

**WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY**



**REQUEST FOR INFORMATION (RFI)**

**METROBUS SHELTER REPLACEMENT**

**October 21, 2021**

**OFFICE OF CAPITAL PROGRAM DELIVERY – CAPD**

# Request for Information (RFI)

## Metrobus Shelter Replacement

### 1 BACKGROUND

The Washington Metropolitan Area Transit Authority's (WMATA) Metrobus system ranks as the 6th busiest bus transit network in the United States, with over 1,500 buses serving 91 stations and 66.7 million annual riders forecasted for 2021-2022. Metrobus operates in the District of Columbia (DC), Maryland (MD), and Virginia (VA).

WMATA is in the planning phase of its Metrobus Shelter Replacement program. WMATA owns 641 bus shelters throughout the three (3) jurisdictions it serves. Many of the current bus shelters are more than 30-years old and are in poor condition, resulting in negative impact to customers. Replacing bus shelters in poor condition will improve customer safety and provide a better customer experience. In addition to offering protection from inclement weather, shelters will be upgraded to include bus information screens and improved lighting. Solar panels will be installed and used to power the new shelters where feasible.

As part of WMATA's 6- year Capital Improvement Program, about 300 of these Bus Shelters have been identified for replacement. There are two types of shelters being considered for replacement – single and double shelters. The program is planned to be implemented through several federally funded contracts therefore Buy America compliance will be required.

### 2 PURPOSE

WMATA has compiled this Request for Information (RFI) to determine vendor capability, availability, and interest to fabricate and deliver approximately 300 bus shelters to be located at several bus loops at WMATA's rail stations in DC, MD, and VA. The shelters in question are composed of structural steel, glazing, and light fixtures (bus information screens and solar panels will be provided by others). WMATA seeks to understand how the industry can provide cost effective solutions that meet the goals WMATA has set for the Metrobus shelter replacement program. The questions as outlined below address topics related to the bus shelter fabrication, storage, delivery, and implementation.

### 3 QUESTIONS

WMATA hereby requests feedback from vendors to address the following questions:

1. Does the vendor or contractor have the capacity, starting in spring/summer 2022 and ending 36-months after, to fabricate, deliver, and implement approximately 300 bus shelters (~40 single and ~260 double shelters) as denoted in the attached drawings? If not, what schedule and quantity can the vendor or contractor support (schedule in months or number of Single and Double Shelters)?

2. What is the lead time that the vendor or contractor requires to begin fabrication and delivery of the first set of shelters after approval of the shop drawings and material submittals? Is the required lead time different for Single Shelters and Double Shelters?
3. How many shelters (Single only, Double only, or Single and Double) can the vendor or contractor fabricate in twelve (12) calendar months?
4. What kind of rate of production and delivery schedule can the vendor or contractor accommodate over twelve (12) calendar months?
5. Is there a guaranteed minimum order quantity required to support procurement of the vendor or contractor fabrication of the bus shelters?
6. Would there be impacts to fabrication start up, actual fabrication times, and delivery schedules if the fabrication and delivery of shelters are executed in smaller groupings separated by time (e.g., three orders of 100 shelters versus one order of 300 shelters)? If yes, please clarify what these potential impacts would be and how they could be mitigated or reduced.
7. Are there restrictions and/or recommendations relative to the amount of prefabrication of the shelter structures prior to delivery to be considered by WMATA to maximize schedule efficiency and provide cost savings opportunities? If yes, please clarify restrictions and vendor or contractor recommendations.
8. Do the designs shown in Appendix A present any challenges or constraints from the vendor or contractor's perspective? Are there any recommendations or alternatives relative to the designs in Appendix A that WMATA should consider to maximize schedule efficiency and provide cost saving opportunities? If yes, please provide feedback on potential challenges/constraints and vendor or contractor recommendations.
9. What is the storage capacity (quantity of shelters and duration) of the vendor or contractor to stockpile completed shelters?
10. Are you aware of logistics or implementation concerns/issues that may impact the vendor's, contractor's, or WMATA's ability to execute this work?

The responses should include a completed Template for Company Information and Question Responses as outlined in Appendix B.

## 4 CONSTRAINTS

As with any large publicly funded agency, there are various constraints that shape and influence any strategic, tactical, or operational change. These constraining factors must be recognized by responders because they will likely limit the speed and degree of change possible at WMATA. These include but are not limited to:

- WMATA's commitment to a safety culture, and the rules, guidelines, and approvals that constrain change to operations and administration
- WMATA's Compact Agreement:  
[https://www.wmata.com/about/board/upload/Compact\\_Annotated\\_2009\\_final.pdf](https://www.wmata.com/about/board/upload/Compact_Annotated_2009_final.pdf)
- Extensive regulatory framework that dictates standards and approach to delivery of operations in many areas (e.g., Federal Transit Administration [FTA], Occupational Safety and Health Administration [OSHA])

## 5 INSTRUCTIONS TO VENDORS

This is an RFI. No cost(s) associated with your response will be charged to WMATA for any reason. This document will not be construed as a request or authorization to perform work at WMATA's expense. Any work performed by a vendor will be at the vendor's own discretion and expense. This RFI does not represent a commitment to purchase or obligate WMATA in any manner. Submission of a response constitutes an acknowledgement that the vendor has read and agrees to be bound by such terms.

WMATA may release a formal Request for Proposal (RFP) and/or Invitation for Bid (IFB) for the services described in this document in the coming months. There is no guarantee that WMATA will publish an RFP or IFB. If published, the RFP or IFB will be publicly advertised on [www.wmata.com](http://www.wmata.com) and sent to vendors and contractors that have responded to this RFI. The information contained in this RFI is provided based on the information gathered and/or known at this time. There are no guarantees as to the accuracy of this information.

## 6 POINT OF CONTACT

All communication with WMATA must be directed to the single Point of Contact (POC) for this project:

- Najeem Ahmad, Office of Procurement & Materials  
[nahmad1@wmata.com](mailto:nahmad1@wmata.com)

Any entity wanting to participate in this RFI **must** contact Mr. Ahmad.

Respondents should email questions and responses to Mr. Ahmad as well as [MetroBusShelter@wmata.com](mailto:MetroBusShelter@wmata.com) in response to this RFI.

## 7 VENDOR QUESTIONS

All interested parties may submit questions to the WMATA POC by **October 28, 2021**. WMATA will respond to all questions in a single document and distribute the responses to all parties that submitted at least one question by **November 04, 2021**.

## 8 SUBMISSION RESPONSES

A response must be received by 2:00 p.m. EST on **November 12, 2021**, via emailed documents to Mr. Ahmad as well as [MetroBusShelter@wmata.com](mailto:MetroBusShelter@wmata.com). Response shall include the RFI number and the POC name on the front of the package.

The response should include a completed Template for Company Information and Question Responses (Appendix B).

The template provided for the Company Information should serve as the first page of the response. The completed Appendix B should respond to all sections of this document as concisely as possible while providing all information necessary. Respondents may respond to any and/or all sections of this RFI. Respondents do not need to respond to all sections, but responses should clearly identify sections or criteria their proposed solution does not address.

Per the Company Information template, responses must agree to the statement that the vendor understands the requirements of the RFI and accepts the terms and conditions. An authorized officer must sign the original response. The original response, including all supplementary literature and appendices, must be emailed to Mr. Ahmad as well as [MetroBusShelter@wmata.com](mailto:MetroBusShelter@wmata.com).

All information provided by respondents will be kept confidential and not distributed to the public. All responses become the property of WMATA upon submission.

## 9 RESERVATION OF RIGHTS

WMATA reserves all rights, which shall be exercisable by WMATA at its sole discretion, available to it under applicable law, including without limitation the following, with or without cause and with or without notice: the right to cancel, withdraw, postpone, or extend the RFI in whole or in part at any time, without incurring any obligations or liabilities; the right to issue a new RFI; the right to modify all dates set or projected in this RFI; the right to issue addenda, supplements, and modifications to this RFI; and the right to permit submittal of addenda and supplements to data previously provided with any response to this RFI. Submission of a response constitutes an acknowledgement that the vendor has read and agrees to be bound by the terms and conditions of this RFI.

## 10 DEFINITIONS AND ABBREVIATIONS

Abbreviation	Description
CAPD	Office of Capital Program Delivery
FTA	Federal Transit Administration
IFB	Invitation for Bid
OSHA	Occupational Safety and Health Administration
POC	Point of Contact
RFI	Request for Information
RFP	Request for Proposal
WMATA	Washington Metropolitan Area Transit Authority

### APPENDIX:

- A. WMATA Architectural Standard Drawings (Single and Double Shelters)
- B. Template for Company Information and Question Responses

## **APPENDIX A: WMATA Architectural Standard Drawings (Single and Double Shelters)**

# WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY



## STANDARD BUS SHELTER

### COVER SHEET

JUNE 2021

## OFFICE OF CAPITAL PROJECT DELIVERY ENGINEERING AND ARCHITECTURE

#### **SHEET INDEX:**

##### ARCHITECTURAL STANDARD DRAWINGS

ST-A-SLTR-000	COVER SHEET
ST-A-SLTR-001	SINGLE SHELTER PLANS, ELEVATION AND SECTIONS
ST-A-SLTR-002	SINGLE SHELTER ELEVATIONS, PUSH BUTTON/VOICE MOUNTING HOLE AND GLASS FITTING DETAILS
ST-A-SLTR-003	DOUBLE SHELTER ROOF PLAN, FLOOR PLAN AND SECTIONS
ST-A-SLTR-004	DOUBLE SHELTER ELEVATIONS
ST-A-SLTR-005	GLAZING AND MAP CASE DETAIL
ST-A-SLTR-006	BUS SHELTER SIGNAGE AND FASCIA DETAILS
ST-A-SLTR-007	BUS SHELTER SECTIONS AND DETAILS
ST-A-SLTR-008	BUS SHELTER SECTIONS AND DETAILS
ST-A-SLTR-009	BUS SHELTER DETAILS

##### STRUCTURAL STANDARD DRAWINGS

ST-S-SLTR-001	SINGLE SHELTER PLANS, SECTIONS AND NOTES
ST-S-SLTR-002	DOUBLE SHELTER PLANS, SECTIONS AND NOTES
ST-S-SLTR-003	SINGLE SHELTER AND DOUBLE SHELTER STRUCTURAL DETAILS AND SECTIONS

##### ELECTRICAL STANDARD DRAWINGS

ST-E-SLTR-001	LIGHTING AND CIEDS POWER SUB PANEL OVERVIEW
ST-E-SLTR-002	LIGHTING AND CIEDS POWER SUB PANEL DIMENSIONS
ST-E-SLTR-003	LIGHTING AND CIEDS POWER SUB INTERNAL WIRING
ST-E-SLTR-004	ELECTRICAL DETAILS AND SECTIONS

##### COMMUNICATION STANDARD DRAWINGS

ST-CM-SLTR-001	SINGLE SHELTER COMMUNICATION PLAN
----------------	-----------------------------------

##### LEGEND:

(A)	ROOF GLAZING PANEL - END
(B)	ROOF GLAZING PANEL - INSIDE
(C)	SIDE GLAZING PANEL - FRONT
(D)	SIDE GLAZING PANEL - REAR
(E)	REAR GLAZING PANEL AT MAP CASE
(F)	REAR GLAZING PANEL - INSIDE
(G)	REAR GLAZING PANEL - END

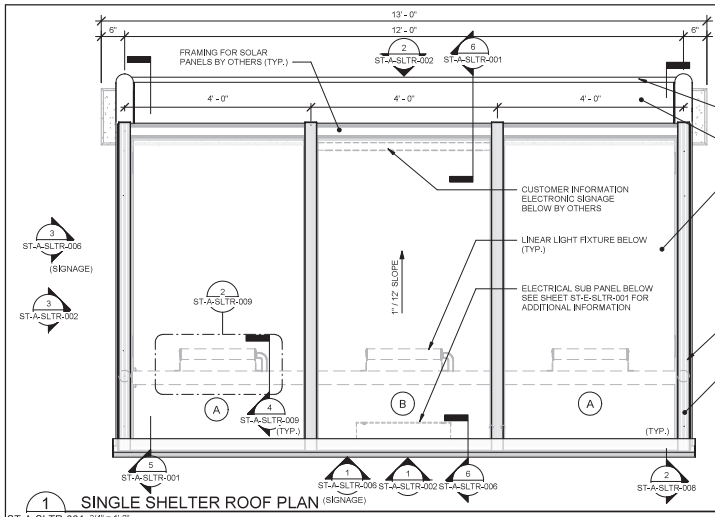
##### GENERAL NOTE:

1. ALL STAINLESS STEEL TO BE GRADE 304. WHERE STAINLESS STEEL IS IN CONTACT WITH DISSIMILAR METALS OR CONCRETE, COAT CONTACT SURFACES.
2. ALL HOLES USED FOR ELECTRICAL WIRES SHALL HAVE SMOOTH EDGES TO PROTECT THE CABLES.

