

MIAMI BUS SHELTER & OPPI PAL-LI SOLAR DISPLAY PANEL

(I) VALID ONLY FOR MIAMI BUS SHELTER

- 1.- MIAMI BUS SHELTER SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE THROUGH TESTING AND RATIONAL ANALYSIS IN ACCORDANCE WITH THE 2017 (8th EDITION) AND THE 2020 (7th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH SECTION 1620 OF THE ABOVE MENTIONED CODES, FOR A BASIC WIND SPEED OF 175 M.P.H. AND IN ACCORDANCE WITH ASCE 7-10 (FBC 2017) & ASCE 7-16 (FBC 2020) STANDARDS. TESTING FOR WIND CAPACITY HAS BEEN PERFORMED IN ACCORDANCE WITH TAS-202 AND AS PER ASTM E-330 STANDARD, PER PENETRATION TESTING LAB REPORTS # 3987, 3785, 3801, 3801 AND 3925. THIS STRUCTURE SHALL ONLY BE INSTALLED WHERE DESIGN WIND LOADS DO NOT EXCEED THE MAXIMUM VALUES INDICATED BELOW.
MAXIMUM A.S.D. DESIGN LOADS ARE:
DEAD LOADS ON STRUCTURAL ROOF: 0.0 P.S.F.
LIVE LOADS ON STRUCTURAL ROOF: 30 P.S.F.
MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR WIND:
- ON STRUCTURAL ROOF: +80, -80 P.S.F. (S.F.=2.00)
- ON SOLAR PANELS: +36, -72 P.S.F. (S.F.=2.00)
- ON REAR GLASS WALL: +50, -61 P.S.F. (S.F.=1.50)
- 2.- ALL STEEL POSTS AND PLATES TO BE MADE OF AISI 304 SERIES WITH A MINIMUM YIELD STRENGTH OF 42.0 ksi.
- 3.- ALL ALUMINUM EXTRUSIONS SHALL BE MADE OF A MINIMUM ALUMINUM ASSOCIATION ALLOY AND TEMPER CORRESPONDING TO 6063-T6.
- 4.- ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2015 ALUMINUM DESIGN MANUAL.
- 5.- BENCH MATERIAL SHALL BE ASTM A-1011 HOT ROLLED STEEL W/ A MINIMUM YIELD STRENGTH OF 40.0 ksi. PAINTED AS PER FEDERAL SPECIFICATIONS CORRESPONDING TO RED OXIDE PAINT OR EQUAL MATERIAL TO BE COATED WITH DEFLUX PX-12412 PVC PLASTISOL COATING, 0.125" THICK, AS MANUFACTURED BY POLYONE, CHICAGO, ILLINOIS W/ 10.1 lb./Gallon DENSITY, 2300 psi TENSILE STRENGTH (ASTM D-412), 419 psi TENSILE STRENGTH (ASTM D-624). COATING WAS EXPOSED FOR 1000 hrs. IN A QUV ULTRAVIOLET CHAMBER, RESULTING ON SOME LOSS OF GLOSS BUT NO PHYSICAL PROPERTY DEGRADATION. COATING SHALL MAINTAIN A COMFORTABLE TEMPERATURE OF BENCH'S SURFACE UNDER EXTREME WEATHER CONDITIONS (HOT OR COLD). THIS ENGINEER IS NOT RESPONSIBLE FOR THE THERMAL PERFORMANCE OF THIS COATING, WHICH SHALL BE GUARANTEED BY THE COATING MANUFACTURER. MAXIMUM BENCH CAPACITY IS 640 Lbs.
- 6.- ALL MACHINE SCREWS & BOLTS TO BE AISI 304 OR 316 SERIES STAINLESS STEEL. MINIMUM SHEAR STRENGTH SHALL BE 60.0 ksi. MINIMUM TENSILE STRENGTH SHALL BE 90.0 ksi. AS PER ASTM A-276 STANDARD. ALL SHEET METAL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 WITH 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
