



**CITY OF GREENFIELD**  
*Department of Public Works*

**CONTRACT DPW 23-13**

**Furnishing and Delivery of One New  
Prefabricated Outdoor Public Restroom**

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**INVITATION FOR BIDS**  
**BID # DPW 23-13**

The City of Greenfield, Massachusetts will accept sealed bids for furnishing and delivering to the City of Greenfield's Chapman-Davis Municipal Parking Lot:

**One (1) New Prefabricated Outdoor Public Restroom**

Sealed Bids addressed to the Department of Public Works, 189 Wells Street, Greenfield, Massachusetts and plainly marked "***Prefabricated Outdoor Public Restroom, DPW 23-13***" will be accepted by the Department of Public Works in the DPW Administration Building adjacent to the DPW Yard. Bids will be accepted until 2:00 p.m. on Tuesday, March 7, 2023, at which time said bids will be publicly opened and read aloud in the Administration Building Meeting Room.

Bid documents, including specifications and bid form will be emailed upon request by contacting [alan.twarog@greenfield-ma.gov](mailto:alan.twarog@greenfield-ma.gov) or by downloading them from the City's Purchasing Department's webpage at <https://greenfield-ma.gov/p/6981/FY-2023-IFBRFPRFQRF>. Bidding/contract documents will be available starting February 21, 2023.

Bids for this project are subject to the provisions of the Massachusetts General Laws Chapter 30B as amended.

The City of Greenfield reserves the right to accept or reject any or all proposals if the City deems it in the public interest or in the interest of the City to do so.

The contract/bid awarding authority is the City of Greenfield, Department of Public Works.

Advertise: February 21<sup>st</sup> and February 28<sup>th</sup>, 2023

**SECTION 1**  
**INFORMATION FOR BIDDERS**

## Section 1.0 Information for Bidders:

This contract is for the purchase and delivery of one (1) new prefabricated outdoor public restroom.

- 1.1 The scope of this contract consists of furnishing the prefabricated building and all associated components, equipment, accessories, parts and supplies necessary for and pertinent to the delivery of the building in accordance with the specifications appearing hereinafter or annexed hereto.
- 1.2 The prefabricated building supplied shall conform to standards prescribed or approved within these specifications. Any reference to a specification refers to the most recent or latest specifications or designation. Where names of specific products may be designated in these specifications, the intent is to state the general type and quality of product desired without ruling out use of other products of equal type and quality which have been approved in writing by the Owner.
- 1.3 Guarantee: The bidder hereunder guarantees its respective prefabricated outdoor restroom against defective parts and/or materials for a period of one year from date of delivery by the bidder and acceptance by the Owner.
- 1.4 Contract Documents: The Notice of Bid, Bidder Information, and Forms for Bid, will be emailed upon request by contacting [alan.twarog@greenfield-ma.gov](mailto:alan.twarog@greenfield-ma.gov).
- 1.5 Questions regarding Documents: In general, no answer will be given to prospective bidders in reply to an oral question if the question involves an interpretation of the intent or meaning of the contract documents, or the equality specifications. Any information given to bidders, other than by means of contract documents, including Addenda, as described below, is given for information and convenience of the bidder only and is not guaranteed. The bidder agrees that such information does not entitle the bidder to assert any claim or demand against the Owner or the Engineer on account thereof.

To receive consideration, such questions shall be submitted in writing to the owner at least three days before the established date for receipt of bids. If the question involves the equality or use of products, it must be accompanied by drawings, specifications, or other data in sufficient detail to enable the owner to determine the equality or suitability of the products. In general, the owner will neither approve nor disapprove particular products prior to the opening of bids.

The Owner will set forth, as Addenda, which shall become a part of the contract documents, such questions received as above provided as in its sole judgment, are appropriate or necessary and its decision regarding each. At least two days prior to the receipt of bids, a copy of these Addenda will be sent to those prospective bidders known to have taken out sets of the bidding/contract documents.

- 1.6 Blank Form for Bid: All bids must be upon the blank form for bid annexed hereto, state the proposed price of each item, both in words and in figures, and be signed by the bidder with its business address and the place of residence.
- 1.7 Withdrawal of Bids: Except as hereinafter in this subsection otherwise expressly provided, once its bid is submitted and received by the Owner for consideration and comparison with

other bids similarly submitted, the bidder agrees that it may not and will not withdraw it within forty (40) consecutive calendar days after the actual date of the opening of bids.

Upon proper written request, and identification, it may be withdrawn only as follows:

1. At any time prior to the designated time for opening of Bids.
2. Provided the bid has not been accepted by the Owner, at any time subsequent to the expiration of the period during which the bidder has agreed not to withdraw its bid.

Unless a bid is withdrawn as provided above, the bidder agrees that it shall be deemed open for acceptance until the Agreement has been executed by both parties thereto or until the Owner notified a bidder, in writing, that its bid is rejected or that the Owner does not intend to accept it. Notice of acceptance of a bid shall not constitute rejection of any other bid.

- 1.8 Ability and Experience of Bidder: No award will be made to any bidder who cannot satisfy the Owner that it has sufficient ability and experience in this type of building fabrication and sufficient capital and plant to enable it to prosecute and furnish the prefabricated building within a normal period of time. The Owner's decision or judgment on these matters shall be final, conclusive, and binding.

The Owner may take such investigations as it deems necessary, and the bidder shall furnish to the Owner, under oath, if so required, all such information and data for this purpose as the Owner may request.

- 1.9 Bids: The Owner, in its sole judgment, may reject bids which are either incomplete, conditional, obscure or not responsive or which contain additions not called for, erasures not properly initialed, alterations, or similar irregularities or the Owner may waive such omissions, conditions, or irregularities
- 1.10 The City of Greenfield reserves the right to reject any or all bids wholly or in part; to waive technicalities and informalities; to amend and/or cancel bid prior to the time of opening; to make awards in a manner deemed best to the City; to correct any award erroneously made as a result of a clerical error on the part of the City.
- 1.11 Execution of Agreement: The bidder whose bid is accepted will be notified by letter and agrees to duly execute the Agreement within ten (10) days after notification that the Agreement is ready for signature.
- 1.12 Unit Prices: Only firm unit prices will be accepted. Any bid proposals containing escalator clauses or any other such provisions will be rejected as unsuitable for consideration.
- 1.13 Delivery: The prefabricated outdoor public restroom shall be delivered to the City of Greenfield's Chapman-Davis Municipal Parking Lot (southern end of the Davis Street side). It shall not be delivered prior to June 12, 2023, and shall be delivered between the hours of 7:00am and 3:00pm Eastern Standard Time, Monday through Friday. All prices shall be F.O.B. City of Greenfield, Massachusetts. All shipping charges are to be prepaid by the bidder. The City of Greenfield's purchases are tax exempt under the number #E-046-001-163.

1.14 Comparison of Bids: Bids will be compared and awarded on the basis of each individual items unit price stated in the bid.

In the event that there is a discrepancy in the bid between the unit prices written in words and figures, prices written in words shall govern.

The Owner agrees to examine and consider each bid submitted in consideration of the bidder's agreements, as hereinabove set forth and as set forth in the bid.

1.15 Questions Regarding Specifications: All questions relative to the specifications shall be directed to:

Alan Twarog  
189 Wells Street  
Greenfield, MA 01301  
413-772-1528 x6104  
[alan.twarog@greenfield-ma.gov](mailto:alan.twarog@greenfield-ma.gov)

1.16 Disputes: In the event of any dispute as to any of the terms and conditions of this contract, it shall be determined in accord with the laws of the Commonwealth of Massachusetts and the Courts of the Commonwealth of Massachusetts shall have exclusive jurisdiction of the same.

1.17 Addenda: This bid includes addenda number/numbers \_\_\_\_\_.

1.18 Bid Enclosures: Manufacturers specifications must be enclosed with the bid proposal.

1.19 Rule for Award: The bid will be awarded to the responsive and responsible bidder offering the lowest price.

**SECTION 2**  
**FORMS FOR BID**

\_\_\_\_\_  
Bidder's Name

**PROPOSAL FORM**

To the City of Greenfield, Massachusetts, (hereinafter called the "Owner") acting through its Department of Public Works, duly authorized therefore, who act solely for said City and without personal liability to themselves:

The undersigned \_\_\_\_\_, as bidder, declares that the only persons or parties interested in this bid as principals are those named herein; that the bidder has carefully examined the proposed form of Proposal and the Contract Documents (and amendments thereto); and bids and agrees, if this bid is accepted, that the bidder will furnish all equipment, materials and labor necessary for the completion of the work as specified in the Proposal, in the manner and time therein prescribed and according to the requirements of the Owner as herein set forth.

The bidder agrees that the Owner will have forty (40) consecutive days from date of opening to accept the bid, except as described in the specifications, the unit(s) at the price, therein. The bidder also understands that the Owner reserves the right to accept or reject any or all bids and to waive any informalities in the Proposals if it is in the Owner's interest to do so. The Invitation for Bids, Information for Bidders, General and Technical Specifications, and Proposal Form attached thereto, shall become a contract upon the receipt by the bidder of written acceptance of this bid by the Owner.