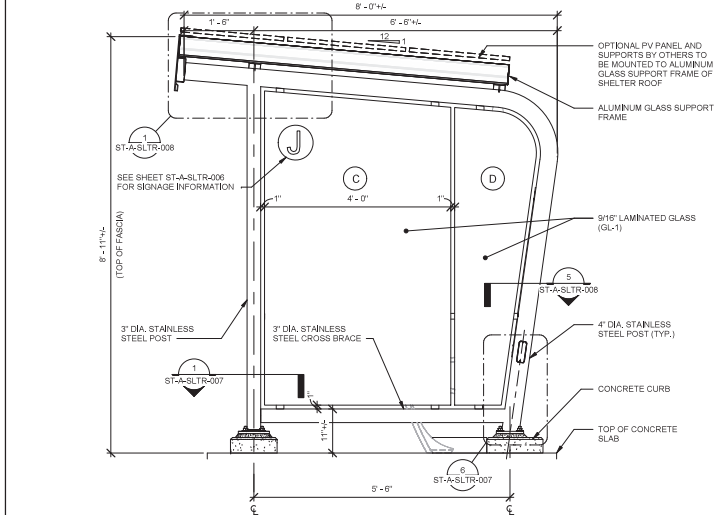
##### ABBREVIATIONS:

A.F.F.	ABOVE FINISH FLOOR
ARCH.	ARCHITECTURAL
CL.	CENTERLINE
CONC.	CONCRETE
CONT.	CONTINUOUS
DIA.	DIMETER
DIM.	DIMENSION
MAX.	MAXIMUM
MIN.	MINIMUM
O.H.	OPPOSITE HAND
PL.	PLATE
PNL.	PANEL
REQD.	REQUIRED
SIM.	SIMILAR
S.S.	STAINLESS STEEL
THK.	THICK
TYP.	TYPICAL

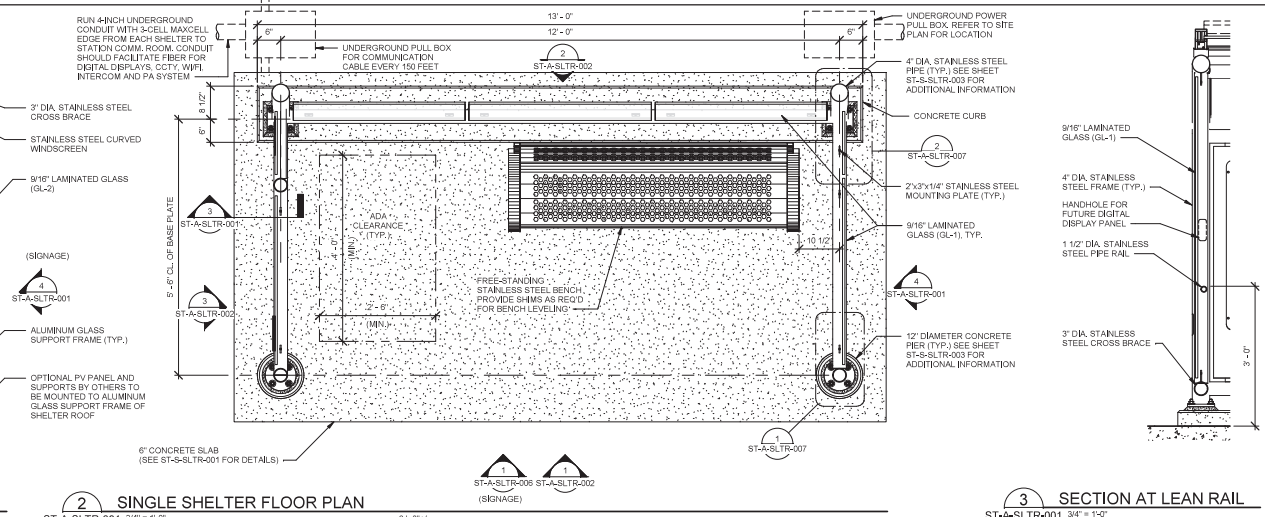




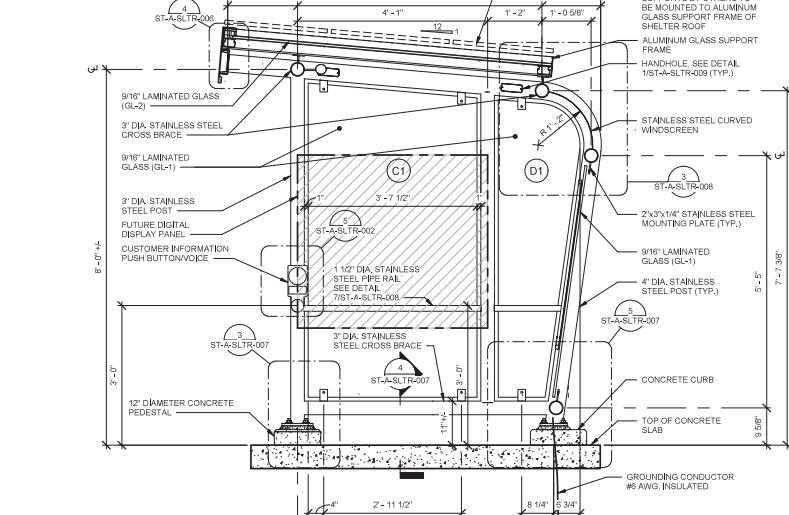
1 SINGLE SHELTER ROOF PLAN  
ST-A-SLTR-001 3/4" = 1'-0"



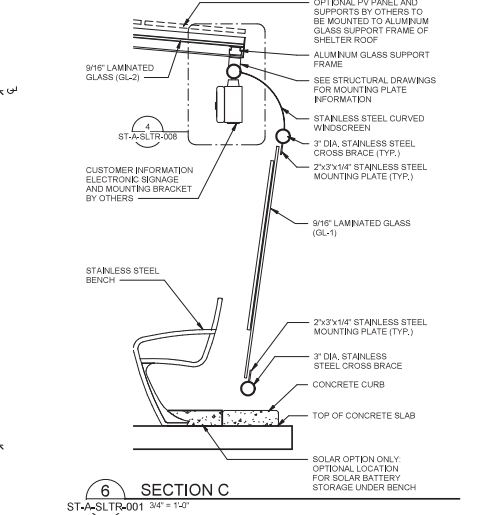
4 ELEVATION A  
ST-A-SLTR-001 3/4" = 1'-0"



2 SINGLE SHELTER FLOOR PLAN  
ST-A-SLTR-001 3/4" = 1'-0"



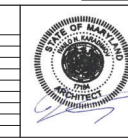
5 SECTION B  
ST-A-SLTR-001 3/4" = 1'-0"



3 SECTION AT LEAN RAIL  
ST-A-SLTR-001 3/4" = 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184  
EXPIRATION DATE: 2023-01-13

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS	
		NUMBER	TITLE	DATE	DESCRIPTION
DESIGNED	J. LOCKART	08/2021			
DRAWN	F.D. CHASE	08/2021			
CHECKED	J. LOCKART	08/2021			
APPROVED	J. KARADIMOV	08/2021			



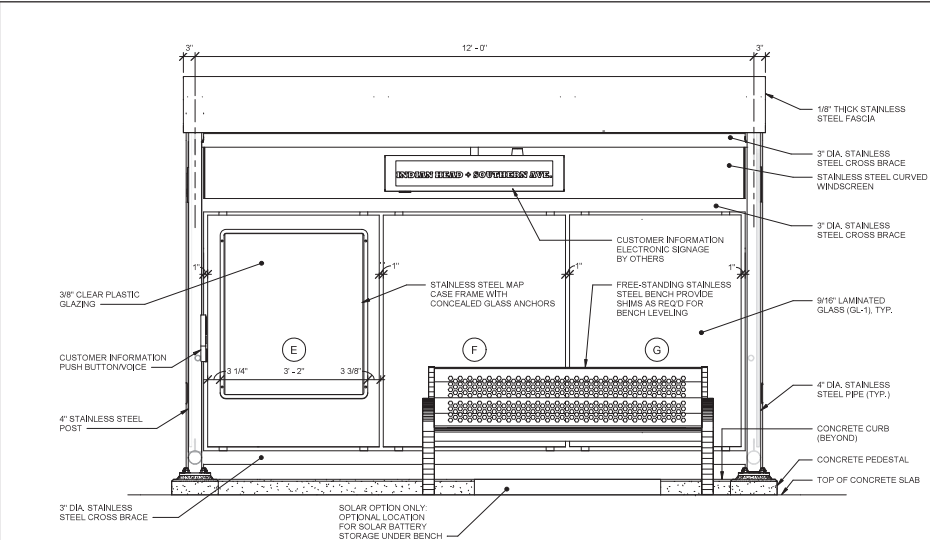
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *[Signature]* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 09/01/2021

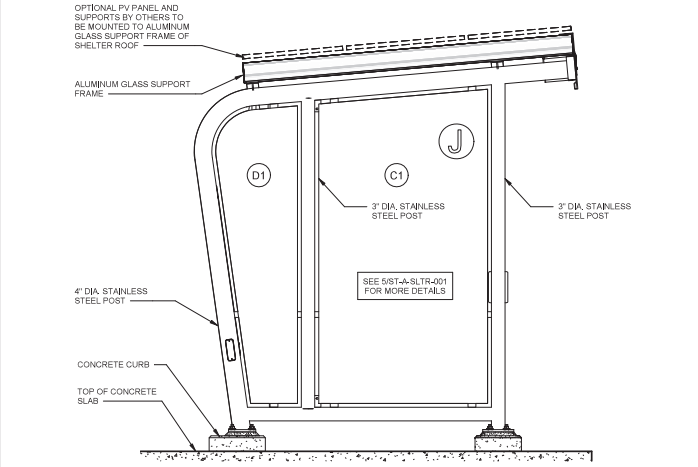
ARCHITECTURAL STANDARD DRAWING SINGLE SHELTER PLANS, ELEVATION AND SECTIONS		
SCALE	DRAWING NO.	SHEET NO.
3/4" = 1'-0"	FQxxxxx-ST-A-SLTR-001	Mxxx-2

TASK ORDER NO.

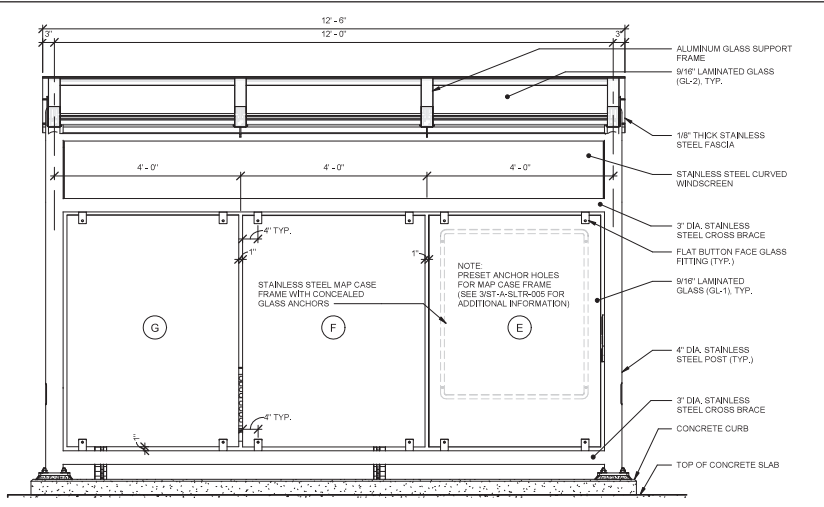
DRAWING FILE: C:\Users\ed160833\Documents\Bus\_Shelter\_Central\_20\_Rev\_4\chase.dwg  
DATE: 9/1/2021 2:22:15 PM



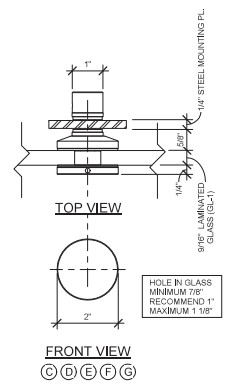
1 ELEVATION D  
ST-A-SLTR-002 3/4" = 1'-0"



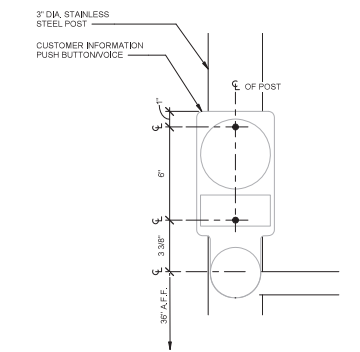
3 ELEVATION F  
ST-A-SLTR-002 3/4" = 1'-0"



2 ELEVATION E  
ST-A-SLTR-002 3/4" = 1'-0"



4 NON-ARTICULATING BOLT NB4 W/FLAT FRONT PLATE - GLASS FITTING  
ST-A-SLTR-002 6" = 1'-0"



5 PUSH BUTTON/VOICE MOUNTING HOLE DETAIL  
ST-A-SLTR-002 3" = 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184  
EXPIRATION DATE: 2023-01-13

