Emergency Shelter Approval

Applicant: Jefferson County Faith Based Network/City of Madras

Location: 61 NW Oak Street

Map and Tax Lot: 111302DD00502

Proposal: Approximately 4,250 square foot emergency shelter

Application Filing Date: April 6, 2022

Exhibits:

A. City of Madras Shelter, 90% CD Set
B. City of Madras Burden of Proof Narrative
C. City of Madras Resolution No. 03-2021
D. FEMA Flood Insurance Rate Map No. 4101030001C

Background:
In June 2020, the Oregon State Legislature adopted HB 4212 to remove land use barriers that might otherwise prevent emergency shelters from locating on certain sites. HB 4212 was followed by the passage of HB 2006 in May of 2021 continuing to allow local governments and certain non-profit organizations to develop emergency shelters in available buildings and/or on open sites without the need for any land use approvals (such as an application for a zone change or a conditional use permit) for the underlying property and notwithstanding any conflicting land use regulations. Applicant is seeking approval under this HB 2006.

FINDINGS AND CONCLUSIONS:

HB 2006 (2021 Regular Session)
SECTION 2. (1) As used in this section, "emergency shelter" means a building or cluster of buildings that provides shelter on a temporary basis for individuals and families who lack permanent housing.

FINDING: Applicant is proposing a building for temporarily sheltering individuals and families who lack permanent housing, the proposal qualifies as an "emergency shelter".

SECTION 3. (1) A local government shall approve an application for the development or use of land for an emergency shelter, as defined in section 2 of this 2021 Act, on any property, notwithstanding ORS chapter 195, 197, 197A, 215 or 227 or any statewide plan, rule of the Land Conservation and Development Commission or local land use regulation, zoning ordinance, regional framework plan, functional plan or comprehensive plan, if the emergency shelter:

(a) Includes sleeping and restroom facilities for clients;

FINDING: Per plans submitted by Applicant (Sheet A2.10), sleeping quarters and restrooms are proposed.

(b) Will comply with applicable building codes;

FINDING: As with other structural development, Applicant will be required to obtain all required building permits for this type of development from Jefferson County prior to commencement of construction. Applicant shall satisfy this criterion based upon issuance of all necessary building permits.

(c) Is located inside an urban growth boundary or in an area zoned for rural residential use as defined in ORS 215.501;

FINDING: The subject parcel is within Madras city limits.

(d) Will not result in the development of a new building that is sited within an area designated under a statewide planning goal relating to natural disasters and hazards, including flood plains or mapped environmental health hazards, unless the development complies with regulations directly related to the hazard;

FINDING: This parcel is outside of known flood hazards per the 1989 FIRM map, which is the most recent map available. There are no other mapped environmental or health hazards known at this location.

(e) Has adequate transportation access to commercial and medical services; and

FINDING: The subject parcel is located adjacent to improved streets (NW 4th Street is paved with marked bike lanes) and near Highways 26 and 97 as well as near the Willow Creek multi-use path. This parcel is located a few blocks north of the main part of downtown Madras and less than a half mile from a full-service grocery store and pharmacy as well as less than a half mile from the nearest hospital and medical offices adjacent to the hospital.

(f) Will not pose any unreasonable risk to public health or safety.

FINDING: As this will be a staffed facility that will provide stability and support to underserved populations, the building will receive building permits from Jefferson County and is not located in known hazard zones, this facility is not expected to pose unreasonable risks to public health or safety.

(2) An emergency shelter allowed under this section must be operated by:
(a) A local government as defined in ORS 174.116;
(b) An organization with at least two years' experience operating an emergency shelter using best practices that is:
(A) A local housing authority as defined in ORS 456.375;
(B) A religious corporation as defined in ORS 65.001; or
(C) A public benefit corporation, as defined in ORS 65.001, whose charitable purpose includes the support of homeless individuals, that has been recognized as exempt from income tax under section 501(a) of the Internal Revenue Code on or before January 1, 2018; or
(c) A nonprofit corporation partnering with any other entity described in this subsection.

FINIDNG: This parcel is owned by the City of Madras and will be operated by the Jefferson County Faith Based Network who has provided shelter and relates services to individuals and families in need for more than four (4) years and therefore this standard is met.

> *(3) An emergency shelter approved under this section:*
> *(a) May provide on-site for its clients and at no cost to the clients:*
> *(A) Showering or bathing;*
> *(B) Storage for personal property;*
> *(C) Laundry facilities;*
> *(D) Service of food prepared on-site or off-site;*
> *(E) Recreation areas for children and pets;*
> *(F) Case management services for housing, financial, vocational, educational or physical or behavioral health care services; or*
> *(G) Any other services incidental to shelter.*
> *(b) May include youth shelters, winter or warming shelters, day shelters and family violence shelter homes as defined in ORS 409.290.*
> *(4) An emergency shelter approved under this section may also provide additional services not described in subsection (3) of this section to individuals who are transitioning from unsheltered homeless status. An organization providing services under this subsection may charge a fee of no more than $300 per month per client and only to clients who are financially able to pay the fee and who request the services.*

FINIDNG: Subject to the limitations contained in HB 2006, the proposed emergency shelter may, but is not required to, include any of the foregoing accessory uses/services/amenities.

> *(5) The approval of an emergency shelter under this section is not a land use decision and is subject to review only under ORS 34.010 to 34.100.*

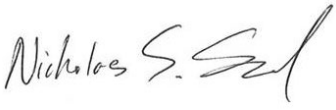
FINIDNG: Pursuant to the foregoing, this decision is not subject to appeal to the Land Use Board of Appeals and is only subject to review under ORS 34.010 to 34.100.

BASED ON THE FOREGOING, the proposed emergency shelter is hereby APPROVED subject to the following conditions of approval:

1. The applicant shall obtain all required building permits for any Emergency Shelter sited on the subject property.

2. The Emergency Shelter located on the subject site must be operated by an entity or partnership meeting the requirements of HB 2006.

APPROVED BY:



Nick Snead, Community Development Director — April 6, 2022 (Date)

*This approval is not a land use decision and is subject to review only under ORS 34.010 to 34.100.

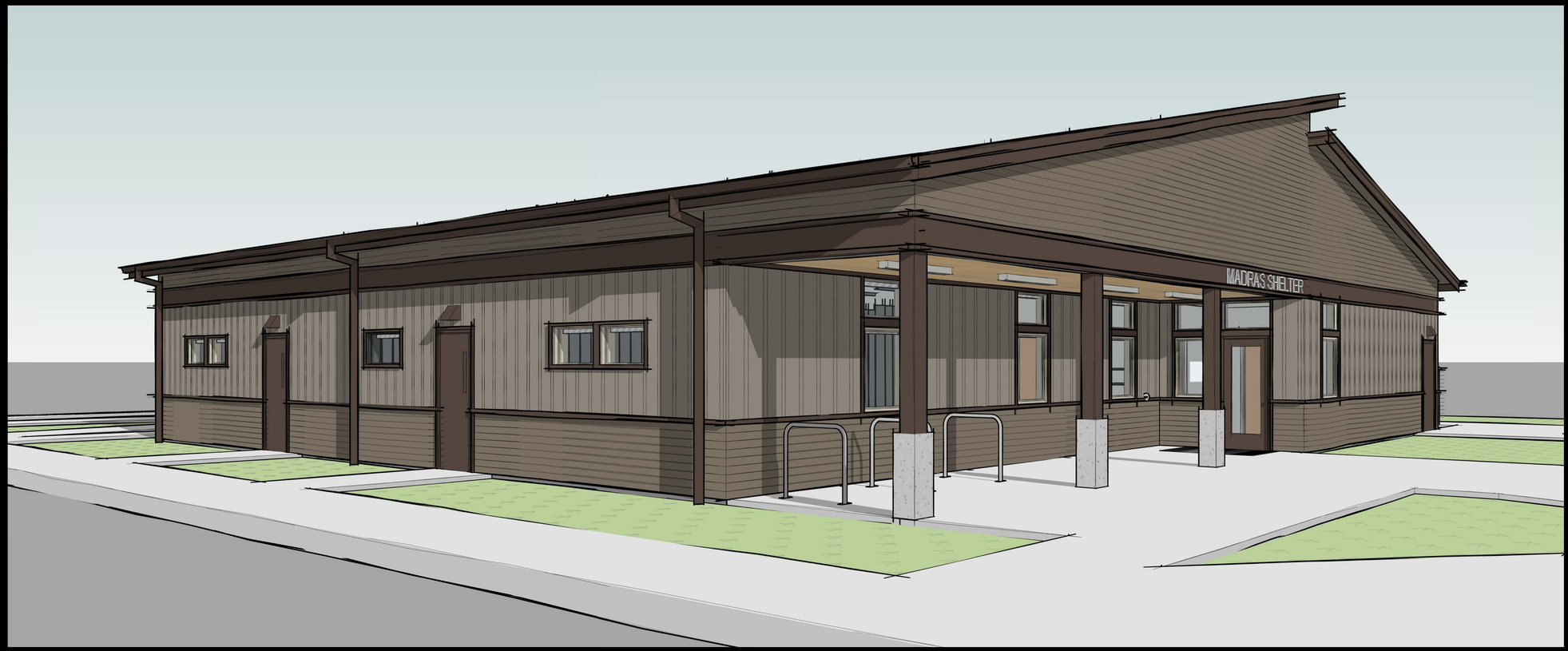
MADRAS SHELTER

CITY OF MADRAS

08/17/2022

90% CD SET

PROJECT ADDRESS
61 NW Oak Street
Madras, OR 97741



OWNER
CITY OF MADRAS
125 SW E Street
Madras, OR 97741
Phone: 541-325-0308
Contact: Gus Burril

ARCHITECT
BLRB ARCHITECTS P.S.
721 SW Industrial Way, Suite 130
Bend, OR 97702
Phone: 541-330-6506
Contact: Eric Nielsen

LAND USE PLANNING
BLACKMORE PLANNING & DEVELOPMENT SERVICES
Phone: 541-419-1455
Contact: Greg Blackmore

GEOTECHNICAL ENGINEER
THE WALLACE GROUP
62915 NE 18th Street, Suite 1
Bend, OR 97701
Phone: 541-382-4707
Contact: Adam Larson

CIVIL ENGINEER
HWA
62930 O.B. Riley Road, Suite 100
Bend, OR 97703
Phone: 541-389-9351
Contact: Grant Hardgrave

LANDSCAPE ARCHITECT
SZABO LANDSCAPE ARCHITECURE
1000 NW Wall Street, Suite 270
Bend, OR 97703
Phone: 541-382-2059
Contact: Brian Nierman

STRUCTURAL ENGINEER
WALKER STRUCTURAL ENGINEERING
2863 NW Crossing Drive, Suite 201
Bend, OR 97703
Phone: 541-330-6869
Contact: Craig Davis

MECHANICAL / ELECTRICAL ENGINEER
SAZAN GROUP
111 Southwest Fifth Avenue, Suite 3210
Portland, OR 97204
Phone: 503-416-2400
Contact: Daniel Touger

BLRB architects
TACOMA | SPOKANE | PORTLAND | **BEND**

1250 Pacific Ave	421 W Riverside Ave	621 SW Morrison St	721 SW Industrial
Suite 700	Suite 511	Suite 950	**Suite 130**
WA 98402	WA 99201	OR 97205	**OR 97702**
253.627.5599	509.252.5080	503.595.0270	**541.330.6506**

8/22/2022
8:14:00 AM

022044.000
90% CD SET

COVER SHEET
A0.01

MADRAS SHELTER

022044.000

61 NW OAK STREET
MADRAS, OR 97741

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

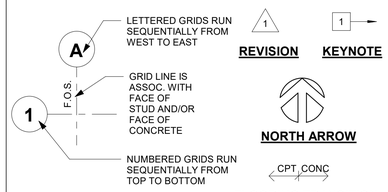
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270

BEND | 721 SW Industrial Way Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

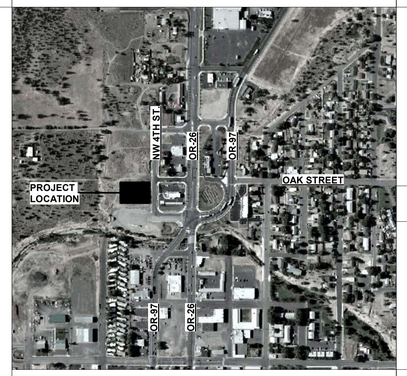
ARCHITECTURAL SYMBOLS



ABBREVIATIONS

AB	ANCHOR BOLT	NO	NUMBER
AFF	ABOVE FINISHED FLOOR	NTS	NOT TO SCALE
AL	ALUMINUM	OC	ON CENTER
BD	BOARD	OD	OVERFLOW DRAIN
BFF	BELOW FINISHED FLOOR	OFCI	OWNER FURNISHED / CONTRACTOR INSTALLED
BLDG	BUILDING		
BO	BOTTOM OF	OFOI	OWNER FURNISHED / OWNER INSTALLED
CLG	CEILING		
CMU	CONCRETE MASONRY UNIT	OPG	OPENING
CONC	CONCRETE	OVHD	OVERHEAD
CONT	CONTINUOUS	PL	PLATE
DIA	DIAMETER	PPM	PRE-PAINTED METAL
DIM	DIMENSION	R	RISER
DN	DOWN	RAD	RADIUS
DWG	DRAWING	RD	ROOF DRAIN
EA	EACH	REF	REFERENCE
ELEV	ELEVATION	REINF	REINFORCING
EQ	EQUAL	REQ	REQUIREMENT
EXP	EXPANSION	SEC	SECTION
FD	FLOOR DRAIN	SHTNG	SHEATHING
FE	FIRE EXTINGUISHER	SHT	SHEET
FF	FINISHED FLOOR	SIM	SIMILAR
FIN	FINISH	SPEC	SPECIFICATION
FOB	FACE OF BRICK	SQ	SQUARE
FOC	FACE OF CONCRETE	STD	STANDARD
FOF	FACE OF FOUNDATION	STL	STEEL
FOS	FACE OF STUD	STRL	STRUCTURAL
FT	FOOT	TEL	TELEPHONE
GA	GAUGE	TFCI	TENANT FURNISHED / CONTRACTOR INSTALLED
GALV	GALVANIZED		
GYP	GYPSUM	TFTI	TENANT FURNISHED / TENANT INSTALLED
GWB	GYPSUM WALL BOARD		
HB	HOSE BIB	TO	TOP OF
HM	HOLLOW METAL	TOB	TOP OF BRICK
HR	HOUR	TOC	TOP OF CURB
ID	INSIDE DIAMETER	TOW	TOP OF WALL
INSUL	INSULATION	TYP	TYPICAL
JT	JOINT	UNO	UNLESS OTHERWISE NOTED
MAX	MAXIMUM	VIF	VERIFY IN FIELD
MTL	METAL	W/	WITH
MFR	MANUFACTURER	W/O	WITHOUT
MIN	MINIMUM	WD	WOOD
MIR	MIRRORED	WP	WATERPROOF
NC	NON-COMBUSTIBLE	WR	WATER RESISTANT
NIC	NOT IN CONTRACT	WT	WEIGHT

VICINITY MAP



GENERAL NOTES

1. FINISH FLOOR ELEVATION IS FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS FOR THE CORRESPONDING TARGET ELEVATION ABOVE SEA LEVEL.
2. DIMENSIONS: DIMENSIONS ARE TO FACE OF STUDS. ON MASONRY AND CONCRETE WALL DIMENSIONS ARE TO FACE OF WALL.
3. LOCATE ALL SINGLE INTERIOR DOORWAY OUTSIDE OF FRAME AT 4" FROM FACE OF WALL TO FINISH WALL, UNLESS NOTED OTHERWISE.
4. LOCATE ALL SINGLE EXTERIOR DOORWAY OUTSIDE OF FRAME AT 6" FROM FACE OF WALL TO FINISH WALL, UNLESS NOTED OTHERWISE.
5. BUILDING SHALL BE SPRINKLED THROUGHOUT, INCLUDING ENCLOSED SPACES, EXTERIOR CANOPY AND CONCEALED AREAS AS REQUIRED.
6. "PROVIDE" MEANS "FURNISH AND INSTALL."
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS (UNLESS OTHERWISE NOTED), AND WORKMANSHIP IN ACCORDANCE WITH FEDERAL, STATE, CITY AND LOCAL BUILDING CODES AND THEIR REQUIREMENTS.
8. ALL FREESTANDING FURNITURE TO BE PROVIDED AND INSTALLED BY OWNER.
9. FIELD VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO PROCEEDING WITH WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES. FAILURE TO REPORT ANY DISCREPANCIES WITHIN THESE CONSTRUCTION DOCUMENTS TO THE ARCHITECT WILL NOT BE GROUNDS FOR ADDITIONAL COST OR CHANGE ORDERS.
10. DO NOT SCALE THE DRAWINGS.

PROJECT INFORMATION

OWNER:
CITY OF MADRAS
125 SW E STREET
MADRAS, OR 97741
PHONE: 541-475-2344
CONTACT: GUS BURRIL

PROJECT ADDRESS:
61 NW OAK STREET
MADRAS, OR 97741

TAX LOT ID:
111302DD00502

PROJECT DESCRIPTION

PROGRAM:
RESIDENTIAL TEMPORARY (LESS THAN 30 DAYS) SHELTER FOR +/-25 RESIDENTIAL OCCUPANTS AND 2 MANAGEMENT RESIDENTS.

BUILDING:
ONE-STORY WOOD-FRAMED BUILDING WITH FIRE SPRINKLERS

SITE WORK:
NEW PARKING AREAS, LANDSCAPING, UTILITIES, TRASH ENCLOSURE, AND STORMWATER INFRASTRUCTURE.

PROJECT DATA

JURISDICTION:
CITY OF MADRAS, JEFFERSON COUNTY

BUILDING CODES:
2019 OREGON STRUCTURAL SPECIALTY CODE (OSSC)
BASED ON 2018 INTERNATIONAL BUILDING CODE (IBC)
W/ OREGON STATE CHAPTER 1 INTERIM AMENDMENTS

2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC)
REFERENCES ASHRAE STANDARD 90.1-2019

2021 OREGON ELECTRICAL SPECIALTY CODE (OESC)
BASED ON THE 2020 NFPA 70 - NATIONAL ELECTRICAL CODE (NEC)
W/ OREGON AMENDMENTS TO THE 2020 NEC

2019 OREGON MECHANICAL SPECIALTY CODE (OMSC)
BASED ON THE 2018 INTERNATIONAL MECHANICAL CODE (IMC) AND INTERNATIONAL FUEL GAS CODE (IFGC)

2021 OREGON PLUMBING SPECIALTY CODE (OPSC)
BASED ON THE 2021 UNIFORM PLUMBING CODE (UPC)

ACCESSIBILITY:
2019 OSSC - CHAPTER 11 & APPENDIX E
ICC/ANSI A117.1-2009 (REFERENCED BY IBC)

ZONING:
USE: RESIDENTIAL BOARDING HOUSE
ZONING DESIGNATION: CORRIDOR COMMERCIAL (C-1)
SEE CODE INFORMATION SHEET FOR ADDITIONAL INFORMATION

VEHICLE PARKING SPACES:
26 SPACES

BICYCLE SPACES:
6 SPACES

SITE AREA:
33,920 SF

OCCUPANCY:
USE: BOARDING HOUSE (TRANSIENT) WITH MORE THAN 10 OCCUPANTS
OCCUPANCY GROUPS: A-2, B, R-1, S-1
SEPARATED/NONSEPARATED: NONSEPARATED

CONSTRUCTION TYPE:
TYPE: VB
AUTOMATIC FIRE SPRINKLER:
NFPA 13R (OSSC 903.3.1.2)
W/ QUICK RESPONSE -or-
RESIDENTIAL AUTOMATIC SPRINKLERS (OSSC 903.3.2)

BUILDING AREA:
GROUND FLOOR (SINGLE-STORY): 3,760 SQ FT

BUILDING HEIGHT:
STORIES: 1
FEET: 22 FEET

SHEET INDEX

SHEET #	SHEET NAME
GENERAL	
A0.01	COVER SHEET
A0.02	PROJECT INFORMATION
A0.03	CODE INFORMATION, CODE PLAN
A0.04	ACCESSIBILITY DIAGRAMS
CIVIL	
C1.01	EXISTING CONDITIONS AND REMOVAL PLAN
C1.02	EROSION CONTROL PLAN (ESCP)
C2.01	GRADING AND DRAINAGE PLAN
C3.01	UTILITY PLAN
C4.01	UTILITY PROFILES
C4.02	UTILITY PROFILES
C5.01	DETAILS
C5.02	DETAILS
C5.03	DETAILS
C5.04	RAMP AND RETAINING WALL DETAILS
C10.1	COVER SHEET
C10.2	CONSTRUCTION NOTES
C11.1	EXISTING CONDITIONS AND REMOVAL PLAN
C11.2	EROSION CONTROL PLAN
C12.1	UTILITY PLAN AND PROFILE
C13.1	DETAILS
C13.2	DETAILS
C13.3	DETAILS
C14.1	TRAFFIC CONTROL PLAN
LANDSCAPE	
LI1.01	LANDSCAPE IRRIGATION PLAN
LI2.01	IRRIGATION DETAILS
LI2.02	IRRIGATION DETAILS
LP3.01	LANDSCAPE PLANTING PLAN
LP3.02	PLANTING DETAILS
ARCHITECTURAL	
A1.01	SITE PLAN
A1.05	SITE DETAILS
A2.00	ASSEMBLY TYPES
A2.10	FLOOR PLAN
A2.11	DIMENSION PLAN
A2.20	ROOF PLAN
A3.01	EXTERIOR ELEVATIONS
A3.02	EXTERIOR ELEVATIONS
A4.01	BUILDING SECTIONS
A4.02	BUILDING SECTIONS
A4.11	WALL SECTIONS
A4.12	WALL SECTIONS
A5.01	INTERIOR ELEVATIONS
A5.02	INTERIOR ELEVATIONS
A6.10	REFLECTED CEILING PLAN
A7.01	DOOR AND WINDOW SCHEDULES
A7.30	OPENING DETAILS
A7.31	OPENING DETAILS
A8.10	EXTERIOR DETAILS
A8.30	ROOF DETAILS
A8.50	INTERIOR DETAILS
A8.51	INTERIOR DETAILS
A9.01	FINISH SCHEDULE / PLAN
A9.70	ENLARGED RESTROOM PLANS AND ELEVATIONS

SHEET INDEX

SHEET #	SHEET NAME
STRUCTURAL	
S0.01	GENERAL STRUCTURAL NOTES & DRAWING INDEX
S0.02	ABBREVIATIONS & SYMBOLS
S2.11	FOUNDATION PLAN
S2.21	ROOF FRAMING PLAN
S3.01	SHEAR WALL PLAN
S3.02	SHEAR WALL DETAILS
S5.01	STRUCTURAL DETAILS - FOUNDATION
S6.01	STRUCTURAL DETAILS - FRAMING
S6.02	STRUCTURAL DETAILS - FRAMING
PLUMBING	
P0.00	GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX
P0.02	PLUMBING SCHEDULES
P3.01	PLUMBING WASTE & VENT - UNDERGROUND PLAN
P3.02	PLUMBING WASTE & VENT PLAN - FIRST FLOOR
P4.01	PLUMBING DOMESTIC WATER & GAS PLAN - FIRST FLOOR
P7.00	PLUMBING DETAILS
MECHANICAL	
M0.00	GENERAL NOTES, ABBREVIATIONS AND SHEET INDEX
M0.01	MECHANICAL LEGEND
M0.02	MECHANICAL SCHEDULES
M0.03	MECHANICAL SCHEDULES
M1.01	MECHANICAL HVAC - FIRST FLOOR PLAN
M1.02	MECHANICAL HVAC - ROOF PLAN
M2.00	MECHANICAL DETAILS
ELECTRICAL	
E0.00	GENERAL NOTES, ABBREVIATIONS & SHEET INDEX
E0.01	ELECTRICAL LEGEND
E1.01	ELECTRICAL SITE PLAN
E1.02	ELECTRICAL LIGHTING SITE PLAN
E1.03	PHOTOMETRIC SITE PLAN
E2.00	LUMINAIRE SCHEDULE
E2.01	LIGHTING CONTROLS SCHEDULE
E3.01	ELECTRICAL LIGHTING PLAN
E4.01	ELECTRICAL POWER PLAN
E5.01	ELECTRICAL SYSTEM PLAN
E6.00	ELECTRICAL ONE LINE DIAGRAM, PANEL, HVAC SCHEDULES
E7.00	ELECTRICAL DETAILS

Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: PROJECT INFORMATION

Drawn By : EN
Project No. 022044.000
Date : 08/17/2022
Revised :

Sheet No.
A0.02

8/22/2022 8:14:00 AM

MAX. FLOOR AREA PER OCCUPANT (OSSC TABLE 1004.5)

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	GROSS OR NET	Notes
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT	300 SF	GROSS	
ASSEMBLY: WITHOUT FIXED SEATS: CONCENTRATED	7 SF	NET	
BUSINESS AREAS	150 SF	GROSS	
KITCHENS, COMMERCIAL	200 SF	GROSS	
RESIDENTIAL	200 SF	GROSS	DORM ROOM OCCUPANT LOAD INCREASED BASED ON NUMBER OF BEDS PROVIDED.

SIGN SCHEDULE

TAG	TYPE	DESCRIPTION	NOTES
SP-1	EXIT SIGN	RRE-655	SN-1, SN-3, SN-4
SP-2	OCCUPANT LOAD	NHEP-8249	SN-2, SN-3
SP-3	WOMEN'S RESTROOM	RRE-130	SN-2, SN-3
SP-4	WOMEN'S SHOWER	RRE-14824	SN-2, SN-3
SP-5	MEN'S RESTROOM	RRE-145	SN-2, SN-3
SP-6	MEN'S SHOWER	RRE-14822	SN-2, SN-3

SP = SIGN PANEL

GENERAL NOTES:
A. SIGNS TO PROVIDE 3/4" RAISED COPY ACCOMPANIED BY GRADE 2 BRAILLE PER ICC A117.2 SECTION 703.
B. ALL SIGN PANEL SYMBOLS BASED ON BEST SIGNS POPULAR CHOICE MODEL NUMBERS

NOTES:
SN-1 INSTALL SIGNAGE ON WALL ADJACENT TO LATCH SIDE OF DOOR, 6" MIN. DISTANCE FROM DOOR FRAME

SN-2 INSTALL SIGNAGE ON WALL ADJACENT TO FRAMED OPENING, 6" MIN. DISTANCE FROM OPENING

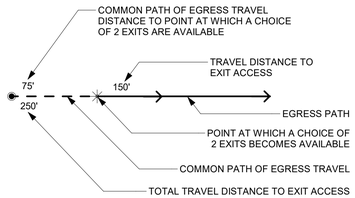
SN-3 60" A.F.F. TO BASELINE OF TOP ROW OF TEXT

SN-4 PROVIDE ADDITIONAL LOW-LEVEL INTERNALLY ILLUMINATE EXIT SIGNS AT R-1 GUESTROOMS PER OSSC 1013.2. EXCLUDES SLEEPING ROOM #108.

CODE PLAN LEGEND

- 1 HOUR FIRE PARTITION
- A-2 ASSEMBLY OCCUPANCY
- B BUSINESS OCCUPANCY
- R-1 RESIDENTIAL OCCUPANCY
- S-1 MODERATE HAZARD STORAGE OCCUPANCY
- ILLUMINATED EXIT LIGHT. DIRECTIONAL ARROWS AS INDICATED. SHADED AREAS DENOTE FACES
- F.E. TYPE 2A FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
- ROOM NAME / 123 SF — AREA
- 1 — ROOM #
- OCC: 1 — NUMBER OF OCCUPANTS
- # — OCCUPANT LOAD EXITING SPACE
- BUILDING EXIT
- PROVIDED EGRESS WIDTH (INCHES)
- REQ'D EGRESS WIDTH IN INCHES, 36 MIN
- EXIT OCCUPANT LOAD
- DF — DRINKING FOUNTAIN
- FACP — FIRE ALARM CONTROL PANEL
- KNOX — EMERGENCY KNOX BOX
- ADA — HC AUTOMATIC DOOR OPERATION & ACTUATOR BUTTON

EGRESS TRAVEL LEGEND



2019 OREGON STRUCTURAL SPECIALTY CODE (OSSC)

CHAPTER 3 - OCCUPANCY
SECTION 303.3 OCCUPANCY GROUP A-2
CAFETERIA OR DINING FACILITY, INCLUDES ASSOCIATED KITCHEN
SECTION 304 OCCUPANCY GROUP B
OFFICES, SERVICE-TYPE TRANSACTIONS, INCLUDING STORAGE OF RECORDS AND ACCOUNTS.
SECTION 310 OCCUPANCY GROUP R-1
BOARDING HOUSE (TRANSIENT) CONTAINING SLEEPING UNITS WHERE THE OCCUPANTS ARE TRANSIENT IN NATURE
SECTION 311.2 OCCUPANCY GROUP S-1
MODERATE-HAZARD STORAGE USE

CHAPTER 4 - SPECIAL REQUIREMENTS BASED ON USE & OCCUPANCY
SECTION 420 SPECIAL REQUIREMENTS GROUP R-1

SECTION 420.2 SEPARATION WALLS
WALLS SEPARATING DWELLING UNITS IN THE SAME BUILDING, WALLS SEPARATING SLEEPING UNITS IN THE SAME BUILDING AND WALLS SEPARATING DWELLING OR SLEEPING UNITS FROM OTHER OCCUPANCIES CONTIGUOUS TO THEM IN THE SAME BUILDING SHALL BE CONSTRUCTED AS FIRE PARTITIONS PER SECTION 708 FIRE PARTITIONS.
1-HR FIRE PARTITIONS PROVIDED, SEE CODE PLAN AND ASSEMBLIES.

SECTION 420.4 AUTOMATIC SPRINKLER SYSTEM
GROUP R OCCUPANCIES SHALL BE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.2.8.
AUTOMATIC SPRINKLER SYSTEM PROVIDED

SECTION 420.5 FIRE ALARM & SMOKE ALARMS
FIRE ALARM SYSTEMS AND SMOKE ALARM SYSTEMS SHALL BE PROVIDED IN GROUP R-1 OCCUPANCY PER SECTIONS 907.2.6, 907.2.8, AND 907.2.9
FIRE AND SMOKE ALARMS PROVIDED

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS
TABLES 504.3, 504.4, 506.2 ALLOWABLE HEIGHT AND BUILDING AREAS
GROUP A-2, CONSTRUCTION TYPE VB, S1 SPRINKLERS
ALLOWED:
2-STORIES
60 FOOT HEIGHT
24,000 SQ FT
NO AREA MODIFICATIONS UTILIZED
GROUP B, CONSTRUCTION TYPE VB, S1 SPRINKLERS
ALLOWED:
2-STORIES
60 FOOT HEIGHT
36,000 SQ FT
NO AREA MODIFICATIONS UTILIZED
GROUP R-1, CONSTRUCTION TYPE VB, S13R SPRINKLERS
ALLOWED:
2-STORIES
40 FOOT HEIGHT
7,000 SQ FT
NO AREA MODIFICATIONS UTILIZED
GROUP S, CONSTRUCTION TYPE VB, S1 SPRINKLERS
ALLOWED:
2-STORIES
60 FOOT HEIGHT
36,000 SQ FT
NO AREA MODIFICATIONS UTILIZED

ACTUAL:
1-STORY
22 FOOT HEIGHT
GROUND FLOOR: 3,760 SQ FT TOTAL - COMPLIES

SECTION 508.3 NON SEPARATED OCCUPANCIES
NONSEPARATED OCCUPANCY APPROACH USED - ALLOWABLE BUILDING AREA, HEIGHT, AND NUMBER OF STORIES BASED ON MOST RESTRICTIVE OCCUPANCY: R-1

CHAPTER 6 - TYPES OF CONSTRUCTION
CONSTRUCTION TYPE: TYPE VB
TABLE 601 FIRE-RESISTANCE RATING OF BUILDING ELEMENTS
STRUCTURAL FRAME: 0-HR
BEARING WALLS: 0-HR
NON-BEARING WALLS: 0-HR
FLOOR CONSTRUCTION: 0-HR
ROOF CONSTRUCTION: 0-HR

TABLE 602 EXTERIOR WALLS
FIRE SEPARATION DISTANCE 10 FOOT & GREATER: 0-HR
COMPLIES - NO FIRE SEPARATION LESS THAN 10 FT

CHAPTER 7 - FIRE & SMOKE PROTECTION FEATURES
SECTION 705.8 ALLOWABLE AREA OF OPENINGS
TABLE 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS
COMPLIES - FIRE SEPARATION DISTANCE GREATER THAN 30 FEET PROVIDED, NO LIMIT TO OPENINGS

SECTION 708.3 FIRE PARTITIONS SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 1-HOUR.
COMPLIES - 1-HOUR PARTITIONS PROVIDED

SECTION 708.4 FIRE PARTITIONS SHALL EXTEND FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW AND BE SECURELY ATTACHED TO THE UNDERSIDE OF THE FLOOR OR ROOF SHEATHING, DECK, OR SLAB ABOVE:
COMPLIES - PARTITIONS EXTEND FROM SLAB TO UNDERSIDE OF ROOF DECK

TABLE 716.1(2) FIRE DOOR PROTECTION RATINGS
FIRE PARTITIONS:
OTHER PARTITIONS, 1-HOUR - DOOR MINIMUM 3/4 HOUR
COMPLIES - 3/4 HOUR DOORS PROVIDED, SEE DOOR SCHEDULE

CHAPTER 8 - INTERIOR FINISHES
TABLE 803.13 INTERIOR WALL AND CEILING FINISHES
GROUP R-1 WITH NFPA 13R SPRINKLERS
EXIT PASSAGEWAYS: CLASS B
CORRIDORS: CLASS C
ROOMS AND ENCLOSED SPACES: CLASS C
COMPLIES - FINISHES PROVIDED ACCORDINGLY

CHAPTER 9 - FIRE PROTECTION & LIFE SAFETY SYSTEMS
SECTION 903.2.8 AUTOMATIC SPRINKLER SYSTEM GROUP R
AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS WITH A GROUP R FIRE AREA.
PROVIDED:
NFPA 13R (903.3.1.2 SYSTEM)
W/ QUICK RESPONSE -or- RESIDENTIAL HEADS (903.3.2)

SECTION 903.3.1.2.3 ATTICS
ATTIC PROTECTION SHALL BE PROVIDED AS FOLLOWS:
2. WHERE FUEL-FIRED EQUIPMENT IS INSTALLED IN AN UNSPRINKLERED ATTIC, NOT FEWER THAN ONE QUICK-RESPONSE INTERMEDIATE TEMPERATURE SPRINKLER SHALL BE INSTALLED ABOVE THE EQUIPMENT.

CHAPTER 10 - MEANS OF EGRESS
SECTION 1005.1 MEANS OF EGRESS SIZING BASED ON OCCUPANT LOAD
OTHER EGRESS COMPONENTS: 0.15-IN. PER OCCUPANT, SPRINKLERED
TABLE 1006.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY
OCCUPANCY GROUP A, SPRINKLERED:
MAX. OCCUPANT LOAD OF SPACE: 49 OCCUPANTS
MAX. COMMON PATH OF EGRESS TRAVEL: 75 FEET
OCCUPANCY GROUP B, SPRINKLERED:
MAX. OCCUPANT LOAD OF SPACE: 49 OCCUPANTS
MAX. COMMON PATH OF EGRESS TRAVEL: 100 FEET
OCCUPANCY GROUP R-1, SPRINKLERED:
MAX. OCCUPANT LOAD OF SPACE: 10 OCCUPANTS
MAX. COMMON PATH OF EGRESS TRAVEL: 75 FEET
OCCUPANCY GROUP S, SPRINKLERED:
MAX. OCCUPANT LOAD OF SPACE: 29 OCCUPANTS
MAX. COMMON PATH OF EGRESS TRAVEL: 100 FEET

COMPLIES - MAXIMUM COMMON PATH = 60 FEET

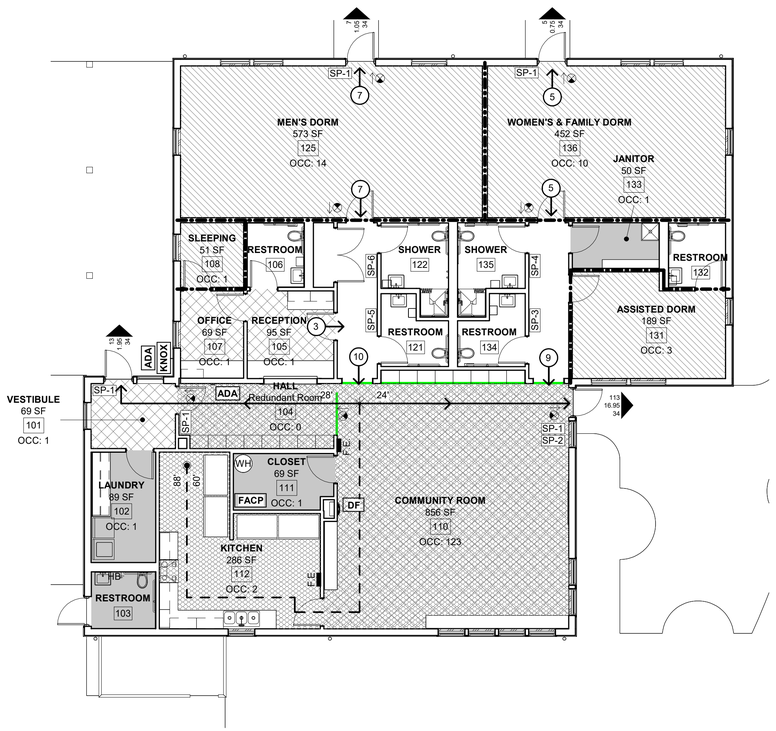
TABLE 1017.2: EXIT ACCESS TRAVEL DISTANCE
OCCUPANCY GROUP A, R, S-1 SPRINKLERED: 250 FEET
OCCUPANCY GROUP B SPRINKLERED: 300 FEET

COMPLIES - MAXIMUM EXIT ACCESS TRAVEL DISTANCE = 80 FEET

CHAPTER 29 - PLUMBING SYSTEMS
TABLE 2902.1 MINIMUM PLUMBING FIXTURES
GROUP A
- OCCUPANTS ARE USING R-1 FACILITIES
- 1 DRINKING FOUNTAIN (1 PROVIDED)

GROUP B, S
- 1 WATER CLOSET & LAVATORY (1 UNISEX RESTROOM PROVIDED)

GROUP R BOARDING HOUSE, TRANSIENT
- 1 WATER CLOSET PER SLEEPING UNIT (4 PROVIDED)
- 1 LAVATORY PER SLEEPING UNIT (4 PROVIDED)
- 1 SHOWER PER SLEEPING UNIT (2 PROVIDED)



1 CODE COMPLIANCE PLAN
1/8" = 1'-0" @ FULL SIZE
0' 2' 4' 8'

2021 OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC)

ENERGY CODE COMPLIANCE METHOD: 4.2.1.1 NEW BUILDING
NEW BUILDING COMPLYING WITH PRESCRIPTIVE PROVISIONS OF:
A. SECTION 5, "BUILDING ENVELOPE"; SECTION 6, "HEATING, VENTILATING, AND AIR CONDITION-ING"; SECTION 7, "SERVICE WATER HEATING"; SECTION 8, "POWER"; SECTION 9, "LIGHTING"; AND SECTION 10, "OTHER EQUIPMENT,"

5.4.3.1.2 CONTINUOUS AIR BARRIER AND INSTALLATION
CONTINUOUS AIR BARRIER DESIGNED AND IDENTIFIED ON CONSTRUCTION DOCUMENTS.

5.4.3.3 VESTIBULES
VESTIBULE PROVIDED, SHALL NOT EXCEED 2% OF GROSS CONDITIONED FLOOR AREA - *COMPLIES: VESTIBULE IS 1.8% OF GROSS FLOOR AREA*

TABLE 5.5-5 BUILDING ENVELOPE REQUIREMENTS: NONRESIDENTIAL
DESCHUTES COUNTY , OR - CLIMATE ZONE: 5B

OPAQUE ELEMENTS	REQUIRED U-VALUE (R)	PROVIDED U-VALUE (R)
ROOFS		
INSULATION ABOVE ROOF DECK	0.032 (R-30 CI)	N/A
ATTIC AND OTHER	0.021 (R-49)	0.021 (R-49)
WALLS		
WOOD FRAMED	U-0.051 (R-13 + R-7.5 CI or R-19 + R-5 CI)	U-0.051 (R-19 + R-5 CI)
MASS	0.090 (R-11.4 CI)	N/A
BELOW-GRADE	C-0.119 (R-7.5 CI)	N/A
FLOORS		
WOOD FRAMED	0.033 (R-30)	N/A
SLAB-ON-GRADE FLOORS		
UNHEATED SLABS	F VALUE: 0.52 (R-15 FOR 24")	F VALUE: 0.52 (R-15 FOR 24")
OPAQUE DOORS		
SWINGING	0.37 MIN	0.37
NON-SWINGING	0.31 MIN	N/A

FENESTRATION	MAX. U-FACTOR		MAX. SHGC	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
FIXED	0.36	0.36	0.38	0.38
OPERABLE	0.45	0.35	0.33	0.33
ENTRANCE DOORS	0.63	0.63	0.33	0.33
SKYLIGHTS	0.50	0.50	0.40	0.40

MIN. SHGC = 1.10 FOR ALL TYPES

*REFER TO SPECIFICATIONS FOR BASIS OF DESIGN DOORS, WINDOWS, AND SKYLIGHTS AS APPLICABLE.

MADRAS DEVELOPMENT CODE (MDC)

DESIGNATION
ZONING DESIGNATION: CORRIDOR COMMERCIAL (C-1)

USE
RESIDENTIAL, CONDITIONAL USE

DEVELOPMENT STANDARDS (MDC 18.15.070)
LOT SIZE REQUIREMENTS:
NONE

MINIMUM SETBACK:
REQUIRED:
NONE, EXCEPT 10 FEET MIN. WHERE ADJACENT TO RESIDENTIALLY ZONED PARCEL

PROVIDED:
NORTH: SEE SITE PLAN
SOUTH: SEE SITE PLAN
EAST: SEE SITE PLAN
WEST: SEE SITE PLAN

MAXIMUM SETBACK:
REQUIRED: NONE

MAX. BUILDING HEIGHT:
ALLOWED: 45 FEET
ACTUAL: 24 FEET

OFF-STREET PARKING (MDC TABLE 18.25.050-1)

USE	REQ'D	
OFFICE	2.5 SPACES/1000SF (270SF)	= 1 SPACE
TRANSIENT	0.5/BED (27 BEDS)	= 14 SPACES
	TOTAL	= 15 SPACES
	ACTUAL	**= 26 SPACES**

BIKE PARKING (MDC 18.25.070)
REQUIRED: 1 SPACE / 10 VEHICLE SPACES = 3 BIKE SPACES
ACTUAL: 6 BIKE SPACES

VISION CLEARANCE (MDC 18.25.090)
REQUIRED:
15 FEET MIN. AT INTERSECTIONS OF COMMERCIAL ACCESS
PROVIDED

LANDSCAPING STANDARDS (MDC 18.25.170)
MINIMUM LANDSCAPE AREA:
REQUIRED: 15%
ACTUAL: SEE LANDSCAPE

LANDSCAPE LOCATION:
REQUIRED: 50% OF REQUIRED LANDSCAPING MUST BE LOCATED IN THE FRONT YARD SETBACK

PARKING LOT LANDSCAPING (MDC 18.25.170 (4)(d))
REQUIRED:
7% OF PARKING AREA MUST BE LANDSCAPED
1 TREE / 10 PARKING SPACES TO ACHIEVE CANOPY EFFECT OVER 50% OF THE LOT AREA
3 FT MIN. LANDSCAPE BUFFER BETWEEN PARKING & LOT LINE
5 FT MIN. LANDSCAPE BUFFER BETWEEN PARKING & RESIDENTIAL LOT

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 99201 | 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Square 150 | OR 97702 | 541.330.6506

Stamp
FOR REFERENCE ONLY

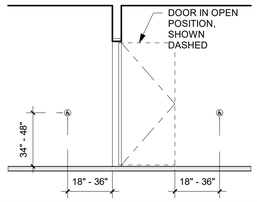
DRAWING REVISIONS

#	Date	Description

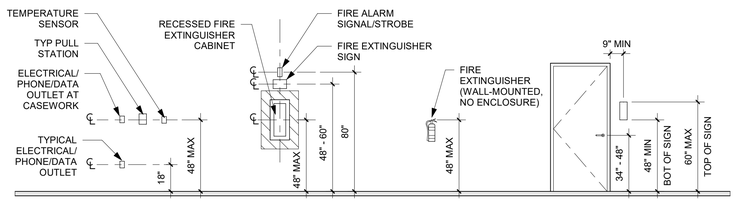
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: CODE INFORMATION, CODE PLAN
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:
Sheet No. A0.03

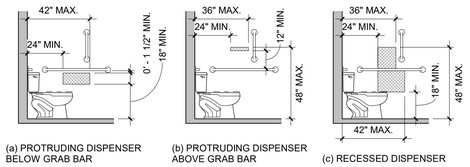
8/22/2022 8:14:02 AM



AUTOMATIC DOOR OPENER CONTROLS



8 MISCELLANEOUS WALL MOUNTING HEIGHTS
1/4" = 1'-0"

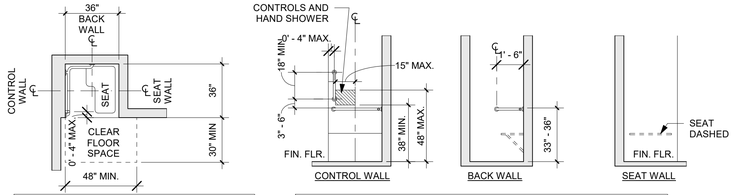


(a) PROTRUDING DISPENSER BELOW GRAB BAR

(b) PROTRUDING DISPENSER ABOVE GRAB BAR

(c) RECESSED DISPENSER

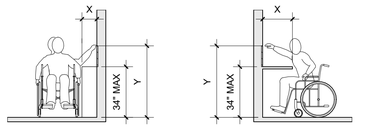
5 CODE - ACCESSIBILE DISPENSER OUTLET LOCATIONS
1/4" = 1'-0"



CLEAR FLOOR SPACE AT TRANSFER TYPE SHOWER COMPARTMENT

GRAB BARS AT TRANSFER TYPE SHOWER COMPARTMENT

4 CLEAR FLOOR SPACE AND GRAB BARS AT TRANSFER SHOWER
1/4" = 1'-0"

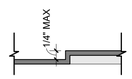


Y = 46" MAX, IF X = 24" MAX
Y = 48" MAX, IF X = 10" MAX

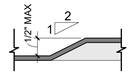
OBSTRUCTED HIGH AND LOW SIDE REACH LIMITS

Y = 44" MAX, IF X = 25" MAX
Y = 48" MAX, IF X = 20" MAX

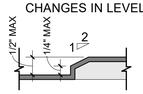
OBSTRUCTED HIGH AND LOW FRONT REACH LIMITS



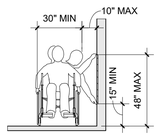
CHANGES IN LEVEL - VERTICAL



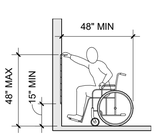
CHANGES IN LEVEL - BEVELED



CHANGES IN LEVEL - VERTICAL AND BEVELED



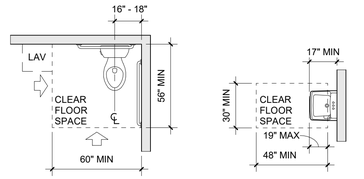
UNOBSTRUCTED HIGH AND LOW SIDE REACH LIMITS



UNOBSTRUCTED HIGH AND LOW FRONT REACH LIMITS

7 CODE - ACCESSIBLE ROUTE - CHANGE IN LEVEL
6" = 1'-0"

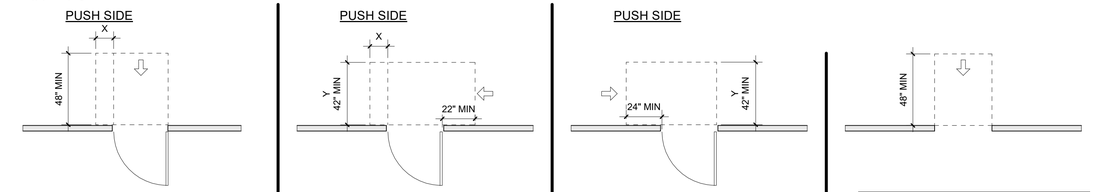
1 ACCESSIBLE REACH RANGES
1/4" = 1'-0"



(A) AT WATER CLOSET

(F) AT LAVATORY (WALL HUNG)

6 CLEAR SPACE AT TOILET ROOMS AND COMPARTMENTS
1/4" = 1'-0"



(A) FRONT APPROACHES FOR SWINGING DOORS

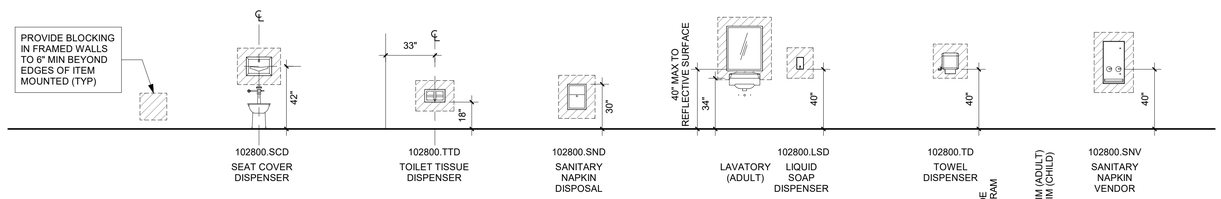
(B) HINGE SIDE APPROACHES FOR SWINGING DOORS

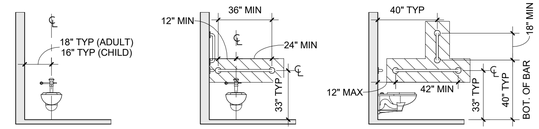
(C) LATCH SIDE APPROACHES FOR SWINGING DOORS

(E) SIDE APPROACH AT DOORWAY WITHOUT DOOR

NOTE: ALL DOORS IN ALCOVES SHALL COMPLY WITH THE CLEARANCES FOR FRONT APPROACHES.

3 MANEUVER CLEARANCES AT MANUAL SWING DOORS AND DOORWAYS WITHOUT DOORS
1/4" = 1'-0"





WATER CLOSET

GRAB BAR 1 1/4" DIAMETER - REAR WALL (ADULT)

GRAB BAR 1 1/4" DIAMETER - SIDE WALL (ADULT)

DRINKING FOUNTAIN (FRONT)

LAVATORIES AND SINKS

2 RESTROOM TOILET MOUNTING HEIGHTS
1/4" = 1'-0"

ACCESSIBILITY CODE LEGEND

- PROVIDE BLOCKING IN FRAMED WALLS TO 6" MIN. BEYOND EDGES OF ITEM MOUNTED (TYP)
- DIRECTION OF TRAVEL OR APPROACH
- BOUNDARY OF CLEAR FLOOR SPACE OR MANEUVERING CLEARANCE
- WALL, FLOOR, CEILING, OR OTHER ELEMENT CUT IN SECTION OR PLAN
- CENTERLINE

ACCESSIBILITY CODE NOTES

1. THE INFORMATION ON THIS SHEET IS PROVIDED AS A MEANS TO GRAPHICALLY IDENTIFY THE MOST COMMON DIMENSIONS, CLEARANCES, AND MOUNTING HEIGHTS REQUIRED. IT IS NOT FEASIBLE FOR ALL OF THE ADDITIONAL GRAPHIC AND NON-GRAPHIC INFORMATION INCLUDE IN ANSI ICC A11.7.1-2009: ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES, TO BE INCLUDED ON THIS SHEET. THEREFORE, THE CONTRACTOR SHALL REFER TO ANSI A117.1-2009 AND BE RESPONSIBLE FOR ALL REQUIRED INFORMATION INCLUDED THEREIN.
2. VERIFY ACCESSORY SIZE WITH MANUFACTURER TO ENSURE CONFORMANCE WITH ADA MOUNTING HEIGHTS. COORDINATE THE INSTALLATION OF ALL PLUMBING FIXTURES AND ACCESSORIES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
3. DIMENSIONS TO TOILET ROOM ACCESSORIES ARE TO THE HIGHEST PORTION OF THE OPENING OR OPERATING DEVICE.
4. PLACE TELEPHONE DEVICES AT 44" ABOVE FINISH FLOOR.
5. PROVIDE BLOCKING WITHIN WALL AS REQUIRED FOR MOUNTING FIXTURES.
6. PROVIDE GYPSUM BOARD WRAP BEHIND FIXTURES AT WALLS DESIGNATED ON FLOOR PLANS AS FIRE-RATED, SEE WALL TYPES.
7. EDGE OF ACCESSIBLE SHOWER UNITS SHALL BE FLUSH WITH THE FINISHED SURFACE OF ADJACENT FLOORING.
8. THIS DRAWING ONLY SHOWS WALL-MOUNTED TOILET FIXTURES. SUBSTITUTE FLOOR-MOUNTED TOILET FIXTURES WHERE INDICATED IN BATHROOM ELEVATIONS.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ACCESSIBILITY DIAGRAMS
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:
Sheet No. A0.04

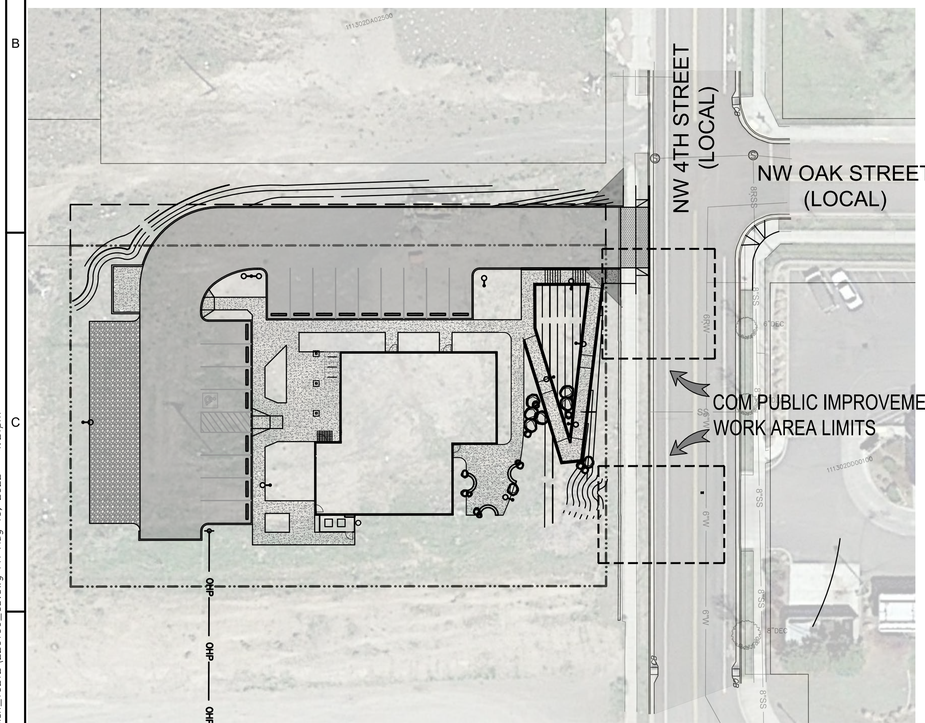
8/22/2022 8:14:02 AM

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

AUGUST, 2022

LOCATED IN THE SE 1/4 OF THE SE 1/4 OF SECTION 02
TOWNSHIP 11 SOUTH, RANGE 13 EAST, WILLAMETTE MERIDIAN
CITY OF MADRAS, JEFFERSON COUNTY, OREGON

VICINITY MAP
SCALE: 1"=1000'
SITUS LOCATION: 61 NW OAK STREET, MADRAS, OR 97741
TAXLOT: 11-13-02DD-00502



SITE PLAN
SCALE: 1"=30'

Utility Notification Center

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 Center Is (800) 332-2344.)

LEGEND

EXISTING	PROPOSED		EXISTING	PROPOSED	
		CURB INLET CATCH BASIN			WATER MANHOLE
CB		STANDARD CATCH BASIN	WM		WATER METER
D		SEDIMENATION MANHOLE			WATER VALVE
DW		DRYWELL ASSEMBLY			FIRE HYDRANT ASSEMBLY
		DRYWELL W/ SLOTTED LID	PIV	PIV	POST INDICATOR VALVE (PIV)
		ELECTRICAL TRANSFORMER	FDC		FIRE DEPARTMENT CONNECTION (FDC)
		ELECTRICAL SERVICE		S	SANITARY SEWER MANHOLE
		LIGHT	CO		SANITARY SEWER CLEANOUT
		STREET LIGHT			SANITARY SEWER SERVICE
		GUY POLE / ANCHOR			PRESSURE SEWER VALVE
		UTILITY POLE			STREET SIGN
T		TELEPHONE MANHOLE			MAILBOX
		TELEPHONE RISER			FOUND SURVEY MONUMENT
		CABLE TV SERVICE / RISER			DIMENSION POINT
		GAS SERVICE			DECIDUOUS TREE (SIZE AS NOTED)
GM		GAS METER			JUNIPER TREE (SIZE AS NOTED)
GV		GAS VALVE			PONDEROSA PINE TREE (SIZE AS NOTED)
IRR		IRRIGATION VALVE			

EXISTING	PROPOSED	
		PROJECT BOUNDARY
		RIGHT-OF-WAY LINE
		TAXLOT LINE
		EASEMENT (AS NOTED)
		CENTERLINE (AS NOTED)
		CONCRETE CURB
		UNDERGROUND STORM DRAIN LINE (SIZE AS NOTED)
		UNDERGROUND SANITARY SEWER LINE (SIZE AS NOTED)
		UNDERGROUND WATER LINE (SIZE AS NOTED)
		UNDERGROUND POWER LINE
		OVERHEAD POWER LINE
		UNDERGROUND TELEPHONE LINE
		UNDERGROUND CABLE TV LINE
		UNDERGROUND SHARED / COMMON TRENCH
		UNDERGROUND GAS LINE
		FENCE LINE
3430	3430	CONTOUR LINE, 5' INTERVAL
3431	3431	CONTOUR LINE, 1' INTERVAL
		HMAC PAVEMENT
		PCC PAVEMENT

OWNER

CITY OF MADRAS
125 SW E STREET
MADRAS, OR 97741

SITE LOCATION

61 NW OAK ST.
MADRAS, OR 97741
TAXLOT(S): 11-13-02DD-00502

SCHEDULE OF IMPROVEMENTS

CITY OF MADRAS:
2" WATER LINE - 40 LF±
2" WATER METER BOX ASSEMBLY - 1
4" SANITARY SEWER LINE - 17 LF±
12" CONCRETE CURB - 40 LF±
CONCRETE SIDEWALK - 300 SF±
HMAC PAVEMENT - 1252 SF±

APPROVALS

CITY OF MADRAS ENGINEER: DATE
NOTE: SIGNATURE DOES NOT GRANT APPROVAL TO COMMENCE CONSTRUCTION.

MADRAS FIRE DEPARTMENT: DATE

PACIFIC POWER: DATE

BEND BROADBAND: DATE

LUMEN: DATE

CASCADE NATURAL GAS: DATE

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS
COVER SHEET
JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62920 O.B. RILEY ROAD, SITE 100, BEND, OR 97703
(541)389-9250
WWW.HWANET.COM

DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C10.1

HWA # 220106
COM #:

PLAN SUBMITTAL STATUS

GENERAL

1. NO CONSTRUCTION SHALL BE STARTED WITHOUT A NOTICE TO PROCEED BY THE CITY ENGINEERING DEPARTMENT. THE CITY ENGINEERING DEPARTMENT AND THE DESIGN ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY CONSTRUCTION WORK DONE PRIOR TO NOTICE TO PROCEED BEING ISSUED OR WITHOUT INSPECTION WILL BE REJECTED.
2. CONTRACTOR SHALL VERIFY ALL CONDITIONS ON THE JOB SITE INCLUDING BUT NOT LIMITED TO, ALL DIMENSIONS, GRADES, ELEVATIONS, EXTENT AND COMPATIBILITY TO THE EXISTING SITE CONDITIONS, AND WITH THE WORK DESCRIBED ON THE ENGINEER'S DRAWINGS. ANY DISCREPANCIES OR UNEXPECTED CONDITIONS THAT AFFECT OR CHANGE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. CONTRACTOR SHALL NOT PROCEED WITH ANY OF THE WORK IN THE AREA OF DISCREPANCIES UNTIL ALL SUCH DISCREPANCIES ARE RESOLVED. IF THE CONTRACTOR CHOOSES TO DO SO, THEN IT IS UNDERSTOOD THAT THE CONTRACTOR IS CHOOSING TO PROCEED AT THE CONTRACTOR'S OWN RISK AND SHALL INCUR ALL COSTS, IF ANY TO RESOLVE THE ISSUES TO THE SATISFACTION OF THE ENGINEER.
3. A CITY INSPECTOR ACTING ON BEHALF OF THE CITY MAY REQUIRE REVISIONS IN PLANS TO SOLVE UNFORESEEN PROBLEMS THAT MAY ARISE IN THE FIELD.
4. ALL CONSTRUCTION WORK AND INSTALLATIONS SHALL CONFORM TO THE CITY STANDARDS AND SPECIFICATIONS, AND ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE CITY.
5. EXCAVATORS SHALL COMPLY WITH THE PROVISIONS OF OAR 952-001-0090.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT "UNDERGROUND LOCATE SERVICE" AT 1-800-332-2344 AT LEAST 48 BUSINESS-DAY HOURS PRIOR TO THE START OF CONSTRUCTION FOR THE LOCATION OF POWER, GAS, CABLE TV AND TELEPHONE UNDERGROUND FACILITIES. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE PUBLIC AGENCY FOR THE LOCATION OF UNDERGROUND FACILITIES.
7. ALL UTILITIES SHOWN ARE ACCURATE TO THE EXTENT OF AVAILABLE RECORDS AND KNOWLEDGE. NO POTHOLING TO VERIFY LOCATIONS AND ELEVATIONS WAS AUTHORIZED BY THE OWNER. THE CONTRACTOR HAS THE TOTAL RESPONSIBILITY TO VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND TO NOTIFY THE UTILITY COMPANIES WHEN WORKING IN THEIR PROXIMITY. CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. 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 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)232-2987.
8. GRADING SHALL BE IN CONFORMANCE WITH THE CURRENT U.B.C., THE 2019 OREGON STRUCTURAL SPECIALTY CODE, AND THE CITY OF BEND CODE TITLE 16.
9. ALL FINAL CUT AND FILL SLOPES SHALL NOT EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE APPROVED.
10. ALL UNSUITABLE SOILS MATERIALS, RUBBISH AND DEBRIS RESULTING FROM GRADING OPERATIONS SHALL BE REMOVED FROM THE JOB SITE AND DISPOSED OF PROPERLY.
11. THE CONTRACTOR SHALL EMPLOY ALL LABOR, EQUIPMENT, AND METHODS REQUIRED TO PREVENT DUST IN AMOUNTS DAMAGING TO PROPERTY. CULTIVATED VEGETATION AND DOMESTIC ANIMALS OR CAUSING A NUISANCE TO PERSONS OCCUPYING BUILDINGS IN THE VICINITY OF THE JOB SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST RESULTING FROM CONSTRUCTION.
12. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE INDUSTRIAL SAFETY REGULATIONS. THE CITY AND DESCHUTES COUNTY AND THEIR OFFICIALS, THE ENGINEER, AND THE OWNER SHALL NOT BE RESPONSIBLE FOR ENFORCING SAFETY REGULATIONS.
13. MATERIAL QUANTITIES USED, NOTED, OR PROVIDED IN A SEPARATE ITEMIZED QUANTITY TAKE-OFF ARE AN ENGINEER'S OPINION OF PROBABLE MATERIAL REQUIREMENTS, AND IS AN ESTIMATE ONLY. CONTRACTORS HAVE THE SOLE RESPONSIBILITY OF MAKING THEIR OWN QUANTITY TAKE-OFF AND COST ESTIMATE.
14. ALL WORK IN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED BY A CITY APPROVED CONTRACTOR (INCLUDING SUBCONTRACTORS).
15. UTILITIES SHALL HAVE THE RIGHT TO INSTALL, MAINTAIN, AND OPERATE THEIR EQUIPMENT ABOVE AND BELOW GROUND AND ALL OTHER RELATED FACILITIES WITHIN THE PUBLIC UTILITY EASEMENTS (PUE) IDENTIFIED ON THIS PLAT MAP AS MAY BE NECESSARY OR DESIRABLE IN SERVING THE LOTS IDENTIFIED HEREIN, INCLUDING THE RIGHT OF ACCESS TO SUCH FACILITIES AND THE RIGHT TO REQUIRE THE REMOVAL OF ANY OBSTRUCTIONS INCLUDING TREES AND VEGETATION THAT MAY BE PLACED WITH IN THE PUE AT THE LOT OWNERS EXPENSE. AT NO TIME MAY ANY PERMANENT STRUCTURES BE PLACED WITHIN THE PUE OR ANY OTHER OBSTRUCTION WHICH INTERFERES WITH THE USE OF THE PUE WITHOUT PRIOR WRITTEN APPROVAL OF THE UTILITIES AND FACILITIES IN THE PUE.
16. CITY ENGINEER'S SIGNATURE DOES NOT CONSTITUTE APPROVAL OF FACILITIES PROPOSED ON PRIVATE PROPERTY. SEPARATE PERMITS ISSUED BY THE BUILDING DEPARTMENT ARE REQUIRED AND SHALL BE OBTAINED BY THE DEVELOPER FOR FACILITIES LOCATED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY.
17. ANY WORK WITHIN EXISTING PUBLIC RIGHT-OF-WAY OR DEDICATED CITY EASEMENTS REQUIRES A SEPARATE RIGHT-OF-WAY EXCAVATION PERMIT OBTAINED FROM THE CITY ENGINEERING DIVISION.
18. ALL WATER MAIN CONNECTION TO BE DESIGNED AND CONSTRUCTED WITH CROSS CONNECTION PROTECTION.
19. CONTRACTOR SHALL OBTAIN HYDRANT METER PERMIT FOR USE OF TESTING WATER MAIN. A MINIMUM OF 48 HOURS ADVANCED NOTICE IS REQUIRED TO THE CITY OF BEND UTILITIES DEPARTMENT.
20. ALL RESTORATION TO BE COMPLETED AS SOON AS POSSIBLE UPON COMPLETION AND APPROVAL FROM THE INSPECTOR FOR ON-SITE WORK AND UNDERGROUND WORK.
21. ALL RESTORATION SHALL COMPLY WITH CITY OF MADRAS STANDARDS AND SPECIFICATIONS AND FOLLOW THE BMP PAVING GUIDELINES ESTABLISHED BY STREET DEPARTMENT.
22. ALL GRADED AND/OR CLEARED AREAS, INCLUDING EXCAVATION AND FILL SLOPES, SHALL BE RE-VEGETATED OR STABILIZED IN ORDER TO REDUCE EROSION, DUST, AND NOXIOUS WEEDS.
23. PRIOR TO IMPLEMENTING ANY TRAFFIC CONTROL PLANS, NOTIFICATION AND APPROVAL IS REQUIRED BY THE CITY OF MADRAS PRIVATE DEVELOPMENT ENGINEERING DEPARTMENT.
24. THESE PLANS WILL EXPIRE ONE YEAR FROM THE "CITY OF MADRAS ENGINEER" SIGNATURE DATE ON THE COVER.
25. PRIVATE INSPECTIONS WILL BE REQUIRED PER PART V OF THE CITY OF MADRAS STANDARDS AND SPECIFICATIONS UNLESS SPECIFIED OTHERWISE.

TRAFFIC CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE APPROVED TRAFFIC CONTROL PLAN (TCP) TO PROVIDE SAFE AND EFFICIENT VEHICULAR, BICYCLE AND PEDESTRIAN MOVEMENT IN AND AROUND THE WORK ZONES. CERTIFIED TRAFFIC CONTROL FLAGGERS AND PROFESSIONALS MAY BE REQUIRED PER THE CONDITIONS OF THE PERMIT. THE CITY OF BEND RESERVES THE RIGHT TO MODIFY THE TCP AT ANY TIME BASED ON FIELD CONDITIONS.
2. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS INCLUDING THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK FOR OPERATIONS OF THREE DAYS OR LESS, DATED DECEMBER 2011 AND PREPARED BY ODOT (ORANGE BOOK).
3. UNLESS APPROVED BY THE CITY ENGINEER, ARTERIAL ROADS SHALL HAVE NO LANE RESTRICTIONS FROM 6:30 TO 9:00 AM AND FROM 3:30 TO 6:30 PM. COLLECTORS AND LOCAL NEIGHBORHOOD MAIN ROUTES SHALL HAVE NO LANE RESTRICTIONS FROM 7:00 AM TO 8:30 AM AND FROM 4:00 PM TO 6:00 PM.
4. TCP SHALL BE SUBMITTED TO THE CITY OF BEND A MINIMUM OF 14 DAYS PRIOR TO IMPLEMENTATION FOR REVIEW. 48 HOURS PRIOR TO IMPLANTATION THE CITY OF BEND SHALL BE NOTIFIED IN ORDER TO PROVIDE ADEQUATE PUBLIC NOTIFICATION.

GRADING AND ESC NOTES

1. THE ENGINEER OF RECORD CAN PROVIDE ADDITIONAL BEST MANAGEMENT PRACTICES (BMP) FROM SECTION 9.4.3 IN THE CENTRAL OREGON STORMWATER MANUAL (COSM) THAT APPLY TO THE PROJECT.
2. HOLD A PRE-CONSTRUCTION MEETING THAT INCLUDES THE CITY OF MADRAS INSPECTOR, EOR AND CONTRACTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
3. THE EROSION AND SEDIMENT CONTROL (ESC) PLAN MUST BE KEPT ONSITE AT ALL TIMES WHEN WORK IS OCCURRING.
4. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTIONS PERIOD, THE MEASURES MUST BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS.
5. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE FOLLOWED IN ORDER TO BEST MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION CONTROL PROBLEMS:
   a. FENCE OR FLAG AREAS TO BE PROTECTED OR LEFT UNDISTURBED DURING CONSTRUCTION
   b. INSTALL GRAVELED OR PAVED CONSTRUCTION ENTRANCES, EXITS, AND PARKING AREAS TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC AND PRIVATE ROADS
   c. CLEAR AND GRUB SUFFICIENTLY FOR INSTALLATION OF TEMPORARY ESC BMPS
   d. INSTALL TEMPORARY ESC BMPS, CONSTRUCTING SEDIMENT TRAPPING BMPS AS ONE OF THE FIRST STEPS PRIOR TO GRADING
   e. CLEAR, GRUB AND GRADE INDIVIDUAL AND ROUGH GRADE FOR ROADS AND UTILITY LOCATIONS
   f. CLEAR, GRUB AND GRADE INDIVIDUAL LOTS OR GROUPS OF LOTS
   g. TEMPORARILY STABILIZE A LOT OR GROUPS OF LOTS, THROUGH RE-VEGETATION OR OTHER APPROPRIATE BMPS, WHERE SUBSTANTIAL CUT OR FILL SLOPES ARE RESULT OF SITE GRADING
   h. CONSTRUCT ROADS, BUILDINGS, PERMANENT STROMWATER FACILITIES (I.E. INLETS, PONDS, UIC FACILITIES, ETC.)
   i. PROTECT ALL PERMANENT STORMWATER FACILITIES UTILIZING THE APPROPRIATE BMPS
   j. REMOVE TEMPORARY ESC CONTROLS WHEN PERMANENT STORMWATER FACILITIES HAVE BEEN INSTALLED, ALL LAND-DISTURBING ACTIVITIES HAVE CEASED, AND VEGETATION HAS BEEN ESTABLISHED IN THE AREAS NOTED ON THE ACCEPTED ESC PLAN(S)
6. RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT AND DURATION PRACTICAL.
7. INSPECT ALL ROADWAYS ADJACENT TO THE CONSTRUCTION ACCESS ROUTE AT THE END OF EACH DAY. SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVES THE CONSTRUCTION SITE MUST BE CLEANED UP WITHIN 24 HOURS. VACUUMING OR DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENT AND SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
8. COVER AND SECURE ALL DUMP TRUCK LOADS LEAVING THE CONSTRUCTION SITE TO MINIMIZE SPILLAGE ON ROADS.
9. RESTORE CONSTRUCTION ACCESS ROUTE EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION. CONTROL FUGITIVE DUST FROM CONSTRUCTION ACTIVITY.
10. STABILIZE EXPOSED UNWORKED SOILS (INCLUDING STOCKPILES), WHETHER AT FINAL GRADE OR NOT, WITHIN 10 CALENDAR DAYS DURING THE REGIONAL DRY SEASON (JULY 1 THROUGH SEPTEMBER 30) AND WITHIN 5 CALENDAR DAYS DURING THE REGIONAL WET SEASON (OCTOBER 1 THROUGH JUNE 30).
11. PROTECT INLETS, DRYWELLS, CATCH BASINS AND OTHER STORMWATER MANAGEMENT FACILITIES FROM SEDIMENT, WHETHER OR NOT FACILITIES ARE OPERABLE
12. KEEP ROADS ADJACENT TO INLETS CLEAN.
13. INSPECT INLETS WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS. CLEAN OR REMOVE AND REPLACE INLET PROTECTION DEVICES BEFORE SIX INCHES OF SEDIMENT CAN ACCUMULATE.
14. INSTALL SEDIMENT CONTROLS ALONG THE SITE PERIMETER ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE BEFORE COMMENCING EARTH DISTURBING ACTIVITIES.
15. WHENEVER POSSIBLE, CONSTRUCT STORMWATER CONTROL FACILITIES (DETENTION/RETENTION STORAGE POND OR SWALES) BEFORE GRADING BEGINS. THESE FACILITIES SHOULD BE OPERATIONAL BEFORE THE CONSTRUCTION OR IMPERVIOUS SITE IMPROVEMENTS.
16. STOCKPILE MATERIALS (SUCH AS TOPSOIL) ONSITE MUST BE KEPT OFF OF ROADWAY AND SIDEWALKS AND SHALL BE PROTECTED FROM EROSION BY WIND AND/OR WATER.
17. COVER, CONTAIN AND PROTECT ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCT, AND NON-INERT WASTES PRESENT ONSITE FROM VANDALISM. MAINTAIN A SUPPLY OF MATERIALS ON HAND TO ADDRESS AND CONTAIN SPILLS.
18. LOCATE DESIGNATED VEHICLE AND EQUIPMENT SERVICE AREAS, FUEL, AND MATERIALS AWAY FROM DRAINAGE INLETS, WATER COURSES, AND CANALS. PROPERLY CONTAIN AREAS USING BERMS, SAND BAGS, OR OTHER BARRIERS.
19. REGULARLY INSPECT AND MAINTAIN EQUIPMENT, ESPECIALLY FOR DAMAGED HOSES AND LEAKY GASKETS. CONDUCT MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES (I.E. OIL CHANGES, FUEL TANK DRAIN DOWN, ETC) THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CLEAN ALL CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT, PERFORM REPAIRS ONSITE USING TEMPORARY PLASTIC OR OIL ABSORBING BLANKETS BENEATH THE VEHICLE.
20. DESIGNATE AN AREA FOR CLEANING PAINTING EQUIPMENT AND TOOLS. NEVER CLEAN BRUSHES OR RINSE CONTAINERS INTO THE STREET, GUTTER, DRAINAGE INLET, OR WATERWAY.
21. APPLY LANDSCAPING OR AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, IN SUCH A MANNER, AND AT APPLICATIONS RATES, THAT INHIBITS THE LOSS OF CHEMICALS INTO STORMWATER RUNOFF FACILITIES.
22. INSPECT ON A REGULAR BASIS (AT A MINIMUM WEEKLY, AND DAILY DURING/AFTER A RUNOFF PRODUCING STORM EVENT) AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL BMPS TO ENSURE SUCCESSFUL PERFORMANCE OF THE BMPS.
23. REMOVE TEMPORARY ESC BMPS WITHIN 30 DAYS AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. PERMANENTLY STABILIZE AREAS THAT ARE DISTURBED DURING THE REMOVAL PROCESS.
24. KEEP SEDIMENT ON THE PROJECT SITE, TO THE MAXIMUM EXTENT PRACTICAL.
25. CONTROL FUGITIVE DUST FROM CONSTRUCTION ACTIVITY. DUST CONTROL MUST BE CONTINUOUS, PARTICULARLY DURING THE DRY SEASON.
26. DESIGNATE THE LOCATION OF A SLURRY PIT WHERE CONCRETE TRUCKS AND EQUIPMENT CAN BE WASHED OUT. SLURRY PITS ARE NOT TO BE LOCATED IN, OR UPSTREAM OF, A SWALE, DRAINAGE AREA, STORMWATER FACILITY, WATER BODY, OR IN AN AREA WHERE A STORMWATER FACILITY EXISTS OR IS PROPOSED.

UTILITIES

1. UTILITY CROSSINGS SHALL BE PERPENDICULAR (90 DEGREES) TO THE CITY WATER, STORM, AND SEWER LINES.
2. UTILITY CROSSINGS SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 12 INCHES FROM ALL WATER AND SEWER MAIN LINES.
3. ANY UTILITY THAT IS LOCATED PARALLEL TO A CITY WATER OR SEWER MAIN LINE SHALL MAINTAIN A MINIMUM OF 10-FT OF HORIZONTAL SEPARATION.
4. THE CITY REQUIRES VISUAL INSPECTION (POTHOLING) OF ALL UTILITY CROSSINGS OF CITY WATER, STORM, AND SEWER LINES. SEWER LINES MAY BE INSPECTED BY CLOSED CIRCUIT CAMERA AT THE APPROVAL OF THE CITY ENGINEER.
5. EXCAVATION AND DIRECTIONAL DRILLING REQUIRES POTHOLING PRIOR TO ANY WORK BEING CONDUCTED AND DURING DRILLING
6. DIRECTIONAL DRILLING REQUIRES ADVANCED PROFILING OF THE CROSSING BEFORE WORK CAN BE PERMITTED.
7. NO EXCAVATION IS PERMITTED WITHIN 10 FT BEHIND FORCE MAINS, PRESSURE MAINS, FIRE HYDRANT OR WATER MAIN THRUST BLOCKS.
8. UTILITY CROSSINGS SHALL MAINTAIN 2-FT CLEARANCE HORIZONTALLY FROM CITY UTILITIES SUCH AS MANHOLES, VALVE CANS, INLETS, CATCH BASINS, ETC.
9. UTILITY LINES SHALL NOT BE PLACED IN THE ROOT AREAS OF TREES AND SHALL MAINTAIN 5-FT CLEARANCE FROM THE DRIPLINE OF TREES OR AS DIRECTED BY THE CITY ENGINEER. ANY TREES DAMAGED ARE TO BE REPLACED.
10. COMPACTION IS REQUIRED AND TESTING SHALL CONFORM TO SECTION 00405.46 (C) OR AT THE DISCRETION OF THE CITY ENGINEER. ALL LIFTS MUST BE MECHANICALLY COMPACTED WITH ADEQUATE COMPACTION EQUIPMENT, WITH A MINIMUM OF 5 PASSES FOR EACH LIFT OR AS DIRECTED BY THE CITY.

STREETS

1. IF ANY WORK (NEW CONSTRUCTION OR RECONSTRUCTION) IMPACTS A CURB WHERE THERE IS A PEDESTRIAN WALKWAY (E.G. A SIDEWALK OR TRAIL/PATH) INTERSECTING A ROADWAY THEN A NEW RAMP OR REPLACEMENT OF AN EXISTING NON-COMPLIANT CURB RAMP MUST BE CONSTRUCTED.
2. IF ANY NEW WORK INCLUDES RESURFACING THROUGH A STREET LEVEL PEDESTRIAN WALKWAY (E.G. MARKED OR UNMARKED CROSSWALK), EVEN IF THE WORK IS NOT THE FULL WIDTH OF THE ROADWAY, CURB RAMPS MUST BE BUILT OR RECONSTRUCTED ON BOTH ENDS OF THE CROSSWALK.
3. IF ANY NEW SIDEWALK WORK CONNECTING TO AN EXISTING NON-COMPLIANT RAMP THAT REQUIRES ANY MODIFICATION TO ANY PORTION OF THE RAMP TO MEET CURRENT SIDEWALK DESIGN STANDARDS, THEN THE ENTIRE RAMP SHALL BE RECONSTRUCTED TO CURRENT STANDARDS.
4. IF ANY UTILITY TRENCH WORK IMPACTS A CURB AT A CROSS WALK, WITH OR WITHOUT A RAMP, THE REPLACEMENT OF AN EXISTING NON-COMPLIANT CURB RAMP MUST BE CONSTRUCTED.
5. IF UTILITY TRENCH WORK DOES NOT IMPACT A CURB RAMP BUT IS "LIMITED TO A PORTION OF THE PAVEMENT, INCLUDING A PORTION OF THE CROSS WALK" REPLACEMENT OF AN EXISTING NON-COMPLIANT CURB RAMP MAY NOT BE REQUIRED (DEPENDENT ON OVERALL PROJECT SCOPE AND REQUIRED PAVEMENT RESTORATION LIMITS).
6. ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY THAT DISTURBS A PEDESTRIAN SIDEWALK OR TRAIL REQUIRES THE REPLACEMENT OF THAT FACILITY TO CURRENT CITY AND PROWAG STANDARDS. THIS INCLUDES BUT IS NOT LIMITED TO ALL ADA RAMPS, CONCRETE SIDEWALKS, ASPHALT TRAILS, DRIVEPADS, CROSSWALKS, AND SIGNAGE.
7. IF ANY ADA RAMPS ARE IDENTIFIED TO BE CONSTRUCTED, THE CONTRACTOR SHALL CONSTRUCT PERPENDICULAR RAMPS PER CITY STANDARDS. DIAGONAL OR PARALLEL RAMPS SHALL ONLY BE USED IF THERE ARE UNIQUE SITE CONSTRAINTS THAT PROHIBIT CONSTRUCTION OF PERPENDICULAR RAMPS. ALL VARIATIONS FROM PERPENDICULAR RAMPS ARE AT THE DISCRETION OF THE CITY ENGINEER.
8. THE CITY PREFERS THAT VACTOR EXCAVATION AND ASPHALT CORE SAW BE USED TO POTHOLE UTILITIES. ALTERNATE METHODS MAY BE ALLOWED, BUT REQUIRE APPROVAL AS A CONDITION OF THE PERMIT.
9. ASPHALT RESTORATION LIMITS WILL BE DETERMINED AFTER PERMIT SCOPE IS COMPLETED.

CONSTRUCTION, INSPECTION, AND NOTIFICATIONS

1. PERMITTEE SHALL REQUEST INSPECTIONS A MINIMUM OF 24 HOURS IN ADVANCE.
2. THE PERMITTEE SHALL REQUEST FINAL INSPECTION 48 HOURS AFTER THE WORK IS COMPLETE.
3. THE CITY CAN INSPECT ANY PORTION OF THE PROJECT AT ANY TIME. THE INSPECTION SHALL BE PERFORMED BY CITY INSPECTORS AND MAY REQUIRE INSPECTION BY THE ENGINEER OF RECORD (THIRD PARTY INSPECTORS). PRIOR TO CONSTRUCTION, A PRE-CONSTRUCTION MEETING MAY BE REQUIRED. THE PERMITTEE/CONTRACTOR IS REQUIRED TO CALL IN ALL INSPECTIONS PER THE REQUIREMENTS OF THE PERMIT
4. CONTRACTOR SHALL PROVIDE THE CITY A MINIMUM OF 48 HRS NOTICE PRIOR TO ANY TRAFFIC CONTROL BEING IMPLEMENTED. NOTICE TO THE CITY AND THE INSPECTOR BY EMAIL IS PREFERRED
5. INSPECTIONS ARE REQUIRED FOR CITY UTILITY CROSSINGS AND FINAL STREET RESTORATION.
6. OUTSTANDING AND INCOMPLETE PERMITS MAY CONSTITUENT RESTRICTED PERMITTING TO THE APPLICANT AND CONTRACTOR(S).
7. THE PERMITTEE AND CONTRACTOR ARE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC AND PRIVATE PROPERTY. ALL DAMAGE SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AND TO THE SATISFACTION OF THE PROPERTY OWNER.

C.O.M. STANDARD DRAWINGS

NO.	TITLE	NO.	TITLE
1-2	TRENCHING BACKFILL	6-1	WATER SERVICE
1-1	T-PATCH	5-3	SEWER SERVICE AND CLEANOUT
7-1A	STREET SIDEWALK SECTION	7-6	SAWCUT AND MATCH NEW ASPHALT DETAIL
7-15	CONCRETE CURB	7-12A	VISION CLEARANCE FOR COMMERCIAL ZONE ACCESS

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

CONSTRUCTION NOTES

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62920 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)389-3251
WWW.HWAINC.ORG

DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C10.2

HWA # 220106
COM #:

PLAN SUBMITTAL STATUS

EXISTING CONDITIONS & REMOVAL KEY NOTES

NOTE: SAWCUT AND MATCH NEW ASPHALT PER COM STD DWG 7-6, SHEET C13.3

1. SAWCUT AND REMOVE EXISTING HMAC SURFACE AND AGGREGATE BASE AS SHOWN (TYP.)
2. SAWCUT AND REMOVE EXISTING PCC PAVEMENT AND AGGREGATE BASE AS SHOWN (TYP.)
3. REMOVE EXISTING CONCRETE CURB
4. REMOVE EXISTING WATER METER
5. REMOVE EXISTING CINDER BLOCK WALL
6. REMOVE EXISTING WATER SERVICE (CUT AND CAP AT MAIN)
7. CONTRACTOR TO VERIFY EXISTING SEWER LATERAL SIZE AND NOTIFY ENGINEER OF RECORD PRIOR TO ANY WATERLINE TAPS OR CONSTRUCTION. CURRENT PLANS ASSUME NEW 4" SEWER SERVICE CONNECTION FROM EXISTING 4" SEWER STUB.

GENERAL SURVEY NOTES

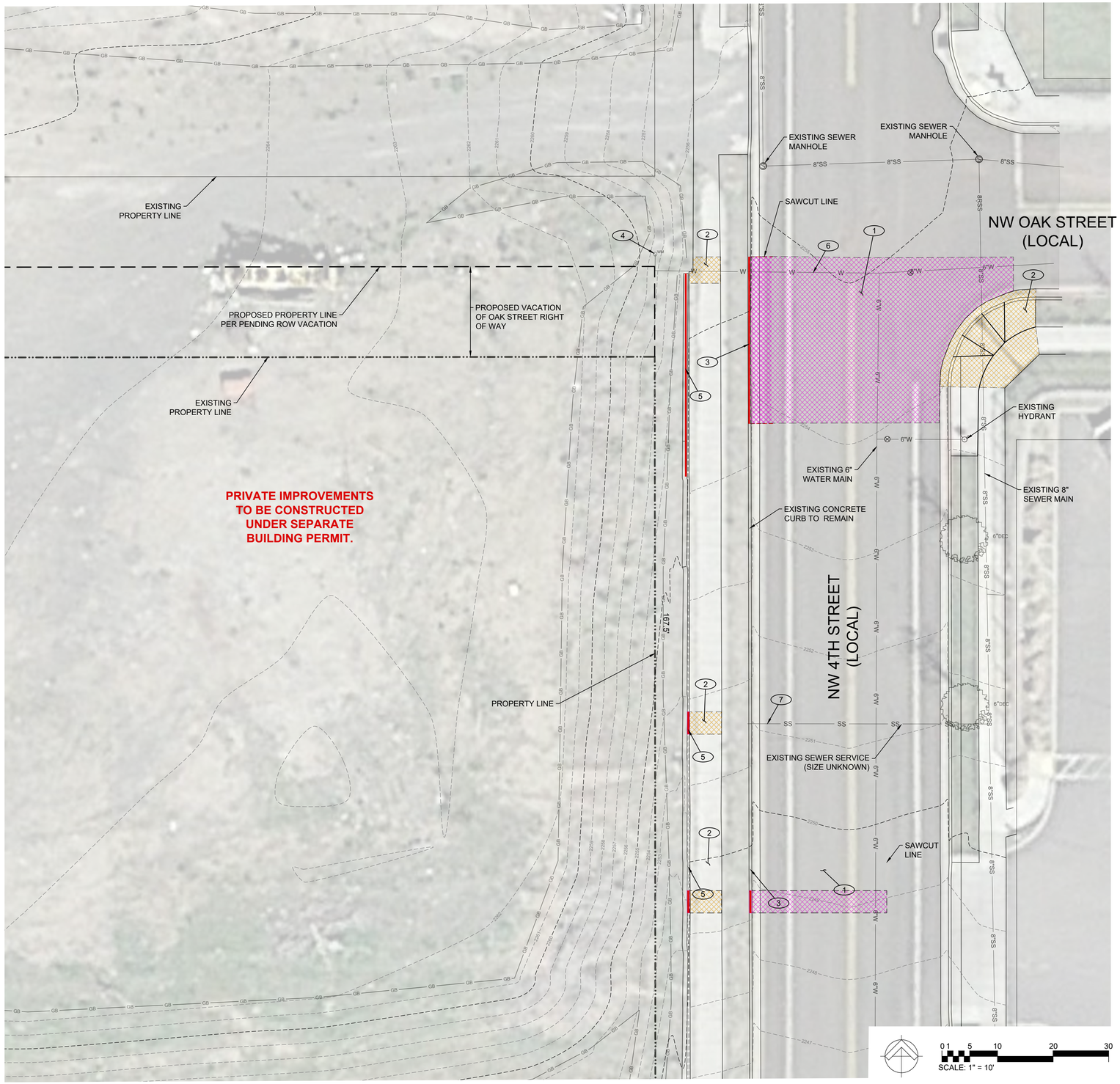
1. PROJECT SITE IS LOCATED IN SECTION 02, TOWNSHIP 11 SOUTH, RANGE 13 EAST, WILLAMETTE MERIDIAN, JEFFERSON COUNTY, OREGON.
2. TOPOGRAPHIC SURVEY INFORMATION DEPICTED HEREIN IS FROM SURVEY PREPARED BY HWA IN MARCH 2022. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, INCLUDING POTHOLING OF EXISTING UTILITIES AS NECESSARY TO VERIFY LOCATION, DEPTH, AND SIZE.
3. WITH REGARD TO UNDERGROUND UTILITIES, INFORMATION FROM CITY OF MADRAS AND UTILITY LOCATE MARKINGS WERE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, EXCAVATION MAY BE NECESSARY.
4. THIS PROPERTY IS SUBJECT TO ALL EASEMENTS, RESTRICTIONS, AND RIGHT-OF-WAYS OF RECORD AND THOSE COMMON AND APPARENT ON THE LAND.
5. THE COORDINATES SHOWN ARE BASED ON THE CENTRAL OREGON COORDINATE SYSTEM. ELEVATIONS SHOWN ARE BASED ON THE VERTICAL DATUM NGVD29 AND WERE DERIVED FROM PUBLISHED CENTRAL OREGON COORDINATE SYSTEM BENCHMARKS.
   LINEAR UNITS: INTERNATIONAL FEET
   HORIZONTAL DATUM: NAD (83-91)
   VERTICAL DATUM: NGVD29

GENERAL REMOVAL NOTES

1. MINIMUM SAWCUT REMOVAL SHOWN - ACTUAL SAWCUT LINES TO FOLLOW EXISTING CONCRETE SCORE LINES (TYPICAL FOR ALL CONCRETE REMOVAL).
2. WORK WITHIN THE RIGHT-OF-WAY SHALL BE PERFORMED UNDER A SEPARATE CITY OF BEND INFR PERMIT.

LEGEND

- PROPERTY LINE
- ASSESSOR'S TAX LOT LINE (APPROX. LOCATION)
- CURB LINE
- GAS — UNDERGROUND GAS LINE
- UGP — UNDERGROUND POWER LINE
- 8"SS — UNDERGROUND SEWER LINE (SIZE AS NOTED)
- 4"PS — UNDERGROUND PRESSURE SEWER LINE
- 8"SD — UNDERGROUND STORM DRAIN
- 8"W — UNDERGROUND WATERLINE (SIZE AS NOTED)
- X — FENCE - WIRE
- HMAC PAVEMENT
- PCC PAVEMENT
- GRAVEL
- 3641 — CONTOUR LINE, 1' INTERVAL
- 3645 — CONTOUR LINE, 5' INTERVAL
- CATCH BASIN
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- SEWER MANHOLE
- SEDIMENTATION MANHOLE
- DW — DRYWELL
- UTILITY POLE
- UTILITY PEDESTAL
- DECIDUOUS TREE (SIZE AS NOTED)
- PINE TREE (SIZE AS NOTED)
- SHRUB
- EXISTING HMAC PAVEMENT & AGG. BASE TO BE REMOVED
- EXISTING PCC PAVEMENT & AGG. BASE TO BE REMOVED
- EXISTING TREE/VEGETATION TO BE REMOVED
- EXISTING CONCRETE CURB TO BE REMOVED
- X · X · X · EXISTING UTILITY TO BE REMOVED



REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1990 GRANT HARDGRAVE

MADRAS HOMELESS SHELTER PUBLIC INFRASTRUCTURE PLANS

EXISTING CONDITIONS AND REMOVAL PLAN

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)389-9229
WWW.HWANC.ORG

DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 — 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET: C11.1

HWA # 220106
COM #:

PLAN SUBMITTAL STATUS

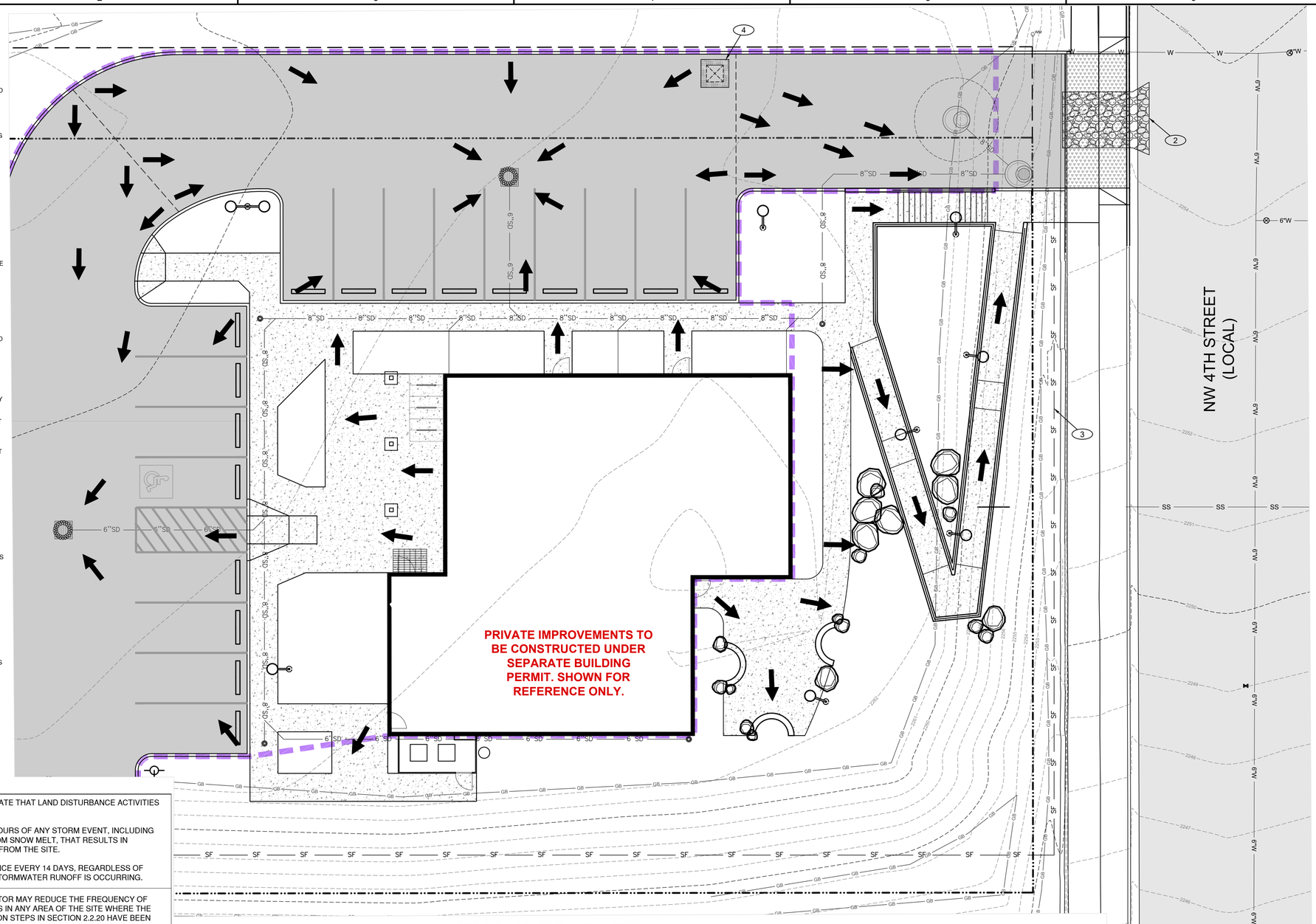
32.5'
135'
212'

Maxb C:\Users\Maxb\AppData\Local\Temp\AcPublish_10212\220106_CD.dwg Fri Aug 19, 2022 - 4:21pm

GENERAL EROSION CONTROL NOTES

THE FOLLOWING ESCP STANDARD PLAN NOTES ARE BASED ON THE CENTRAL OREGON STORMWATER MANUAL (COSM) APPENDIX 9A.

