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April 3, 2023

FILED BY ELECTRONIC MAIL AND US MAIL

Melanie Bachman, Esq.
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **PETITION NO. 1492** – CT NSB ProjectCo LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.99-megawatt AC solar photovoltaic electric generating facility located at 486 Fitch Hill Road, Montville (Uncasville), Connecticut, and associated electrical interconnection.

Dear Attorney Bachman:

On behalf of CT NSB ProjectCo LLC (“Petitioner”), this letter to the Connecticut Siting Council (“Council”) is in response to Council’s Petition No. 1492 Decision dated June 24, 2022 (“Decision”), specifically Conditions #2 and #6.

Enclosed – and in response to Condition #2 of the Decision – please find a copy of the CT Department of Energy and Environmental Protection General Stormwater Permit (“Stormwater Permit”). Please note that the recipient of the Stormwater Permit, TRITEC Americas, LLC, is the parent company of Petitioner.

Regarding Condition #6 of the Decision, Eversource, Petitioner, and Michaud Law Group met on February 16, 2023, to discuss the visual impact of the electrical interconnection and overall construction of the project. Eversource agreed to install Petitioner-owned equipment on utility-owned poles. This will reduce the number of utility poles from twenty to ten poles.

Consistent with Council requirements, Petitioner submits one electronic version, an original, and fifteen hard copies of all necessary documents.

Please feel free to contact me if you have any questions.

Very truly yours,

Paul R. Michaud



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

NOTICE OF PERMIT AUTHORIZATION

Date: December 15, 2022

ATTN: Nicole SantaMaria, Associate Director of Asset Management

Mailing Address:
Tritec Americas LLC
888 Prospect Street
La Jolla, CA 92037

Site Information:
N Silver Brook Solar
486 Fitch Hill Road
Uncasville, CT 06382

RE: General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
Permit No. GSN003862, issued to Tritec Americas LLC
Application No. 202208685

Dear Nicole SantaMaria:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the N Silver Brook Solar (located in Uncasville, CT) registration for the **General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 12/31/2020 (general permit)**. The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003862 has been assigned to authorize the stormwater discharge(s) from this project.

Should you have any questions about this letter or any other question concerning the general permit, please feel free to contact Laura Gaughran at 860-424-4049 or laura.gaughran@ct.gov.

Sincerely,
Karen L. Allen, PE
Supervising Sanitary Engineer
Water Permitting and Enforcement Division
Bureau of Materials Management and Compliance Assurance

PREPARED FOR:
SOLV INC.
16680 WEST BERNARDO DR
SAN DIEGO, CA 92127

PREPARED BY:
SOLAR FLEXRACK

1. CODES AND STANDARDS:

2. WIND DESIGN PARAMETERS:

3. SNOW DESIGN PARAMETERS:

TILT ANGLE	Cs VALUE
0°-15°	1.00
20°	0.91
25°	0.82
30°	0.73
35°	0.64
40°	0.55
45°	0.46
50°	0.37
55°	0.28

4. EARTHQUAKE DESIGN PARAMETERS – EQUIVALENT LATERAL FORCE:

MAPPED	DESIGN
S _s - 0.167g	S _{DS} - 0.178g
S ₁ - 0.060g	S _{p1} - 0.096g

5. FOUNDATIONS:

6. APPLICABLE INSTALLATION TOLERANCES (PER SINGLE TRACKER):

POST TOLERANCES ARE REFERENCED AT TOP-OF-POST LOCATION.
DRIVE POST HEIGHT ABOVE GRADE IS 3" ABOVE IDLER POSTS
MINIMUM RECOMMENDED CLEARANCE BETWEEN TRACKERS NO LESS THAN 12".

<u>ABBREVIATIONS</u>			
MIN	MINIMUM	BC	BEARING CRADLE
MAX	MAXIMUM	C—C	CENTER TO CENTER
OH	OVERHANG	CD	CRITICAL DIMENSION
PAG	POST ABOVE	CTA	CENTRAL TUBE AXIS
REF	REFERENCE	DIM	DIMENSION
DIA	DIAMETER	EOP	END OF PANEL
TYP	TYPICAL	HORIZ	HORIZONTAL
VERT	VERTICAL	HDG	HOT DIPPED GALVANIZED
STD	STANDARD	PLN	PLAIN
RV	RECEIVER	SWG	SWAGED
CP	CLAMP	EOT	END OF TUBE
S/C	STOCK CODE		


ABBREVIATIONS

MIN	MINIMUM
MAX	MAXIMUM
OH	OVERHANG
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REF	REFERENCE
DIA	DIAMETER
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PLN	PLAIN
SWG	SWAGED
EOT	END OF TUBE

S1	PV MODULE SPECIFICATION SHEETS	●			
S2	1X53 RACK PLAN VIEW, ELEVATION, & NOTES	●			
S3	1X41 RACK PLAN VIEW, ELEVATION, & NOTES	●			
S4	1X35 RACK PLAN VIEW, ELEVATION, & NOTES	●			
S5	ISO VIEW, BILL OF MATERIAL, & HARDWARE DETAILS	○			
S6	TRACKER CONNECTIONS – DRIVE POST & SPLICE CONNECTION DETAILS	○			
S7	TRACKER CONNECTIONS – IDLER POST & VERTICAL RAIL CONNECTION DETAILS	○			
S8	TRACKER CONNECTIONS – DAMPER & PANEL CONNECTION DETAILS	○			

SIGN-OFF SEP. 16, 2022	
	ISSUANCE/REVISION



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SOLAR PLEX RACK
A Division of Northern States Metals

**3207 Innovation Place
Youngstown, OH 44509-4023
Phone (888) 380-8138**

COVER SHEET

SOLV INC.
NORTH SILVER BROOK SOLAR PROJECT
UNCASVILLE, CT 06382

DATE:	09/16/2022
DRAWN BY:	

16235 PAGE:

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OS



BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

Mono Multi Solutions

PRODUCT: TSM-DEG19C.20
PRODUCT RANGE: 525-550W

550W+

MAXIMUM POWER OUTPUT

0~+5W

POSITIVE POWER TOLERANCE

21.0%

MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation
- Designed for compatibility with existing mainstream system components
- High return on Investment



High power up to 550W

- Up to 21.0% module efficiency with high density interconnect technology
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



High reliability

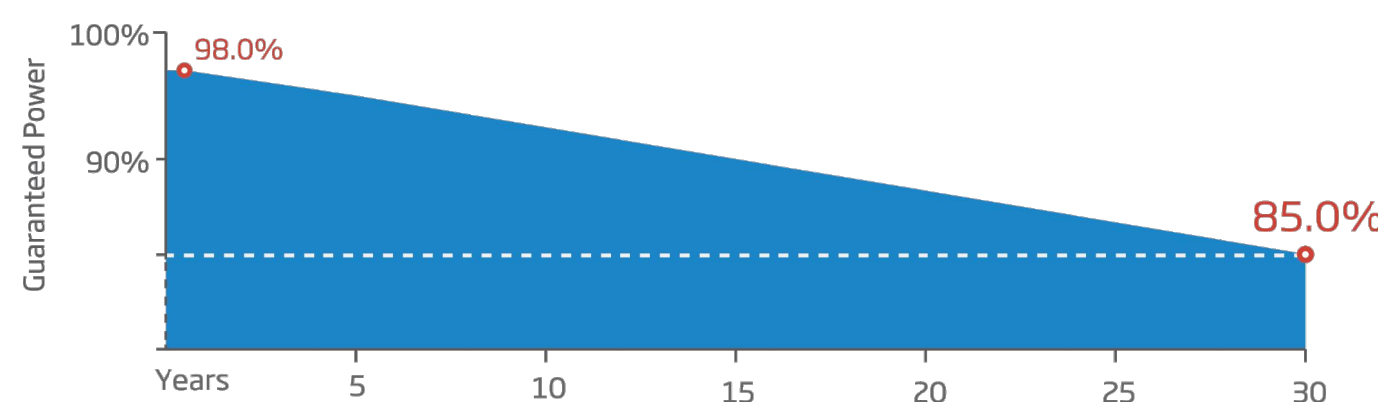
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material control
- Resistant to harsh environments such as salt, ammonia, sand, high temperature and high humidity areas
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature
- Up to 25% additional power gain from back side depending on albedo