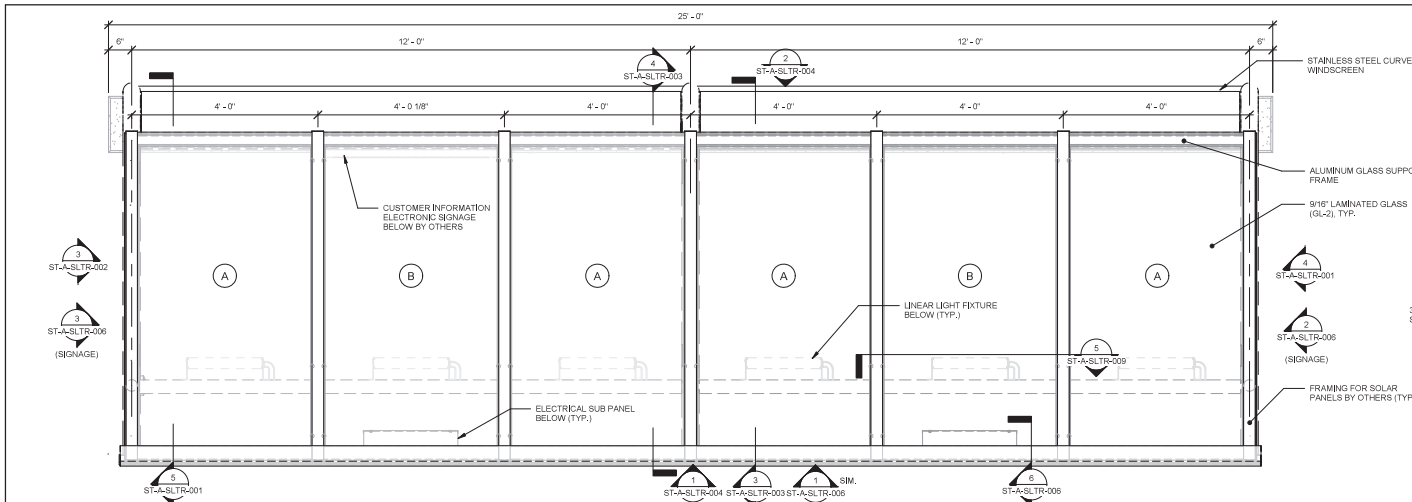


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE  
SUBMITTED BY: *[Signature]* DATE: 09/01/2021 APPROVED BY: *[Signature]* DATE: 09/01/2021

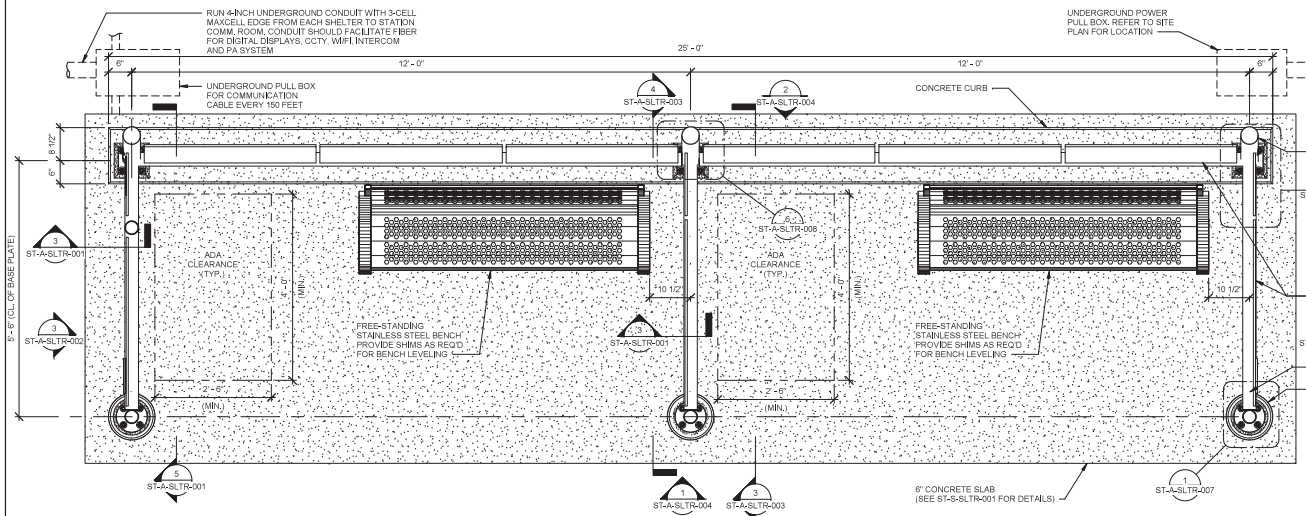
ARCHITECTURAL STANDARD DRAWING SINGLE SHELTER ELEVATIONS, PUSH BUTTON/VOICE MOUNTING HOLE AND GLASS FITTING DETAILS		
SCALE As indicated	DRAWING NO. FQxxxxx-ST-A-SLTR-002	SHEET NO. Mxxxx- 3

TASK ORDER NO.

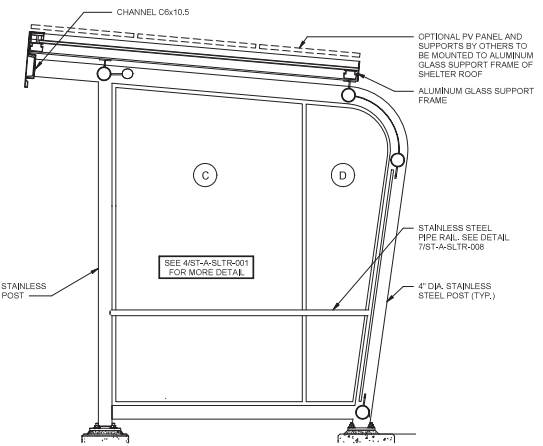
DRAWING FILE: C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev\_01base.rvt  
DATE: 9/7/2021 11:52:03 AM



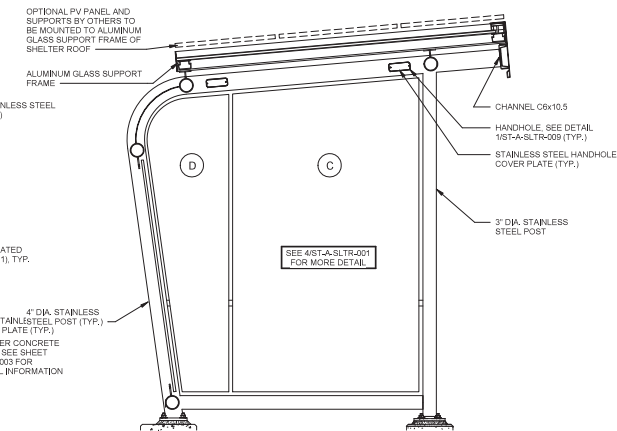
1 DOUBLE SHELTER ROOF PLAN  
ST-A-SLTR-003 3/4" = 1'-0"



2 DOUBLE SHELTER FLOOR PLAN  
ST-A-SLTR-003 3/4" = 1'-0"



3 SECTION G  
ST-A-SLTR-003 3/4" = 1'-0"



4 SECTION H  
ST-A-SLTR-003 3/4" = 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184  
EXPIRATION DATE: 2023-01-13



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

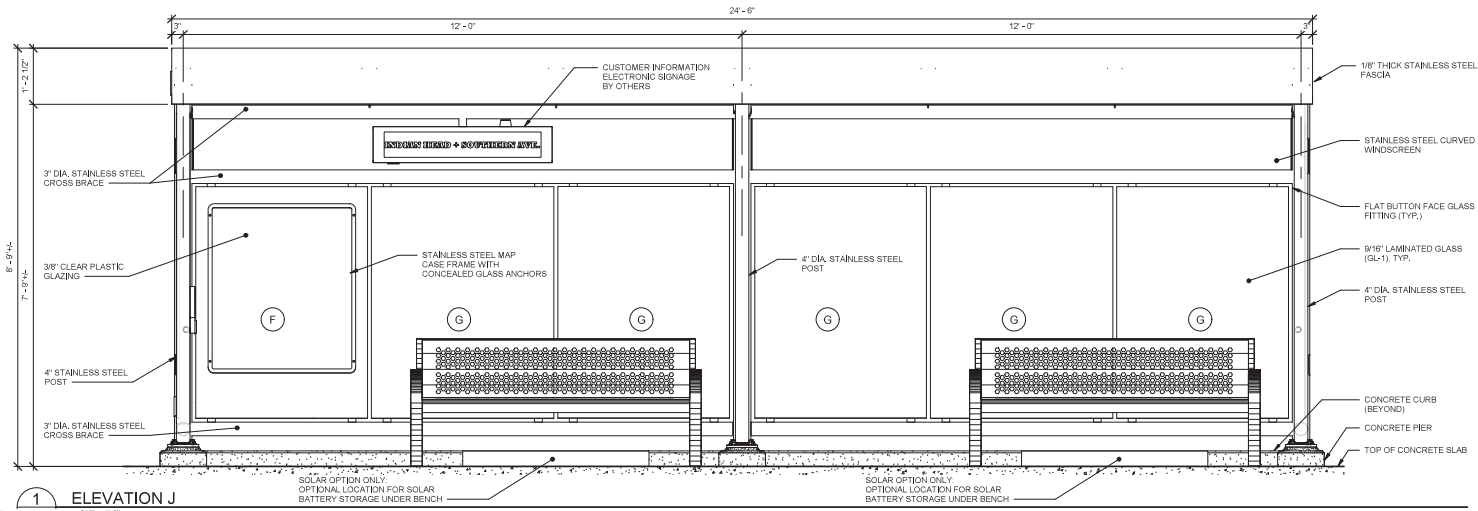
SUBMITTED BY: *[Signature]* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 09/01/2021

ARCHITECTURAL STANDARD DRAWING  
DOUBLE SHELTER ROOF PLAN, FLOOR PLAN AND SECTIONS

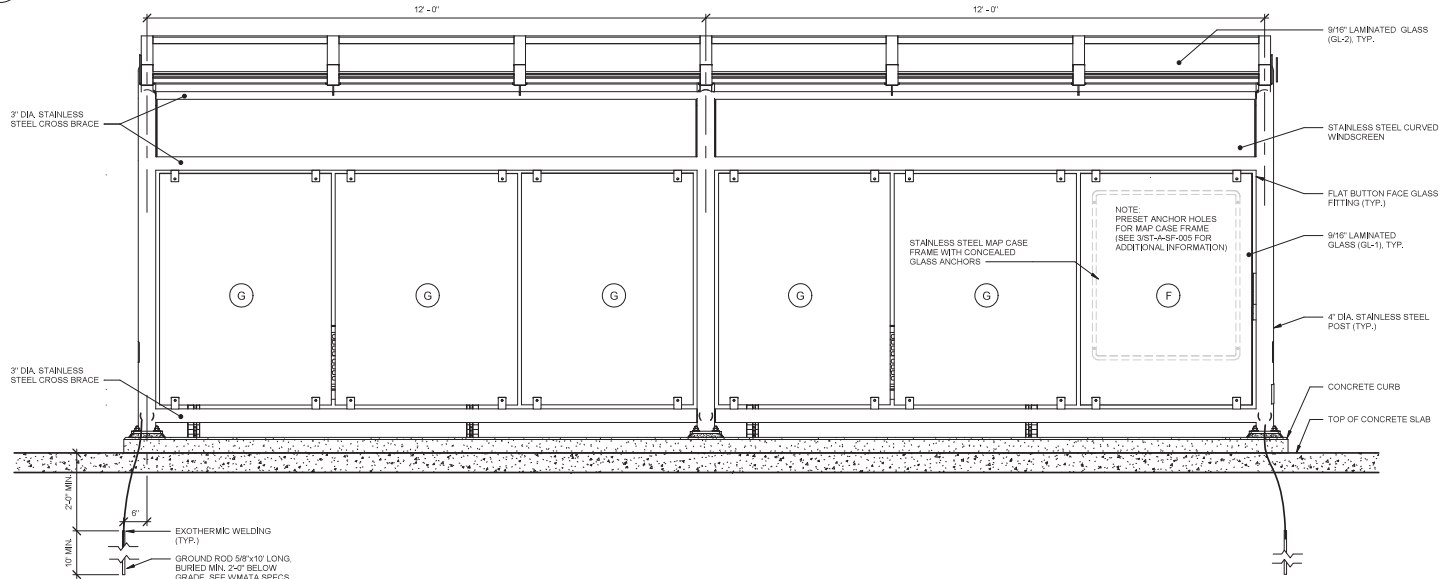
SCALE: 3/4" = 1'-0"  
DRAWING NO. FQxxxxx-ST-A-SLTR-003  
SHEET NO. Mxxxx-4

TASK ORDER NO.