The bidder will take in full payment, therefore, the following price, to wit:

Item Number	Quantity	Description	Total in Figures
1.	One	Prefabricated Outdoor Public Restroom With Specified Options	

Lump Sum Price in words \_\_\_\_\_ dollars  
and \_\_\_\_\_ cents (\$ \_\_\_\_\_) \$ \_\_\_\_\_

Delivery Date: \_\_\_\_\_ Warrantee: \_\_\_\_\_

\_\_\_\_\_  
This BID includes Addenda number \* \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

\* To be filled in by Bidder if Addenda are issued.

\_\_\_\_\_  
Name of Bidder

(SEAL)

By \_\_\_\_\_  
(Signature and title of authorized representative)

\_\_\_\_\_  
(Business Address)

\_\_\_\_\_  
(City & State)

Date \_\_\_\_\_

The Bidder is a corporation incorporated in the State (or Commonwealth) of \_\_\_\_\_  
\_\_\_\_\_(Bidder must add and delete, as necessary, to make this sentence read correctly).

(Note: If the Bidder is a corporation, affix corporate seal and give below the names of its president, treasurer, and general manager, if any; if a partnership, give full names and residential addresses of all partners, and if an individual, give residential address if different from business address.)

### **CERTIFICATE OF NON-COLLUSION**

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

\_\_\_\_\_  
Signature of individual submitting bid or proposal

\_\_\_\_\_  
Name of Business

### **TAX COMPLIANCE CERTIFICATION**

Pursuant to M.G.L. Ch. 62C, Sec. 49A, I certify under the penalties of perjury that I, to the best of my knowledge and belief, am in compliance with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

\_\_\_\_\_  
Signature of individual submitting bid or proposal

\_\_\_\_\_  
Name of business

**NOTARIZED STATEMENT**

I, (name) \_\_\_\_\_

(title) \_\_\_\_\_

of (company) \_\_\_\_\_

of (address) \_\_\_\_\_

do hereby certify that the information contained herein is true, accurate and correct, to the best of my knowledge. It is agreed that any and all merchandise to be delivered hereunder, will be in conformity with the specifications set forth, including any and all amendments thereto.

Witness my hand and seal this \_\_\_\_\_ day of

\_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Signature

State of \_\_\_\_\_

\_\_\_\_\_, ss. \_\_\_\_\_, 20\_\_

Personally appeared the above named \_\_\_\_\_  
and acknowledged the foregoing statement to be true, to the best of his/her knowledge, before me.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

**SECTION 3**  
**AGREEMENT**

**AGREEMENT FOR CONTRACT DPW 23-13**

**Furnishing and Delivery of One New Prefabricated Outdoor Public Restroom**

**THIS AGREEMENT**, executed this \_\_\_\_\_ day of \_\_\_\_\_  
in the year Two Thousand and Twenty-Three.

(herein referred to as the “AGREEMENT”), by and between the City of Greenfield, Massachusetts, acting by and through its Department of Public Works, duly authorized therefore, which acts solely for said City and without personal liability to itself, party of the first part, and \_\_\_\_\_ party of the second part.

WITNESSETH, that the parties to these presents, each in consideration of the undertakings, promises, and agreements on the part of the other herein contained, have undertaken, promised and agreed and do hereby undertake, promise, and agree, the party of the first part for itself, its successors and assigns, and the party of the second part for itself and its heirs, executors, administrators, successors and assigns, as follows:

The Supplier agrees to furnish and deliver the prefabricated outdoor public restroom and all associated components, equipment, accessories, parts and supplies required to be furnished and delivered in accordance with the specifications and conditions attached hereto and made a part hereof, in strict conformity with the provisions herein contained and the Invitation for Bids, Information for Bidders, Proposal, and Specifications hereto annexed. All said Invitation for Bids, Information for Bidders, Proposal, and Specifications are hereby specifically made a part of this contract as fully and to the same effect as if the same had been set forth at length herein.

In consideration of the foregoing premises, the Owner agrees to pay and the Supplier agrees to receive as full compensation for everything furnished by the Supplier under this contract.

The Supplier’s bid price is \_\_\_\_\_.

IN WITNESS WHEREOF, the Owner has caused this instrument to be signed and its corporate seal to be hereto affixed in its behalf, and the Supplier has caused this instrument to be signed in its behalf.

**AGREEMENT FOR CONTRACT DPW 23-13**

**Furnishing and Delivery of One New Prefabricated Outdoor Public Restroom**

FOR THE OWNER,

\_\_\_\_\_

By the \_\_\_\_\_

\_\_\_\_\_

FOR THE SUPPLIER,

Witness: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By the \_\_\_\_\_

\_\_\_\_\_

(If a corporation, attach to each signed Agreement a notarized copy of the corporate vote authorizing the signatory to sign this Agreement.)

Approved as to Appropriation:

\_\_\_\_\_  
City Accountant

**Certificate of Acknowledgment of Contractor if a Corporation**

**For AGREEMENT**

State of \_\_\_\_\_)

SS:

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,

before me personally came \_\_\_\_\_

to me known, who being by me duly sworn, did depose and say as follows:

That he/she resides at \_\_\_\_\_

and is the \_\_\_\_\_

of \_\_\_\_\_

the corporation described in and which executed the foregoing instrument; that he/she knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like order he/she signed thereto his/her name and official designation.

\_\_\_\_\_  
Notary Public (Seal)

My commission expires: \_\_\_\_\_

**SECTION 4**  
**TECHNICAL SPECIFICATIONS**

**SECTION 4.**  
**TECHNICAL SPECIFICATIONS**

**CITY OF GREENFIELD**  
**SPECIFICATIONS**

**GENERAL PROVISIONS:**

All goods furnished under this contract shall meet all State, Federal and Osha standards at time of delivery. Items that exceed bid specifications will be considered to meet specifications. All items appearing in bidders regular published specifications are assumed to be included in bidders proposal. Bidders are required to furnish complete specifications with each bid and proposals shall state the number of days required for delivery from the time of the award.

The bidder will include a ‘Compliance Sheet’ indicating compliance with each listed specification. Failure to provide a “Compliance Sheet” may be cause to reject bid.

The bidder shall list on “Deviation Sheet” any variations from, or exceptions to, the conditions and specifications of this bid. This sheet shall be labeled “Deviation Sheet” and shall be attached to the bid. All variations from specifications must be listed including those items that exceed specifications. Failure to list deviations may be cause to reject bid.

All goods shall have a minimum warranty of one year against any defective parts and/or materials. The warranty shall cover all costs of parts and labor for replacement repairs. Bidder shall state on the Proposal Form any other additional extended guarantees offered.

The price quoted shall include all transportation charges full prepaid to the City of Greenfield, MA. Local, State and Federal taxes will not be included. Bidder will assume 100% responsibility for the delivery of the unit.

**SPECIFICATIONS:**

The following specifications are not meant to limit the vendor and are guidelines to minimum qualifications. Bids differing in minor detail from these specifications will be considered. Differences shall be correctly stated and described in detail by the bidder.

The following options shall be provided:

1. Single occupant public toilet with 304 stainless steel posts, panels, louvers, roof and toilet; aluminum front door; skylight; 40W heat trace; interior & exterior LED lighting with photoeye and motion sensor control and occupancy counter; interior 32oz hand sanitizer dispenser and lockable 2-roll toilet paper dispenser; AC power; and left hand (LH) door swing and left hand (LH) hand wash.
2. Prefabricated outdoor restroom template
3. Foundation mounting hardware
4. Baby changing table
5. Trash can

6. Sharps container
7. Cold weather toilet upgrade
8. Recessed hand wash with cold air hand dryer, tempered water, and soap dispenser

## **FABRICATED ENGINEERED STRUCTURES**

### **PART 1: GENERAL**

#### **1.1 DESCRIPTION**

This section includes all material and labor required in the fabrication and placement of the pre-fabricated outdoor restroom as shown on the structural drawings.

#### **1.2 SCOPE**

- A. Building materials shall be supplied by Portland Loo Inc. 2550 NW 25<sup>th</sup> Place Portland, OR 97210, or approved equal.
- B. Generally, site work will include site preparation, installation of underground plumbing and electric conduit, foundation and pad construction, and building placement. This work shall be done by the Owner.
- C. Requests for substitution shall be submitted to the Owner a minimum of 7 days prior to bid date. The request shall be a complete package as noted below:
  - i. Documents to be in CSI format
  - ii. Product literature/or brochure illustrating appearance, layout, building shape, materials, and assembly manual
  - iii. Certificate from manufacturer that the proposed substitution is in compliance with all provisions of this specification
  - iv. List of five (minimum) completed projects, including contact names and phone numbers, that are similar in scope and magnitude
  - v. Proof of at least five years of experience as a pre-engineered building supplier

#### **1.3 DOCUMENTATION**

Provide all necessary documents for approval and installation.

- A. Construction documents include:
  - i. Detailed plans
  - ii. Specifications
- B. Floor plan dimensions: 6'-4" W x 10'-7" L x 8'-9 1/2" Tall

## **1.4 REFERENCES**

- A. ASTM A-240
- B. ASTM A-554
- C. ASTM A650 Grade 60
- D. ADAAG
- E. CBC
- F. CSFM
- G. ANSI
- H. ASME
- I. MILITARY SPECIFICATION V-29193

## **1.5 DESIGN CRITERIA**

- A. Members to withstand dead load, design loads and wind loads as calculated in accordance with the latest version of state and local building codes.
- B. Portland Loo, Inc. reserves the right to make substitutions of equivalent materials and items without notice.
- C. Design loads: Refer to drawings
- D. Accessibility: Design shall meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and Massachusetts Building Codes.