Trina Solar's Vertex Bifacial Dual Glass Performance Warranty



Comprehensive Products and System Certificates



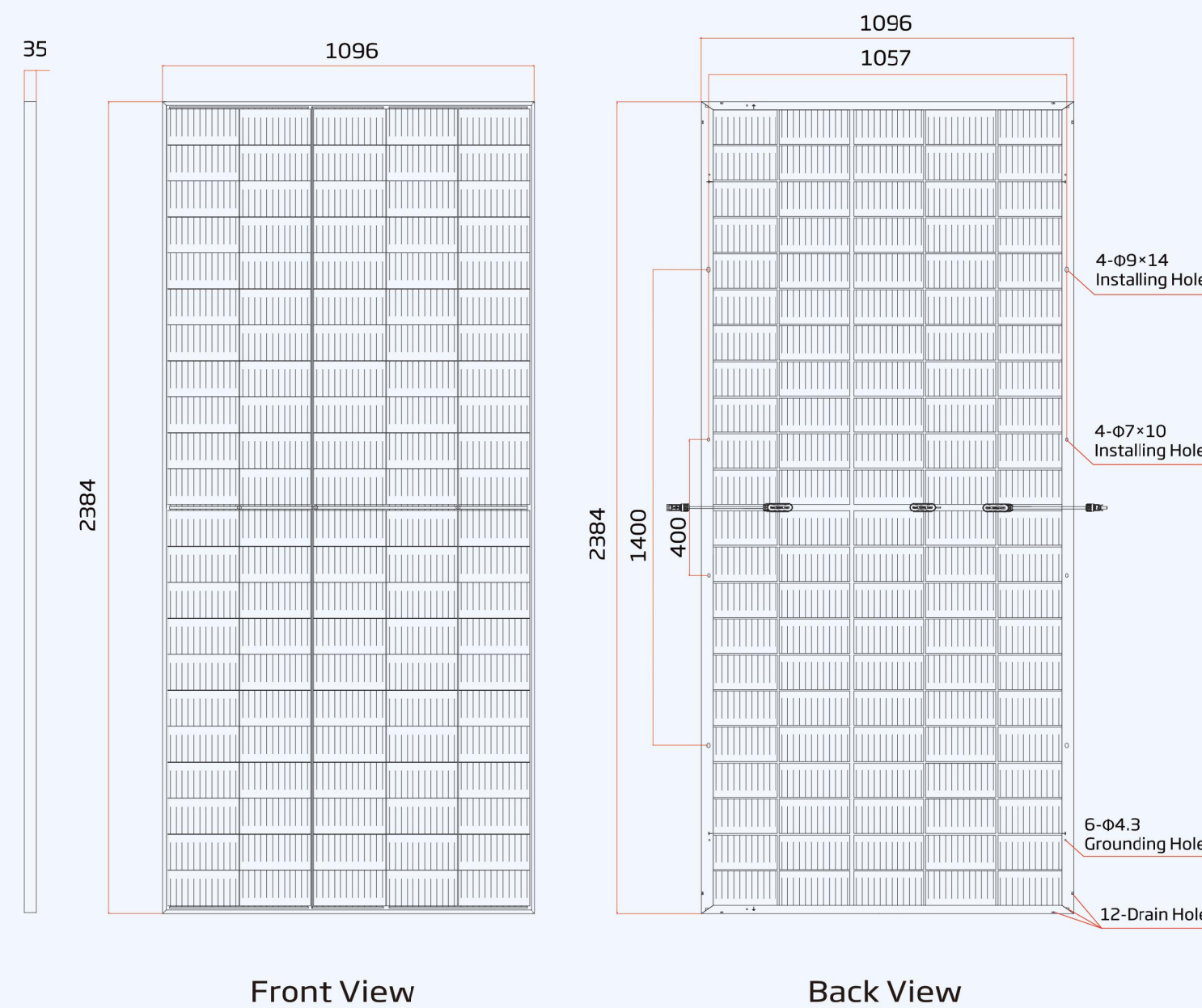
IEC61215/IEC61730/IEC61701/IEC62716/UL61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupational Health and Safety Management System



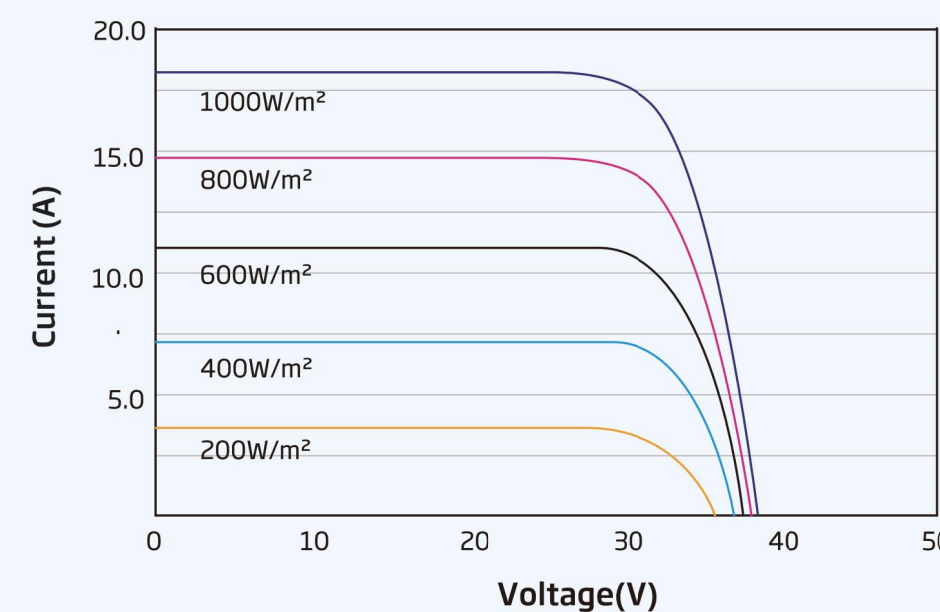
BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

PRODUCT: TSM-DEG19C.20
PRODUCT RANGE: 525-550W

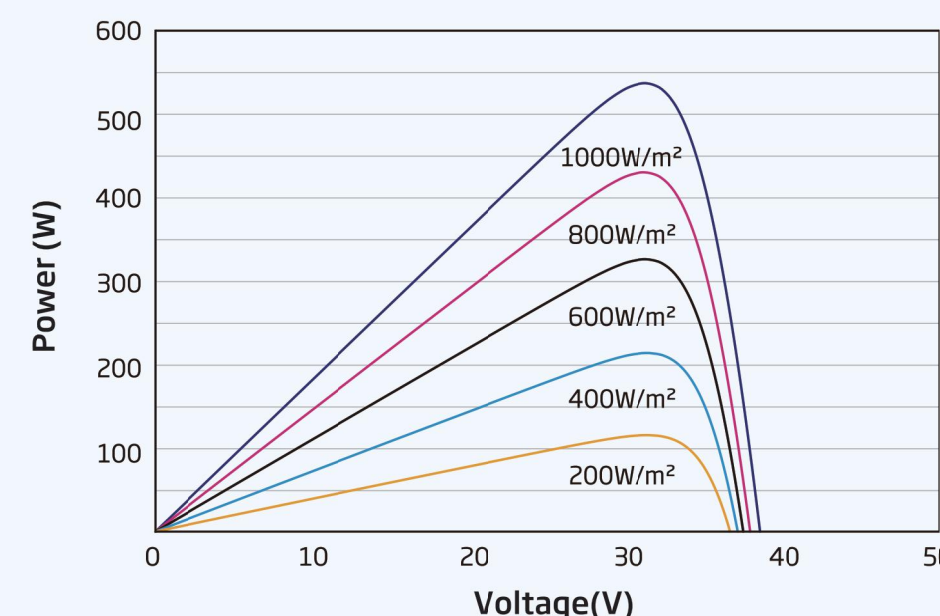
DIMENSIONS OF PV MODULE(mm)



