panels may be 4 to 6 feet square, but all of equal size.
3. Expansion joints to be placed at sides of driveway approaches, utility vaults, sidewalk ramps and/or at points of tangency in curb as shown on the standard drawings for sidewalk ramps and at spacing not to exceed 45 feet.
4. Sidewalk shall have a minimum thickness of 4 inches, except that sidewalk that is intended as a portion of a driveway shall have a minimum thickness of 6 inches. See *Beaverton Standard Dwgs* 210 & 211.
5. Finish with broom and edge all joints.
6. Width of curb is included in planter strip width.
7. Street trees are required except where specifically modified or waived in writing by the City Engineer.
8. For sidewalk repairs, replacements and installations in existing developments, match existing width of sidewalks, and sidewalk panels' widths and lengths.

Beaverton Engineering	STANDARD SIDEWALK	SCALE: NONE	DATE: JUNE 2018	215

CITY APPROVAL

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	PER 07-12-2020 DEV REVIEW	MJK	08-17-20
2	ADDED 3 FT SOUTH PLANTER	MJK	11-05-20
3	11/20 Plan review (ADA Parking revision)	MJK	11-18-20
4	SITE DEVELOPMENT PERMIT SET	MJK	12-28-20
5	REV 1 PER 2/12/21 CITY REVIEW	MJK	03-10-21
6	REV 2 PER 4/1/21 CITY REVIEW	MJK	04-01-21
7			

JOB NO.: 4737
DWG. NAME: 4737_SDP-PLANS.DWG
SCALE: SEE BAR SCALE
DESIGNED: MJK
DRAWN BY: MJK
CHECKED: DBM
DWG. DATE: 08/03/17
FLAT FILE:

ENGINEERING & SURVEYING, INC.
(PH) 541/485-1505 (FAX) 541/485-0524
P.O. BOX 2527 EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

POAGE

PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSOR'S MAP No. 1S105AB TAX LOT No.(s) 1100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

SHEET TITLE: PUBLIC IMPROVEMENT CONSTRUCTION PLAN DETAILS

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 19, 1985
DONOVAN B. MOSSTROM

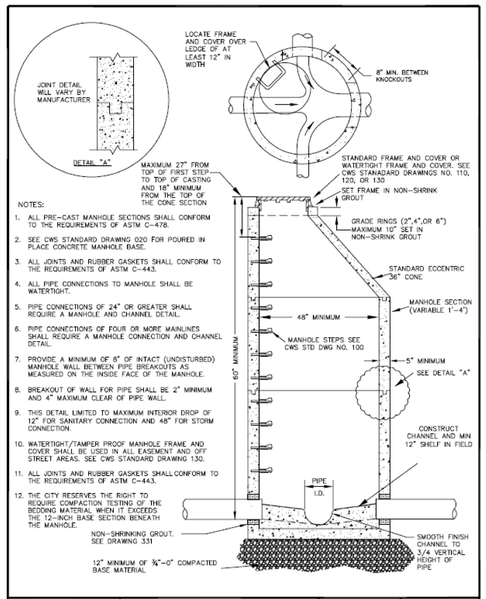
EXPIRES: 12-31-2022

SHEET No. C-4.01

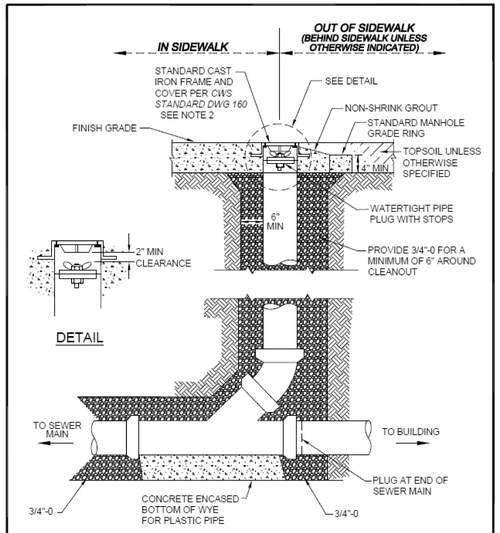
CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
06/11/2021

COB Revision/Tracking #:
REV 21-136
T X

RECEIVED
06/02/2021
CITY OF BEAVERTON
BUILDING DIVISION

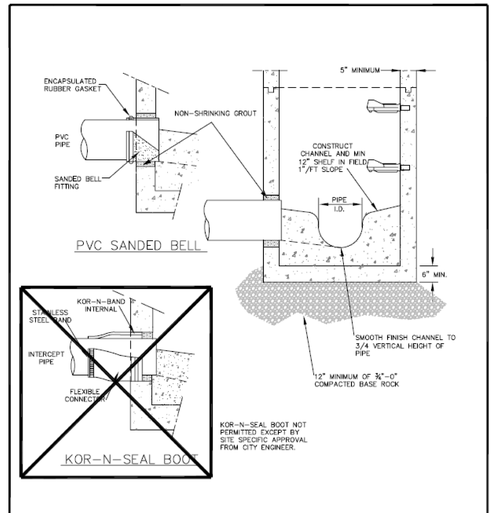


Beaverton Engineering	CWS STANDARD MANHOLE WITH C.O.B. MODIFICATIONS	SCALE: NONE	DATE: JUNE 2018	330



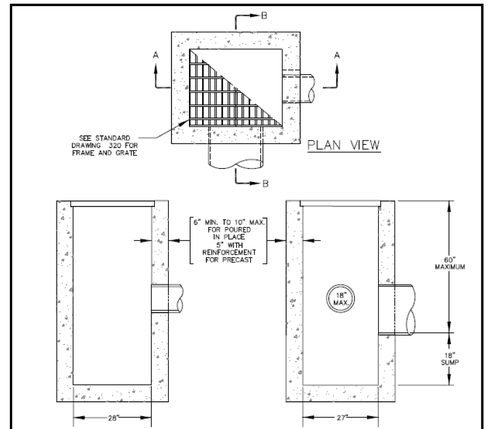
NOTES:
1. Concrete encase entire wye section and 45° bend if concrete pipe.
2. Cleanout in sidewalk to be centered in sidewalk width.

Beaverton Engineering	STANDARD CLEANOUT IN EXISTING STREET	SCALE: NONE	DATE: JUNE 2018	340



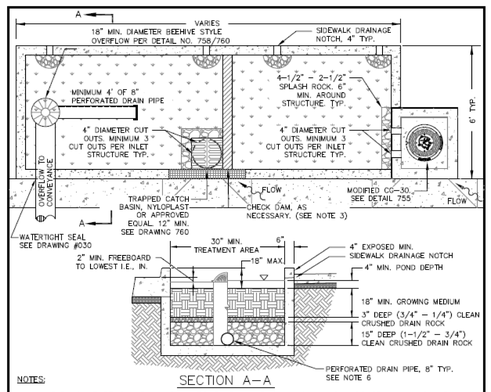
NOTES:
1. ALL PRE-CAST MANHOLE SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478 AND DRAWING 330.
2. NON-FLEXIBLE PIPES SHALL HAVE A SHEAR JOINT WITHIN 18"-24" OF THE INSIDE WALL OF THE MANHOLE.

Beaverton Engineering	MANHOLE CONNECTIONS	SCALE: NONE	DATE: JUNE 2018	331



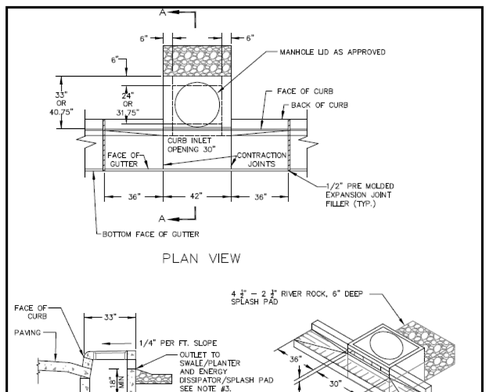
NOTES:
1. ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF ASTM C-478.
2. INSTALL STRUCTURE ON MIN. OF 8" OF 3/4"-0" COMPACTED BASE MATERIAL.
3. PRE CAST REINFORCEMENT SHALL BE REBAR MEETING ASTM A615 GRADE OR WELDED WIRE MEETING ASTM A497.
4. ALL POURED INPLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. AND A SLUMP OF 2" TO 4".
5. AREA DRAINS IN REAR OR SIDE YARDS SHALL NOT BE SUMPED AND SHALL BE PROPERLY CHANNELIZED.
6. PRECAST STRUCTURES CONFORMING TO ODOT TYPE CG-2 CATCH BASIN INLETS ARE AN ACCEPTABLE ALTERNATE. (ALL GRATE MATERIALS AND DIMENSIONS SHALL MEET CWS STANDARDS AS SHOWN ON DRAWING 320).

AREA DRAIN TYPE II		
DRAWING NO. 380	REVISED 10-31-19	Clean Water Services



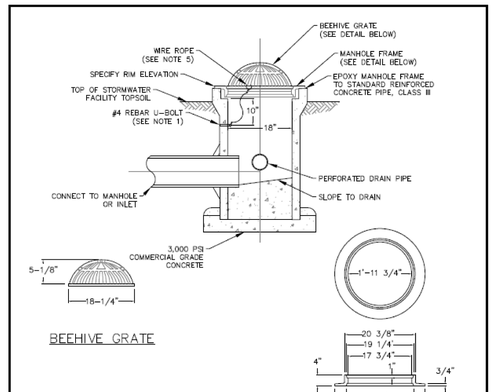
NOTES:
1. THIS DETAIL REPRESENTS A FLOW THROUGH PLANTER WITH FULL LENGTH CONCRETE WALLS AND FLOOR. FOR INFILTRATION PLANTER CONCRETE WALLS W/FOOTING WILL BE REQUIRED AS SHOWN ON DRAWING #750.
2. WALL'S STRUCTURAL DESIGN AND DIMENSIONS DETERMINED BY ENGINEER.
3. PROVIDE PROTECTION FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED FACILITY AREAS PRIOR TO, DURING, AND AFTER CONSTRUCTION.
4. SIDEWALK ELEVATION MUST BE SET ABOVE CHECK DAM AND INLET/OUTLET ELEVATIONS TO ALLOW OVERFLOW TO DRAIN TO STREET OR PIPED OVERFLOW SYSTEM AS APPLICABLE.
5. PLANTER SHALL BE FLAT BOTTOM IN ALL DIRECTIONS TO WITHIN 1 INCH. CHECK DAMS SHALL BE PLACED ACCORDING TO INDIVIDUAL PROJECT PLANS PER DETAIL 762. PROVIDE 2" MIN FREEBOARD.
6. STREET SIDE CURB NOTCHES TO BE LOCATED AS IDENTIFIED ON PROJECT PLANS.
7. SIDEWALK CURB NOTCH: 1" LOWER THAN SIDEWALK, SLOPED TO FACILITY. SIDEWALK DRAINAGE NOTCHES SHALL ALIGN WITH SIDEWALK CONTRACTION JOINTS AND LOW POINTS.
8. PERFORATED PIPE IN INFILTRATION FACILITIES: BOTTOM OF PIPE SHALL BE SET AT 2 1/2" ABOVE SUBGRADE. PERFORATED PIPE IN FLOW THROUGH FACILITIES: BOTTOM OF PIPE SHALL BE SET AT BASE OF DRAIN ROCK LAYER.
9. HYDRANTS, UTILITY POLES, OR ANY UTILITY BOXES PLACED WITHIN PLANTER MUST BE APPROVED BY JURISDICTION IN WRITING.
10. ACTUAL ELEVATIONS AND DIMENSIONS TO BE CONSTRUCTED AS IDENTIFIED ON PROJECT PLANS.
11. ENSURE THAT A DOWNSTREAM CATCH BASIN IS IN PLACE FOR EMERGENCY OVERFLOW.

STREET SIDE PLANTER WITHOUT STREET PARKING		
DRAWING NO. 745	REVISED 10-31-19	Clean Water Services



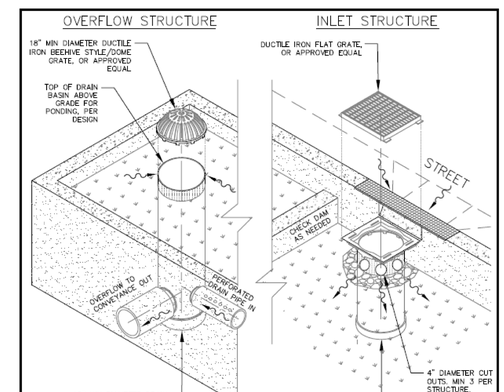
NOTES:
1. INSTALL STRUCTURE ON MINIMUM OF 8" OF 3/4" TO 0" COMPACTED BASE MATERIAL.
2. INSTALL ENERGY DISSIPATER/SPLASH PAD AT OUTFALL OF STRUCTURE.
3. FOUR INCH DIAMETER CUT OUTS, MINIMUM 3 CUT OUTS EVENLY SPACED PER INLET STRUCTURE, TYPICAL.

MODIFIED CG-30 INLET WITH SUMP		
DRAWING NO. 755	REVISED 10-31-19	Clean Water Services



NOTES
1. SECURE GRATE IN PLACE WITH 54" OF WIRE ROPE. LOOP ENDS OF WIRE ROPE AROUND U-BOLT AND GRATE. CRIMP EACH END OF WIRE ROPE WITH 3" OVERLAP.
2. DRILL 2" DEEP HOLES INTO PIPE AND EPOXY #4 REBAR U-BOLT (2"X 4") IN HOLES.
3. GRATE TO BE CAST IRON, ASTM A48 CL30.
4. SIZE INLET BASED ON CALCULATED FLOWS AND MANUFACTURERS RECOMMENDATIONS.
5. WIRE ROPE BETWEEN 1/8"-3/16" DIAMETER, STAINLESS STEEL, 7 STRANDS OF 19 WIRES.

BEEHIVE INLET		
DRAWING NO. 758	REVISED 10-31-19	Clean Water Services



NOTE:
1. PLACE STRUCTURE ON 3/4" TO 0" BASE ROCK PLACED OVER NATIVE SUBGRADE.

OVERFLOW/INLET STRUCTURE		
DRAWING NO. 760	REVISED 10-31-19	Clean Water Services

CITY APPROVAL

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	PER 07-12-2020 DEV REVIEW	MJK	08-17-20
2	ADDED 3 FT SOUTH PLANTER	MJK	11-05-20
3	11/20 Plan review (ADA Parking revision)	MJK	11-18-20
4	SITE DEVELOPMENT PERMIT SET	MJK	12-28-20
5	REV 1 PER 2/12/21 CITY REVIEW	MJK	03-10-21
6			
7			

JOB NO.: 4737
DWG. NAME: 4737_SDP-PLANS.DWG
SCALE: SEE BAR SCALE
DESIGNED: MJK
DRAWN BY: MJK
CHECKED: DBM
DWG. DATE: 08/03/17
FLAT FILE:

POAGE ENGINEERING & SURVEYING, INC.
(PH) 541/485-1505 (FAX) 541/485-5624
P.O. BOX 2522 EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSORS MAP No. 1S05AB TAX LOT No.(s) 1100
SITE ADDRESS: 595 SW 150TH AVE, BEAVERTON, OR. 97006

SHEET TITLE: PUBLIC IMPROVEMENT CONSTRUCTION PLAN DETAILS

REGISTERED PROFESSIONAL ENGINEER
17255
OREGON
JULY 19, 1985
DONOVAN B. MOSSNER

EXPIRES: 12-31-2022

SHEET No. C-4.02

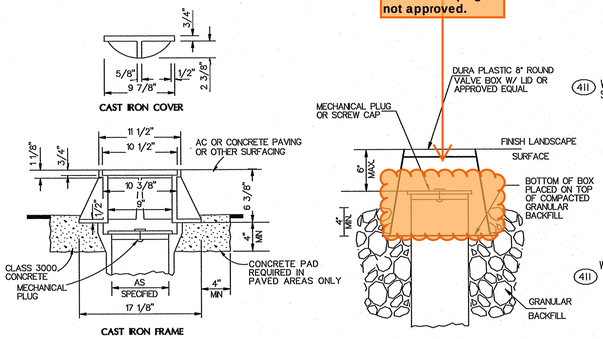
GENERAL NOTES:

1. AS APPLICABLE, MATERIALS & WORKMANSHIP FOR PRIVATE UTILITY PIPING & FITTINGS (WATER, WASTEWATER AND STORM SEWER) SHALL CONFORM TO THE OREGON PLUMBING SPECIALTY CODE (OPSC), OR OREGON STRUCTURAL SPECIALTY CODE (OSSC). ALL PUBLIC IMPROVEMENTS SHALL COMPLY WITH CITY OF GLADSTONE DESIGN AND CONSTRUCTION STANDARDS.

2. EXISTING CONTOURS AND ELEVATIONS SHOWN HEREON ARE BASED ON ASSUMED ELEVATIONS. A TBM WAS ESTABLISHED ON THE EASTERLY SIDE OF SW 150TH ST...A SPIKE WITH AN ELEVATION = 231.81

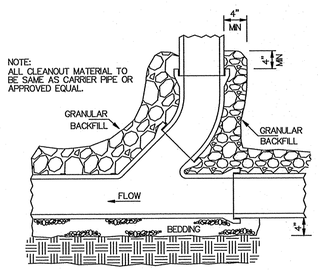
CONSTRUCTION NOTES

(401) CONSTRUCT VEGETATED BASIN AND INFILTRATION FACILITY PER DETAIL SHEET C-2.1.
(411) INSTALL 12" TRAPPED GIBSON STEEL CATCH BASIN OR APPROVED EQUAL - SEE DETAIL SHEET C-2.1
(412) INSTALL 24" TRAPPED GIBSON STEEL CATCH BASIN OR APPROVED EQUAL - SEE DETAIL SHEET C-2.1
(413) INSTALL SPECIAL SYSTEM OUTLET CONTROL STRUCTURE - SEE DETAILS SHEET C-2.1
(427) INSTALL CLEANOUT WITH TRAFFIC BEARING COVER PER DETAIL THIS SHEET
(428) INSTALL CLEANOUT WITH NON-TRAFFIC BEARING COVER PER DETAIL ON THIS SHEET
(435) INSTALL BEND AS NOTED
(439) INSTALL TEE-WYE
(442) CONNECT DOWNSPOUTS TO STORM DRAIN PIPE USING APPROVED FITTING
(448) CAP END
(480) INSTALL SCHED 40 PVC DWV STORM SEWER PIPE OR APPROVED EQUAL - SIZE AS NOTED.
(481) INSTALL ASTM 3034 SDR 35 PVC STORM SEWER PIPE OR APPROVED EQUAL - SIZE AS NOTED
(487) INSTALL ADS HDPE PERFORATED STORM SEWER PIPE OR APPROVED EQUAL - SIZE AS NOTED
(490) INSTALL ADS HDPE ACCESS/INSPECTION PORT 24 x 8 TEE WITH 8" RISER & CAP, SEE DETAIL SHEET C-2.1
(495) INSTALL APPROVED SPLASH PAD/ENERGY DISSIPATER - 6" DEPTH OF 4-1/2" - 2-1/2" RIVER ROCK. SEE DETAIL SHEET C-2.1



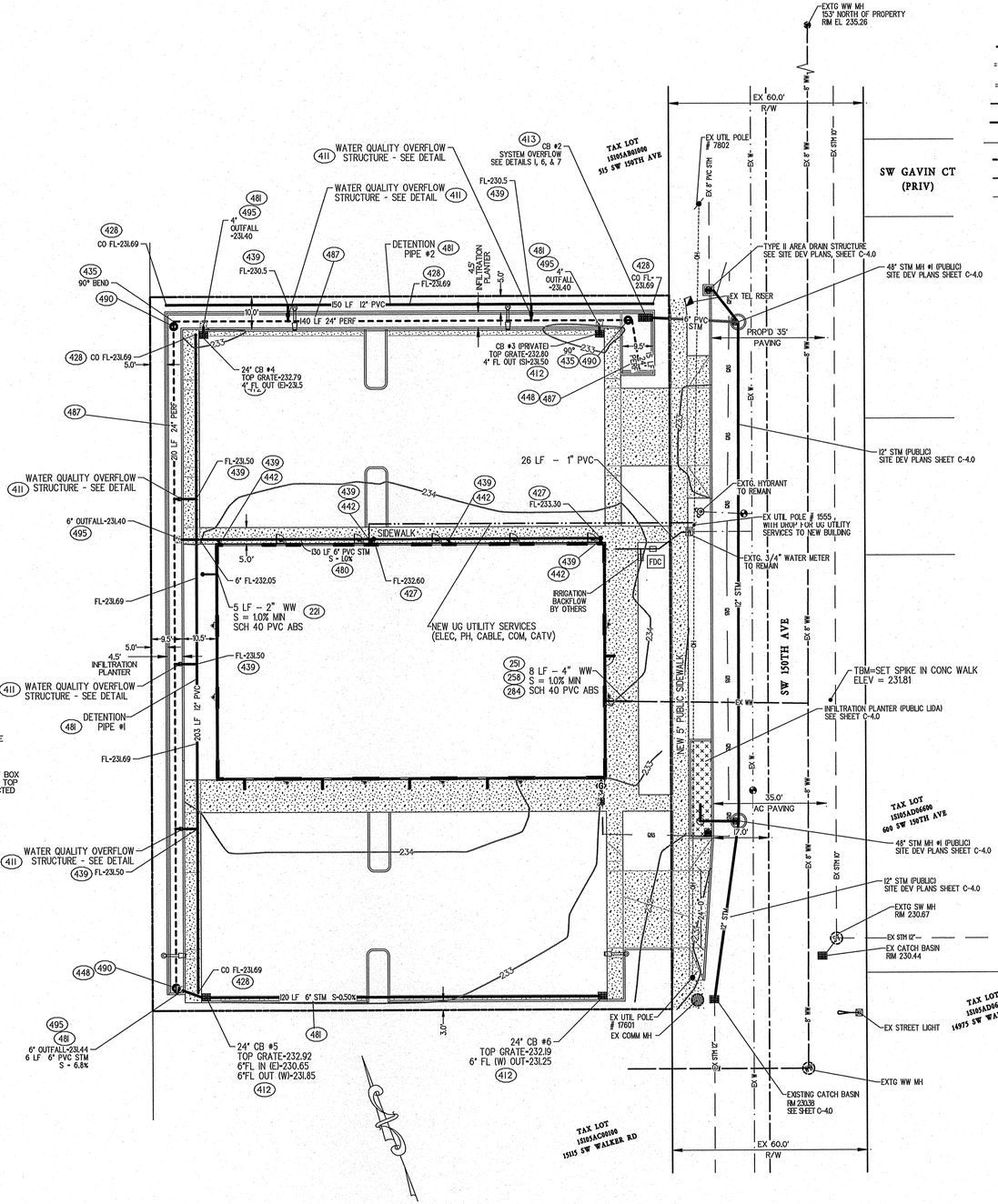
TRAFFIC AREA CLEANOUT COVER

LANDSCAPE AREA CLEANOUT COVER



(1) CLEAN-OUT DETAIL, TYPICAL
NOT TO SCALE

Must be an approved plumbing cap & fitting. Mechanical plugs not approved.



LEGEND

- SUBJECT PROPERTY BOUNDARY
- EXISTING CURB & GUTTER
- PROPOSED CURB
- EX WW — EXISTING WASTEWATER SEWER
- WW — PROPOSED WASTEWATER SEWER
- EX STM — EXISTING STORM SEWER
- STM — PROPOSED STORM PERFORATED PIPE
- STM — PROPOSED STORM SEWER
- EAC — EDGE EXISTING ASPHALT
- EXISTING WASTEWATER SEWER MANHOLE
- EXISTING CLEANOUT
- EXISTING STORMWATER MANHOLE
- PROPOSED STORMWATER MANHOLE
- EXISTING CATCH BASIN
- EXISTING CURB INLET
- PROPOSED CATCH BASIN
- 100 YEAR FLOOD OVERFLOW ISE CORNER OF SITE - OVERFLOWS OVER SOUTH PORTION OF SOUTHERLY DRIVEWAY)
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING ELEC VAULT
- EX TELECOMM. ACCESS CABINET
- EX UTILITY VAULT
- EXISTING GAS VALVE
- EXISTING GAS METER
- EX UTILITY POLE
- PROPOSED SITE LIGHT - SEE ELECTRICAL PLANS BY OTHERS
- PROPOSED WALL PACK LIGHT - SEE ELECTRICAL PLANS BY OTHERS
- OH — EXISTING OVERHEAD UTILITIES
- UTIL — EXISTING UNDERGROUND UTILITY
- EX W — EXISTING WATER
- X X X — EXISTING FENCE (SIZE & TYPE NOTED)
- PROPOSED LANDSCAPE AREA SEE LANDSCAPE PLAN
- PROPOSED STORMWATER TREATMENT FACILITY
- 299.37 XX — PROPOSED GRADE AT FINISHED SURFACE. REFERENCED "XX" LOCATION NOTED WHERE APPROPRIATE PER GRADE PLAN ABBREVIATION LEGEND BELOW.
- 234 — FINISHED GRADE CONTOUR (1 FT CONTOURS)

SEE SHEET C-1 (EX CONDITIONS PLAN) FOR EXISTING CONTOURS

GRADING PLAN ABBREVIATION

AC - ASPHALTIC CONCRETE SURFACE
TC - TOP OF CURB
ME - MATCH EXISTING
TW - TOP OF CURB AT TOP OF WING
TWa - TOP OF WALL
BC - BOTTOM OF CURB (GUTTER)

(221) INSTALL FLOOR DRAIN AND CONNECT TO BUILDING DRAIN PER OSPC. PRESSURE TEST PER CITY AND OSPC STDS PRIOR TO USE.
(251) INSTALL CLEANOUT AND CONNECT TO BUILDING DRAIN PER OSPC. PRESSURE TEST PER CITY AND OSPC STDS PRIOR TO USE.
(258) CONNECT TO EXISTING WW SERVICE USING APPROVED FITTER PER OSPC AND CITY STDS
(284) INSTALL WASTEWATER PIPE, SIZE AS NOTED (ABS DWV OR APPROVED EQUAL).

All non water quilty treatment catch basins shall be the lynch style outlet only under the plumbing code 1101.11

PERMIT # B2021-3746
NO PLAN REVIEW REQUIRED
NOT REVIEWED FOR CODE COMPLIANCE
☒ Plumbing (OAR 918-780-0040)
☐ Electrical (OAR 918-311-0040)

PRIVATE SITE PLUMBING

APPROVAL

NO.	DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			
6			
7			

JOB NO: 4737
DWG NAME: 4737_PLUMBING PLAN
SCALE: SEE BAR SCALE
DESIGNED: DBM/MJK
DRAWN BY: DBM/MJK
CHECKED: DBM
DWG. DATE: 9/25/21
FLAT FILE

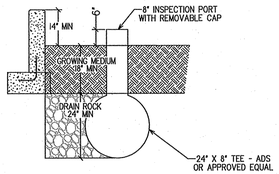
POAGE
ENGINEERING & SURVEYING, INC.
(PH) 541/485-4505 (FAX) 541/485-5624
P.O. BOX 2527, EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSORS MAP No. 1S105AB TAX LOT No. 01900
SITE ADDRESS: 515 SW 150TH AVE, BEAVERTON, OR. 97006

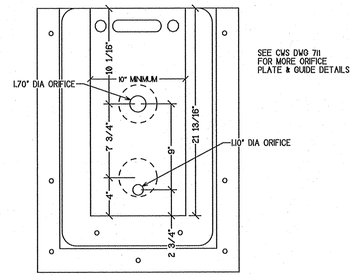
SHEET TITLE: SITE PLUMBING PLAN

REGISTERED PROFESSIONAL ENGINEER 17255 OREGON JULY 19, 1985 DONOVAN B. MOGSTAD
EXPIRES: 12-31-2022

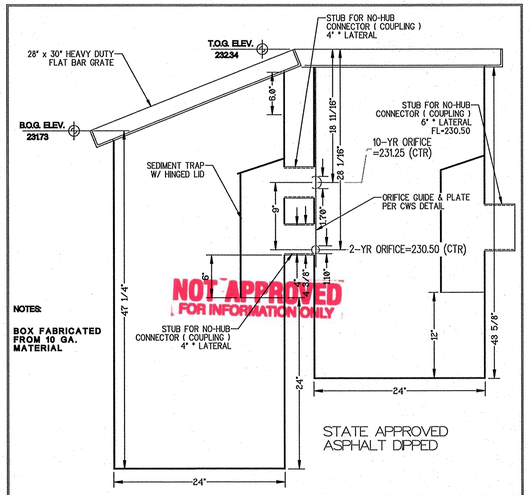
SHEET No. 1



7 PERF PIPE INSPECTION PORT
N.T.S.

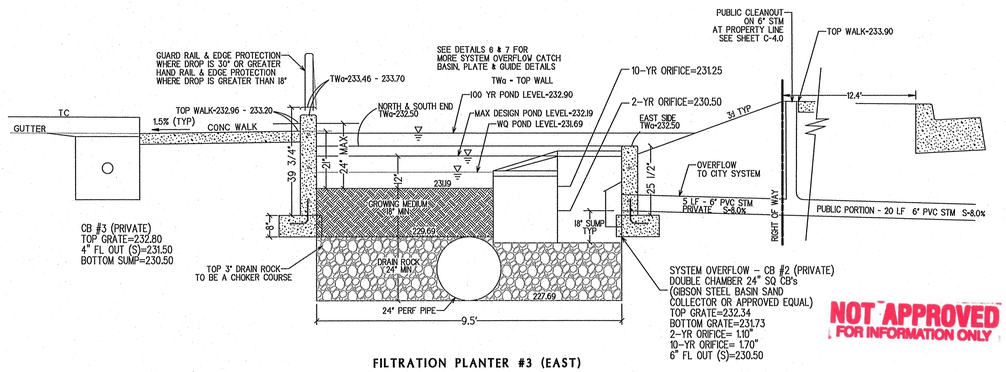


7 ORIFICE PLATE & GUIDE
N.T.S.

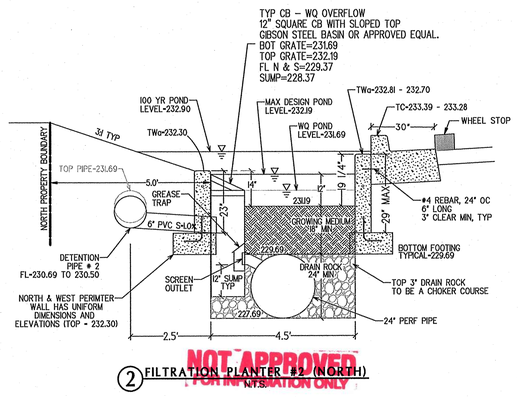


Gibson Steel Basins SINCE 1972	24" SQUARE WITH OUTLETS AS SHOWN
247 Washington St. Eugene, Or. 97401 ph(541) 687 - 8672 fax344-0207	STORM WATER CATCH BASIN WITH DITCH INLET
	SCALE NONE

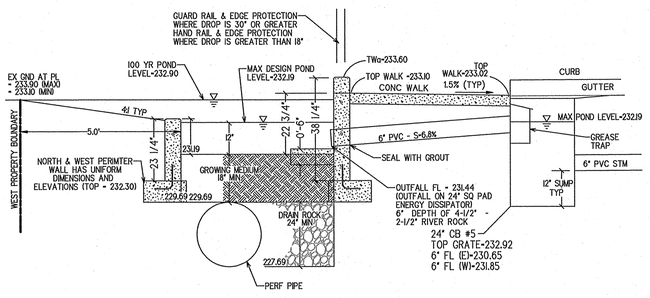
6 SYSTEM OVERFLOW DETAIL
N.T.S.



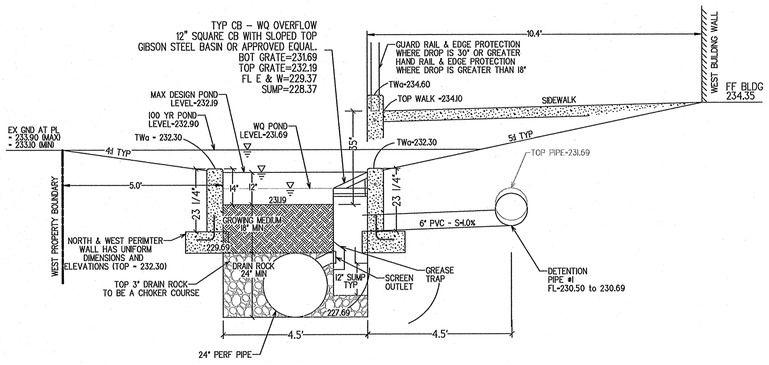
1 FILTRATION PLANTER #3 (EAST) & OVERFLOW TO PUBLIC SYSTEM
N.T.S.



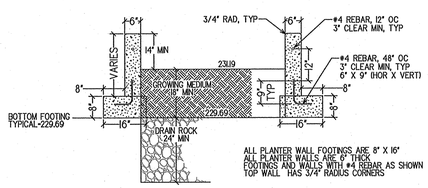
2 FILTRATION PLANTER #2 (NORTH)
N.T.S.



5 FILTRATION PLANTER #1 (WEST) AND CB #5
N.T.S.



3 FILTRATION PLANTER #1 (WEST)
N.T.S.



4 TYPICAL PLANTER WALLS
N.T.S.

3.0 PIPED UTILITIES:

1. Contractor shall coordinate connections to existing water, wastewater and storm sewer facilities. Any extraneous fees required to make the connections will be paid by the OWNER.
2. As applicable, materials & workmanship for private utility piping & fittings (water, wastewater and storm sewer) shall conform to the Oregon Plumbing Specialty Code (OPSC), or Oregon Structural Specialty Code (OSSC). All public improvements shall comply with City of Beaverton Design and Construction Standards.
3. All storm and wastewater piping shall have cleanouts installed within 5 feet of the building connection, at minimum 100 foot intervals and for every 135 degrees of bend as per the uniform plumbing code (OSSC 1101.4.4, 1101.11.3.1 & OSPC 707.0, 719.0).
4. Bedding and Backfill: Unless specified otherwise, all pipes in the street right of way shall be bedded with a minimum 2 inch depth of 3/4" minus crushed rock bedding and backfilled with compacted 3/4" minus crushed rock in the pipe zone (crushed rock shall extend a minimum of 12 inches over the top of the pipe in all cases). Crushed rock trench backfill shall be used under all improved areas, including sidewalks. Granular trench backfill shall be compacted to 92% of the maximum dry density per AASHTO T- 180 test method (Modified Proctor).
5. The Contractor shall have appropriate equipment on site to produce a firm, smooth, undisturbed subgrade at the trench bottom, true to grade. The bottom of the trench excavation shall be smooth and free of loose materials for the entire width of the trench prior to placing the granular bedding material.
6. Contractor shall provide all materials, equipment and facilities required for testing all utility piping.
7. Tracer Wire. All non-metallic water, wastewater and storm sewer piping located outside of the public right-of-way or not laid in straight lines between structures shall have an electrically conductive insulated 12 gauge copper tracer wire the full length of the installed pipe using blue wire for water and green for storm and wastewater piping. Tracer wire shall be extended up into all valve boxes, and manholes and catch basins. Tracer wire penetrations into manholes shall be within 18-inches of the rim elevation. The tracer wire shall be tied to the manhole frame to allow retrieval from the outside of the manhole.
8. Warning Tape. Detectable or non-detectable acid and alkali resistant safety warning tape shall be provided along the full length of all wastewater and storm drain service laterals and along all water, wastewater and storm drain mainline segments not located under sidewalks or paved portions of public streets. Underground warning tape shall be continuous the entire length of service laterals installed from the mainline to the back of the PUE.

4.0 WASTEWATER:

1. All pipe materials and construction shall comply with APWA, and OPSC standards. Unless otherwise shown, all gravity wastewater pipe shall be PVC in conformance with ASTM D-3034, SDR 35. Pipe within five feet of buildings shall be schedule 40 PVC, ABS. All other appurtenances and installation to conform to OPSC specifications. All pressure pipe shall be HDPE Pressure Pipe (ASTM D3035 DRII), Schedule 40 PVC, OR approved equal.
2. Cleaning. Prior to leakage testing, mandrel testing and/or TV inspection, flush & clean all wastewater mains & laterals, & remove all foreign material from the mainlines & manholes. Failure to clean all dirt, rock & debris from pipelines prior to TV inspection will require them to be re-cleaned and re-TV'd.
3. Leakage Testing. Wastewater pressure line and appurtenances shall be tested for leakage. Leakage tests shall include an air test of the 2" pressure main prior to paving. Air test shall be performed on the system using 100 psi. The pump vault shall be pressure tested per the manufacturers specifications.

5.0 STORM DRAIN:

1. All storm pipe materials and construction shall comply with CITY, APWA and OPSC standards. Unless otherwise noted on the plans, storm drain pipe shall be PVC in conformance with ASTM D-3034, SDR 35. Pipe within five feet of buildings shall be schedule 40 PVC, DWV. Contractor shall use uniform pipe material on each pipe run between structures unless otherwise directed or approved. Jointed HDPE pipe shall not be used for slopes exceeding ten percent (10%).
2. Catch basins and junction boxes shall be set square with buildings or with the edge of the parking lot or street wherein they lie. Storm drain inlet structures and paving shall be adjusted so water flows into the structure without ponding water. All catch basins shall be Gibson Steel Basins with bike proof, heavy duty traffic grate (supports H25 loads) or approved equal.
3. Unless otherwise approved by the Engineer, all storm drain connections shall be by manufactured tees or saddles.
4. Sweep storm drain pipe into catch basins and manholes as required. Cleanouts shall be provided per OSPC.
5. Unless otherwise specified or directed, install storm drain pipe in accordance with manufacturer's installation guidelines.
6. Cleaning. Upon completion of installation of the storm pipe system, and prior to mandrel testing, flush and clean all storm drains, and remove all foreign material from mainlines, manholes and catch basins.
7. Mandrel Testing. Contractor shall conduct deflection test of flexible storm sewer pipes (10" dia. and larger) by pulling an approved mandrel through the completed pipe line following trench compaction. The diameter of the mandrel shall be 95% of the initial pipe diameter. Test shall be conducted not more than 30 days after the trench backfilling and compaction has been completed.

APPROVAL

REVISIONS

NO.	DESCRIPTION	BY	DATE
1	SITE DEVELOPMENT PERMIT SET	MJK	12-28-20
2	SITE DEV PERMIT SET - REV 1 PER 2/12/21 CITY REVIEW	MJK	03-10-21
3	SITE DEV PERMIT SET - REV 2 PER 4/09/21 CITY REVIEW	MJK	04-05-21
4			
5			
6			
7			

JOB NO.: 4737
DWG. NAME: 4737_SDP-PLANS
SCALE: SEE BAR SCALE
DESIGNED: DBM/MJK
DRAWN BY: FS/MJK
CHECKED: DBM
DWG. DATE: 11/20/19
FLAT FILE:

ENGINEERING & SURVEYING, INC.
(PH) 541/485-1505 (FAX) 541/485-5624
P.O. BOX 2527, EUGENE, OR 97402
E-MAIL POAGE@POAGE.NET

POAGE

PROJECT: SITE DEVELOPMENT PERMIT PLANS for PORTAL BEAVERTON
ASSESSOR'S MAP No. (3S)4AB TAX LOT No.(8)100
SITE ADDRESS: 595 SW 158TH AVE, BEAVERTON OR. 97006

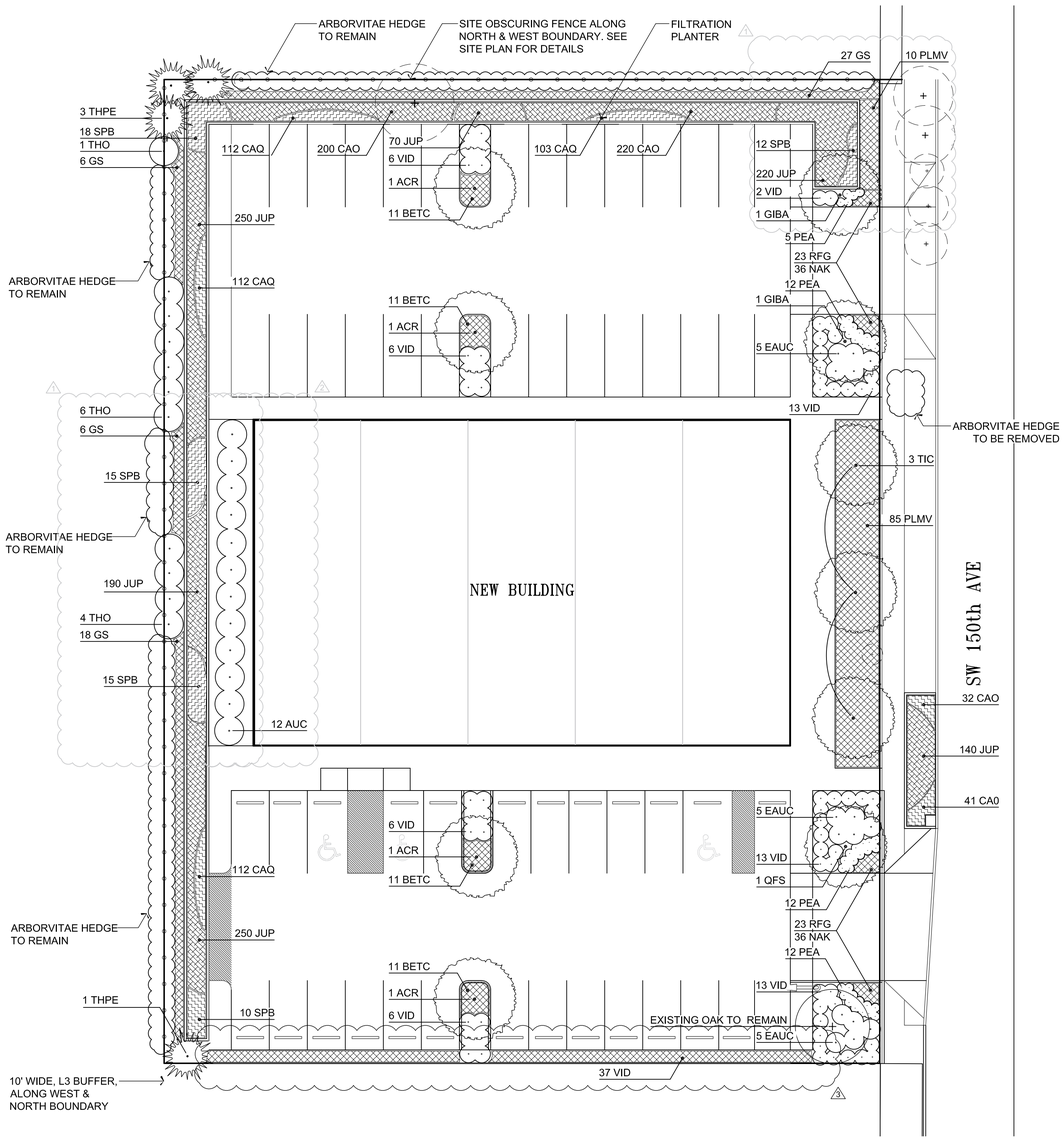
SHEET TITLE: DETAILS AND SPECIFICATIONS

REGISTERED PROFESSIONAL ENGINEER 17255 OREGON JULY 19, 2005 DONOVAN B. MOOSTRAM
EXPIRES: 12-31-2022

SHEET No. 2

Warr
full l
segn
the

COB Revision/Tracking #:
REV 21-020
T X



PLANTING LEGEND

- EXISTING TREES TO BE REMOVED
- EXISTING TREES TREES TO REMAIN
- DECIDUOUS TREES
- CONIFEROUS TREES
- SHRUBS
- SMALL SHRUBS, GROUND COVER & PERENNIALS
- STORMWATER PLANTS

RECEIVED
01/28/2021
CITY OF BEAVERTON
BUILDING DIVISION

PLANT SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	MIN. SIZE	COMMENTS
TREES					
ACR	4	Acer rubrum 'Red Sunset'	Red Sunset Maple	2" cal.	Matching, limbed up to approx. 6 ft.
GIBA	2	Ginkgo biloba "Autumn Gold'	Autumn Gold Ginkgo	2" cal.	Matching, limbed up to approx 6 ft.
QFS	1	Quercus frainetto 'Schmidt'	Forest Green Oak	2" cal.	Matching, limbed up to approx. 6 ft.
TIC	3	Tilia cordata 'Greenspire'	Greenspire Linden	2" cal.	Matching, limbed up to approx. 6 ft.
THO*	11	Thuja occidentalis	American Arborvitae	6' ht.	matching, full
THPE	4	Thuja plicata var. Excelsa	Excelsa Western Red Cedar	6' ht.	Matching, full, B&B

THO* - ADDITIONAL ARBORVITAE MAY BE REQUIRED TO MEET THE L3- BUFFER REQUIREMENTS. SEE NOTE UNDER CODE REQUIREMENTS FOR DETAILS.

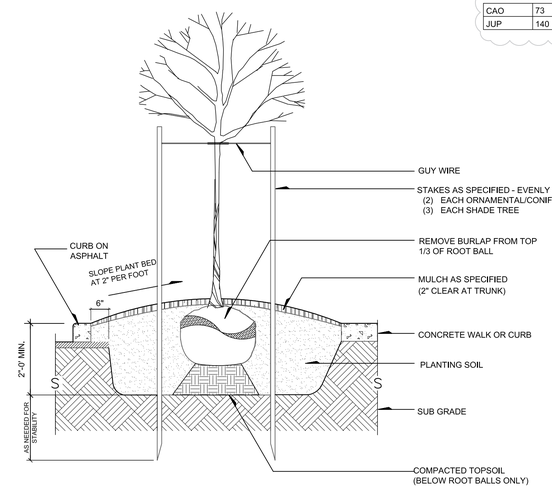
SHRUBS					
AUC	12	Arbutus unedo 'Compacta'	Strawberry Tree	5 gal.	matching, full
BETC	44	Berberis thunbergii 'Crimson Pygmy'	Dwarf Japanese Barberry	1 gal.	matching, full
EUAC	15	Euonymus alata 'Compacta'	Compact Burning Bush	5 gal	matching, full
GS	57	Gaultheria shallon	Salal	1 gal.	matching, full
PLMV	95	Prunus laurocerasus 'Mount Vernon'	Mount Vernon Laurel	3 gal.	matching, full
VID	102	Viburnum davidii	David Viburnum	3 gal.	matching, full
GROUNDCOVERS, GRASSES AND PERENNIALS					
PEA	41	Pennisetum alopercuroides 'Hammeln'	Hameln Fountain Grass	2 gal.	matching, full
RFG	46	Rudbeckia fulgida 'Goldsturm'	Goldsturm Black-Eyed Susan	1 gal.	15" o.c.
NAK	72	Narcissus 'King Alfred'	King Alfred Daffodil	bulb	matching, full

PRIVATE FILTRATION STORMWATER PLANTER - 1764 SQ FT

KEY	QTY.	BOTANICAL NAME	COMMON NAME	MIN. SIZE	COMMENTS
SMALL SHRUBS - 71 REQUIRED					
SPB	71	Spiraea betulifolia	Shiny-leaf Spiraea	1 gal.	matching, full, 24" o.c.
HERBACEOUS PLANTS - 1764 REQUIRED					
CAO	420	Carex obnupta	Dense Sedge	B.R. plugs	matching, full, 12" o.c.
JUP	910	Juncus patens	Spreading Rush	B.R. plugs	matching, full, 12" o.c.
CAQ	439	Camassia quamash	Common Camas	B.R. plugs	6" o.c.

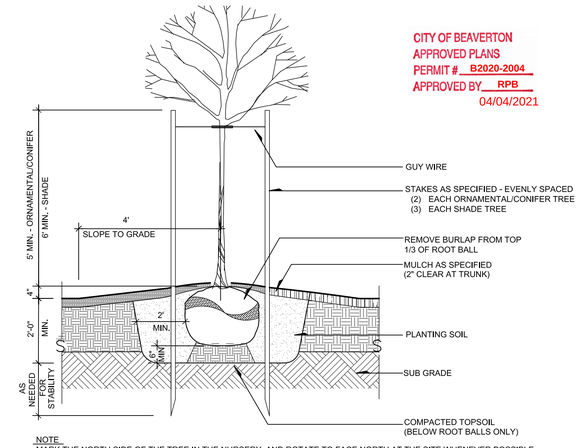
PUBLIC FILTRATION STORMWATER PLANTER - 185 SQ FT

KEY	QTY.	BOTANICAL NAME	COMMON NAME	MIN. SIZE	COMMENTS
HERBACEOUS PLANTS - 213 REQUIRED					
CAO	73	Carex obnupta	Dense Sedge	B.R. plugs	matching, full, 12" o.c.
JUP	140	Juncus patens	Spreading Rush	B.R. plugs	matching, full, 12" o.c.



NOTE
MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.

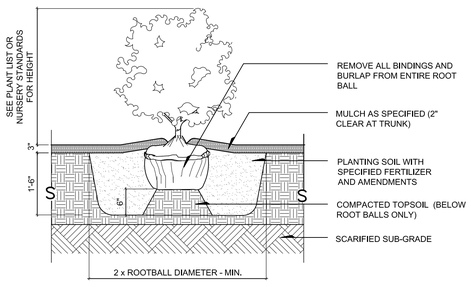
1 / LA-1 TREE PLANTING AT PARKING AREAS
SECTION
SCALE: 1/2" = 1'-0"



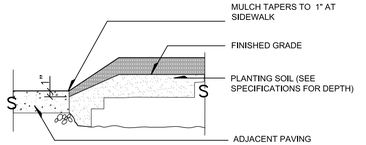
NOTE
MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.