1. HOLD A PRE-CONSTRUCTION MEETING THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
2. THE ESC PLAN MUST BE KEPT ONSITE AT ALL TIMES WHEN WORK IS OCCURRING.
3. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THE MEASURES MUST BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS.
4. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE FOLLOWED IN ORDER TO BEST MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION CONTROL PROBLEMS:
   a. FENCE OR FLAG AREAS TO BE PROTECTED OR LEFT UNDISTURBED DURING CONSTRUCTION;
   b. INSTALL GRAVELED OR PAVED CONSTRUCTION ENTRANCES, EXITS, AND PARKING AREAS TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS;
   c. CLEAR AND GRUB SUFFICIENTLY FOR INSTALLATION OF TEMPORARY ESC BMPS;
   d. INSTALL TEMPORARY ESC BMPS, CONSTRUCTING SEDIMENT TRAPPING BMPS AS ONE OF THE FIRST STEPS PRIOR TO GRADING;
   e. CLEAR, GRUB AND ROUGH GRADE FOR ROADS AND UTILITY LOCATIONS;
   f. CLEAR, GRUB AND GRADE INDIVIDUAL LOTS OR GROUPS OF LOTS;
   g. TEMPORARILY STABILIZE, THROUGH RE-VEGETATION OR OTHER APPROPRIATE BMPS, LOTS OR GROUPS OF LOTS IN SITUATIONS WHERE SUBSTANTIAL CUT OR FILL SLOPES ARE A RESULT OF THE SITE GRADING;
   h. CONSTRUCT ROADS, BUILDINGS, PERMANENT STORMWATER FACILITIES (I.E. INLETS, PONDS, UIC FACILITIES, ETC.);
   i. PROTECT ALL PERMANENT STORMWATER FACILITIES UTILIZING THE APPROPRIATE BMPS;
   j. REMOVE TEMPORARY ESC CONTROLS WHEN PERMANENT STORMWATER FACILITIES HAVE BEEN INSTALLED, ALL LAND-DISTURBING ACTIVITIES HAVE CEASED, AND VEGETATION HAS BEEN ESTABLISHED IN THE AREAS NOTES ON THE ACCEPTED ESC PLAN.
5. RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT AND DURATION PRACTICAL.
6. INSPECT ALL ROADWAYS ADJACENT TO THE CONSTRUCTION ACCESS ROUTE AT THE END OF EACH DAY. SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVES THE CONSTRUCTION SITE MUST BE CLEANED UP WITHIN 24 HOURS AND STABILIZED BACK ON THE SITE OR PROPERLY DISPOSED. THE CAUSE OF SEDIMENT RELEASE MUST BE IDENTIFIED AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. VACUUMING OR DRY SWEEPING MUST BE USED TO CLEAN-UP RELEASED SEDIMENT AND SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
7. COVER AND SECURE ALL DUMP TRUCK LOADS LEAVING THE CONSTRUCTION SITE TO MINIMIZE SPILLAGE ON ROADS.
8. RESTORE CONSTRUCTION ACCESS ROUTE EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION.
9. CONTROL FUGITIVE DUST FROM CONSTRUCTION ACTIVITY.
10. STABILIZE EXPOSED UNWORKED SOILS (INCLUDING STOCKPILES), WHETHER AT FINAL GRADE OR NOT, WITHIN 10 CALENDAR DAYS DURING THE REGIONAL DRY SEASON (JULY 1 THROUGH SEPTEMBER 30) AND WITHIN 5 CALENDAR DAYS DURING THE REGIONAL WET SEASON (OCTOBER 1 THROUGH JUNE 30).
11. PROTECT INLETS, DRYWELLS, CATCH BASINS AND OTHER STORMWATER MANAGEMENT FACILITIES FROM SEDIMENT, WHETHER OR NOT FACILITIES ARE OPERABLE.
12. KEEP ROADS ADJACENT TO INLETS CLEAN.
13. INSPECT INLETS WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS. CLEAN OR REMOVE AND REPLACE INLET PROTECTION DEVICES BEFORE SIX INCHES OF SEDIMENT CAN ACCUMULATE.
14. INSTALL SEDIMENT CONTROLS ALONG THE SITE PERIMETER ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE BEFORE COMMENCING EARTH DISTURBING ACTIVITIES.
15. WHENEVER POSSIBLE, CONSTRUCT STORMWATER CONTROL FACILITIES (DETENTION / RETENTION STORAGE PONDS OR SWALES) BEFORE GRADING BEGINS. THESE FACILITIES SHOULD BE OPERATIONAL BEFORE THE CONSTRUCTION OF IMPERVIOUS SITE IMPROVEMENTS.
16. STOCKPILE MATERIALS (SUCH AS TOPSOIL) ONSITE, KEEPING OFF OF ROADWAY AND SIDEWALKS.
17. COVER, CONTAIN AND PROTECT ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCT, AND NON-INERT WASTES PRESENT ONSITE FROM VANDALISM. MAINTAIN A SUPPLY OF MATERIALS ON HAND TO ADDRESS AND CONTAIN SPILLS.
18. LOCATE DESIGNATED VEHICLE AND EQUIPMENT SERVICE AREAS, FUEL, AND MATERIALS AWAY FROM DRAINAGE INLETS, WATERCOURSES, AND CANALS. PROPERLY CONTAIN AREAS USING BERMS, SANDBAGS, OR OTHER BARRIERS. REGULARLY INSPECT AND MAINTAIN EQUIPMENT, ESPECIALLY FOR DAMAGED HOSES AND LEAKY GASKETS.
19. CONDUCT MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES (I.E. OIL CHANGES, FUEL TANK DRAIN DOWN, ETC.) THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CLEAN ALL CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. PERFORM REPAIRS ONSITE USING TEMPORARY PLASTIC OR OIL ABSORBING BLANKETS BENEATH THE VEHICLE.
20. DESIGNATE AN AREA FOR CLEANING PAINTING EQUIPMENT AND TOOLS. NEVER CLEAN BRUSHES OR RINSE CONTAINERS INTO THE STREET, GUTTER, DRAINAGE INLET, OR WATERWAY.
21. APPLY LANDSCAPING OR AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, IN SUCH A MANNER, AND AT APPLICATION RATES, THAT INHIBITS THE LOSS OF CHEMICALS INTO STORMWATER RUNOFF FACILITIES.
22. INSPECT ON A REGULAR BASIS (AT A MINIMUM WEEKLY, AND DAILY DURING / AFTER A RUNOFF PRODUCING STORM EVENT) AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL BMPS TO ENSURE SUCCESSFUL PERFORMANCE OF THE BMPS.
23. REMOVE TEMPORARY ESC BMPS WITHIN 30 DAYS AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. PERMANENTLY STABILIZE AREAS THAT ARE DISTURBED DURING THE REMOVAL PROCESS.



EROSION CONTROL INSPECTION FREQUENCY

ACTIVE PERIOD	ON INITIAL DATE THAT LAND DISTURBANCE ACTIVITIES COMMENCE. WITHIN 24 HOURS OF ANY STORM EVENT, INCLUDING RUNOFF FROM SNOW MELT, THAT RESULTS IN DISCHARGE FROM THE SITE. AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	THE INSPECTOR MAY REDUCE THE FREQUENCY OF INSPECTIONS IN ANY AREA OF THE SITE WHERE THE STABILIZATION STEPS IN SECTION 2.2.20 HAVE BEEN COMPLETED TO TWICE PER MONTH FOR THE FIRST MONTH, NO LESS THAN 14 CALENDAR DAYS APART, THEN ONCE PER MONTH.
PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER	IF SAFE, ACCESSIBLE AND PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT DISCHARGE POINT OR DOWNSTREAM LOCATION OF THE RECEIVING WATERBODY.
PERIODS DURING WHICH CONSTRUCTION ACTIVITIES ARE SUSPENDED AND RUNOFF IS UNLIKELY DUE TO FROZEN CONDITIONS.	VISUAL MONITORING INSPECTIONS MAY BE TEMPORARILY SUSPENDED. IMMEDIATELY RESUME MONITORING UPON THAWING, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.
PERIODS DURING WHICH CONSTRUCTION ACTIVITIES ARE CONDUCTED AND RUNOFF IS UNLIKELY DURING FROZEN CONDITIONS.	VISUAL MONITORING INSPECTIONS MAY BE REDUCED TO ONCE A MONTH. IMMEDIATELY RESUME MONITORING UPON THAWING, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

EROSION CONTROL LEGEND

- FLOW ARROW
- SF — SEDIMENT FENCING (PER ODOT STD DWG RD1040, SHEET 13.1)
- 8"SD — UNDERGROUND STORM DRAIN LINE (SIZE AS NOTED)
- CATCH BASIN INSERT (PER ODOT STD DWG RD1010, SHEET 13.1)
- GRAVEL CONSTRUCTION ENTRANCE (PER ODOT STD DWG RD1000, SHEET 13.1)
- EQUIPMENT WASHOUT AREA (PER ODOT STD DWG RD1070, SHEET 13.1)

EROSION CONTROL KEY NOTES

1. INSTALL STORM SENTINEL ADJUSTABLE CATCH BASIN INSERT OR ENGINEER-APPROVED EQUAL BENEATH GRATE. (PER ODOT STD DWG RD1010, SHEET C13.1)
2. CONSTRUCT GRAVEL CONSTRUCTION ENTRANCE (PER ODOT STD DWG RD1000, SHEET C13.1)
3. INSTALL SEDIMENT FENCING (PER ODOT STD DWG RD1040, SHEET C13.1)
4. CONSTRUCT CONCRETE TRUCK WASHOUT AREA (PER ODOT STD DWG RD1070, SHEET C13.1)

SCALE: 1" = 10'

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

EROSION CONTROL PLAN

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)389-3026
WWW.HWANET.COM

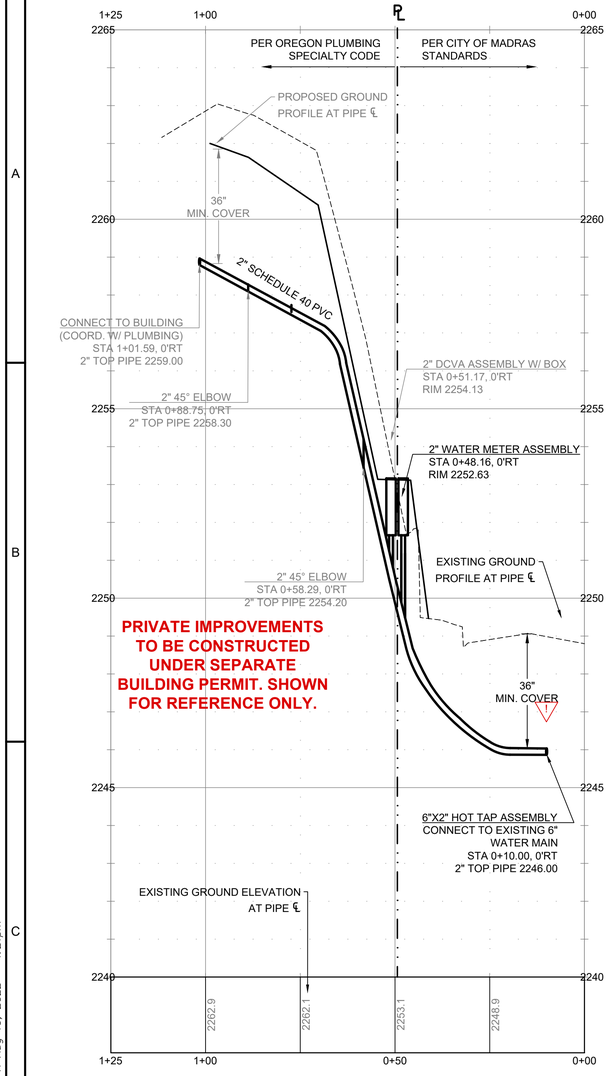
DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 — 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

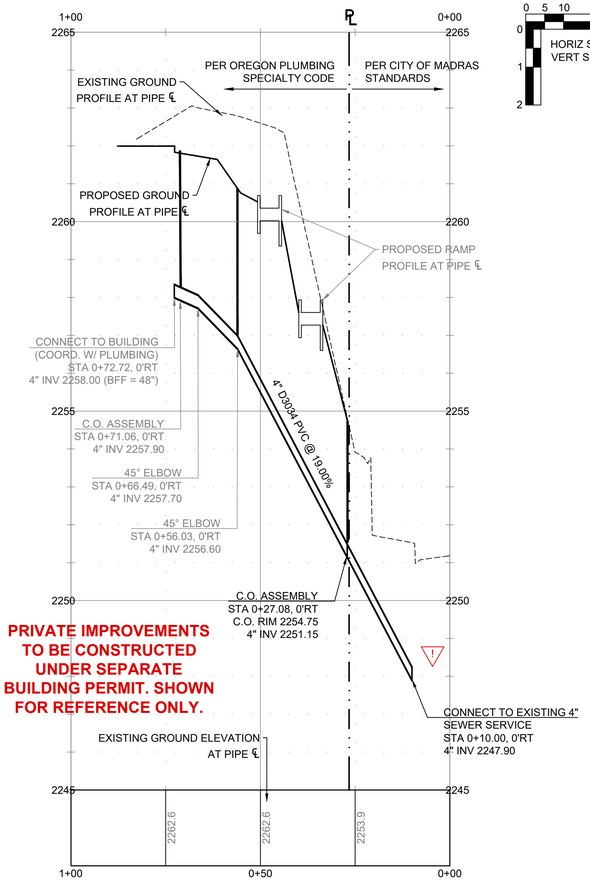
SHEET:
C11.2

HWA # 220106
COM #:

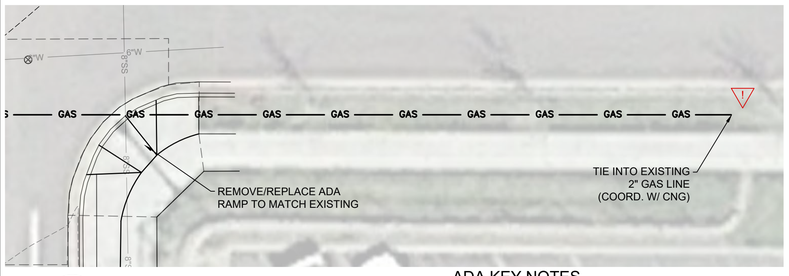
PLAN SUBMITTAL STATUS



1 C12.1 WATER-1 PROFILE
SCALE: HORIZONTAL 1"=20' / VERTICAL 1"=2'



2 C12.1 SEWER-1 PROFILE
SCALE: HORIZONTAL 1"=20' / VERTICAL 1"=2'



3 C12.1 GAS LINE DETAIL
SCALE: 1"=10'

ADA KEY NOTES

NOTE: CONTRACTOR SHALL MATCH EXISTING CONCRETE MAINTAINING REQUIRED ADA MAXIMUM SLOPES:
-7.5% RUNNING SLOPE
-1.5% CROSS SLOPE

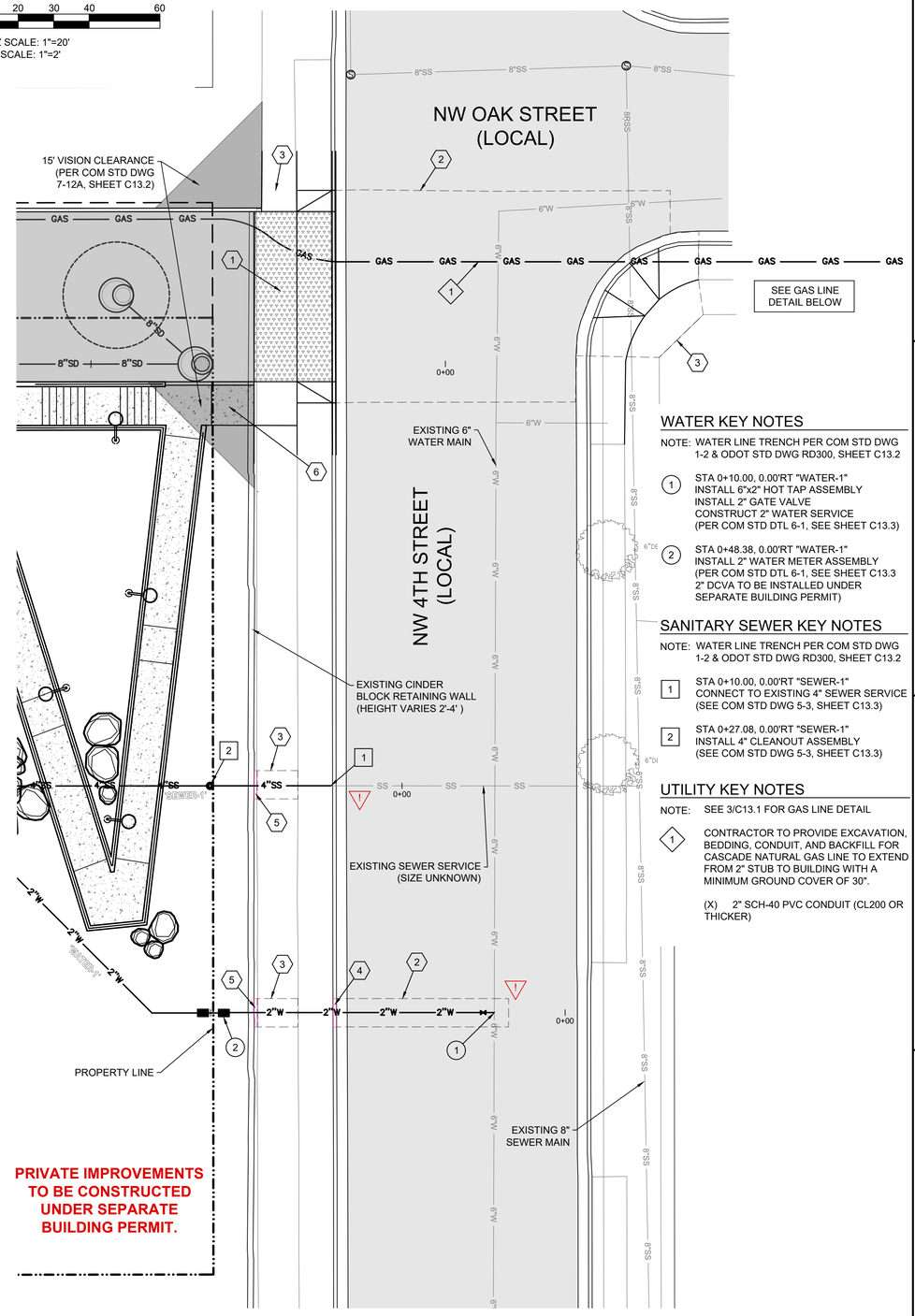
PAVING KEY NOTES

NOTE: BACKFILL TRENCHES PER COM STD DWG 1-2 & ODOT STD DWG RD300, SHEET C13.2

1. CONSTRUCT DRIVEWAY APPROACH (PER ODOT STD DWG RD740, SHEET C13.2)
2. CONSTRUCT HMAC PAVEMENT (3" HMAC ON 6" AGGREGATE BASE) (PER COM STD DWG 1-1, SHEET C13.3)
3. CONSTRUCT PCC PAVEMENT (4" PCC ON 4" AGGREGATE BASE) (PER COM STD DWG 7-1A, SHEET C13.3)
4. CONSTRUCT 12" CONCRETE CURB W/ 6" CURB EXPOSURE (PER COM STD DWG 7-15, SHEET C13.3)
5. CONSTRUCT CINDER BLOCK RETAINING WALL TO MATCH EXISTING
6. INSTALL TRANSITION PANEL TO MATCH PROPOSED PCC PAVEMENT WITH EXISTING PCC PAVEMENT (PER ODOT DTD DWG RD722, SHEET C13.3)

UTILITY LEGEND

- PROPERTY LINE
- 8"SS — PROPOSED SEWER LINE (SIZE AS NOTED)
- 4"W — PROPOSED WATER LINE (SIZE AS NOTED)
- 8"SD — PROPOSED STORM DRAIN LINE (SIZE AS NOTED)
- PROPOSED DOUBLE-GRATE CATCH BASIN ASSEMBLY
- GAS — PROPOSED GAS LINE
- PROPOSED CLEANOUT ASSEMBLY
- "STORM-1" — ALIGNMENT NAME



PRIVATE IMPROVEMENTS TO BE CONSTRUCTED UNDER SEPARATE BUILDING PERMIT.

WATER KEY NOTES

NOTE: WATER LINE TRENCH PER COM STD DWG 1-2 & ODOT STD DWG RD300, SHEET C13.2

1. STA 0+10.00, 0.00'RT "WATER-1"
INSTALL 6"x2" HOT TAP ASSEMBLY
INSTALL 2" GATE VALVE
CONSTRUCT 2" WATER SERVICE
(PER COM STD DTL 6-1, SEE SHEET C13.3)

2. STA 0+48.38, 0.00'RT "WATER-1"
INSTALL 2" WATER METER ASSEMBLY
(PER COM STD DTL 6-1, SEE SHEET C13.3
2" DCVA TO BE INSTALLED UNDER SEPARATE BUILDING PERMIT)

SANITARY SEWER KEY NOTES

NOTE: WATER LINE TRENCH PER COM STD DWG 1-2 & ODOT STD DWG RD300, SHEET C13.2

1. STA 0+10.00, 0.00'RT "SEWER-1"
CONNECT TO EXISTING 4" SEWER SERVICE
(SEE COM STD DWG 5-3, SHEET C13.3)

2. STA 0+27.08, 0.00'RT "SEWER-1"
INSTALL 4" CLEANOUT ASSEMBLY
(SEE COM STD DWG 5-3, SHEET C13.3)

UTILITY KEY NOTES

NOTE: SEE 3/C13.1 FOR GAS LINE DETAIL

1. CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, CONDUIT, AND BACKFILL FOR CASCADE NATURAL GAS LINE TO EXTEND FROM 2" STUB TO BUILDING WITH A MINIMUM GROUND COVER OF 30".

(X) 2" SCH-40 PVC CONDUIT (CL200 OR THICKER)

⚠ CONTRACTOR SHALL POTHOLE AND VERIFY DEPTH AND LOCATION OF EXISTING UTILITY OR UNDERGROUND SERVICE LINE AT PROPOSED CONNECTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO ANY CONSTRUCTION.

0 1 5 10 20 30
SCALE: 1" = 10'

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

UTILITY PLAN AND PROFILE

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62920 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)388-0251
WWW.HWA-INC.ORG

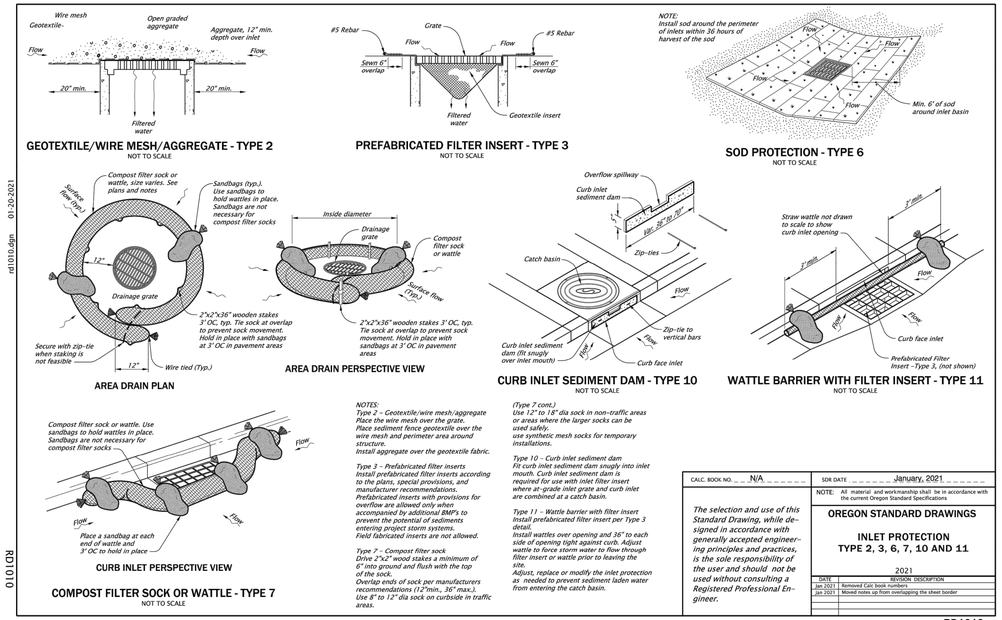
DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C12.1

HWA # 220106
COM #:

PLAN SUBMITTAL STATUS



GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2
NOT TO SCALE

PREFABRICATED FILTER INSERT - TYPE 3
NOT TO SCALE

SOD PROTECTION - TYPE 6
NOT TO SCALE

AREA DRAIN PLAN

AREA DRAIN PERSPECTIVE VIEW

CURB INLET SEDIMENT DAM - TYPE 10
NOT TO SCALE

WATTLE BARRIER WITH FILTER INSERT - TYPE 11
NOT TO SCALE

CURB INLET PERSPECTIVE VIEW

COMPOST FILTER SOCK OR WATTLE - TYPE 7
NOT TO SCALE

NOTES:
Type 2 – Geotextile/wire mesh/aggregate
Place the wire mesh over the grate. Place sediment fence geotextile over the wire mesh and perimeter area around structure.
Install aggregate over the geotextile fabric.

Type 3 – Prefabricated filter inserts
Install prefabricated filter inserts according to the plans, special provisions, and manufacturer recommendations. Prefabricated inserts with provisions for overflow are allowed only when accompanied by additional BMP's to prevent the potential of sediments entering project storm systems. Field fabricated inserts are not allowed.

Type 7 – Compost filter sock
Drive 2"x2" wood stakes a minimum of 6" into ground and flush with the top of the sock.
Overlap ends of sock per manufacturers recommendations (12"min., 36" max.).
Use 8" to 12" dia sock on curbside in traffic areas.

(Type 7 cont.)
Use 12" to 18" dia sock in non-traffic areas or areas where the larger socks can be used safely.
use synthetic mesh socks for temporary installations.

Type 10 – Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet mouth. Curb inlet sediment dam is required for use with inlet filter insert where at-grade inlet grate and curb inlet are combined at a catch basin.

Type 11 – Wattle barrier with filter insert
Install prefabricated filter insert per Type 3 detail.
Install wattles over opening and 36" to each side of opening tight against curb. Adjust wattle to force storm water to flow through filter insert or wattle prior to leaving the site.
Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

CALC. BOOK NO.	N/A	SDR DATE	January, 2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

INLET PROTECTION
TYPE 2, 3, 6, 7, 10 AND 11

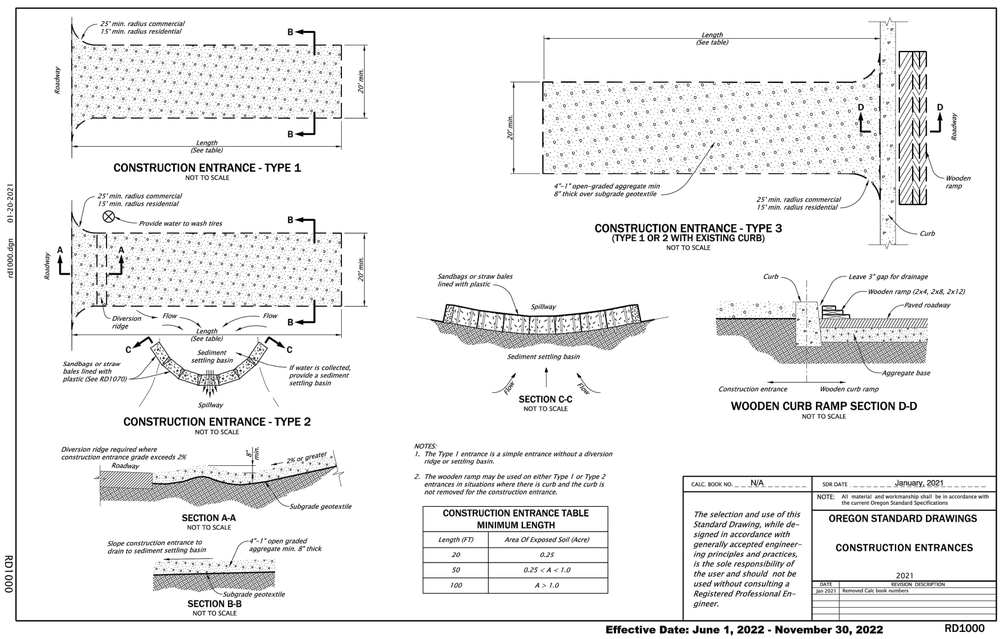
2021

DATE	REVISION DESCRIPTION
Jan 2021	Removed Calc book numbers
Jan 2021	Moved notes up from overlapping the sheet border

rd1010.dgn 01-20-2021

RD1010

Effective Date: June 1, 2022 - November 30, 2022 RD1010



CONSTRUCTION ENTRANCE - TYPE 1
NOT TO SCALE

CONSTRUCTION ENTRANCE - TYPE 3
(TYPE 1 OR 2 WITH EXISTING CURB)
NOT TO SCALE

CONSTRUCTION ENTRANCE - TYPE 2
NOT TO SCALE

SECTION C-C
NOT TO SCALE

WOODEN CURB RAMP SECTION D-D
NOT TO SCALE

SECTION A-A
NOT TO SCALE

SECTION B-B
NOT TO SCALE

NOTES:
1. *The Type 1 entrance is a simple entrance without a diversion ridge or settling basin.*
2. *The wooden ramp may be used on either Type 1 or Type 2 entrances in situations where there is curb and the curb is not removed for the construction entrance.*

CONSTRUCTION ENTRANCE TABLE
MINIMUM LENGTH

Length (FT)	Area Of Exposed Soil (Acre)
20	0.25
50	0.25 < A < 1.0
100	A > 1.0

CALC. BOOK NO.	N/A	SDR DATE	January, 2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

CONSTRUCTION ENTRANCES

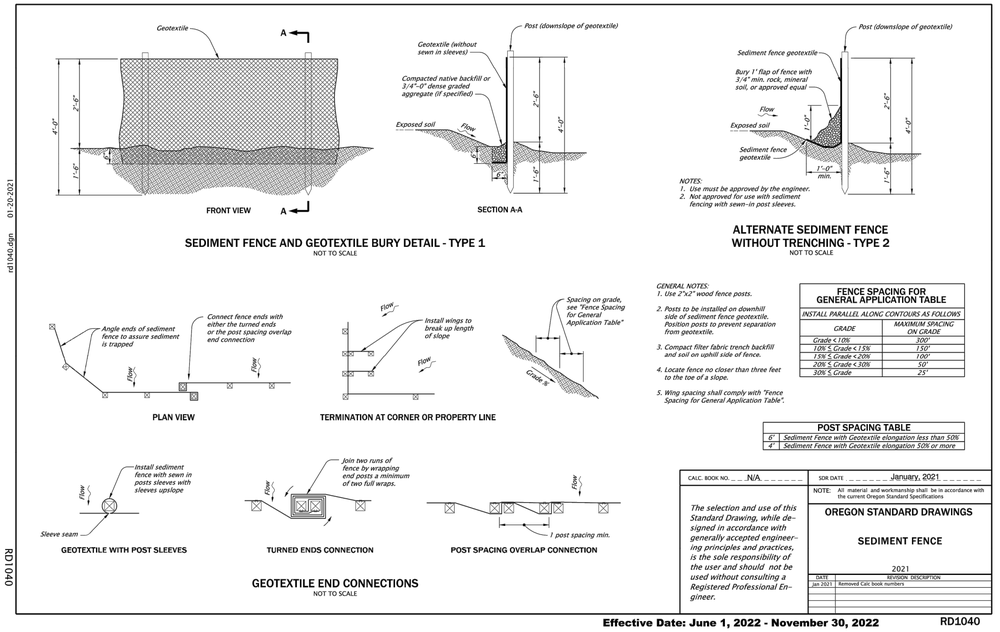
2021

DATE	REVISION DESCRIPTION
Jan 2021	Removed Calc book numbers

rd1000.dgn 01-20-2021

RD1000

Effective Date: June 1, 2022 - November 30, 2022 RD1000



SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1
NOT TO SCALE

ALTERNATE SEDIMENT FENCE WITHOUT TRENCHING - TYPE 2
NOT TO SCALE

FENCE SPACING FOR GENERAL APPLICATION TABLE

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	*MAXIMUM SPACING ON GRADE*
Grade < 10%	*300'*
10% ≤ Grade < 15%	*150'*
15% ≤ Grade < 20%	*100'*
20% ≤ Grade < 30%	*50'*
30% ≤ Grade	*25'*

POST SPACING TABLE

6"	Sediment Fence with Geotextile elongation less than 50%
4"	Sediment Fence with Geotextile elongation 50% or more

GEOTEXTILE END CONNECTIONS
NOT TO SCALE

CALC. BOOK NO.	N/A	SDR DATE	January, 2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

SEDIMENT FENCE

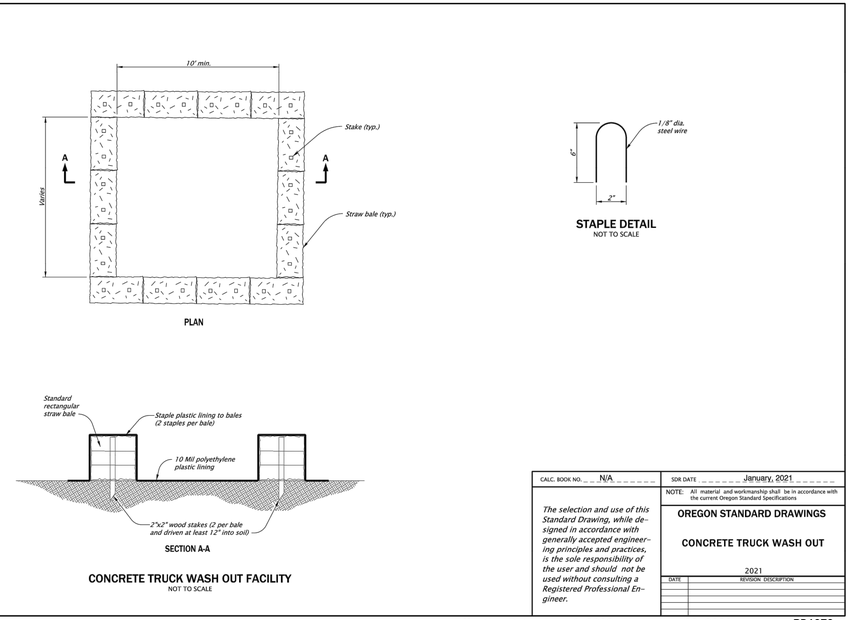
2021

DATE	REVISION DESCRIPTION
Jan 2021	Removed Calc book numbers

rd1040.dgn 01-20-2021

RD1040

Effective Date: June 1, 2022 - November 30, 2022 RD1040



CONCRETE TRUCK WASH OUT FACILITY
NOT TO SCALE

CALC. BOOK NO.	N/A	SDR DATE	January, 2021

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

CONCRETE TRUCK WASH OUT

2021

DATE	REVISION DESCRIPTION

rd1070.dgn 01-20-2021

RD1070

Effective Date: June 1, 2022 - November 30, 2022 RD1070

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

DETAILS

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)389-9251
WWW.HWANET.COM

DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

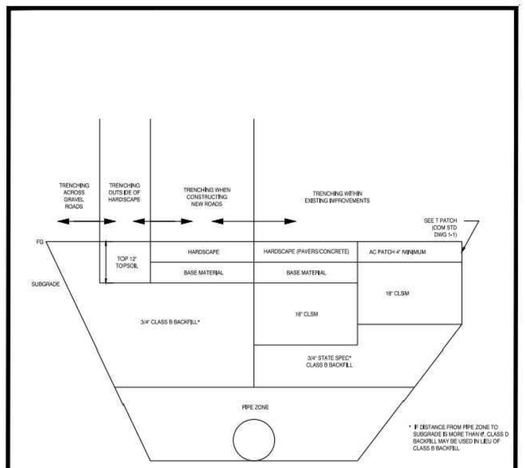
VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C13.1

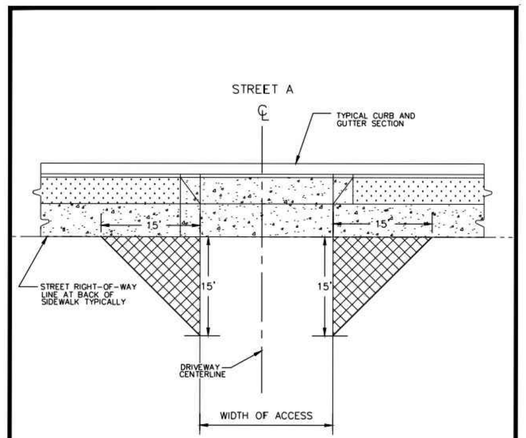
HWA # 220106
COM #:

PLAN SUBMITTAL STATUS

Mxxb C:\Users\Mxxb\AppData\Local\Temp\AcPublish_10212\220106_CD.dwg Fri Aug 19, 2022 – 4:21pm



CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
	DRAWN BY: CPF	1-2
TRENCHING BACKFILL	APPROVED BY: HAM	
	REVISION DATE: 03/28/2018	



CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
	DRAWN BY: CPF	7-12A
VISION CLEARANCE FOR COMMERCIAL/INDUSTRIAL ZONE ACCESS	APPROVED BY: HAM	
	REVISION DATE: 10/24/2017	

rd300.dgn 20-JUL-2020

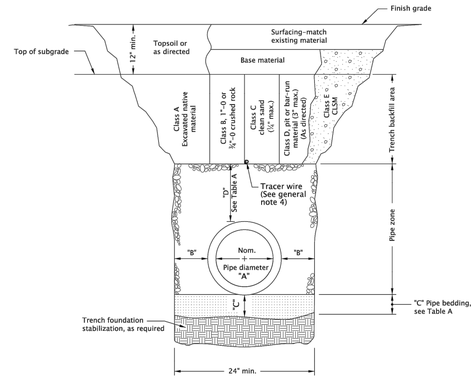
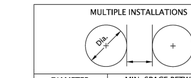


TABLE A

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

For pipes over 72" diameter, see general note 3.

MULTIPLE INSTALLATIONS



DIAMETER	MIN. SPACE BETWEEN PIPES
Up to 48"	24"
48" to 72"	One half (½) dia. of pipe

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Surfacing of paved areas shall comply with street cut Std. Dwg. RD302.
2. For pipe installation in embankment areas where the trench method will not be used and the pipe is ≥ 36" diameter, increase dimension "B" to nominal pipe diameter.
3. Pipes over 72" diameter are structures, and are not applicable to this drawing.
4. See Std. Dwg. RD336 for tracer wire details (When required).

CALC. BOOK NO. N/A — SDR DATE 14-JUL-2014

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

TRENCH BACKFILL, BEDDING, PIPE ZONE AND MULTIPLE INSTALLATIONS

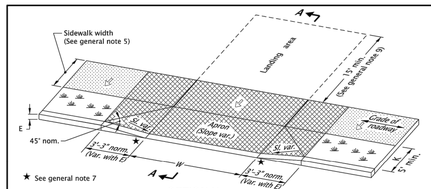
2021

DATE	REVISION DESCRIPTION

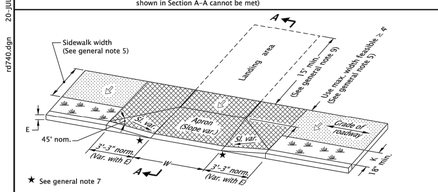
RD300

Effective Date: June 1, 2022 – November 30, 2022

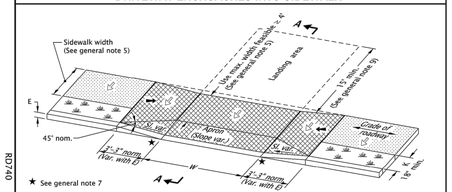
rd740.dgn 20-JUL-2020



OPTION H
TYPICAL SEPARATED SIDEWALK DRIVEWAY
(Use one of the options below if slope requirements shown in Section A-A cannot be met)

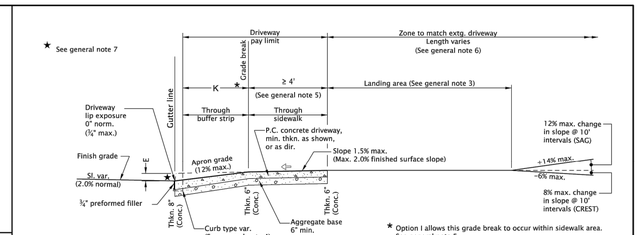


OPTION I
DRIVEWAY ENCROACHES INTO SIDEWALK



OPTION J
LOWERED SIDEWALK

★ See general note 7



SECTION A-A

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Details are based on applicable ODOT Standards.
2. Only use details allowed by jurisdiction.
3. The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, buffer strip width, curb exposure, driveway lip exposure, landing area length and width. See project plans for details not shown.
4. Curb, gutter, and sidewalk types varies, see plans.
   See Std. Dwgs. RD700 & RD701 for curb details.
   See Std. Dwg. RD721 for sidewalk details.
   See Std. Dwg. RD722 for joint details.
5. A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
6. Where existing driveway is in good condition, and meets slope requirements, construct only as much landing area as required for satisfactory connection with new work.
7. Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
8. Construct a full depth expansion joints with 1#2" (In) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
9. 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
10. Any dimensions except those of general note 5 may be amended by local agencies for their use.

LEGEND:
- Sidewalk
- Driveway pay limit (See project plans for details not shown)
- Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope 7.5% max. (Max. 8.3% finished surface slope)

W Width of driveway
K Buffer strip width
E Curb exposure

NOTE: This drawing is to be used by local agencies to assist them in the design of driveways on their facilities.

CALC. BOOK NO. N/A — SDR DATE 20-JUL-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

SEPARATED SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS H, I & J) LOCAL JURISDICTIONS

2021

DATE	REVISION DESCRIPTION

RD740

Effective Date: June 1, 2022 – November 30, 2022

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

DETAILS

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62920 O.B. RILEY ROAD, SITE 100, BEND, OR 97703
(541)389-9324
WWW.HWAGEO.COM

DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

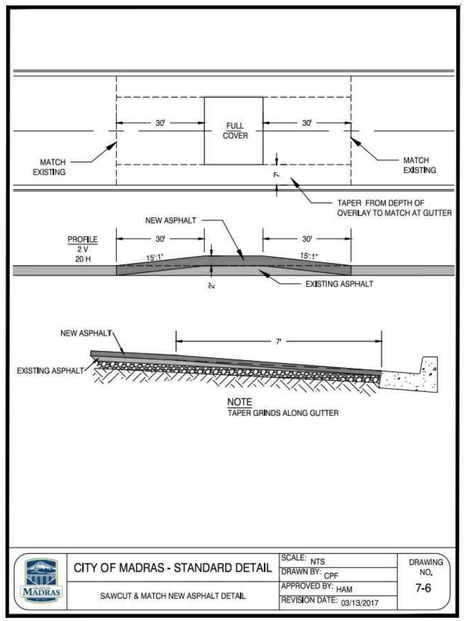
VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C13.2

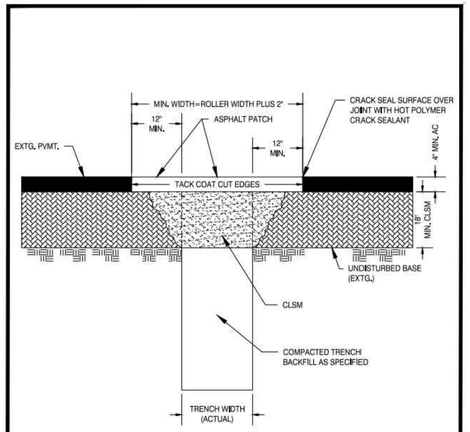
HWA # 220106
COM #:

PLAN SUBMITTAL STATUS

Maxb C:\Users\Maxb\AppData\Local\Temp\AcPublish_10212\220106_CD.dwg Fri Aug 19, 2022 – 4:21pm

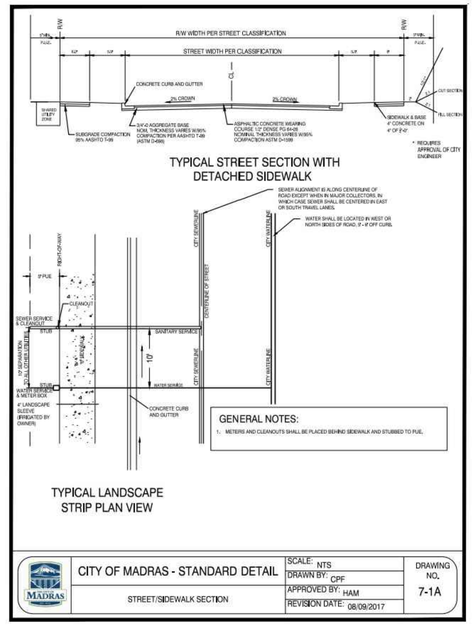


CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
SAWCUT & MATCH NEW ASPHALT DETAIL	DRAWN BY: CPF	7-6
	APPROVED BY: HAM	
	REVISION DATE: 03/13/2017	



NOTE
REFER TO MADRAS PUBLIC IMPROVEMENT DESIGN & CONSTRUCTION STANDARDS, SECTIONS 7-33.2 AND 7-35.

CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
T PATCH	DRAWN BY: CPF	1-1
	APPROVED BY: HAM	
	REVISION DATE: 12/12/2016	

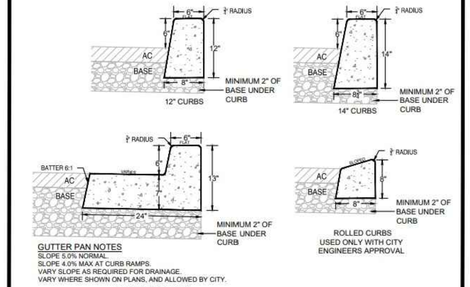


TYPICAL STREET SECTION WITH DETACHED SIDEWALK

GENERAL NOTES:
1. METERS AND CLEANOUTS SHALL BE PLACED BEHIND SIDEWALK AND STUBBED TO PUE.

TYPICAL LANDSCAPE STRIP PLAN VIEW

CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
STREET/SIDEWALK SECTION	DRAWN BY: CPF	7-1A
	APPROVED BY: HAM	
	REVISION DATE: 08/09/2017	

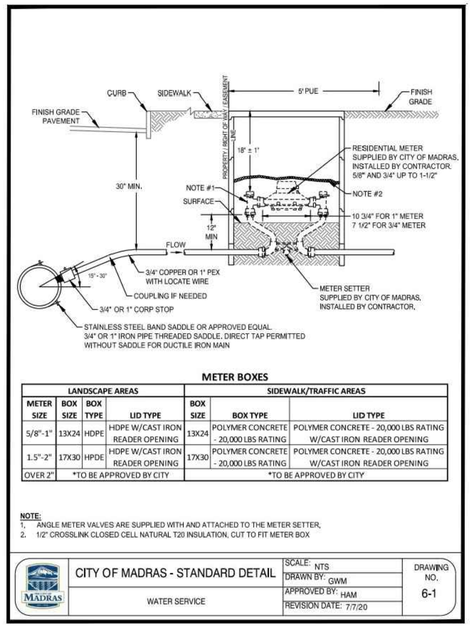


GUTTER PAN NOTES
SLOPE 5.0% NORMAL.
SLOPE 4.0% MAX AT CURB RAMPS.
VARY SLOPE AS REQUIRED FOR DRAINAGE.
VARY WHERE SHOWN ON PLANS, AND ALLOWED BY CITY.
CURB AND GUTTER

CITY STANDARD CURBS

NOTES:
1. CONCRETE SHALL BE CLASS 3000 MEETING THE REQUIREMENTS OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (SECTION 440 "COMMERCIAL GRADE CONCRETE").
2. ROLLED CURBS USED ONLY AT CITY ENGINEERS DISCRETION.
3. EXPANSION JOINTS ARE REQUIRED AT:
   A. A MAXIMUM SPACING OF 100 FEET.
   B. AT EACH POINT OF TANGENCY.
   C. AT THE TOP OF ALL ADA AND DRIVEWAY APRON FLARES.
   D. AROUND ALL POLES, POSTS, BOXES AND OTHER FIXTURES THAT PROTRUDE THROUGH OR AGAINST THE CURB.
4. CONTROL JOINTS ARE TO BE CUT INTO THE WET CONCRETE A MINIMUM 1/3 OF THE DEPTH AND PLACED AT A MAXIMUM OF 10' APART.
5. BASE ROCK UNDER CURB SHALL BE A MINIMUM OF TWO INCHES DEEP OR DEEPER AS REQUIRED TO MATCH STREET SECTION AND MEETING THE REQUIREMENTS OF SECTION 207.
6. DRIVEWAY APRON LIPS SHALL BE MINIMUM OF 1" TO A MAXIMUM OF 1 1/2" HEIGHT ABOVE ASPHALT AT GUTTER.
7. ADA LIPS SHALL BE FLUSH WITH ASPHALT PAVEMENT AT GUTTER.
8. ALL VISIBLE EDGES OF CURB SHALL HAVE A MAXIMUM 3/4" RADIUS FINISHED EDGE.
9. ALL VISIBLE SURFACES SHALL HAVE A LIGHT BROOM FINISH, PARALLEL WITH CURB.
10. ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE MARKED ON THE SURFACE OF CURB USING A STAMPED IMPRESSION OF "W" OR "S".
11. CURB HEIGHTS SHALL BE AS FOLLOWS:
    A. LOCAL STREETS - 12"
    B. ARTERIAL, COLLECTOR AND INDUSTRIAL STREETS - 14"

CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
CONCRETE CURBS	DRAWN BY: GWM	7-15
	APPROVED BY: HAM	
	REVISION DATE: 1/10/20	

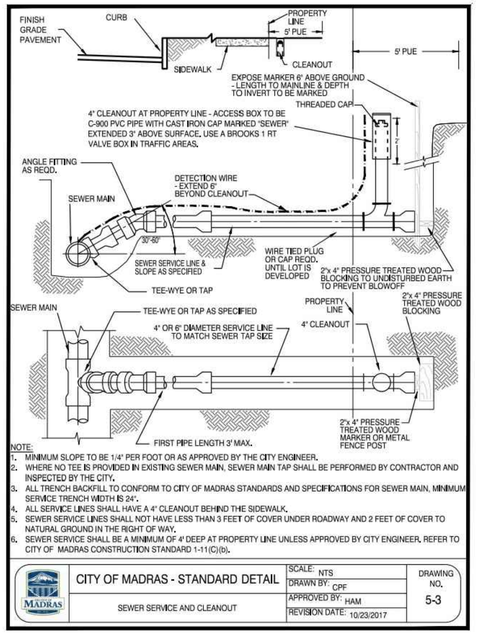


METER BOXES

LANDSCAPE AREAS				SIDEWALK/TRAFFIC AREAS		
METER SIZE	BOX SIZE	BOX TYPE	LID TYPE	BOX SIZE	BOX TYPE	LID TYPE
5/8"-1"	13X24	HDPE	HDPE W/CAST IRON READER OPENING	13X24	POLYMER CONCRETE - 20,000 LBS RATING	POLYMER CONCRETE - 20,000 LBS RATING W/CAST IRON READER OPENING
1.5"-2"	17X30	HPDE	HDPE W/CAST IRON READER OPENING	17X30	POLYMER CONCRETE - 20,000 LBS RATING	POLYMER CONCRETE - 20,000 LBS RATING W/CAST IRON READER OPENING
OVER 2"	*TO BE APPROVED BY CITY			*TO BE APPROVED BY CITY		

NOTE:
1. ANGLE METER VALVES ARE SUPPLIED WITH AND ATTACHED TO THE METER SETTER.
2. 1/2" CROSSLINK CLOSED CELL NATURAL T20 INSULATION, CUT TO FIT METER BOX

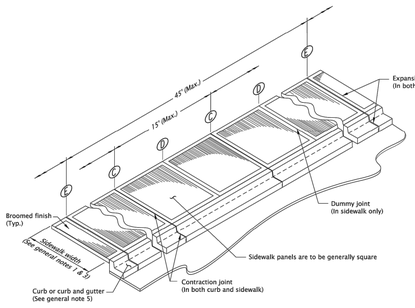
CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
WATER SERVICE	DRAWN BY: GWM	6-1
	APPROVED BY: HAM	
	REVISION DATE: 7/7/20	



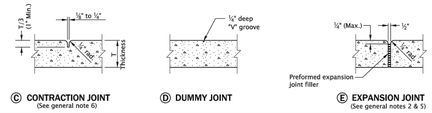
NOTE:
1. MINIMUM SLOPE TO BE 1/4" PER FOOT OR AS APPROVED BY THE CITY ENGINEER.
2. WHERE NO TEE IS PROVIDED IN EXISTING SEWER MAIN, SEWER MAIN TAP SHALL BE PERFORMED BY CONTRACTOR AND INSPECTED BY THE CITY.
3. ALL TRENCH BACKFILL TO CONFORM TO CITY OF MADRAS STANDARDS AND SPECIFICATIONS FOR SEWER MAIN, MINIMUM SERVICE TRENCH WIDTH IS 24".
4. ALL SERVICE LINES SHALL HAVE A 4" CLEANOUT BEHIND THE SIDEWALK.
5. SEWER SERVICE LINES SHALL NOT HAVE LESS THAN 3 FEET OF COVER UNDER ROADWAY AND 2 FEET OF COVER TO NATURAL GROUND IN THE RIGHT OF WAY.
6. SEWER SERVICE SHALL BE A MINIMUM OF 4' DEEP AT PROPERTY LINE UNLESS APPROVED BY CITY ENGINEER, REFER TO CITY OF MADRAS CONSTRUCTION STANDARD 1-11(C)(b).

CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
SEWER SERVICE AND CLEANOUT	DRAWN BY: CPF	5-3
	APPROVED BY: HAM	
	REVISION DATE: 10/23/2017	

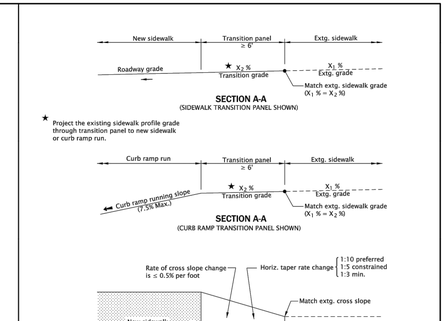
RD722 20-JUL-2020



JOINT DETAIL
(Curb line sidewalk with curb and gutter shown)



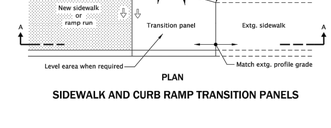
C CONTRACTION JOINT (See general note 6)
D DUMMY JOINT
E EXPANSION JOINT (See general notes 2 & 5)



SECTION A-A
(SIDEWALK TRANSITION PANEL SHOWN)

★ Project the existing sidewalk profile grade through transition panel to new sidewalk or curb ramp run.

SECTION A-A
(CURB RAMP TRANSITION PANEL SHOWN)



PLAN

SIDEWALK AND CURB RAMP TRANSITION PANELS

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. See Std. Dwgs. RD720 & RD721 for concrete sidewalk details. See project plans for sidewalk width, placement and design specified.
2. Provide expansion joints around poles, boxes, at ends of each driveway and other fixtures which protrude through or against the structures. For sidewalk, monolithic curb and sidewalk, construction expansion joints at 45° max. spacing.
3. On sidewalks 8' and wider, provide a longitudinal joint at the midpoint of sidewalk panel.
4. See Std. Dwgs. RD700 & RD701 for concrete curb details. See project plans for the curb design specified.
5. For curb ramps, do not place expansion joints within the limits of curb ramps and between separate concrete pours.
6. Const. contraction joints at 15' max. spacing, and at each curb ramp, driveway, sidewalk and curb.

LEGEND:
- New sidewalk or ramp run
- Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)
- Zero exposure

CALC. BOOK NO. N/A

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

SDR DATE 20-JUL-2020

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

SIDEWALK JOINTS AND TRANSITION PANELS

2021

DATE	REVISION DESCRIPTION

Effective Date: June 1, 2022 - November 30, 2022

RD722

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)389-9251
WWW.HWANET.ORG

DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C13.3

HWA # 220106
COM #:

PLAN SUBMITTAL STATUS

MADRAS HOMELESS SHELTER PUBLIC INFRASTRUCTURE PLANS

DETAILS

JEFFERSON COUNTY, OREGON

REGISTERED PROFESSIONAL ENGINEER
52977PE
OREGON
JULY 13, 1990
GRANT HARDGRAVE

Maxb C:\Users\Maxb\AppData\Local\Temp\AcPublish_10212\220106_CD.dwg Fri Aug 19, 2022 - 4:21pm

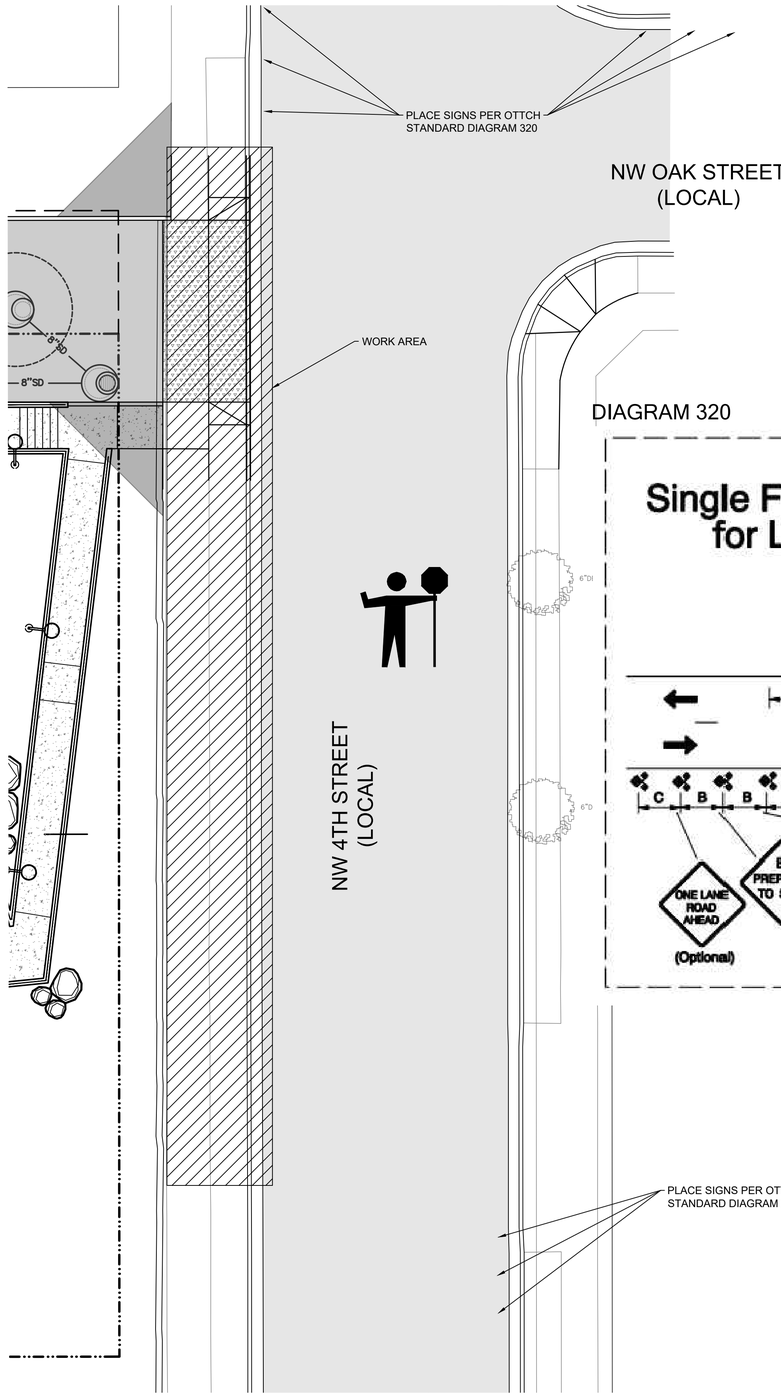
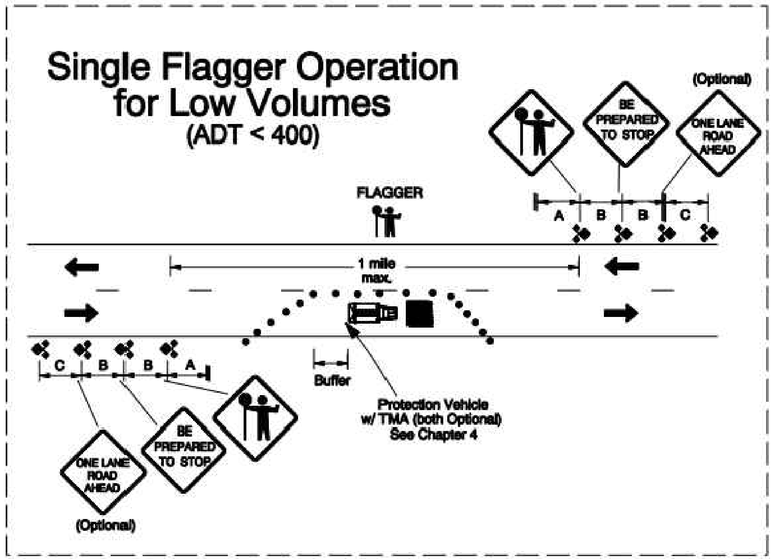


DIAGRAM 320

Sign Spacing and Buffer Lengths (feet)

Posted Speed	Spacing Between Signs A	B	C	"Buffer" Space
20	100	100	100	50
25				75
30				100
35	350	350	350	125
40				150
45	500	500	500	180
50				210
55				250
60	700	700	700	285
65				325
70				365



2-Lane, 2-Way

Stationary Lane Closure with Flagging — Diagram 320

Diagram 320 covers total closure of one lane of a two-lane, two-way roadway. See the detail inset for the layout if using a single flagger to control both directions of traffic on low volume roads (less than 400 ADT) with good sight distance as discussed below.

1. Use truck-mounted flashing warning lights on work and protection vehicles. See Section 4.3 – Lights and Lighted Signs for exceptions.
2. For added visibility, a truck-mounted arrow board or PCMS in caution mode may be used.
3. Flaggers at each approach are required if any of the following conditions exist:
   a. Night Operations.
   b. Work space is over 200 feet in length.
   c. Sight distance is less than 750 feet from each approach through the lane closure.
   d. Traffic volumes are greater than 400 ADT.
4. The length between the Flagger Ahead signs **shall** not exceed one mile. Use Diagram 340 – Lane Closure with Pilot Car if exceeding one mile.
5. Cones should be used to outline the work space when curves or other roadway alignments prevent clear direction for the motorists to pass the work space safely.
6. Cones along the work space are recommended when posted speeds are 45 mph or greater, when working under heavy traffic or when travel lanes are narrower than 11 feet.
7. Extended queue signing (see Diagram 5-4) should be used when traffic queues extend beyond the initial advance warning sign.
8. When flagging near an intersection, the "Flagger Ahead" (CW23-2) sign should be visible to traffic entering from any side road. Additional advance warning and Flagger Ahead symbol signs may be placed on the side road(s).
9. Sign set-up and flagger placement shown may be used for intermittent full road closures of 20 minutes or less.
10. The "ONE LANE ROAD AHEAD" (W20-4) sign is optional and should be considered on high volume or high speed roads, or when extended queues are expected.

1 / C14.1 TRAFFIC CONTROL PLAN
SCALE: 1"=10'

0 1 5 10 20 30
SCALE: 1" = 10'

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1990 GRANT HARDGRAVE

MADRAS HOMELESS SHELTER
PUBLIC INFRASTRUCTURE PLANS

TRAFFIC CONTROL PLAN

JEFFERSON COUNTY, OREGON

REVISIONS:

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62500 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
(541)389-4051
WWW.HWANC.ORG

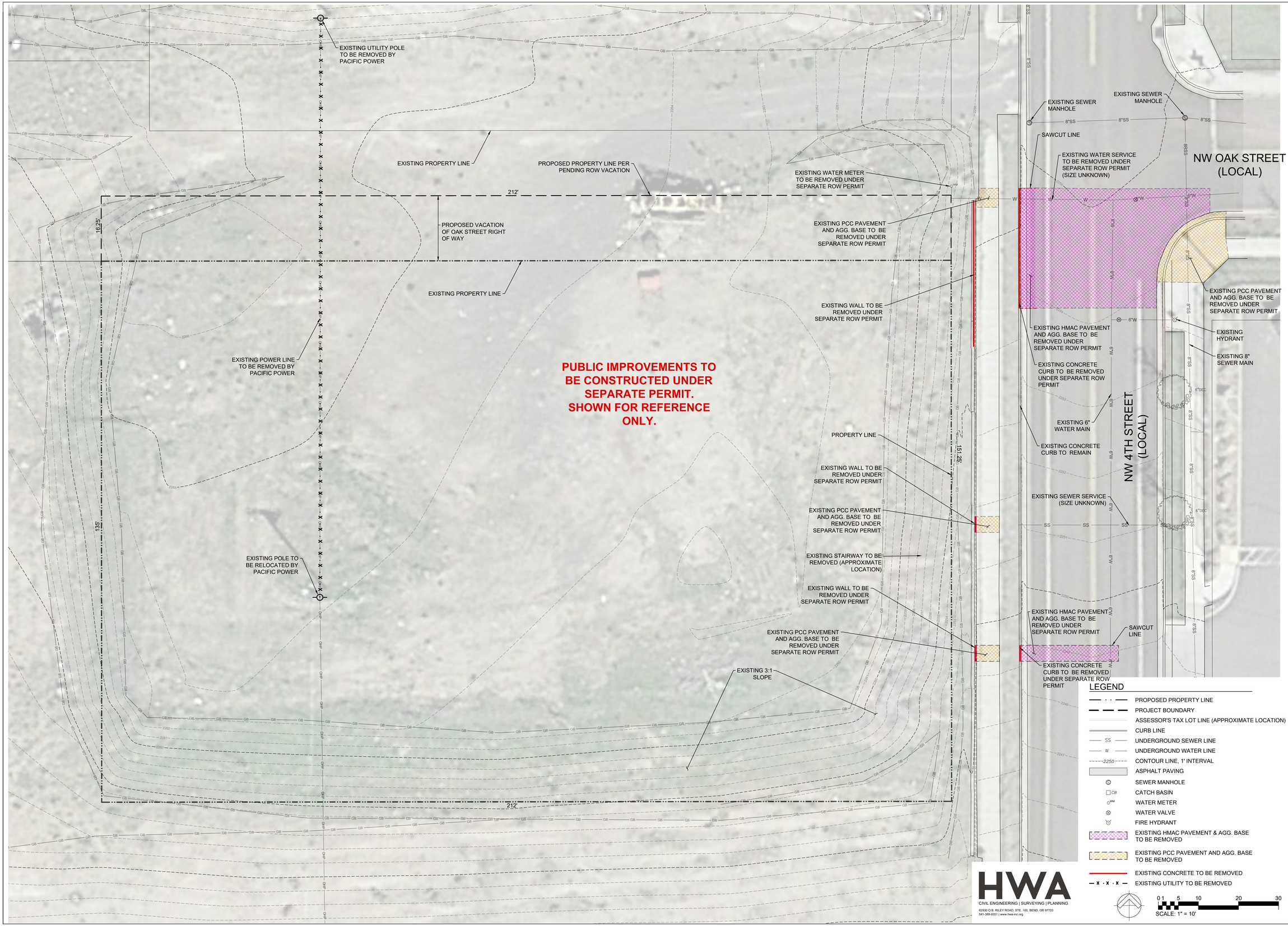
DESIGNED BY: MWB
DRAWN BY: MWB
CHECKED BY: GMH
SCALE: AS NOTED
FILE: 220106_CD.dwg
DATE: 8/18/2022

VERIFY SCALES
0 1"
BAR EQUALS ONE INCH ON ORIGINAL DRAWING

SHEET:
C14.1

HWA # 220106
COM #:

PLAN SUBMITTAL STATUS



LEGEND

- PROPOSED PROPERTY LINE
- PROJECT BOUNDARY
- ASSESSOR'S TAX LOT LINE (APPROXIMATE LOCATION)
- CURB LINE
- SS — UNDERGROUND SEWER LINE
- W — UNDERGROUND WATER LINE
- 2250 — CONTOUR LINE, 1' INTERVAL
- ASPHALT PAVING
- SEWER MANHOLE
- CB — CATCH BASIN
- WM — WATER METER
- WATER VALVE
- FIRE HYDRANT
- EXISTING HMAC PAVEMENT & AGG. BASE TO BE REMOVED
- EXISTING PCC PAVEMENT AND AGG. BASE TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED
- X · X · X — EXISTING UTILITY TO BE REMOVED

SCALE: 1" = 10'

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 Tacoma WA 98402 253.627.5599
421 W Riverside Ave Suite 511 Spokane WA 99201 509.252.5080
621 SW Morrison St. Suite 950 Portland OR 97205 503.595.0270
721 SW Industrial Suite 130 Bend OR 97702 541.330.6506

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE

Stamp

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

Drawing Title: EXISTING CONDITIONS AND REMOVAL PLAN

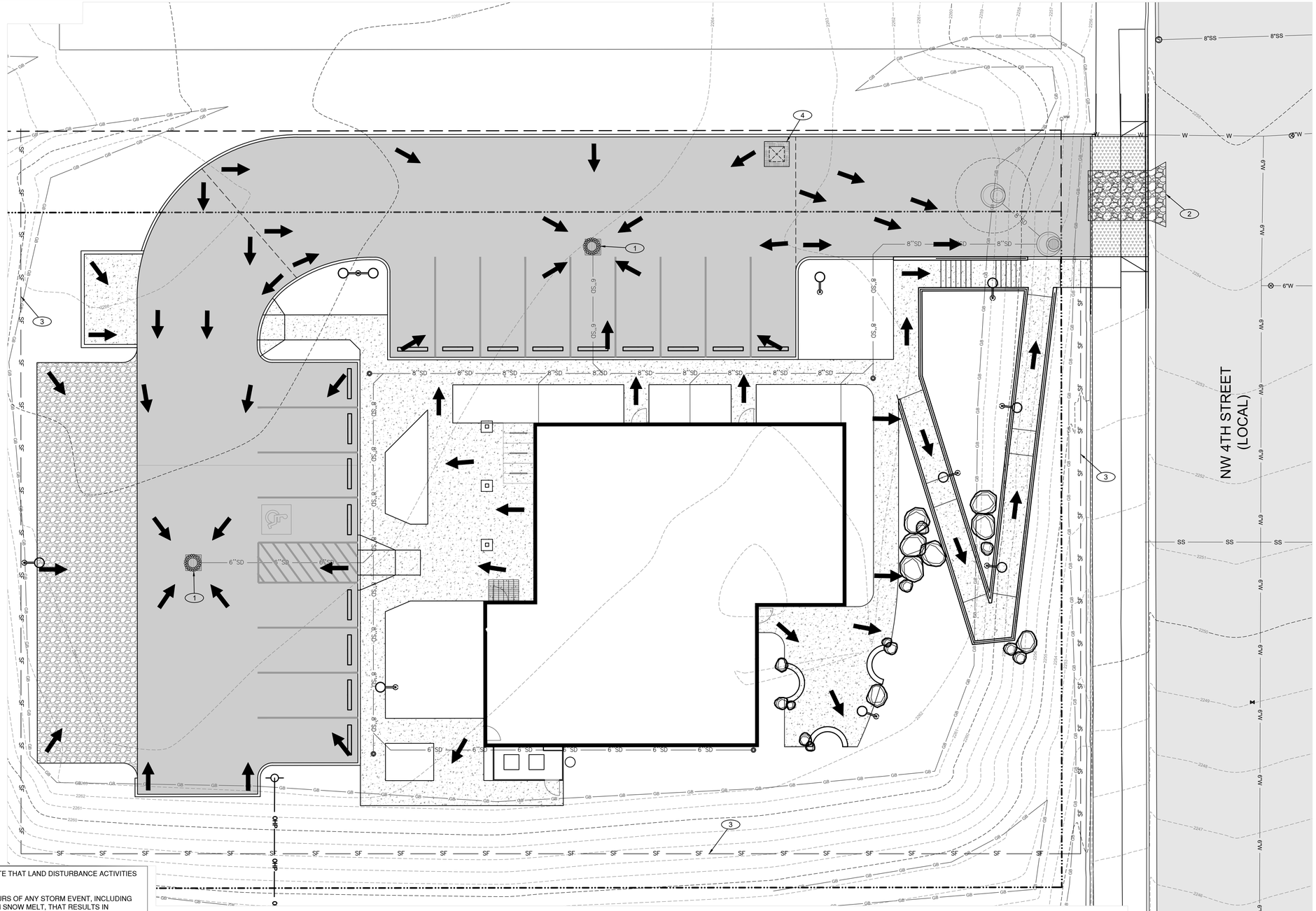
Date: 8/17/2022
Revised:
Drawn By: MWB
Project No. 021062.000

Sheet No. C1.01

GENERAL EROSION CONTROL NOTES

THE FOLLOWING ESCP STANDARD PLAN NOTES ARE BASED ON THE CENTRAL OREGON STORMWATER MANUAL (COSM) APPENDIX 9A.

1. HOLD A PRE-CONSTRUCTION MEETING THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
2. THE ESC PLAN MUST BE KEPT ONSITE AT ALL TIMES WHEN WORK IS OCCURRING.
3. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THE MEASURES MUST BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS.
4. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE FOLLOWED IN ORDER TO BEST MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION CONTROL PROBLEMS:
   a. FENCE OR FLAG AREAS TO BE PROTECTED OR LEFT UNDISTURBED DURING CONSTRUCTION;
   b. INSTALL GRAVELED OR PAVED CONSTRUCTION ENTRANCES, EXITS, AND PARKING AREAS TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS;
   c. CLEAR AND GRUB SUFFICIENTLY FOR INSTALLATION OF TEMPORARY ESC BMPS;
   d. INSTALL TEMPORARY ESC BMPS, CONSTRUCTING SEDIMENT TRAPPING BMPS AS ONE OF THE FIRST STEPS PRIOR TO GRADING;
   e. CLEAR, GRUB AND ROUGH-GRADE FOR ROADS AND UTILITY LOCATIONS;
   f. CLEAR, GRUB AND GRADE INDIVIDUAL LOTS OR GROUPS OF LOTS;
   g. TEMPORARILY STABILIZE, THROUGH RE-VEGETATION OR OTHER APPROPRIATE BMPS, LOTS OR GROUPS OF LOTS IN SITUATIONS WHERE SUBSTANTIAL CUT OR FILL SLOPES ARE A RESULT OF THE SITE GRADING;
   h. CONSTRUCT ROADS, BUILDINGS, PERMANENT STORMWATER FACILITIES (I.E. INLETS, PONDS, UIC FACILITIES, ETC.);
   i. PROTECT ALL PERMANENT STORMWATER FACILITIES UTILIZING THE APPROPRIATE BMPS;
   j. REMOVE TEMPORARY ESC CONTROLS WHEN PERMANENT STORMWATER FACILITIES HAVE BEEN INSTALLED, ALL LAND-DISTURBING ACTIVITIES HAVE CEASED, AND VEGETATION HAS BEEN ESTABLISHED IN THE AREAS NOTES ON THE ACCEPTED ESC PLAN.
5. RETAIN THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT AND DURATION PRACTICAL.
6. INSPECT ALL ROADWAYS ADJACENT TO THE CONSTRUCTION ACCESS ROUTE AT THE END OF EACH DAY. SIGNIFICANT AMOUNTS OF SEDIMENT THAT LEAVES THE CONSTRUCTION SITE MUST BE CLEANED UP WITHIN 24 HOURS AND STABILIZED BACK ON THE SITE OR PROPERLY DISPOSED. THE CAUSE OF SEDIMENT RELEASE MUST BE IDENTIFIED AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. VACUUMING OR DRY SWEEPING MUST BE USED TO CLEAN-UP RELEASED SEDIMENT AND SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
7. COVER AND SECURE ALL DUMP TRUCK LOADS LEAVING THE CONSTRUCTION SITE TO MINIMIZE SPILLAGE ON ROADS.
8. RESTORE CONSTRUCTION ACCESS ROUTE EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITION.
9. CONTROL FUGITIVE DUST FROM CONSTRUCTION ACTIVITY.
10. STABILIZE EXPOSED UNWORKED SOILS (INCLUDING STOCKPILES), WHETHER AT FINAL GRADE OR NOT, WITHIN 10 CALENDAR DAYS DURING THE REGIONAL DRY SEASON (JULY 1 THROUGH SEPTEMBER 30) AND WITHIN 5 CALENDAR DAYS DURING THE REGIONAL WET SEASON (OCTOBER 1 THROUGH JUNE 30).
11. PROTECT INLETS, DRYWELLS, CATCH BASINS AND OTHER STORMWATER MANAGEMENT FACILITIES FROM SEDIMENT, WHETHER OR NOT FACILITIES ARE OPERABLE.
12. KEEP ROADS ADJACENT TO INLETS CLEAN.
13. INSPECT INLETS WEEKLY AT A MINIMUM AND DAILY DURING STORM EVENTS. CLEAN OR REMOVE AND REPLACE INLET PROTECTION DEVICES BEFORE SIX INCHES OF SEDIMENT CAN ACCUMULATE.
14. INSTALL SEDIMENT CONTROLS ALONG THE SITE PERIMETER ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE BEFORE COMMENCING EARTH DISTURBING ACTIVITIES.
15. WHENEVER POSSIBLE, CONSTRUCT STORMWATER CONTROL FACILITIES (DETENTION / RETENTION STORAGE PONDS OR SWALES) BEFORE GRADING BEGINS. THESE FACILITIES SHOULD BE OPERATIONAL BEFORE THE CONSTRUCTION OF IMPERVIOUS SITE IMPROVEMENTS.
16. STOCKPILE MATERIALS (SUCH AS TOPSOIL) ONSITE, KEEPING OFF OF ROADWAY AND SIDEWALKS.
17. COVER, CONTAIN AND PROTECT ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCT, AND NONI-INERT WASTES PRESENT ONSITE FROM VANDALISM. MAINTAIN A SUPPLY OF MATERIALS ON HAND TO ADDRESS AND CONTAIN SPILLS.
18. LOCATE DESIGNATED VEHICLE AND EQUIPMENT SERVICE AREAS, FUEL, AND MATERIALS AWAY FROM DRAINAGE INLETS, WATERCOURSES, AND CANALS. PROPERLY CONTAIN AREAS USING BERMS, SANDBAGS, OR OTHER BARRIERS. REGULARLY INSPECT AND MAINTAIN EQUIPMENT, ESPECIALLY FOR DAMAGED HOSES AND LEAKY GASKETS.
19. CONDUCT MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES (I.E. OIL CHANGES, FUEL TANK DRAIN DOWN, ETC.) THAT MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CLEAN ALL CONTAMINATED SURFACES IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. PERFORM REPAIRS ONSITE USING TEMPORARY PLASTIC OR OIL ABSORBING BLANKETS BENEATH THE VEHICLE.
20. DESIGNATE AN AREA FOR CLEANING PAINTING EQUIPMENT AND TOOLS. NEVER CLEAN BRUSHES OR RINSE CONTAINERS INTO THE STREET, GUTTER, DRAINAGE INLET, OR WATERWAY.
21. APPLY LANDSCAPING OR AGRICULTURAL CHEMICALS, INCLUDING FERTILIZERS AND PESTICIDES, IN SUCH A MANNER, AND AT APPLICATION RATES, THAT INHIBITS THE LOSS OF CHEMICALS INTO STORMWATER RUNOFF FACILITIES.
22. INSPECT ON A REGULAR BASIS (AT A MINIMUM WEEKLY, AND DAILY DURING / AFTER A RUNOFF PRODUCING STORM EVENT) AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL BMPS TO ENSURE SUCCESSFUL PERFORMANCE OF THE BMPS.
23. REMOVE TEMPORARY ESC BMPS WITHIN 30 DAYS AFTER THE TEMPORARY BMPS ARE NO LONGER NEEDED. PERMANENTLY STABILIZE AREAS THAT ARE DISTURBED DURING THE REMOVAL PROCESS.



EROSION CONTROL INSPECTION FREQUENCY

ACTIVE PERIOD	ON INITIAL DATE THAT LAND DISTURBANCE ACTIVITIES COMMENCE. WITHIN 24 HOURS OF ANY STORM EVENT, INCLUDING RUNOFF FROM SNOW MELT, THAT RESULTS IN DISCHARGE FROM THE SITE. AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	THE INSPECTOR MAY REDUCE THE FREQUENCY OF INSPECTIONS IN ANY AREA OF THE SITE WHERE THE STABILIZATION STEPS IN SECTION 2.2.20 HAVE BEEN COMPLETED TO TWICE PER MONTH FOR THE FIRST MONTH, NO LESS THAN 14 CALENDAR DAYS APART, THEN ONCE PER MONTH.
PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER	IF SAFE, ACCESSIBLE AND PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT DISCHARGE POINT OR DOWNSTREAM LOCATION OF THE RECEIVING WATERBODY.
PERIODS DURING WHICH CONSTRUCTION ACTIVITIES ARE SUSPENDED AND RUNOFF IS UNLIKELY DUE TO FROZEN CONDITIONS.	VISUAL MONITORING INSPECTIONS MAY BE TEMPORARILY SUSPENDED. IMMEDIATELY RESUME MONITORING UPON THAWING, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.
PERIODS DURING WHICH CONSTRUCTION ACTIVITIES ARE CONDUCTED AND RUNOFF IS UNLIKELY DURING FROZEN CONDITIONS.	VISUAL MONITORING INSPECTIONS MAY BE REDUCED TO ONCE A MONTH. IMMEDIATELY RESUME MONITORING UPON THAWING, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

EROSION CONTROL LEGEND

- FLOW ARROW
- SF — SEDIMENT FENCING (SEE DETAIL 2/C5.02)
- 8"SD — UNDERGROUND STORM DRAIN LINE (SIZE AS NOTED)
- CATCH BASIN INSERT (SEE DETAIL 1/C5.02)
- GRAVEL CONSTRUCTION ENTRANCE (SEE DETAIL 3/C5.02)
- EQUIPMENT WASHOUT AREA (SEE DETAIL 7/C5.02)

EROSION CONTROL KEY NOTES

1. INSTALL STORM SENTINEL ADJUSTABLE CATCH BASIN INSERT OR ENGINEER-APPROVED EQUAL BENEATH GRATE. (SEE DETAIL 1/C5.02)
2. CONSTRUCT GRAVEL CONSTRUCTION ENTRANCE (SEE DETAIL 3/C5.02)
3. INSTALL SEDIMENT FENCING - 480 LF± (SEE DETAIL 2/C5.02)
4. CONSTRUCT CONCRETE TRUCK WASHOUT AREA (SEE DETAIL 7/C5.02)

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

0 1 5 10 20 30
SCALE: 1" = 10'

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 Tacoma WA 98402 253.627.5599
421 W Riverside Ave Suite 511 Spokane WA 99201 509.252.5080
621 SW Morrison St. Suite 950 Portland OR 97205 503.595.0270
721 SW Industrial Suite 130 Bend OR 97702 541.330.6606

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE

Stamp

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

Drawing Title: EROSION CONTROL PLAN (ESCP)

Date : 8/17/2022
Revised :
Drawn By : MWB
Project No. 021062.000

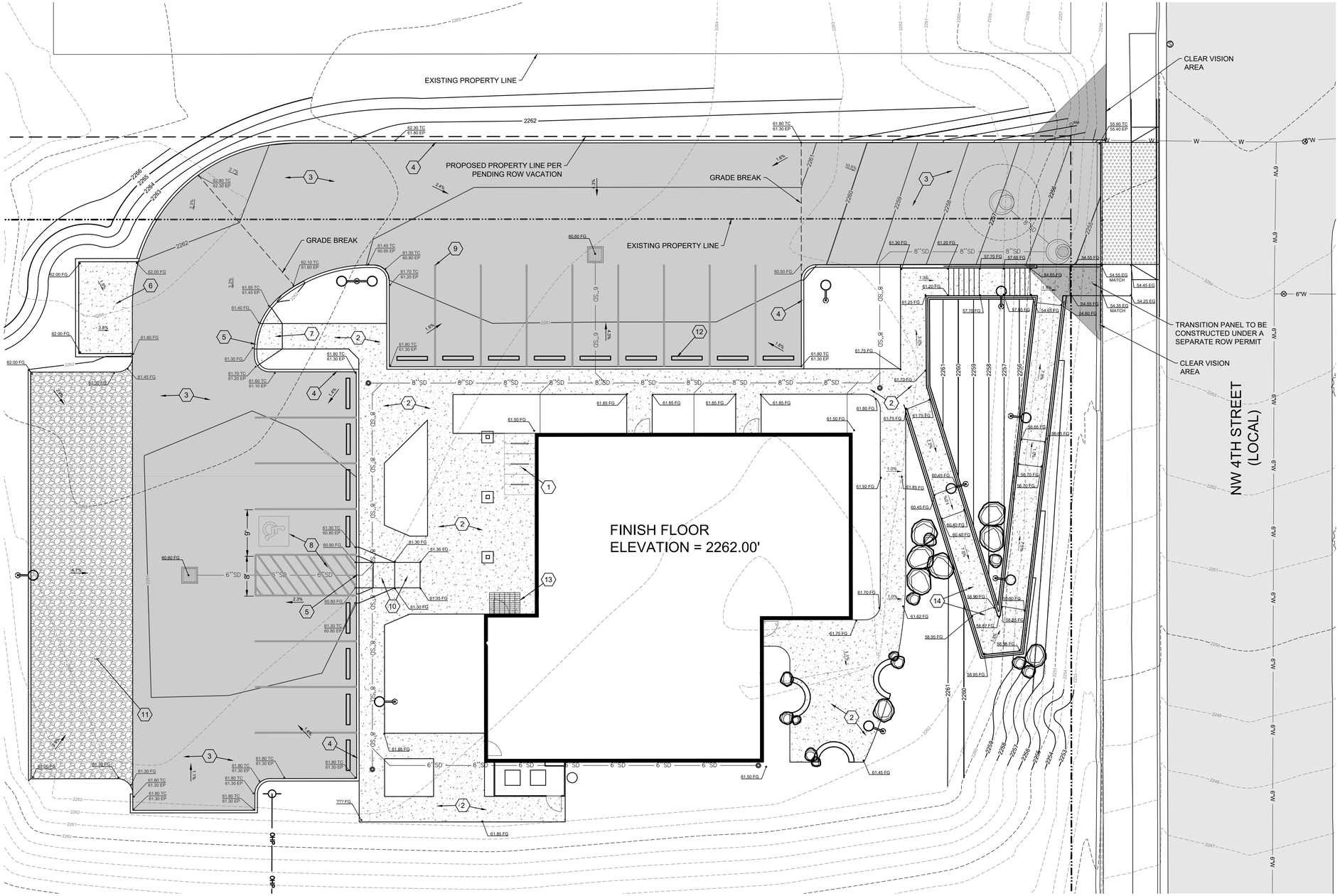
Sheet No.
C1.02

GENERAL GRADING NOTES

1. ALL GRADING SHALL BE IN CONFORMANCE WITH THE CURRENT 2019 OREGON STRUCTURAL SPECIALTY CODE AND WITH THE C.O.M. STANDARDS.
2. EXCAVATORS SHALL COMPLY WITH THE PROVISIONS OF OAR 952-001-0090.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT "UNDERGROUND LOCATE SERVICE" AT 1-800-332-2344 AT LEAST 2 FULL BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION FOR LOCATION OF UNDERGROUND WATER, SEWER, STORM DRAIN, POWER, GAS, OIL, CABLE TV, AND TELEPHONE FACILITIES.
4. ALL UNSUITABLE SOILS MATERIALS, RUBBISH, AND DEBRIS RESULTING FROM GRADING OPERATIONS SHALL BE REMOVED FROM THE JOB SITE AND DISPOSED OF PROPERLY.
5. THE CONTRACTOR SHALL EMPLOY ALL LABOR, EQUIPMENT, AND METHODS REQUIRED TO PREVENT HIS OPERATIONS FROM PRODUCING DUST IN AMOUNTS DAMAGING TO PROPERTY, CULTIVATED VEGETATION, AND DOMESTIC ANIMALS OR CAUSING A NUISANCE TO PERSONS OCCUPYING BUILDINGS IN THE VICINITY OF THE JOB SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST RESULTING FROM HIS OPERATIONS.
6. CUT SLOPES IN SOIL AND LOOSE ROCK RUBBLE SHALL NOT EXCEED A RATIO OF 2 HORIZONTAL TO 1 VERTICAL UNLESS PREVIOUSLY APPROVED BY ENGINEER. CUT SLOPES IN SOLID ROCK SHALL NOT EXCEED A RATIO OF ½ HORIZONTAL TO 1 VERTICAL. FILL SLOPES SHALL NOT EXCEED A RATIO OF 3 HORIZONTAL TO 1 VERTICAL UNLESS PREVIOUSLY APPROVED BY ENGINEER.
7. ALL ACCESSIBLE ROUTES (EXCLUDING CURB RAMPS) SHALL BE CONSTRUCTED WITH A SLOPE OF NO MORE THAN 5.0% IN THE DIRECTION OF TRAVEL AND A CROSS SLOPE OF NO MORE THAN 2.0%. CURB RAMPS SHALL BE CONSTRUCTED WITH A SLOPE OF NO MORE THAN 8.3% IN THE DIRECTION OF TRAVEL AND A CROSS SLOPE OF NO MORE THAN 2.0%
8. THERE ARE NO WETLANDS OR STREAMS LOCATED WITHIN THE PROPOSED DEVELOPMENT AREA. THE PROPOSED PRIVATE SITE IMPROVEMENTS SHALL BE GRADED AND CONSTRUCTED TO CONTAIN PRIVATE STORM WATER ON SITE. MULTIPLE NEW DRYWELLS, AS SHOWN ON THE PLAN, WILL BE CONSTRUCTED FOR PRIVATE STORM WATER DISPOSAL WITHOUT DISCHARGING PRIVATE STORMWATER INTO THE RIGHT-OF-WAY.
9. THE PROPOSED DRAINAGE SYSTEM HAS BEEN DESIGNED TO PROVIDE WATER QUALITY TREATMENT AND FLOW CONTROL FOR THE 25-YEAR STORM EVENT WITH A SAFE OVERFLOW PATH FOR THE 100-YEAR STORM EVENT. THE CONVEYANCE SYSTEM COMPONENTS SUCH AS INLETS AND STORM DRAIN PIPES HAVE BEEN DESIGNED TO CONVEY THE PEAK FLOWS FROM THE 25-YEAR STORM EVENT.

PAVING KEY NOTES

1. INSTALL BIKE RACK (REFER TO ARCHITECT SHEET A1.05)
2. CONSTRUCT PCC PAVEMENT (4" PCC ON 4" AGGREGATE BASE) (SEE DETAIL 8/C5.01)
3. CONSTRUCT HMAC PAVEMENT (3" HMAC ON 6" AGGREGATE BASE) (SEE DETAIL 7/C5.01)
4. CONSTRUCT 12" CONCRETE CURB W/ 6" CURB EXPOSURE (SEE DETAIL 9/C5.01)
5. CONSTRUCT 8" CONCRETE CURB (FLUSH/NO REVEAL) (SEE DETAIL 10/C5.01)
6. TRASH ENCLOSURE (REFER TO ARCHITECT SHEET A1.05)
7. CONSTRUCT CURB RAMP (TYP.) (SEE DETAIL 11/C5.01)
8. INSTALL ACCESSIBLE PARKING SPACE AND LOADING ZONE (TYP.) (SEE DETAIL 5/C5.02)
9. INSTALL PARKING LOT STRIPING (SEE DETAIL 5/C5.02)
10. CONSTRUCT ACCESSIBLE PERPENDICULAR RAMP AND LANDING (SEE DETAIL 6/C5.01)
11. CONSTRUCT GRAVEL PARKING LOT
12. INSTALL CONCRETE WHEEL STOP (SEE DETAIL 5/C5.01)
13. INSTALL RECESSED METAL GRATE (REFER TO ARCHITECT SHEET A2.11
14. CONSTRUCT CONCRETE RAMP AND LANDING WITH HANDRAILS (SEE SHEET C5.04)



PROGRAM USED: HYDROCAD 10.00-24 STORMWATER MODELING

25-YR = 2.1 IN. (NOAA ATLAS 2 - VOLUME X PRECIPITATION VALUE & COB STD 6.2.1 - MADRAS, OR)
100-YR = 2.6 IN. (NOAA ATLAS 2 - VOLUME X PRECIPITATION VALUE & COB STD 6.2.1 - MADRAS, OR)
TIME OF CONCENTRATION Tc = 5 MIN
STORM TYPE - I
CN = 98 (IMPERVIOUS) / 77 (PERVIOUS - NATURAL DESERT SOIL GROUP B)

PER THE UIC TABLE PROVIDED BY THE CITY OF MADRAS, THE DESIGN RATE FOR HARD PAN SOIL IS 5 IN/HR WHEN DRYWELL EXCAVATION METHODS INCLUDE DRILLING OR SHOOTING. IF THESE METHODS ARE USED, THEN 90 CY. OF DRAIN ROCK CAN BE USED IF THE PROPOSED IMPERVIOUS AREA DOES NOT EXCEED 20,000 SQ. FT.

PROPOSED DRYWELLS HAVE BEEN SIZED TO HOLD THE RUNOFF FROM THE 25-YR/24-HR STORM EVENT. DRAIN ROCK VOLUMES WERE CALCULATED USING A UIC TABLE PROVIDED BY THE CITY OF MADRAS.

DRYWELLS DESIGNED ACCORDING TO THE DESIGN TABLE PROVIDED BY THE CITY OF MADRAS DO NOT NEED TO BE FLOW TESTED. VOLUME OF DRAIN ROCK SHALL BE VERIFIED BY LOAD TICKETS, MEASUREMENTS, OR OTHER MEANS THAT CONFIRMS THE VOLUME OF DRAIN ROCK HAS BEEN PROVIDED.

DRAIN ROCK GALLERY SIZING SHALL BE FIELD VERIFIED BY THE ENGINEER OF RECORD (EOR) OR EOR REPRESENTATIVE PRIOR TO BACKFILL OR PLACEMENT OF CLEAN DRAIN ROCK MEDIA.

STORMWATER FACILITIES SHALL BE COMPLETELY DRAINED WITHIN 72 HOURS AFTER COMPLETION OF PERFORMANCE TESTING.

ENGINEER SHALL SUBMIT A GRADING AND DRAINAGE CERTIFICATION PRIOR TO FINAL ACCEPTANCE THAT ALL DRAINAGE INFRASTRUCTURE WAS CONSTRUCTED AND/OR TESTED IN CONFORMANCE WITH THE PLANS.

DRAINAGE BASIN DATA

AREA I.D.	DESCRIPTION	DISPOSAL TYPE	TOTAL TRIBUTARY AREA (SQ. FT.)	COMP. CN	25-YR/24-HR STORM PEAK RUNOFF RATE (CFS / GPM)	TOTAL 25-YR/24-HR STORM INFLOW DESIGN VOLUME (CU. FT. / GAL.)	100-YR/24-HR STORM PEAK RUNOFF RATE (CFS / GPM)	TOTAL 100-YR/24-HR STORM INFLOW DESIGN VOLUME (CU. FT. / GAL.)	DRYWELL MIN. DRAIN ROCK VOLUME (CU. YD.)
1	ROAD/PVMT	DW #1	19,519	98	0.68 / 305	3,047 / 22,792	0.85 / 382	3,855 / 28,835	90

GRADING LEGEND

- DRAINAGE BASIN BOUNDARY
- EXISTING CURB
- PROPOSED 12" CONCRETE CURB (6" REVEAL)
- 2201 — EXISTING 1' GROUND SURFACE CONTOUR
- 2205 — EXISTING 5' GROUND SURFACE CONTOUR
- 2201 — PROPOSED 1' GROUND SURFACE CONTOUR
- 2205 — PROPOSED 5' GROUND SURFACE CONTOUR
- 65.50 TC / 65.00 FG — PROPOSED SPOT ELEVATION
- TC — TOP OF CURB
- FG — FINISH GRADE
- EG — EXISTING GRADE
- EP — EDGE OF PAVEMENT

NOTE:
ADD 2200.00 FT TO ALL SPOT ELEVATIONS

- EXISTING HMAC PAVEMENT TO REMAIN
- PROPOSED HMAC PAVEMENT
- EXISTING CONCRETE TO REMAIN
- PROPOSED PCC PAVEMENT

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

SCALE: 1" = 10'

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 Tacoma WA 98402 253.627.5599
421 W Riverside Ave Suite 511 Spokane WA 99201 509.252.5080
621 SW Morrison St. Suite 950 Portland OR 97205 503.595.0270
721 SW Industrial Suite 130 Bend OR 97702 541.330.6506

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE

Stamp

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

Drawing Title: GRADING AND DRAINAGE PLAN
Drawn By : MWB
Project No. 021062.000
Date : 8/17/2022
Revised :

Sheet No. C2.01

BLRB ARCHITECTS, P.S.