- 7.- ALL RIVETS TO BE STAINLESS STEEL WITH A MINIMUM OF 550 LB. SHEAR STRENGTH AND 700 LB. MINIMUM TENSILE STRENGTH.
- 8.- ALL WELDING OF STAINLESS STEEL MEMBERS SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY AWS D1.6 REGULATIONS. ELECTRODES SHALL BE MADE OF STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 80.0 ksi (A.W.S. CLASSIFICATION E-308, E309 OR EQUAL. ALL WELDING OF ALUMINUM MEMBERS TO CONFORM WITH THE AMERICAN WELDING SOCIETY A.W.S. D.1.2 REGULATIONS. USE E-5556 OR 5356 ELECTRODES. USE CERTIFIED WELDERS.
- 9.- STRUCTURAL INSULATED ROOF PANEL IS A 3" THICK 1lb/ft³ DENSITY EXPANDED POLYSTYRENE AS MANUFACTURED BY DYPPLAST PRODUCTS LLC, W/ MIAMI DADE COUNTY PRODUCT APPROVAL, WITH 0.035" THICK (STUCCO EMBOSSED) 3003-1154 ALUMINUM SKIN (W/ A MINIMUM YIELD STRENGTH OF 28.00 ksi) TOP AND BOTTOM AND ADHERED TO POLYSTYRENE TO SKIN WITH MOR-AD 44-484 URETHANE PREPOLYMER SOLUTION, PRODUCED BY MORTON INTERNATIONAL, INC. CHICAGO, ILLINOIS 60606-1598.
- 10.- GLASS AT REAR WALL OF BUS SHELTER SHALL BE 10mm THICK, TEMPERED AND SHALL COMPLY WITH 16CFR-1201.
- 11.- VERIFICATION OF CODE COMPLIANCE FOR SOLAR PANELS AND THEIR SUPPORTING FRAME COVERS ONLY THEIR STRUCTURAL ADEQUACY TO SUSTAIN THE SUPERIMPOSED WIND LOADS. SOLAR PANELS TO BE MANUFACTURED BY BP SOLAR, MARYLAND, U.S.A., MODEL #BP3160 LI. THIS PRODUCT APPROVAL DOCUMENT DOES NOT INCLUDE SOLAR PANEL'S THERMAL PERFORMANCE. SOLAR PANEL'S INSTALLATION INSTRUCTIONS SHALL INCLUDE INSTRUCTIONS SUCH THAT NO PERSON SHALL EVER STEP ON PANELS AT ANY TIME.
- 12.- ANCHORS USED TO CONNECT POST'S BASE PLATES TO CONCRETE FOUNDATION SHALL BE EITHER OF THE FOLLOWING TYPES:
(a.) 5/8" DIAMETER GALVANIZED STEEL ANCHOR BOLTS, WITH STRAIGHT SHAFT, HEAD AND NUT, TO COMPLY WITH ASTM F1554, GALVANIZED TO ASTM A-153 WITH A MINIMUM YIELD STRENGTH OF 36ksi, AND TO PENETRATE A MINIMUM OF 8" INTO THE CONCRETE FOUNDATION.
MINIMUM A.S.D. TENSION LOAD CAPACITY: 6200 LB.
MINIMUM A.S.D. SHEAR LOAD CAPACITY: 3100 LB.
ANCHORS SHALL BE INSTALLED STRICTLY FOLLOWING THE SPECIFICATIONS OF THE ANCHOR MANUFACTURER AND THE DETAILS SHOWN ON THIS PRODUCT APPROVAL DOCUMENT.
- 13.- ALL CONCRETE TO DEVELOP A 28 DAY MINIMUM COMPRESSIVE STRENGTH f_c OF 3000 psi. ALL REBARS TO BE ASTM A-615 DEFORMED BARS. ALL CONCRETE CONSTRUCTION TO COMPLY WITH ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- 14.- REQUIRED FRAMING FOR INSTALLATION OF SHELTER WITHIN EXPOSURES C OR D AS DEFINED BY ASCE 7-10 (FBC 2017) AND ASCE 7-16 (FBC 2020) STANDARD SHALL BE PROVIDED BASED ON SCHEDULE ON SHEET 4 OF 33 OF THIS DRAWING.