## **1.6 SUBMITTALS**

- A. Indicate profiles, sizes, spacing(s), location of structural members, connections, attachments, openings, fasteners, loads and reinforcements.
- B. Indicate wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, and method of installation.
- C. Submit manufacturer's installation instructions, manuals, and data sheets.
- D. The "Portland Loo Restroom" building and all its associated components, or approved equal, shall be warranted against defects in materials and workmanship for a period of one year from date of final acceptance.

## **1.7 WORK SUPPLIED BY INSTALLER**

- A. The items noted as “*supplied by installer*” shall be supplied by the building installer, which shall be the City of Greenfield.
- B. Refer to drawings for quantities, dimensions, locations, and installation methods for items described in this section.
- C. The installer shall supply any parts not listed in the Portland Loo Inc. submittal, or approved equal, including but not limited to items specified in the final plans and items required by building codes.
- D. The installer shall be responsible for ensuring that the concrete foundation and slab are adequate for the site conditions and the purpose for which the building and foundation/slab are intended.
- E. All equipment, labor, and trades to unload the building, excavate the site, install the underground plumbing and electrical conduit, build concrete forms, supply and install the reinforced concrete footings and slab, and install the building and fixtures.
- F. 1-1/2” minimum water line is required to supply the toilet and hand wash facility shall be included. At 1-1/2”, the water line must have no longer than 100’ run to the water meter. (All dimensions will be site specific).
- G. 4” ABS sanitary sewer line is required to service the restroom shall be included.
- H. The building installer is responsible for the supply and installation of all other items indicated on final plans or required by building codes.

## **PART 2: PRODUCTS**

### **2.1 CONCRETE**

Slab and footings *supplied by installer* – 4000 psi strength at 28 days, ASTM A615 grade 60 rebar reinforcement.

### **2.2 STEEL**

- A. Prefabricated building frame posts supplied by Portland Loo Inc., or approved equal. The prefabricated steel frame is to be constructed of 3” ASTM 304L stainless tube steel.
- B. Prefabricated roof system supplied by Portland Loo Inc., or approved equal.
  - i. The prefabricated roof will consist of 3/16” ASTM A304L stainless steel plate, with 1/4” ASTM A304L stainless steel plate formed around the exterior for fascia.
  - ii. The prefabricated roof system will include (4) 2000# lifting eyes that will act as pick points for the prefabricated roof system. In addition, (4) 1” x 3” slotted drains for water runoff shall be included.
- C. Wall panels supplied by Portland Loo Inc., or approved equal.
  - i. The wall panels will be 3/16” ASTM A304 stainless steel structural plate steel.

- ii. All wall panels to be channel formed around the perimeter and bolted to the prefabricated building frame.

## 2.3 OPENINGS

A. Louvers supplied by Portland Loo Inc., or approved equal.

- i. The frame and louvers will be fabricated from 1/4" 304/304L ASTM A240A stainless steel plate. Louver panels will be bolted to steel fabricated frames and columns.

B. Skylight supplied by Portland Loo Inc., or approved equal.

- i. Pre-assembled 304/304L ASTM A240A stainless steel frame with 1/8" translucent double pane 1/8" tempered glass. Base frame to be seal welded to roof and glass panel secured using 304/304L ASTM removable cover plate with drip edge.

C. Main door supplied by Portland Loo Inc, or approved equal.

- i. 3/16" 304/304L ASTM A240A stainless steel plate with formed edges around perimeter, 3/16" formed channel stiffeners, and an integrated door louver fabricated from 3/16" 304/304L ASTM A240A stainless steel plate.
- ii. Door hinges shall be barrel hinges with zerk fittings welded to 1/4" x 3" x 5" plates. Hinges shall be attached with 3/8-16 vandal resistant security screws.
- iii. Lever lock shall be Best HD door lever 9k series complies with ADA and Massachusetts Fire Safety Code. Dormitory locking feature to keep door from locking after departure. Satin chrome finish. Installation on-site with supplied hardware.
- iv. Door closer shall be Norton 9540 689 inside surface mounted door closer with fast power adjust, shall comply with ADA requirements. Door closer shall be tested and certified under ANSI Standard A156.4, grade one.

D. Mechanical room doors supplied by Portland Loo Inc., or approved equal.

- i. 3/16" ASTM A304 stainless steel plate.
- ii. Door hinges shall be type 304 stainless steel piano hinge without holes. .075" thick, 3" width, 1/4" pin diameter. Attached with stainless steel screws.
- iii. Locks to be (2) Stanley Best 8T-2-7-L-STK-626 Grade 1 Cylinder/Blank Deadbolt with a 2-3/8 backset in satin chrome. Cores to pass ANSI/BHMA A156.11, grade 1 testing. Satin chrome finish to accept Best large format IC cores by installer. Qty 1 per door.

## 2.4 PLUMBING

- A. Toilet supplied by Portland Loo Inc., or approved equal.
  - i. Acorn Dura-Ware 2105 Series wall hung, 16-ga. type 304 stainless steel. Seamlessly welded from a one piece vandal resistant unit. Fully enclosed trap, siphon jet flushing action, and integral elongated seat. Designed for low consumption with appropriate flush valve.
  - iii. Designed to meet or exceed ASME 112.19.3-2008 and CSA B45.4-2008 for hydraulic performance and ASME 112.19.3-2008 for physical dimensions.
  - iv. Exposed surfaces polished to a satin finish.
- B. Flushometer supplied by Portland Loo Inc., or approved equal.
  - i. Sloan manual concealed flushometer for wall hung water closets, 14.5” rough in, rear spud, offset activation, 1.28 gpf/4.8 Lpf, wall box
  - ii. Valve body, cover, tailpiece and control stop shall be in conformance with ASTM alloy classification for semi-red brass.
  - iii. Valve shall be in compliance to the applicable sections of ASSE 1037, ANSI/ASME 112.19.2, and military specification V-29193.
  - iv. ADA compliant non-hold-open feature type actuator.
- C. Exterior hand wash station supplied by Portland Loo Inc., or approved equal.
  - i. Acorn BPH chrome plated brass filler spout with push button actuator and a pneumatic valve.
  - ii. Acorn 03-M pneumatic metering valve
  - iii. Acorn PBH air-trol push button requires less than 5 lb force operation.

## **2.6 FURNISHINGS**

- A. Grab bars supplied by Portland Loo Inc., or approved equal.
  - i. WH Cress 6800 series stainless steel grab bars, 4-ga, satin finish 1-1/2” outside diameter 22-ga round snap on concealed mount.
- B. Toilet paper dispenser supplied by Portland Loo Inc., or approved equal.
  - i. One, 2-roll 12-ga 304 stainless steel, rolling dispenser with 1” long, lockable.
- C. Hand sanitizer dispenser supplied by Portland Loo Inc., or approved equal.
  - i. McMaster 2783K26 chrome-plated gravity-flow valve fed from interior reservoirs.

- ii. High impact polystyrene soap vessel liner, chrome-plated brass soap valve with ABS mechanism that requires less than 5 lbs of force.
- iii. 32oz bottle soap reservoir secured inside locked back water closet space.

D. Signs supplied by Portland Loo Inc., or approved equal.

- i. Restroom entry signs shall be fastened to exterior walls alongside entry doors to meet ADA requirements, Hand Sanitizer sign on inside above hand sanitizer pump, Hand Wash sign on outside above hand wash control valve.
- ii. Graphics and grade 2 Braille on injection molded plastic signs, black or blue color. Unisex design.
- iii. Dimensions: Qty (1) 9" wide by 8" tall by 1/8" thick.
- iv. Dimensions: Qty (1) 8" wide by 2" tall by 1/8" thick "Hand Sanitizer" sign
- v. Dimensions: Qty (1) 8" wide by 2" tall by 1/8" thick "Hand Wash" sign

## **2.7 FINISHES**

All exposed stainless steel and steel surfaces are sandblast finish and two coats of Tiger Drylac Anti-graffiti Powder coat clear finish or one coat exterior color and one coat Tiger Drylac Anti-graffiti Powder coat clear finish.

## **2.8 ELECTRICAL**

Electrical system and components supplied by Portland Loo Inc. – Furnished and wired by electrical contractor licensed in the state of Oregon, or approved equal. Wiring, conduit, electrical enclosures UL listed.

- A. Exterior lighting – LED Flexlight light rope, 3 watts per foot. Blue lighting.
- B. Interior lighting – Two 24 inch Current USA TrueLumen Pro Deepwater Blue 453nm Actinic LED Strip Lights.
- C. Lighting control – Photoeye – 24 VDC Wattstopper Model #EM-24A2.
- D. Electrical heat trace and thermostat – Heatline Kompensator heat trace with 6 watts per foot and 24V DC powered. Heat trace controlled by Engenity Solitat II Solid State DC thermostat set to close at 40 deg Fahrenheit or below, 6V to 24V operation and 20Amp load capability.
- E. Meter Panel (non-solar units) – Cooper AW114TB UL 414 listed and complies with C12.7.
- F. Sola 24 V DC power supply 110V AC input, 240 Watt – model SDN 10-24-100C (non-solar units).

- G. Electrical Enclosure – NEMA (include wording for grounding by others) including breakers and fusing, wire terminations, control relays and Sola 24V DC power supply (non-solar units).