2 / LA-1 TYPICAL TREE PLANTING
SECTION
SCALE: 1/2" = 1'-0"

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
04/04/2021

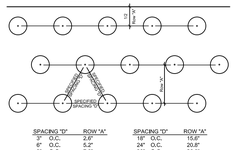


3 / LA-1 TYPICAL SHRUB PLANTING
SECTION
SCALE: 1/2" = 1'-0"



NOTE: SEE GRADING PLAN FOR PLANT BED SOIL LEVELS.

4 / LA-1 PLANT BED EDGE AT PAVEMENT
SECTION
SCALE: 1/2" = 1'-0"



SPACING "S"	ROW "A"	SPACING "D"	ROW "A"
6" O.C.	2.6"	18" O.C.	15.6"
8" O.C.	5.2"	24" O.C.	20.8"
9" O.C.	7.8"	30" O.C.	26.0"
12" O.C.	10.4"	36" O.C.	30.0"
15" O.C.	13.0"	48" O.C.	41.5"

5 / LA-1 GROUNDCOVER SPACING DIAGRAM
PLAN
NTS

STORMWATER PLANTERS

GENERAL NOTES

1. GROWING MEDIUM TO BE (SAND/LOAM/COMPOST) 3 WAY MIX (18" MIN DEPTH) FORMULATED TO COMPLY WITH CITY STORMWATER SOIL STANDARDS. THE APPROVED SELECTED PRODUCT TO BE USED IS THE 'WATER QUALITY MIX' FROM **LANE FOREST OR APPROVED**. PLEASE PROVIDE ONE QUART SAMPLES TO LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. THE BASE OF THE STORMWATER PLANTER SHALL INCLUDE A CONSTRUCTED MEDIUM COMPRISING A MIXTURE OF SAND, NATIVE SOIL, LOAM, AND COMPOST, THE FOC IN THE CONSTRUCTED MEDIUM MUST BE A MINIMUM OF 0.20 (I.E., 40-50%) ORGANIC MATTER. SEE ENGINEERS DRAWINGS FOR DETAILS
3. THE STORMWATER PLANTERS SHALL BE FULLY VEGETATED WITH ALL VEGETATION SPECIES ESTABLISHED PRIOR TO ISSUANCE OF FINAL OCCUPANCY AND COMMENCEMENT OF OPERATIONS. ALTERNATIVELY, IF THIS CONDITION CANNOT BE MET, THE APPLICANT SHALL PROVIDE AND MAINTAIN ADDITIONAL INTERIM EROSION CONTROL/WATER QUALITY MEASURES ACCEPTABLE TO THE DEVELOPMENT & PUBLIC WORKS DEPARTMENT THAT WILL SUFFICE UNTIL TIME AS THE STORMWATER PLANTER VEGETATION BECOMES FULLY ESTABLISHED.
4. PROVIDE ONLY HEALTHY, FULL PLANT MATERIAL AT SIZES INDICATED.
5. PLANT SUBSTITUTIONS TO BE APPROVED BY LANDSCAPE ARCHITECT.
6. PLANT LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

LANDSCAPE GUIDELINES

SOIL PREPERATION

PLANT BEDS
1. FINISHED ELEVATION OF SUB-BASE TO BE 18" MINIMUM BELOW FINISHED GRADE.
2. TILL SUBGRADE THOROUGHLY TO A DEPTH OF 8" MINIMUM PRIOR TO PLACEMENT OF TOPSOIL.
3. PLACE 18" MINIMUM OF TOPSOIL OVER TILLED SUBGRADE. ADD 4" OF ORGANIC MATERIAL AND 15-5-10-10 FERTILIZER TO TOPSOIL AT THE RATE OF 20 LBS. PER 1000 SF. ROTO-TILL AMENDMENTS AND TOPSOIL TO A DEPTH OF 8" MINIMUM.
4. PROVIDE 3" OF SHREDDED FIR BARK MULCH OVER ALL PLANT BEDS.

PLANT MATERIAL

1. PROVIDE ONLY HEALTHY, FULL PLANT MATERIAL AT SIZES INDICATED.
2. PLANT SUBSTITUTIONS TO BE APPROVED BY LANDSCAPE ARCHITECT.
3. PLANT LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

TREE PROTECTION

1. PROTECT ROOT ZONE OF EXISTING TREES TO REMAIN.
2. CUT NO ROOT LARGER THAN 2" WITHOUT APPROVAL BY LANDSCAPE ARCHITECT.
3. PROVIDE PROTECTIVE FENCING AT EDGE OF CRITICAL ROOT ZONE OF EXISTING TREES TO REMAIN.

IRRIGATION DESCRIPTION

1. IRRIGATION DISTRIBUTION TO BE DRIP LINE.
2. SYSTEM WILL PROVIDE FULL COVERAGE.
3. SYSTEM WILL PROVIDE SEPARATE ZONES FOR DIFFERENT SOLAR ORIENTATIONS.
4. MAIN LINE WILL HAVE MANUAL DRAIN VALVES.
5. SYSTEM WILL BE OPERATED AUTOMATICALLY.

CODE REQUIRMENTS

- THE EXISTING ARBORVITAE HEDGE TO THE WEST AND NORTH OF THE SITE WILL REMAIN AND ADDITIONAL ARBORVITAE WILL BE PLANTED TO MEET THE BUFFER REQUIREMENTS OF ONE TREE PER 30 LINEAR FEET, AND AN EVERGREEN SHRUBS THAT WILL FORM A 4 TO 6 FOOT HEDGE. THE EXISTING ARBORVITAE HEDGES WILL BE EVALUATED AND ANY THAT ARE IN POOR CONDITION OR DO NOT MEET THE BUFFER REQUIREMENTS WILL BE REMOVED AND REPLACED.

  NORTH PROPERTY EDGE -REQUIRED NO OF TREES - 5 TREES
  WEST PROPERTY EDGE -REQUIRED NO OF TREES - 7 TREES

- IN ADDITION TO THIS, THERE IS A 6-FOOT HIGH FULLY SIGHT-OBSCURING FENCE. SEE SITE PLAN FOR LOCATION.

LANDSCAPE PLAN

0 4 8 16 32 64
SCALE: 1/16" = 1'-0"
NORTH

Arbor South Architecture
380 Lincoln Street
Eugene, Oregon 97401
Phone: 541-344-3332
Fax: 541-344-1597
www.arborsouth.com

DLA
DOUGHERTY LANDSCAPE ARCHITECTS
474 Willamette Street
Suite 305
Eugene, Oregon 97401
P 541.683.5803
F 541.683.8183
www.DLAdesign.com

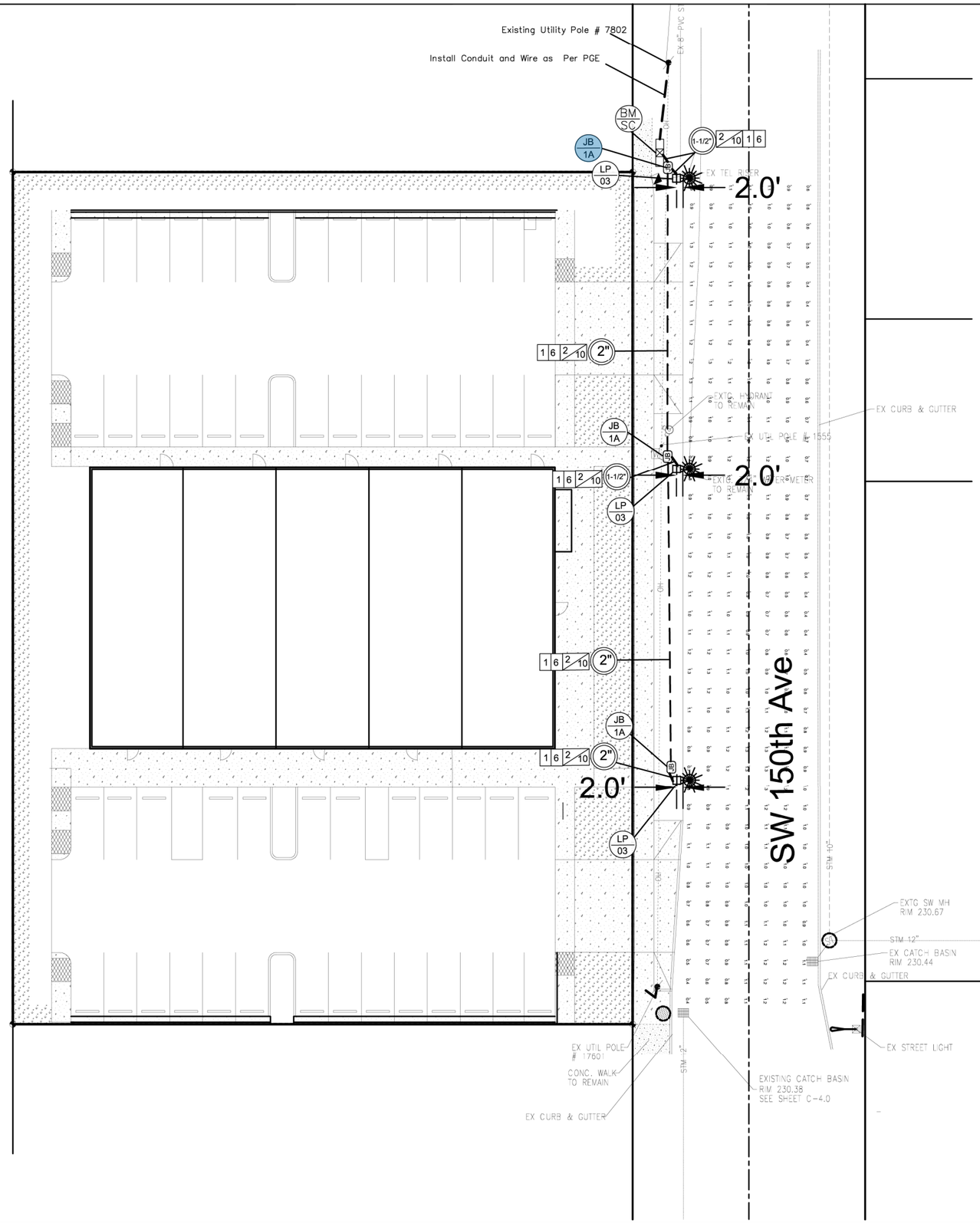
REGISTERED 279 David J. Dougherty OREGON LANDSCAPE ARCHITECT

PORTAL BEAVERTON
595 SW 150th AVE, BEAVERTON, OR

Date: 02.13.2020
Drawn By: LS
Checked By: DJD
Submission: SITE REVIEW

Revisions
1 REVISED PER 03.25.20 DEVELOPMENT REVIEW
2 REVISED PER 07125.20 DEVELOPMENT REVIEW
3 DESIGN EXCEPTION 11.05.2020

LA-1



LEGEND

- (BM / SC) INSTALL Copper B–LIne CUP 4111 Unmetered Street Light Controller on a MB1515 Pad with GFCI Outlet
- (JB / 1A) Install Type 1, 17"x10"x12", precast polymer concrete junction box with concrete skirt. Conform to ODOT Standard Drawing TM472
- (JB / EX) Existing concrete junction box
- (S) Install (S=Size) inch schedule 40 PVC or rigid metallic electrical conduit.All conduit to be installed per City standards.
- (N / G) Install (N=number) No. (G=AWG wire size) type XHHW wires
- 1 | 6 Install (N=number) No.(G=AWG wire size) type THWN wires.
- (LP / 03) Furnish and install LEDway Series LED Street Light Luminaire with a Type II Distribution, 100W–4000K, and 240V. STR–LWY–2M–HT–03–E–UL–SV–525. Fixture to include Photocontrol Receptacle. Furnish and install aluminum pole with 25 foot mounting height.Poles to be placed on 5CL–LB anchor base type foundation. Fixture and pole to be finished in Silver.

GENERAL NOTES

1. Locations of poles, conduits, and junction boxes shown on plan are approximate. Actual locations shall be designated in the field by the City engineer.
2. Coordinate locations of existing utilities prior to rough–in.
3. If junction box not installed in sidewalk, a PCC apron shall be installed per ODOT Standard Drawing TM472 and TM 472(A)
4. All equipment and installation shall conform to City of Beaverton standards.

ILLUMINATION DATA		
Roadway Classification	Neighborhood Route	Mixed-Use Commercial and Residential
Light Levels	Standard	Designed
Average (fc)	0.9000	0.9500
Average/Minimum	3	2.3800

N

Graphic Scale

15 0 15 30 60

(In Feet)

NO.	DATE	DESCRIPTION REVISION	APPD.

DESIGNED BY KRS | DRAWN BY JR | CHECKED BY KRS | DATE APPD.

SANDOW ENGINEERING
160 MADISON STREET SUITE A
Eugene, Oregon 97402 (PH) 541.513.3376
www.sandowengineering.com

REGISTERED PROFESSIONAL ENGINEER
77929PE
OREGON
JAN. 4, 2011
KELLY R. SANDOW

RENEWAL 06/30/22

CITY ENGINEER REG. PROF. ENGR.

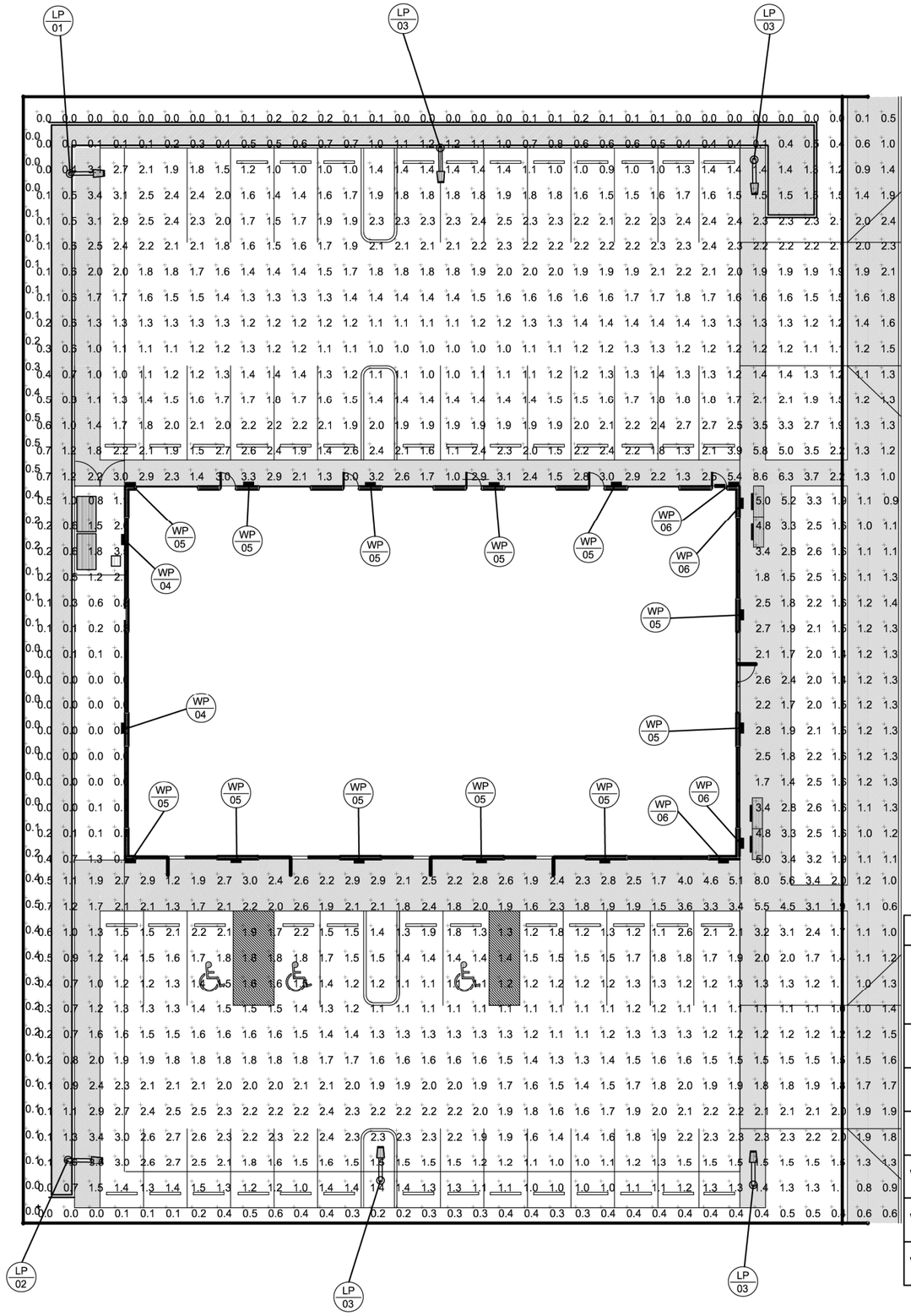
Tokatly Portal

Street Lighting Plans

April 6, 2021

SHEET NO.

L1



ILLUMINATION DATA	
Average (fc)	1.48
Max (fc)	6.3
Min (fc)	1.0
Max/Min	6.3:1
Avg/Min	1.48:1

Pole Mounted Luminaires, Poles, and bases are to be finished or painted in a non-reflective color

Light Fixture

Label	Manufacturer	Catalog Number	Number of Fixtures	Mounting Height	Mounting Type
LP-01	Lithonia Lighting	DSX0_LED_P2_40K_LCC0_MVOLT_SPA_DDBXD	1	20 ft	Pole
LP-02	Lithonia Lighting	DSX0_LED_P2_40K_RCC0_MVOLT_SPA_DDBXD	1	20 ft	Pole
LP-03	Lithonia Lighting	DSX0_LED_P2_40K_BLC_MVOLT_SPA_SBXD	4	20 ft	Pole
WP-04	Lithonia Lighting	LIL_LED_40K_MVOLT_DDBTXD	2	10 ft	Wall
WP-05	Lithonia Lighting	WPX1_LED_P1_40K_MVOLT_E4WC_DDBXD	12	12 ft	20 ft
WP-06	Lithonia Lighting	WPX1_LED_P2_40K_MVOLT_E4WC_DDBXD	4	12 ft	20 ft

NO.	DATE	DESCRIPTION REVISION	APPD.

DESIGNED BY KRS | DRAWN BY JR | CHECKED BY KRS | DATE APPD.

SANDOW ENGINEERING
160 MADISON STREET SUITE A
Eugene, Oregon 97402 (PH) 541.513.3376
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REGISTERED PROFESSIONAL ENGINEER
77929PE
OREGON
JAN. 4, 2011
KELLY R. SANDOW

RENEWAL 06/30/22

CITY ENGINEER REG. PROF. ENGR.

Tokatly Portal

Site Lighting Plans
August 11, 2021

SHEET NO.
L2

File: S:\Projects\5797 Beaverton Escape Room\5.11.21 Site lighting\8.10.21 Modifications\eight lighting 8.11.21.dwg TAB:Layout1

CODE ANALYSIS

Use and Occupancy Classification — Chapter 3

Group A-3, Assembly, and Group B, Business

Exterior: Wall Construction Tilt-Up Concrete, Ground Floor Construction Concrete Slab on Grade, Second Floor Construction Wood Framed Engineered Joists and Beams, Roof Construction Wood Framed Engineered Joists and Beams.

Type III-B Construction, sprinkled

Building Heights and Area — Chapter 5

Mixed Use Occupancies: *Section 508*
Building is Mixed Use, Non-Separated Occupancy

Mixed Use, Non-separated Occupancies: *Section 508.3*
Use most restrictive allowable area, building height and Chapter 9 provisions.
No separation is required.
Occupancies are: A-3 Assembly and B Business
Most Restrictive Occupancy is: A-3 Assembly

Allowable Building Height: *per Table 504.3*
Allowable 75 feet (sprinkled)

Actual Building Height: 29'-0" from grade plane (average grade around building) to maximum height of highest roof

Stories Allowed: *Tables 504.3 & 504.4*
Allowed: 3 story
Actual: 2 story

Allowable Building Area: *Table 506.2 and Section 506*

Base Allowable Area: A_t = 28,500 sq. ft.

Frontage Increase (506.3.3): I_f = [F/P-0.25] x W/30
I_f = [385.5/385.5-0.25] x 28.1/30 = 0.70

Total Allowable Building Area (506.2.3): A_a = [A_t + (NS x I_f)] x S_s
A_a = [28,500 + (9,500 x .70)] x 2
A_a = 70,300 sq. ft

Actual area: 9,662 sq. ft.

Type of Construction — Chapter 6

Construction Classification: *Section 602*
Type III-B Construction, *602.3*
2-Hour Exterior Bearing Walls, no other resistances required for building elements by Table 601.

Fire Separation Distance: *Table 602*
Exterior walls with a Fire Separation Distance 20 feet or less are required to be 1-hour rated.

Fire-Rated Construction — Chapter 7

Exterior Wall Openings Based on Fire Separation Distance: *Table 705.8 & Section 705.8.1*

Fire Separation Distances:	Allowable Openings:
10-15 feet:	45% UP, S
15-20 feet:	75% UP, S
20-25 feet:	No Limit UP, S
25-30 feet:	No Limit UP, S
30+ feet:	No Limit

All Walls are 20 feet or more from property lines, unlimited openings allowed

Separated Occupancies *Section 707.3.9*
Building is Non-Separated Occupancy, all A Occupancy

Fire Barriers: *Section 707*
No Fire Barriers Required

Fire Partitions: *Section 708*
No Fire Partitions Required

Smoke Barriers: *Section 709*
No Smoke Barriers Required

Smoke Partitions: *Section 710*
No Smoke Partitions Required

Floor and Roof Assemblies: *Section 711*
No Floor and Roof Assemblies Required

Vertical Openings: *Section 712*
No Vertical Openings Required

Penetrations, Fire-Resistant Joint Systems & Opening Protectives: *Sections 713-716*
Not Applicable

Concealed Spaces: *Section 718*
Not Applicable

Fire Sprinkler System — Chapter 9
Required due to Section 903.2.1.3, sub 3

Means of Egress — Chapter 10

Occupant Load: Table *1004.5*

Assembly Areas:	15 net	
Business Areas:	150 gross	(Occupant Load to be determined at tenant infill configurations)

Per Space Required Number of Exits: Table *1006.2.1 and 1006.3.2*
One Exit Max Occupant Load, Group A : 49
2 exits are required if common path of egress exceeds allowable above.
Required Exit Separation (per Space & per Story): *Section 1007.1.1*
Required: 1/3 max overall diagonal if sprinkled (exception 2)

Exit Access Travel Distance: *Section 1017 & Table 1017.2*
Allowed (Group A, S): 250 feet
Actual: 120 feet (maximum)

Number of Exits & Exit Configuration — Section 1021

Per Story Required Number of Exits: *Section 1021.2*
Min. Number of Exits per story: 2 per story, (except as modified in 1021.2 below)

Required Interior or Exterior Exit Stairway: *Section 1021.1*
Interior or Exterior Exits Stairways Req: None required if 2 stories or less

Stairs — Section 1009, 1021, 1022

Minimum Stair Width: *Section 1005.1 and 1011*
Width, base: 44" min. (36" min. with occ. load < 50)
Width, sized (Section 1005.1): To be determined at tenant infill configurations

Accessibility — Chapter 11

Parking Spaces: *Table 1106.1*

Total Parking Spaces:	54
Required Accessible Spaces:	3 (provided)
Required Van Accessible Spaces:	1 (provided)

Water Closets & Lavatories:
Comply with ICC A117.1

Interior Environment — Chapter 12

1202 and 1203: Refer to Mechanical drawings for ventilation compliance.
1204: Refer to Electrical drawings for lighting compliance

Plumbing — Chapter 29

Required Water Closets:
Number of fixtures required per Table 29-A:
To be determined at tenant infill configurations

Energy Conservation — 2019 Oregon Zero Energy Ready Commercial Code

☐ SHEET INDEX

PORTAL BEAVERTON

COB Revision/Tracking Number
REV 20-582
T_x

COB Revision/Tracking Number
REV 20-639
T_x

RECEIVED
01/28/2021
CITY OF BEAVERTON
BUILDING DIVISION

COB Revision/Tracking #:
REV 21-020
T X

Notice: A building permit is required for the private underground fire service mains. The Private Fire Service Mains shall comply with the Oregon Fire Code and NFPA-24. Section 508.2.1 OFC.

CONDITIONS OF APPROVAL
LETTER IS ATTACHED TO THIS
APPROVED SET OF PLANS
DO NOT REMOVE

FINAL INSPECTION
AND
CERTIFICATE
OF
OCCUPANCY
REQUIRED

Deferred Submittals

The following items shall be Deferred Submittals:

1. Fire Sprinklers (via separate permit)
2. Electrical System (via separate permit)
3. Mechanical Systems (via separate permit)
4. Exterior Cladding
5. Storefront Systems (product data and installation)
6. Roof and Floor Trusses
7. Steel Canopies/Awnings
8. Elevator (including two-way communication system)
9. Seismic Bracing of Piping and Equipment
10. Stairs and Handrails
11. Fire Alarm System (via separate permit)
12. Underground Exterior Fire Sprinkler Piping
13. Mechanical Screen Wall

ALL DEFERRED SUBMITTAL DOCUMENTS SHALL BEAR THE SHOP DRAWING STAMP AND SIGNATURE OF THE ENGINEER AND/OR ARCHITECT OF RECORD

All deferred submittal items shall be reviewed by the Architect and stamped and signed by the Architect stating that they are found to be in general conformance to the design of the building.

Special Inspections

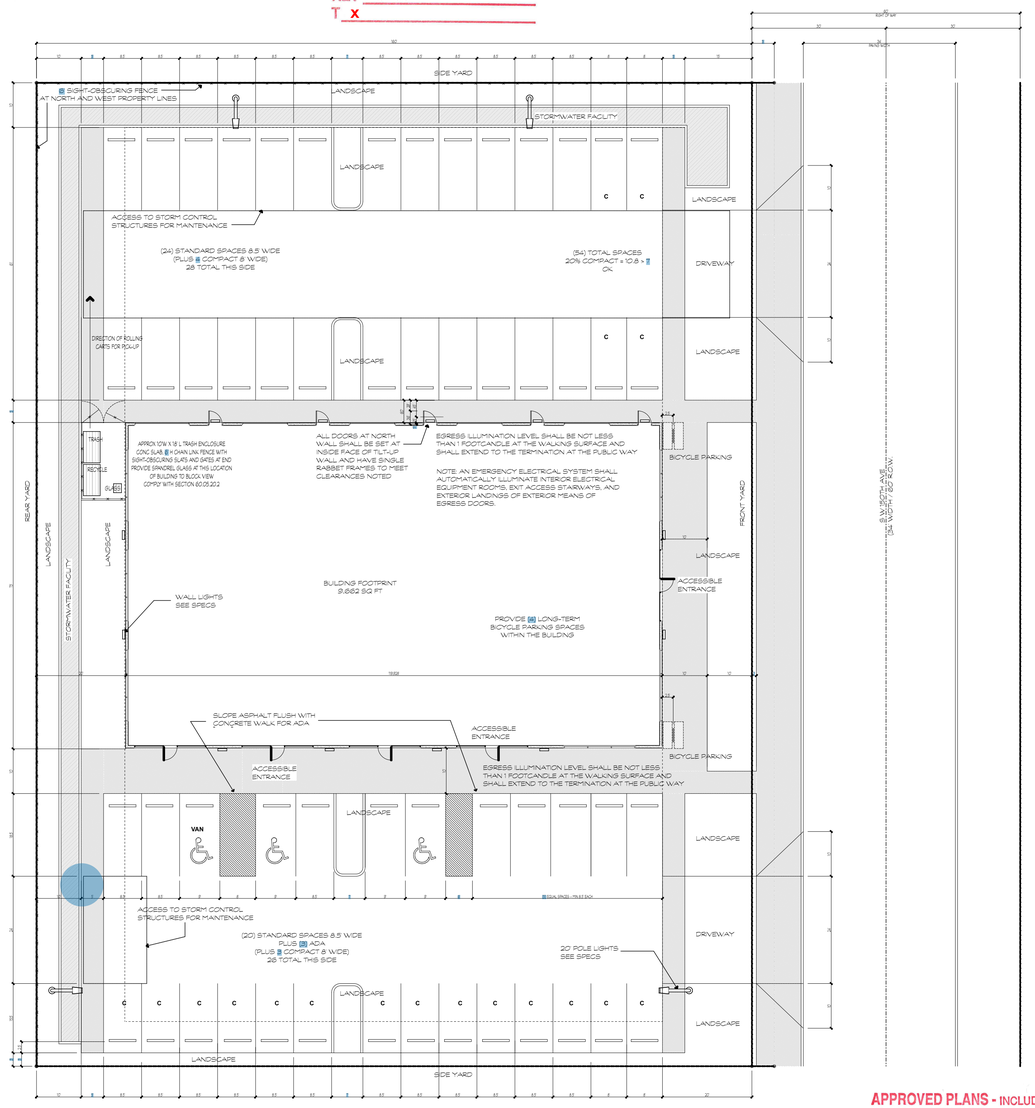
A listing of Special Inspections required is itemized on Sheet S100, "Statement of Special Inspections"

ENVELOPE INSULATION LEVELS AND GLAZING SPECIFICS:

Roof:	R-30ci
Walls:	R-21 (wood framed)
Slab Floors (unheated):	R-15 for 24 in
Opaque Doors:	R-3 (min)
Fenestration:	U 0.36 (metal, fixed) | SHGC 0.25 (see specs)
	North is 33.4%
	South is 36.3%
	West is 32.2% (17.8% of total window area)
	East is 34.0% (18.8% of total window area)

SEPARATE APPLICATION, PLANS AND PERMIT REQUIRED FOR:
___ FIRE AND LIFE-SAFETY
X FIRE ALARMS
X FIRE SPRINKLER
___ FIRE SUPPRESSION
___ TYPE I OR TYPE II HOOD
___ HIGH PILED STORAGE RACKS
X PLUMBING
X MECHANICAL
X ELECTRICAL

SUPERSEDED



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

- NO NATURAL RESOURCE AREAS IDENTIFIED ON SITE
- NO SIGNIFICANT TREES OR HISTORIC TREES IDENTIFIED ON SITE (SEE LANDSCAPE PLAN L1.0 FOR TREES TO BE REMOVED AND TREES TO REMAIN)
- NO SENSITIVE AREAS IDENTIFIED BY CLEAN WATER SERVICES (CWS)
- NO IDENTIFIED WETLAND, UPLAND WOODED AREA, RIPARIAN AREA BOUNDARIES OR ROCK OUTCROPPINGS OR STREAMS
- REFER TO LANDSCAPE PLAN L1.0 FOR ADDITIONAL TREE INFORMATION

CITY OF BEAVERTON
Activity # / Building B2020-2004
Activity # / Mechanical
Activity # / Plumbing
Activity # / Electrical
Activity # / Rest. Elect

APPROVED PLANS - INCLUDES 79 PAGES OF ATTACHED SUPPLEMENTARY INFORMATION.

APPROVED
CITY OF BEAVERTON
THESE PLANS SHALL REMAIN ON THE JOB SITE DURING CONSTRUCTION. THESE PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION FROM THE BUILDING OFFICIAL AND ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS. APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR APPROVAL OF, ANY VIOLATION OF THE CODES OF THE CITY OF BEAVERTON. REQUIRED INSPECTIONS MUST BE MADE AND APPROVED DURING CONSTRUCTION.

	APPROVED BY	DATE
BUILDING	RPB	04/04/2021
MECHANICAL		
PLUMBING		
ELECTRICAL		

Arbor South Architecture
380 Lincoln Street
Eugene, Oregon 9701
Phone: 541-344-3332
Fax: 541-344-1597
www.arborsouth.com

PROJECT
Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

Beaverton, OR

INDEX
Architectural
Site Plan

JOB NO
2019

DATE
27 January 2021

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
WILLIAM A RANDALL
EUGENE, OREGON
STATE OF OREGON

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

SHEET NO
1

COB Revision/Tracking #:
REV 21144
T X

RECEIVED
06/22/2021
CITY OF BEAVERTON
BUILDING DIVISION

COB Revision/Tracking Number
REV 20-582
T x

COB Revision/Tracking Number
REV 20-639
T x

COB Revision/Tracking Number
REV 21-020
T x

PORTAL BEAVERTON

CITY OF BEAVERTON GENERAL CONSTRUCTION NOTES

GENERAL:

1) All public improvements shall be constructed per the applicable sections of the standards in place at the time of permit application.

2) Existing utility locations are approximate only. In order to protect existing underground utilities, contractors performing work shown on these plans must notify utilities and public agencies at least 48 business hours in advance of, and no more than 10 business days before, beginning excavation, in accordance with the provisions of OAR 952-001-0090. Limits of work shall be pre-marked for the utility locators. Pothole all crossings as necessary to prevent grade and alignment conflicts. Report all conflicts to the engineer immediately. Protect existing utilities at all times during construction. Call the One Call Utility Notification Center at 503-246-6699 for utility locates. Any damage to existing utilities, whether they're shown on these drawings or not, will be repaired or replaced at the contractor's expense. ATTENTION: Oregon law requires all excavators to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-1010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center. (Note: The telephone number of the administration office for the Oregon Utility Notification Center is 503-232-1987).

3) The contractor shall exercise all due care in protecting property along the route of the improvements. This protection shall include, but not be limited to, trees, yards, fences, drainage lines, mail boxes, driveways, shrubs, lawns, irrigation systems, within any rights-of-ways and easements. If any of the above have been disturbed, they shall be restored as necessary to as near their original condition as possible or replaced in kind.

4) The contractor shall perform all the work shown on the drawings and all incidental work considered necessary to complete the project in an acceptable manner.

5) The contractor and/or each sub-contractor shall have a minimum of one set of City-approved construction plans on the job site at all times during each construction phase while work is being done.

6) All material supplies shall submit to the engineer proof of material(s) tested in accordance with specifications. By acceptance of the contract with the owner/developer, the contractor certifies that all materials delivered to the job site will meet or exceed those specifications. Any material not conforming shall be removed from the site at no additional cost to the owner.

7) Following substantial completion, the developer's engineer shall provide three paper-copy, as-built and record drawing sets of all sheets in this plan set plus any approved revisions. After walk through and punch-list preparation by City crews, the City inspector will request revisions to the as-builts and record drawings. The developer's engineer shall then provide one set of mylar as-builts and record drawings and an electronic copy in AutoCAD format (dxf or dwg files) on disk to the City Inspector, per City standards.

STORM SEWER:

1) All storm sewer construction and all materials shall conform to the applicable sections of the City of Beaverton 2019 Engineering Design Manual & 2019 R&O 19-5 CWS Design and Construction Standards.

2) All service laterals to be constructed at a minimum slope of one-quarter inch per linear foot unless otherwise shown on plans or approved by the City Building Division.

3) All existing storm systems shall be cleaned and flushed and original drainage restored. Sediment, rock and other debris shall be collected and disposed of in a proper manner. In no case shall debris be flushed down a storm or sanitary sewer for disposal. All damaged irrigation and house drainage pipe, drain tiles, sewer laterals and culverts shall be repaired expeditiously. Debris collected shall be disposed in a commercial landfill or other approved location.

4) Storm sewer pipe shall be of the size and type noted on the plans. Concrete reinforced pipe shall be bell & spigot pipe and shall conform to ASTM C76-CL III (unless otherwise shown). Catch basins and curb inlets shall be the type shown on the detail sheet.

5) Installation of the storm sewer shall be performed according to the standard practice. Pipe lines shall be laid on a straight alignment and uniform grade between structures. Pipe bedding shall be placed to form a continuous and uniform bearing support for the pipe at every point between joints; pipe zone material shall be placed up to the spring line of the pipe and material uniformly compacted by hand to insure proper support within the pipe haunches. All backfill in public right of way and other traffic areas shall be ¾"-0" compacted crushed rock, compacted to 95% percent of maximum density as obtained by AASHTO T-99 compaction test.

6) Storm sewer stubs and service laterals shall be marked with a 2"x4", minimum 8 foot posts (with at least 3 feet exposed above ground) painted white with thick, black pen or black lumber crayon indicating depth of pipe, lot # (if applicable), and stationing. PVC pipe used for storm service laterals shall be white in color.

7) Prior to acceptance, all public storm sewer shall be thoroughly cleaned and, as appropriate, mandrelled (by Developer) and TV-scanned (by City Operations) in accordance with the City of Beaverton's requirements for such tests.

SANITARY SEWERS:

1) All sanitary sewer construction and all materials shall conform to the applicable sections of the City of Beaverton 2019 Engineering Design Manual & 2019 R&O 19-5 CWS Design and Construction Standards.

2) All service laterals to be constructed at a minimum slope of one-quarter inch per linear foot unless otherwise shown on plans or approved by the City Building Division.

3) Water line construction shall comply with EDM section 630.3 and Oregon Department of Human Services (DHS, formerly Oregon Health Division – rules accessed at www.cin.h.state.or.us/dwp/rules.cfm) regarding the location and separation of water lines and sanitary sewer lines – (specifically, separation requirements can be accessed at http://oregon.gov/DHS/ph/dwp/docs/pwrules/61-0030.pdf)

8. Upon completion of installation of the water system, all lines shall be flushed and disinfected in conformance with EDM section 630.6, DHS guidelines and the requirements of the Oregon Department of Environmental Quality. Waterlines shall be pressure tested following completion. The minimum test pressure shall be 150 PSI. For lines working with operation pressures greater than 100 PSI, the minimum test pressure shall be one and one-half times the operation pressure. The duration of the test shall be 2 hour, unless otherwise directed by the City Inspector. Allowable leakage is in accordance to City Standards (0 psi).

9. All water service laterals are to be installed by the developer in accordance with the City Standards.

10. Fire hydrants shall be located to allow a minimum of 36" clear space surrounding all portions of the hydrant. There shall also be no obstructions directly in line with any of the ports of the hydrant for a distance of 5 feet.

11. All waterline taps 8" or greater shall use an all stainless steel tapping sleeve (JCM 432 or approved equal).

12. Cross Connection Control and Backflow Assemblies shall be as per City of Beaverton 2019 Engineering Design Manual, Section 610 and detail drawings 690-1 through 690-10. When required, backflow prevention assemblies for the protection of the public water system shall meet the requirements set forth in the current Oregon Administrative Rules Chapter 333-061-0070, Uniform Plumbing Code, and City of Beaverton Code 4.02.160 and 4.02.165. Contact the City Backflow Specialist for more information at 503-350-4042.

STREET LIGHTS:

1) Option "C" street lighting will be used as stated in Section 450 of the City of Beaverton 2019 Engineering Design Manual. An electrical permit from the City Building Division is required prior to any installation.

2) All electrical components shall be UL approved or approved-equal.

3) The contractor shall be responsible for making arrangements with PGE for connecting the street lighting system to the local distribution system.

4) Anchor base poles shall be used unless otherwise pre-approved (on a case by case basis) by the City Operations and Maintenance Director. Wood poles shall not be used.

5) A J-box shall be located within 3 feet of each light pole base (exception: a controller may serve as a J-box for a light pole base within ten feet proximity to a controller).

8. The contractor shall notify the City inspector at least 48 hours (two full working days) prior to beginning the project. Connections between existing infrastructure and new work shall not be made until necessary inspections and tests have been completed on the new work and it is found to conform in all respects to the requirements of the plans and specifications.

STREETS AND STRUCTURAL FILLS:

1) All trees, brush and debris within the limits of the right-of-way and on the areas to be filled shall be removed and disposed of by the contractor unless otherwise noted on the plans or flagged in the field.

2) All areas of construction shall be stripped. Stripping shall consist of removing the topsoil humus. Stripping materials shall be stockpiled or disposed by the contractor on site as approved by the inspector, or hauled off site to an approved location.

3. Embankments and structural fills for roadway construction or fills to be constructed on buildable areas shall be constructed from excavated materials acceptable to the soils engineer and shall be brought to grade in lifts not to exceed 12" to 18" loose measure. Each lift shall be compacted to 95 percent of maximum density as obtained by AASHTO T-99 compaction test. Combination test results shall be submitted to the City inspector.

4) Fills shall not be constructed on natural slopes steeper than 2 horizontal to 1 vertical. All fill slopes shall not exceed 2 horizontal to 1 vertical. No rock or similar irreducible material with a minimum dimension greater than 12 inches shall be buried or placed in the fills.

5) If springs or ground water are encountered during construction, the contractor shall advise the soils and civil engineers of the condition found and coordinate activities in a manner that will allow the engineer(s) time to review the situation and prepare a plan to properly dispose of the water encountered for City approval and per Clean Water Services requirements.

6) Rock base, asphaltic concrete pavement, concrete pavement curb and sidewalk construction shall be as shown on the typical sections and detail sheet and in accordance with the above referenced specifications.

7) The contractor shall clean all spilled dirt, gravel or other foreign material caused by the construction operations from all streets and roads at the conclusion of each day or operation. Cleaning shall be by grader and front-end loader, supplemented by power brushing and hand labor unless otherwise approved by the City. The contractor shall follow City and CWS erosion control procedures.

8. As soon as practical after completion of all paving and gravel shoulder resurfacing, the contractor shall remove all dirt, mud, rock gravel and other foreign material from the paved surface and storm drainage system.

3) Installation of the sanitary sewer shall be performed according to the standard practice. Pipe lines shall be laid on a straight alignment and uniform grade between structures. Pipe bedding shall be placed to form a continuous and uniform bearing support for the pipe at every point between joints; pipe zone material shall be placed up to the spring line of the pipe and material uniformly compacted by hand to insure proper support within the pipe haunches. All backfill in public right of way and other traffic areas shall be ¾"-0" compacted crushed rock compacted to 95% percent of maximum density as obtained by AASHTO T-99 compaction test.

4) Sanitary sewer stubs and service laterals shall be marked with 2"x4", minimum 8 foot posts (with at least 3 feet exposed above ground) painted green or red with thick, black pen or black lumber crayon indicating depth of pipe, lot # (if applicable), and stationing. PVC pipe used for sanitary service laterals shall be green in color.

5) Prior to acceptance, all public sanitary sewers shall be thoroughly cleaned and, as appropriate, mandrelled and air tested (both by Developer) and TV scanned (by City Operations) in accordance with the City of Beaverton's requirements for such tests.

WATER LINES (City Water Service Area ONLY):

1) Operation of existing valves shall be performed only by Public Works Water Operations staff as authorized by City DRC, per EDM section 610.4.4.

2) All materials and workmanship shall comply with AWWA, City of Beaverton, and the Uniform Plumbing Code as applicable. All material shall be of new manufacture. No rebuilt or used materials will be allowed.

3) All mainline ductile iron pipe shall have push-on, cement-lined interior coating with the exterior coated with zinc. The pipe shall be Class 52 with Tyton joints. The zinc coated pipe requires V-Bio Enhanced Polyethylene Encasement of not less than 8 mil thickness per EDM section 610.2.11. All fittings shall be mechanical joints conforming to ANSI A-21.11. All joints shall be mechanically restrained EB AA iron works or equal with USA or Canadian parts.

4) Fire hydrant assemblies shall conform to the City of Beaverton's accepted brands and models.

5) All pipes shall have 36" minimum cover measured from finish grade unless specifically noted for less cover with mitigating measures. All new piping to be mechanically restrained.

6) All backfill in the right of way or other traffic areas shall be ¾"-0" compacted crushed rock, compacted to 95 percent of maximum density as obtained by AASTO T-99 compaction test. Pipe bedding shall be placed to form a continuous and uniform bearing support for the pipe at every point between joints; pipe zone material shall be first placed up to the spring line of the pipe and material uniformly compacted by hand to insure proper support within the pipe haunches.

Conduit between light pole base and adjoining J-box shall be minimum 1 inch diameter size. Conduit between J-boxes and conduit to power source, controller, or other structures shall be minimum 2 inch diameter size. J-Boxes shall be Brooks #36 or equivalent at all light pole bases; other applications may require larger box sizes.

TRAFFIC CONTROL:

1) Traffic control to be performed in accordance with the Manual for Uniform Traffic Control Devices and Oregon amendments as required. The City can require additional traffic control measures as needed to provide for public safety.

2) On residential local streets, the contractor shall be responsible to provide all required traffic control when work is being done in the right of way.

3. All existing streets with a greater classification than a residential local street shall require a traffic control plan prepared by a professional engineer for both construction operations and after-hour situations.

4) All traffic control measures need to be submitted to the City of Beaverton for review prior to construction.

APPROVALS AND MODIFICATIONS:

1) Any revision to approved plans must be under the direction of the Engineer of Record (or Coordinating Design Professional). It shall be at the discretion of the City's Project Inspector as to whether the revision is significant enough to warrant review by the City Engineering Plan Review staff. If so, the Engineer shall submit five (5) copies of the proposed revision; no work affected by the revision shall be done until approved by the City Site Development Engineer. The City inspector and the Engineer of Record must approve all other changes prior to implementation of the change.

Notice: A building permit is required for the private underground fire service mains. The Private Fire Service Mains shall comply with the Oregon Fire Code and NFPA-24. Section 508.2.1 OFC.

Deferred Submittals

The following items shall be Deferred Submittals:

1. Fire Sprinklers (via separate permit)
2. Electrical System (via separate permit)
3. Mechanical Systems (via separate permit)
4. Exterior Cladding
5. Storefront Systems (product data and installation)
6. Roof and Floor Trusses
7. Steel Canopies/Awnings
8. Elevator (including two-way communication system)
9. Seismic Bracing of Piping and Equipment
10. Stairs and Handrails
11. Fire Alarm System (via separate permit)
12. Underground Exterior Fire Sprinkler Piping
13. Mechanical Screen Wall

All deferred submittal items shall be reviewed by the Architect and stamped and signed by the Architect stating that they are found to be in general conformance to the design of the building.

Special Inspections

A listing of Special Inspections required is itemized on Sheet S100, "Statement of Special Inspections"

ENVELOPE INSULATION LEVELS AND GLAZING SPECIFICS:

Roof:	R-30ci
Walls:	R-21 (wood framed)
Slab Floors (unheated):	R-15 for 24 in
Opaque Doors:	R-3 (min)
Fenestration:	U 0.36 (metal, fixed) | SHGC 0.25 (see specs)
	North is 33.4%
	South is 36.3%
	West is 32.2% (17.8% of total window area)
	East is 34.0% (18.8% of total window area)

SHEET INDEX

FINAL INSPECTION AND CERTIFICATE OF OCCUPANCY REQUIRED

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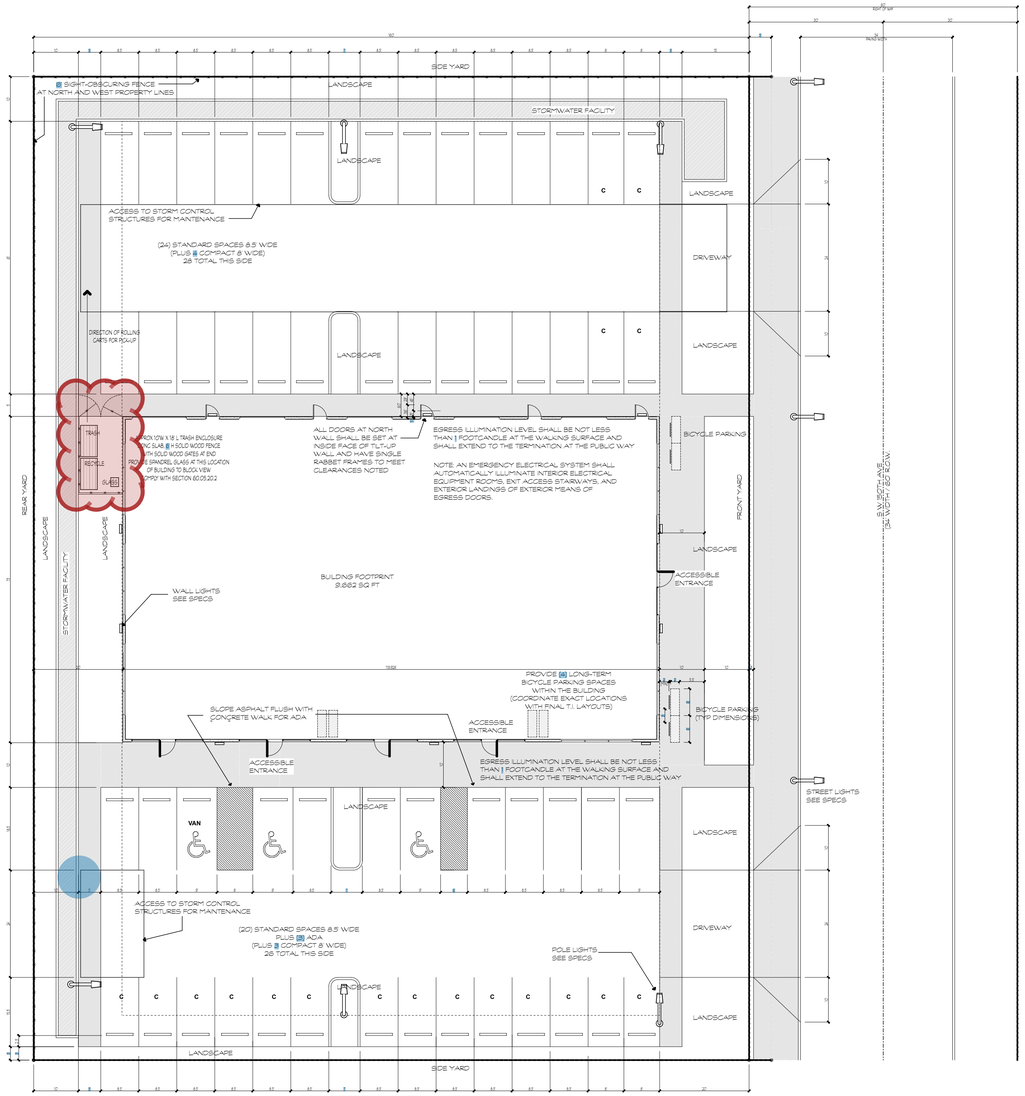
SEPARATE APPLICATION, PLANS AND PERMIT REQUIRED FOR:

- [X] FIRE AND LIFE-SAFETY
- [X] FIRE ALARMS
- [X] FIRE SPRINKLER
- [ ] FIRE SUPPRESSION
- [ ] TYPE I OR TYPE II HOOD
- [ ] HIGH PILED STORAGE RACKS
- [X] PLUMBING
- [X] MECHANICAL
- [X] ELECTRICAL

CONDITIONS OF APPROVAL LETTER IS ATTACHED TO THIS APPROVED SET OF PLANS DO NOT REMOVE

VICINITY MAP (N.T.S.)