I-V CURVES OF PV MODULE (540 W)



P-V CURVES OF PV MODULE(540 W)



ELECTRICAL DATA (STC)

Peak Power Watts-P _{MAX} (Wp)*	525	530	535	540	545	550
Power Tolerance-P _{MAX} (W)	0 ~ +5					
Maximum Power Voltage-V _{MPP} (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current-I _{MPP} (A)	17.04	17.11	17.16	17.21	17.24	17.29
Open Circuit Voltage-V _{OC} (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current-I _{SC} (A)	18.14	18.19	18.24	18.30	18.35	18.39
Module Efficiency-η _m (%)	20.1	20.3	20.5	20.7	20.9	21.0

STC: Irradiance:1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

Electrical characteristics with different power bin (reference to 10% Irradiance ratio)**

Total Equivalent power -P _{MAX} (Wp)	562	567	573	578	583	589
Maximum Power Voltage-V _{MPP} (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current-I _{MPP} (A)	18.23	18.31	18.36	18.41	18.45	18.50
Open Circuit Voltage-V _{OC} (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current-I _{SC} (A)	19.41	19.46	19.52	19.58	19.63	19.68
Irradiance ratio (rear/front)	10%					

Power Bifaciality:70±5%.

ELECTRICAL DATA (NOCT)

Maximum Power-P _{MAX} (Wp)	398	401	405	409	413	416
Maximum Power Voltage-V _{MPP} (V)	28.6	28.8	29.0	29.2	29.4	29.5
Maximum Power Current-I _{MPP} (A)	13.88	13.93	13.97	14.02	14.08	14.10
Open Circuit Voltage-V _{OC} (V)	35.0	35.1	35.3	35.5	35.7	35.9
Short Circuit Current-I _{SC} (A)	14.62	14.66	14.70	14.75	14.79	14.82

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline 210mm PERC
No. of cells	110 cells
Module Dimensions	2384×1096×35 mm (93.86×43.15×1.38 inches)
Weight	32.6 kg (71.9 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	35mm (1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), Portrait: 280/280 mm (11.02/11.02 inches) Landscape: 1400/1400 mm (55.12/55.12 inches)
Connector	Trina TS4*/MC4 EVO2

*Please specify connector on your order

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P _{MAX}	-0.34%/°C
Temperature Coefficient of V _{OC}	-0.25%/°C
Temperature Coefficient of I _{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC) 1500V DC (UL)
Max Series Fuse Rating	35A

WARRANTY

12 year Product Workmanship Warranty
30 year Power Warranty
2% first year degradation
0.45% Annual Power Attenuation

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 31 pieces
Modules per 40' container: 527 pieces

** Back-side power gain varies depending upon the specific project albedo



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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Version number: TSM_DE19C_2021_A

www.trinasolar.com

CUSTOMER:

SOLV INC.
NORTH SILVER BROOK SOLAR PROJECT
UNCASVILLE, CT 06382

Sheet

16235

DATE: 09/16/2022

DRAWN BY: DH

CHECK BY: JS

PAGE: S1 of S8

S1

PV MODULE SPECIFICATION SHEETS



A Division of Northern States Metals

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Phone (888) 380-8138

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REV	DESCRIPTION	DATE

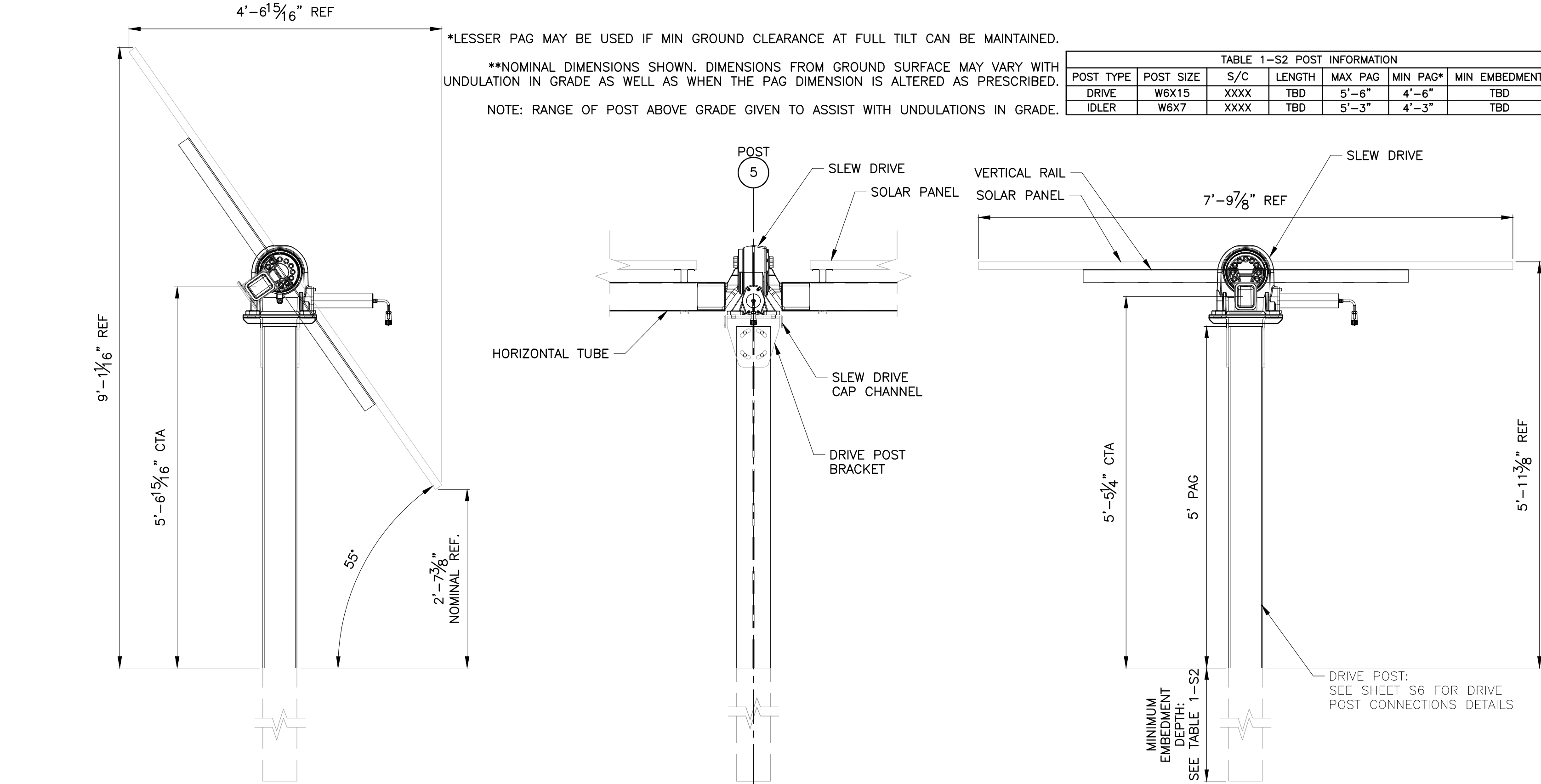
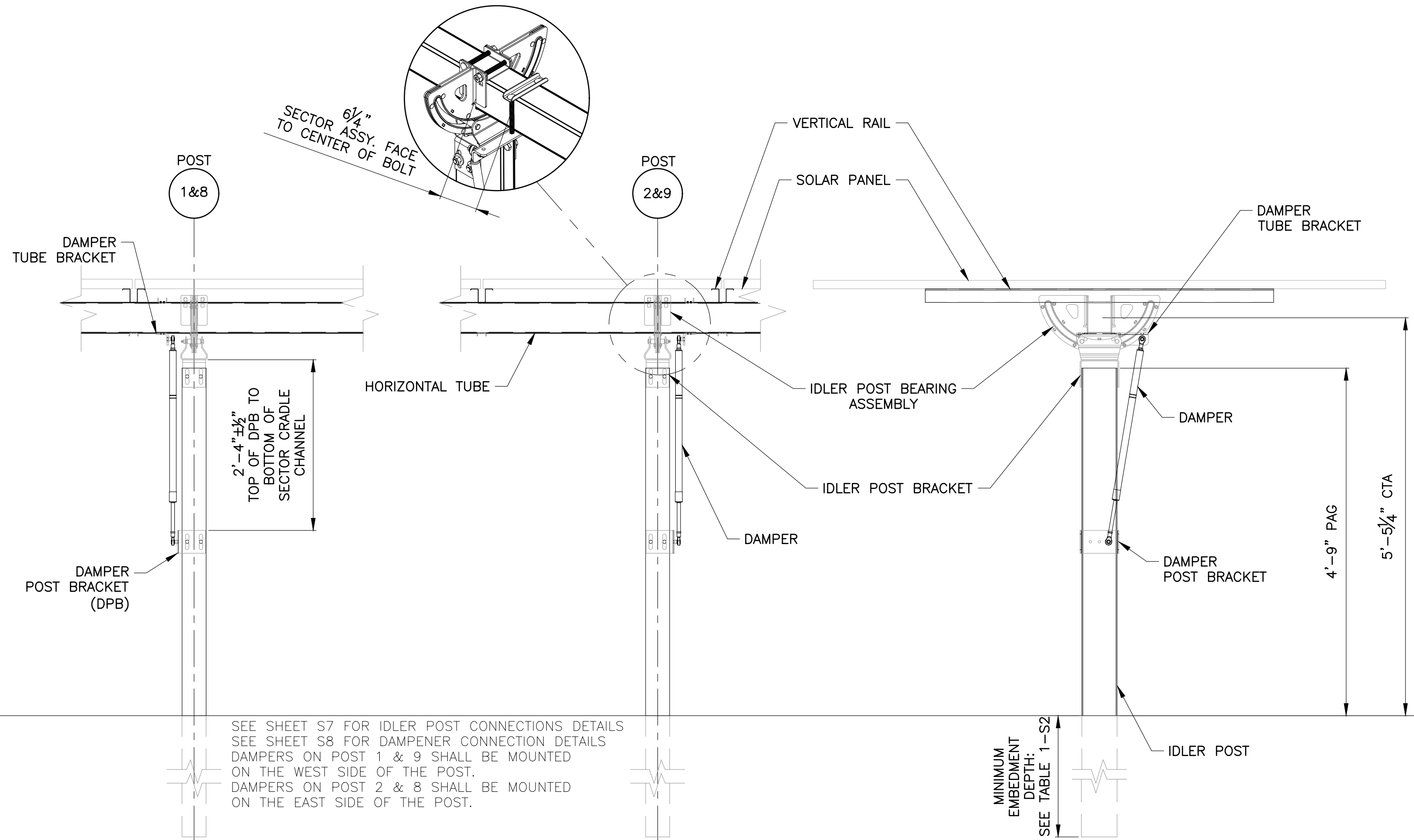
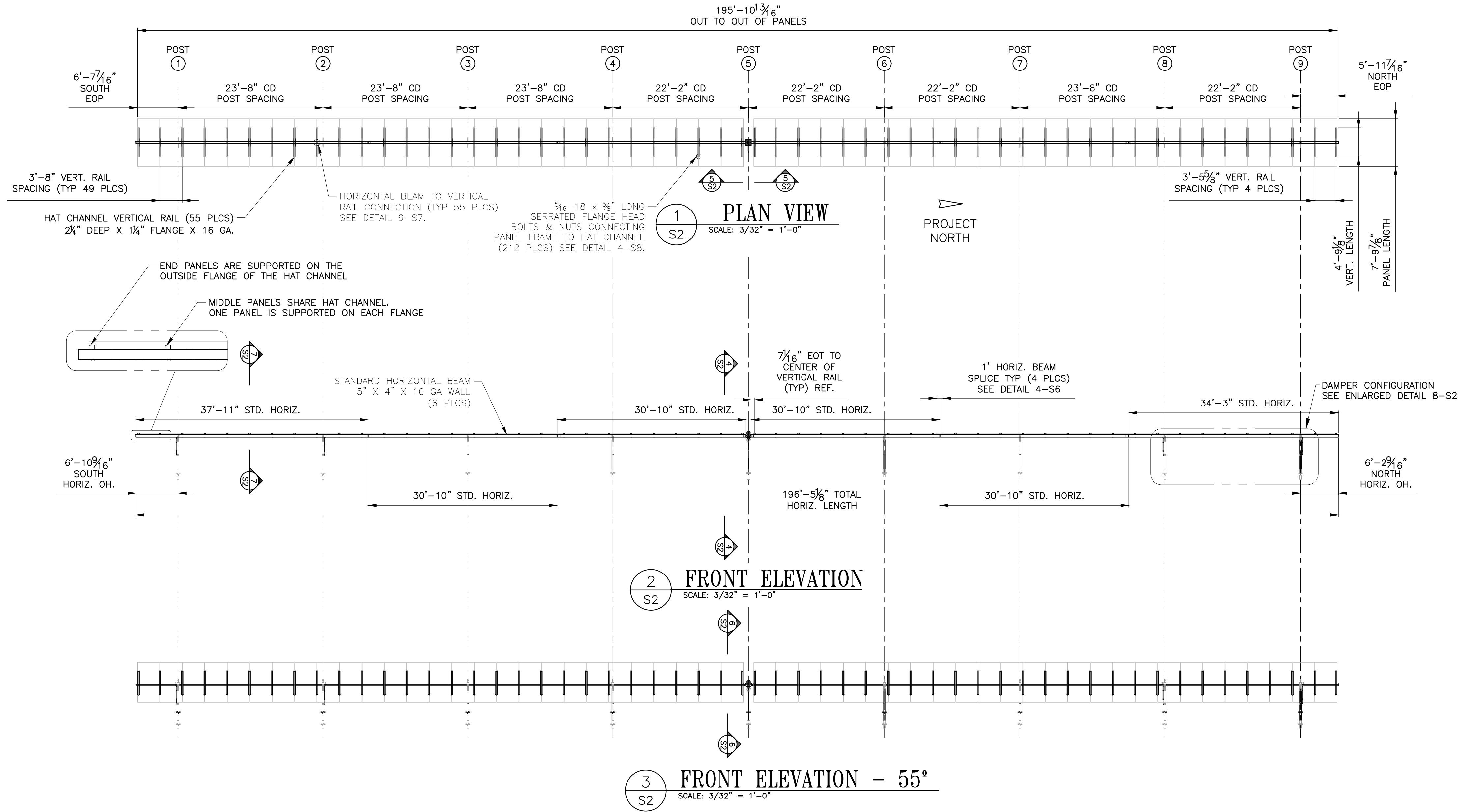
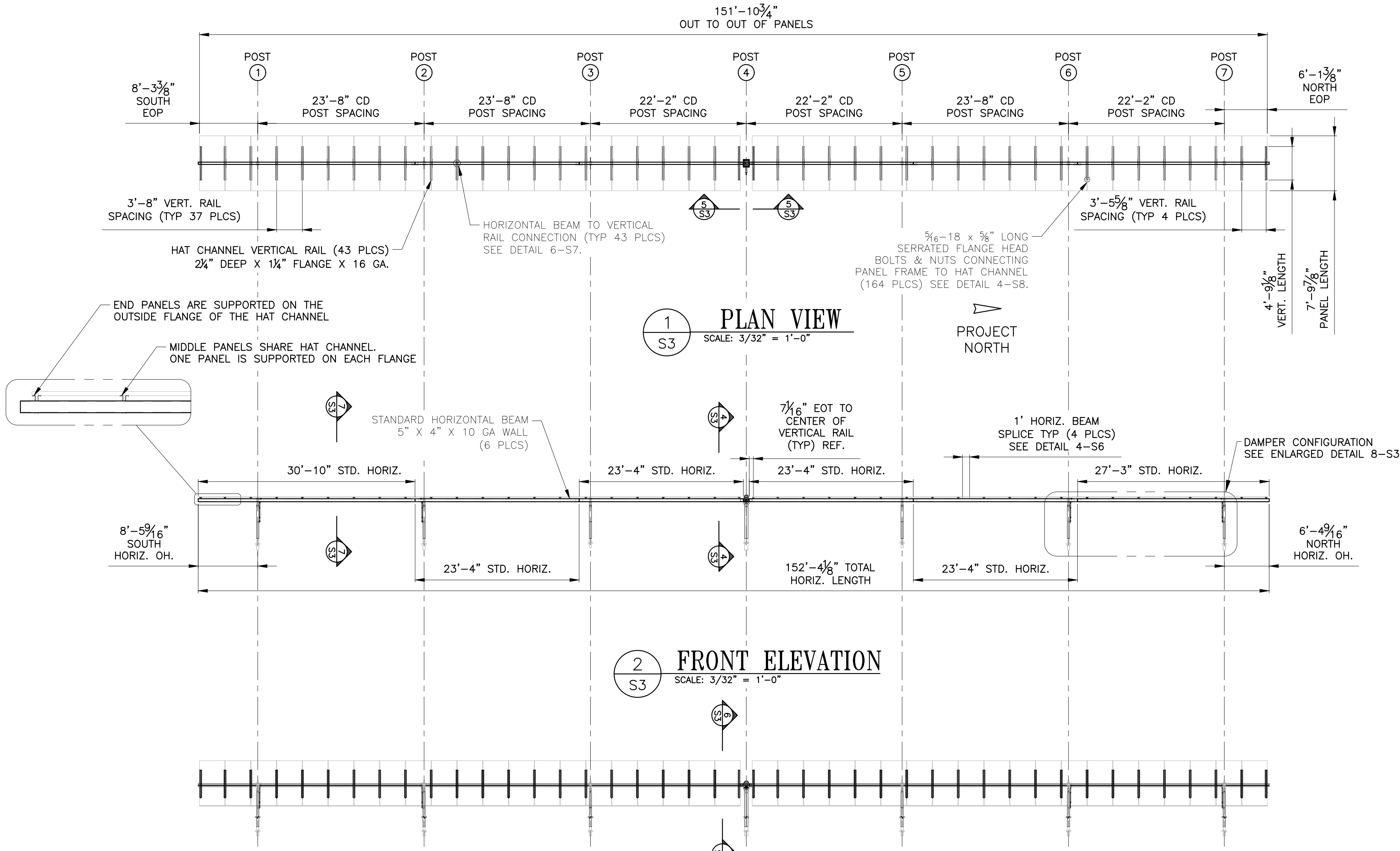
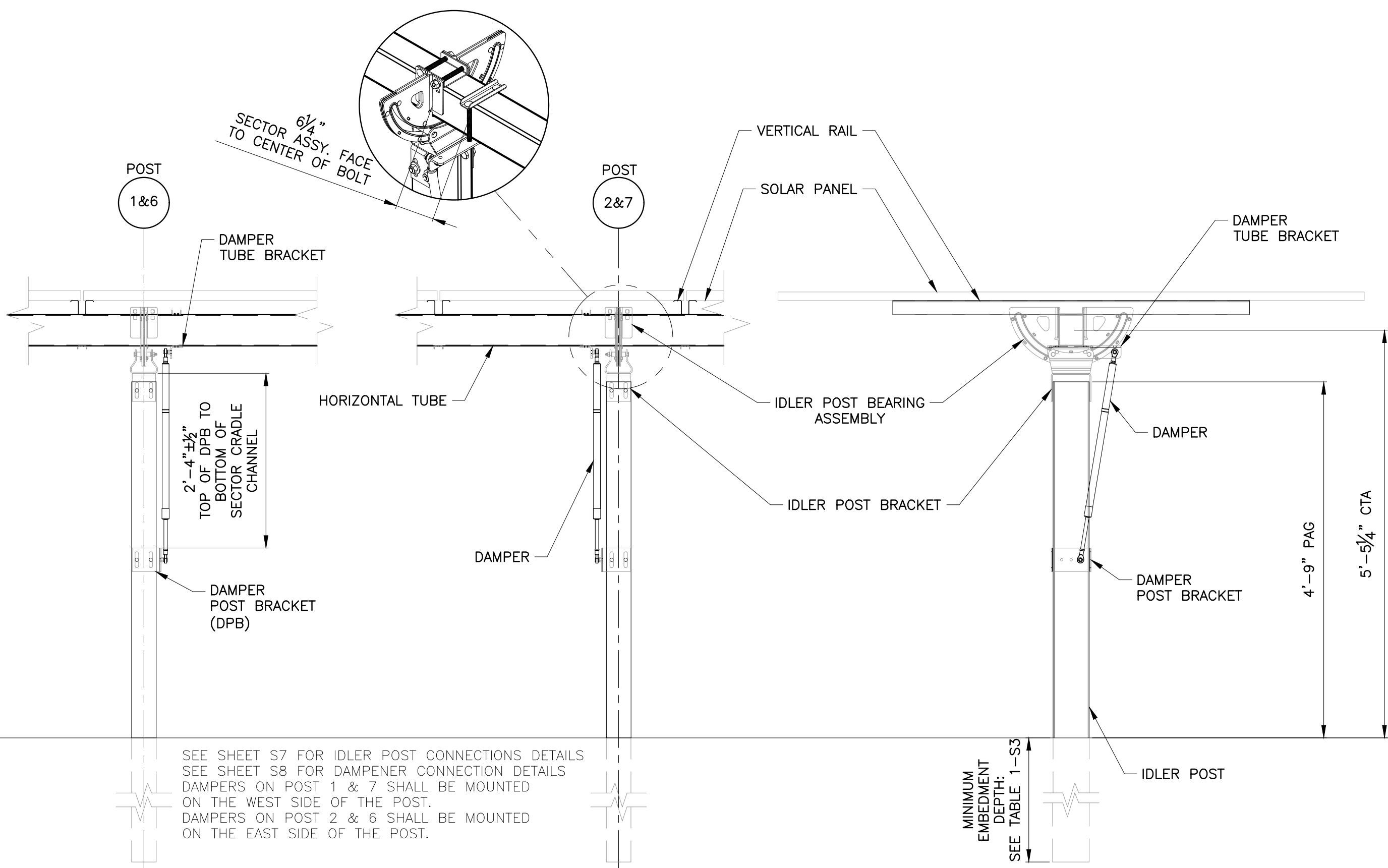