## **PART 3: EXECUTION**

### **3.1 SITEWORK**

- A. Refer to site plan.
  - i. Structural fill per geotechnical reports (by others).
  - ii. Site grading and structural fill (by others).
  - iii. Building foundation structural fill (by others).
  - iv. Structural fill to bring the site to grade and compaction (by others).
  - v. Structural fill for footing foundation and slab grading per plan (by installer)
  - vi. Sidewalks (by installer).

### **3.2 BUILDING ERECTION**

- A. Verify site conditions are prepared for building installation.
- B. Do not field cut or alter structural members without approval of architect or engineer.
- C. Install in accordance with manufacturer's instructions.

**END OF SECTION**

**APPENDIX A**  
**STRUCTURAL DRAWINGS**

# Hk9'DCFH@5B8'@CC

GFI 7H F5@8F5K B; G

## UPÒÒVÁ@ÒÒY

OEEWOUXOUÁJPÒON  
 OEEWOSUUÁUSOE  
 OEEWOUYVÓUQUÁOSOXCEWPUÁOUUPVÁEÓÁUOPVÁUOÓ  
 OEEWOUYVÓUQUÁOSOXCEWPUÁOOSÁEÓÁSOZÁUOÓ  
 OEEWUUUOÁSEYUW  
 OEEWUUUOÁSEYUWÁ QPÁJUSOEÁUOEÓŠU  
 OEEWOUVÓUQUÁOONWPAKQY  
 OEEWOUVÓUQUÁOONWPAKQY UÁ  
 ÚFEWOUSWT PÁEÓÁOCEÁSEYUW  
 ÚGEWOUUPVÁOUU  
 ÚHEWOUWPÓCEWPAEÓÁEÓPUÁÓUSVÁCEVÓUB  
 ÚFEWUSWT OÓÁOSUUÁUSOE  
 ÚGEWUSWT OÓÁOONCES  
 OFEWWOSOONVÓSAJOPOT CEWÓAAA

## ÒÒUOPÁ@OUÛT CEWUP

FÉT ÒONVÁÓWSÖEÓÁOUÒÒU  
 GEŠQÒÁŠUCÉÁMGEÁUØ  
 HEÁ Q ÓÁŠUCÖK  
 ÁÁÁKMI ÁT ÚP  
 ÁÁÁÓYUUÙWÜOÁMÖ  
 ÁÁÁUQISÁOCEÓOUÛYÁMÖ  
 ÁÁÁVÓUBCEÁUÜOUÙWÜOÁMÉEÁEÍ  
 I ÉÁUOQT OÁŠUCÖK  
 ÁÁÁUQOÁOŠCEUÁMÖ  
 ÁÁÁQMFÈ  
 ÁÁÁQMFÈ Í  
 ÁÁÁQÁMFÈ JI  
 ÁÁÁUáÁMÉÈ FE  
 ÁÁÁUáFÁMÉÈ FJ  
 ÁÁÁUÖOÁMÖ  
 ÁÁÁUÁMÁ È  
 Í ÉÁONVÁEŠSUY CEÓÁUUSÁOCEUQ ÓÁUÜOUÙWÜOÁEÍ €ÉÁUØ  
 ÁÁÁCOM €€ÁUØ  
 Í ÉÁUPVÜOONVUÁUÁKÓUQYÁOOUOPÁJCEJCE ÒVÓUÙÁUPUY PÁ QP  
 ÁÁÁEONVCEÁUQOÁOUPOQWPUÁEÓÁEÓUWÜOÁEONVCEÁUQO  
 ÁÁÁJCEJCE ÒVÓUÙÁUAPUNÁYÓOÓOÁOOUOP

## ÖÒPÒÜCEŠÁPUVÒU

FÉÁY ÓOPVÁÁ ÈEFHÁ•  
 CEÁUWCEÜOÁUUVCEÖOÁM FÈ  
 HEÁEŠÁUWÜWÖWÜCEÁUVOŠÁUÁOÁOCEÜOCEÓOÁEÓÁUÜOONVÓÁEÁEÓOUÜOCEÓOÁ QPÁEÜOÁ CEWCEŠ  
 ÁÁÁFI VPÁOQWPAEÁEY ÈEÁEŠÁUOEÓŠEŠUWXOÜÜEÁEÓÁUÜUOÁUÁOÁHE ÁUÁFÍ ÁUVEP SÓUÙÁVNOŠEÁ ÁMÁEÁ•ã  
 I ÉÁUWÜWÖWÜCEÁMÓEÓÁHE ÁUÁFÍ ÁUVEP SÓUÙÁVNOŠ  
 Í ÉÁEÓPUÁÓUSVÁFÉÁYÁ ÁÁUQ UUU PÁVQCEÁRÓÁEÓPUÜÜ  
 Í ÉÁEŠÁY ÓŠOCEÓÁUÁOÁOUPOÁYÁOÜVCEOÁY ÓŠOOUÈY ÓŠOÁEŠSÓUÁOŠOONVUÜOÁE CEÓUÜCEÁUÁOÁ €  
 ÁÁÁÁ•ÁŠUY ÁYÖÜUOÖP  
 Í ÉÁEŠÁÓYUUÜOÓÁUSVÁEÓÁUÜOY UÁUÁOÁCEUÜOÜÁOONVCEVÁZUÜÁPÓYÁUQÁOQÜE  
 Í ÉÁUQONÁWUÁUÁOÁOÉVÉÁUÜOQUÁEÓÁVCEP SÓUÙÁVNOŠHEGE  
 JÉÁEŠÁT CEÓUÜCEÁUÁOÁUOEÓÁOŠCEVNOÁEÓÁUUY OOUÁOUCEVÖO  
 FEÁEŠÁUWÜWÖWÜOÁUÁOÁOCEÜOCEÓOÁUOÁUQOÁUPCEŠÁOÁOUPOÁEÁUPUÜÁUÁOCEÜOCEUÜÜ  
 ÁÁÁEÓOPÜOÓÁUÁEÁUÜUXOÓÁYÁPOÁOWSÖEÓÁEÓÁEÓOCEÓOÁOQWPAJÁVPOÁOQYÁZUÜÁ PÖP  
 ÁÁÁVPÓÁEÜVCEŠCEWPAEÁEŠÁOÖWÜ

F9J-G-CB.  
 758 : @9 B5A 9.

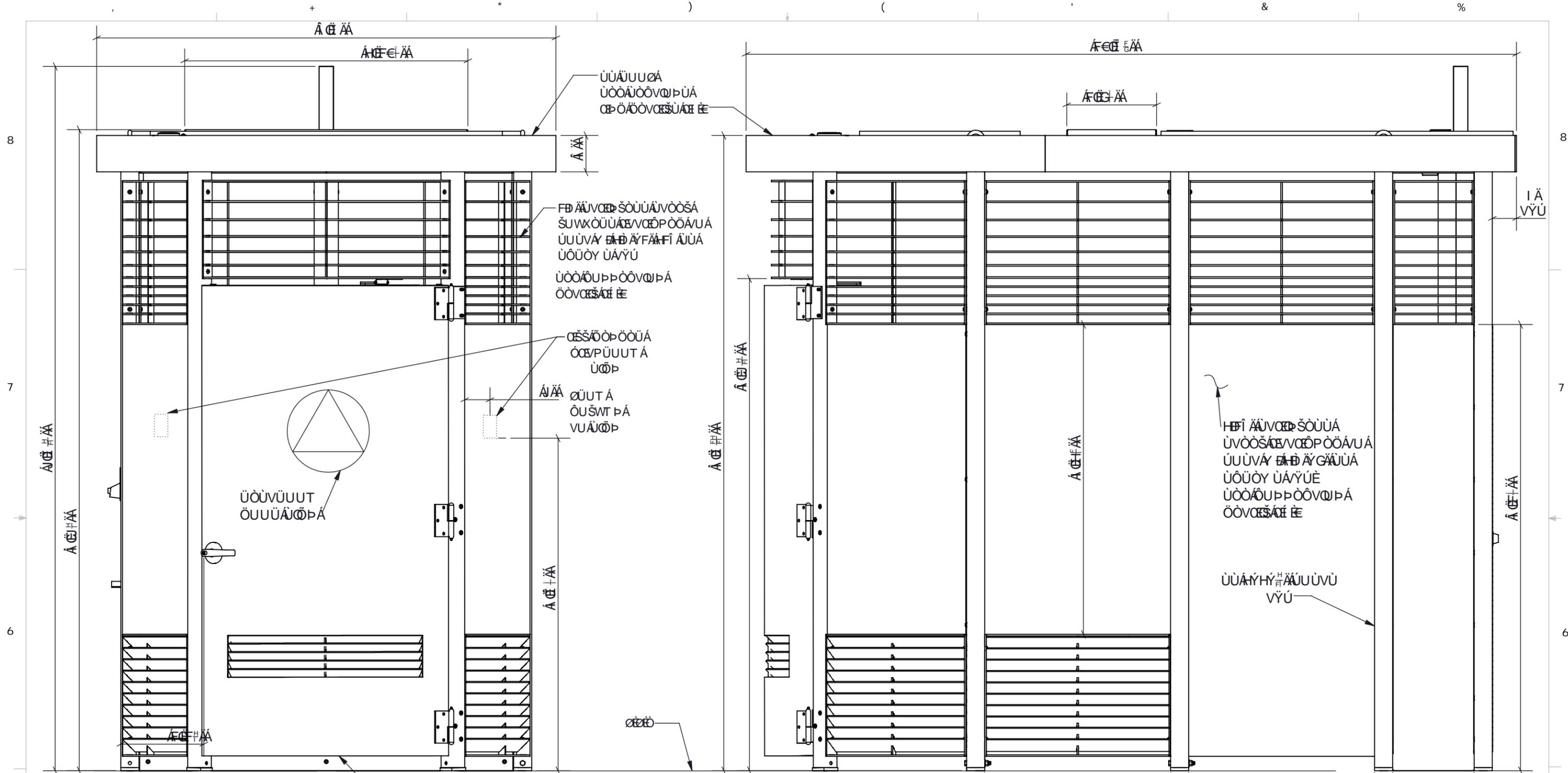
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 5BMF 9DF C8I 7H<CB -B D6FH<CF 5G'5 K <C@9 K H<CI H H<9 K F H H9B D9FA -GG-CB C: A 5889B: 56F =75H<CBZ -B7 -G DF C<-6+98"