- NO NATURAL RESOURCE AREAS IDENTIFIED ON SITE
- NO SIGNIFICANT TREES OR HISTORIC TREES IDENTIFIED ON SITE (SEE LANDSCAPE PLAN L1.0 FOR TREES TO BE REMOVED AND TREES TO REMAIN)
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- NO IDENTIFIED WETLAND (PLANTED/MODIFIED AREA, REMAIN) AREA BOUNDARIES OR RIDGE/OUTCROPPINGS OR STREAMS
- REFER TO LANDSCAPE PLAN L1.0 FOR ADDITIONAL TREE INFORMATION

TOTAL SITE AREA: 39,200 SQ FT

ON-SITE IMPERVIOUS AREA:
EXISTING: 4,100 SQ FT
PROPOSED: 28,440 SQ FT

ROW IMPERVIOUS AREA (DISTURBED):
EXISTING: 2,400 SQ FT
PROPOSED: 2,400 SQ FT

NOTICE TO EXCAVATORS:
ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER.
(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)-232-1987).

POTENTIAL UNDERGROUND FACILITY OWNERS
Dig Safely.
Call the Oregon One-Call Center
1-800-332-2344

SITE DEVELOPMENT PERMIT NO SD2021-0002

PROJECT OWNER:
TTT RANCH IV, LLC
2237 MAIN STREET, SUOTE 1
SPRINGFIELD, OREGON 97477
JOE TOKATLY: 541-726-7721

ENGINEER:
POAGE ENGINEERING & SURVEYING, INC
P.O. BOX 2527
EUGENE, OREGON 97402
MIKE KAISER: 541-485-4505

APPROVED
CITY OF BEAVERTON
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	APPROVED BY	DATE
BUILDING	RPB	06/23/2021
MECHANICAL		
PLUMBING		
ELECTRICAL		

SITE PLAN
SCALE: 1/16" = 1'-0"
ASSESSOR'S MAP NO 1S105AB TAX LOT 1100

CITY OF BEAVERTON
Activity # / Building B2020-2021
Activity # / Mechanical
Activity # / Plumbing
Activity # / Electrical
Activity # / Rest. Elect

APPROVED PLANS - INCLUDES 79 PAGES OF ATTACHED SUPPLEMENTARY INFORMATION.

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Phone: 541-344-3332
Fax: 541-344-1597
www.arborsouth.com

PROJECT
Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

Beaverton, OR

INDEX
Architectural Site Plan

JOB NO
2019

DATE
22 June 2021

DRAWN BY
Bill

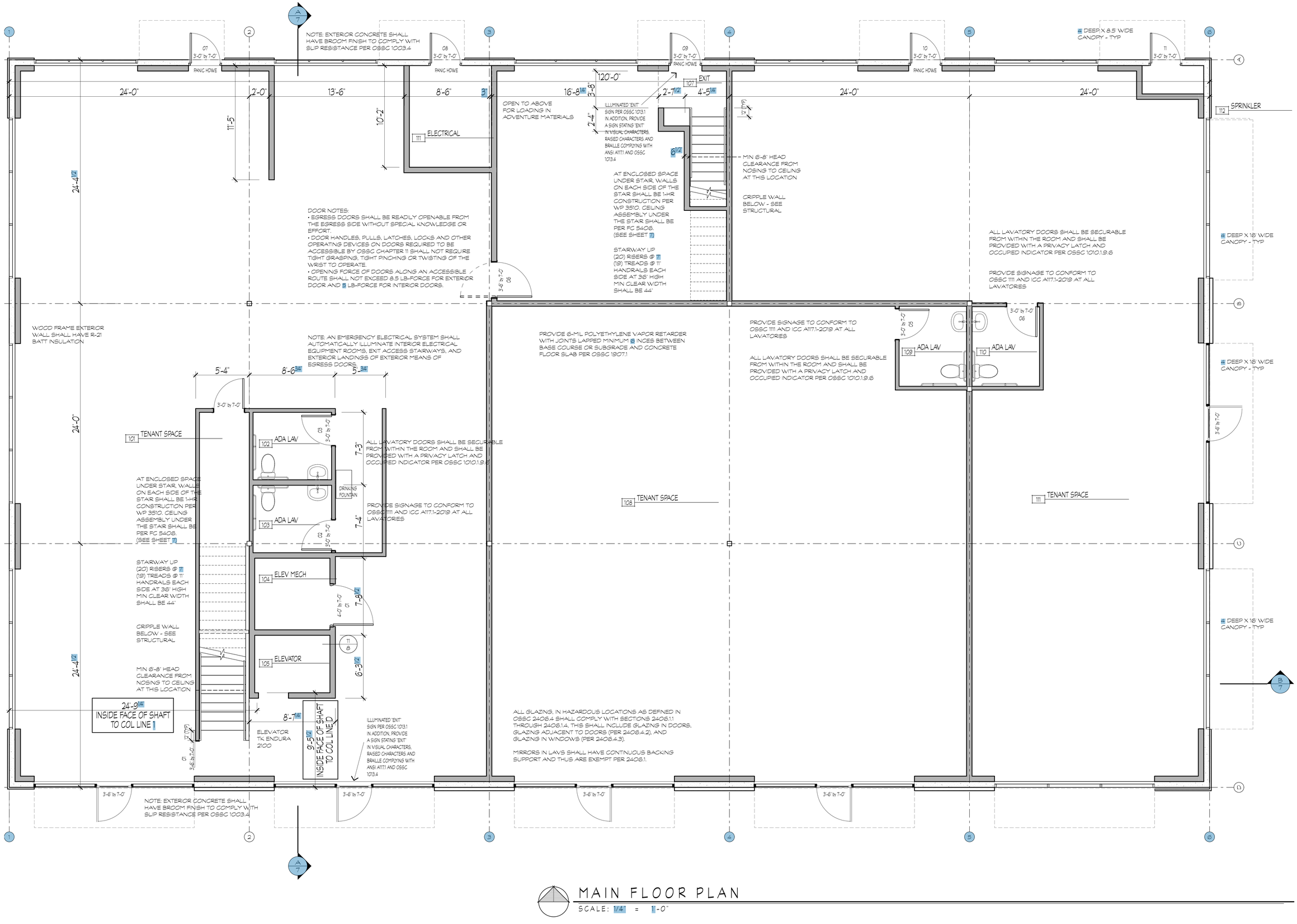
CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
WILLIAM A RANDALL
EUGENE, OREGON
STATE OF OREGON

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

SHEET NO
1



MAIN FLOOR PLAN

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

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Eugene, Oregon 97701

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Fax: 541-344-1597

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PROJECT

Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

Beaverton, OR

INDEX

Main Floor Plan

JOB NO
2019

DATE
26 October 2021

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
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EUGENE, OREGON
STATE OF OREGON

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

SHEET NO

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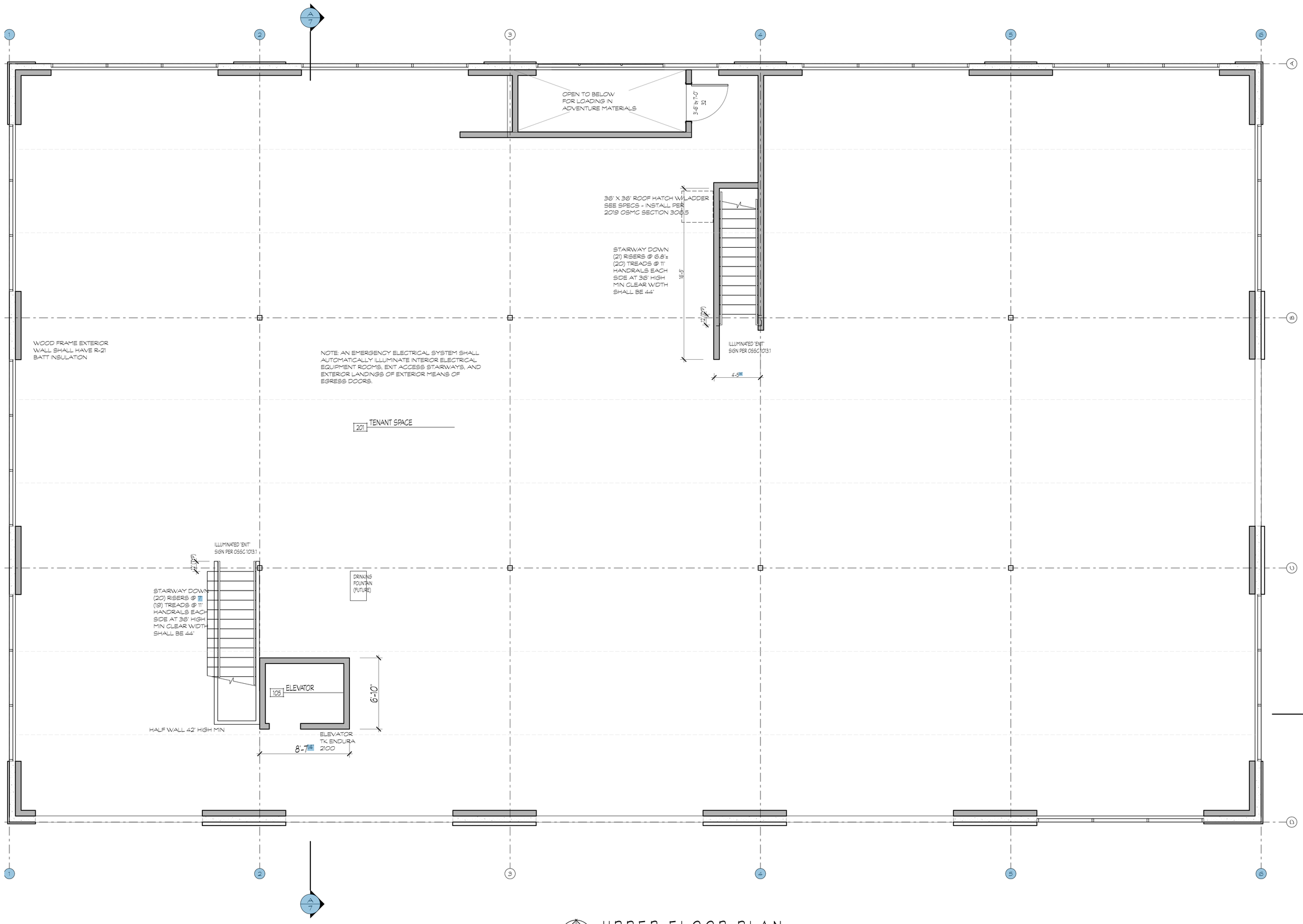

UPPER FLOOR PLAN

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

Arbor South ARCHITECTURE

380 Lincoln Street
Eugene, Oregon 9701

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Fax: 541-344-1597

www.arborsouth.com

PROJECT

Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

Beaverton, OR

INDEX

Upper Floor Plan

JOB NO
2019

DATE
26 October 2021

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
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STATE OF OREGON

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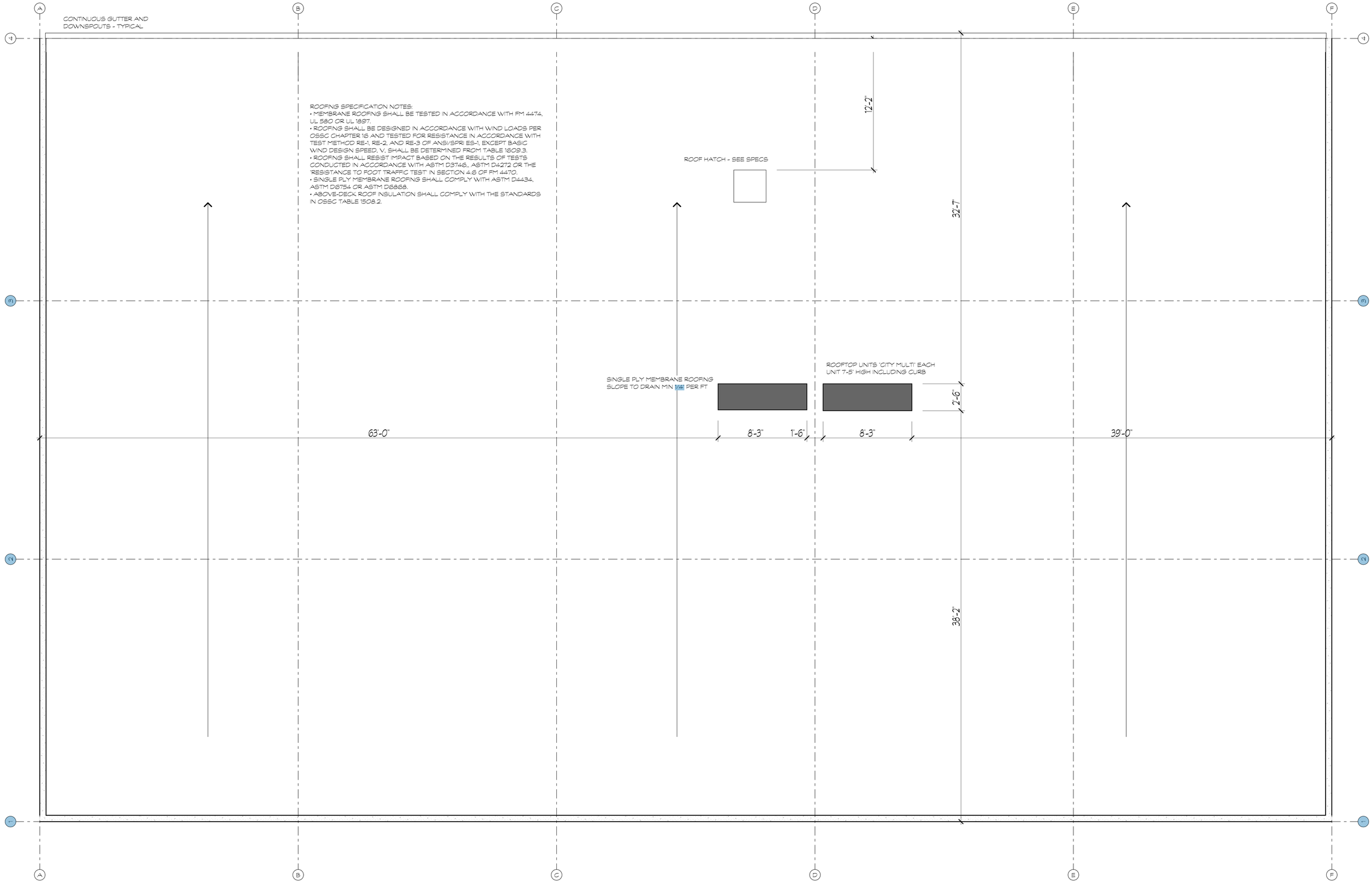

ROOF PLAN

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

Arbor South Architecture

380 Lincoln Street
Eugene, Oregon 9701

Phone: 541-344-3332
Fax: 541-344-1597

www.arborsouth.com

PROJECT

Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
04/04/2021

Beaverton, OR

INDEX

Roof Plan

JOB NO
2019

DATE
27 January 2021

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
WILLIAM A RANDALL
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STATE OF OREGON

MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS

SHEET NO

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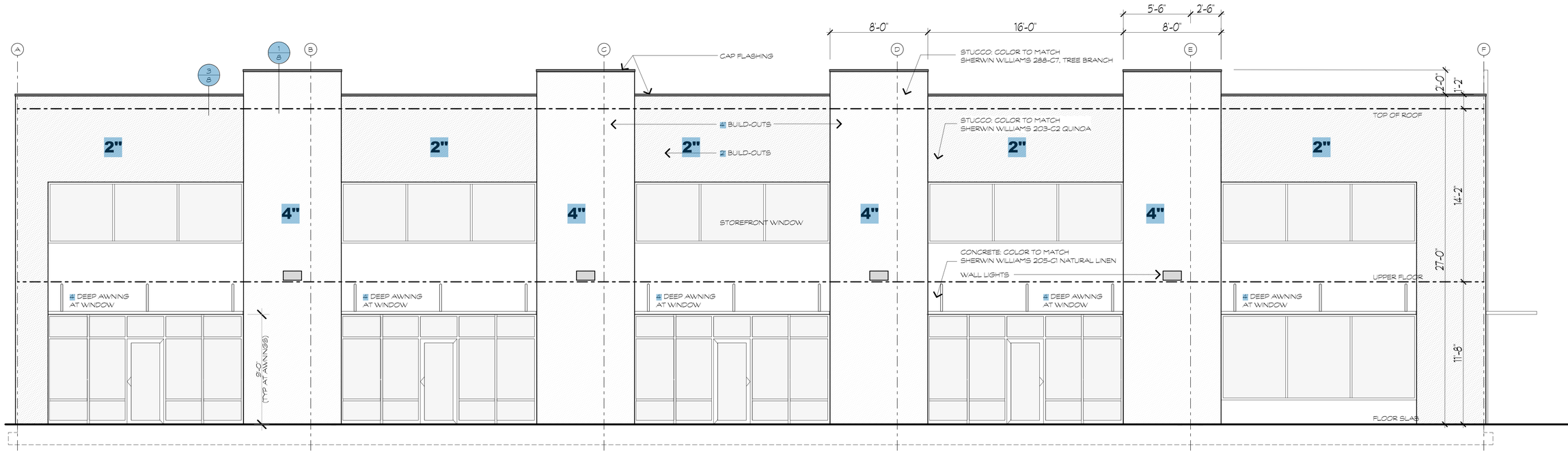
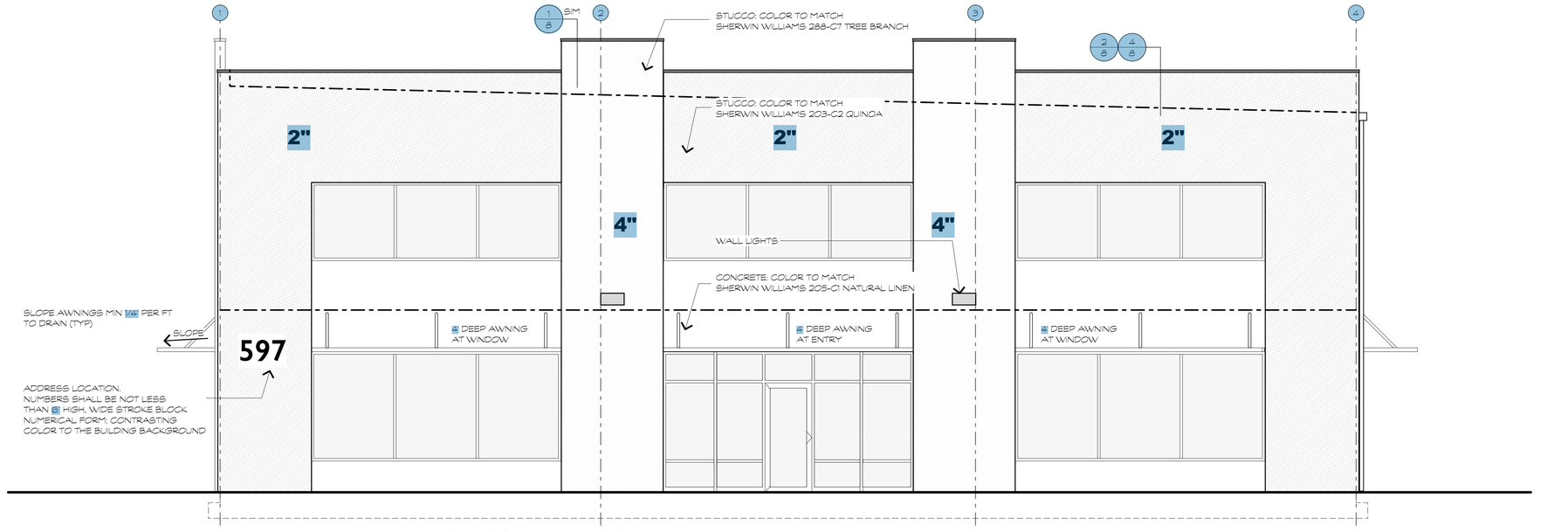


SOUTH ELEVATION

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



EAST ELEVATION

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

Arbor South Architecture

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Fax: 541-344-1597

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PROJECT

Portal Beaverton
597 SW 150th Ave
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CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
04/04/2021

Beaverton, OR

INDEX

Elevations

JOB NO
2019

DATE
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DRAWN BY
Bill

CHECKED BY
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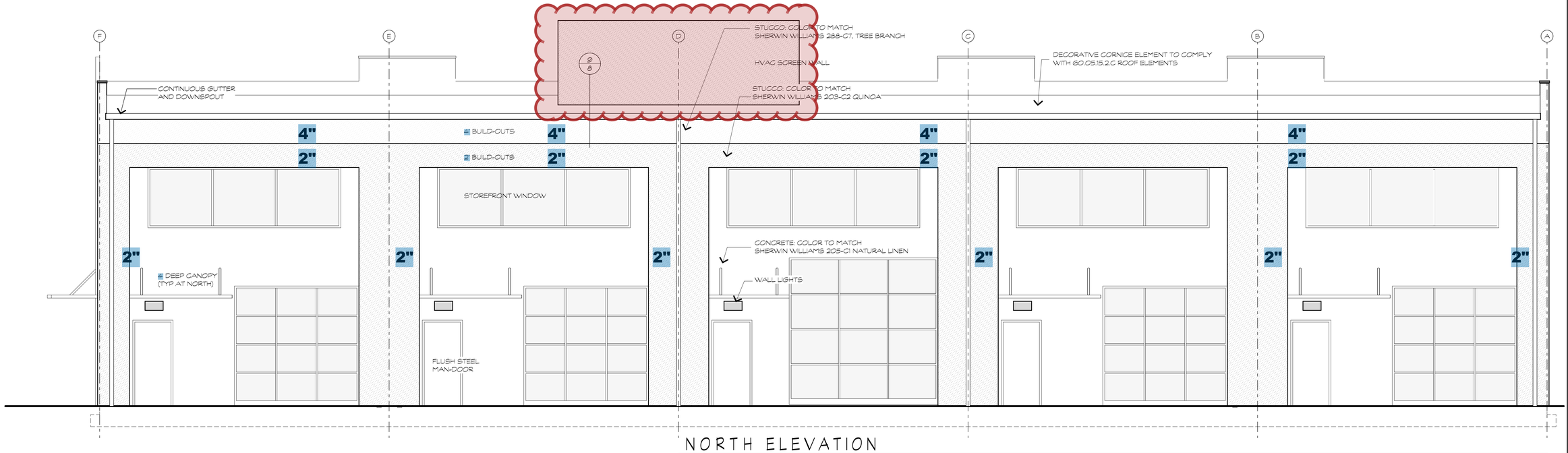
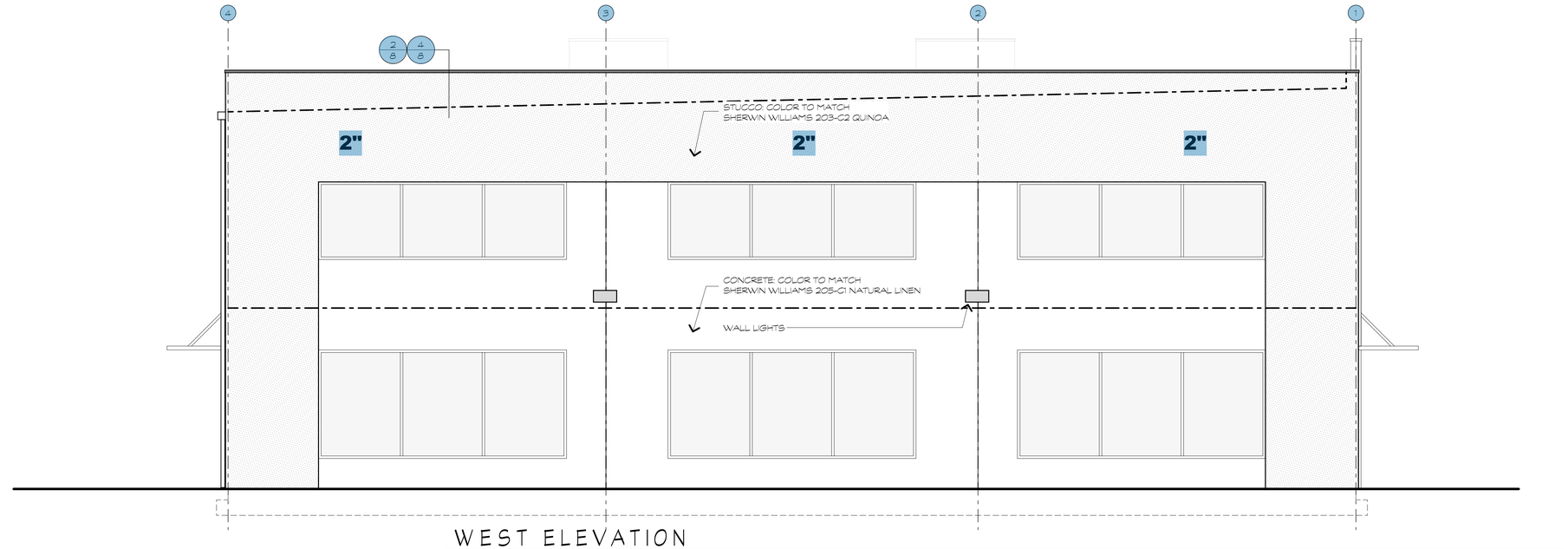
SHEET NO

5



NORTH ELEVATION

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



WEST ELEVATION

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

Arbor South ARCHITECTURE

380 Lincoln Street
Eugene, Oregon 9701

Phone: 541-344-3332
Fax: 541-344-1597

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PROJECT

Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
04/04/2021

Beaverton, OR

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Elevations

JOB NO
2019

DATE
27 January 2021

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
WILLIAM A RANDALL
EUGENE, OREGON
STATE OF OREGON

MEMBERS OF THE
AMERICAN INSTITUTE
OF ARCHITECTS

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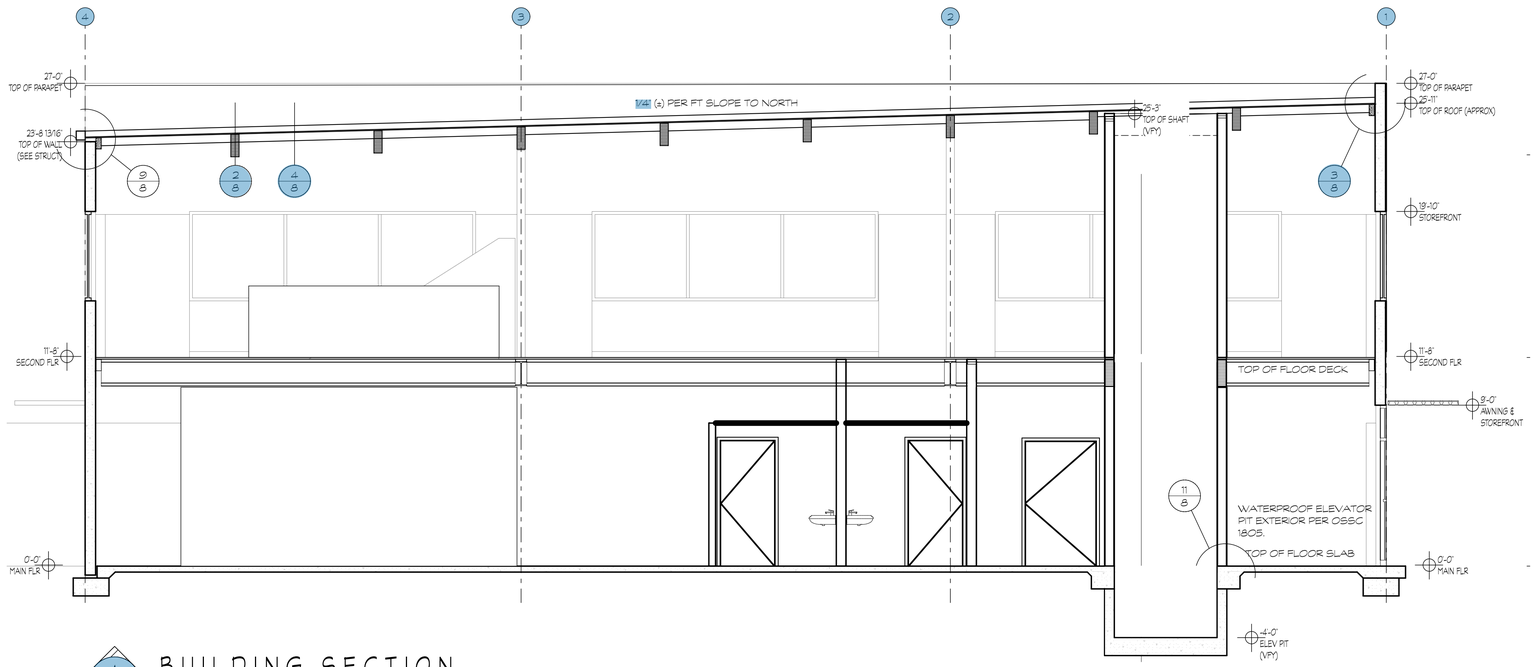
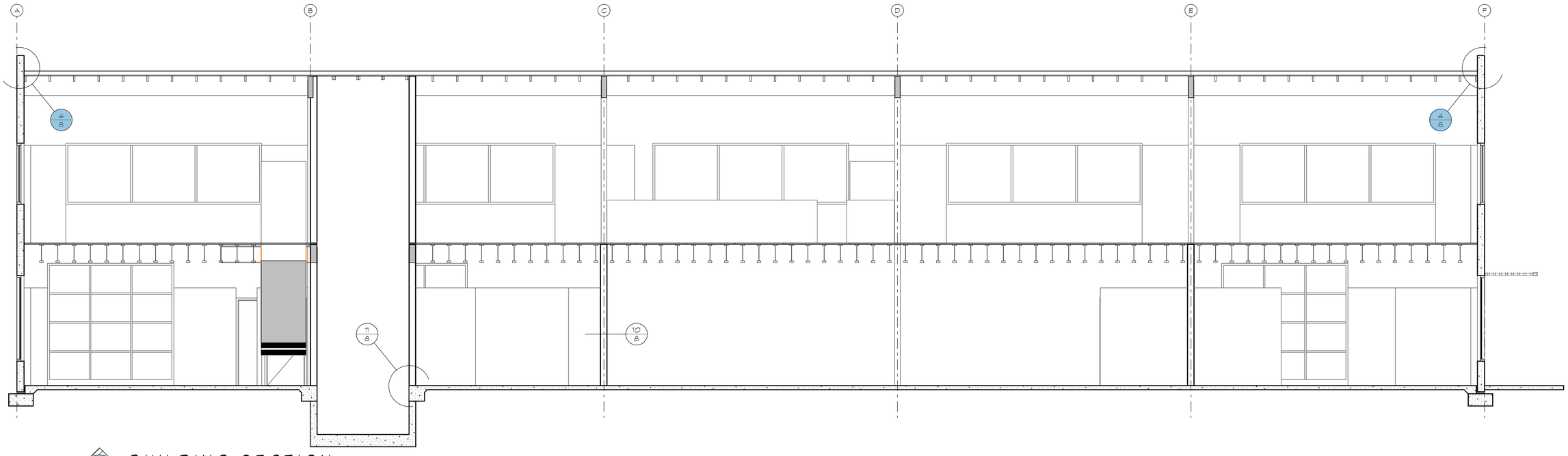
6



A 7 BUILDING SECTION

SCALE 1/4" = 1'-0"



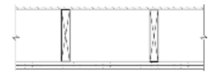
B 7 BUILDING SECTION

SCALE 1/4" = 1'-0"

GA FILE NO. FC 5406	GENERIC	1 HOUR FIRE	35 to 39 STC SOUND

WOOD JOISTS, GYPSUM WALLBOARD

Base layer 5/8" type X gypsum wallboard applied at right angles to 2 x 10 wood joists 24" o.c. with 1¼" Type W or S drywall screws 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to joists with 1⅞" Type W or S drywall screws 12" o.c. at joints and intermediate joists and 1½" Type G drywall screws 12" o.c. placed 2" back on either side of end joints. Joints offset 24" from base layer joints. Wood joists supporting ½" plywood with exterior glue applied at right angles to joists with 8d nails. **Ceiling provides one hour fire resistance protection for framing, including trusses.**



Approx. Ceiling Weight: 5 psf
Fire Test: FM FC 172, 2-25-72; ITS, 8-6-98
Sound Test: Estimated

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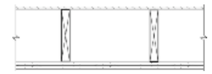

Approx. Ceiling Weight: 5 psf
Fire Test: FM FC 172, 2-25-72; ITS, 8-6-98
Sound Test: Estimated

FIRE ASSEMBLY DETAILS AT STAIRS

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WILLIAM A RANDALL
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STATE OF OREGON

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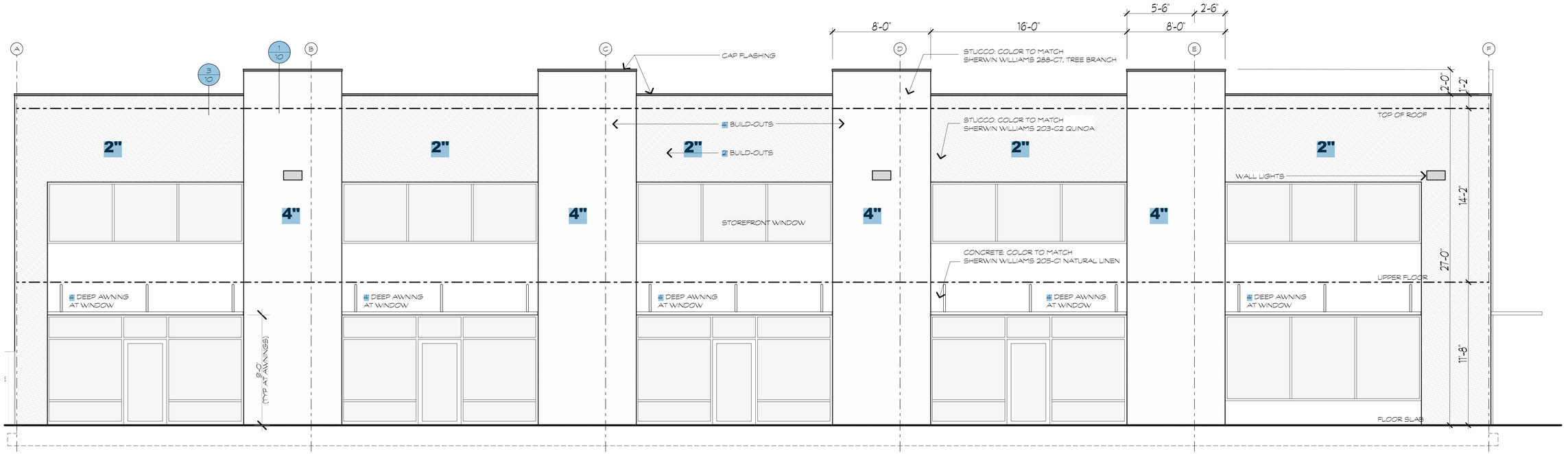
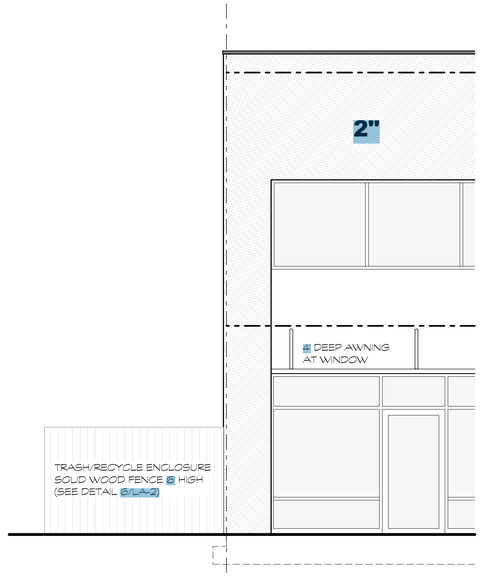


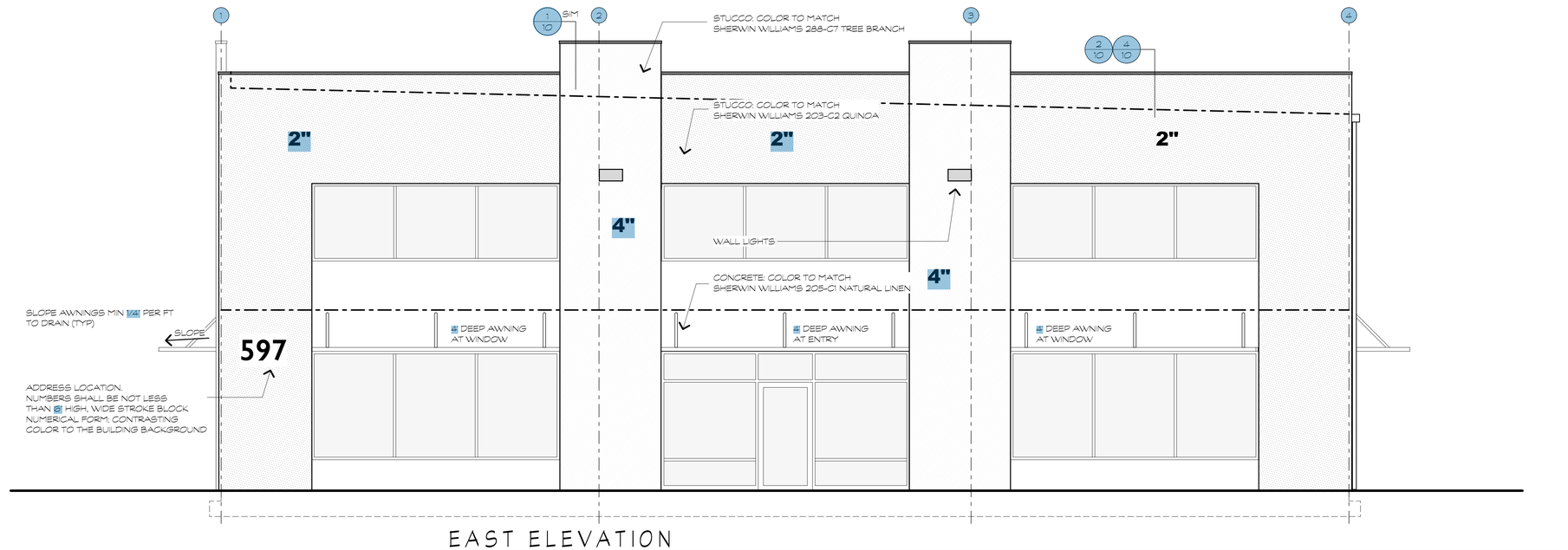
SOUTH ELEVATION

SCALE: 1/4 = 1'-0"



TRASH ENCLOSURE

SCALE: 1/4 = 1'-0"



EAST ELEVATION

SCALE: 1/4 = 1'-0"

COB Revision/Tracking Number
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T X

CITY OF BEAVERTON
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06/23/2021

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PROJECT

Portal Beaverton
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Beaverton, OR

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DRAWN BY
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CHECKED BY
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EUGENE, OREGON
STATE OF OREGON

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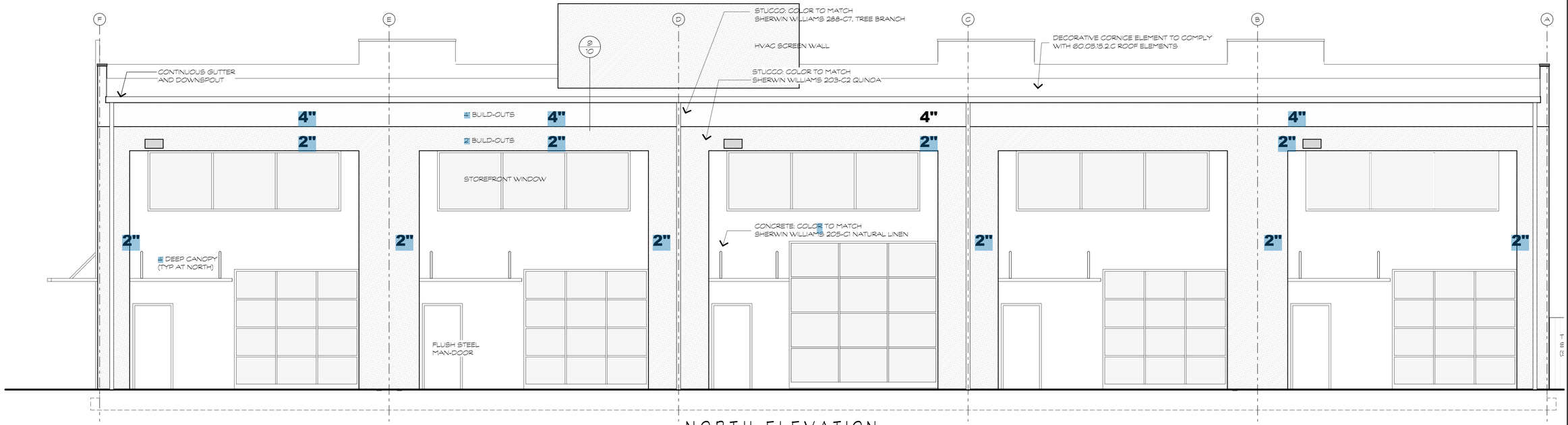
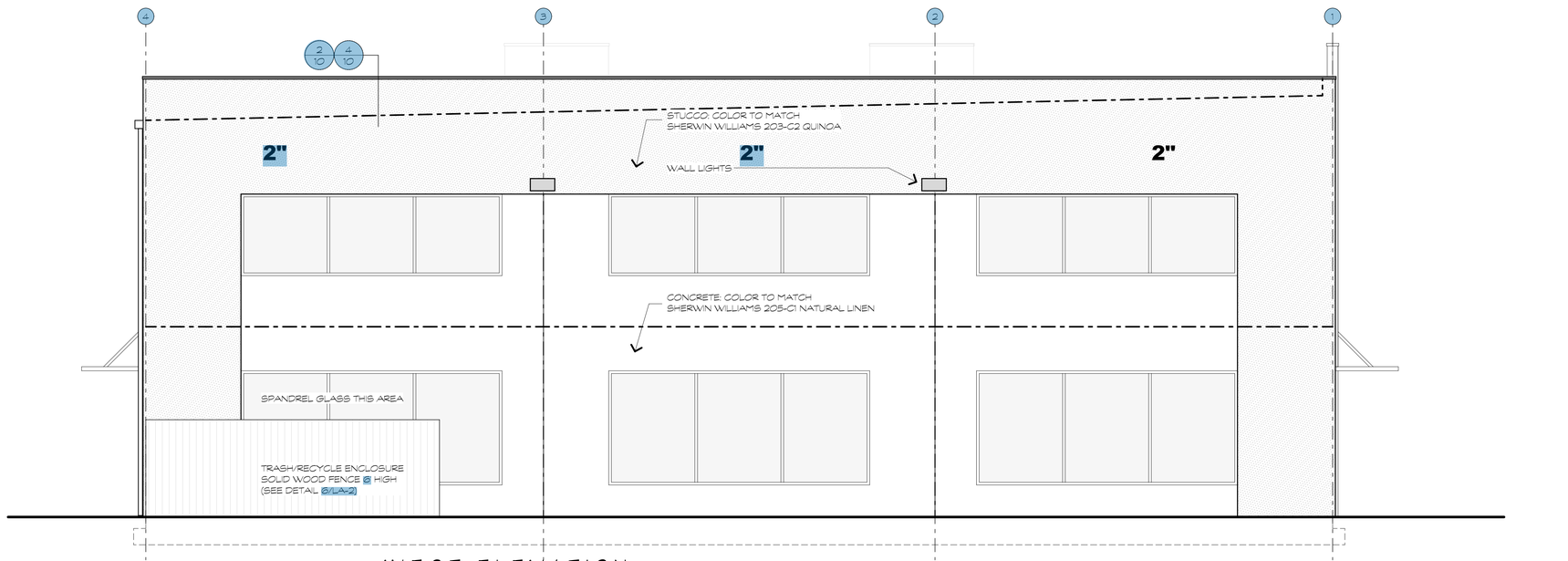


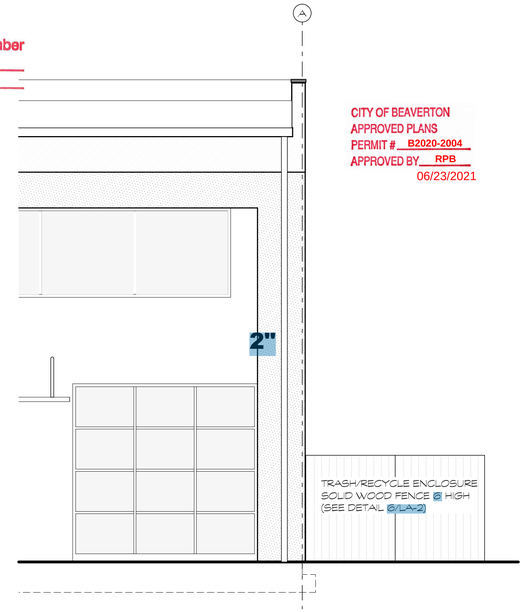
NORTH ELEVATION

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



WEST ELEVATION

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



TRASH ENCLOSURE

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

COB Revision/Tracking Number
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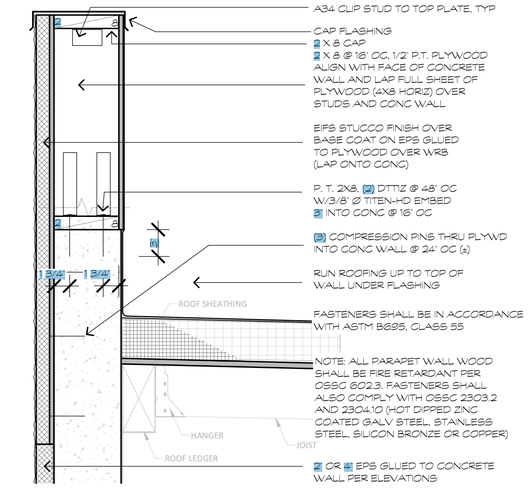
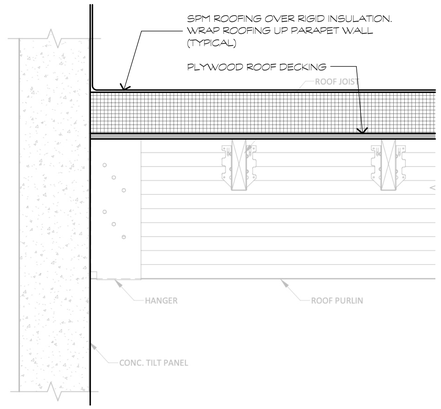
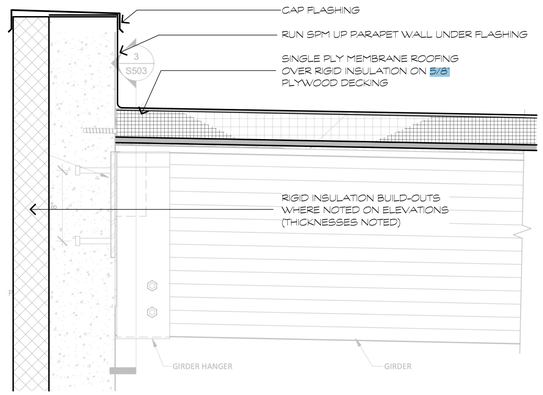


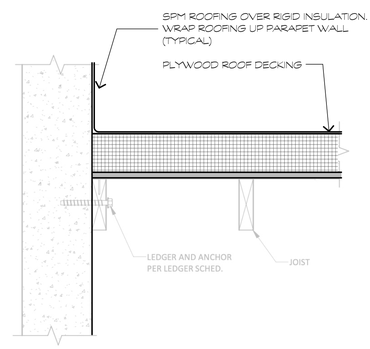
1/8 PARAPET DETAIL
SCALE: 1 1/2" = 1'-0"



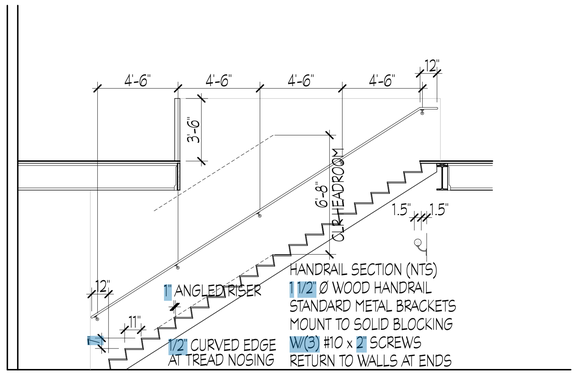
2/8 ROOF DETAIL
SCALE: 1 1/2" = 1'-0"



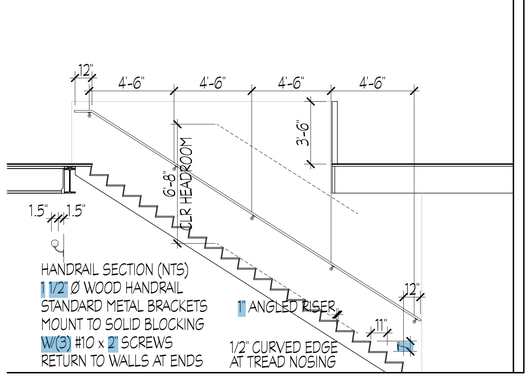
3/8 ROOF DETAIL
SCALE: 1 1/2" = 1'-0"



4/8 ROOF DETAIL
SCALE: 1 1/2" = 1'-0"

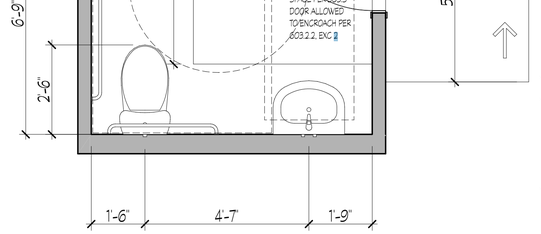


SOUTH STAIR SECTION

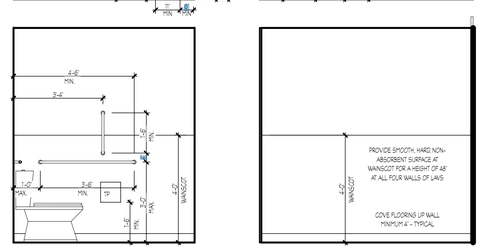


NORTH STAIR SECTION

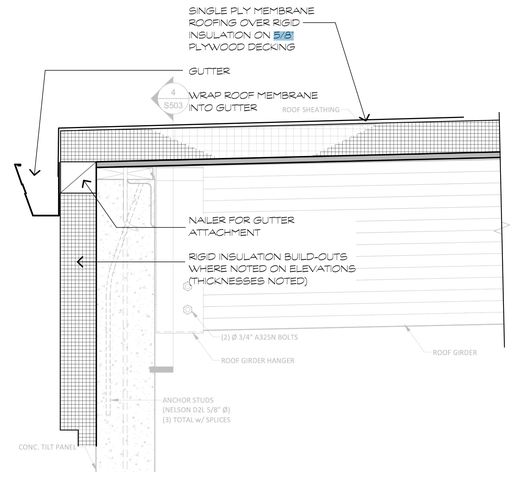
5/8 STAIR SECTIONS
SCALE: 1/4" = 1'-0"



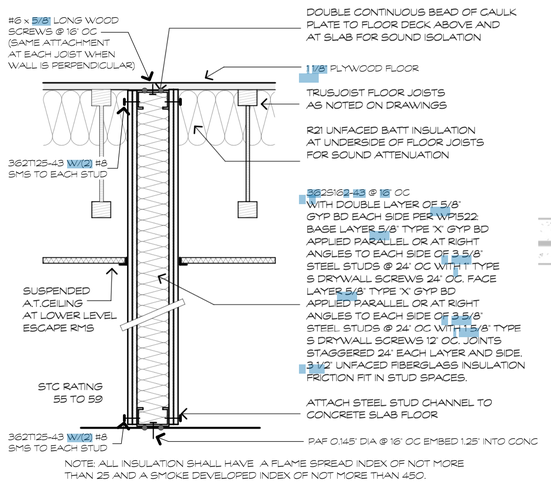
6/8 TYPICAL LAV
SCALE: 1/2" = 1'-0"



7/8 LAV ELEVATIONS
SCALE: 3/8" = 1'-0"

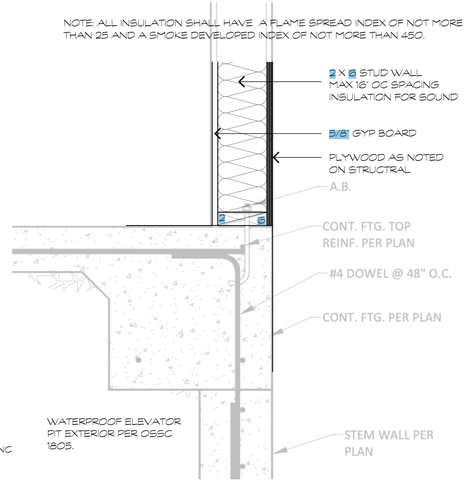


9/8 GUTTER DETAIL
SCALE: 1 1/2" = 1'-0"

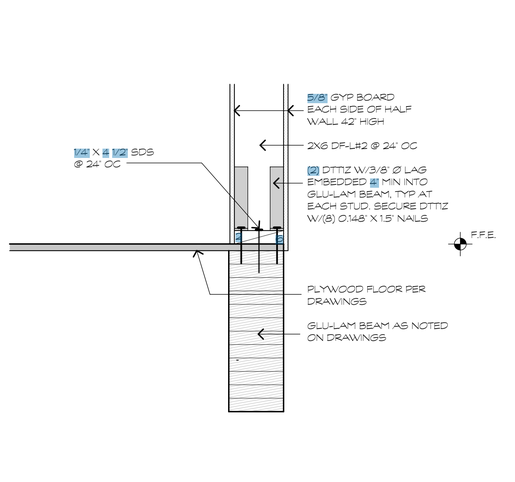


NOTE: ALL INSULATION SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 450.