WATER KEY NOTES

NOTE: WATER LINE TRENCH PER DETAIL 2/C5.01

1. STA 0+10.00, 0.00'RT "WATER-1"
INSTALL 6"x2" HOT TAP ASSEMBLY
INSTALL 2" GATE VALVE
TO BE INSTALLED UNDER SEPARATE INFR PERMIT
(SEE DETAIL 8/C5.02)

2. STA 0+48.38, 0.00'RT "WATER-1"
INSTALL 2" WATER METER
TO BE INSTALLED UNDER SEPARATE INFR PERMIT
(SEE DETAIL 8/C5.02)

3. STA 0+51.01, 0.00'RT "WATER-1"
INSTALL 2" DCVA ASSEMBLY AND BOX
(SEE DETAIL 8/C5.03)

4. STA 0+58.29, 0.00'RT "WATER-1"
INSTALL 2" 45° ELBOW - 1

5. STA 0+88.75, 0.00'RT "WATER-1"
INSTALL 2" 45° ELBOW - 1

6. STA 1+01.59, 0.00'RT "WATER-1"
CONNECT 2" WATER SERVICE TO BLDG
(REFER TO PLUMBING SHEET P4.01)

SANITARY SEWER KEY NOTES

NOTE: SANITARY SEWER TRENCH PER DETAIL 1/C5.1

1. STA 0+10.00, 0.00'RT "SEWER-1"
CONNECT TO EXISTING 4" SEWER SERVICE
TO BE INSTALLED UNDER SEPARATE INFR PERMIT
(SEE DETAIL 3/C5.03)

2. STA 0+27.08, 0.00'RT "SEWER-1"
INSTALL 4" CLEANOUT ASSEMBLY
(SEE DETAIL 6/C5.03)

3. STA 0+56.03, 0.00'RT "SEWER-1"
INSTALL 4" 45° ELBOW - 1

4. STA 0+66.49, 0.00'RT "SEWER-1"
INSTALL 4" 45° ELBOW - 1

5. STA 0+71.06, 0.00'RT "SEWER-1"
INSTALL 4" CLEANOUT ASSEMBLY
(SEE DETAIL 6/C5.03)

6. STA 0+72.72, 0.00'RT "SEWER-1"
CONNECT 4" SEWER SERVICE TO BLDG
(REFER TO PLUMBING SHEET P3.01)

STORM DRAIN KEY NOTES

NOTE: STORM DRAIN TRENCH PER DETAIL 1/C5.1

1. STA 0+46.43, 9.72'RT "STORM-1"
INSTALL DRYWELL ASSEMBLY
(SEE DETAIL 1/C5.03)

2. STA 0+35.30, 0.00'RT "STORM-1"
INSTALL SEDIMENTATION MANHOLE W/ SLOTTED LID
(SEE DETAIL 2/C5.03)

3. STA 0+68.41, 0.00'RT "STORM-1"
INSTALL 8" 45° ELBOWS - 2

4. STA 0+98.19, 0.00'RT "STORM-1"
INSTALL 8" 45° ELBOWS - 1
INSTALL 8"x8" WYE - 1
INSTALL 8" CLEANOUT ASSEMBLY
(SEE DETAIL 6/C5.03)

5. STA 1+00.61, 0.00'RT "STORM-1"
INSTALL 8"x4" REDUCING WYE - 1
CONSTRUCT 4" LATERAL TO BLDG DOWNSPOUT
@ MINIMUM SLOPE OF 2% - 8 LF

6. STA 1+30.73, 0.00'RT "STORM-1"
INSTALL 8"x4" REDUCING WYE - 1
CONSTRUCT 4" LATERAL TO BLDG DOWNSPOUT
@ MINIMUM SLOPE OF 2% - 8 LF

7. STA 1+50.11, 0.00'RT "STORM-1"
INSTALL 8"x6" REDUCING WYE - 1
INSTALL 6" 45° ELBOW - 1
(SEE DETAIL 7/C5.03)

8. STA 1+52.08, 25.25'RT "STORM-1"
INSTALL CATCH BASIN ASSEMBLY
(SEE DETAIL 5/C5.03)

9. STA 1+60.95, 0.00'RT "STORM-1"
INSTALL 8"x4" REDUCING WYE - 1
CONSTRUCT 4" LATERAL TO BLDG DOWNSPOUT
@ MINIMUM SLOPE OF 2% - 8 LF

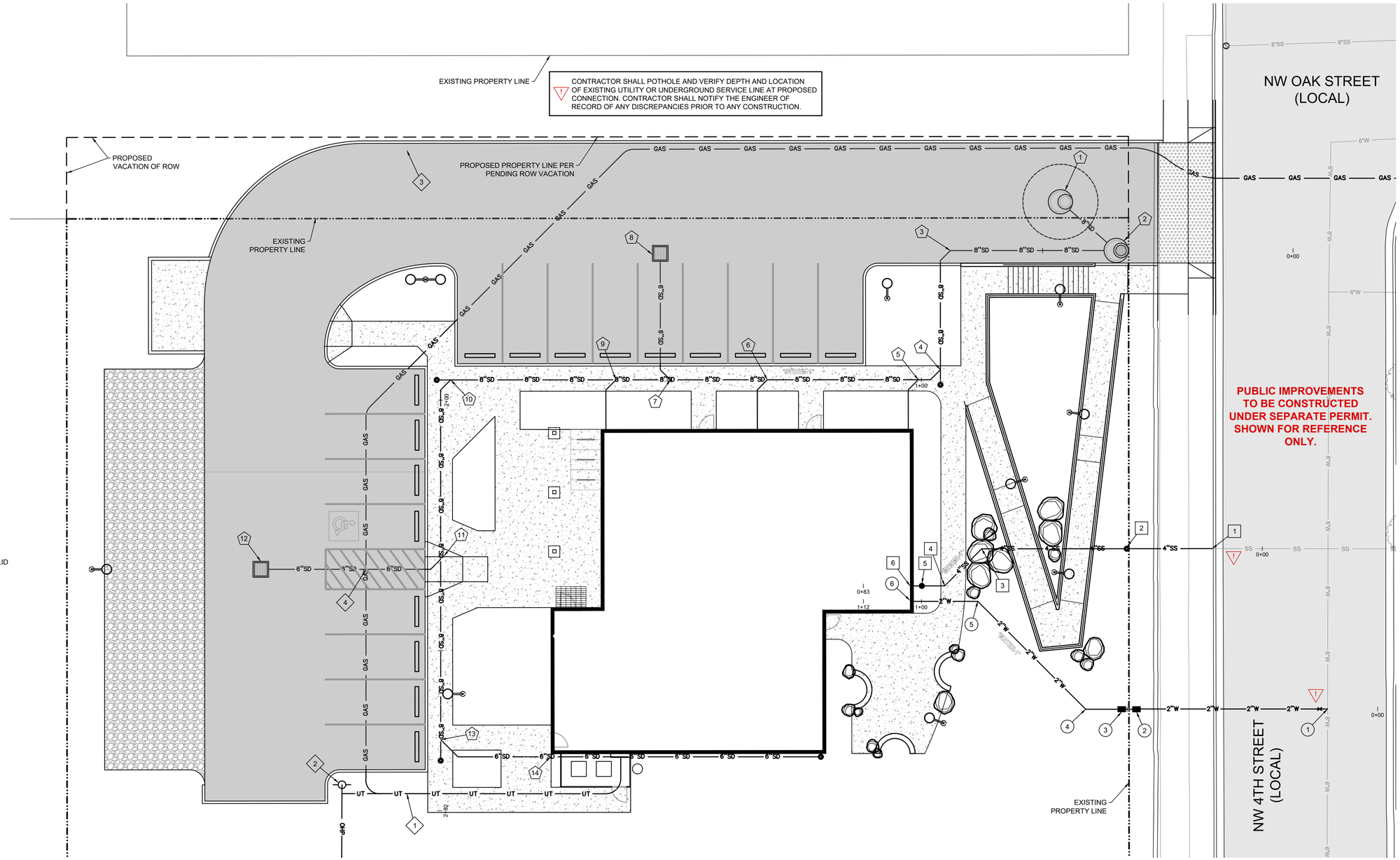
10. STA 1+93.98, 0.00'RT "STORM-1"
INSTALL 8" 45° ELBOW - 1
INSTALL 8"x8" WYE - 1
INSTALL 8" CLEANOUT ASSEMBLY
(SEE DETAIL 6/C5.03)

11. STA 2+31.74, 0.00'RT "STORM-1"
INSTALL 8"x6" REDUCING WYE - 1
INSTALL 6" 45° ELBOW - 1
(SEE DETAIL 7/C5.03)

12. STA 2+33.75, 35.90'RT "STORM-1"
INSTALL CATCH BASIN ASSEMBLY
(SEE DETAIL 5/C5.03)

13. STA 2+67.81, 0.00'RT "STORM-1"
INSTALL 8"x6" REDUCING WYE - 1
INSTALL 8" CLEANOUT ASSEMBLY
INSTALL 6" 45° ELBOW - 1
(SEE DETAIL 6/C5.03)

14. STA 2+71.19, 22.00'LT "STORM-1"
RUN 6" TIGHTLINE ALONG SOUTH
FOOTING TO EACH DOWNSPOUT
(REFER TO ARCHITECT SHEET A1.01 FOR
DOWNSPOUT LOCATIONS)



UTILITY KEY NOTES

NOTE: SEE ALSO ELECTRICAL SHEET E1.01 TO CONFIRM SIZE AND NUMBER OF CONDUIT.

1. CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, CONDUIT, AND BACKFILL FOR BEND BROADBAND AND PACIFIC POWER FROM EXISTING TRANSFORMER VAULT AND PEDESTAL LOCATION TO NEW TRANSFORMER VAULT LOCATION.
(X) 2" SCH-40 PVC CONDUIT FOR BBB
(X) 4" SCH-40 PVC CONDUIT FOR PPL
(COORDINATE WITH ELECTRICAL, BBB, AND PPL, SEE DETAIL 4/C5.01)

2. RELOCATED POLE WITH TRANSFORMER BY PACIFIC POWER

3. CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, AND BACKFILL FOR CASCADE NATURAL GAS LINE TO EXTEND FROM 2" STUB IN RIGHT-OF-WAY TO BUILDING WITH A MINIMUM GROUND COVER OF 30".
(COORDINATE WITH CNG AND PLUMBING, SEE DETAIL 3/C5.01)

4. GAS LINE TO PASS BENEATH THE 6" STORM DRAIN LINE WITH A 12" MINIMUM SEPARATION

GENERAL NOTES

1. ALL PUBLIC UTILITIES SHALL BE IN CONFORMANCE WITH CITY OF MADRAS STANDARDS AND SPECS.
2. ALL PRIVATE UTILITIES SHALL BE IN CONFORMANCE WITH THESE PLANS, PROJECT SPECIFICATIONS, AND 2021 OREGON PLUMBING SPECIALTY CODE (OPSC).
3. ALL SANITARY SEWER PIPING UNDER COVERED PORCHES, OR WITHIN 5' OF THE BUILDING SHALL BE OF MATERIALS IN CONFORMANCE WITH THE PLUMBING CODE. ALL OTHER SEWER PIPING SHALL BE PVC ASTM D-3034.
4. ALL STORM SEWER PIPING IN COMMON TRENCHES WITH WATER, OR LOCATED UNDER PORCHES, OR WITHIN 5' OF THE BUILDING SHALL BE SCH-40 OR ABS, PER 2021 OREGON SPECIALTY PLUMBING CODE. ALL OTHER STORM SEWER PIPING SHALL BE PVC ASTM D-3034, UNLESS NOTED OTHERWISE.
5. PER 2021 OPSC 314.4, EXCAVATIONS SHALL BE COMPLETELY BACKFILLED AS SOON AFTER INSPECTION AS PRACTICABLE. PRECAUTION SHALL BE TAKEN TO ENSURE COMPACTNESS OF BACKFILL AROUND PIPING WITHOUT DAMAGE TO SUCH PIPING. TRENCHES SHALL BE BACKFILLED IN THIN LAYERS TO 12 INCHES (305 mm) ABOVE THE TOP OF THE PIPING WITH CLEAN EARTH, WHICH SHALL NOT CONTAIN STONES, BOULDERS, CINDERFILL, FROZEN EARTH, CONSTRUCTION DEBRIS, OR OTHER MATERIALS THAT WILL DAMAGE OR BREAK THE PIPING OR CAUSE CORROSIVE ACTION...FILL SHALL BE PROPERLY COMPACTED [IN ACCORDANCE WITH THE GEOTECHNICAL REPORT]. PRECAUTIONS SHALL BE TAKEN TO ENSURE PERMANENT STABILITY FOR PIPE LAID IN FILLED OR MADE GROUND.
6. ALL STORM DRAIN PIPING AND FITTINGS SHALL MEET THE 2021 OPSC AND BE THE SAME AS SPECIFIED FOR SANITARY SEWERS IN SECTION 715.0 AND STORM DRAINAGE IN SECTION 1101.4 OF THE OPSC.
7. CATCH BASINS SHALL COMPLY WITH 2021 OPSC 1101.11
8. CLEANOUTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED 100' IN STRAIGHT RUNS AND FOR EACH AGGREGATE HORIZONTAL CHANGE IN DIRECTION EXCEEDING 135 DEGREES PER 2021 OSPC 719.0 & 1101.13.
9. MANHOLES - THE INLET AND OUTLET CONNECTIONS SHALL BE MADE BY USE OF A FLEXIBLE COMPRESSION JOINT NOT LESS THAN 12 INCHES AND NOT EXCEEDING 3 FEET PER 2017 OPSC 719.6. THE MAXIMUM DISTANCE BETWEEN MANHOLES SHALL NOT EXCEED 300 FEET PER 2021 OPSC 719.6.
10. CONNECT BUILDING DOWNSPOUTS TO PROPOSED ROOF DRAINS, COORDINATE WITH BUILDING PLUMBING PLANS.
11. PER OPSC 718.1, BUILDING SEWERS SHALL BE RUN IN PRACTICAL ALIGNMENT AND AT A UNIFORM SLOPE OF NOT LESS THAN 1/4 INCH PER FOOT (20.8 mm/m) TOWARD THE POINT OF DISPOSAL. EXCEPTION: WHERE APPROVED BY THE BUILDING OFFICIAL AND WHERE IT IS IMPRACTICAL, DUE TO THE DEPTH OF THE STREET SEWER OR TO THE STRUCTURAL FEATURES OR TO THE ARRANGEMENT OF A BUILDING OR STRUCTURE, TO OBTAIN A SLOPE OF 1/4 INCH PER FOOT (20.8 mm/m), SUCH PIPE OR PIPING 4 INCHES (100 mm) THROUGH 6 INCHES (150 mm) SHALL BE PERMITTED TO HAVE A SLOPE OF NOT LESS THAN 1/8 INCH PER FOOT (10.4 mm/m) AND SUCH PIPING 8 INCHES (200 mm) AND LARGER SHALL BE PERMITTED TO HAVE A SLOPE OF NOT LESS THAN 1/16 INCH PER FOOT (5.2 mm/m) PER 2021 OPSC 718.1.
12. IF PRESENT, SUBSOIL, FOUNDATION, AND ABSORPTION DRAINS THAT ARE SUBJECT TO REVERSE FLOW SHALL BE EQUIPPED WITH APPROVED, ACCESSIBLE BACKWATER VALVES AS REQUIRED BY THE BUILDING OFFICIAL PER OPSC 1101.6.2.(3).
13. MECHANICAL (MECH.) JOINT RESTRAINTS ON FIRE HYDRANT PIPING SHALL BE "MEGA LUG" FITTINGS AS MANUFACTURED BY EBAA IRON, INC. OR ENGINEER-APPROVED EQUAL COMPLYING WITH AWWA C-600 AND ASTM D-2774. SEE DETAIL 1/C5.3 FOR MECH. JOINT RESTRAINT TABLE.
14. ALL SEWER DIMENSIONS AND SLOPES SHOWN ARE TO CENTER OF MANHOLE.
15. STATION AND OFFSETS ARE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
16. INTERIOR GREASE INTERCEPTOR TO BE INSTALLED BY TENANT DURING TENANT IMPROVEMENTS FOR EACH TENANT SPACE.

UTILITY LEGEND

- PROPERTY LINE
- 8"SS — PROPOSED SEWER LINE (SIZE AS NOTED)
- 4"W — PROPOSED WATER LINE (SIZE AS NOTED)
- 8"SD — PROPOSED STORM DRAIN LINE (SIZE AS NOTED)
- PROPOSED DOUBLE-GRATE CATCH BASIN ASSEMBLY
- UT — PROPOSED SHARED UTILITY TRENCH
- PROPOSED CLEANOUT ASSEMBLY
- "STORM-1" — ALIGNMENT NAME

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

SCALE: 1" = 10'

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 Tacoma WA 98402 253.627.5599
421 W Riverside Ave Suite 511 Spokane WA 99201 509.252.5080
621 SW Morrison St. Suite 950 Portland OR 97205 503.595.0270
721 SW Industrial Suite 130 Bend OR 97702 541.330.6506

Stamp: REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE

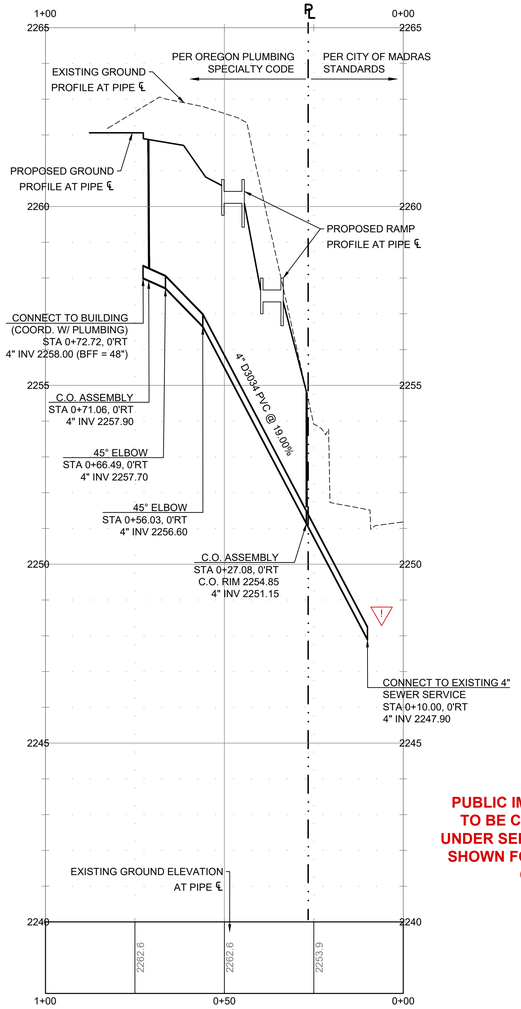
DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

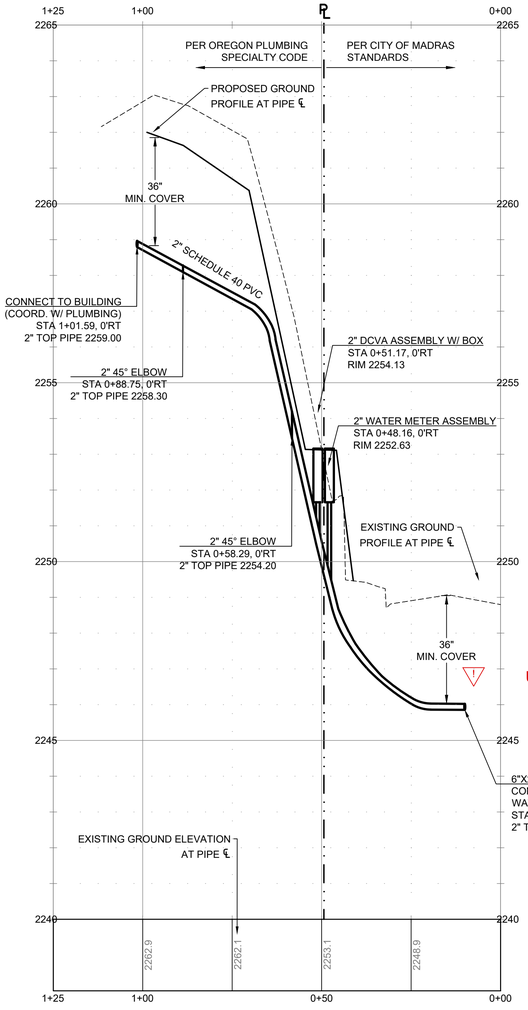
Drawing Title: UTILITY PLAN
Drawn By: MWB
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No. C3.01



PUBLIC IMPROVEMENTS TO BE CONSTRUCTED UNDER SEPARATE PERMIT. SHOWN FOR REFERENCE ONLY.

1 C4.01 SEWER-1 PROFILE
SCALE: HORIZONTAL 1"=20' / VERTICAL 1"=2'



PUBLIC IMPROVEMENTS TO BE CONSTRUCTED UNDER SEPARATE PERMIT. SHOWN FOR REFERENCE ONLY.

2 C4.01 WATER-1 PROFILE
SCALE: HORIZONTAL 1"=20' / VERTICAL 1"=2'

1 CONTRACTOR SHALL POTHOLE AND VERIFY DEPTH AND LOCATION OF EXISTING UTILITY OR UNDERGROUND SERVICE LINE AT PROPOSED CONNECTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES PRIOR TO ANY CONSTRUCTION.

GENERAL NOTES

1. ALL PUBLIC UTILITIES SHALL BE IN CONFORMANCE WITH CITY OF MADRAS STANDARDS AND SPECS.
2. ALL PRIVATE UTILITIES SHALL BE IN CONFORMANCE WITH THESE PLANS, PROJECT SPECIFICATIONS, AND 2021 OREGON PLUMBING SPECIALTY CODE (OPSC).
3. ALL SANITARY SEWER PIPING UNDER COVERED PORCHES, OR WITHIN 5' OF THE BUILDING SHALL BE OF MATERIALS IN CONFORMANCE WITH THE PLUMBING CODE. ALL OTHER SEWER PIPING SHALL BE PVC ASTM D-3034.
4. ALL STORM SEWER PIPING IN COMMON TRENCHES WITH WATER, OR LOCATED UNDER PORCHES, OR WITHIN 5' OF THE BUILDING SHALL BE SCH-40 OR ABS, PER 2021 OREGON SPECIALTY PLUMBING CODE. ALL OTHER STORM SEWER PIPING SHALL BE PVC ASTM D-3034, UNLESS NOTED OTHERWISE.
5. PER 2021 OPSC 314.4, EXCAVATIONS SHALL BE COMPLETELY BACKFILLED AS SOON AFTER INSPECTION AS PRACTICABLE. PRECAUTION SHALL BE TAKEN TO ENSURE COMPACTNESS OF BACKFILL AROUND PIPING WITHOUT DAMAGE TO SUCH PIPING. TRENCHES SHALL BE BACKFILLED IN THIN LAYERS TO 12 INCHES (305 mm) ABOVE THE TOP OF THE PIPING WITH CLEAN EARTH, WHICH SHALL NOT CONTAIN STONES, BOULDERS, CINDERFILL, FROZEN EARTH, CONSTRUCTION DEBRIS, OR OTHER MATERIALS THAT WILL DAMAGE OR BREAK THE PIPING OR CAUSE CORROSIVE ACTION...FILL SHALL BE PROPERLY COMPACTED [IN ACCORDANCE WITH THE GEOTECHNICAL REPORT]. PRECAUTIONS SHALL BE TAKEN TO ENSURE PERMANENT STABILITY FOR PIPE LAID IN FILLED OR MADE GROUND.
6. ALL STORM DRAIN PIPING AND FITTINGS SHALL MEET THE 2021 OPSC AND BE THE SAME AS SPECIFIED FOR SANITARY SEWERS IN SECTION 715.0 AND STORM DRAINAGE IN SECTION 1101.4 OF THE OPSC.
7. CATCH BASINS SHALL COMPLY WITH 2021 OPSC 1101.11
8. CLEANOUTS SHALL BE INSTALLED AT INTERVALS NOT TO EXCEED 100' IN STRAIGHT RUNS AND FOR EACH AGGREGATE HORIZONTAL CHANGE IN DIRECTION EXCEEDING 135 DEGREES PER 2017 OSPC 719.0 & 1101.13.
9. MANHOLES - THE INLET AND OUTLET CONNECTIONS SHALL BE MADE BY USE OF A FLEXIBLE COMPRESSION JOINT NOT LESS THAN 12 INCHES AND NOT EXCEEDING 3 FEET PER 2021 OPSC 719.6. THE MAXIMUM DISTANCE BETWEEN MANHOLES SHALL NOT EXCEED 300 FEET PER 2017 OPSC 719.6.
10. CONNECT BUILDING DOWNSPOUTS TO PROPOSED ROOF DRAINS, COORDINATE WITH BUILDING PLUMBING PLANS.
11. PER OPSC 718.1, BUILDING SEWERS SHALL BE RUN IN PRACTICAL ALIGNMENT AND AT A UNIFORM SLOPE OF NOT LESS THAN 1/4 INCH PER FOOT (20.8 mm/m) TOWARD THE POINT OF DISPOSAL. EXCEPTION: WHERE APPROVED BY THE BUILDING OFFICIAL AND WHERE IT IS IMPRACTICAL, DUE TO THE DEPTH OF THE STREET SEWER OR TO THE STRUCTURAL FEATURES OR TO THE ARRANGEMENT OF A BUILDING OR STRUCTURE, TO OBTAIN A SLOPE OF 1/4 INCH PER FOOT (20.8 mm/m), SUCH PIPE OR PIPING 4 INCHES (100 mm) THROUGH 6 INCHES (150 mm) SHALL BE PERMITTED TO HAVE A SLOPE OF NOT LESS THAN 1/8 INCH PER FOOT (10.4 mm/m) AND SUCH PIPING 8 INCHES (200 mm) AND LARGER SHALL BE PERMITTED TO HAVE A SLOPE OF NOT LESS THAN 1/16 INCH PER FOOT (5.2 mm/m) PER 2021 OPSC 718.1.
12. IF PRESENT, SUBSOIL, FOUNDATION, AND ABSORPTION DRAINS THAT ARE SUBJECT TO REVERSE FLOW SHALL BE EQUIPPED WITH APPROVED, ACCESSIBLE BACKWATER VALVES AS REQUIRED BY THE BUILDING OFFICIAL PER OPSC 1101.6.2.(3).
13. MECHANICAL (MECH.) JOINT RESTRAINTS ON FIRE HYDRANT PIPING SHALL BE "MEGA LUG" FITTINGS AS MANUFACTURED BY EBAA IRON, INC. OR ENGINEER-APPROVED EQUAL COMPLYING WITH AWWA C-600 AND ASTM D-2774. SEE DETAIL 1/C5.3 FOR MECH. JOINT RESTRAINT TABLE.
14. ALL SEWER DIMENSIONS AND SLOPES SHOWN ARE TO CENTER OF MANHOLE.
15. STATION AND OFFSETS ARE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

0 5 10 20 30 40 60
HORIZ SCALE: 1"=20'
VERT SCALE: 1"=2'

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 WA 98402 253.627.3599
421 W Riverside Ave Suite 511 WA 99201 509.252.5080
621 SW Morrison St. Suite 950 OR 97205 503.595.0270
721 SW Industrial Suite 130 OR 97702 541.330.6506

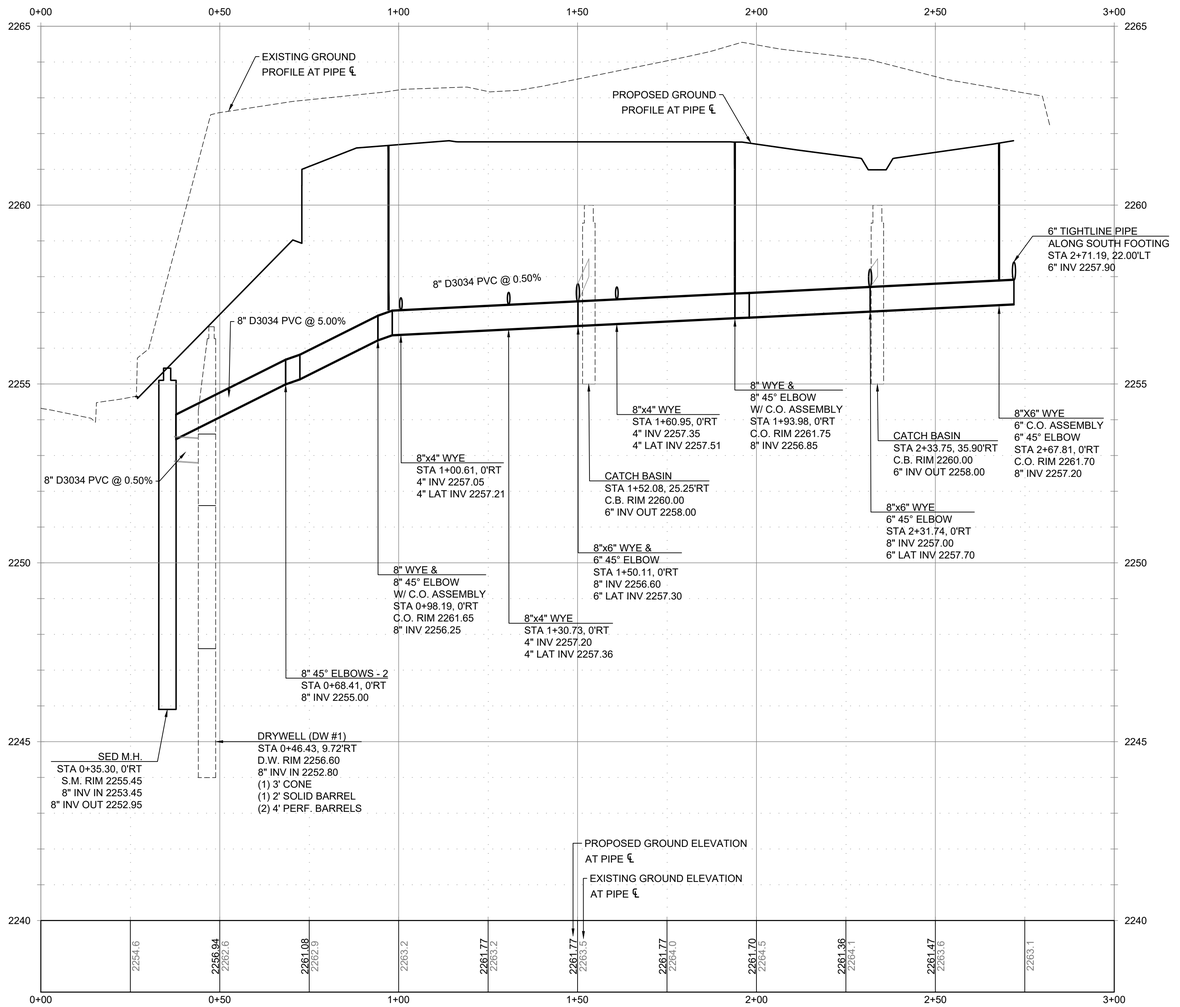
REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE
Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

Drawing Title: UTILITY PROFILES
Drawn By : MWB
Project No. 021062.000
Date : 8/17/2022
Revised :
Sheet No. C4.01



1 C4.02 STORM-1 PROFILE

SCALE: HORIZONTAL 1"=20' / VERTICAL 1"=2'

HWA

CIVIL ENGINEERING | SURVEYING | PLANNING

62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

0 5 10 20 30 40 60

0 HORIZ SCALE: 1"=20'
1 VERT SCALE: 1"=2'
2

BLRB architects

TACOMA I SPOKANE I PORTLAND I BEND

1250 Pacific Ave, Suite 700, WA 98402, 253.627.3599
421 W Riverside Ave, Suite 511, WA 99201, 509.252.5080
621 SW Morrison St., Suite 950, OR 97205, 503.595.0270
721 SW Industrial, Suite 130, OR 97702, 541.330.6506

Stamp

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER

CITY OF MADRAS

CONSTRUCTION DOCUMENTS

Drawing Title: UTILITY PROFILES

Date : 8/17/2022

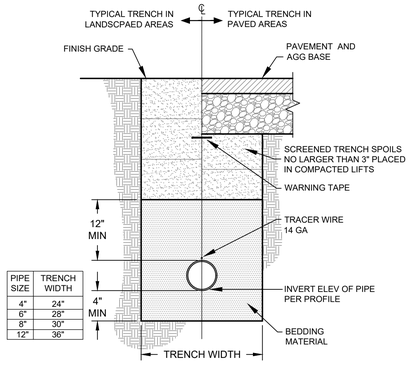
Drawn By: MWB

Project No. 021062.000

Revised :

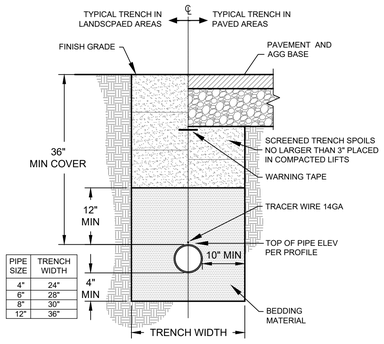
Sheet No.

C4.02



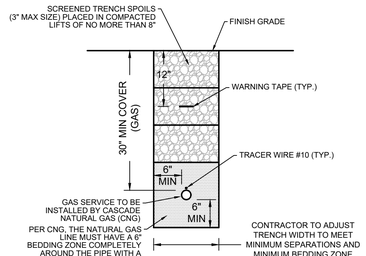
PIPE SIZE	TRENCH WIDTH
4"	24"
6"	28"
8"	30"
12"	36"

1 C5.01 STORM DRAIN / SANITARY SEWER TRENCH
SCALE: NOT TO SCALE



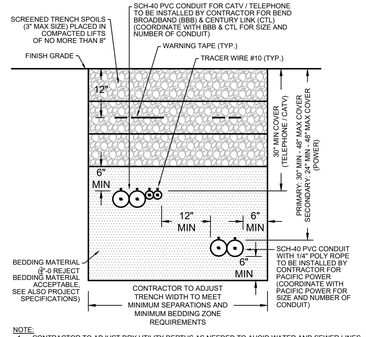
PIPE SIZE	TRENCH WIDTH
4"	24"
6"	28"
8"	30"
12"	36"

2 C5.01 WATERLINE TRENCH
SCALE: NOT TO SCALE



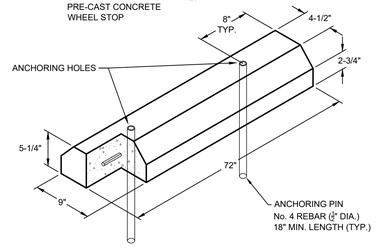
NOTE:
1. CONTRACTOR TO ADJUST DRY UTILITY DEPTHS AS NEEDED TO AVOID WATER AND SEWER LINES
2. CONTRACTOR TO PROVIDE TRENCH EXCAVATION, BEDDING MATERIAL, AND BACKFILL
3. MAINTAIN 6" MINIMUM VERTICAL SEPARATION AT WATERLINE CROSSINGS
4. MAINTAIN 42" MINIMUM HORIZONTAL SEPARATION FROM POWER CONDUIT.

3 C5.01 GAS TRENCH
SCALE: NOT TO SCALE

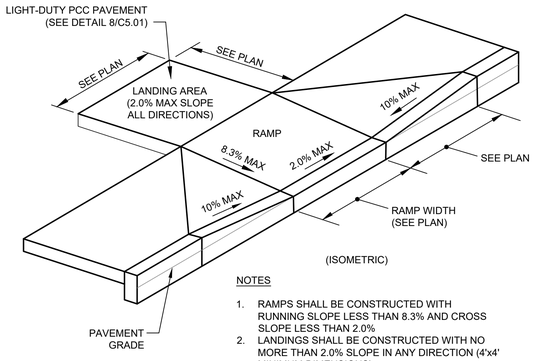


NOTE:
1. CONTRACTOR TO ADJUST DRY UTILITY DEPTHS AS NEEDED TO AVOID WATER AND SEWER LINES
2. CONTRACTOR TO PROVIDE TRENCH EXCAVATION, BEDDING MATERIAL, AND BACKFILL
3. MAINTAIN 6" MINIMUM VERTICAL SEPARATION AT WATERLINE CROSSINGS

4 C5.01 SHARED UTILITY TRENCH
SCALE: NOT TO SCALE



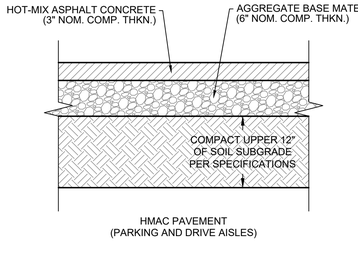
5 C5.01 CONCRETE WHEEL STOP
SCALE: NOT TO SCALE



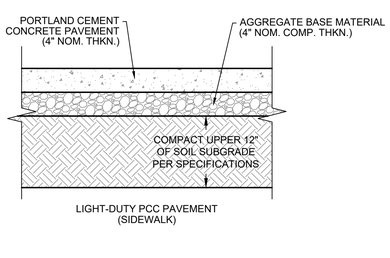
NOTES

1. RAMPS SHALL BE CONSTRUCTED WITH RUNNING SLOPE LESS THAN 8.3% AND CROSS SLOPE LESS THAN 2.0%
2. LANDINGS SHALL BE CONSTRUCTED WITH NO MORE THAN 2.0% SLOPE IN ANY DIRECTION (4'x4' MINIMUM DIMENSIONS)
3. SEE GRADING PLAN AND DETAIL GRADING PLAN FOR DIMENSIONS AND SPOT ELEVATIONS.

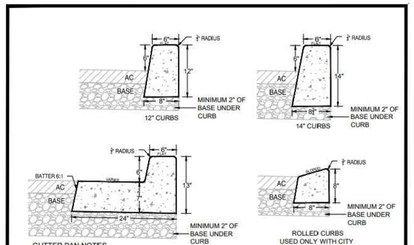
6 C5.01 PERPENDICULAR CURB RAMP
SCALE: NOT TO SCALE



7 C5.01 HMAC PAVEMENT
SCALE: NOT TO SCALE



8 C5.01 PCC PAVEMENT
SCALE: NOT TO SCALE

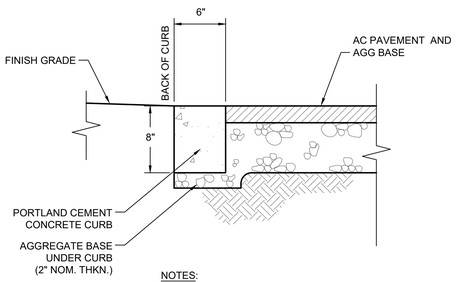


CITY STANDARD CURBS

NOTES:
1. CONCRETE SHALL BE CLASS 3000 MEETING THE REQUIREMENTS OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION (SECTION 440 "COMMERCIAL GRADE CONCRETE").
2. ROLLED CURBS USED ONLY AT CITY ENGINEERS DISCRETION.
3. EXPANSION JOINTS ARE REQUIRED AT:
   A. A MAXIMUM SPACING OF 100 FEET.
   B. AT EACH POINT OF TANGENCY.
   C. AT THE TOP OF ALL ADA AND DRIVEWAY APRON FLARES.
   D. AROUND ALL POLES, POSTS, BOXES AND OTHER FIXTURES THAT PROTRUDE THROUGH OR AGAINST THE CURB.
4. CONTROL JOINTS ARE TO BE CUT INTO THE WET CONCRETE A MINIMUM 1/3 OF THE DEPTH AND PLACED AT A MAXIMUM OF 10' APART.
5. BASE ROCK UNDER CURB SHALL BE A MINIMUM OF TWO INCHES DEEP OR DEEPER AS REQUIRED TO MATCH STREET SECTION AND MEETING THE REQUIREMENTS OF SECTION 207.
6. DRIVEWAY APRON LIPS SHALL BE MINIMUM OF 1" TO A MAXIMUM OF 1 1/2" HEIGHT ABOVE ASPHALT AT GUTTER.
7. ADA LIPS SHALL BE FLUSH WITH ASPHALT PAVEMENT AT GUTTER.
8. ALL VISIBLE EDGES OF CURB SHALL HAVE A MAXIMUM 3/4" RADIUS FINISHED EDGE.
9. ALL VISIBLE SURFACES SHALL HAVE A LIGHT BROOM FINISH, PARALLEL WITH CURB.
10. ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE MARKED ON THE SURFACE OF CURB USING A STAMPED IMPRESSION OF "W" OR "S".
11. CURB HEIGHTS SHALL BE AS FOLLOWS:
    A. LOCAL STREETS - 12"
    B. ARTERIAL, COLLECTOR AND INDUSTRIAL STREETS - 14"

CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.
	DRAWN BY: GWM	7-15
CONCRETE CURBS	APPROVED BY: HAM	
	REVISION DATE: 1/10/20	

9 C5.01 CONCRETE CURB
SCALE: NOT TO SCALE



NOTES:

1. FINE BRUSH TOP & FRONT OF CURB PARALLEL TO LINE OF CURB
2. PROVIDE 1/2" EXPANSION JOINT AT EVERY CHANGE OF DIRECTION TYPICAL, AS INDICATED IN TABLE AT LEFT, AND WHERE NEW CONSTRUCTION ABUTS EXISTING OR OLD CONCRETE.
3. PROVIDE "BOND BREAKER" EXPANSION JOINT BETWEEN BACK OF CURB & SIDEWALK AND BETWEEN SIDEWALK AND BUILDING WHERE APPLICABLE.

	TOOLED CONTRACTION JNT.	EXPANSION JNT.
CURB	SPACE @ 10' O.C.	SEE NOTE 2

10 C5.01 8" CONCRETE CURB (FLUSH)
SCALE: NOT TO SCALE

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 Tacoma WA 98402 253.627.5599
421 W Riverside Ave Suite 950 Spokane WA 99201 509.252.5080
621 SW Morrison St. Suite 511 Portland OR 97205 503.595.0270
721 SW Industrial Suite 130 Bend OR 97702 541.330.6506

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE
Stamp

DRAWING REVISIONS

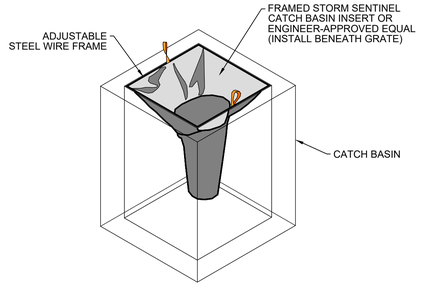
#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

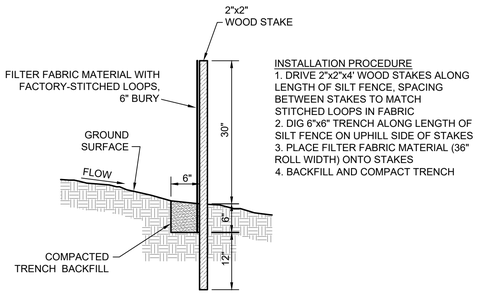
Drawing Title: DETAILS
Date: 8/17/2022
Drawn By: MWB
Project No. 021062.000
Revised:

Sheet No.
C5.01

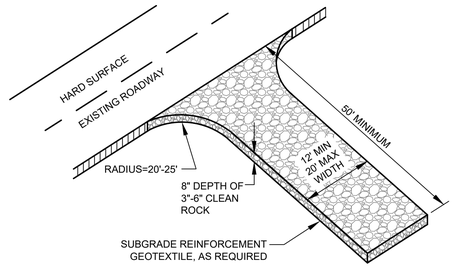
HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org



1 C5.02 CATCH BASIN INSERT
SCALE: NOT TO SCALE



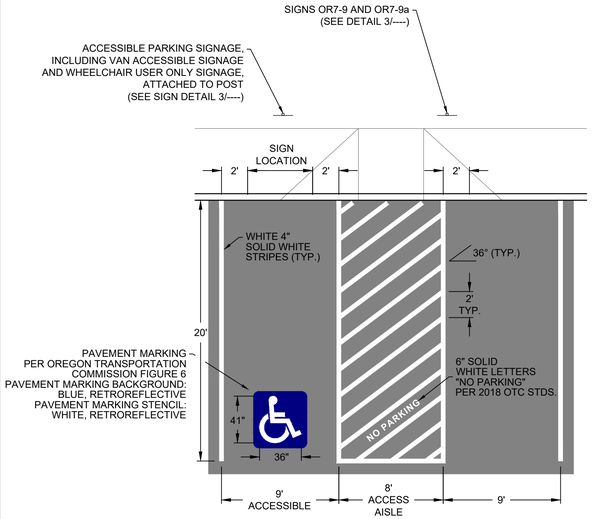
2 C5.02 SEDIMENT FENCE
SCALE: NOT TO SCALE



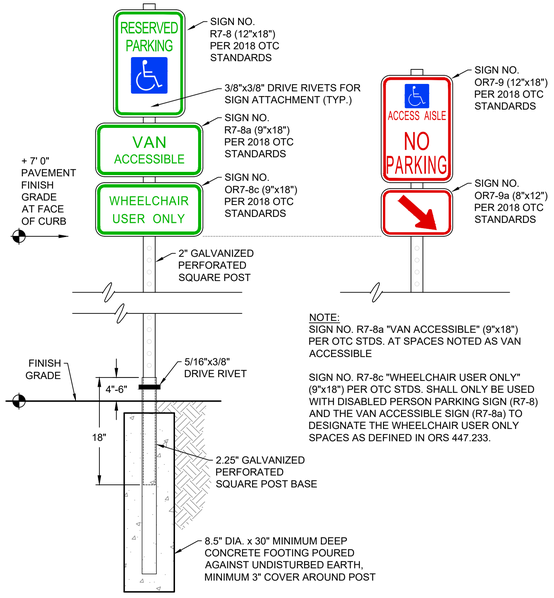
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE AN AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.

3 C5.02 GRAVEL CONSTRUCTION ENTRANCE
SCALE: NOT TO SCALE

4 C5.02 NOT USED
SCALE: NOT TO SCALE



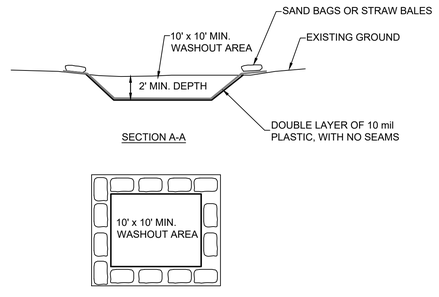
5 C5.02 PARKING SPACE STRIPING
SCALE: NOT TO SCALE



NOTE:
SIGN NO. R7-8a "VAN ACCESSIBLE" (9"x18") PER OTC STDS. AT SPACES NOTED AS VAN ACCESSIBLE

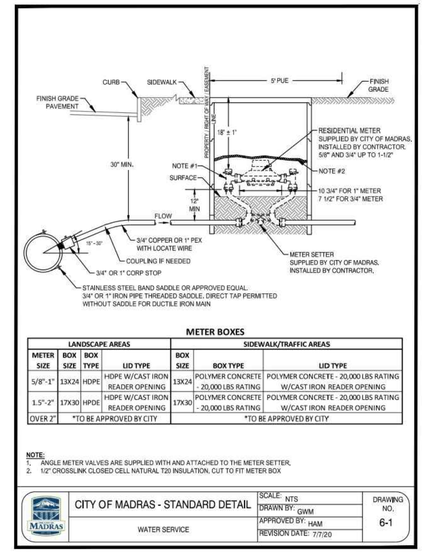
SIGN NO. R7-8c "WHEELCHAIR USER ONLY" (9"x18") PER OTC STDS. SHALL ONLY BE USED WITH DISABLED PERSON PARKING SIGN (R7-8) AND THE VAN ACCESSIBLE SIGN (R7-8a) TO DESIGNATE THE WHEELCHAIR USER ONLY SPACES AS DEFINED IN ORS 447.233.

6 C5.02 ACCESSIBLE PARKING SIGNAGE
SCALE: NOT TO SCALE



NOTES:
1. WASHOUT AREA MAY ALSO BE CONSTRUCTED ABOVE GROUND WITH STRAW BALES. 2' MIN. DEPTH REQUIRED.
2. AREA SHALL BE CLEANED OUT OUT WHEN THERE IS LESS THAN 12" OF FREE BOARD REMAINING. MATERIAL SHALL BE DISPOSED OF IN APPROVED MANNER. INSPECT LINER FOR TEARS AND REPLACE AS REQUIRED.
3. FACILITY SHALL BE COVERED PRIOR TO RAIN PERIODS.
4. HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

7 C5.02 EQUIPMENT WASHOUT AREA DETAIL
SCALE: NOT TO SCALE



METER BOXES

LANDSCAPE AREAS				SIDEWALK/TRAFFIC AREAS		
METER SIZE	BOX SIZE	BOX TYPE	LID TYPE	BOX SIZE	BOX TYPE	LID TYPE
5/8"-1"	13X24	HDPE	HDPE W/CAST IRON READER OPENING	13X24	POLYMER CONCRETE - 20,000 LBS RATING	POLYMER CONCRETE - 20,000 LBS RATING W/CAST IRON READER OPENING
1.5"-2"	17X30	HPDE	HDPE W/CAST IRON READER OPENING	17X30	POLYMER CONCRETE - 20,000 LBS RATING	POLYMER CONCRETE - 20,000 LBS RATING W/CAST IRON READER OPENING
OVER 2"	*TO BE APPROVED BY CITY			*TO BE APPROVED BY CITY		

NOTE:
1. ANGLE METER VALVES ARE SUPPLIED WITH AND ATTACHED TO THE METER SETTER.
2. 1/2" CROSSLINK CLOSED CELL NATURAL T20 INSULATION, CUT TO FIT METER BOX

MADRAS	CITY OF MADRAS - STANDARD DETAIL	SCALE: NTS	DRAWING NO.: 6-1
		DRAWN BY: GWM	
	WATER SERVICE	APPROVED BY: HAM	
		REVISION DATE: 7/7/20	

8 C5.02 WATER SERVICE
SCALE: NOT TO SCALE

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 WA 98402 253.627.5599
421 W Riverside Ave Suite 511 WA 99201 509.252.5080
621 SW Morrison St. Suite 950 OR 97205 503.595.0270
721 SW Industrial Suite 130 OR 97702 541.330.6506

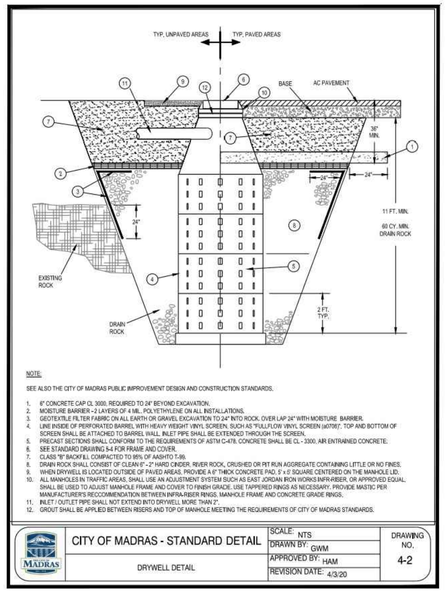
REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE
Stamp

DRAWING REVISIONS

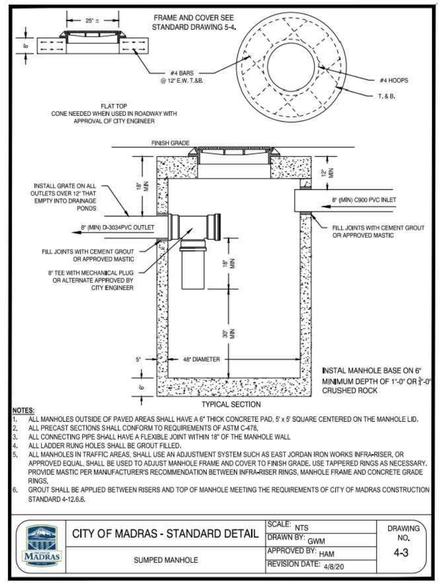
#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

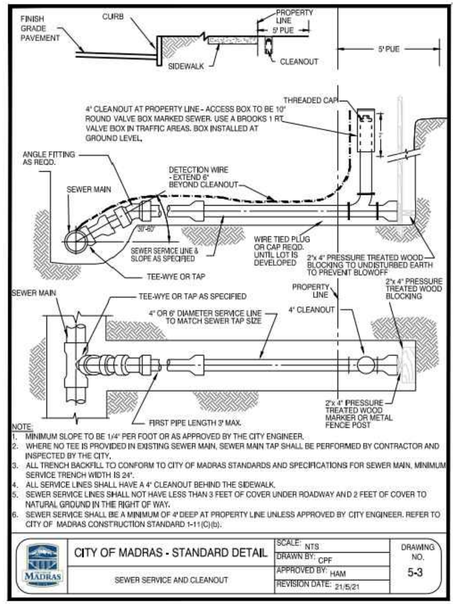
Drawing Title: DETAILS
Drawn By: MWB
Project No. 021062.000
Date : 8/17/2022
Revised :
Sheet No. C5.02



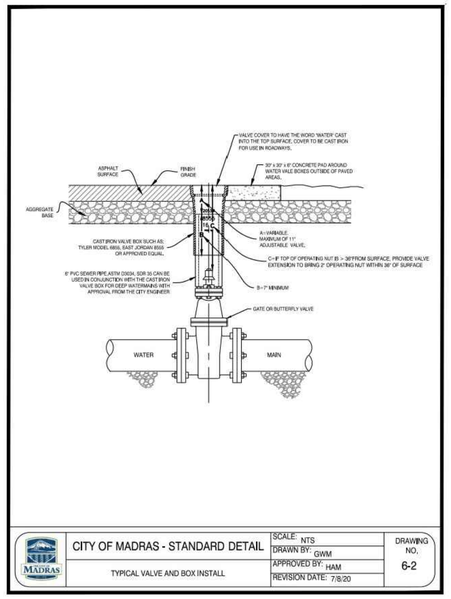
1 C5.03 DRYWELL ASSEMBLY
SCALE: NOT TO SCALE



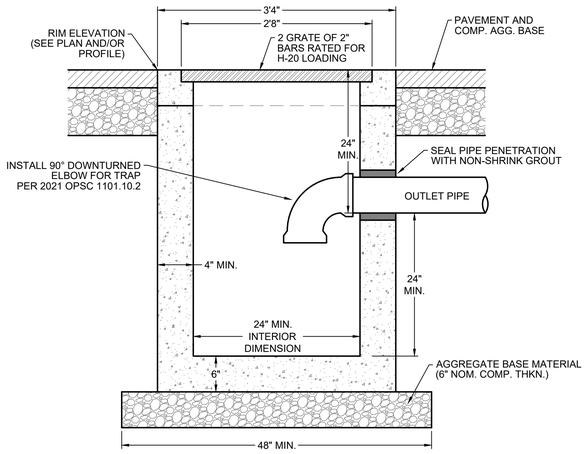
2 C5.03 SEDIMENTATION MANHOLE
SCALE: NOT TO SCALE



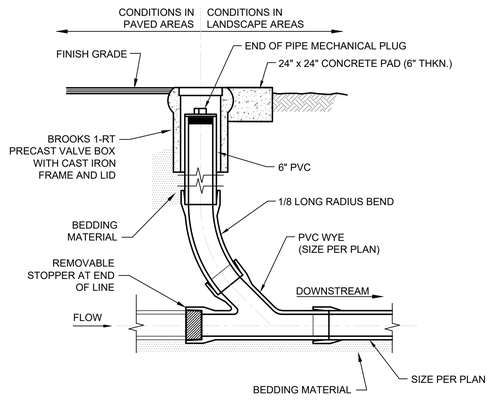
3 C5.03 SEWER SERVICE AND CLEANOUT ASSEMBLY
SCALE: NOT TO SCALE



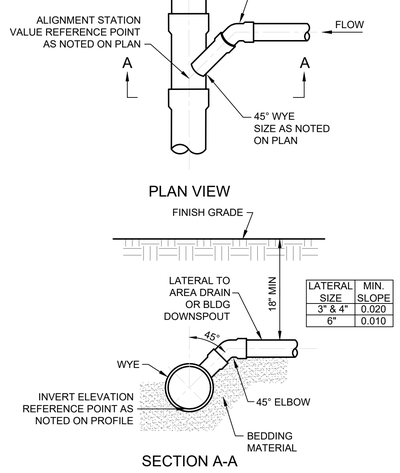
4 C5.03 VALVE AND BOX ASSEMBLY
SCALE: NOT TO SCALE



5 C5.03 PRECAST DOUBLE-GRATE CATCH BASIN
SCALE: NOT TO SCALE

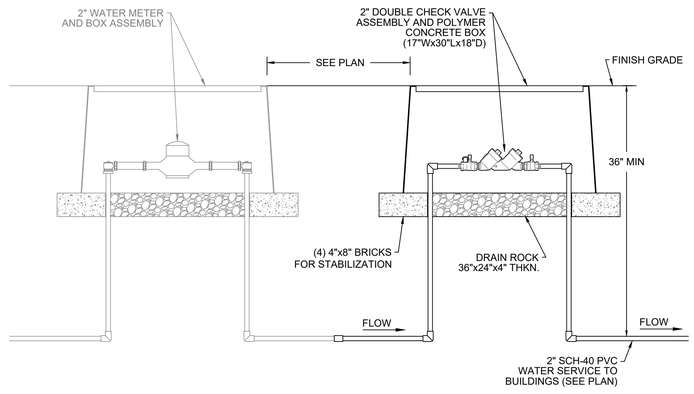


6 C5.03 CLEANOUT ASSEMBLY
SCALE: NOT TO SCALE



LATERAL SIZE	MIN. SLOPE
3", & 4"	0.020
6"	0.010

7 C5.03 STORM DRAIN LATERAL
SCALE: NOT TO SCALE



8 C5.03 2-INCH DCVA ASSEMBLY
SCALE: NOT TO SCALE

BLRB architects
TACOMA I SPOKANE I PORTLAND I BEND
1250 Pacific Ave Suite 700 Tacoma WA 98402 253.627.3599
421 W Riverside Ave Suite 511 Spokane WA 99201 509.252.5080
621 SW Morrison St. Suite 950 Portland OR 97205 503.595.0270
721 SW Industrial Suite 130 Bend OR 97702 541.330.6506

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE
Stamp

DRAWING REVISIONS

#	Date	Description

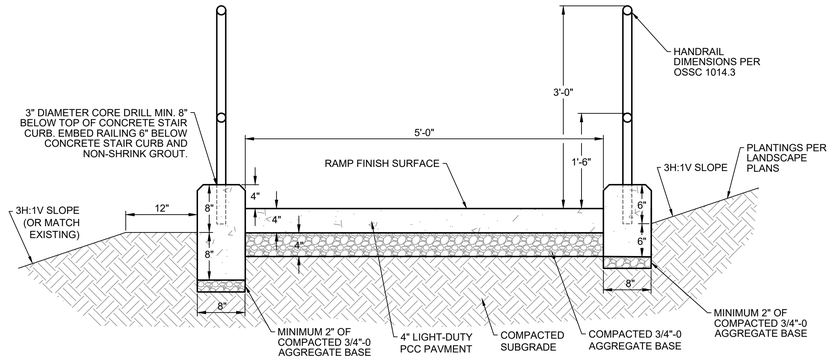
MADRAS SHELTER
CITY OF MADRAS
CONSTRUCTION DOCUMENTS

DETAILS

Drawing Title:
Date : 8/17/2022
Drawn By : MWB
Project No. 021062.000
Revised :

Sheet No.
C5.03

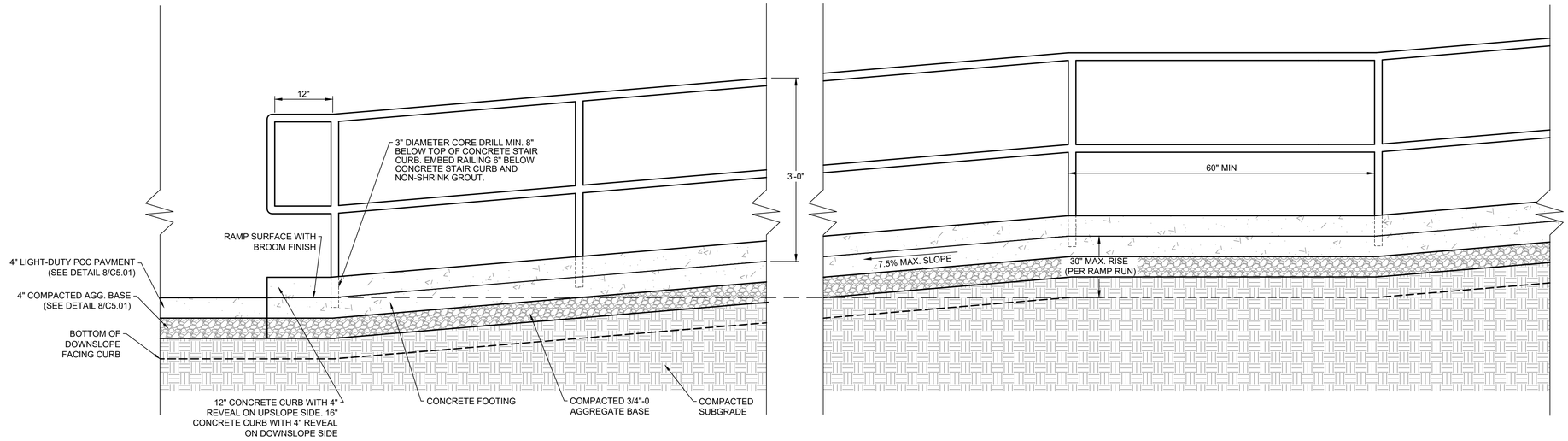
HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-9351 | www.hwa-inc.org



1
C5.04

HANDRAIL AND WALKWAY DETAIL

SCALE: NOT TO SCALE



3
C5.04

CONCRETE RAMP DETAIL

SCALE: NOT TO SCALE

BLRB architects

TACOMA I SPOKANE I PORTLAND I BEND

1250 Pacific Ave, Suite 700, WA 98402, 253.627.3599
621 SW Morrison St., Suite 950, OR 97205, 503.595.0270
421 W Riverside Ave, Suite 511, WA 99201, 509.252.5080
721 SW Industrial, Suite 130, OR 97702, 541.330.6506

Stamp

REGISTERED PROFESSIONAL ENGINEER 52977PE OREGON JULY 13, 1989 GRANT HARDGRAVE

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER

CITY OF MADRAS

CONSTRUCTION DOCUMENTS

Drawing Title: RAMP AND RETAINING WALL DETAILS

Drawn By : MWB

Project No. 021062.000

Date : 8/17/2022

Revised :

Sheet No. C5.04

HWA
CIVIL ENGINEERING | SURVEYING | PLANNING
62930 O.B. RILEY ROAD, STE. 100, BEND, OR 97703
541-389-8351 | www.hwa-inc.org

VALVE KEY

12 — BODY HEIGHT
5.2 — STA NO & PROGRAM
1" — VALVE SIZE
20 — GPM
900 L.F. — L.F. OF DRIP LINE ±

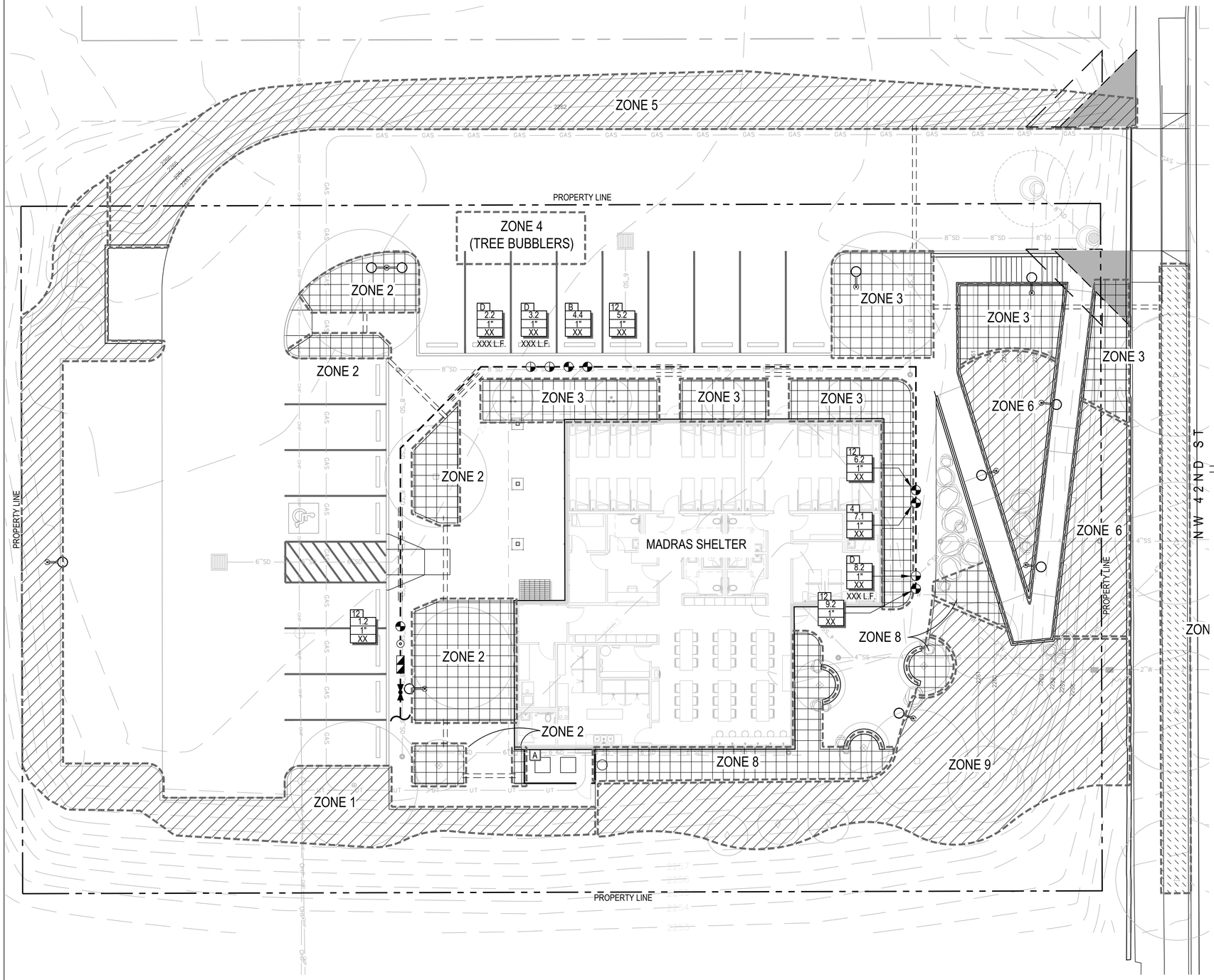
PROGRAM	BODY HEIGHT
1= TURF	4 = 4" POP-UP
2 = SHRUBS	6 = 6" POP UP
3 = SLOPES	12 = 12" POP-UP
4 = TREES	B = BUBBLER
	D = DRIPLINE

SCH. 40 PVC PIPE SIZING CHART

PIPE SIZE	MAX FLOW
3/4"	7 GPM
1"	12 GPM
1-1/4"	22 GPM
1-1/2"	30 GPM
2"	50 GPM

IRRIGATION LEGEND

SYMBOL		MODEL # / DESCRIPTION	GPM 360°	270°	180°	90°	PSI	RADIUS	P.R.	DETAIL
360° 270° 180° 90°	RAINBIRD	1800-SAM-PRS-HE-VAN-15 POP-UP SPRAY	3.7	2.78	1.85	0.93	30	15'	1.8	X / LI501
	RAINBIRD	1800-SAM-PRS-HE-VAN-12 POP-UP SPRAY	2.37	1.77	1.18	0.59	30	12'	1.8	X / LI501
	RAINBIRD	1800-SAM-PRS-HE-VAN-10 POP-UP SPRAY	1.78	1.34	0.89	0.45	30	10'	2.0	X / LI501
	RAINBIRD	1800-SAM-PRS-HE-VAN-8 POP-UP SPRAY	1.17	0.88	0.59	0.29	30	8'	2.0	X / LI501
	RAINBIRD	(2) 1800-SAM-PRS-MPR-5Q-B POP-UP STREAM BUBBLERS (EACH SYMBOL REPRESENTS TWO BUBBLERS)			0.50		30	5'	N/A	X / LIX.01
LCS SST RCS	RAINBIRD	1800-SAM-PRS-MPR-15XCS & 15SST MPR STRIPS	.49 / 1.21				30	4'x15'/30'	N/A	X / LIX.01



IRRIGATION LEGEND

SYMBOL		MODEL # / DESCRIPTION	DETAIL
	LASCO	1 1/2" SCH. 40 PRESSURIZED PVC MAINLINE	X / LI501
	LASCO	SCH. 40 NON-PRESSURE PVC LATERAL, SIZE AS NOTED	X / LI501
	LASCO	PVC SCH. 40 SLEEVING, 2.5 TIMES THE DIAMETER OF THE PIPE OR BUNDLE INSIDE. PLACE UNDER HARDSCAPE OR ASPHALT AREAS, EXTEND 12" BEYOND PAVING EDGES.	
	RAINBIRD	XFD-06-12-XXX DRIPLINE TUBING 0.61 GPH EMITTERS. ALL TUBING SHALL BE INSTALLED 2" BELOW GRADE W/ 9" WIRE STAKES FIVE (5) FEET ON CENTER; SPACED A MAXIMUM OF 18" ON CENTER	X / LI501
	LASCO	3/4" SCH. 40 NON-PRESSURIZED PVC HEADER	X / LI501
Ⓐ	RAINBIRD	ARV050 AIR/VACUUM RELIEF VALVE. INSTALL AIR RELIEF ASSEMBLY INSIDE A 6" ROUND VALVE BOX AT THE HIGH POINT OF EACH PLANTER, MIN. 1 ARV PER 500' OF DISTRIBUTION TUBING. USING AIR RELIEF LATERAL, CONNECT AIR RELIEF VALVE TO ALL DRIP LINE LATERALS WITHIN THE ELEVATED AREA.	X / LI501
Ⓕ	HUNTER	PLD-BV MANUAL SHUT OFF VALVE USED AS A FLUSH VALVE. INSTALL INSIDE 6" ROUND VALVE BOX, AT THE FAR END OF DRIP LINE LATERAL. INSTALL MINIMUM OF ONE FLUSH VALVE PER MAXIMUM OF 800' OF TUBING. MULTIPLE FLUSH VALVES MAY BE REQUIRED WITHIN DRIP LINE LAYOUT. ALWAYS INSTALL VALVES IN OPPOSITE DIRECTIONS OF THE PVC/DRIP CONNECTION MANIFOLD.	X / LI501
Ⓘ	RAINBIRD	OPERIND DRIP SYSTEM OPERATION INDICATOR. INSTALL (1) INDICATOR PER DRIP VALVE. INSTALL DRIP SYSTEM OPERATION INDICATOR ON EXHAUST HEADER OPPOSITE OF THE FLUSH VALVE.	X / LI501
	WILKINS	950XL XX" XL SERIES DOUBLE CHECK VALVE	X / LI501
	LASCO	SLO-CLOSE SCH. 80 PVC TRUE-UNION BALL VALVE, LINE SIZE	X / LI501
	RAINBIRD	100-PEB-PRS-D PEB SERIES CONTROL VALVE WITH PRESSURE REGULATING MODULE	X / LI501
	RAINBIRD	XCZ-100-PRB-COM DRIP CONTROL ZONE KIT	X / LI501
	RAINBIRD	44-RC 1" QUICK COUPLER VALVE, NPT RUBBER COVER, 2-PIECE BODY	X / LI501
A	RAINBIRD	ESP12LXMEF 12-STATION CONTROLLER WITH FLOW SMART MODULE PLUS. VERIFY LOCATION WITH OWNER.	X / LI501
	PER CIVIL	WATER METER PER CIVIL DRAWINGS	-

IRRIGATION NOTES

A. THIS DESIGNED SYSTEM REQUIRES A MINIMUM STATIC PRESSURE OF XX PSI AND A MAXIMUM FLOW OF XX GPM AT THE POINT OF CONNECTION. NOTIFY THE LANDSCAPE ARCHITECT IF ACTUAL FIELD DATA DIFFERS FROM THIS INFORMATION.

B. MAINLINE AND RELATED EQUIPMENT SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL MAINLINE AND RELATED EQUIPMENT LOCATION TO BE WITHIN PLANTERS AND A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES.

C. CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC.

D. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN WORKING WITHIN THE DRIPLINE OF EXISTING TREES. NO MECHANICAL TRENCHING WITHIN THE DRIPLINE OF THE EXISTING REES WILL BE ALLOWED. AIR SPADE SHALL BE UTILIZED FOR ALL TRENCHING WITHIN THE DRIPLINE OF EXISTING TREES.

E. BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING FOR CLARITY ONLY. ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE LOCATED JUST OUTSIDE THE ROOTBALL ON OPPOSITE SIDES OF THE TREE.

F. ELECTRICAL WIRING FOR REMOTE CONTROL VALVES NOT SHOWN ON PLANS, CONTRACTOR INSTALL WIRING FOR ALL VALVES AND USE PVC SLEEVING FOR WIRE RUNS UNDER CONCRETE OR HARDSCAPE.

G. CONTRACTOR SHALL INSTALL HUNTER MINI-CLIK RAIN SENSOR ON SYSTEM AND MOUNTED ON BUILDING WHERE IT WILL BE EXPOSED TO DIRECT, UNOBSTRUCTED RAINFALL (BUT AWAY FROM SPRINKLER SPRAY). CHECK FOR OBSTRUCTIONS TO RAINFALL SUCH AS OVERHANGS, TREES, ETC.

H. WITH THE EXCEPTION OF ZONES 1,5, & 9, ALL SPRAY IRRIGATION SHALL ACHIEVE HEAD-TO-HEAD COVERAGE AND MINIMIZE OVER SPRAY. CONTRACTOR TO VERIFY IN FIELD AND MAKE NECESSARY ADJUSTMENTS.

I. CONTRACTOR TO INSTALL BLOWOUT VALVE IN THE SYSTEM FOR WINTERIZATION PER DETAIL X/LIX.XX.

J. CONTRACTOR TO COORDINATE POWER TO IRRIGATION CONTROLLER WITH ELECTRICAL CONTRACTOR.

K. ALL LATERAL END RUNS SHALL BE 3/4" PVC SCHEDULE 40 PIPE UNLESS OTHERWISE NOTED ON PLANS.

0 5' 10' 20'
SCALE: 1" = 10'-0"

SZABO LANDSCAPE ARCHITECTURE
1000 nw wall st., suite 205 | bend, or 97703 | www.szabo-la.com

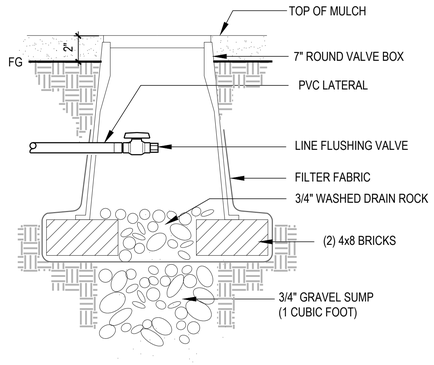
BLRB architects
TACOMA | 1250 Pacific Ave Suite 500 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 303 WA 99201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 1250 OR 97205 503.595.0270
BEND | 221 SW Industrial Way Suite 150 OR 97702 541.330.6506

REGISTERED LANDSCAPE ARCHITECT
PRELIMINARY
NOT FOR CONSTRUCTION
OREGON
02.24.2014
Stamp

DRAWING REVISIONS
A | Date | Description

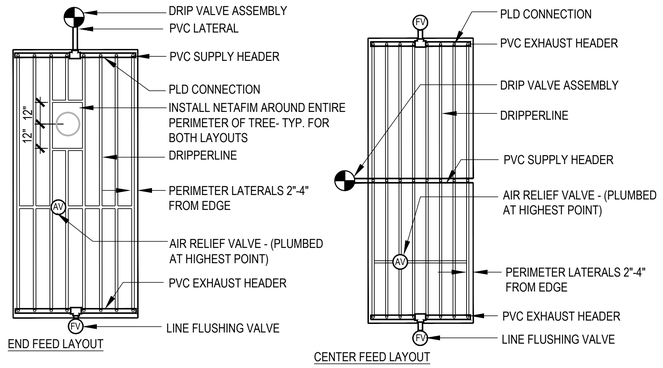
MADRAS SHELTER
CITY OF MADRAS
90% CONSTRUCTION DOCUMENTS

Drawing Title: LANDSCAPE IRRIGATION PLAN
Drawn By :
Project No. 021062.000
Date : 2022.08.17
Revised :
Sheet No. LI1.01



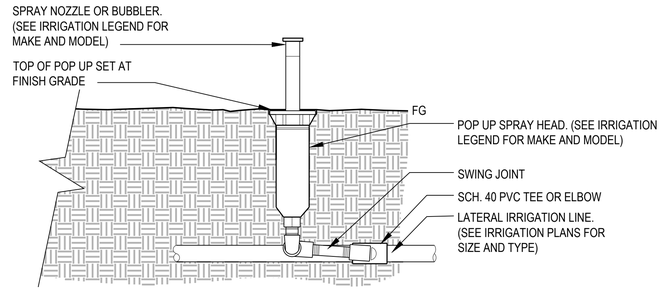
7 LINE FLUSHING VALVE

SCALE: NTS



4 DRIPPERLINE TYPICAL LAYOUT

SCALE: NTS

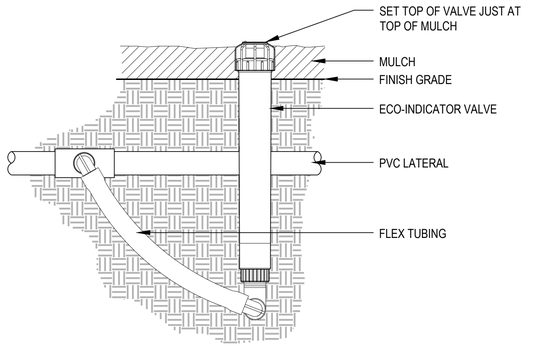


NOTES:

1. 6" POP UPS SHALL BE USED IN TURF AREAS, 12" POP UPS SHALL BE USED IN PLANTING BEDS.
2. CONTRACTOR SHALL SETTLE SOIL AROUND THE POP UP AFTER INSTALLATION.
3. ALL POP UP SPRAY HEADS SHALL HAVE CHECK VALVES.
4. ALL SCH. 40 PVC TO SCH. 80 PVC CONNECTIONS SHALL BE MADE USING TEFLON TAPE.

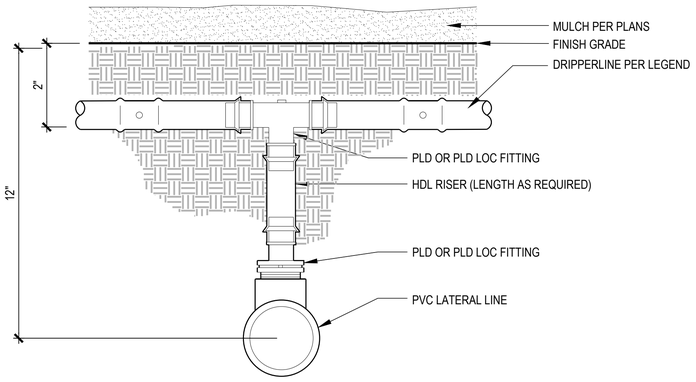
1 POP-UP SPRAY HEAD

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



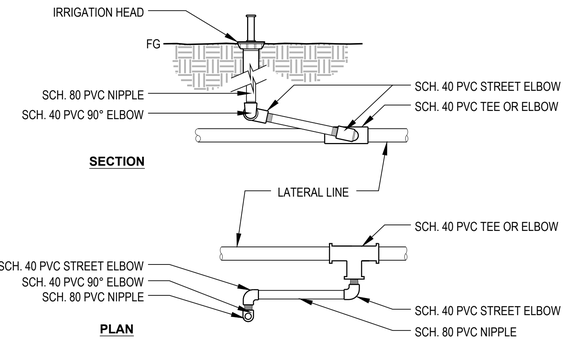
8 DRIP INDICATOR VALVE

SCALE: 1"= 1'-0"



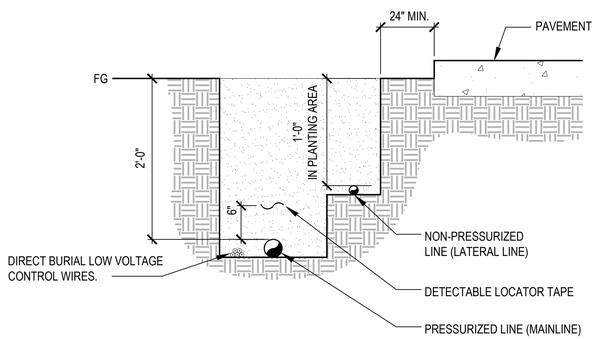
5 DRIPLINE INSTALLATION

SCALE: NTS



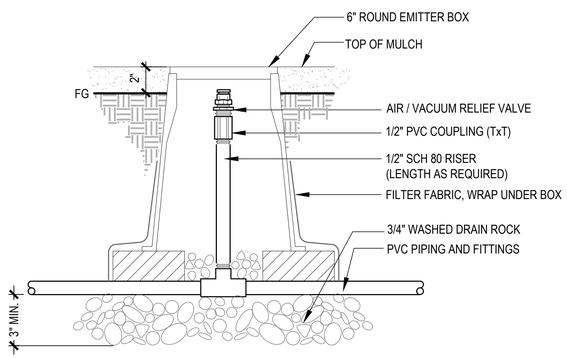
2 SWING JOINT

SCALE: 3" = 1'-0"



9 IRRIGATION TRENCHING

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

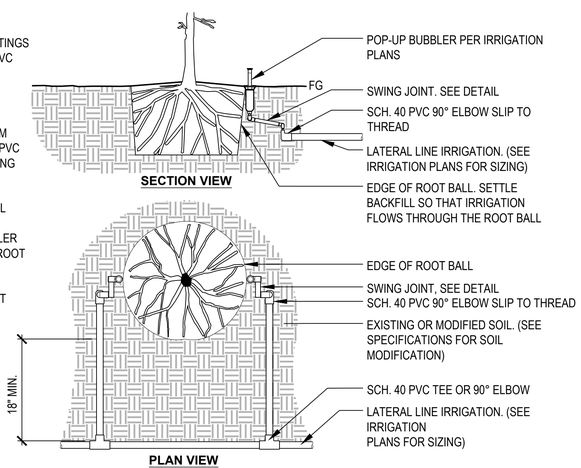


6 AIR RELIEF VALVE

SCALE: NTS

Notes:

1. ALL IRRIGATION FITTINGS SHALL BE SCH. 40 PVC UNLESS SPECIFIED OTHERWISE.
2. ALL THREADED CONNECTIONS FROM SCH. 40 TO SCH. 80 PVC SHALL BE MADE USING TEFLON TAPE.
3. CONTRACTOR SHALL SETTLE THE AREA AROUND THE BUBBLER AND EDGE OF THE ROOT BALL SO THAT ALL IRRIGATION FLOWS THROUGH THE ROOT BALL.



3 IRRIGATION BUBBLER (2) W/ LAYOUT

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

BLRB architects
TACOMA | 1250 Pacific Ave Suite 750 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 309 WA 98201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 1025 OR 97205 503.595.0270
BEND | 721 SW Industrial Way Suite 150 OR 97702 541.330.6506

REGISTERED LANDSCAPE ARCHITECT
PRELIMINARY
NOT FOR CONSTRUCTION
OREGON
02.24.2014
Stamp

DRAWING REVISIONS

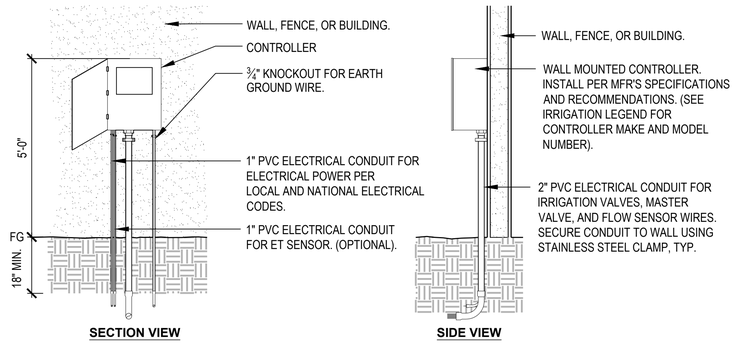
	Description	Date
A		

MADRAS SHELTER
CITY OF MADRAS
90% CONSTRUCTION DOCUMENTS

Drawing Title: IRRIGATION DETAILS
Drawn By :
Project No. 021062.000
Date : 2022.08.17
Revised :

Sheet No. LI2.01

SZABO LANDSCAPE ARCHITECTURE
1000 nw wall st., suite 205 | bend, or 97703 | www.szabo-la.com

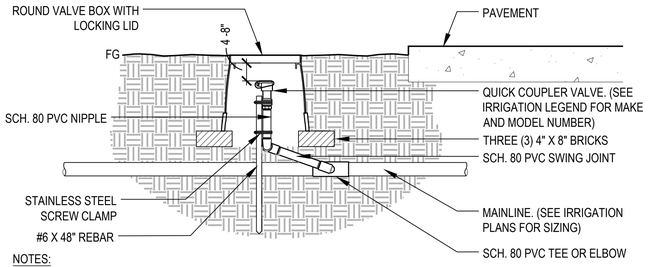


NOTES:

1. COMMON AND CONTROLLER WIRE TO BE BUNDLED USING ELECTRICAL TAPE AT 10'-0" ON CENTER.
2. GROUNDING RODS SHALL BE LOCATED BETWEEN 8'- 0" TO 12'- 0" AWAY FROM THE CONTROLLER. GROUNDING RODS SHALL BE ⅝" IN DIAMETER X 8' IN LENGTH. CONNECT THE GROUNDING ROD TO THE CONTROLLER USING 6 GAUGE BARE COPPER WIRE OR PER THE MANUFACTURER'S SPECIFICATIONS.

7 WALL MOUNTED CONTROLLER

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

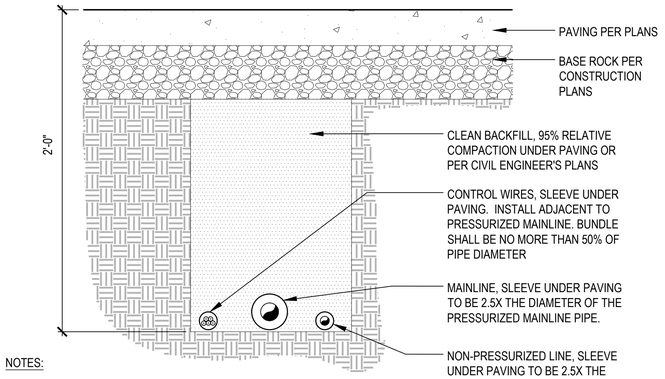


NOTES:

1. ALL THREADED CONNECTIONS SHALL BE INSTALLED USING TEFLON TAPE.
2. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
3. ALL QUICK COUPLERS SHALL BE INSTALLED A MINIMUM OF 18" OFF OF THE MAINLINE.
4. VALVE BOXES SHALL BE LOCATED IN PLANTING AREAS.

4 QUICK COUPLER VALVE

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

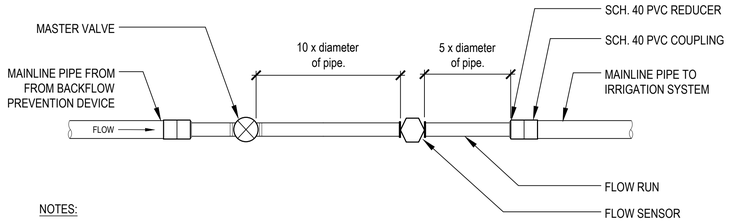


NOTES:

1. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
2. END OF SLEEVES SHALL BE LOCATED WITH A PERMANENT PAVEMENT MARKING PIN, STANDARD BRASS SURVEY PIN IN LEAD, SET 1 INCH FROM EDGE OF PAVING OR CURB.

1 PIPE BENEATH PAVEMENT

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



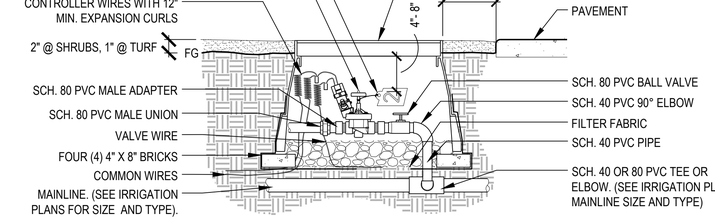
NOTES:

1. FLOW SENSOR SHALL BE OF MAKE AND MODEL AS RECOMMENDED BY THE CONTROLLER MANUFACTURER.
2. FLOW SENSOR WIRE SHALL BE PER MANUFACTURER'S SPECIFICATIONS.
3. MASTER VALVE WIRE SHALL BE DIRECT BURIAL 14 AWG WIRE (OR LARGER). COLOR: BLACK.
4. ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES.
5. SEE MASTER VALVE DETAIL AND FLOW SENSOR DETAIL FOR FURTHER INFORMATION.
6. FLOW RUN PIPE SHALL BE REDUCED DOWN ONE (1) PIPE SIZE AS INDICATED.

   EXAMPLE
   3" MAINLINE = 2-1/2" FLOW RUN
   2-1/2" MAINLINE = 2" FLOW RUN
   2" MAINLINE = 1-1/2" FLOW RUN

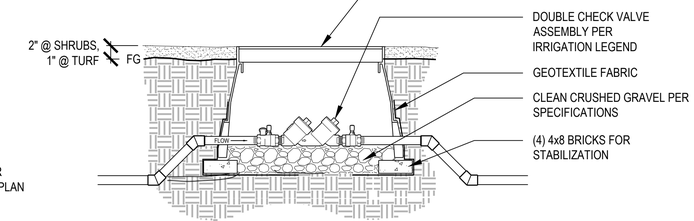
8 MASTER VALVE AND FLOW SENSOR LAYOUT

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



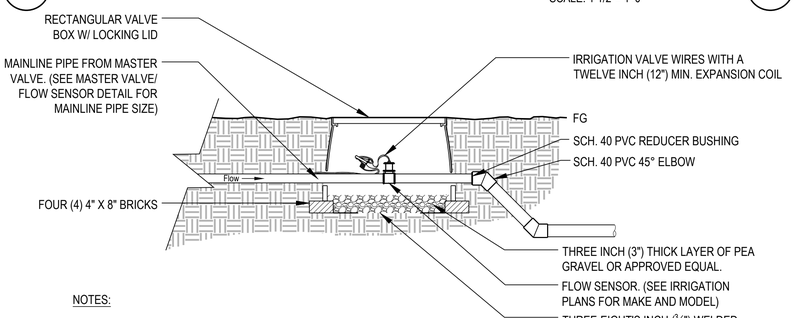
5 REMOTE CONTROL IRRIGATION VALVE

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



2 DOUBLE CHECK VALVE ASSEMBLY

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

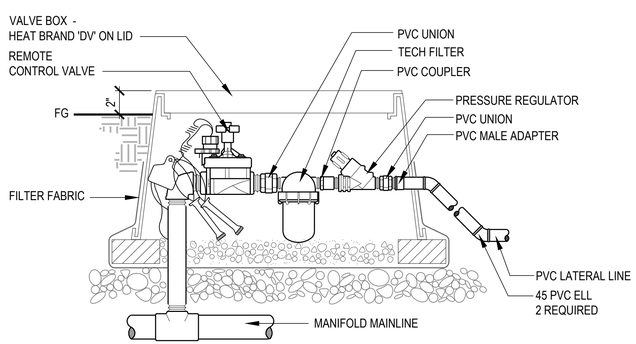


NOTES:

1. FLOW SENSOR MAKE AND MODEL NUMBER SHALL BE PER CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. (SEE IRRIGATION PLANS).
2. FLOW SENSOR WIRE SHALL BE PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS.
3. INSTALL FLOW SENSOR PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
4. ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES. WIRE CONNECTIONS SHALL BE MADE USING DBR/Y-6 CONNECTORS OR APPROVED EQUAL.

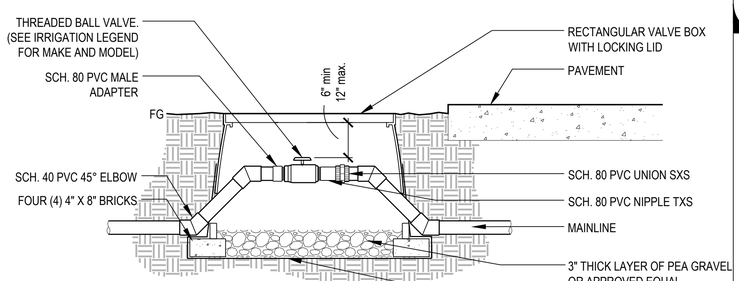
9 FLOW SENSOR

SCALE: 1"= 1'-0"



6 DRIP VALVE ASSEMBLY

SCALE: NTS



3 BALL VALVE - 3" AND SMALLER

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

SZABO LANDSCAPE ARCHITECTURE
1000 nw wall st., suite 205 | bend, or 97703 | www.szabo-la.com

BLRB architects
TACOMA | SPOKANE | PORTLAND | BEND
1250 Pacific Ave Suite 500 WA 98402 253.627.5599
905 W Riverside Suite 300 WA 99201 509.252.5080
621 SW Morrison St. Suite 1025 OR 97205 503.595.0270
721 NW Bond OR 97702 541.330.6506

REGISTERED LANDSCAPE ARCHITECT
PRELIMINARY
NOT FOR CONSTRUCTION
OREGON
02.24.2014
Stamp

DRAWING REVISIONS

A	Date	Description

MADRAS SHELTER
CITY OF MADRAS
90% CONSTRUCTION DOCUMENTS

Drawing Title: IRRIGATION DETAILS
Drawn By:
Project No. 021062.000
Date : 2022.08.17
Revised :

Sheet No.
LI2.02

LANDSCAPE TABULATIONS:

SITE REQUIREMENTS
- GROSS SITE AREA: **28,620 SF**
- REQUIRED LANDSCAPE AREA: **15%** (**4,293 SF)**
- PROVIDED LANDSCAPE AREA: **36.6% (10,500 SF)**

PARKING REQUIREMENTS
- GROSS PARKING AND DRIVE AISLES AREA: **9,122 SF**
- REQUIRED PARKING LOT LANDSCAPE: **7% (639 SF)**
- PROVIDED PARKING LOT LANDSCAPE: **10% (960 SF)**

NW 42ND STREET TREE REQUIREMENTS

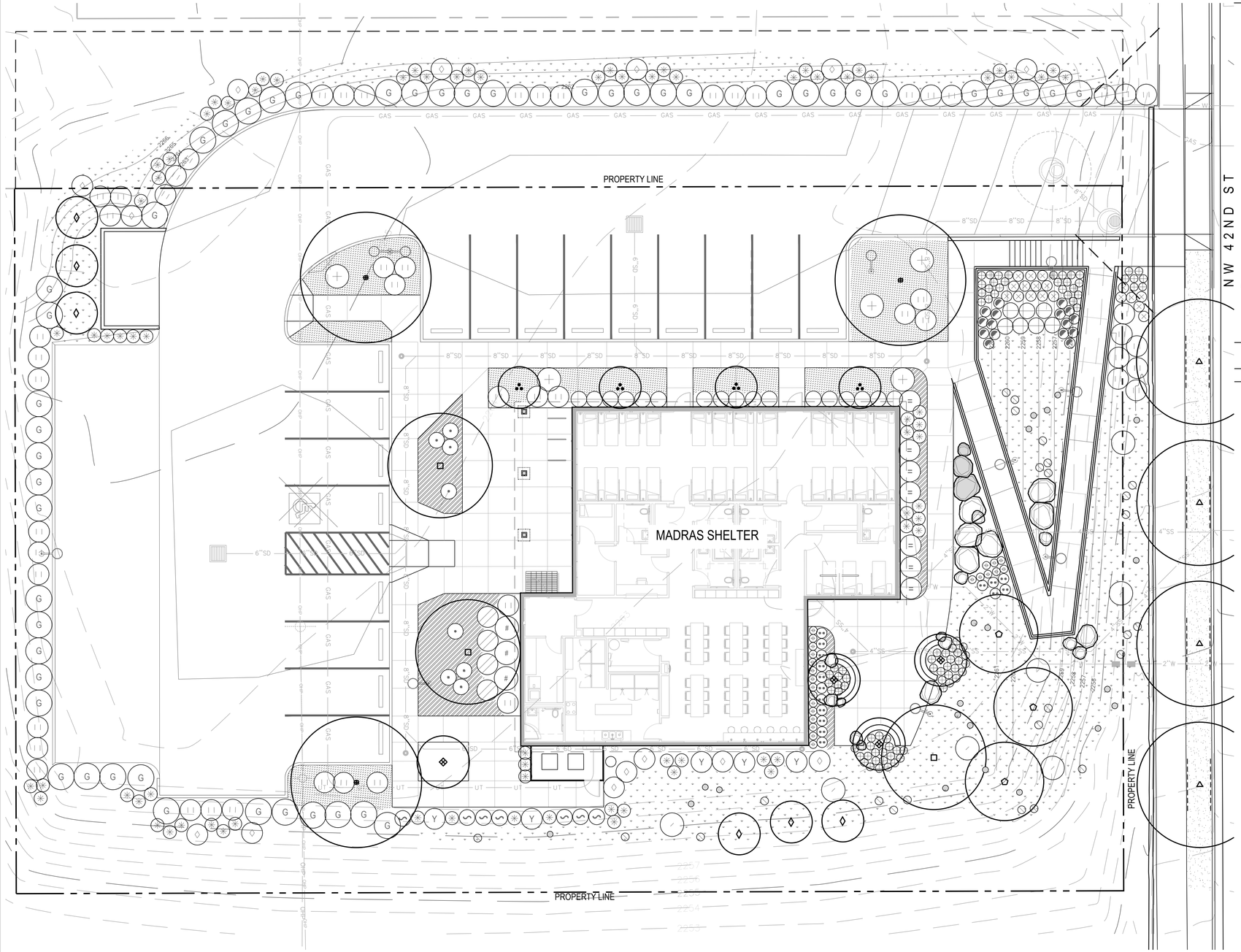
TOTAL LINEAL FEET OF FRONTAGE:	135 LF
REQUIRED STREET TREES @ 35 FT. ON CENTER:	04 TREES
EXISTING STREET TREES TO REMAIN:	00 TREES
PROPOSED STREET TREES:	04 TREES
TOTAL PROVIDED STREET TREES:	**04 TREES**

PARKING LOT TREE REQUIREMENTS

REQ'D PARKING LOT TREES @ 1 PER 10 STALLS:	03 TREES
EXISTING PARKING LOT TREES TO REMAIN:	03 TREES
PROPOSED PARKING LOT TREES:	03 TREES
TOTAL PROVIDED PARKING LOT TREES:	**03 TREES**

PLANTING NOTES

1. CONTRACTOR SHALL OBTAIN A SOIL TEST ANALYSIS PER THE SPECIFICATION SECTION 32 9113. SOIL TEST SHALL BE TAKEN ONCE TOPSOIL HAS BEEN PLACED AND ROUGH GRADING HAS BEEN COMPLETED. SOIL TEST ANALYSIS RESULTS SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT FOR REVIEW AND DETERMINATION OF FINAL SOIL AMENDMENTS. REFER TO SPECIFICATIONS FOR SOIL AMENDMENTS FOR BIDDING PURPOSES.
2. REFER TO SPECIFICATIONS FOR SOIL PREPARATION AND PLANTING SUBMITTALS AND PROCEDURES.
3. LANDSCAPE ARCHITECT SHALL SPOT ALL TREES PRIOR TO PLANTING. NOTIFY LANDSCAPE ARCHITECT 48 HOURS PRIOR TO INSTALLATION OF TREES.
4. PLANTING SHALL OCCUR BETWEEN THE MONTHS OF APRIL AND OCTOBER. PLANTING DURING JULY AND AUGUST SHOULD BE AVOIDED IF POSSIBLE, AND WILL REQUIRE ADDITIONAL WARRANTY.
5. REFER TO SPECIFICATIONS FOR MAINTENANCE AND WARRANTY REQUIREMENTS.
6. ALL PLANTING AREAS SHALL RECEIVE A 2" THK TOP DRESSING OF DARK SHREDDED HEMLOCK BARK MULCH PER SPECIFICATIONS.