I B@9GGCH<9FK -G9 GD97=-98.	85H9	B5A 9
8-A 9BG-CBG 5F 9 -B -B7<-9G 5B8	89G# B98	%#&#.#&\$&\$
A=@A 9H9F G OAA QZ HC@9F 5B79G.	8F5K B	%#&#.#&\$&\$ ? 7CI F-5B
=B7<9G	A=@A 9H9F G	7<97798
"L": "±\$%"	Q.Q": "Q: Q	AA #88#MM
"LL": "±\$%"	Q.LL": "Q: S" Q	9B: "5DDF"
"LLL": "±\$%"	Q.LLQ. Q: S" Q	A: ; "5DDF"
5B: 1 @SF.		AA #88#MM
A 57<-B9. ±\$") S2 698B. ±%\$\$		AA #88#MM
; 9CA 9HF =7 HC@9F 5B7-B: D9F.	E "5"	
5GA 9IM(*)!- (		
A 5H9F -5@		
8C B<CHG75@9		

**MADDEN FABRICATION** &) '\$ BK '&) H' D'UW  
 DcfhUbXz.CF '- +&/%\$  
 a UXZUVWta  
 H-H@.  
 7CJ 9F 'G<99H  
 G=N9. 8F5K =B: '  
**6** 5\$"\$  
 G75@. %%& | K 9# <H  
 G<99H %C: %)  
 F9J.  
 5





F9J-G-CB. 5  
758 : @9 B5A 9. %\$%&& !>CV'BM7

F  
ÜGEE  
F  
ÜGEE  
ÜÜPVAÖŠÒXÆ/ΩPÁΩY

G  
ÜGEE  
ÜΩPVAÖŠÒXÆ/ΩPÁΩY



I B@9GCH<9FK -G9 GD97 = -98.	85H9	B5A 9
8-A 9BG-CBG 5F 9 -B -B7 -9G 5B8	89G# B98	? 7CI F-5B
A @@A 9H9F G OAA QZHC@9F 5B79G	8F5K B	%&#& #&S&S ? 7CI F-5B
=B7<9G	7<97798	AA #88#MM B#5
"L : : ±\$%"	9B: " 5DDF"	AA #88#MM B#5
"LL : : ±\$%"	A : : " 5DDF"	AA #88#MM B#5
"LLL : : ±\$%"	E "5"	AA #88#MM B#5
5B: 1 @SF.		
A 57<-B9 ±\$%) S2 698B. ±%\$\$		
: 9CA 9HF =7 HC@9F 5B7-B: D9F.		
5GA 9IM(*) I- (		
A 5H9F -5@ AUWYUJ ObchgyWVWYXZ		
8C BCHG75@9		

**MADDEN FABRICATION** & ) \$'BK `&) H' D'UW  
DcfhUbXz'CF '- +&%%\$  
a UXZJW'Vta

H-H@.

9LH9F -CF '9@J 5H-CBG: FCBH/ F# <H'  
G-B9

G=N9. 8F5K =B: ' .  
**6** 5&"\$

F9J. 5  
G75@. %% K 9# <H.) & (%%) % G<99H' 'C: %)

DF CDF =9H5F M5B8 7CB: =89BH-5@ "H<9 -B: CFA 5H-CB 7CBH5-B98 -B H<-G8F5K -B: "G H<9 GC@9 DF CD9F HMC: A 5889B: 56F =75H-CBZ -B7 -5B MF 9DF C8I 7H-CB -B D6FH'CF 5G'5 K <C@9 K #<CI H H<9 K F #H9B D9FA -GG-CB C: A 5889B: 56F =75H-CBZ -B7 -G DF C<-6+98"



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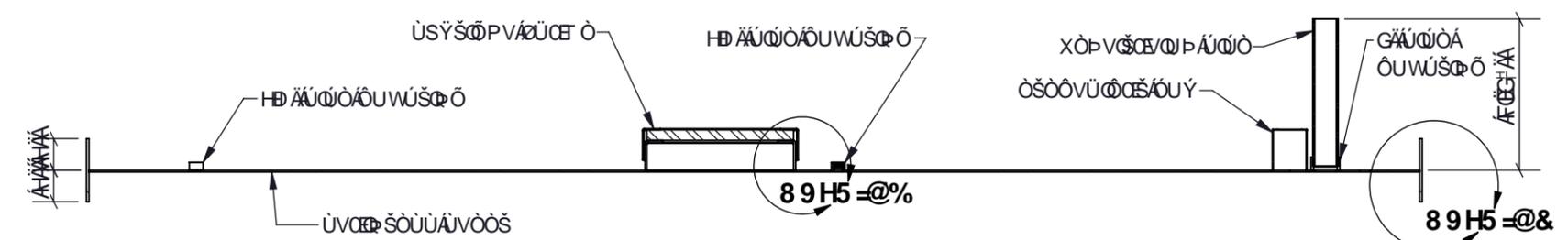
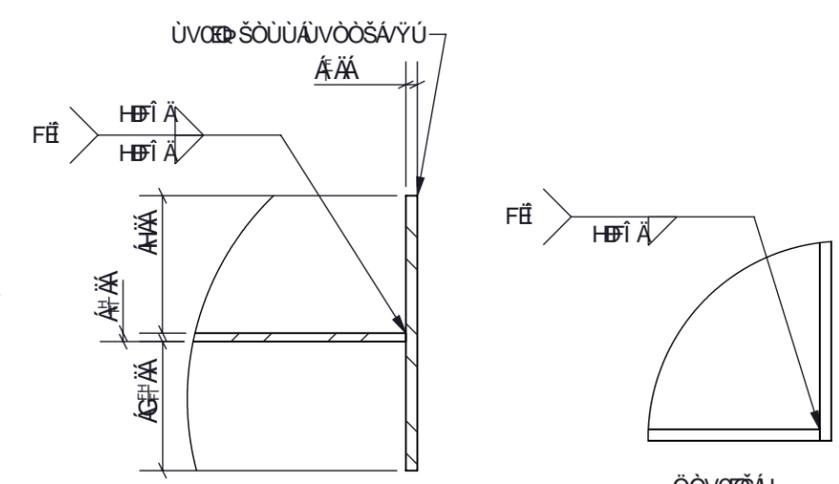
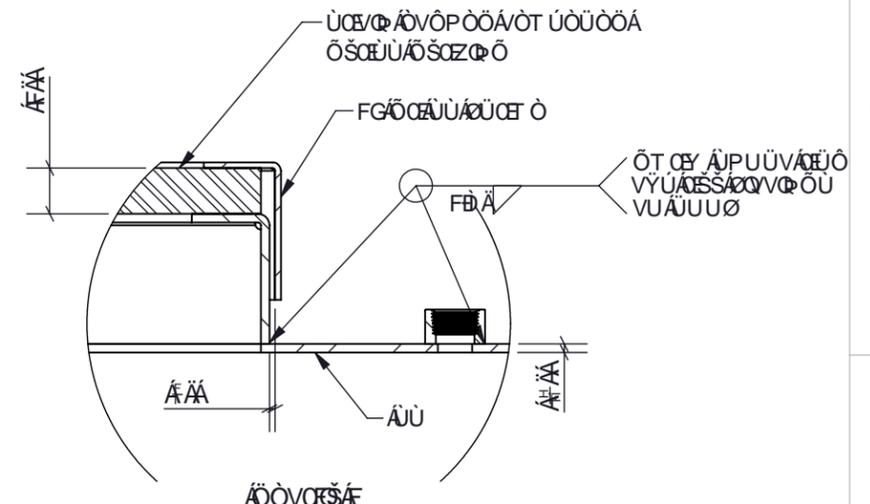
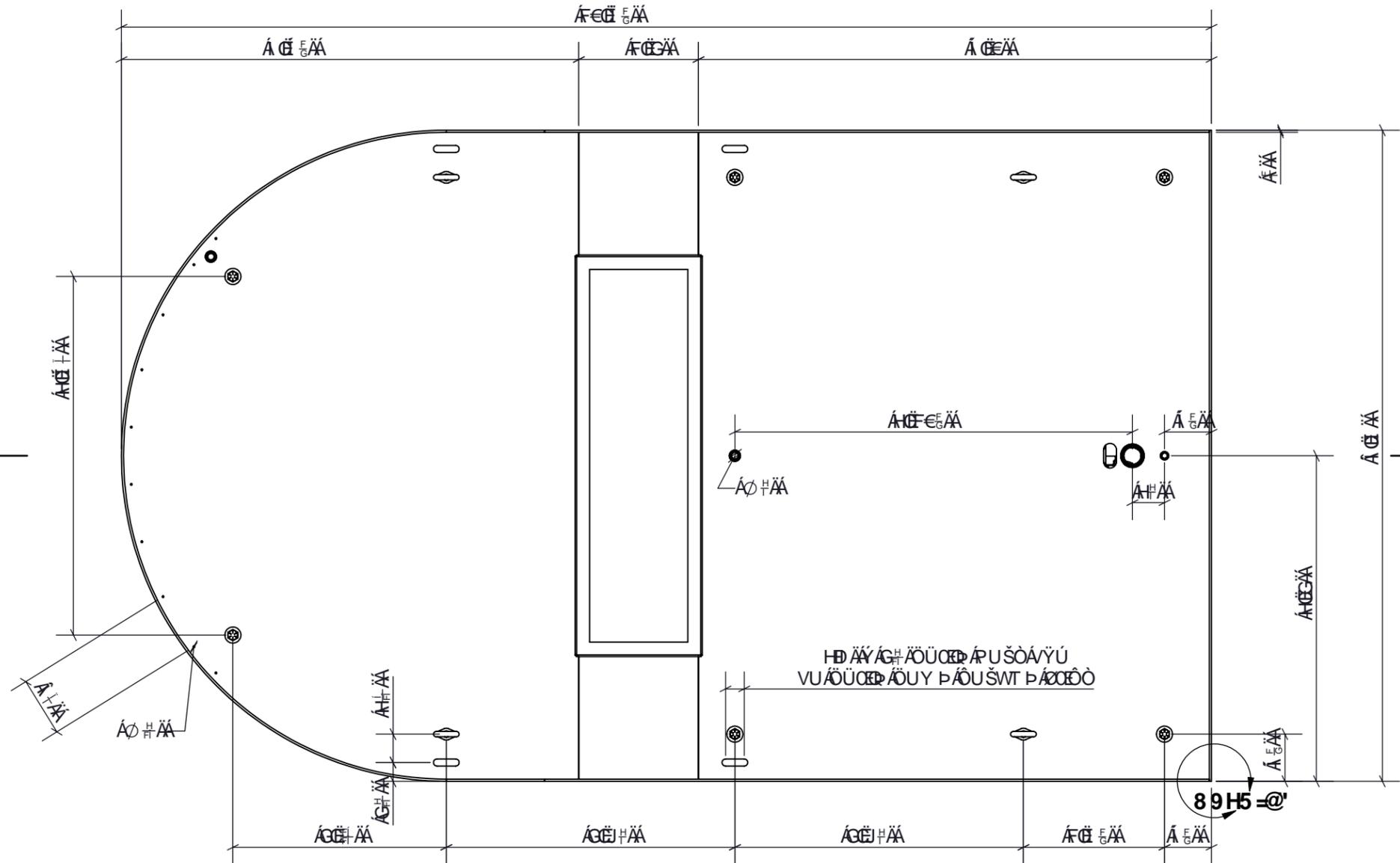
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F9J-G-CB. 5  
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1 B@9G CH<9FK -G9 GD97 = -98.	85H9	B5A 9
8-A 9BG-CBG 5F 9 -B7-9G 5B8	89G# B98	? 7CI F-5B
A=@A 9H9F G OAA QZHC@9F 5B79G	8F5K B	%&#& #&S&S ? 7CI F-5B
=B7<9G A=@A 9H9F G	7<97798	AA #88#MM B#5
"L : : ±\$%" Q.Q : : Q' Q	9B: "5DDF"	AA #88#MM B#5
"LL : : ±\$%" Q.L.O. Q±\$% Q	A: : "5DDF"	AA #88#MM B#5
"LLL : : ±\$%" Q.L.L.O. Q±\$% Q	E "5"	AA #88#MM B#5
5B: 1 @SF.		
A 57<-B9 ±\$%) S2 698B. ±%\$S		
: 9CA 9HF =7 HC@9F 5B7-B: D9F.		
5GA 9IM(*) 1- (		
A 5H9F =5@ AUYUJU ObchgdYVWYXZ		
8C BCHG75@9		