10/8 SOUND/DEMISING WALL
SCALE: 1 1/2" = 1'-0"



11/8 ELEVATOR SHAFT DETAIL
SCALE: 1 1/2" = 1'-0"



12/8 HALF WALL
SCALE: 1 1/2" = 1'-0"

Arbor South Architecture
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Details

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Tokatly Concrete Tilt-Up Structural Documents

RECEIVED
12/17/2020
CITY OF BEAVERTON
BUILDING DIVISION

COB Revision/Tracking #:
REV 20-639
T X

Project Location

Address: 590 SW 150th Ave.
Beaverton, OR 97006

Project Contacts

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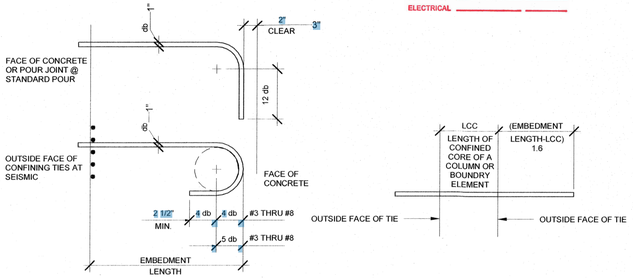
Engineer
Peter Degner, P.E.
Pioneer Engineering LLC.
1717 Centennial Blvd. Suite 9
Springfield, OR 97477
541-746-5841

APPROVED
CITY OF BEAVERTON
THESE PLANS SHALL REMAIN ON THE JOB SITE DURING CONSTRUCTION. THESE PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION FROM THE BUILDING OFFICIAL AND ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS. APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR APPROVAL OF ANY VIOLATION OF THE CODES OF THE CITY OF BEAVERTON. REQUIRED INSPECTIONS MUST BE MADE AND APPROVED DURING CONSTRUCTION.

APPROVED BY	DATE
BUILDING BBH	12/18/2020
MECHANICAL	
PLUMBING	
ELECTRICAL	



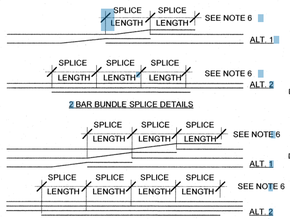
STANDARD HOOK NOTES:
1. ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE TO THE OPPOSITE FACE WITH A MINIMUM OF 2" END COVER AND EMBEDMENT NOT LESS THAN SCHEDULE
2. MINIMUM SIDE COVER = 2 1/2"
3. Ø = 6 db (FOR #3 THROUGH #8)
   Ø = 8 db (FOR #9, #10 AND #11)
   Ø = 10 db (FOR #14 AND #18)

STRAIGHT BARS AT A JOINT NOTES:
1. STRAIGHT BARS TERMINATED AT A JOINT SHALL PASS THROUGH THE CONFINED CORE OF A SEISMIC COLUMN OR SHEAR WALL BOUNDARY ELEMENT. ANY PORTION OF THE STRAIGHT EMBEDMENT NOT WITHIN THE CONFINED CORE SHALL BE INCREASED BY A FACTOR OF 1.6

BAR	AREA (SQ. IN.)	0.11		0.20		0.31		0.44		0.60		0.79		1.00		1.27		1.56	
	DIAMETER db	0.375		0.500		0.625		0.750		0.875		1.000		1.128		1.270		1.410	
DEVELOPMENT TYP.	CATEGORY	DESCRIPTION	NORMAL WEIGHT CONCRETE f'c PSI	#3		#4		#5		#6		#7		#8		#9		#10		#11	
				TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT
STRAIGHT TENSION EMBEDMENT (CLASS A)	1	COVER ≥ 2db AND CLEAR SPACING ≥ 4db	3000	16	12	18	14	22	17	26	20	38	29	43	33	49	37	55	42	61	47
			4000	16	12	16	12	19	15	23	18	33	25	37	29	42	33	47	37	53	41
			5000	16	12	16	12	17	13	20	16	29	23	34	26	38	29	43	55	47	36
			6000	16	12	16	12	16	12	19	24	27	21	31	24	34	27	39	30	43	33
	2	ALL OTHERS	3000	22	17	29	22	36	28	43	33	63	48	72	55	81	62	91	70	101	78
			4000	19	15	25	19	31	24	37	29	54	42	62	48	70	54	79	61	87	67
			5000	17	13	23	17	28	22	34	26	49	38	56	43	63	48	71	54	78	60
			6000	16	12	21	16	26	20	31	24	45	34	51	39	57	44	64	50	71	55
	3	COVER <db OR CLEAR SPACING >2db	3000					54	42	65	50	94	72	107	33	121	93	136	105	151	116
			4000					47	36	56	43	81	63	93	72	105	81	118	91	131	101
			5000					42	32	50	39	73	56	83	64	94	72	106	81	117	90
			6000					16	12	19	24	27	51	76	59	85	66	96	74	107	83
	SEISMIC	STRAIGHT BAR ANCHORED IN SEISMIC FRAME COLUMN	3000	23	16	30	22	37	27	45	32	52	37	59	43	67	48	75	54	84	60
			4000	21	15	26	19	32	23	39	28	45	32	52	37	58	42	65	47	73	52
			5000	21	15	23	17	29	21	35	25	40	29	46	33	52	37	59	42	65	47
			6000	21	15	21	15	27	19	32	23	37	27	42	30	47	34	53	38	59	43
HOOK EMBEDMENT	STANDARD	ALL OTHERS	3000	6		8		10		12		14		16		18		20		22	
			4000	6		7		9		10		12		14		16		17		19	
			5000	6		6		8		9		11		12		14		16		17	
			6000	6		6		7		9		10		11		13		14		16	
	SEISMIC	HOOK ANCHORED IN SEISMIC FRAME COLUMN	3000	7		9		11		13		15		17		19		22		24	
			4000	6		8		10		11		13		15		17		19		21	
			5000	6		7		9		10		12		14		15		17		19	
			6000	6		6		8		9		11		12		14		16		17	

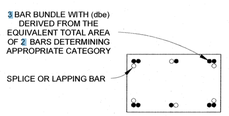
REINFORCING SPLICE NOTES
1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS
2. BOTTOM BARS ARE ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST BELOW HORIZONTAL BARS
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.3
4. FOR GRADE 75 REINFORCING MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.25
5. FOR 2 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.20. FOR 3 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHDULE BY 1.33
6. FOR BUNDLED BARS, AN EFFECTIVE BAR DIAMTER SHALL BE USED FOR DETERMINING COVER AND SPACING LIMITATIONS
   A. FOR 2 BAR BUNDLE dbe = 1.60 (√BAR AREA)
   B. FOR 3 BAR BUNDLE dbe = 1.95 (√BAR AREA)

1 Typ Straight and Hooked Embedment Length Schedule
3/4" = 1'-0"

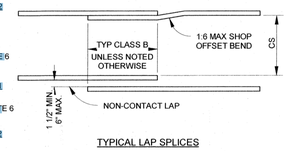


BUNDLED LAP SPLICES

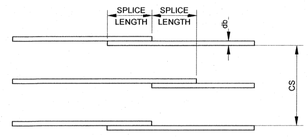
NOTE: BARS SHALL BE BUNDLED WITH NO MORE THAN TWO BARS IN THE SAME PLANE (. . .)



BAR SPACING



TYPICAL LAP SPLICES



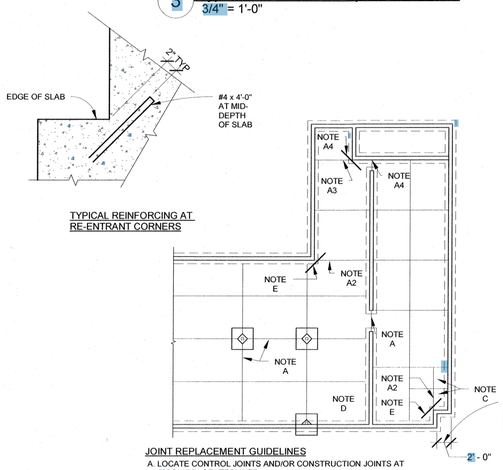
CS = CLEAR SPACING

STAGGERED SPLICING

BAR	AREA (SQ. IN.)	0.11		0.20		0.31		0.44		0.60		0.79		1.00		1.27		1.56	
	DIAMETER db	0.375		0.500		0.625		0.750		0.875		1.000		1.128		1.270		1.410	
CLASS	CATEGORY	DESCRIPTION	NORMAL WEIGHT CONCRETE f'c PSI	#3		#4		#5		#6		#7		#8		#9		#10		#11	
				TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT	TOP	BOT
CLASS B	1	COVER ≥ 2db AND CLEAR SPACING ≥ 4db	3000	21	16	23	18	28	22	34	26	49	38	56	43	63	49	71	55	79	61
			4000	21	16	21	16	25	19	29	23	43	33	49	37	55	42	?	47	68	53
			5000	21	16	21	16	22	17	26	20	38	29	44	34	49	38	55	43	61	47
			6000	21	16	21	16	21	16	24	19	35	27	40	31	45	34	50	39	56	43
	2	ALL OTHERS	3000	28	22	38	29	47	36	56	43	81	63	93	72	105	49	118	91	131	101
			4000	25	19	33	25	41	31	49	37	71	54	81	62	91	42	102	79	114	87
			5000	22	17	29	23	36	28	44	34	63	49	72	56	81	38	92	71	102	78
			6000	21	16	27	21	33	26	40	31	58	45	66	51	74	34	84	64	93	71
	3	COVER <db OR CLEAR SPACING >2db	3000					70	54	84	64	122	94	139	107	157	49	177	136	196	151
			4000					61	47	73	56	106	81	121	93	136	42	153	118	170	131
			5000					54	42	65	50	95	73	108	83	121	38	137	105	152	117
			6000					50	36	59	46	86	67	99	76	111	85	125	96	139	107

REINFORCING EMBEDMENT NOTES
1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS.
2. BOTTOM BARS ARE ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST BELOW HORIZONTAL BARS.
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.3
4. FOR GRADE 75 REINFORCING MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.25
5. FOR 3 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.20. FOR 4 BAR BUNDLE MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.33.
6. FOR BUNDLED BARS, AN EFFECTIVE BAR DIAMETER SHALL BE USED FOR DETERMINING COVER AND SPACING LIMITATIONS.
   A. FOR 2 BAR BUNDLE dbe = 1.60 (√BAR AREA)
   B. FOR 3 BAR BUNDLE dbe = 1.95 (√BAR AREA)
   C. FOR 4 BAR BUNDLE dbe = 2.26 (√BAR AREA)

3 Typ. Reinf. Grade 60 Splice Sched.
3/4" = 1'-0"



TYPICAL REINFORCING AT RE-ENTRANT CORNERS

JOINT REPLACEMENT GUIDELINES
A. LOCATE CONTROL JOINTS AND/OR CONSTRUCTION JOINTS AT
   1. COLUMN CENTERLINES
   2. RE-ENTRANT CORNERS OF BUILDING
   3. AT CORNERS OF INTERIOR MASONRY WALLS AND FOOTINGS
   4. AT OPENINGS IN MASONRY WALLS WITH FOOTINGS
B. SPACE JOINTS NO MORE THAN THE FOLLOWING: 10' o.c. EA. WAY
C. SUBDIVIDE SLAB AREAS TO LIMIT LENGTH TO WIDTH RATIO OF SLAB AREA TO 3 TO 1 MAXIMUM. PROVIDE SQUARE SLAB AREAS WHERE PRACTICAL
D. PROVIDE DIAMOND SHAPED JOINT PATTERN AROUND COLUMNS
E. PROVIDE (2) #4 BARS AT RE-ENTRANT CORNERS OF SLAB PER TYPICAL DETAIL

2 Typ. Slab on Grade Joint Layout
N.T.S.

Building Specifications

Division 0100 – General

101 Code - All work to comply with all local and state codes, including:
- 2019 Oregon Structural Specialty Code
- Codes Specified by Architect

102 Permits and Fees:
A. The owner will provide and pay for all permits and fees except where provided by contract.

103 Coordination:
A. The contractor is responsible for the coordination of all sub contractors and trades.

Division 0300 – Concrete

301 General Requirements:
A. Concrete design, components, storage, mixture, placement and reinforcement shall conform to chapter 19 of the building code.
B. Protect all concrete from damage and use special care on all exposed concrete to prevent staining or discoloration.
C. Concrete is to be ready mixed, air entrained ASTM C-94 & ASTM C-260. The minimum 28 day strength is to be 4000 psi. Special inspection as required. Do not air entrain interior slabs which are to be smooth, dense, and hardtroweled finished.

302 Formwork:
A. Forms shall be substantial, sufficiently tight, and properly braced to prevent leakage and maintain position and shape.
B. Forms and shoring shall not be removed until the structure has sufficient strength to support safely its weight and all loads placed thereon.

303 Reinforcement:
A. Grade 40 minimum for #3 bars and smaller. Grade 60 for all others unless noted otherwise. ASTM A615. Place per ACI code and standards. Lap continuous bars 30" minimum unless noted otherwise.

304 Cast-in-Place Concrete:
A. Exterior slabs and walkways are to have a light broom finish. Slope a minimum of ¼" per ft. away from structure for drainage.

Division 0500 – Metal

501 Bolts: ASTM A307, A325, or A490 as specified on the plans.
502 Welding: E70 (FEXX = 70 ksi)
503 Hot Rolled Steel: C, MC, L sections – ASTM A36; W sections – ASTM A992;
HSS sections – ASTM A500 GR. B; Steel Pipe – ASTM A53 GR. B
Plates, Bars - ASTM A36

506 Fasteners:
A. Nails: ASTM F1667; Use ASTM A153 if in contact with pressure treated wood or exposed to weather. 8d: .131"x2 ½"; 10d: .148"x3"; 16d: .162"x3½"
B. Wood Screws: Simpson Strong-Tie SD or SDS (or equivalent); Screws are to be in compliance with ASTM B695 Class 55 if in contact with pressure treated wood or exposed to weather.
C. Lag Bolts (or Lag Screws): ANSI/ASME Standard B18.2.1; hot dip galvanize if exposed to weather.

507 Anchors:
A. Prefabricated anchors are to be Simpson Strong-Tie or equal.
B. ½" or 5/8" anchors per ASTM A307; ¾" or larger per ASTM F1554
C. Threaded rods: ASTM A36
D. PAF's (Power Actuated Fasteners): ITW Ramset 1500 Series (ICC ESR-1799) or equal; .145" diameter minimum
E. Titen HD: Simpson Strong-Tie, Install per ICC-ES ESR-2713 (Concrete), ESR-1056 (CMU)
F. Nelson D2L Deformed Bars: Per ICC ER-2907
G. Nelson Headed/Threaded Studs per ICC ESR-2856

Statement of Special Inspections

Post Installed Anchors
- Titen HD (Periodic ICC ESR-2713)

Steel: Fabrication to be performed in approved shop (Unless noted otherwise on approved plans)
- Material verification of structural steel (Periodic)
- Material verification of weld filler materials (Periodic)
- Welding: Single pass fillet welds (Periodic)
- Reinforcing steel in walls (Periodic)
- High Strength Bolts (Periodic)
- Concrete Construction: Per OSSC 1705.3
- Soils per OSSC 1705.6
- Fabricated Items per OSSC 1705.10

Concrete Construction (Per OSSC 1705.3)
Soils (Per OSSC 1705.6)
Fabricated Items (Per OSSC 1705.10)

1

Division 0600 – Wood, Plastics, and Composites

601 General: Woods construction is to conform to chapter 23 of the code

602 Solid Sawn Lumber:
A. Evidence of grade: Grade mark of an approved grading organization having jurisdiction must appear on each piece of material.
B. Framing Lumber: DF-L, S4S, to standard dimensions
2x4Stud: Stud Grade (or better)
2x6 Stud: #2 (or better)
2x Framing: #2 (or better)
4x Framing: #2 (or better)
6x Framing: #1 (or better)
Furring or Blocking: #3 (or better)

603 Laminated Lumber:
A. Evidence of grade: Grade mark of an approved grading organization having jurisdiction must appear on each piece of material.
B. Beams: DF/DF, to specified dimensions
Supported at each end: 24F-V4
More than two supports, or cantilevered: 24F-V8
C. Columns: DF/DF, to specified dimensions: 24F-V4

604 Structural Composite Lumber:
A. LVL (Laminated Veneer Lumber) 1.9E – Trus Joist Microllam or equal
B. PSL (Parallel Strand Lumber) 2.0E – Trus Joist Parallam or equal
C. LSL (Laminated Sheet Lumber) 1.5E Structural – Trus Joist TimberStrand or equal
D. LSL (Laminated Sheet Lumber) 1.3E Non-Structural – Trus Joist TimberStrand or equal
E. I-Joists – Trus Joist TJI or equal

606 Sheathing:
A. Roof Sheathing: APA rated sheathing, exposure 1. Minimum panel span rating of 32/16 with a minimum thickness of 19/32". Grade mark by APA or other approved agency. Minimum attachment to supporting members: 8d nails, 6"o.c. at panel edges, 12"o.c. at interior of panel.
B. Floor Sheathing: APA rated sheathing. Minimum panel span rating 48/24 with a minimum thickness of ¾". Grade mark by APA or other approved agency. Minimum attachment to supporting members: 10d nails, 6"o.c. at panel edges, 12"o.c. at interior of panel.
C. Wall Sheathing: APA rated sheathing, exposure 1. Minimum panel span rating of 24/0 with a minimum thickness of 7/16". Grade mark of APA or other approved agency. Minimum attachment to supporting members: 8d nails, 6"o.c. at panel edges, 12"o.c. at interior of panel.

607 Pressure Treated Lumber:
A. Sill plates and foundation plates in contact with concrete - #3 Hem, PT to comply with AWPB LP-2 Stamp .25#/ft^3 specifications and conform to ICC standards.
B. All purpose construction lumber and timbers - #2 & BTR Hem, PT to comply with with AWPB LP-22 Stamp .40#/ft^3 specifications and conform to ICC standards.

Structural Criteria

GENERAL:
RISK CATEGORY: II
WIND:
ULTIMATE DESIGN SPEED = 97 MPH
EXPOSURE = B
INTERNAL PRESSURE COEFFICIENT = +/- 0.18
COMPONENT & CLADDING DESIGN WIND PRESSURE IN ASD
LOADING AND GREATER THAN 10 SQ. FT.
= 31 PSF (WALL SURFACE)
=24 PSF (ROOF SURFACE)
SEISMIC:
IMPORTANCE FACTOR = 1.0
SS = 0.895 SI = 0.413
SITE CLASS: D
SDS = 0.716 SDI = 0.523
Seismic Design Category: 'D'
INTERMEDIATE PRECAST CONCRETE SHEAR WALLS
TOTAL DESIGN BASE SHEAR = 172.8k (LRFD LOAD)
CS = 0.179 R = 4.0
EQUIVALENT LATERAL FORCE DESIGN
ROOF:
DEAD = 20 PSF
SNOW = 25 PSF
SECOND FLOOR LEVEL (OFFICE ONLY):
DEAD = 15 PSF
LIVE (OFFICE) = 50 PSF OR 80 PSF OR 2000#
PL* = 15 PSF
* = PL WITH 50 PSF LL ONLY
FIRST FLOOR LEVEL (CONC. SLAB ON GRADE):
DEAD = 20 PSF
LIVE = 125 PSF
SOIL BEARING CAPACITY:
-3800 PSF ISOLATED FOOTINGS
-2500 PSF STRIP FOOTINGS
* BASED ON BEARING PER GEOTECHNICAL REPORT BY K&A ENGINEERING DATED MARCH 2, 2020 AND SOIL AND FILL NOTES ON SHEET S101
STAIRS / EXIT:
LIVE = 100 PSF

1

List of Abbreviations

A		**D**		**F**		**I**		**P**	
ACT	Acoustic Ceiling Tile	DBL	Double	FD	Floor Drain or Fire Department	ILO	In Lieu Of	PCC	Pre-Cast Concrete
AD	Area Drain	DEMO	Demolish or Demolition	FEC	Fire Extinguisher Cabinet	INSUL	Insulated or Insulation	PLUMB	Plumbing
AFF	Above Finished Floor	DIA	Diameter	FIXT	Fixture	INT	Interior	PLYD	Plywood
ALUM	Aluminum	DIM	Dimension	FLR	Floor	**L**		PT	Pressure Treated
ANOD	Anodized	DIMS	Dimensions	FT	Feet	LO	Low	PNT	Paint or Painted
ARCH	Architect	DN	Down	FTG	Footing	**M**		PVC	Polyvinyl Chloride
B		DR	Door	FND	Foundation	MAX	Maximum	**R**	
BSMT	Basement	DWG	Drawing	FFE	Finish Floor Elevation	MO	Masonry Opening	RBR	Rubber
BRG	Bearing	**E**		**G**		MECH	Mechanical	RCP	Reflected Ceiling Plan
BYND	Beyond	EA	Each	GA	Gauge	MEMBR	Membrane	RD	Roof Drain
BOTT	Bottom	EJ	Expansion Joint	GALV	Galvanized	MIN	Minimum	REINF	Reinforcement
BLDG	Building	EL	Elevation	GLB	Glulam Beam	MTL	Metal	REQD	Required
C		ELEC	Electrical	GWB	Gypsum Wall Board	**N**		RM	Room
CIP	Cast In Place	ELEV	Elevator or Elevation	**H**		NIC	Not In Contract	**S**	
CHNL	Channel	EQ	Equal	HC	Hollow Core	NO	Number	SCHED	Schedule
CJ	Control Joint	EXIST	Existing	HI	High	NOM	Nominal	SIM	Similar
CLG	Ceiling	(E)	Existing	HM	Hollow Metal	(N)	New	SPEC	Specified OR Specification
CLR	Clear	EXP JT	Expansion Joint	HP	High Point	N.T.S.	Not To Scale	SF	Square Foot
CMU	Concrete Masonry Unit	EXT	Exterior	HR	Hour	**O**		SSTL	Stainless Steel
COL	Column	EW	Each Way	HVAC	Heating, Ventilating, And Air Conditioning	OC	On Center	STC	Sound Transmission Coefficient
COMPR	Compressible					OH	Opposite Hand	STL	Steel
CONC	Concrete					OZ	Ounce	STRUCT	Structure or Structural
CONT	Continuous							**T**	
CPT	Carpet							T&G	Tongue And Groove
CT	Ceramic Tile							TBD	To Be Determined
CTYD	Courtyard							TELE	Telephone
								TLT	Toilet
								TO	Top Of
								TOC	Top Of Concrete
								TOS	Top Of Steel
								TPD	Toilet Paper Dispenser
								T/D	Telephone/Data
								TYP	Typical
								U	
								UNO	Unless Noted Otherwise
								U/S	Underside
								V	
								VIF	Verify In Field
								VP	Vision Panel
								W	
								W/	With
								WD	Wood

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER
86970PE
OREGON
DECEMBER 12, 2006
PETER KELLY DEGNER
EXPIRES 12/31/2021

PIONEER ENGINEERING LLC
1717 CENTENNIAL BLVD STE 9
SPRINGFIELD, OR 97477
PHONE: 541-746-5841 | FAX: 541-393-2651
pioneereng.com

Tokatly Concrete Tilt-Up Structural Documents

Project Information

Beaverton, OR

REV #	DATE	REVISION
1	9/10/2020	Plan Review 1

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003
DWN CDB
CHK'D PKD

S100

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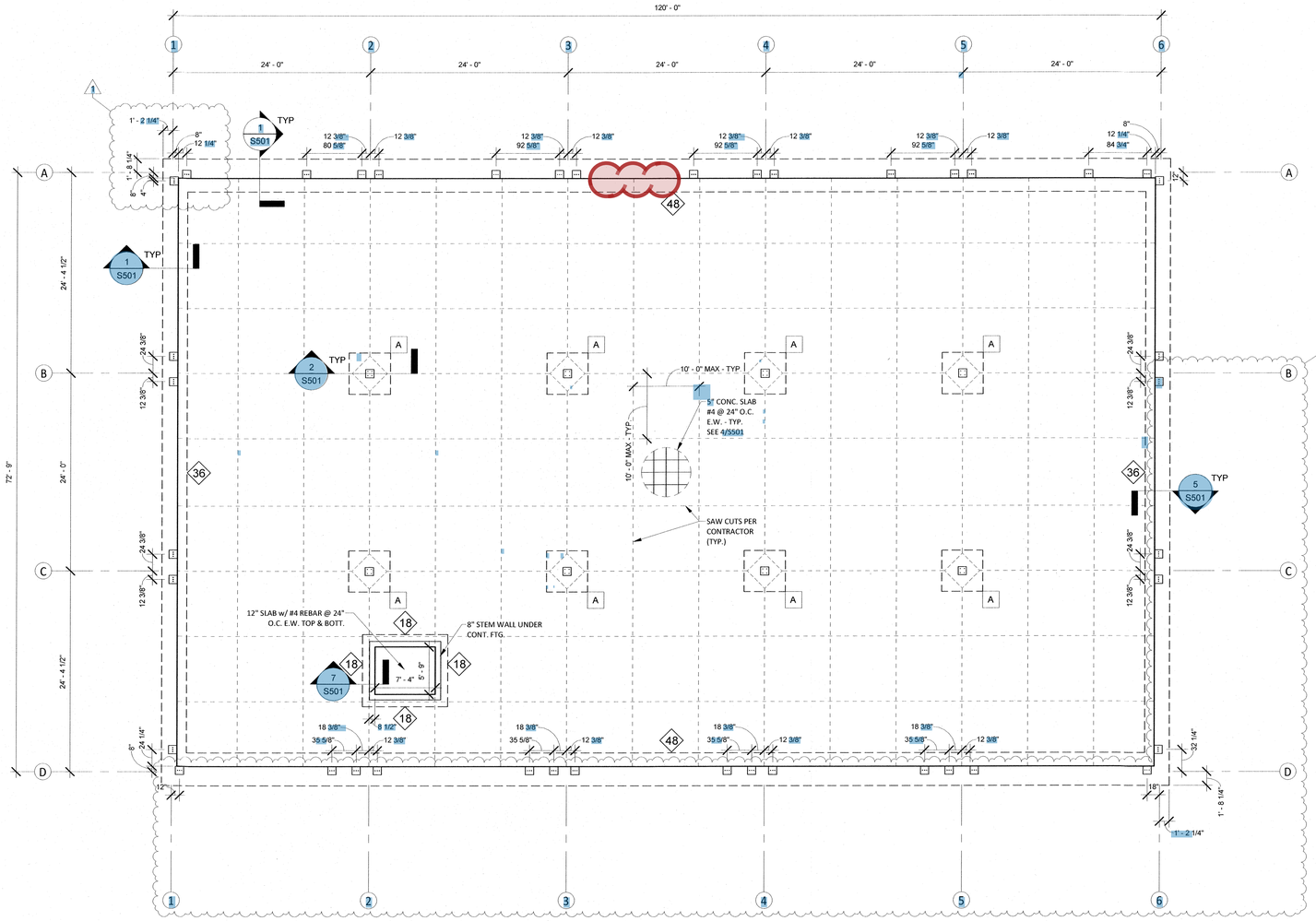


1 Foundation Plan
1/8" = 1'-0"

SPREAD FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICKNESS	BOTT. REINFORCEMENT	TOP REINFORCEMENT	Comments
A	5' - 0"	5' - 0"	2' - 6"	#4 @ 8" O.C. E.W.	#4 @ 8" O.C. E.W.	

SYMBOL	NOTES:
X	• REBAR 3" CLEAR FROM FTG. EDGE TYP. • REFER TO BUILDING MANUF. PLANS FOR PLATE & ANCHOR LOCATIONS AND DIMENSIONS • DIMENSIONS ARE TO CENTER OF FOOTINGS.

SOIL AND FILL NOTES

1. ALLOWABLE BEARING PRESSURE AND FILL NOTES BASED ON GEOTECHNICAL REPORT DATED MARCH 2, 2020 BY K&A ENGINEERING
2. FOOTINGS TO BEAR ON STRUCTURAL FILL PER GEOTECHNICAL REPORT BY K&A ENGINEERING DATED 3/2/2020
3. BASE OF FOOTINGS TO BE NOTED PER GEOTECH.
4. K&A ENGINEERING TO INSPECT AND APPROVE ALL EXCAVATIONS AND COMPACTED FILL

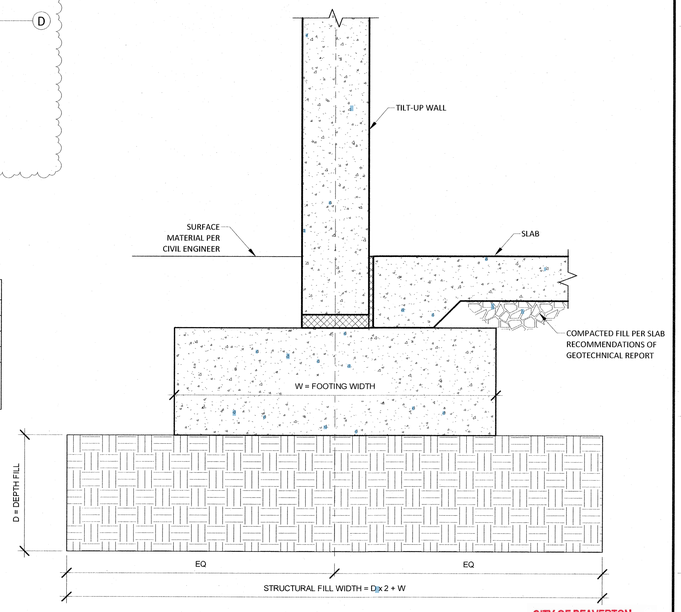
CONTINUOUS FOOTING SCHEDULE

MARK	WIDTH	DEPTH	TOP REINF	BOTT REINF
48	48"	12"	N/A	(6) #4
36	36"	12"	N/A	(4) #4
18	18"	18"	#4 CONT.	(2) #4

SYMBOL	NOTES:
#	

FOUNDATION LEGEND

- [1] = FOOTING EMBED PLATE
- ☐ = COLUMN BASE PLATE (PL 3/4"x12"x12" w/ (4) NELSON D2L ANCHORS, EMBED 25" INTO CONC., TYP.)



2 Fill Detail - TYP @ FTG.
N.T.S.

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

REGISTERED PROFESSIONAL ENGINEER
86970PE
OREGON
DECEMBER 12, 2014
PETER KELLY DEGNER
EXPIRES 12/31/2021

PIONEER ENGINEERING LLC
17177 CENTENNIAL BLVD STE 9 | PHONE: 541-748-5841 | FAX: 541-393-2651
SPRINGFIELD, OR 97477 | pioneerengr.com

Tokatly Concrete Tilt-Up Structural Documents

Beaverton, OR

Foundation Plan

REV.#	DATE	REVISION
1	9/10/2020	Plan Review 1

DWN CDB CHKD PKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S101

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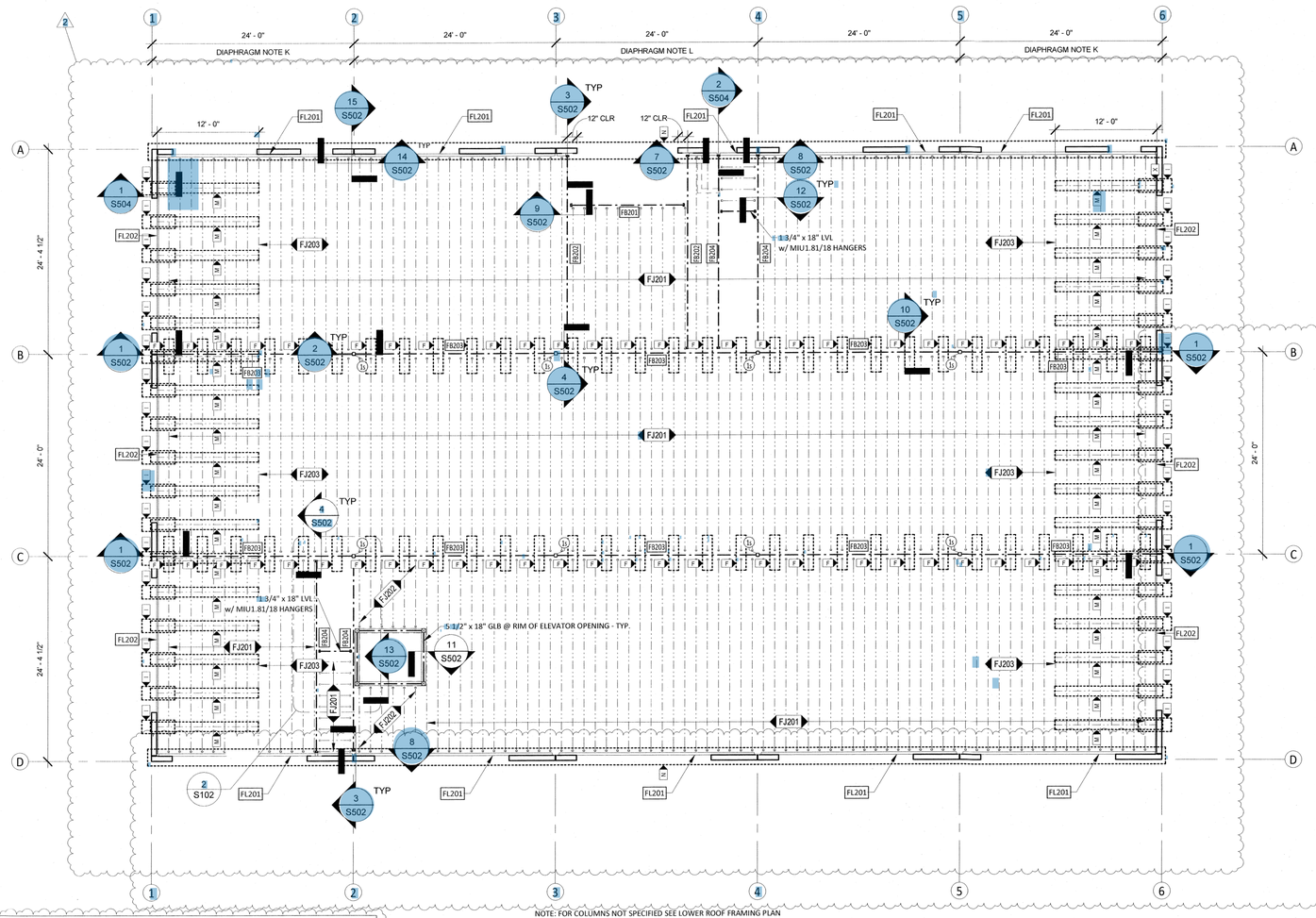
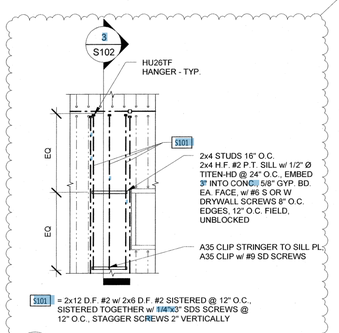
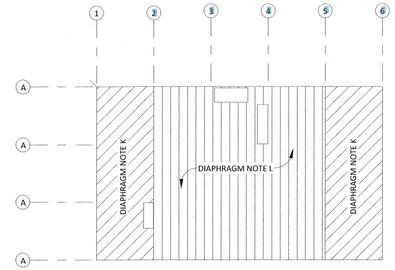


1 2nd Floor Framing Plan
1/8" = 1'-0"



2 Stair Framing Plan
1/8" = 1'-0"

3 Section 5
1/8" = 1'-0"



3 Floor Diaphragm Nailing Key
N.T.S.

LEDGER SCHEDULE

MARK	TYPE	SIZE	ATTACHMENT	NOTES
FL201	STEEL, LLV	L5x3 1/2x1/4	1/2" Ø x 4" NELSON HEADED STUDS @ 12" O.C.	2x4 PLATE SCREWED BY (2) 0.145 Ø ITW RAMSET 1500 STAGGERED 1/2" TO LEDGER @ 6" O.C.
FL202	LVL	1 3/4" x 18"	(3) 5/8" Ø TITEN-HD 24" O.C. 3.5" EMBED	SPACE ANCHORS 5" VERT., INSTALL LST173 STRAP AT LEDGER SPLICE LOCATIONS w/ 10d COMMON x 1 1/2" LONG NAILS
LEDGER MARK SYMBOL		GENERAL NOTES: • ALL HEADER 4x8 #2-D.F. - U.N.O. • • •		

FRAMING LEGEND

- = 7 1/2" CONCRETE TILT UP WALL
- = 2x6 STUD BEARING WALL
- = 2x4 STUD BEARING WALL
- = 2x4 STUD NON-BEARING WALL

2nd FLOOR FRAMING SCHEDULE

MARK	FLOOR JOIST TYPE	FLOOR JOIST SIZE	FLOOR JOIST SPACING	FLOOR JOIST HANGER	SUBFLOOR	NAILING & BLOCKING NAILS	NAILING & BLOCKING EDGE	NAILING & BLOCKING FIELD	NAILING & BLOCKING EDGE BLOCKING	NOTES
FJ201	TJI 560	3 1/2"x18"	16" O.C.	MIT418	1 1/8" PLY	8d	6" O.C.	12" O.C.	NONE	OPTIONAL: MIT418 HANGER
FJ202	TJI 360	2 5/16"x18"	16" O.C.	SEE NOTES	1 1/8" PLY	8d	6" O.C.	12" O.C.	NONE	MIU 2.37/18 @ ELEVATOR; MIT 3518 @ STEEL BEAM
FJ203	PSL	3 1/2"x18"	16" O.C.	SEE NOTES	1 1/8" PLY	8d	6" O.C.	12" O.C.	NONE	IUS3.56/18 HANGER TO LEDGER, THA422 HANGER TO BEAM
FLOOR FRAMING MARK SYMBOL		GENERAL NOTES: • = HANGER; SEE FRAMING PLAN FOR LOCATIONS; HANGERS AT FLUSH BEAMS AND LEDGERS - TYPICAL • T.O.J. = T.O.P.								

COLUMN SCHEDULE

MARK	TYPE	SIZE	BASE PLATE	BASE ANCHORS	BASE EMBED	CAP TYPE	NOTES
1s	TUBE STEEL	HSS 5 1/2x5 1/2x1/4	PL 3/4"x12"x12"	(4) NELSON D2L ANCHORS	25"	CC0 5 1/4	SEE DETAIL 3/S501 FOR BASE PLATE REBAR REINF.
COLUMN MARK SYMBOL		NOTES: • • •					

DIAPHRAGM NOTES SCHEDULE

MARK	NOTE
A	5/8" PLY., 10d COMMON 4" O.C. @ LEDGER, 6" O.C. OTHER, BLOCKED
B	5/8" PLY., 8d COMMON 6" O.C. EDGES, FIELD, UNBLOCKED
C	L6x3-1/2x1/2x16" EMBED w/ (4) NELSON DEFORMED BARS
D	MST60 STRAP: GIRDER TO GIRDER
E	MST37 STRAP: PURLIN TO PURLIN
F	CS16 STRAP: JOIST TO JOIST, 11" END LAP
G	LTT19 TIE: JOIST TO WALL, w/ 1/2" Ø x 8" TITEN-HD 24" O.C., EMBED = 5" INTO CONC. (MIN.)
H	4x6 BLOCKING 8' - 0" O.C., 60" FROM WALL w/ CS16 STRAP L=60"
I	HTT4 w/ 5/8" Ø TITEN-HD w/ 5" EMBED INTO CONC. WALL @ BLOCKING & PURLIN (TYP.)
J	HD19 TO HD19 w/ 1 1/8" Ø ALL THREAD @ CENTER OF BEAM
K	1 1/8" EDGE GOLD GLUED AND NAILED w/ 10d @ 4" O.C. EDGES, 12" O.C. FIELD, BLOCKED
L	1 1/8" EDGE GOLD GLUED AND NAILED w/ 10d @ 6" O.C. EDGES, 12" O.C. FIELD, BLOCKED
M	4x6 BLOCKING 4' - 0" O.C., RUN 12' - 0" (MIN.) INTO DIAPHRAGM w/ CS14 STRAP L=12' - 0" CONNECTING BLOCKING TOGETHER w/ 10d COMMON (0.148"x3") FILL ALL HOLES
N	LTT19 TIE: JOIST TO WALL, w/ 1/2" Ø x 8" TITEN-HD 16" O.C., EMBED = 5" INTO CONC. (MIN.)
DIAPHRAGM MARK SYMBOL	REGION X MARK		

2nd FLOOR BEAM SCHEDULE

MARK	TYPE	SIZE	HANGER	LOCATION	NOTES
FB201	24F-V4 GLB	3 1/2" x 18"	HGUS414	T.O.B. = T.O.J.	
FB202	24F-V4 GLB	5 1/2" x 18"	HGUS.63-SDS	T.O.B. = T.O.J.	BA HANGER (MAX.) AT BEAM
FB203	STEEL	W16x57	1.2/S502	T.O.PLATE = T.O.J.	2x8 PLATE SECURED w/ 1/2" Ø x 2 1/4" LONG NELSON THREADED STUDS @ 24" O.C. w/ 0.229"x3" SQ. WASHER
FB204	24F-V4 GLB	5 1/2" x 18"	SEE NOTES	T.O.B. = T.O.J.	MBHUS 50 @ WALL, WP HANGER @ STEEL BEAM
BEAM MARK SYMBOL		GENERAL NOTES: • HEADERS AS NOTED • 4x6 #2-D.F., UNLESS NOTED OTHERWISE			

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

REGISTERED PROFESSIONAL ENGINEER
86970PE
Peter Degner
OREGON
DECEMBER 31, 2012
PETER KELLY DEGNER
EXPIRES 12/31/2021

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Tokatly Concrete Tilt-Up Structural Documents

Beaverton, OR

Floor Framing Plan

REV. #	DATE	REVISION
1	9/10/2020	Plan Review 1
2	12/11/2020	Plan Review 2

DESIGNED BY: DKG
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

DWN: CDB CHKD: PKD
DWN: CDB CHKD: PKD

S102

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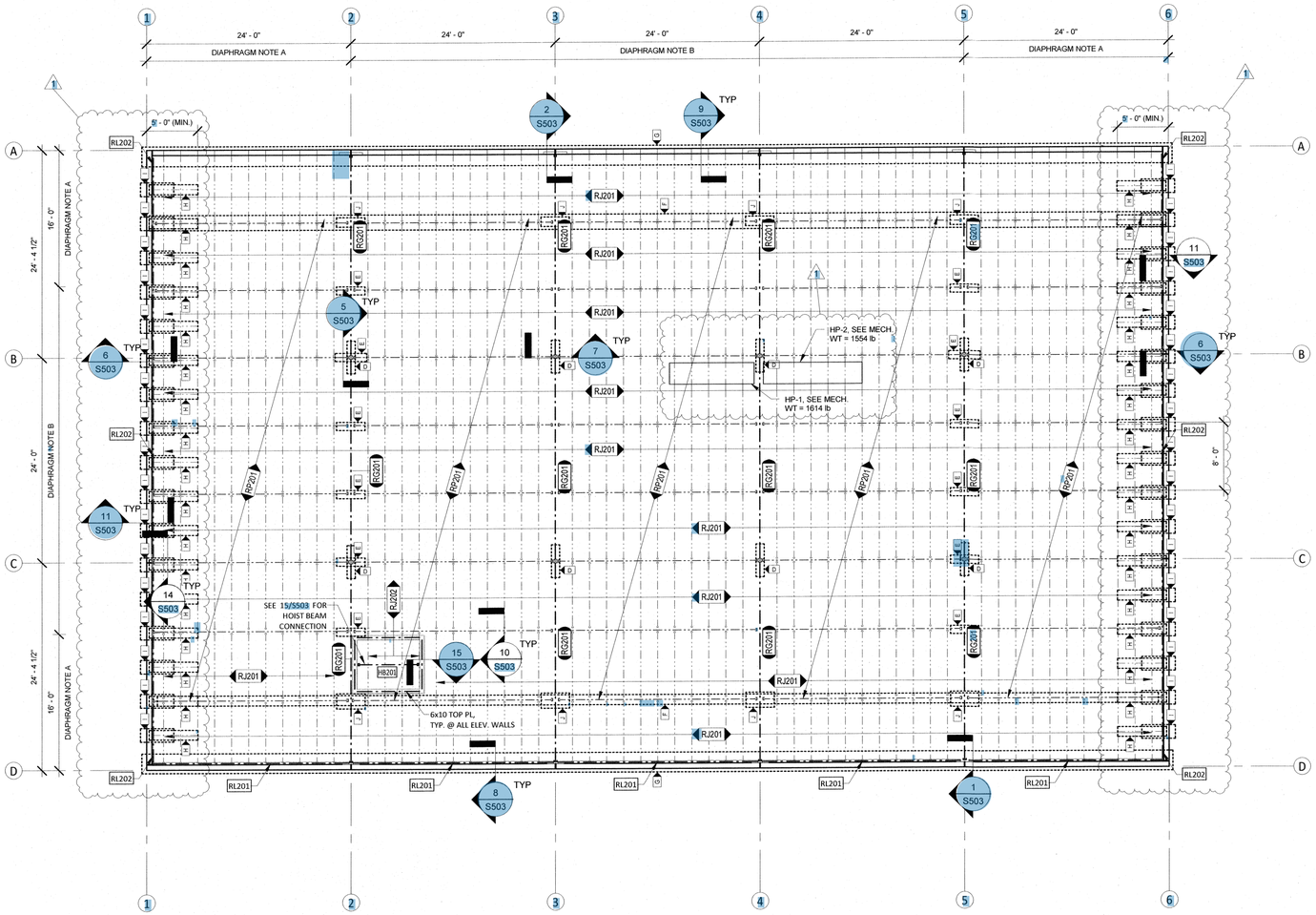
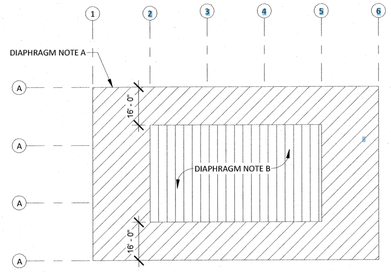


1 Roof Framing Plan
1/8" = 1'-0"

NOTE: SEE FLOOR FRAMING PLAN FOR COLUMNS NOT SPECIFIED

FRAMING LEGEND

- = 7 1/2" CONCRETE TILT UP WALL
- = 2x6 STUD BEARING WALL
- = 2x4 STUD BEARING WALL
- = 2x4 STUD NON-BEARING WALL



3 Roof Diaphragm Nailing Key
N.T.S.

LEDGER SCHEDULE

MARK	TYPE	SIZE	ATTACHMENT	NOTES
RL201	D.F. #2	4x8	(2) 1/2" Ø TITEN-HD @ 8" O.C.	EMBED TITENS 3.5" INTO CONC., SPACE 3" APART
RL202	D.F. #2	2x6	1/2" Ø TITEN-HD @ 4" O.C.	EMBED TITENS 3.5" INTO CONC.
LEDGER MARK SYMBOL		GENERAL NOTES:		
XX###		• ALL HEADER 4x8 #2-D.F. - U.N.O.		