PLANT MATERIAL LEGEND

TREES ALL TREES ARE STANDARD FORM UNLESS NOTED. REFER TO DETAILS ON SHEET LP 501 FOR TREE PLANTING AND STAKING.

SYMBOL	QTY	SIZE	BOTANICAL NAME	COMMON NAME
	-	8'-9' HT	ACER GINNALA 'FLAME'	FLAME AMUR MAPLE (MULTI TRUNK)
	-	2" CAL	ACER SACCHARUM	SUGAR MAPLE
	-	2" CAL	GLEDITSIA TRIACANTHOS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST
	-	1.5" CAL	PYRUS CALLERYANA	CLEVELAND SELECT PEAR
	-	2" CAL	QUERCUS RUBRA	RED OAK
	-	15 GAL	JUNIPERUS SCOPULORUM 'MOONGLOW'	MOONGLOW JUNIPER
	-	8'-9'	PINUS FLEXIS 'VANDERWOLF'S PYRAMID'	VANDERWOLF LIMBER PINE

SHRUBS & GRASSES REFER TO DETAILS ON SHEET LP 501 FOR SHRUB PLANTING

SYMBOL	QTY	SIZE	BOTANICAL NAME	COMMON NAME
	25	1 GAL	ACHILLEA MILLEFOLIUM	COMMON YARROW
	23	1 GAL	AGASTACHE RUPESTRIS	LICORICE MINT / SUNSET HYSSOP
	8	1 GAL	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION B. GRAMA GRASS
	80	1 GAL	CALAMAGROSTIS A. 'KARL FOERESTER'	FEATHER REED GRASS
	7	5 GAL	CHAMAEBATIARIA MILLEFOLIUM	DESERT SWEET
	85	1 GAL	COREOPSIS VERTICILLATA 'MOONBEAM'	MOONBEAM THREADLEAF TICKSEED
	7	5 GAL	CORNUS SERICEA 'FARROW ARCTIC FIRE'	ARCTIC FIRE DOGWOOD
	5	3 GAL	COTONEASTER DAMMERI 'CORAL BEAUTY'	CORAL BEAUTY COTONEASTER
	24	1 GAL	DESCHAMPSIA CAESPITOSA	TUFTED HAIRGRASS
	16	1 GAL	FESTUCA GLAUCA 'BEYOND BLUE'	BEYOND BLUE FESCUE
	4	5 GAL	FOTHERGILLA GARDENII	DWARF FOTHERGILLA
	16	1 GAL	LAVANDULA ANGUSTIFOLIA	MUNSTEAD LAVENDER
	21	1 GAL	LINUM LEWISII	BLUE FLAX
	7	1 GAL	NEPETA RACEMOSA 'WALKERS LOW'	WALKERS LOW CATMINT
	14	1 GAL	PEROVISKIA ATRIPLICIFOLIA	RUSSIAN SAGE
	3	5 GAL	PHYSOCARPUS OPULIFOLIUS 'DIABOLO'	DIABOLO NINEBARK
	54	5 GAL	PINUS MUGO 'PUMILIO'	DWARF MUGO PINE
	49	5 GAL	RHUS AROMATICA 'GRO-LOW'	GRO LOW SUMAC
	18	1 GAL	SEDUM AUTUMNALIS 'AUTUMN JOY'	AUTUMN JOY SEDUM
	5	3 GAL	YUCCA FILAMENTOSA 'BRIGHT EDGE'	BRIGHT EDGE YUCCA

GROUNDCOVER REFER TO SHEET LP 501 GROUNDCOVER PLANTING DETAILS

SYMBOL	QTY	SIZE	BOTANICAL NAME	COMMON NAME	SPACING
	53	1 GAL	ARCTOSTAPHALUS UVA-URSI	KINNICKINNICK	24" O.C.
	27	4" POTS	CERATOSTIGMA PLUMBAGINOIDES	HARDY PLUMBAGO	18" O.C.
	192	4" POTS	FESTUCA IDAHOENSIS	IDAHO FESCUE	18" O.C.
	587 SQ FT		LAWN CLASSIC BLEND AVAIL. FROM MCPHEETERS		
			12" DEPTH ROOT BARRIERS PER DETIAL 9/SHT LP4.01; SEE ALSO SPECIFICATIONS		

0 5' 10' 20'
SCALE: 1" = 10'-0"

SZABO LANDSCAPE ARCHITECTURE
1000 nw wall st., suite 205 | bend, or 97703 | www.szabo-la.com

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 300 WA 99201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 625 OR 97205 503.595.0270
BEND | 721 SW Industrial Way Suite 150 OR 97702 541.330.6506

REGISTERED LANDSCAPE ARCHITECT
OREGON
02.24.2014

PRELIMINARY
NOT FOR CONSTRUCTION

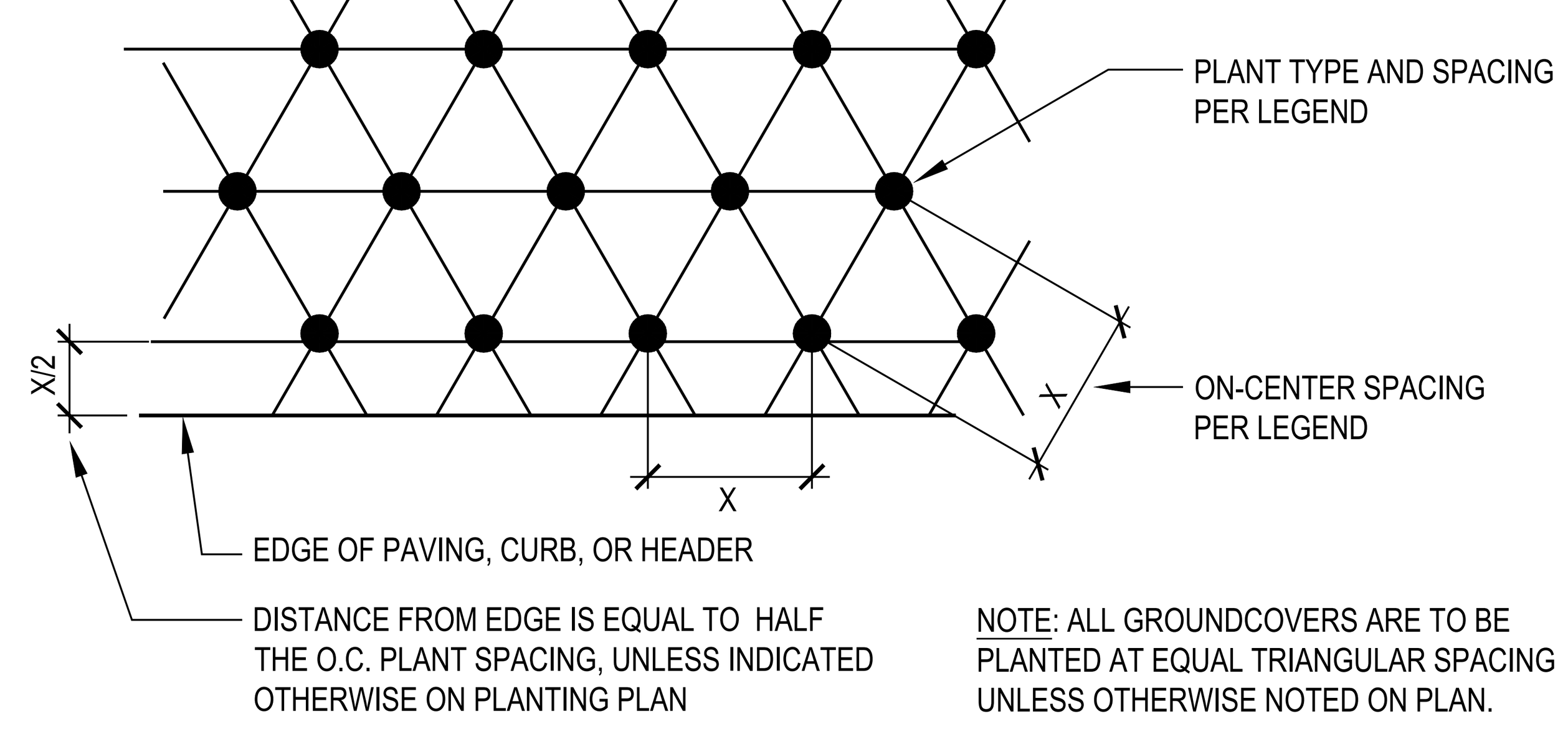
Stamp

DRAWING REVISIONS

	Description	Date
A		

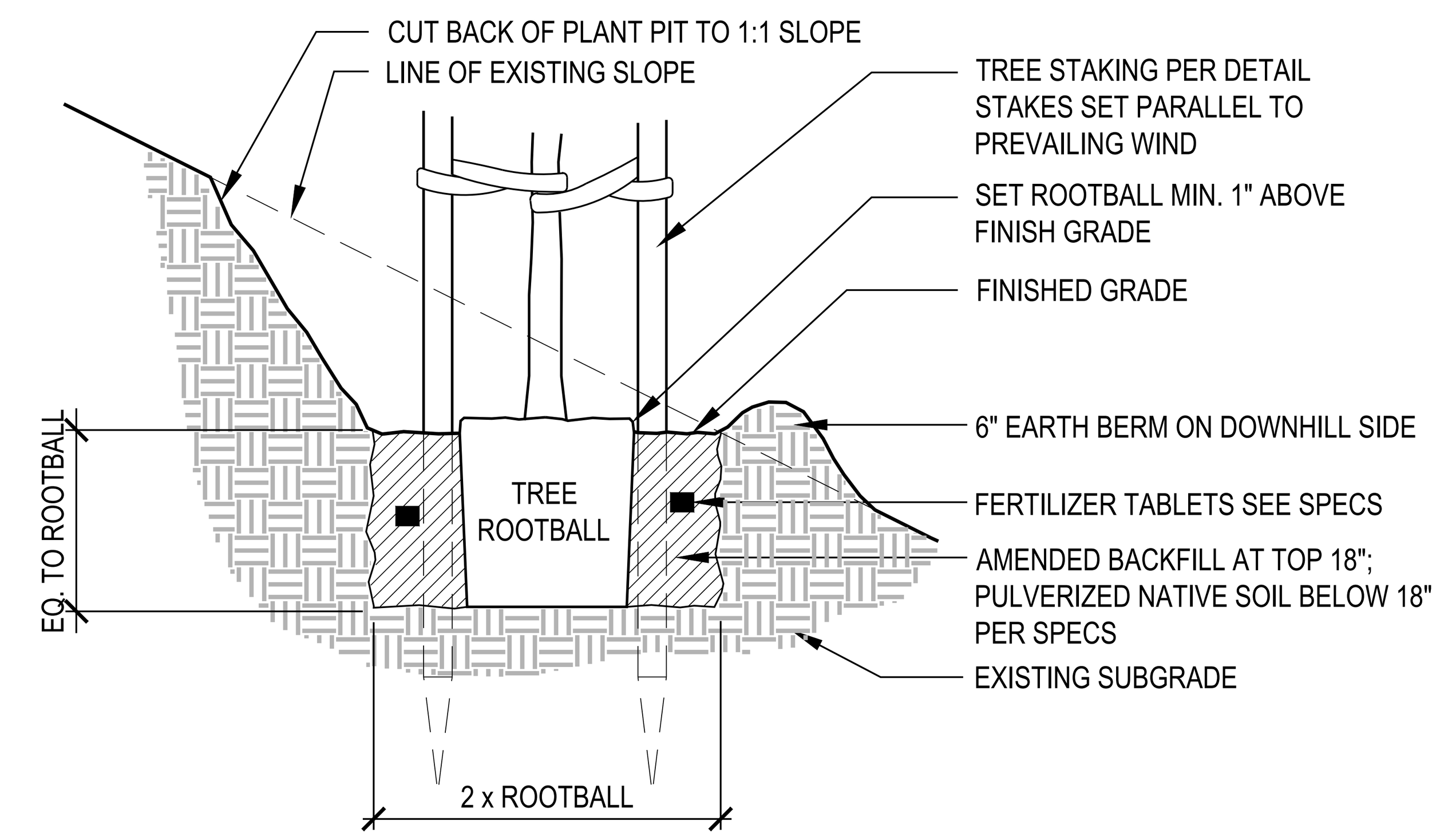
MADRAS SHELTER
CITY OF MADRAS
90% CONSTRUCTION DOCUMENTS

Drawing Title: LANDSCAPE PLANTING PLAN
Drawn By :
Project No. 021062.000
Date : 2022.08.17
Revised :
Sheet No. LP3.01



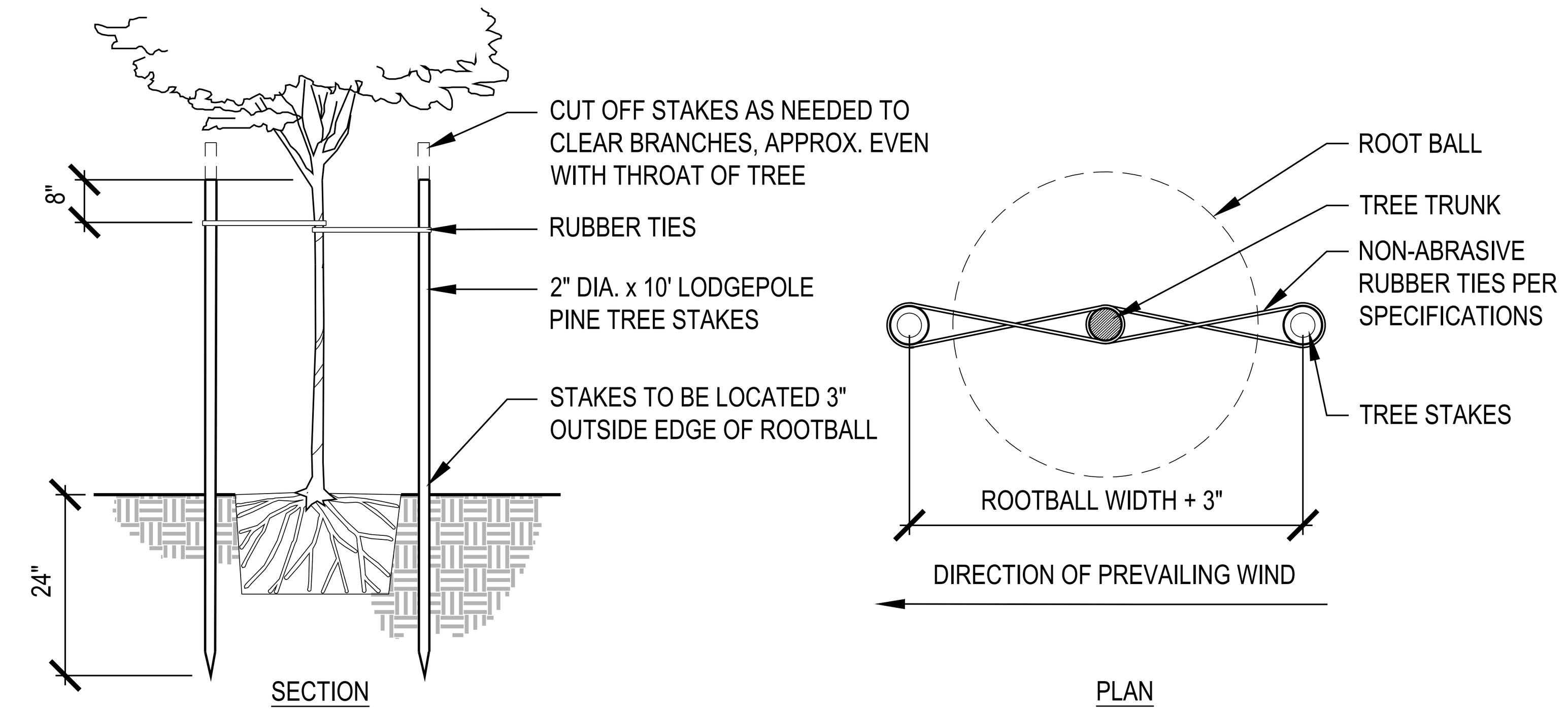
7 GROUNDCOVER PLANTING

SCALE: N.T.S.



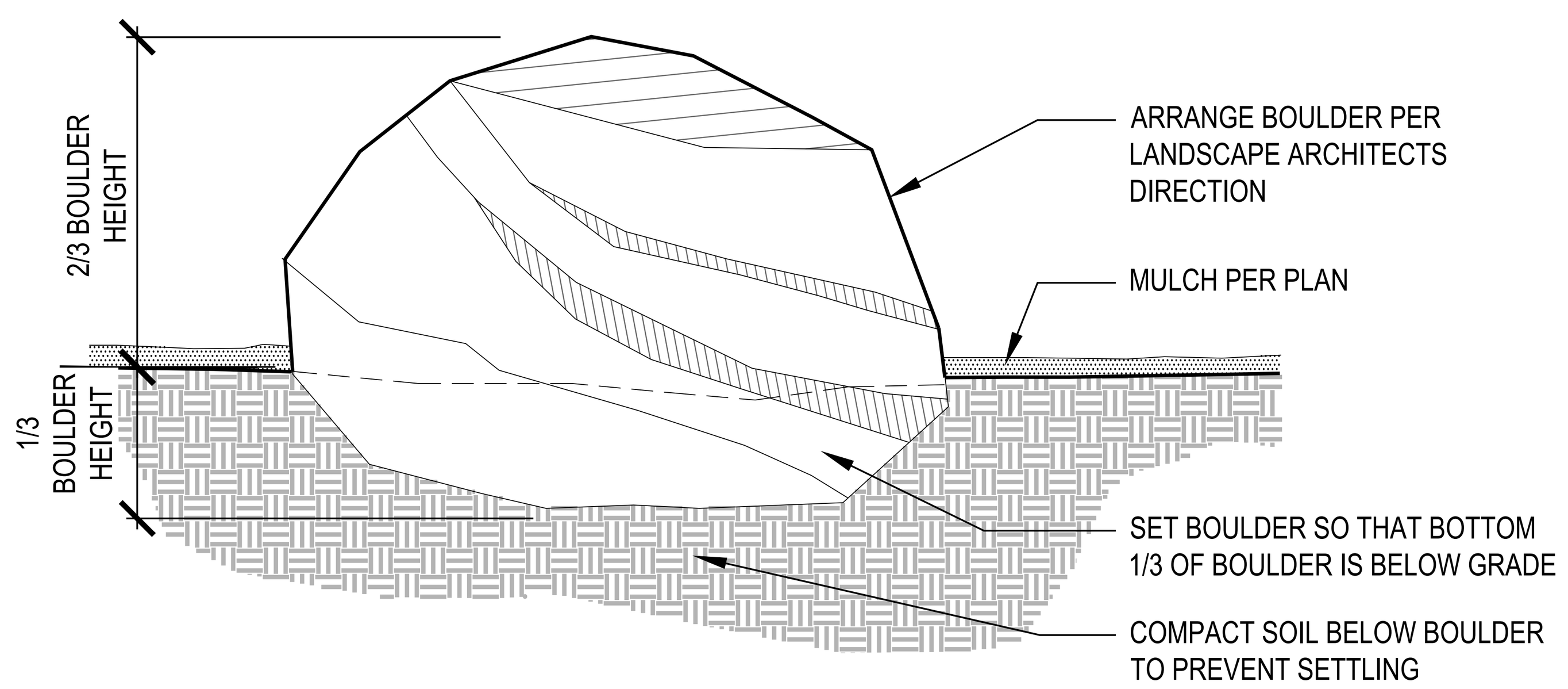
4 TREE PLANTING - SLOPES

SCALE: 1" = 1'-0"



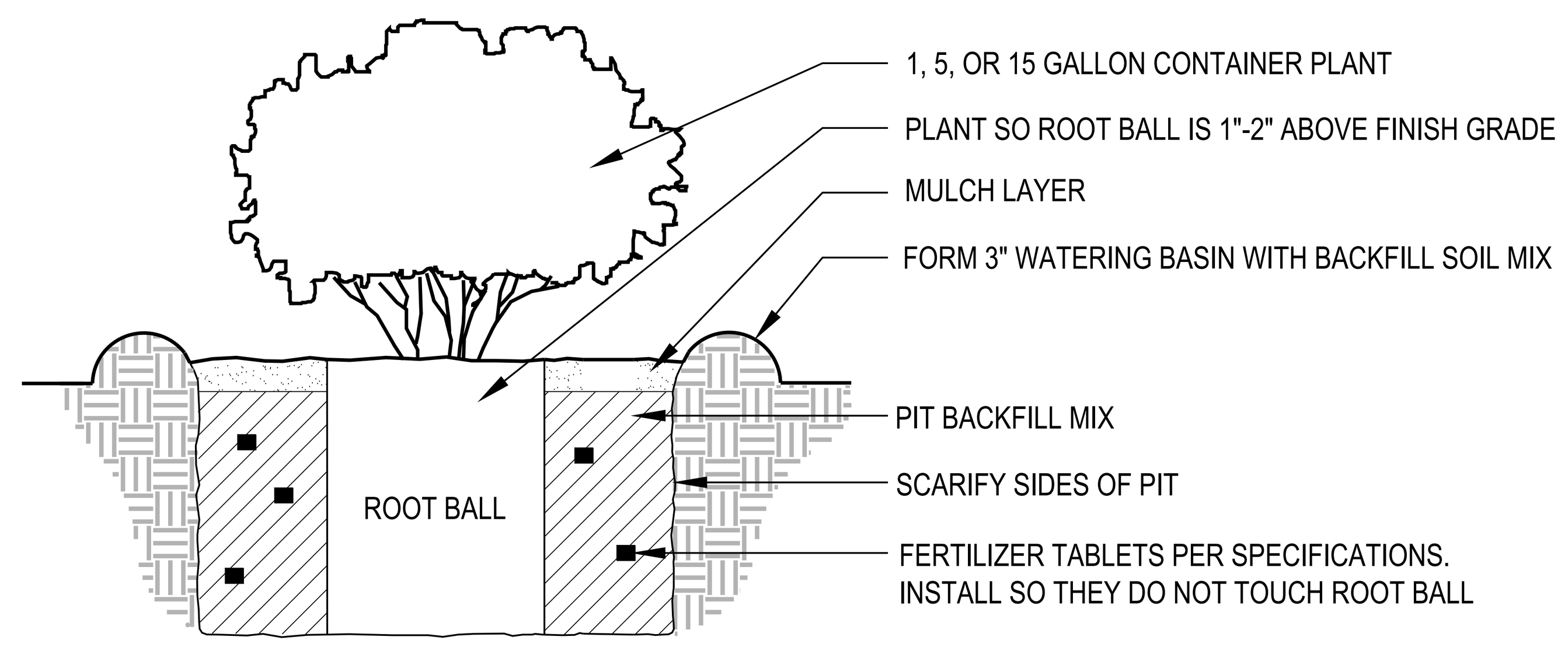
1 TREE STAKING - DOUBLE

SCALE: N.T.S.



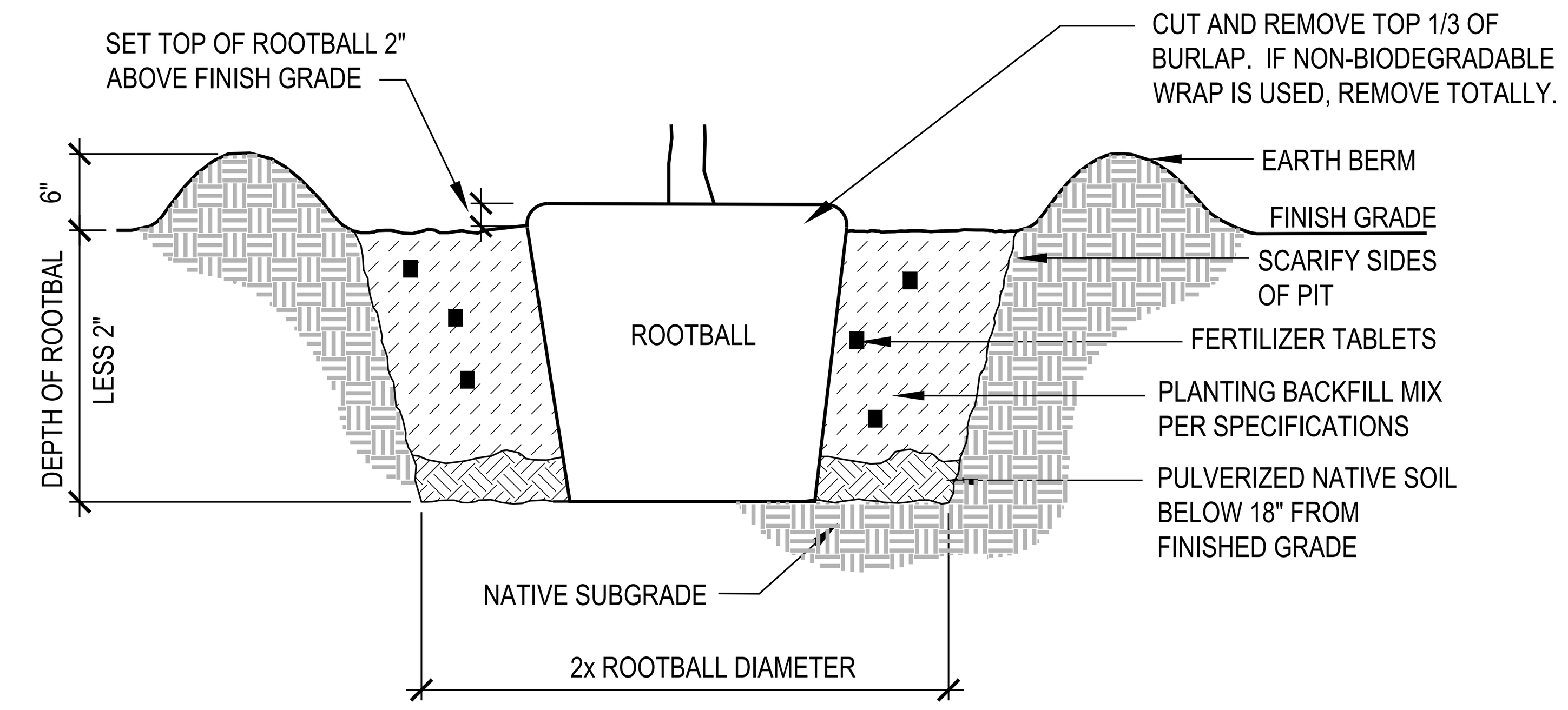
8 ACCENT BOULDER PLACEMENT

SCALE: N.T.S.



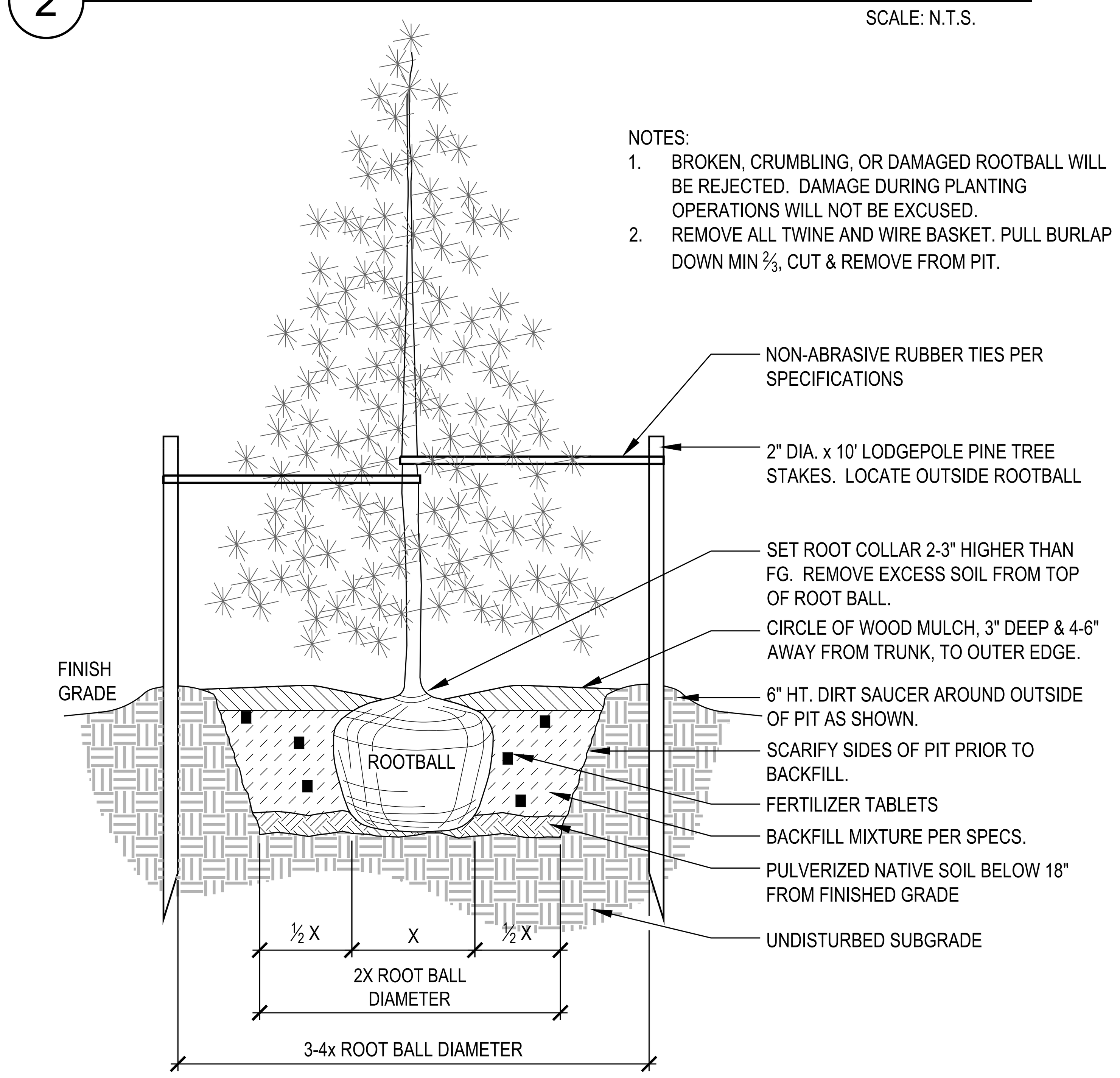
5 CONTAINER SHRUB AND GRASS PLANTING

SCALE: N.T.S.



2 TREE PLANTING

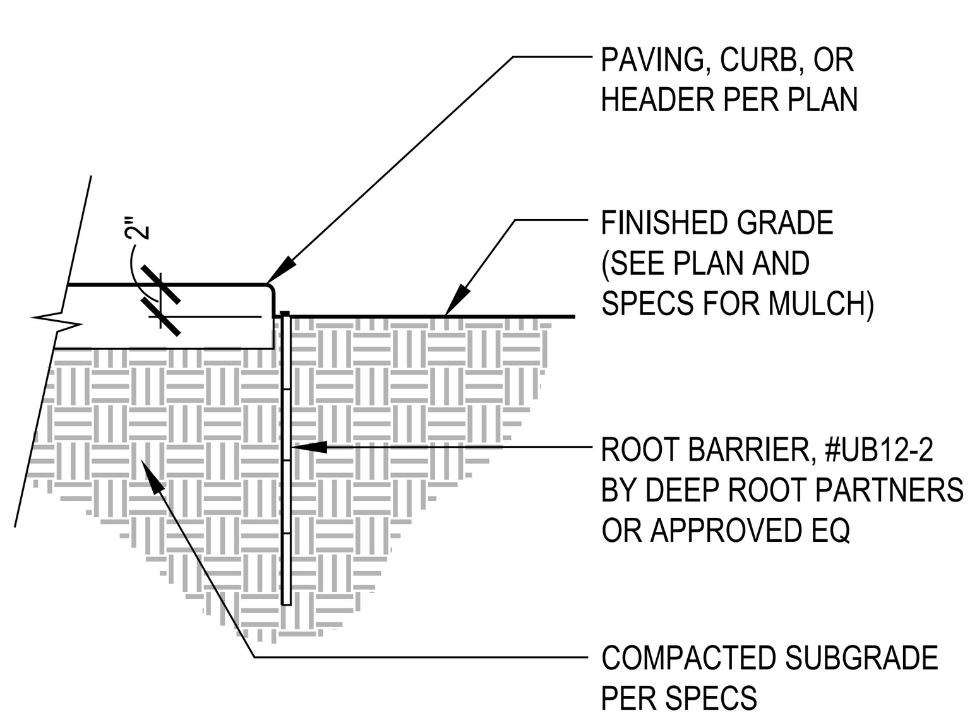
SCALE: N.T.S.



NOTES:
1. BROKEN, CRUMBLING, OR DAMAGED ROOTBALL WILL BE REJECTED. DAMAGE DURING PLANTING OPERATIONS WILL NOT BE EXCUSED.
2. REMOVE ALL TWINE AND WIRE BASKET. PULL BURLAP DOWN MIN ⅔, CUT & REMOVE FROM PIT.

3 CONIFEROUS TREE PLANTING

SCALE: 1" = 1'-0"

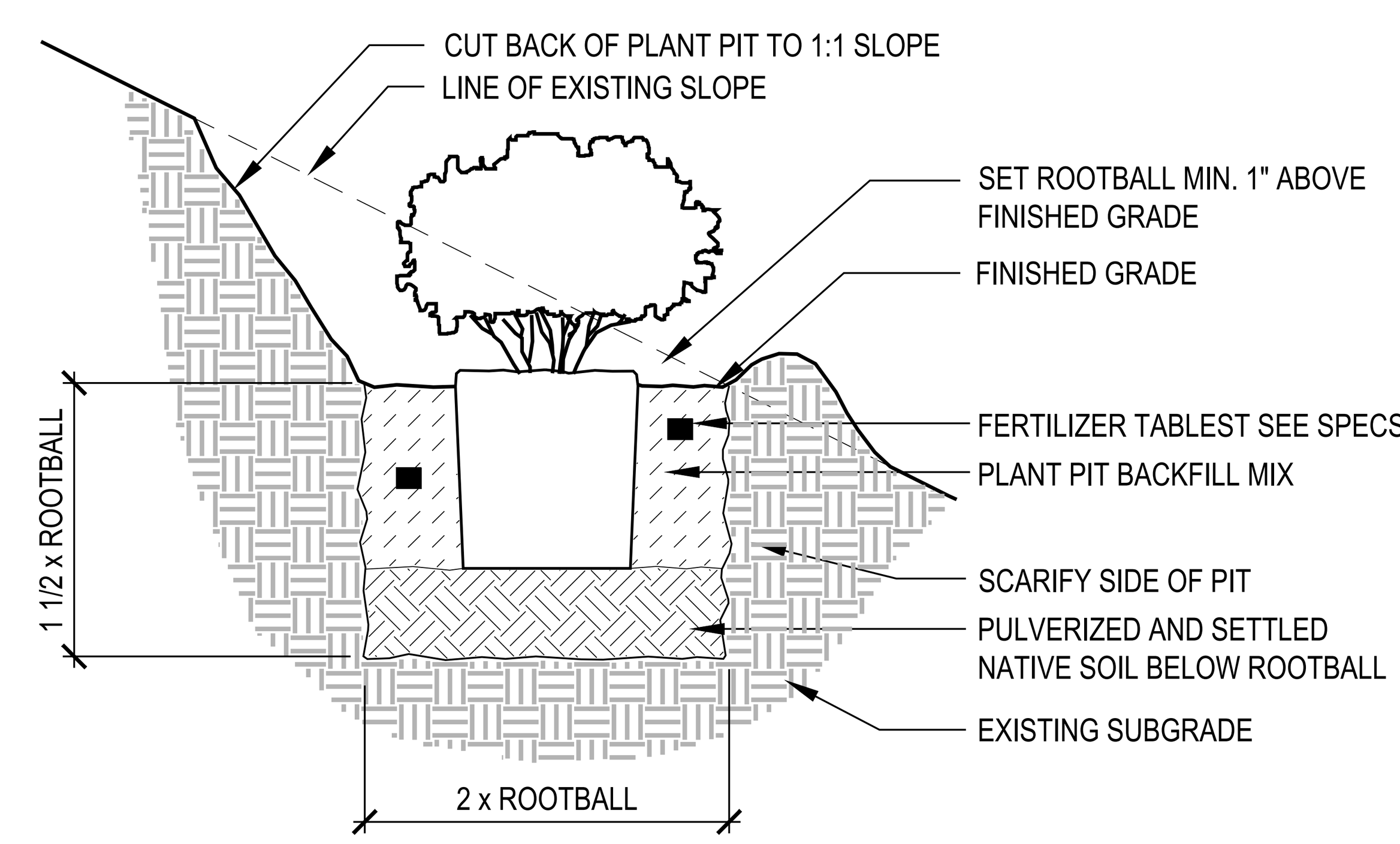


NOTES:

1. THE BARRIERS SHALL BE BLACK , INJECTION MOLDED PANELS, O.085" WALL THICKNESS IN MODULES 24 INCHES LONG BY 12 INCHES DEEP.
2. EACH PANEL SHALL HAVE: NOT LESS THAN FOUR (4) MOLDED INTEGRAL VERTICAL ROOT DEFLECTING RIBS, A DOUBLE TOP EDGE OF HORIZONTAL RIDGES, (9) MIN ANTI-LIFT GROUND LOCK TABS, AND REASSEMBLED SELF-LOCKING FLEXIBLE (0°-180°) JOINER STRIPS TO CONNECT ONE PANEL TO THE NEXT.
3. ROOT DEFLECTING RIBS SHALL BE FACING INWARDS TO THE ROOT BALL.
4. THE DOUBLE TOP EDGE SHALL BE 1/2 INCH ABOVE FINISH GRADE
5. PANELS SHALL BE CONNECTED WITH THE FLEXIBLE JOINER STRIPS IN THE LENGTH REQUIRED, USE ONLY FULL PANELS.

9 12" DEEP ROOT BARRIER

SCALE: 1"= 1'-0"



6 SHRUB PLANTING - SLOPES

SCALE: 1" = 1'-0"

SZABO LANDSCAPE ARCHITECTURE
1000 nw wall st., suite 205 | bend, or 97703 | www.szabo-la.com

BLRB architects
TACOMA 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE 505 W Riverside Suite 500 WA 98201 509.252.5080
PORTLAND 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND 721 SW Industrial Suite 130 OR 97702 541.330.6506

Stamp: REGISTERED LANDSCAPE ARCHITECT OREGON 02.24.2014 PRELIMINARY NOT FOR CONSTRUCTION

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
90% CONSTRUCTION DOCUMENTS

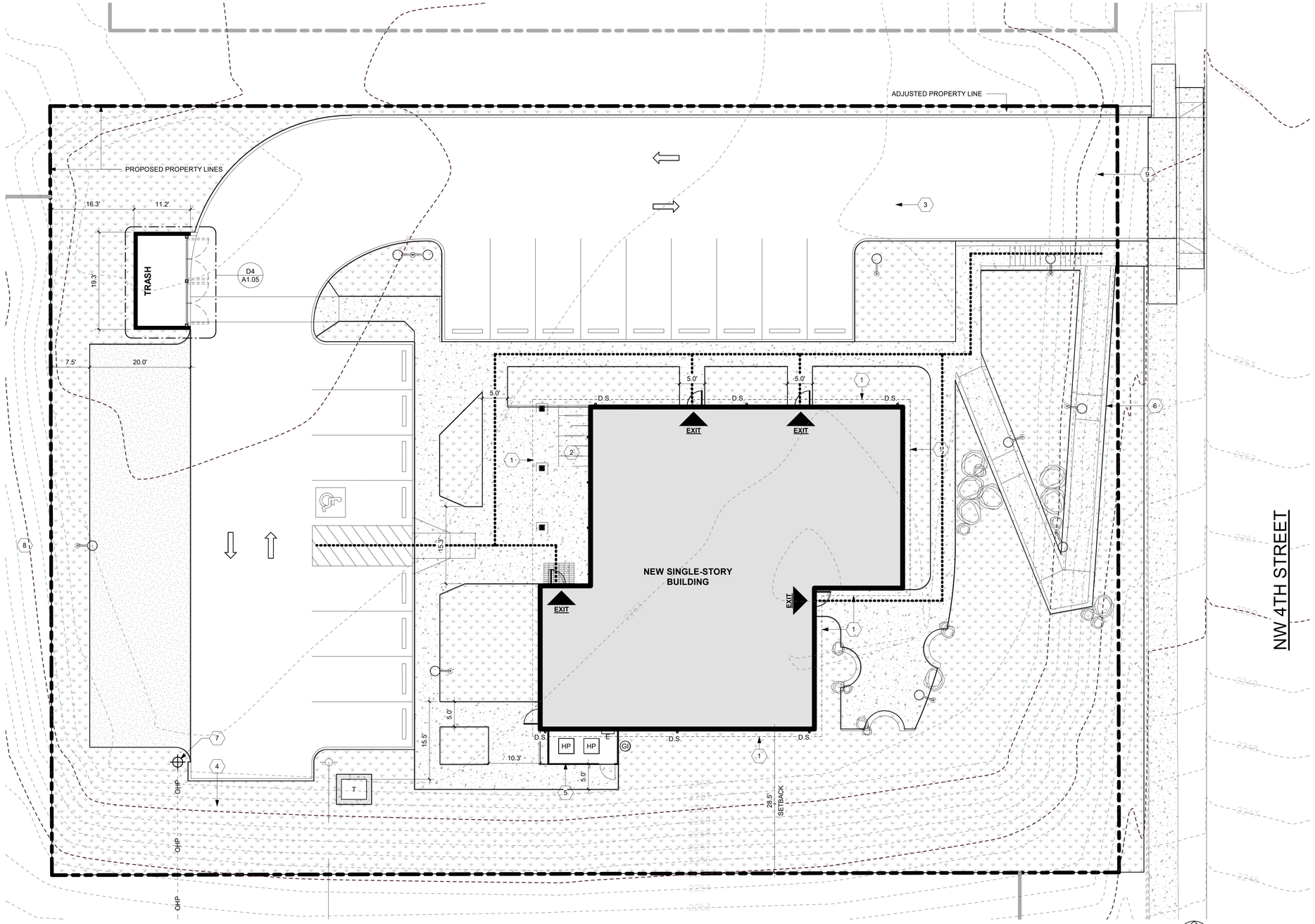
Drawing Title: PLANTING DETAILS
Date: 2022.08.17
Drawn By:
Revised:
Project No. 021062.000

Sheet No. LP4.01

BLRB ARCHITECTS, P.S.

SITE PLAN LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- UTILITY EASEMENT
- ACCESSIBLE PATH OF TRAVEL
- FENCE: +/-6' HEIGHT, DECORATIVE METAL
- W — WATER LINE
- SS — SANITARY SEWER LINE
- OHP — OVERHEAD POWER LINE
- FO — FIBER OPTIC LINE
- HMAC PAVEMENT - SEE CIVIL
- CONCRETE PAVEMENT - SEE CIVIL & LANDSCAPE
- AGGREGATE ROCK SURFACING - SEE CIVIL & LANDSCAPE
- LANDSCAPE AREA - SEE LANDSCAPE
- CLEAR VISION AREA - NO OBSTRUCTION ABOVE 3.5' HEIGHT
- POLE-MOUNTED LIGHTING ON RAISED CONCRETE POLE BASE
- PARKING SIGNAGE
- GI — GREASE INTERCEPTOR - SEE PLUMBING
- T — PAD MOUNTED TRANSFORMER - SEE ELECTRICAL
- HP — HEAT PUMP - SEE MECHANICAL
- E — ELECTRICAL METER



1 SITE PLAN
1" = 10'-0" @ FULL SIZE

SITE PLAN GENERAL NOTES

A. REFER TO CIVIL DRAWINGS FOR HORIZONTAL CONTROL INFORMATION, DRAINAGE, SLAB AND PAVING ELEVATIONS, PUBLIC WORK IMPROVEMENTS, AND SITE UTILITIES. REFER TO LANDSCAPE DRAWINGS FOR PLANTING AND IRRIGATION DESIGN. REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION AND SLAB DESIGN.
B. FOLLOW ALL RECOMMENDATIONS AND REQUIREMENTS OF THE GEOTECHNIAL INVESTIGATION REPORT.
C. SIDEWALKS AND RAMPS SHALL BE CONSTRUCTED TO THE FOLLOWING REQUIREMENTS:
   - MAXIMUM CROSS SLOPE OF SIDEWALKS & LANDINGS: 1:50
   - MAXIMUM SLOPE OF SIDWEALKS 1:20
   - MAXIMUM SLOPE OF RAMPS: 1:12
   - MAXIMUM SLOPE OF DISABLED PARKING STALLS: 2% IN ANY DIRECTION
   - 2% MAXIMUM SLOPE FOR 5'-0" IN DIRECTION OF TRAVEL AT ALL BUILDING ENTRANCES.
D. LIMITS OF WORK: THE CONTRACTOR SHALL CONFINE OPERATIONS AT THE SITE TO AREAS PERMITTED BY LAW, ORDINANCES, PERMITS AND THE CONTRACT DOCUMENTS.
E. STAGING AREA: THE CONTRACTOR AND SUBCONTRACTORS SHALL LIMIT STORAGE OF MATERIALS AND PORTABLE FIELD OFFICES WITHIN THE AREAS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
F. GENERAL CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE OR DISRUPT EXISTING UTILITIES, INCLUDING DRAINS, WHILE EXCAVATING OR GRADING DURING CONSTRUCTION. CONFIRM LOCATION OF EXISTING UTILITIES ON ADJACENT PROPERTIES.
G. PRIOR TO START OF WORK THE CONTRACTOR SHALL COORDINATE WITH EACH RESPECTIVE GOVERNING AUTHORITY IN VERIFYING THE LOCATION (INVERT ELEVATIONS, HORIZONTAL CONTROLS, EASEMENTS) OF EXISTING SANITARY AND STORM SEWER, WATER, NATURAL GAS, ELECTRICAL, FIBER OPTIC, TELEPHONE, OVERHEAD POWER LINES AND OTHER UTILITY SYSTEMS, BOTH ONSITE AND OFFSITE. THE CONTRACTOR SHALL COMPARE UTILITY INFORMATION WITH THE CONTRACT DOCUMENTS. IF A CONSTRUCTION CONFLICT IS DISCOVERED BETWEEN THE UTILITY INFORMATION OBTAINED AND THE CONTRACT DOCUMENTS NOTIFY THE ARCHITECT IMMEDIATELY.
H. EMERGENCY VEHICLE ACCESS: THE CONTRACTOR SHALL MAINTAIN FIRE TRUCK ACCESS TO THE SITE THROUGHOUT THE CONSTRUCTION PROCESS UNLESS AN ALTERNATE PLAN IS APPROVED BY THE FIRE DEPARTMENT.

PARKING PROVIDED

VEHICLE PARKING SPACE	COUNT
ADA	1
STANDARD	24

VEHICLE SPACES PROVIDED: 25

BICYCLE PARKING PROVIDED:
3 RACKS = 6 SPACES TOTAL

SITE PLAN KEYNOTES

1. LINE OF ROOF ABOVE
2. BICYCLE PARKING
3. CANTILEVER GATE
4. TRASH ENCLOSURE
5. MECHANICAL ENCLOSURE
6. SITE WALL - ASSUMING PRECAST LANDSCAPE BLOCKS UP TO 3'-0" HEIGHT, +/-110' LENGTH
7. RELOCATED POWER POLE - SEE CIVIL & ELECTRICAL
8. DRAINAGE SWALE - SEE CIVIL
9. DRIVEWAY APRON - SEE CIVIL

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

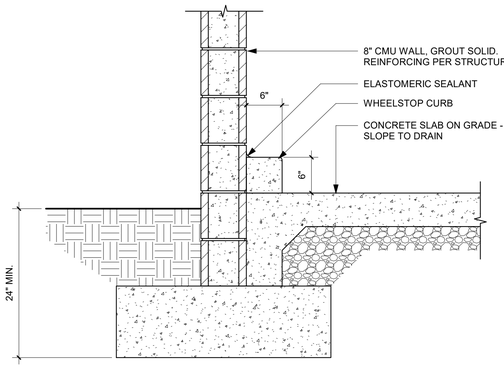
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: SITE PLAN
Date: 08/17/2022
Revised:
Drawn By: EN
Project No. 022044.000

Sheet No. A1.01

BLRB ARCHITECTS, P.S.

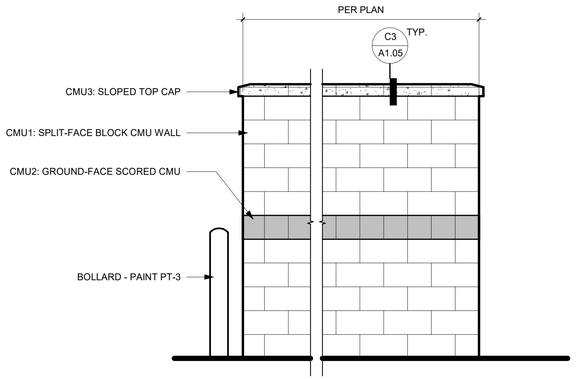
8/22/2022 8:14:05 AM



A1 ENCLOSURE CMU WALL FOOTING

1" = 1'-0" @ FULL SIZE

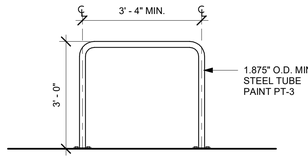
0' 3" 6" 1'



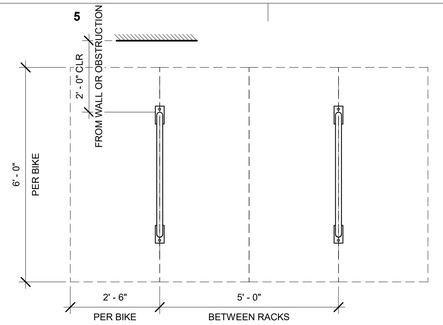
A3 ENCLOSURE SIDE ELEVATION - REAR SIM.

1/2" = 1'-0" @ FULL SIZE

0' 6" 1' 2'



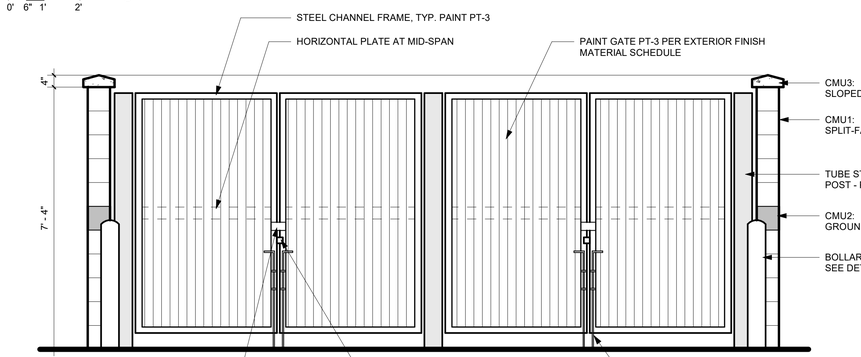
NOTE:
BIKE RACK DESIGN TO CONFORM CITY OF MADRAS STANDARDS AS LISTED IN MDC 18.25.070 (5)



A4 BIKE RACK

1/2" = 1'-0" @ FULL SIZE

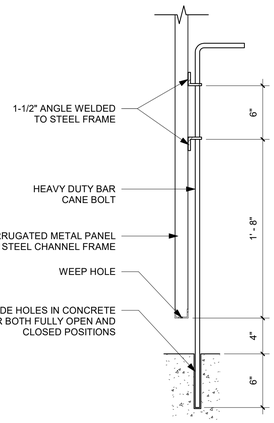
0' 6" 1' 2'



B4 ENCLOSURE FRONT ELEVATION

1/2" = 1'-0" @ FULL SIZE

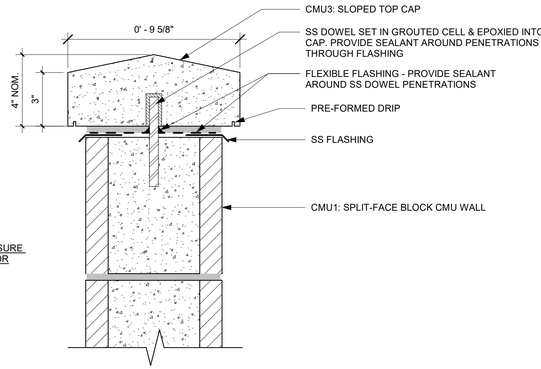
0' 6" 1' 2'



C1 ENCLOSURE - SECTION AT CANE BOLT

1 1/2" = 1'-0" @ FULL SIZE

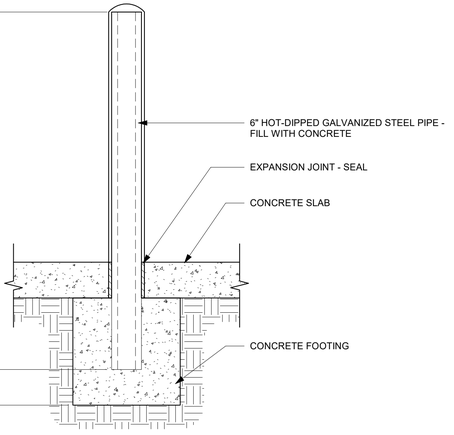
0' 2" 4" 8"



C3 ENCLOSURE CAP

3" = 1'-0" @ FULL SIZE

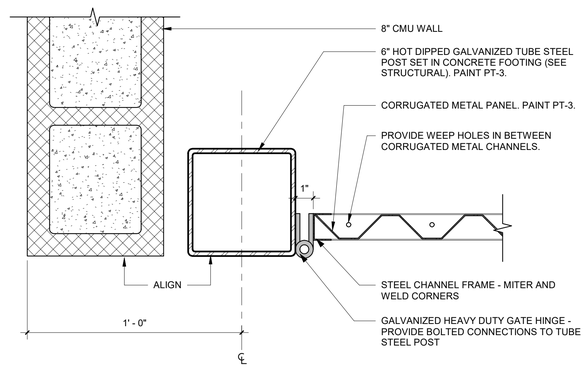
0' 1" 2" 4"



D1 ENCLOSURE BOLLARD

1" = 1'-0" @ FULL SIZE

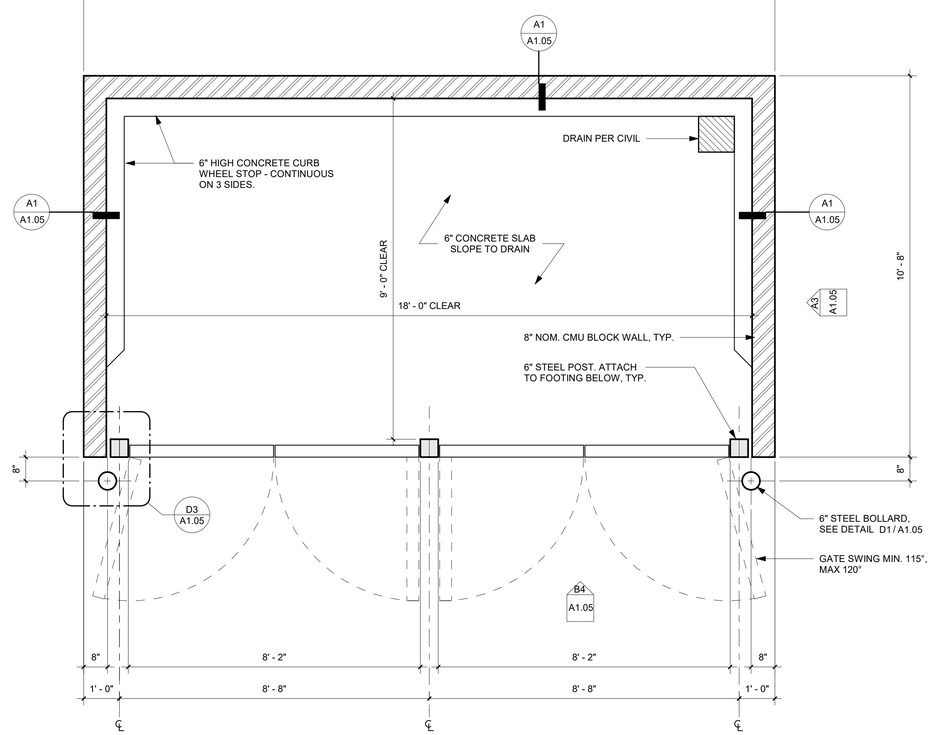
0' 3" 6" 1'



D3 ENCLOSURE GATE HINGE

3" = 1'-0" @ FULL SIZE

0' 1" 2" 4"



D4 ENCLOSURE FLOOR PLAN

1/2" = 1'-0" @ FULL SIZE

0' 6" 1' 2'

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980

PORTLAND | 623 SW Morrison St. Suite 350 OR 97205 503.595.0270

BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: SITE DETAILS

Drawn By : Author

Project No. 022044.000

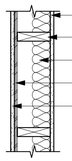
Date : 08/17/2022

Revised :

Sheet No. A1.05

8/22/2022 8:14:05 AM

INTERIOR FIRE-RATED WALL ASSEMBLIES

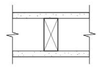
WALL TYPE	ASSEMBLY	DESCRIPTION
FIRE-RATED ASSEMBLY	TEST SOURCE: UL DESIGN U-305 GA FILE NO. WP 3605	1-HOUR RATED INTERIOR WALL
4W3 / 6W3		TYPE 'X' GYPSUM BOARD (5/8") WOOD STUDS @ 16" O.C. 3" MINERAL OR GLASS FIBER INSULATION PLYWOOD SHEATHING PER STRUCTURAL TYPE 'X' GYPSUM BOARD (5/8")

GA FILE NO. WP 3510	GENERIC	1 HOUR FIRE

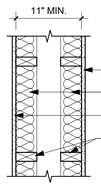
GYPSUM WALLBOARD, WOOD STUDS

Fire Design:
One layer 5/8″ type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of 2 × 4 wood studs 24″ o.c. with 6d coated nails, 1-7/8″ long, 0.0915″ shank, 1/4″ heads, 7″ o.c.

Joints staggered 24″ on opposite sides. **(LOAD-BEARING)**



Thickness: 4-7/8″ (Fire)
Approx. Weight: 7 psf (Fire)
Fire Test: UL R3501-47, -48, 9-17-65, UL Design U309, UL R1319-129, 7-22-70, UL Design U314

FIRE-RATED ASSEMBLY	TEST SOURCE: UL DESIGN U-305 (SIM) GA FILE NO. WP 3370	1-HOUR RATED PLUMBING WALL
4WW2		TYPE 'X' GYPSUM BOARD (5/8") 3" MINERAL OR GLASS FIBER INSULATION TYPE 'X' GYPSUM BOARD (5/8") WOOD STUDS @ 16" O.C.

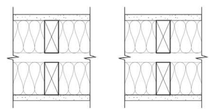
GA FILE NO. WP 3269	GENERIC	1 HOUR FIRE	50 to 54 STC SOUND

GYPSUM WALLBOARD, WOOD STUDS, INSULATION

Fire Design:
One layer 5/8″ type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of double row of 2 × 4 wood studs 16″ o.c. on separate plates 1″ apart with 2″ Type W screws 7″ o.c. Two layers 3.5″ unfaced glass fiber insulation friction fit on both sides of cavity.

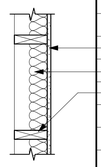
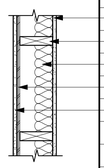
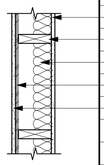
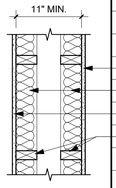
Joints staggered 16″ on opposite sides. Horizontal bracing required at mid-height. **(LOAD-BEARING)**

Sound Design:
Sound tested as constructed for fire.

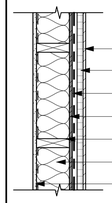


Thickness: 9-1/2″ (Fire and Sound)
Approx. Weight: 8.5 psf (Fire and Sound)
Fire Test: UL R4024, 10-31-68 UL Design U341,
Sound Test: NOAL 17-0837, 8-25-17

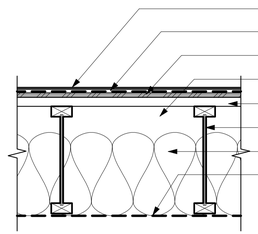
INTERIOR WALL ASSEMBLIES (PLAN VIEW)

WALL TYPE	ASSEMBLY	DESCRIPTION
		INTERIOR FURRING WALL
4W1 / 6W1		GYPSUM BOARD (5/8") 3" MINERAL OR GLASS FIBER INSULATION WOOD STUDS @ 16" O.C.
		NON-RATED INTERIOR WALL
4W2 A / 6W2 A		GYPSUM BOARD (5/8") WOOD STUDS @ 16" O.C. 3" MINERAL OR GLASS FIBER INSULATION PLYWOOD SHEATHING PER STRUCTURAL GYPSUM BOARD (5/8")
		INTERIOR SHEAR WALL
4W2 S / 6W2 S		TYPE 'X' GYPSUM BOARD (5/8") WOOD STUDS @ 16" O.C. 3" MINERAL OR GLASS FIBER INSULATION PLYWOOD SHEATHING PER STRUCTURAL TYPE 'X' GYPSUM BOARD (5/8")
		PLUMBING WALL
4WW1		GYPSUM BOARD (5/8") 3" MINERAL OR GLASS FIBER INSULATION GYPSUM BOARD (5/8") WOOD STUDS @ 16" O.C.

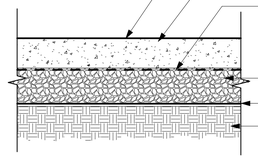
EXTERIOR WALL ASSEMBLIES (PLAN VIEW)

WALL TYPE	ASSEMBLY	DESCRIPTION
		EXTERIOR FIBER CEMENT SIDING
E6W1 T		CLADDING PER ELEVATIONS RIGID INSULATION (1") (R-5 CI MIN.) VAPOR-PERMEABLE AIR BARRIER MEMBRANE (WRB) PLYWOOD SHEATHING PER STRUCTURAL WOOD FRAMING PER STRUCTURAL R-21 MIN. THERMAL BATT INSULATION W/ FSK FACER GYPSUM BOARD (5/8")

ROOF ASSEMBLIES (SECTION VIEW)

ROOF TYPE	ASSEMBLY	DESCRIPTION
		ASPHALT ROOF
R1		ASPHALT SHINGLES UNDERLAYMENT PLYWOOD SHEATHING - SEE STRUCTURAL VENTED CAVITY AT EACH JOIST BAY 1.5" WOOD PURLINS @ 24" O.C. ROOF JOIST - SEE STRUCTURAL R-49 MIN. BATT INSULATION CLASS II VAPOR RETARDER (AIR BARRIER)

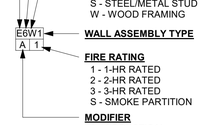
FLOOR ASSEMBLIES (SECTION VIEW)

FLOOR TYPE	ASSEMBLY	DESCRIPTION
		SLAB ON GRADE
F1		SEE PLANS FOR FLOOR FINISH CONCRETE SLAB (SEE STRUCTURAL) UNDERSLAB VAPOR BARRIER GRANULAR FILL (SEE GEOTECH) GEOTEXTILE SEPARATION FABRIC (SEE GEOTECH) COMPACTED SOIL (SEE CIVIL) **NOTE:** PROVIDE XPS RIGID INSULATION (R-15) FOR 24 IN. VERTICALLY AT FOUNDATION WALL. NOT SHOWN, SEE DETAILS

WALL TYPE GENERAL NOTES

1. EXTERIOR FINISH MATERIALS PER ELEVATIONS.
2. FLOOR TRACKS & SILL PLATES SHALL BE ANCHORED TO THE SLAB AT SPACING NO GREATER THAN 24" O.C.
3. PENETRATIONS IN EXTERIOR WALLS SHALL BE SEALED AIR TIGHT WITH SPRAY FOAM, SEALANT, OR WRB FLASHING COMPONENT.
4. TOILET ROOMS SHALL HAVE TILE BACKER BOARD BEHIND CERAMIC WALL TILE (WHERE OCCURS) & MOISTURE RESISTANT GWB AT ALL OTHER SURFACES.
5. PROVIDE CEMENT BOARD BEHIND ALL CERAMIC WALL TILE LOCATIONS (WHERE OCCURS).
6. PROVIDE TYPE 'X' MOISTURE RESISTANT GWB AT THE FOLLOWING LOCATIONS: BEHIND COOLER/FREEZERS, WALLS ADJACENT TO SINKS AND SINK CABINETS, WALLS ADJACENT TO FLOOR SINKS, WALLS ADJACENT TO DRINKING FOUNTAINS, ANY WET/EXTREME COLD AREAS.
7. SEE FINISH SCHEDULE & INTERIOR ELEVATIONS (A5.00 SERIES) FOR FINISHES, SUBSTRATES AND ADDITIONAL NOTES ON SPECIFIC TYPES OF GWB.
8. PROVIDE SOLID BLOCKING FOR ALL WALL-MOUNTED CABINETS, EQUIPMENT, WAINSCOTTING & ACCESSORIES.
9. SEE CODE SHEETS (A0.0X SERIES) FOR BUILDING CODE ANALYSIS.
10. STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER FRAMING & PLYWOOD THICKNESS SHOWN ON ARCHITECTURAL WALL TYPES.
11. REFER TO STRUCTURAL DRAWINGS FOR STUD SPACING, WALL BRACING, AND SHEAR PANEL LOCATIONS & REQUIREMENTS
12. AT INTERIOR BEARING WALLS WITHOUT SOUND INSULATION: REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS. CARRY GYP BOARD TO AT LEAST 6" ABOVE CEILING (UON). IF THERE IS NO CEILING, CARRY GYP BOARD UP TO STRUCTURAL DECK ABOVE.
13. AT INTERIOR BEARING WALLS WITH SOUND INSULATION: REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS. CARRY GYP BOARD TO AT LEAST 6" ABOVE CEILING (UON) AND SOUND INSULATION TO THE UNDERSIDE OF STRUCTURAL DECK ABOVE. IF THERE IS NO CEILING, CARRY GYP BOARD UP TO STRUCTURAL DECK ABOVE.
14. AT FIRE RATED WALLS: CARRY ENTIRE ASSEMBLY UP TO STRUCTURAL DECK ABOVE OR BEYOND ROOF DECK PER DRAWINGS. PROVIDE FIRE-STOPPING AT PENETRATIONS & PERIMETER. SEE FIRESTOPPING SCHEDULE.
15. AT EXTERIOR WALLS: CARRY GYP BOARD UP TO THE STRUCTURAL DECK ABOVE. TAPE WALL VAPOR RETARDERS TO ROOF VAPOR RETARDERS.
16. PROVIDE ALL NECESSARY FRAMING TO EXTEND FINISHES TO DECK WHERE REQUIRED, INCLUDING AROUND INTERSECTING STRUCTURE.
17. PROVIDE ACOUSTICAL CAULK AT ALL GWB-TO-FLOOR & GWB-TO-DECK INTERSECTIONS.
18. SEAL ALL WALLS, ROOF & SLAB PENETRATIONS WITH SEALANT. TAPE ALL PENETRATIONS THROUGH VAPOR RETARDERS AND AIR BARRIERS w/ MANUFACTURER'S TAPE. TYPICAL AT WALLS, ROOFS & SLABS.

ASSEMBLY TAG LEGEND



FIRE STOPPING SCHEDULE

	BUILDING ELEMENT	UL #
1-HR FIRE RATED WALL	METAL PIPE: MAX 12" STEEL; CAST IRON; MAX 4" COPPER; STEEL CONDUIT 6" OR MAX 4" EMT (SLEEVED)	W-L-1524
	PLASTIC PIPE: 2" MAX	W-L-2543
	CABLE BUNDLE: 4" DIA. MAX	W-L-3195
	METAL PIPE W/ GLASS-FIBER INSULATION: MAX 8" STEEL; MAX 4" COPPER	W-L-5039
	SHEET METAL DUCT: RECTANGULAR MAX 30"x18"	W-L-7091
	SHEET METAL DUCT: ROUND; 6" MAX SPIRAL	W-L-7032
	SHEET METAL DUCT: RECTANGULAR; MAX 12"x12"	W-L-7052
	SHEET METAL DUCT INSULATED: ROUND; MAX 12" STEEL; MAX 6" COPPER PIPE AND TUBE	W-L-5011
	ELECTRICAL BOXES	FIRESTOP PUTTY PAD UL-CLIV
	ELECTRICAL WIRES	W-L-3015
	PLASTIC PIPE: 3" MAX	W-L-2284
1-HR FIRE RATED FLOOR-CEILING ASSEMBLY	METAL DUCT: 4" MAX	F-C-7017
	PLASTIC PIPE: 3" MAX	F-C-2027
	PLASTIC PIPE: 4" MAX	F-C-2035
	ELECTRICAL WIRES	F-C-3017
	TOILET FLANGE	F-C-1162

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Square #150 | OR 97702 | 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

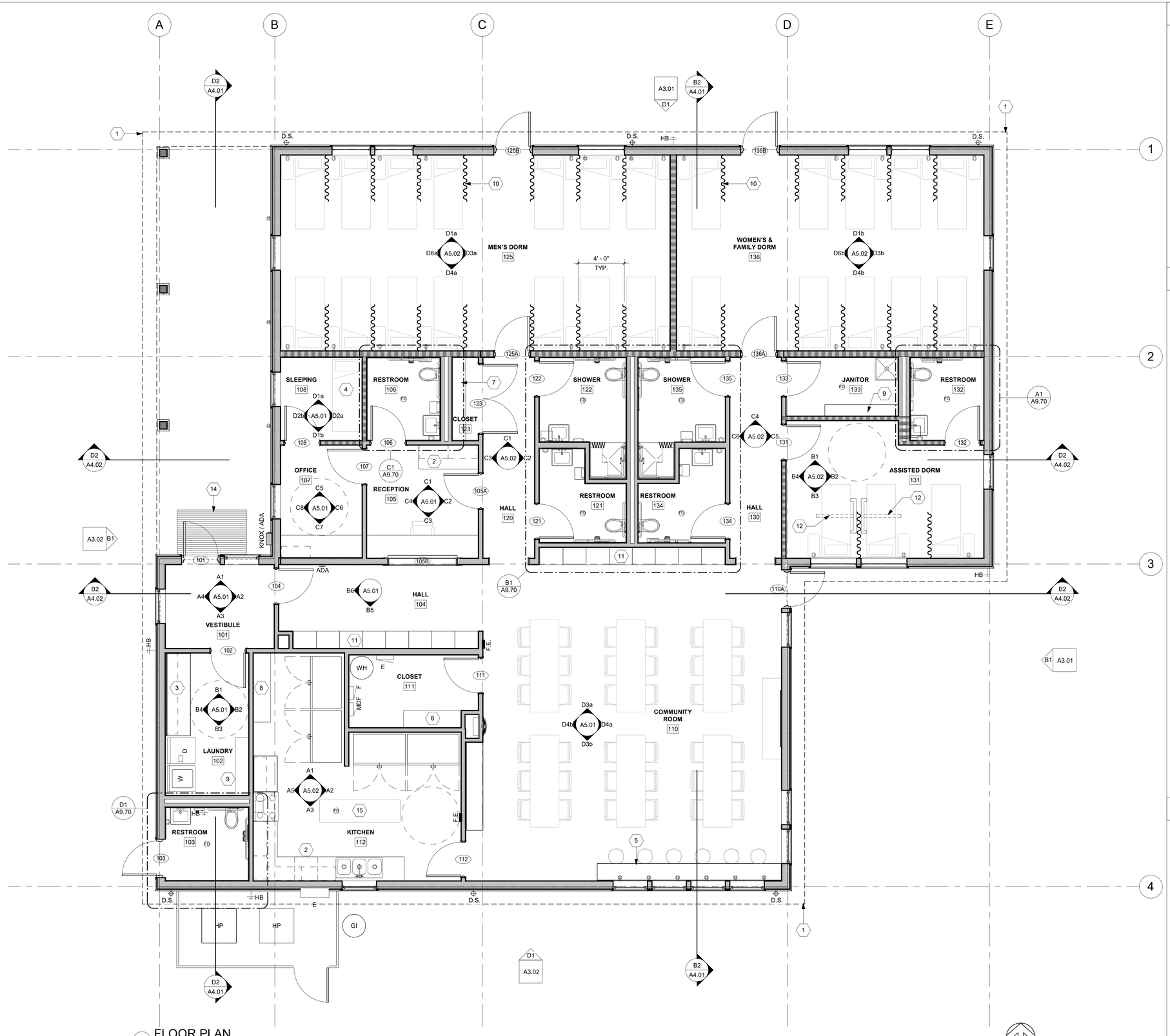
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ASSEMBLY TYPES
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:

Sheet No.
A2.00

8/22/2022 8:14:07 AM

BLRB ARCHITECTS, P.S.



1 FLOOR PLAN

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

FLOOR PLAN GENERAL NOTES

A. DRAWINGS ARE SHOWN TO SCALE AS NOTED AS AIDS IN DETERMINING SIZE AND PROPORTION. ONLY WRITTEN DESCRIPTIONS AND SIZES SHALL BE UTILIZED FOR CONSTRUCTION. DRAWINGS SHALL NOT BE SCALED.
- UNLESS NOTED OTHERWISE, DIMENSIONS ON PLANS ARE:
- FACE OF STUD (F.O.S.)
- FACE OF CONCRETE (F.O.C.)

B. FIXTURES AND EQUIPMENT SHOWN ARE FOR COORDINATION PURPOSES ONLY. REFER TO THE MANUFACTURER'S PRODUCT DATA, ENGINEERING DRAWINGS, AND SPECIFICATIONS FOR FIXTURE AND EQUIPMENT DESCRIPTIONS AND LOCATIONS.

C. PRESERVATION OF ADJACENT OR EXISTING CONSTRUCTION:
- AVOID DAMAGE TO EXISTING STRUCTURES, SIDEWALKS, CURBS, PAVING AND LANDSCAPING.
- PATCH, REPAIR, OR REPLACE ANY ITEMS DAMAGED, OR AS DIRECTED BY THE PROPERTY OWNER.

D. AVOID UNNECESSARY DISRUPTIONS TO THE FUNCTIONS AND ACTIVITIES OF ADJACENT BUILDINGS.

E. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION. BRING DISCREPANCIES OR CONFLICTING DATA TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCING WORK.

F. UNLESS NOTED OTHERWISE, INSTALL DOORS WITH 4" FROM HINGE SIDE OF DOOR TO ADJACENT WALL FRAMING.

G. CONTRACTOR TO VERIFY SIZES OF ROUGH DOOR AND WINDOW OPENINGS PRIOR TO ORDERING DOORS AND WINDOWS.

FLOOR PLAN LEGEND

- E — ELECTRICAL PANEL
- E — ELECTRICAL METER
- F — FIRE ALARM PANEL
- MDF — MDF CABINET
- DUPLEX RECEPTACLE
- QUADPLEX RECEPTACLE
- ELECTRIC RANGE OVEN
- WH — WATER HEATER
- W — WASHER - BASIS OF DESIGN: WHIRLPOOL CHW9160GW
- D — DRYER - BASIS OF DESIGN: WHIRLPOOL CSP2971HQ STACK DRYER
- REFRIGERATOR - BASIS OF DESIGN: ARCTIC AIR AR 49 54" (OFCI)
- REFRIGERATOR - BASIS OF DESIGN: ARCTIC AIR AF 49 54" (OFCI)
- HB — HOSE BIB
- MOP SINK
- WALL-HUNG TOILET
- WALL-HUNG LAVATORY
- D.S. — DOWNSPOUT - CONNECT TO STORM
- FD — FLOOR DRAIN
- F.E. — TYPE 2A FIRE EXTINGUISHER IN SEMI-RECESSED CABINET
- KNOX — FIRE DEPARTMENT KNOX BOX
- BOTTLE-FILL FOUNTAIN ELKAY EZH20-S
- TRANSFER SHOWER INSERT, SEE PLUMBING

NOTE : NOT ALL SYMBOLS ARE USED IN PLAN

FLOOR PLAN KEYNOTES

1. LINE OF ROOF ABOVE
2. BASE CABINET W/ PLAM COUNTER, UPPER CABINETS
3. BASE CABINET W/ PLAM COUNTER, WHITE MELAMINE ADJ. SHELVES ABOVE
4. MURPHY BED - PROVIDE BLOCKING IN WALL
5. PLAM COUNTER - SEE ELEVATION A5.01 / A9.01 FOR DETAILS
6. HM DOOR WITH FULL LITE AND HM FRAME WITH FULL RELITE
7. ADJUSTABLE WIRE SHELVING WITH ROD
8. WIRE SHELVING - 18"D
9. WIRE SHELVIING - 12"D
10. CEILING MOUNTED PRIVACY CURTAIN - SEE A9.01 FOR DETAILS
11. 2-TIER METAL LOCKER (EACH LOCKER 18" DEEP x 24" WIDE x 36" HEIGHT)
12. MOBILITY AID - FREE-STANDING BARIATIRC TRAPEZE (1,000# CAPACITY)
13. NOT USED
14. RECESSED SERRATED ALUMINUM WALK-OFF GRATE
15. FREESTANDING STAINLESS STEEL FOOD PREP TABLE WITH UNDERSHELF
16.

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

SPOKANE | 925 W Riverside Suite 500 WA 98201 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270

BEND | 721 SW Industrial Way Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

Description	Date	#

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: FLOOR PLAN

Drawn By: EN

Project No. 022044.000

Date: 08/17/2022

Revised:

Sheet No. A2.10

8/22/2022 8:14:11 AM

FLOOR PLAN GENERAL NOTES

A. DRAWINGS ARE SHOWN TO SCALE AS NOTED AS AIDS IN DETERMINING SIZE AND PROPORTION. ONLY WRITTEN DESCRIPTIONS AND SIZES SHALL BE UTILIZED FOR CONSTRUCTION. DRAWINGS SHALL NOT BE SCALED.
- UNLESS NOTED OTHERWISE, DIMENSIONS ON PLANS ARE:
- FACE OF STUD (F.O.S.)
- FACE OF CONCRETE (F.O.C.)

B. FIXTURES AND EQUIPMENT SHOWN ARE FOR COORDINATION PURPOSES ONLY. REFER TO THE MANUFACTURER'S PRODUCT DATA, ENGINEERING DRAWINGS, AND SPECIFICATIONS FOR FIXTURE AND EQUIPMENT DESCRIPTIONS AND LOCATIONS.

C. PRESERVATION OF ADJACENT OR EXISTING CONSTRUCTION:
- AVOID DAMAGE TO EXISTING STRUCTURES, SIDEWALKS, CURBS, PAVING AND LANDSCAPING.
- PATCH, REPAIR, OR REPLACE ANY ITEMS DAMAGED, OR AS DIRECTED BY THE PROPERTY OWNER.

D. AVOID UNNECESSARY DISRUPTIONS TO THE FUNCTIONS AND ACTIVITIES OF ADJACENT BUILDINGS.

E. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION. BRING DISCREPANCIES OR CONFLICTING DATA TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCING WORK.

F. UNLESS NOTED OTHERWISE, INSTALL DOORS WITH 4" FROM HINGE SIDE OF DOOR TO ADJACENT WALL FRAMING.

G. CONTRACTOR TO VERIFY SIZES OF ROUGH DOOR AND WINDOW OPENINGS PRIOR TO ORDERING DOORS AND WINDOWS.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Way Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

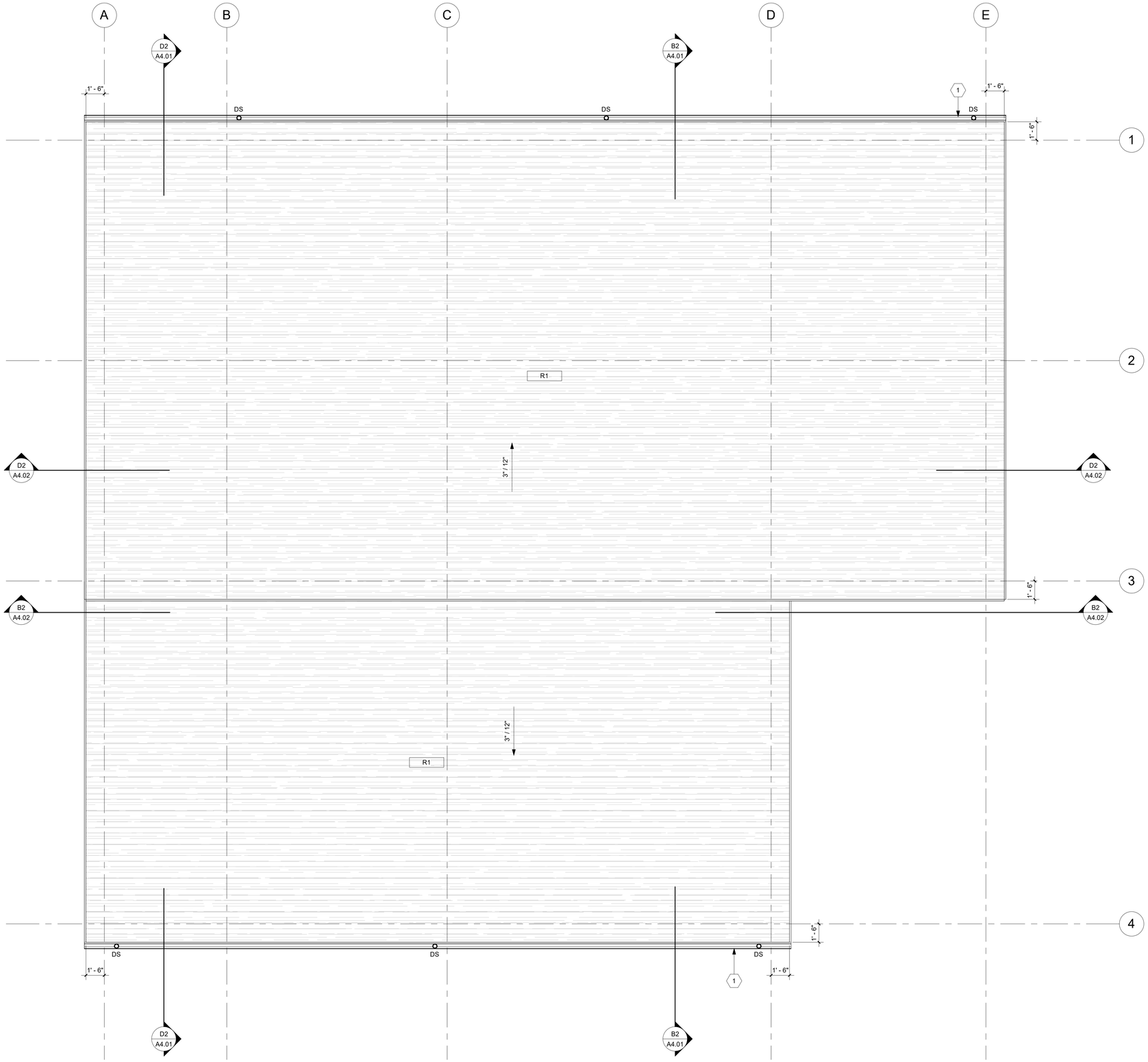
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: DIMENSION PLAN
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:

Sheet No. A2.11

1 DIMENSION PLAN
1/4" = 1'-0" @ FULL SIZE
0' 2' 4' 8'

8/22/2022 8:14:13 AM



1 ROOF PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

ROOF PLAN GENERAL NOTES

A. ENSURE ROOF SLOPES TO DRAINS.

B. PROVIDE ROOF CRICKETS AROUND OBSTRUCTIONS FOR POSITIVE DRAINAGE. 1/2" / FT. SLOPE MIN.

C. PROVIDE FLASHING AND WATER-TIGHT SEAL AROUND ALL ROOF TOP EQUIPMENT AND PENETRATIONS; INCLUDING THOSE NOT SHOWN HERE. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR EQUIPMENT OR PENETRATIONS NOT SHOWN HERE.

D. PROVIDE HEAT TRACE AT ALL ROOF DRAINS, BUILDING GUTTERS, AND DOWNSPOUTS. SEE ELECTRICAL.

E. ROOF OVERHANG DIMENSIONS ARE TO END OF BEAM OR TOP CHORD EXTENSION.

ROOF PLAN LEGEND

ASPHALT SHINGLE ROOFING

3"/12" — DIRECTION OF ROOF SLOPE

DS — 4" DOWNSPOUT, CONNECT TO STORMWATER DRAINAGE SYSTEM
PROVIDE HEAT TRACE, TYP. - SEE ELECTRICAL

RV — ROOF VENT PENETRATION
SEE DETAIL

ROOF PLAN KEYNOTES

1. CONTINUOUS INTEGRAL GUTTER. PROVIDE HEAT TRACE IN GUTTER AND DOWNSPOUTS PER ELECTRICAL.

BLRB architects

TACOMA
1756 Pacific Ave
Suite 100
WA 98402
253.627.5599

SPOKANE
245 W Riverside
Suite 500
WA 98201
509.252.5980

PORTLAND
621 SW Morrison St.
Suite 950
OR 97205
503.595.0270

BEND
721 SW Industrial
Suite 150
OR 97702
541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: ROOF PLAN

Drawn By: EN

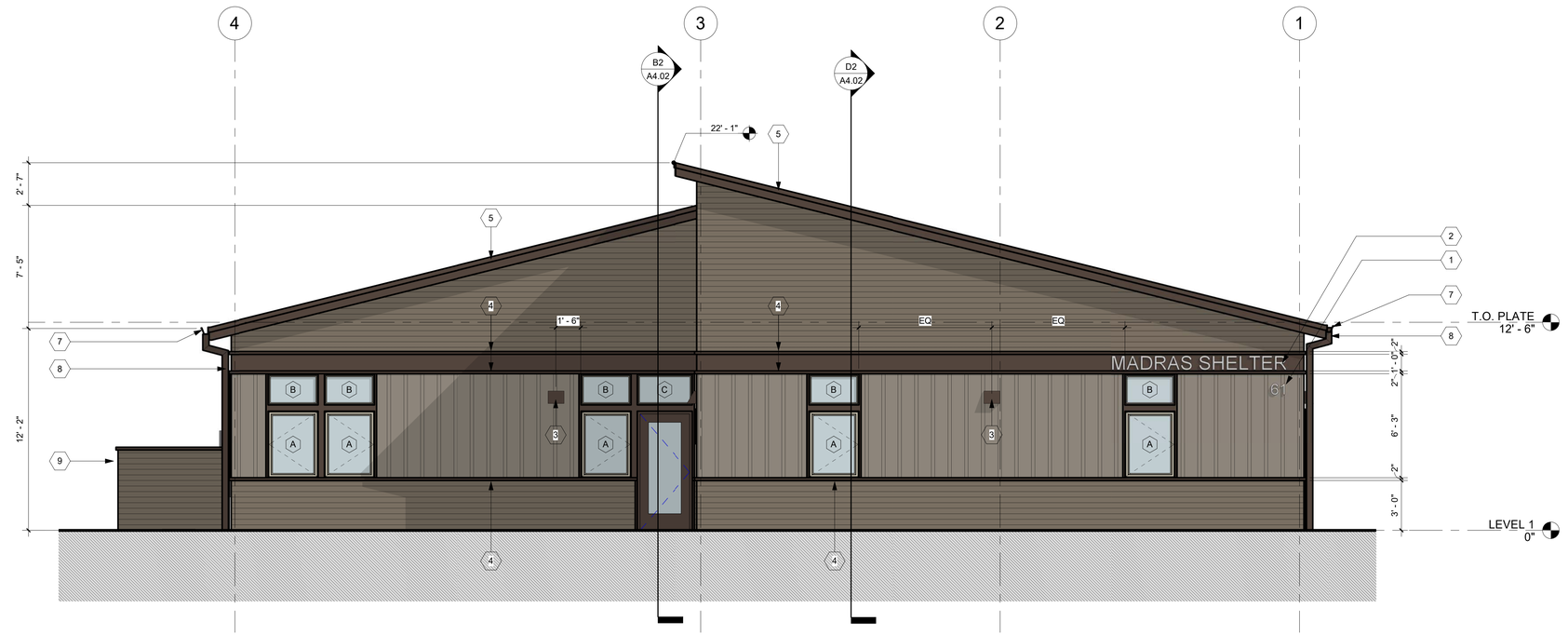
Project No. 022044.000

Date: 08/17/2022

Revised:

Sheet No.

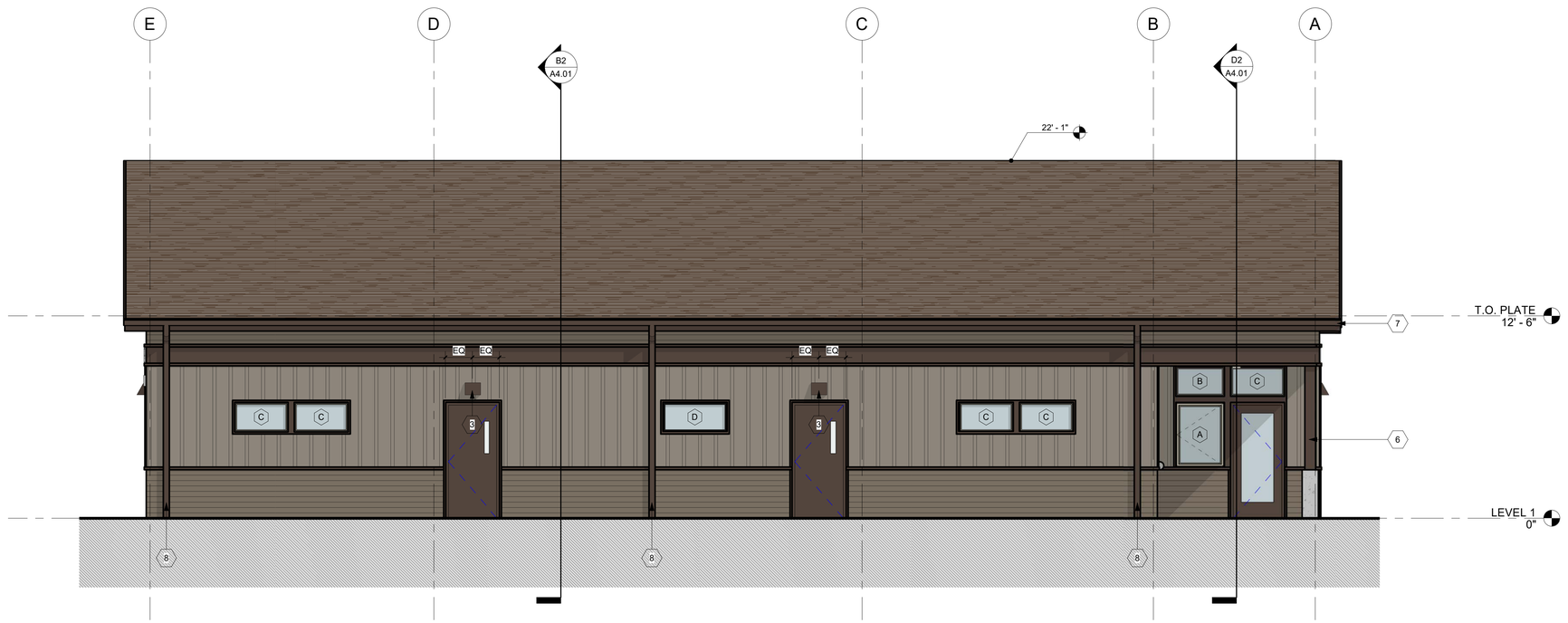
A2.20



B1 EAST ELEVATION

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'



D1 NORTH ELEVATION

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

EXTERIOR FINISH MATERIAL LEGEND

S-1: FIBER CEMENT SIDING
MANUFACTURER: JAMES HARDIE
PRODUCT: HARDIE PANEL VERTICAL SIDING W/ RUSTIC GRAIN BATTEN BOARDS
TEXTURE: SELECT CEDARMILL, BATTENS @ 12" O.C.
COLOR: PT-10 BENJAMIN MOORE TAOS TAUPE 2111-40

S-2: FIBER CEMENT SIDING
MANUFACTURER: JAMES HARDIE
PRODUCT: HARDIE PLANK LAP SIDING, DREAM COLLECTION
TEXTURE: SELECT CEDARMILL, 4 IN. EXPOSURE
COLOR: PT-11 BENJAMIN MOORE WOODCLIFF LAKE 980

S-3: FIBER CEMENT TRIM
MANUFACTURER: JAMES HARDIE
PRODUCT: HARDIE PANEL VERTICAL SIDING W/ RUSTIC GRAIN BATTEN BOARDS
TEXTURE: SELECT CEDARMILL, BATTENS @ 12" O.C.
COLOR: PT-12 BENJAMIN MOORE MINK 2112-10

R-1: ASPHALT SHINGLE ROOFING
MANUFACTURER: GAF
PRODUCT: TIMBERLINE HDZ
COLOR: BARKWOOD

EXTERIOR ELEVATION KEYNOTES

1. BUILDING ADDRESS SIGNAGE
2. BUILDING NAME SIGNAGE - PROVIDE ELECTRICAL FOR LIGHTING
3. WALL-MOUNTED LIGHT FIXTURE WITH SHARP CUT-OFF (8'-0" AFF, UNO)
4. TRIM BOARD
5. BUILT-UP FASCIA (1X10 W/ 1X6)
6. WOOD POST WITH CONCRETE BASE
7. METAL GUTTER
8. METAL DOWNSPOUT, CONNECT TO STORM PER CIVIL
9. WOOD-FRAMED ENCLOSURE WITH FIBER CEMENT SIDING & GATE

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270

BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: EXTERIOR ELEVATIONS

Drawn By: EN

Project No. 022044.000

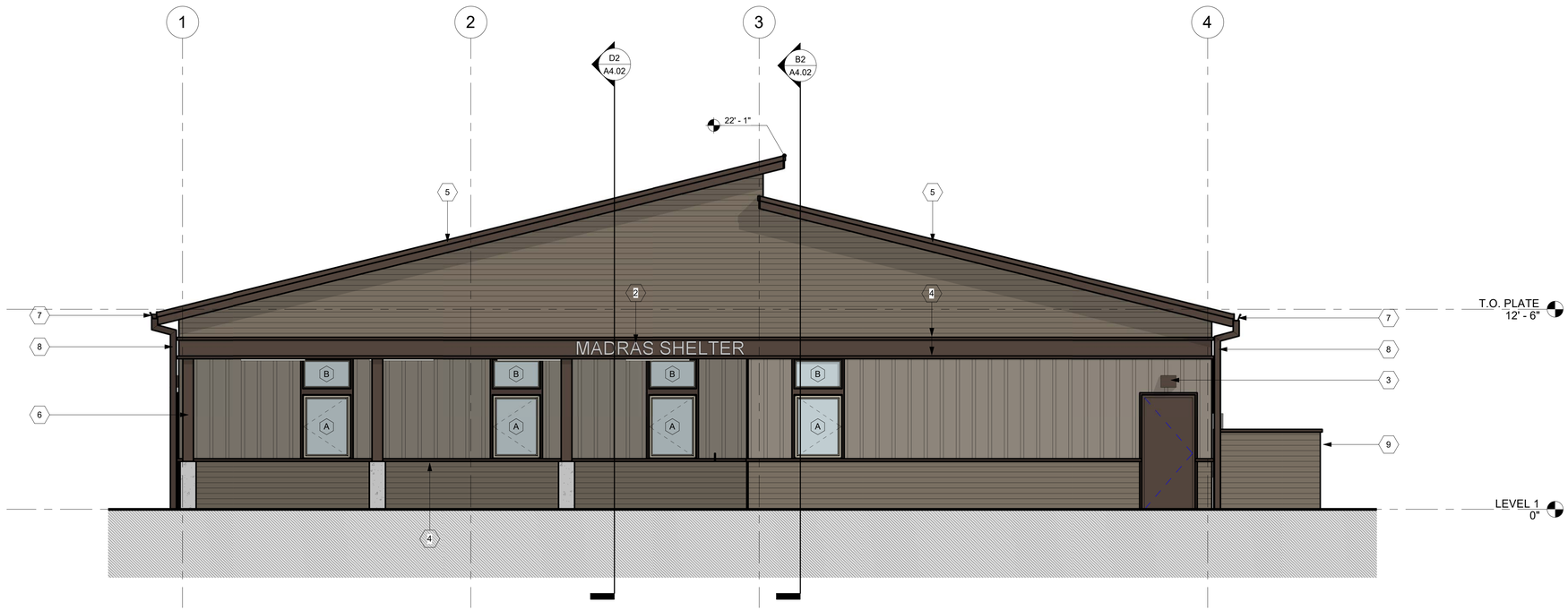
Date: 08/17/2022

Revised :

Sheet No.