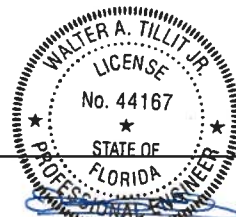
GENERAL NOTES:

(II) VALID ONLY FOR OPPI PAL-LI SOLAR DISPLAY PANEL

- 1.- OPPI PAL-LI SOLAR DISPLAY UNIT SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE THROUGH TESTING AND RATIONAL ANALYSIS IN ACCORDANCE WITH THE 2017 (8th EDITION) AND 2020 (7th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH SECTION 1620 OF THE ABOVE MENTIONED, FOR A BASIC WIND SPEED OF 175 M.P.H. AND IN ACCORDANCE WITH ASCE 7-10 (FBC 2017) & ASCE 7-16 (FBC 2020) STANDARDS. TESTING FOR WIND CAPACITY HAS BEEN PERFORMED IN ACCORDANCE WITH TAS-202 AND AS PER ASTM E-330 STANDARD, AS PER PENETRATION TESTING LAB REPORTS # 3788 AND 3782. THIS STRUCTURE SHALL ONLY BE INSTALLED WHERE DESIGN WIND LOADS DO NOT EXCEED THE MAXIMUM VALUES INDICATED BELOW.
MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR WIND:
+80, -67 P.S.F. (S.F.=1.50)
- 2.- MAIN FRAME COMPONENTS (SEE SHEET 22) SHALL BE MADE OF ASTM A-36 STEEL, GALVANIZED AS PER ASTM A-123. CLADDING COMPONENTS SHALL BE MADE OF AISI 304L SERIES, WITH MINIMUM YIELD STRENGTH OF 25.0 ksi.
- 3.- FRAME COMPONENTS FOR FRONT AND REAR DOORS OF DISPLAY UNIT SHALL BE MADE OF EXTRUDED ALUMINUM WITH ALUMINUM ASSOCIATION 6063-T5 ALLOY AND TEMPER, REINFORCED WITH CONTINUOUS AISI 304L SERIES STAINLESS STEEL PLATES AT STILES.
- 4.- GLASS AT FRONT AND REAR DOORS OF DISPLAY UNIT SHALL BE 0.315" THICK TEMPERED GLASS AND SHALL COMPLY WITH 16CFR-1201.
- 5.- ALL MACHINE SCREWS & BOLTS TO BE AISI 304 OR 316 SERIES STAINLESS STEEL. MINIMUM SHEAR STRENGTH SHALL BE 60.0 ksi. MINIMUM TENSILE STRENGTH SHALL BE 90.0 ksi. AS PER ASTM A-276 STANDARD & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
- 6.- ALL RIVETS TO BE STAINLESS STEEL WITH A MINIMUM OF 550 LB. SHEAR STRENGTH AND 700 LB. MINIMUM TENSILE STRENGTH.
- 7.- ALL WELDING OF HOT ROLLED STEEL MEMBERS SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY A.W.S. D 1.1 REGULATIONS. ELECTRODES SHALL BE E70 XX, AS PER A.W.S. A 5.1 OR A 5.5. WELDING OF GALVANIZED STEEL SHALL BE IN ACCORDANCE WITH A.W.S. D-19.0 SPECIFICATIONS.
- 8.- ALL HARDWARE FOR LOCKING ASSEMBLY FOR DOORS AT TOP AND BOTTOM SHALL BE AISI 304L STAINLESS STEEL AS SPECIFIED ON SHEETS 27, 28 AND 30 OF THIS PRODUCT APPROVAL DOCUMENT.
- 9.- ANCHORS USED TO CONNECT MAIN FRAME POST'S BASE PLATES TO CONCRETE FOUNDATION SHALL BE EITHER OF THE FOLLOWING TYPES:
(a.) 5/8" DIAMETER GALVANIZED STEEL ANCHOR BOLTS, WITH STRAIGHT SHAFT, HEAD AND NUT, TO COMPLY WITH ASTM F1554, GALVANIZED TO ASTM A-153 AND TO PENETRATE A MINIMUM OF 8" INTO THE CONCRETE FOUNDATION.
MINIMUM A.S.D. TENSION LOAD CAPACITY: 6200 LB.
MINIMUM A.S.D. SHEAR LOAD CAPACITY: 3100 LB.
ANCHORS SHALL BE INSTALLED STRICTLY FOLLOWING THE SPECIFICATIONS OF THE ANCHOR MANUFACTURER AND THE DETAILS SHOWN ON THIS PRODUCT APPROVAL DOCUMENT.
- 10.- ALL CONCRETE TO DEVELOP A 28 DAY MINIMUM COMPRESSIVE STRENGTH f_c OF 3000 psi. ALL REBARS TO BE ASTM A-615 DEFORMED BARS. ALL CONCRETE CONSTRUCTION TO COMPLY WITH ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.