**MADDEN FABRICATION** & ) '\$ BK (&) H' D'UW  
 DcfhUbXz'CF '- +&%\$  
 a UXZU"Vta

H-H@.  
 FCC: @5MCI H

G=N9. 8F5K =B: '  
**6** 5("\$

G75@. %% K 9= <H.) & (%%) % G<99H) 'C: %

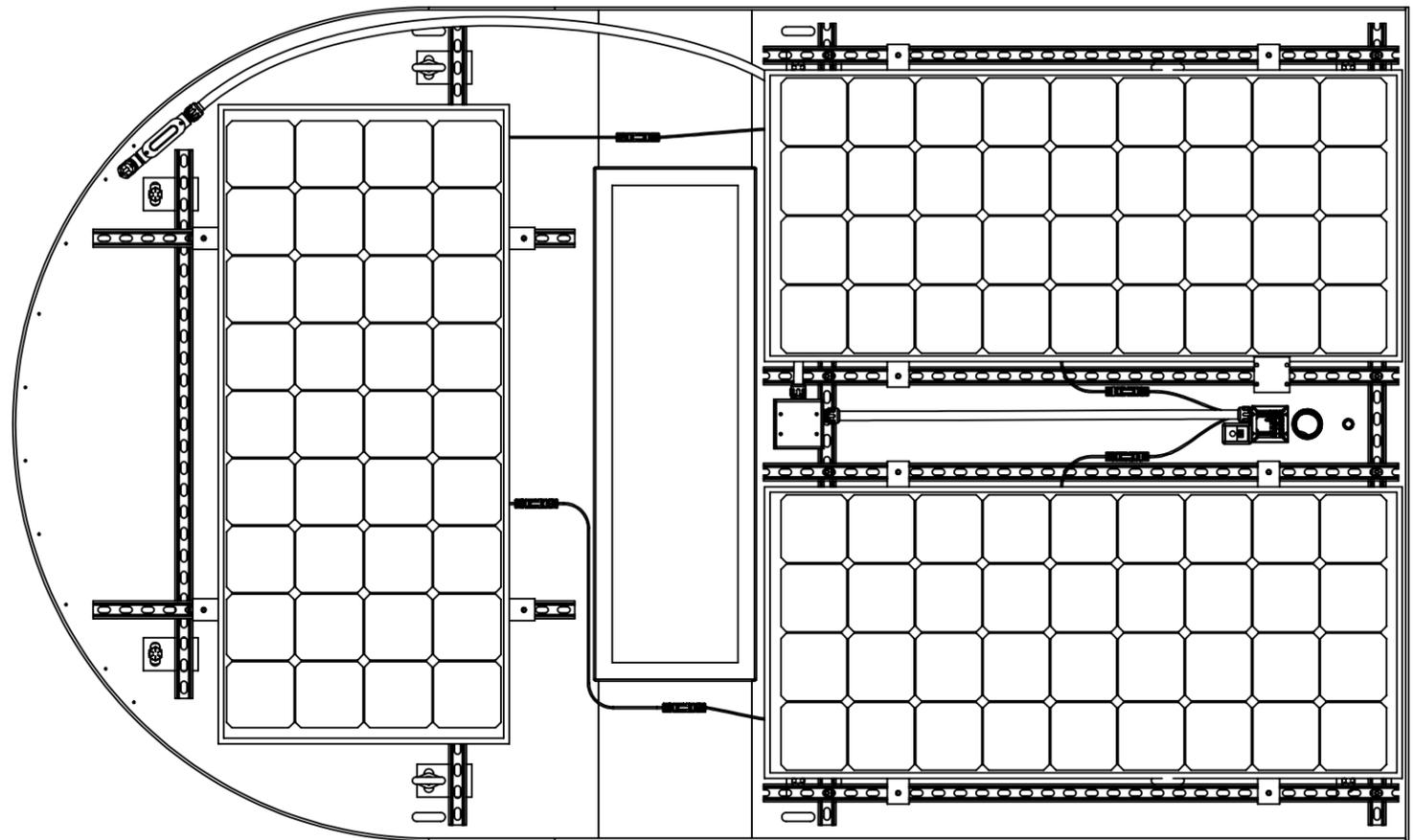
F9J. 5

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ÜUUØŠŒÿUWÁ QP ÁU ŠŒÿÁŮŒ ÒŠÙ

F9J -G-CB.  
5

758 : @9 B5A 9.  
%\$%\$&&(!>CV'BM7



DF CDF =945F M5B8 7CB: =89BH5@ "H<9 -B: CFA 5H-CB 7CBH5-B98 -B H<-G8F 5K -B: -G H<9 GC@9 DFCD9F HMC: A 5889B: 56F =75H-CBZ -B7- 5BMF 9DFC8I 7H-CB -B D6FH'CF 5G'5 K <C@9 K H<CI H H<9 K F H H9B D9FA -GG-CB C: A 5889B: 56F =75H-CBZ -B7 -G DFC <-6+98"