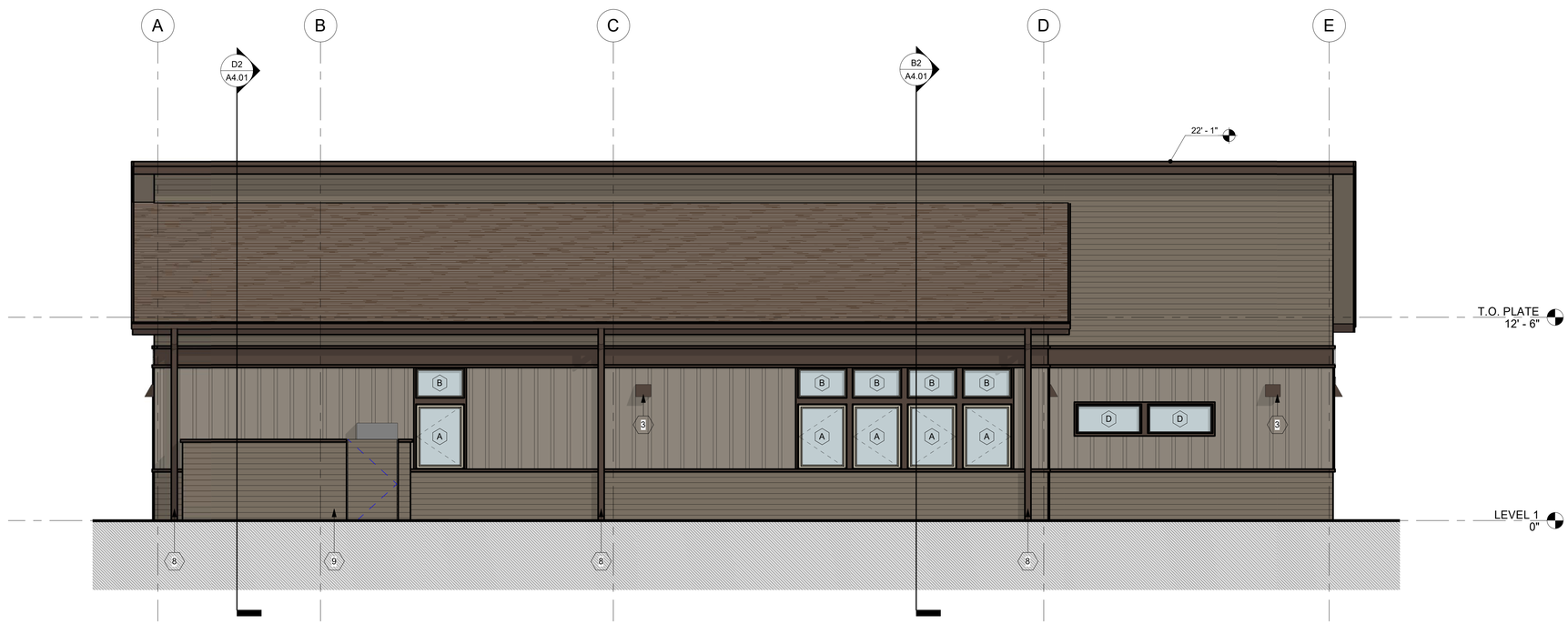
A3.01

8/22/2022 8:14:17 AM



B1 WEST ELEVATION

0' 1" 2" 4" 1/4" = 1'-0" @ FULL SIZE



D1 SOUTH ELEVATION

0' 1" 2" 4" 1/4" = 1'-0" @ FULL SIZE

EXTERIOR FINISH MATERIAL LEGEND

S-1: FIBER CEMENT SIDING
MANUFACTURER: JAMES HARDIE
PRODUCT: HARDIE PANEL VERTICAL SIDING W/ RUSTIC GRAIN BATTEN BOARDS
TEXTURE: SELECT CEDARMILL, BATTENS @ 12" O.C.
COLOR: PT-10 BENJAMIN MOORE TAOS TAUPE 2111-40

S-2: FIBER CEMENT SIDING
MANUFACTURER: JAMES HARDIE
PRODUCT: HARDIE PLANK LAP SIDING, DREAM COLLECTION
TEXTURE: SELECT CEDARMILL, 4 IN. EXPOSURE
COLOR: PT-11 BENJAMIN MOORE WOODCLIFF LAKE 980

S-3: FIBER CEMENT TRIM
MANUFACTURER: JAMES HARDIE
PRODUCT: HARDIE PANEL VERTICAL SIDING W/ RUSTIC GRAIN BATTEN BOARDS
TEXTURE: SELECT CEDARMILL, BATTENS @ 12" O.C.
COLOR: PT-12 BENJAMIN MOORE MINK 2112-10

R-1: ASPHALT SHINGLE ROOFING
MANUFACTURER: GAF
PRODUCT: TIMBERLINE HDZ
COLOR: BARKWOOD

EXTERIOR ELEVATION KEYNOTES

1. BUILDING ADDRESS SIGNAGE
2. BUILDING NAME SIGNAGE - PROVIDE ELECTRICAL FOR LIGHTING
3. WALL-MOUNTED LIGHT FIXTURE WITH SHARP CUT-OFF (8'-0" AFF, UNO)
4. TRIM BOARD
5. BUILT-UP FASCIA (1X10 W/ 1X6)
6. WOOD POST WITH CONCRETE BASE
7. METAL GUTTER
8. METAL DOWNSPOUT, CONNECT TO STORM PER CIVIL
9. WOOD-FRAMED ENCLOSURE WITH FIBER CEMENT SIDING & GATE

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 245 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

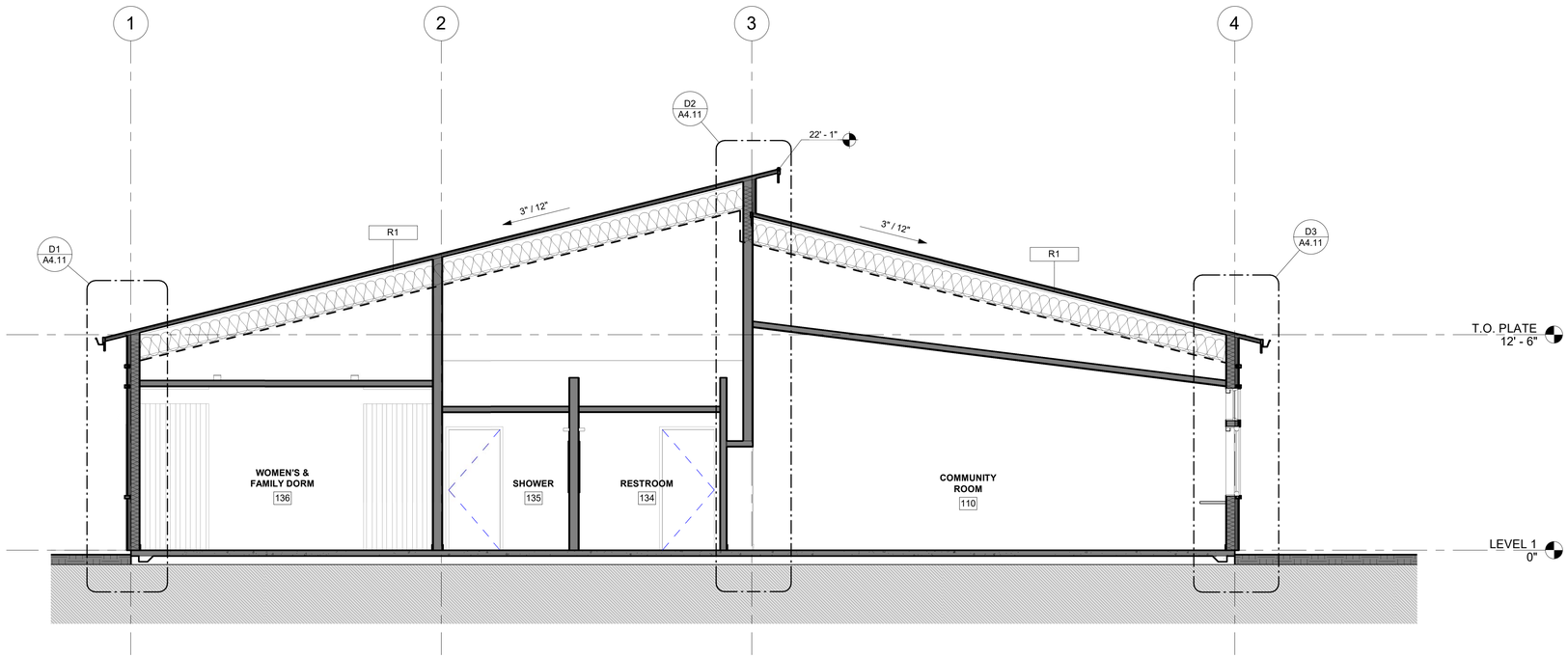
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: EXTERIOR ELEVATIONS
Date: 08/17/2022
Revised:
Drawn By: Author
Project No. 022044.000

Sheet No. A3.02

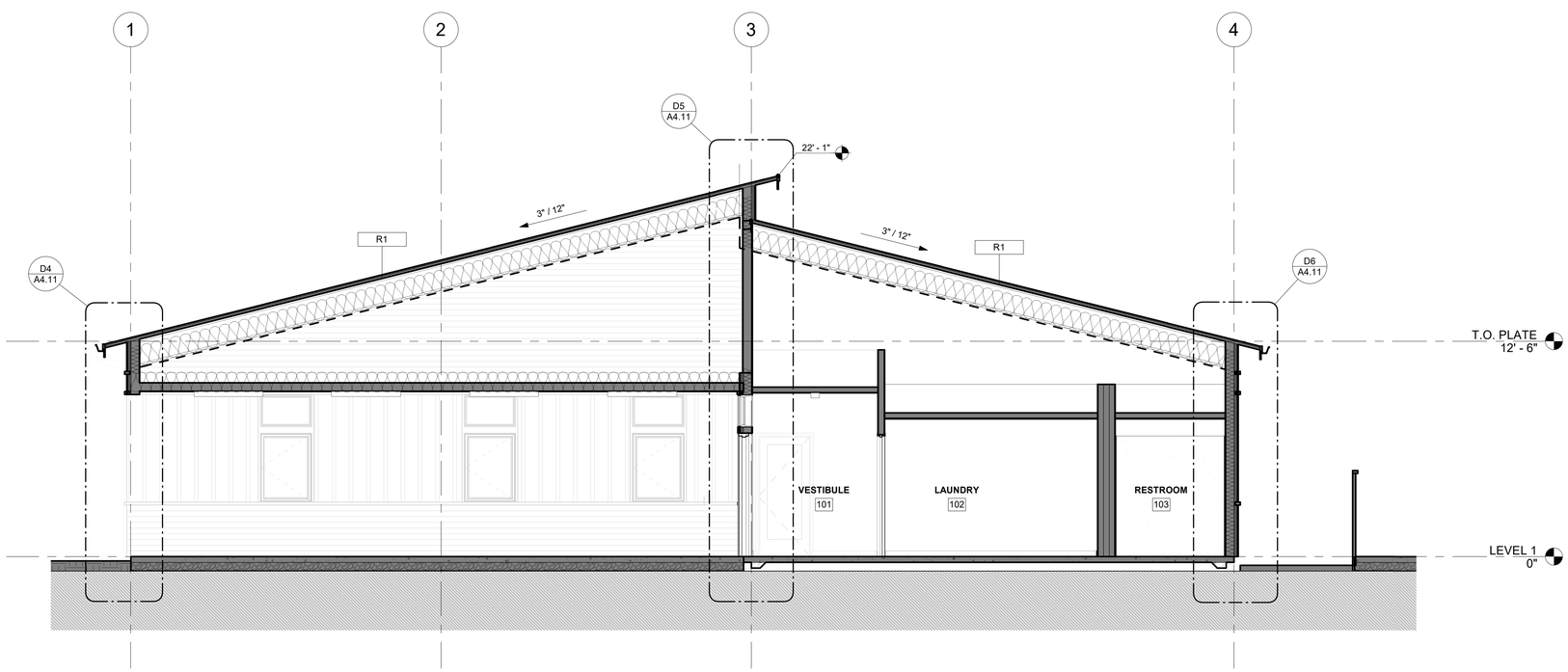
BLRB ARCHITECTS, P.S.

8/22/2022 8:14:20 AM



B2 NORTH-SOUTH BUILDING SECTION

0" 1" 2" 4" 1/4" = 1'-0" @ FULL SIZE



D2 NORTH-SOUTH BUILDING SECTION

0" 1" 2" 4" 1/4" = 1'-0" @ FULL SIZE

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599

SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5080

PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270

BEND | 721 SW Industrial Square #150 | OR 97702 | 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: BUILDING SECTIONS

Date : 08/17/2022

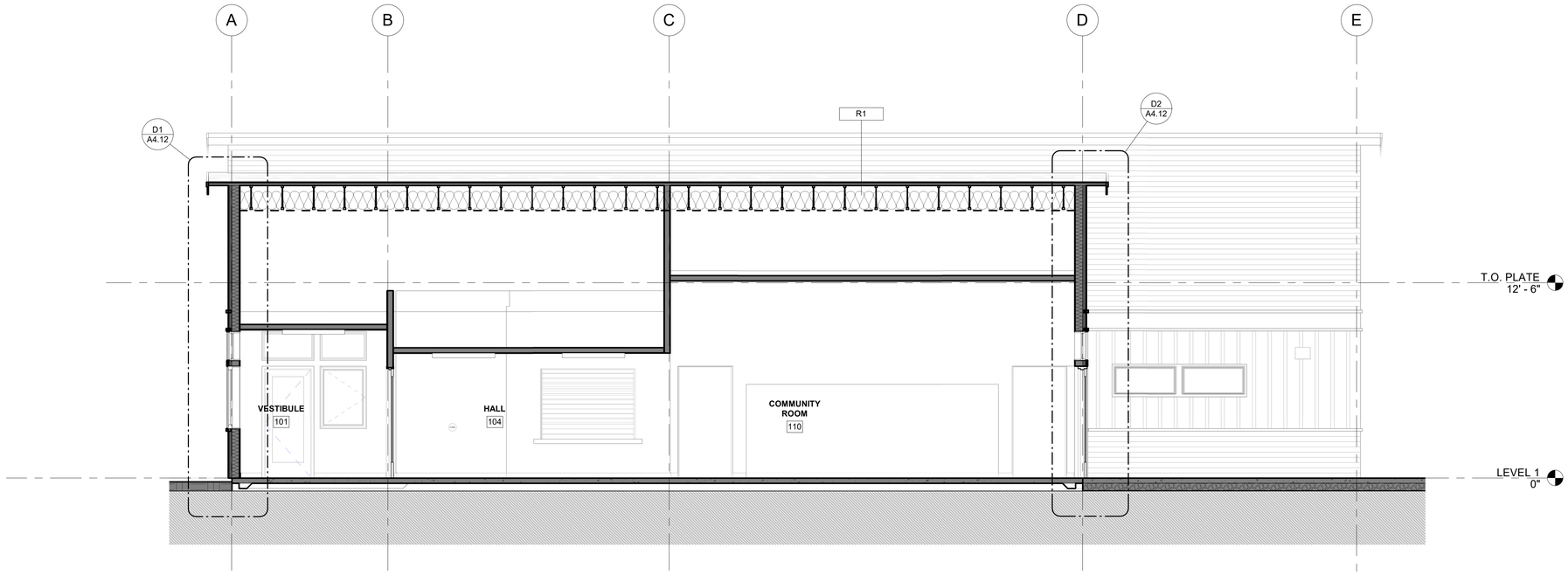
Drawn By : EN

Project No. 022044.000

Revised :

Sheet No. A4.01

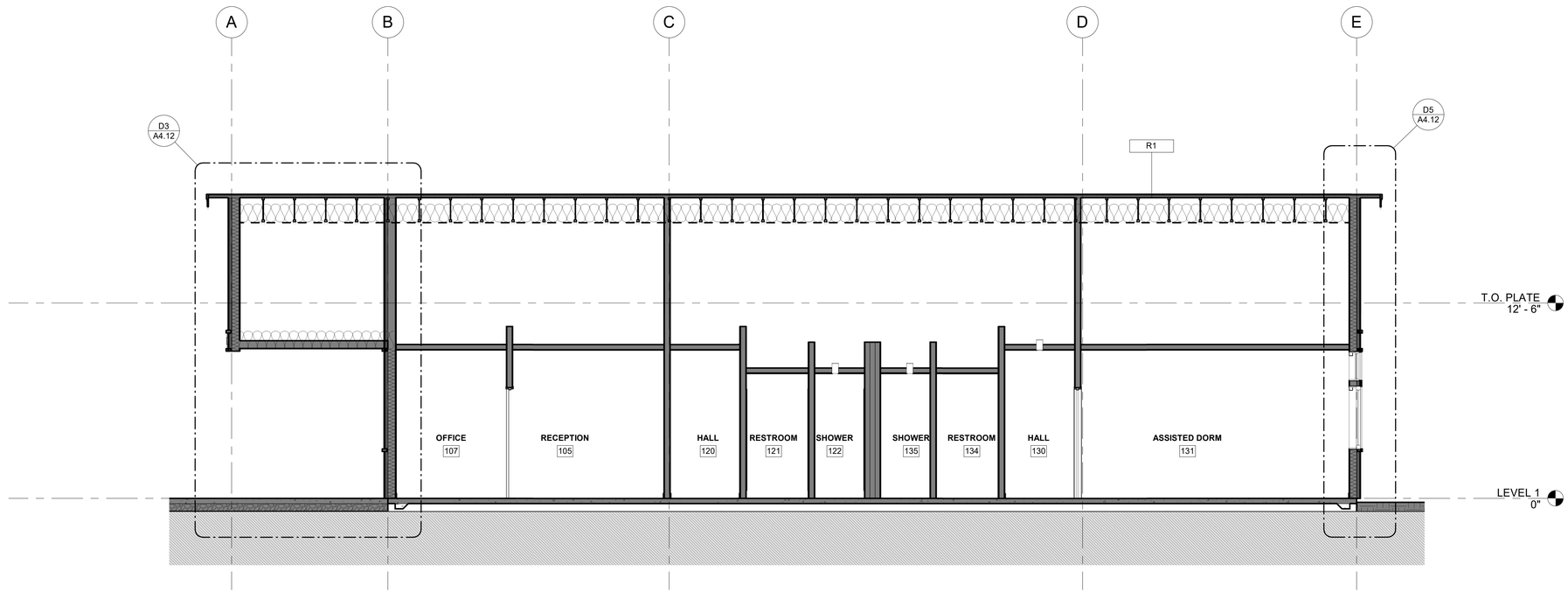
8/22/2022 8:14:22 AM



B2 EAST-WEST BUILDING SECTION

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'



D2 EAST-WEST BUILDING SECTION

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599

SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270

BEND | 721 SW Industrial Way Suite 150 | OR 97702 | 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: BUILDING SECTIONS

Drawn By : Author

Project No. 022044.000

Date : 08/17/2022

Revised :

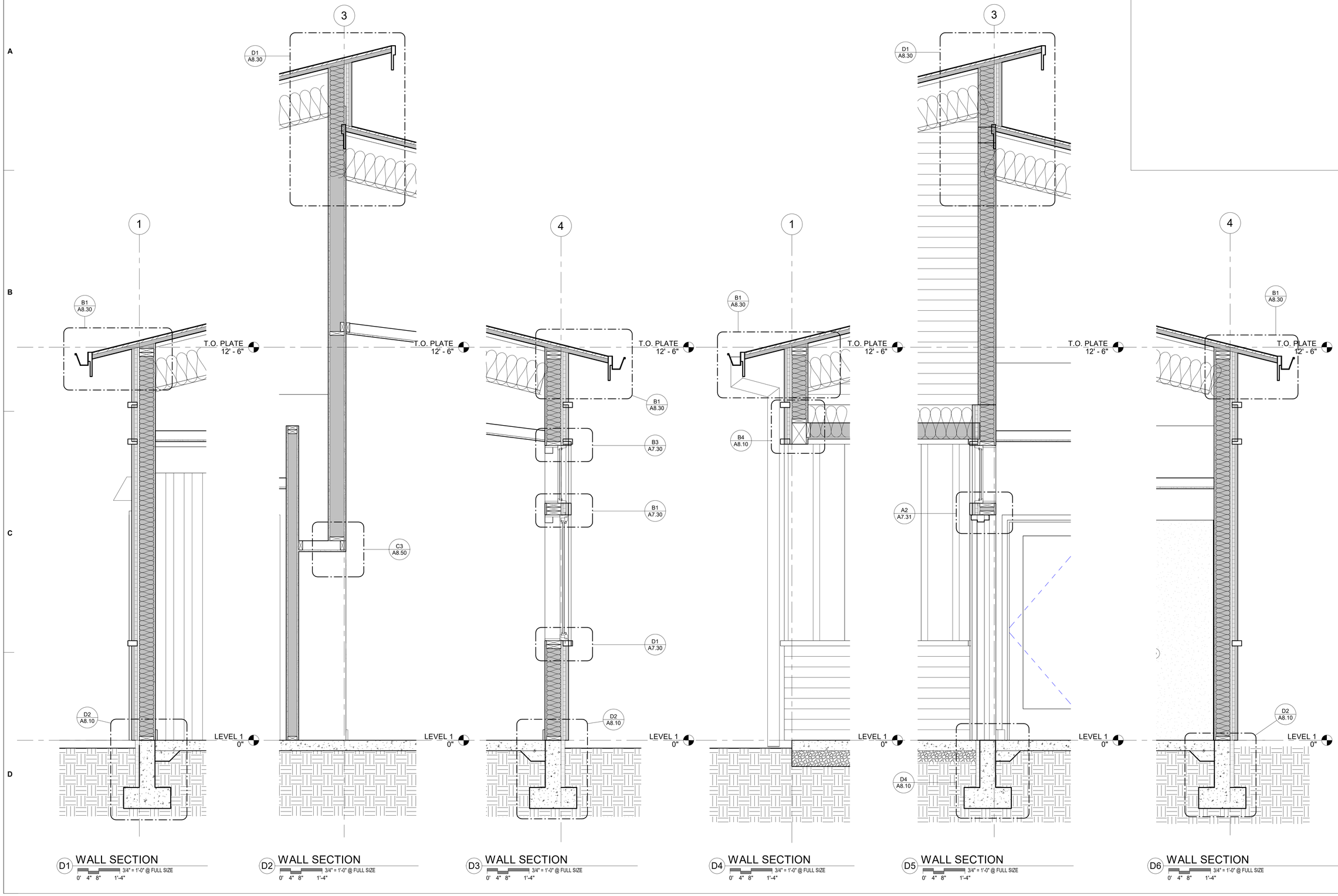
Sheet No.

A4.02

8/22/2022 8:14:24 AM

SECTION GENERAL NOTES

1. SECTION NOTE



D1 WALL SECTION 3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D2 WALL SECTION 3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D3 WALL SECTION 3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D4 WALL SECTION 3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D5 WALL SECTION 3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D6 WALL SECTION 3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599

SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270

BEND | 721 SW Industrial Square #150 | OR 97702 | 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: WALL SECTIONS

Drawn By: Author

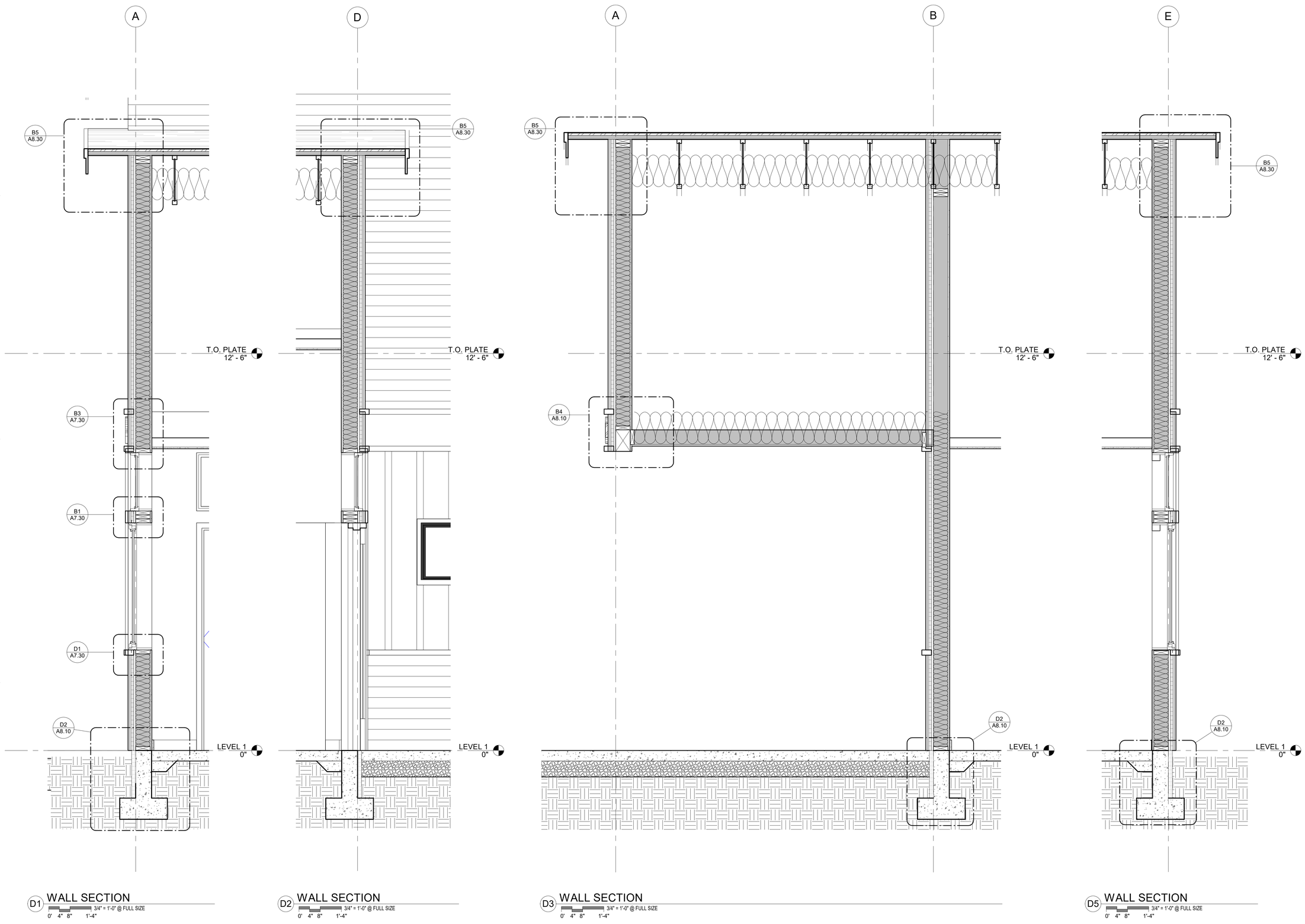
Project No. 022044.000

Date: 08/17/2022

Revised:

Sheet No. A4.11

8/22/2022 8:14:25 AM



D1 WALL SECTION
3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D2 WALL SECTION
3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D3 WALL SECTION
3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

D5 WALL SECTION
3/4" = 1'-0" @ FULL SIZE
0' 4" 8" 1'-4"

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599

SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270

BEND | 721 SW Industrial Square #130 | OR 97702 | 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: WALL SECTIONS

Drawn By : Author

Project No. 022044.000

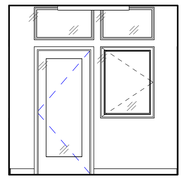
Date : 08/17/2022

Revised :

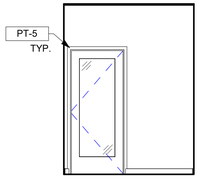
Sheet No.

A4.12

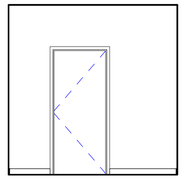
8/22/2022 8:14:26 AM



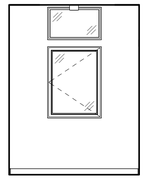
A1 101 VESTIBULE - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



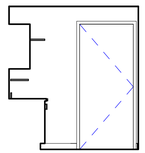
A2 101 VESTIBULE - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



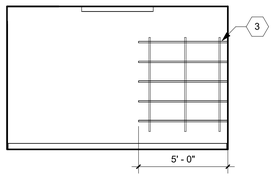
A3 101 VESTIBULE - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



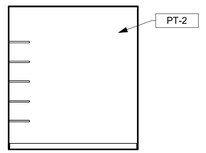
A4 101 VESTIBULE - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



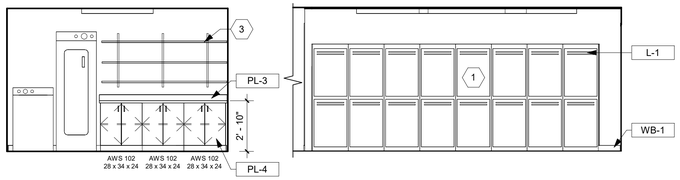
B1 102 LAUNDRY - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



B2 102 LAUNDRY - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

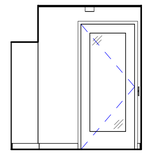


B3 102 LAUNDRY - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

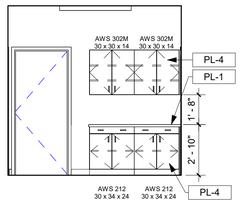


B4 102 LAUNDRY - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

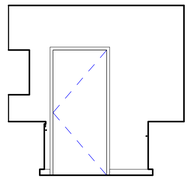
B5 104 HALL - SOUTH
1/4" = 1'-0" @ FULL SIZE



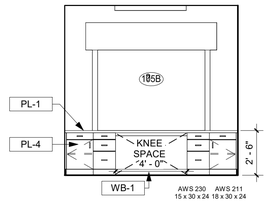
B6 104 HALL - WEST
1/4" = 1'-0" @ FULL SIZE



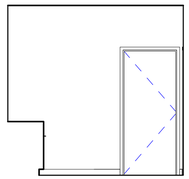
C1 105 RECEPTION - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



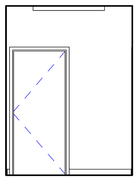
C2 105 RECEPTION - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



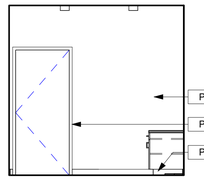
C3 105 RECEPTION - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



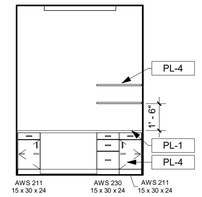
C4 105 RECEPTION - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



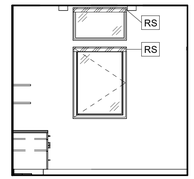
C5 107 OFFICE - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



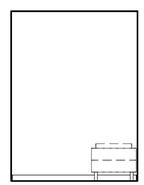
C6 107 OFFICE - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



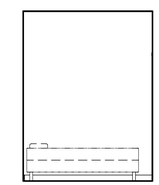
C7 107 OFFICE - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



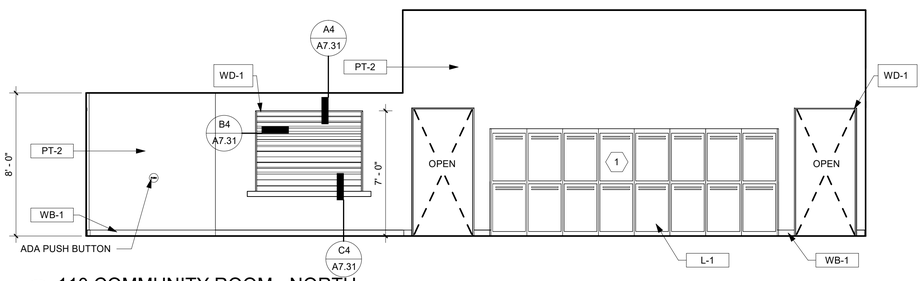
C8 107 OFFICE - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



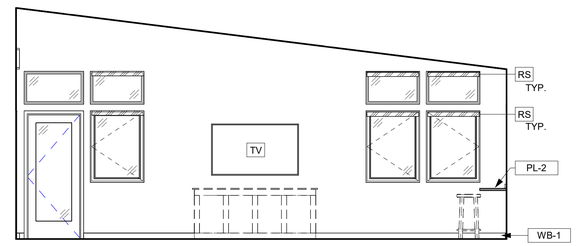
D1a 108 SLEEPING - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



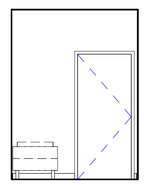
D2a 108 SLEEPING - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



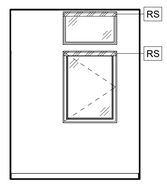
D3a 110 COMMUNITY ROOM - NORTH
1/4" = 1'-0" @ FULL SIZE



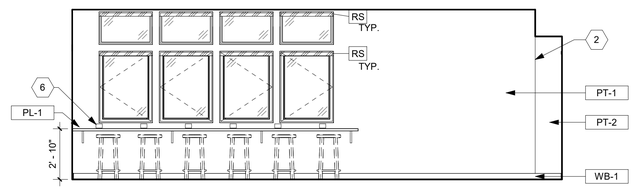
D4a 110 COMMUNITY ROOM - EAST
1/4" = 1'-0" @ FULL SIZE



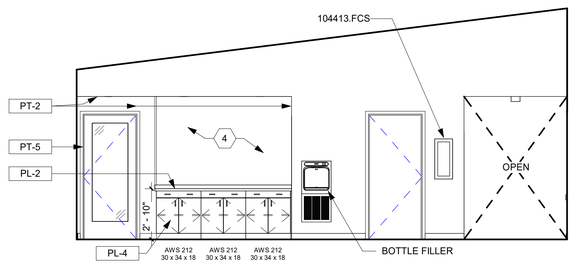
D1b 108 SLEEPING - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



D2b 108 SLEEPING - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



D3b 110 COMMUNITY ROOM - SOUTH
1/4" = 1'-0" @ FULL SIZE



D4b 110 COMMUNITY ROOM - WEST
1/4" = 1'-0" @ FULL SIZE

GENERAL NOTES

1. ALL WALLS & CEILINGS TO RECEIVE PT1 W/ WB1, UNLESS NOTED OTHERWISE.
2. MOUNTING HEIGHTS SHALL BE PER A0.04, U.N.O.
3. VERIFY EXACT CABINET LAYOUT WITH FLOOR PLAN A2.10
4. ALL CABINETS AND COORDINATING 4" TOE KICKS PER SPECIFICATIONS; FINISHED PANELS ON ALL EXPOSED AND VISIBBLE SURFACES OF CABINETRY.
5. 4'W X FULL HEIGHT PRIVACY CURTAINS WITH CEILING MOUNTED TRACKS PROVIDED IN DORMS; PC-1 AT MEN'S DORM 125, PC-2 AT ASSISTED DORM 131 AND WOMEN'S DORM 136. SEE FLOOR PLAN A2.10 FOR QUANTITY AND FINISH SCHEDULE A9.01 FOR BASIS OF DESIGN DETAILS.
6. KITCHEN TO RECEIVE FRP ON ALL WALLS, TYP. TO 7' AND ALIGNED WITH TOP OF UPPER CABINETS.

KEYNOTES - INTERIOR ELEVATIONS

#	DESCRIPTION
1	2 TIERED LOCKERS. SEE SPECIFICATIONS AND A9.01 FOR DETAILS
2	GYPSUM WALL BOARD REVEAL JOINT
3	LAMINATE / MELAMINE SHELVING WITH ADJUSTABLE STANDARDS / BRACKETS
4	FINISH / INSTALLATION TBD
6	HORIZONTAL MOUNT ELECTRICAL OUTLETS
7	KEEP WALL AREA CLEAR FOR OWNER INSTALL OF CORK / WHITE BOARD

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 1050 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

Proprietary Two-Coat Protection System

DRAWING REVISIONS
Description
Date
1

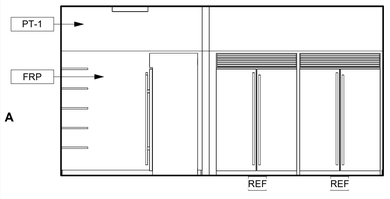
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: INTERIOR ELEVATIONS
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:
Sheet No. A5.01

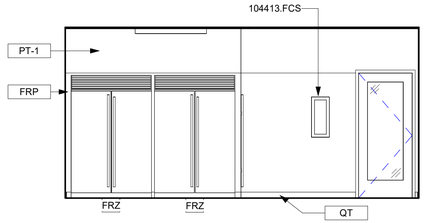
BLRB ARCHITECTS, P.S.

8/22/2022 8:14:30 AM

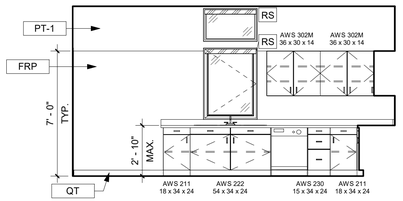
A



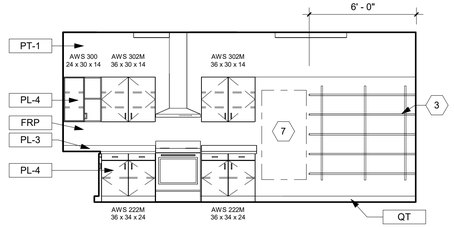
A1 112 KITCHEN - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



A2 112 KITCHEN - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

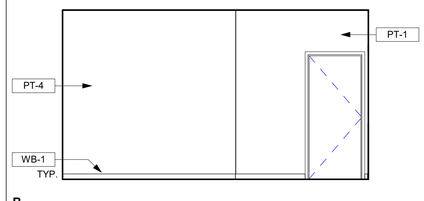


A3 112 KITCHEN - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

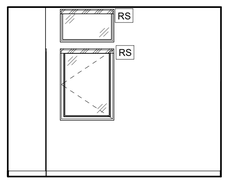


A5 112 KITCHEN - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

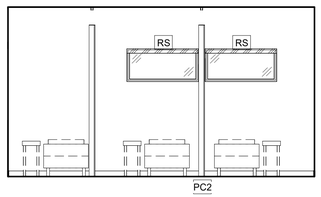
B



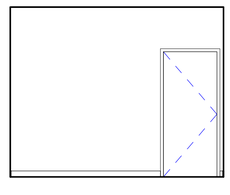
B1 131 ASSISTED DORM - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



B2 131 ASSISTED DORM - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

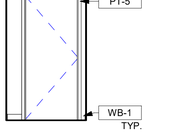


B3 131 ASSISTED DORM - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



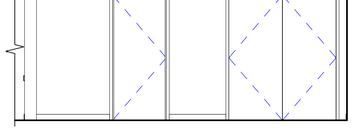
B4 131 ASSISTED DORM - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

C

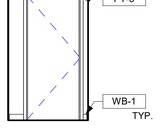


C1 120 HALLWAY - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

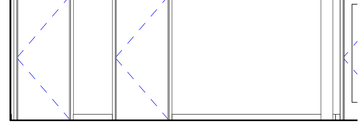
C2 120 HALLWAY - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



C3 120 HALLWAY - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



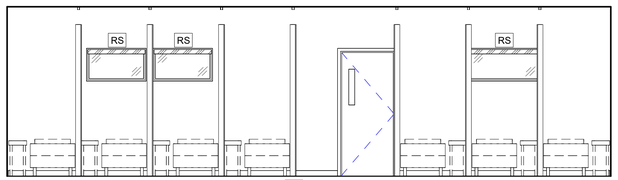
C4 130 HALLWAY - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



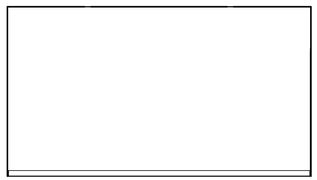
C5 130 HALLWAY - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

C6 130 HALLWAY - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

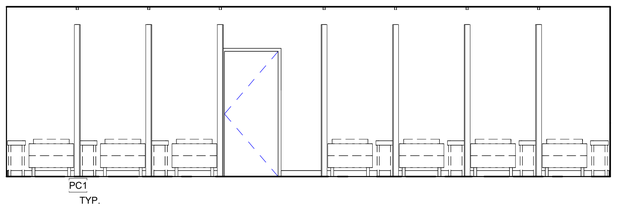
D



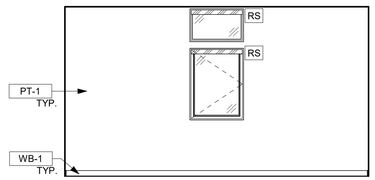
D1a 125 MEN'S DORM - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



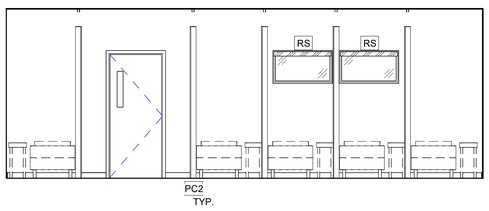
D3a 125 MEN'S DORM - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



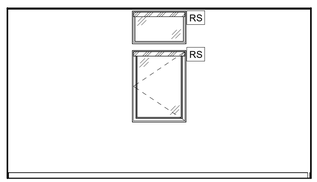
D4a 125 MEN'S DORM - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



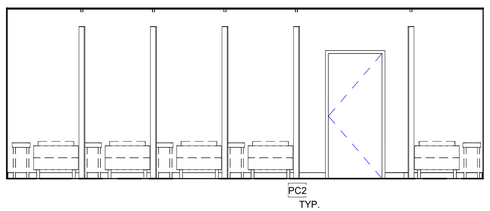
D6a 125 MEN'S DORM - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



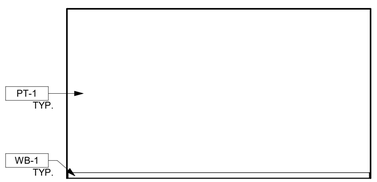
D1b 136 WOMEN'S DORM - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



D3b 136 WOMEN'S DORM - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



D4b 136 WOMEN'S DORM - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'



D6b 136 WOMEN'S DORM - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1" 2" 4'

GENERAL NOTES

1. ALL WALLS & CEILINGS TO RECEIVE PT1 W/ WB1, UNLESS NOTED OTHERWISE.
2. MOUNTING HEIGHTS SHALL BE PER A0.04, U.N.O.
3. VERIFY EXACT CABINET LAYOUT WITH FLOOR PLAN A2.10
4. ALL CABINETS AND COORDINATING 4" TOE KICKS PER SPECIFICATIONS; FINISHED PANELS ON ALL EXPOSED AND VISIBBLE SURFACES OF CABINETRY.
5. 4'W X FULL HEIGHT PRIVACY CURTAINS WITH CEILING MOUNTED TRACKS PROVIDED IN DORMS; PC-1 AT MEN'S DORM 125, PC-2 AT ASSISTED DORM 131 AND WOMEN'S DORM 136. SEE FLOOR PLAN A2.10 FOR QUANTITY AND FINISH SCHEDULE A9.01 FOR BASIS OF DESIGN DETAILS.
6. KITCHEN TO RECEIVE FRP ON ALL WALLS, TYP. TO 7' AND ALIGNED WITH TOP OF UPPER CABINETS.

KEYNOTES - INTERIOR ELEVATIONS

#	DESCRIPTION
1	2 TIERED LOCKERS. SEE SPECIFICATIONS AND A9.01 FOR DETAILS
2	GYPSUM WALL BOARD REVEAL JOINT
3	LAMINATE / MELAMINE SHELVING WITH ADJUSTABLE STANDARDS / BRACKETS
4	FINISH / INSTALLATION TBD
6	HORIZONTAL MOUNT ELECTRICAL OUTLETS
7	KEEP WALL AREA CLEAR FOR OWNER INSTALL OF CORK / WHITE BOARD

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: INTERIOR ELEVATIONS
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:

Sheet No.
A5.02

1 REFLECTED CEILING PLAN

1/4" = 1'-0" @ FULL SIZE

0' 2' 4' 8'

RCP GENERAL NOTES

A. COORDINATE CEILING HEIGHTS WITH ALL MECHANICAL EQUIPMENT AND ELECTRICAL SYSTEMS. WHERE LIGHTING FIXTURES CONFLICT WITH VENTILATION, LIGHTING LOCATIONS TAKE PRECEDENCE.
B. COORDINATE LIGHTING FIXTURES WITH ELECTRICAL AND MECHANICAL DRAWINGS. PROVIDE FIXTURES AS INDICATED ON THE LUMINAIRE SCHEDULE.
C. REFER TO DETAILS, SHEET A8.05 FOR CEILING LATERAL BRACING.

CEILING TYPES LEGEND

CL-1
GYPSUM WALL BOARD OVER WOOD FRAMING

CL-3
TONGUE & GROOVE WOOD OVER WOOD FRAMING

CEILING FIXTURE LEGEND

- 2X4 RECESSED LUMINAIRE - SEE ELECTRICAL
- 2X2 RECESSED LUMINAIRE - SEE ELECTRICAL
- 4' SURFACE MOUNTED LINEAR LUMINAIRE - SEE ELECTRICAL
- RECESSED LUMINAIRE - SEE ELECTRICAL
- 2' LINEAR WALL SCONCE - SEE ELECTRICAL
- EXTERIOR WALL SCONCE - SEE ELECTRICAL
- SUPPLY REGISTER, SEE MECHANICAL
- RETURN REGISTER, SEE MECHANICAL
- EXHAUST REGISTER, SEE MECHANICAL
- ATTIC ACCESS HATCH -
  - SIZE: 36" X 36"
  - PROVIDE WEATHERSTRIPPING OR GASKET AROUND ACCESS HATCH OPENING.
- RWS — ROLLER WINDOW SHADE

RCP KEYNOTES

1. SOFFIT - PAINT ROOF SHEATHING AND FRAMING PT-11, TYPICAL

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Way Suite 150 | OR 97702 | 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

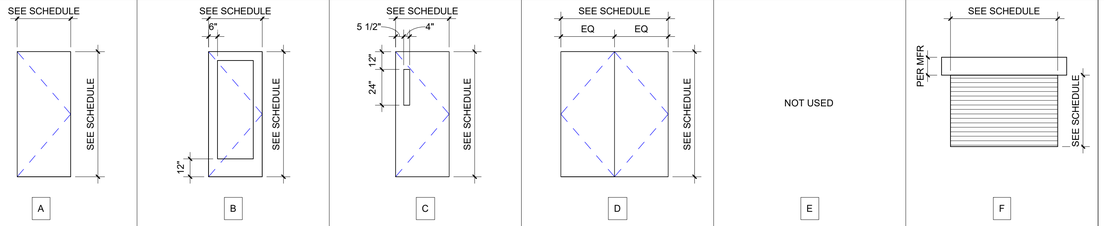
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: REFLECTED CEILING PLAN
Drawn By: Author
Project No. 022044.000
Date: 08/17/2022
Revised:

Sheet No. A6.10

8/22/2022 8:14:37 AM

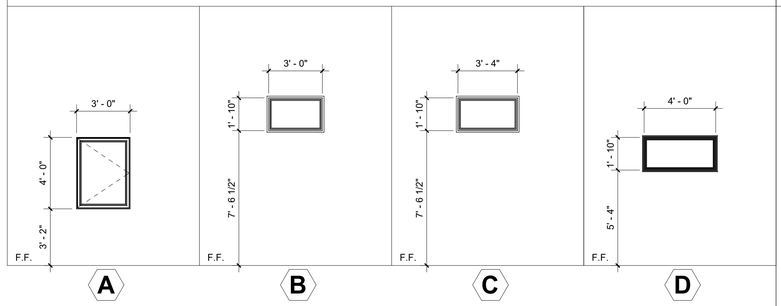
DOOR TYPES



DOOR SCHEDULE

DOOR				DOOR PANEL			DOOR FRAME					
MARK	WIDTH	HEIGHT	FIRE RATING	TYPE	MATERIAL	FINISH	MATERIAL	FINISH	HARDWARE	U-VALUE	SHGC	COMMENTS
LEVEL 1												
101	3' - 0"	7' - 0"	--	B	HM-IS/G-3	PT	HM	PT		U-0.63	0.33	ADA ACTUATOR
102	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
103	3' - 0"	7' - 0"	--	A	HM-IS	PT	HM-IS	PT		U-0.37		
104	3' - 0"	7' - 0"	--	B	SC-V/G-1	FF	HM	PT				ADA ACTUATOR
105A	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
105B	6' - 0"	4' - 6"	--	F	MTL	MFR	MFR	MFR				
106	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
107	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
108	3' - 0"	7' - 0"	45 MIN.	A	SC-V	FF	HM	PT				
110A	3' - 0"	7' - 0"	--	B	HM-IS/G-3	PT	HM-IS	PT		U-0.63	0.33	
111	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
112	3' - 0"	7' - 0"	--	B	SC-V	FF	HM	PT				
121	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
122	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
123	6' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
125A	3' - 0"	7' - 0"	45 MIN.	A	SC-V	FF	HM	PT				
125B	3' - 0"	7' - 0"	--	C	HM-IS/G-3	PT	HM-IS	PT		U-0.63	0.33	
131	3' - 0"	7' - 0"	45 MIN.	A	SC-V	FF	HM	PT				
132	3' - 0"	7' - 0"	45 MIN.	A	SC-V	FF	HM	PT				
133	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
134	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
135	3' - 0"	7' - 0"	--	A	SC-V	FF	HM	PT				
136A	3' - 0"	7' - 0"	45 MIN.	A	SC-V	FF	HM	PT				
136B	3' - 0"	7' - 0"	--	C	HM-IS/G-3	PT	HM-IS	PT		U-0.63	0.33	

WINDOW TYPES



DOOR GENERAL NOTES

A. ALL DOORS TO HAVE LEVERS FOR ACCESSIBILITY
B. ALL LABELED DOORS SHALL BE GOVERNED BY UL REQUIREMENTS AND SHALL BEAR PHYSICAL UL LABEL OF FIRE RATING SPECIFIED.
C. INTERIOR DOORS TO HAVE MAXIMUM EFFORT OF 15 LBS TO OPERATE, EXTERIOR DOORS: 8 1/2 LBS., FIRE RATED DOORS: 15 LBS., NON FIRE RATED DOORS: 5 LBS. (NOT APPLICABLE FOR SUITE DOORS)
D. VERIFY ALL PARTITION THICKNESSES PRIOR TO DETERMINING FRAME THROAT SIZES.
E. ALL DOOR FRAME DEPTH SIZE DIMENSIONS SHALL BE 1/8" GREATER ON EACH SIDE OF PARTITION WHERE SNAP-ON CASING IS SCHEDULED.
F. DOUBLE DOORS SHALL HAVE METAL ASTRAGAL.
G. ALL FIRE RATED DOOR FRAMES SHALL BE 18 GAUGE.
H. ALL VISION PANELS IN DOOR JAMBS SHALL HAVE AN 18 GUAGE STEEL FRAME.
I. PER SECTION 715.4.3.1, ALL FIRE-RATED DOOR ASSEMBLIES SHALL ALSO MEET THE REQUIREMENTS FOR A SMOKE AND DRAFT CONTROL DOOR ASSEMBLY TESTED IN ACCORDANCE WITH UL 1784 WITH AN ARTIFICIAL BOTTOM SEAL INSTALLED ACROSS THE FULL WIDTH OF THE BOTTOM OF THE DOOR ASSEMBLY. THE AIR LEAKAGE RATE OF THE DOOR ASSEMBLY SHALL NOT EXCEED 3.0 CUBIC FEET PER MINUTE PER SQUARE OF DOOR OPENING AT 0.10 INCH OF WATER FOR BOTH THE AMBIENT TEMPERATURE TEST AND THE ELEVATED TEMPERATURE EXPOSURE TEST.
J. DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT AND SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.
K. PROVIDE TEMPERED SAFETY GLAZING IN DOORS PER OSSC 2406.4.1.
L. ALL HAND-ACTIVATED DOOR OPENING HARDWARE SHALL MEET THE FOLOWING REQUIREMENTS:
   - CENTERED AT LEAST 34", BUT NO MORE THAN 48" A.F.F.
   - LATCHING OR LOCKING DOORS IN A PATH OF TRAVEL SHALL BE OPERATED WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE WITHOUT NEED TO GRASP HARDWARE.
   - MAXIMUM EFFORT TO OPERATE DOORS SHALL BE EQUAL TO 8 1/2 LBS AT EXTERIOR DOORS AND LESS THAN OR EQUAL TO 5 LBS AT INTERIOR DOORS.
   - RESTROOM DOORS SHALL BE PROVIDED WITH OCCUPANCY INDICATOR.
   - CONTRACTOR TO VERIFY SIZES OF ROUGH DOOR OPENINGS PRIOR TO ORDERING DOORS.
M. ALL INTERIOR DOOR FRAMES TO BE PAINTED PT-5

DOOR SCHEDULE NOTES

D-1 PROVIDE "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" SIGN PER OSSC 1008.1.9.3. INSTALL ON DOOR FRAME AT HEAD OF DOOR.

D-2 PROVIDE DOOR WITH 3/4" UNDERCUT PER MECHANICAL FOR SUPPLY AIR

D-3 NOTE

D-4 NOTE

D-5 NOTE

D-6 NOTE

WINDOW GENERAL NOTES

A. PERIMETER DIMENSIONS ARE TO ROUGH OPENING.
B. CONTRACTOR TO VERIFY SIZES OF ROUGH WINDOW OPENINGS PRIOR TO ORDERING WINDOWS.
C. U-FACTORS OF FENESTRATION PRODUCTS ARE TO BE LABELED AND CERTIFIED BY THE MANUFACTURER OR ARE DETERMINED USING THE COMMERCIAL SIZE CATEGORY VALUES LISTED IN CHAPTER 15 OF THE 2009 ASHRAE HANDBOOK OF FUNDAMENTALS.
D. THE TEMPORARY LABEL AFFIXED TO FENESTRATION PRODUCT MUST NOT BE REMOVED PRIOR TO INSPECTION.
E. SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION PRODUCTS SHALLBE LABELED AND CERTIFIED BY THE MANUFACTURER OR BE DETERMINED USING THE SOLAR HEAT GAIN COEFFICIENTS USING THE SGHC IN CHAPTER 15 OF THE 2009 ASHRAE HANDBOOK OF FUNDAMENTALS, TABLE NO. 10. THE OVERALL VALUES MUST CONSIDER THE TYPE OF FRAME MATERIAL AND OPERATOR FOR THE SHGC AT NORMAL INCIDENCE.
F. SEE DETAIL SHEET A7.02 FOR WINDOW HEAD, JAMB, AND SILL DETAILS. COORDINATE WITH EXTERIOR ELEVATIONS FOR FINISH MATERIAL.
G. PROVIDE WINDOW CONTROL OPENING DEVICES ON OPERABLE WINDOWS.
H. PROVIDE TEMPERED SAFETY GLAZING AT WINDOWS ADJACENT TO DOORS PER OSSC 2406.4.2.

FINISH TAG KEY

CONSTRUCTION

ALUM: ALUMINUM
FIG: FIBERGLASS INSULATED CORE (BENCHMARK OR APPROVED)
HC-W: HOLLOW CORE WOOD VENEER
HC-H: HOLLOW CORE HARDBOARD FACED
HM: HOLLOW METAL
HM-IS: HOLLOW METAL INSULATED
MFR: PER MANUFACTURER
MTL: METAL (TIMELY OR SIMILAR)
MTL-IS: INSULATED METAL
SC-W: SOLID CORE WOOD
SC-V: SOLID CORE VENEER
STF: STOREFRONT, ANODIZED
VN: VINYL
WD: WOOD

GLASS TYPES

G-1: CLEAR TEMPERED
G-2: INSULATED
G-3: TEMPERED/INSULATED
G-4: FIRE RATED GLAZING, RATING SAME AS DOOR

FINISH

P-1: PAINT, COLOR TO MATCH EXISTING
P-2: PAINT, COLOR _____
S-1: STAINED, CLEAR STAIN
S-2: STAINED, PREFINISHED, COLOR _____

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Way Suite 150 | OR 97702 | 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date
1		

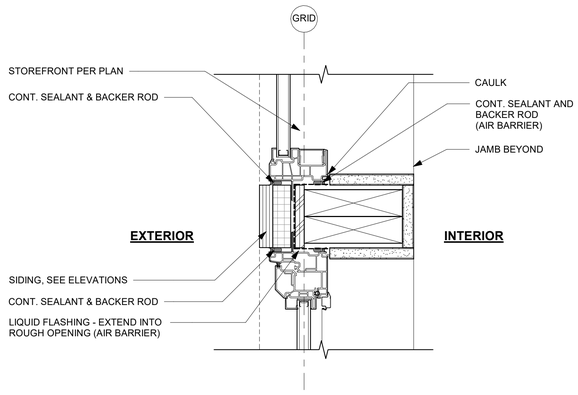
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: DOOR AND WINDOW SCHEDULES
Drawn By : Author
Project No. 022044.000
Date : 08/17/2022
Revised :

Sheet No. A7.01

BLRB ARCHITECTS, P.S.

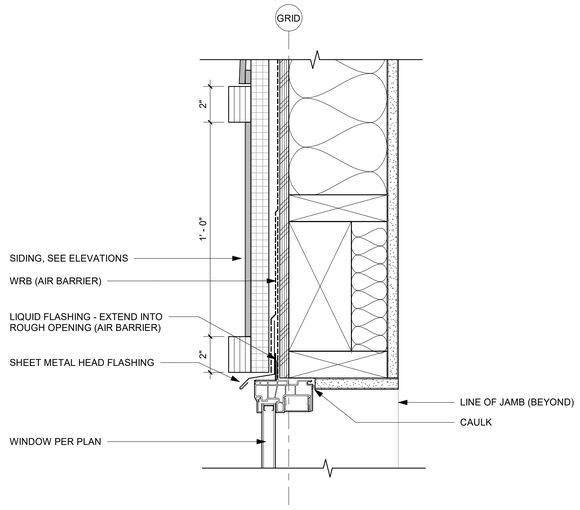
8/22/2022 8:14:38 AM



B1 WINDOW HEAD AT ACCENT PANEL SIDING

3" = 1'-0" @ FULL SIZE

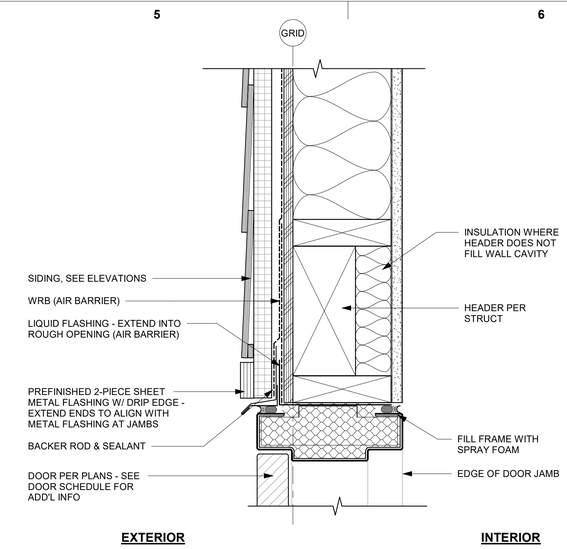
0' 1" 2" 4"



B3 WINDOW HEAD AT PANEL SIDING

3" = 1'-0" @ FULL SIZE

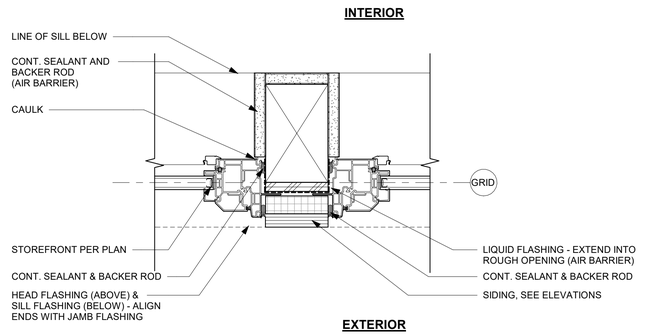
0' 1" 2" 4"



B5 HM DOOR HEAD AT PANEL SIDING

3" = 1'-0" @ FULL SIZE

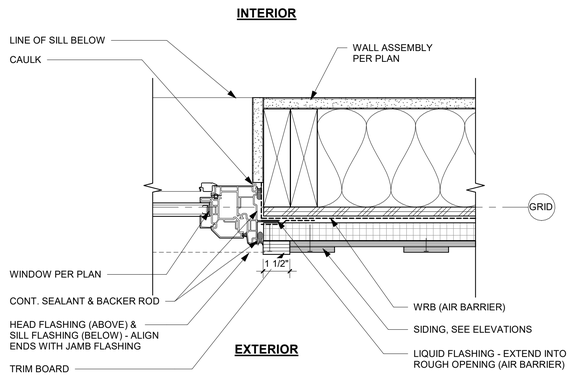
0' 1" 2" 4"



C1 WINDOW JAMB AT ACCENT PANEL SIDING

3" = 1'-0" @ FULL SIZE

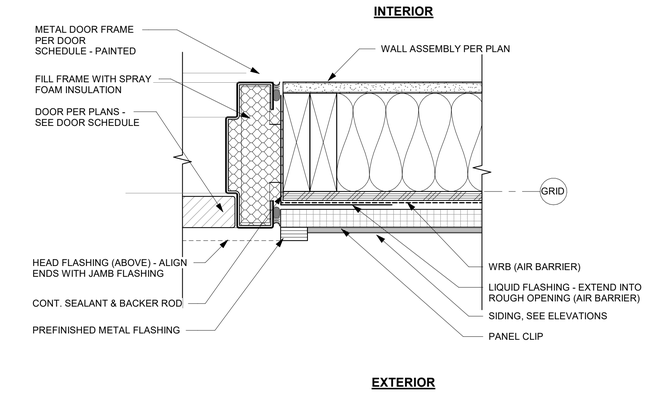
0' 1" 2" 4"



C3 WINODW JAMB AT B&B SIDING

3" = 1'-0" @ FULL SIZE

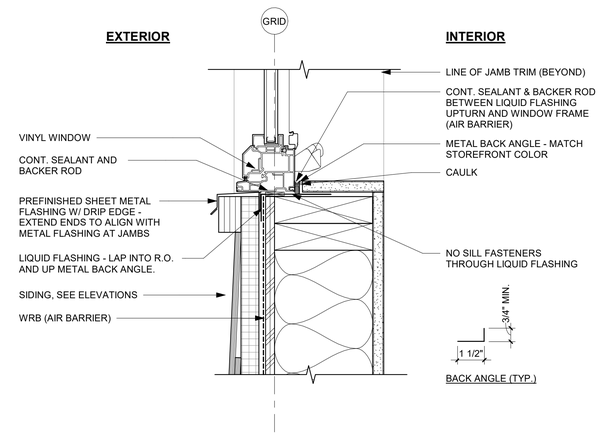
0' 1" 2" 4"



C5 HM DOOR JAMB AT PANEL SIDING

3" = 1'-0" @ FULL SIZE

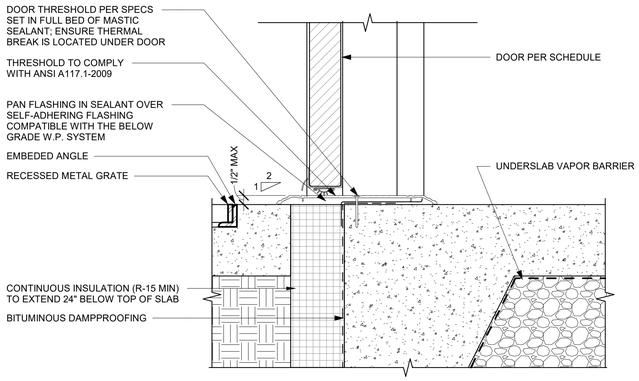
0' 1" 2" 4"



D1 WINDOW SILL AT PANEL SIDING

3" = 1'-0" @ FULL SIZE

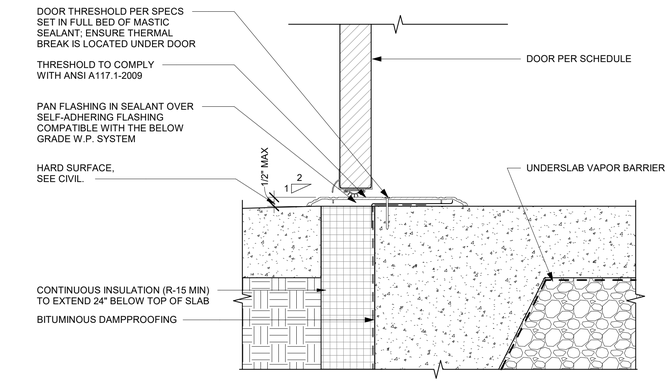
0' 1" 2" 4"



D3 DOOR THRESHOLD @ ENTRY

3" = 1'-0" @ FULL SIZE

0' 1" 2" 4"



D5 DOOR THRESHOLD, TYP.

3" = 1'-0" @ FULL SIZE

0' 1" 2" 4"

8/22/2022 8:14:39 AM

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599

SPOKANE | 245 W Riverside Suite 500 | WA 98201 | 509.252.5080

PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270

BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: OPENING DETAILS

Drawn By: Author

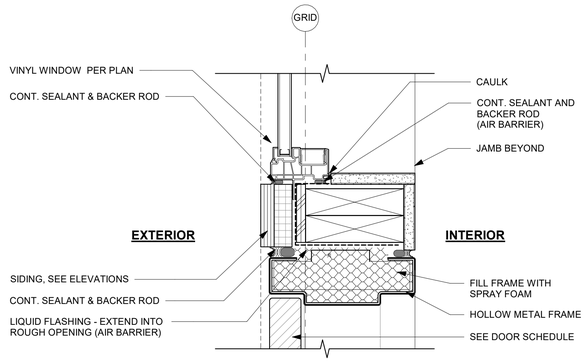
Project No. 022044.000

Date : 08/17/2022

Revised :

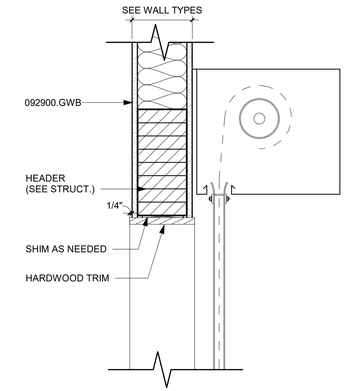
Sheet No.

A7.30



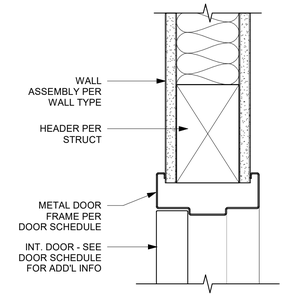
A2 HM DOOR HEAD AT VINYL WINDOW

3" = 1'-0" @ FULL SIZE
0" 1" 2" 4"



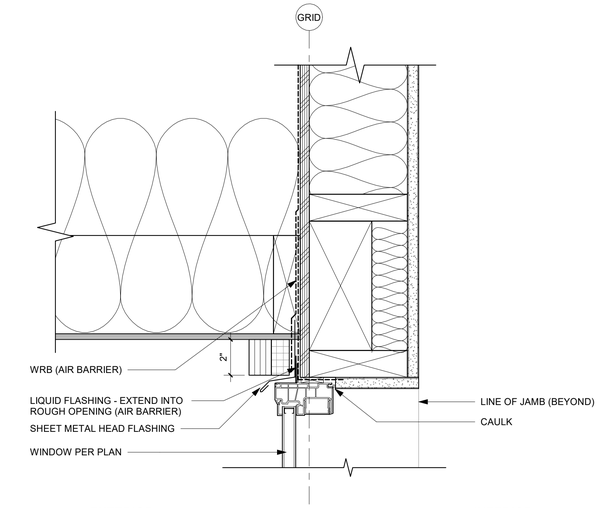
A4 COUNTER COILING DOOR @ HEAD

1 1/2" = 1'-0" @ FULL SIZE
0" 2" 4" 8"



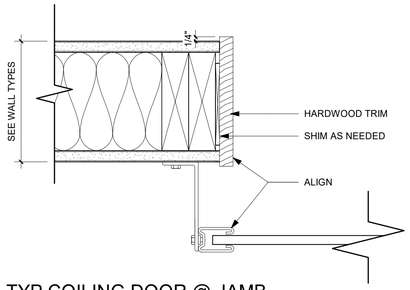
A5 HM DOOR HEAD - INTERIOR

3" = 1'-0" @ FULL SIZE
0" 1" 2" 4"



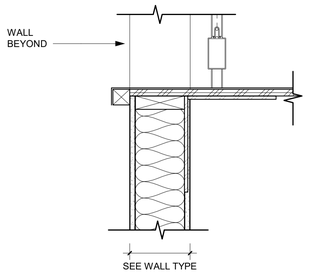
C2 WINDOW HEAD AT SOFFIT

3" = 1'-0" @ FULL SIZE
0" 1" 2" 4"



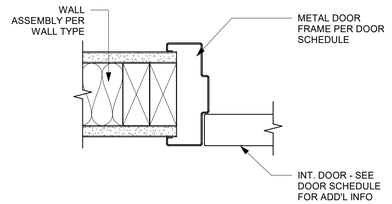
B4 TYP COILING DOOR @ JAMB

3" = 1'-0" @ FULL SIZE
0" 1" 2" 4"



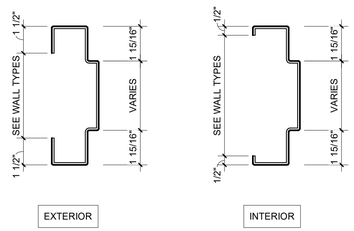
C4 COUNTER DOOR @ SILL

1 1/2" = 1'-0" @ FULL SIZE
0" 2" 4" 8"



B5 DOOR JAMB - INTERIOR

3" = 1'-0" @ FULL SIZE
0" 1" 2" 4"



C5 HOLLOW METAL FRAME PROFILES

3" = 1'-0" @ FULL SIZE
0" 1" 2" 4"

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 245 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

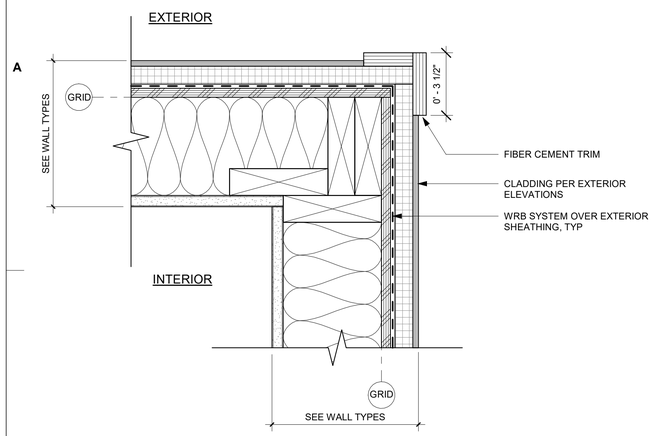
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: OPENING DETAILS
Drawn By: Author
Date : 08/17/2022
Project No. 022044.000
Revised :

Sheet No.
A7.31

BLRB ARCHITECTS, P.S.

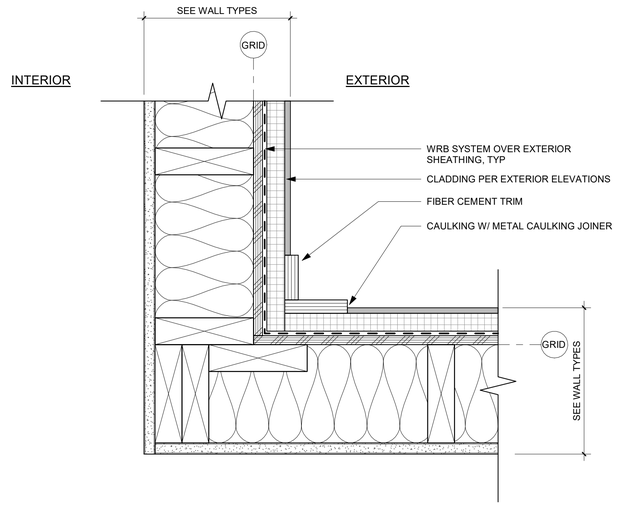
8/22/2022 8:14:39 AM



B1 PANEL SIDING - OUTSIDE CORNER

3" = 1'-0" @ FULL SIZE

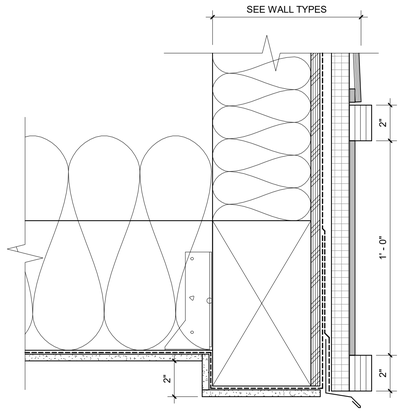
0' 1" 2" 4"



B2 PANEL SIDING - INSIDE CORNER

3" = 1'-0" @ FULL SIZE

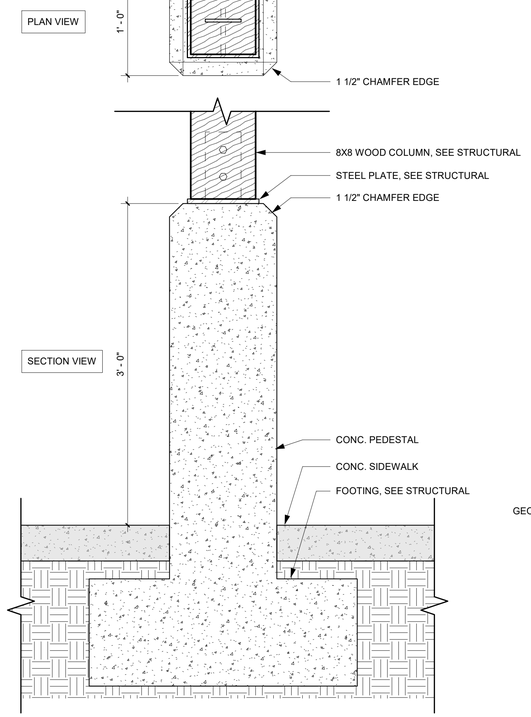
0' 1" 2" 4"



B4 GABLE DETAIL, TYP

3" = 1'-0" @ FULL SIZE

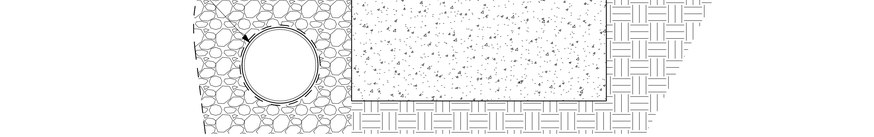
0' 1" 2" 4"



D1 COLUMN BASE @ ENTRY

1 1/2" = 1'-0" @ FULL SIZE

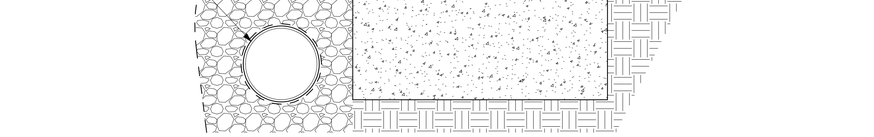
0' 2" 4" 8"



D2 FOUNDATION @ LANDSCAPE

3" = 1'-0" @ FULL SIZE

0' 1" 2" 4"



D4 BASE OF EXTERIOR WALL, 6" STEM WALL

3" = 1'-0" @ FULL SIZE

0' 1" 2" 4"

8/22/2022 8:14:40 AM

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: EXTERIOR DETAILS

Drawn By: Author

Project No. 022044.000

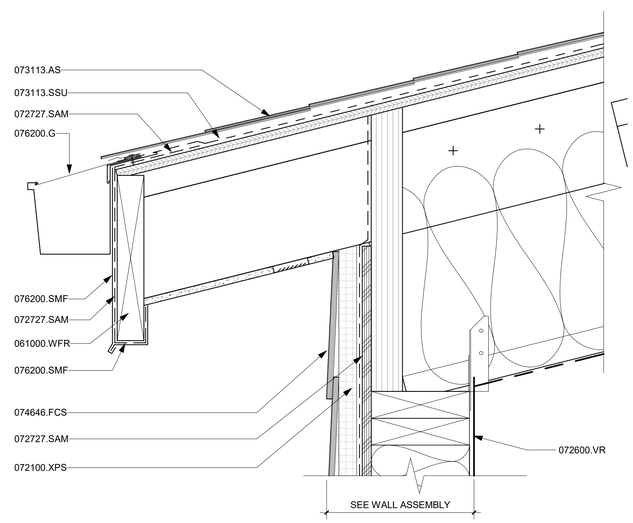
Date: 08/17/2022

Revised:

Sheet No.

A8.10

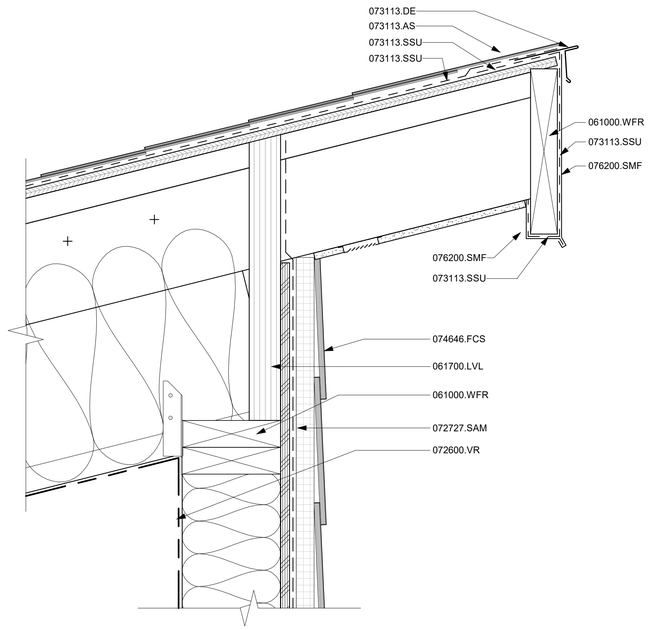
BLRB ARCHITECTS, P.S.



B1 EAVE DETAIL, TYP

3" = 1'-0" @ FULL SIZE

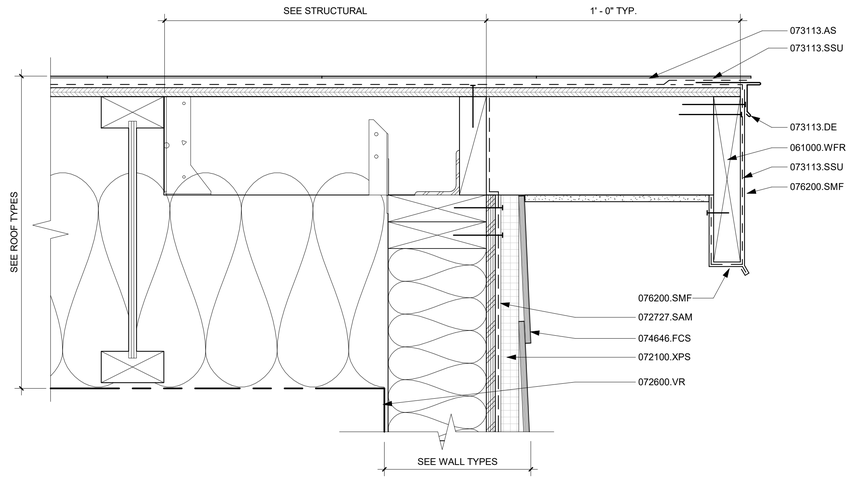
0' 2" 4" 8"



B3 EAVE DETAIL, TYP

3" = 1'-0" @ FULL SIZE

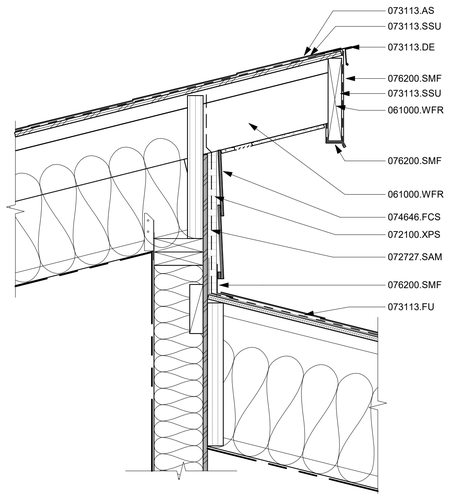
0' 2" 4" 8"



B5 GABLE DETAIL, TYP

3" = 1'-0" @ FULL SIZE

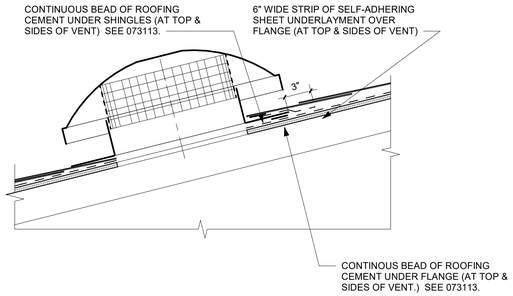
0' 2" 4" 8"



D1 EAVE DETAIL, TYP

1 1/2" = 1'-0" @ FULL SIZE

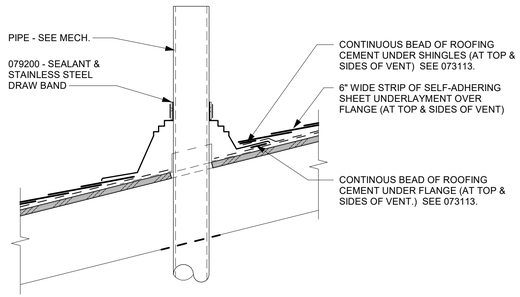
0' 1" 2" 4"



C5 DOME VENT - (ATTIC EXHAUST VENT), TYP

1 1/2" = 1'-0" @ FULL SIZE

0' 2" 4" 8"



D5 VENT PIPE THROUGH ROOF, TYP

1 1/2" = 1'-0" @ FULL SIZE

0' 2" 4" 8"

KEYNOTES - BY SHEET

061000.WFR	WOOD FRAMING
061700.LVL	
072100.XPS	EXTRUDED POLYSTYRENE BOARD INSULATION
072600.VR	VAPOR RETARDER
072727.SAM	SELF-ADHERED AIR BARRIER MEMBRANE
073113.AS	ASPHALT SHINGLES
073113.DE	DRIP EDGES
073113.FU	FELT UNDERLAYMENT
073113.SSU	SELF-ADHERING SHEET UNDERLAYMENT
074646.FCS	FIBER CEMENT SIDING
076200.G	GUTTERS
076200.SMF	SHEET METAL FLASHING

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5080

PORTLAND | 623 SW Morrison St. Suite 350 OR 97205 503.595.0270

BEND | 721 SW Industrial Square #150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: ROOF DETAILS

Drawn By : Author

Project No. 022044.000

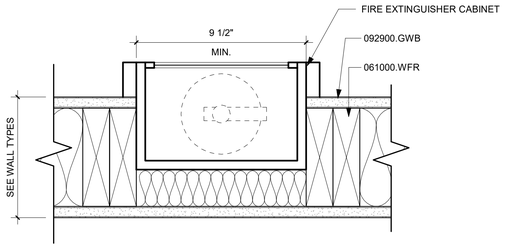
Date : 08/17/2022

Revised :

Sheet No.

A8.30

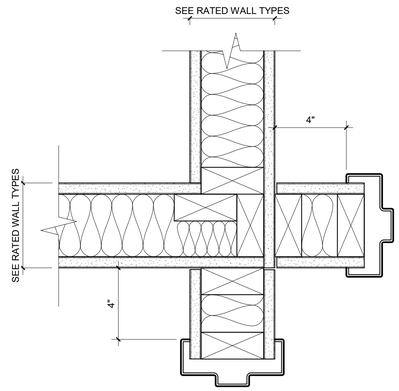
8/22/2022 8:14:41 AM



B2 SEMI-RECESSED FIRE EXTINGUISHER CABINET

3" = 1'-0" @ FULL SIZE

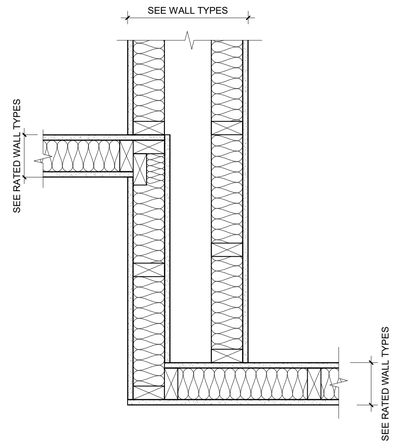
0" 1" 2" 4"



B3 1HR FIRE WALL TRANSITION AT STAFF RESTROOM

3" = 1'-0" @ FULL SIZE

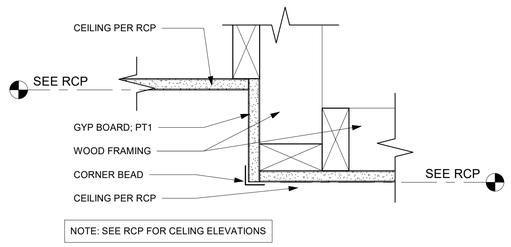
0" 1" 2" 4"



B5 1HR FIRE WALL TRANSITION AT RESTROOM

1 1/2" = 1'-0" @ FULL SIZE

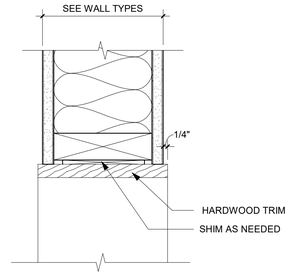
0" 2" 4" 8"



C3 SOFFIT @ GYP CEILING

3" = 1'-0" @ FULL SIZE

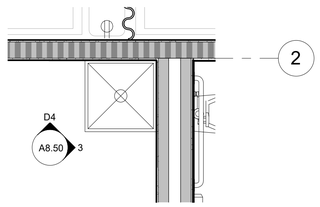
0" 1" 2" 4"



C5 HARDWOOD TRIM HEAD @ FRAMED OPENING

3" = 1'-0" @ FULL SIZE

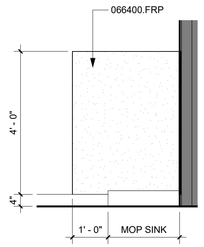
0" 1" 2" 4"



D2 MOP SINK - FLOOR PLAN

1/2" = 1'-0" @ FULL SIZE

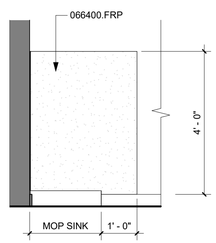
0" 6" 1' 2'



D4 INT. ELEV MOP SINK - NORTH

1/2" = 1'-0" @ FULL SIZE

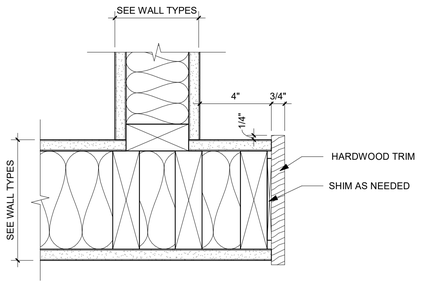
0" 6" 1' 2'



3 INT. ELEV. MOP SINK - EAST

1/2" = 1'-0" @ FULL SIZE

0" 6" 1' 2'



D5 HARDWOOD TRIM JAMB @ FRAMED OPENING

3" = 1'-0" @ FULL SIZE

0" 1" 2" 4"

8/22/2022 8:14:42 AM

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: INTERIOR DETAILS

Drawn By: Author

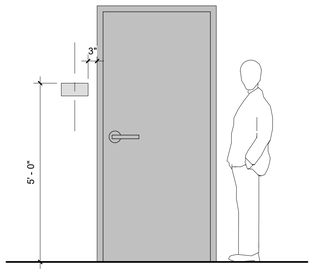
Project No. 022044.000

Date : 08/17/2022

Revised :

Sheet No.

A8.50



NOTE:

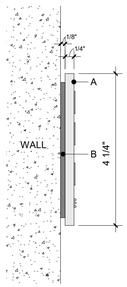
TYPICAL MOUNTING ELEVATION
FOR TYPES 1, 2, 3.
MOUNT @ 5'-0" TO TOP OF SIGN

A1 TYPICAL MOUNTING HEIGHT

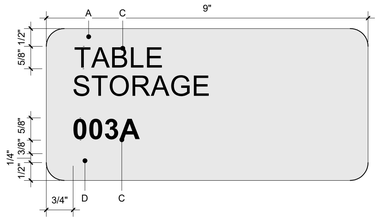
1/2" = 1'-0" @ FULL SIZE

0' 6" 1' 2'

SIDE VIEW



FRONT VIEW



NOTES:
A. 1/4" PHOTOPOLYMER PANEL, PAINTED. ADHERED TO ACRYLIC BACKER.

B. 1/8" BLACK ACRYLIC BACKER. ADHERED TO WALL WITH VHB AND ADHESIVE.

C. INTEGRAL PHOTOPOLYMER CHARACTERS.

D. INTEGRAL TYPE II BRAILLE, PAINTED.

E. BACKGROUND AND TEXT COLOR TBD.

B1 SIGNAGE TYPE 1

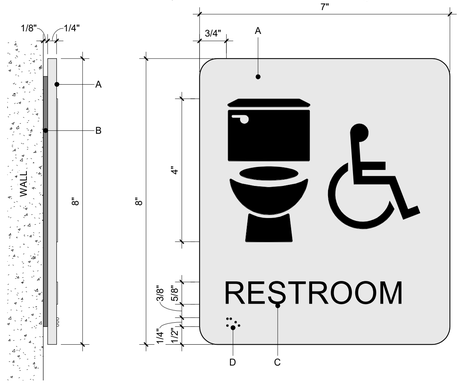
6" = 1'-0" @ FULL SIZE

0' 1/2" 1" 2"

A3 SIGNAGE TYPE 2

6" = 1'-0" @ FULL SIZE

0' 1/2" 1" 2"



NOTES:
A. 1/4" PHOTOPOLYMER PANEL, PAINTED. ADHERED TO ACRYLIC BACKER.

B. 1/8" BLACK ACRYLIC BACKER. ADHERED TO WALL WITH VHB AND ADHESIVE.

C. INTEGRAL PHOTOPOLYMER CHARACTERS.

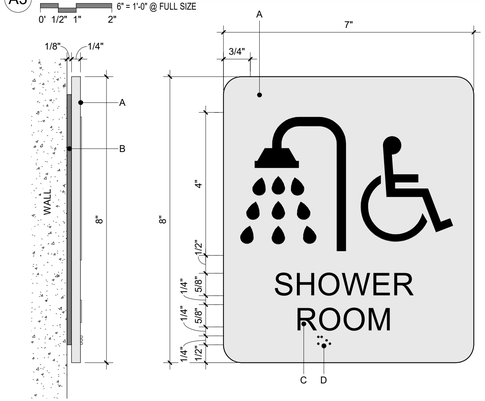
D. INTEGRAL TYPE II BRAILLE, PAINTED.

E. BACKGROUND AND TEXT COLOR TBD.

B3 SIGNAGE TYPE 3

6" = 1'-0" @ FULL SIZE

0' 1/2" 1" 2"



NOTES:
A. 1/4" PHOTOPOLYMER PANEL, PAINTED. ADHERED TO ACRYLIC BACKER.

B. 1/8" BLACK ACRYLIC BACKER. ADHERED TO WALL WITH VHB AND ADHESIVE.

C. INTEGRAL PHOTOPOLYMER CHARACTERS.

D. INTEGRAL TYPE II BRAILLE, PAINTED.

E. BACKGROUND AND TEXT COLOR TBD.

C1 WALL TRANSITIONS

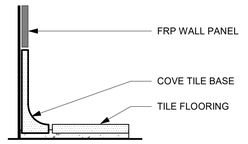
1" = 1'-0" @ FULL SIZE

0' 2" 4" 8"

C2 FLASH COVE TO FRP

1" = 1'-0" @ FULL SIZE

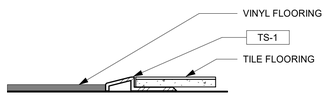
0' 2" 4" 8"

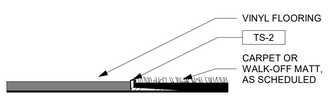


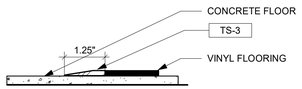
C3 TILE COVE TO FRP

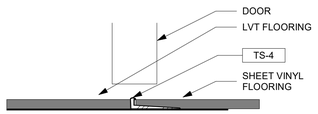
1" = 1'-0" @ FULL SIZE

0' 2" 4" 8"





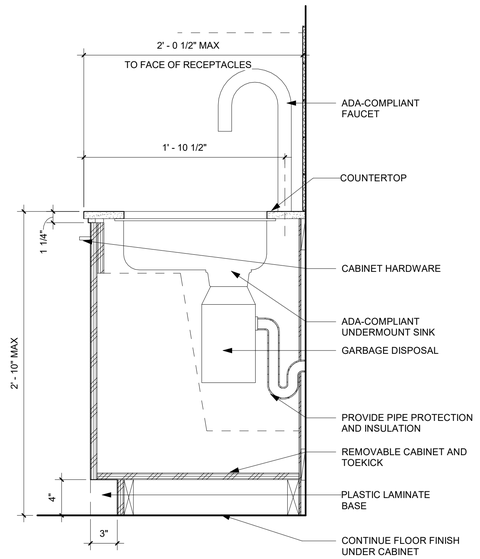




D1 FLOOR TRANSITIONS

1" = 1'-0" @ FULL SIZE

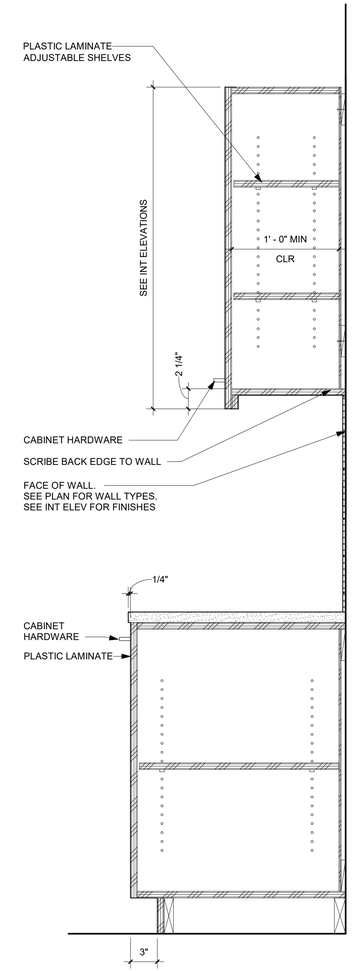
0' 2" 4" 8"



D4 BASE SINK CABINET TYP

1 1/2" = 1'-0" @ FULL SIZE

0' 2" 4" 8"



D5 BASE/UPPER CABINET TYP

1 1/2" = 1'-0" @ FULL SIZE

0' 2" 4" 8"

8/22/2022 8:14:43 AM

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599

SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270

BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

Description	Date
4	

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: INTERIOR DETAILS

Drawn By : Author

Project No. 022044.000

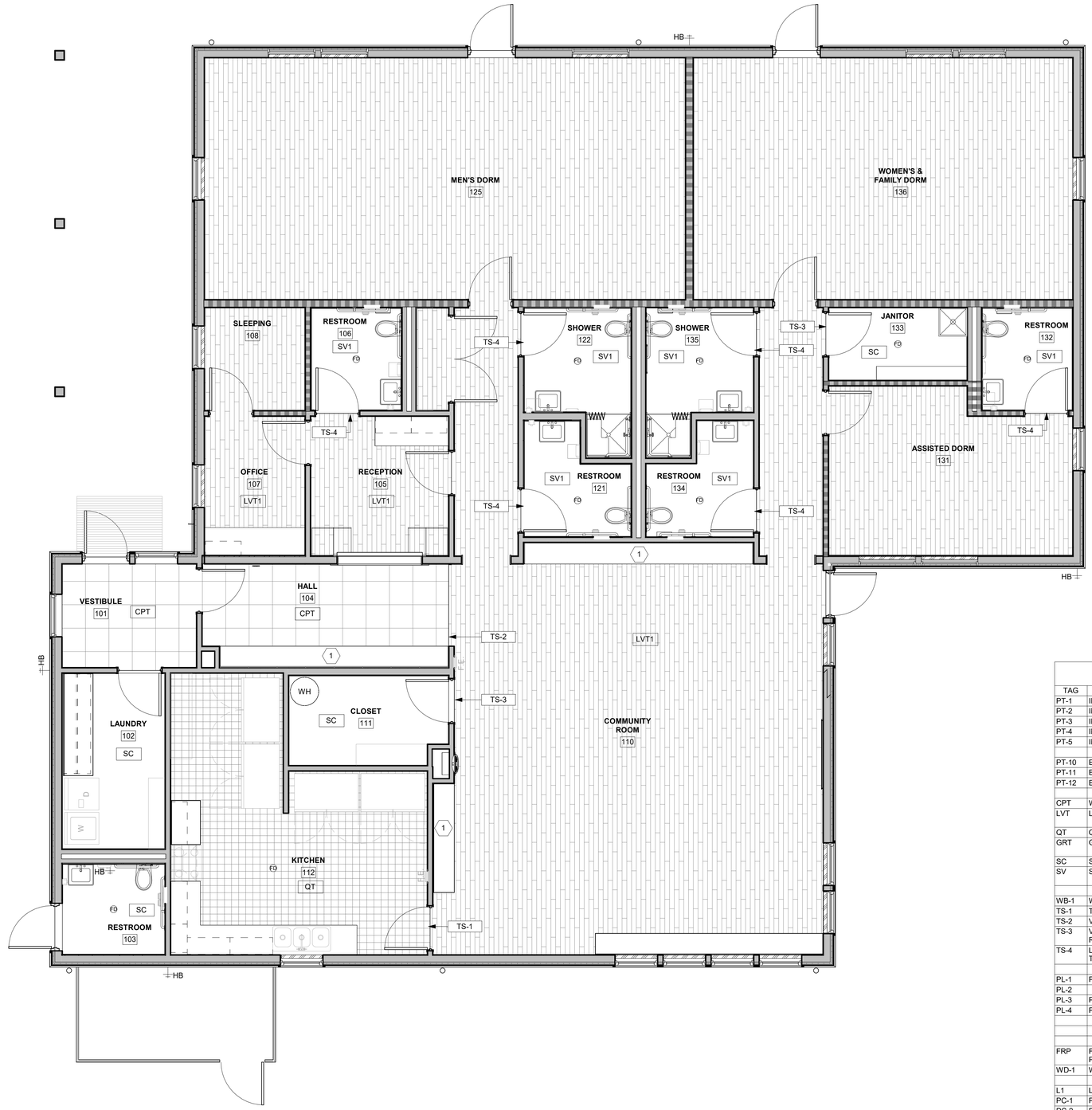
Date : 08/17/2022

Revised :

Sheet No.