ROOF PURLIN / JOIST SCHEDULE

MARK	ROOF FRAMING TYPE	SIZE	SPACING	HANGER	ROOF SHEATHING	NAILING & BLOCKING NAILS	EDGE	FIELD	EDGE BLKG.	NOTES
RP201	24F-V4 GLB	5 1/2" x 15"	8' - 0" O.C.	SEE NOTES	5/8" PLY	8d	6" O.C.	12" O.C.	NONE	WALL: MBHU5.5, H=15" GLB: HGUS5.50/10
RJ201	D.F. #2	2x6	24" O.C.	LRU26Z	5/8" PLY	8d	6" O.C.	12" O.C.	NONE	AT GRIDLINE A USE JB26 HANGERS
RJ202	D.F. #2	(2) 2x4	24" O.C.	LUS24-Z	5/8" PLY	8d	6" O.C.	12" O.C.	NONE	
ROOF FRAMING MARK SYMBOL		GENERAL NOTES:								
XX###		•								

COLUMN SCHEDULE

MARK	TYPE	SIZE	BASE PLATE	BASE ANCHORS	BASE EMBED	CAP TYPE	NOTES
1s	TUBE STEEL	HSS 5 1/2x5 1/2x1/4	PL 3/4"x12"x12"	(4) NELSON D2L ANCHORS	25"	CCO 5 1/4	SEE DETAIL 3/S501 FOR BASE PLATE REBAR REINF.
COLUMN MARK SYMBOL		NOTES:					
#s		•					

DIAPHRAGM NOTES SCHEDULE

MARK	NOTE
A	5/8" PLY., 10d COMMON 4" O.C. @ LEDGER, 6" O.C. OTHER, BLOCKED
B	5/8" PLY., 8d COMMON 6" O.C. EDGES, FIELD, BLOCKED
C	L6x3-1/2x1/2x16" EMBED w/ (4) NELSON DEFORMED BARS
D	MST60 STRAP: GIRDER TO GIRDER
E	MST37 STRAP: PURLIN TO PURLIN
F	CS16 STRAP: JOIST TO JOIST, 11" END LAP
G	LTT19 TIE: JOIST TO WALL, w/ 1/2" Ø x 8" TITEN-HD 24" O.C., EMBED = 5" INTO CONC. (MIN.)
H	4x6 BLOCKING 8' - 0" O.C., 60" FROM WALL w/ CS16 STRAP L=60"
I	HTT4 w/ 5/8" Ø TITEN-HD w/ 5" EMBED INTO CONC. WALL @ BLOCKING & PURLIN (TYP.)
J	HD19 TO HD19 w/ 1 1/8" Ø ALL THREAD @ CENTER OF BEAM
K	1 1/8" EDGE GOLD GLUED AND NAILED w/ 10d @ 4" O.C. EDGES, 12" O.C. FIELD, BLOCKED
L	1 1/8" EDGE GOLD GLUED AND NAILED w/ 10d @ 6" O.C. EDGES, 12" O.C. FIELD, BLOCKED
M	4x6 BLOCKING 4' - 0" O.C., RUN 12" - 0" (MIN.) INTO DIAPHRAGM w/ CS14 STRAP L=12" - 0" CONNECTING BLOCKING TOGETHER w/ 10d COMMON (0.148"x3") FILL ALL HOLES
N	LTT19 TIE: JOIST TO WALL, w/ 1/2" Ø x 8" TITEN-HD 16" O.C., EMBED = 5" INTO CONC. (MIN.)
DIAPHRAGM MARK SYMBOL	
REGION — MARK — X	

ROOF BEAM SCHEDULE

MARK	TYPE	SIZE	HANGER	NOTES
HB201	WIDE FLANGE	W8x24	N/A	SEE DETAIL 15/S503
RG201	24F-V4 GLB	5 1/8" x 21"	EG5	WELD HANGER TO EMBED PLATES @ COLUMN CCO 5 1/4" CAP
BEAM MARK SYMBOL		GENERAL NOTES:		
XX###		• ALL HEADER 4x8 #2-D.F. - U.N.O.		
		•		

COB Revision/Tracking #:
REV 21-020
T X

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01/28/2021
CITY OF BEAVERTON
BUILDING DIVISION

REGISTERED PROFESSIONAL ENGINEER
86970PE
OREGON
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Tokatly Concrete Tilt-Up Structural Documents

Beaverton, OR

Roof Framing Plan

REV #	DATE	REVISION	DWN	CHKD
1	9/10/2020	Plan Review 1	CDB	PKD
2	12/11/2020	Plan Review 2	CDB	PKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
01/29/2021

S103

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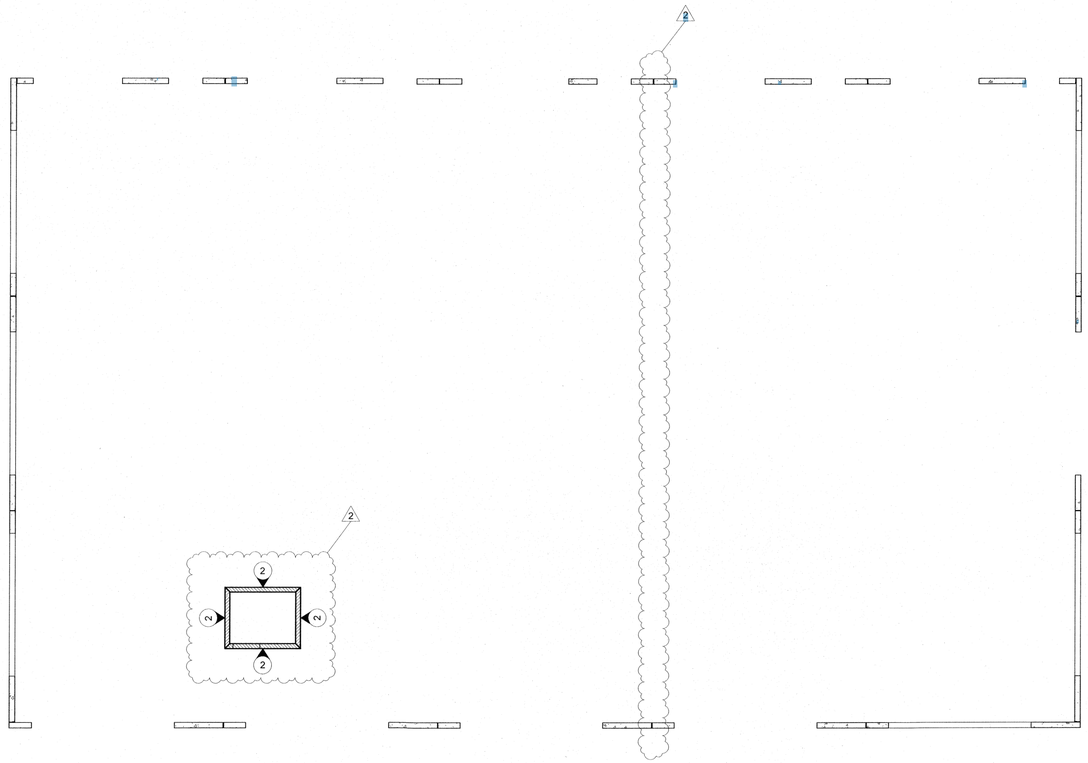
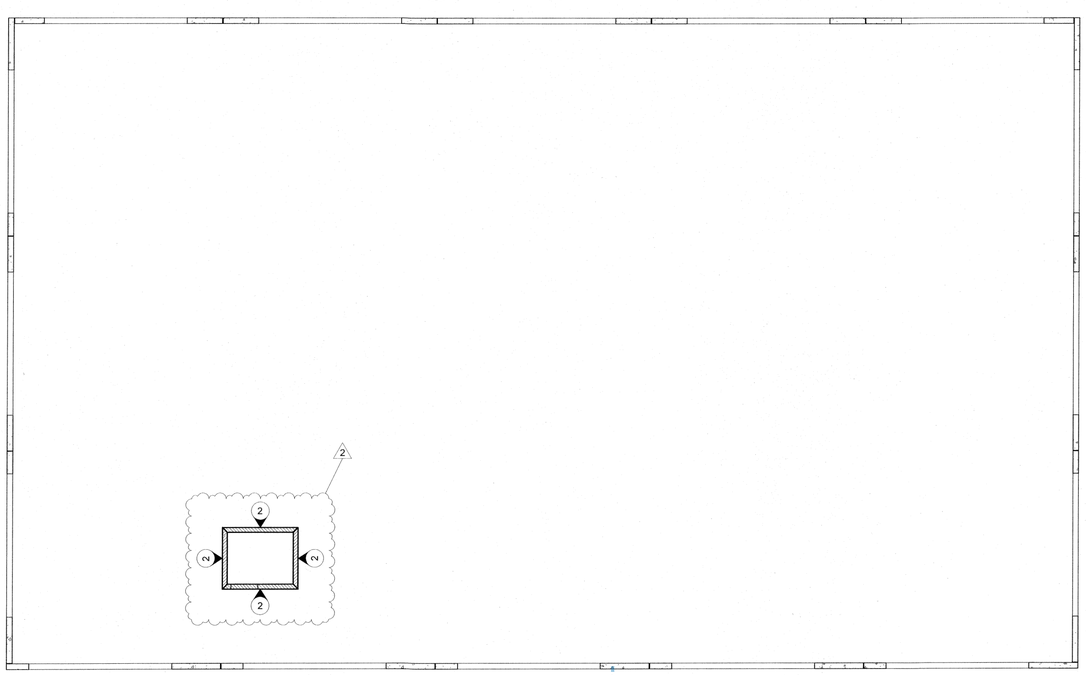


1 1st Floor Shear Wall Plan
1/8" = 1'-0"



2 2nd Floor Shear Wall Plan
1/8" = 1'-0"

LATERAL NAILING SCHEDULE

NOTE	WALL SHEATHING	NAILING			STUDS AT ABUTTING PANEL EDGES	EDGE BLOCKING
		NAILS	EDGE	FIELD		
0	1/2" PLYWOOD OR 7/16" OSB	8d	6"o.c.	12"o.c.	2x	None
1			6"o.c.		2x	2x (FLAT)
2			4"o.c.		(2) 2x	2x (FLAT)
3			3"o.c.		(2) 2x	2x (FLAT)
4			2"o.c., STAGGERED		(2) 2x	2x (FLAT)
5	1/2" PLYWOOD OR 7/16" OSB BOTH SIDES OF WALL		6"o.c.		(2) 2x	4x
6			4"o.c.		4x	4x
7			3"o.c.		4x	4x
8			2"o.c., STAGGERED		4x	4x

SUB NOTES:
A: N/A
B: N/A
C: N/A
D: N/A

LATERAL NAILING SYMBOL

GENERAL NOTES:
- STUDS @ 16"o.c. (TYP., U.N.O.)
- 8d NAILS: 0.131" x 2 1/2" (ALTERNATIVE: GALVANIZED 0.113" x 2 1/2", 1 3/8" (MIN.) PENETRATION
- 3" x 3" x .229" WASHERS
- 1/2" ANCHOR BOLTS W/ 7" MIN. EMBEDMENT, 72"o.c. MIN. (TYP., U.N.O.)
- (2) 2x @ PANEL EDGES NAILED TOGETHER W/ (2) 16d @ 6"o.c.

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

REGISTERED PROFESSIONAL ENGINEER
86970PE
OREGON
DECEMBER 12, 2012
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EXPIRES 12/31/2021

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Tokatly Concrete Tilt-Up
Structural Documents

Beaverton, OR

Shear Wall Plans

REV. #	DATE	REVISION	DWN	CHK'D
2	12/11/2020	Plan Review 2	CDB	PKD

DESIGNED BY: Designer
DRAWN BY: Author
CHK'D BY: Checker
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S104

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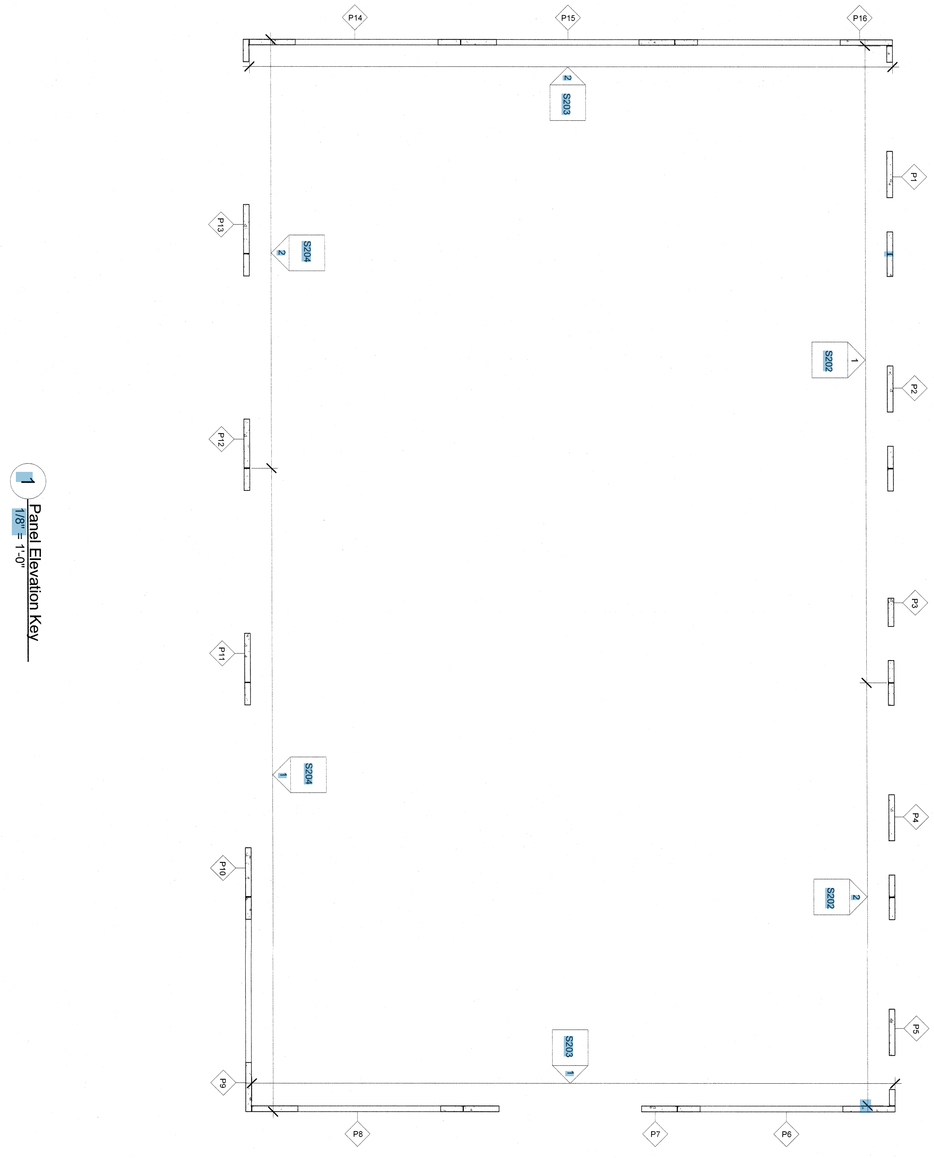

1 Panel Elevation Key
1/8" = 1'-0"

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY: BBH
12/18/2020

S201

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

Panel Elevations: Key

REV. #	DATE	REVISION	DWN	CHKD

Tokatly Concrete Tilt-Up Structural Documents

Beaverton, OR

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REGISTERED PROFESSIONAL ENGINEER
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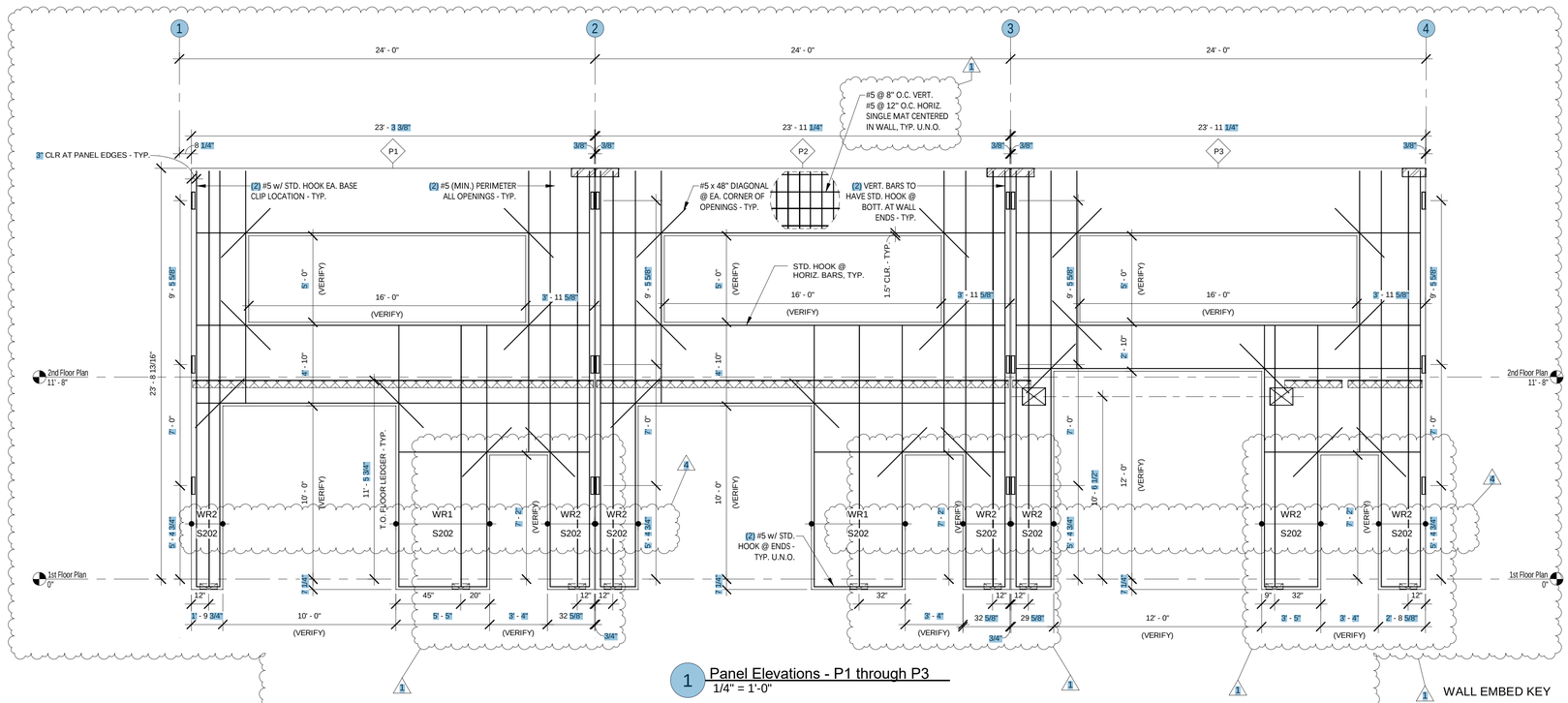
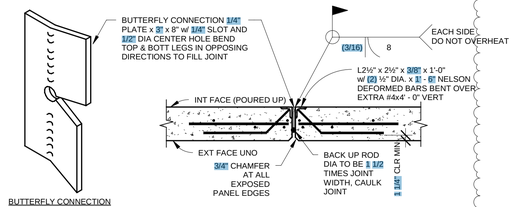
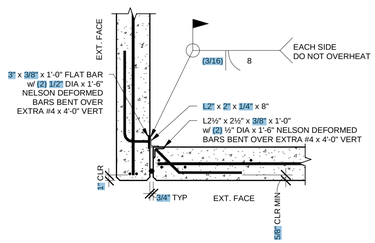
PETER K. KELLY DESIGNER
EXPIRES 12/31/2021



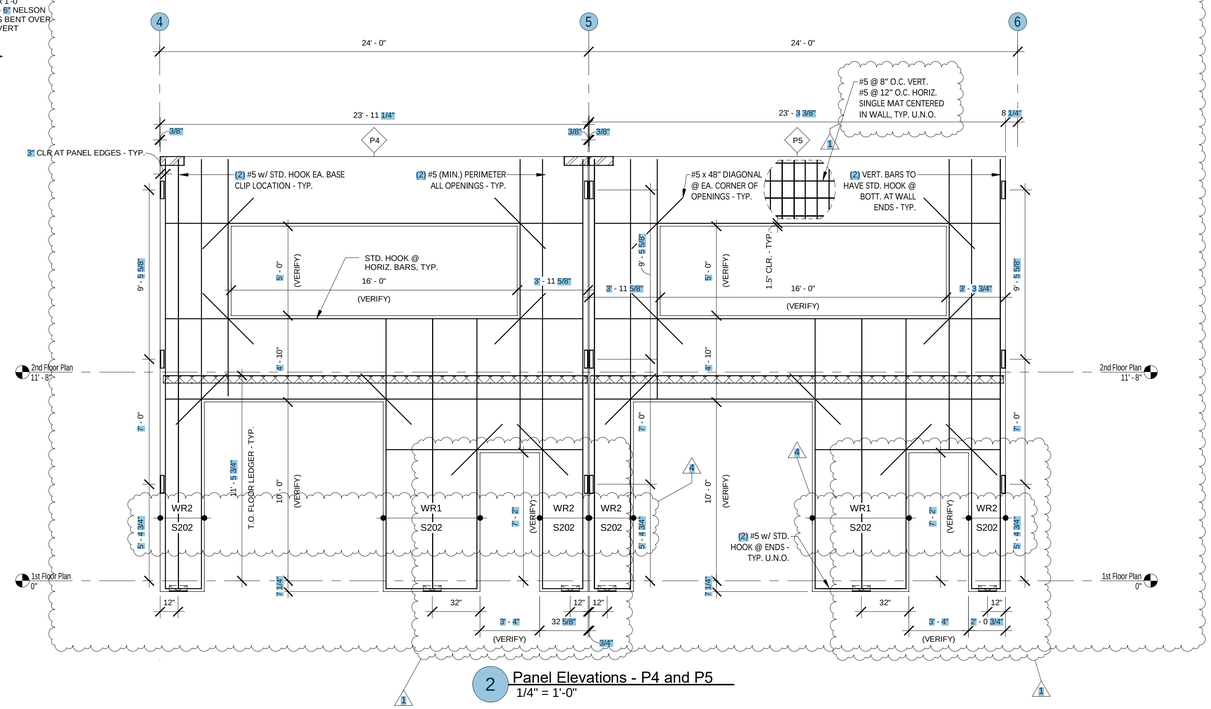
1 Panel Elevations - P1 through P3
1/4" = 1'-0"



3 Panel Connection (TYP)
N.T.S.



4 Panel Corner Connection (TYP)
N.T.S.



2 Panel Elevations - P4 and P5
1/4" = 1'-0"

1 WALL EMBED KEY

= WALL CONNECTION EMBED ANGLE

= WALL CONNECTION FLAT BAR

= FLOOR OR ROOF GIRDER / BEAM HANGER EMBED PLATES

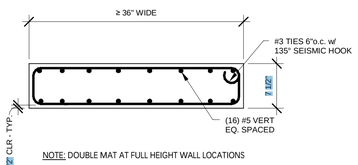
= FLOOR BEAM HANGER EMBED PL.

= WALL BASE CONNECTION ANGLE

= ROOF ANGLE EMBED PLATE

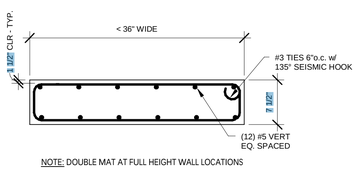
= FLOOR ANGLE EMBED PLATE

= NELSON STUD EMBEDDED ANGLE LEDGER



NOTE: DOUBLE MAT AT FULL HEIGHT WALL LOCATIONS

5 Wall Reinforcement - WR1
N.T.S.



NOTE: DOUBLE MAT AT FULL HEIGHT WALL LOCATIONS

6 Wall Reinforcement - WR2
N.T.S.

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86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 12, 2012
PETER KELLY DEGNER
EXPIRES 12/31/2021

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Tokatly Concrete Tilt-Up
Structural Documents

Beaverton, OR

Panel Elevations - North Wall

REV. #	DATE	REVISION	DWN	CHKD
	9/10/2020	Plan Review 1	CDB	PKD
1	8/13/21	Wall Reinforcements	CDB	PKD
4				

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S202

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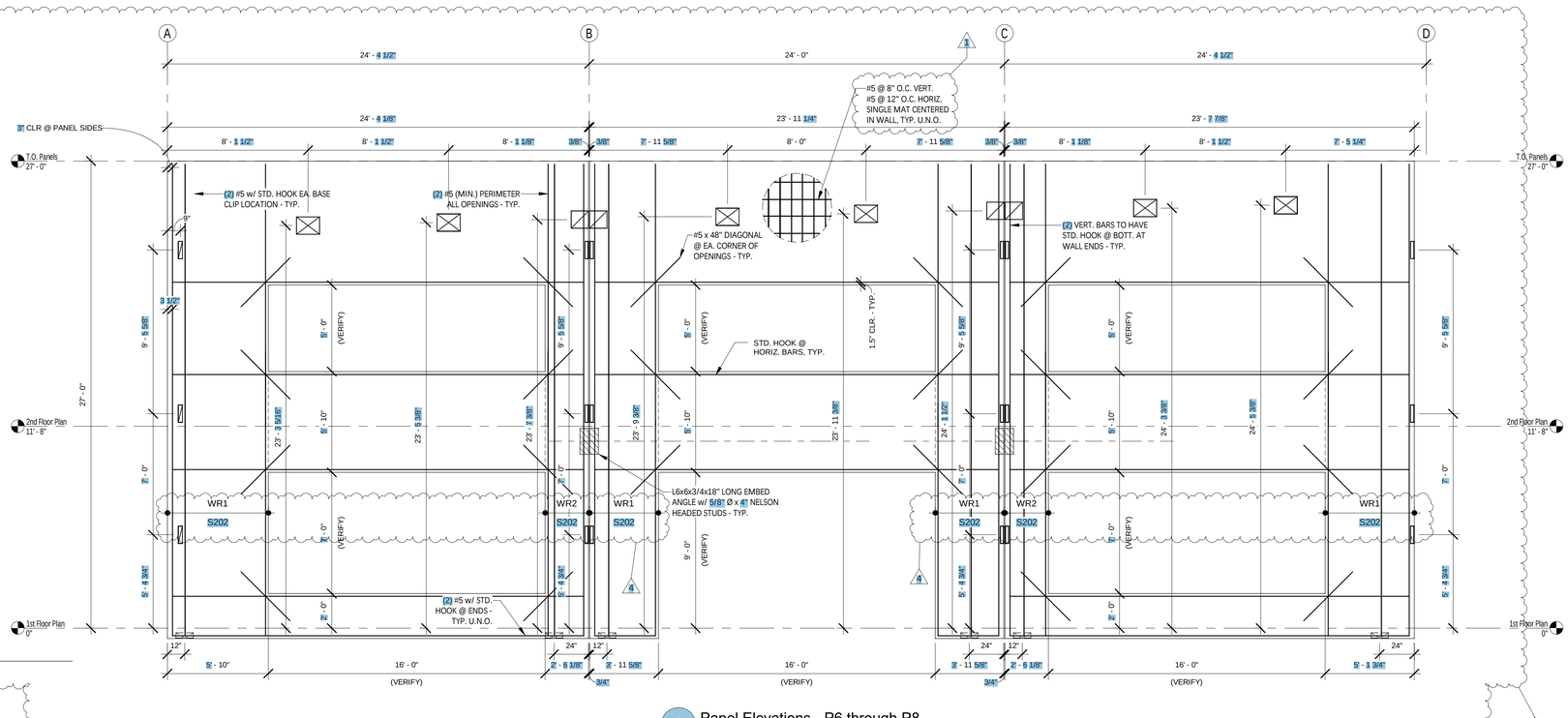
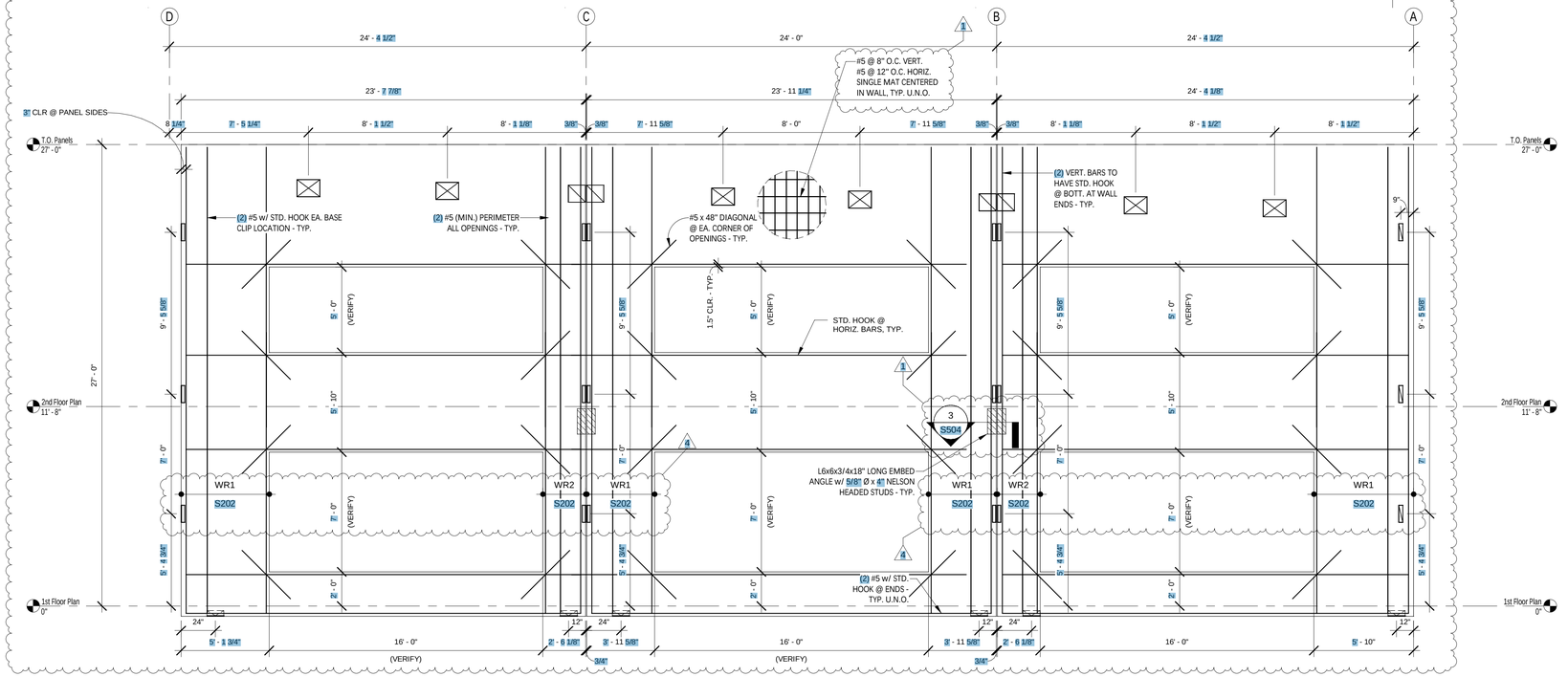


1 Panel Elevations - P6 through P8
1/4" = 1'-0"



2 Panel Elevations - P14 through P16
1/4" = 1'-0"

WALL EMBED KEY

- = WALL CONNECTION EMBED ANGLE
- = WALL CONNECTION FLAT BAR
- = FLOOR OR ROOF GIRDER / BEAM HANGER EMBED PLATES
- = FLOOR BEAM HANGER EMBED PL.
- = WALL BASE CONNECTION ANGLE
- = ROOF ANGLE EMBED PLATE
- = FLOOR ANGLE EMBED PLATE
- = NELSON STUD EMBEDDED ANGLE LEDGER

REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
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DECEMBER 31, 2020
PETER KELLY DEGNER
EXPIRES 12/31/2021

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Tokatly Concrete Tilt-Up
Structural Documents

Beaverton, OR

Panel Elevations - End Wall Panels

REV. #	DATE	REVISION	DWN	CHKD
1	9/10/2020	Plan Review 1	CDB	PKD
2	8/13/21	Wall Reinforcements	CDB	PKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S203

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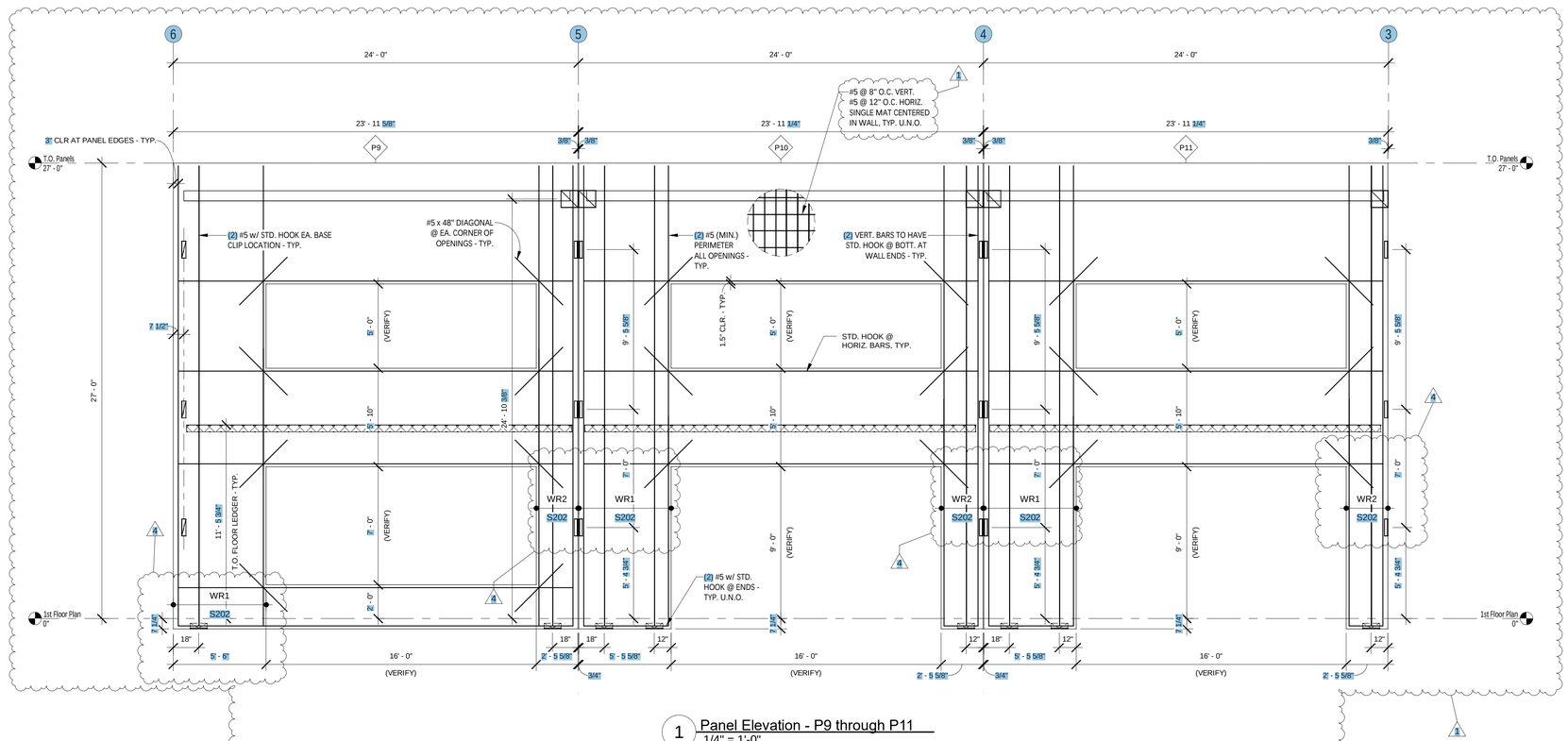
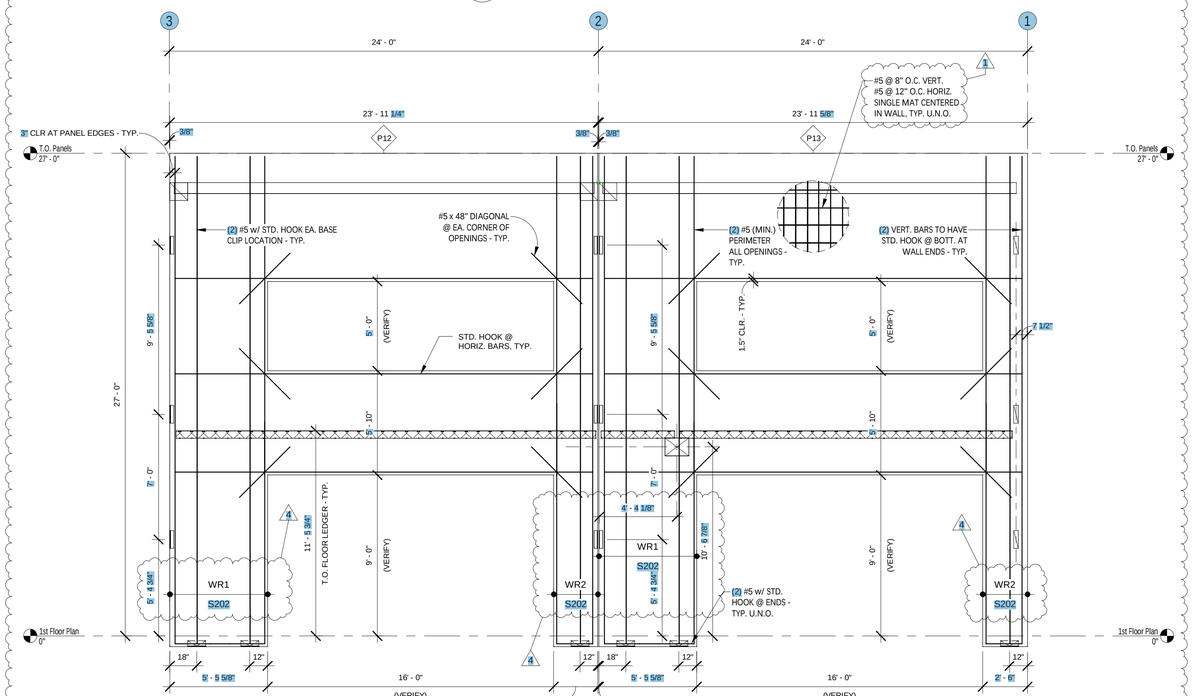


1 Panel Elevation - P9 through P11
1/4" = 1'-0"



2 Panel Elevation - P12 through P13
1/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
86970PE
DIGITALLY SIGNED
OREGON
DECEMBER 31, 2013
PETER KELLY DEGNER
EXPIRES 12/31/2021

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Tokatly Concrete Tilt-Up
Structural Documents

Beaverton, OR

Panel Elevations - South Wall

REV. #	DATE	REVISION	DWN	CHK'D
1	9/10/2020	Plan Review 1	CDB	PKD
2	8/13/21	Wall Reinforements	CDB	PKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S204

Drawing File:P:\2020- Jobs\003 Tokatly Project Arbor South\drawings\20-003 rev-4 v08.13.21.rvt
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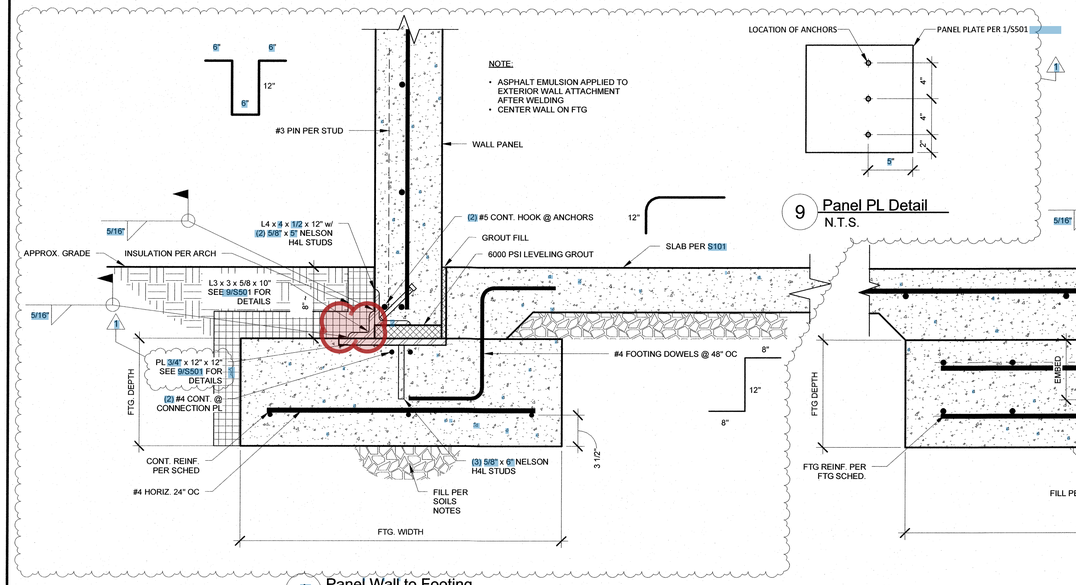
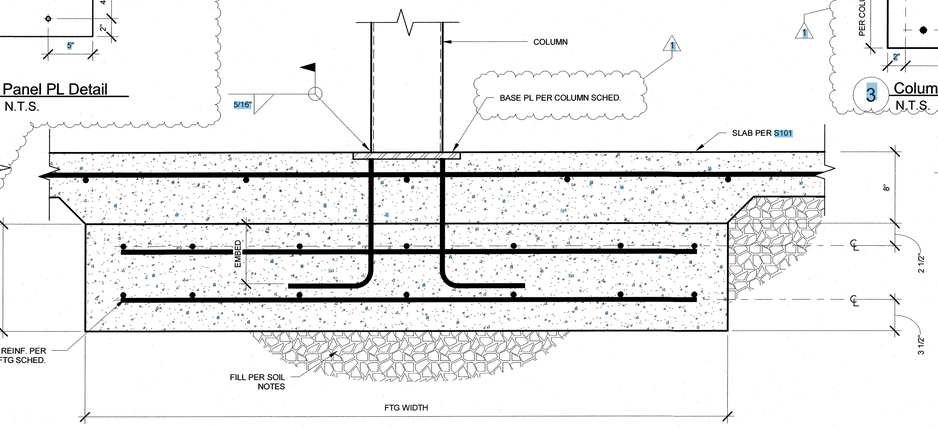
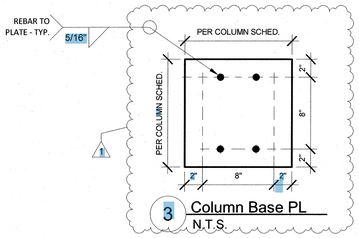


1 Panel Wall to Footing
N.T.S.

9 Panel PL Detail
N.T.S.



2 Column Footing
N.T.S.



3 Column Base PL
N.T.S.

COB Revision/Tracking #:
REV 20-638
T X

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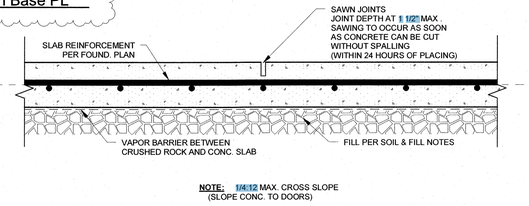
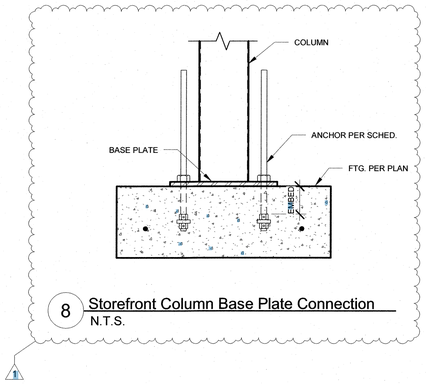
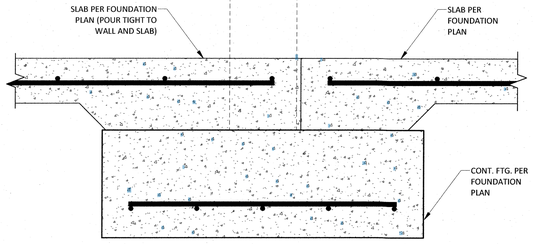
12/17/2020
CITY OF BEAVERTON
BUILDING DIVISION



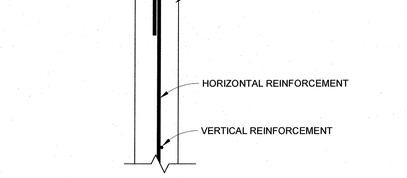
4 Typ Slab Detail
N.T.S.



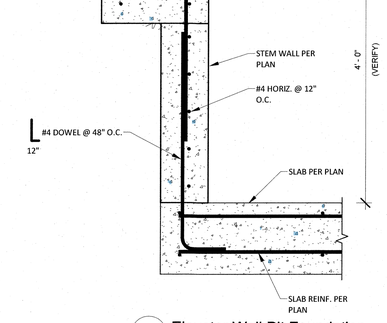
8 Storefront Column Base Plate Connection
N.T.S.