TABLE 1-S2 POST INFORMATION						
POST TYPE	POST SIZE	S/C	LENGTH	MAX PAG	MIN PAG*	MIN EMBEDMENT
DRIVE	W6X15	XXXX	TBD	5'-6"	4'-6"	TBD
IDLER	W6X7	XXXX	TBD	5'-3"	4'-3"	TBD



3 FRONT ELEVATION - 55°
SCALE: 3/32" = 1'-0"



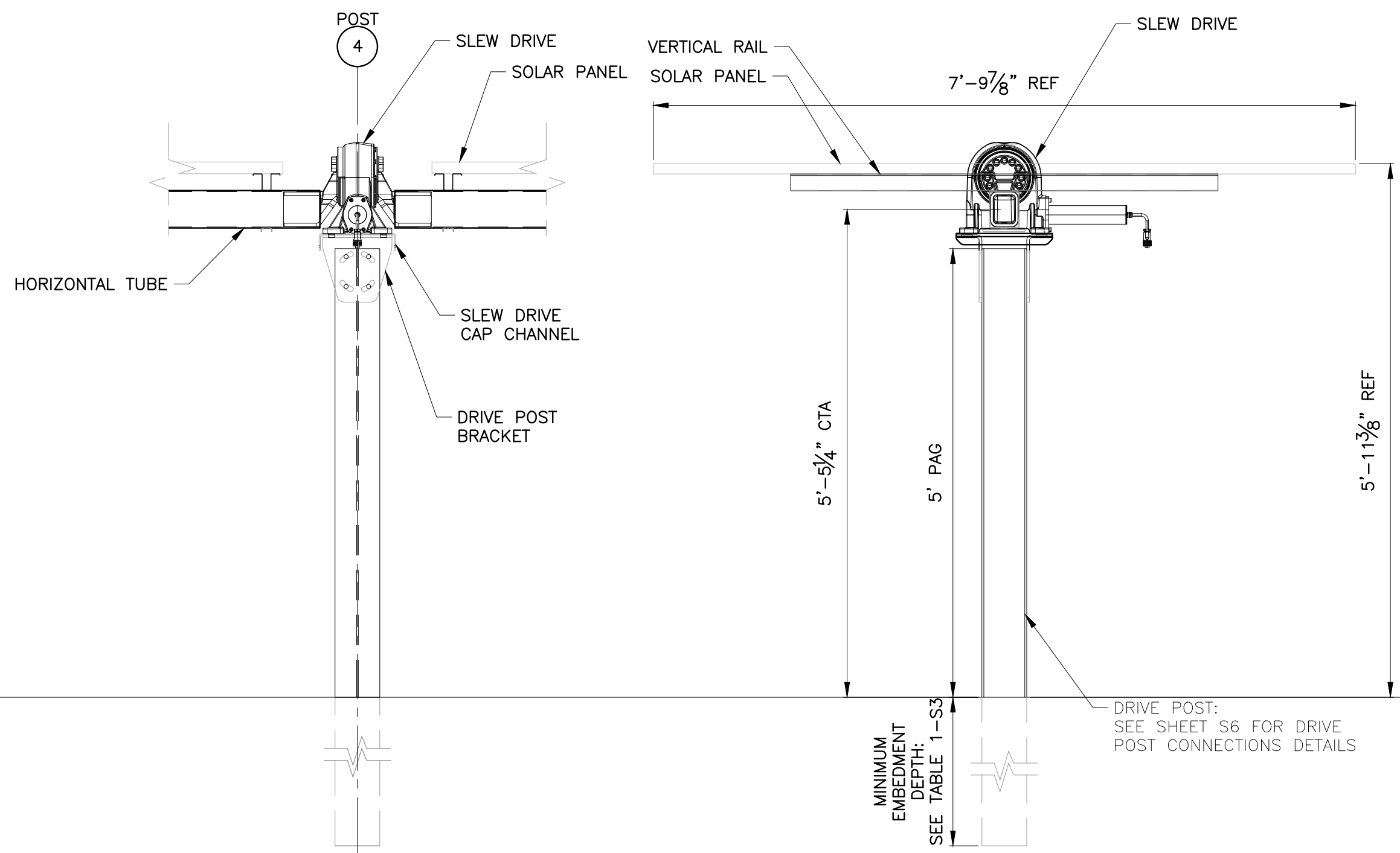
6 DRIVE POST SECTION VIEW - 55°
SCALE: 3/4" = 1'-0"

*LESSER PAG MAY BE USED IF MIN GROUND CLEARANCE AT FULL TILT CAN BE MAINTAINED.

**NOMINAL DIMENSIONS SHOWN. DIMENSIONS FROM GROUND SURFACE MAY VARY WITH UNDULATION IN GRADE AS WELL AS WHEN THE PAG DIMENSION IS ALTERED AS PRESCRIBED.

NOTE: RANGE OF POST ABOVE GRADE GIVEN TO ASSIST WITH UNDULATIONS IN GRADE.

TABLE 1-S3 POST INFORMATION						
POST TYPE	POST SIZE	S/C	LENGTH	MAX PAG	MIN PAG*	MIN EMBEDMENT
DRIVE	W6X15	XXXX	TBD	5'-6"	4'-6"	TBD
IDLER	W6X7	XXXX	TBD	5'-3"	4'-3"	TBD



5 DRIVE POST FRONT ELEVATION VIEW
SCALE: 3/4" = 1'-0"

7 IDLER POST DAMPER SECTION VIEW - 0°
SCALE: 3/4" = 1'-0"

REV	DESCRIPTION	DATE

MIDDLE PANELS SHARE HAT CHANNEL.
ONE PANEL IS SUPPORTED ON EACH FLANGE

END PANELS ARE SUPPORTED ON THE
OUTSIDE FLANGE OF THE HAT CHANNEL

$\frac{5}{16}$ -18 x $\frac{5}{8}$ " LONG
SERRATED FLANGE HEAD
BOLTS & NUTS CONNECTING
PANEL FRAME TO HAT CHANNEL
(140 PLCS) SEE DETAIL 4-S8.

3'-8" VERT. RAIL
SPACING (TYP 31 PLCS)

HAT CHANNEL VERTICAL RAIL (37 PLCS)
2 $\frac{1}{4}$ " DEEP X 1 $\frac{1}{4}$ " FLANGE X 16 GA.

HORIZONTAL BEAM TO VERTICAL
RAIL CONNECTION (TYP 37 PLCS)
SEE DETAIL 6-S7.

3'-5 $\frac{5}{8}$ " VERT. RAIL
SPACING (TYP 4 PLCS)

1 PLAN VIEW
SCALE: 3/32" = 1'-0"

PROJECT
NORTH

STANDARD HORIZONTAL BEAM
5" X 4" X 10 GA WALL
(4 PLCS)

31'-5" STD. HORIZ.

31'-5" STD. HORIZ.

1' HORIZ. BEAM
SPLICE TYP (2 PLCS)
SEE DETAIL 4-S6

DAMPER CONFIGURATION
SEE ENLARGED DETAIL 8-S4

6'-7 $\frac{5}{16}$ "
SOUTH
HORIZ. OH.

35'-3" STD. HORIZ.

130'-4 $\frac{5}{8}$ " TOTAL
HORIZ. LENGTH

31'-5" STD. HORIZ.

6'-3 $\frac{5}{16}$ "
NORTH
HORIZ. OH.