(III) VALID FOR BOTH MIAMI BUS SHELTER & OPPI PAL-LI SOLAR DISPLAY PANEL

- 1.- ALL ELECTRICAL & MECHANICAL DETAILS AND SPECIFICATIONS, AS APPLICABLE, ARE NOT PART OF THIS PRODUCT APPROVAL DOCUMENT. THEY SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT AND SHALL BE REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION.
- 2.- ALL ZONING DETAILS AND SPECIFICATIONS NEEDED FOR THE LOCATION, USE AND CONSTRUCTION OF BUS SHELTER AND SOLAR ADVERTISING DISPLAY ARE NOT PART OF THIS PRODUCT APPROVAL DOCUMENT AND SHALL BE SUBMITTED SEPARATELY TO THE CORRESPONDING ZONING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION.
- 3.- MINIMUM SOIL BEARING CAPACITY SHALL BE 2000 P.S.F.
- 4.- ELECTRIC SERVICE DROP CONDUCTORS OR ANY OVERHEAD WIRING SHALL NOT EXIST OR BE INSTALLED OVER ANY PART OF THIS STRUCTURE. CONTRACTOR TO COORDINATE AND VERIFY THE EXISTENCE OF ANY UTILITIES THAT MAY INTERFERE WITH THE CONSTRUCTION AND INSTALLATION OF THE BUS SHELTER OR SOLAR ADVERTISING DISPLAY BEFORE PROCEEDING WITH THE WORK.
- 5.- (a.) THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; I.E. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.
(b.) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
(c.) THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
(d.) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.A.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
(e.) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
- 6.- BUS SHELTER AND OPPI PAL-LI SOLAR ADVERTISING UNIT SHALL BE BONDED AND/OR GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
- 7.- FINISH COLOR FOR MIAMI BUS SHELTER & OPPI PAL-LI SOLAR DISPLAY PANEL IS NOT PART OF THIS APPROVAL, BUT SHALL BE DEFINED AS PER AGREEMENT BETWEEN MANUFACTURER AND OWNER OF BUS SHELTER/OPPI.
8. THIS DRAWING IS A GENERIC STRUCTURAL DRAWING AND DOES NOT CONSTITUTE AT ALL A SHOP DRAWING FOR THE DIRECT MANUFACTURING OF THIS BUS SHELTER.
9. LABELING OF THIS PRODUCT SHALL COMPLY W/ MIAMI DADE COUNTY REGULATIONS.



P.E. SEAL/SIGNATURE/DATE

MIAMI DADE COUNTY
 PRODUCT REVIEWED
 as complying with the Florida
 Building Code
 Acceptance No. 20-0972-01
 Expiration Date 10/22/2025
 By: *Hedy A. [Signature]*
 Miami Engineering & Construction

TILECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 6365 N.W. 36th St., Ste. 305
 VIRGINIA GARDENS, FL 33116
 Phone (305)871-1530, Fax: (305)871-1531
 e-mail: tileco@tillit.com
 CA-000719
 WALTER A. TILLIT JR., P. E.
 FLORIDA LIC. # 44167