5 Slab Detail @ Storefront Locations
N.T.S.



6 Stem Wall Corner Reinf.
N.T.S.



7 Elevator Wall Pit Foundation
N.T.S.

REGISTERED PROFESSIONAL ENGINEER
86970PE
OREGON
DECEMBER 12, 2014
DEREK KELLY DEGNER
EXPIRES 12/31/2021

PIONEER ENGINEERING LLC
1717 CENTENNIAL BLVD STE 9
SPRINGFIELD, OR 97477
PHONE: 541-746-5841 | FAX: 541-393-2651
pioneerengr.com

Tokatly Concrete Tilt-Up Structural Documents

Beaverton, OR

Foundation / Framing Details

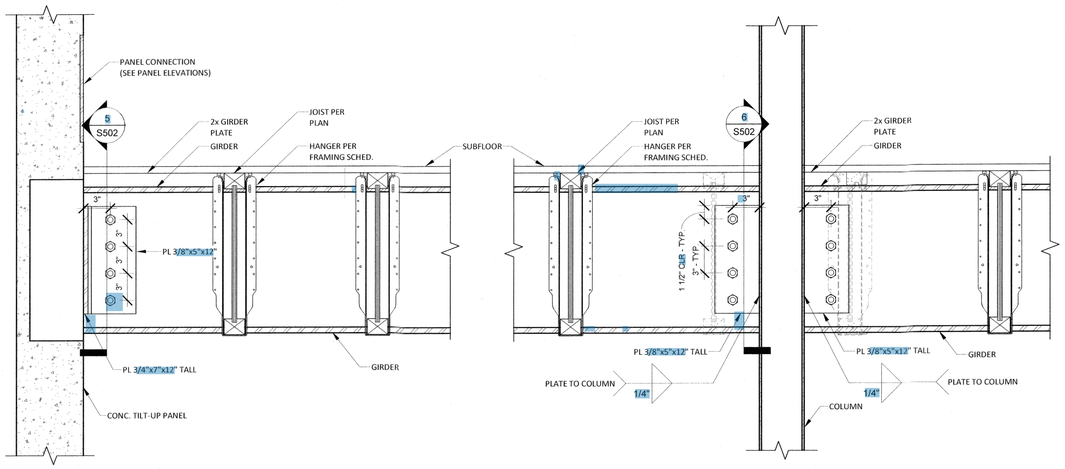
REV. #	DATE	REVISION
1	9/10/2020	Plan Review 1

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

DWN CDB
CHKD PKD

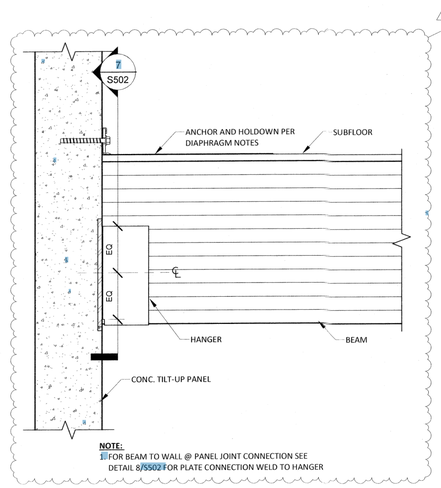
CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

S501



1 Floor Girder to Wall
N.T.S.

2 Floor Girder to Column
N.T.S.



3 Floor Beam to Wall
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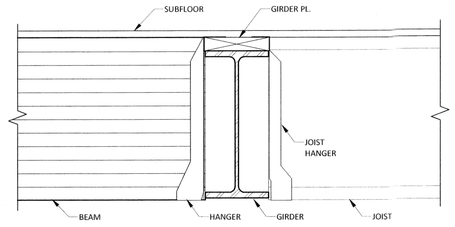

4 Floor Beam to Girder
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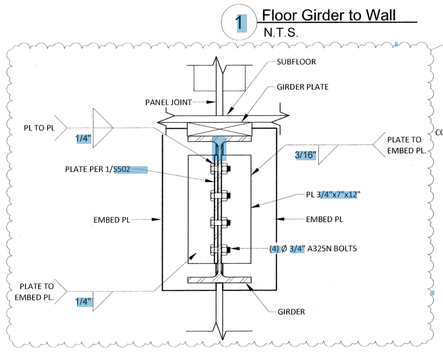

5 Floor Girder to Wall - Front View
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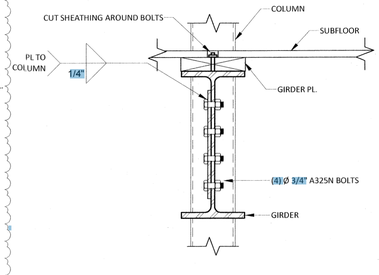
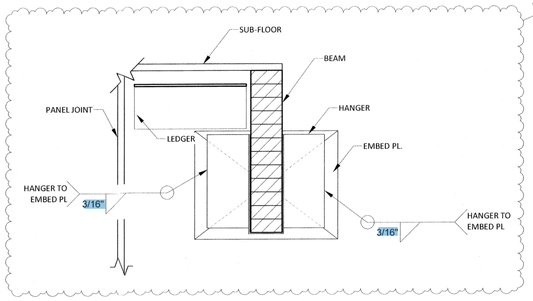


6 Floor Girder to Column - Front View
N.T.S.



7 Floor Beam Hanger to Wall - Front View
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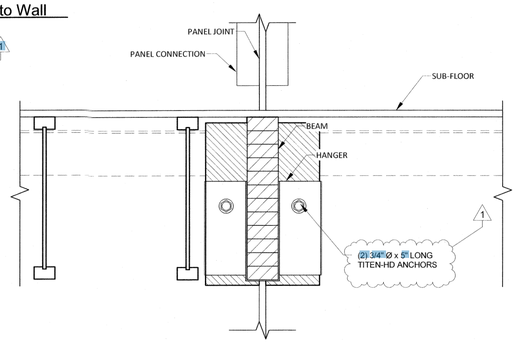
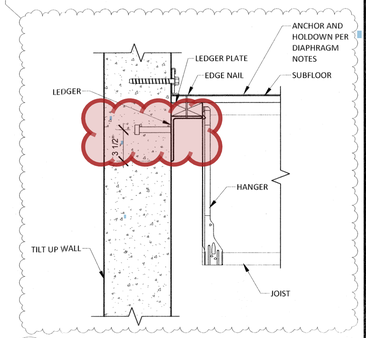


8 Floor Beam Hanger to Wall @ Panel Joint - Front View
N.T.S.



15 Joist to Ledger Plate to Ledger to Wall
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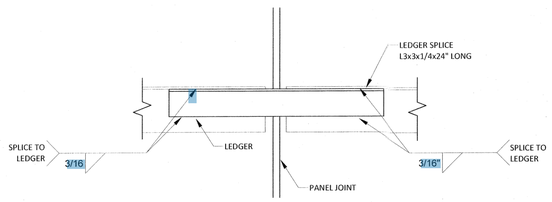

14 Ledger Splice Detail - TYP.
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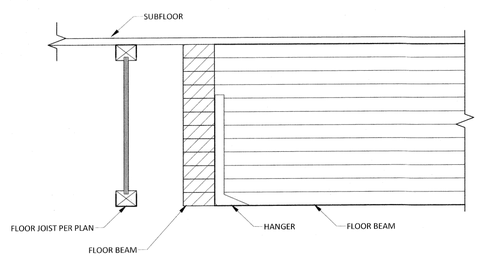
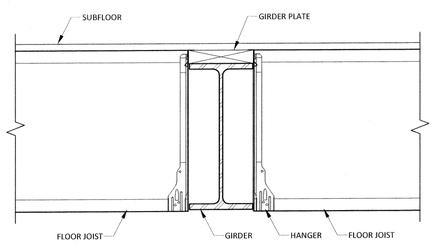


9 Floor Beam to Beam
N.T.S.



10 Floor Joist to Girder
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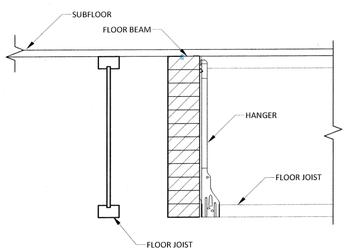
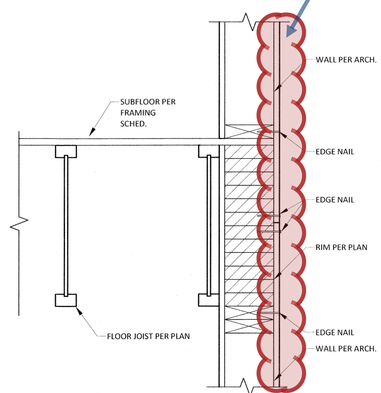
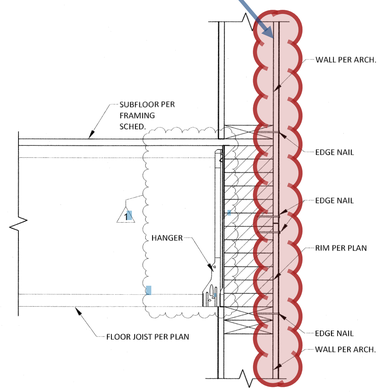


12 Floor Joist to Beam
N.T.S.

SHEETING DETAIL (S104 #2)



11 Floor Framing at Elevator - Parallel
N.T.S.



13 Floor Framing at Elevator - Perpendicular
N.T.S.

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

REGISTERED PROFESSIONAL ENGINEER
86970PE
OREGON
DECEMBER 12, 2017
PETER KELLY DEGNER
EXPIRES 12/31/2021

PIONEER ENGINEERING LLC
1717 CENTENNIAL BLVD STE 9
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Tokatly Concrete Tilt-Up
Structural Documents

Beaverton, OR

Floor Framing Details

REV. #	DATE	REVISION
1	9/10/2020	Plan Review 1

DWN CDB CHK'D PKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S502

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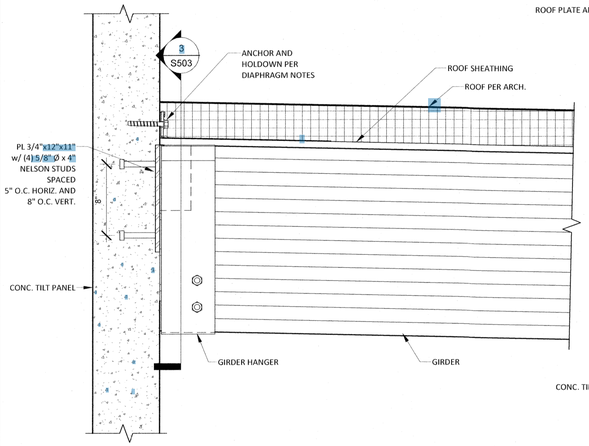

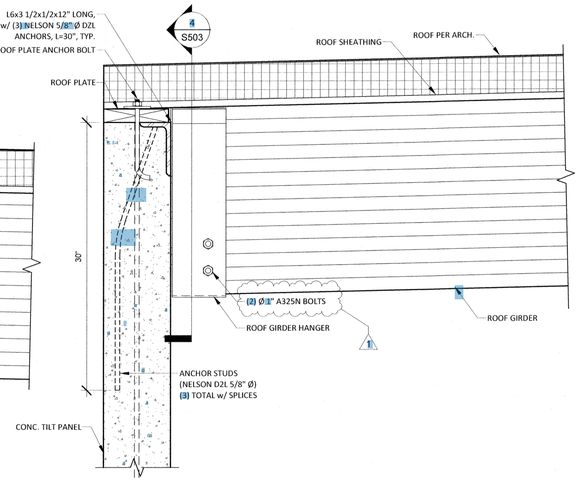

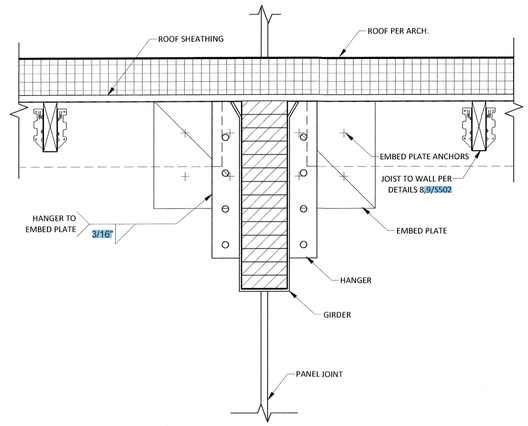

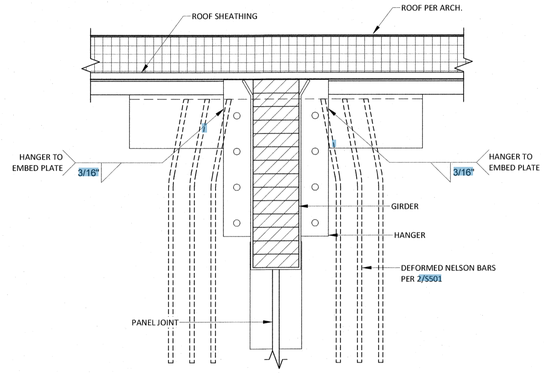

1 Roof Girder to Parapet Wall
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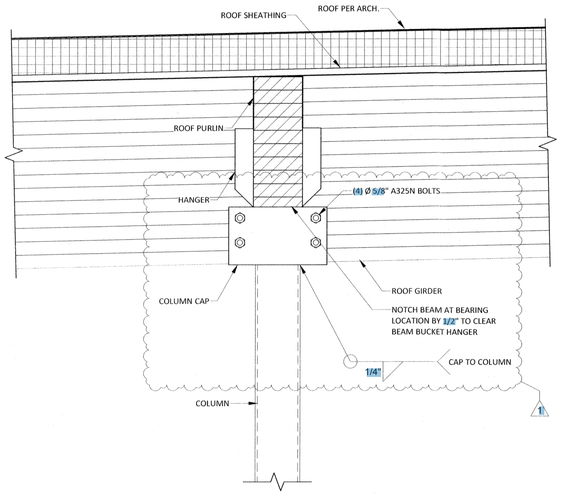

2 Roof Girder to Lower Panel Side
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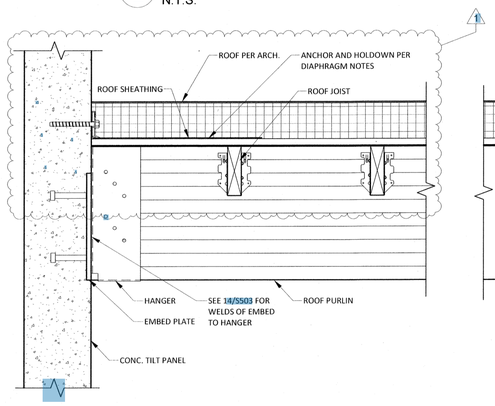
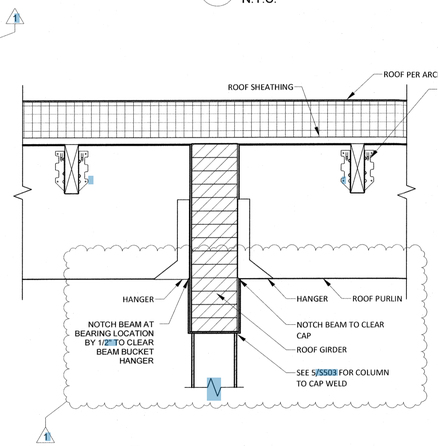
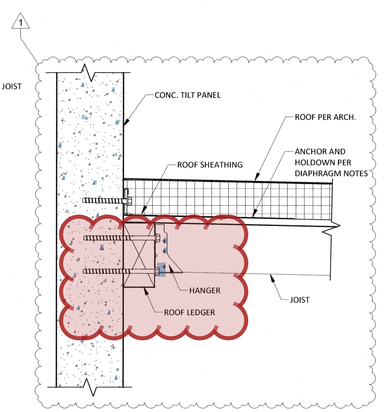


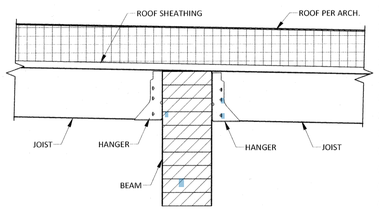
3 Roof Girder to Wall - Front View
N.T.S.



4 Roof Girder to Low Wall - Front View
N.T.S.



5 Roof Girder to Column
N.T.S.



6 Roof Purlin to Wall
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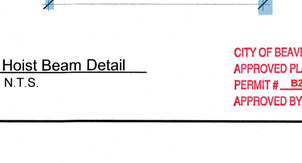

15 Hoist Beam Detail
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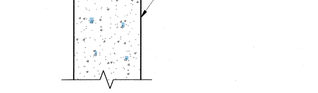
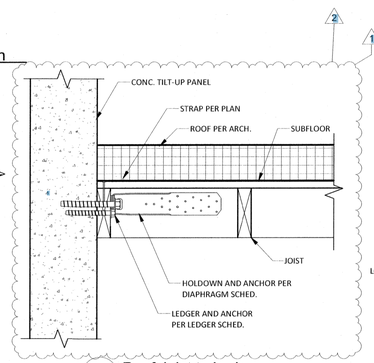
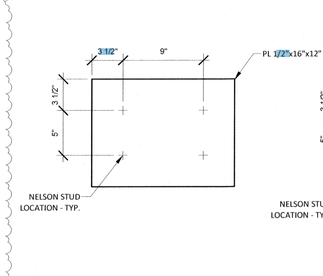


9 Roof Joist to Lower Panel Side
N.T.S.

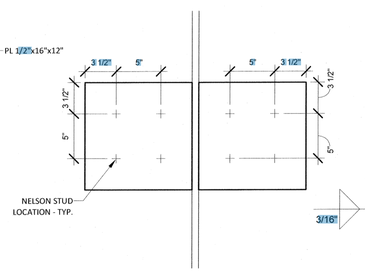
10 Roof Joist to Purlin
N.T.S.



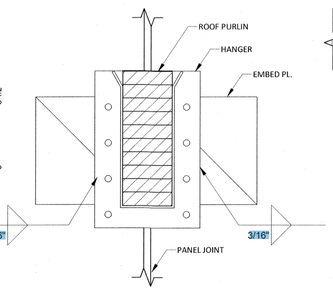
11 Roof Joist to Ledger
N.T.S.



12 Embed PL - TYP.
N.T.S.



13 Embed Plates @ Panel Joint - Front View
N.T.S.



14 Hanger to Embed PL - TYP.
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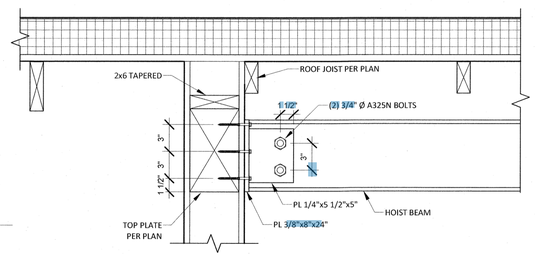

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

REGISTERED PROFESSIONAL ENGINEER
86970PE
Peter Degner
OREGON
DECEMBER 12, 2005
PETER KELLY DEGNER
EXPIRES 12/31/2021

PIONEER ENGINEERING LLC
1717 CENTENNIAL BLVD STE 9
SPRINGFIELD, OR 97477
PHONE: 541-746-5841 | FAX: 541-383-2651
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Tokatly Concrete Tilt-Up Structural Documents

Beaverton, OR

Roof Framing Details

REV. #	DATE	REVISION	DWN	CHK'D
1	9/01/2020	Plan Review 1	CDB	PKD
2	12/17/2020	Plan Review 2	CDB	PKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S503

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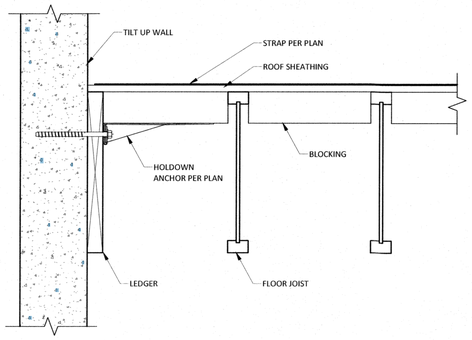
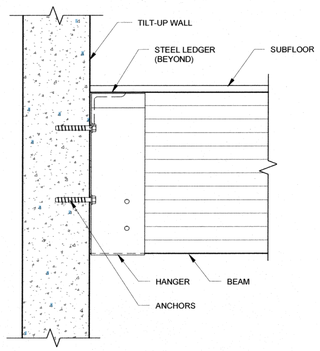


1 Blocking and Anchor Tieing - Floor to Wall
N.T.S.



2 Joist to Ledger Plate to Ledger to Wall1
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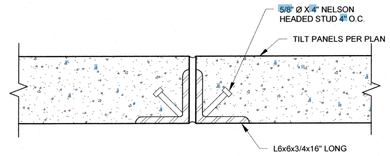

3 Embed Plates Detail
N.T.S.

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY BBH
12/18/2020

REGISTERED PROFESSIONAL ENGINEER
86970PE
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PIONEER ENGINEERING LLC
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SPRINGFIELD, OR 97477
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Tokatly Concrete Tilt-Up
Structural Documents

Beaverton, OR

Additional Structural Details

REV. #	DATE	REVISION	DWN	CHKD

DESIGNED BY: DKC
DRAWN BY: CDB
CHK'D BY: PKD
SCALE: AS NOTED
DATE: 03/31/20
W.O. NUMBER: 20-003

S504

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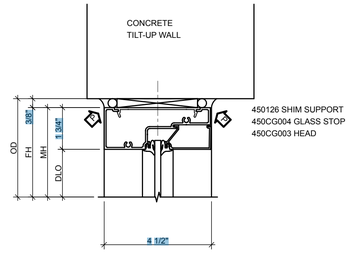
COB Revision/Tracking #:
REV 21-020
T X

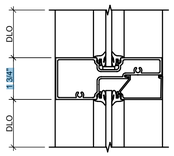
RECEIVED
01/28/2021
CITY OF BEAVERTON
BUILDING DIVISION

DETAIL 1
HEAD



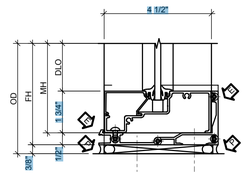
450126 SHIM SUPPORT
450CG004 GLASS STOP
450CG003 HEAD

DETAIL 2
HORIZONTAL



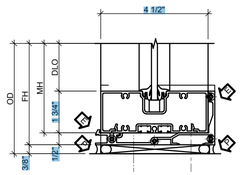
450CG004 GLASS STOP
450CG011 TUBE HORIZONTAL

DETAIL 3
SILL WITH
SEALANT OPTION



450CG014 SILL
450CG004 GLASS STOP
450VG037 HP SILL FLASHING
451VG316 END DAM
128407 10 x 7/16" TYPE I CRPHTFS "B"
028808 #8 x 1/2" PHTF "AB"

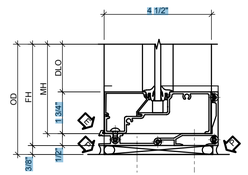
DETAIL 3A
SILL WITH SILL FILLER CLIP,
SEALANT OPTION



450CG001 MULLION/JAMB/SILL
450VG037 HP SILL FLASHING
451VG316 END DAM
451CG365 SILL FILLER CLIP
028808 #8 x 1/2" PHTF "AB"

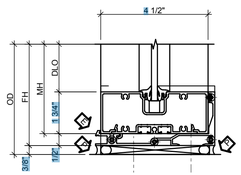
NOTE:
FOR FRAME HEIGHTS < 6'-0" TALL
ADD 1/4" TO HEAD SHIM SPACE WIDTH

DETAIL 3B
SILL WITH
SEALANT & GASKET
OPTION



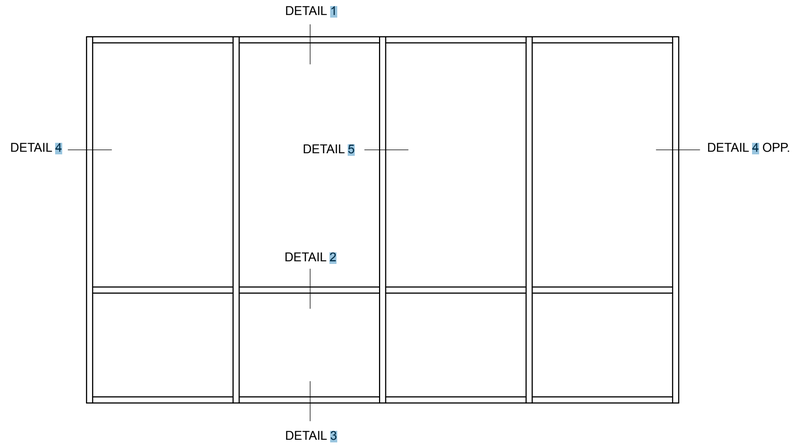
450CG014 SILL
450CG004 GLASS STOP
450VG037 HP SILL FLASHING
451VG316 END DAM
028808 #8 x 1/2" PHTF "AB"
127043 WEATHERING

DETAIL 3C
SILL WITH SILL FILLER CLIP,
SEALANT & GASKET
OPTION



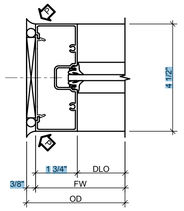
450CG001 MULLION/JAMB/SILL
450VG037 HP SILL FLASHING
451VG316 END DAM
451CG365 SILL FILLER CLIP
028808 #8 x 1/2" PHTF "AB"
127043 WEATHERING

NOTE:
FOR FRAME HEIGHTS < 6'-0" TALL
ADD 1/4" TO HEAD SHIM SPACE WIDTH



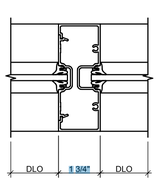
TYPICAL ELEVATION
ELEVATION SCALE: 1/8" = 1'-0"

450126 SHIM SUPPORT
450CG001 MULLION / JAMB / SILL



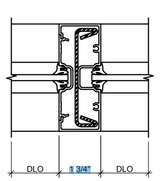
DETAIL 4
JAMB

450CG002 POCKET FILLER
450CG001 MULLION / JAMB / SILL



DETAIL 5
VERTICAL MULLION

450110 STEEL REINFORCING
450CG001 MULLION / JAMB / SILL
450CG002 POCKET FILLER



DETAIL 5A
VERTICAL MULLION
WITH STEEL REINFORCING

NOTE:
CONSULT APPLICATION
ENGINEERING FOR PROPER
STEEL SIZE & ATTACHMENT PER
JOB REQUIREMENTS.

STEEL BAR CENTERED IN
MULLION
STEEL LENGTH = MULLION
HEIGHT - 12"

TRIFAB™ VG 450 FRAMING SYSTEM 1-3/4" SIGHTLINE

CENTER SET - SCREW SPLINE ASSEMBLY INSIDE GLAZED

KAWNEER
AN ARCONIC COMPANY

ENGINEERING CHANGE: 97910-182 (APRIL 2020)
FILE NAME: KCDC020A SHEET 03 OF 11.DWG

Arbor South ARCHITECTURE

380 Lincoln Street
Eugene, Oregon 9701

Phone: 541-344-3332
Fax: 541-344-1597

www.arborsouth.com

PROJECT

Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
APPROVED BY RPB
04/04/2021

Beaverton, OR

INDEX

Storefront Details

JOB NO
2019

DATE
15 October 2020

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

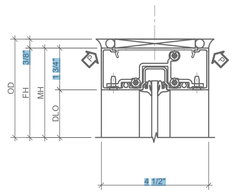
REGISTERED ARCHITECT
WILLIAM A. RANDALL
EUGENE, OREGON
STATE OF OREGON

MEMBERS OF THE
AMERICAN INSTITUTE
OF ARCHITECTS

SHEET NO

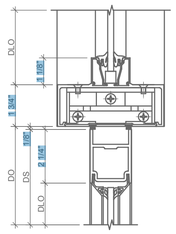
SF-1

ENTRANCE DETAIL 1
TRANSOM HEAD

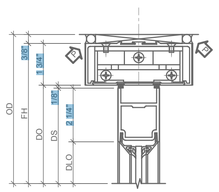


450CG001 MULLION/JAMB/SILL
450126 SHIM SUPPORT
450CG524 SHEAR BLOCK PACKAGE

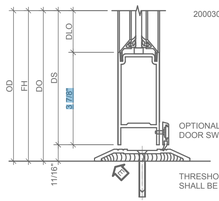
ENTRANCE DETAIL 2
TRANSOM BAR
DOUBLE ACTING
CONCEALED CLOSER



ENTRANCE DETAIL 2A
HEADER
DOUBLE ACTING
CONCEALED CLOSER



ENTRANCE DETAIL 3
STD. BOTTOM RAIL
DOUBLE ACTING

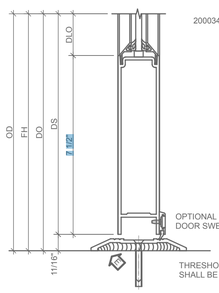


200030 STANDARD 190 BOTTOM DOOR RAIL

OPTIONAL BOTTOM
DOOR SWEEP

THRESHOLD MAX HT
SHALL BE 1/2" TYP

ENTRANCE DETAIL 3A
OPTIONAL 7-1/2"
BOTTOM RAIL
DOUBLE ACTING

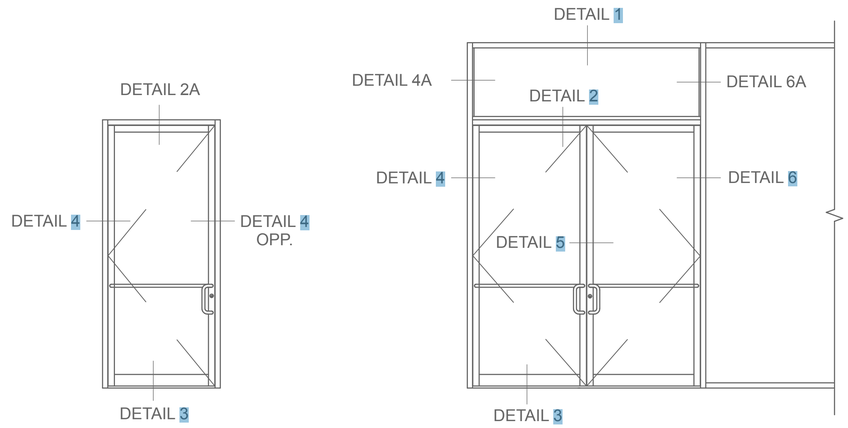


200034 7-1/2" BOTTOM RAIL

OPTIONAL BOTTOM
DOOR SWEEP

THRESHOLD MAX HT
SHALL BE 1/2" TYP

NOTE:
ADDITIONAL BOTTOM RAIL
HEIGHTS AND OTHER DOOR
OPTIONS AVAILABLE.



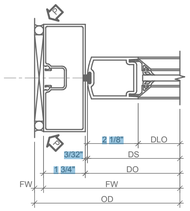
TYPICAL ELEVATION

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

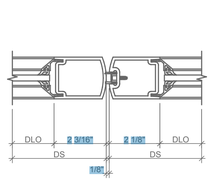
Trifab VG 450 Entrance Framing Shown
(Note: Other Kawneer Framing can be used)

450019 D/A DOOR JAMB

200001 190 LOCK/PIVOT STILE
027205 PILE WEATHERING



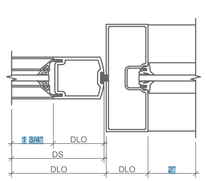
ENTRANCE DETAIL 4
DOOR JAMB
DOUBLE ACTING



ENTRANCE DETAIL 5
MEETING STILE

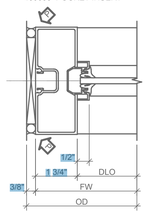
450019 D/A DOOR JAMB

200001 190 LOCK/PIVOT STILE
027205 PILE WEATHERING



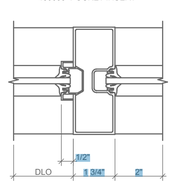
ENTRANCE DETAIL 6
DOOR JAMB
DOUBLE ACTING
WITH SIDELITE

450019 D/A DOOR JAMB
450033 POCKET INSERT



ENTRANCE DETAIL 4A
DOOR JAMB
AT TRANSOM AREA

450019 D/A DOOR JAMB
450033 POCKET INSERT



ENTRANCE DETAIL 6A
DOOR JAMB AT
TRANSOM AREA

TRIFAB™ VG 450 FRAMING SYSTEM 1-3/4" SIGHTLINE
CENTER SET - ENTRANCE DETAILS
CENTER HUNG WITH CONCEALED OVERHEAD CLOSER

NOTE:
KAWNEER "190" NARROW STILE DOOR SHOWN ON THESE DETAILS.
OTHER KAWNEER DOORS MAY BE USED.

KAWNEER
AN ARCONIC COMPANY

ENGINEERING CHANGE: 97910-171 (JANUARY 2020)
FILE NAME: KCDC024A SHEET 01 OF 06.DWG

Arbor South Architecture

380 Lincoln Street
Eugene, Oregon 9701

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Fax: 541-344-1597

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PROJECT

Portal Beaverton
597 SW 150th Ave
Beaverton, Oregon

CITY OF BEAVERTON
APPROVED PLANS
PERMIT # B2020-2004
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04/04/2021

Beaverton, OR

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Storefront Details

JOB NO
2019

DATE
15 October 2020

DRAWN BY
Bill

CHECKED BY
Bill

REVISION

REGISTERED ARCHITECT
WILLIAM A. RANDALL
EUGENE, OREGON
STATE OF OREGON

MEMBERS OF THE
AMERICAN INSTITUTE
OF ARCHITECTS

SHEET NO

SF-2

ENERGY COMPLIANCE NOTES

1. SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH A MINIMUM OF R-6 INSULATION WHEN LOCATED IN UNCONDITIONED SPACES AND A MINIMUM OF R-8 INSULATION WHEN LOCATED OUTSIDE THE BUILDING INSULATION ENVELOPE. OUTSIDE AIR, SUPPLY AIR, AND RETURN AIR DUCTWORK CONVEYING AIR LESS THAN 15 DEG. F. WARMER OR COOLER THAN THE SURROUNDING AIR NEED NOT BE INSULATED. (IECC C403.11.1, ASHRAE STD. 90.1 6.4.4.1.2).

2. WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS SHALL BE CONFIGURED TO PROVIDE A TEMPERATURE RANGE OR DEADBAND OF NOT LESS THAN 5 DEG. F. WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS CAPABLE OF BEING SHUT-OFF OR REDUCED TO A MINIMUM. (IECC C403.4.1.2, ASHRAE STD. 90.1 6.4.3.1).

3. WHERE A ZONE HAS A SEPARATE HEATING AND SEPARATE COOLING THERMOSTATIC CONTROL LOCATED WITHIN THE ZONE, A LIMIT SWITCH, MECHANICAL STOP OR DIRECT DIGITAL CONTROL SYSTEM WITH SOFTWARE PROGRAMMING SHALL BE CONFIGURED TO PREVENT THE HEATING SETPOINT FROM EXCEEDING THE COOLING SETPOINT AND TO MAINTAIN A DEADBAND OF NOT LESS THAN 5 DEG. F. (IECC C403.4.1.3, ASHRAE STD. 90.1 6.4.3.2).

4. AUTOMATIC START CONTROLS SHALL BE PROVIDED FOR EACH HVAC SYSTEM. THE CONTROLS SHALL BE CONFIGURED TO AUTOMATICALLY ADJUST THE THE DAILY START TIME OF THE HVAC SYSTEM IN ORDER TO BRING EACH SPACE TO THE DESIRED OCCUPIED TEMPERATURE IMMEDIATELY PRIOR TO SCHEDULED OCCUPANCY. (IECC C403.4.2.3, ASHRAE STD. 6.4.3.3.3).

5. OFF HOURS CONTROLS: EACH ZONE SHALL BE PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OF PROGRAMMABLE CONTROL SYSTEM. (IECC C403.4.2, ASHRAE STD. 6.4.3.3).

6. SYSTEMS ADJUSTING AND BALANCING: HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING STANDARDS. AIR AND WATER FLOW RATES SHALL BE MEASURED AND ADJUSTED TO DELIVER FINAL FLOW RATES WITHIN THE TOLERANCES PROVIDED IN THE PRODUCT SPECIFICATIONS. TEST AND BALANCE ACTIVITIES SHALL INCLUDE AIR SYSTEM AND HYDRONIC SYSTEM BALANCING AS APPLICABLE. (IECC C408.2.2, ASHRAE STD. 6.7.2.3.1).

7. AIR SYSTEMS BALANCING: EACH SUPPLY AIR OUTLET AND ZONE TERMINAL DEVICE SHALL BE EQUIPPED WITH MEANS FOR AIR BALANCING IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 6 OF THE 2018 INTERNATIONAL MECHANICAL CODE (2019 OMSC). (IECC C408.2.2.1, ASHRAE STD. 90.1 6.7.2.3.2).

8. HYDRONIC SYSTEMS BALANCING: INDIVIDUAL HYDRONIC HEATING AND COOLING COILS SHALL BE EQUIPPED WITH MEANS FOR BALANCING AND MEASURING FLOW. HYDRONIC SYSTEMS SHALL BE PROPORTIONATELY BALANCED IN A MANNER TO FIRST MINIMIZE THROTTLING LOSSES, THEN THE PUMP IMPELLER SHALL BE TRIMMED OR PUMP SPEED SHALL BE ADJUSTED TO MEET DESIGN FLOW CONDITIONS. EACH HYDRONIC SYSTEM SHALL HAVE EITHER THE CAPACITY TO MEASURE PRESSURE ACROSS THE PUMP, OR TEST PORTS AT EACH SIDE OF EACH PUMP. (IECC C408.2.2.2, ASHRAE STD. 90.1 6.7.2.3.).

   EXCEPTIONS: THE FOLLOWING EQUIPMENT IS NOT REQUIRED TO BE EQUIPPED WITH A MEANS FOR BALANCING OR MEASURING FLOW:

   1. PUMPS WITH PUMP MOTORS OF 5 HP OR LESS.
   2. WHERE THROTTLING RESULTS IN NOT GREATER THAN 5 PERCENT OF THE NAMEPLATE HORSEPOWER DRAW ABOVE THAT REQUIRED IF THE IMPELLER WERE TRIMMED.

9. DOCUMENTATION REQUIREMENTS: THE CONSTRUCTION DOCUMENTS SHALL SPECIFY THAT THE DOCUMENTS DESCRIBED BELOW BE PROVIDED TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY. (IECC C408.3.2, ASHRAE STD. 90.1 6.7.2).

   A. DRAWINGS: CONSTRUCTION DOCUMENTS SHALL INCLUDE THE LOCATION AND CATALOG (TAG) NUMBER OF EACH PIECE OF EQUIPMENT (IECC C4083.2.1, ASHRAE STD. 90.1 6.7.2.1).

   B. MANUALS: AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED AND INCLUDE THE FOLLOWING (IECC C408.3.2.2, ASHRAE STD. 90.1 6.7.2.2):

      1. CAPACITY OF EQUIPMENT (INPUT AND OUTPUT) AND REQUIRED MAINTENANCE ACTIONS.
      2. HVAC SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS. DESIRED OR FIELD DETERMINED SETPOINTS SHALL BE PERMANENTLY RECORDED ON CONTROL DRAWINGS, AT CONTROL DEVICES, OR FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS.
      3. NAME AND ADDRESS OF NOT LESS THAN ONE SERVICE AGENCY FOR INSTALLED EQUIPMENT.
      4. A COMPLETE WRITTEN NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.
      5. EQUIPMENT CUT SHEETS AND PARTS LIST.
      6. WARRANTY INFORMATION.

   C. REPORT: A REPORT OF TEST RESULTS SHALL BE PROVIDED AND INCLUDE THE FOLLOWING (IECC C408.3.2.2):

      1. RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
      2. DISPOSITION OF DEFICIENCIES FOUND DURING TESTING, INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.

GENERAL NOTES

1. ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2019 OSSC, 2019 OMSC, 2018 INTERNATIONAL ENERGY CONSERVATION CODE (IEEC), CITY & COUNTY CODES, AND OTHER APPLICABLE CODES AND REGULATIONS.
2. COORDINATE ENTIRE INSTALLATION OF THE H.V.A.C. SYSTEM WITH THE WORK OF OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
3. PLATFORMS, CURBS AND FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE PLANS, UNLESS NOTED OTHERWISE.
4. EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
5. CONSTRUCT, ERECT AND TEST DUCTWORK IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS, 2019 OMSC, PROCEDURES DETAILED IN THE ASHRAE HANDBOOK OF FUNDAMENTALS OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION. A COPY OF THE SMACNA STANDARDS SHALL BE KEPT AT THE JOB FOR REFERENCE BY THOSE REVIEWING THE WORK.
6. DUCT SIZES ARE NET INSIDE CLEAR DIMENSIONS (I.E. NOT INCLUDING LINER). DUCT JOINTS SHALL BE SEALED AIR TIGHT. PROVIDE STRAP, TRAPEZE, OR ROD HANGERS.
7. DUCT INSULATION AND LININGS, INCLUDING ADHESIVES WHEN USED, SHALL HAVE A FLAME SPREAD INDEX NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723..
8. DUCTWORK INSULATION SHALL HAVE THERMAL CONDUCTANCE OF 0.24 BTU PER SQ. IN./SQ. FT. PER DEG. F. PER HOUR AT A MEAN TEMPERATURE OF 75 DEG. F. AT 1-1/2 LB./CU. FT. DENSITY. LINER SHALL BE TREATED WITH A FIRE DAMAGE AND MILDEW RESISTANT SURFACE. FIBERGLASS DUCT WRAP BLANKET SHALL HAVE A THERMAL CONDUCTANCE OF 0.27 BTU PER IN./ SQ. FT. /DEG. F. PER HOUR AT A MEAN TEMPERATURE OF 75 DEG. F., AT 0.75 LB./CU. FT. DENSITY, WITH FSK FOIL REINFORCED FIRE-RESISTANT FACING AND A VAPOR BARRIER RATING OF 0.5 PERM.
9. SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS WITH A DESIGN CAPACITY GREATER THAN 2000 CFM IN THE RETURN AIR DUCT OR PLENUM UPSTREAM OF ANY FILTERS, EXHAUST AIR CONNECTIONS, OR DECONTAMINATION EQUIPMENT OR APPLIANCES PER OMSC SECTION 606.
10. LOCATIONS SHOWN ON PLANS FOR THERMOSTATS, SENSORS, AND SWITCHES CONTROLLING HVAC EQUIPMENT ARE SUGGESTED AND ARE TO BE VERIFIED AND COORDINATED WITH ARCHITECTURAL DRAWINGS AND ELECTRICAL DEVICE LAYOUTS.
11. FAN COIL UNITS FOR VRF HEAT PUMP TO BE DETERMINED AT TIME OF TENANT INFILL AND SUBMITTED UNDER SEPERATE PERMIT.

LEGEND

MARK	DESCRIPTION	MARK	DESCRIPTION
UP / DN.	SUPPLY DUCTS		SUPPLY DIFFUSER
UP / DN.	RETURN DUCTS		RETURN GRILLE
UP / DN.	EXHAUST DUCTS		EXHAUST GRILLE
SA	SUPPLY AIR	T	THERMOSTAT
RA	RETURN AIR	S	SENSOR
EA	EXHAUST AIR	C	CONTROLLER
OSA	OUTSIDE AIR	OC	OCCUPANCY SENSOR
CFM	CUBIC FEET PER MIN.	CO2	CARBON DIOXIDE
CEF	CEILING EXHAUST FAN		EXISTING EQUIPMENT
REF	ROOF EXHAUST FAN		POINT OF CONNECTION
RTU	ROOFTOP UNIT	AHU	AIR HANDLING UNIT
MUA	MAKE-UP AIR	FC	FAN COIL
HRV	HEAT RECOVERY UNIT	HP	HEAT PUMP
ERV	ENERGY RECOVERY UNIT	EDH	ELECTRIC DUCT HEATER
O.C.	ON CENTER	FD	FIRE DAMPER
SQ./FT.	SQUARE FOOT	FSD	FIRE/SMOKE DAMPER
CU./FT.	CUBIC FOOT	BDD	BACKDRAFT DAMPER
LBS.	POUNDS	CSD	CEILING SUPPLY DIFFUSER
∅	DIAMETER	SWG	SIDEWALL SUPPLY GRILLE
MVD	MANUAL VOL. DAMPER	SRG	SIDEWALL RETURN GRILLE
G.C.	GENERAL CONTRACTOR	SEG	SIDEWALL EXHAUST GRILLE
FG	FILTER GRILLE	RGC	RETURN GRILLE CEILING
(E)	EXISTING	EGC	EXHAUST GRILLE CEILING
TYP.	TYPICAL	EGC	EXHAUST GRILLE CEILING
EF	EXHAUST FAN	STG	SIDEWALL TRANSFER GRILLE
		CTG	CEILING TRANSFER GRILLE

EXHAUST FAN SCHEDULE

TAG	MANU.	MODEL	LOCATION	AREA SERVED	DRIVE	AIR FLOW(CFM)	ESP.(WC)	RPM	VOLT/PH.	HP	AMPS(FLA)	OPER. WEIGHT	NOTES
CEF-1	GREENHECK	SP-AP0511W	CEILING	BATHROOMS	DIRECT	80	0.25	831	115 / 1	...	0.29	10	[1]

NOTES:
[1] INTERLOCK W/ LIGHT SWITCH WITH TIME DELAY SHUT-OFF.