2 FRONT ELEVATION
SCALE: 3/32" = 1'-0"

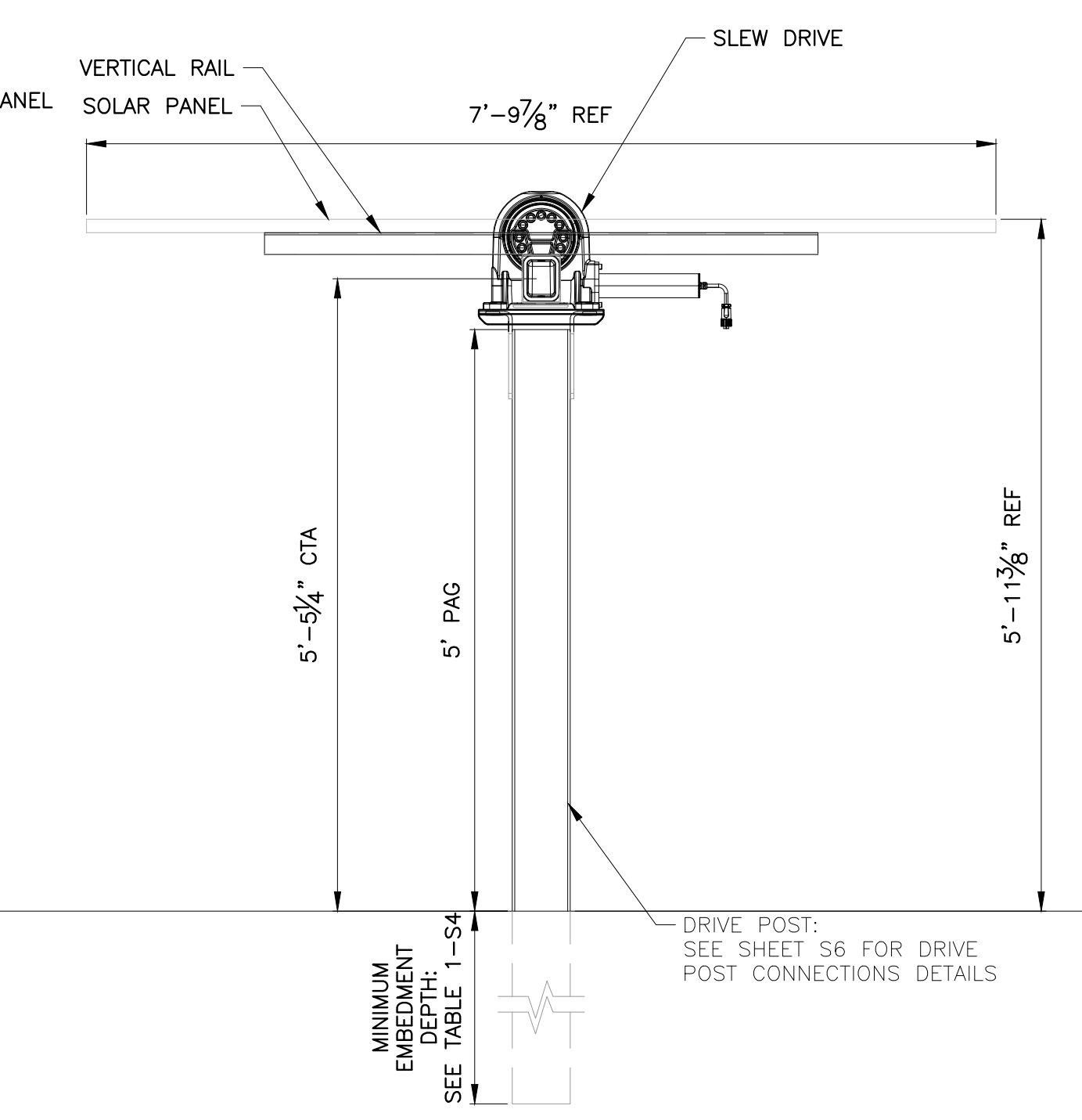
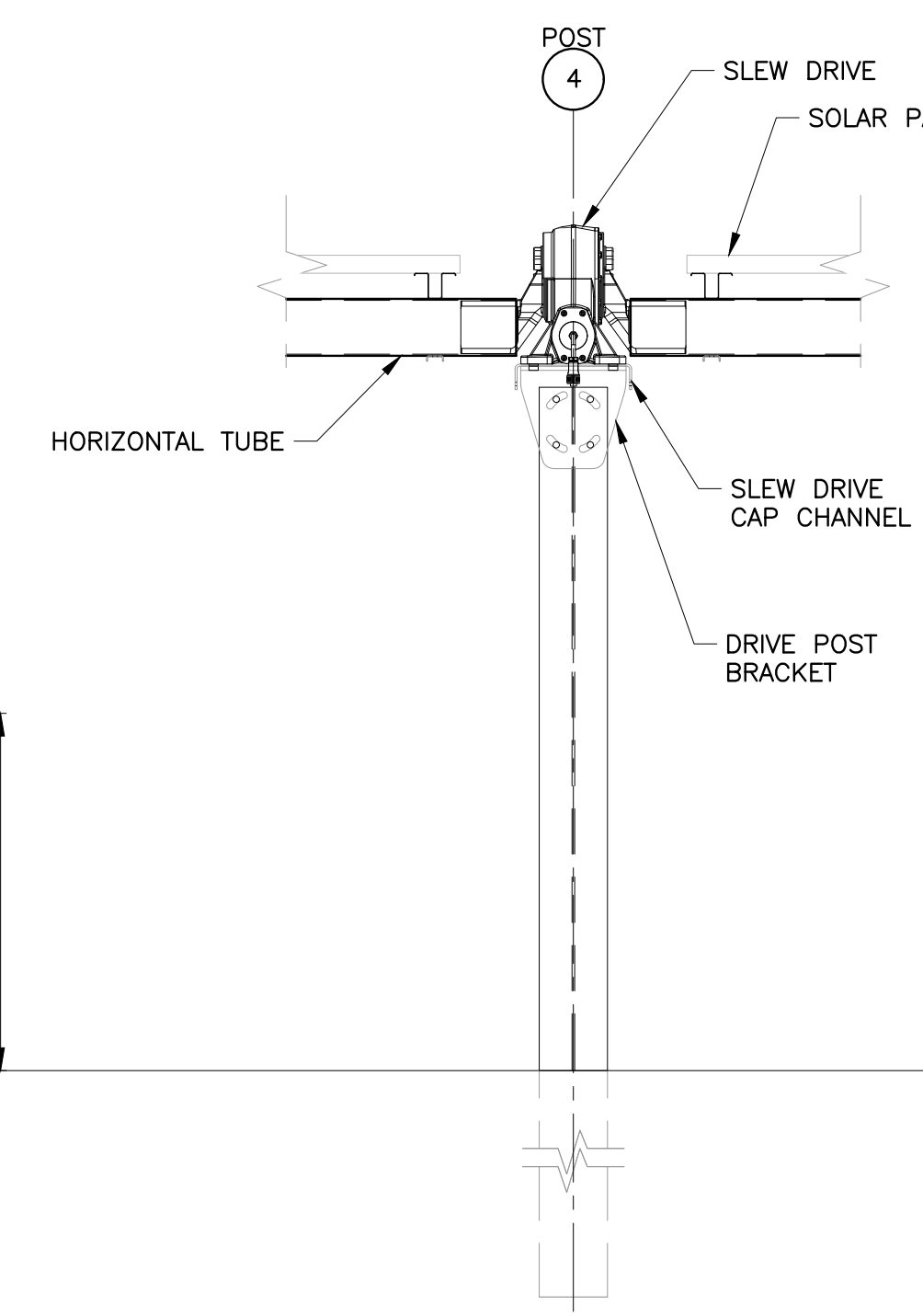
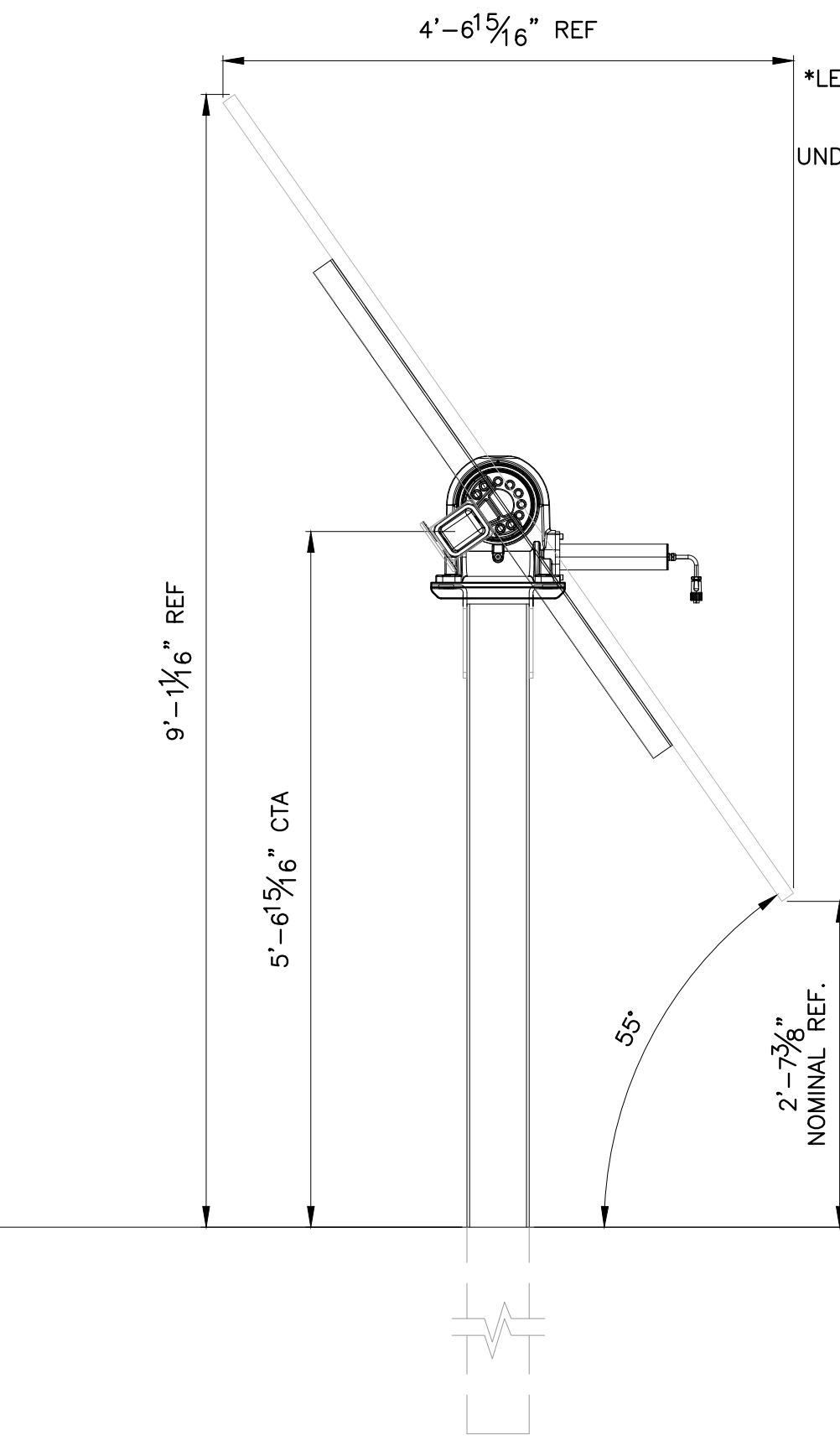
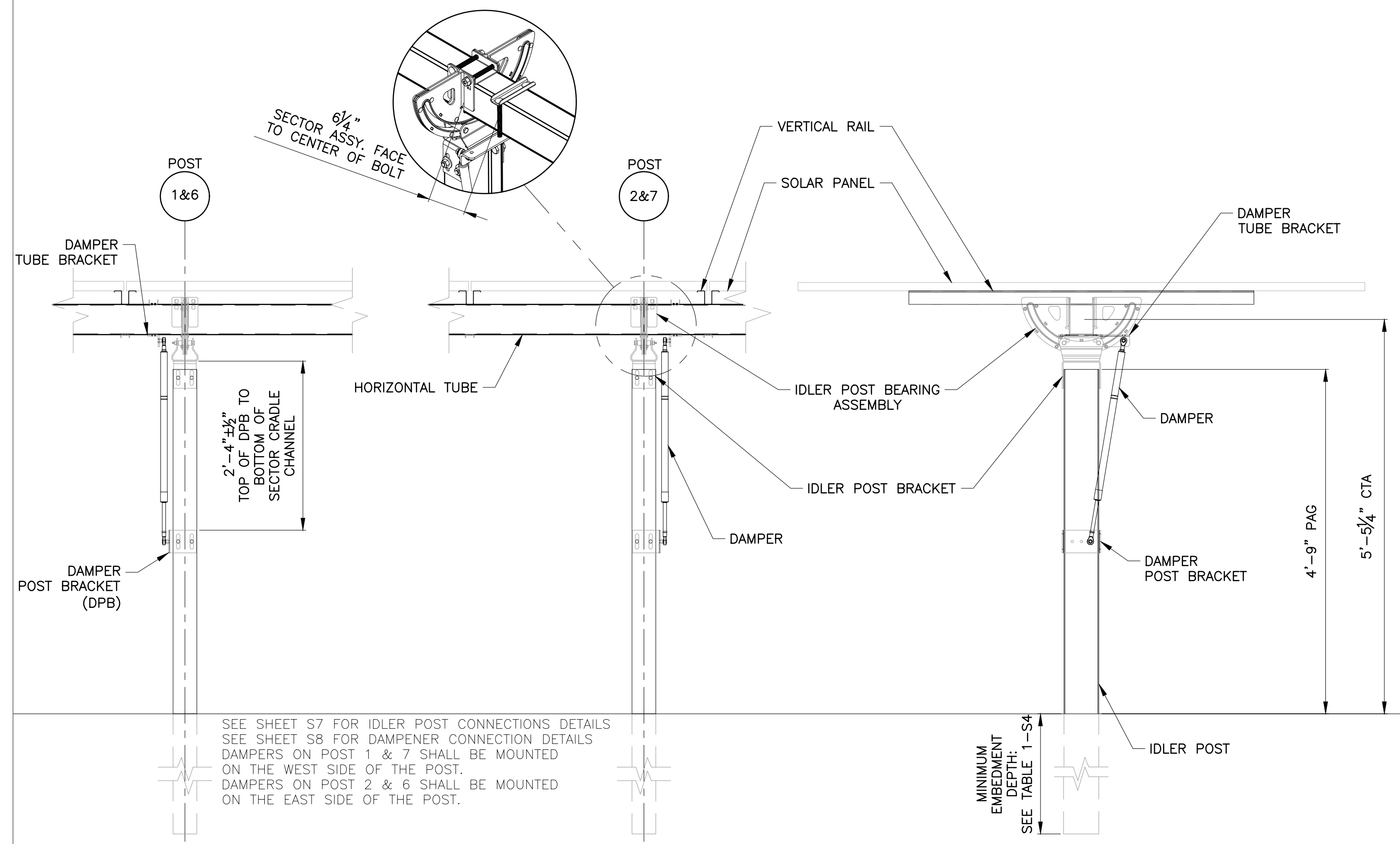
3 FRONT ELEVATION - 55°
SCALE: 3/32" = 1'-0"