MIAMI
 BUS SHELTER &
 OPPI PAL-LI SOLAR
 DISPLAY PANEL

OUTFRONT MEDIA, INC.
 6530 NW 22nd Street
 Doral, FL 33122
 Phone (786) 546-0130

GENERAL NOTES

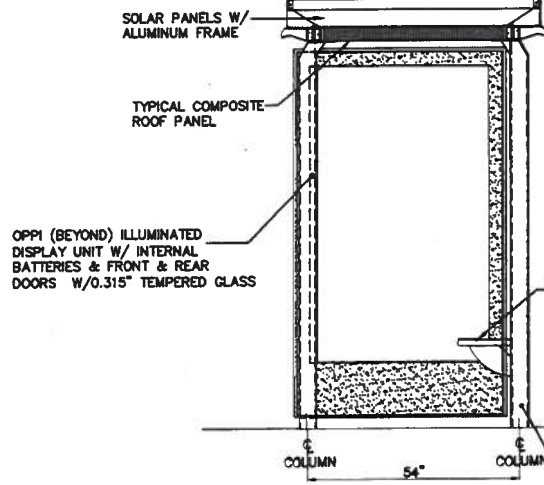
DRAWING BY:
 M.P.

9/3/2020

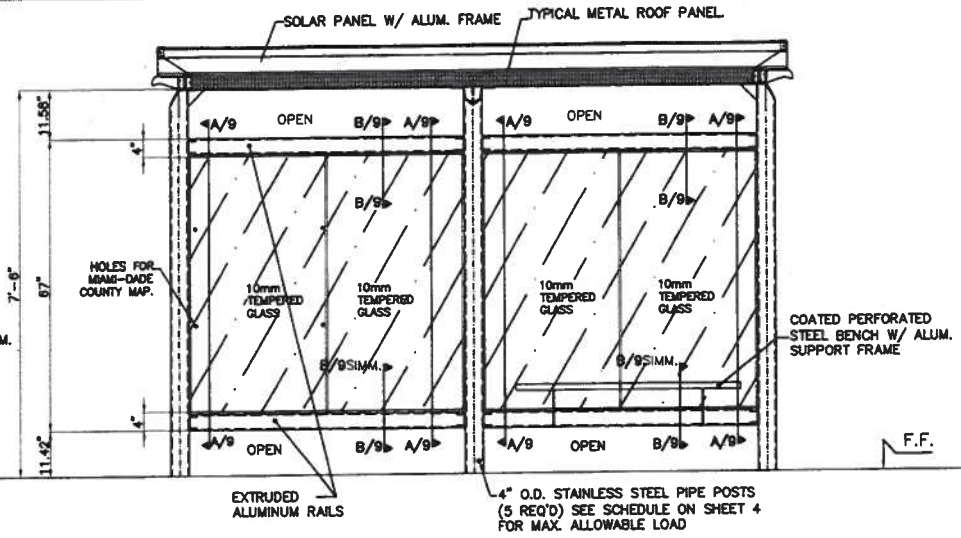
DATE:

20-032
 DRAWING No.