EQUIPMENT SCHEDULE

TAG	MANU.	MODEL	LOCATION	AREA SERVED	COOLING	HEATING	EER/SEER	COP 47/17	HSPF	AFUE	VOLT/PH.	MCA/MOP/FUSE	NOMINAL CFM	OPER. WEIGHT	NOTES
HP-1	MITSUBISHI	PURY-P312TSNU-A	ROOF	1ST FLOOR	312,000	350,000	10.1/.....	3	.....	.....	208/3	REFER TO MODULES	.....	1614	
HP-1-MODULE-1	MITSUBISHI	PURY-P168TNU-A	ROOF	1ST FLOOR	168,000	188,000	.....	.....	.....	.....	208/3	61/100/60	.....	777	
HP-1 MODULE-2	MITSUBISHI	PURY-P144TNU-A	ROOF	1ST FLOOR	144,000	160,000	.....	.....	.....	.....	208/3	52/80/60	.....	680	
HP-2	MITSUBISHI	PURY-P336TSNU-A	ROOF	2ND FLOOR	336,000	378,000	9.9/.....	3	.....	.....	208/3	REFER TO MODULES	.....	1554	
HP-2-MODULE-1	MITSUBISHI	PURY-P168TNU-A	ROOF	2ND FLOOR	168,000	188,000	.....	.....	.....	.....	208/3	61/100/60	.....	777	
HP-2-MODULE-2	MITSUBISHI	PURY-P168TNU-A	ROOF	2ND FLOOR	168,000	188,000	.....	.....	.....	.....	208/3	61/100/60	.....	777	

NOTES:
[1] VERIFY VOLTAGE AND PHASE BEFORE ORDERING EQUIPMENT

1

SHEET INDEX

Innovative Air, Inc.
5120 Franklin Blvd. Ste. 7
Eugene, OR 97405
Ph. 541-746-1040 Fax 541-746-4099
CCB 161742

PERMIT DRAWINGS

TOKATLY PORTAL

BEAVERTON. OREGON

DESIGNED BY: COS
DRAWN BY: AWM
CHECKED BY: COS

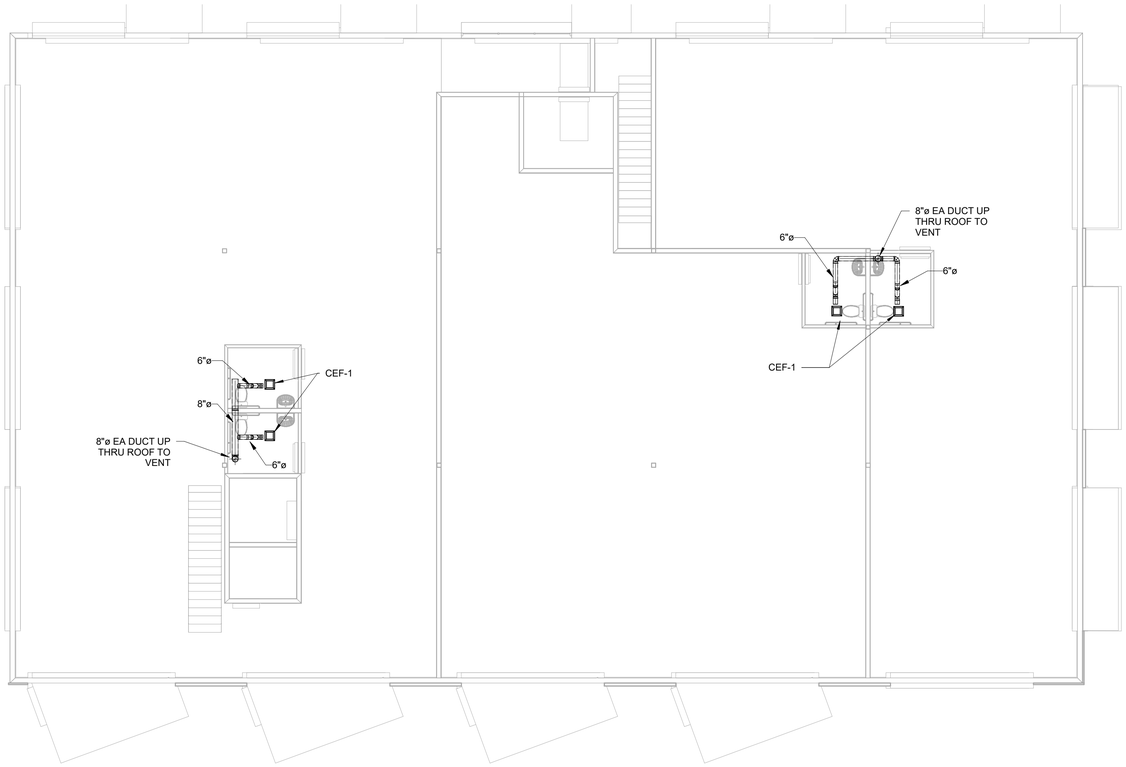
SHEET TITLE:
HVAC LEGEND, SCHEDULES & SHEET INDEX

REVISIONS:

#	DESCRP.	DATE
1	PERMIT SET	10.09.2020
1	EQUIPMENT UPDATE	11.10.2020

ISSUE DATE: 11/10/2020

M001



1 HVAC FIRST FLOOR PLAN
1/8" = 1'-0"

NORTH

Innovative Air, Inc.
5120 Franklin Blvd. Ste. 7
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Ph: 541-762-1040 Fax: 541-762-4099
CCB 161742

PERMIT DRAWINGS

TOKATLY PORTAL

BEAVERTON, OREGON

DESIGNED BY:	COS
DRAWN BY:	AWM
CHECKED BY:	COS

SHEET TITLE:
HVAC FIRST FLOOR PLAN

REVISIONS:

#	DESCRP.	DATE
1	PERMIT SET	10.9.2020

ISSUE DATE: 10/09/2020

M101

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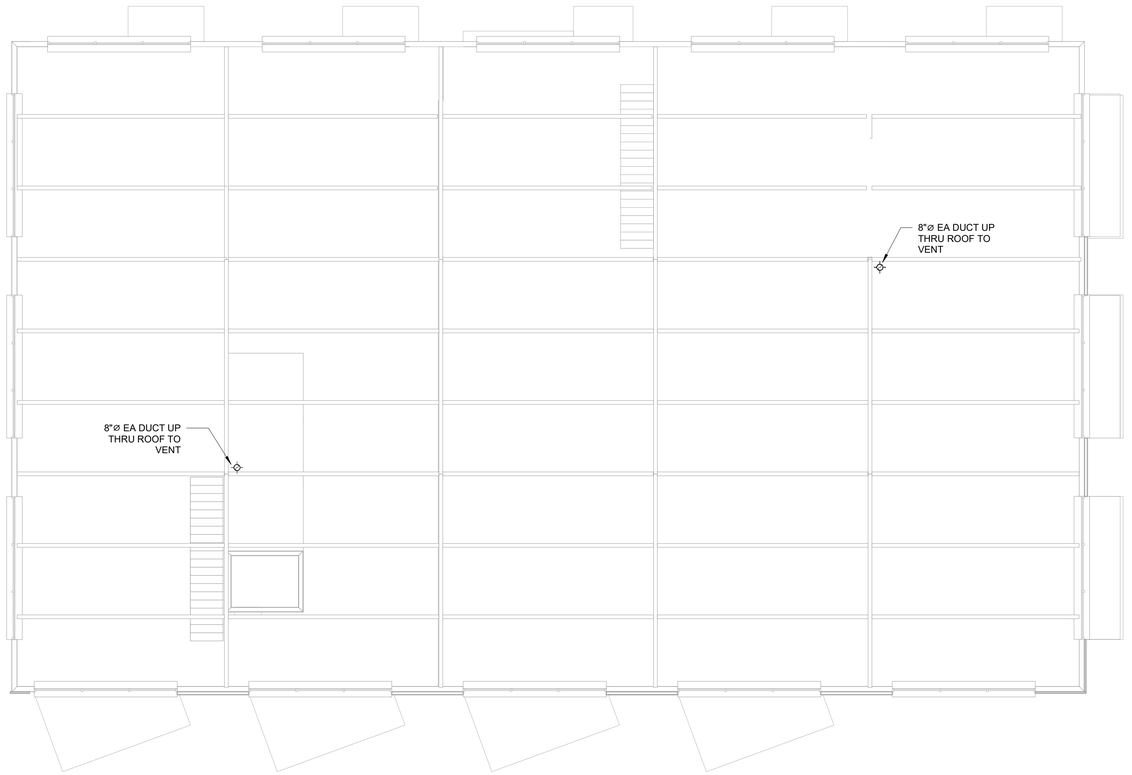

1 HVAC SECOND FLOOR PLAN
1/8" = 1'-0"

NORTH

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PERMIT DRAWINGS

TOKATLY PORTAL

BEAVERTON. OREGON

DESIGNED BY:	COS
DRAWN BY:	AWM
CHECKED BY:	COS

SHEET TITLE:
HVAC SECOND FLOOR PLAN

REVISIONS:

#	DESCRP.	DATE
1	PERMIT SET	10.9.2020

ISSUE DATE: 10/09/2020

M102

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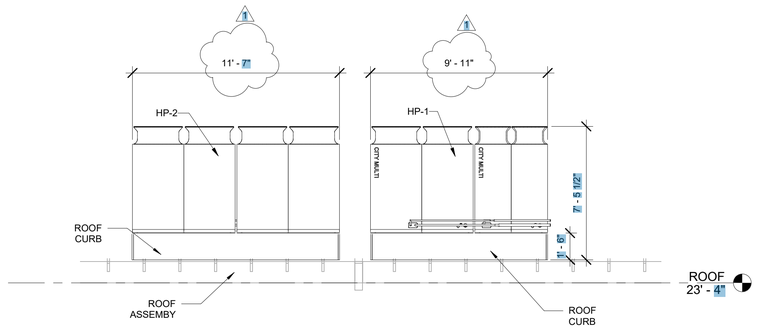
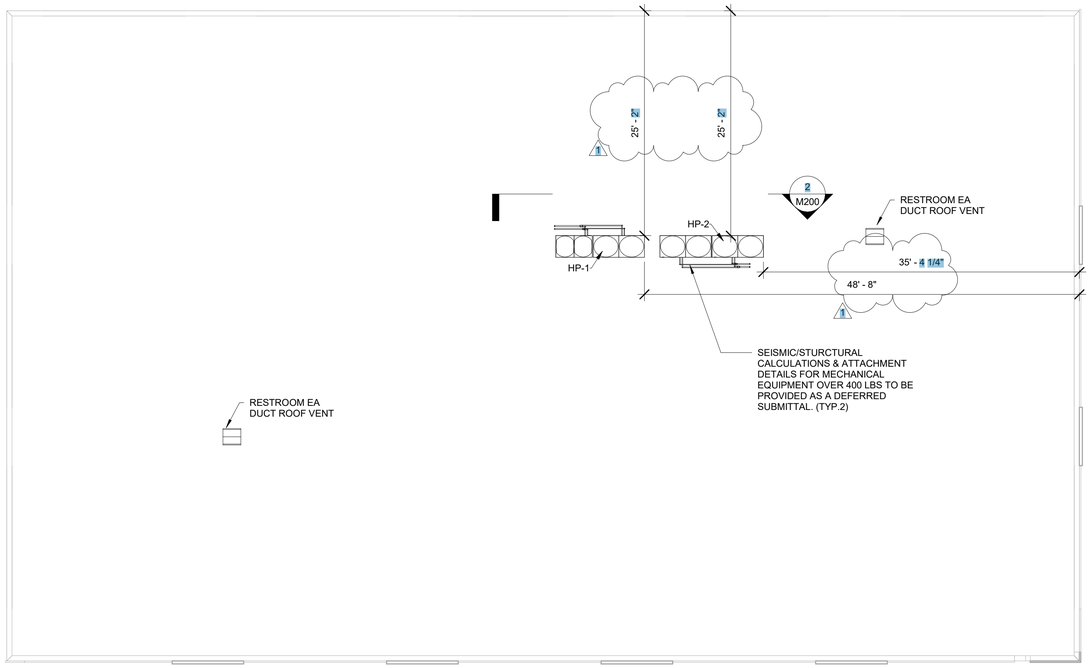


2 HVAC HEAT PUMP SECTION - SOUTH VIEW

1/4" = 1'-0"



1 HVAC ROOF PLAN

1/8" = 1'-0"

Innovative Air, Inc.
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Ph: 541-746-1040 Fax:541-746-4099
CCB 161742

PERMIT DRAWINGS

TOKATLY PORTAL

BEAVERTON, OREGON

DESIGNED BY:	COS
DRAWN BY:	AWM
CHECKED BY:	COS

SHEET TITLE:

HVAC ROOF PLAN

REVISIONS:

#	DESCRP.	DATE
1	PERMIT SET	10.09.2020
1	EQUIPMENT UPDATE	11.10.2020

ISSUE DATE: 11/10/2020

M200

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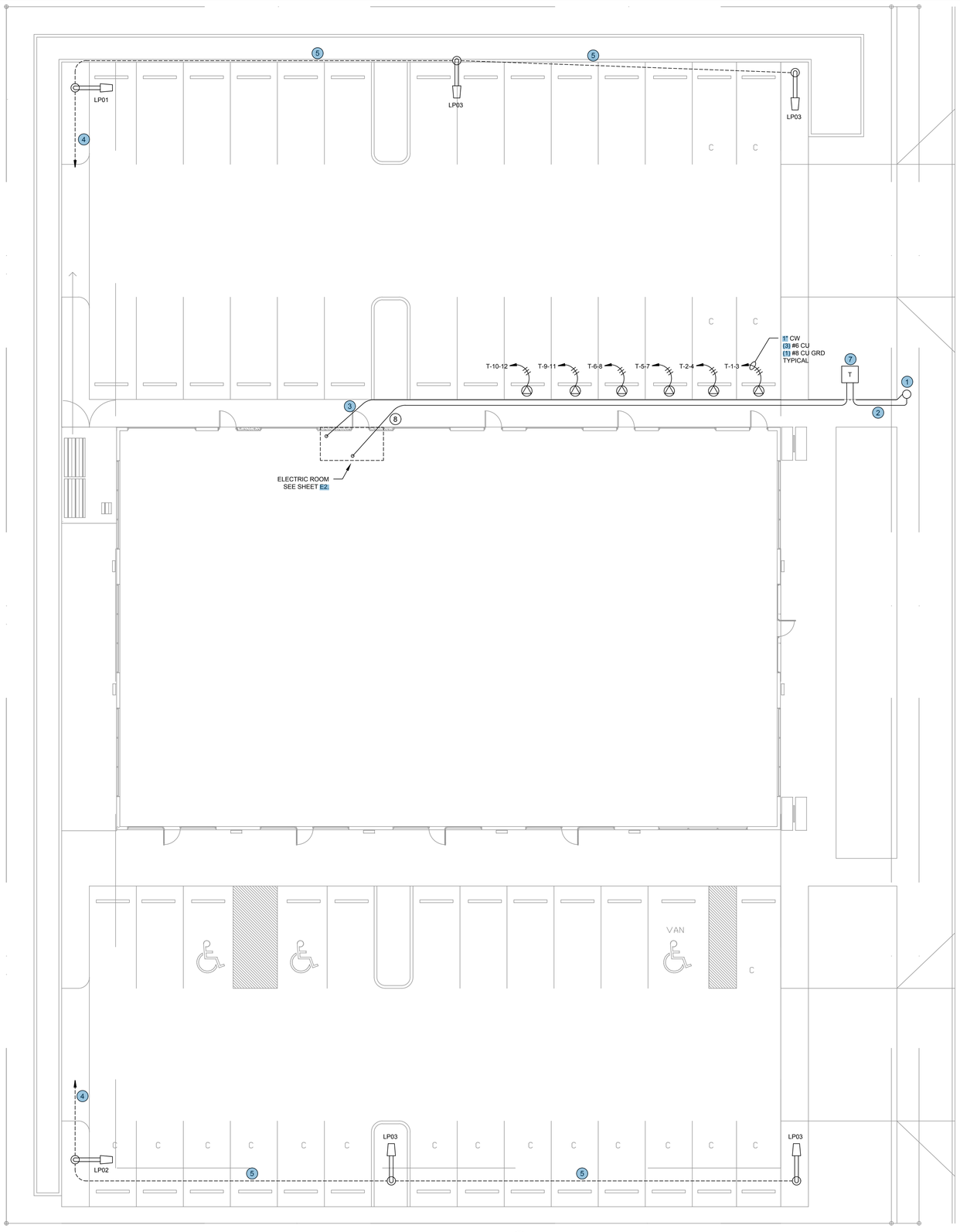

SITE PLAN - ELECTRICAL
SCALE: 1"=10'-0"

NOTE:

PLEASE REVIEW SHEET L1 FOR COMPLETE STREET LIGHTING INSTALL. SUPPLY LIGHT FIXTURES, POLES, JUNCTION BOXES, LIGHTING CONTROLLER, CONDUIT AND CONDUCTORS AS PER PGE / CITY OF BEAVERTON REQUIREMENTS.

SHEET NOTES:

1. EXISTING PGE POLE #1555 WITH TRANSFORMER BANK.
2. (3) 4" PVC CONDUITS FROM ELECTRIC ROOM TO POLE (UP 10 FEET WITH SCHEDULE 80) CABLE BY PGE. INSTALL PULL ROPE.
3. (2) 2" CO. TO TELCO BACKBOARD, UP POLE 10 FEET. (1) PHONE, (1) CABLE. INSTALL PULL ROPE.
4. 3/4" PVC CO. WITH (2) #10 THHN CU & (1) #10 THHN CU GROUND TO "HPA".
5. 3/4" PVC CO. WITH (2) #10 THHN CU & (1) #10 THHN CU GROUND.
6. SEE CIVIL DRAWINGS FOR CONCRETE POLE BASE DETAIL.
7. NEW PGE PAD - TRANSFORMER. VERIFY LOCATION.
8. NEW SERVICE LATERAL - SEE ONE LINE.

REVOLUTION ELECTRIC, INC.
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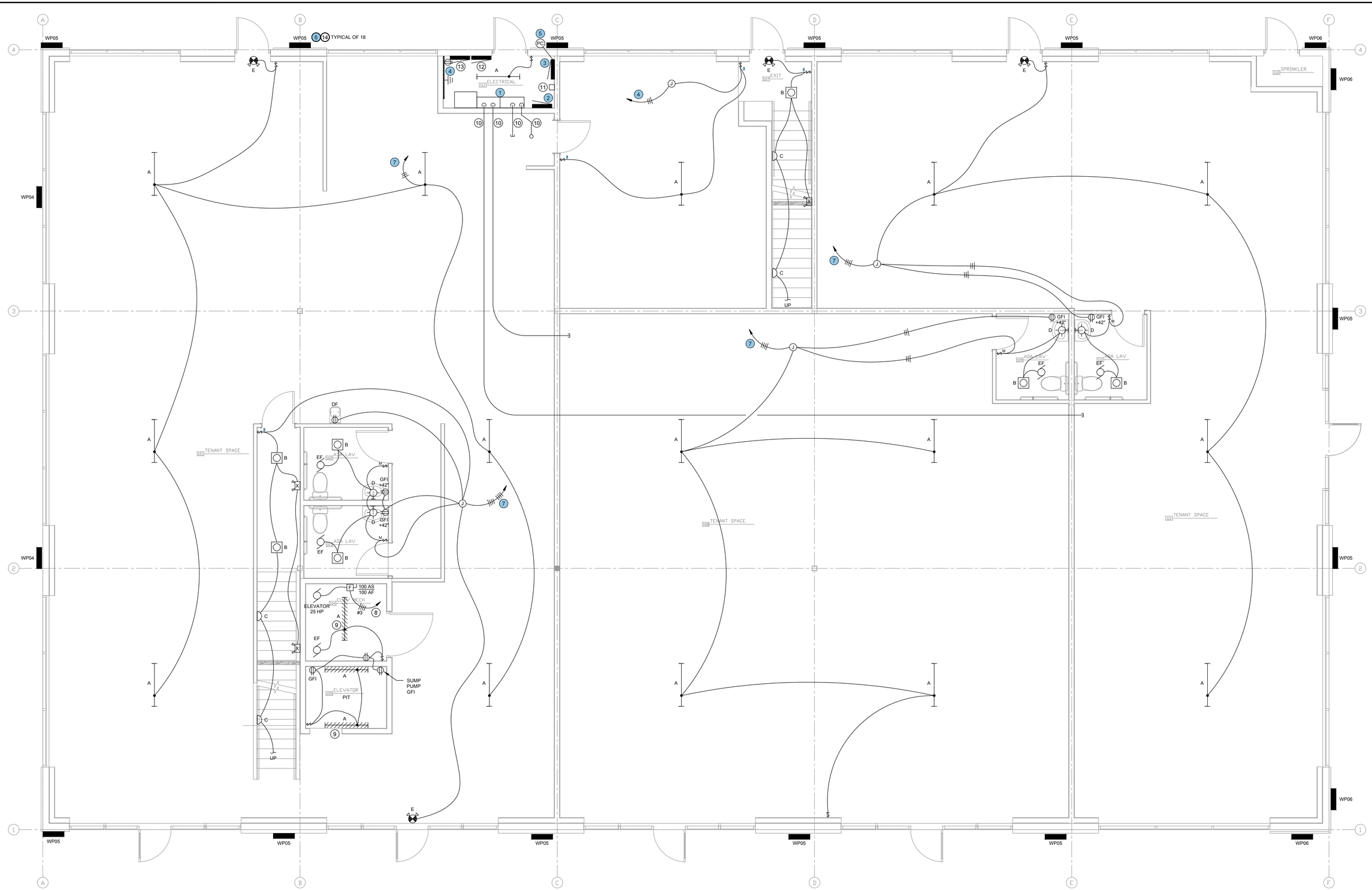
PORTAL BEAVERTON
597 SW 150th AVE.
BEAVERTON, OREGON

PROJECT TYPE:
SITE PLAN ELECTRICAL

DRAWN BY: RGM DRAFTING	
DATE: 01MAR21	PROJECT NO:
CHECKED BY: MS	DRAWING NO: E1
FILE NAME: PB-E1	
DRAWING SCALE: AS NOTED	PLOT SCALE: 1-1
SHEET NO: 1 OF 5	REV.



NOTE:

PLEASE REVIEW SHEET A1, A5, A6 AND L2 FOR COMPLETE WALL PACK INSTALLATION.

MAIN FLOOR PLAN - ELECTRICAL

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

SHEET NOTES:

1. "MSB" - 800A, 120 / 208V, 3Ø, 4 WIRE - SEE ONE LINE.
2. HOUSE PANEL "HPB" - 200A, 42 CIRCUIT, MLO, SURF, NEMA 1
3. HOUSE PANEL "HPA" - 200A, 42 CIRCUIT, MLO, SURF., NEMA 1
4. TELCO BACKBOARD 3/4" X 4' X 8' PLYWOOD. DUPLEX OUTLET & (1) #6 CU GROUND TO "MSB" PANEL GROUND BAR.
5. EXTERIOR PHOTO CELL +12' FT. RUN VIA 4PNO 30A LIGHTING CONTACTOR, MOUNT ABOVE PANEL "HPB.
6. WIRE ALL WALL PACKS VIA INVERTER "HPB-1". RUN SEPARATE UNSWITCHED HOT TO FIXTURE WP04, WP05, AND WP06.
7. INSTALL HOME RUNS TO PANEL "HPA" FOR TEMPORARY POWER DISCONNECT AT TIME OF TENANT INFILL & INSTALL IN TENANT PANEL (TYP OF 4)
8. PERMENANT HOME RUN TO PANEL "HPA" - 1 1/4" CO. WITH (3) THHN CU & (1) #7 CU GROUND ELEVATOR DISCONNECT AND FUSES. VERIFY EXACT LOCATION IN ROOM WITH ELEVATOR INSTALLER.
9. INSTALL METAL WIRE GUARD ON (3) TYPE A.
10. STUB OUT OF METER / MAIN IN TENANT SPACE FOR FUTURE PANEL. SEE 1-LINE.
11. BATTERY INVERTER.
12. PANEL "T", 100A, 40 CIRCUIT, MLO.
13. PANEL "P", 200A, 42 CIRCUIT, MLO.
14. **SEE DRAWING L2 - 8/11/21.**

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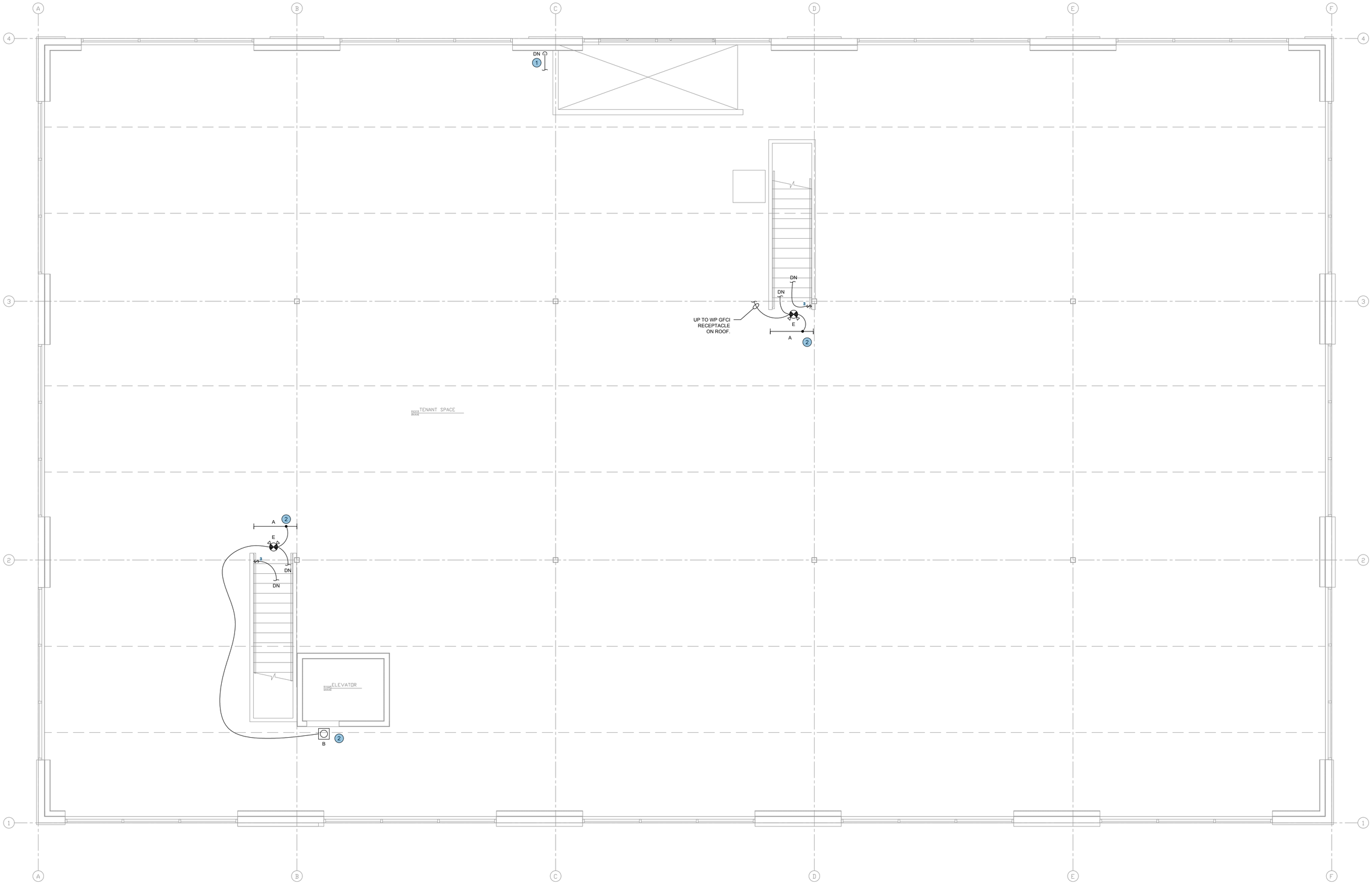
PORTAL BEAVERTON

597 SW 150th AVE.

BEAVERTON, OREGON

PROJECT TYPE: MAIN FLOOR PLAN ELECTRICAL

DRAWN BY: RGM DRAFTING	
DATE: 01MAR21	PROJECT NO:
CHECKED BY: MS	DRAWING NO: E2
FILE NAME: PB-E1	
DRAWING SCALE: AS NOTED	PLOT SCALE: 1-1
SHEET NO: 2 OF 5	REV:



UPPER FLOOR PLAN - ELECTRICAL

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

SHEET NOTES:

1. STUB DOWN TO METER / MAIN FOR FUTURE PANEL. SEE ONE LINE.
2. FIXTURE ON 24 HOURS.

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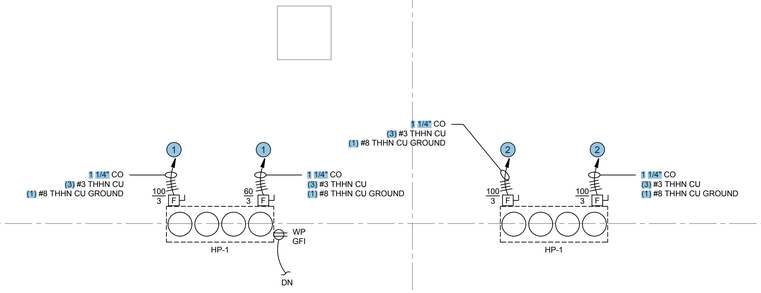
PORTAL BEAVERTON

597 SW 150th AVE.

BEAVERTON, OREGON

PROJECT TYPE: UPPER FLOOR PLAN ELECTRICAL

DRAWN BY: RGM DRAFTING	
DATE: 01MAR21	PROJECT NO:
CHECKED BY: MS	DRAWING NO: E3
FILE NAME: PB–E1	
DRAWING SCALE: AS NOTED	PLOT SCALE: 1–1
SHEET NO: 3 OF 5	REV:



ROOF PLAN - ELECTRICAL
SCALE: 1/4"=1'-0"

SHEET NOTES:

1. HOME RUN TO PANEL "HP-1".
2. HOME RUN TO PANEL "HP-2".
3. ALL WIRING ON ROOF WATER TIGHT NEMA 3R.
4. DISCONNECTS TYPE NEMA 3R GQ. WITH FRN-R FUSES.
5. CONFIRM WITH MECHANICAL EXACT LOCATION FOR STUB UPS AND EXACT MODULE LOCATIONS.

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PORTAL BEAVERTON

597 SW 150th AVE.
BEAVERTON, OREGON

PROJECT TYPE:
ROOF PLAN ELECTRICAL

DRAWN BY: RGM DRAFTING	
DATE: 01MAR21	PROJECT NO:
CHECKED BY: MS	DRAWING NO: E4
FILE NAME: PB-E1	
DRAWING SCALE: AS NOTED	PLOT SCALE: 1=1
SHEET NO: 4 OF 5	REV.

PANEL SCHEDULE

VOLTAGE 120 / 208 | PHASE 3Ø | WIRE 4W | A.I.C. 10,000 | PANEL HPA | LOCATION ELECTRIC ROOM | FEEDER SEE ONE LINE | MOUNTING SURFACE | MAINS MLO | BUSSING 225 | FEED OH

LOCATION	WATTAGE ØA	WATTAGE ØB	WATTAGE ØC	LTG	REC	MIS	BKR	CIR	Ø	CIR	BKR	MIS	REC	LTG	WATTAGE ØA	WATTAGE ØB	WATTAGE ØC	LOCATION
ELEV GFI	200						20	1	A	2	100				7320			HP-2 MOD 1
ELEV PIT LIGHTS		200					20	3	B	4						7320		
ELEV SUMP			300				20	5	C	6		3					7320	
ELEV ROOM	300						20	7	A	8	100				7320			HP-2 MOD 2
RESTROOM 102		340					20	9	B	10						7320		
RESTROOM 103			340				20	11	C	12		3					7320	
RESTROOM 109	340						20	13	A	14								SPACE
RESTROOM 110		340					20	15	B	16								SPACE
DRINKING FOUNTAIN			500				20	17	C	18								SPACE
WEST STAIR	100						20	19	A	20								SPACE
NORTH STAIR		100					20	21	B	22								SPACE
LIGHTS 101			210				20	23	C	24								SPACE
LIGHTS 108	150						20	25	A	26								SPACE
LIGHTS 111		150					20	27	B	28								SPACE
WATER HEATER			2250				30	29	C	30								SPACE
	2250						2	31	A	32								SPACE
SPARE		1000					20	33	B	34								SPACE
SPARE							20	35	C	36								SPACE
SPARE							20	37	A	38								SPACE
SPARE							20	39	B	40								SPACE
SPARE							20	41	C	42								SPACE
SUB TOTAL	3340	2130	3600												14,640	14,640	14,640	
TOTAL ØA	17,980								ØB	16,770			ØC	18,240				
TOTAL LOAD	52,990								WATTS AT	120 / 208 V.,3Ø,4W.=	148 A			SEE LOAD CALCS				
HIGH PHASE	18,240								WATTS AT	120 V.,1Ø,2W.=	152 A							

PANEL	P	FEEDER	
FED FROM	MAIN	NUMBER OF CONDUIT	
# CIRCUITS	42	FEEDER CONDUIT	2 1/2"
HI VOLTAGE	208	WIRE SIZE L1	250 AL
LOW VOLTAGE	120	WIRE SIZE L2	250 AL
PHASE	3Ø	WIRE SIZE L3	250 AL
DESIGN LOAD AMPS	200	WIRE SIZE NEUTRAL	250 AL
NEUTRAL BUS		WIRE SIZE GROUND	#6 CU
GROUND BUS			
AVAILABLE FAULT CURRENT AT THIS PANEL			

#	BKR	CIRCUIT DESCRIPTION	VA		VA	CIRCUIT DESCRIPTION	BKR	#
1				L1				2
3				L2				4
5				L3				6
7				L1				8
9				L2				10
11				L3				12
13				L1				14
15				L2				16
17				L3				18
19				L1				20
21				L2				22
23				L3				24
25				L1				26
27				L2				28
29				L3				30
31				L1				32
33				L2				34
35				L3				36
37				L1				38
39				L2	10,400	CHARGER 6	2P100	40
41				L3	10,400			42

A - 0 B - 10,400 C - 20,800 T - 20,800 A - 58

LIGHT FIXTURE SCHEDULE

FIXTURE TYPE	SYMBOL	MANUFACTURER	CATALOG NUMBER	WATTS	VOLTS	MTG	LAMP TYPE	REMARKS
A		LITHONIA	CSSL4B 4000 LM MV 40K 80CR1	35.3	120	CS	LED 40K	4 FT STRIP
B		LITHONIA	L7XLEDT24U 65BEMWLED 40K 90CR1 M6	12	120	CR	LED 41K	6" RECESS
C		TBD - USE $150 EACH ALLOWANCE	TBD	13	120	WS	LED 40K	WALL SCONCE
D		TBD - USE $150 EACH ALLOWANCE	TBD	18	120	WS	LED 40K	BATH OVER MIRROR
E		LITHONIA	ECC RM6	4	120	CS	INCL	EXIT BUG EYE
LP		LITHONIA	SSS QS 20 4C DM19AS			P		PARK POLE
LP01		LITHONIA	DSXO-LED-P2-40K-LCCO-MVOLT-SPA-DDBXD					
LP02		LITHONIA	DSXO-LED-P2-40K-LCCO-MVOLT-SPA-DDBXD					
LP03		LITHONIA	DSXO-LED-P2-40K-LCCO-MVOLT-SPA-DDBXD					
WP04		LITHONIA	LIL-LED-40K-MVOLT-DDBTXD					@ 10' MH.
WP05		LITHONIA	WPX1-LED-P1-40K-MVOLT-E4WC-DDBXD					@ 12' MH.
WP06		LITHONIA	WPX1-LED-P1-40K-MVOLT-E4WC-DDBXD					@ 12' MH.
X		LITHONIA	ELM2L-BLK	4.8	120	WS	INCL	BUG EYE EGRESS

MOUNTING TYPES:

WS-WALL SURFACE
WR-WALL RECESSED
CS-CEILING SURFACE
CR-CEILING RECESSED
CH-CHAIN
PN-PENDANT
U-UNIVERSAL
G-GROUND
P-POLE
TBD-TO BE DETERMINED

PANEL SCHEDULE

VOLTAGE 120 / 208 | PHASE 3Ø | WIRE 4W | A.I.C. 10,000 | PANEL HPB | LOCATION ELECTRIC ROOM | FEEDER SEE ONE LINE | MOUNTING SURFACE | MAINS MLO | BUSSING 225 | FEED OH

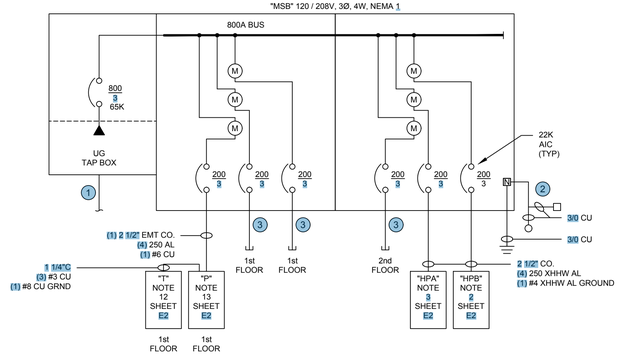
LOCATION	WATTAGE ØA	WATTAGE ØB	WATTAGE ØC	LTG	REC	MIS	BKR	CIR	Ø	CIR	BKR	MIS	REC	LTG	WATTAGE ØA	WATTAGE ØB	WATTAGE ØC	LOCATION
WALL PACKS	680						20	1	A	2	100				9120			ELEVATOR
PARK POLES		100					20	3	B	4						9120		
PARK POLES			100				20	5	C	6		3					9120	
ROOF GFCI	180						20	7	A	8	100				6240			HP-1 MOD 2
ELECTRIC RM LIGHTS		700					20	9	B	10						6240		
TELCO RECEP			500				20	11	C	12		3					6240	
SPARE	100						20	13	A	14	100				7320			HP-1 MOD 1
SPARE		100					20	15	B	16						7320		
SPARE			200				20	17	C	18		3					7320	
SPACE								19	A	20								SPACE
SPACE								21	B	22								SPACE
SPACE								23	C	24								SPACE
SPACE								25	A	26								SPACE
SPACE								27	B	28								SPACE
SPACE								29	C	30								SPACE
SPACE								31	A	32								SPACE
SPACE								33	B	34								SPACE
SPACE								35	C	36								SPACE
SPACE								37	A	38								SPACE
SPACE								39	B	40								SPACE
SPACE								41	C	42								SPACE
SUB TOTAL	960	900	800												22,680	22,680	22,680	
TOTAL ØA	20,400								ØB	20,340			ØC	22,680				
TOTAL LOAD	63,420								WATTS AT	120 / 208 V.,3Ø,4W.=	177 A			SEE LOAD CALCS				
HIGH PHASE	22,680								WATTS AT	120 V.,1Ø,2W.=	189 A							

PANEL	T	FEEDER	
FED FROM	PANEL P	NUMBER OF CONDUIT	
# CIRCUITS	40	FEEDER CONDUIT	1 1/4"
HI VOLTAGE	208	WIRE SIZE L1	#3 CU
LOW VOLTAGE	120	WIRE SIZE L2	#3 CU
PHASE	1Ø		
DESIGN LOAD AMPS		WIRE SIZE NEUTRAL	#3 CU
NEUTRAL BUS		WIRE SIZE GROUND	#8 CU
GROUND BUS			
AVAILABLE FAULT CURRENT AT THIS PANEL			

#	BKR	CIRCUIT DESCRIPTION	VA		VA	CIRCUIT DESCRIPTION	BKR	#
1	2P60	CHARGER 1	1733	L1	1733	CHARGER 2	2P60	2
3			1733	L2	1733			4
5	2P60	CHARGER 3	1733	L1	1733	CHARGER 4	2P60	6
7			1733	L2	1733			8
9	2P60	CHARGER 5	1733	L1	1733	CHARGER 6	2P60	10
11			1733	L2	1733			12
13				L1				14
15				L2				16
17				L1				18
19				L2				20
21				L1				22
23				L2				24
25				L1				26
27				L2				28
29				L1				30
31				L2				32
33				L1				34
35				L2				36
37				L1				38
39				L2				40

A - 10,400 B - 10,400 T - 20,800 A - 100

ONE LINE DIAGRAM



ONE LINE NOTES:

1. (4) 4" PVC CO. (1) 4" SPARE TO NEW TRANSFORMER. VERIFY WITH PGE PRIOR TO INSTALL.
2. SERVICE GROUND PER ART 250 - NEC.
3. STUB UP CONDUIT INTO LEASE SPACES. SEE SHEETS E2 & E3. (2 1/2")
4. AFC 14,098 @ LINE SIDE OF SERVICE DISCONNECT.

LOAD CALCS

PANEL	WATTS
TESLA CHARGERS	20,000
PANEL "HPA"	52,990
PANEL "HPB"	63,420
FUTURE LEASE SPACE 101 ALLOWANCE	32,300
FUTURE LEASE SPACE 108 ALLOWANCE	34,560
FUTURE LEASE SPACE 111 ALLOWANCE	34,560
FUTURE LEASE SPACE 201 ALLOWANCE	43,200
LCL - LIGHTING & LARGEST MOTOR 25%	4,160
TOTAL WATTS	286,440

286,440W / @ 120 / 208V, 3Ø, 4W = 796A
USE 800 AMP SERVICE

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PORTAL BEAVERTON
597 SW 150th AVE.
BEAVERTON, OREGON

PROJECT TYPE: SCHEDULES AND ONE LINE

DRAWN BY: RGM DRAFTING
DATE: 01MAR21 | PROJECT NO:
CHECKED BY: MS | DRAWING NO: E5
FILE NAME: PB-E1
DRAWING SCALE: AS NOTED | PLOT SCALE: 1-1
SHEET NO: 5 OF 5 | REV.

WATER HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	TANK SIZE	CONNECTION		VOLTAGE	KW	MAX. PRESSURE	WEIGHT	NOTES
				CW INLET	HW OUTLET					
WH-1	AO SMITH	LTE 66D	66 GAL	3/4"	3/4"	208	4.5	150 PSI	146	[1]

NOTES:
[1] INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS.

HOT WATER RETURN CIRCULATOR PUMP SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	LOCATION	SYSTEM SERVED	GPM	HEAD (FT.)	VOLT/PH.	AMPS/WATTS	HP	CONNECTION SIZE	OPER. WEIGHT	NOTES
CP-5	GRUNDFOS	UP 15-10 BUC7/LC	IN-LINE	ATTIC	DHW CIRCULATION	1	4	115/1	0.22 / 25	1/25	3/4"	10 LBS.	[1] [2] [3]

NOTES:
[1] OIL LUBRICATED CIRCULATOR.
[2] MAXIMUM WORKING PRESSURE: 145 PSI
[3] MAXIMUM OPERATING TEMPERATURE (STANDARD SEAL): 230 DEG. F.

GREASE INTERCEPTOR SCHEDULE

TAG	MANUFACTURER	MODEL	LOCATION	INSTALL	GREASE CAPACITY (LBS.)	FLOW RATE (GPM)	INLET/OUTLET	RECOMMENDED PUMP CYCLE	UNIT WEIGHT (EMPTY)	NOTES
GI-1	SCHIER	GB-75	INSIDE	BELOW GRADE	861	75	4"	90 DAYS (MAX.)	135	[1] [2] [3] [4] [5] [6]

NOTES:
[1] GREASE INTERCEPTOR SIZED USING TOTAL GREASE WASTE DFU'S WITH ONE-MINUTE DRAINAGE PEROD - 2017 OPSC TABLE 1014.2.1
[2] INTERCEPTOR TO BE MAINTANENCED NOT LESS THAN EVERY 90 DAYS.
[3] CERTIFIED TO ASME A112.14.3 (TYPE C) AND CSA B481.1 W/ INTERGRAL FLOW CONTROLS.
[4] UNIT WEIGHT INDICATED IS FOR UNIT EQUIPPED WITH A COMPOSITE ACCESS COVER.
[5] INSTALL INTERCEPTOR WITH SIDE OUTLET CONNECTION PER MANUFACTURER'S INSTALLATION INSTRUCTIONS - REFER TO ENLARGED SHEET P101.
[6] LISTED GREASE INTERCEPTORS WITH INTEGRAL FLOW CONTROLS OR RESTRICTING DEVICES SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS PER 2017 OPSC 1014.2 - EXCEPTION.

GREASE WASTE DRAINAGE FIXTURE UNITS

FIXTURE QTY.	DESCRIPTION		2017 OPSC TABLE 702.1 DFU UNIT VALUE			
			PRIVATE	PUBLIC	TOTAL DFU	NOTES
3	HAND SINK	S-1	-	2.0	6.0	
1	2 - COMP SINK	S-2	-	3.0	3.0	
1	3-COMP SINK	S-3	-	3.0	3.0	
1	FLOOR SINK	FS-1	-	1.0	1.0	[1]
3	FLOOR SINK	FS-2	-	2.0	6.0	[2]
1	MOP SINK	MS-1	-	3.0	3.0	
	TOTAL DFU'S				22.0	

NOTES:

[1] 1-1/2" TRAP INDIRECT WASTE RECEPTOR PER TABLE 702.1. SERVES INDIRECT WASTE FROM ICE MACHINE (ID #5) PER FOOTNOTES 1 & 3 AND TABLE 702.2(2).
[2] 2" TRAP INDIRECT WASTE RECEPTOR PER TABLE 702.1. SERVES INDIRECT WASTE FROM 2-COMPARTMENT SINK (S-2 / ID #17), 3-COMPARTMENT SINK (S-3 / ID #6), WARE WASHER (WW-1 / ID #4), UNDERCOUNTER GLASS RINSER (ID #B3), OR BEER DISPENSER (ID #B15) PER FOOTNOTES 1 & 4 AND TABLE 702.2(2).

BRANCH WATER PIPING SIZING

FIXTURE		QTY X WSFU (CW)	TOTAL WSFU (CW)		TOTAL WSFU (HW) (CW X 0.75)
HAND SINK	(S-1)	3 @ 2.0	6.0		4.50
2-COMPARTMENT SINK	(S-3)	1 @ 2.0	2.0		1.50
3-COMPARTMENT SINK	(S-4)	2 @ 2.0	4.0		3.00
WAREWASHER	(WW-1)	1 @ 1.5	1.5		1.13
MOP SINK	(MS-1)	1 @ 3.0	3.0		2.25
HOSE BIB	(HB-1)	1 @ 2.5	2.5		-
		TOTAL F.U.	19.0		12.38
		TOTAL LENGTH (FT.)	45.0		

	COLD WATER		HOT WATER
TOTAL WATER FIXTURE UNITS (WFU TABLE A-103.1)	19.0		12.38
TOTAL FLOW IN GPM FOR LISTED FIXTURES (CHART A-103.1(2))	14	GPM	8
GRAND TOTAL BRANCH DEMAND GPM:	14	GPM	8
(REFER TO BASE SHELL WATER SIZING CALCULATIONS FOR SITE SERVICE)			
FROM OPSC TABLE 610., MAXIMUM ALLOWABLE LENGTH: 80 FT. @ 2" BLDG. SUPPLY & 2" METER - PRESSURE RANGE - 46 TO 60 PSI: **1" BRANCH = 85 WSFU'S**			2" (WATER SERVICE)

LEGEND

MARK	DESCRIPTION
---------	EXISTING PIPING (TYPE INDICATED)
———	(E) WASTE PIPING
- - - - - - - -	(N) WASTE VENT PIPING
—— – ——	(N) COLD WATER PIPING
——– – ——–	(N) HOT WATER PIPING
(E)	EXISTING
(N)	NEW
I.E.	INVERT ELEVATION
FCO	FLOOR CLEAN-OUT
WCO	WALL CLEAN-OUT
COTG	CLEAN-OUT TO GRADE
VTR	VENT THRU ROOF
DN.	DOWN
RPB	REDUCED PRESSURE BACKFLOW ASSEMBLY
WSFU	WATER SUPPLY FIXTURE UNITS
DFU	DRAINAGE FIXTURE UNITS
GWDFU	GREASE WASTE DRAINAGE FIXTURE UNITS
CW	COLD WATER
HW	HOT WATER
W.	WASTE
SS	SANITARY SEWER
V.	VENT
WC	WATER CLOSET
L	LAVATORY
FD	FLOOR DRAIN
FC	FLOOR SINK
MS	MOP SINK
HS	HAND SINK
RS	RINSE SINK
PRS	PRE-RINSE SINK

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	DESCRIPTION	CONNECTION				
			WASTE	VENT	HW	CW	NOTES
S-1	HAND SINK	SUPPLIED BY KITCHEN EQUIPMENT VENDOR, INSTALLED BY PLUMBING CONTRACTOR.	1-1/2"	1-1/2"	1/2"	1/2"	
S-2	2 - COMP SINK	SUPPLIED BY KITCHEN EQUIPMENT VENDOR, INSTALLED BY PLUMBING CONTRACTOR.	1-1/2"	1-1/2"	1/2"	1/2"	INDIRECT WASTE TO FLOOR SINK W/ 1" AIR GAP
S-3	3-COMP SINK	SUPPLIED BY KITCHEN EQUIPMENT VENDOR, INSTALLED BY PLUMBING CONTRACTOR.	2"	1-1/2"	(2) @ 1/2"	(2) @ 1/2"	INDIRECT WASTE TO FLOOR SINK W/ 1" AIR GAP
WW-1	WARE-WASHER	SUPPLIED BY KITCHEN EQUIPMENT VENDOR, INSTALLED BY PLUMBING CONTRACTOR.	(2) 1-1/2"	1-1/2"	1/2"	1/2"	VERIFY CONNECTION REQUIREMENTS WITH PROVIDED EQUIPMENT
IM-1	ICE MAKER	SUPPLIED BY KITCHEN EQUIPMENT VENDOR, INSTALLED BY PLUMBING CONTRACTOR.	1-1/2"	-	-	1/2"	VERIFY CONNECTION REQUIREMENTS WITH PROVIDED EQUIPMENT / INDIRECT WASTE TO FLOOR SINK W/ 1" AIR GAP
MS-1	MOP SINK	SUPPLIED BY KITCHEN EQUIPMENT VENDOR, INSTALLED BY PLUMBING CONTRACTOR.	2"	1-1/2"	1/2"	1/2"	
FS-1	FLOOR SINK	CECO 906-2" W/ 912-2 SPLIT HALF GRATE.	2"	1-1/2"	-	-	
FS-2	FLOOR SINK	CECO 906-3" W/ 912-2 SPLIT HALF GRATE.	3"	1-1/2"	-	-	
FCO	FLOOR CLEANOUT	SIUOX CHIEF 834 SERIES W/ ROUND NICKEL/BRONZE TOP (SIZE PER LINE SERVED).	-	-	-	-	

GENERAL NOTES

1. PLUMBING INSTALLATION SHALL COMPLY WITH CURRENT APPLICABLE STATE OF OREGON, COUNTY, AND CITY BUILDING CODES.
2. PLUMBING CONTRACTOR SHALL OBTAIN AND PAY FOR PLUMBING AND OTHER PERMITS ASSOCIATED WITH THE SCOPE OF WORK.
3. COORDINATE PLUMBING INSTALLATION WITH MECHANICAL, ELECTRICAL, AND FIRE PROTECTION CONTRACTORS PRIOR TO CONSTRUCTION. PLUMBING CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING.
4. EQUIPMENT AND FIXTURE LOCATIONS TO BE VERIFIED WITH OWNER PRIOR TO ANY WORK BEING DONE.
5. PLUMBING CONTRACTOR IS RESPONSIBLE FOR TESTING AND INSPECTIONS REQUIRED. ANY INSTALLATION DEFICIENCIES ARE TO BE CORRECTED PRIOR TO COVER.
6. PROVIDE FIRE STOPPING FOR PENETRATIONS THROUGH RATED CONSTRUCTION PER OPSC CHAPTER 14 AND OSSC SECTION 714. PROVIDE SUBMITTAL OF FIRE STOPPING MATERIALS AND METHODS AS REQUIRED.
7. COORDINATE PLUMBING INSTALLATION WITH SITE UTILITIES INDICATED ON THE SITE PLAN AND CIVIL DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR FOR REQUIRED CONNECTION POINTS AND PIPING MATERIALS TO BE CONNECTED TO SITE UTILITIES – REFER TO CIVIL AND IRRIGATION DRAWINGS.
8. VERIFY WITH ARCHITECT THE TYPE OF MATERIAL FOR VERTICAL WASTE RISERS FOR SOUND ATTENUATION.
9. PROVIDE OFFSETS AND ASSOCIATED FITTINGS NOT INDICATED ON DRAWINGS AS REQUIRED.
10. PROVIDE CLEAN-OUTS AS REQUIRED PER OPSC SECTION 707.0.
11. PROVIDE WATER HAMMER ARRESTERS ON WATER SUPPLY SYSTEMS AT QUICK-ACTING VALVES AND AT END OF PIPING RUNS PER OPSC 609.10.
12. INSULATE CONDENSATE DRAINS FOR HVAC EQUIPMENT LOCATED INSIDE BUILDING ENVELOPE. DRAIN TO NEAREST APPROVED RECEPTOR OR WHERE INDICATED ON DRAWINGS.
13. INSULATE HOT WATER AND HOT WATER RE-CIRCULATING PIPING IN ACCORDANCE WITH OEESC 504.5.
14. SLOPE HORIZONTAL WASTE PIPING AT 2% MINIMUM.
15. USE OF PEX PIPING LIMITED TO RUN-OUTS AND DROPS TO FIXTURES.
16. HOT AND COLD WATER RUN-OUTS AND DROPS TO FIXTURES 1/2" UNLESS OTHERWISE NOTED ON DRAWINGS.
17. VERIFY HEIGHT OF EXTERIOR HOSE BIBS (WALL HYDRANTS) WITH ARCHITECT.
18. SEISMICALLY BRACE WASTE, VENT, WATER, AND GAS PIPING PER SMACNA STANDARDS, CURRENT EDITION, AS APPLICABLE.
19. VERIFY WITH CITY PLAN REVIEW AND PLUMBING INSPECTORS THE TYPE OF DOMESTIC WATER BACK FLOW PROTECTION REQUIRED FOR SITE WATER SERVICE. THIS INFORMATION IS TO BE PROVIDED TO THE GENERAL CONTRACTOR FOR ISSUE TO SITE UTILITY CONTRACTOR.