A8.51

BLRB ARCHITECTS, P.S.



1 FINISH FLOOR PLAN - LEVEL 1

1/4" = 1'-0" @ FULL SIZE

0' 2' 4' 8'

FINISH PLAN GENERAL NOTES

1. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION / ORDERING OF FINISH MATERIALS. BRING DISCREPENCIES OR CONFLICTING DATA TO ARCHITECT'S ATTENTION PRIOR TO COMMENCING WORK.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL PRODUCT INFORMATION.
3. EXTEND FLOOR FINISHES UNDER APPLIANCES AND OPEN COUNTER AREAS.
4. FLOORING TRANSITIONS TO BE LOCATED AS SHOWN; U.N.O. TO BE CENTER OF DOOR FRAME, OR ALIGNED WITH WALL FINISH FACE. SEE SHEET A8.51 FOR TRANSITION DETAILS.
5. FLOORING LAYOUTS AND DIRECTION TO BE AS SHOWN.
6. REFER TO WINDOW / DOOR DETAILS FOR DOOR THRESHOLD INFORMATION.
7. ALL MATERIALS TO BE INSTALLED PER MANUFACTURE DIRECTION.
8. PROVIDE FLASH COVE AT ALL AREAS WITH SHEET VINYL, SEE DETAIL A8.51/C2.
9. ALL WALLS TO RECEIVED PT-1 W/ WB-1 UNLESS OTHERWISE NOTED
10. ALL METAL DOORFRAMES TO BE PAINTED PT-5
11. KITCHEN TO RECEIVE FRP ON ALL WALLS, TYP. TO 7' AND ALIGNED WITH TOP OF UPPER CABINETS.

KEYNOTES - FINISH PLAN

#	DESCRIPTION	View Type
1	NO FLOORING UNDER LOCKERS OR CASEWORK	FINISH PLAN

MATERIAL / FINISH SCHEDULE

TAG	PRODUCT TYPE	MANUFACTURER	DESCRIPTION	FINSH	NOTES
PT-1	INTERIOR PAINT	SHERWIN WILLIAMS	SW7566 WESTHIGHLAND WHITE	EGGSHELL	GENERAL WALL / CEILING COLOR
PT-2	INTERIOR PAINT	SHERWIN WILLIAMS	SW9130 EVERGREEN FOG	EGGSHELL	ACCENT
PT-3	INTERIOR PAINT	SHERWIN WILLIAMS	SW6218 TRADEWIND	EGGSHELL	ACCENT
PT-4	INTERIOR PAINT	SHERWIN WILLIAMS	SW6688 SOLARIA	EGGSHELL	ACCENT
PT-5	INTERIOR PAINT	SHERWIN WILLIAMS	SW7566 WESTHIGHLAND WHITE	SEMI-GLOSS	METAL DOOR FRAMES
PT-10	EXTERIOR PAINT	BENJAMIN MOORE	TAOS TAUPE, 2111-40	SATIN	
PT-11	EXTERIOR PAINT	BENJAMIN MOORE	WOODCLIFF LAKE, 980	SATIN	
PT-12	EXTERIOR PAINT	BENJAMIN MOORE	MINK, 2112-10	SATIN	
CPT	WALK OFF CARPET	FOSS FLOORS	GRIZZLY TILE, COLOR: D66 ASH, 24" X 24" TILE		SELF STICK INSTALLATION
LVT	LUXURY VINYL TILE	MANNINGTON COMMERCIAL	SPACIA FIRST 20 - STYLE: WOOD; COLOR: NATURAL OAK SP5W3021		6" x 36" x 0.098", 20 MIL, GLUE DOWN
QT	QUARRY TILE	DALTILE	QUARRY TILE - ARID GRAY,0Q42, 6" x 6"		USE COORDINATING COVE BASE TRIMS / GROUT 1
GRT	GROUT	LATICRETE	EPOXY GROUT - COLOR: 56 DESERT KHAKI - 3/8 GROUT JOINT		USE WITH QUARRY TILE
SC	SEALED CONCRETE	N/A	N/A		
SV	SHEET VINYL	MANNINGTON COMMERCIAL	ENTWINDED COLLECTION - STYLE: SUBER, COLOR: LEAD WHITE		0.080" THICK - 6', 9', 12' WIDTHS; FLASH COVE - SEE DETAIL A8.51/C2
WB-1	WALL BASE	TARKETT / JOHNSONITE	4" VINYL COVED WALL BASE, COLOR: TA3 CASTAWAY CB		
TS-1	TILE TO RESILIENT REDUCER	SCHLUTER	RENO-U, SATIN ANODIZED		
TS-2	VINYL TO CARPET REDUCER	TARKETT / JOHNSONITE	COLOR: TA6 BEDROCK CG		
TS-3	VINYL TO CONCRETE REDUCER	TARKETT / JOHNSONITE	COLOR: TA3 CASTAWAY CB		
TS-4	LVT TO SHEET VINYL TRANSISTION	TARKETT / JOHNSONITE	COLOR: TA3 CASTAWAY CB		
PL-1	PLASTIC LAMINATE	FORMICA	MINERAL SPA - 06920-58	MATTE	COUNTERS - RECEPTION 105
PL-2		WILSONART	FLAX LINEN - 4990-38		COUNTERS - COMMUNITY ROOM 110
PL-3	PLASTIC LAMINATE	WILSONART	DESERT ZEPHYR 4841.60	WOODBRUSH	COUNTERS - KITCHEN 112 / LAUNDRY 102
PL-4	PLASTIC LAMINATE	FORMICA	AGED ASH 8844-WR		CABINETS
FRP	FIBERGLASS REINFORCED PANEL	CRANE COMPOSITES	VARIETEX, LINEN TEXTURE, COLOR: SOUTH BEACH IVORY 1282		USE MFG RECOMMENDED TRIM AT ALL EDGES & SEAMS
WD-1	WOOD TRIM	N/A	SPECIES: MAPLE	SATIN CLEAR	FLAT TRIM
L1	LOCKERS	PENCO	COLOR: 073 CHAMPAGNE		BASIS OF DESIGN
PC-1	PRIVACY CURTAIN	INPRO	ARRAY - STONE (SHIELD BY PANAZ)		BASIS OF DESIGN, MEN'S DORM 125
PC-2	PRIVACY CURTAIN	INPRO	ARRAY - AUBURN (SHIELD BY PANAZ)		BASIS OF DESIGN, WOMEN'S DORM 136
TB	TACK BOARD	KOROSEAL	TAC WALL - COLOR 82 QUARRY		

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Square #150 | OR 97702 | 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: FINISH SCHEDULE / PLAN

Drawn By: Author

Project No. 022044.000

Date: 08/17/2022

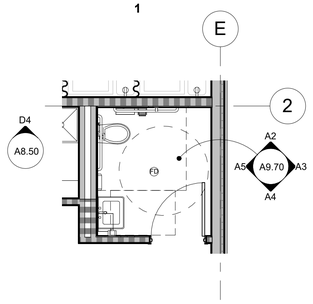
Revised:

Sheet No.

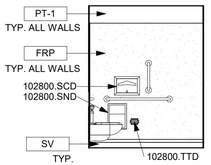
A9.01

8/22/2022 8:14:44 AM

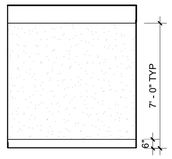
BLRB ARCHITECTS, P.S.



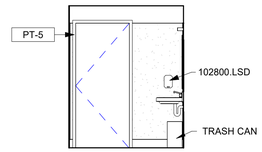
A1 TYP RESTROOM PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



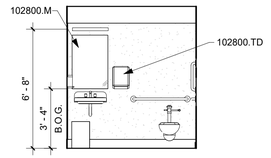
A2 132 RESTROOM - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



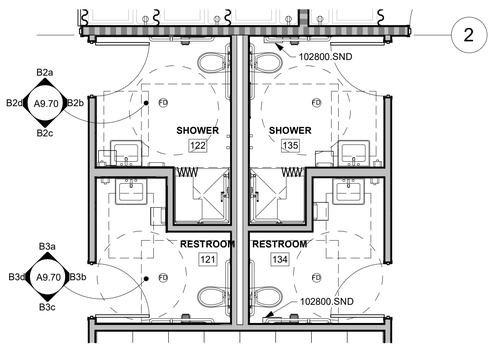
A3 132 RESTROOM - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



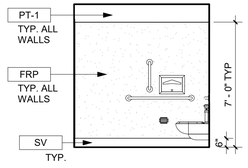
A4 132 RESTROOM - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



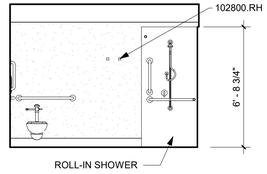
A5 132 RESTROOM - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



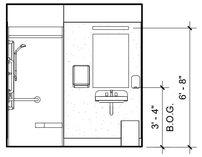
B1 ENLARGED RESTROOM PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



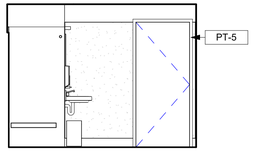
B2a 122/135 SHOWER - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



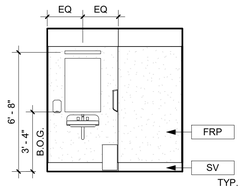
B2b 122/135 SHOWER - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



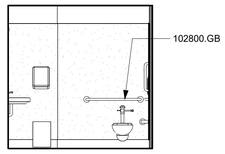
B2c 122/135 SHOWER - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



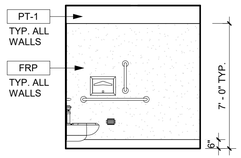
B2d 122/135 SHOWER - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



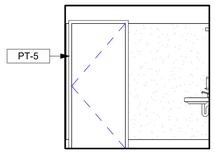
B3a 121/134 RESTROOM - NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



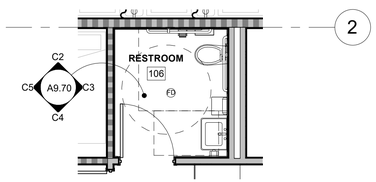
B3b 121/134 RESTROOM - EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



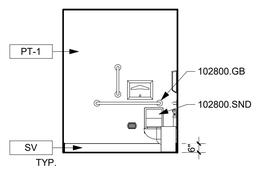
B3c 121/134 RESTROOM - SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



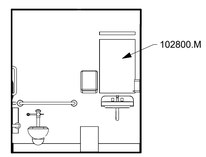
B3d 121/134 RESTROOM - WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



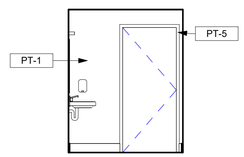
C1 106 ENLARGED RESTROOM PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



C2 106 RESTROOM NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

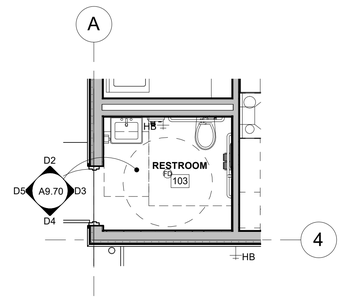


C3 106 RESTROOM EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

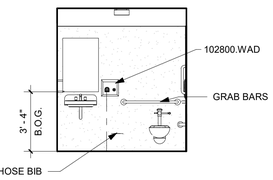


C4 106 RESTROOM SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

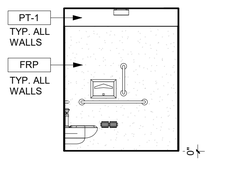
C5 106 RESTROOM WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



D1 103 ENLARGED RESTROOM PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

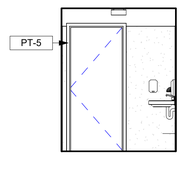


D2 103 RESTROOM NORTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



D3 103 RESTROOM EAST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

D4 103 RESTROOM SOUTH
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'



D5 103 RESTROOM WEST
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

KEYNOTES - BY SHEET

102800.GB	GRAB BAR
102800.LSD	LIQUID SOAP DISPENSER
102800.M	MIRROR
102800.RH	ROBE HOOK
102800.SCD	SEAT COVER DISPENSER
102800.SND	SANITARY NAPKIN DISPOSAL UNIT
102800.TD	TOWEL DISPENSER (TYPE)
102800.TTD	TOILET TISSUE DISPENSER
102800.WAD	WARM AIR DRYER

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ENLARGED RESTROOM PLANS AND ELEVATIONS
Drawn By : Author
Project No. 022044.000
Date : 08/17/2022
Revised :

Sheet No.
A9.70

8/22/2022 8:14:52 AM

GENERAL STRUCTURAL NOTES:

GENERAL NOTES:

1. ALL CONSTRUCTION AND DESIGN SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AS AMENDED BY THE STATE OF OREGON (2019 OSSC).
2. THE STRUCTURAL DRAWINGS SHALL BE UTILIZED IN CONJUNCTION WITH OTHER DESIGN CONSULTANT'S DRAWINGS (ARCHITECTURAL, MECHANICAL, ETC.). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE REQUIREMENTS OF THE DRAWINGS INTO THEIR SHOP DRAWINGS AND CONSTRUCTION.
3. THE GENERAL STRUCTURAL NOTES ARE INTENDED FOR USE IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THE TWO, THE GENERAL STRUCTURAL NOTES SHALL SUPERSEDE THE PROJECT SPECIFICATIONS. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER.
4. CONSTRUCTION SEQUENCE AND METHODS:
   A. THE STRUCTURAL DRAWINGS ARE INTENDED FOR THE STRUCTURE TO ACT AS A WHOLE ONCE CONSTRUCTION IS COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE SAFETY AND STABILITY (I.E. TEMPORARY BRACING IF REQUIRED) DURING CONSTRUCTION AS A RESULT OF CONSTRUCTION METHODS AND SEQUENCES.
   B. THE CONTRACTOR SHALL TAKE INTO ACCOUNT COLD WEATHER CONSTRUCTION AND THE EFFECTS OF THERMAL MOVEMENT DURING THE CONSTRUCTION SCHEDULE.
   C. NON-CANTILEVERED OR RESTRAINED RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL THE WALL HAS BEEN TIED INTO THE LOWER AND UPPER SLAB SUPPORTS UNLESS ADEQUATE ENGINEERED BRACING HAS BEEN APPROVED.
5. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS. THE ARCHITECT AND/OR ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY BETWEEN THE EXISTING CONDITIONS AND CONSTRUCTION DOCUMENTS.
6. SUBMITTALS:
   A. SUBMITTALS OF SHOP DRAWINGS, MILL TEST REPORTS, PRODUCT DATA FOR ITEMS AND BIDDER DESIGN ITEMS SHALL BE MADE TO THE ARCHITECT/ ENGINEER PRIOR TO FABRICATION AND CONSTRUCTION. BEFORE SUBMISSION TO THE ARCHITECT/ ENGINEER, THE CONTRACTOR SHALL REVIEW THE SUBMITTALS FOR COMPLETENESS. VERIFICATION OF DIMENSIONS AND QUANTITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MARK THE SHOP DRAWING WITH ALL NECESSARY COMMENTS AND DETAILER REQUESTED INFO BEFORE FORWARDING TO THE ARCHITECT/ ENGINEER. SUBMITTALS SHALL BE MADE IN TIME TO PROVIDE A MINIMUM OF TWO WEEKS FOR REVIEW BY THE ARCHITECT/ ENGINEER.
   B. SHOP DRAWINGS FOR ALL STRUCTURAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT/ ENGINEER PRIOR TO FABRICATION AND CONSTRUCTION. SUCH ITEMS INCLUDE:

   CONCRETE MIX DESIGNS, CONCRETE REINFORCEMENT (INCLUDING MILL TEST REPORTS), EMBEDDED STEEL ITEMS, STRUCTURAL STEEL (INCLUDING MILL TEST REPORTS), GLUED-LAMINATED MEMBERS, OPEN WEB WOOD JOISTS AND WOOD I-JOISTS.

   SHOP DRAWINGS OR CONTRACTOR ENGINEERED DETAILS SHALL BEAR THE SEAL AND SIGNATURE OF A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF OREGON IF IT DIFFERS FROM THE DESIGN OF THE STRUCTURAL DRAWINGS. ANY REVISION FROM THE STRUCTURAL DRAWINGS SHALL BE SUBMITTED ALONG WITH SUPPORTING CALCULATIONS BEARING THE SEAL AND SIGNATURE OF A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF OREGON TO THE ARCHITECT/ ENGINEER FOR REVIEW AND ACCEPTANCE.

   C. CALCULATIONS, DESIGN DRAWINGS, AND SHOP DRAWINGS FOR THE DESIGN, FABRICATION AND CONSTRUCTION OF THE BIDDER DESIGN ITEMS SHALL BEAR THE SEAL AND SIGNATURE OF A REGISTERED STRUCTURAL ENGINEER IN THE STATE OF OREGON AND SHALL BE SUBMITTED TO THE ARCHITECT/ ENGINEER PRIOR TO FABRICATION. BIDDER DESIGN ITEMS FOR THIS PROJECT INCLUDE:

   OPEN WEB WOOD JOISTS, WOOD I-JOISTS, STAIRS, SUNSHADES/ PREMANUFACTURED AWNINGS, SKYLIGHTS, WINDOW WALLS, AND ALL OTHER GLAZING SYSTEMS.

   CALCULATIONS AND BIDDER DESIGN DRAWINGS SHALL INCLUDE THE DESIGN, CONNECTION TO THE STRUCTURE, AND ACCOUNTING OF ANY LOCALIZED EFFECTS THE CONNECTIONS OR SYSTEMS MAY INDUCE ON THE STRUCTURE. ALL SUCH BIDDER DESIGNED ITEMS SHALL BE BASED ON THE DESIGN REQUIREMENTS AS SPECIFIED IN THE GENERAL STRUCTURAL NOTES.
7. DESIGN CRITERIA:

A. CODE: 2018 INTERNATIONAL BUILDING CODE AS AMENDED BY THE STATE OF OREGON (2019 OSSC) .
B. LOADS AND DESIGN CRITERIA: THE FOLLOWING LIVE LOADS AND CRITERIA WERE USED IN ADDITION TO THE DEAD LOAD OF THE STRUCTURE.

LIVE LOADS:
ROOF
GROUND SNOW LOAD.. 15 PSF
SNOW EXPOSURE FACTOR... Ce= 1.0
SNOW IMPORTANCE FACTOR...................................... Is= 1.0
THERMAL FACTOR... Ct = 1.1
ROOF SNOW LOAD (SLOPES < 1:12)............................ 25 PSF (PLUS ADDED SNOW DRIFT IF SHOWN ON PLANS)

SOIL CRITERIA: (BY: WALLACE GROUP; PROJECT NO. 21239 (1); DATED MARCH 15, 2022)
FOOTING (FROST) DEPTH... 1'-6" MIN. BELOW GRADE
ALLOWABLE SOIL BEARING VALUES
ON ENGINEERED FILL OR NATIVE SOILS....................... 2500 PSF (W/ 1/3 INCREASE FOR SHORT TERM LATERAL LOADS)
RETAINING WALLS (VALUES ARE ASSUMED)
ACTIVE - UNRESTRAINED.. 35 PCF (LEVEL BACKFILL)
ACTIVE - RESTRAINED.. 50 PCF (LEVEL BACKFILL)
PASSIVE.. 250 PSF/FT. BELOW NATURAL GRADE (ENGINEERED FILL OR NATIVE SOILS)
FRICTION COEFFICIENT.. 0.35 (ENGINEERED FILL OR NATIVE SOILS)

LATERAL CRITERIA:
RISK CATEGORY... II
WIND (DIRECTIONAL DESIGN PROCEDURE PER 2019 OSSC)
ULT. DESIGN WIND SPEED, Vult (3-SEC GUST).................. 100 MPH
WIND EXPOSURE... C
INTERNAL PRESSURE COEFFICIENT................................ ± 0.18
COMPONENTS AND CLADDING DESIGN
PRESSURE NOTES:
1. LOADS APPLIED IN EITHER DIRECTION NORMAL TO SURFACE
2. REFER TO FIGURE 30.4-1 ASCE 7-16 FOR ZONES
3. FLAT, HT.=30', EXP. ADJ.=1.0

ULT. NET DESIGN WIND PRESSURE (PSF) FOR 10 FT.^{2}		
ROOF (PSF)	ZONE 1, 2e	+16.0/ -40.2
	ZONE 2n,2r,3e	+16.0/ -58.7
	ZONE 3r	+16.0/ -69.7
WALL (PSF)	ZONE 4	+21.8/ -23.6
	ZONE 5	+21.8/ -29.1

SEISMIC (EQUIVALENT LATERAL FORCE PROCEDURE)
IMPORTANCE FACTOR (SEISMIC)................................ Ie= 1.0
SITE CLASS.. D
SPECTRAL RESPONSE ACCELERATIONS........................ Ss= 0.378
S1= 0.188
SPECTRAL RESPONSE COEFFICIENTS........................... Sds= 0.377
Sd1= 0.279
SEISMIC DESIGN CATEGORY.. D
BOTH DIRECTIONS:
RESPONSE MODIFICATION COEFFICIENT............................. R= 6.5 (LIGHT FRAMED PLYWOOD S.W.'S)
SEISMIC RESPONSE COEFFICIENT........................... Cs= 0.058
DESIGN BASE SHEAR (ULT)...................................... V= 6.70K (rho=1.0)

CONCRETE AND REINFORCING STEEL:

1. CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318-14 AND THE 2018 INTERNATIONAL BUILDING CODE AS AMENDED BY THE STATE OF OREGON (2019 OSSC).
2. THE MINIMUM 28 DAY CONCRETE STRENGTHS SHALL BE AS FOLLOWS:
   F'c = 4500 PSI (MAX. w/cm=0.45)...........................FOR ALL USES UNLESS NOTED OTHERWISE (I.E. FOOTINGS, STEM WALLS, PIERS)
   F'c = 3000 PSI..INTERIOR SLAB ON GRADE
   (NOTE: FOOTINGS / STEM WALLS DESIGNED FOR F'c=2500 PSI, CONCRETE SPECIAL INSPECTION NOT REQUIRED FOR FOOTINGS / STEM WALLS).
3. CONCRETE MIX DESIGNS, ALONG WITH TEST DATA AS REQUIRED, BY ACI 318-14, SECTION 26.4, SHALL BE SUBMITTED TO THE ARCHITECT/ ENGINEER FOR REVIEW A MINIMUM OF TWO WEEKS PRIOR TO CONCRETE POURS.
4. SPECIFIED CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39, WHEN AND WHERE SPECIAL INSPECTION IS REQUIRED.
5. A 20% MAXIMUM OF THE CEMENT CONTENT MAY BY SUBSTITUTED WITH FLYASH CONFORMING TO ASTM C618, TYPE F OR C. HIGHER PERCENTAGES OF FLYASH MAY BE UTILIZED WITH ACCEPTANCE AND APPROVAL BY THE STRUCTURAL ENGINEER. ANY CONCRETE MIX UTILIZING FLYASH SHALL BE VERIFIED WITH TEST DATA.
6. ADDITIONAL WATER SHALL NOT BE ADDED TO THE CONCRETE MIX AT THE JOBSITE. WATER REDUCING ADMIXTURES CONFORMING TO ASTM C494 MAY BE UTILIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. IF CONCRETE IS TO BE POURED AGAINST AN EXISTING CONCRETE SURFACE, THE EXISTING SURFACE SHALL BE CLEANED AND ROUGHENED TO A MIN. 1/4" AMPLITUDE.
8. SLEEVES, OPENINGS, CONDUITS, AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER BEFORE POURING. CONDUITS EMBEDDED IN SLABS SHALL NOT BE LARGER IN OUTSIDE DIAMETER THAN ONE THIRD THE THICKNESS OF THE SLAB AND SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS ON CENTER. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED CONCRETE EDGES UNLESS NOTED OTHERWISE.
9. SHORING AND RESHORING:
   SHORING AND RESHORING SHALL CONFORM TO ACI347.2 R-17. SHORING AND SUPPORTING FORMWORK SHALL NOT BE REMOVED FROM HORIZONTAL MEMBERS BEFORE CONCRETE STRENGTH IS AT LEAST 70 PERCENT OF DESIGN STRENGTH, AS DETERMINED BY FIELD CURED CYLINDERS. IN ADDITION, SHORING SHALL NOT BE REMOVED SOONER THAN RECOMMENDED BY ACI 347.2R-17. FORMWORK SHALL NOT BE REMOVED IN LESS THAN (10) DAYS.

CONCRETE AND REINFORCING STEEL CONT.:

10. REINFORCING STEEL:
    A. REINFORCING STEEL SHALL BE DETAILED, FABRICATED, AND INSTALLED ACCORDING TO THE "MANUAL OF STANDARD PRACTICE OF REINFORCED CONCRETE CONSTRUCTION" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
    B. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
    C. SMOOTH BARS OR WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.
    D. REINFORCING STEEL REQUIRING WELDING OR PLACED WITHIN A SPECIFIED BOUNDARY ELEMENT OR MOMENT FRAME ELEMENT SHALL CONFORM TO WELDABLE ASTM A706.
    E. ALL LAP SPLICES OF REINFORCEMENT SHALL CONFORM TO CLASS B LAPS AS SHOWN ON THE LAP SPLICE SCHEDULE, UNLESS NOTED OTHERWISE.
    F. ANY MECHANICAL BAR SPLICES SHOWN SHALL BE MADE WITH DAYTON BAR-GRIP COUPLERS OR WITH AN APPROVED PRODUCT SUBMITTED TO THE ENGINEER OF RECORD WITH AN ICBO REPORT.
    G. UNLESS NOTED OTHERWISE, REINFORCING STEEL SHALL HAVE THE MINIMUM COVER OR PROTECTION FOR THE FOLLOWING USES AS NOTED BELOW:
    BEAMS, JOISTS, AND COLUMNS............................. 1-1/2" (TO TIES OR STIRRUPS)
    SLABS...1"
    WALLS
    INTERIOR FACES...3/4"
    EXPOSED TO EARTH OR WEATHER.............1-1/2" (#5 BARS AND SMALLER)
    2" (#6 BARS AND LARGER)
    FOOTINGS..3"
11. CONCRETE WALLS:
    A. PROVIDE THE MINIMUM WALL REINFORCING AS SHOWN BELOW UNLESS NOTED OTHERWISE ON PLANS:

WALL THICKNESS	REINFORCING
6"	#4 VERT. @ 18" O.C. & #4 HORIZ. @ 16" O.C. @ ℄ OF WALL
8"	#4 VERT. @ 18" O.C. & #4 HORIZ. @ 12" O.C. @ ℄ OF WALL

    B. HOOKED DOWELS FROM FOUNDATIONS SHALL BE PROVIDED TO MATCH VERTICAL WALL REINFORCING.
    C. PROVIDE HOOKED DOWELS MATCHING SLAB REINFORCING FROM WALLS TO SLABS OR HOOK SLAB REINFORCEMENT INTO WALLS.
    D. UNLESS NOTED OTHERWISE, PLACE (2) #5 BARS IN WALLS W/ (2) LAYERS OF REINF. IN BOTH DIRECTIONS & (1) #5 BAR IN WALLS HAVING SINGLE LAYER OF REINF. IN BOTH DIRECTIONS, ON ALL SIDES OF SLAB AND WALL OPENINGS EXTENDED 36" BEYOND OPENING. PROVIDE (1) OR (2) 4'-8" LONG DIAGONAL #5 BARS AT EACH CORNER OF THE OPENING MATCHING THE LAYERS OF REINFORCING.
12. ADDITIONAL CONCRETE ITEMS:
    A. HEADED SHEAR STUDS AND DEFORMED BAR ANCHORS SHALL BE AN APPROVED NELSON PRODUCT OR APPROVED EQUAL.
    B. WEDGE ANCHORS OR EXPANSION BOLTS SHALL BE HILTI KWIK BOLT-TZ OR AN APPROVED EQUAL SUBMITTED WITH ICBO REPORTS TO THE ENGINEER FOR REVIEW.
    C. EPOXY ANCHORS OR DOWELS SHALL BE INSTALLED WITH HILTI HIT-RE 500-V3 EPOXY ADHESIVE. AN APPROVED EQUAL IN CRACKED OR UNCRACKED CONCRETE WITH ICBO REPORTS MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
    D. UNLESS NOTED OTHERWISE, PERMANENTLY EXPOSED EMBEDDED PLATE AND ANGLE ASSEMBLIES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION. WELDS OR LOADS SHALL NOT BE PLACED ON THE EMBEDDED ASSEMBLIES FOR A MINIMUM OF (7) DAYS AFTER CASTING IN CONCRETE.
13. REINFORCEMENT SHALL BE SECURED IN FORMS WITH SUITABLE TIES AND ANCHORAGE TO PREVENT DISPLACEMENT. BARS ADJACENT TO EARTH SHALL BE SUPPORTED BY CEMENT MORTAR CUBES.
14. REINFORCING STEEL SHALL NOT BE DISPLACED FOR THE CONVENIENCE OF OTHER TRADES UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
15. "WET SETTING" OF REINFORCEMENT, ANCHOR BOLTS AND INSERTS IS NOT PERMITTED.

CONCRETE REINFORCING LAP SPLICE SCHEDULE

BAR SIZE	f'c=3,000 psi				f'c=4,000 psi				f'c=5,000 psi			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	28	42	22	32	24	36	19	28	22	33	17	25
#4	37	56	29	43	32	48	25	37	29	43	22	33
#5	47	70	36	54	40	60	31	47	36	54	28	42
#6	56	84	43	64	48	72	37	56	43	65	33	50
#7	81	122	63	94	70	106	54	81	63	94	49	73
#8	93	139	72	107	80	121	62	93	72	108	55	83
#9	105	157	81	121	91	136	70	105	81	122	63	94
#10	118	177	91	136	102	153	79	118	91	137	70	105
#11	131	196	101	151	113	170	87	131	101	152	78	117

LAP SPLICE SCHEDULE NOTES:

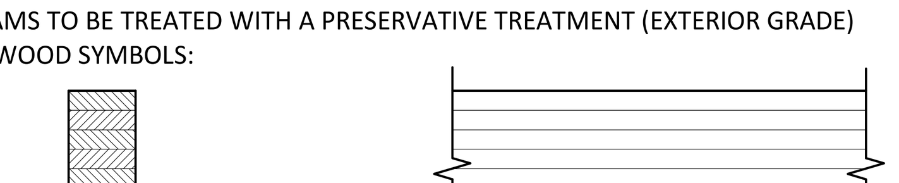
1. LAP LENGTHS ARE IN INCHES AND ARE BASED ON GRADE 60 REINFORCING STEEL AND NORMAL WEIGHT CONCRETE.
2. WHERE CLASS A LAP SPLICES ARE NOTED IN THE PLANS OR DETAILS, DIVIDE THE TABULATED VALUES BY 1.3
3. FOR LIGHTWEIGHT AGGREGATE CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3.
4. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.
5. CASES 1 AND 2 ARE DEFINED AS FOLLOWS:
   BEAMS OR COLUMNS:
   CASE 1: COVER AT LEAST 1.0 DB AND C.C. SPACING AT LEAST 2.0 DB (WHERE DB = BAR DIAMETER).
   CASE 2: COVER LESS THAN 1.0 DB OR C.C. SPACING LESS THAN 2.0 DB.
   ALL OTHERS:
   CASE 1: COVER AT LEAST 1.0 DB AND C.C. SPACING AT LEAST 3.0 DB.
   CASE 2: COVER LESS THAN 1.0 DB OR C.C. SPACING LESS THAN 3.0 DB.

GLUED LAMINATED MEMBERS:

1. GLUED LAMINATED MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF ONE OF THE FOLLOWING STANDARDS AND PUBLICATIONS:
   A. AMERICAN NATIONAL STANDARD FOR STRUCTURAL GLUED LAMINATED TIMBER.
   B. ANSI STANDARD A190.1.
   C. ANY CODE-APPROVED STANDARD OR PUBLICATION. APPROVAL MUST BE OBTAINED FROM W.S.E.
2. THE MINIMUM GLUE LAMINATED MEMBER GRADES SHALL BE AS FOLLOWS:

MEMBER	GRADE
SIMPLE SPAN	24F-V4
CONTINUOUS/ CANTILEVER	24F-V8

3. APPEARANCE SHALL BE FRAMING INDUSTRIAL FOR HIDDEN MEMBERS AND ARCHITECTURAL FOR EXPOSED MEMBERS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
4. ALL BEAMS SHALL HAVE A 3500 FOOT RADIUS CAMBER UP UNLESS OTHERWISE NOTED ON THE DRAWINGS.
5. NO NOTCHING OR BORING OF HOLES IN BEAMS IS ALLOWED WITHOUT APPROVAL BY W.S.E.
6. GLUE SHALL BE WET-USE EXTERIOR WATERPROOF GLUE.
7. WHERE HANGERS ARE REQUIRED BUT NOT SPECIFICALLY SIZED, SIMPSON GLT HANGERS SHALL BE USED. SUBSTITUTION OF HARDWARE IS NOT ALLOWED WITHOUT APPROVAL OF W.S.E. THE SUBSTITUTION SUBMITTAL SHALL INCLUDE DOCUMENTATION SHOWING THE ALLOWABLE LOADS OF THE SPECIFIED HARDWARE ALONG WITH TABULATED ALLOWABLE LOADS FOR THE SUBSTITUTED ITEMS. ALL ITEMS SHALL BE INSTALLED PER THE MANUFACTURERS INSTALLATION REQUIREMENTS.
8. ALL EXTERIOR GLULAMS TO BE TREATED WITH A PRESERVATIVE TREATMENT (EXTERIOR GRADE)
9. GLUED LAMINATED WOOD SYMBOLS:



GLUED LAMINATED BEAM **GLUED LAMINATED BEAM ELEVATION**

WOOD STRUCTURAL PANELS:

1. STRUCTURAL WOOD PANELS SHALL CONFORM TO THE REQUIREMENTS OF ONE OF THE FOLLOWING STANDARDS AND PUBLICATIONS:
   A. U.S. PRODUCT STANDARD PS 1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD.
   B. U.S. PRODUCT STANDARD PS 2 PERFORMANCE STANDARD FOR WOOD BASED STRUCTURAL USE PANELS.
   C. APA PRP-108 PERFORMANCE STANDARDS.
   D. ANY CODE-APPROVED STANDARD OR PUBLICATION. APPROVAL MUST BE OBTAINED FROM W.S.E. STRUCTURAL ENGINEERS.
2. ROOF PANELS SHALL BE 5/8" APA RATED 40/20, EXPOSURE 1 SHEATHING, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
3. WALL PANELS SHALL BE 7/16" APA RATED 24/16, EXPOSURE 1 SHEATHING, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
4. ALL ROOF AND FLOOR SHEATHING SHALL BE INSTALLED WITH THE FACE GRAIN PERPENDICULAR TO THE SUPPORTS AND A 1/8" GAP AT ALL PANEL EDGES UNLESS RECOMMENDED OTHERWISE BY THE PANEL MANUFACTURER.
5. WHERE BLOCKING IS NOT SPECIFICALLY REQUIRED FOR THE ROOF SHEATHING, PLY CLIPS OR TONGUE AND GROOVE PLYWOOD SHALL BE USED.
6. SUB-FLOOR SHEATHING SHALL BE UNBLOCKED UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS. SUB-FLOOR SHEATHING SHALL BE GLUED DOWN TO THE SUPPORTING MEMBERS AND GLUED AT THE TONGUE AND GROOVE JOINT WHEN PROVIDED.
7. ALL NAILS SHALL BE COMMON NAILS EXCEPT AT ROOF SHEATHING WHERE RING SHANK NAILS SHALL BE USED. GALVANIZED NAILS SHALL BE USED AT PERMANENTLY EXPOSED EXTERIOR AREAS. GALVANIZED NAILS SHALL BE HOT DIPPED OR TUMBLED ONLY.
8. ALL NAILS AT FIRE-TREATED SHEATHING SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED, UNLESS OTHERWISE SPECIFIED BY MANUFACTURER.

SAWN LUMBER:

1. ALL SAWN LUMBER SHALL CONFORM TO THE WESTERN WOOD PRODUCTS ASSOCIATION OR THE WEST COAST LUMBER INSPECTION BUREAU GRADING RULES. LUMBER SHALL BE OF THE SPECIES AND GRADE SHOWN BELOW:

MEMBER	GRADE
2X & 4X FRAMING	DOUGLAS FIR-LARCH NO. 2
5X & GREATER BEAMS	DOUGLAS FIR-LARCH NO. 1
POSTS/ COLUMNS	DOUGLAS FIR-LARCH NO. 1
T&G DECKING	DOUGLAS FIR-COMMERCIAL DEX

2. ALL LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR CMU SHALL BE PRESSURE TREATED. CONTRACTOR MAY SUBMIT FOR APPROVAL, A MOISTURE BARRIER IN-LIEU OF THE PRESSURE TREATED WOOD.
3. ALL METAL HARDWARE AND FRAMING ACCESSORIES SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY OR AN APPROVED EQUAL. SUBSTITUTION OF AN APPROVED EQUAL SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER. THE SUBMITTAL SHALL INCLUDE DOCUMENTATION SHOWING THE ALLOWABLE LOADS OF THE SPECIFIED SIMPSON ITEM ALONG WITH TABULATED ALLOWABLE LOADS FOR THE SUBSTITUTED ITEMS. ALL ITEMS SHALL BE INSTALLED PER THE MANUFACTURERS INSTALLATION REQUIREMENTS. ALL NAIL HOLES SHALL BE FILLED WITH THE RECOMMENDED FASTENER UNLESS NOTED OTHERWISE ON THE DRAWINGS.
4. WHERE FRAMING HANGERS ARE REQUIRED BUT ARE NOT SPECIFICALLY SIZED, THE FOLLOWING SIZES SHALL BE USED. SLOPE, SKEW, TURN IN FLANGES AND PROVIDE TOP FLANGE HANGERS AS REQUIRED FOR THE SPECIFIC CONDITIONS AT THE END OF THE MEMBER.

MEMBER	HANGER
2X & 3X MEMBERS	U TYPE HANGERS
4X MEMBERS	HU TYPE HANGERS
6X MEMBERS	HUTF TYPE HANGERS
I-JOIST MEMBERS	MIT HANGERS
GLU-LAM MEMBERS	LEG HANGERS

5. ALL WALLS SHALL HAVE DOUBLE TOP PLATES AND SHALL BE SPLICED PER THE TYPICAL TOP PLATE SPLICE DETAIL, UNLESS NOTED OTHERWISE. TOP PLATES AT WALL INTERSECTIONS SHALL BE LAPPED AND NAILED WITH (3) 16D NAILS.
6. HOLES FOR BOLTS SHALL BE DRILLED WITH A BIT OF THE SAME NOMINAL DIAMETER AS THE BOLT + 1/16".
7. ALL BOLTS, CARRIAGE BOLTS, LAG SCREWS, EXPANSION BOLTS AND EPOXY BOLTS SHALL BE INSTALLED WITH STANDARD CUT WASHERS UNDER THE BOLT HEADS AND NUTS THAT BEAR DIRECTLY ON THE WOOD. ALL NUTS SHALL BE TIGHTENED AT THE TIME OF INSTALLATION AND RE-TIGHTENED IF NECESSARY, DUE TO WOOD SHRINKAGE, PRIOR TO CLOSE-IN OR AT THE COMPLETION OF THE PROJECT. BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-2012.
8. DRILLING, CUTTING AND NOTCHING OF JOISTS SHALL BE IN CONFORMANCE WITH 2012 IBC 2308.4.2.4 CUTS/ NOTCHES IN THE TOP AND BOTTOM SHALL NOT BE DEEPER THAN ONE-SIXTH THE JOIST DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE ONE-THIRD OF THE SPAN. HOLES BORED IN JOISTS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF JOISTS, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE JOIST DEPTH. DRILLING, CUTTING AND NOTCHING IN EXCESS OF THESE LIMITS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
9. DRILLING/ CUTTING AND NOTCHING OF STUDS SHALL BE IN CONFORMANCE WITH 2018 IBC AND 2308.5.9 AND 2308.5.10 CUTS/ NOTCHES SHALL NOT EXCEED 25% THE WIDTH OF THE STUD. HOLES BORED IN STUDS SHALL NOT EXCEED 40% THE WIDTH OF THE STUD. DRILLING, CUTTING AND NOTCHING IN EXCESS OF THESE LIMITS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
10. WOOD SYMBOLS:

CONTINUOUS BLOCKING

11. ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS. HOLES SHALL BE PRE-DRILLED WHERE NECESSARY TO PREVENT SPLITTING. NAILING NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE PER THE NAILING SCHEDULE BELOW:

NAIL TYPE	SHANK DIAMETER	MINIMUM PENETRATION - INCHES
6D	0.113	1.13
8D	0.131	1.31
10D	0.148	1.48
16D	0.162	1.62

NAILING SCHEDULE

A.	JOIST SITTING ON SILL OR GIRDER	(3) 8D TOENIALS, EA. SIDE
B.	BRIDGING TO JOIST	(2)8D TOENAILS, EA. SIDE, EA. END
C.	TOP PLATE TO STUD	(2) 16D
D.	STUD TO SILL PLATE	(2) 16D END NAILS OR (4) 8D TOENAILS
E.	DOUBLE STUDS	16D @ 24" O.C.
F.	DOUBLE TOP PLATES - BETWEEN SPLICE NAILING	16D @ 16" O.C.
G.	DOUBLE TOP PLATES - EACH SIDE OF SPLICED PLATE	(8) 16D
H.	BLOCKING TO TOP PLATE	(3) 8D TOENAILS EACH SIDE
I.	RIM JOIST TO TOP PLATE OR SILL PLATE	8D TOENAILS @ 6" O.C.
J.	CONTINUOUS (2) & (3) PIECE HEADERS	16D @ 16" O.C. ALONG EA. EDGE
K.	CEILING JOIST LAPS OVER PARTITIONS	(3) 16D FACE NAILS
L.	RAFTER TO TOP PLATE OR SILL PLATE	(3) 8D TOENAILS EA. SIDE
M.	BUILT-UP CORNER STUDS	16D @ 24" O.C.
N.	TONGUE & GROOVE DECKING	(2) 16D @ EA. BEARING
O.	CROSS BRIDGING	(2) 10D EA. END

MANUFACTURED WOOD I-JOISTS:

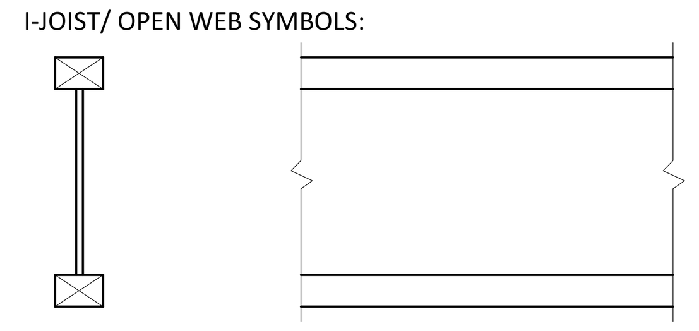
1. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN ENGINEERING FOR THE MANUFACTURED WOOD I-JOISTS/ OPEN WEB JOISTS. THE DESIGN SHALL BE SUBMITTED TO THE ARCHITECT/ ENGINEER FOR APPROVAL. THE JOISTS SHALL BE OF THE SAME SIZE AND TYPE AS SHOWN ON THE DRAWINGS. THE JOISTS SHALL BE MANUFACTURED IN CONFORMANCE WITH APA EWS STANDARD PRI-400, PERFORMANCE STANDARD FOR APA EWS I-JOISTS.
2. BRIDGING, BLOCKING, HANGERS AND OTHER ACCESSORIES REQUIRED FOR PROPER INSTALLATION AND FUNCTION OF THE JOISTS SHALL BE PROVIDED IN CONFORMANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
3. ALL ROOF, FLOOR JOISTS AND BRIDGING SHALL BE DESIGNED TO RESIST THE GRAVITY FORCES SHOWN BELOW:

ROOF	
ROOF SNOW LOAD	25 PSF (PLUS ADDED DRIFT SNOW LOADS IF SHOWN ON PLANS)
ROOF DEAD LOAD	20 PSF
ROOF NET UPLIFT (WIND, ULT.)	REFERENCE LATERAL CRITERIA C&C PRESSURE TABLE

4. JOISTS SHALL BE DESIGNED TO MEET THE FOLLOWING DEFLECTION CRITERIA:

LOADING	DEFLECTION LIMIT
ROOF LIVE LOAD	L /240
ROOF TOTAL LOAD	L/180

5. CONTRACTOR SHALL VERIFY ALL WEIGHTS AND LOCATIONS OF LOADS DUE TO ROOF TOP MECHANICAL EQUIPMENT, PIPING, ELECTRICAL UNITS, AND OTHER ADDITIONAL LOADS PRIOR TO JOIST FABRICATION.
6. DO NOT DRILL OR NOTCH JOIST MEMBERS WITHOUT WRITTEN APPROVAL OF THE JOIST MANUFACTURER AND THEIR ENGINEER.
7. THE CONTRACTOR/ JOIST MANUFACTURE SHALL PROVIDE SHOP DRAWING WITH THE FOLLOWING INFORMATION:
   A. JOIST LAYOUT, SIZE, SPACING, AND GRADE OF ALL MEMBERS ALONG WITH ANY DETAILING REQUIRED FOR THE TRUSS CONNECTIONS OR CONNECTIONS TO THE SUPPORTING STRUCTURE.
   B. SUPPORTING CALCULATIONS FOR THE TRUSS SHOP DRAWINGS. BOTH THE SHOP DRAWINGS AND THE CALCULATIONS SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE STATE OF OREGON.
8. WHERE JOIST HANGERS ARE REQUIRED BUT NOT SPECIFICALLY IDENTIFIED ON THE DRAWINGS, IUS TYPE HANGERS SHALL BE USED AT FACE MOUNT CONDITIONS AND ITS TYPE HANGERS AT TOP FLANGE ONLY CONDITIONS.
9. IF ANOTHER I-JOIST/ OPEN WEB JOIST PRODUCT IS TO BE SUBSTITUTED, THE SUBSTITUTED PRODUCT MUST BE EQUAL OR BETTER IN STRENGTH, STIFFNESS, AND PERFORMANCE AS THE PRODUCT SPECIFIED FOR THIS PROJECT. THE SUPPLIER SHALL BE RESPONSIBLE FOR THE STRUCTURAL PLANS OR DETAILS DUE TO THE SUBSTITUTION OF THEIR PRODUCT.
10. ALTERNATIVE PRODUCTS AND DESIGN MUST BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO BID
11. I-JOIST/ OPEN WEB SYMBOLS:



I-JOIST **I-JOIST ELEVATION**

DRAWING INDEX

BLRB architects
TACOMA 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
I SPOKANE 505 W Riverside Suite 500 WA 98201 509.252.5080
I PORTLAND 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
I BEND 721 SW Industrial Suite 130 OR 97702 541.330.6506

Stamp

DRAWING REVISIONS
#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: GENERAL STRUCTURAL NOTES & DRAWING INDEX
Date : 8/17/2022
Drawn By : GAT
Revised :
Project No. 22002

Sheet No. S0.01

ABBREVIATIONS

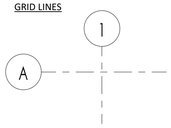
#	NUMBER OR POUNDS
&	AND
@	AT
A.B.	ANCHOR BOLT
ADD'L	ADDITIONAL
ADJ.	ADJACENT
ALT.	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AOR	ARCHITECT OF RECORD
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL DOCUMENTS
ASC	AREA OF STEEL CORE
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AWG	AMERICAN WIRE GAUGE
A.W.S	AMERICAN WELDING SOCIETY
BF	BRACED FRAME
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
B.O.	BOTTOM OF
BTM	BOTTOM
BRB	BUCKLING RESTRAINED BRACE
BRBF	BUCKLING RESTRAINED BRACED FRAME
C	CHANNEL (AMERICAN STANDARD)
CDF	CONTROLLED DENSITY FILL
CG	CENTER OF GRAVITY
CIP	CAST-IN-PLACE
C.J.	CONSTRUCTION JOINT OR CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL or ℄	CENTERLINE
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CP	COMPLETE PENETRATION
d	PENNY (NAIL SIZE) or REINFORCING BAR DIAMETER
DBA	DEFORMED BAR ANCHOR
DBL	DOUBLE
DEMO	DEMOLITION or DEMOLISH
DIA. or ∅	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DIST.	DISTANCE
DN	DOWN
do	DITTO OR REPEAT
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
EL	ELEVATION
ELEC.	ELECTRICAL
ELEV.	ELEVATOR
EMBED	EMBEDMENT
EOR	ENGINEER OF RECORD
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.S.	EACH SIDE
E.W.	EACH WAY
EXP.	EXPANSION
EXT.	EXTERIOR
F.F.	FAR FACE
FIN.	FINISH(ED)
FL. or FLR	FLOOR
F.O.	FACE OF
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUDS
FRP	FIBER REINFORCED POLYMER
F.S.	FAR SIDE
FT	FOOT or FEET
GA.	GAUGE
GALV.	GALVANIZED
GB	GRADE BEAM
GL	GLUED-LAMINATED MEMBER
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
HP	BEARING PILE
H.S.B.	HIGH STRENGTH BOLTS
HSS	HOLLOW STRUCTURAL SECTION
HT	HEAVY TIMBER
I.D.	INSIDE DIAMETER
INFO	INFORMATION
K	KIP, KIPS
K.O.	KNOCK-OUT
KSI	KIPS PER SQUARE INCH

(CONTINUED ==>)

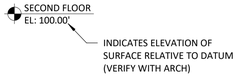
L OR 2L	ANGLE OR DOUBLE ANGLE
LB	CELLULAR BEAM
LD	DEVELOPMENT LENGTH
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONG.	LONGITUDINAL
L.P.	LOW POINT
LS	LAP SPLICE
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
LSL	LAMINATED STRAND LUMBER (TIMBER STRAND)
LT	LIGHT
LVF	LOW-VELOCITY FASTENER
LVL	LAMINATED VENEER LUMBER (MICROLAM)
M	MISCELLANEOUS SHAPE
MAX.	MAXIMUM
M.B.	MACHINE BOLT
MC	CHANNEL (OTHER THAN AMERICAN STANDARD)
MECH.	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, PLUMBING DOCUMENTS
MF	MOMENT FRAME
MFR	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MTL	METAL
N	NORTH
(N)	NEW
N.F.	NEAR FACE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL DIAMETER
N.S.	NEAR SIDE
N.T.S	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER (DIM.)
OPP.	OPPOSITE HAND
OWJ	OPEN WEB JOIST
P.A.F.	POWDER ACTUATED FASTENER
PC, PCS	PIECE, PIECES
PDF	POWDER DRIVEN FASTENER
PERP.	PERPENDICULAR
PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
P.P.	PARTIAL PENETRATION
PR	PAIR
PSI	POUNDS PER SQUARE FOOT
PSF	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER (PARALLAM)
PT	POINT
P.T.	PRESSURE-TREATED or POST TENSIONED
R or RAD.	RADIUS
R.A.D.	REF. ARCH. DOCUMENTS
REBAR	REINFORCING BAR
REF.	REFER TO, REFERENCE
REINF.	REINFORCEMENT
REQ'D	REQUIRED
RET.	RETURN
REV.	REVISE or REVISION
R.O.	ROUGH OPENING
S.C.	SLIP CRITICAL
SIM.	SIMILAR
S.M.S.	SHEET METAL SCREW
S.O.G.	SLAB-ON-GRADE
SOMD	SLAB-ON-METAL DECK
SPEC.	SPECIFICATION
SQ.	SQUARE
SS or SST	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUCT.	STRUCTURAL
T	TON, TONS
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
THRU	THROUGH
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O. SLAB	TOP OF STRUCTURAL SLAB
TRANS.	TRANSVERSE
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
URM	UNREINFORCED MASONRY
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W or WF	WIDE FLANGE
w/	WITH
W/O	WITHOUT
WD	WOOD
W.P.	WORK POINT
WSE	WALKER STRUCTURAL ENGINEERING
WT	STRUCTURAL TEE (CUT FROM WIDE FLANGE)
WWF	WELDED WIRE FABRIC
XS	EXTRA STRONG (STRUCTURAL PIPE)
XXS	DOUBLE-EXTRA STRONG (STRUCTURAL PIPE)

ANNOTATION SYMBOLS

GRID LINES

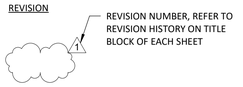


ELEVATION LINE

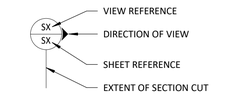


REFERENCED ELEVATION

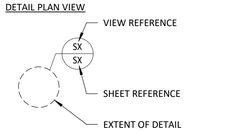
REVISION



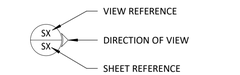
DETAIL SECTION CUT



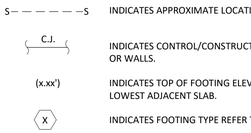
DETAIL PLAN VIEW



ELEVATION

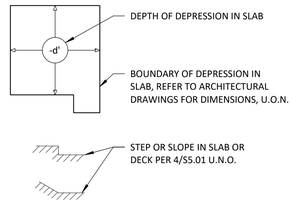


FOUNDATIONS

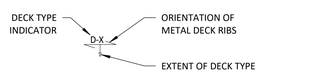


WORK POINT

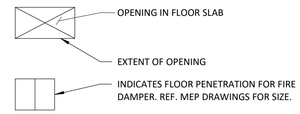
SLAB DEPRESSIONS (PLAN)



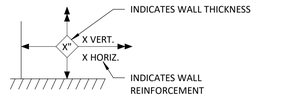
METAL DECK ORIENTATION (PLAN)



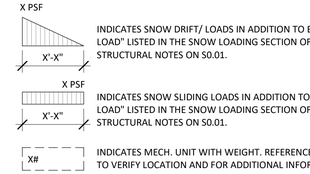
OPENING (PLAN OR ELEVATION)



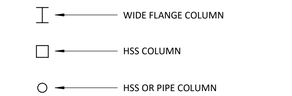
SHEAR WALL (ELEVATION)



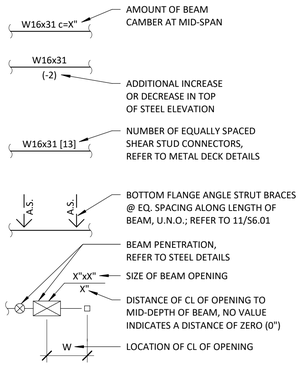
MEMBER LOADING



COLUMNS (PLAN)



BEAM DESIGNATIONS (PLAN)



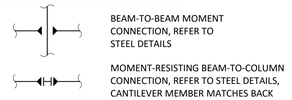
X INDICATES BOLTED BEAM SHEAR PLATE CONNECTION TYPE.

F INDICATES FULL-DEPTH STIFFENER CONNECTION.

W INDICATES WELDED BEAM CONNECTION.

AS INDICATES ANGLE STRUT BRACE TO O.W.J. TOP CHORD,

MOMENT RESISTING CONNECTIONS (PLAN)



BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 1050 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Square #150 | OR 97702 | 541.330.6506

Stamp

DRAWING REVISIONS

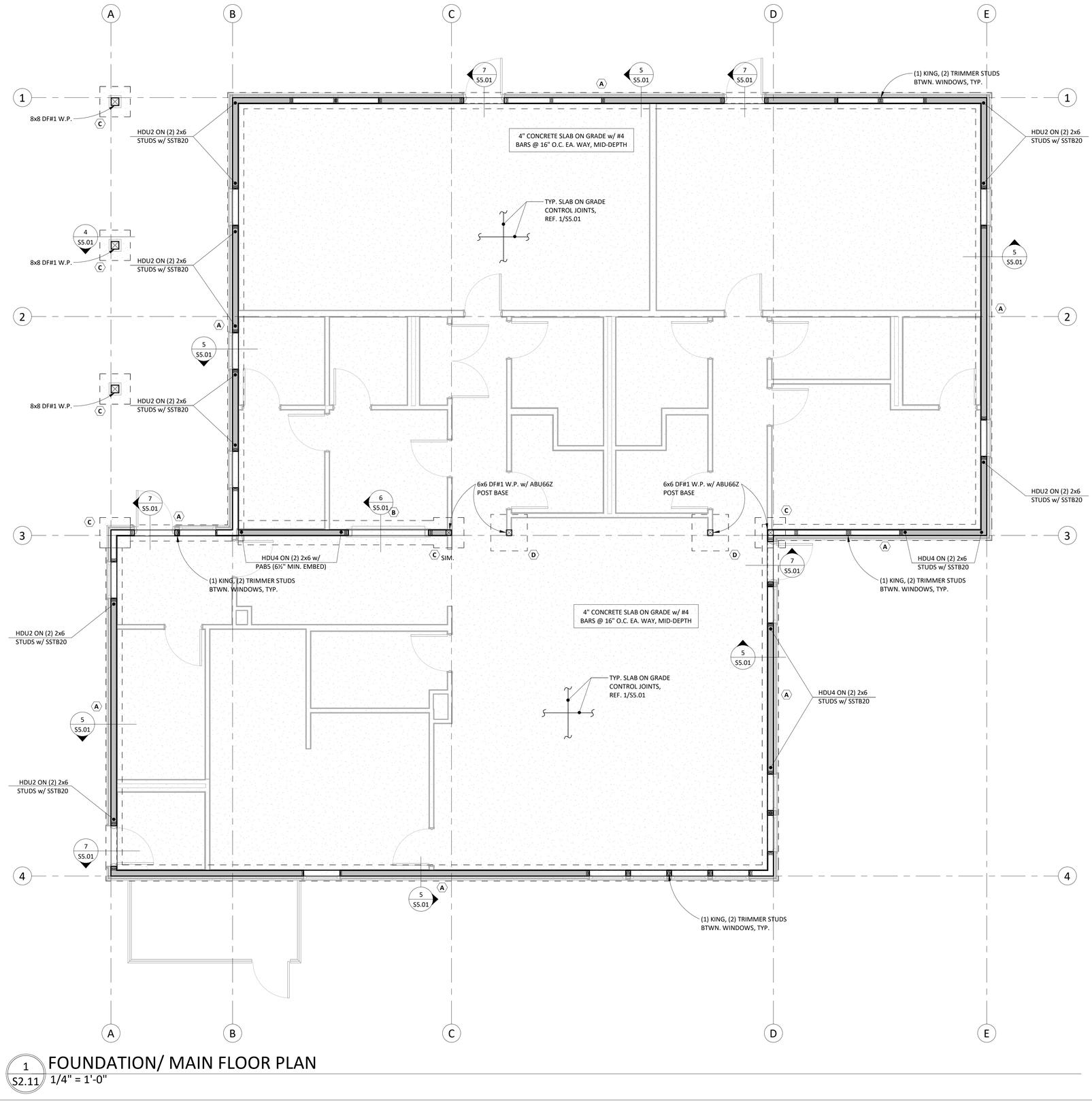
#	Date	Description
1	Date 1	Revision 1

MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: ABBREVIATIONS & SYMBOLS
Drawn By: GAT
Project No. 22002
Date: 8/17/2022
Revised:

Sheet No.
S0.02

8/10/2022 3:58:27 PM



1 S2.11 FOUNDATION/ MAIN FLOOR PLAN
1/4" = 1'-0"

FOUNDATION PLAN NOTES

1. DO NOT USE STRUCTURAL DRAWINGS ALONE FOR BUILDING LAYOUT. DO NOT SCALE THESE DRAWINGS MANUALLY OR ELECTRONICALLY. COORDINATE LOCATIONS OF ALL STRUCTURAL ELEMENTS, INCLUDING BUT NOT LIMITED TO, COLUMNS, WALLS, SLAB EDGES, DEPRESSIONS AND OPENINGS WITH ARCHITECTURAL DRAWINGS AND RESOLVE ANY CONFLICTS BETWEEN DRAWINGS OR ELEMENTS PRIOR TO CONSTRUCTION. A REGISTERED SURVEYOR SHALL PERFORM BUILDING LAYOUT AND LOCATION OF ALL STRUCTURAL ELEMENTS AT ALL LEVELS. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS/ ELEVATIONS NOT SHOWN. CONTRACTOR IS RESPONSIBLE FOR CROSS REFERENCING ALL DIMENSIONS/ ELEVATIONS SHOWN WITH ARCHITECTURAL DRAWINGS NOTIFY ARCHITECT / ENGINEER OF RECORD IF THERE ARE ANY DISCREPANCIES.
2. INDICATES CONCRETE STEMWALL PER PLAN WITH BEARING WALL, 2x6 STUDS @ 16" O.C., U.N.O.
3. INDICATES INTERIOR BEARING WALL, 2x6 STUDS @ 16" O.C., U.N.O.
4. INDICATES INTERIOR NON-BEARING WALL PER ARCHITECT.
5. INDICATES SHEAR WALL LOCATION. REFERENCE SHEAR WALL PLAN 1/ S3.01 FOR ADDITIONAL INFORMATION (INCLUDING ANCHOR BOLT SPACING REQUIREMENTS).
6. X SX.X — INDICATES STRUCTURAL FRAMING DETAIL. REFERENCE STRUCTURAL DETAIL SHEET.
7. X — INDICATES FOOTING TYPE, REFERENCE FOOTING SCHEDULE.
8. ⊠ TYPICAL HEADER SUPPORT TO BE: (1) 2x TRIMMER & (1) 2x KING @ OPENING LESS THAN 6'-0" AND (2) 2x TRIMMERS & (2) 2x KINGS @ OPENINGS GREATER THAN 6'-0", U.N.O.
9. PROVIDE SOLID 2x STUDS @ ALL BEAM & GIRDER TRUSS BEARING POINTS UNLESS DETAILED OR NOTED OTHERWISE. FOR BEAMS FRAMING INTO WALLS, FORM BEAM POCKET WITH ADDITIONAL STUDS ALONG SIDE OF BEAM AND FACE NAIL WITH (5) 16d NAILS ON EACH SIDE (MINIMUM).
10. REFERENCE GEOTECH REPORT FOR SUBGRADE REQUIREMENTS.

FOOTING SCHEDULE

MARK (X)	SIZE (WIDTH x LENGTH)	"T"	REINFORCING
A	1'-6" x CONT.	10"	(2) #4 CONT., BTM.
B	2'-0" x CONT. (THICKENED SLAB)	12"	(3) #4 CONT., BTM.
C	2'-6" x 2'-6" (THICKENED SLAB @ SIM.)	12"	(3) #4 EA. WAY @ BTM.
D	3'-0" x 3'-0" (THICKENED SLAB)	12"	(4) #4 EA. WAY @ BTM.

NOTE: TOTAL FOOTING DEPTH @ THICKENED SLABS INCLUDES SLAB THICKNESS.

ALL HOLDOWN ANCHOR BOLTS SHOWN ON THE FOUNDATION PLAN REPRESENT A GENERAL LOCATION AND MUST BE VERIFIED BASED ON SPECIFIED POST SIZE WITH RELATION TO ROUGH OPENING/ EDGE OF WALL LOCATIONS. REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL VERIFICATION. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THESE ARE PLACED PRIOR TO THE FOUNDATION POUR - EPOXIED ANCHOR BOLTS ARE NOT AN EQUAL SUBSTITUTE. FAILURE TO PLACE HOLDOWN BOLTS IN THE CORRECT LOCATION WILL LIKELY RESULT IN CUTTING/ REMOVAL OF FOUNDATION ELEMENTS, DOWELING & REPOUR OF AREAS REMOVED. ADDITIONAL FEES MAY INCUR FOR REDESIGNING OF FOUNDATIONS & REPLACEMENT HOLDOWNS.

BLRB architects
TACOMA | 1756 Pacific Ave Suite 700 WA 98402 253.627.5569
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Square #150 OR 97702 541.330.6506

Stamp

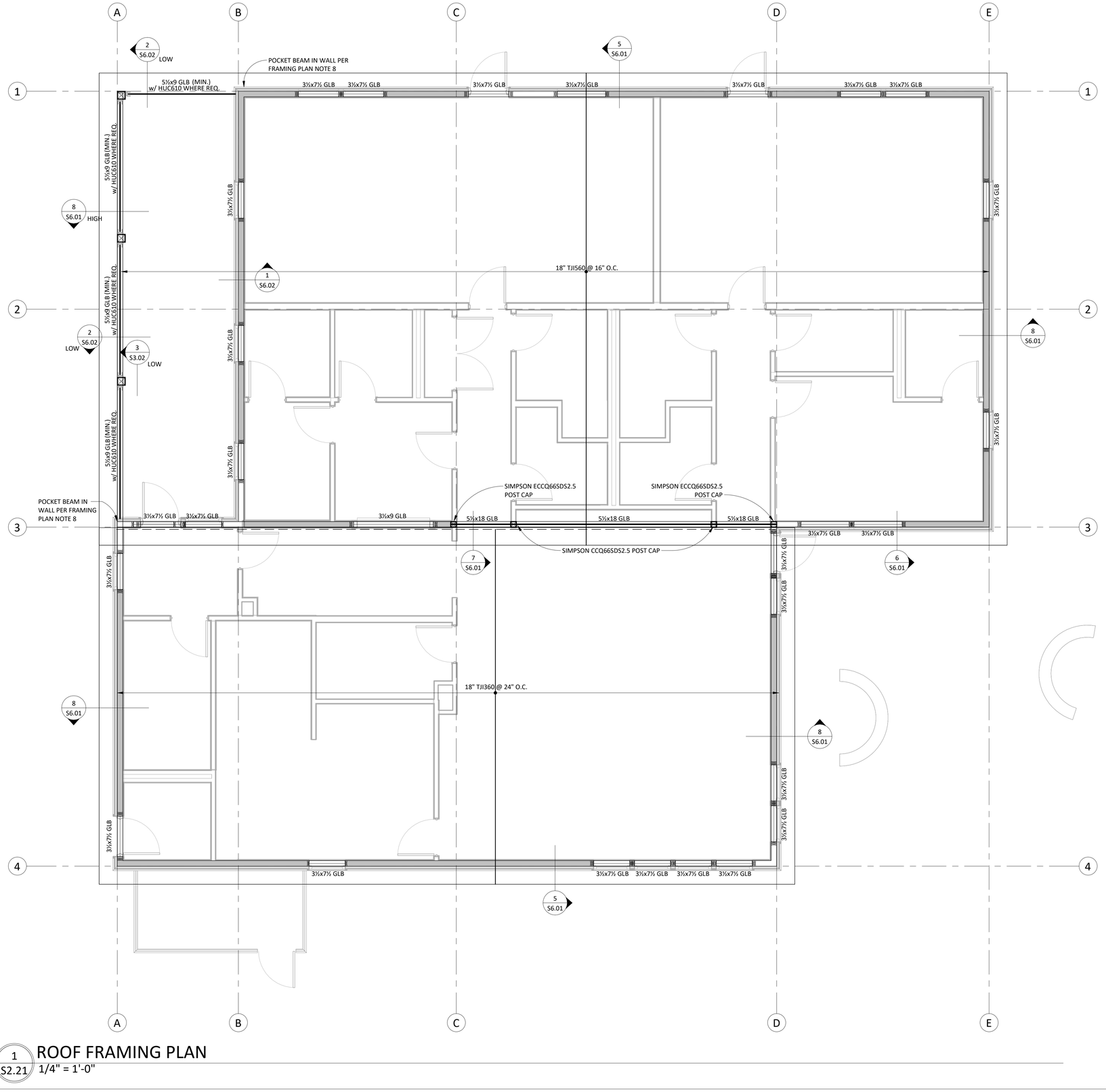
DRAWING REVISIONS

#	Description	Date

MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: FOUNDATION PLAN
Drawn By : GAT
Project No. 22002
Date : 8/17/2022
Revised :
Sheet No. S2.11

8/10/2022 3:58:27 PM



1 S2.21 ROOF FRAMING PLAN
1/4" = 1'-0"

FRAMING PLAN NOTES

1. DO NOT USE STRUCTURAL DRAWINGS ALONE FOR BUILDING LAYOUT. DO NOT SCALE THESE DRAWINGS MANUALLY OR ELECTRONICALLY. COORDINATE LOCATIONS OF ALL STRUCTURAL ELEMENTS, INCLUDING BUT NOT LIMITED TO, COLUMNS, WALLS, SLAB EDGES, DEPRESSIONS AND OPENINGS WITH ARCHITECTURAL DRAWINGS AND RESOLVE ANY CONFLICTS BETWEEN DRAWINGS OR ELEMENTS PRIOR TO CONSTRUCTION. A REGISTERED SURVEYOR SHALL PERFORM BUILDING LAYOUT AND LOCATION OF ALL STRUCTURAL ELEMENTS AT ALL LEVELS. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS/ ELEVATIONS NOT SHOWN. CONTRACTOR IS RESPONSIBLE FOR CROSS REFERENCING ALL DIMENSIONS/ ELEVATIONS SHOWN WITH ARCHITECTURAL DRAWINGS NOTIFY ARCHITECT / ENGINEER OF RECORD IF THERE ARE ANY DISCREPANCIES.
2. INDICATES BEARING / SHEAR WALL, 2x6 STUDS @ 16" O.C., U.N.O.
3. INDICATES INTERIOR BEARING WALL BELOW, 2x6 STUDS @ 16" O.C., U.N.O.
4. INDICATES INTERIOR NON-BEARING WALL PER ARCHITECT.
5. X / SX.X — INDICATES STRUCTURAL FRAMING DETAIL. REFERENCE STRUCTURAL DETAIL SHEET.
6. D-1 — INDICATES SPAN DIRECTION OF 5/8" APA SHEATHING (APA INDEX 48/24). ATTACH TO ROOF FRAMING WITH 8d NAILS @ 6" O.C. @ ALL PANEL EDGES AND 12" O.C. @ INTERMEDIATE FRAMING MEMBERS. EDGE NAIL @ ALL BLOCKING AND DRAG STRUTS.
7. TYPICAL HEADER SUPPORT TO BE: (1) 2x TRIMMER & (1) 2x KING @ OPENING LESS THAN 6'-0" AND (2) 2x TRIMMERS & (2) 2x KINGS @ OPENINGS GREATER THAN 6'-0", U.N.O.
8. ⊠ PROVIDE SOLID 2x STUDS @ ALL BEAM & GIRDER TRUSS BEARING POINTS UNLESS DETAILED OR NOTED OTHERWISE. FOR BEAMS FRAMING INTO WALLS, FORM BEAM POCKET WITH ADDITIONAL STUDS ALONG SIDE OF BEAM AND FACE NAIL WITH (5) 16d NAILS ON EACH SIDE (MINIMUM). EACH PLY OF 2x STUD BUILT-UP COLUMNS MUST BE ATTACHED w/ 10d NAILS @ 6" O.C. (STAGGERED) FULL HT. OF COLUMN.
9. INDICATES SHEAR WALL. REFERENCE SHEAR WALL PLANS FOR ADDITION INFORMATION.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 925 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

Stamp

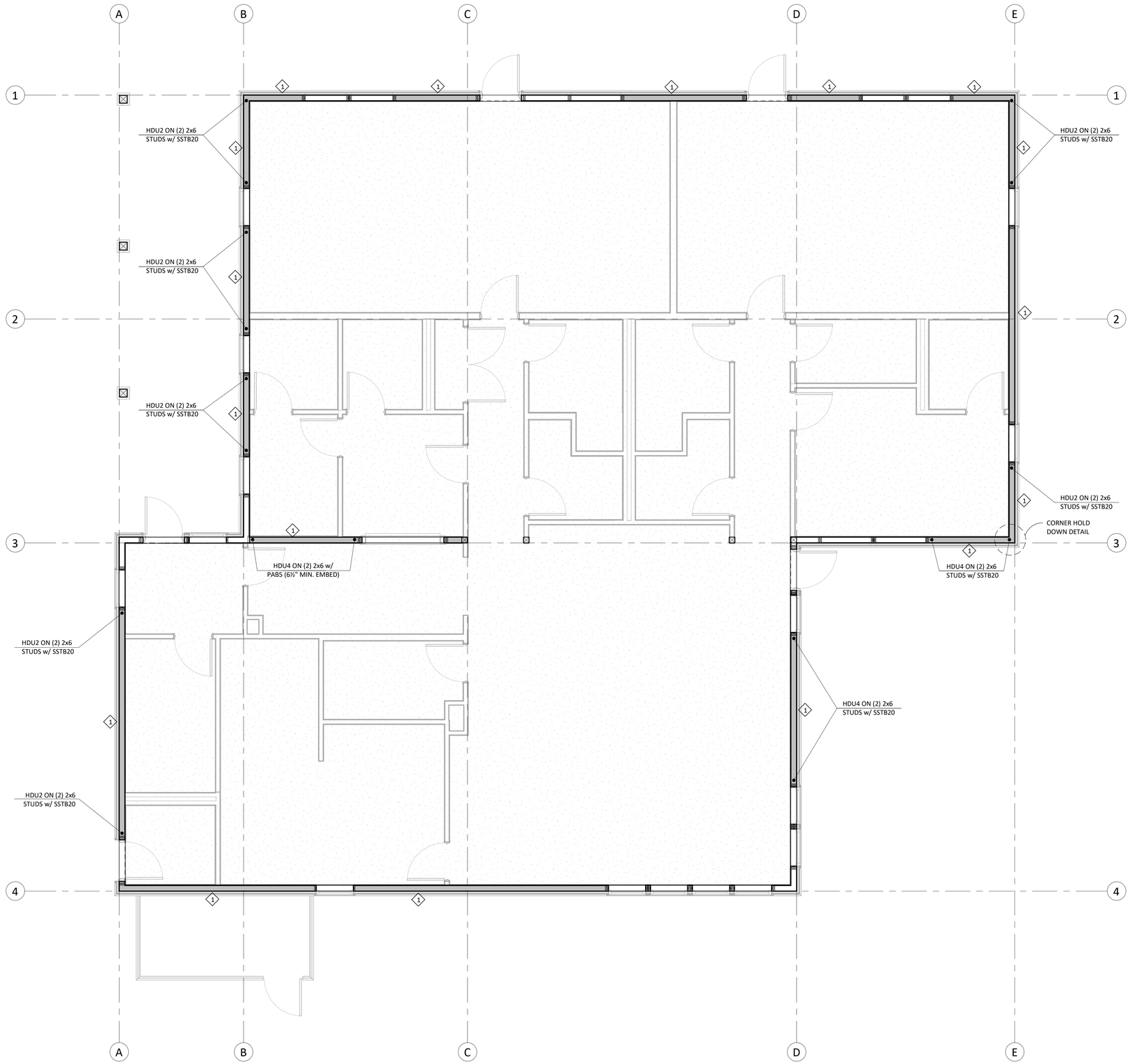
DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: ROOF FRAMING PLAN
Drawn By: GAT
Date: 8/17/2022
Project No. 22002
Revised :

Sheet No.
S2.21



1 S3.01 SHEAR WALL PLAN
1/4" = 1'-0"

SHEAR WALL SCHEDULE

SYMBOL	SHEATHING/ ATTACHMENT (SEE NOTE 9)	SILL PL & SILL ATTACHMENT TO FOUNDATION	NOTES
1	7/16" SHEATHING w/ 8d @ 6" O.C. EDGES, 12" O.C. FIELD. ALL EDGES BLOCKED	2x P.T. SILL PL. w/ 5/8" Ø x 10" A.B.'s @ 48" O.C. (5/8" Ø TITEN HD SCREW ANCHOR w/ 4 1/2" MIN. EMBED IN INTERIOR SLAB FTG.) w/ PLATE WASHERS PER NOTE 11	-SILL PLATE- SILL TO RIM - 16d @ 6" O.C. RIM TO PLATE - SIMPSON A35 CLIPS @ 32" O.C.

SHEAR WALL NOTES

1. X — INDICATES EXTENT OF SHEAR WALL. PROVIDE HOLDOWNS AS CALLED OUT ON PLANS @ EACH END OF SHEAR WALL. HOLDOWNS INDICATE ON PLANS ARE BY "SIMPSON STRONG-TIE CO." INSTALL AS PER MANUF. RECOMMENDATIONS.
2. IF A.B. SPACING IS GREATER THAN SHEAR WALL, PLACE (1) A.B. WITHIN 12" OF EACH END, UNLESS NOTED OTHERWISE.
3. THE CAPACITY VALUES ARE APPLICABLE TO STUDS OF SPECIES GROUP II (DOUGLAS FIR-SOUTHERN PINE).
4. PANEL EDGES FOR TYPE "1" & "2" WALLS SHALL BE BACKED WITH 2x NOMINAL (MIN.). PANEL EDGES FOR TYPE "3" & "4" WALLS SHALL BE BACKED WITH 3x NOMINAL OR (2) 2x STITCHED TOGETHER W/ 10d NAILS @ 3" O.C. (STAGGERED).
5. ALL SHEATHING NAILS REFERENCED ARE COMMON WIRE NAILS (i.e. 8d 0.131") SOLE PLATE NAILS REFERENCED ARE TO BE SINKER NAILS (i.e. 16d=0.148"). VALUES OF THEIR STANDARD CONSTRUCTION FASTENERS WILL REQUIRE SPACING ADJUSTMENTS AND MUST BE APPROVED BY WSE PRIOR TO USE. MINIMUM NAIL PENETRATIONS INTO SUPPORT FRAMING. 8d=1.5", 10d=1.625", 16d=1.625".
6. DO NOT PENETRATE SURFACE PLY OF SHEATHING WITH NAIL HEAD.
7. APA RATED WALL SHEATHING C-D, C-C SHEATHING, PLYWOOD PANEL SIDING, OSB, AND OTHER GRADES COVERED IN 2019 OSSC CH. 35 STANDARDS.
8. SHEATHING FACE GRAIN CAN BE APPLIED PERPENDICULAR OR PARALLEL TO STUDS PROVIDED THE STUDS ARE SPACED @ 16" O.C. OR LESS. WHERE STUDS ARE SPACED GREATER THAN 16" O.C. APPLY SHEATHING PERPENDICULAR TO STUDS.
9. SHEATHING MAY BE APPLIED AT EITHER SIDE OF WALL UNLESS REQ'D AT BOTH SIDES.
10. WALL SHEATHING MUST BE EDGE NAILED @ STUDS ATTACHED TO HOLDOWNS, FULL HT.
11. PER ANSI/AF&PA SDPWS-15, SECTION 4.3.6.4.3. PROVIDE SIMPSON BPS-6 SLOTTED PLATE WASHERS (OR FABRICATED EQUIVALENT) WITH STANDARD CUT WASHERS BETWEEN PLATE WASHER & NUT. EDGE OF PLATE WASHER SHALL BE WITHIN 1/2" OF EDGE OF SILL PLATE ON THE SIDE WITH SHEATHING (WHERE SHEATHING IS REQUIRED @ BOTH SIDES, ALTERNATE SIDES.)
12. ALL HOLDOWN ANCHOR BOLTS SHOWN ON THE FOUNDATION PLAN REPRESENT A GENERAL LOCATION AND MUST BE VERIFIED BASED ON SPECIFIED POST SIZE WITH RELATION TO THE ROUGH OPENING/EDGE OF WALL LOCATIONS. REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL VERIFICATION.
13. REFERENCE SHEET S3.02 FOR TYPICAL SHEAR WALL DETAILS.

ALL HOLDOWN ANCHOR BOLTS SHOWN ON THE FOUNDATION PLAN REPRESENT A GENERAL LOCATION AND MUST BE VERIFIED BASED ON SPECIFIED POST SIZE WITH RELATION TO ROUGH OPENING/ EDGE OF WALL LOCATIONS. REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONAL VERIFICATION. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ENSURE THESE ARE PLACED PRIOR TO THE FOUNDATION POUR - EPOXIED ANCHOR BOLTS ARE NOT AN EQUAL SUBSTITUTE. FAILURE TO PLACE HOLDOWN BOLTS IN THE CORRECT LOCATION WILL LIKELY RESULT IN CUTTING/ REMOVAL OF FOUNDATION ELEMENTS, DOWELING & REPOUR OF AREAS REMOVED. ADDITIONAL FEES MAY INCUR FOR REDESIGNING OF FOUNDATIONS & REPLACEMENT HOLDOWNS.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

Stamp

DRAWING REVISIONS

#	Date	Description

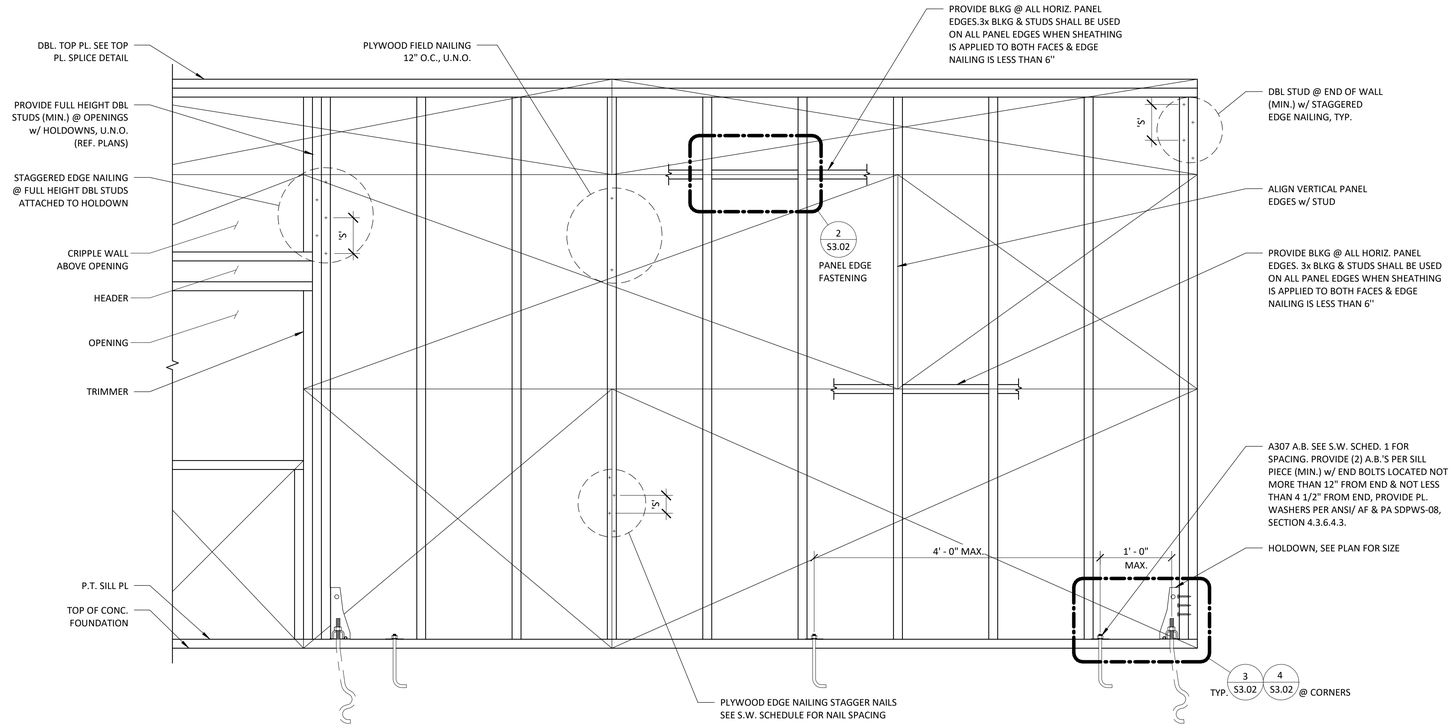
MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: SHEAR WALL PLAN
Drawn By : GAT
Date : 8/17/2022
Project No. 22002
Revised :

Sheet No.
S3.01

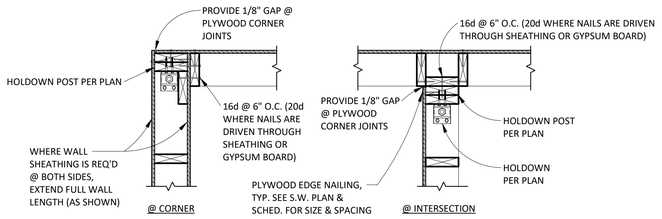
BLRB ARCHITECTS, P.S.

8/10/2022 3:58:28 PM



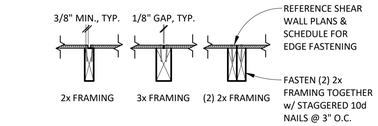
1 S3.02 PLYWOOD SHEAR WALL ELEVATION

1" = 1'-0"



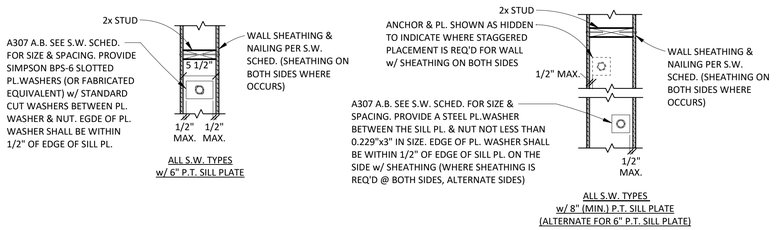
4 S3.02 HOLDOWN @ CORNER

1" = 1'-0"



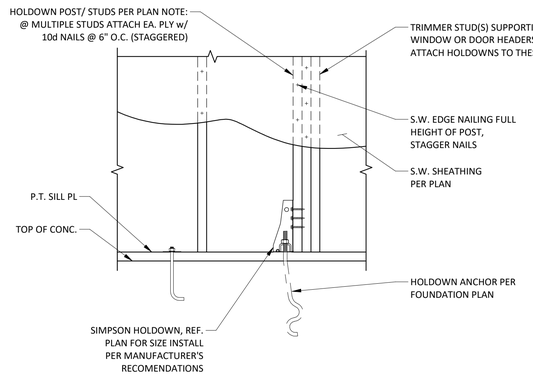
2 S3.02 FRAMING @ ADJOINING PANEL EDGES

1" = 1'-0"



5 S3.02 S.W. SILL PLATE ANCHORAGE

1" = 1'-0"



3 S3.02 HOLDOWN TIE

1" = 1'-0"

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

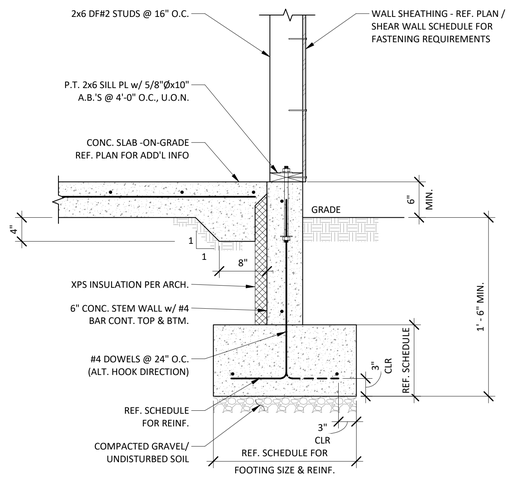
DRAWING REVISIONS

#	Description	Date

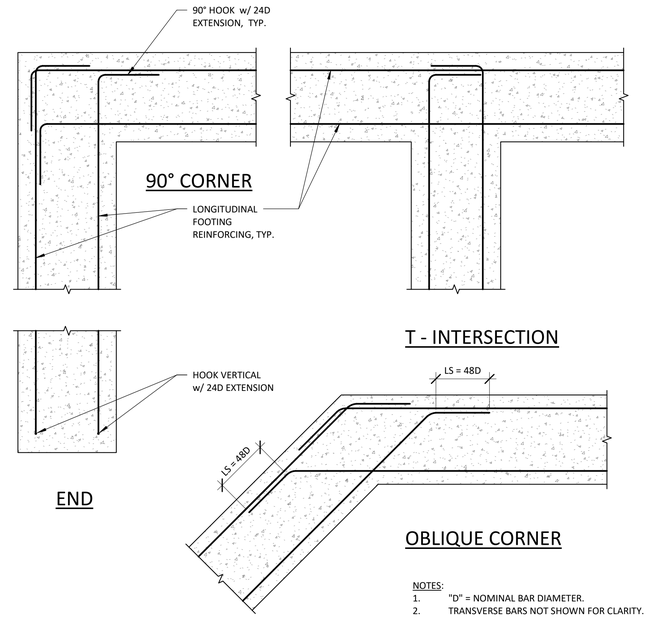
MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: SHEAR WALL DETAILS
Drawn By: GAT
Project No. 22002
Date: 8/17/2022
Revised:
Sheet No. S3.02

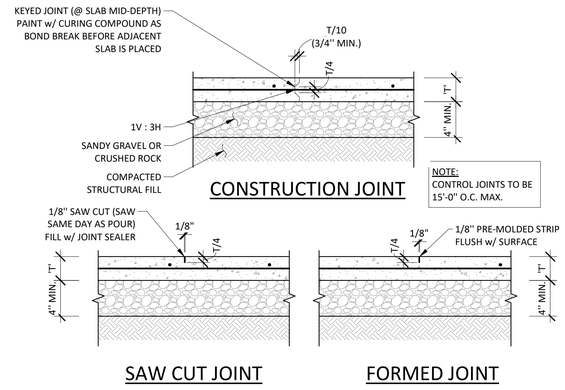
8/10/2022 3:58:29 PM



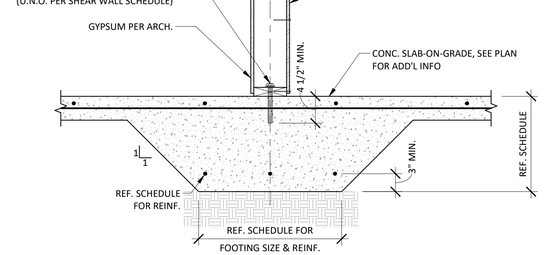
5 S5.01 TYPICAL PERIMETER FOOTING
1" = 1'-0"



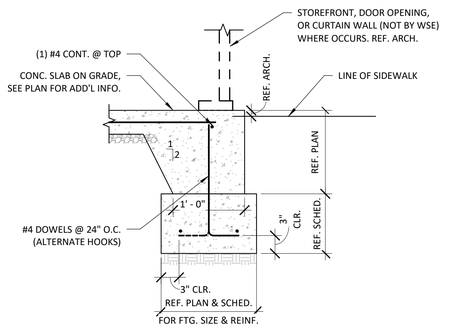
3 S5.01 FOOTING REINF. AT CORNERS AND INTERSECTIONS
N.T.S.



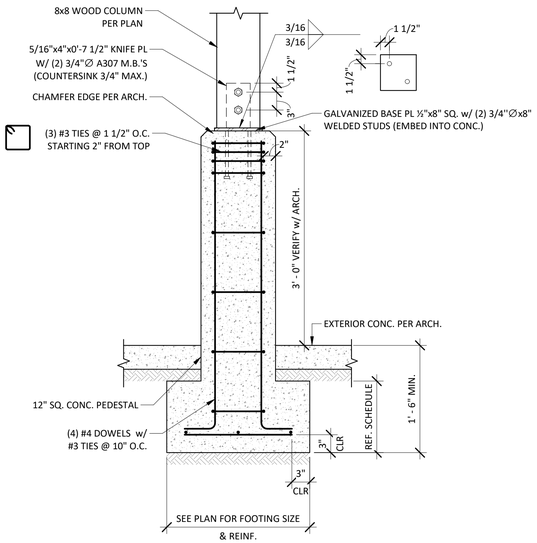
1 S5.01 TYPICAL SLAB ON GRADE
1" = 1'-0"



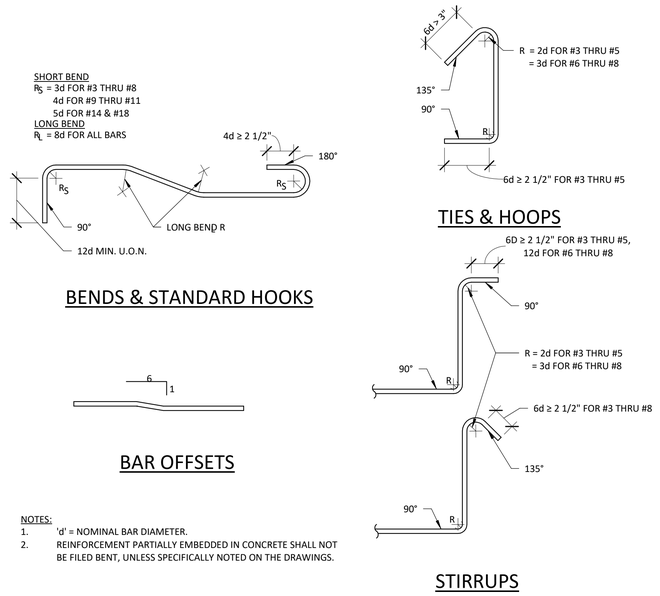
6 S5.01 INTERIOR BEARING/SHEAR WALL FOOTING
1" = 1'-0"



7 S5.01 THICKENED SLAB EDGE AT EXTERIOR DOOR
1" = 1'-0"



4 S5.01 EXTERIOR WOOD COLUMN AT FOOTING
1" = 1'-0"



2 S5.01 REINFORCING HOOKS AND BENDS
N.T.S.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 35 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

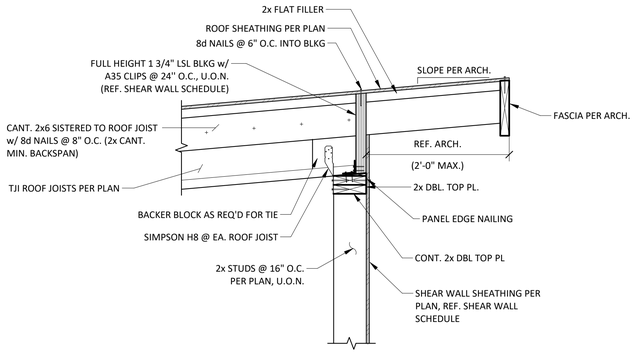
DRAWING REVISIONS

#	Date	Description

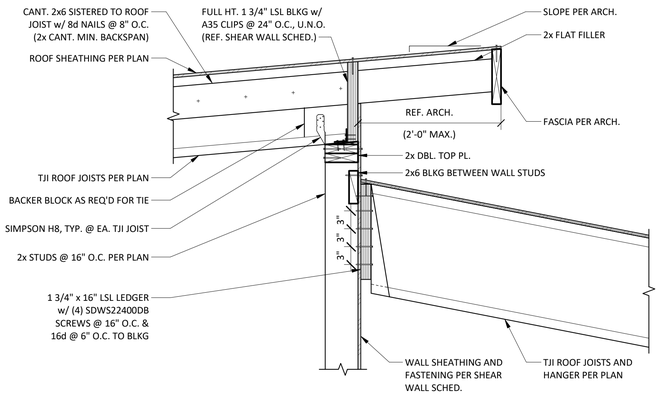
MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: STRUCTURAL DETAILS - FOUNDATION
Date: 8/17/2022
Drawn By: GAT
Project No. 22002
Revised:
Sheet No. S5.01

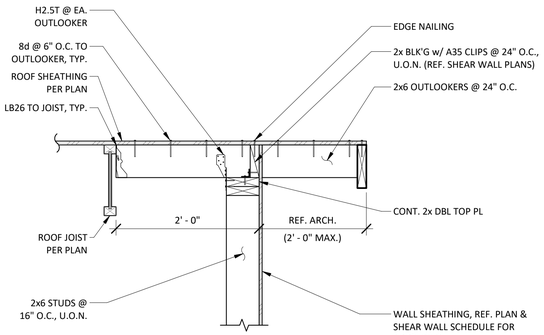
8/10/2022 3:58:30 PM



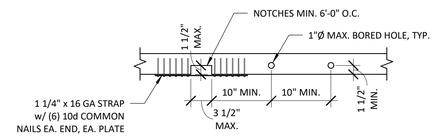
6 S6.01 CANTILEVER ROOF JOISTS (HIGH END)
1" = 1'-0"



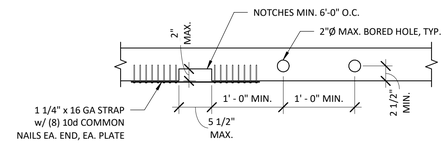
7 S6.01 LOW ROOF CONNECTION AT HIGH EAVE
1" = 1'-0"



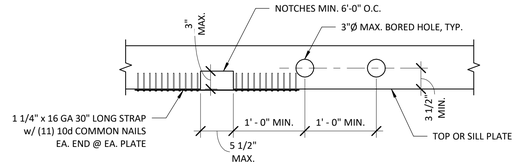
8 S6.01 ROOF JOIST EAVE FRAMING AT RAKE WALL
1" = 1'-0"



2x4 DOUBLE TOP PLATE - 2x4 OR 3x4 SILL PLATE SIM.



2x6 DOUBLE TOP PLATE - 2x6 OR 3x6 SILL PLATE SIM.

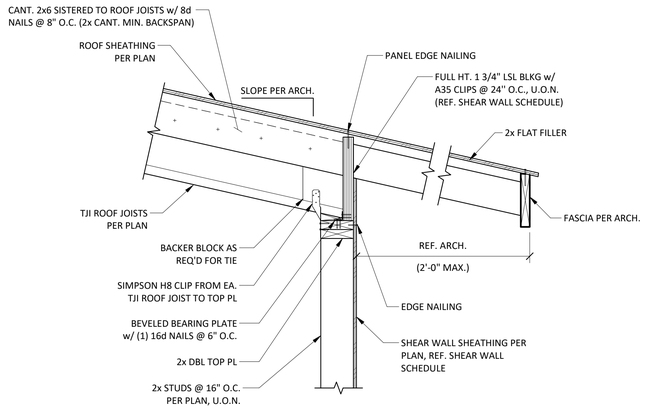


2x8 DOUBLE TOP PLATE - 2x8 OR 3x8 SILL PLATE SIM.

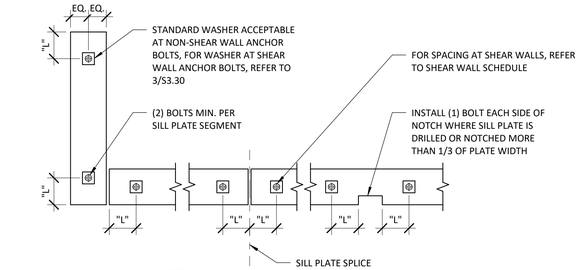
NOTES:
1. WHERE PENETRATIONS EXCEED THESE LIMITS, CONTACT WSE.
2. FOR ADDITIONAL SILL PLATE ANCHORAGE AT NOTCHES, REF. 2/S7.01

HOLES AND NOTCHES IN DOUBLE TOP PLATE (SILL PLATE SIM.)