SHEET 1 OF 33

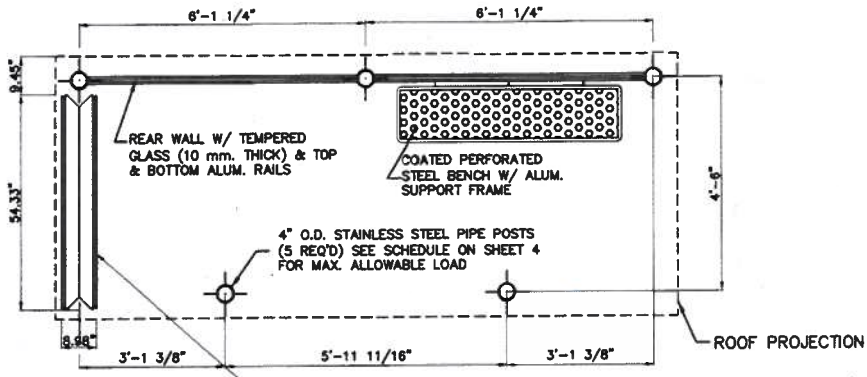


RIGHT SIDE ELEVATION

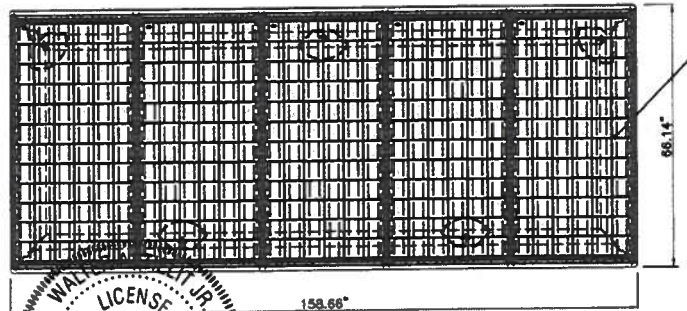


REAR WALL ELEVATION

NOTE : OPPI ILLUMINATED DISPLAY DO NOT SHOWN FOR CLARITY

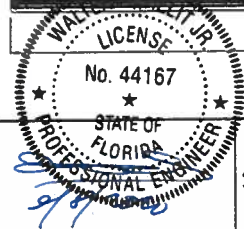


FLOOR PLAN



ROOF PLAN

MIAMI DADE COUNTY
 PRODUCT REVISED
 its complying with the Florida
 Building Code
 Acceptance No. 20-0922.01
 Expiration Date 10/22/2025
 By: [Signature]
 Division Chief, Product Control



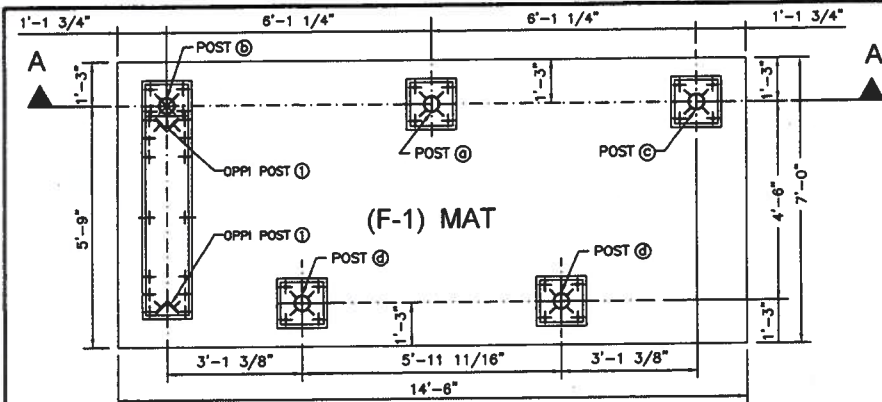
P.E. SEAL/SIGNATURE/DATE

TILECO inc.
 TILIT TESTING & ENGINEERING COMPANY
 6365 N.W. 36th St. Ste. 306
 VIRGINIA GARDENS, FL 33166
 Phone: (305)871-1530. Fax: (305)871-1531
 e-mail: tileco@taco.com
 CA-0008719
 WALTER A. TILIT JR., P. E.
 FLORIDA Lic. #44167

BUS SHELTER
 MIAMI
 PLANS & ELEVATIONS

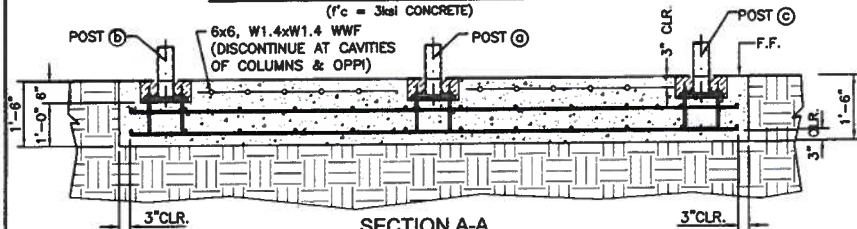
OUTFRONT MEDIA, INC.
 6550 NW 23rd Street
 Coral, FL 33122
 Phone (788) 848-0126

DRAWING BY: M.P.
 9/3/2020
 DATE:
20-032
 DRAWING No.
 SHEET 2 OF 33



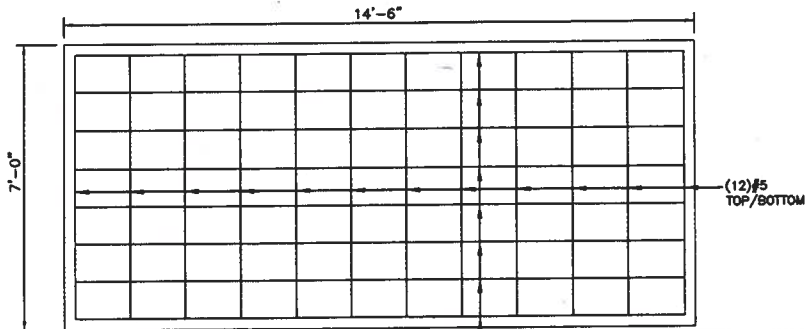
MAT FOUNDATION PLAN BUS SHELTER & OPPI

($f'_c = 3\text{ksi}$ CONCRETE)