DRAWING FILE C:\Users\ed160833\Documents\Bus\_Shelter\_Central\_20\_Rev\_4\chase.dwg  
DATE: 9/1/2021 11:52:05 AM



1 ELEVATION J  
ST-A-SLTR-004 3/4" = 1'-0"



2 ELEVATION K  
ST-A-SLTR-004 3/4" = 1'-0"

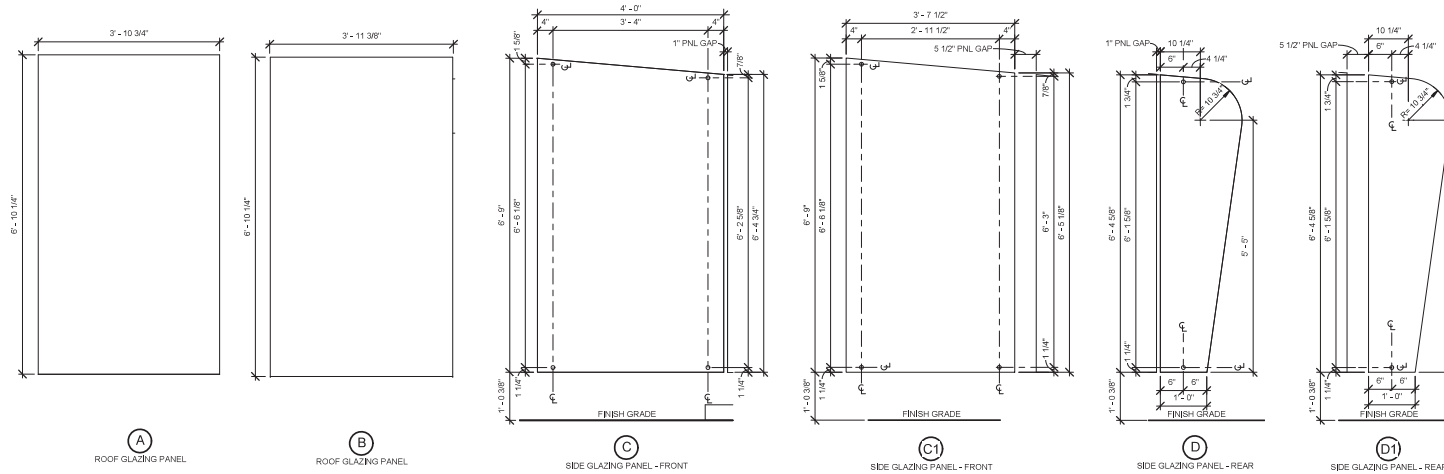
"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184  
EXPIRATION DATE: 2023-01-13

REFERENCE DRAWINGS		REVISIONS	
NUMBER	TITLE	DATE	NUM DESCRIPTION
DESIGNED	J. LOCKART	08/2021	
DRAWN	F.D. CHASE	08/2021	
CHECKED	J. LOCKART	08/2021	
APPROVED	J. KARADIMOV	08/2021	



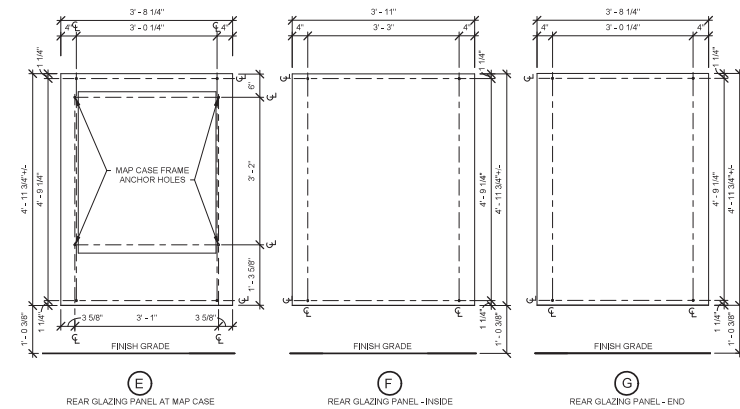
<b>WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY</b>
<b>OFFICE OF CAPITAL PROGRAM DELIVERY ENGINEERING AND ARCHITECTURE</b>
SUBMITTED BY: <i>[Signature]</i> DATE: 08/01/2021 APPROVED BY: <i>[Signature]</i> DATE: 08/01/2021

ARCHITECTURAL STANDARD DRAWING DOUBLE SHELTER ELEVATIONS	
SCALE 3/4" = 1'-0"	DRAWING NO. FQxxxx-ST-A-SLTR-004
SHEET NO. Mxxxx-5	TASK ORDER NO.



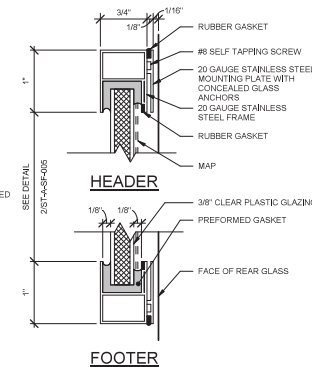
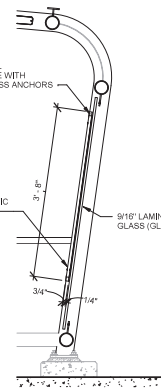
1 ROOF GLAZING PANELS  
ST-A-SLTR-005 3/4" x 1'-0"

2 SIDE GLAZING PANELS  
ST-A-SLTR-005 3/4" x 1'-0"

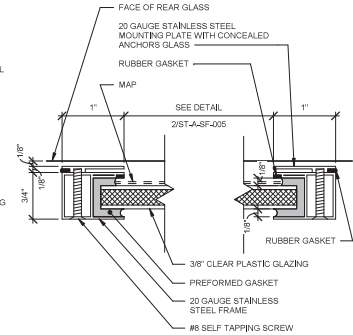


3 REAR GLAZING PANELS  
ST-A-SLTR-005 3/4" x 1'-0"

4 MAP CASE DETAILS  
ST-A-SLTR-005 3/4" x 1'-0"



5 HEADER/FOOTER AT MAP CASE  
ST-A-SLTR-005 12" x 1'-0"



6 JAMB AT MAP CASE  
ST-A-SLTR-005 12" x 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE NO. 17184 EXPIRATION DATE: 2023-01-13

	REFERENCE DRAWINGS		REVISIONS	
	NUMBER	TITLE	DATE	DESCRIPTION
DESIGNED	J. LOCKHART	08/2021		
DRAWN	F.D. CHASE	08/2021		
CHECKED	J. LOCKHART	08/2021		
APPROVED	J. KARADIMOV	08/2021		

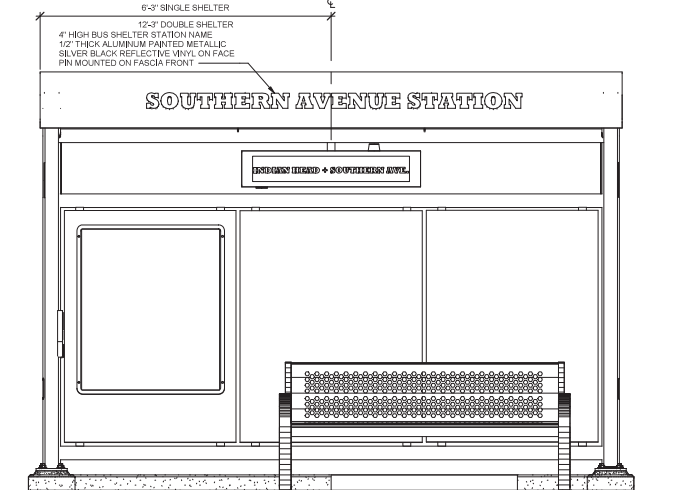


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY	
OFFICE OF CAPITAL PROGRAM DELIVERY ENGINEERING AND ARCHITECTURE	
SUBMITTED BY: <i>[Signature]</i>	DATE: 08/01/2021
APPROVED BY: <i>[Signature]</i>	DATE: 08/01/2021

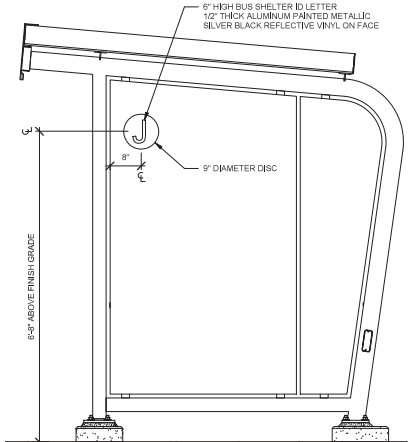
ARCHITECTURAL STANDARD DRAWING GLAZING AND MAP CASE DETAIL		
SCALE As indicated	DRAWING NO. FQxxxxx-ST-A-SLTR-005	SHEET NO. Mxxxx-6

TASK ORDER NO.

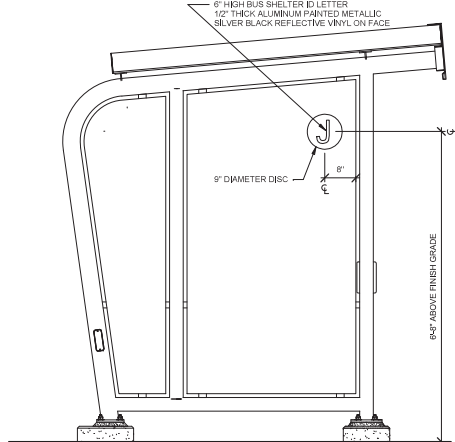
DRAWING FILE C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev\_1.dwg DATE: 9/1/2021 11:52:07 AM



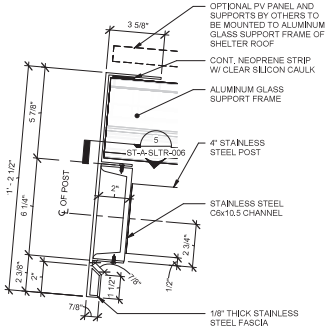
1 FRONT SIGNAGE ELEVATION  
ST-A-SLTR-006 3/4" = 1'-0"



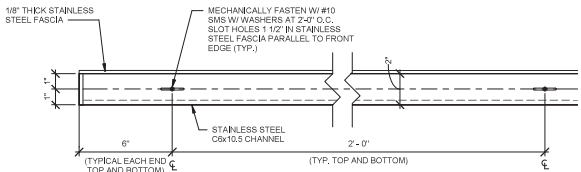
2 RIGHT SIGNAGE ELEVATION  
ST-A-SLTR-006 3/4" = 1'-0"



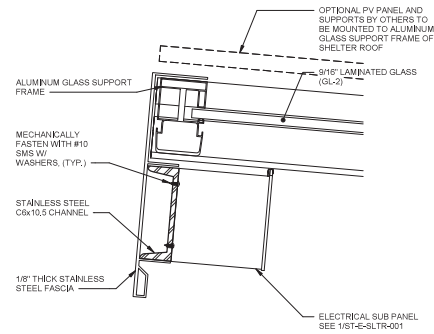
3 LEFT SIGNAGE ELEVATION  
ST-A-SLTR-006 3/4" = 1'-0"



4 TYPICAL DETAIL AT CHANNEL ENDS  
ST-A-SLTR-006 3" = 1'-0"



5 TYPICAL FASCIA TO CHANNEL CONNECTION  
ST-A-SLTR-006 3" = 1'-0"



6 TYPICAL SECTION AT ELECTRICAL ENCLOSURE  
ST-A-SLTR-006 3" = 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184  
EXPIRATION DATE: 2023-01-13

DESIGNED	DATE	REFERENCE DRAWINGS		REVISIONS	
		NUMBER	TITLE	DATE	DESCRIPTION
J. LOCKHART	08/2021				
F.D. CHASE	08/2021				
J. LOCKHART	08/2021				
J. KARADIMOV	08/2021				



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

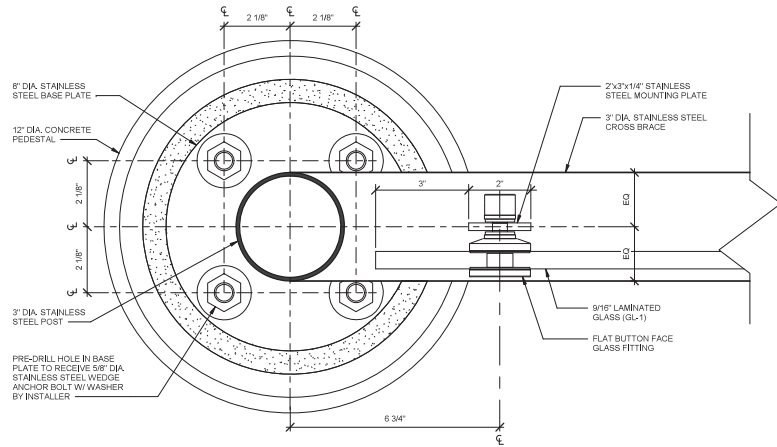
OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *[Signature]* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 08/01/2021

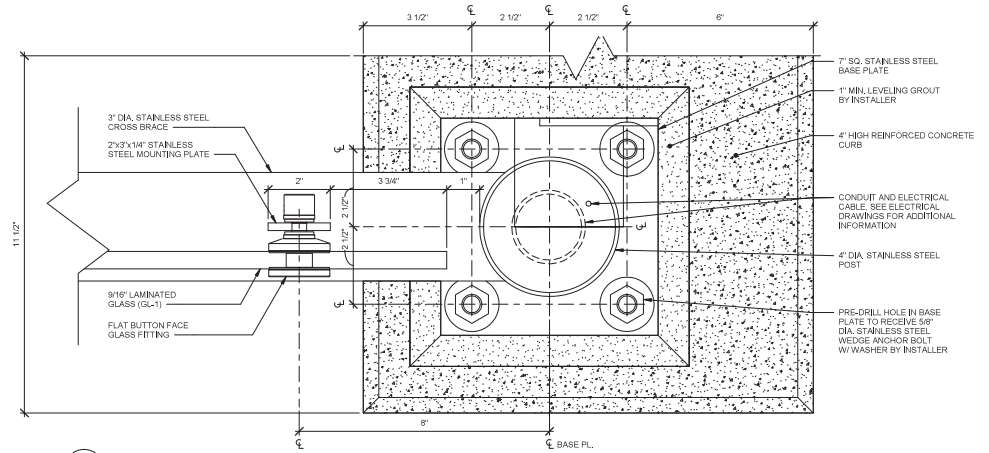
ARCHITECTURAL STANDARD DRAWING BUS SHELTER SIGNAGE AND FASCIA DETAILS		
SCALE As indicated	DRAWING NO. FQxxxxx-ST-A-SLTR-006	SHEET NO. Mxxxx-7