4 S6.01 NOTCHES AND PENETRATIONS IN PLATES
N.T.S.

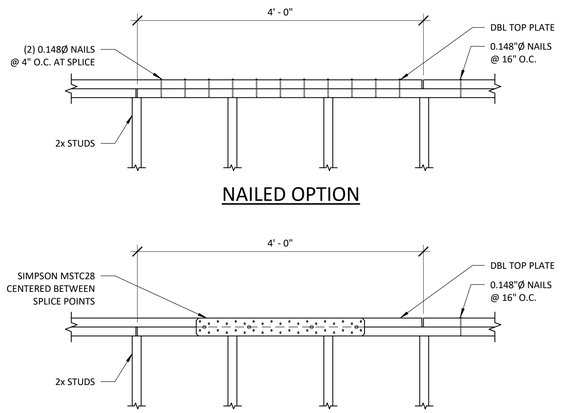


5 S6.01 TJI ROOF JOIST AT WALL FRAMING
1" = 1'-0"



NOTE:
"L" = 4 1/2" MINIMUM, 1'-0" MAXIMUM.

1 S6.01 SILL PLATE BOLT PATTERN
N.T.S.

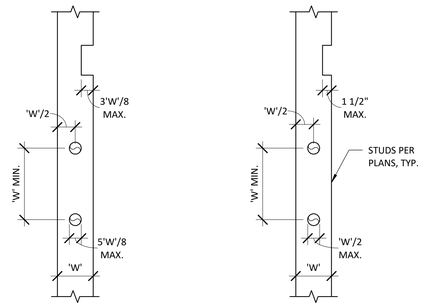


NAILED OPTION

STRAP OPTION

NOTE:
SPLICE SHALL OCCUR OVER A STUD.

2 S6.01 TOP PLATE SPLICE
N.T.S.



NON-LOAD BEARING

LOAD BEARING

NOTE:
NOTCHING OF STUDS IN WALLS SHOWN IN STRUCTURAL DRAWINGS IS NOT PERMITTED WITHOUT WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE AND APPROVAL OF THE NOTCH LOCATIONS FROM WSE, OVER-SIZE HOLES TO ACCOMMODATE WOOD SHRINKAGE, REFER TO 5/S7.01.

HOLES & NOTCHES IN STUDS

3 S6.01 HOLES & NOTCHES IN STUDS
N.T.S.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

DRAWING REVISIONS

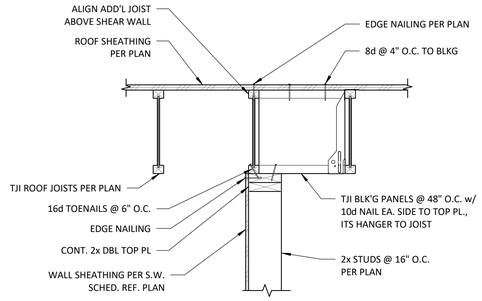
#	Date	Description

MADRAS SHELTER
CITY OF MADRAS
90% CD

Drawing Title: STRUCTURAL DETAILS - FRAMING
Drawn By: GAT
Project No. 22002
Date: 8/17/2022
Revised :

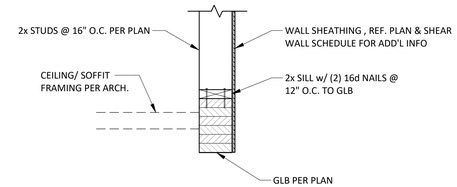
Sheet No. S6.01

8/10/2022 3:58:31 PM



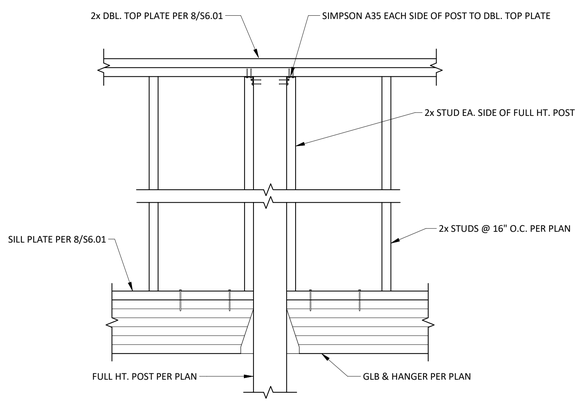
1 S6.02 ROOF JOIST AT WALL

1" = 1'-0"



2 S6.02 EXTERIOR ROOF BEAM

1" = 1'-0"



3 S6.02 BEAM @ EXTERIOR POST CONNECTION

1" = 1'-0"

BLRB architects

TACOMA | SPOKANE | PORTLAND | BEND

1250 Pacific Ave Suite 700 WA 98402 253.627.5599

905 W Riverside Suite 500 WA 98201 509.252.5980

621 SW Morrison St. Suite 950 OR 97205 503.595.0270

721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

DRAWING REVISIONS

#	Date	Description

MADRAS SHELTER

CITY OF MADRAS

90% CD

Drawing Title: STRUCTURAL DETAILS - FRAMING

Drawn By : Author

Project No. 22002

Date : 8/17/2022

Revised :

Sheet No.

S6.02

BLRB ARCHITECTS, P.S.

8/10/2022 3:58:31 PM

GENERAL NOTES

1. THE SCOPE OF THE PLUMBING WORK CONSISTS OF WORK SHOWN ON THE PLANS AND AS DESCRIBED IN THE SPECIFICATIONS. IN CASE OF CONFLICT, THE SPECIFICATIONS SHALL GOVERN. PROVIDE A COMPLETE & FUNCTIONAL SYSTEM.
2. PERFORM ALL WORK IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND PAY FOR ALL FEES REQUIRED BY AUTHORITIES HAVING JURISDICTION. PAY ALL ROYALTIES OR FEES REQUIRED IN CONNECTION WITH THE USE OF PATENTED DEVICES AND SYSTEMS.
3. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION INCLUDING LOUVERS, CONCRETE EQUIPMENT PADS, FLASHING DETAILS, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR ROOM ELEVATIONS, LOCATE DEVICES SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION (WAINSCOT, DOOR HARDWARE, ETC.) NOR WITH ELECTRICAL SYSTEM (LIGHT SWITCHES, SPEAKERS, OUTLETS, ETC.).
4. COORDINATE WITH OTHER TRADES:
   A. REFER TO ELECTRICAL DRAWINGS AND CONFIRM ELECTRICAL CHARACTERISTICS SHOWN FOR MECHANICAL EQUIPMENT (VOLTAGE, PHASE, HZ, ETC). MATCHES THAT OF THE MECHANICAL EQUIPMENT PROVIDED.
   B. PROVIDE ADEQUATE CLEARANCE OF PLUMBING WORK FROM ELECTRICAL EQUIPMENT. MAINTAIN MINIMUM ACCESS OF 6-INCHES ABOVE CABLE TRAYS AND 18-INCHES TO THE SIDE OF CABLE TRAYS. CLEARANCE ABOVE CABLE TRAY SHOULD BE 1/2 THE WIDTH AND NOT LESS THAN 6-INCHES WHEN RUNNING PARALLEL WITH CABLE TRAY. AND NOT LESS THAN 6-INCHES WHEN RUNNING PERPENDICULAR TO THE CABLE TRAY.
5. ARRANGE EQUIPMENT SO THAT ACCESS CLEARANCES INDICATED BY DRAWINGS, REQUIRED BY CODES, OR RECOMMENDED BY MANUFACTURER ARE PROVIDED.
6. INSTALL MATERIALS AND SYSTEMS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND ACCEPTED SUBMITTALS. INSTALL MATERIAL IN PROPER RELATION TO ADJACENT CONSTRUCTION AND WITH UNIFORM APPEARANCE FOR EXPOSED WORK.
7. THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT AND PIPING WILL BE INSTALLED AND REPORT ANY CONDITION THAT PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.
8. THE COMMISSIONING SPECIFICATION, INCLUDING ALL FUNCTIONAL TEST PROCEDURES, SHALL BE PROVIDED AND ENFORCED BY THE CONTRACTOR.
9. PROVIDE SEISMIC RESTRAINT IN ACCORDANCE WITH OSS C AND ASCE STANDARD 7. SUBMIT CALCULATIONS BY LICENSED STRUCTURAL ENGINEER. PRODUCTS MAY CONFORM TO SMACNA SEISMIC RESTRAINT GUIDELINES.
10. PROVIDE A SINGLE SUBMITTAL OF ALL PLUMBING EQUIPMENT AS SPECIFIED. AS A MINIMUM, SUBMIT PRODUCT DATA FOR ALL EQUIPMENT AND FIXTURES LISTED IN ACCOMPANYING SCHEDULES FOR APPROVAL.
11. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
12. ARRANGEMENT OF SYSTEMS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC, AND INDICATES THE MINIMUM REQUIREMENTS FOR PLUMBING WORK. TAKE FIELD MEASUREMENTS BEFORE PREPARING SHOP DRAWINGS, OBTAIN APPROVAL OF SHOP DRAWINGS BEFORE BEGINNING FABRICATION. BE RESPONSIBLE FOR ACCURACY OF DIMENSIONS AND LAYOUT. OVERHEAD PIPING SHALL BE ARRANGED TO OBTAIN MAXIMUM HEAD ROOM.
13. CLEAN AND PROTECT WORK FROM DAMAGE. RESTORE DAMAGED FINISHES. COVER ENDS OF PIPING NOT ACTIVELY BEING WORKED ON.
14. MODIFY AND EXTEND EXISTING SERVICE TO ACCOMMODATE NEW WORK. RELOCATE EXISTING COMPONENTS AS REQUIRED FOR NEW SYSTEM. COORDINATE WITH BUILDING MANAGEMENT.
15. PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
16. DO NOT CUT STRUCTURAL ELEMENTS WITHOUT PRIOR WRITTEN APPROVAL.
17. CONCEAL PIPING TO THE GREATEST EXTENT POSSIBLE.
18. INSTRUCT OWNER IN PROPER OPERATION OF SYSTEMS.
19. DRAWINGS DO NOT SHOW ALL OFFSETS WHICH MAY BE REQUIRED. MAKE OFFSETS WITH FITTINGS USING THE LEAST ANGLE OF OFFSET POSSIBLE. PIPING SHALL BE ROUTED TO AVOID ALL STRUCTURAL SUPPORTS, AND COORDINATED WITH WORK OF OTHER TRADES.
20. MATERIALS, METHODS, AND INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.

    OREGON STRUCTURAL SPECIALITY CODE (OSSC)
    OREGON MECHANICAL SPECIALITY CODE
    OREGON PLUMBING SPECIALITY CODE (OPSC)
    OREGON FIRE CODE
    OREGON STATE ENERGY CODE WITH LOCAL AMENDMENTS

REMODEL CONSTRUCTION NOTES

1. DEMOLITION: WORK REQUIRED IS NOTED ON PLANS. VERIFY WITH ON SITE CONDITION AND OWNER. SALVAGE EQUIPMENT FOR OWNER'S USE AS NOTED.
2. COORDINATE INTERRUPTIONS OF SERVICES PASSING THROUGH WORK AREA TO MINIMIZE DISRUPTION IN ADJACENT SPACES. COORDINATE WITH BUILDING OWNER.
3. INSTALL NEW WORK GENERALLY AS SHOWN. ADEQUATE SPACE HAS BEEN VERIFIED TO THE DEGREE POSSIBLE, BUT MAY REQUIRE MINOR RELOCATION OF SMALL CONDUIT AND CEILING WIRE. COORDINATE EXTENT OF RELOCATION WITH GENERAL CONSTRUCTION WORK.
4. COORDINATE WORK WITH GENERAL CONSTRUCTION TO MINIMIZE DUST & DUST MIGRATION.

PIPING NOTES

1. SANITARY, WASTE, AND VENT PIPING (PLASTIC NOT ALLOWED) SHALL BE NO-HUB CAST IRON OR DWV COPPER.
2. HOT AND COLD WATER PIPING SHALL BE HARD DRAWN COPPER TUBING: TYPE L, ASSEMBLED WITH WROT COPPER FITTINGS AND LEAD-AND ANTIMONY-FREE SOLDER.
3. INSULATE ALL HOT AND COLD WATER PIPING WITH GLASS FIBER INSULATION WITH ALL SERVICE JACKET. USE HEAT BONDING TAPE TO CLOSE INSULATION; STAPLES AND PRESSURE TAPE ARE PROHIBITED.
4. PROVIDE ALL REQUIRED ACCESSORIES INCLUDING SHUT-OFFS AND CLEAN-OUTS. PROVIDE COMPONENTS WHICH PREVENT BACK-SIPHONAGE OR CROSS-CONNECTIONS. PROVIDE ISOLATION DEVICES TO REDUCE SOUND TRANSMISSION.
5. PROVIDE STOPS FOR EACH WATER CONNECTION TO EACH FIXTURE OR ITEM OF EQUIPMENT.
6. DISINFECT WATER DISTRIBUTION SYSTEM. FLUSH AND TEST ALL SYSTEMS FOR PROPER OPERATION. ADJUST SYSTEM TO PREVENT WATER HAMMER.
7. REFER TO PIPING DIAGRAMS AND DETAILS FOR REQUIRED FITTINGS, VALVES, ETC. FLOOR PLANS AND SECTIONS INDICATE EQUIPMENT LOCATIONS AND GENERAL PIPE ROUTING ONLY.
8. REFER TO CIVIL DRAWINGS FOR UTILITY WORK 5'-0" BEYOND THE BUILDING LINE.

ABBREVIATIONS

A	AIR	ID	INDIRECT DRAIN
AFF	ABOVE FINISHED FLOOR	IE	INVERT ELEVATION
ARRGT	ARRANGEMENT	IN	INCH
ATM	ATMOSPHERE	INIT	INITIAL
		INT	INTERIOR
BFF	BELOW FINISHED FLOOR		
BFP	BACKFLOW PREVENTER	KW	KILOWATT
BHP	BRAKE HORSEPOWER	KWH	KILOWATT HOURS
BLDG	BUILDING		
BOB	BOTTOM OF BEAM	L	LENGTH
BOS	BOTTOM OF STEEL	LB	POUND, LINEAR BAR
BTUH	BRITISH THERMAL UNITS PER HOUR	LBS	POUNDS
		LWT	LEAVING WATER TEMPERATURE
CAP	CAPACITY		
CFM	CUBIC FEET PER MINUTE	MAX	MAXIMUM
CI	CAST IRON	MBH	THOUSAND BTU PER HOUR
CLG	CEILING, COOLING	MCA	MINIMUM CIRCUIT AMPACITY
CNTFGL	CENTRIFUGAL	MECH	MECHANICAL
CO	CLEANOUT	MFR	MANUFACTURER
CONC	CONCRETE	MIN	MINIMUM
COND	CONDENSATE	MTR	MOTOR
CONT	CONTINUE, CONTROL		
COMP	COMPRESSOR	NC	NORMALLY CLOSED
CP	CIRCULATING PUMP	NEG	NEGATIVE
CTG	CLEANOUT TO GRADE	NIC	NOT IN CONTRACT
CU FT	CUBIC FEET	NO	NUMBER, NORMALLY OPEN
CV	CONSTANT VOLUME	NTS	NOT TO SCALE
CW	COLD WATER		
		OC	ON CENTER
dB	DECIBELS	OD	OUTSIDE DIAMETER
DCVA	DOUBLE CHECK VALVE ASSEMBLY	OPNG	OPENING
DEG	DEGREE	ORD	OVERFLOW ROOF DRAIN
DF	DRINKING FOUNTAIN	ORL	OVERFLOW RAIN LEADER
DI	DE-IONIZED		
DIA	DIAMETER	P	PUMP, PLUMBING
DN	DOWN	PH	PHASE
DS	DOWNSPOUT	POC	POINT OF CONNECTION
		POS	POSITIVE
E	EXISTING	P/T	PRESSURE/TEMPERATURE
EER	ENERGY EFFICIENCY RATING	PVC	POLYVINYL CHLORIDE
EFF	EFFICIENCY		
EL	ELEVATION	QTY	QUANTITY
EQUIP	EQUIPMENT		
ESP	EXTERNAL STATIC PRESSURE	RD	ROOF DRAIN
EWT	ENTERING WATER TEMPERATURE	REF	REFERENCE
EXH	EXHAUST	REQD	REQUIRED
EWC	ELECTRIC WATER COOLER	RL	RAIN LEADER
EXIST	EXISTING	RPBFP	REDUCED PRESSURE BACKFLOW
EXP	EXPANSION		PREVENTER
EXT	EXTERIOR, EXTERNAL	RPM	REVOLUTIONS PER MINUTE
F	FAHRENHEIT, FIRE LINE	S	SOIL
FD	FIRE DAMPER, FLOOR DRAIN	SD	STORM DRAIN, SMOKE DAMPER
FDC	FIRE DEPARTMENT CONNECTION	SPR	SPRINKLER
FLA	FULL LOAD AMPS	SS	STAINLESS STEEL, SANITARY SEWER
FLR	FLOOR	STP	STANDPIPE
FLTR	FILTER		
FM	FLOW METER	TEMP	TEMPERATURE
FPM	FEET PER MINUTE	TOT	TOTAL
FPS	FEET PER SECOND	TP	TRAP PRIMER, TOTAL PRESSURE
FT	FEET	TYP	TYPICAL
FV	FACE VELOCITY		
		UON	UNLESS OTHERWISE NOTED
GA	GAGE		
GAL	GALLONS	V	VENT, VOLT
GALV	GALVANIZED	VA	VALVE
GPM	GALLONS PER MINUTE	VEL	VELOCITY
		VFD	VARIABLE FREQUENCY DRIVE
HB	HOSE BIBB	VTR	VENT THROUGH ROOF
HD	HEAD		
HEX	HEAT EXCHANGE	W	WASTE, WATER, WATT, WIDTH
HOA	HAND-OFF-AUTOMATIC	WG	WATER GAGE
HP	HORSEPOWER, HEAT PUMP	WH	WATER HEATER, WALL HYDRANT
HW	HOT WATER	WTR	WATER
HWC	HOT WATER CIRCULATING		
HWP	HOT WATER PUMP		
HZ	HERTZ		

SYMBOLS LEGEND - GENERAL

SYMBOL	DESCRIPTION
1	DRAWING CONSTRUCTION ("FLAG") NOTE
X-XX	EQUIPMENT IDENTIFIER
	MATCHLINE
	REVISION CLOUD (ENCIRCLES DRAWING CHANGES MADE SINCE THE PREVIOUS RELEASE)
1	REVISION REFERENCE
	EXISTING TO BE REMOVED (HATCH)
	HEAVY LINEWEIGHT INDICATES NEW WORK
	LIGHT LINEWEIGHT INDICATES EXISTING INFORMATION
	POINT OF CONNECTION
X / XX.XX	DETAIL REFERENCE DETAIL IDENTIFICATION NUMBER SHEET WHERE DETAIL IS DRAWN
X / XX.XX	ELEVATION REFERENCE ELEVATION IDENTIFICATION NUMBER SHEET WHERE ELEVATION IS DRAWN
X / XX.XX	SECTION REFERENCE SECTION IDENTIFICATION NUMBER SHEET WHERE SECTION IS DRAWN
N	NORTH REFERENCE

SYMBOLS LEGEND - PIPING

SYMBOL	DESCRIPTION
S / F/T	STEAM TRAP ASSEMBLY F/T = FLOAT AND THERMOSTATIC F = FLOAT T = THERMOSTATIC B = BUCKET IB = INVERTED BUCKET I = IMPULSE O = ORIFICE
A	PIPE ANCHOR
	PIPE ALIGNMENT GUIDE
C	CONTROL VALVE STATION
PS	PIPE SUPPORT
P/T	PRESSURE/TEMPERATURE TEST PORT
	CAP
	PLUG
	UNION
	WYE STRAINER
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BALANCING OR PLUG VALVE
	NEEDLE VALVE
	PRESSURE REDUCING VALVE
	BALANCING/MEASURING VALVE
	RELIEF VALVE
	CHECK VALVE
	PIPE TURNING DOWN / AWAY
	PIPE TURNING UP / TOWARDS
	PIPE DOWN TEE
	PIPE DOWN TEE / AWAY
	PIPE UP TEE / TOWARDS

SYMBOLS LEGEND - LABORATORY

SYMBOL	DESCRIPTION
+	NON POTABLE COLD WATER
++	NON POTABLE HOT WATER
+++	NON POTABLE HOT WATER RECIRCULATE
LA	LABORATORY AIR
LV	LABORATORY VACUUM

SYMBOLS LEGEND - MEDICAL GASES

SYMBOL	DESCRIPTION
O2	OXYGEN
MA	MEDICAL COMPRESSED AIR
MV	MEDICAL VACUUM
WAG	WASTE ANESTHETIC GAS
MA	MEDICAL AIR OUTLET
WAGD / WAG	WASTE ANESTHETIC GAS DEVICE
NO2	NITROUS OXIDE (NITROUS)
N2	NITROGEN
CO2	CARBON DIOXIDE
ETO	ETHYLENE OXIDE
	MEDICAL GAS VALVE (SERVICE VALVE)
ZVB	ZONE VALVE BOX
MAB	MEDICAL GAS ALARM BOX
MA	MEDICAL AIR PRESSURE SENSOR
	HOSE REEL (RETRACTABLE)

SYMBOLS LEGEND - PIPING

SYMBOL	DESCRIPTION
	SOIL OR WASTE
	VENT
RL	RAIN LEADER
ORL	OVERFLOW RAIN LEADER
ID	INDIRECT DRAIN
	COLD WATER
	HOT WATER
	HOT WATER CIRCULATING
140° HW	140° POTABLE HOT WATER
120° HW	120° POTABLE HOT WATER
F	FIRE
SPR	SPRINKLER
STP	STANDPIPE
HPS	HIGH PRESSURE STEAM
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
	REDUCER, CONCENTRIC
	WYE STRAINER WITH CAPPED HOSE AND BLOWDOWN VALVE
	ANGLE VALVE
	AUTOMATIC CONTROL VALVE - TWO WAY (PNEUMATIC OPERATOR SHOWN)
M	AUTOMATIC CONTROL VALVE - THREE WAY (ELECTRIC OPERATOR SHOWN)
	BUTTERFLY VALVE
	FLEXIBLE CONNECTION IN PIPING
MAV / AAV	MANUAL AIR VENT (MAV), AUTOMATIC AIR VENT (AAV)
	PRESSURE GAUGE
	THERMOMETER
	THERMOMETER WELL
	SIGHT GLASS
	HOSE BIB

SYMBOLS LEGEND - PIPING & AIRFLOW DIAGRAMS

SYMBOL	DESCRIPTION
	PIPING OR DUCTED AIRFLOW
	NON-DUCTED AIRFLOW
	ELECTRICAL CONNECTION
	FLOW CONTINUATION ARROW
	COMPLEX INTERLOCK (ELEC., PNEUMATIC, ETC.)
	CONNECTION TO CENTRAL MONITORING AND CONTROL SYSTEM (CMCS)
	PUMP
	CENTRIFUGAL FAN
M	ELECTRIC MOTOR/STARTER ASSEMBLY
M	ELECTRIC MOTOR OPERATOR (VALVES AND DAMPERS)
	FLOOR DRAIN
	FUNNEL DRAIN
	FLOOR SINK (SQUARE AND ROUND)
	FLOW DIRECTION

PLUMBING SHEET INDEX

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Way Suite 150 | OR 97702 | 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: GENERAL NOTES, ABBREVIATIONS & SHEET INDEX
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:
Sheet No. P0.00

8/17/2022 2:59:21 PM

OVERALL WATER SERVICE CALCULATION

ITEM	DESCRIPTION		FIXTURE UNIT EACH	TOTAL UNITS (COMB)	(.75) COLD WATER	(.75) HOT WATER
1	HOSE BIBB		2.50	2.50	2.50	0.00
3	HOSE BIBB (EACH ADDITIONAL)		1.00	3.00	3.00	0.00
7	WATER CLOSET		2.50	17.50	17.50	0.00
7	LAVATORY		1.00	7.00	5.25	5.25
2	SHOWER		2.00	4.00	3.00	3.00
1	KITCHEN SINK		1.50	1.50	1.13	1.13
1	MOP SINK		3.00	3.00	2.25	2.25
1	WATER COOLER		0.50	0.50	0.50	0.00
1	WASHMACHINE		4.00	4.00	3.00	3.00
1	DISHWASHER					
	FIXTURE UNIT TOTAL			43.00	38.13	14.63
	FLOW IN GPM			48.00		20.00
	IRRIGATION--SEPARATE METER			0		
a.	MINIMUM DAILY SERVICE PRESSURE			65		psi
b.	STATIC HEAD LOSS .434 /FT X		15	6.51		psi
c.	WATER METER PRESSURE DROP			3		psi
d.	BACKFLOW PREVENTER--RPBP			8		psi
e.	BOOSTER PUMPS			0		psi
f.	PRESSURE REQUIRED AT FIXTURE			30		psi
	PRESSURE AVAILABLE FOR FRICTION LOSS, a - b - c - d + e - f			17.49		psi
150	TOTAL EQUIVALENT PIPE LENGTH FT, PLUS FITTINGS	X	1.3	195		ft
	MAXIMUM FRICTION LOSS PRESS. AVAIL. X 100/EQUIV. LENGTH			8.969		psi
	BUILDING COLD WATER MAIN	2"				
	BUILDING HOT WATER MAIN	1.5"				

SANITARY CALCULATION

QUANTITY	DESCRIPTION	UNITS PER PUBLIC GENERAL	TOTAL UNITS
7	WATER CLOSET	4.00	28.00
7	LAVATORY	1.00	7.00
2	SHOWER	2.00	4.00
1	KITCHEN SINK	2.00	2.00
1	MOP SINK	3.00	3.00
1	WATER COOLER	0.50	0.50
1	WASHMACHINE	3.00	3.00
2	FLOOR SINK	2.00	4.00
7	FLOOR DRAIN	2.00	14.00
	TOTAL FIXTURE UNITS		65.50

MINIMUM BUILDING GRAVITY DRAIN SIZE = 4" AT 1/4"/FT SLOPE

MINIMUM BUILDING GRAVITY DRAIN SIZE = 4" AT 1/8"/FT SLOPE

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	ROUGH-IN CONNECTION IN W	V	CW	HW	TW	REMARKS
EWC-1	ELECTRIC WATER COOLER	1-1/2	1-1/2	3/8	--	--	ELKAY EZH20-S
WB-1	CLOTHES WASHER OUTLET BOX	2	--	1/2	1/2	--	OATEY SCS INC. CENTRO II CLOTHES WASHER OUTLET BOX AND BRACKET.
WB-2	CLOTHES DRYER OUTLET BOX	--	--	--	--	--	OATEY MODA GAS SUPPLY BOX, 1/2".
WC-1	WATER CLOSET, FLUSH VALVE	3	2	1/2	--	--	ACORN PENAL-WARE 1680
WC-2	WATER CLOSET, FLUISH VALVE	3	2	1/2	--	--	FLOOR MOUNTED, ADA COMPLIANT, WHITE, 1.28 GPF. WHITE SOLID PLASTIC SEAT. MCGUIRE ANGLE STOPS, RISER, WAX RING, BOLT KIT.
L-1	WALL MOUNT LAVATORY	2	2	1/2	1/2	--	ACORN DURA-WARE 1953LC
L-2	WALL MOUNT LAVATORY	2	2	1/2	1/2	--	ZURN Z5340 WALL HUNG LAVATORY, 4" CENTER FAUCET HOLES, VITREOUS CHINA, FRONT OVERFLOW, ADA COMPLIANT. FAUCET: CHICAGO FAUCETS 802-370-317XKABCP. THERMO-MIXING VALVE: CHICAGO FAUCET MODEL 122-NF. PROVIDE FLOOR MOUNTED IN WALL CARRIER. PROVIDE MCGUIRE STOPS, SUPPLIES, TRAP, ADA WRAP.
SH-1	SHOWER	2	2	1/2	1/2	--	EVERFAB COMPARTMENT SHOWER. MOEN P/BL TUB/SHR VALVE. CLEVELAND CFG 4800NHCGR/45311 TUB/SHOWER TRIM. OATEY NO CAULC BRASS SHOWER DRAIN WITH STAINLESS STEEL STRAINER. MOEN HAND SHOWER.
S-1	SINK	2	2	1/2	1/2	--	EAGLE SR14-16-9.5-3
MS-1	MOP SINK	3	2	3/4	3/4	--	ACORN TSH-24-KF24-KDG3-KH36-KMH-2KWG 24" X 24" TERRAZO MOP SINK WITH HOSE AND HOSE BRACKET, MOP HANGER, WALL GUARD. . CHICAGO FAUCETS 445-897SRXKCCOWALL MTD FAUCET WITH HOSE THREADS, INTEGRAL VACUUM BREAKER, INTEGRAL CHECK STOPS IN SHANKS, BUCKET HOOK, WALL BRACE.
HB-1	HOSE BIBB	--	--	1/2	--	--	ACORN MODEL 8140, 3/4" SINGLE TEMP HOSE BOX W/ DOOR. VANDAL RESISTANT
HB-2	HOSE BIBB	--	--	1/2	--	--	ACORN MODEL 8160, 3/4" NON-FREEZE INTEGRAL VACCUM BREAKER DUAL CHECK HYDRANT RECESSED W/ DOOR. VANDAL RESISTANT
FD-1	FLOOR DRAIN FD-1	3	2	--	--	--	SIOUX CHIEF 833 SERIES WITH 5 INCH TOP AND SHIM KIT.
GI-1	GREASE INTERCEPTOR	4	--	--	--	--	SCHEIR GB-75

REMARKS:

1. COORDINATE MOUNTING HEIGHTS AND HANDING WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS.
2. MANUFACTURER LISTED IS BASIS OF DESIGN. PROVIDE LISTED OR EQUAL APPROVED BY OWNER.

EQUIPMENT SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	TYPE	CONNECTION SIZE (IN)	GPM	FT HD	HP	FLA	V/PH/HZ	WEIGHT (LBS)	REMARKS
WH-1	111 - CLOSET	BLDG HOT WATER	BOCK	OT199N	100 GALLON STORAGE	1 1/2" WATER, 3/4" NAT GAS	-	-	-		120/1/1960	670 EMPTY	199,900 BTUH INPUT. PROVIDE ACID NEUTRALIZER
ET-2	111 - CLOSET	EXPANSION TANK	AO SMITH	ST-12C-DD	ASME DIAPHRAGM	3/4"	-	-	-	-	-	15	6.4 GAL VOL, 3.2 GAL ACCEPTANCE,150 PSI RATING, 12" X 18", NO VALVE BETWEEN TANK AND COLD WATER PIPING.
RCP-1	111 - CLOSET	HOT WATER RECIRCULATION PUMP	B&G	ECOCIRC 20-18	CIRCULATOR				0-70 WATTS	-	120/1/60	-	PROVIDE STAINLESS STEEL PUMP HOUSING.

REMARKS: INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMONDATIONS

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5569
SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

Description	Date
1	

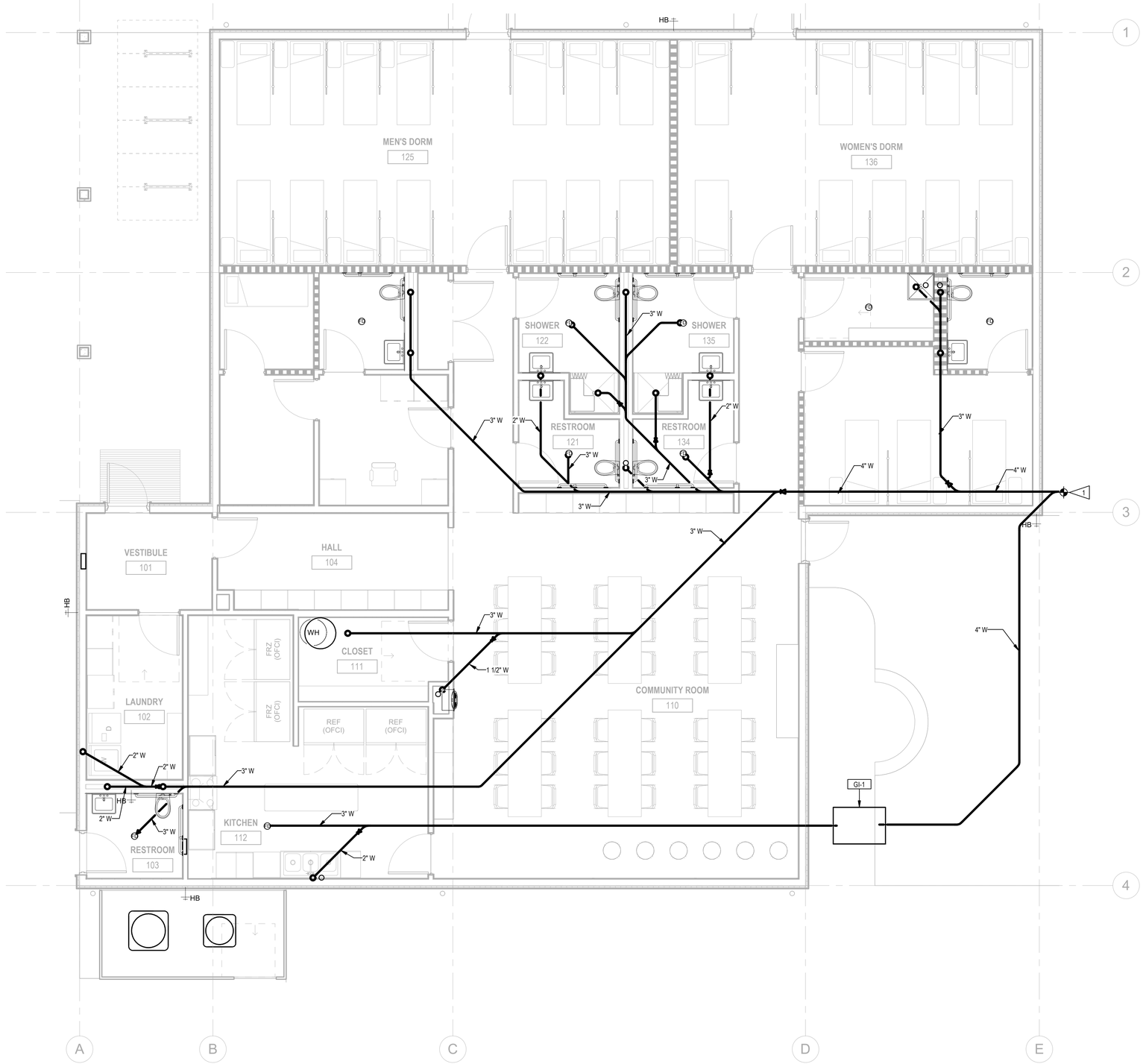
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: PLUMBING SCHEDULES
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No. P0.02

8/17/2022 2:59:22 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028



SHEET NOTES

A. PLANS ARE DIAGRAMMATIC IN NATURE AND REPRESENT CONCEPTUAL ROUTING ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL ACTUAL CONDITIONS AND COORDINATING WITH OTHER TRADES.

FLAG NOTES

1. INVERT TO BE APPROXIMATLEY 48" BELOWW FF.

1 PLUMBING WASTE & VENT UNDERGROUND PLAN
1/4" = 1'-0" @ FULL SIZE
0" 1" 2" 4"

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS
	Date	Description

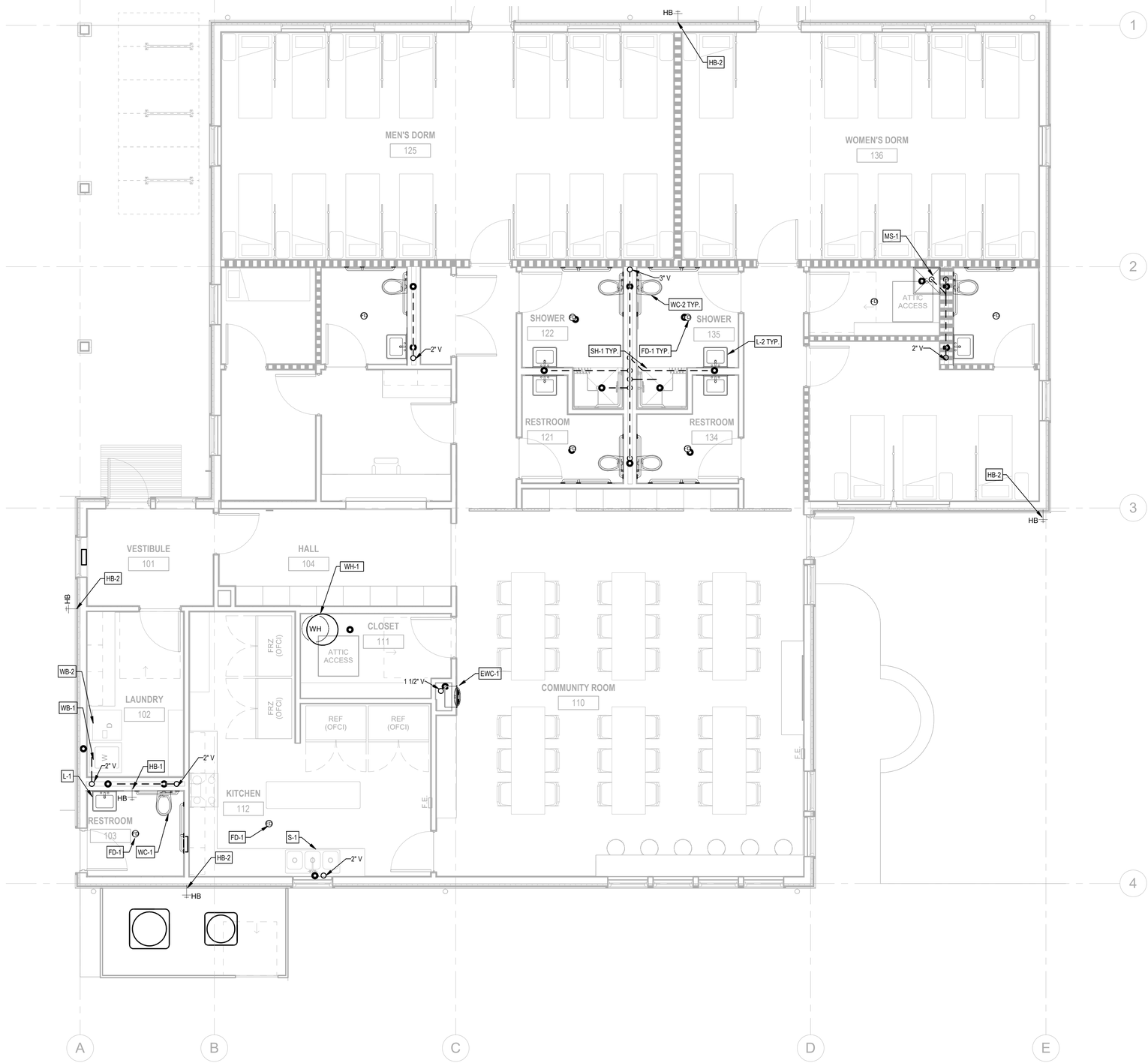
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: PLUMBING WASTE & VENT - UNDERGROUND PLAN
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No.
P3.01

8/17/2022 2:59:24 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028



SHEET NOTES

A. PLANS ARE DIAGRAMMATIC IN NATURE AND REPRESENT CONCEPTUAL ROUTING ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL ACTUAL CONDITIONS AND COORDINATING WITH OTHER TRADES.

1 PLUMBING WASTE & VENT PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Date	Description
1		

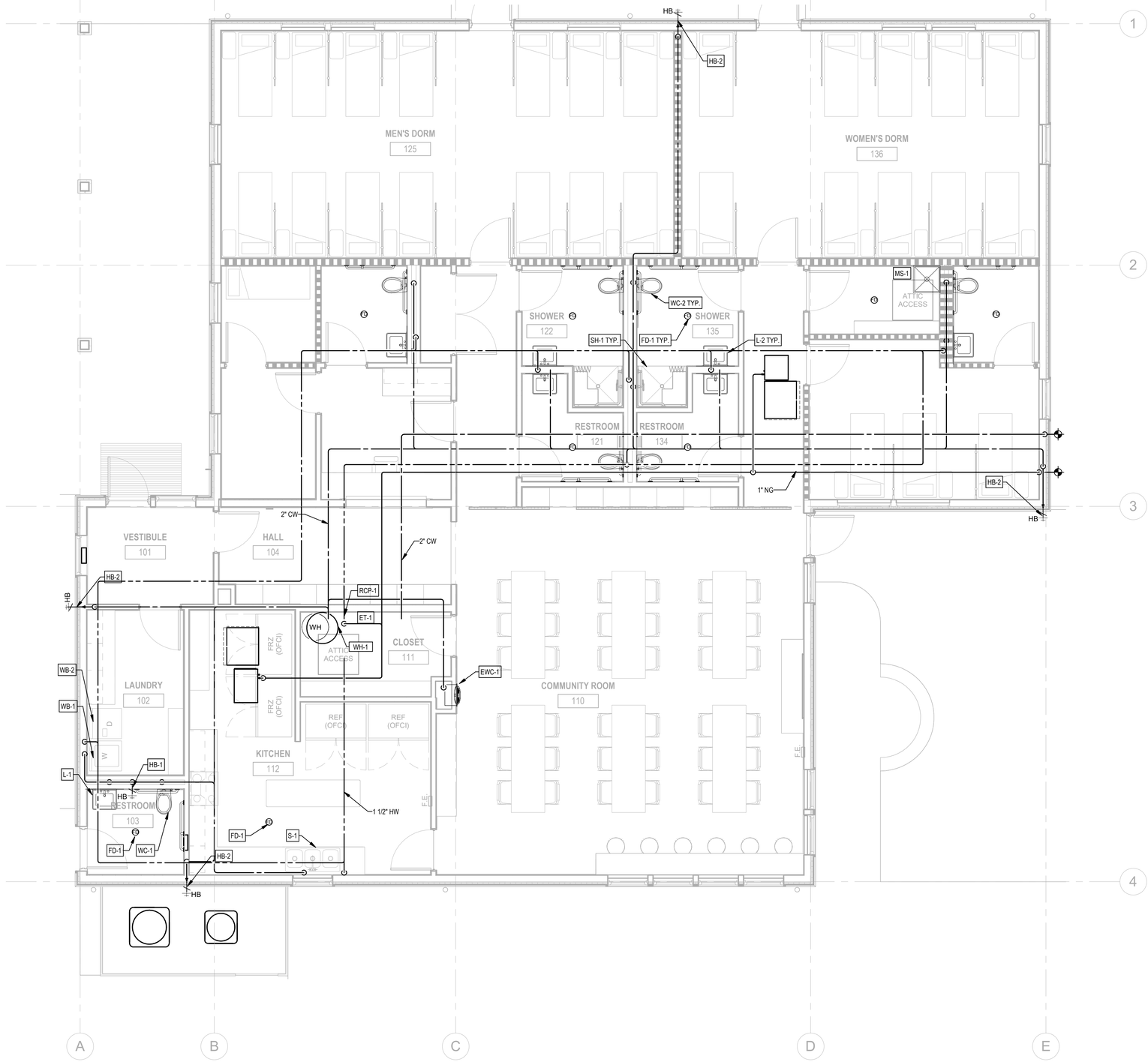
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: PLUMBING WASTE & VENT PLAN - FIRST FLOOR
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No.
P3.02

8/17/2022 2:59:25 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028



SHEET NOTES

A. PLANS ARE DIAGRAMMATIC IN NATURE AND REPRESENT CONCEPTUAL ROUTING ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL ACTUAL CONDITIONS AND COORDINATING WITH OTHER TRADES.

1 PLUMBING WATER & GAS PLAN
1/4" = 1'-0" @ FULL SIZE
0" 1" 2" 4"

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

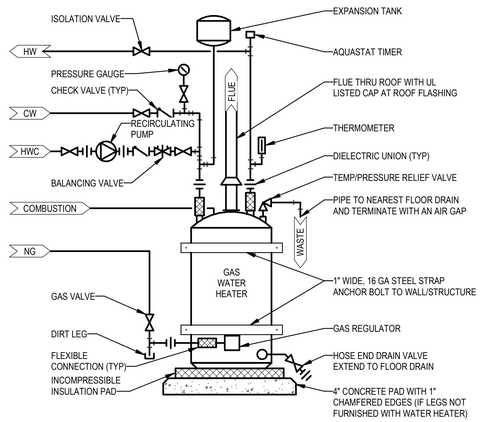
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: PLUMBING DOMESTIC WATER & GAS PLAN - FIRST FLOOR
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:
Sheet No. P4.01

8/17/2022 2:59:26 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701

SAZAN# 646-22028



1 GAS-FIRED WATER HEATER WITH RECIRC. PUMP DIAGRAM

NTS

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270

BEND | 721 SW Industrial Square #150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

	Date	Description
1		

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: PLUMBING DETAILS

Drawn By: Author

Project No. 021062.000

Date: 8/17/2022

Revised:

Sheet No.

P7.00

8/17/2022 2:59:26 PM

GENERAL NOTES

1. MATERIALS, METHODS, AND INSTALLATION SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE FOLLOWING CODES AS ADOPTED BY LOCAL AUTHORITIES HAVING JURISDICTION.
   - OREGON STRUCTURAL SPECIALTY CODE (OSSC)
   - OREGON MECHANICAL SPECIALTY CODE (OMSC)
   - OREGON PLUMBING SPECIALTY CODE (OPSC)
   - OREGON FIRE CODE (OFC)
   - OREGON ENERGY EFFICIENCY SPECIALTY CODE (OEESC)
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE AND ADOPTED REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE, LOCAL CODES AND ORDINANCES WHICH MAY BE IN EFFECT. ALL MECHANICAL MATERIALS, INSTALLATION PROCEDURES AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE CODE ENFORCEMENT AUTHORITIES HAVING JURISDICTION. THE MECHANICAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION. PAY ALL ROYALTIES OR FEES REQUIRED IN CONNECTION WITH THE USE OF PATENTED DEVICES AND SYSTEMS.
3. UPON CONTRACT AWARD, CONTRACTOR SHALL CONTACT LOCAL UTILITY COMPANY TO SCHEDULE UTILITY CONNECTIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL UTILITY WORK, SECURE ALL PERMITS AND INSPECTIONS.
4. ALL CONNECTIONS TO BUILDING SERVICES SHALL BE CAREFULLY COORDINATED WITH THE UTILITY COMPANY AND THE CONSTRUCTION MANAGER. SERVICE WORK OF THIS NATURE TO OCCUR DURING UNOCCUPIED BUILDING HOURS. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL EXISTING EQUIPMENT IS OPERATIONAL AFTER ANY SHUTDOWN OCCURS.
5. ALL CONTRACT WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE WRITTEN SPECIFICATIONS FOR THIS PROJECT WHICH ARE CONSIDERED TO BE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS SHALL MAINTAIN (AT THE JOBSITE) AND REFER TO COPIES OF THE WRITTEN SPECIFICATIONS AS PART OF THESE DRAWINGS. REFER TO THE WRITTEN SPECIFICATIONS IN CONJUNCTION WITH THE PLANS FOR FULL PROJECT SCOPE. IN ALL CASES OF DISCREPANCY BETWEEN PLANS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN AND WHERE IT IS UNCLEAR, SUCH CASES SHALL BE REFEREED TO THE ENGINEER FOR ADJUDICATION.
6. ANY DISCREPANCIES OR INADEQUACIES WITHIN THESE BID DOCUMENTS OR BETWEEN THESE BID DOCUMENTS AND RELATED PLUMBING, ELECTRICAL, FIRE PROTECTION, ARCHITECTURAL, INTERIOR DECOR AND FIELD CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER PRIOR TO BID SUBMISSION. DURING THE COURSE OF CONSTRUCTION COORDINATION AND ACTUAL CONSTRUCTION, THE MECHANICAL CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS AND TRADES ON THIS PROJECT TO ENSURE A SMOOTH RUNNING AND CAREFULLY COORDINATED INSTALLATION.
7. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING HIS BID FOR THE PROPOSED WORK. HE SHALL BE RESPONSIBLE TO VERIFY FIELD CONDITIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO SUBMISSION OF BIDS IN WRITING.
8. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION INCLUDING LOUVERS, CONCRETE EQUIPMENT PADS, FLASHING DETAILS, ETC. REFER TO ARCHITECTURAL DRAWINGS FOR ROOM ELEVATIONS, LOCATE MECHANICAL DEVICES SUCH AS TEMPERATURE SENSORS, HUMIDISTATS, PANELS, ETC. SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION (WAINSCOT, DOOR HARDWARE, ETC.) NOR WITH ELECTRICAL SYSTEM (LIGHT SWITCHES, SPEAKERS, OUTLETS, ETC.).
9. COORDINATE WITH OTHER TRADES: A) REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT (VOLTAGE, PHASE, HZ, ETC). B) PROVIDE ADEQUATE CLEARANCE OF MECHANICAL WORK FROM ELECTRICAL ITEMS. MAINTAIN MINIMUM ACCESS OF 6-INCHES ABOVE ELECTRICAL CABLE TRAYS AND 18-INCHES TO THE SIDE OF CABLE TRAYS.
10. DUCTING AND PIPING SHOWN ON DRAWINGS SHOW THE GENERAL RUN AND CONNECTIONS AND MAY OR MAY NOT IN ALL PARTS BE SHOWN IN ITS EXACT POSITION. CONTRACTOR SHALL BE RESPONSIBLE FOR ERECTING THE DUCTING AND PIPING SUITABLE IN EVERY RESPECT FOR THE WORK PERFORMED. DUCTWORK AND PIPING SHALL BE INSTALLED SO THAT ACCESS, CLEARANCE, HEADROOM, AND PITCH ARE MAINTAINED. CONTRACTORS OF THE VARIOUS TRADES SHALL COORDINATE THE INSTALLATION. MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR CHASE AND SOFFIT LOCATIONS TO COORDINATE ALL EXPOSED DUCTWORK AND PIPE ROUTING.
11. THE COMMISSIONING SPECIFICATION, INCLUDING ALL FUNCTIONAL TEST PROCEDURES, SHALL BE PROVIDED AND ENFORCED BY THE CONTRACTOR.
12. PROVIDE SEISMIC RESTRAINT IN ACCORDANCE WITH IBC AND ASCE STANDARD 7. SUBMIT CALCULATIONS BY LICENSED STRUCTURAL ENGINEER. PRODUCTS MAY CONFORM TO SMACNA SEISMIC RESTRAINT GUIDELINES.
13. PROVIDE A SINGLE SUBMITTAL OF ALL MECHANICAL EQUIPMENT AS SPECIFIED. AS A MINIMUM, SUBMIT PRODUCT DATA FOR ALL EQUIPMENT AND FIXTURES LISTED IN ACCOMPANYING SCHEDULES FOR APPROVAL.
14. USE EXPERIENCED INSTALLERS. DELIVER, HANDLE, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
15. ARRANGEMENT OF SYSTEMS INDICATED ON THE DRAWINGS IS DIAGRAMMATIC, AND INDICATES THE MINIMUM REQUIREMENTS FOR PLUMBING AND MECHANICAL WORK. ADJUST BOX LOCATIONS, BASED ON FIELD MEASUREMENTS, TO AVOID INSTALLATION ABOVE DESKS. SITE CONDITIONS SHALL DETERMINE THE ACTUAL ARRANGEMENT OF THE WORK. TAKE FIELD MEASUREMENTS BEFORE PREPARING SHOP DRAWINGS, OBTAIN APPROVAL OF SHOP DRAWINGS BEFORE BEGINNING FABRICATION. BE RESPONSIBLE FOR ACCURACY OF DIMENSIONS AND LAYOUT. OVERHEAD PIPING AND DUCTWORK SHALL BE ARRANGED TO OBTAIN MAXIMUM HEAD ROOM. SHOP DRAWING SHALL BE SUBMITTED TO AND REVIEWED BY THE ENGINEER OF RECORD.
16. CLEAN AND PROTECT WORK FROM DAMAGE. RESTORE DAMAGED FINISHES. COVER ENDS OF PIPING AND DUCTWORK NOT ACTIVELY BEING WORKED ON. DO NOT USE ANY PART OF THE OWNER'S BUILDING AS A SHOP, EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES BY THE OWNER.
17. CHANGES OR SUBSTITUTIONS OF EQUIPMENT WILL NOT BE ALLOWED WITHOUT SPECIFIC WRITTEN APPROVAL FROM THE ARCHITECT OR ENGINEER. ALL COSTS RESULTING FROM THE SELECTION OF OTHER THAN SPECIFIED EQUIPMENT SHALL BE BORNE BY THE CONTRACTOR, INCLUDING, BUT NOT LIMITED TO WORK AFFECTING OTHER CONTRACTORS, THE OWNER, OR RE-DESIGN ISSUES.
18. ALL INDICATED WORK SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED. CONTRACTOR SHALL COORDINATE HIS SCHEDULING WITH THE OWNER AND GENERAL CONTRACTOR TO COMPLY WITH THE OWNERS USAGE OF THE BUILDING.
19. ALL CONTRACTORS SHALL PROVIDE CUTTING AND PATCHING FOR THEIR RESPECTIVE TRADES. ALL CONTRACTORS REMOVING OR RELOCATING ANY EQUIPMENT, PIPES, DUCTS, CONDUITS, ETC SHALL PATCH ALL SURFACES DISTURBED BY THIS WORK TO MATCH ADJACENT SURFACES.
20. CONTRACTOR IS RESPONSIBLE FOR THE PROPER CARE OF ALL OWNER'S EQUIPMENT AND/OR FURNISHINGS WHICH ARE REQUIRED TO BE TEMPORARILY REMOVED, STORED, OR RELOCATED. CONTRACTOR SHALL REPLACE, REPAIR, OR REIMBURSE OWNER FOR ALL DAMAGES TO SUCH PROPERTIES AT FULL REPLACEMENT VALUE AND EQUIVALENCY. CONTRACTOR SHALL ADVISE OWNER FOR DISPOSITION OF REMOVED EQUIPMENT AND/OR MATERIALS.
21. CONTRACTOR'S WORK MAY BE REQUIRED OUTSIDE OF THE DESIGNATED SPACE. ALL SYSTEMS BEING DEMOLISHED AND REMOVED, MODIFIED, AND/OR TERMINATED SHALL BE FIELD VERIFIED TO INSURE NO WORK PERFORMED, INSIDE OR OUTSIDE, OF THE DESIGNATED SPACE SHALL DISRUPT ANY SERVICE OR SYSTEMS OF ANY OTHER AREAS. IF ANY CONDITIONS ARISE THAT ARE NOT IDENTIFIED ON THE DRAWINGS, IMMEDIATE NOTIFICATION SHALL BE PROVIDED TO THE ENGINEER OR OWNER. NO WORK SHALL PROCEED WITHOUT APPROVALS FROM ENGINEER OR OWNER.
22. DO NOT CUT OR PENETRATE STRUCTURAL ELEMENTS WITHOUT PRIOR WRITTEN APPROVAL.
23. THE MECHANICAL CONTRACTOR SHALL MOUNT THE DUCT SMOKE DETECTOR. THE ELECTRICAL CONTRACTOR TO PROVIDE AND WIRE DUCT MOUNTED SMOKE DETECTOR. ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE AND WIRE A REMOTE MONITORING KEY OPERATED TEST AND ALARM STATION FOR EACH DUCT SMOKE DETECTOR. THE REMOTE TEST ALARM STATION SHALL BE MOUNTED AS DIRECTED IN THE AREA OF THE SMOKE DETECTOR.
24. THE MECHANICAL CONTRACTOR TO PROVIDE ALL ROOF CURBS, EQUIPMENT RAILS, SUPPORTS, ROOF PORTALS AND ASSOCIATED EQUIPMENT TO ENSURE A COMPLETE INSTALLATION FOR NEW HVAC EQUIPMENT. MECHANICAL CONTRACTOR RESPONSIBLE TO PROVIDE EXACT LOCATIONS AND REVIEWED AND RELEASED EQUIPMENT SUBMITTALS OF ROOF CURBS, EQUIPMENT SUPPORTS, ROOF PORTALS, AND ASSOCIATED EQUIPMENT TO THE ARCHITECT. ALL ROOF PENETRATIONS, EQUIPMENT SUPPORTS, ROOF PORTALS AND ASSOCIATED EQUIPMENT SHALL BE INSTALLED BY ROOFING SUB-CONTRACTOR. ROOFING CONTRACTOR SHALL BE BONDED AND ALL WORK SHALL BE DONE SO AS NOT TO VOID ROOF WARRANTY. ROOFING CONTRACTOR SHALL PROVIDE BASE FLASHING, AND PROVIDE TEMPORARY WEATHER-PROOF COVERS UNTIL MECHANICAL CONTRACTOR INSTALLS NEW HVAC UNITS. MECHANICAL CONTRACTOR TO PROVIDE COUNTER FLASHING.
25. FURNISH TO ELECTRICAL CONTRACTOR ALL MOTOR STARTERS AND CONTROL DEVICES FOR MECHANICAL EQUIPMENT. ELECTRICAL CONTRACTOR SHALL INSTALL AND WIRE STARTER AND CONTROL EQUIPMENT FOR ALL MOTORS.
26. ALL HVAC EQUIPMENT CONTAINING COOLING (EVAPORATOR) COILS INCLUDING DOWN FLOW ROOF TOP UNITS SHALL HAVE CONDENSATE MONITORING FOR OVERFLOW PROTECTION FOR PRIMARY OR SECONDARY DRAIN PANS AS APPLICABLE. SUCH DEVICES SHALL BE LABELED TO COMPLY WITH UL#508 AND SHALL SHUT DOWN COOLING SYSTEM AND SIGNAL BMS SYSTEM IF APPLICABLE.
27. ALL EXPOSED HORIZONTAL AND VERTICAL PIPING SHALL BE INSTALLED IN A NEAT ARRANGEMENT IN LOCATIONS WHICH ARE THE MOST INCONSPICUOUS. VERTICAL DROPS SHALL BE KEPT TO AN ABSOLUTE MINIMUM AND THEIR FINAL LOCATIONS SHALL BE COORDINATED AND RUN WITHIN CHASES, WALLS, OR SOFFITS WITH OTHER PLUMBING AND ELECTRICAL FEEDS. MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR CHASE AND SOFFIT LOCATIONS TO COORDINATE ALL EXPOSED PIPING ROUTING. ALL SUCH LOCATIONS SHALL BE REVIEWED WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
28. ALL PENETRATIONS THRU FIRE RATED WALLS, FLOORS, AND CEILINGS SHALL BE SEALED WITH A UL APPROVED FIRESTOP MATERIAL SUITABLE FOR CONSTRUCTION MATERIAL TO MAINTAIN FIRE, SMOKE AND DRAFT INTEGRITY OF STRUCTURE. FIRE RESISTANT SEALER SHALL BE TESTED IN ACCORDANCE WITH ASTM E84. INSTALL SEALANT, INCLUDING FOAMING, PACKING AND OTHER ACCESSORY MATERIALS TO FILL OPENINGS WHERE FIRE RATED PENETRATIONS OCCUR. COMPLY WITH INSTALLATION REQUIREMENTS ESTABLISHED BY TESTERS AND INSPECTION AGENCY.
29. FURNISH AND INSTALL PIPE SLEEVES PASSING THROUGH EXTERIOR WALLS. SLEEVES SHALL BE STEEL PIPE: ASTM A53, TYPE E, GRADE A, SCHEDULE 40, GALVANIZED PLAIN ENDS, 2" LONGER THAN WALL WIDTH.
30. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER HANDLING, DISPOSAL AND ASSOCIATED COSTS OF ALL REFRIGERANT MATERIAL DURING THIS CONTRACT IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL CODES AND/OR REGULATIONS.
31. THERMOSTATS SHALL BE MOUNTED AT 48" AFF TO MEET ADA REQUIREMENTS. PROVIDE TAMPER PROOF COVERS IN PUBLIC AREAS AND WIRE GUARDS IN GYMNASIUMS.
32. ALL DUCTWORK SHALL BE CONNECTED TO MOTORIZED EQUIPMENT WITH FLEXIBLE DUCT CONNECTORS.
33. ALL DUCTWORK SIZES SHOWN ON DRAWINGS ARE CLEAR INTERNAL DIMENSIONS.
34. INSTRUCT OWNER IN PROPER OPERATION OF SYSTEMS.
35. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND MAY HAVE TO BE ADAPTED TO COMPLY WITH BUILDING CONDITIONS. CONTRACTOR SHALL SUBMIT HVAC SHOP DRAWINGS, INDICATING LOCATIONS, AND ROUTING OF ALL DUCTS, PIPING, WIRING AND ASSOCIATED ACCESSORIES. MAKE OFFSETS WITH FITTINGS WITH AS SMALL ANGLE OF OFFSET AS POSSIBLE. DUCTWORK & PIPING SHALL BE ROUTED TO AVOID ALL STRUCTURAL SUPPORTS, AND COORDINATE ALL WORK WITH WORK OF OTHER TRADES.
36. ALL MECHANICAL EQUIPMENT AND APPLIANCES SHALL BEAR THE LABEL OF AN APPROVING AGENCY. LISTING AND LABELING AGENCY QUALIFICATIONS: A "NATIONALLY RECOGNIZED TESTING LABORATORY" AS DEFINED IN THE INTERNATIONAL MECHANICAL CODE.
37. THE MECHANICAL CONTRACTOR SHALL PROVIDE A COMPLETE SET OF "AS-BUILT" DRAWINGS INDICATING THE PRECISE LOCATION OF ALL SYSTEMS, EQUIPMENT, DUCTWORK, PIPING AND ACCESS DOORS. THESE PLANS SHALL ALSO INCLUDE ALL CHANGES AND DEVIATIONS FROM BID DOCUMENTS.

SHEETMETAL NOTES

1. PERFORM ALL SHEETMETAL WORK IN ACCORDANCE WITH CURRENT SMACNA STANDARDS.
2. CONSTRUCT DUCTS WITH G-60 OR BETTER GALVANIZED STEEL (ASTM 527) LFQ, CHEM TREAT IN GENERAL.
3. CONSTRUCT RECTANGULAR DUCTWORK TO MEET ALL FUNCTIONAL CRITERIA DEFINED IN CHAPTER 11, OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS. PROVIDE DIAGONAL CREASING OR BEADING ON ALL PANELS WIDER THAN 18-INCHES, AND PANELS LESS THAN 18 GAGE. CONSTRUCT ROUND AND FLAT OVAL DUCTWORK IN ACCORDANCE WITH CHAPTER 3 OF SMACNA HDCS.
4. DUCTMATE, METZ, OR W.D.C.I. DUCT CONNECTION SYSTEMS ARE ACCEPTABLE. DUCTS CONSTRUCTED USING THESE SYSTEMS WILL REFER TO THE MANUFACTURER'S GUIDELINES FOR SHEET GAGE, INTERMEDIATE REINFORCEMENT SIZE AND SPACING, AND JOINT REINFORCEMENTS.
5. PROVIDE COLLARS WHEREVER AN EXPOSED DUCT PASSES THROUGH A WALL, SLAB, OR CEILING--1-INCH WIDE, 18-GAGE ANGLE WITH MITERED CORNERS & SEAL WITH FIBERGLASS AND MASTIC.
6. SPIN-IN FITTINGS SHALL BE CONICAL TYPE WITH VOLUME DAMPER, AND QUADRANT; FLEX MASTER ELGEN OR EQUIVALENT.
7. ELBOWS IN RECTANGULAR OR SQUARE DUCTWORK SHALL HAVE AN INSIDE RADIUS EQUAL TO DIMENSION OF ELBOW IN THE PLANE OF THE TURN; OTHERWISE USE SQUARE ELBOWS WITH TURNING VANES.
8. ELBOWS IN ROUND DUCTWORK SHALL HAVE THE INSIDE RADIUS EQUAL TO DIMENSION OF ELBOW IN THE PLANE OF THE TURN. USE SEGMENTED, STANDING SEAM, PLEATED, OR STAMPED ELBOWS. ADJUSTABLE ELBOWS ARE ALLOWED IF RADIUS CONFORMS TO ABOVE.
9. SQUARE CORNER INSERTS (TURNING VANES) SHALL BE SMACNA FIG. 4.3 DOUBLE THICKNESS, RUNNER TYPE 2 WITH 2-1/8-INCH SPACING.
10. VOLUME DAMPERS ARE NOT SHOWN GENERALLY, INCLUDE A DAMPER IN THE DUCT TO EACH SUPPLY, EXHAUST, OR RETURN OPENING; ALSO IN EACH BRANCH DUCT WHERE THREE OR MORE OPENINGS ARE ASSOCIATED WITH THE BRANCH. LOCATE DAMPERS AT A POINT WHERE THE DUCT IS ACCESSIBLE; AS FAR FROM THE OUTLET AS POSSIBLE.
11. THOROUGHLY CLEAN ALL DEBRIS FROM THE INSIDE OF ALL DUCTWORK AND PLENUMS. BLOW FREE ALL SMALL PARTICLES OF RUBBISH AND DUST.
12. MECHANICAL DRAWINGS SHOW APPROXIMATE LOCATIONS FOR GRILLES AND DIFFUSERS. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LOCATIONS. AFTER SHOP DRAWINGS ARE COMPLETED VERIFY EXACT LOCATION OF GRILLES AND DIFFUSERS IN THE FIELD. ENSURE THAT DIFFUSER AND GRILLE FRAMES MATCH CEILING TYPES AND FINISH PRIOR TO ORDERING.
13. CONNECT FLEXIBLE DUCTS TO METAL DUCTS WITH A SLIP JOINT MADE USING FIRE RESISTANT MASTIC AND CLAMP, IDEAL "DRAW-TAP-LOCK" OR VENTLOCK "SURETIGHT NO. 670" AT EACH END. SUPPORT IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS. DO NOT INSTALL WITH ABRUPT BENDS OR OFFSETS. MAXIMUM LENGTH 5-FEET. LOW PRESSURE INSULATED FLEXIBLE DUCT SHALL BE THERMAFLEX MK-E. HIGH PRESSURE INSULATED FLEXIBLE DUCT SHALL BE THERAMFLEX MK-C.
14. GREASE EXHAUST TO BE ½ INCH W.G. PRESSURE CLASS, 18 GAGE STAINLESS STEEL WITH LIQUID TIGHT CONSTRUCTION WITH CONTINUOUS EXTERNAL WELD FOR ALL SEAMS AND JOINTS. PROVIDE ALL ACCESS DOORS AS REQUIRED BY CODE.
15. FUME HOOD EXHAUST TO BE ½ INCH W.G. PRESSURE CLASS, 18 GAGE STAINLESS STEEL CONSTRUCTION WITH CONTINUOUS EXTERNAL WELD FOR ALL SEAMS AND JOINTS.

ENERGY CODE MECHANICAL NOTES

1. HEAT PUMPS HAVING SUPPLEMENTARY ELECTRIC RESISTANCE HEAT HAVE CONTROLS THAT, EXCEPT DURING DEFROST, PREVENT SUPPLEMENTARY HEAT OPERATION WHEN THE HEAT PUMP CAN MEET THE HEATING LOAD.
2. WHERE USED TO CONTROL BOTH HEATING AND COOLING, ZONE THERMOSTATIC CONTROLS PROVIDE A TEMPERATURE RANGE OR DEADBAND OF AT LEAST 5°F WITHIN WHICH THE SUPPLY OF HEATING AND COOLING ENERGY TO THE ZONE IS CAPABLE OF BEING SHUT OFF OR REDUCED TO A MINIMUM.
3. EACH HVAC SYSTEM HAS CONTROLS THAT VARY THE START-UP TIME OF THE SYSTEM TO JUST MEET THE TEMPERATURE SET POINT AT TIME OF OCCUPANCY.
4. EACH ZONE IS PROVIDED WITH THERMOSTATIC SETBACK CONTROLS THAT ARE CONTROLLED BY EITHER AN AUTOMATIC TIME CLOCK OR PROGRAMMABLE CONTROL SYSTEM.
5. BOTH OUTDOOR AIR SUPPLY AND EXHAUST ARE EQUIPPED WITH NOT LESS THAN CLASS I MOTORIZED DAMPERS.
6. WHERE A HUMIDITY CONTROL DEVICE EXISTS IT IS SET TO MAINTAIN A DEADBAND OF AT LEAST 10% RELATIVE HUMIDITY WHERE NO ACTIVE HUMIDIFICATION OR DEHUMIDIFICATION TAKES PLACE.
7. DEMAND CONTROLLED VENTILATION (DCV) IS INCLUDED FOR SPACES LARGER THAN 500 SF2 FOR SIMPLE SYSTEMS AND SPACES LARGER THAN 150 SF2 FOR MULTIPLE ZONE SYSTEMS.
8. ALL LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS AND CONNECTIONS OF LOW-PRESSURE SUPPLY AND RETURN DUCTS ARE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS OR TAPES INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

   EXCEPTION(S):
   A. CONTINUOUSLY WELDED AND LOCKING-TYPE LONGITUDINAL JOINTS AND SEAMS ON DUCTS OPERATING AT STATIC PRESSURES LESS THAN 2 INCHES W.G. PRESSURE CLASSIFICATION.
9. AN OPERATING AND MAINTENANCE MANUAL WILL BE PROVIDED TO THE BUILDING OWNER BY THE MECHANICAL CONTRACTOR.

ABBREVIATIONS

A	AIR, AMP
ACU	AIR CONDITIONING UNIT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AL	ALUMINUM, ACOUSTICAL LINING
ARRGT	ARRANGEMENT
ATM	ATMOSPHERE
BC	BLOWER COIL
BDD	BACKDRAFT DAMPER
BFF	BELOW FINISHED FLOOR
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOB	BOTTOM OF BEAM
BOD	BOTTOM OF DUCT
BOS	BOTTOM OF STEEL
BTUH	BRITISH THERMAL UNITS PER HOUR
CAP	CAPACITY
CC	COOLING COIL
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CHR	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
CI	CAST IRON
CLG	CEILING, COOLING
CNTFGL	CENTRIFUGAL
CO	CLEANOUT
CONC	CONCRETE
COND	CONDENSATE
CONT	CONTINUE, CONTROL
COMP	COMPRESSOR
COP	COEFFICIENT OF PERFORMANCE
CP	CIRCULATING PUMP
CRU	CONDENSATE RETURN UNIT
CU	CONDENSING UNIT
CU FT	CUBIC FEET
CV	CONSTANT VOLUME
CVTR	CONVERTER
CW	COLD WATER
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
dB	DECIBELS
DB	DRY BULB
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DEG	DEGREE
DF	DRINKING FOUNTAIN
DI	DE-IONIZED
DIA	DIAMETER
DMPR	DAMPER
DN	DOWN
DS	DOWNSPOUT
E	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATING
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
EL	ELEVATION
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR, EXTERNAL
F	FAHRENHEIT, FIRE LINE
FD	FIRE DAMPER, FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FLA	FULL LOAD AMPS
FLR	FLOOR
FLTR	FILTER
FM	FLOW METER
FOB	FLAT ON BOTTOM
FO	FLAT OVAL
FOT	FLAT ON TOP
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FSD	FIRE SMOKE DAMPER
FT	FEET, FAN TERMINAL
FV	FACE VELOCITY
GA	GAGE
GAL	GALLONS
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
H	HUMIDIFIER, HEIGHT
HB	HOSE BIBB
HC	HEATING COIL
HD	HEAD
HEX	HEAT EXCHANGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER, HEAT PUMP
HPS	HIGH PRESSURE STEAM
HTG	HEATING
HW	HOT WATER
HWC	HOT WATER CIRCULATING
HWP	HOT WATER PUMP
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
HZ	HERTZ
IDE	INDIRECT DRAIN
IE	INVERT ELEVATION
IH	INTAKE HOOD
IN	INCH
INIT	INITIAL
INT	INTERIOR
IPLV	INTEGRATED PART LOAD VALUE
KW	KILOWATT
KWH	KILOWATT HOURS
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LB	POUND, LINEAR BAR
LBS	POUNDS
LD	LINEAR DIFFUSER
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MD	MANUAL DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MOCP	MAXIMUM OVER CURRENT PROTECTION
MOD	MOTOR OPERATED DAMPER
MTR	MOTOR
NC	NORMALLY CLOSED
NEG	NEGATIVE
NIC	NOT IN CONTRACT
NO	NUMBER, NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTDOOR AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
ORD	OVERFLOW ROOF DRAIN
ORL	OVERFLOW RAIN LEADER
P	PUMP, PLUMBING
PD	PRESSURE DROP
PH	PHASE
POC	POINT OF CONNECTION
POS	POSITIVE
PR	PUMPED RETURN
P/T	PRESSURE/TEMPERATURE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RA	RETURN AIR
RD	ROOF DRAIN
REF	REFERENCE
REQD	REQUIRED
RF	RETURN FAN
RG	RETURN GRILLE
RH	RELIEF HOOD, RELATIVE HUMIDITY
RL	RAIN LEADER
RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
RPM	REVOLUTIONS PER MINUTE
S	SOIL
SA	SUPPLY AIR
SD	STORM DRAIN, SMOKE DAMPER
SENS	SENSIBLE
SEER	SEASONAL ENERGY EFFICIENCY RATING
SF	SUPPLY FAN, SQUARE FEET
SG	SUPPLY GRILLE
SL	SOUNDLINING
SP	STATIC PRESSURE
SPR	SPRINKLER
SS	STAINLESS STEEL, SANITARY SEWER
STP	STANDPIPE
T	THERMOSTAT
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
TOD	TOP OF DUCT
TOT	TOTAL
TP	TRAP PRIMER, TOTAL PRESSURE
TSP	TOTAL STATIC PRESSURE
TU	TERMINAL UNIT
TYP	TYPICAL
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VENT, VOLT
VA	VALVE
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THROUGH ROOF
W	WASTE, WATER, WATT, WIDTH
WB	WET BULB
WG	WATER GAGE
WH	WATER HEATER, WALL HYDRANT
WTR	WATER

MECHANICAL SHEET INDEX

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5080
PORTLAND | 623 SW Morrison St. Suite 350 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Way Suite 150 | OR 97702 | 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: GENERAL NOTES, ABBREVIATIONS & SHEET INDEX
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No. M0.00

8/17/2022 3:42:45 PM

SYMBOLS LEGEND - GENERAL

SYMBOL	DESCRIPTION
1	DRAWING CONSTRUCTION ("FLAG") NOTE
X-XX	EQUIPMENT IDENTIFIER
	MATCHLINE
	REVISION CLOUD (ENCIRCLES DRAWING CHANGES MADE SINCE THE PREVIOUS RELEASE)
1	REVISION REFERENCE
	EXISTING TO BE REMOVED (HATCH)
	HEAVY LINEWEIGHT INDICATES NEW WORK
	LIGHT LINEWEIGHT INDICATES EXISTING INFORMATION
	POINT OF CONNECTION
X / XX.XX	DETAIL REFERENCE DETAIL IDENTIFICATION NUMBER SHEET WHERE DETAIL IS DRAWN
X / XX.XX	ELEVATION REFERENCE ELEVATION IDENTIFICATION NUMBER SHEET WHERE ELEVATION IS DRAWN
X / XX.XX	SECTION REFERENCE SECTION IDENTIFICATION NUMBER SHEET WHERE SECTION IS DRAWN
N	NORTH REFERENCE

SYMBOLS LEGEND - AIR HANDLING

SYMBOL	DESCRIPTION
	SUPPLY AIR DUCT - UP
	SUPPLY AIR DUCT - DOWN
	RETURN AIR DUCT - UP
	RETURN AIR DUCT - DOWN
	OUTSIDE AIR DUCT - UP
	OUTSIDE AIR DUCT - DOWN
	EXHAUST AIR DUCT - UP
	EXHAUST AIR DUCT - DOWN
	FLAT-OVAL DUCT - TURNING TOWARD
	FLAT-OVAL DUCT - TURNING AWAY
R	INCLINE RISE (R) OR DROP (D) IN DIRECTION OF ARROW
	FLEXIBLE CONNECTION
AD / AP	ACCESS DOOR (AD) OR ACCESS PANEL (AP)
	VOLUME DAMPER
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE SMOKE DAMPER
M	MOTOR OPERATED DAMPER
BDD	BACKDRAFT DAMPER
	FLEXIBLE DUCT

SYMBOLS LEGEND - AIR HANDLING

SYMBOL	DESCRIPTION
	ROUND, 90° ELBOW, R/W OR R/D = 1.5
	RECTANGULAR, 90° ELBOW, R/W OR R/D = 1.5
	RECTANGULAR OR ROUND, 90° ELBOW, R/W OR R/D = 1.5
	SQUARE CORNER ELBOW WITH TURNING VANE
	45° BRANCH CONNECTION
	RECTANGULAR BRANCH TO RECTANGULAR DUCT CONNECTION WITH 45° TAPER
	ROUND OR RECTANGULAR BRANCH TO ROUND OR RECTANGULAR DUCT CONNECTION
	ROUND BRANCH TO RECTANGULAR DUCT CONNECTION
	ROUND BRANCH TO ROUND DUCT CONNECTION
	TRANSITION OR REDUCER - NOTED FOT (FLAT ON TOP) OR FOB (FLATON BOTTOM) IF REQUIRED
	RECTANGULAR TO ROUND TRANSITION

SYMBOLS LEGEND - AIR HANDLING

SYMBOL	DESCRIPTION
X-XX	EQUIPMENT WITH EQUIPMENT IDENTIFICATION
T	THERMOSTAT
A / 10x10 / 100	DIFFUSER IDENTIFIER CONNECTION SIZE AIR FLOW (CFM) DIFFUSER TYPE MARK
	CEILING SUPPLY DIFFUSER
	CEILING RETURN DIFFUSER
	SIDEWALL GRILL DIFFUSER
	AIRFLOW, SUPPLY
	AIRFLOW, RETURN
	DOOR UNDERCUT

SYMBOLS LEGEND - PIPING

SYMBOL	DESCRIPTION
	SOIL OR WASTE
	VENT
RL	RAIN LEADER
ORL	OVERFLOW RAIN LEADER
ID	INDIRECT DRAIN
	COLD WATER
	HOT WATER
	HOT WATER CIRCULATING
140° HW	140° POTABLE HOT WATER
120° HW	120° POTABLE HOT WATER
F	FIRE
SPR	SPRINKLER
STP	STANDPIPE
HPS	HIGH PRESSURE STEAM
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
	REDUCER, CONCENTRIC
	WYE STRAINER WITH CAPPED HOSE AND BLOWDOWN VALVE
	ANGLE VALVE
M	AUTOMATIC CONTROL VALVE - TWO WAY (PNEUMATIC OPERATOR SHOWN)
M	AUTOMATIC CONTROL VALVE - THREE WAY (ELECTRIC OPERATOR SHOWN)
	BUTTERFLY VALVE
	FLEXIBLE CONNECTION IN PIPING
MAV / AAV	MANUAL AIR VENT (MAV), AUTOMATIC AIR VENT (AAV)
	PRESSURE GAUGE
	THERMOMETER
	THERMOMETER WELL
	SIGHT GLASS
	HOSE BIB

SYMBOLS LEGEND - PIPING

SYMBOL	DESCRIPTION
S / F/T	STEAM TRAP ASSEMBLY F/T = FLOAT AND THERMOSTATIC F = FLOAT T = THERMOSTATIC B = BUCKET IB = INVERTED BUCKET I = IMPULSE O = ORIFICE
A	PIPE ANCHOR
	PIPE ALIGNMENT GUIDE
	CONTROL VALVE STATION
PS	PIPE SUPPORT
P/T	PRESSURE/TEMPERATURE TEST PORT
	CAP
	PLUG
	UNION
	WYE STRAINER
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	BALANCING OR PLUG VALVE
	NEEDLE VALVE
	PRESSURE REDUCING VALVE
	BALANCING/MEASURING VALVE
	RELIEF VALVE
	CHECK VALVE
	PIPE TURNING DOWN / AWAY
	PIPE TURNING UP / TOWARDS
	PIPE DOWN TEE
	PIPE DOWN TEE / AWAY
	PIPE UP TEE / TOWARDS

SYMBOLS LEGEND - PIPING & AIRFLOW DIAGRAMS

SYMBOL	DESCRIPTION
	PIPING OR DUCTED AIRFLOW
	NON-DUCTED AIRFLOW
	ELECTRICAL CONNECTION
	FLOW CONTINUATION ARROW
	COMPLEX INTERLOCK (ELEC., PNEUMATIC, ETC.)
	CONNECTION TO CENTRAL MONITORING AND CONTROL SYSTEM (CMCS)
	PUMP
	CENTRIFUGAL FAN
M	ELECTRIC MOTOR/STARTER ASSEMBLY
M	ELECTRIC MOTOR OPERATOR (VALVES AND DAMPERS)
	FLOOR DRAIN
	FUNNEL DRAIN
	FLOOR SINK (SQUARE AND ROUND)
	FLOW DIRECTION

SYMBOLS LEGEND - FIRE PROTECTION

SYMBOL	DESCRIPTION
F	FIRE
	EQUIPMENT WITH EQUIPMENT IDENTIFICATION
FDC	FIRE DEPARTMENT CONNECTION
	PRESSURE REGULATING VALVE WITH SUPERVISORY SWITCH
	WET SPRINKLER HEAD
	DRY SPRINKLER HEAD

SYMBOLS LEGEND - MEDICAL GASES

SYMBOL	DESCRIPTION
O2	OXYGEN
MA	MEDICAL COMPRESSED AIR
MV	MEDICAL VACUUM
WAG	WASTE ANESTHETIC GAS
MA	MEDICAL AIR OUTLET
WAGD / WAG	WASTE ANESTHETIC GAS DEVICE
NO2	NITROUS OXIDE (NITROUS)
N2	NITROGEN
CO2	CARBON DIOXIDE
ETO	ETHYLENE OXIDE
	MEDICAL GAS VALVE (SERVICE VALVE)
ZVB	ZONE VALVE BOX
MAB	MEDICAL GAS ALARM BOX
MA	MEDICAL AIR PRESSURE SENSOR
	HOSE REEL (RETRACTABLE)

SYMBOLS LEGEND - LABORATORY

SYMBOL	DESCRIPTION
+	NON POTABLE COLD WATER
++	NON POTABLE HOT WATER
+++	NON POTABLE HOT WATER RECIRCULATE
LA	LABORATORY AIR
LV	LABORATORY VACUUM

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5569
SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Monson St. Suite 360 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

Description	Date

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: MECHANICAL LEGEND
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No.
M0.01

BLRB ARCHITECTS, P.S.

8/17/2022 3:42:45 PM

REQUIRED OUTSIDE AIR FLOW RATE

MINIMUM VENTILATION RATES FROM TABLE 403.3, 2019 OREGON MECHANICAL SPECIALTY CODE

ROOM NUMBER	ROOM NAME	TOTAL AREA (SQFT)	DEFAULT OCCUPANT DENSITY #/1,000 SQFT	ZONE NO. OF PEOPLE	CFM PER PERSON	Rp*Pz (CFM)	CFM PER SQFT	Ra*Rz (CFM)	Vbzp+Vbza (CFM)	ZONE AIR DISTRIB EFFECT	Voz=Vbz/Ez (CFM)	SCHEDULED OUTDOOR AIRFLOW (CFM)	REQUIRED EXHAUST AIRFLOW RATE (CFM)	SCHEDULED EXHAUST AIRFLOW (CFM)
		Az		**Pz**	**Rp**	**Vbzp**	**Ra**	**Vbza**	**Vbz**	**Ez**	**Voz**			
101	VESTIBULE	70	10	1	5	5	0.06	4.2	9	0.8	12	15	0	0
102	LAUNDRY	90	10	1	5	5	0.12	10.8	16	0.8	20	20	90	90
103	RESTROOM	48	-	-	-	-	-	-	-	0.8	-	0	50	50
104	HALLWAY	129	-	-	-	-	0.06	7.7	8	0.8	10	10	0	0
105	RECEPTION	97	30	3	5	15	0.06	5.8	21	0.8	26	30	0	0
106	RESTROOM	47	-	-	-	-	-	-	-	0.8	-	0	50	50
107	OFFICE	70	5	1	5	5	0.06	4.2	9	0.8	12	15	0	0
108	SLEEPING	52	20	1	5	5	0.06	3.1	8	0.8	10	15	0	0
110	COMMUNITY ROOM	735	120	42	5	210	0.06	44.1	254	0.8	318	320	0	0
111	CLOSET	64	-	0	-	-	-	-	-	0.8	-	0	64	64
112	KITCHEN	290	20	0	8	0	0.12	34.8	35	0.8	44	45	203	203
120	HALLWAY	83	-	0	-	-	0.06	5.0	5	0.8	6	10	0	0
121	RESTROOM	50	-	-	-	-	-	-	-	0.8	-	0	50	50
122	SHOWER	70	-	-	-	-	-	-	-	0.8	-	0	100	100
123	CLOSET	17	-	-	-	-	0.06	1.0	1	1.8	1	0	0	0
125	MEN'S DORM	577	20	14	5	70	0.06	34.6	105	0.8	131	183	0	0
130	HALLWAY	82	-	0	-	-	0.06	4.9	5	0.8	6	10	0	0
131	ASSISTED DORM	191	20	3	5	15	0.06	11.5	26	0.8	33	35	0	0
132	RESTROOM	48	-	-	-	-	-	-	-	0.8	-	0	50	50
133	JANITOR	50	-	-	-	-	-	-	-	0.8	-	0	50	50
134	RESTROOM	50	-	-	-	-	-	-	-	0.8	-	0	50	50
135	SHOWER	70	-	-	-	-	-	-	-	0.8	-	0	100	100
136	WOMEN'S DORM	454	20	10	5	50	0.06	27.2	77	0.8	97	149	0	0
MADRAS HOMELESS SHELTER		3,434		76		380		199	579		723	**857**	**857**	**857**

FAN COIL SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	TYPE	COOLING COIL			MAXIMUM SOUND PRESSURE (dBA)	OPERATING WEIGHT (LBS)	REMARKS
						TOTAL LOAD (BTUH)	MAXIMUM PRESSURE DROP (FT)	OA DESIGN TEMP (DEG F)			
FCU-01	ATTIC	NORTH SIDE	DAIKIN	CAPF3131C6	HORIZONTAL	30		93.6		50	1
FCU-02	ATTIC	SOUTH SIDE	DAIKIN	CAPF4961D6	HORIZONTAL	60		93.6		76	1

REMARKS:

1. INSTALL PER MANUFACTURER RECOMMENDATIONS.

HEAT PUMP SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	COOLING CAPACITY			HEATING CAPACITY					MAXIMUM SOUND PRESSURE (dBA)	OPERATING WEIGHT (LBS)	REMARKS
					TOTAL LOAD (MBH)	OA DESIGN TEMP (DEG F)	EER	TOTAL LOAD (MBH)	OA DESIGN TEMP (DEG F)	COP @ 47 DEGREE F	MOCP	V/PH/HZ			
HP-01	EXTERIOR OF BUILDING	NORTH SIDE	DAIKIN	DZ14SN0601	27.6	93.6	11.5	28.4	6.1	3.7	30	208/230/1/60	74	193	
HP-02	EXTERIOR OF BUILDING	SOUTH SIDE	DAIKIN	DZ14SN0601	56.5	93.6	11.5	59	6.1	3.9	60	208/230/1/60	76	307	

REMARKS:

1. PROVIDE FACTORY MOTOR STARTERS. SEE ELECTRICAL DRAWINGS FOR SEPARATE DISCONNECT SWITCH
2. PROVIDE 120V/1Ø CONVENIENCE OUTLET ON A SEPARATE CIRCUIT UNLESS OUTLET IS AVAILABLE WITHIN 25 FEET OF EQUIPMENT PER 2008 NEC 210.63
3. COMPRESSOR FOR OUTDOOR UNIT TO BE OPERATING WITH VARIABLE SPEED DRIVE (VSD)
4. FACTORY PROVIDED INTEGRAL CRANKCASE HEATER
5. SYSTEM MUST BE INSTALLED BY A CONTRACTOR CERTIFIED WITH THE HEAT PUMP MANUFACTURER. SEE DETAILS FOR ADDITONAL INFORMATION ON UNIT MOUNTING.

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE 505 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

No.	Description	Date
1	ADDENDUM 1	8/17/2022

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: MECHANICAL SCHEDULES

Drawn By : Author
Project No. 021062.000
Date : 8/17/2022
Revised :

Sheet No.
M0.02

8/17/2022 3:42:46 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

EXHAUST FAN SCHEDULE

EQUIP NO.	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	TYPE	VOLUME	STATIC PRESSURE	DRIVE TYPE	FAN RPM	MOTOR			Dba	VFD YES/NO	OPERATING WEIGHT (LBS)	REMARKS
						CFM	INCHES W.G.			HP	FLA	V/PH/HZ				
EF-01	ATTIC	RESTROOM/LAUNDRY	GREENHECK	SQ-60-VG	INLINE	160	0.25	DIRECT	1172	1/4	5.8	115/1/60	56	NO	80	1,2

REMARKS:

1. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS

2. (FACTORY PROVIDED STARTER,) ELECTRICAL TO PROVIDE DISCONNECT SWITCH.

ENERGY RECOVERY VENTILATOR SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	SUPPLY AIR		EXHAUST AIR		ELECTRICAL			WEIGHT LBS	REMARKS
					AIRFLOW (CFM)	ESP (IN WG)	AIRFLOW (CFM)	ESP (IN WG)	MCA	MOCP	SINGLE POINT V/PH/HZ		
ERV-01	ATTIC	VENTILATION	RENEWAIRE	HE1.5XINH	857	0.5	857	0.5	7.7	15	208-230/1/60	504	1,2

REMARKS:

1. PROVIDE MERV 8 PRE-FILTER PRIOR TO SUPPLY AND EXHAUST FANS.

2. PROVIDE ALL DAMPERS AS REQUIRED BY THE ENERGY CODE. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL COMPONENTS REQUIRED FOR CONTROL AS PER THE...

ELECTRIC HEATER SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	TYPE	ELECTRICAL			REMARKS
						KW	AMPS	V/PH/HZ	
EH-1	103 RESTROOM	RESTROOM	KING	LPW2015-TP	WALL	.5-1.5	2.4-7.2	208/1/60	1,2,3,5
EH-2	101 VESTIBULE	VESTIBULE	KING	PAW2022	WALL	.5-2.25	2.4-10.8	208/1/60	1,2,3,4

REMARKS:

1. PROVIDE WALL MOUNTED 24 VOLT THERMOSTAT.

2. PROVIDE SURFACE MOUNTING FRAME, 1" OR 2" SEMI RECESS MOUTING FRAME, COORDINATE REQUIREMENT WITH ARCHITECT, COLOR AS PER ARCHITECT.

3. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.

4. REMOTE THERMOSTAT.

5. INTEGRAL TAMPER PROOFTHERMOSTAT.

DIFFUSER-GRILLE SCHEDULE

EQUIP. NO	LOCATION	SERVICE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN SERIES	DESCRIPTION	MAXIMUM SOUND PRESSURE (dBA)	REMARKS
CD-1	CEILING	SUPPLY DIFFUSER	TITUS	MCD	4-WAY ADJUSTABLE, MODULAR CORE DIFFUSER	19	1,2,3
RG-1	CEILING	RETURN GRILLE	TITUS	50F	EGGCRATE RETURN GRILLE	24	1,3,4
EG-1	CEILING	EXHAUST GRILLE	TITUS	350FL	SINGLE DEFLECTION GRILLE	-	1,5

REMARKS:

1. SEE MECHANICAL FLOOR PLANS FOR DUCT SIZE AND CFM

2. STEEL, WHITE, ROUND NECK, SEE MECHANICAL FLOOR PLANS FOR NECK SIZE

3. BORDER TO MATCH CEILING TYPE

4. STEEL, WHITE, CORE ONLY IN ACT, 1/2"X1/2"X1/2" GRID

5. ALUMINUM, WHITE, FOR GWB CEILING, 3/4" BLADE SPACING, 35 DEG. FIXED DEFLECTION

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 525 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

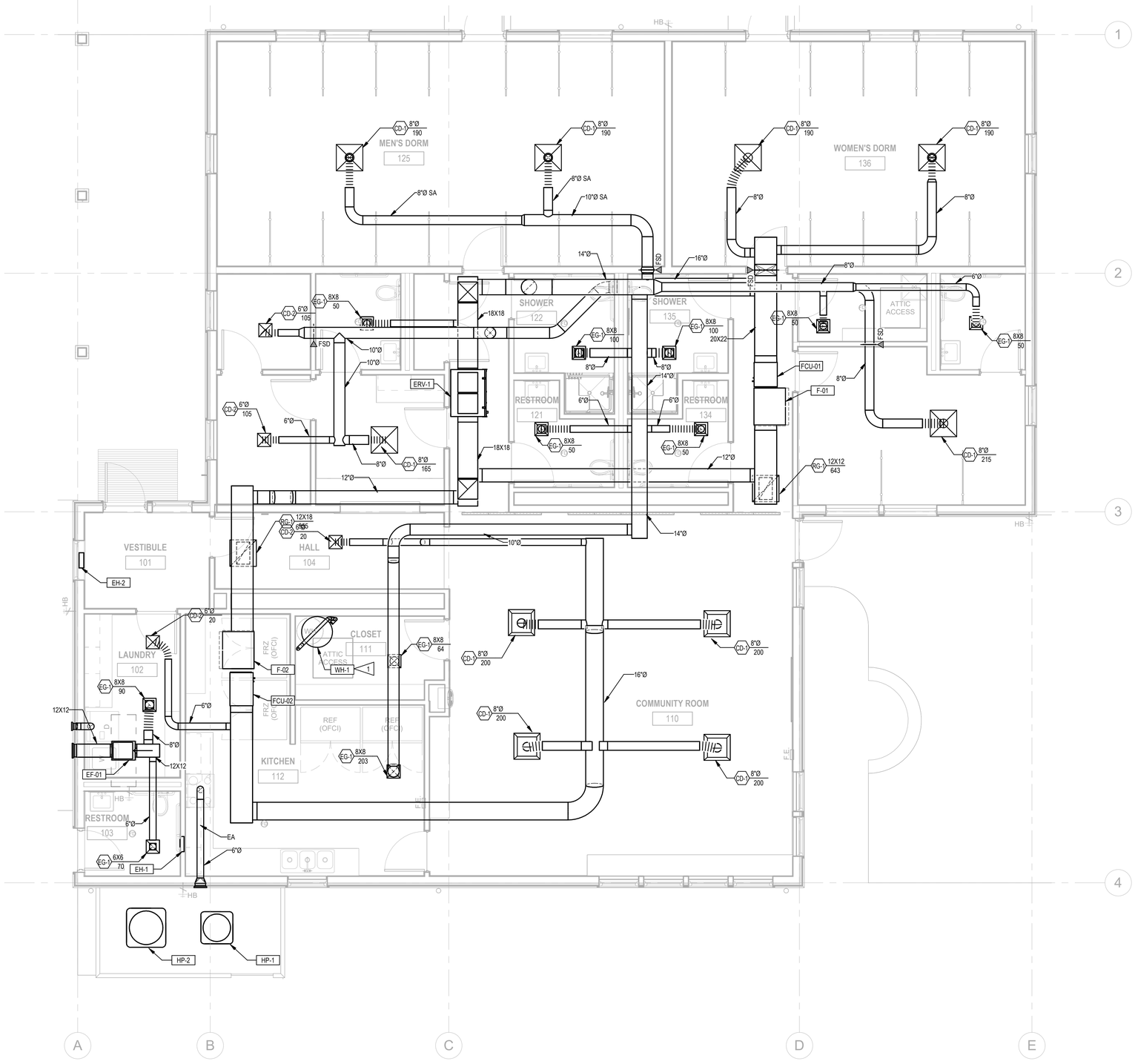
	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: MECHANICAL SCHEDULES
Drawn By: Author
Project No. 021062.000
Date : 8/17/2022
Revised :
Sheet No. M0.03

8/17/2022 3:42:48 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028



SHEET NOTES

A. PLANS ARE DIAGRAMMATIC IN NATURE AND REPRESENT CONCEPTUAL ROUTING ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL ACTUAL CONDITIONS AND COORDINATING WITH OTHER TRADES.