GENERAL PIPING MATERIALS NOTES

DOMESTIC WATER:
ASTM B88 TYPE L ABOVE GRADE, TYPE K BELOW GRADE W/ WROUGHT COPPER SOLDER TYPE FITTINGS (150 PSI SERVICE). TIN / ANTIMONY SOLDER (ASTM B32-95TA)

PEX PLASTIC TUBING AND JOINTS ALLOWED FOR FINAL CONNECTIONS TO FIXTURES

MATERIALS AND FITTINGS SHALL COMPLY WITH OPSC SECTION 604.0 AND TABLE 604.1.

DRAIN, SANITARY SEWER, & VENT
SCHEDULE 40 ABS (ASTM D3965 & F628 CELLULAR CORE) ASTM D3965 & D2661 DWV FITTINGS & ASTM D2235 SOLVENT CEMENT (UNLESS NOTED OTHERWISE)

MATERIALS AND FITTINGS SHALL COMPLY WITH OPSC SECTION 701.0 AND TABLE 701.2.

ENERGY COMPLIANCE NOTES

1. PROVIDE TEMPERATURE CONTROLS ON SERVICE WATER HEATING SYSTEMS TO LIMIT MAXIMUM HOT WATER TEMPERATURE TO <= 120 DEG. F. (ASHRAE STD. 90.1 7.4.4.1).
2. PROVIDE AUTOMATIC TIME SWITCH(ES) TO AUTOMATICALLY SWITCH OFF RECIRCULATING HOT WATER SYSTEMS OR HEAT TRACE TAPE (ASHRAE STD. 90.1 7.4.4.2).
3. PROVIDE HEAT TRAPS ON NON-CIRCULATING STORAGE WATER TANKS (ASHRAE STD. 90.1 7.4.6).
4. PROVIDE TEMPERATURE CONTROLLING MEANS TO LIMIT THE MAXIMUM TEMPERATURE OF WATER DELIVERED FROM LAVATORY FAUCETS IN PUBLIC FACILITY RESTROOMS TO 110 DEG. F. (ASHRAE STD. 90.1 7.4.4.3).
5. INSULATE HOT WATER IN ACCORDANCE WITH ASHRAE STD. 90.1 7.4.3 & TABLE 6.8.3-1.
6. INSULATE HEAT TRACED OR EXTERNALLY HEATED PIPING IN ACCORDANCE WITH ASHRAE STD. 90.1 7.4.3. & TABLE 6.8.3-1.

SHEET INDEX

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REGISTERED PROFESSIONAL ENGINEER
#81286PE
OREGON
MARCH 10, 2006
BRIAN E. JACOBY
RENEWS: 07/01/2023
09/14/2021

CONSTRUCTION SET

TOKATLY PORTAL - BEAVERTON

FIRST FLOOR FOOD SERVICE TENANT IMPROVEMENT

595 SW 150TH AVE
BEAVERTON, OREGON

DESIGNED BY: BEJ
DRAWN BY: BEJ
CHECKED BY: BEJ

SHEET TITLE:
PLUMBING NOTES, SCHEDULES, LEGEND & SHEET INDEX

REVISIONS:

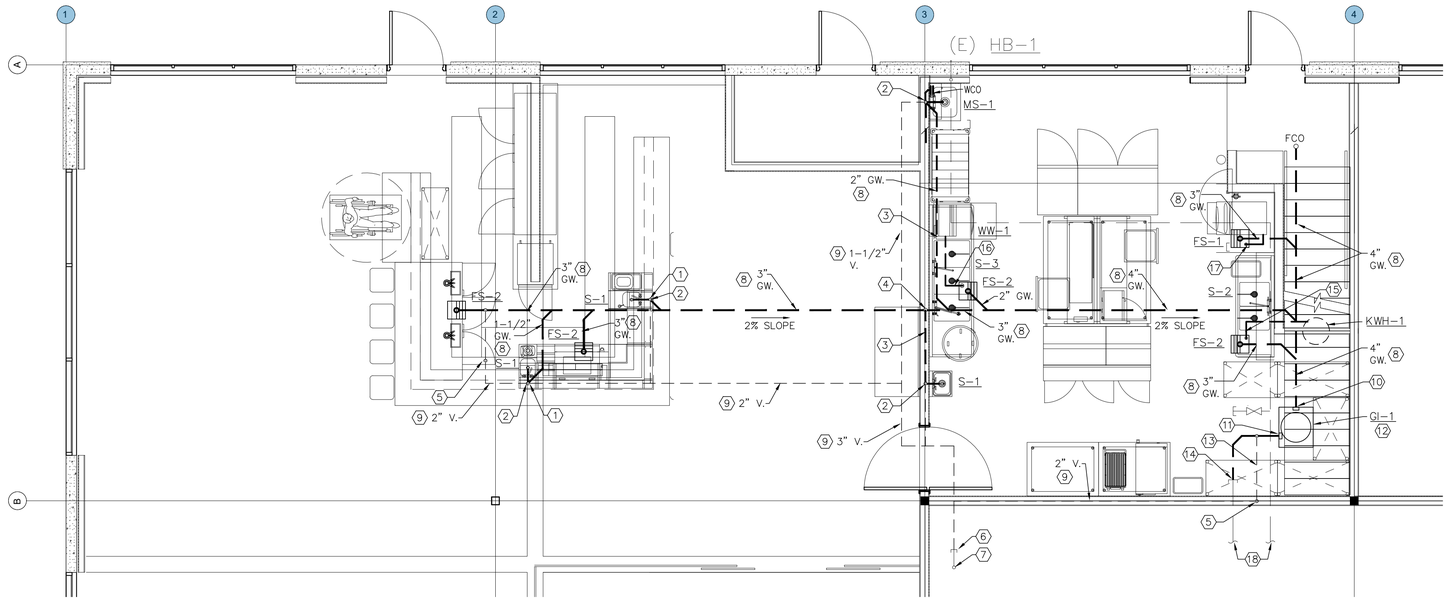
#	DESCRP.	DATE
1	CONST. SET	09-14-2021

ISSUE DATE: 09/14/2021

P001

PLAN NOTES

1. 1–1/2" GW. DN. IN WALL TO BELOW FLOOR.
2. 1–1/2" V. UP IN WALL TO ABV. CLG.
3. 1–1/2" GW. ROUTED IN WALL.
4. 2" GW. DN. IN WALL TO BELOW FLOOR.
5. 2" V. UP IN WALL TO ABV. CLG.
6. P.O.C. 3" V. TO (E) V. STUB ABV. CLG.
7. (E) 3" V. UP THRU 2ND. FLOOR TO ROOF.
8. PIPING ROUTED BELOW FLOOR.
9. PIPING ROUTED ABV. CLG.
10. 3" GW. CONNECTION TO GREASE INTERCEPTOR BELOW FLOOR.
11. 3" W. FROM GREASE INTERCEPTOR SIDE CONNECTION
12. VERIFY DEPTH OF INLET INVERT ELEVATION TO ACCOMODATE GRAVITY GREASE WASTE@ 2% SLOPE FROM FARTHEST FIXTURE SERVED (FS–2 IN BAR AREA).
13. 2" V. BELOW FLOOR.
14. P.O.C. 4" W. TO (E) 4" W. STUB–OUT BELOW FLOOR.
15. SPILL WATER HEATER T & P VALVE AND 3/4" CONDENSATE DRAIN TO FLOOR SINK W/ MINIMUM 1" AIR GAP.
16. SPILL DISHWASHER DISCHARGE TO FLOOR SINK W/ MINIMUM 1" AIR GAP.
17. SPILL ICE MAKER DISCHARGE TO FLOOR SINK W/ MINIMUM 1" AIR GAP.
18. (E) WATER AND WASTE PIPING INSTALLED UNDER SHELL SCOPE OF WORK.



1 P101 PLUMBING FIRST FLOOR TENANT PLAN - WASTE & VENT
SCALE: 1/4" = 1'-0"

NORTH

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RENEWS: 07/01/2023
09/14/2021

CONSTRUCTION SET

TOKATLY PORTAL - BEAVERTON

FIRST FLOOR FOOD SERVICE TENANT IMPROVEMENT

595 SW 150TH AVE
BEAVERTON, OREGON

DESIGNED BY:	BEJ
DRAWN BY:	BEJ
CHECKED BY:	BEJ

SHEET TITLE:

PLUMBING FIRST FLOOR TENANT PLAN - WASTE & VENT

REVISIONS:

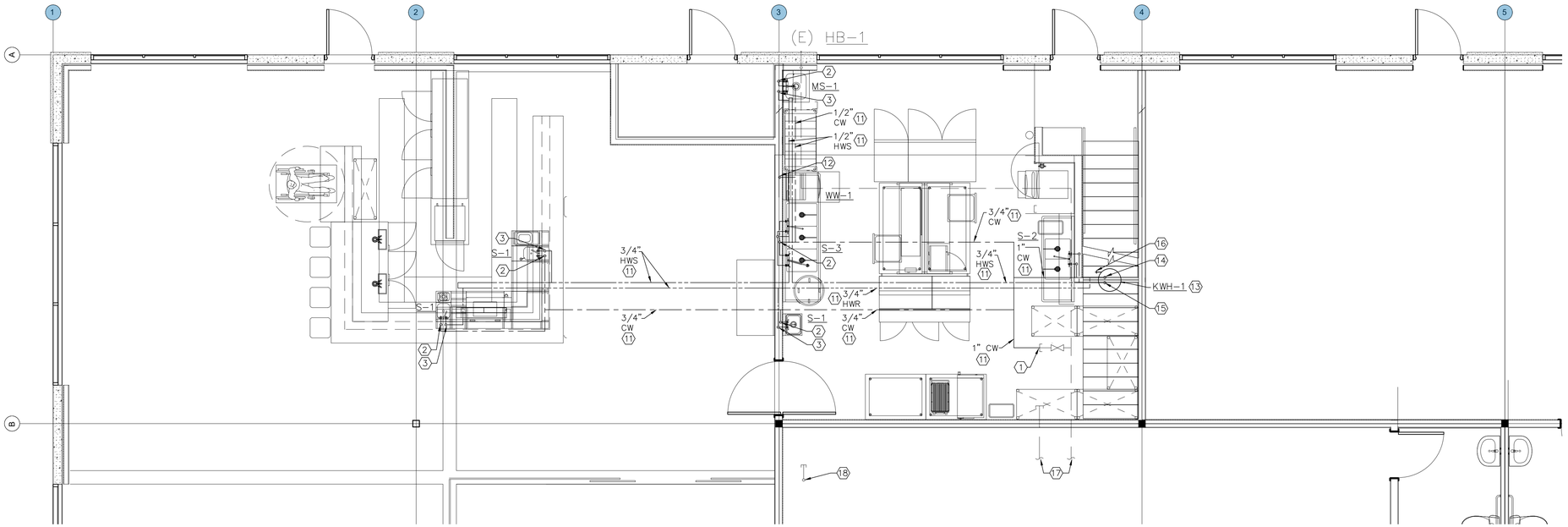
#	DESCRP.	DATE
1	CONST. SET	09-14-2021

ISSUE DATE: 09/14/2021

P101

PLAN NOTES

1. P.O.C. 1" CW TO (E) CW STUB-OUT W/ S.O.V. ABOVE CEILING.
2. 1/2" CW DN. IN WALL.
3. 1/2" HW DN. IN WALL.
4. 3/4" HW ABV. CLG.
5. 3/4" HW DN. IN WALL TO CONNECTION AT WARE WASHER (DW-1).
6. 1" CW INLET TO WATER HEATER (KWH-1) – PROVIDE ADAPTER FITTING FOR CONNECTION AS REQ'D.
7. 1" HW OUTLET FROM WATER HEATER (KWH-1) – PROVIDE ADAPTER FITTING FOR CONNECTION AS REQ'D.
8. SPILL WATER HEATER T & P VALVE AND ¾" CONDENSATE DRAIN TO FLOOR SINK.
9. 1-1/2" V. UP IN WALL TO ABOVE CEILING.
10. 2" V. UP IN WALL TO ABOVE CEILING.
11. PIPING ROUTED ABOVE CEILING.
12. 3/4" HW DN. IN WALL TO CONNECTION AT WARE WASHER (WW-1).
13. ELECTRIC WATER HEATER FLOOR MOUNTED BELOW STAIRS – REFER TO DETAIL 4/P201 FOR PIPING & INSTALLATION (VERIFY CLEARANCES).
14. 1" CW INLET TO WATER HEATER (KWH-1) – PROVIDE ADAPTER FITTING FOR CONNECTION AS REQ'D.
15. 1" HW OUTLET FROM WATER HEATER (KWH-1) – PROVIDE ADAPTER FITTING FOR CONNECTION AS REQ'D.
16. SPILL WATER HEATER T & P VALVE AND 3/4" CONDENSATE DRAIN TO FLOOR SIN – REFER TO SHEET P101.
17. (E) WATER & WASTE PIPING INSTALLED UNDER SHELL SCOPE OF WORK.
18. (E) 3" V. W/ STUB OUT INSTALLED UNDER SHELL SCOPE OF WORK.



1 P102 PLUMBING FIRST FLOOR TENANT PLAN - DOMESTIC HOT & COLD WATER

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

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MARCH 10, 2008
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TOKATLY PORTAL - BEAVERTON

FIRST FLOOR FOOD SERVICE TENANT IMPROVEMENT

595 SW 150TH AVE
BEAVERTON, OREGON

DESIGNED BY:	BEJ
DRAWN BY:	BEJ
CHECKED BY:	BEJ

SHEET TITLE:

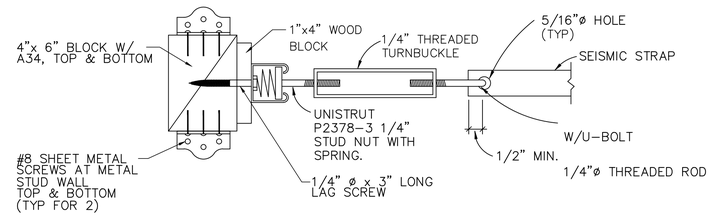
PLUMBING FIRST FLOOR TENANT PLAN - DOMESTIC HOT & COLD WATER

REVISIONS:

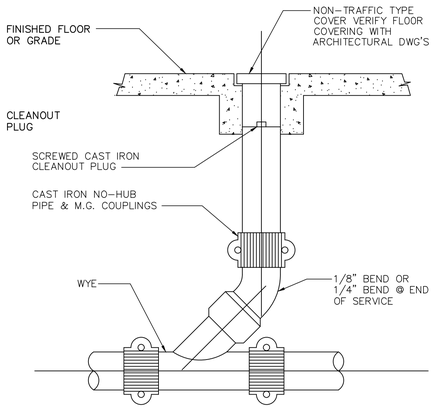
#	DESCRP.	DATE
1	CONST. SET	09-14-2021

ISSUE DATE: 09/14/2021

P102



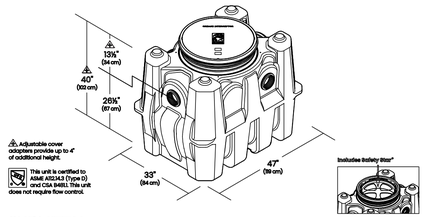
SEISMIC STRAP CONNECTION TO STRUCTURE | SCALE NONE | 3



CLEANOUT TO GRADE OR FLOOR DETAIL | SCALE NONE | 4

SPECIFICATION AND SUBMITTAL

GB-75 75 GPM Great Basin™ Indoor/Outdoor Grease Interceptor



SUBMITTAL

Standard

Location: Indoor/outdoor
Installation: Above/below grade
Flow Rate / Pressure Drop: 75 GPM (4.7 L/s) / 889 lbs. (396 kg), 118 gal. (447 L)
Removal Efficiency at the Rated Capacity: 95.8%
Solids Capacity: 31 gal. (117 L)
Liquid Capacity: 125 gal. (473 L)
Weight: 180 lbs. (86 kg)
Connections: 4" FPT with 4" plain end adapters, single inlet and triple outlet
Camera: Cast iron cover, pickable 24" gas/water tight, H-20 rated, proof-load tested to 40,000 lbs.
Access Restriction: Safety Step™ (450 lb. rating) built into cover adapter

Options

- ☐ 6" plain end inlet/outlet (straight-through) with dual pumpout port connections
- ☐ 6" MPT inlet/outlet. (stainless steel, straight-through)
- ☐ –HO (fixed outlet)
- ☒ GS48S Composite covers, bolted 24" gas/water tight, traffic load rated for 10,000 lbs.

Accessories

- ☐ FOR3 14" – 24" field cut riser
- ☐ FOR3 (48) 1-3/4" – 6-4" field cut risers
- ☐ FOR3 (48) 1-6-4" – 9-4" field cut risers
- ☐ CA3 Adapter for 24" corrugated pipe riser
- ☐ PP8 Pumpout port
- ☐ AR3 High water anchor kit
- ☐ AT3S Cover adapter tie-down kit
- ☐ PLAM-9A-S4 2" plain end fitting
- ☐ PLAM-6A-S4 3" plain and fitting
- ☐ FPT-9A-S4 4" x 2" FPT fitting
- ☐ FPT-9A-S3 3" x 2" FPT fitting
- ☐ FOR3 Integral membrane clamping collar kit

SCHIER	MODEL NUMBER: GB-75	DESCRIPTION: 75 GPM Polyethylene Grease Interceptor
PART #: 4046-007-01	DWG BY: S. Kizner	DATE: 8/28/2020 REV: ECO:

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SPECIAL PRECAUTIONS

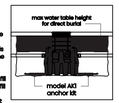
For Schier Grease Interceptor Installations – Failure to follow this guidance voids your warranty

Secure Cover Adapters

Cover adapters must be secured to base units in above grade installations with increased head pressure conditions. Use cover adapter tie-down kit model AT3S.

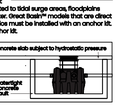
High Water Table Installations

Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). If it is possible for this to occur, install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in stages to avoid crushing the interceptor). At risk areas include but are not limited to tidal surge areas, floodplains and areas that receive storm water. Great Basin™ models that are direct buried in high water table scenarios must be installed with an anchor kit. Model GB-75 uses model AR3 anchor kit.

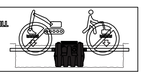


Hydrostatic Pressure Risks

When installed under a hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.

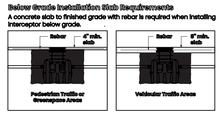


DO NOT COMPACT BACKFILL MECHANICALLY
Compact by hand only

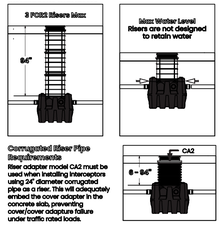


Below Grade Installation Slab Requirements

A concrete slab to finished grade with rebar is required when installing interceptor below grade.



Installations with Risers



Corrugated Riser Pipe Requirements

Riser adapter model CA2 must be used when installing interceptors using 24" diameter corrugated pipe as a riser. This will adequately embed the cover adapter in the concrete slab, preventing cover/cover adapters failure under traffic rated loads.

SCHIER	MODEL NUMBER: GB-75	DESCRIPTION: 75 GPM Polyethylene Grease Interceptor
PART #: 4046-007-01	DWG BY: S. Kizner	DATE: 8/28/2020 REV: ECO:

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SPECIFICATIONS

NOTES

1. 4" FPT with 4" plain end adapters, single inlet and triple outlet
2. Unit weight – w/cast iron cover: 180 lbs.; w/composite cover: 135 lbs. (for wet weight calculations)
3. Maximum operating temperature: 150°F continuous
4. Capacities – Liquid: 125 gal.; Grease: 60 lbs. Solids: 31 gal.
5. This unit does not require flow control.
6. For gravity drainage applications only.
7. Do not use for pressure applications.
8. Cover placement allows full access to tank for ease of maintenance.
9. Inlet and outlet unions per local code.
10. Engineered inlet and outlet diffusers are removable to inspect / clean piping.
11. Integral air relief / Anti-siphon / sampling access.
12. Adjustable cover adapters provide up to 4" of additional height.
13. Fixed outlet models (–FO) have inlet and outlet permanently welded at the factory in the straight-through (B) position.
14. Maximum of 3 risers per unit at one drain time.
15. Safety Step™ access restrictor built into cover adapter, prevents accidental entry to tanks (450 lb rating)

DIFFUSION FLOW TECHNOLOGY

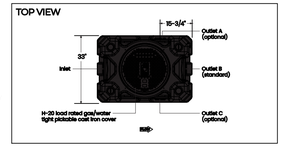
The inlet diffuser reduces turbulence, creates laminar flow and allows the entire tank volume to be utilized for efficient grease separation and minimal re-suspension of captured grease in subsequent layers. The integral air relief / anti-siphon at the outlet diffuser top allows pressure stabilization within the unit during operation. The outlet diffuser can easily be attached to any of the three outlets provided to ease job site piping layouts.

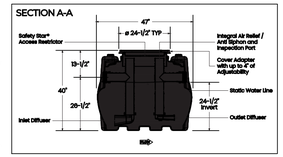
ENGINEER SPECIFICATION GUIDE

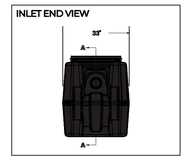
Schier Great Basin™ grease interceptor model # GB-75 shall be fiberglass reinforced and made in accordance with ASME A112.14.3 and CSA B481 series. Interceptor shall be furnished for above and below grade installation. Interceptor shall be certified to ASME A112.14.3 (Type G) and CSA B481 with adjustable cover adapter, Safety Step™ access restrictor built into cover adapter, and three outlet options. Interceptor flow rate shall be 75 GPM. Interceptor grease capacity shall be 881 lbs. Cover shall provide water/gas-tight seal and have minimum 10,000 lbs. load capacity.

CERTIFIED PERFORMANCE

Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME A112.14.3 and CSA B481 grease interceptor standards and gravity exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.







Rated Grease Capacities for Units Piped in Series

No. of Units In Series	Removal Efficiency
1	75 GPM 95.8%
2	1,722 lbs.
3	2,583 lbs.
4	3,444 lbs.

SCHIER	MODEL NUMBER: GB-75	DESCRIPTION: 75 GPM Polyethylene Grease Interceptor
PART #: 4046-007-01	DWG BY: S. Kizner	DATE: 8/28/2020 REV: ECO:

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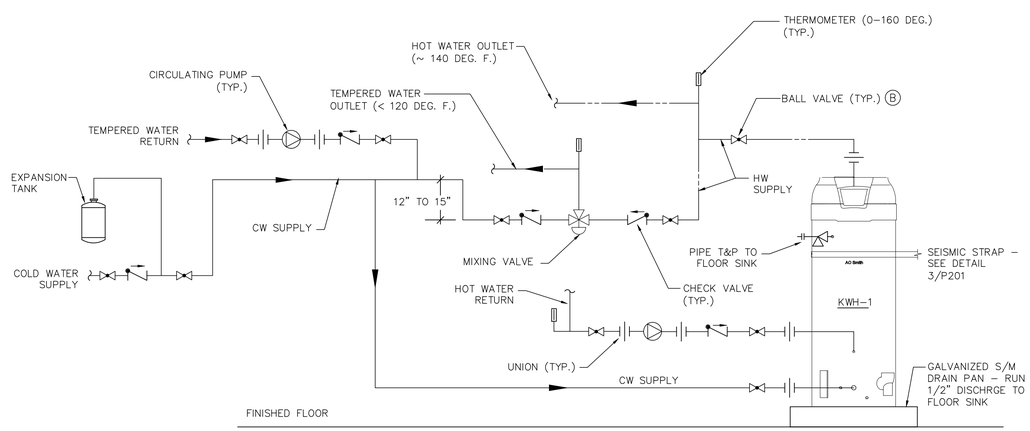
HYDROMECHANICAL GREASE INTERCEPTOR (GI-1 - BELOW FLOOR)

SCALE NONE | 1



KITCHEN / BAR WATER HEATER PIPING SCHEMATIC (KWH-1) | SCALE NONE | 2

NOTES:

1. WATER HEATER PIPING SCHEMATIC IS SHOWN FOR GENERAL LAYOUT OF PIPING AND APPURTENENCES ONLY. CONTRACTOR IS TO PROVIDE REQUIRED DEVICES FOR A COMPLETE AND WORKABLE SYSTEM AND SHALL SIZE & LOCATE PIPING AND ACCESSORIES AS REQUIRED FOR FINAL EQUIPMENT AND FIXTURE LAYOUT PER APPROVED PLAN.
2. INSTALLATION SHALL COMPLY WITH APPLICABLE CURRENT CODES AND STANDARDS.
3. HOT WATER SUPPLY TEMPERATURE PROVIDED TO CODE REQUIRED FIXTURES MUST BE MAINTAINED WITHIN A RANGE OF 110–120 DEGREES FAHRENHEIT. HOT WATER DELIVERED FROM WATER HEATER IS TEMPERED WITH A THERMAL MIXING VALVE TO MAINTAIN REQUIRED RANGE.
4. HOT WATER SUPPLIED TO CODE REQUIRED DIETARY FOOD SERVICE AREA TO BE SET AT A TEMPERATURE OF 140 DEGREES FAHRENHEIT FROM WATER HEATER, BY–PASSING THE THERMAL MIXING VALVE THAT PROVIDES 120 DEG. F. HOT WATER.

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REGISTERED PROFESSIONAL ENGINEER #81286PE OREGON MARCH 10, 2008 BRIAN E. JACOBY
RENEWS: 07/01/2023
09/14/2021

CONSTRUCTION SET

TOKATLY PORTAL - BEAVERTON

FIRST FLOOR FOOD SERVICE TENANT IMPROVEMENT

595 SW 150TH AVE
BEAVERTON, OREGON

DESIGNED BY:	BEJ
DRAWN BY:	BEJ
CHECKED BY:	BEJ

SHEET TITLE:

PLUMBING DETAILS

REVISIONS:

#	DESCRP.	DATE
1	CONST. SET	09-14-2021

ISSUE DATE: 09/14/2021

P201

DOMESTIC HOT WATER CIRCULATOR PUMP SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	LOCATION	SYSTEM SERVED	GPM	HEAD (FT.)	VOLT/PH.	AMPS/WATTS	HP	CONNECTION SIZE	OPER. WEIGHT	NOTES
CP-5	GRUNDFOS	UP 15-10 BUC7/LC	IN-LINE	ATTIC	DHW CIRCULATION	1	4	115/1	0.22 / 25	1/25	3/4"	10 LBS.	[1] [2] [3]

NOTES:
[1] OIL LUBRICATED CIRCULATOR.
[2] MAXIMUM WORKING PRESSURE: 145 PSI

WATER HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	TANK SIZE	CONNECTION		VOLTAGE	KW	MAX. PRESSURE	WEIGHT	NOTES
				CW INLET	HW OUTLET					
WH-1	AO SMITH	LTE 66D	66 GAL	3/4"	3/4"	208	4.5	150 PSI	146	[1]

NOTES:
[1] INSTALL PER MANUFACTURERS INSTALLATION INSTRUCTIONS.

WATER PIPING SIZING

FIXTURE		QTY X WSFU (CW)	TOTAL WSFU (CW)		TOTAL WSFU (HW) (CW X 0.75)
WATER CLOSETS	(WC-1)	6 @ 2.5	15.0		-
LAVATORY	(L-1)	6 @ 1.0	6.0		4.50
HOSE BIBS	(HB-1)	1 @ 2.5	2.5		1.88
HOSE BIBS	(HB-1)	2 @ 1.0	2.0		1.50
		TOTAL F.U.	25.5		7.88
		TOTAL LENGTH (FT.)	150.0		

	COLD WATER		HOT WATER
TOTAL WATER FIXTURE UNITS (WFU TABLE A-103.1)	25.5		7.88
TOTAL FLOW IN GPM FOR LISTED FIXTURES (CHART A-103.1(2))	19	GPM	15
GRAND TOTAL SITE DEMAND GPM:	19	GPM	15
A. MINIMUM DAILY SERVICE PRESSURE [1]	83	PSI	(RESIDUAL PSI IN STREET)
B. STATIC HEAD LOSS (.434 X 27)	11.7	PSI	
C. WATER METER PRESSURE DROP (BASED ON 2" METER)	0.5	PSI	
D. BACKFLOW PREVENTER PRESSURE (BASED ON 2" WATTS LF009)	13	PSI	
PRESSURE AVAILABLE FOR FRICTION LOSS (A-B-C-D)	57.8	PSI	
TOTAL EQUIVALENT PIPE LINE FROM METER TO FURTHEST FIXTURE (WC-1 -2ND FLR.)	150	FT	
MAXIMUM FRICTION LOSS PER 100 FT (31.8 X 100/150)	38.5	PSI	
SERVICE SIZE FROM 5 FT, OUTSIDE BUILDING @ 19 GPM (28.5 WSFU'S) DEMAND (CHART A 105.1(2)):			1"
FROM OPSC TABLE 610.4, MAXIMUM ALLOWABLE LENGTH: 150 FT. @ 1-1/2" BLDG. SUPPLY & 1" METER - PRESSURE RANGE - 46 TO 60 PSI: 85 WSFU'S			

[1] AN APPROVED-TYPE PRESSURE REGULATOR SHALL BE INSTALLED AND THE STAIC PRESSURE REDUCED TO 80 PSI OR LESS, WHERE STATIC PRESSURE IN THE WATER SUPPLY PIPING EXCEEDS 80 PSI PER 2017 OPSC SECTION 608.2

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE TYPE	DESCRIPTION	CONNECTION				
			WASTE	VENT	HW	CW	NOTES
(WC-1)	WATER CLOSET	OWNER PROVIDED, CONTRACTOR INSTALLED	3"	2"	-	1/2"	
(L-1)	LAVATORY	OWNER PROVIDED, CONTRACTOR INSTALLED	1-1/2"	1-1/2"	1/2"	1/2"	
(HB-1)	HOSE BIB	WOODFORD B65 AUTOMATIC DRAINING WALL HYDRANT W/ SINGLE CHECK VACUUM BREAKER.	2"	-	1/2"	1/2"	
(FCO)	FLOOR CLEANOUT	SIOUX CHIEF 834 SERIES W/ ROUND NICKEL-BRONZE TOP (SIZE PER	-	-	-	-	

DRAINAGE FIXTURE UNITS (DFU'S)

FIXTURE QTY.	DESCRIPTION		2017 OPSC TABLE 702.1 DFU UNIT VALUE		
			PRIVATE	PUBLIC	TOTAL DFU
6	WATER CLOSET	(WC-1)	-	4.0	24.0
6	LAVATORY	(L-1)	-	1.0	6.0
	TOTAL DFU'S				**30.0**

PER 2017 TABLE 703.2 4" PIPE HAS MAXIMUM LOADING OF 216 DFU'S (HORIZONTAL).

*BASED ON SLOPE OF WASTE PIPING AT 1/4" (2%) PER FOOT, PER TABLE 703.2 NOTE #5.

LEGEND

MARK	DESCRIPTION
– – – – – – – –	EXISTING PIPING (TYPE INDICATED)
———	(E) WASTE PIPING
– – – – – – – –	(N) WASTE VENT PIPING
——— — ———	(N) COLD WATER PIPING
———– –———	(N) HOT WATER PIPING
(E)	EXISTING
(N)	NEW
I.E.	INVERT ELEVATION
FCO	FLOOR CLEAN–OUT
WCO	WALL CLEAN–OUT
COTG	CLEAN–OUT TO GRADE
VTR	VENT THRU ROOF
DN.	DOWN
RPB	REDUCED PRESSURE BACKFLOW ASSEMBLY
WSFU	WATER SUPPLY FIXTURE UNITS
DFU	DRAINAGE FIXTURE UNITS
GWDFU	GREASE WASTE DRAINAGE FIXTURE UNITS
CW	COLD WATER
HW	HOT WATER
W.	WASTE
SS	SANITARY SEWER
V.	VENT
WC	WATER CLOSET
L	LAVATORY
FD	FLOOR DRAIN
FC	FLOOR SINK
MS	MOP SINK
HS	HAND SINK
RS	RINSE SINK
PRS	PRE–RINSE SINK

ENERGY COMPLIANCE NOTES

1. PROVIDE TEMPERATURE CONTROLS ON SERVICE WATER HEATING SYSTEMS TO LIMIT MAXIMUM HOT WATER TEMPERATURE TO <= 120 DEG. F. (ASHRAE STD. 90.1 7.4.4.1).
2. PROVIDE AUTOMATIC TIME SWITCH(ES) TO AUTOMATICALLY SWITCH OFF RECIRCULATING HOT WATER SYSTEMS OR HEAT TRACE TAPE (ASHRAE STD. 90.1 7.4.4.2).
3. PROVIDE CONTROLS THAT LIMIT THE OPERATION OF A RECIRCULATION PUMP INSTALLED TO MAINTAIN TEMPERATURE OF A STORAGE TANK. (ASHRAE STD. 90.1 7.4.4.4).
4. PROVIDE TEMPERATURE CONTROLLING MEANS TO LIMIT THE MAXIMUM TEMPERATURE OF WATER DELIVERED FROM LAVATORY FAUCETS IN PUBLIC FACILITY RESTROOMS TO 110 DEG. F. (ASHRAE STD. 90.1 7.4.4.3).
5. INSULATE HOT WATER IN ACCORDANCE WITH ASHRAE STD. 90.1 7.4.3 & TABLE 6.8.3–1.
6. INSULATE HEAT TRACED OR EXTERNALLY HEATED PIPING IN ACCORDANCE WITH ASHRAE STD. 90.1 7.4.3. & TABLE 6.8.3–1.

GENERAL NOTES

1. PLUMBING INSTALLATION SHALL COMPLY WITH CURRENT APPLICABLE STATE OF OREGON, COUNTY, AND CITY BUILDING CODES.
2. PLUMBING CONTRACTOR SHALL OBTAIN AND PAY FOR PLUMBING AND OTHER PERMITS ASSOCIATED WITH THE SCOPE OF WORK.
3. COORDINATE PLUMBING INSTALLATION WITH MECHANICAL, ELECTRICAL, AND FIRE PROTECTION CONTRACTORS PRIOR TO CONSTRUCTION. PLUMBING CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING.
4. EQUIPMENT AND FIXTURE LOCATIONS TO BE VERIFIED WITH OWNER PRIOR TO ANY WORK BEING DONE.
5. PLUMBING CONTRACTOR IS RESPONSIBLE FOR TESTING AND INSPECTIONS REQUIRED. ANY INSTALLATION DEFICIENCIES ARE TO BE CORRECTED PRIOR TO COVER.
6. PROVIDE FIRE STOPPING FOR PENETRATIONS THROUGH RATED CONSTRUCTION PER OPSC CHAPTER 14 AND OSSC SECTION 714. PROVIDE SUBMITTAL OF FIRE STOPPING MATERIALS AND METHODS AS REQUIRED.
7. COORDINATE PLUMBING INSTALLATION WITH SITE UTILITIES INDICATED ON THE SITE PLAN AND CIVIL DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR FOR REQUIRED CONNECTION POINTS AND PIPING MATERIALS TO BE CONNECTED TO SITE UTILITIES – REFER TO CIVIL AND IRRIGATION DRAWINGS.
8. VERIFY WITH ARCHITECT THE TYPE OF MATERIAL FOR VERTICAL WASTE RISERS FOR SOUND ATTENUATION.
9. PROVIDE OFFSETS AND ASSOCIATED FITTINGS NOT INDICATED ON DRAWINGS AS REQUIRED.
10. PROVIDE CLEAN–OUTS AS REQUIRED PER OPSC SECTION 707.0.
11. PROVIDE WATER HAMMER ARRESTERS ON WATER SUPPLY SYSTEMS AT QUICK–ACTING VALVES AND AT END OF PIPING RUNS PER OPSC 609.10.
12. INSULATE CONDENSATE DRAINS FOR HVAC EQUIPMENT LOCATED INSIDE BUILDING ENVELOPE. DRAIN TO NEAREST APPROVED RECEPTOR OR WHERE INDICATED ON DRAWINGS.
13. INSULATE HOT WATER AND HOT WATER RE–CIRCULATING PIPING IN ACCORDANCE WITH OEESC 504.5.
14. SLOPE HORIZONTAL WASTE PIPING AT 2% MINIMUM.
15. USE OF PEX PIPING LIMITED TO RUN–OUTS AND DROPS TO FIXTURES.
16. HOT AND COLD WATER RUN–OUTS AND DROPS TO FIXTURES 1/2" UNLESS OTHERWISE NOTED ON DRAWINGS.
17. VERIFY HEIGHT OF EXTERIOR HOSE BIBS (WALL HYDRANTS) WITH ARCHITECT.
18. SEISMICALLY BRACE WASTE, VENT, WATER, AND GAS PIPING PER SMACNA STANDARDS, CURRENT EDITION, AS APPLICABLE.
19. VERIFY WITH CITY PLAN REVIEW AND PLUMBING INSPECTORS THE TYPE OF DOMESTIC WATER BACK FLOW PROTECTION REQUIRED FOR SITE WATER SERVICE. THIS INFORMATION IS TO BE PROVIDED TO THE GENERAL CONTRACTOR FOR ISSUE TO SITE UTILITY CONTRACTOR.

GENERAL PIPING MATERIALS NOTES

DOMESTIC WATER:	ASTM B88 TYPE L ABOVE GRADE, TYPE K BELOW GRADE W/ WROUGHT COPPER SOLDER TYPE FITTINGS (150 PSI SERVICE), TIN / ANTIMONY SOLDER (ASTM B32–95TA) PEX PLASTIC TUBING AND JOINTS ALLOWED FOR FINAL CONNECTIONS TO FIXTURES MATERIALS AND FITTINGS SHALL COMPLY WITH OPSC SECTION 604.0 AND TABLE 604.1.
DRAIN, SANITARY SEWER, & VENT	SCHEDULE 40 ABS (ASTM D3965 & F628 CELLULAR CORE) ASTM D3965 & D2661 DWV FITTINGS & ASTM D2235 SOLVENT CEMENT (UNLESS NOTED OTHERWISE) MATERIALS AND FITTINGS SHALL COMPLY WITH OPSC SECTION 701.0 AND TABLE 701.2.

SHEET INDEX

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REGISTERED PROFESSIONAL ENGINEER #81286PE OREGON MARCH 10, 2006 BRIAN E. JACOBY
RENEWS: 07/01/2023
09/14/2021

CONSTRUCTION SET

TOKATLY PORTAL - BASE SHELL

595 SW 150TH AVE
BEAVERTON, OREGON

DESIGNED BY: BEJ
DRAWN BY: BEJ
CHECKED BY: BEJ

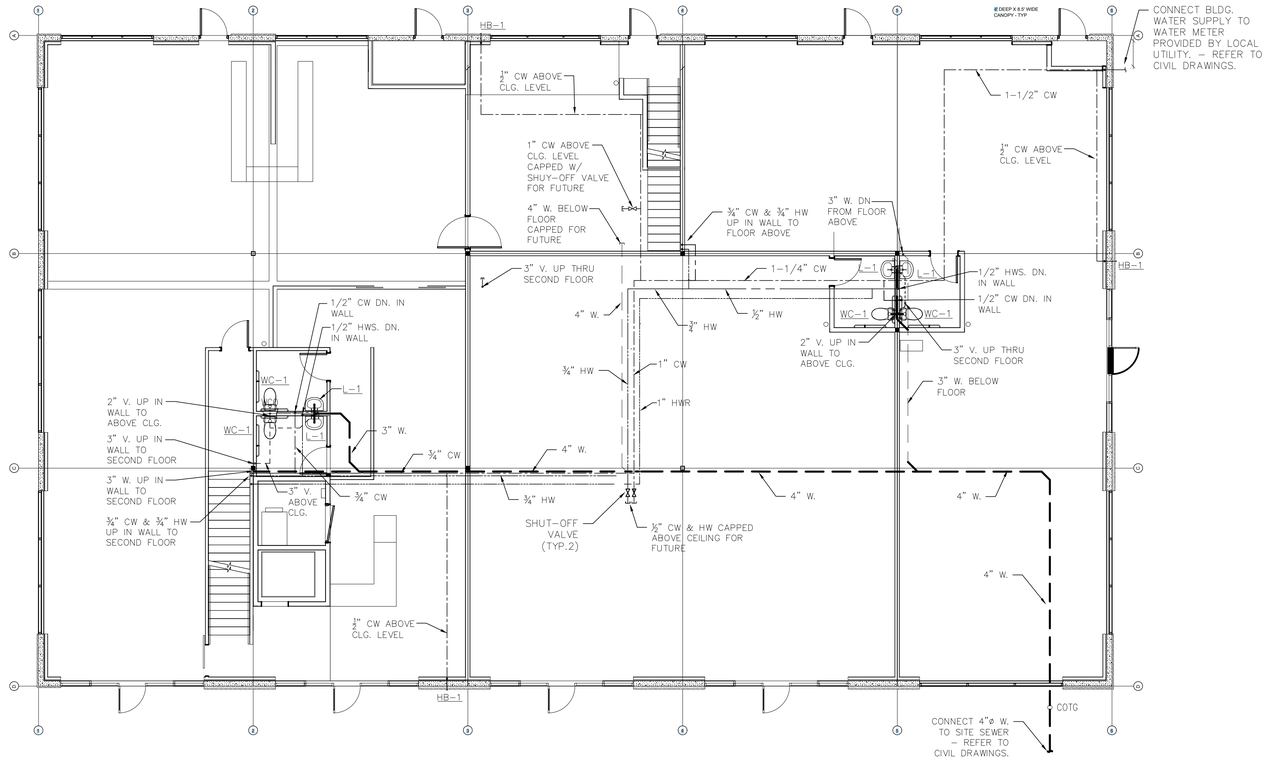
SHEET TITLE:
PLUMBING NOTES, SCHEDULES, LEGEND & SHEET INDEX

REVISIONS:

#	DESCRP.	DATE
1	CONST. SET	09-14-2021

ISSUE DATE: 09/14/2021

P001



1 P101 PLUMBING - FIRST FLOOR PLAN

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

NORTH

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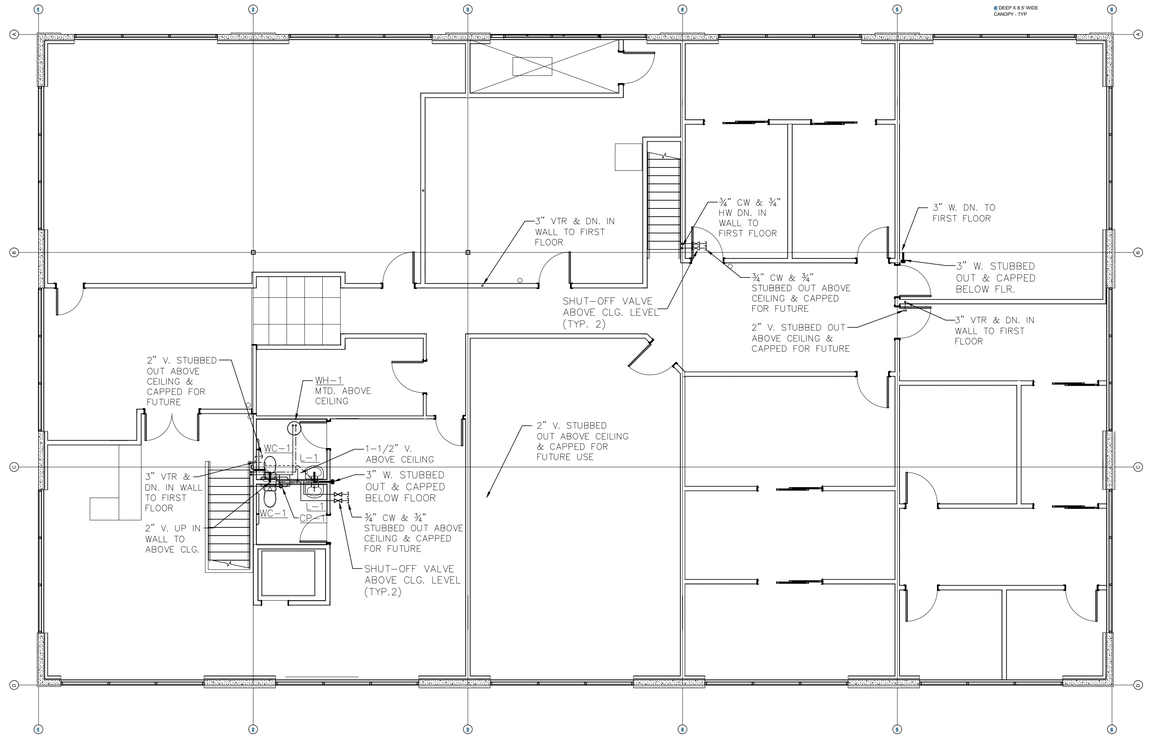
P101



1 P102 PLUMBING - SECOND FLOOR PLAN

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

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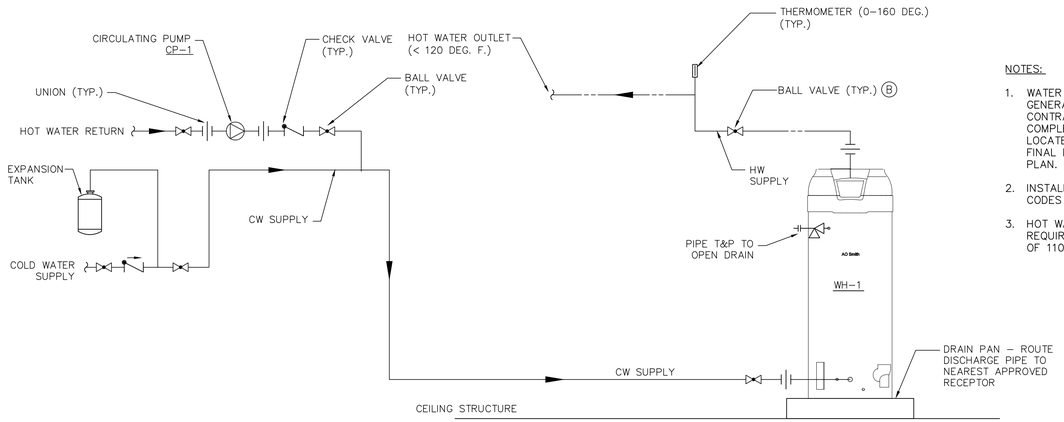
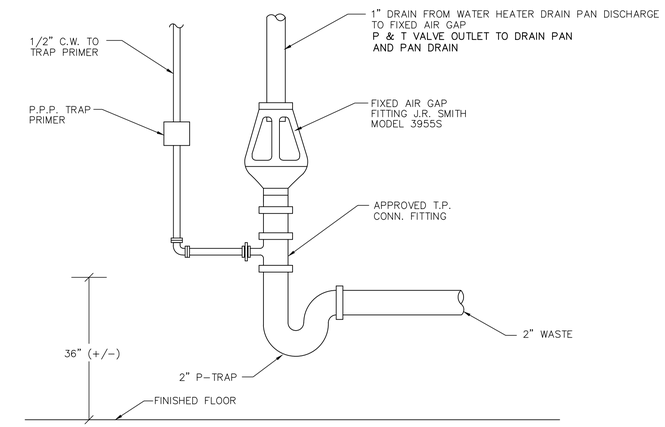


NOTES:

1. WATER HEATER PIPING SCHEMATIC IS SHOWN FOR GENERAL LAYOUT OF PIPING AND APPURTENENCES ONLY. CONTRACTOR IS TO PROVIDE REQUIRED DEVICES FOR A COMPLETE AND WORKABLE SYSTEM AND SHALL SIZE & LOCATE PIPING AND ACCESSORIES AS REQUIRED FOR FINAL EQUIPMENT AND FIXTURE LAYOUT PER APPROVED PLAN.
2. INSTALLATION SHALL COMPLY WITH APPLICABLE CURRENT CODES AND STANDARDS.
3. HOT WATER SUPPLY TEMPERATURE PROVIDED TO CODE REQUIRED FIXTURES MUST BE MAINTAINED WITHIN A RANGE OF 110-120 DEGREES FAHRENHEIT.

DOMESTIC WATER HEATER PIPING SCHEMATIC (WH-1) | SCALE NONE | 4

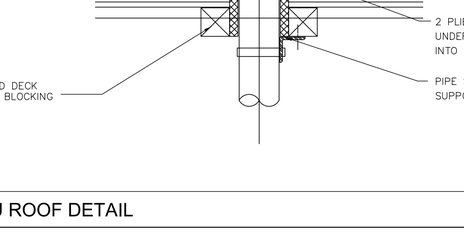


NOTE: PIPING MOUNTED EXPOSED ON WALL BELOW FIXTURES.

FIXED AIR GAP DETAIL | SCALE NONE | 1

SCALE NONE	6

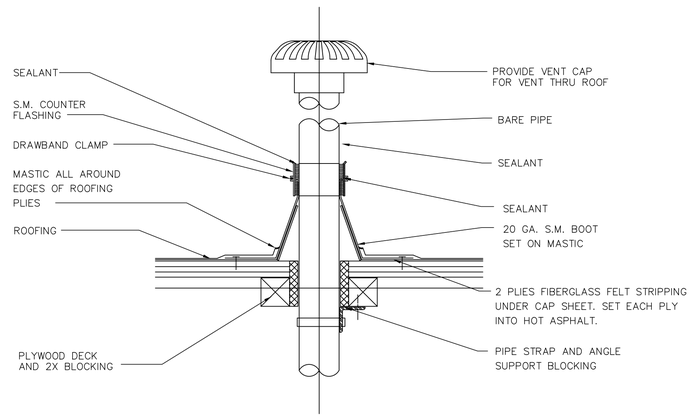
SCALE NONE	5



CLEANOUT TO GRADE OR FLOOR DETAIL | SCALE NONE | 2

SCALE NONE	7

SCALE NONE	6



VENT THRU ROOF DETAIL | SCALE NONE | 3

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