I B@9G CH<9FK -G9 GD97 = -98.	85H9	B5A 9
8-A 9BG-CBG 5F 9 -B -B7< 9G 5B8	89G# B98	? 7CI F -5B
A @@A 9H9F G OAA QZ HC@9F 5B79G.	8F5K B	? 7CI F -5B
=B7<9G : E57H-CB5@	7< 97798	AA #88#MM B#5
"L : : ±\$%" ±%#%	9B: " 5DDF"	AA #88#MM B#5
"LL : : ±\$%"	A: : " 5DDF"	AA #88#MM B#5
"LLL : : ±\$%"	E "5"	AA #88#MM B#5
5B: 1 @5F.		
A 57<-B9 ±\$") S2 698B. ±%\$\$		
; 9CA 9HF =7 HC@9F 5B7-B: D9F.		
5GA 9IM(*) 1- (		
A 5H9F -5@ AUWYJU ObchgdYWYXZ		
8C BCHG75@9		

**MADDEN FABRICATION** &) '\$ BK ' &) H' D'UW  
DcfhUbXz'CF '- +&%'\$  
a UXZUV'Wta

H-H@9.  
FCC: @5MCI H'K 3'GC@5F 'D5B9@G

G=N9. 8F5K =B: '.	F9J.
6 %\$%\$&(<	5
G75@9. %%" K 9= <H.) &,%%)%+ G<99H* 'C: %)	



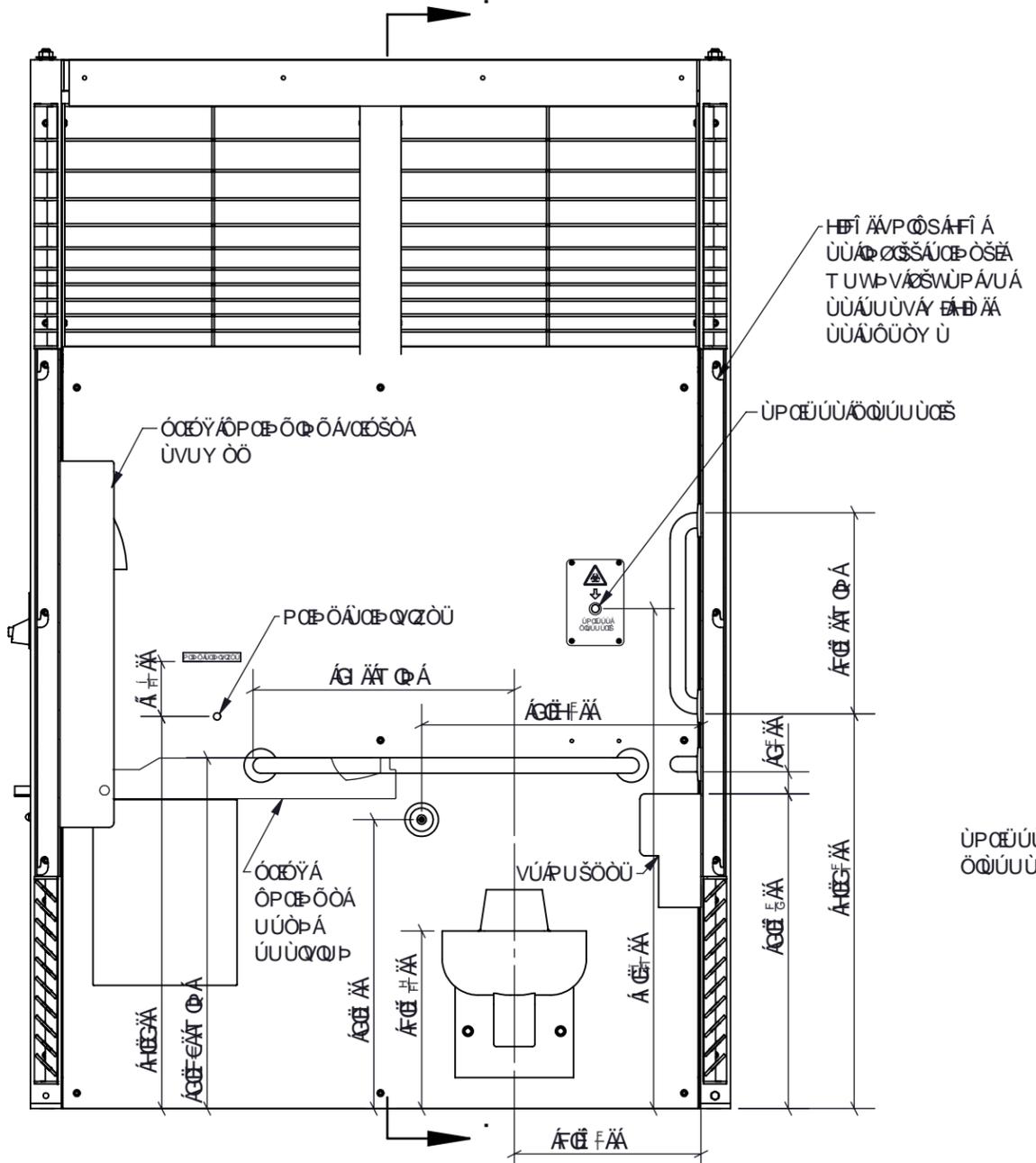
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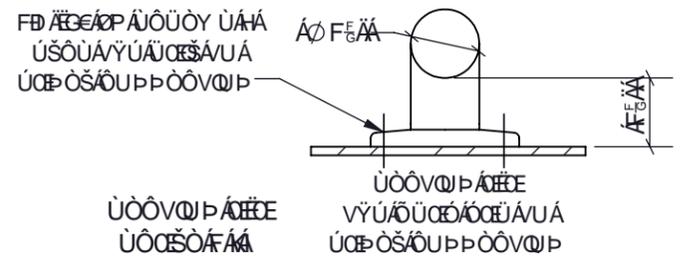
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F9J-G-CB. 5  
758 : @9 B5A 9.  
%\$%\$&& !>CV'BM7



**F**  
ÓÏ ËË  
**Υ ÇΕΝΟΥΑΪΣΥ Û ÒΝΑÛ ÇΣΠ Ò**  
FË BÄ Ö Á Æ Ç ΕΑΥ ÇËΣÁÛÁ  
ÛΣÁ ÆÏ ÁÁÛÛ

ÇËΣÁÛ ÇÏÇÓÇÛÁ  
ÓÛ ÛΣÏÁ ÇΠÇÓÓÁ ÆÇÓÁ  
VÛÁ ÇΠÛÇΠÇÓÁ ÛÛÓÁ  
ÛÇÏ ÇÁÁÛ ÇVÁΣÛÇ



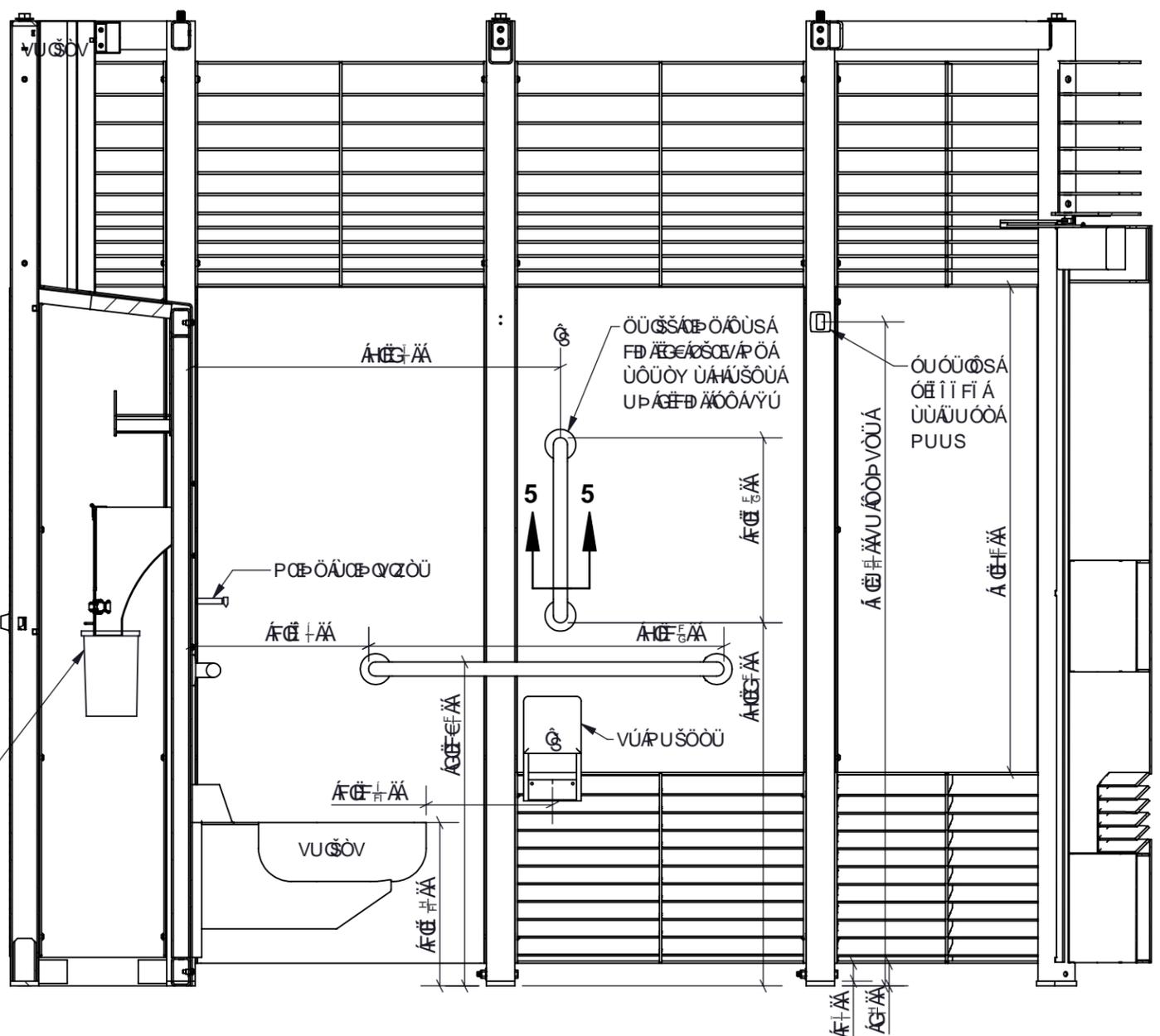
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8