FLAG NOTES

1. WATER HEATER EXHAUST AND COMBUSTION AIR INTAKE TO TERMINATE THROUGH THE ROOF WITH A CONCENTRIC VENT KIT.

1 MECHANICAL PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

BLRB architects
TACOMA | 1756 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: MECHANICAL HVAC - FIRST FLOOR PLAN
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No.
M1.01

8/17/2022 3:42:50 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701

SAZAN# 646-22028

1 MECHANICAL PLAN - ROOF
1/4" = 1'-0" @ FULL SIZE
0' 1' 2' 4'

SHEET NOTES

A. PLANS ARE DIAGRAMMATIC IN NATURE AND REPRESENT CONCEPTUAL ROUTING ONLY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL ACTUAL CONDITIONS AND COORDINATING WITH OTHER TRADES.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Square #150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Date	Description
1		

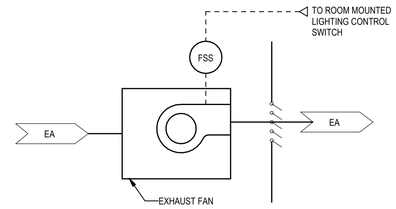
MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: MECHANICAL HVAC - ROOF PLAN
Drawn By : Author
Project No. 021062.000
Date : 8/17/2022
Revised :

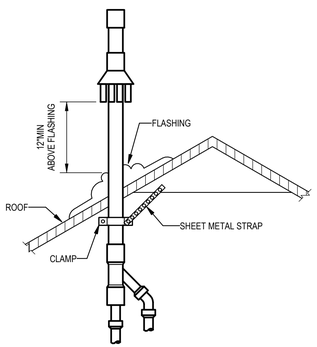
Sheet No.
M1.02

8/17/2022 3:42:50 PM

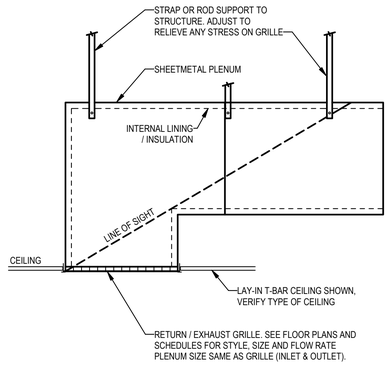
SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028



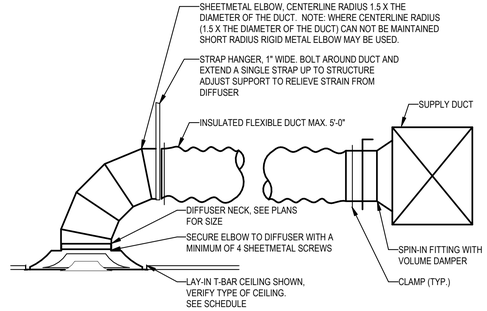
4 EXHAUST FAN LOCAL CONTROLS P&ID
NTS



3 VERTICAL CONCENTRIC VENT DETAIL
NTS



2 MEC 01.03 - RETURN AIR GRILLE DETAIL
NTS



1 CEILING DIFFUSER DETAIL
NTS

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 405 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: MECHANICAL DETAILS
Drawn By : Author
Project No. 021062.000
Date : 8/17/2022
Revised :
Sheet No. M2.00

8/17/2022 3:42:50 PM

GENERAL NOTES

1. SYMBOLS LEGENDS ARE PROVIDED FOR REFERENCE PURPOSES ONLY. THE SYMBOLS REPRESENT THE TYPE OF DEVICES THAT MAY BE REQUIRED IN THE WORK; QUANTITIES AND LOCATIONS ARE AS SHOWN ON THE PLAN SHEETS.

2. PROVIDE 3/4" CONDUIT & #12 CONDUCTORS UNLESS NOTED OTHERWISE. PROVIDE ONE NEUTRAL CONDUCTOR FOR EACH UNGROUNDED CONDUCTOR OF SINGLE PHASE LINE-NEUTRAL BRANCH CIRCUITS. DO NOT SHARE NEUTRAL CONDUCTORS.

3. EACH FEEDER AND BRANCH CIRCUIT CONDUIT SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NFPA 70, ARTICLE 250.

4. THE FOLLOWING IS PART OF THIS PROJECT AND ALL COSTS PERTAINING THERETO SHALL BE INCLUDED IN THE BASE BID:

   A. POWER WIRING AND CABLE INSTALLATIONS SHALL BE CONCEALED ABOVE ACCESSIBLE CEILINGS AND IN WALLS. EXPOSED WIRING SHALL BE INSTALLED IN APPROVED SURFACE METAL RACEWAY WHERE INDICATED.

   B. LOCATIONS OF ALL WALL MOUNTED DEVICES SUCH AS SWITCHES, RECEPTACLES, AND OUTLETS ARE SHOWN DIAGRAMMATICALLY.DETERMINE EXACT DEVICE LOCATIONS IN FIELD; COORDINATE INSTALLATIONS WITH FIXED CASEWORK, DOORS AND RELITES.

   C. PROVIDE PENETRATIONS THROUGH WALLS, FLOORS, AND CEILINGS AS REQUIRED. PROVIDE SUITABLE FIRE RATED MATERIALS AND SEAL ALL CEILING, FLOOR, AND WALL PENETRATIONS TO MATCH FIRE RATING OF SURFACES PENETRATED.

LIGHTING AND RECEPTACLE NOTES

1. LIGHTING SYSTEMS SHALL BE PROVIDED WITH CONTROLS AS ZONED ON THE LIGHTING PLANS. SWITCHING AND DIMMING ZONES ARE INDICATED ADJACENT TO EACH FIXTURE.

2. MANUAL CONTROLS SHALL ALLOW OCCUPANTS TO UNIFORMLY REDUCE ILLUMINATION LEVELS AT LEAST 50%. EXCEPTION: CORRIDORS, RESTROOMS, LOBBIES, MECHANICAL, ELECTRICAL, AND INFORMATION TECHNOLOGY (IDF) ROOMS CONTROLLED BY OCCUPANCY SENSORS.

3. LUMINAIRES PROVIDING MEANS OF EGRESS ILLUMINATION AND HAVING BOTH NORMAL AND EMERGENCY POWER SOURCES SHALL BE CONTROLLED BY A COMBINATION OF U.L. 924 LISTED EMERGENCY RELAYS AND OCCUPANCY SENSORS THAT ENABLES THE LIGHTING TO BE SHUT OFF WHEN THE AREAS SERVED ARE UNOCCUPIED AND AUTOMATICALLY ILLUMINATES IN THE EVENT OF NORMAL POWER SOURCE FAILURE.

4. THE MAXIMUM LIGHTING POWER THAT MAY BE CONTROLLED FROM A SINGLE SWITCH OR AUTOMATIC CONTROL SHALL NOT EXCEED THAT WHICH IS PROVIDED BY A 20 AMPERE CIRCUIT LOADED TO NOT MORE THAN 80 PERCENT.

5. PROVIDE FUNCTIONAL TESTING OF AUTOMATIC LIGHTING CONTROLS. SUBMIT WRITTEN PROCEDURES FOR FUNCTIONAL TESTING OF ALL AUTOMATIC CONTROLS WITH DESCRIPTION OF THE EXPECTED SYSTEM RESPONSE.

FIRE ALARM SYSTEM NOTES (DELEGATED DESIGN)

A. PREPARE A COMPLETE SET OF FIRE ALARM SYSTEM DRAWINGS INCLUDING DESIGN CALCULATIONS, WIRING DETAILS, FIRE ALARM APPLIANCES, MONITORING AND CONTROL MODULES, INTERFACE RELAYS, COMMUNICATIONS DEVICES, SYSTEM PROGRAMMING, ETC., AS REQUIRED FOR A COMPLETE AND OPERATIONAL FIRE ALARM. REFER TO SECTION 28 31 00 FIRE DETECTION AND ALARM FOR SPECIFIC REQUIREMENTS.

B. FIRE ALARM DEVICES SHOWN ON THE DRAWINGS ARE REPRESENTATIVE OF AREAS REQUIRING COVERAGE ONLY. THE ENGINEER MAKES NO REPRESENTATION THAT THE QUANTITIES OR LOCATIONS OF DEVICES SHOWN ARE SUFFICIENT TO SATISFY THE AUTHORITY HAVING JURISDICTION (AHJ).

C. THE FIRE ALARM SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
   2019 OREGON STRUCTURAL SPECIALTY CODE CHAPTER 9
   2021 OREGON ELECTRICAL SPECIALTY CODE
   2020 NFPA 70 (NEC)
   2016 NFPA 72
   2015 NFPA 101
   2013 ASME A17.1
   2014 OREGON FIRE CODE (OFC) CHAPTER 11

D. COORDINATE FIRE ALARM DESIGN REQUIREMENTS WITH THE AHJ AND OBTAIN AHJ APPROVAL OF THE FINAL DESIGN.

E. SUBMIT A COMPLETE SET OF AHJ APPROVED FIRE ALARM DRAWINGS FOR OWNER/ARCHITECT REVIEW PRIOR TO START OF CONSTRUCTION. SEE SPECIFICATIONS 28 31 00 FOR ADDITIONAL SUBMITTAL REQUIREMENTS.

F. INSTALLATION: PROVIDE ALL LABOR, MATERIAL, SUPPORT HARDWARE, ETC., AS REQUIRED AND INSTALL FIRE ALARM SYSTEM AS SPECIFIED.

G. SCHEDULED TESTING: INCLUDE STEP-BY-STEP PROCEDURES FOR PERFORMANCE TESTING EVERY FIRE ALARM DEVICE AND SYSTEM OUTPUT TO DEMONSTRATE FUNCTIONALITY IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS.

H. RECORD DRAWINGS: MARK-UP CONSTRUCTION DRAWINGS DURING INSTALLATIONS TO SHOW ACCURATE LOCATIONS OF DEVICES, ACTUAL ROUTING OF CONDUIT, AND LOCATIONS OF END OF LINE DEVICES. INCORPORATE AS-BUILT MARK-UPS INTO AUTO-CAD RECORD DRAWINGS UPON COMPLETION OF THE WORK. PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, SUBMIT RECORD DRAWINGS AS FOLLOWS: 1 SET IN ELECTRONIC (AUTO-CAD) FORMAT, 1 SET IN ELECTRONIC (PDF) FORMAT, AND 4 SETS OF PRINTED DRAWINGS; 2 FULL-SIZE AND 2 HALF-SIZE

STRUCTURED CABLE SYSTEM PATHWAY NOTES

1. SYSTEM CABLING PATHWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF TIA-569.

2. CABLE SUPPORTS SHALL NOT BE PLACED MORE THAT 5' APART.

3. CABLES AND PATHWAYS SHALL BE CLEARLY LABELED IN ACCORDANCE WITH TIA-606-C.

4. PROVIDE (1) 2" CONDUIT SLEEVE WITH INSULATED BUSHINGS FOR PENETRATION INTO OFFICES, EXAM ROOMS, ETC, AS REQUIRED TO FACILITATE CABLE ROUTING WHETHER SHOWN ON DRAWINGS OR NOT.

5. ALL PENETRATIONS MUST BE FIRE-STOPPED IN ACCORDANCE OF THE NFPA, NEC AND TO THE SATISFACTION OF THE AHJ.

6. ALL TELECOMMUNICATION ROOMS AND PATHWAYS SHALL ADHERE TO TIA-569-D.

7. ALL TELECOMMUNICATION BONDING AND GROUNDING SHALL ADHERE TO TIA-607-D.

8. NOT ALL PARTS SHOWN. ENSURE A COMPLETE WORKING INSTALLATION INCLUDING MISCELLANEOUS INSTALLATION MATERIALS, CONNECTORS, CONSUMABLES, AND APPURTENANCES.

9. PROVIDE NETWORK/TELEPHON CONDUIT PATHWAYS TO THE FOLLOWING LOCATIONS FROM THE NEAREST COMMUNICATIONS ROOM, UNLESS OTHERWISE NOTED:

   A. ENERGY SYSTEM MANAGEMENT PANELS/ENCLOSURES
   B. FIRE ALARM CONTROL SYSTEM PANELS/ENCLOSURES
   C. ACCESS CONTROL SYSTEM PANELS/ENCLOSURES

ABBREVIATIONS

@	AT
A/C	AIR CONDITIONING(ER)
A (AMP)	AMPERE
AC	ABOVE COUNTER, ALTERNATING CURRENT
ADJ	ADJUSTABLE
ADJT	ADJACENT
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
ALT	ALTERNATE
ANN	ANNUNCIATOR
ARCH	ARCHITECT; ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BKBD	BACKBOARD
BKR	BREAKER
BLDG	BUILDING
C	CONDUIT
CAP	CAPACITY
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CLR	CLEAR
COL	COLUMN
COM	COMMUNICATION
CPS	CYCLES PER SECOND
CT	CURRENT TRANSFORMER
CTL	CONTROL
CU	COPPER
DC	DIRECT CURRENT
DISC SW	DISCONNECT SWITCH
DISC	DISCONNECT
DN	DOWN
DWG	DRAWING
E	EXIST, EAST
EDH	ELECTRIC DUCT HEATER
EF	EXHAUST FAN
EGC	EQUIPMENT GROUNDING CONDUCTOR
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
ENTR	ENTRANCE
EP	EXPLOSION PROOF
EPO	EMERGENCY POWER OFF
EQUIP/EQP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXH	EXHAUST
EXT	EXTERIOR
EXIST	EXISTING
F	FAHRENHEIT/FUSE
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FAP	FIRE ALARM PANEL
FC	FOOTCANDLE
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FDR	FEEDER
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FSD	FIRE/SMOKE DAMPER
GEC	GROUNDING ELECTRODE CONDUCTOR
GEN	GENERATOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GFR	GROUND FAULT RELAY
H	HEIGHT
HOA	HAND OFF AUTOMATIC
HOR	HORIZONTAL
HP	HORSEPOWER
HR	HOUR
HT	HEIGHT
HW	HOT WATER
HZ	HERTZ
IBC	INTERNATIONAL BUILDING CODE
IC	INTERCOM
IES	ILLUMINATING ENGINEERING SOCIETY
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
IN	INCH
ISP	INTERNET SERVICE PROVIDER
JB	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILLS
KVA	KILOVOLT AMPERES
KVAR	KILOVOLT AMPERES REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LBS	POUNDS
LF	LINEAR FEET (FEET)
LRA	LOCKED ROTOR AMPS
LS	LIFE SAFETY
LT	LIGHT
LTG	LIGHTING
LV	LOW VOLTAGE
MAG	MAGNETIC
MAN	MANUAL
MAT	MATERIAL
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCBMAIN	CIRCUIT BREAKER
MECH	MECHANICAL
MEZZ	MEZZANINE
MG	MOTOR GENERATOR
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MS	MAGNETIC STARTER
MTD	MOUNTED
MTG	MOUNTING
MTR	MOTOR
N	NORTH; NEUTRAL
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NESC	NATIONAL ELECTRICAL SAFETY CODE
NEUT	NEUTRAL
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER
OL	INSTALLED OVERLOAD
OS	OPTIONAL STANDBY
P	PRIMARY
PA	PUBLIC ADDRESS
PAR	PARALLEL
PB	PULL BOX
PE	PHOTO ELECTRIC
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATOR VALVE
PNL	PANEL
POC	POINT OF CONNECTION
PWR	POWER
QTY	QUANTITY
R (R)	RELOCATE (D)
RAD	RADIUS
RECPT	RECEPTACLE
REF	REFRIGERATOR
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
S	SOUTH
SC	SECURITY
SD	SMOKE DETECTOR
SECT	SECTION
SF	SUPPLY FAN
SHT	SHEET
SPEC	SPECIFICATION
SPL	SPECIAL
SQ	SQUARE
STOR	STORAGE
SPD	SURGE PROTECTION DEVICE
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
SYS	SYSTEM
T	THERMOSTAT
TB	TERMINAL BOX
TC	TIME CLOCK
TEL	TELEPHONE
TV	TELEVISION
TYP	TYPICAL
UFC	UNIFORM FIRE CODE
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
UV	UNIT VENTILATOR
V	VOLT
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VM	VOLTMETER
VOL	VOLUME
W	WATT, WEST
WAP	WIRELESS ACCESS POINT
W/	WITH
W/O	WITHOUT
WH	WATER HEATER
WHM	WATTHOUR METER
WP	WEATHERPROOF
X	REACTANCE
XFMR	TRANSFORMER
XMTR	TRANSMITTER
Z	IMPEDANCE
&	AND
IE:	THAT IS

ELECTRICAL SHEET INDEX

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 405 W Riverside Suite 500 | WA 98201 | 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Square 150 | OR 97702 | 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS
	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: GENERAL NOTES, ABBREVIATIONS & SHEET INDEX
Drawn By: Author
Project No. 021062.000
Date : 8/17/2022
Revised :

Sheet No.
E0.00

8/17/2022 3:35:19 PM

SYMBOLS LEGEND - GENERAL

SYMBOL	DESCRIPTION
1	DRAWING CONSTRUCTION ("FLAG") NOTE
X-XX	EQUIPMENT IDENTIFIER
	MATCHLINE
	REVISION CLOUD (ENCIRCLES DRAWING CHANGES MADE SINCE THE PREVIOUS RELEASE)
1	REVISION REFERENCE
	EXISTING TO BE REMOVED (HATCH)
	HEAVY LINEWEIGHT INDICATES NEW WORK
	LIGHT LINEWEIGHT INDICATES EXISTING INFORMATION
	POINT OF CONNECTION
X / XX.XX	DETAIL REFERENCE DETAIL IDENTIFICATION NUMBER SHEET WHERE DETAIL IS DRAWN
X / XX.XX	ELEVATION REFERENCE ELEVATION IDENTIFICATION NUMBER SHEET WHERE ELEVATION IS DRAWN
X / XX.XX	SECTION REFERENCE SECTION IDENTIFICATION NUMBER SHEET WHERE SECTION IS DRAWN
N	NORTH REFERENCE

SYMBOLS LEGEND - GENERAL

SYMBOL	DESCRIPTION
	CONDUIT CONCEALED IN CEILING SPACE OR IN WALL. PROVIDE MINIMUM 3/4" WITH #12 AWG CONDUCTORS AND DEDICATED NEUTRAL EACH CIRCUIT UNLESS OTHERWISE NOTED ON PLAN. PROVIDE EQUIPMENT GROUNDING CONDUCTORS SIZED PER NFPA 70.
	FLEXIBLE METAL CONDUIT
	CONDUIT - CONCEALED IN OR UNDER FLOOR
UG	CONDUIT - ROUTED UNDERGROUND
LV	LOW-VOLTAGE WIRING (CLASS B)
	CONDUIT OR CABLE VERTICAL DOWN
	CONDUIT OR CABLE VERTICAL UP
	CONDUIT STUB - TERMINATE WITH BUSHING OR CAP IF UNDERGROUND
	BREAK LINE
	CONDUIT SEAL
	EXPANSION FITTING
	CABLE TRAY
A-1,3,5	BRANCH CIRCUIT NUMBERS PANEL DESIGNATION HOME RUN TO SOURCE OF SUPPLY
	CONDUCTORS - CONNECTED
	CONDUCTORS - NOT CONNECTED
	JUNCTION BOX
PB	PULLBOX - SIZE AS INDICATED OR AS REQUIRED BY CODE
HH	HANDHOLE
MH	MANHOLE

SYMBOLS LEGEND - AUDIO VISUAL / CLOCK

SYMBOL	DESCRIPTION
TV	TV OUTLET

SYMBOLS LEGEND - POWER

SYMBOL	DESCRIPTION
T	TRANSFORMER
X-XX-X	POLE-MOUNTED TRANSFORMER
	POLE
	DELTA
	WYE
	MEDIUM VOLTAGE CABLE TERMINATOR
	LIGHTNING ARRESTORS
	SURGE ARRESTORS
	NEUTRAL GROUNDING RESISTOR
M	METER
MM	MICROPROCESSOR CONTROLLED MONITOR REFER TO SPECIFICATIONS FOR METERING VALUES AND PROTECTIVE FUNCTIONS
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
AM	INDICATING INSTRUMENT AM-AMMETER; VM-VOLTMETER; FM-FREQUENCY METER; kVAR-KILOVAR METER; kWH-KILOWATT HOUR METER; kWH/D-KILOWATT HOUR DEMAND METER
AS	INSTRUMENT SWITCH AS-AMMETER SWITCH; VS-VOLTMETER SWITCH; SS-SYNCHRONIZING SWITCH; SV-SUPERVISORY (LOCAL-REMOTE) SWITCH
	SEPARABLE CONNECTOR
52	DRAWOUT AC TYPE POWER CIRCUIT BREAKER

SYMBOLS LEGEND - POWER

SYMBOL	DESCRIPTION
	480Y/277V, 3Ø, 4W PANELBOARD
	208Y/120V, 3Ø, 4W PANELBOARD
	EQUIPMENT CABINET - TYPE AS NOTED
XX	PANELBOARD
	TRANSFER SWITCH (AUTO)
XXXXXX	AMPERES SHORT CIRCUIT AVAILABLE (SYMMETRICAL)
#####	FEEDER TAG - REFER TO FEEDER SCHEDULE

SYMBOLS LEGEND - POWER

SYMBOL	DESCRIPTION
CB	CIRCUIT BREAKER ST - INDICATES SHUNT TRIP
CB xxxA/xP	ENCLOSED CIRCUIT BREAKER (PLAN VIEW) xxxA/xP - AMPS/POLES
	ENCLOSED CIRCUIT BREAKER (ONE-LINE DIAGRAM) xxxA/xP - AMPS/POLES
	BREAKER WITH EXTERNAL GROUND FAULT RELAY AND CT
	CIRCUIT BREAKER WITH INTEGRAL GROUND FAULT PROTECTION
	MOTOR-OPERATED CIRCUIT BREAKER
	SWITCH WITH EXTERNAL GROUND FAULT RELAY AND CT
	MOV SURGE PROTECTION
	RESISTOR
	FUSE
	MOTOR THERMAL OVERLOADS - (3) UNLESS OTHERWISE NOTED
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
SV	SOLENOID VALVE
M	MOTOR-OPERATED VALVE
T	THERMOSTAT
	TERMINAL BLOCK
A	INDICATING LIGHT - TYPE AS NOTED A-AMBER; B-BLUE; G-GREEN; R-RED; W-WHITE
– +	BATTERY

SYMBOLS LEGEND - WIRING DEVICES

SYMBOL	DESCRIPTION
$	SINGLE-POLE WALL SWITCH MOUNT SWITCHES AT 48" AFF. TO TOP, UON.
$xx	WALL SWITCH - SUBSCRIPT 2 = 2-POLE LV = LOW-VOLTAGE 3 = 3-WAY OS = OCCUPANCY SENSOR TYPE 4 = 4-WAY OP = OCCUPANCY/PHOTOELECTRIC TYPE K = KEYED WP = WEATHERPROOF LOWER CASE LETTER INDICATES SWITCHING GROUP MOUNT SWITCHES AT +48" AFF. TO TOP, UON. ANY COMBINATION OF SWITCH TYPES CAN BE USED (IE. 3K = 3-WAY KEYED SWITCH)
	SPECIAL PURPOSE RECEPTACLE TYPE AS SHOWN ON PLANS
	SINGLE SERVICE OR COMBINATION FLUSH MOUNTED FLOOR BOX. REFER TO FLOOR PLANS FOR DEVICES.
	SINGLE SERVICE OR COMBINATION FLUSH FLOOR POKE THRU. REFER TO FLOOR PLANS FOR DEVICES.
	POWER/COMM POLE - FLOOR TO CEILING.
	SURFACE MOUNTED FLOOR BOX (PEDESTAL TYPE).
	PUSH BUTTON
	SIMPLEX RECEPTACLE NEMA 5-20R, +18" AFF UON
	NEMA 5-20R, +18" AFF UON
T T	TAMPER RESISTANT, NEMA 5-20R, +18" AFF UON
S S	SWITCHED RECEPTACLE, NEMA 5-20R, +18" AFF UON
IG IG	ISOLATED GROUND, NEMA 5-20R, +18" AFF UON
	NEMA 5-20R W/ GROUND FAULT CIRCUIT INTERRUPTER, +18" AFF UON
	SPLIT WIRED, NEMA 5-20R, +18" AFF UON
	CONTROLLED, NEMA 5-20R, +18" AFF UON
	NEMA 5-20R, ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER, ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
T T	TAMPER RESISTANT, NEMA 5-20R WITH GROUND FAULT CIRCUIT INTERRUPTER, ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	NEMA 5-20R, CONNECTED TO EMERGENCY CIRCUIT, +18" AFF UON
	NEMA 5-20R ON EMERGENCY CIRCUIT MOUNTED ABOVE COUNTER. COORDINATE WITH CASEWORK SHOP DRAWINGS AND ARCHITECTURAL DRAWINGS.
	CEILING-MOUNTED, NEMA 5-20R
	NEMA 5-20R WITH USB CHARGER - (2) TYPE A USB PORTS
T	TAMPER RESISTANT, NEMA 5-20R WITH USB CHARGER - (2) TYPE A USB PORTS

SYMBOLS LEGEND - POWER

SYMBOL	DESCRIPTION
	2-POSITION SELECTOR SWITCH
	3-POSITION SELECTOR SWITCH HAND-OFF-AUTOMATIC
	ON-OFF SELECTOR SWITCH
	2-CIRCUIT PUSHBUTTON
	PUSHBUTTON SWITCH MOMENTARY CONTACT
	EQUIPMENT CONNECTION
G	GENERATOR
M	MOTOR CONNECTION
M SD	SMOKE DAMPER
M FSD	FIRE SMOKE DAMPER
M	STARTER 3-POLE, NEMA SIZE 1 MINIMUM UNLESS NOTED OTHERWISE
	COMBINATION STARTER HP RATED, 3-POLE, NEMA SIZE 1 MINIMUM, UNLESS NOTED OTHERWISE - OVERCURRENT PROTECTION AS REQUIRED BY EQUIPMENT MANUFACTURER OR AS NOTED
	DISCONNECT SWITCH 3-POLE UNLESS NOTED OTHERWISE
	FUSED DISCONNECT SWITCH 3-POLE UNLESS NOTED OTHERWISE
C	CONTACTOR
CR	RELAY COIL CR-CONTROL RELAY; TD-TIME DELAY RELAY; UV-UNDERVOLTAGE RELAY; M-MOTOR CONTACTOR;
M $	MOTOR-RATED SWITCH - SIZE OL PER MOTOR REQUIREMENTS
	EQUIPMENT EMERGENCY SHUTDOWN SWITCH

SYMBOLS LEGEND - LIGHTING

SYMBOL	DESCRIPTION
L1 A - 1 Z-XXX-1 EM	LIGHT FIXTURE IDENTIFIER - REFER TO LUMINAIRE SCHEDULE PANEL NAME - CIRCUIT NUMBER SWITCH DESIGNATION - MIDDLE DIGITS REFER TO ROOM NUMBER - END DIGITS REFER TO SWITCH LEG SUBSCRIPT (IF APPLICABLE) * IF LABEL IS ORIENTED HORIZONTALLY A SLASH WILL SEPARATE THIS INFORMATION. EX: RL1 / A-1 / a / NL
	SHADING INDICATES LUMINAIRE ON EMERGENCY CIRCUIT OR WITH BATTERY BACKUP
	2x4 LUMINAIRE
	1x4 LUMINAIRE
	2x2 LUMINAIRE
	LINEAR LUMINAIRE
	WALL WASH LUMINAIRE
	WALL MOUNTED LUMINAIRE
	UNDER-CABINET LUMINAIRE
	STRIP LUMINAIRE
	DOWNLIGHT
	WALL WASH DOWNLIGHT LUMINAIRE
	WALL MOUNTED LUMINAIRE
	WALL MOUNTED DIRECTIONAL LUMINAIRE
	PENDANT MOUNTED LUMINAIRE
	TRACK LIGHT - LENGTH AS INDICATED ON PLANS NUMBER OF LUMINAIRES AS SHOWN
	POLE-MOUNTED LUMINAIRE - NUMBER OF LUMINAIRES AS SHOWN ON PLANS
	STREET LIGHT
	IN-GROUND LANDSCAPE LUMINAIRE
	ILLUMINATED EXIT SIGN - SINGLE FACE ARROW INDICATES DIRECTION OF EGRESS, UNIVERSAL MOUNT
	ILLUMINATED EXIT SIGN - DOUBLE FACE ARROW INDICATES DIRECTION OF EGRESS, UNIVERSAL MOUNT
	BATTERY-POWERED EMERGENCY WALLPACK
	COMBINATION BATTERY POWERED EMERGENCY WALLPACK AND ILLUMINATED EXIT SIGN
OS	OCCUPANCY SENSOR CEILING MOUNTED WITH POWER PACK - DUAL TECHNOLOGY TYPE UNLESS NOTED: U = ULTRASONIC P = PASSIVE INFRARED
OS	OCCUPANCY SENSOR WALL MOUNTED
PC	PHOTOELECTRIC CONTROL CEILING MOUNTED
PC	PHOTOELECTRIC CONTROL WALL MOUNTED

SYMBOLS LEGEND - SECURITY

SYMBOL	DESCRIPTION
CR WP	CARD READER (KP = KEYPAD) (WP = WEATHERPROOF)
DC	DOOR/WINDOW CONTACT
ES	ELECTRIC STRIKE
REX	REQUEST TO EXIT PUSHBUTTON
RES	REQUEST TO EXIT SENSOR
WP	CCTV CAMERA - CEILING MOUNTED (WP = WEATHERPROOF) (° = ANGLE OF CAMERA VIEW (IE. 180°, 270°, 360°, PTZ))
WP	CCTV CAMERA - WALL MOUNTED (WP = WEATHERPROOF) (° = ANGLE OF CAMERA VIEW (IE. 180°, 270°, 360°, PTZ))
	PANIC / DURESS BUTTON
X IC	INTERCOM OUTLET (D = DESK MOUNTED) (W = WALL MOUNTED @ +48" AFF)
K	KEYPAD - ALARM PANEL
MD	MOTION DETECTOR - INFRARED TYPE UNLESS OTHERWISE NOTED
BG	BREAK GLASS SENSOR
A	ALARM BELL

SYMBOLS LEGEND - FIRE ALARM

SYMBOL	DESCRIPTION
ESR	FIRE ALARM SYSTEM CONTROL PANEL ESR - ELEVATOR STATUS/RECALL FAC - FIRE ALARM COMMUNICATOR FACP - FIRE ALARM CONTROL PANEL FAA OR FARA - FIRE ALARM ANNUNCIATOR HVA - HVAC OR EXHAUST STAIRWELL PRESSURIZATION LCD - FIRE ALARM LCD ANNUNCIATOR
FS	FIRE ALARM FLOW SWITCH
PS	HI/LO AIR PRESSURE SWITCH
DH	HI/LO AIR PRESSURE SWITCH
VS	VALVE SUPERVISORY SWITCH
PIV	POST INDICATOR VALVE SUPERVISORY SWITCH
F	FIRE ALARM PULL STATION
SD	FIRE/SMOKE DAMPER
SD	SMOKE DAMPER
F	FIRE ALARM HORN ONLY
XX	FIRE ALARM HORN STROBE, XX = CANDELA RATING
S	FIRE ALARM SPEAKER ONLY
XX	FIRE ALARM SPEAKER STROBE, XX = CANDELA RATING
XX	FIRE ALARM STROBE ONLY - WALL, XX = CANDELA RATING
XX	FIRE ALARM STROBE ONLY - CEILING, XX = CANDELA RATING
F	FIRE ALARM BELL
	HEAT DETECTOR, RATE OF RISE AND FIXED TEMPERATURE UON F - FIXED TEMPERATURE R - RATE OF RISE ONLY R/C - RATE COMPENSATION
S	SMOKE DETECTOR, PHOTOELECTRIC UON BT - BEAM TRANSMITTER BR - BEAM RECEIVER I - IONIZATION
S	FIRE ALARM DUCT SMOKE DETECTOR WITH SAMPLING TUBE
	FLAME DETECTOR
	GAS DETECTOR
AIM	ADDRESSABLE INPUT MODULE
AOM	ADDRESSABLE OUTPUT MODULE
ISO	ISOLATION MODULE
	FIRE ALARM EQUIPMENT CONNECTION
R	RELAY BLOCK

SYMBOLS LEGEND - GROUNDING

SYMBOL	DESCRIPTION
	GROUND CONNECTION
	GROUND ROD
	GROUND WELL
	AIR TERMINAL

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 350 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

FOR REFERENCE ONLY

Stamp

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL LEGEND

Drawn By : Author
Project No. 021062.000
Date : 8/17/2022
Revised :

Sheet No.
E0.01

8/17/2022 3:35:19 PM

BLRB ARCHITECTS, P.S.

FLAG NOTES

1. PROVIDE TRANSFORMER PRIMARY-SIDE CONDUIT STUB-UP WITH PULL-STRING FROM PRECAST CONCRETE VAULT TO UTILITY POLE LOCATED ON SOUTH-EAST CORNER OF PROPERTY. COORDINATE EXACT POINT OF CONNECTION WITH PACIFIC POWER.
2. PROVIDE TRANSFORMER SECONDARY-SIDE CONDUITS WITH PULL STRINGS FROM PRECAST VAULT TO CT ENCLOSURE.
3. PROVIDE PRECAST CONCRETE VAULT WITH BASE AND COVER FOR UTILITY TRANSFORMER; OLD CASTLE P/N: 575-TRANS-PCORP, #7992600.
4. PROVIDE 2-1/2" CONDUIT FROM INTERNET FIBER DISTRIBUTION PANEL LOCATED ON EXTERIOR OF BUILDING TO LS NETWORKS AND SURELINE POINTS OF CONNECTION. EXACT POINT OF CONNECTION TBD.
5. PROVIDE 11"LX18"WX12"D TIER 8 PG STYLE QUAZITE UNDERGROUND, OPEN BOTTOM PULL BOX. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ISP.

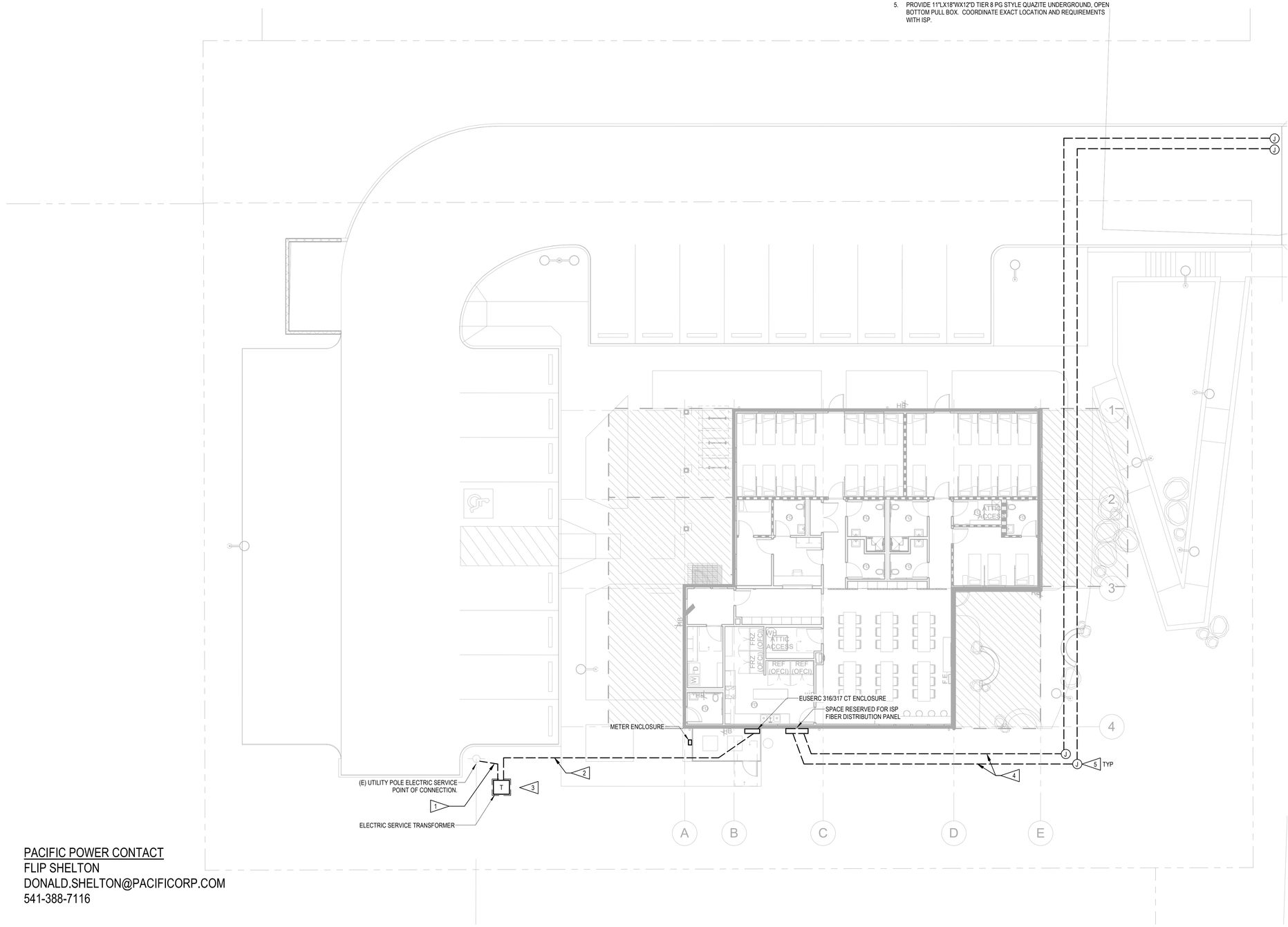
SHEET NOTES

A. ENGAGE A LOCATING SERVICE TO IDENTIFY AND TRACE ROUTING OF UNDERGROUND UTILITIES PRIOR TO EXCAVATING FOR ELECTRICAL INSTALLATION.

B. ROUTING SHOWN IS DIAGRAMMATIC. DETERMINE EXACT ROUTING IN FIELD.

C. REFER TO PACIFIC POWER'S POLICY 343 -UNDERGROUND CONDUIT SYSTEMS FOR PRIMARY AND SECONDARY CONDUCTORS DOCUMENT FOR INSTALLATION REQUIREMENTS.

D. REFER TO SHEET E6.00 ONE LINE DIAGRAM FOR CONDUIT AND CONDUCTOR SIZES .



PACIFIC POWER CONTACT
FLIP SHELTON
DONALD.SHELTON@PACIFICORP.COM
541-388-7116

1 ELECTRICAL SITE PLAN
1" = 10'-0" @ FULL SIZE
0' 1' 2' 4'

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 620 SW Monson St. Suite 350 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Date	Description

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL SITE PLAN
Drawn By: Author
Date : 8/17/2022
Project No. 021062.000
Revised :

Sheet No.
E1.01

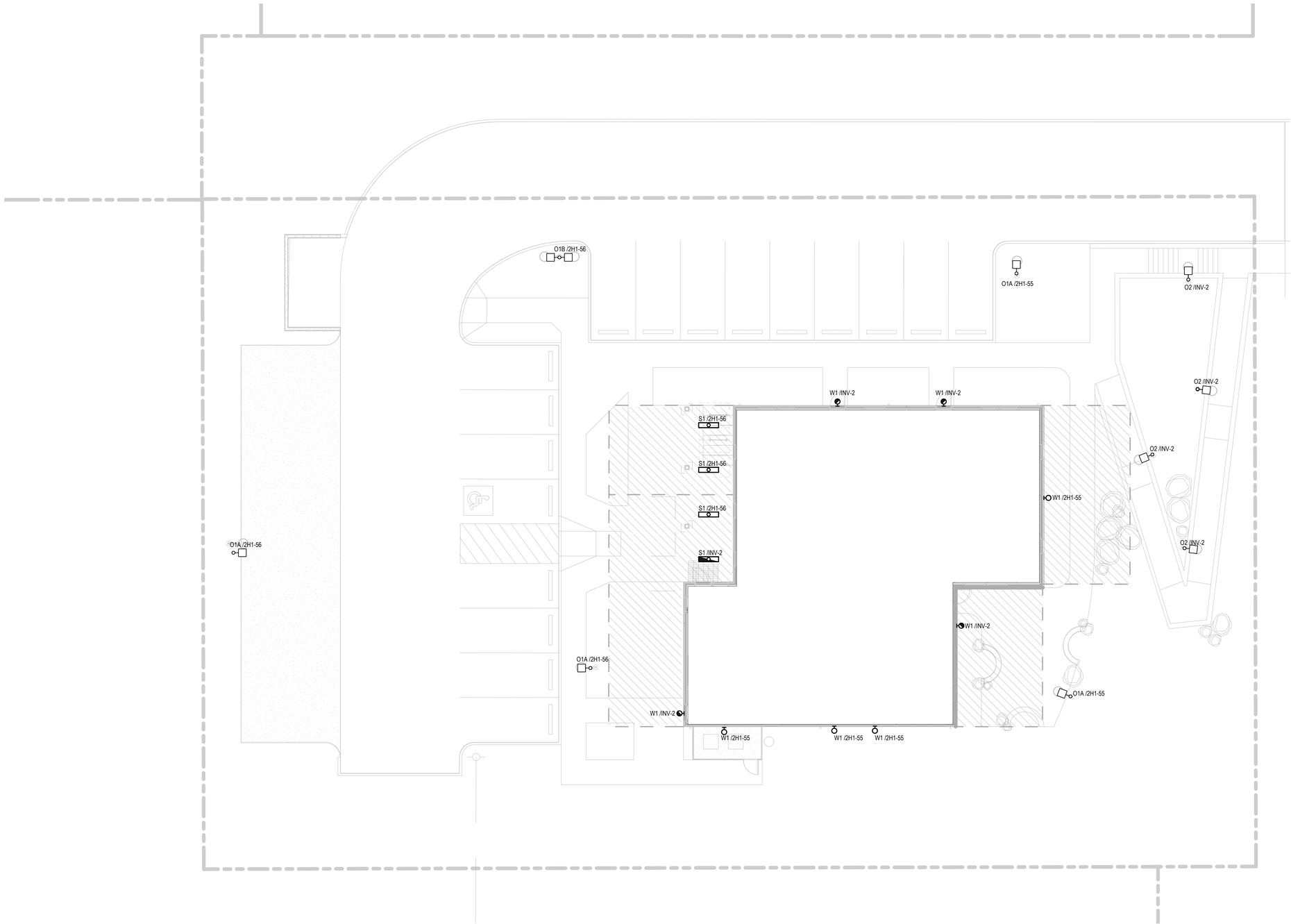
8/17/2022 3:35:21 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

SHEET NOTES

A. ALL SITE LIGHTING TO BE CONTROLLED VIA CENTRALIZED PHOTOCELL THAT ACTIVATES LIGHTING WHEN LESS THAN 5FC IS SENSED AND EXTINGUISHES WHEN MORE THAN 5FC IS SENSED.

B. ALL BUILDING MOUNTED LIGHTING TO BE CONTROLLED VIA CENTRALIZED ASTRONOMICAL TIMECLOCK. DIM LIGHITNG BY 50% BETWEEN HOURS OF MIDNIGHT AND 6AM.



1 ELECTRICAL LIGHTING SITE PLAN
1" = 10'-0" @ FULL SIZE
0' 1' 2' 4'

8/17/2022 3:35:21 PM

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 | WA 98402 | 253.627.5599
SPOKANE | 905 W Riverside Suite 500 | WA 98201 | 509.252.5080
PORTLAND | 621 SW Morrison St. Suite 950 | OR 97205 | 503.595.0270
BEND | 721 SW Industrial Suite 150 | OR 97702 | 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Date	Description
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL LIGHTING SITE PLAN
Drawn By: Author
Date: 8/17/2022
Project No. 021062.000
Revised:

Sheet No.
E1.02

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects

TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599

SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980

PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270

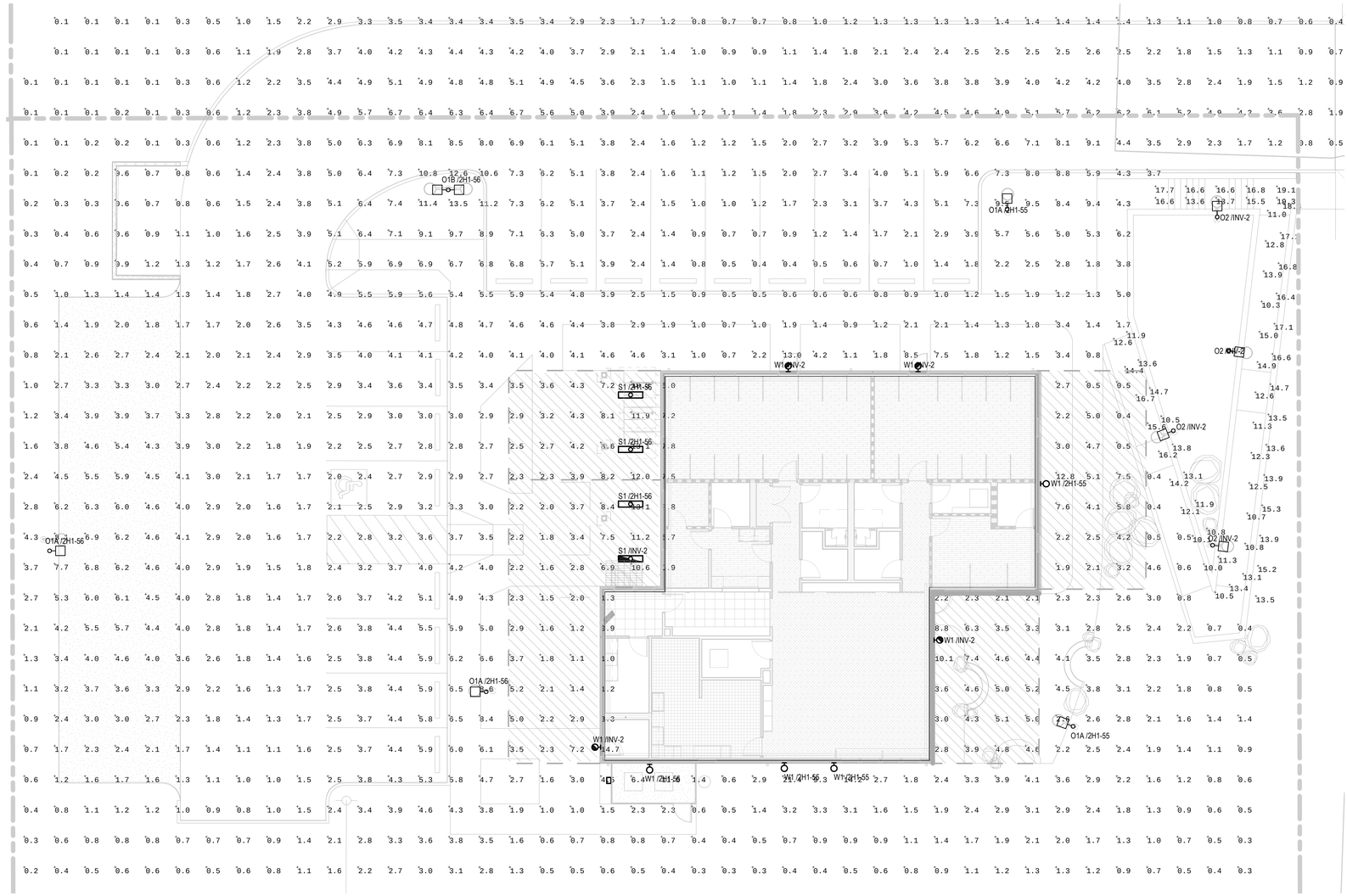
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		



1 PHOTOMETRIC SITE PLAN

1" = 10'-0" @ FULL SIZE

0' 1' 2' 4'

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: PHOTOMETRIC SITE PLAN

Drawn By: Author

Project No. 021062.000

Date: 8/17/2022

Revised :

Sheet No.

E1.03

8/17/2022 3:35:22 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

LUMINAIRE SCHEDULE

FIXTURE TYPE	DESCRIPTION	MOUNTING	CCT / CRI	INPUT WATTS (W)	LUMEN OUTPUT	EFFICACY (LUMENS / WATTS)	BALLAST / TRANSFORMER / DRIVER	VOLTAGE	LENS / REFLECTOR / BEAM	HOUSING	TRIM / FLANGE / BAFFLE / FINISH	MANUFACTURER / CATALOG #	NOTES
INTERIOR LIGHTING													
R1	4" DIAMETER MEDIUM DISTRIBUTION DOWNLIGHT LED LUMINAIRE	RECESSED	3000K 85 CRI	19	2000	102	0-10V DIMMING STANDARD	UNV	OPEN	STEEL	FLANGLESS TRIM	GOTHAM EVO SERIES	SLOPED CEILING ADAPTER: SCA4 (ORDER AS SEPARATE CATALOG NUMBER)
S1	4'-0" LINEAR LED LUMINAIRE	SURFACE	3000K 80 CRI	20	2000	100	0-10V DIMMING STANDARD	UNV	FROSTED	ALUMINUM	BY ARCHITECT	NULITE RXT-R SERIES	
S2A	5" DIAMETER LOW PROFILE LED LUMINAIRE	SURFACE	3000K 90 CRI	10	700	70	0-10V DIMMING DRIVER	UNV	DIFFUSED LENS	ALUMINUM	WHITE	JUNO JSF SERIES	
S2B	7" DIAMETER LOW PROFILE LED LUMINAIRE	SURFACE	3000K 90 CRI	13	1000	76	0-10V DIMMING DRIVER	UNV	DIFFUSED LENS	ALUMINUM	WHITE	JUNO JSF SERIES	
S2C	11" DIAMETER LOW PROFILE LED LUMINAIRE	SURFACE	3000K 90 CRI	15	1300	86	0-10V DIMMING DRIVER	UNV	DIFFUSED LENS	ALUMINUM	WHITE	JUNO JSF SERIES	
S2D	13" DIAMETER LOW PROFILE LED LUMINAIRE	SURFACE	3000K 90 CRI	20	1800	90	0-10V DIMMING DRIVER	UNV	DIFFUSED LENS	ALUMINUM	WHITE	JUNO JSF SERIES	
S3	4' -0" LOW PROFILE WRAPAROUND LED LUMINAIRE	SURFACE	3500K 80 CRI	53	5000	94	0-10V DIMMING DRIVER	UNV	POLYCARBONATE DIFFUSER	METAL	STANDARD	LITHONIA LIGHTING FML4W SERIES	
S4	6" ROUND VANDAL RESISTANT DOWNLIGHT LED LUMINAIRE	SURFACE	3000K 85 CRI	19	2000	88	0-10V DIMMING DRIVER	UNV	VANDAL RESISTANT LENS	STEEL	STANDARD	GOTHAM EVO SERIES	
S5	2X4 TROFFER LED LUMINAIRE	SURFACE	3500K 80 CRI	55	5000	115	0-10V DIMMING DRIVER	UNV	SATIN WHITE LENS	ALUMINUM	STANDARD	LITHONIA LIGHTING CPANL SERIES	
S6A	4'-0" LOW PROFILE LINEAR DIRECT LED LUMINAIRE	SURFACE	3500K 80 CRI	25	2896	115	0-10V DIMMING DRIVER	UNV	FROSTED LENS	ALUMINUM	BY ARCHITECT	NULITE REGOLO 4 LED SURFACE SERIES	
S6B	6'-0" LOW PROFILE LINEAR DIRECT LED LUMINAIRE	SURFACE	3500K 80 CRI	38	4344	114	0-10V DIMMING DRIVER	UNV	FROSTED LENS	ALUMINUM	BY ARCHITECT	NULITE REGOLO 4 LED SURFACE SERIES	
V1	2'-0" CYLINDER VANITY LED LUMINAIRE	WALL	3000K 90 CRI	18	1391	77	ELECTRONIC DRIVER	UNV	ACRYLIC DIFFUSER	BRUSHED NICKEL	BRUSHED NICKEL	LITHONIA CONTEMPORARY CYLINDER VANITY SERIES - FMVCCL 24IN MVOLT 30K 90CRI BN	
W1	CYLINDRICAL WALL SCONCE LED LUMINAIRE	WALL	3000K 90 CRI	30	1750	35	0-10V DIMMING DRIVER	UNV	CLEAR LENS	ALUMINUM	BY ARCHITECT	WAC LGHTING TUBE SERIES - WS-W2605-3000K 30W 800 TBD	
EXTERIOR LIGHTING													
O1A	SINGLE HEAD P4 OPTICS TYPE III DISTRIBUTION AREA LED LUMINAIRE	15'-0" POLE	3000K 80 CRI	125	13457	108	0-10V DIMMING DRIVER	UNV	ACRYLIC DIFFUSER	ALUMINUM	BY ARCHITECT	LITHONIA LIGHTING D SERIES - DSX1 LED P4 30K T3M MVOLT RPA DMG TBD TBD	PROVIDE PHOTOCELL
O1B	DOUBLE HEAD P4 OPTICS TYPE III DISTRIBUTION AREA LED LUMINAIRE	15'-0" POLE	3000K 80 CRI	125	13457	108	0-10V DIMMING DRIVER	UNV	ACRYLIC DIFFUSER	ALUMINUM	BY ARCHITECT	LITHONIA LIGHTING D SERIES - DSX1 LED P4 30K T3M MVOLT RPA DMG TBD TBD	PROVIDE PHOTOCELL
O2	TYPE II DISTRIBUTION AREA LED LUMINAIRE	10'-0" POLE	3000K 80 CRI	151	8165	54	0-10V DIMMING DRIVER	UNV	FLAT GLASS LENS	ALUMINUM	BY ARCHITECT	LITHONIA LIGHTING MRP LED 42C 1000 30K SR2 MVOLT TBD	PROVIDE PHOTOCELL

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Square 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS
	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: LUMINARE SCHEDULE
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No.
E2.00

8/17/2022 3:35:23 PM

SEQUENCE OF OPERATIONS CONTROLS MATRIX

Applicable Code	Notes
2019 OEESC	

Approved Manufacturer/s		Notes
Douglas		1
Enlighted		1
Cooper		1

Control system start up required?	Yes	Yes	No	Notes
Factory representative	X	X		

Emergency Strategy	Notes
Inverter	

SPACE TYPE	STANDALONE SYSTEM	NETWORKED SYSTEM	LINE VOLTAGE SWITCHING	LOW VOLTAGE SWITCHING	ON/OFF SWITCH	DIMMING SWITCH	SCENE SWITCH	KEY SWITCH	OCCUPANCY SENSOR ON TO 50%	OCCUPANCY SENSOR ON TO 100%	MANUAL ON TO 100%	VACANCY SENSOR OFF	TIMECLOCK ON	TIMECLOCK OFF	PHOTOCONTROL SWITCHING	PHOTOCONTROL DAYLIGHT HARVESTING	TUNABLE TECHNOLOGY	NOTES
INTERIOR																		
VESTIBULE		X		X								X						
HALLS		X		X						X				X				
LAUNDRY		X		X								X						
RESTROOM 103	X			X	X							X						
RESTROOM AND SHOWER ROOMS		X		X	X							X						
RESTROOM 132 AND 106	X			X	X							X						
KITCHEN		X		X	X							X						
CLOSET 111	X			X						X								
COMMUNITY ROOM		X		X		X						X				X		
RECEPTION		X		X		X						X						
OFFICE		X		X		X						X						
SLEEPING 108	X			X	X						X							
ASSISTED DORM	X			X	X						X							
JANITOR	X			X						X								
MEN'S AND WOMEN'S DORM	X			X	X						X							

SEQUENCE OF OPERATION NOTES
1.) OR APPROVED EQUAL.
2.) CONFIRM TIMECLOCK SETPOINTS WITH OWNER.
3.) 20 MINUTE TIMEOUT FOR ALL OCCUPANCY SENSORS.
4.) OCCUPANCY SENSOR IN RESTROOM TO BE 100% OUTPUT AUTO-ON WITH 20 MINUTE TIMOUT TO OFF.
5.) OCCUPANCY SENSOR IN STAIRWELL TO BE 100% OUTPUT AUTO-ON WITH 20 MINUTE TIMOUT TO 50% OUTPUT.

LIGHTING CONTROL STATIONS

CONTROL STATION DESIGNATION	ZONES CONTROLLED	BUTTON NUMBER	FUNCTION	LABEL	NOTES
$OS	ALL	1	ALL ON	ON	1
		2	ALL OFF	OFF	
$LV#	ALL	1	ALL ON	^	
	After hours network lighting overide - 2 hours only	2	ALL OFF	V	
$LVA	ALL	1	ALL ON	ON	1
		2	ALL OFF	OFF	
$LVB	ALL	1	ALL ON/HOLD DIM UP	ON	1
		2	ALL OFF/HOLD DIM DOWN	OFF	

GENERAL NOTES:
1.) OCCUPANCY SENSOR AUTO-ON TO 50%, 20 MINUTE VACANCY TIMEOUT.

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 405 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

	Date	Description
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: LIGHTING CONTROL SCHEDULES
Drawn By : Author
Project No. 021062.000
Date : 8/17/2022
Revised :

Sheet No.
E2.01

1 ELECTRICAL LIGHTING PLAN

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

SHEET NOTES

A. ALL LIGHTING WILL BE COMPRISED OF LED SOURCE LUMINAIRES.

B. DAYLIGHT/DIMMING WILL BE PROVIDED IN AREAS WHERE THERE WILL BE ENOUGH AMBIENT LIGHTING COMING INTO THE WINDOWS IN THE ROOMS.

C. LIGHTING CONTROLS WILL MEET THE REQUIREMENTS OF ASHRAE 90.1.

D. LOCAL CONTROLS OF LIGHTS WILL BE PROVIDED IN EACH ROON. ENCLOSED ROOMS WILL BE AUTOMATICALLY CONTROLLED VIA OCCUPANCY SENSORS AND INCLUDE A MANUAL OVERRIDE SWITCH. OCCUPANCY SENSORS WILL UTILIZE PASSIVE INFRARED, ULTRASONIC AND DUAL TECHNOLOGY SENSOR BASED ON THE APPLICATION.

E. EMERGENCY EGRESS LIGHTING WILL BE CONTROLLED BUT WILL INCORPORATE A UL924 LISTED TRANSFER RELAY TO OVERRIDE ANY LIGHITING CONTROLS IN THE EVENT OF A POWER OUTTAGE.

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER

CITY OF MADRAS

90% CD SET

Drawing Title: ELECTRICAL LIGHTING PLAN

Drawn By: Author

Project No. 021062.000

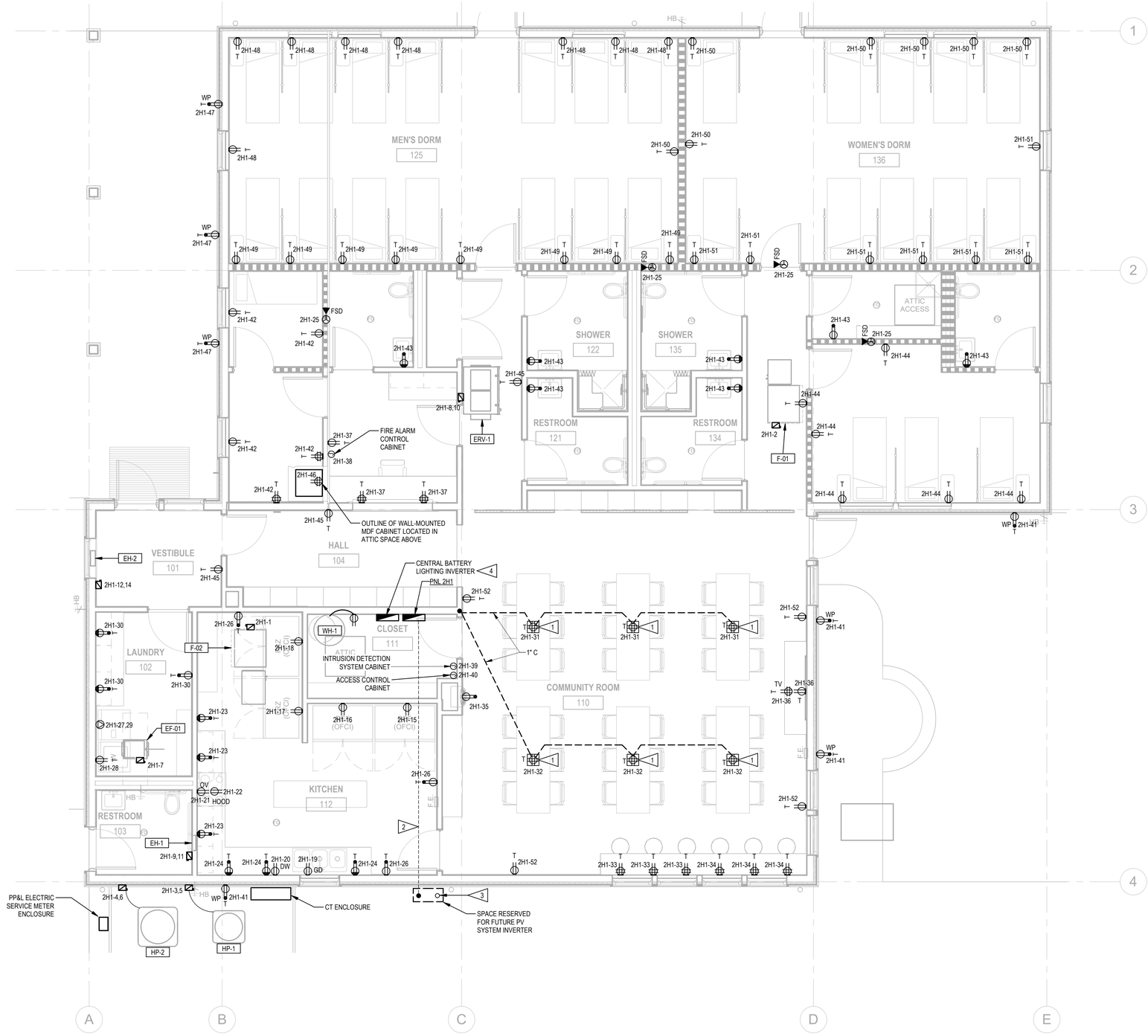
Date: 8/17/2022

Revised:

Sheet No. E3.01

8/17/2022 3:35:25 PM

SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028



SHEET NOTES

A. COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL SHEETS AND ACTUAL FIELD CONDITIONS.

B. REFER TO ELECTRICAL EQUIPMENT SCHEDULES ON SHEET E2.00 FOR ADDITIONAL ELECTRICAL AND HVAC EQUIPMENT CONNECTION INFORMATION.

C. SEE SHEET E0.00 FOR GENERAL NOTES.

FLAG NOTES

1. PROVIDE QUAD RECEPTACLE FLOOR BOX. BASIS OF DESIGN: LEGRAND WIREMOLD RESOURCE RFBA SERIES FLOOR BOX OR APPROVED EQUAL.
2. PROVIDE (1) 2" CONDUIT STUB-UP FROM PANEL 2H1 TO FUTURE PV SYSTEM INVERTER LOCATION. CAP AND SEAL EXTERIOR STUB-UP.
3. PROVIDE (1) 2" CONDUIT STUB-UP FROM FUTURE PV SYSTEM INVERTER LOCATION TO ROOF. CAP AND SEAL CONDUIT AT BOTH ENDS.
4. PROVIDE 2.2KVA EMERGENCY LIGHTING INVERTER. BASIS OF DESIGN MYERS ILLUMINATOR EM SERIES.

1 ELECTRICAL POWER PLAN
1/4" = 1'-0" @ FULL SIZE
0' 1" 2' 4'

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 620 SW Monson St. Suite 350 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

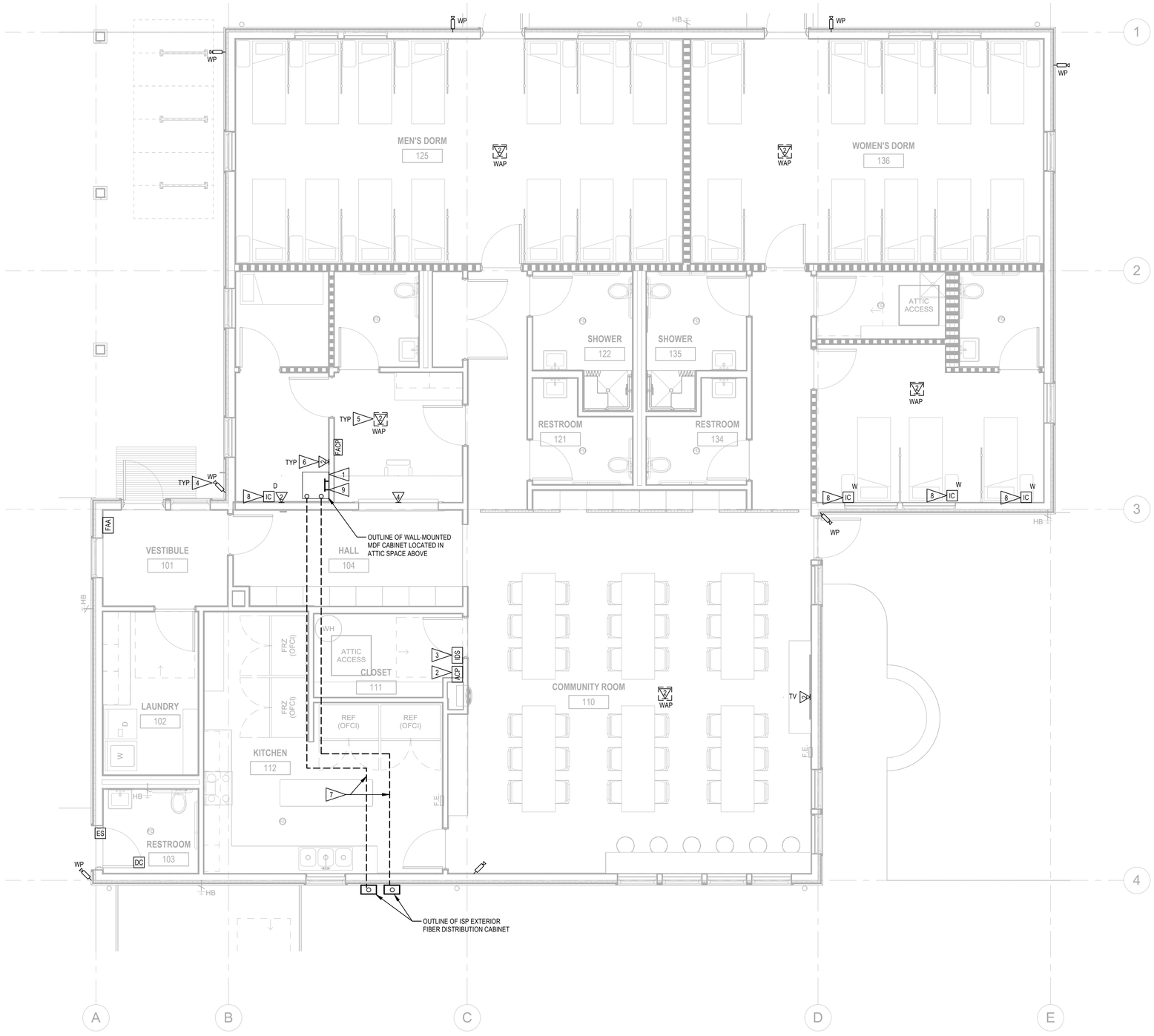
DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL POWER PLAN
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:
Sheet No. E4.01

8/17/2022 3:35:27 PM



1 ELECTRICAL SYSTEMS PLAN

1/4" = 1'-0" @ FULL SIZE

0' 1' 2' 4'

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

SHEET NOTES

A. COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL SHEETS AND ACTUAL FIELD CONDITIONS.

B. SEE SHEET E0.00 FOR STRUCTURED CABLING SYSTEM PATHWAY NOTES.

C. PROVIDE PLASTIC BUSHING WITH PULL STRING FOR ALL CONDUIT ROUGH-INS.

FLAG NOTES

1. PROVIDE WALL-MOUNTED CHATSWORTH 3'H X 2'W X 2'D CUBE-IT CABINET AS BASIS OF DESIGN.
2. PROVIDE ACCESS CONTROL SYSTEM. COORDINATE EXACT REQUIREMENTS AND DOORS WITH OWNER.
3. PROVIDE INTRUSION DETECTION SYSTEM. COORDINATE EXACT REQUIREMENTS AND DOORS WITH OWNER.
4. PROVIDE 4S BACK BOX AND 3/4" CONDUIT PATHWAY FOR IP VIDEO SURVEILLANCE SYSTEM DEVICE. COORDINATE EXACT REQUIREMENTS AND DOORS WITH OWNER.
5. APPROXIMATE LOCATION OF CEILING-MOUNTED WAP (DEVICE, BRACKET PROVIDED AND INSTALLED BY OTHERS). PROVIDE CABLING PATHWAY BACK TO MDF.
6. PROVIDE 1" CONDUIT WITH 4S BACKBOX FROM ATTIC SPACE DOWN TO DATA OUTLET.
7. PROVIDE 2-1/2" CONDUIT FROM FIBER DISTRIBUTION CABINET TO MDF CABINET.
8. PROVIDE 1" CONDUIT WITH 4S BACKBOX FROM ATTIC SPACE DOWN TO TWO-COMMUNICATION SYSTEM OUTLET. BASIS OF DESIGN: JERON SPECTRUM 480 DIGITAL INTERCOM SYSTEM. A NETWORKED PUSH-TO-CALL STATION FROM DORM BEDS TO MONITORED CONSOL AT OFFICE BEDROOM.
9. PROVIDE 12"X2"X1/4" TELECOM BACKBOARD GROUND BAR. #6 GREEN/YELLOW TRACER BONDING CONDUCTOR TO CONDUITS, EQUIPMENT, AND CABINET. COORDINATE WITH OWNER.

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 245 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp

FOR REFERENCE ONLY

DRAWING REVISIONS

#	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL SYSTEM PLAN

Drawn By : Author
Project No. 021062.000
Date : 8/17/2022
Revised :

Sheet No.
E5.01

8/17/2022 3:35:28 PM

PANEL 2H1 SCHEDULE

LOCATION: **CLOSET 111**
GROUNDING: **EQUIPMENT GROUND BUS**
FED FROM:

VOLTAGE: **120/240 1-PH, 3-WIRE**
TYPE: **BOLT-ON**
MOUNTING: **SURFACE**
SKIRTS: **NONE**
A.I.C. RATING:

600 A MCB

CKT #	ITEM	NOTE	AMPS	POLE	A	B	POLE	AMPS	NOTE	ITEM	CKT #
1	F-02		20 A	1	1469 VA	836 VA	1	15 A		F-01	2
3	HP-01		30 A	2		1404 VA	2746 VA	2	60 A		HP-02	4
5	--	--	--	--	1404 VA	2746 VA	--	--	--	--	--	6
7	EF-01		20 A	1		100 VA	641 VA	2	15 A		ERV-01	8
9	EH-01		20 A	2	750 VA	641 VA	--	--	--	--	--	10
11	--	--	--	--		750 VA	1125 VA	2	20 A		EH-02	12
13	WH-1		20 A	1	1800 VA	1125 VA	--	--	--	--	--	14
15	RCPT - REFRIGERATOR KITCHEN 112		20 A	1		600 VA	600 VA	1	20 A		RCPT - REFRIGERATOR KITCHEN 112	16
17	RCPT - FREEZER KITCHEN 112		20 A	1	180 VA	180 VA					RCPT - FREEZER KITCHEN 112	18
19	RCPT - GARBAGE DISPOSAL KITCHEN 112		20 A	1		1500 VA	800 VA	1	20 A		RCPT - DISHWASHER KITCHEN 112	20
21	RCPT - RANGE KITCHEN 112		20 A	1	300 VA	180 VA					RCPT - VENT HOOD KITCHEN 112	22
23	RCPT - ABOVE COUNTER KITCHEN 112		20 A	1		540 VA	540 VA	1	20 A		RCPT - GARBAGE DISPOSAL KITCHEN 112	24
25	FSDs		20 A	1	200 VA	540 VA					RCPT - KITCHEN 112	26
27	RCPT - DRYER LAUNDRY 102		30 A	2		2400 VA	1200 VA	1	20 A		RCPT - WASHER LAUNDRY 102	28
29	--	--	--	--	2400 VA	540 VA					RCPT - LAUNDRY 102	30
31	RCPT - FLOOR BOX COMMUNITY ROOM-1 110-1	1	20 A	1		1080 VA	1080 VA	1	20 A	1	RCPT - FLOOR BOX COMMUNITY ROOM-1 110-1	32
33	RCPT - COMMUNITY ROOM-1 110-1	1	20 A	1	1080 VA	1080 VA					RCPT - COMMUNITY ROOM-1 110-1	34
35	RCPT - EWC COMMUNITY ROOM-1 110-1		20 A	1		400 VA	540 VA	1	20 A	1	RCPT - TV COMMUNITY ROOM-1 110-1	36
37	RCPT - RECEPTION 105	1	20 A	1	900 VA	300 VA					FACP	38
39	ACCESS CONTROL CABINET		20 A	1		300 VA	300 VA	1	20 A		INTRUSION DETECTION CABINET	40
41	RCPT - GFCI CONDENSING UNITS, PATIO		20 A	1	720 VA	1260 VA					RCPT - OFFICE 107	42
43	RCPT - GFCI RESTROOMS, CUST CLOSET		20 A	1		1260 VA	1080 VA	1	20 A	1	RCPT - ASSISTED DORM	44
45	RCPT - HALL, VESTIBULE	1	20 A	1	540 VA	1500 VA					RCPT - ATTIC MDF RACK	46
47	RCPT - GFCI ENTRYWAY		20 A	1		540 VA	1440 VA	1	20 A	1	RCPT - MEN'S DORM 125	48
49	RCPT - MEN'S DORM 125	1	20 A	1	1440 VA	1260 VA					RCPT - WOMEN'S DORM 136	50
51	RCPT - WOMEN'S DORM 136	1	20 A	1		1260 VA	720 VA	1	20 A	1	RCPT - COMMUNITY ROOM-1 110-1	52
53	LIGHTING - KITCHEN, COMMONS, HALL		20 A	1	715 VA	690 VA					LIGHTING - RR, DORMS	54
55	LIGHTING - EXTERIOR		20 A	1		370 VA	800 VA	1	20 A		LIGHTING - EXTERIOR	56
57	INVERTER		20 A	1	1243 VA	0 VA					SPARE	58
59	SPARE		20 A	1		0 VA	0 VA	1	20 A		SPARE	60
61	SPARE		20 A	1	0 VA	0 VA					SPARE	62
63	SPARE		20 A	1		0 VA	0 VA	1	20 A		SPARE	64
65	SPARE		20 A	1	0 VA	0 VA					SPARE	66
67	SPARE		20 A	1		0 VA	0 VA	1	20 A		SPARE	68
69	SPARE		20 A	1	0 VA	0 VA					SPARE	70
71	SPARE		20 A	1		0 VA	0 VA	1	20 A		SPARE	72
			Total Load:		27989 VA		26057 VA					
			Total Amps:		**233 A**		**217 A**					

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Equipment	900 VA	100.00%	900 VA		
HVAC	12186 VA	100.00%	12186 VA	**Total Conn. Load:**	54046 VA
Heating	5550 VA	100.00%	5550 VA	**Total Est. Demand:**	44161 VA
Lighting	3818 VA	125.00%	4773 VA	**Total Conn. Current:**	225 A
Receptacle	31680 VA	65.78%	20840 VA	**Total Est. Demand Current:**	184 A

Notes:
1. PROVIDE AFCI TYPE BREAKER

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

SCHEDULE NOTES:
1) NEMA-3R FUSED DISCONNECT SWITCH.
2) PROVIDE MOTOR-RATED SWITCH, WITH WP COVER, AS DISCONNECT.
3) PROVIDE MOTOR-RATED SWITCH AS DISCONNECT.
4) EXHAUST FAN SHARES CIRCUIT WITH OTHER EXHAUST FANS.
5) WATER HEATER SHARES CIRCUIT WITH OTHER WATER HEATER.

ABBREVIATION:
FLA: FULL LOAD AMPERES
HP: HORSEPOWER
KVA: KILOVOLT-AMPERES
KW: KILOWATTS
MCA: MINIMUM CIRCUIT AMPACITY
MOCP: MAXIMUM OVERCURRENT PROTECTIVE DEVICE
OFOI: OWNER-FURNISHED, OWNER-INSTALLED
OFCI: OWNER-FURNISHED, CONTRACTOR-INSTALLED
W: WATTS
WP: WEATHERPROOF
VA: VOLT-AMPERS

SCHEDULE GENERAL NOTES
A) DISCONNECTS ARE SHOWN AS FRAME RATING / FUSE SIZE.
B) PROVIDE DUCT SMOKE DETECTORS FOR ALL HVAC UNITS SUPPLYING 2,000 CFM OR MORE. COORDINATE WITH FIRE ALARM CONTRACTOR.
C) ALL 120V, 15A AND 20A RECEPTACLES AND/OR EQUIPMENT CIRCUITS SHALL BE GFCI PROTECTED PER NOTE 2, UNLESS NOTED OTERWISE/

NO.	EQUIPMENT DESCRIPTION	LOCATION	VA	KVA	MCA	MOCP	VOLTAGE	PHASES	CONDUIT SIZE	WIRE SIZE	DISC/FUSE/POLES	NOTES
EF-1	EXHAUST FAN	ATTIC	100	0.1		20 A	120	1	3/4"	2#12, 1#12 GND	30/30/2	
EH-1	ELECTRIC HEATER	RESTROOM 103	1500	1.5		20 A	208	1	3/4"	2#12, 1#12 GND	30/30/2	
EH-2	ELECTRIC HEATER	VESTIBULE 101	2250	2.3		20 A	208	1	3/4"	2#12, 1#12 GND	30/30/2	
ERV-1	ENERGY RECOVERY VENTILATOR	ATTIC	1282	1.3	7.7	15 A	208	1	3/4"	2#12, 1#12 GND	30/15/2	
F-01	CONDENSING FURNACE	ATTIC	836	0.8	8.7	15 A	120	1	3/4"	2#12, 1#12 GND	30/15/2	
F-02	CONDENSING FURNACE	ATTIC	1469	1.5	15.3	20 A	120	1	3/4"	2#12, 1#12 GND	30/20/2	
HP-1	HEAT PUMP	OUTDOOR	2808	2.8		30 A	208	1	3/4"	2#10, 1#10 GND	30/30/3	
HP-2	HEAT PUMP	OUTDOOR	5491	5.5		60 A	208	1	3/4"	2#4, 1#10 GND	60/60/3	

SHEET NOTES

A. COORDINATE LOCATION AND MOUNTING HEIGHT OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL SHEETS AND ACTUAL FIELD CONDITIONS.

B. SEE SHEET E0.00 FOR GENERAL NOTES.

C. ALL ITEMS SHOWN ON ONE-LINE DIAGRAM SHALL BE CONSIDERED NEW UON.

D. REFER TO SHEETS E1.01 AND E4.01 FOR MORE INFORMATION ON LAYOUT.

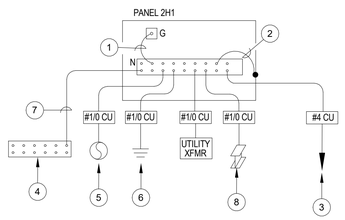
E. PACIFIC POWER WILL PROVIDE AND INSTALL PRIMARY/SECONDARY TRANSFORMER CONDUCTORS AND WILL PROVIDE AND MOUNT TRANSFORMER. PACIFIC POWER WILL PROVIDE CTS, METER INCLUDING WIRING, AND PROVIDE AND PERFORM TRANSFORMER TERMINATIONS AND SECONDARIES AT CT.

FLAG NOTES

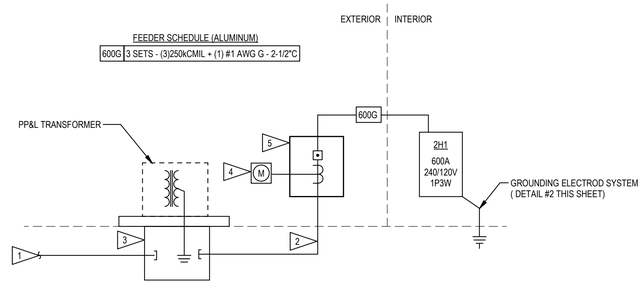
1. TRENCH AND PROVIDE (1) 4" CONDUIT WITH PULL STRING FROM UTILITY POLE TO TRANSFORMER VAULT.
2. TRENCH AND PROVIDE (2) 4" CONDUITS WITH PULL STRINGS FROM TRANSFORMER VAULT TO CT ENCLOSURE.
3. PROVIDE CONCRETE TRANSFORMER VAULT AND COVER, OLDCASTLE P/N: 575-TRANS-PCORP 7992600.
4. PROVIDE 1" (MIN) CONDUIT WITH PULL STRING AND EUSERC 305, DIRECT CONNECT, NEMA 3R METER ENCLOSURE.
5. PROVIDE EUSERC 316/317, 600A, NEMA 3R CT ENCLOSURE.

GROUNDING KEY NOTES

1. "2H1": FACTORY PROVIDED MAIN BONDING JUMPER.
2. "2H1": #1/0 CU SUPPLY SIDE EQUIPMENT BONDING JUMPER.
3. CONCRETE ENCASED ELECTRODE "UFER". SIZE PER DETAIL #4/E7.00
4. 12"X2"X1/4" TELECOM BACKBOARD GROUND BAR.
5. METAL PIPING.
6. 5/8" Ø 10'L CU CLAD STEEL GROUND ROD. PROVIDE ADDITIONAL GROUND ROD AS REQUIRED PER NEC 250.53(A)(2) IF GROUND RESISTANCE TEST EXCEEDS 25 OHMS.
7. TELECOM GROUNDING CONDUCTOR, SIZE PER GROUND BAR DETAIL 5/E7.00.
8. BUILDING STEEL



2 GROUNDING ELECTRODE SYSTEM
NTS



1 ONE LINE DIAGRAM
NTS

SÄZÄN GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1758 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 623 SW Morrison St. Suite 360 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp: FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL ONE LINE DIAGRAM, PANEL, HVAC SCHEDULES
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised :
Sheet No. E6.00

8/17/2022 3:35:29 PM

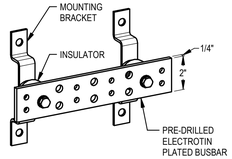
SÄZÄN
GROUP
111 SW Fifth Ave, Ste 3210
Portland, Oregon 97204
Tel 503.416.2400
Fax 206.267.1701
SAZAN# 646-22028

BLRB architects
TACOMA | 1250 Pacific Ave Suite 700 WA 98402 253.627.5599
SPOKANE | 905 W Riverside Suite 500 WA 98201 509.252.5980
PORTLAND | 621 SW Morrison St. Suite 950 OR 97205 503.595.0270
BEND | 721 SW Industrial Suite 150 OR 97702 541.330.6506

Stamp
FOR REFERENCE ONLY

DRAWING REVISIONS

	Description	Date
1		

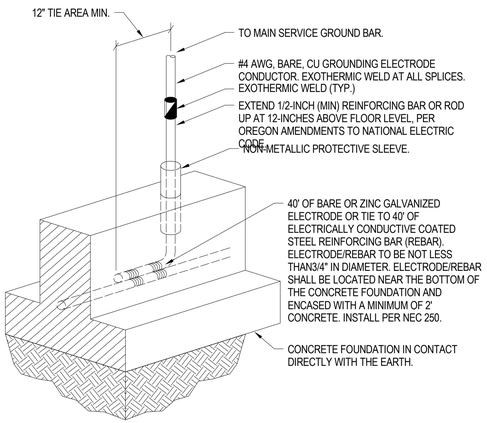


DETAIL NOTES

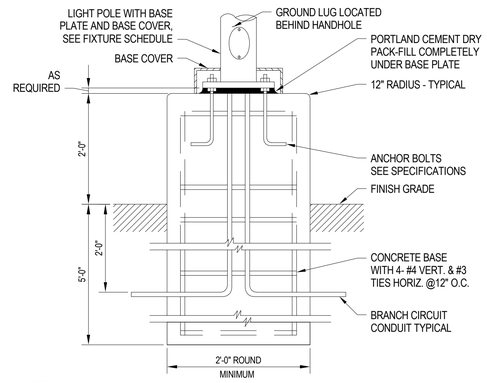
1. BUSBAR AND ALL BONDING COMPONENTS SHALL COMPLY WITH NATIONAL ELECTRICAL CODE, ANSI/TIA 607-C STANDARDS, LOCAL CODES, OR AHJ. WHERE CONFLICTS OCCUR, THE MORE RESTRICTIVE STANDARD WILL TAKE PRECEDENT
2. HOLE PATTERNS SHALL SUPPORT LISTED LUGS AND HARDWARE
3. BUSBAR SHALL BE ELECTROTIN PLATED COPPER WITH A MINIMUM 95% CONDUCTIVITY AND HAVE AN ANTI-OXIDANT APPLIED BEFORE ATTACHING ANY BONDING COMPONENTS
4. PRIMARY BUSBAR SHOULD BE A MINIMUM 4" HIGH AND SECONDARY BUSBARS SHALL BE A MINIMUM OF 2" HIGH. REFER TO SPECIFICATIONS FOR SPECIFIC LENGTHS

TYPICAL CONDUCTOR SIZE	
LINEAR LENGTH (FT)	**SIZE (AWG)**
< 13	6
14 - 20	4
21 - 26	3
27 - 33	2
34 - 41	1
42 - 52	1/0
53 - 66	2/0
67 - 84	3/0
14 - 20	4/0
21 - 26	250 kcmil
27 - 33	300 kcmil
34 - 41	350 kcmil
42 - 52	500 kcmil
53 - 66	600 kcmil
67 - 84	750 kcmil

5 TELECOMMUNICATIONS BONDING BUSBAR DETAIL
NTS



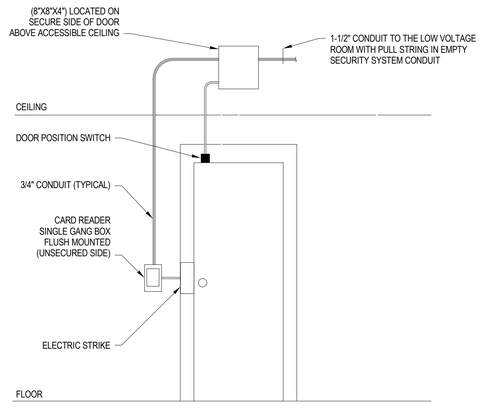
4 UFER GROUND
NTS



NOTES:

1. ENGAGE A LICENSED STRUCTURAL ENGINEER TO CERTIFY POLE BASE DESIGN BASED ON SOIL CONDITIONS.

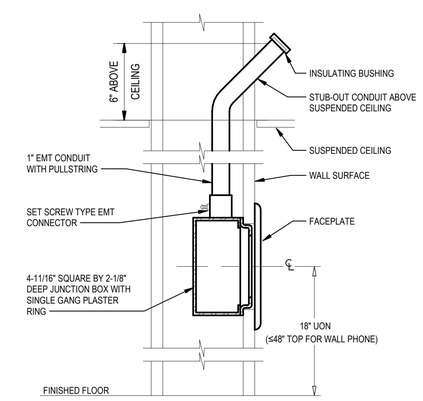
3 LIGHT POLE
NTS



NOTES:

1. VERIFY AND COORDINATE ALL DOOR HARDWARE WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH IN.

2 ACCESS CONTROL ROUGH-IN
NTS



NOTE:
TYPICAL INSTALLATION WITH CONDUIT STUBBED ABOVE CEILING FOR INSULATED, EXTERIOR, OR FIRE-RATED WALLS UNLESS OTHERWISE SHOWN ON PLANS.

1 WALL OUTLET DETAIL
NTS

MADRAS SHELTER
CITY OF MADRAS
90% CD SET

Drawing Title: ELECTRICAL DETAILS
Drawn By: Author
Project No. 021062.000
Date: 8/17/2022
Revised:

Sheet No.
E7.00

8/17/2022 3:35:30 PM

City of Madras
Burden of Proof Narrative
Emergency Shelter – City of Madras

APPLICANT/ OWNER:	City of Madras 125 SW E Street Madras, OR 97741
ARCHITECT:	BLRB Architects P.S. Eric Nielsen 721 SW Industrial Way, Suite 130 Bend, OR 97702
ENGINEER:	HWA Grant Hardgrave, PE 62930 O.B. Riley Road, Suite 100 Bend OR 97703
PLANNER:	Blackmore Planning and Development Services, LLC Greg Blackmore, Principal Planner 19454 Sunshine Way Bend, OR 97702
LOCATION:	The site is located on NW 4th Street at the wester terminus of Oak Street. The address is 61 NW Oak Street, which is identified as Tax Lot 502 on the Jefferson County Tax Assessor's Map 11-13-02 DD.
ZONING:	Corridor Commercial (C-1)
REQUEST:	The applicant is requesting 3,760 square foot, 1-story, emergency shelter.

I. PROCEDURES, STANDARDS, AND APPROVAL CRITERIA

- *City of Madras Emergency Shelter Super Siting Application - https://www.ci.madras.or.us/commdev/page/emergency-shelter-super-siting-application*
- *Oregon House Bill 2006*

II. EXHIBITS

- Architectural Plan Set

III. BASIC FACTS

1. **PROPERTY LOCATION:**
The site is located on NW 4th Street at the wester terminus of Oak Street. The address is 61 NW Oak Street, which is identified as Tax Lot 502 on the Jefferson County Tax Assessor's Map 11-13-02 DD.

2. **ZONING AND COMPREHENSIVE PLAN DESIGNATION:**
The property is designated Corridor Commercial (C-1) on the City of Madras Urban Area Comprehensive Plan and Zoning Map.

3. **SITE DESCRIPTION AND SURROUNDING USES:**
The subject property is situated upon varied topography, which slopes to the east (toward NW 4th Street). To the north, west and south is undeveloped land. To the east is commercially zoned land that is developed with a Sonic Drive-In restaurant.

4. **PROPOSAL:**
The applicant is requesting 3,760 square foot, 1-story, emergency shelter.

IV. CONFORMANCE WITH CITY OF MADRAS APPROVAL CRITERIA

Application Requirements

The Emergency Shelter Super Siting application submitted to the City of Madras must demonstrate the following:

- **The Emergency Shelter:**
  - **Includes sleeping and restroom facilities**
  - **Will comply with applicable building codes**
  - **Is located within the City's urban growth boundary**
  - **Will not result in a new building that is sited within an area designated under a statewide land use planning goal relating to natural disasters and hazards (e.g. flood plains or mapped environmental health hazards) unless the development complies with regulations directly related to the hazard**
  - **Has adequate transportation access to medical and commercial services**
  - **Will not pose any unreasonable risk to public health or safety**

Applicant Response: As documented on the Plan Set, the design includes sleeping facilities. Also, the submittal packet includes a Building Code Analysis, which documents conformance with all applicable building codes, and as a standard procedure prior to construction, the applicant will be required to submit and be issued a building permit from the authorizing jurisdiction, which will be based upon a detailed assessment of building code compliance. Regarding location, the property is situated within the Madras Urban Growth Boundary (UGB) and it is not in a natural disaster area. Regarding access, the emergency shelter will have access to NW 4th Street, which is a public street and is connected to the City-wide transportation system that connects to medical and commercial services. Lastly, given that the proposal is an allowed use that will be built to all building code standards and that conforms to all local rules and regulations, it will not pose a risk to public health or safety.

Overall, the proposed development conforms to these requirements.

- **The Emergency Shelter must be operated by:**
  - **A local government, or**
  - **A religious corporation,**
  - **A public benefit corporation whose charitable purpose includes the support of homeless individuals and that has been recognized as exempt from income tax under section 501(a) of the Internal Revenue Code on or before January 1, 2017, or**
  - **A nonprofit corporation partnering with any of those entities.**

Applicant Response: The property is owned by the City of Madras, a local government, and the shelter will be operated by Jefferson County Faith Based Network. The City plans to ensure that the operator will continually be one of the entity types established in this section.

- **Additionally, an Emergency Shelter may provide on-site and at no cost:**
  - **Showering and bathing facilities**
  - **Personal property storage**
  - **Laundry**
  - **Food service**
  - **Recreation areas for children and pets**
  - **Case management services, or**
  - **Any other services incidental to the shelter**
- **An Emergency Shelter may include youth shelters, veterans' shelters, winter or warming shelters, day shelters and family violence shelter homes.**
- **An Emergency Shelter may provide additional transitional housing services at a fee of not more than $300/month.**

Applicant Response: The provisions of these sections are permissive, but not required or mandatory.

Applicants have until June 30, 2022 to submit their Emergency Shelter Super Siting application. Applications received after June 30, 2022 are not eligible for the Emergency Shelter Super Siting process.

State law does not set a deadline for the City to make a decision on an Emergency Shelter Super Siting application.

Applicant Response: The application is being submitted prior to June 30, 2022, which conforms to the requirements of this section. While state law does not set a deadline on how long a City has to make a decision, the applicant anticipates that a timely decision will be made.

What is the public engagement process for super siting applications?

This is a special application process mandated by state law (HB 2006). A decision on an Emergency Shelter Super Siting application is not a land use decision, so the Emergency Shelter Super Siting process does not follow the typical land use process. State law does not require mailed notice of an Emergency Shelter Super Siting application to adjacent or nearby property owners and residents nor does it require a public hearing or other solicitation of public comment.

Who is the decision maker for the City of Madras' Emergency Shelter Super Siting Applications?

The Community Development Director will make the decision on an Emergency Shelter Super Siting application based on the requirements in HB 2006.

Can an Emergency Shelter Super Siting decision be appealed?
Yes, an Emergency Shelter Super Siting decision may be appealed to the Jefferson County Circuit Court within 60 days of the date of the decision utilizing the writ of review process in Chapter 34 of the Oregon Revised Statutes.

Applicant Response: These provisions are informational. The applicant anticipates that the decision will be made according to these provisions.

V. CONFORMANCE WITH HB 2006

SECTION 3. (1) A local government shall approve an application for the development or use of land for an emergency shelter, as defined in section 2 of this 2021 Act, on any property, notwithstanding ORS chapter 195, 197, 197A, 215 or 227 or any statewide plan, rule of the Land Conservation and Development Commission or local land use regulation, zoning ordinance, regional framework plan, functional plan or comprehensive plan, if the emergency shelter:

(a) Includes sleeping and restroom facilities for clients;
(b) Will comply with applicable building codes;
(c) Is located inside an urban growth boundary or in an area zoned for rural residential use as defined in ORS 215.501;
(d) Will not result in the development of a new building that is sited within an area designated under a statewide planning goal relating to natural disasters and hazards, including flood plains or mapped environmental health hazards, unless the development com- plies with regulations directly related to the hazard; (e) Has adequate transportation access to commercial and medical services; and (f) Will not pose any unreasonable risk to public health or safety.

(2) An emergency shelter allowed under this section must be operated by:

(a) A local government as defined in ORS 174.116;
(b) An organization with at least two years' experience operating an emergency shelter using best practices that is:

(A) A local housing authority as defined in ORS 456.375;
(B) A religious corporation as defined in ORS 65.001; or
(C) A public benefit corporation, as defined in ORS 65.001, whose charitable purpose includes the support of homeless individuals, that has been recognized as exempt from income tax under section 501(a) of the Internal Revenue Code on or before January 1, 2018; or

(c) A nonprofit corporation partnering with any other entity described in this subsection.

(3) An emergency shelter approved under this section:

(a) May provide on-site for its clients and at no cost to the clients:

(A) Showering or bathing;
(B) Storage for personal property;
(C) Laundry facilities;
(D) Service of food prepared on-site or off-site;
(E) Recreation areas for children and pets;
(F) Case management services for housing, financial, vocational, educational or physical or behavioral health care services; or
(G) Any other services incidental to shelter.

(b) May include youth shelters, winter or warming shelters, day shelters and family violence shelter homes as defined in ORS 409.290.

(4) An emergency shelter approved under this section may also provide additional services not described in subsection (3) of this section to individuals who are transitioning from unsheltered homeless status. An organization providing services under this subsection may charge a fee of no more than $300 per month per client and only to clients who are financially able to pay the fee and who request the services.

Applicant Response: The City of Madras Approval Criteria are nearly identical to the HB 2006 Criteria of this section. The above noted finding (addressing the City of Madras Approval Criteria) address all of these criteria.

VI. SUMMARY AND CONCLUSION

The preceding sections document that the proposal conforms to the applicable Standards and Criteria. Because the proposal conforms to all applicable criteria and standards, the applicant respectfully requests that the City approve the Emergency Shelter application as proposed.

RESOLUTION NO. 03-2021

A RESOLUTION AUTHORIZING THE CITY OF MADRAS TO APPLY FOR THE COMMUNITY DEVELOPMENT BLOCK GRANT FROM BUSINESS OREGON FOR DESIGN AND CONSTRUCTION OF THE "MADRAS HOMELESS SERVICE CENTER PROJECT" IN THE AMOUNT OF $1,800,000.00

WHEREAS, the Community Development Block Grant is currently accepting applications; and

WHEREAS, the City of Madras desires to participate in this grant program to the greatest extent possible for design, land acquisition, grant administration, and construction services to construct a homeless services center within City limits; and

WHEREAS, the proposed facility will be operated by the Madras Faith-Based Network and will benefit both City and County residents; and

WHEREAS, the estimated project cost to include design, land acquisition, grant administration, and construction of the facility is $1,800,000.00; and

WHEREAS, the City is proposing the project be financed with the Community Development Block Grant at $1,500,000.00 and City funds at $300,000.00;

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Common Council of the City of Madras as follows:

SECTION 1: The City of Madras supports the proposed project and is hereby authorized to apply for the Community Development Block Grant in the amount of $1,800,000.00 for design, land acquisition, grant administration, and construction services to construct a homeless services center within City limits to serve City and County residents. The City of Madras will contribute $300,000.00 towards the total project costs.

The City of Madras is hereby authorized to commit the funds and resources necessary to deliver the proposed design and construction of the Madras Homeless Service Center.

SECTION 2: Mayor Richard Ladeby is hereby empowered to sign the resolution on the City's behalf.

SECTION 3: This resolution shall become effective immediately upon its passage by the Council and execution by the Mayor.

APPROVED AND ADOPTED by the City Council of the City of Madras and signed by the Mayor this 13th day of April, 2021.

Ayes:	4
Nays:	0
Abstentions:	0
Absent:	1
Vacancies:	1

Richard Ladeby, Mayor

ATTEST:

Lysa Vattimo, City Recorder

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** — No base flood elevations determined.
- **ZONE AE** — Base flood elevations determined.
- **ZONE AH** — Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** — To be protected from 100-year flood by Federal flood protection system under construction; no base elevations determined.
- **ZONE V** — Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** — Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** — Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** — Areas determined to be outside 500-year flood plain.
- **ZONE D** — Areas in which flood hazards are undetermined.

Flood Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet*

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone*

$RM7_X$ — Elevation Reference Mark

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas.

Areas of special flood hazard (100-year flood) include Zones A, A1-30, AE, AH, AO, A99, V, V1-30 AND VE.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Floodway widths are provided in the Flood Insurance Study Report.

Coastal base flood elevations apply only landward of the shoreline.

Elevations reference marks are described in the Flood Insurance Study Report.

MAP REPOSITORY
City Hall
City of Madras
416 6th Street
Madras, Oregon 97741
(Maps available for reference only, not for distribution.)

INITIAL IDENTIFICATION:
JUNE 28, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
NOVEMBER 14, 1975
OCTOBER 3, 1978

FLOOD INSURANCE RATE MAP EFFECTIVE:
JULY 17, 1989

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the Flood Insurance Rate Map Effective Date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths has been established.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET
500 0 500

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
MADRAS,
OREGON
JEFFERSON COUNTY

ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
410103 0001C

EFFECTIVE DATE:
JULY 17, 1989

Federal Emergency Management Agency