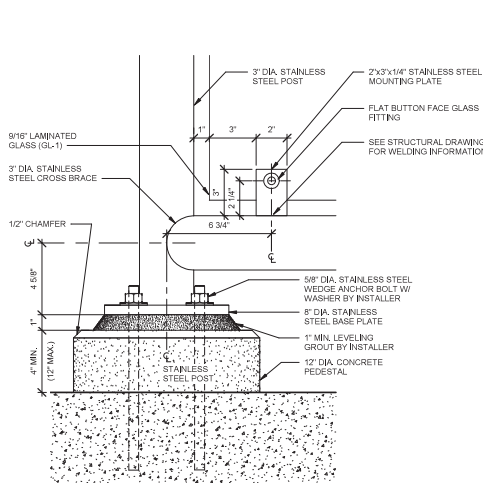
DRAWING FILE C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev.fdbase.rvt  
DATE: 9/1/2021 11:52:09 AM



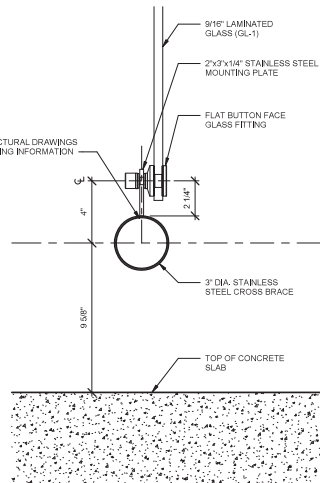
1 DETAIL AT FRONT POST  
ST-A-SLTR-007 6\"/>



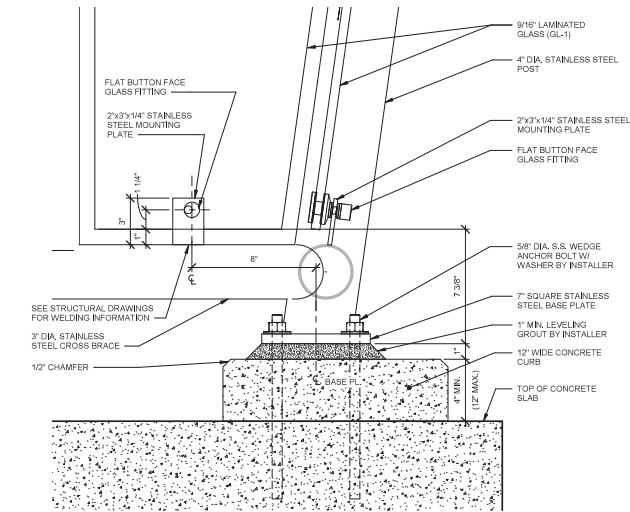
2 DETAIL AT REAR POST  
ST-A-SLTR-007 6\"/>



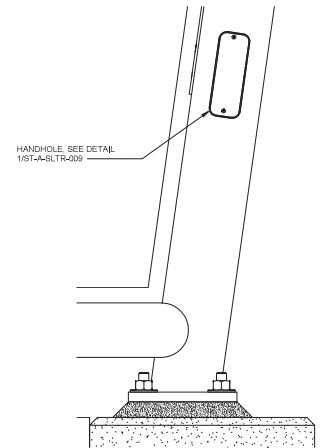
3 SECTION AT FRONT POST  
ST-A-SLTR-007 3\"/>



4 DETAIL AT CROSS BRACE  
ST-A-SLTR-007 3\"/>



5 SECTION AT REAR POST  
ST-A-SLTR-007 3\"/>



6 DETAIL AT HANDHOLE  
ST-A-SLTR-007 3\"/>

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184  
EXPIRATION DATE: 2023-01-13

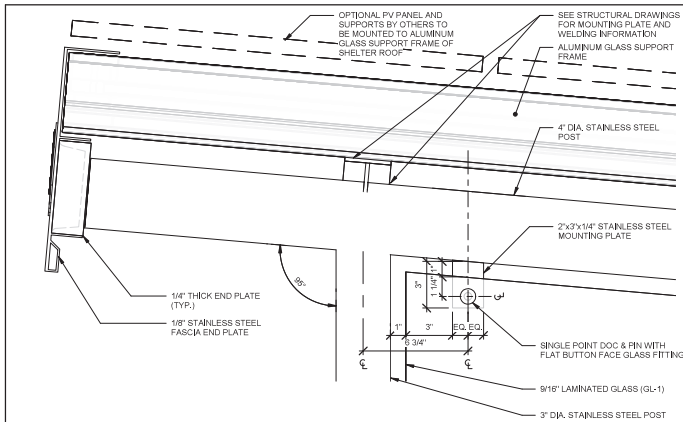
DESIGNED	REFERENCE DRAWINGS			REVISIONS	
	NUMBER	TITLE	DATE	NUM	DESCRIPTION
LOCKHART					
DATE					
DRAWN: F.D. CHASE					
DATE					
CHECKED: J. LOCKHART					
DATE					
APPROVED: J. KARADIMOV					
DATE					



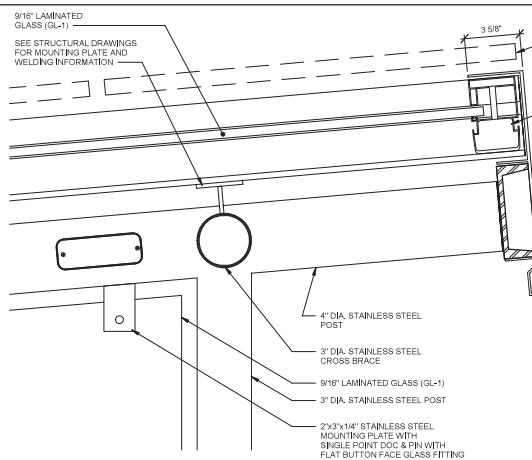
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY		
OFFICE OF CAPITAL PROGRAM DELIVERY ENGINEERING AND ARCHITECTURE		
SUBMITTED BY: <i>[Signature]</i>	DATE: 09/01/2021	APPROVED BY: <i>[Signature]</i> DATE: 09/01/2021

ARCHITECTURAL STANDARD DRAWING BUS SHELTER SECTIONS AND DETAILS		
SCALE: As indicated	DRAWING NO.: FQxxxxx-ST-A-SLTR-007	SHEET NO.: Mxxxx-8

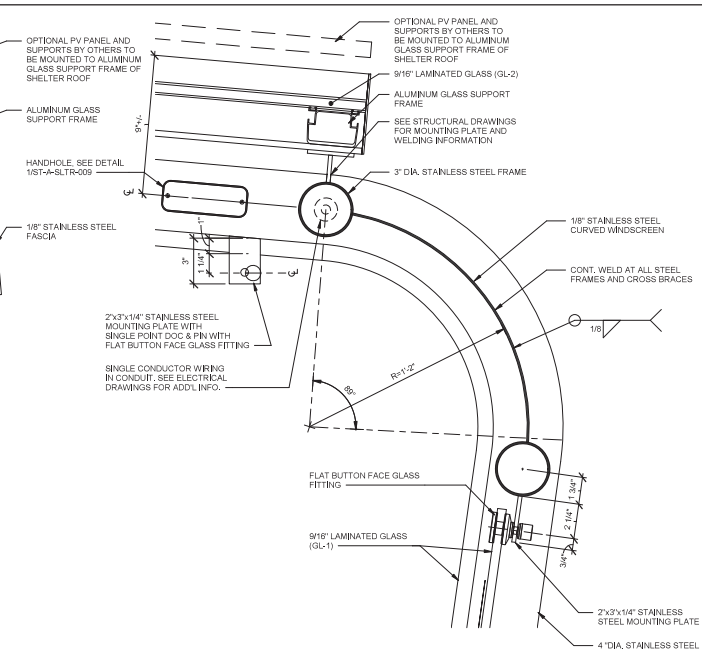
DRAWING FILE C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev\_1.dbase.vxd  
DATE: 9/1/2021 11:52:10 AM



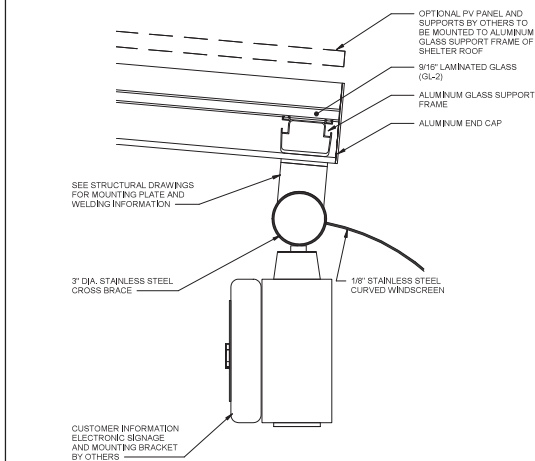
1 SECTION AT FRONT POST - ROOF  
ST-A-SLTR-008 3" = 1'-0"



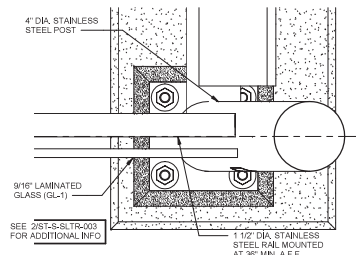
2 SECTION AT 4" POST AND SOLAR PANEL FRAMING  
ST-A-SLTR-008 3" = 1'-0"



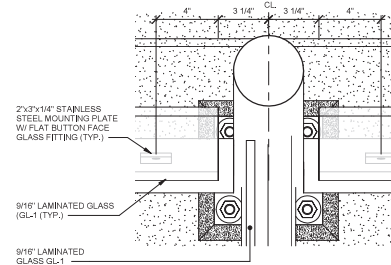
3 SECTION AT REAR POST - ROOF  
ST-A-SLTR-008 3" = 1'-0"



4 DETAIL AT ELECTRONIC SIGNAGE  
ST-A-SLTR-008 3" = 1'-0"

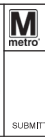


5 DETAIL AT REAR POST (LEAN RAIL)  
ST-A-SLTR-008 3" = 1'-0"



6 DETAIL AT REAR POST - (CTR AT DOUBLE)  
ST-A-SLTR-008 3" = 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 17184 EXPIRATION DATE: 2023-01-13



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *[Signature]* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 08/01/2021

TASK ORDER NO.

ARCHITECTURAL STANDARD DRAWING  
BUS SHELTER SECTIONS AND DETAILS

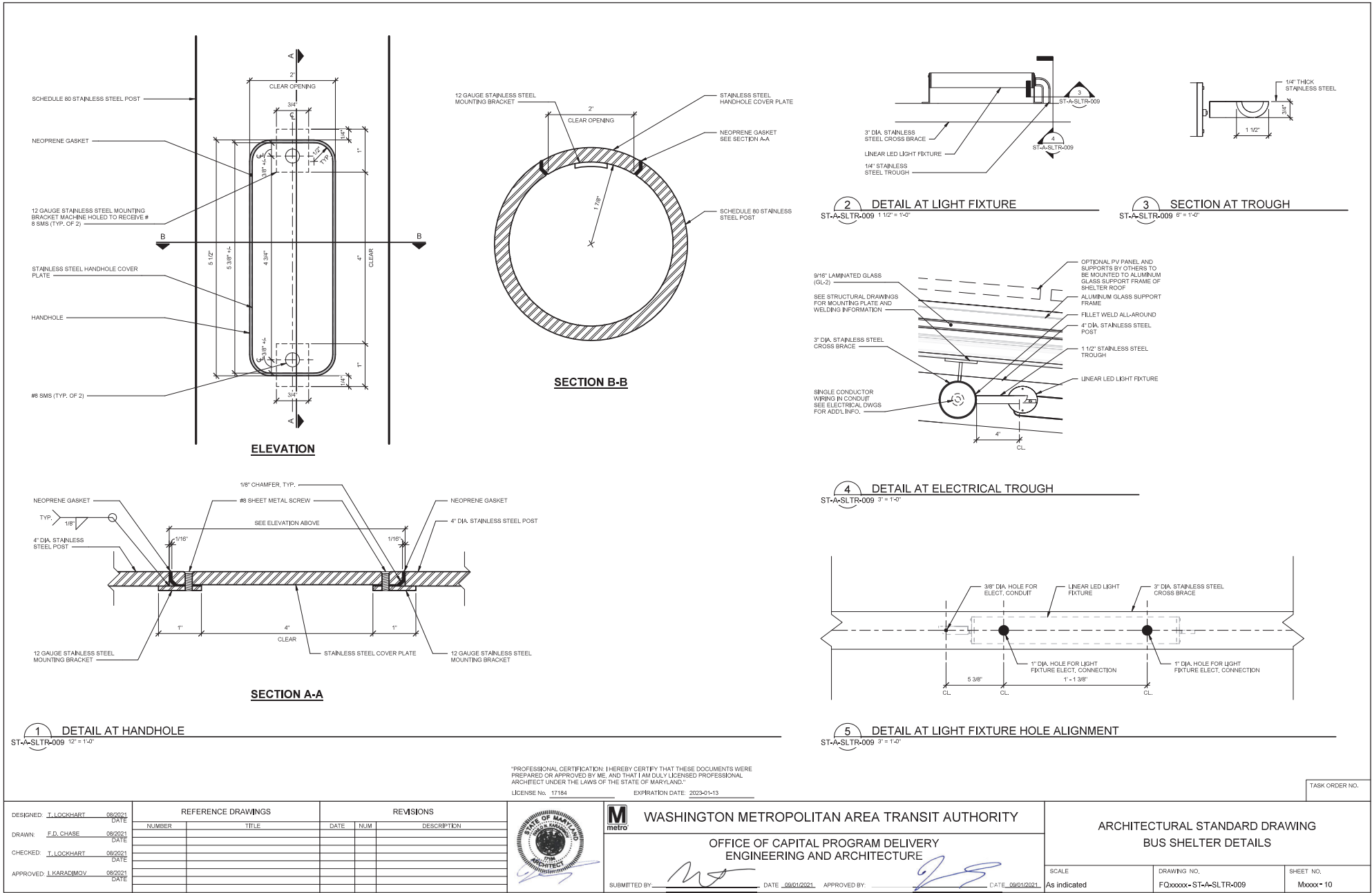
SCALE  
3" = 1'-0"