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6

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**G**  
ÓÏ ËË  
**Υ ÇΕΝΟΥΑΪΣΥ Û ÒΝΑÛ ÇΣΠ Ò**  
FË BÄ Ö Á Æ Ç ΕΑΥ ÇËΣÁÛÁ  
ÛΣÁ ÆÏ ÁÁÛÛ



1 B@9G CH<9FK -G9 GD97 = -98.	85H9	B5A 9
8-A 9B G-CBG 5F 9 -B -B7< 9G 5B8	89G# B98	? 7CI F-5B
A @A 9H9F G O A Q HC@9F 5B79G.	8F5K B	%&#& #&S&S ? 7CI F-5B
=B7< 9G	7< 977 98	AA #88#MM B#5
"L": ±\$%" Q.O": Q: Q	9B: "5DDF"	AA #88#MM B#5
"LL": ±\$%" Q.LLO: Q.S" Q	A: "5DDF"	AA #88#MM B#5
"LLL": ±\$%" Q.LLQ: Q.S% Q	E "5"	AA #88#MM B#5
5B: 1 @F.		
A 57<-B9 ±\$%) S2 698B. ±%\$\$		
: 9CA 9HF =7 HC@9F 5B7-B: D9F.		
5GA 9IM(*) 1- (		
A 5H9F -5@ A UUYU J ObchgyWVWYXZ		
8C BCHG75@9		

**MADDEN FABRICATION** & ) \$'BK `&) H' D'UW  
DcfnUbXz'CF' - +&)%\$  
a UXZU"Vta

H-H@9.  
-BH9F -CF 'G97H-CB 'J -9K G

G=N9. 8F5K =B: ' .  
**6** 5\*"\$

F9J. 5  
G75@9. %% K 9= <H.) & (%%) % G<99H, 'C: %)



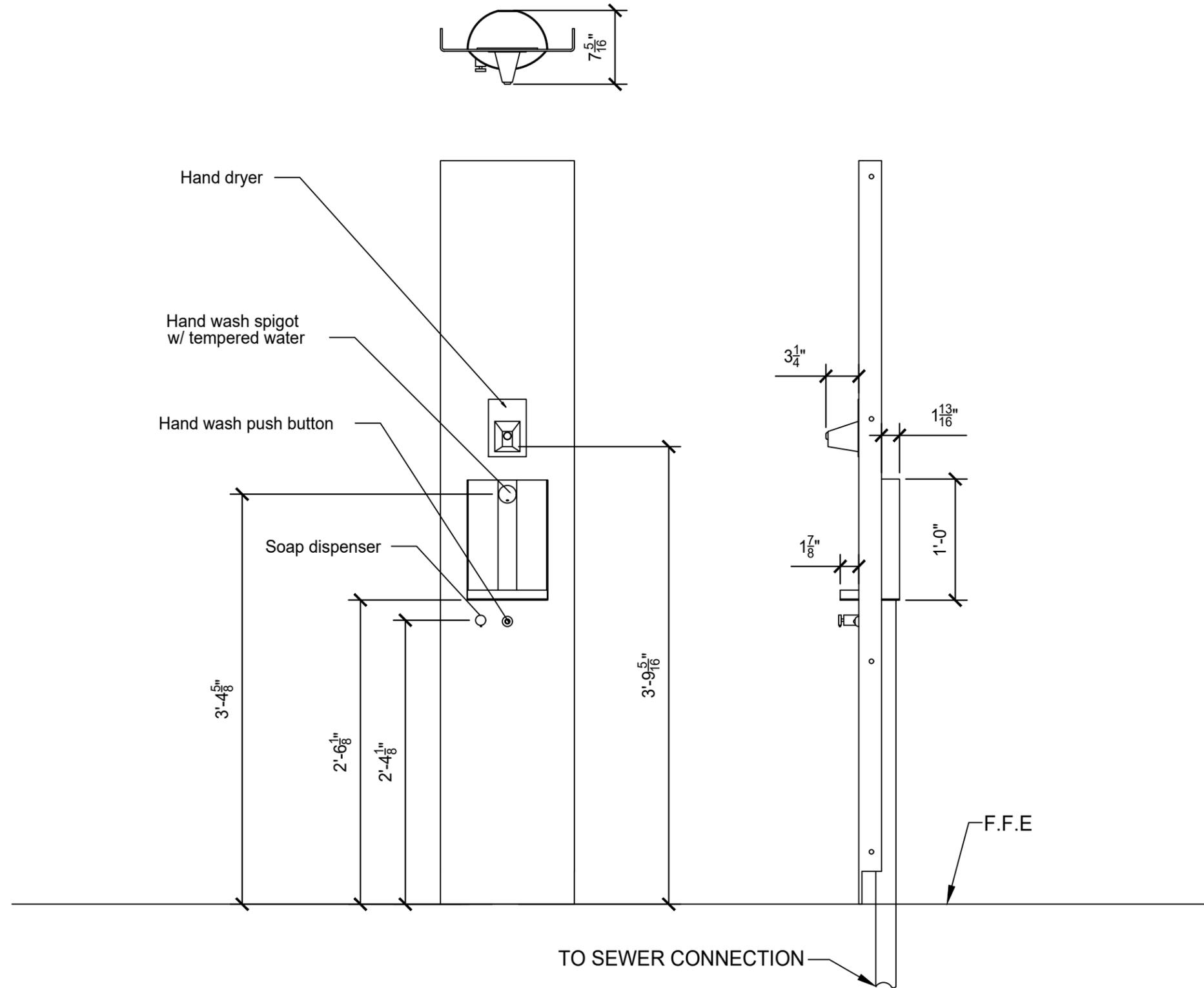






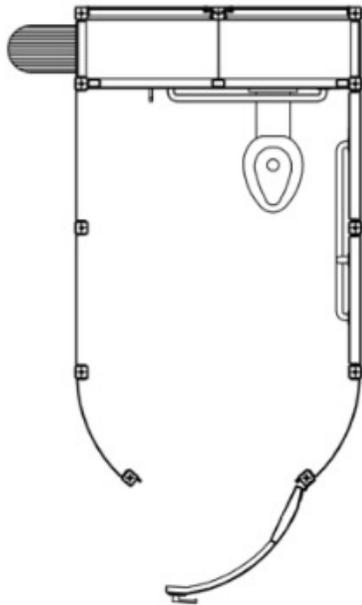




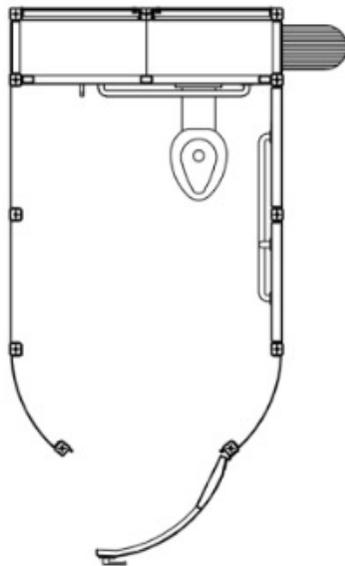


					<b>MADDEN FABRICATION</b>	SEATTLE LOOS			
						RECESSED HAND WASH (OPTION)			
REV	DATE	DESCRIPTION	DRN	APP'D	2550 NW 25th Place • Portland, OR 97210 Phone: (503) 226-3968 Fax (503) 242-2446	NAME	DATE	SERIAL NO.	DRW. NO.
						LEO	11/16/2016		A3.2

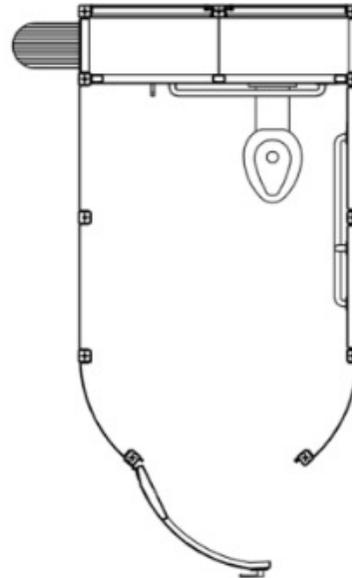
Left Door,  
Left Hand Wash



Left Door  
Right Hand Wash.



Right Door,  
Left Hand Wash



Right Door,  
Right Hand Wash