*LESSER PAG MAY BE USED IF MIN GROUND CLEARANCE AT FULL TILT CAN BE MAINTAINED.

**NOMINAL DIMENSIONS SHOWN. DIMENSIONS FROM GROUND SURFACE MAY VARY WITH
UNDULATION IN GRADE AS WELL AS WHEN THE PAG DIMENSION IS ALTERED AS PRESCRIBED.

NOTE: RANGE OF POST ABOVE GRADE GIVEN TO ASSIST WITH UNDULATIONS IN GRADE.

TABLE 1-S4 POST INFORMATION						
POST TYPE	POST SIZE	S/C	LENGTH	MAX PAG	MIN PAG*	MIN EMBEDMENT
DRIVE	W6X15	XXXX	TBD	5'-6"	4'-6"	TBD
IDLER	W6X7	XXXX	TBD	5'-3"	4'-3"	TBD



8 DAMPER FRONT ELEVATION DETAIL
SCALE: 3/4" = 1'-0"

6 DRIVE POST SECTION VIEW - 55°
SCALE: 3/4" = 1'-0"

4 DRIVE POST SECTION VIEW - 0°
SCALE: 3/4" = 1'-0"

7 IDLER POST DAMPER SECTION VIEW - 0°
SCALE: 3/4" = 1'-0"

5 DRIVE POST FRONT ELEVATION VIEW
SCALE: 3/4" = 1'-0"