SECTION A-A

SCALE: 3/8"=1'-0"



DETAIL 1

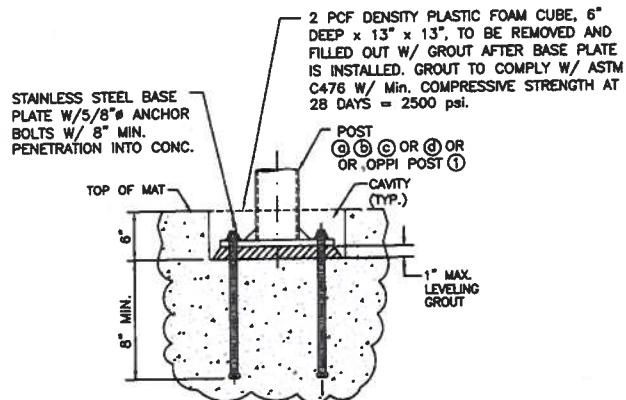
TOP / BOTTOM REINFORCEMENT FOR 18" THICK CONCRETE MAT (TOP WWF NOT SHOWN FOR CLARITY)

(8) #5 TOP/BOTTOM

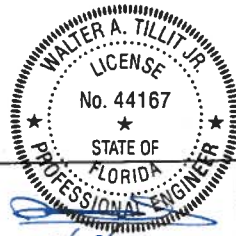
FOUNDATION NOTES:

- 1.-THE ELEVATION OF CAVITIES LEFT FOR POST'S BASE PLATES (SEE DETAILS) SHALL BE A MINIMUM OF 6" BELOW THE TOP OF THE BUS SHELTER FINISHED FLOOR SLAB.
- 2.-REINFORCEMENT STEEL SHOULD BE AS INDICATED ON FOOTING SCHEDULE:
- 3.-SEE GENERAL NOTES ON SHEET 1 OF 33 FOR ADDITIONAL SPECIFICATIONS & NOTES.
- 4.-SEE SHEETS 6, 7 & 8 FOR POST/BASE, PLATE SPECIFICATIONS FOR BUS SHELTER. SEE SHEETS 22 & 23 FOR OPPI BASE PLATE SPECIFICATIONS.

FOOTING SCHEDULE			
NUMBER	DIMENSION (WxL)	DEPTH	STEEL REINFORCEMENT
F-1	7'-0"x14'-6"	1'-6"	(12) #5 @ 16" MAX. O.C. @ 14'-6" DIRECTION, TOP / BOTTOM. & (8) #5 @ 11" MAX. O.C. 7'-0" DIRECTION, TOP / BOTTOM.



TYPICAL POST/ OPPI POST CONNECTION



P. E. SEAL/SIGNATURE/DATE

MIAMI DADE COUNTY

PRODUCT REVISED
in compliance with the Florida Building Code
Acceptance No. 20-0922-01
Expiration Date 10/22/2025
By: *Walter A. Tillit Jr.*
Miami (Tillit Product Control)

TILECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 26th St., Ste. 300,
VIRGINIA GARDENS, FL 33166
Phone (305)871-1530 Fax: (305)871-1531
e-mail: tillit@tileco.com
CA-0000719
WALTER A. TILLIT JR., P. E.
FLORIDA LIC. # 44167

BUS SHELTER
MIAMI

FOUNDATION PLAN
& SCHEDULE

OUTFRONT MEDIA, INC.
8530 NW 23rd Street
Doral, FL 33122
Phone (786) 648-9136

DRAWING BY:
M.P.

9/3/2020

DATE:

20-032
DRAWING No.

SHEET 3 OF 33