DRAWING NO.  
FQxxxxx-ST-A-SLTR-008

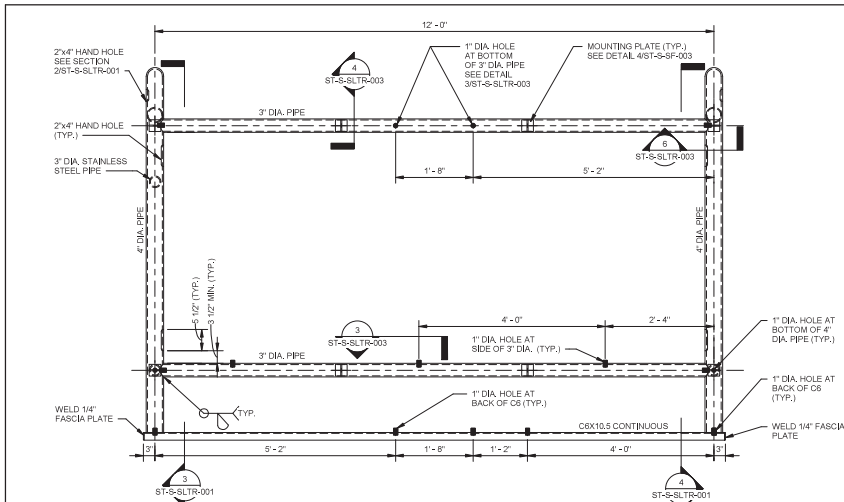
SHEET NO.  
Mxxxx-9



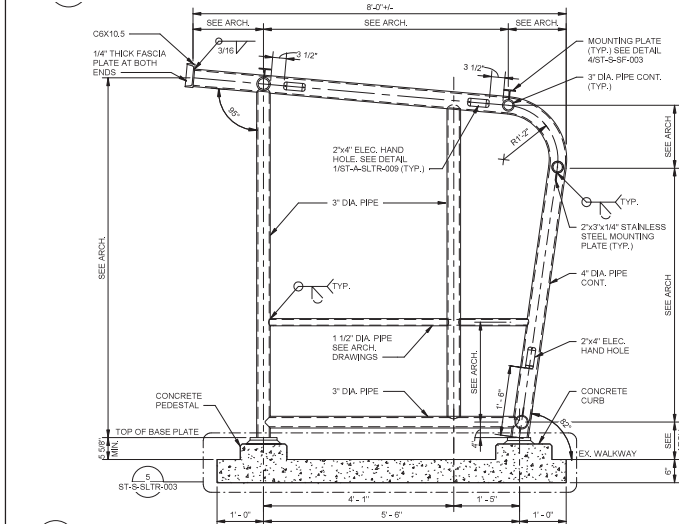
DRAWING FILE C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev\_1.dwg  
DATE: 9/1/2021 11:52:10 AM



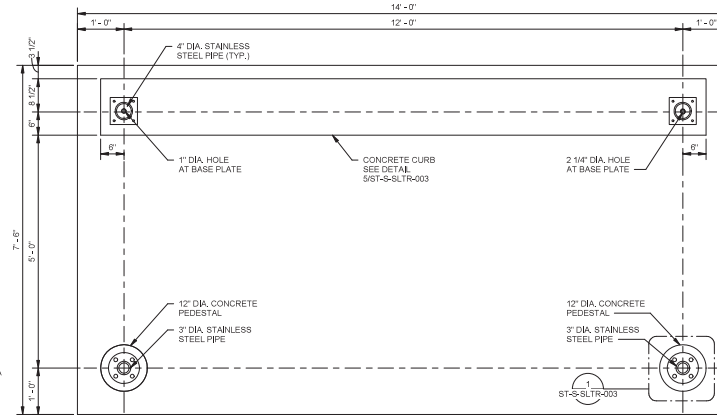
DRAWING FILE: C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev\_1.dwg  
DATE: 9/14/2021 2:56:39 PM



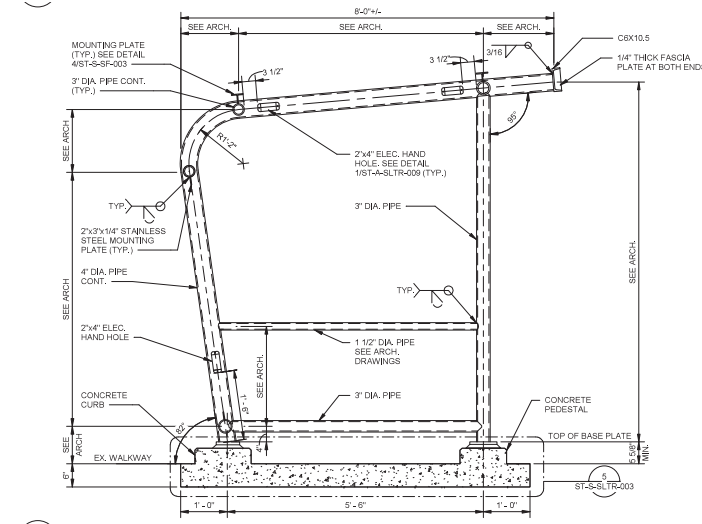
1 SINGLE SHELTER ROOF PLAN  
ST-S-SLTR-001 3/4" = 1'-0"



3 SECTION A  
ST-S-SLTR-001 3/4" = 1'-0"



2 SINGLE SHELTER FOUNDATION PLAN  
ST-S-SLTR-001 3/4" = 1'-0"



4 SECTION B  
ST-S-SLTR-001 3/4" = 1'-0"

STRUCTURAL GENERAL NOTES:

- DESIGN LOAD:  
ROOF LIVE LOAD: 20 PSF  
ROOF SUPERIMPOSED DEAD LOAD: 20 PSF  
SOLAR PANEL DEAD LOAD: 10 PSF MAXIMUM INCLUDED.  
SNOW LOAD:  
GROUND SNOW: 30 PSF  
SNOW EXPOSURE FACTOR: CE=1.0  
WIND LOAD:  
BASIC WIND SPEED (3-SECOND GUST): 115 MPH  
WIND EXPOSURE CATEGORY: B
- MATERIAL:  
CAST-IN-PLACE CONCRETE: f'<sub>c</sub>=4000 PSI  
REINFORCING STEEL: ASTM A767, GRADE 60  
WELDED WIRE REINFORCEMENT: ASTM A1063  
STAINLESS STEEL PIPE/CHANNEL: ASTM A312, TYPE 304 WITH F<sub>y</sub>=30KSI  
STAINLESS STEEL PLATES: ASTM A240, TYPE 304  
STAINLESS STEEL ANCHOR BOLT: ASTM F593, ALLOY GROUP 2
- ALL PIPES SHALL BE STAINLESS STEEL SCHEDULE 80S.
- ALL WELD SHALL CONFORM TO AWS D1.6 AND SHALL BE SHOP WELD. WELD SHALL BE FULL DEPTH BEVEL WELD (U.N.O.).
- ANCHOR BOLTS: ALL ANCHOR BOLTS SHALL BE 5/8" DIA. STAINLESS STEEL BOLTS.
- COORDINATE ALL DIMENSIONS WITH ARCH DRAWINGS.
- SEE ARCH DRAWINGS FOR GLAZING AND MISC. CONNECTIONS AND HAND HOLE DETAILS.
- CLEAR ALL LOOSE MATERIAL AND COMPACT SOIL AT LOCATIONS AND PLACE 6" GRADED AGGREGATE BASE (AST) PRIOR TO SLAB PLACEMENT.
- CONCRETE SLAB SHALL BE SLOPED TO MATCH EXISTING GRADE ELEVATION AT 4 SIDES. TOP OF CONCRETE PEDESTAL AND CURB SHALL BE LEVELED.
- DO NOT MAKE ANY CHANGES OR ALTERATIONS TO THE DRAWINGS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
- GC SHALL COORDINATE ALL REQUIRED STRUCTURAL ATTACHMENTS AND PENETRATION PRIOR TO FABRICATION OF SHELTER STRUCTURE.

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 20679  
EXPIRATION DATE: 2021-12-17



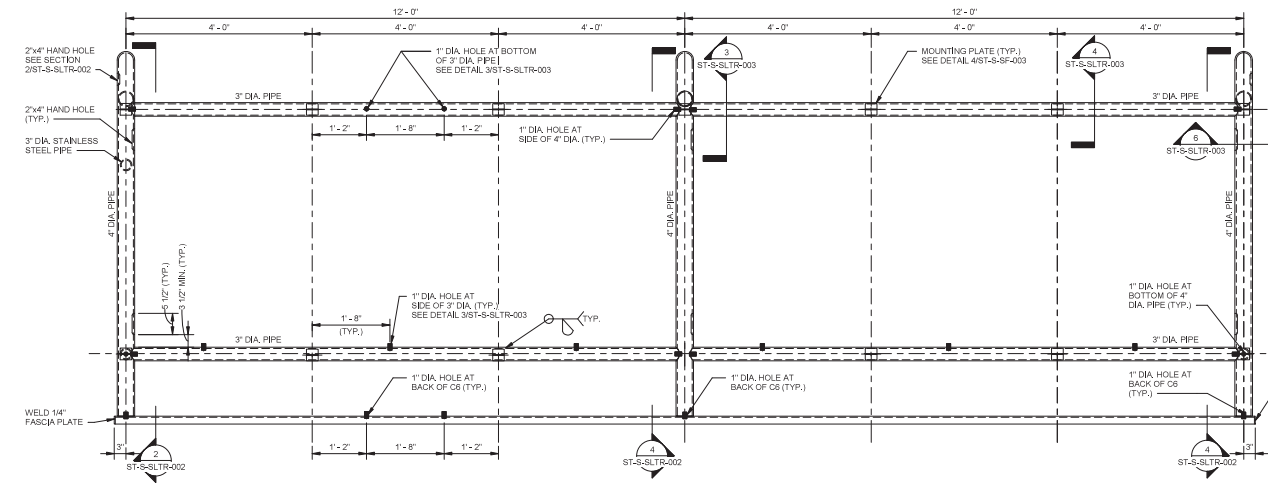
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

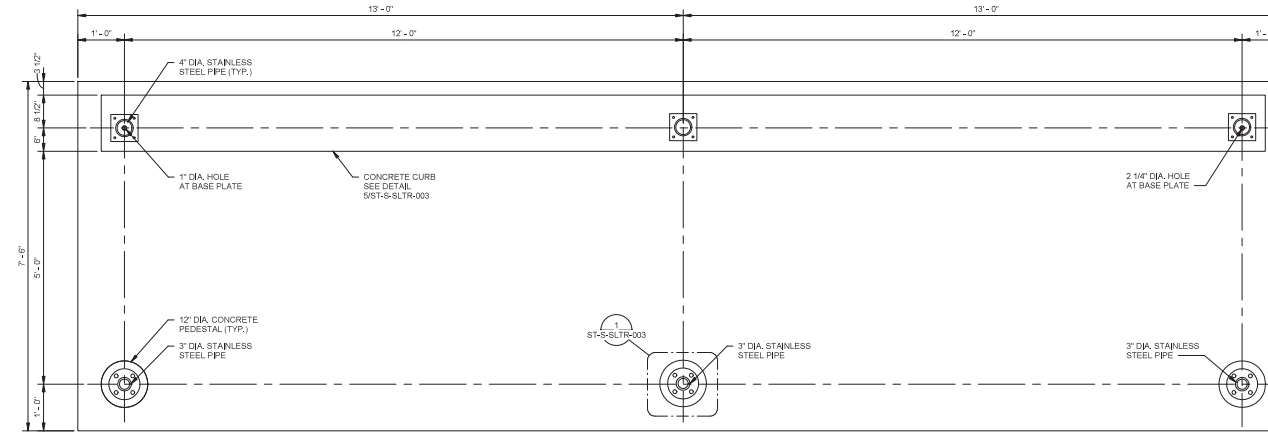
SUBMITTED BY: *[Signature]* DATE: 08/13/2021 APPROVED BY: *[Signature]* DATE: 08/13/2021

STRUCTURAL STANDARD DRAWING  
SINGLE SHELTER PLANS, SECTION AND NOTES

SCALE: 3/4" = 1'-0"  
DRAWING NO.: FQxxxxx-ST-S-SLTR-001  
SHEET NO.: Mxxxx-11



1 DOUBLE SHELTER ROOF PLAN  
ST-S-SLTR-002 3/4" = 1'-0"



3 DOUBLE SHELTER FOUNDATION PLAN  
ST-S-SLTR-002 3/4" = 1'-0"

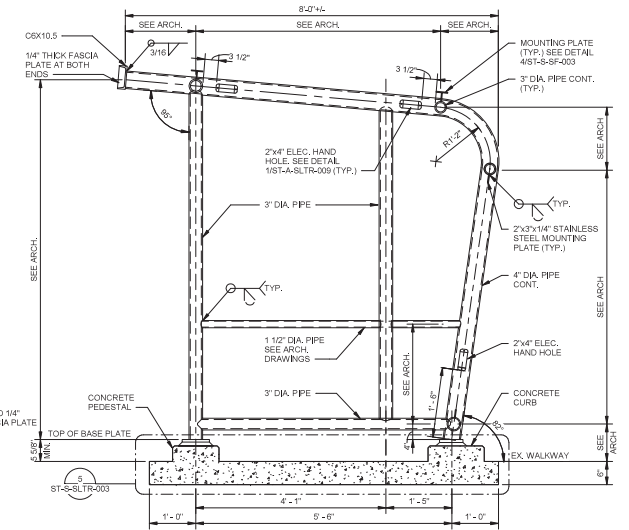
"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 20679 EXPIRATION DATE: 2021-12-17



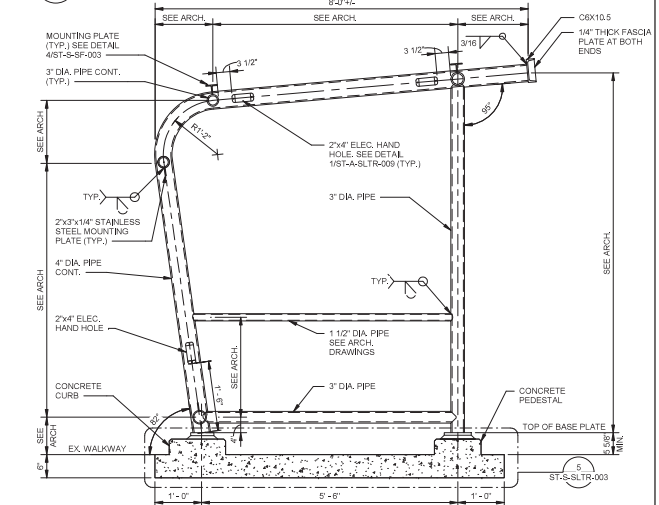
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *[Signature]* DATE: 09/13/2021 APPROVED BY: *[Signature]* DATE: 09/13/2021



2 SECTION A  
ST-S-SLTR-002 3/4" = 1'-0"



4 SECTION B  
ST-S-SLTR-002 3/4" = 1'-0"

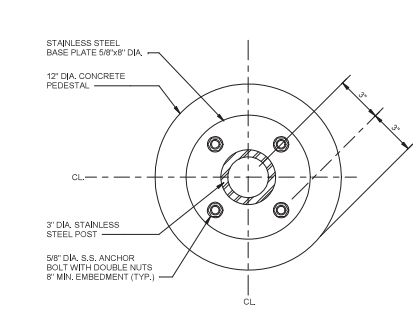
STRUCTURAL GENERAL NOTES.

1. SEE ST-S-SLTR-001 FOR STRUCTURAL GENERAL NOTES.

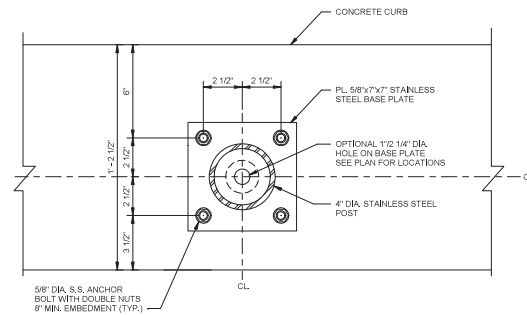
TASK ORDER NO.

STRUCTURAL STANDARD DRAWING  
DOUBLE SHELTER PLANS, SECTION AND NOTES

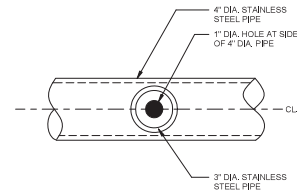
SCALE: 3/4" = 1'-0" DRAWING NO. FQxxxxx-ST-S-SLTR-002 SHEET NO. Mxxxx-12



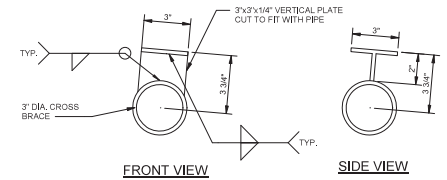
1 DETAIL AT CONCRETE PEDESTAL  
ST-S-SLTR-003 3" = 1'-0"



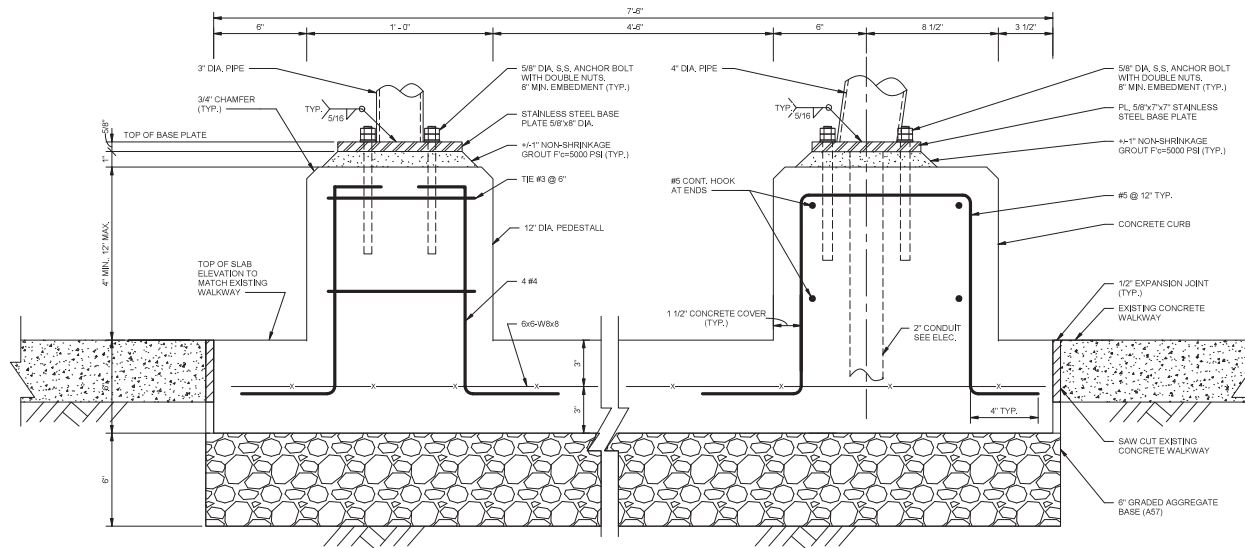
2 DETAIL AT CONCRETE CURB  
ST-S-SLTR-003 3" = 1'-0"



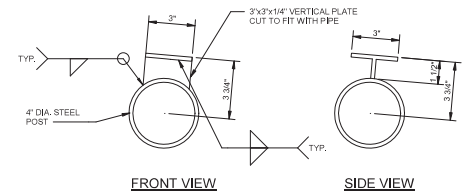
3 SECTION C  
ST-S-SLTR-003 3' = 1'-0"



4 SECTION AT VERTICAL MOUNTING PLATE - 3" CROSS BRACE  
ST-S-SLTR-003 3' = 1'-0"



5 DETAIL AT CONCRETE PEDESTAL AND CURB  
ST-S-SLTR-003 3" = 1'-0"



6 SECTION AT VERTICAL MOUNTING PLATE - 4" POST  
ST-S-SLTR-003 3' = 1'-0"

STRUCTURAL GENERAL NOTES:

1. SEE ST-S-SLTR-001 FOR STRUCTURAL GENERAL NOTES

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."

LICENSE No. 26679                      EXPIRATION DATE: 2021-12-17

EXPIRATION DATE: 2021-12-17



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: [Signature] DATE 09/13/2021 APPROVED BY: [Signature] DATE 09/13/2021

STRUCTURAL STANDARD DRAWING  
SINGLE SHELTER AND DOUBLE SHELTER STRUCTURAL  
DETAILS AND SECTIONS

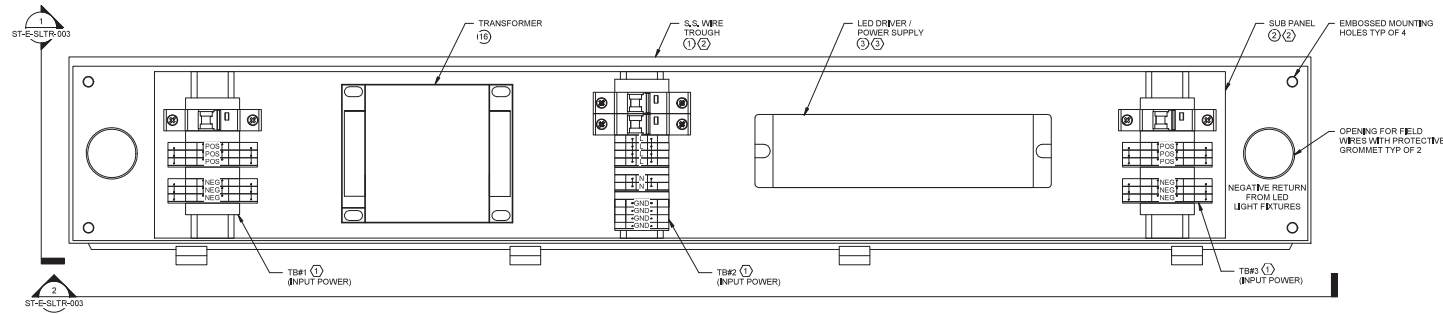
SCALE	DRAWING NO.	SHEET NO.
3" = 1'-0"	FQxxxxx-ST-S-SLTR-003	Mxxxx-13

DRAWING FILE: C:\Users\ed16083\Documents\Bus\_Shedder\_Central\_20\_Rev\_1\edbase.rvt  
DATE: 9/1/2021 11:53:45 AM

CABINET EQUIPMENT SCHEDULE			
ITEM	DESCRIPTION	QTY	SIZE
1	WIRE TROUGH, NEMA 4X, STAINLESS STEEL, HINGED COVER	1	6" x 6" x 40"
2	ENCLOSURE SUB PANEL, CONDUCTIVE	1	5.4" X 34.6" X .125"
3	LED DRIVER / POWER SUPPLY	1	48WATT, 24VDC, 3AMP
4	CIRCUIT BREAKER, TYPE UL489, DIN RAIL MOUNTED	2	2 AMP
5	CIRCUIT BREAKER, TYPE UL489, DIN RAIL MOUNTED	1	5 AMP
6	TERMINAL BLOCK, DOUBLE LEVEL, RED	3	30 AMP, 10 AWG, 600V
7	TERMINAL BLOCK, DOUBLE LEVEL, BLUE	3	30 AMP, 10 AWG, 600V
8	TERMINAL BLOCK, SINGLE LEVEL, BLACK	3	30 AMP, 10 AWG, 600V
9	TERMINAL BLOCK, SINGLE LEVEL, WHITE	3	30 AMP, 10 AWG, 600V
10	TERMINAL BLOCK, CHASSIS GROUND TYPE	5	24 - 10 AWG
11	SEPARATOR PLATE	3	SINGLE LEVEL
12	SEPARATOR PLATE	2	DOUBLE LEVEL
13	TERMINAL BLOCK, END BRACKET	7	DIN RAIL CLAMPING
14	TERMINAL JUMPERS	1	
15	DIN RAIL SEGMENT	1	35 MM
16	CONTROL TRANSFORMER	1	1-PHASE 277/120VAC, 500 VA
17	CIRCUIT BREAKER, TYPE UL489, DIN RAIL MOUNTED	1	2 AMP

NOTES:

- 1 EACH DIN RAIL SEGMENT SHALL BE SECURED TO THE PANEL BACK PLATE BY THREE (3) STAINLESS STEEL #10-32 MACHINE SCREWS IN TAPPED HOLES. EACH SCREW SHALL BE EQUIPPED WITH A .75" OD FENDER WASHER. NO MOUNTING HARDWARE IS TO BE ON REAR SIDE OF SUB PANEL.
- 2 THE WIRE TROUGH, ENCLOSURE COVER AND SUB PANEL SHALL BE GROUNDED AT THE FACTORY PROVIDED STUD, THERE SHALL BE A CRIMP ON RING TERMINAL, AND AN INTERNAL SHAKE PROOF WASHER UNDER THE NUT.
- 3 THE LED DRIVER / POWER SUPPLY SHALL BE SECURED TO THE PANEL BACK E BY FOUR (4) STAINLESS STEEL #10-32 MACHINE SCREWS WITH VIBRATION PROOF WASHERS, ONE IN EACH CORNER OF THE DRIVER/POWER SUPPLY.



1 SUB PANEL OVERVIEW

ST-E-SLTR-001 SCALE=NTS

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 48328 EXPIRATION DATE: 2022-12-12



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *Danica J. Khan* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 08/01/2021

TASK ORDER NO.

ELECTRICAL STANDARD DRAWING  
LIGHTING AND CIEDS POWER SUB PANEL OVERVIEW

SCALE

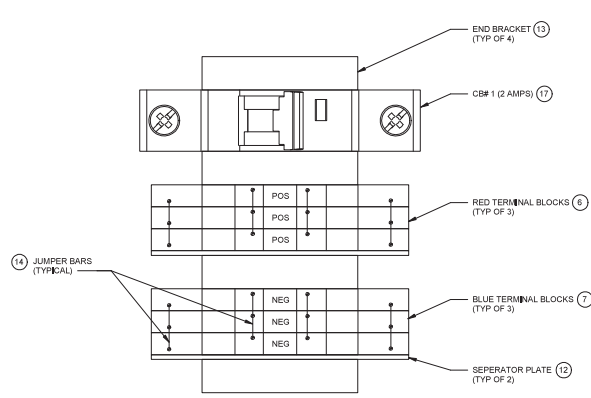
NTS

DRAWING NO.

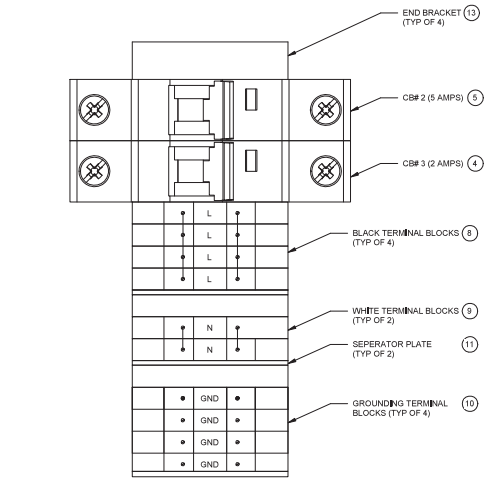
FQxxxxx- ST-E-SLTR-001

SHEET NO.

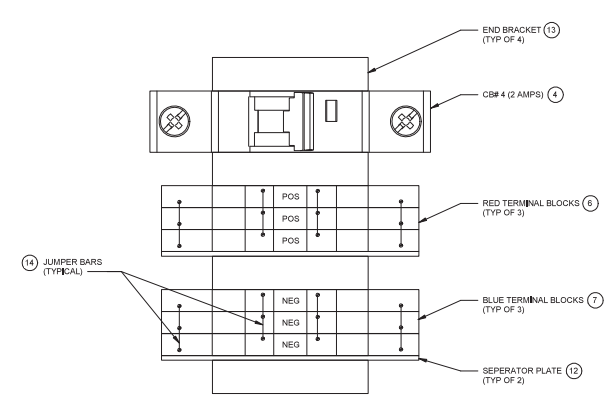
Mxxxx- 14



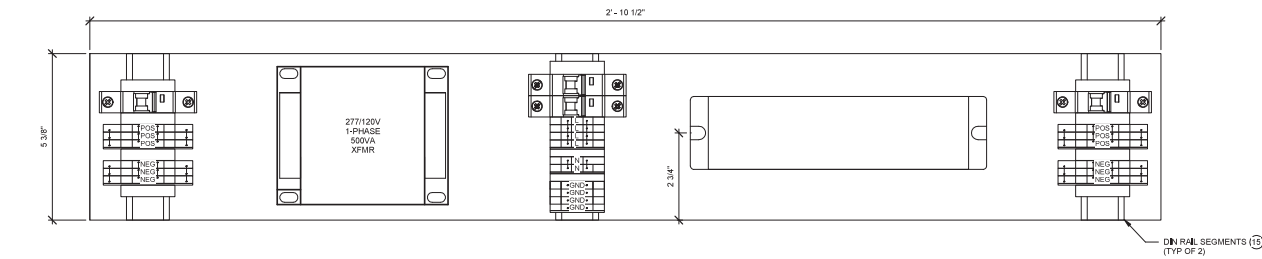
1 TB#1 DETAIL (277AC INPUT)  
ST-E-SLTR-002 SCALE=NTS



2 TB#2 DETAIL (120VAC INPUT)  
ST-E-SLTR-002 SCALE=NTS



3 TB#3 DETAIL (24VDC OUTPUT)  
ST-E-SLTR-002 SCALE=NTS



4 SUB PANEL DIMENSIONS  
ST-E-SLTR-002 SCALE=NTS

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 48328 EXPIRATION DATE: 2022-12-12



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

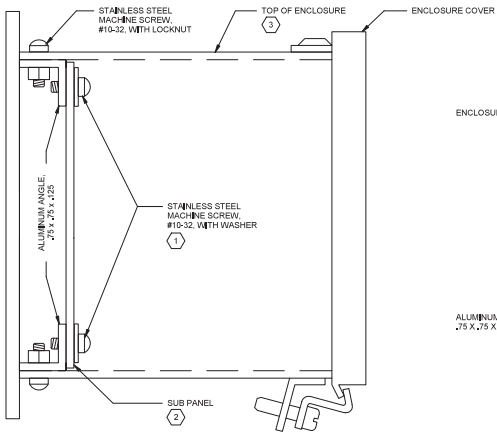
SUBMITTED BY: *Danica J. [Signature]* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 08/01/2021

TASK ORDER NO.

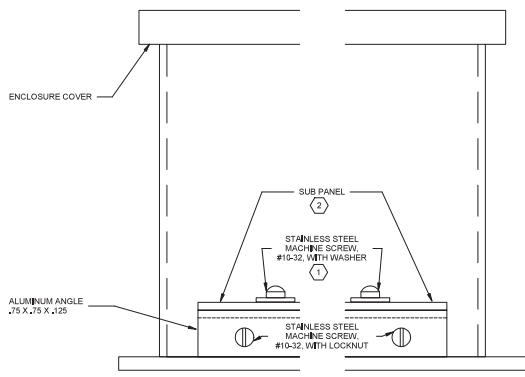
ELECTRICAL STANDARD DRAWING  
LIGHTING AND CIEDS POWER SUB PANEL DIMENSIONS

SCALE: As indicated  
DRAWING NO.: FQxxxxx- ST-E-SLTR-002  
SHEET NO.: Mxxxx- 15

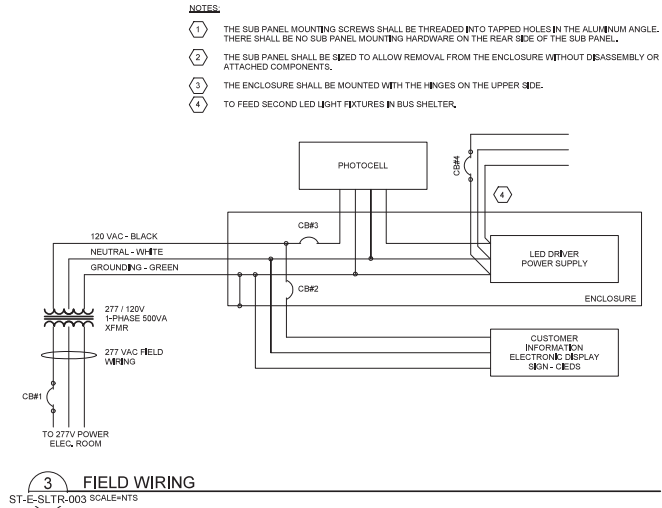
DRAWING FILE: C:\Users\ed16083\Documents\Bus\_Shelter\_Central\_20\_Rev\_04base.rvt  
DATE: 9/1/2021 11:53:50 AM



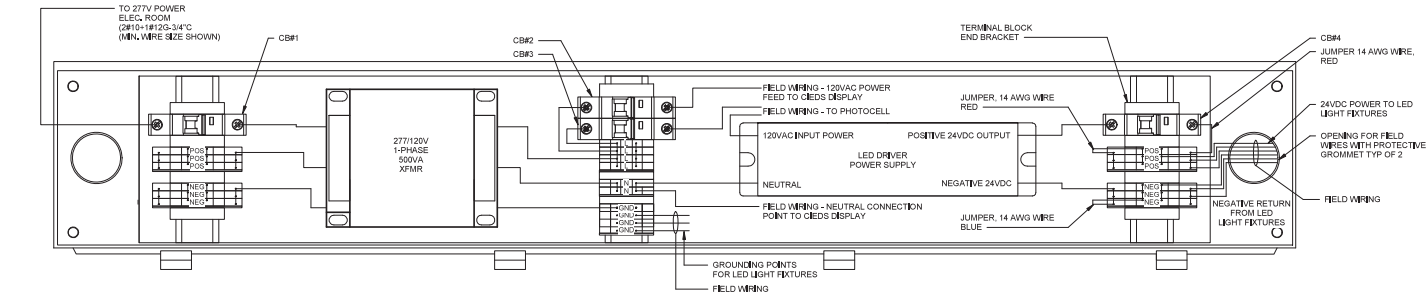
1 SECTION - SIDE VIEW  
ST-E-SLTR-003 SCALE=NTS



2 SECTION - BOTTOM VIEW  
ST-E-SLTR-003 SCALE=NTS

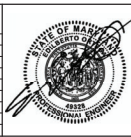


3 FIELD WIRING  
ST-E-SLTR-003 SCALE=NTS



4 VIEW - INTERNAL WIRING  
ST-E-SLTR-003 SCALE=NTS

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 48328 EXPIRATION DATE: 2022-12-12



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

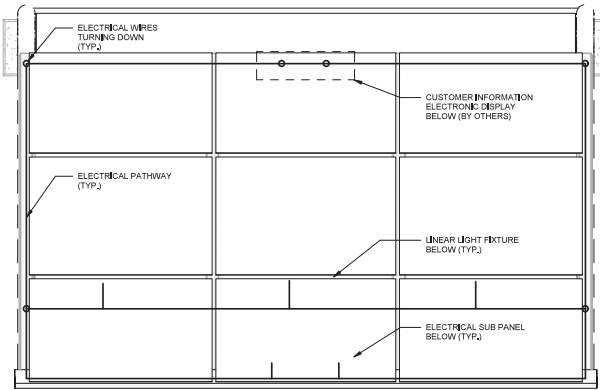
OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *Danica J. Khan* DATE: 08/01/2021 APPROVED BY: *SVT* DATE: 08/01/2021

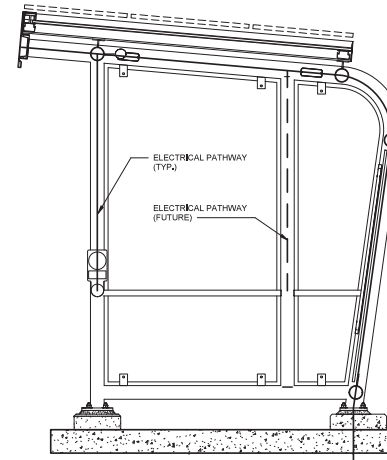
ELECTRICAL STANDARD DRAWING  
LIGHTING AND CIEDS POWER SUB PANEL INTERNAL WIRING

SCALE: As indicated DRAWING NO.: FQxxxxx-ST-E-SLTR-003 SHEET NO.: Mxxxx-16

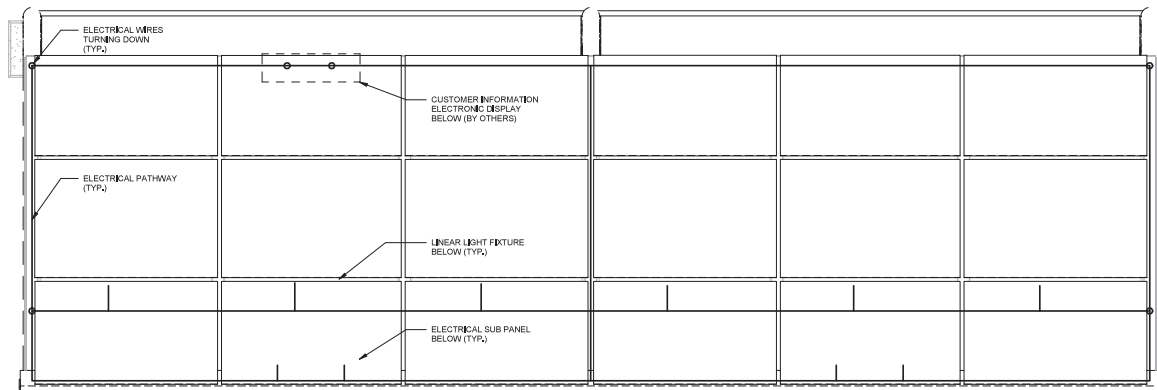
TASK ORDER NO.



1 SINGLE SHELTER ROOF PLAN - ELECTRICAL PATHWAYS  
ST-E-SLTR-004 3/4" = 1'-0"



3 SECTION B - ELECTRICAL PATHWAYS  
ST-E-SLTR-004 3/4" = 1'-0"



2 DOUBLE SHELTER ROOF PLAN - ELECTRICAL PATHWAYS  
ST-E-SLTR-004 3/4" = 1'-0"

"PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND."  
LICENSE No. 48328 EXPIRATION DATE: 2022-12-12



WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OFFICE OF CAPITAL PROGRAM DELIVERY  
ENGINEERING AND ARCHITECTURE

SUBMITTED BY: *Danica J. Khan* DATE: 08/01/2021 APPROVED BY: *[Signature]* DATE: 08/01/2021

TASK ORDER NO.

ELECTRICAL STANDARD DRAWING  
SINGLE SHELTER AND DOUBLE SHELTER ELECTRICAL  
DETAILS AND SECTIONS

SCALE  
3/4" = 1'-0"

DRAWING NO.  
FQxxxxx - ST-E-SLTR-004

SHEET NO.  
Mxxxxx - 17





**APPENDIX B: Template for Company Information and Question Responses**

Company Information		
1	Company Name	
2	Company Address	
3	Company Website	
4	Main products and services (include NAICS codes if available)	
5	POC for this RFI (Full Name)	
	Title	
	Email	
	Phone	
	Address	
	Signature	
6	Relevant current customers	
7	Other companies who collaborated on the RFI response	

**Question Responses:**

(As a guide, vendors are recommended to limit each response to a question to a maximum of two [2] 8.5" x 11" letter paper pages)

Question 1 Response:

Question 2 Response:

Question 3 Response:

Question 4 Response:

Question 5 Response:

Question 6 Response:



Question 7 Response:

Question 8 Response:

Question 9 Response:

Question 10 Response: