APPLICATION FOR OSHPD PREAPPROVAL OF MANUFACTURER'S CERTIFICATION (OPM)

OFFICE USE ONLY

APPLICATION #: OPM-0494

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: ☐ New ☒ Renewal/Update

Manufacturer Information

Manufacturer: Abbott

Manufacturer's Technical Representative: Claudia Moreno

Mailing Address: 1921 Hurd Dr., MS 2-33, Irving, TX 75038

Telephone: (972) 518-7691 Email: claudia.moreno@abbott.com

Product Information

Product Name: Accelerator® a 3600 Automation Track Interfaces

Product Type: Interfaces for Alinity i and c unified automated diagnostic processing laboratory instruments

Product Model Number: N/A

General Description: The Accelerator® a3600 is a modular system designed to automate pre/post-analytical

Applicant Information

Applicant Company Name: Abbott

Contact Person: Claudia Moreno

Mailing Address: 1921 Hurd Dr., MS 2-33, Irving, TX 75038

Telephone: (972) 518-7691 Email: claudia.moreno@abbott.com

Title: Engineering Supervisor

Registered Design Professonal Preparing Engineering Recommendations

Company Name: CYS STRUCTURAL ENGINEERS, INC.

Name: Dieter Siebald California License Number: S4346

Mailing Address: 2495 Natomas Park Drive, Suite 650, Sacramento, CA 95833

Telephone: (916) 920-2020 Email: dieters@cyseng.com

OSHPD Special Seismic Certification Preapproval (OSP)

☐ Special Seismic Certification is preapproved under OSP OSP Number:

Certification Method

Testing in accordance with: ☐ ICC-ES AC156 ☐ FM 1950-16

☐ Other(s) (Please Specify):

*Use of criteria other than those adopted by the California Building Standards Code, 2019 (CBSC 2019) for component supports and attachments are not permitted. For distribution system, interior partition wall, and suspended ceiling seismic bracings, test criteria other than those adopted in the CBSC 2019 may be used when approved by OSHPD prior to testing.

☒ Analysis

☐ Experience Data

☐ Combination of Testing, Analysis, and/or Experience Data (Please Specify):

OSHPD Approval

Date: 10/29/2020

Name: Jeffrey Kikumoto Title: Senior Structural Engineer

Condition of Approval (if applicable):

ABBOTT LABORATORIES
ALINITY i & c INSTRUMENTS
OPM–0494–19

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NOTES:

1. THESE DRAWINGS ARE PREPARED FOR ABBOTT LABORATORIES, AN ILLINOIS CORPORATION, ABBOTT PARK, ILLINOIS.
2. THE CONTRACTOR AND THE INSPECTOR SHALL OBTAIN A COPY OF THIS PRE–APPROVAL FROM THE OSHPD WEBSITE.
3. THIS PRE–APPROVAL COVERS THE SUPPORTS AND ATTACHMENTS OF THE LABORATORY EQUIPMENT TO THE SUPPORTING STRUCTURE. THE EQUIPMENT IS SUPPLIED BY THE MANUFACTURER. THE MANUFACTURER INSTALLS THE BRACKETS THAT ATTACH TO THE EQUIPMENT CHASSIS. THE SEISMIC BRACKETS, EXPANSION ANCHORS, THROUGH–BOLTS & STRUT PLATES SHOWN IN THIS OPM SHALL BE SUPPLIED & INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: SHEET INDEX

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ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020
SACRAMENTO, CA 95833 www.cyseng.com

GENERAL NOTES:

1. THIS OSHPD PRE–APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE WITH THIS OPM SHALL BE BASED ON THE CBC 2019.
2. IT IS THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD FOR A SITE SPECIFIC PROJECT TO VERIFY:
   A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES AND WEIGHT SPECIFIED FOR EACH COMPONENT IN ADDITION TO ALL OTHER LOADS. PROVIDE AND DESIGN SUPPLEMENTARY MEMBERS AS REQUIRED.
   B. THAT THE ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPENINGS.
   C. THAT THE ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS. THE SPACING SHOWN IN THE TEST VALUES TABLE ON THIS PAGE IS THE REQUIRED SPACING FROM ANCHORS OF OTHER DIAMETERS AND EMBEDMENTS WILL VARY.
   D. THAT THE INSTALLATION IS IN CONFORMANCE WITH THE 2019 CBC AND WITH THE DETAILS SHOWN IN THIS PRE–APPROVAL.
   E. THAT THE ACTUAL EQUIPMENT'S WEIGHT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS, AND THE MATERIAL AND GAGE OF THE EQUIPMENT WHERE ATTACHMENTS ARE MADE, AGREE WITH THE INFORMATION SHOWN ON THE PRE–APPROVAL DOCUMENTS.

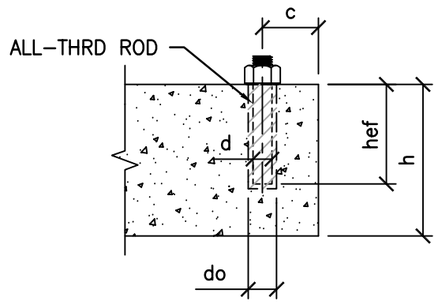
3A. EXPANSION ANCHORS INSTALLED IN NORMAL WEIGHT OR SAND–LIGHTWEIGHT CONCRETE SHALL BE STAINLESS STEEL HILTI KB–TZ EXPANSION ANCHORS COMPLYING WITH ICC–ES ESR–1917 REVISED JANUARY 2020. ADHESIVE ANCHORS INSTALLED IN NORMAL WEIGHT CONCRETE SHALL BE ASTM F593 CW1 (316) INSTALLED USING HILTI HIT–RE 500 V3 ADHESIVE COMPLYING WITH ICC–ES ESR–3814 REVISED JANUARY 2020.

B. INSTALLATION: INSTALL THE POST–INSTALLED DRILLED–IN CONCRETE ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR AND THE PARAMETERS GIVEN IN THE TABLES ON THIS PAGE.

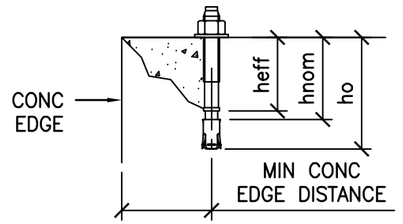
C. TESTING:

- JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOB SITE TESTING IN ACCORDANCE WITH THE TEST LOAD TABLE PROVIDED IN THIS DOCUMENT. TEST 50% OF THE INSTALLED ANCHORS. FOR TENSION TESTING, THE TEST LOAD MAY BE APPLIED BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION IN THE ANCHOR SUCH AS DIRECT PULL WITH A HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICES. FOR TORQUE TESTING, THE TEST LOAD SHALL BE APPLIED WITH A CALIBRATED TORQUE WRENCH. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE INSPECTOR OF RECORD. IF ANY ANCHOR FAILS THE TEST, TEST ALL ANCHORS. THE TEST SHALL BE PERFORMED 24 HOURS OR MORE AFTER INSTALLATION. TESTING MAY BE DONE PRIOR TO EQUIPMENT INSTALLATION. ALSO REFER TO CBC 1910A.5.5 "TESTS FOR POST–INSTALLED ANCHORS IN CONCRETE".
- FAILURE/ACCEPTANCE CRITERIA: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
  - HYDRAULIC RAM METHOD: APPLY AND HOLD TEST LOAD FOR A MINIMUM OF 15 SECONDS. THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLICABLE TEST LOAD WHERE WASHERS ARE USED. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE OR BY A CONTINUOUS LOSS OF JACKING PRESSURE.
  - TORQUE WRENCH METHOD (EXPANSION ANCHORS ONLY): THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE: ONE–HALF (½) TURN OF THE NUT.

D. TEST VALUES: APPLY TEST LOADS TO ANCHORS WITHOUT REMOVING THE NUT.



ADHESIVE ANCHOR
(THRD ROD / REINFORCING BAR)



MECHANICAL ANCHOR

POST–INSTALLED ADHESIVE ANCHOR SCHED

CONDITION OF ANCHORAGE	ANCHOR TYPE & DIA (INCH) d	HOLE DIA (INCH) do	EFFECTIVE EMBED (INCH) hef	MIN CONC THICKNESS (INCH) h	MIN CONC EDGE DISTANCE (INCH) c	MIN AB SPCG UNO (INCH)	TENSION TEST LOAD (LBS)
CASE 2	½"ø HILTI HAS–R (ASTM F593 CW1 316 SS) ALL–THRD ROD	0.5625	2.75	4	12	6.75	2590

POST–INSTALLED MECHANICAL ANCHOR SCHED

CONDITION OF ANCHORAGE	ANCHOR TYPE & DIA (INCH)	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) heff	HOLE DEPTH (INCH) ho	MIN CONC THICKNESS (INCH) h	MIN CONC EDGE DISTANCE (INCH)	MIN AB SPCG UNO (INCH)	TEST LOAD	
								TENSION LOAD (LBS)	TORQUE (FT–LBS)
CASE 1	KB–TZ 304 SS 0.375"ø	2.3125	2.00	2.625	SEE DTLS	12	6.75 PARALLEL TO MTL DECK FLUTES	N/A	25
CASE 2	KB–TZ 304 SS 0.50"ø	2.375	2.00	2.625	4	12	6.00 PARALLEL TO MTL DECK FLUTES	1550	40

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: GENERAL NOTES

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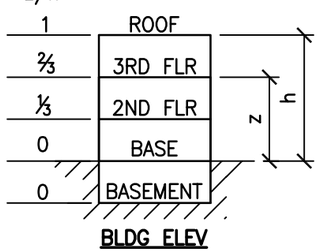
CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
www.cyseng.com

GENERAL NOTES CONTINUED:

4. TWO (2) CONDITIONS OF SUPPORTS & ATTACHMENTS ARE SPECIFIED & PRESENTED IN THIS PRE–APPROVAL:



BLDG ELEV

CASE 1: SUPPORTS & ATTACHMENTS DTLS LOCATED AT UPPER FLRS ABV THE BASE OF A BLDG (z/h <= 1.0), IT IS ASSUMED THAT THE FLRS ARE BUILT OF A MIN 3¼" NWC OR SLWC TOPPING OVER MTL DECK (f'c = 3000 PSI, MIN).

CASE 2: SUPPORTS & ATTACHMENTS DTLS LOCATED AT OR BLW THE BASE OF A BLDG (z/h = 0). THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 4" NWC SLAB (f'c = 3000 PSI, MIN).

5. THIS PRE–APPROVAL MAY BE USED AT ANY GEOGRAPHICAL LOCATION IN THE STATE OF CALIFORNIA WHERE S_{DS} IS LESS THAN OR EQ TO 2.50.
6. COORD THE AB LAYOUT W/ THE COMPONENT IN THE FIELD PRIOR TO SETTING AB'S.
7. ANCHOR BRACKETS SHALL BE PAINTED W/ A RUST INHIBITIVE PRIMER FOLLOWED BY A COLOR COAT SELECTED BY THE HOSPITAL FACILITY OR MATCH THE COLOR OF THE BASE OF THE EQUIP IF A COLOR IS NOT SPECIFIED BY THE HOSPITAL.
8. FASTENERS & ASSOCIATED HARDWARE SHALL BE FIELD PAINTED TO MATCH BRACKETS AFTER INSTALLATION IS COMPLETE.
9. STRUCTURAL STEEL SHAPES & CONNECTORS SHALL CONFORM TO THE FOLLOWING, UNO:
   A. PLATES, ANGLES, BARS & MISCELLANEOUS SHAPES ..... ASTM A36
   B. PLATES AS NOTED ..... ASTM A572 GR 50
   C. MACHINE BOLTS ..... ASTM A307
10. CONTRACTOR SHALL FURNISH & INSTALL THE SEISMIC SUPPORTS & ATTACHMENTS (INCLUDING SEISMIC BRACKETS, EXPANSION ANCHORS, THRU–BOLTS, STRUT PLATES BLW SLABS, HIGH–STRENGTH BOLTS, ETC) IN CONJUNCTION W/ COMPONENT SETTING INSTRUCTIONS FROM ABBOTT FIELD INSTALLATION PERSONNEL.
11. DRAWING SCALES ARE NOT PROVIDED. DO NOT SCALE OFF OF THESE DRAWINGS. THE INTENT OF THESE DRAWINGS IS TO SHOW HOW TO FABRICATE THE SEISMIC BRACKET TO ANCHOR THE EQUIP SPECIFIED. THE REPRESENTATIONS OF THE EQUIP ARE ONLY INTENDED TO SHOW THE COORD W/ THE SEISMIC BRACKETS.
12. BOLTS THRU CONC ON MTL DECK:
   A. BOLTS SHALL BE TORQUED BY ¾ TURN OF THE NUTS AFTER SNUG TIGHT (THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQU TO BRING THE CONNECTED PLIES INTO FIRM CONTACT) CONDITION IS ACHIEVED, UNO.
   B. THRU–BOLT HOLES SHALL BE 1/16" LARGER THAN BOLT SIZE (HOLE SIZE = BOLT SIZE + 1/16")
   C. THRU–BOLTS IN CONC SHALL RECEIVE SPECIAL INSPECTION & TESTING (THRU–BOLTS W/ STL–TO–STL CONN IN TENSION DO NOT REQUIRE TESTING) IN ACCORDANCE W/ REQUIREMENTS FOR POST–INSTALLED ANCHORS.
13. TAKE CARE TO AVOID DAMAGING REBAR OR POST–TENSIONING TENDONS WHEN INSTALLING ANCHORS TO CONC.

GENERAL NOTES CONTINUED:

14. DRY BOLT & NUT INSTALLATION TORQUES SHALL BE AS FOLLOWS:

BOLT OR NUT DIA	TORQUE (FT–LBS)
M5	5
M8	8
M10	15
M16	67
M20	136
0.25"	10
0.50"	40

THESE VALUES DO NOT APPLY TO POST–INSTALLED CONC ANCHORS.

15. FUTURE ALTERATIONS TO TRACK SYSTEMS, INCLUSIVE OF BUT NOT LIMITED TO TRACK & TRACK COMPONENTS, TRACK MODULES & OTHER INSTRUMENTS ATTACHED TO THE TRACK SYSTEM MUST BE REVIEWED BY OSHPD.

WELDING NOTES:

1. WELDING OF SEISMIC BRACKETS SHALL BE PERFORMED BY CERTIFIED WELDERS USING E70XX ELECTRODES (UNO). THE USE OF E70–T4 WELDING WIRE IS NOT ALLOWED FOR ANY APPLICATION. WELDS SHALL BE IN CONFORMITY W/ THE STRUCTURAL WELDING CODE–STEEL OF THE AMERICAN WELDING SOCIETY (AWS D1.1–15). SUBMIT WELDING PROCEDURES & SPECIFICATIONS TO OWNER'S TESTING LABORATORY FOR REVIEW & APPROVAL PRIOR TO BEGINNING SEISMIC BRACKET FABRICATION.
2. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQ. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINSIZE WELDS AS SPECIFIED IN AISC 360–16, SECTION J2.2b.

DESIGN CRITERIA

DESIGN OF SUPPORTS & ATTACHMENTS FOR ALL EQUIP COMPONENTS IS PER 2019 CBC

ASCE 7–16 TABLE 13.6–1
OTHER MECHANICAL OR ELECTRICAL COMPONENTS

S_{DS} = 2.5

I_p = 1.5

a_p = 1.0

R_p = 1.5

Ω_o = 1.5

W_P AS NOTED ON COMPONENT BASE PLAN & ELEVS

SEISMIC LOADS FOR CASE 1 – UPPER FLRS ABV THE BASE, z/h <= 1.0 (LRFD)

$F_p = 3.00\ W_p$

$F_v = 0.50\ W_p$

SEISMIC LOADS FOR CASE 2 – SLAB AT OR BLW BASE, z/h = 0 (LRFD)

$F_p = 1.12\ W_p$

$F_v = 0.50\ W_p$

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ABBREVIATIONS:

@	AT
AB	ANCHOR BOLT
ABV	ABOVE
ADJ	ADJACENT
AISC	AMERICAN INSTITUTE FOR STEEL CONSTRUCTION
ALUM	ALUMINUM
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASD	ALLOWABLE STRENGTH DESIGN
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS
AWS	AMERICAN WELDING SOCIETY
BLDG	BUILDING
BLW	BELOW
BOTT	BOTTOM
BYD	BEYOND
CBC	CALIFORNIA BUILDING CODE
CG	CENTER OF GRAVITY
CJP	COMPLETE JOINT PENETRATION
CLR	CLEAR OR CLEARANCE
CLSE	CALIFORNIA LICENSED STRUCTURAL ENGINEER
℄	CENTERLINE
CONC	CONCRETE
CONN	CONNECTION
COORD	COORDINATE
CTR	CENTER
DBL	DOUBLE
DIA (ø)	DIAMETER
DIM	DIMENSION
DTL	DETAIL
DWG	DRAWING
(E)	EXISTING CONDITION
EA	EACH
EE	EACH END
ES	EACH SIDE
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
f'c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE
FF	FINISHED FLOOR
FLG	FLANGE
FLR	FLOOR
FRMG	FRAMING
FT (')	FOOT/FEET
F_y	SPECIFIED YIELD STRENGTH OF REINFORCING, PSI OR SPECIFIED MINIMUM YIELD STRESS OF STEEL, KSI
GA	GAUGE
GALV	GALVANIZED
GR	GRADE
HEIGHT	HT
ICC	INTERNATIONAL CODE COUNCIL
IN (")	INCH
KSI	KIPS PER SQUARE INCH
L	LENGTH
LBS	POUNDS
LGTH	LENGTH
LRFD	LOAD & RESISTANCE FACTOR DESIGN
LFRS	LATERAL FORCE RESISTING SYSTEM
MAX	MAXIMUM
MFR	MANUFACTURER
MIN	MINIMUM
mm	MILLIMETER
MTL	METAL
NO. (#)	NUMBER OR POUNDS
NTS	NOT TO SCALE
NS&FS	NEAR SIDE & FAR SIDE
NWC	NORMAL WEIGHT CONCRETE
OP	OPERATING
OPG	OPENING
OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
PG	PAGE
PL	PLATE
PSI	POUNDS PER SQUARE INCH
R	RADIUS
REQ	REQUIRED
SCHED	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SIM	SIMILAR
SLWC	SAND LIGHT WEIGHT CONCRETE
SOG	SLAB ON GRADE
SPCG	SPACING
SQ	SQUARE
SS	STAINLESS STEEL
STL	STEEL
T&B	TOP & BOTTOM
TEMP	TEMPORARY
THRD	THREAD OR THREADED
TOC	TOP OF CONCRETE
Tu	ANCHORAGE TENSION REACTION DUE TO SEISMIC FORCE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	ANCHORAGE SHEAR REAC
VERT	VERTICAL
Vu	ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE
W/	WITH
W_p	COMPONENT SELF-WEIGH
WT	WEIGHT

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
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CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020
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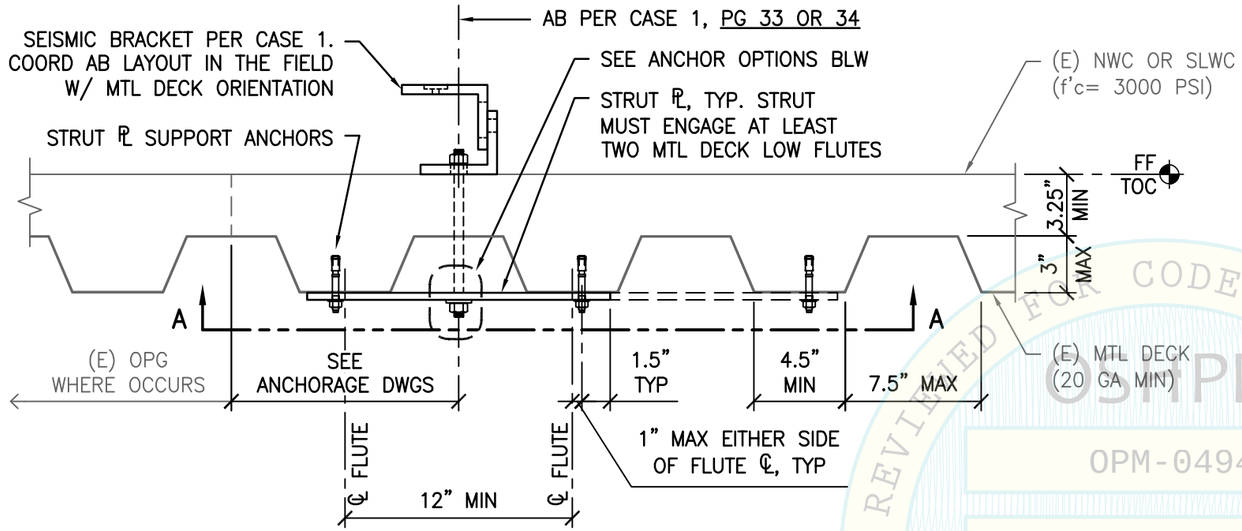
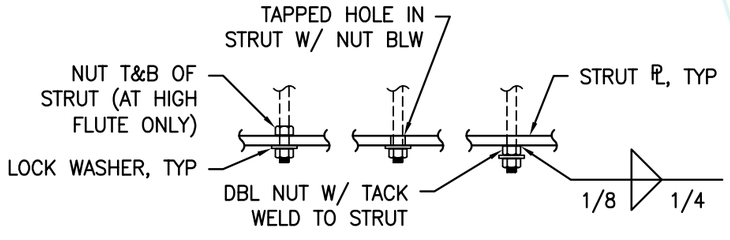
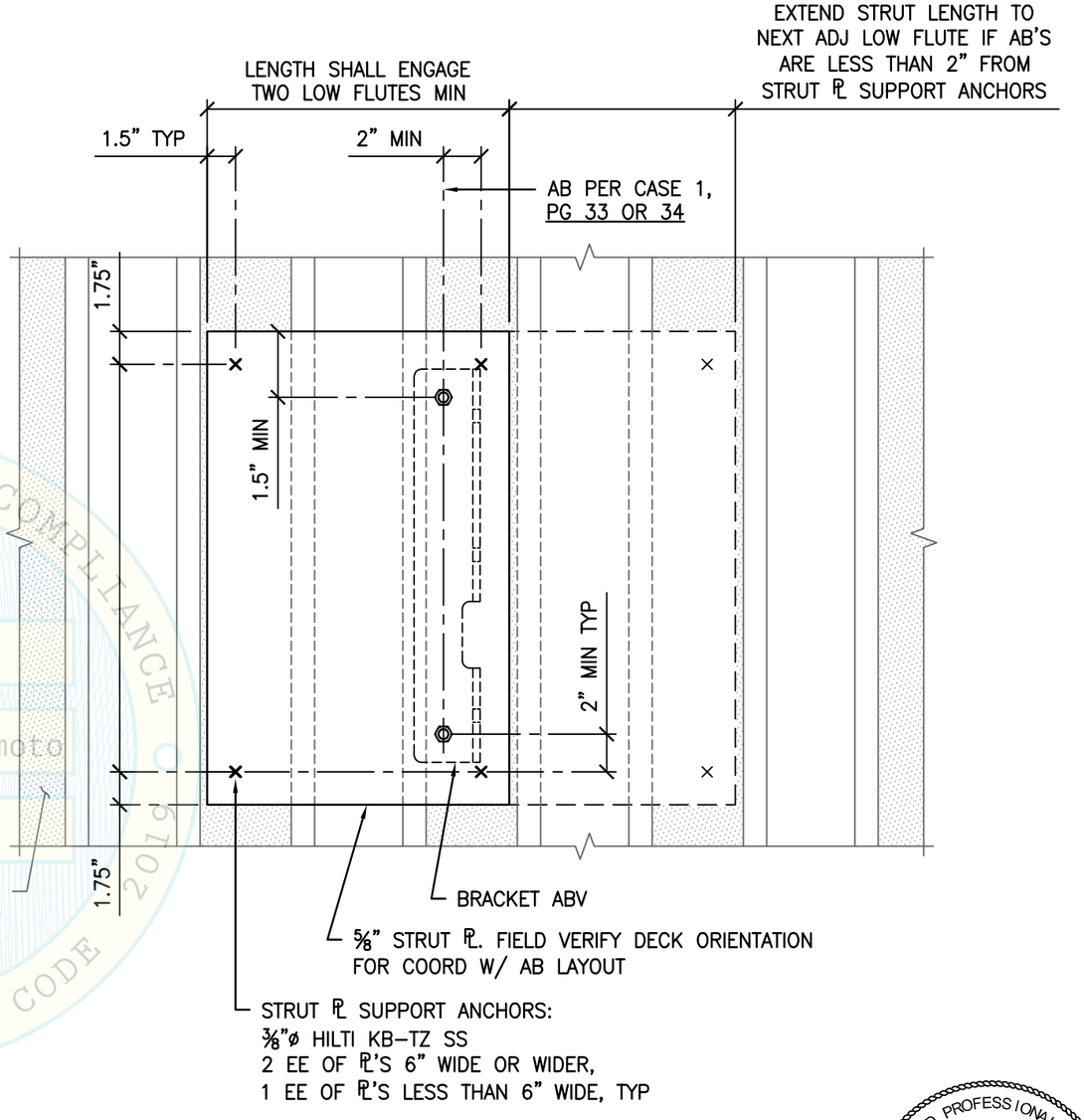




ANCHOR OPTIONS



SECTION A-A

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: TYPICAL STRUT DETAILS

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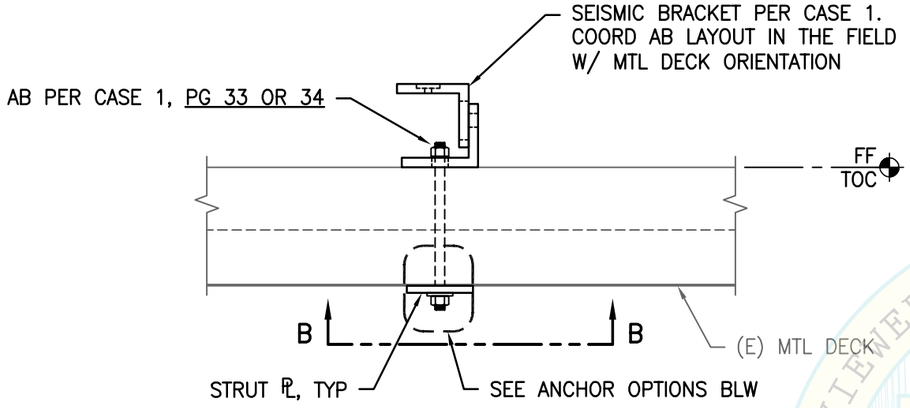

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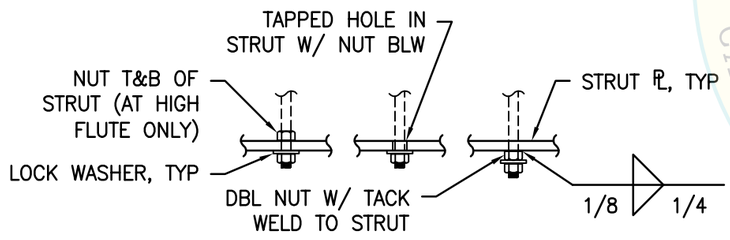
FOR CLARITY.



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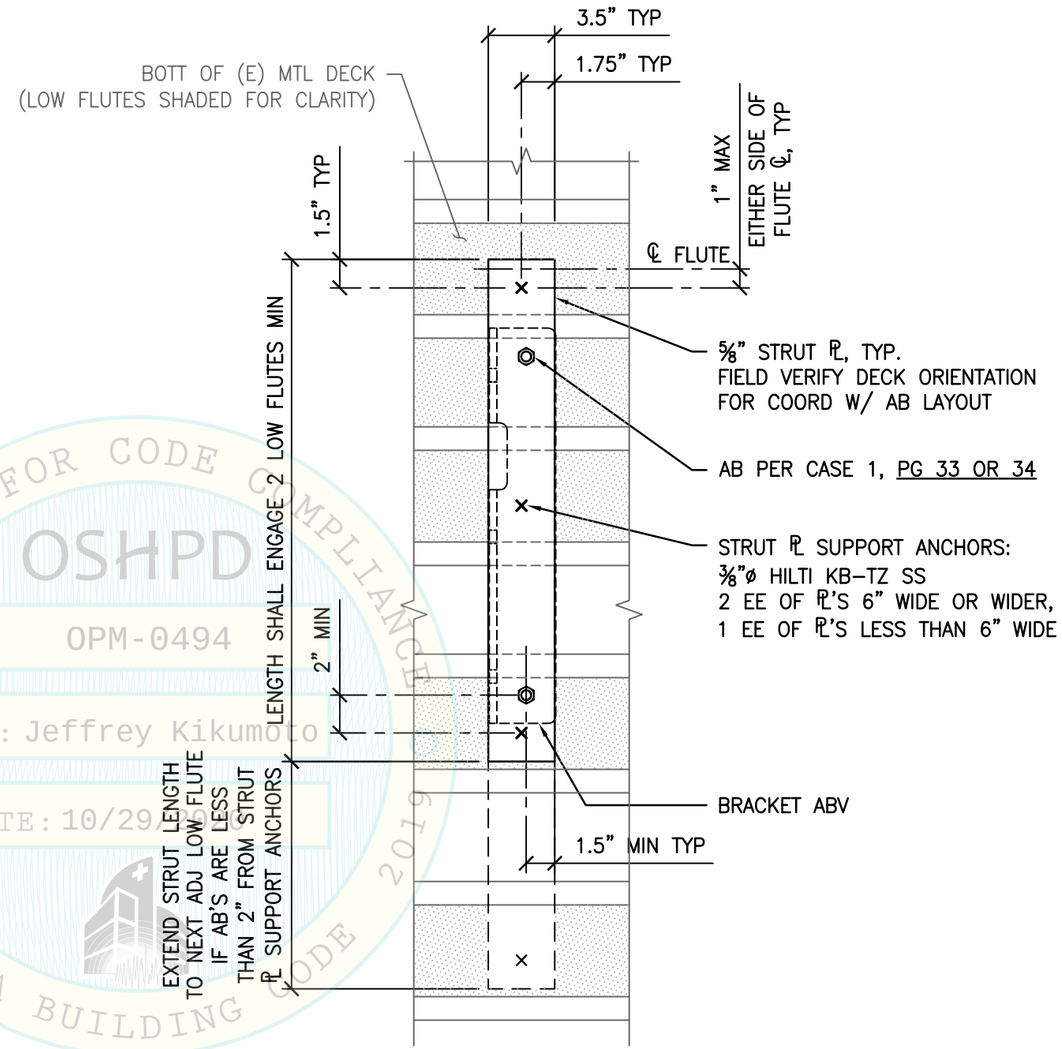

SECTION B-B

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
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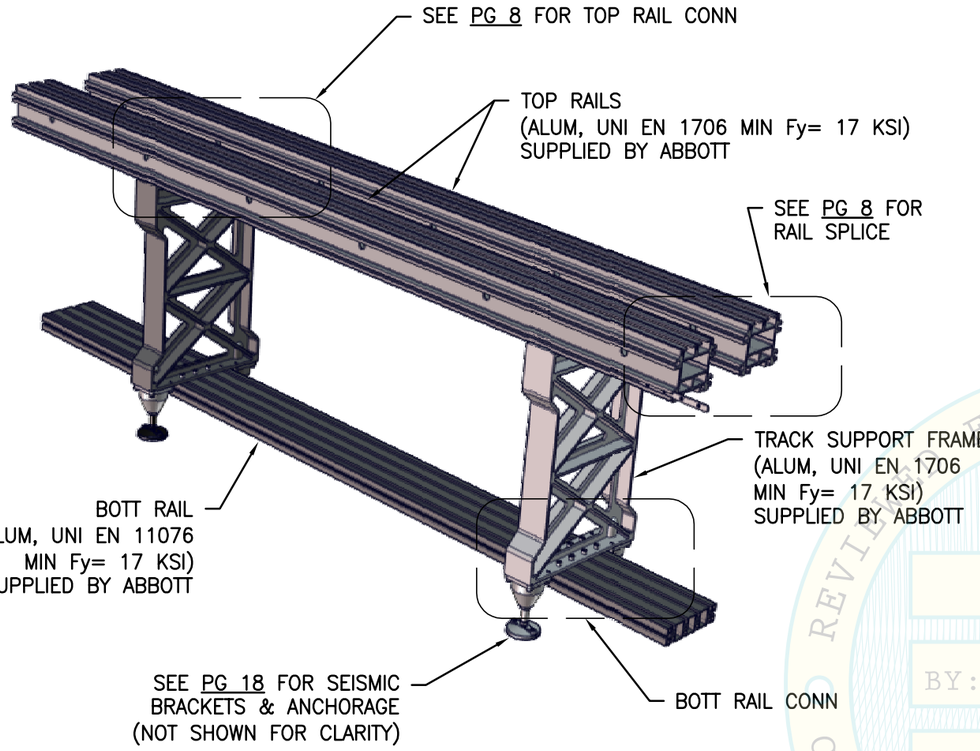
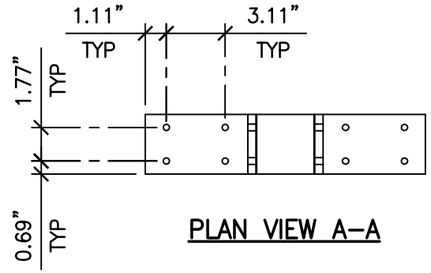
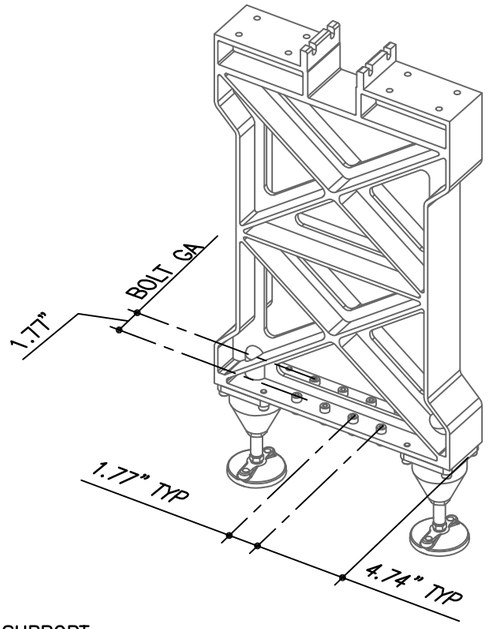
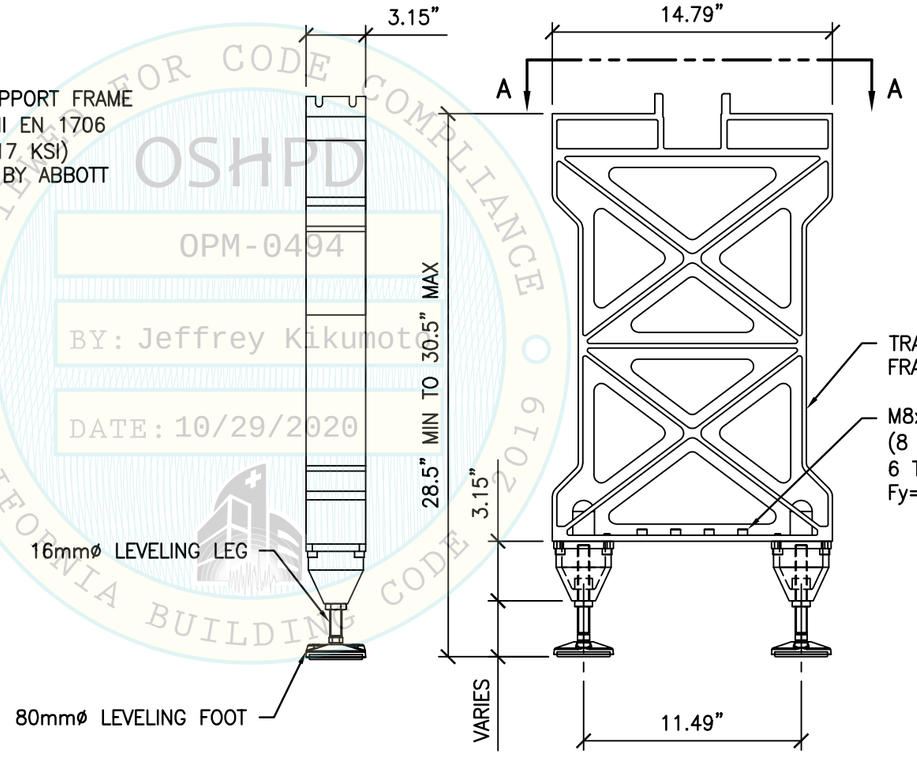




PLAN VIEW A–A



ISOMETRIC VIEW



SIDE VIEW

ELEV VIEW

TRACK SUPPORT FRAME

NOTES:
1. MAX OPERATING WT Wp= 165 LBS INCLUDING SUPPORT FRAMES, T&B RAIL, TRACK, COVERS, ETC.
2. COMPONENT SUB–ASSEMBLY CONNS SHALL BE PERFORMED BY ABBOTT, NOT BY THE GENERAL CONTRACTOR.
3. SEISMIC BRACKETS ARE REQ AT ALL TRACK FRAMES.
4. FUTURE ALTERATIONS TO TRACK SYSTEMS, INCLUSIVE OF BUT BUT NOT LIMITED TO TRACK & TRACK COMPONENTS, TRACK MODULES & OTHER INSTRUMENTS ATTACHED TO THE TRACK SYSTEM MUST BE REVIEWED BY OSHPD.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: MODULE SUB-ASSEMBLY DETAILS
TYPICAL TRACK MODULE

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
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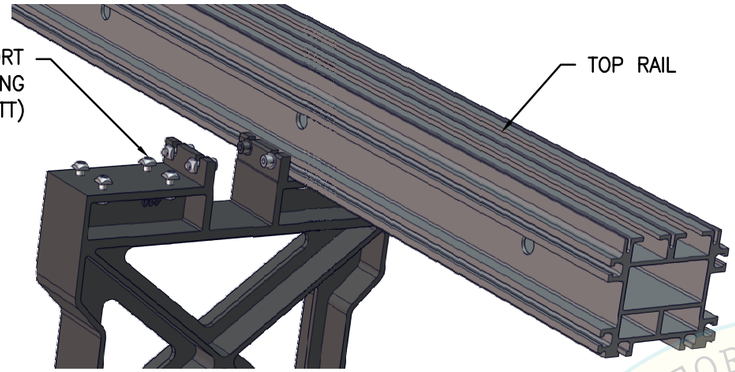
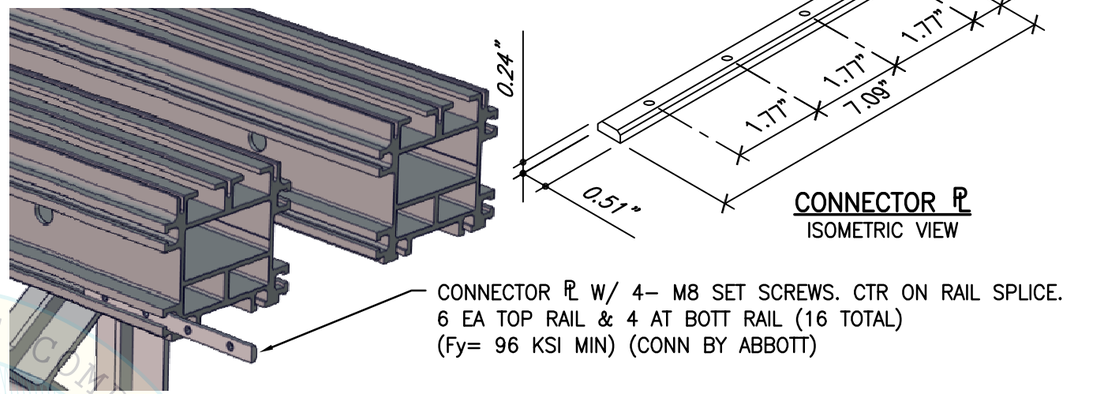
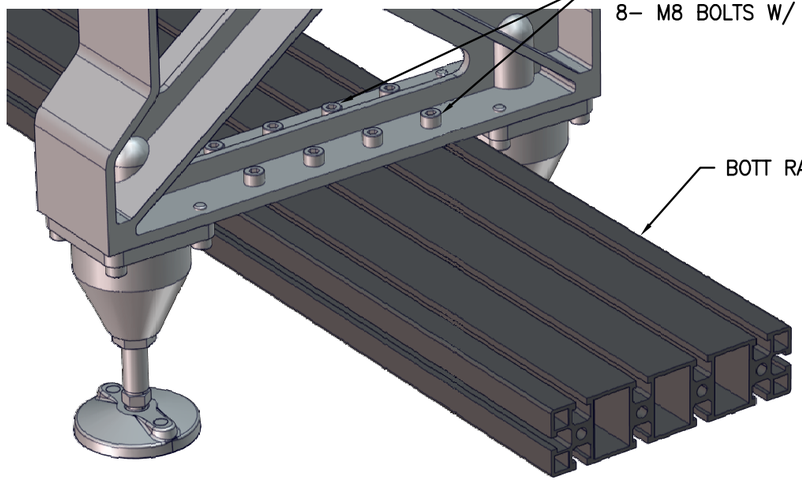


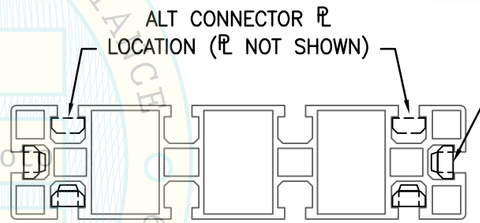


TOP RAIL CONN



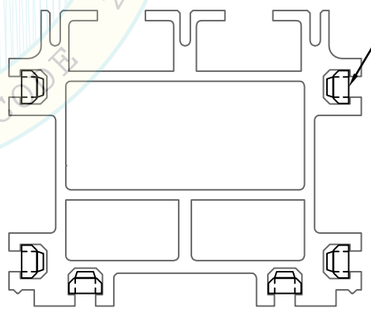
BOTT RAIL CONN

RAIL SPLICE



CONNECTOR PL (STL, Fe 37 GALV MIN Fy= 37 KSI), TYP OF 4 AT BOTT RAIL
SECTION PROPERTIES:
A= 0.1070 IN^2; S= 0.00353 IN^3; I= 0.000454 IN^4
TWO CONNECTOR PL'S ARE REQ AT ES OF THE RAIL IN ANY OF THE 3 LOCATIONS.

BOTT RAIL SPLICE



CONNECTOR PL (STL, Fe 37 GALV MIN Fy= 37 KSI), TYP OF 6 AT TOP RAIL
SECTION PROPERTIES:
A= 0.1070 IN^2; S= 0.00353 IN^3;
I= 0.000454 IN^4

TOP RAIL SPLICE

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: MODULE SUB-ASSEMBLY DETAILS
TYPICAL TRACK MODULE

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SACRAMENTO, CA 95833
TEL (916) 920-2020
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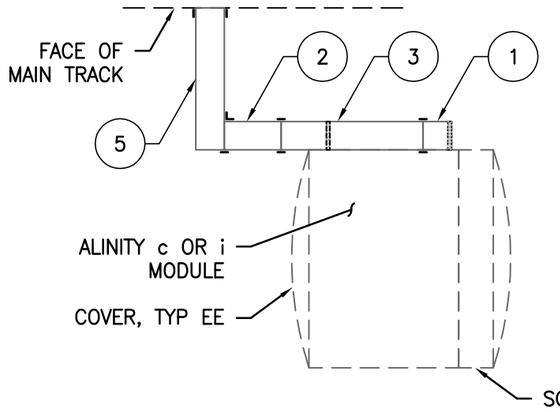
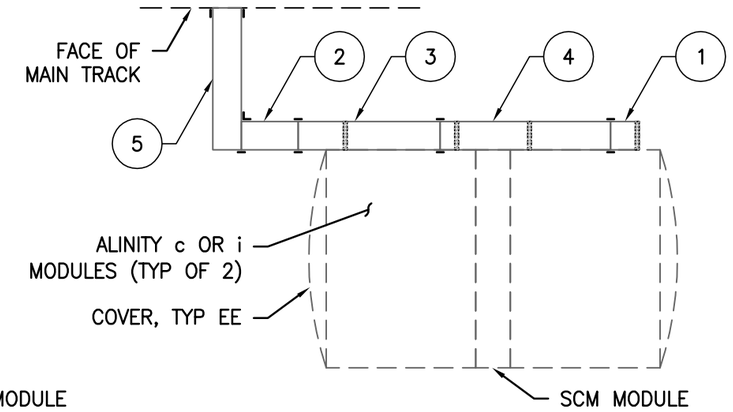
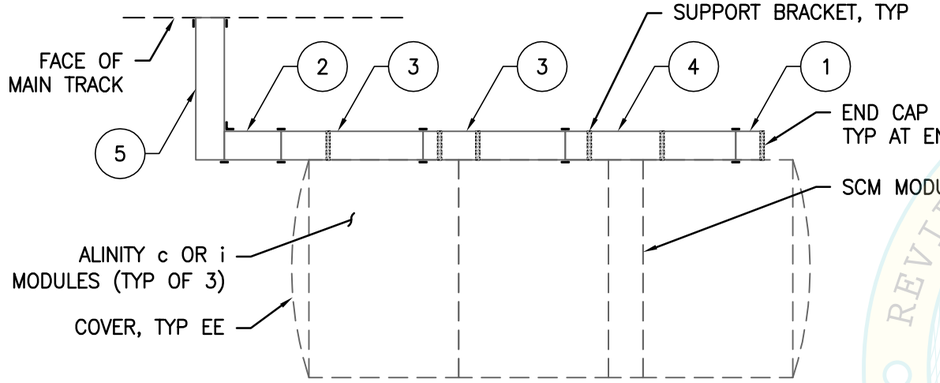
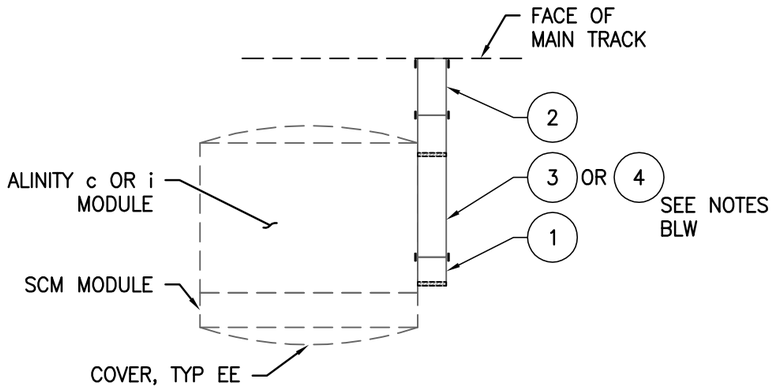






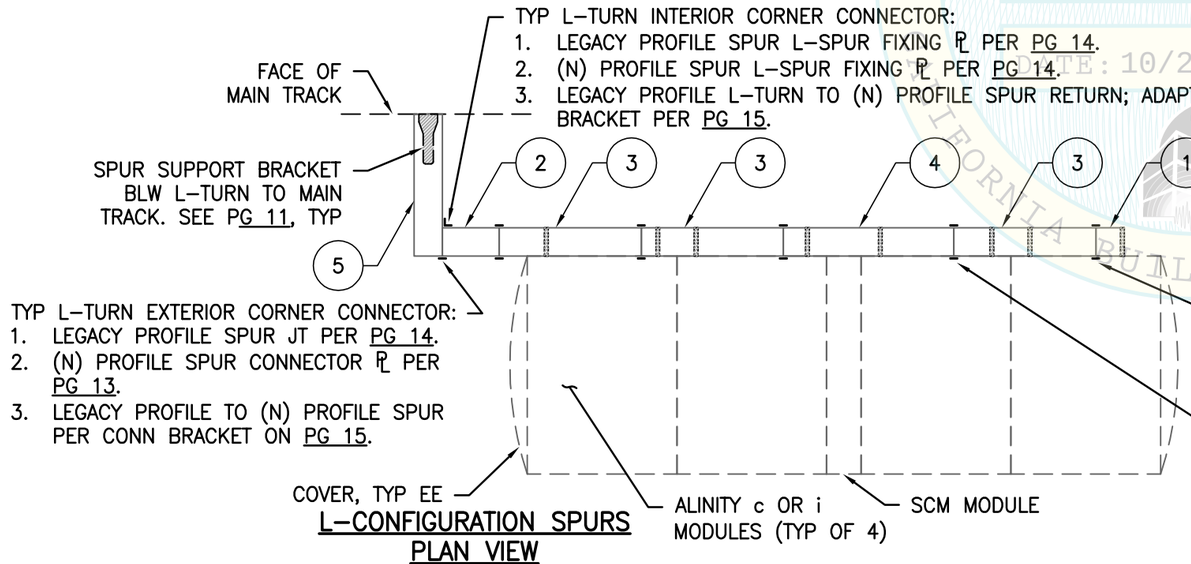


NOTE:
FOR CONFIGURATIONS W/ MULTIPLE ALINITY MODULE, SEE L-CONFIGURATIONS. NOTE THAT STRAIGHT CONFIGURATIONS DO NOT USE COMPONENT #5

STRAIGHT CONFIGURATION SPUR PLAN VIEW

COMPONENT	DESCRIPTION OF SPUR COMPONENTS	WT Wp(LBS)	PG
1	LEGACY PROFILE SPUR END CAP	18	10
	(N) PROFILE SPUR END CAP		
2	LEGACY PROFILE SPUR RETURN & INTERFACE MODULE BLW	44	11
	(N) PROFILE SPUR RETURN & INTERFACE MODULE BLW		
3	LEGACY PROFILE SAMPLING BAY (SHORT)	26	12
	(N) PROFILE SAMPLING BAY (SHORT)		
4	LEGACY PROFILE SAMPLING BAY (LONG)	31	12
	(N) PROFILE SAMPLING BAY (LONG)		
5	LEGACY PROFILE L-TURN	27	14
	(N) PROFILE L-TURN		

NOTE:
CONFIGURING OF THE SPURS & ASSEMBLY OF SUBCOMPONENTS & THEIR INTERFACE MODULE FOR MULTIPLE CONFIGURATIONS W/ CONNECTORS (SUPPORTS, BRACKETS & PLATES) BY MFR



TYP L-TURN INTERIOR CORNER CONNECTOR:
1. LEGACY PROFILE SPUR L-SPUR FIXING PL PER PG 14.
2. (N) PROFILE SPUR L-SPUR FIXING PL PER PG 14.
3. LEGACY PROFILE L-TURN TO (N) PROFILE SPUR RETURN; ADAPTER PL/UNION BRACKET PER PG 15.

TYP L-TURN EXTERIOR CORNER CONNECTOR:
1. LEGACY PROFILE SPUR JT PER PG 14.
2. (N) PROFILE SPUR CONNECTOR PL PER PG 13.
3. LEGACY PROFILE TO (N) PROFILE SPUR PER CONN BRACKET ON PG 15.

TYP END CAP CONNECTOR:
1. LEGACY PROFILE SPUR PER PG 10.
2. (N) PROFILE SPUR PER PG 13.
3. LEGACY PROFILE TO (N) PROFILE SPUR PER PG 17.

TYP SAMPLING BAY CONNECTOR:
1. LEGACY PROFILE SPUR – SPUR FIXING PL ES OF SPUR PER PG 10.
2. (N) PROFILE SPUR – CONNECTOR PL PER PG 13.
3. LEGACY PROFILE TO (N) PROFILE SPUR – ADAPTER PL PER CONN BRACKETS ON PGS 15 & 16.

L-CONFIGURATION SPURS PLAN VIEW

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: a3600 ALINITY SPUR MODULE SUB-ASSEMBLY DETAILS
SPUR CONFIGURATIONS

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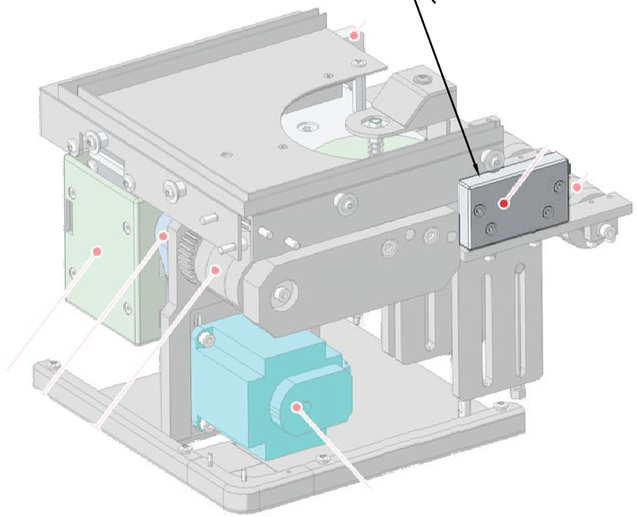
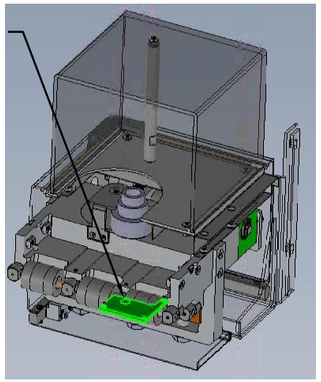
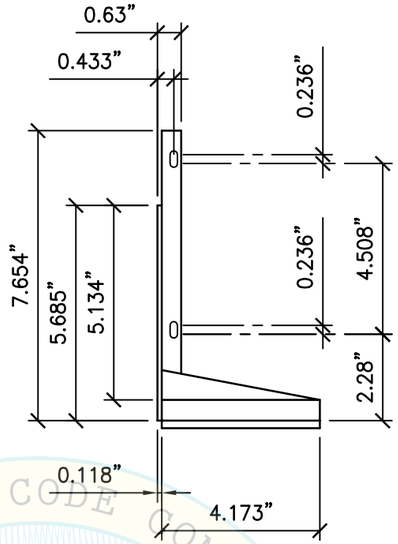


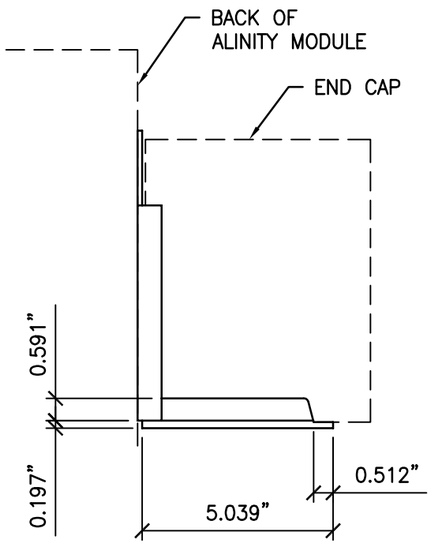
LEGACY SPUR END CAP
COMPONENT 1a



(N) SPUR END CAP
COMPONENT 1b



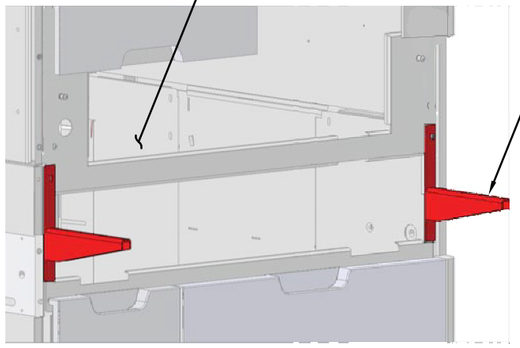
FRONT VIEW



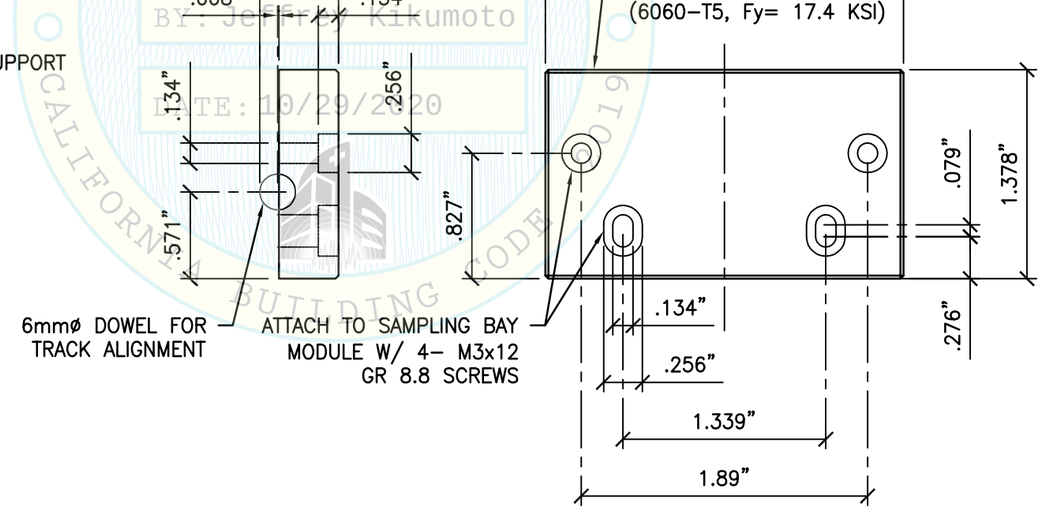
SIDE VIEW

NOTE:
BRACKET IS FABRICATED FROM
EN C40 STL (Fy= 30 KSI)

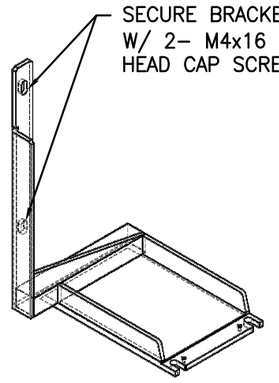
LEGACY END CAP BRACKET DETAIL



ANALYZER SUPPORT BRACKETS FOR SPURS



LEGACY SPUR FIXING PLATE DETAIL



LEGACY END CAP BRACKET
ISOMETRIC VIEW

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: a3600 ALINITY SPUR MODULE SUB-ASSEMBLY DETAILS
COMPONENT 1: a3600 ALINITY ci SPUR END CAP & TYPICAL CONNECTIONS

ABBOTT
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EQUIPMENT SUPPORTS & ATTACHMENTS

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2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
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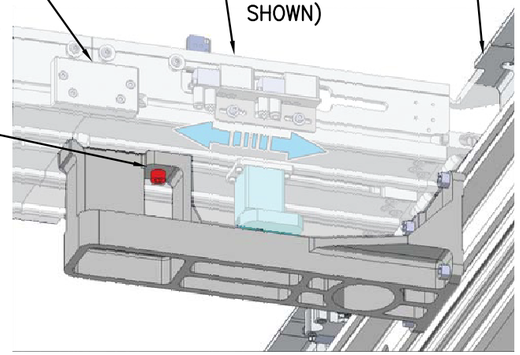
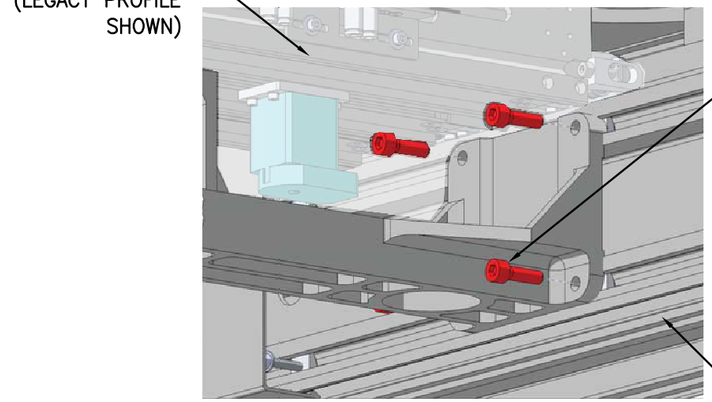
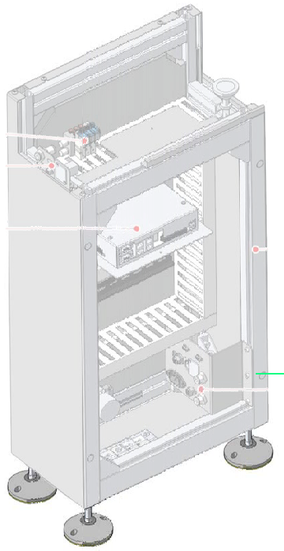
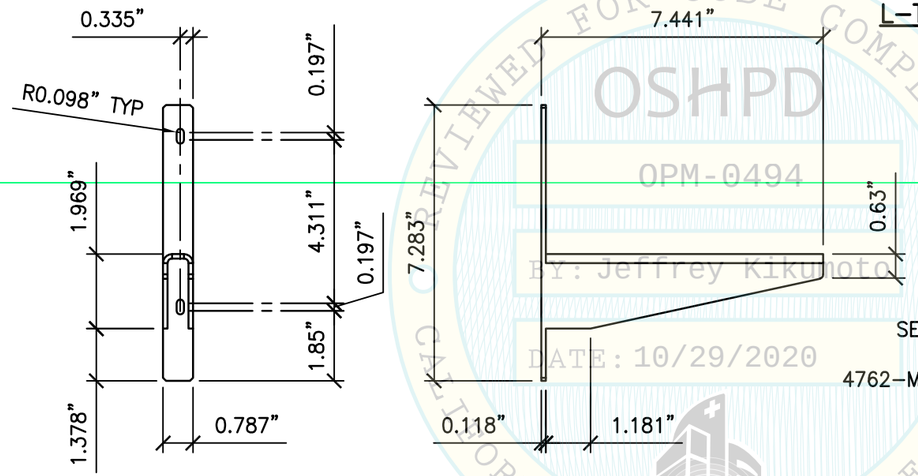


L–TURN SPUR (COMPONENT 5) CONN TO MAIN TRACK
BRACKET TO L–TURN SPUR



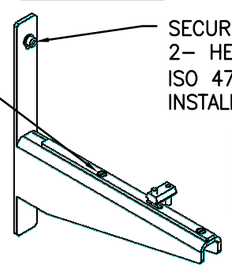


INTERFACE MODULE



FRONT VIEW

SIDE VIEW

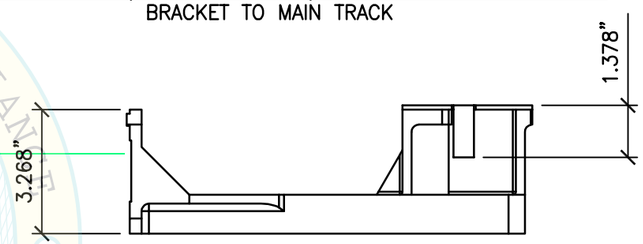


NOTE:
BRACKET IS FABRICATED FROM EN C40 STL (Fy= 30.4 KSI MIN)

ISOMETRIC VIEW

ANALYZER TRACK TO SPUR SUPPORT BRACKET DETAIL

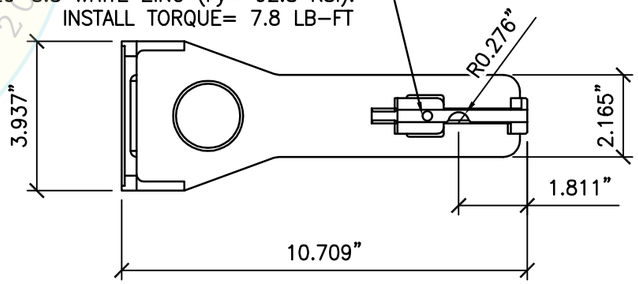
L–TURN SPUR (COMPONENT 5) CONN TO MAIN TRACK
BRACKET TO MAIN TRACK



SIDE VIEW

SECURE SPUR TO BRACKET W/ HEXAGON SOCKET HEAD CAP SCREW UNI EN ISO 4762–M6x20–8.8 WHITE ZINC (Fy= 92.8 KSI). INSTALL TORQUE= 7.8 LB–FT

NOTE:
BRACKET IS FABRICATED FROM CAST ALUM ISO G–AlSi 12 (Fy= 18.9 KSI)



TOP VIEW

L–TURN SPUR TO MAIN TRACK SUPPORT BRACKET DETAIL

NOTE:
ALINITY MODULE(S) ARE NOT SHOWN

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: a3600 ALINITY SPUR MODULE SUB-ASSEMBLY DETAILS
COMPONENT 2: a3600 ALINITY ci SPUR RETURN MODULE & INTERFACE MODULE

ABBOTT
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EQUIPMENT SUPPORTS & ATTACHMENTS

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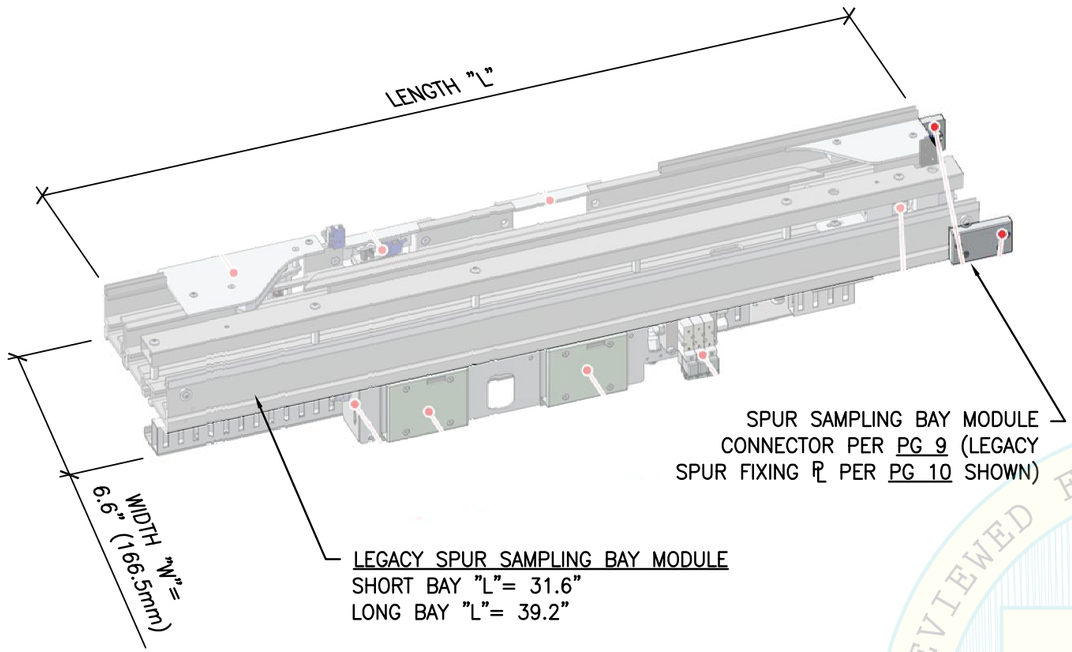
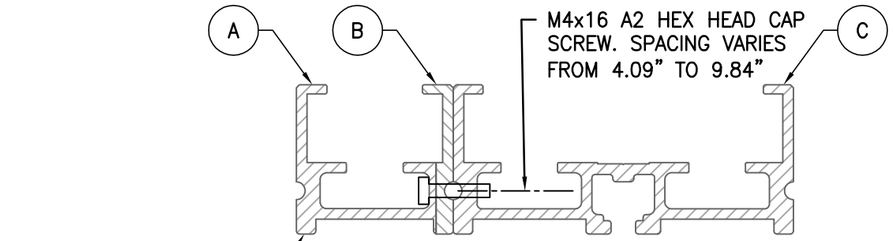
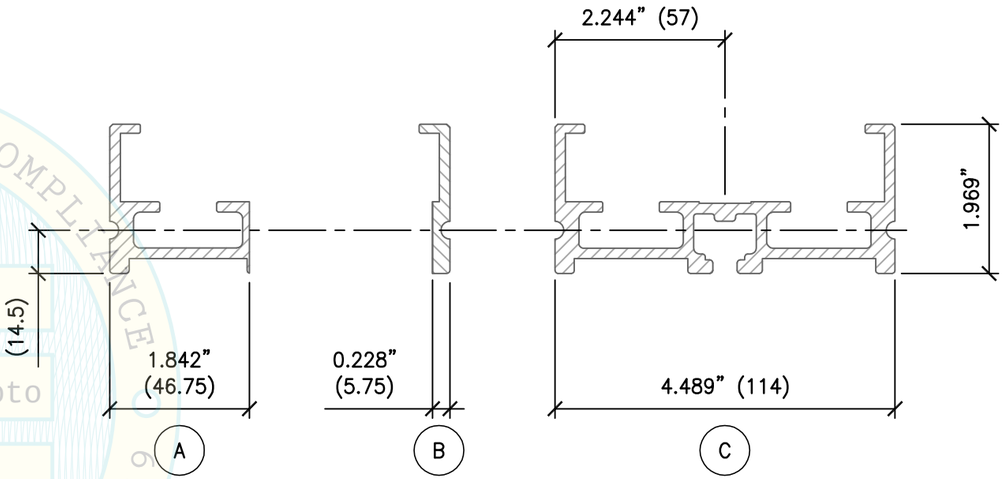




LEGACY SPUR TRACK PROFILE

(#) INDICATES PROFILE ELEMENT



LEGACY SPUR TRACK SUBCOMPONENT & SECTION PROPERTIES

ITEM	A (IN^2)	S_x (IN^3)	S_y (IN^3)	I_x (IN^4)	I_y (IN^4)
ELEMENT A	0.81	0.18	0.29	0.21	0.33
ELEMENT B	0.38	0.15	0.00	0.14	0.00
ELEMENT C	1.84	0.36	2.05	0.47	4.60
ASSEMBLED PROFILE	3.03	0.69	3.88	0.85	13.39

SHEET TITLE: a3600 ALINITY SPUR MODULE SUB-ASSEMBLY DETAILS
COMPONENTS 3&4: a3600 ALINITY ci LEGACY SPUR SAMPLING BAY MODULE

ABBOTT
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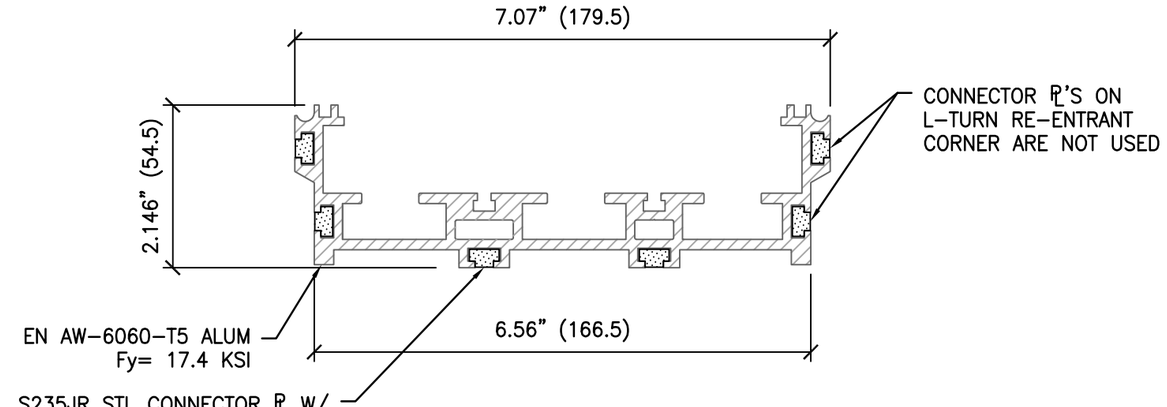
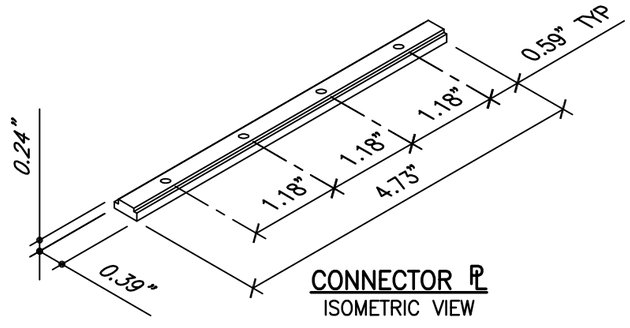


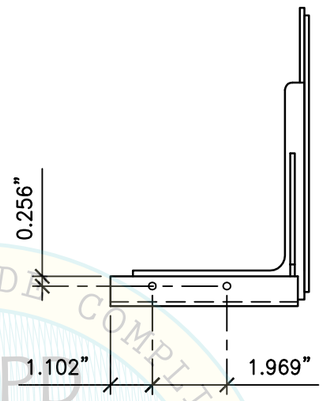
(N) PROFILE SPUR TRACK PROFILE

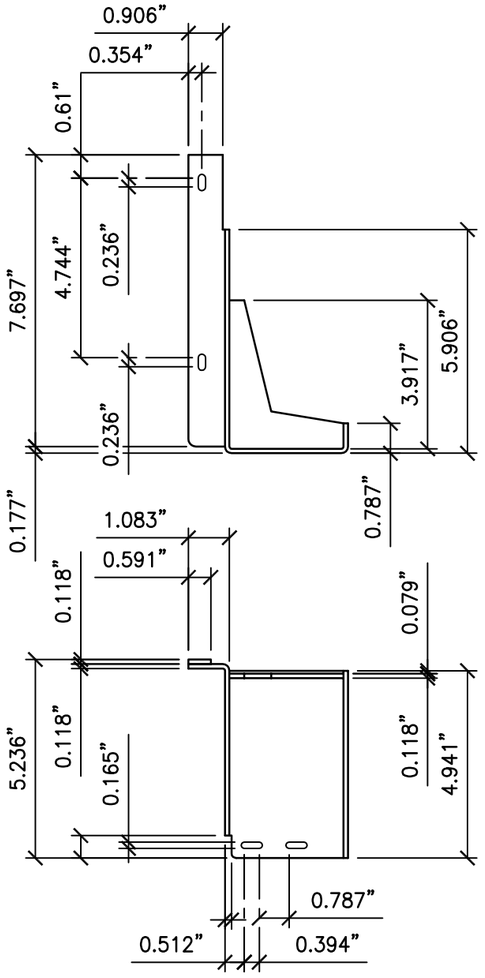
(N) PROFILE SPUR TRACK SECTION PROPERTIES

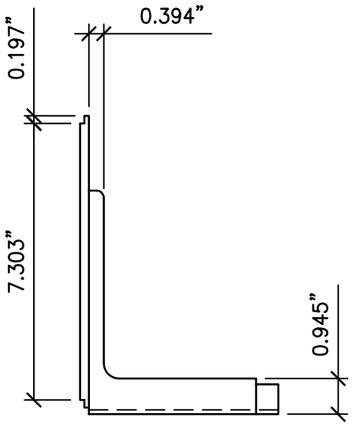
A (IN^2)	S_x (IN^3)	S_y (IN^3)	I_x (IN^4)	I_y (IN^4)
2.821	0.555	4.074	0.782	14.440



CONNECTOR ℄ ISOMETRIC VIEW







(N) PROFILE END CAP BRACKET DETAIL

MATERIAL: AISI 304

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: a3600 ALINITY SPUR MODULE SUB-ASSEMBLY DETAILS
COMPONENTS 3&4: a3600 ALINITY ci (N) SPUR SAMPLING BAY MODULE & END CAP

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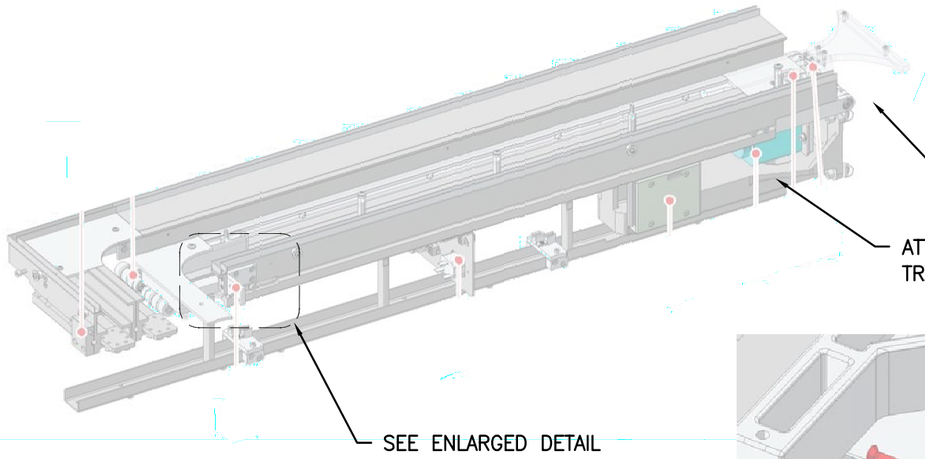
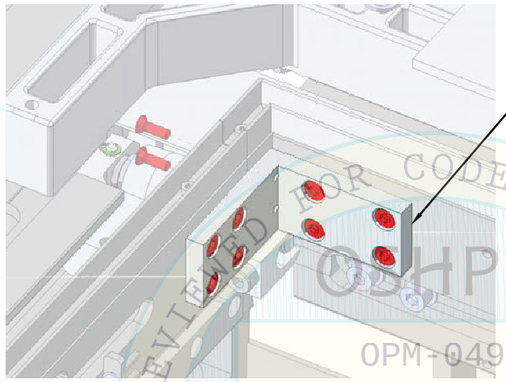
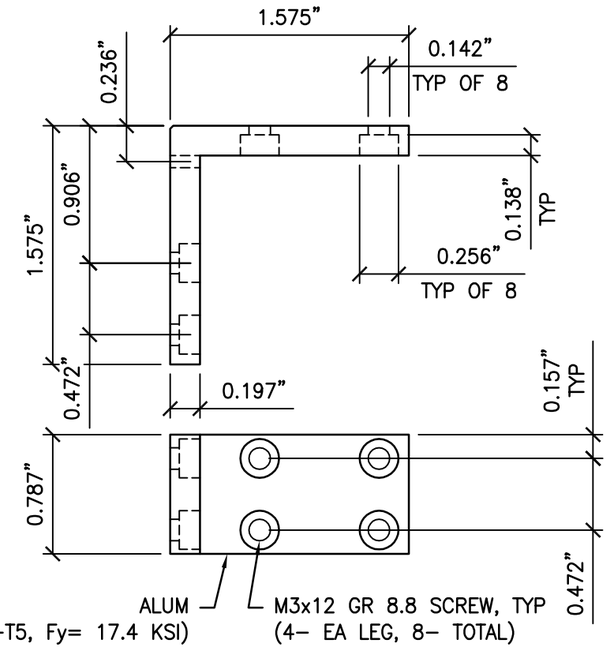


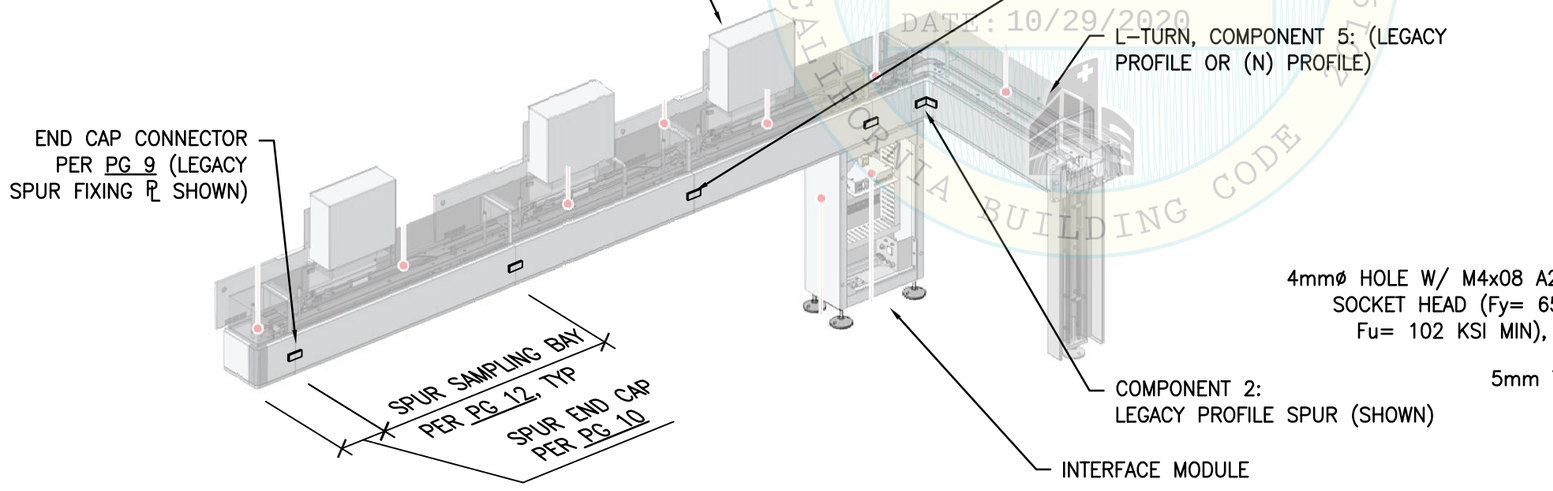


ENLARGED DETAIL

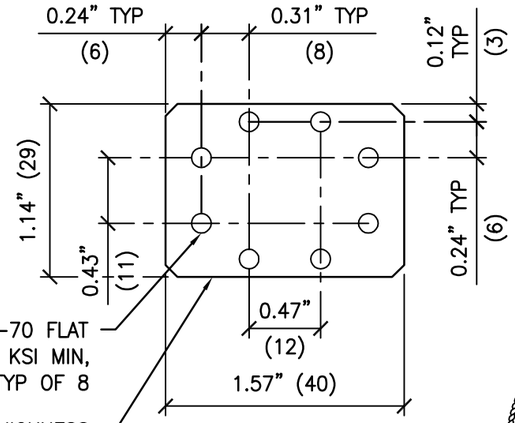
NOTE:
FOR LEGACY PROFILE TO (N) PROFILE, REFER TO UNION BRACKET PER PG 15.



LEGACY PROFILE TO LEGACY PROFILE
OR (N) PROFILE TO (N) PROFILE
L–SPUR FIXING PLATE DETAIL



ASSEMBLED L–TURN SPUR



MATERIAL:
P–A1Mg 0.5 Si 0.4 Fe (6060–T5)
Fy= 17.4 KSI

ASSEMBLED L–TURN SPUR

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: a3600 ALINITY SPUR MODULE SUB-ASSEMBLY DETAILS
COMPONENT 4: a3600 ALINITY ci L-TURN MODULE

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TEL (916) 920-2020
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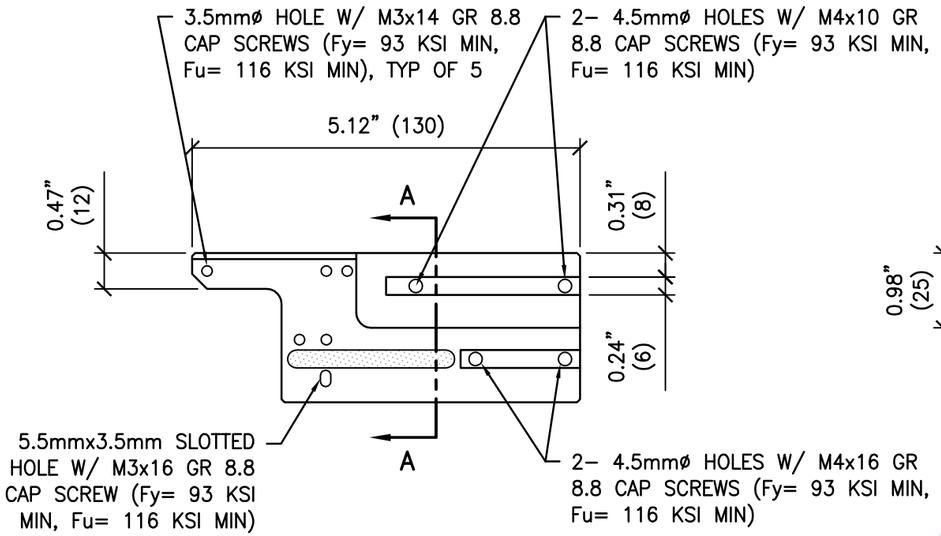
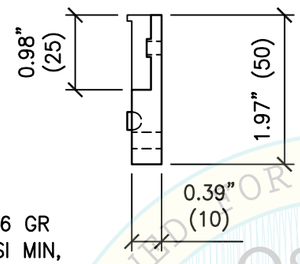
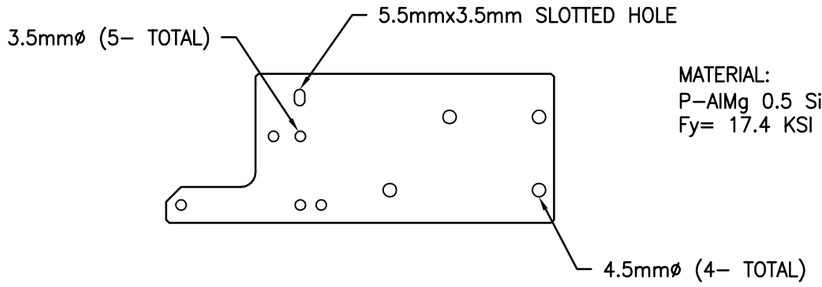
CONNECTION BRACKET:



FRONT VIEW



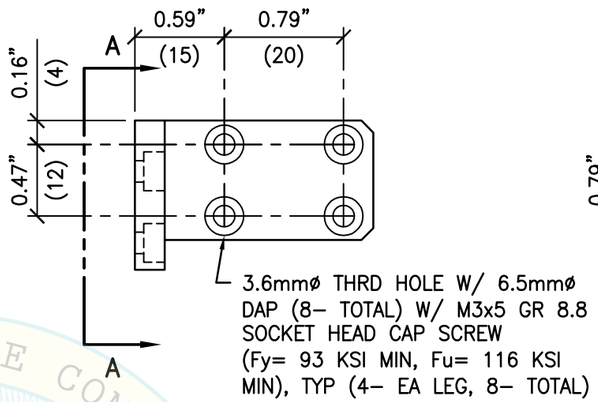
SECTION A–A

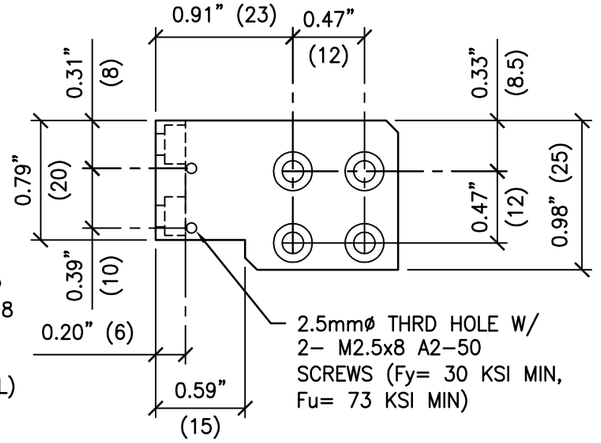


MATERIAL:
P–AlMg 0.5 Si 0.4 Fe (6060–T5)
Fy= 17.4 KSI

REAR VIEW

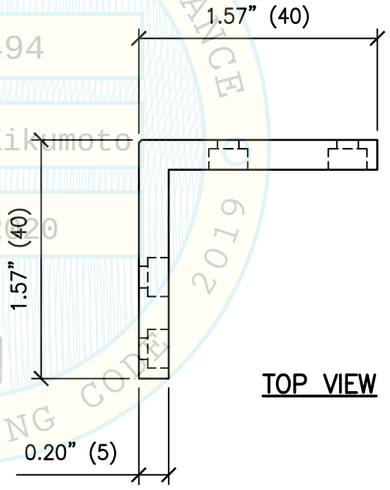
UNION BRACKET:





VIEW A–A

MATERIAL:
P–AlMg 0.5 Si 0.4 Fe (6060–T5)
Fy= 17.4 KSI



TOP VIEW

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: LEGACY PROFILE TO (N) PROFILE SPUR ADAPTER BRACKETS

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SACRAMENTO, CA 95833
TEL (916) 920-2020
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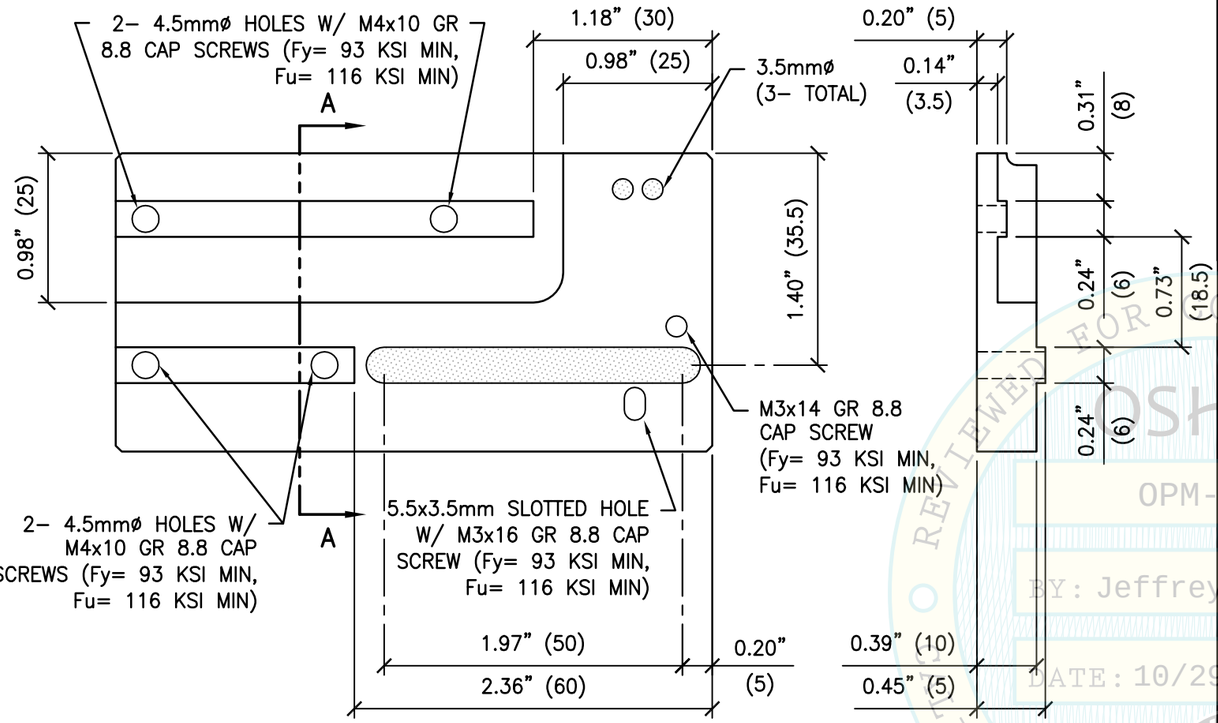
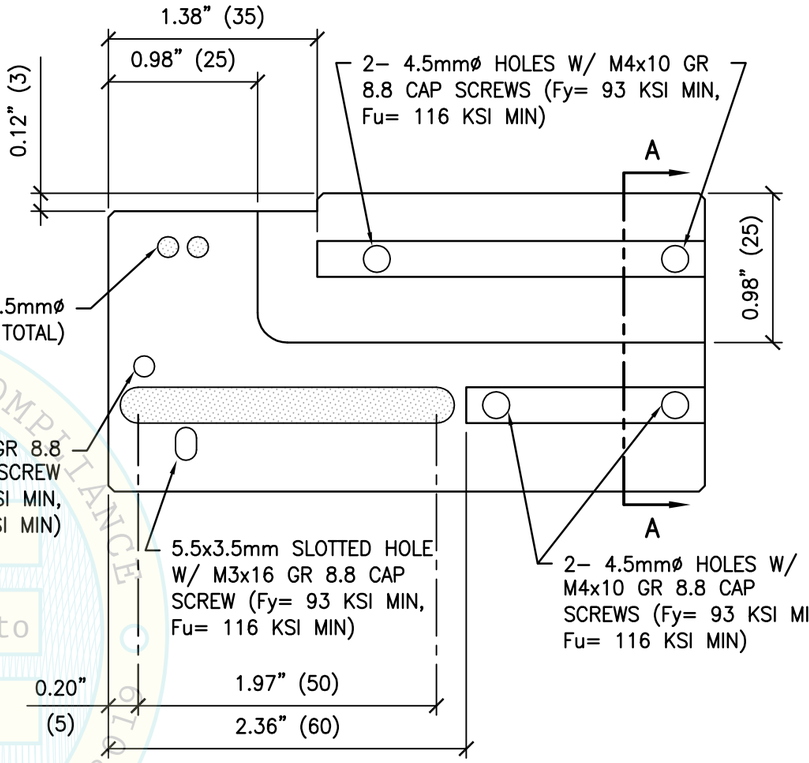
CONNECTION BRACKETS:



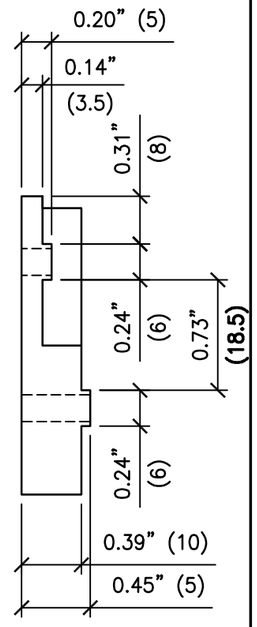
FRONT VIEW

SECTION A–A

MATERIAL:
P–AlMg 0.5 Si 0.4 Fe (6060–T5)
Fy= 17.4 KSI



FRONT VIEW



SECTION A–A

MATERIAL:
P–AlMg 0.5 Si 0.4 Fe (6060–T5)
Fy= 17.4 KSI

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: LEGACY PROFILE TO (N) PROFILE SPUR ADAPTER BRACKETS

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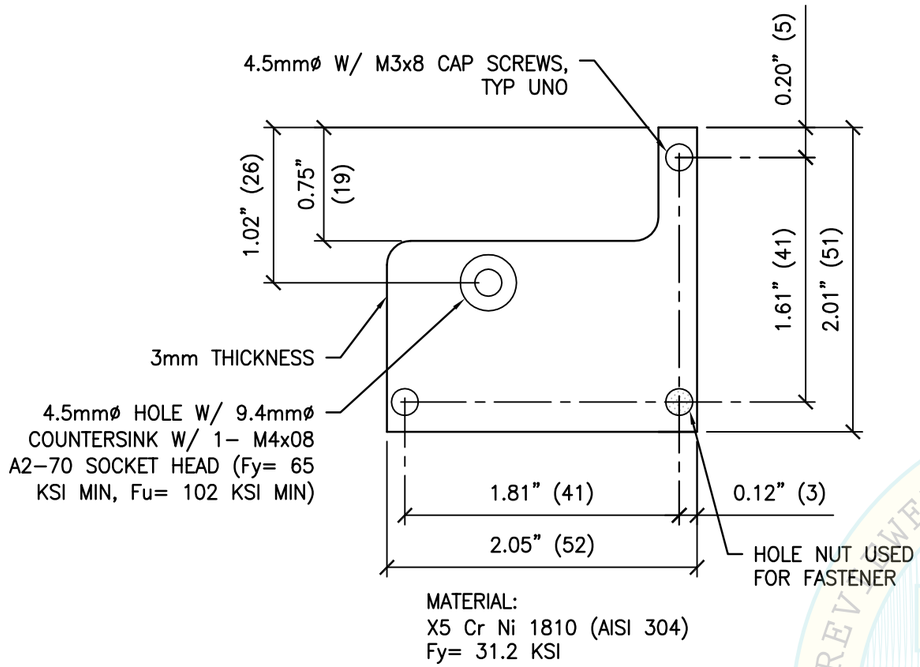
PLATE:



MATERIAL:
X5 Cr Ni 1810 (AISI 304)
Fy= 31.2 KSI

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: LEGACY PROFILE TO (N) PROFILE SPUR ADAPTER PLATE

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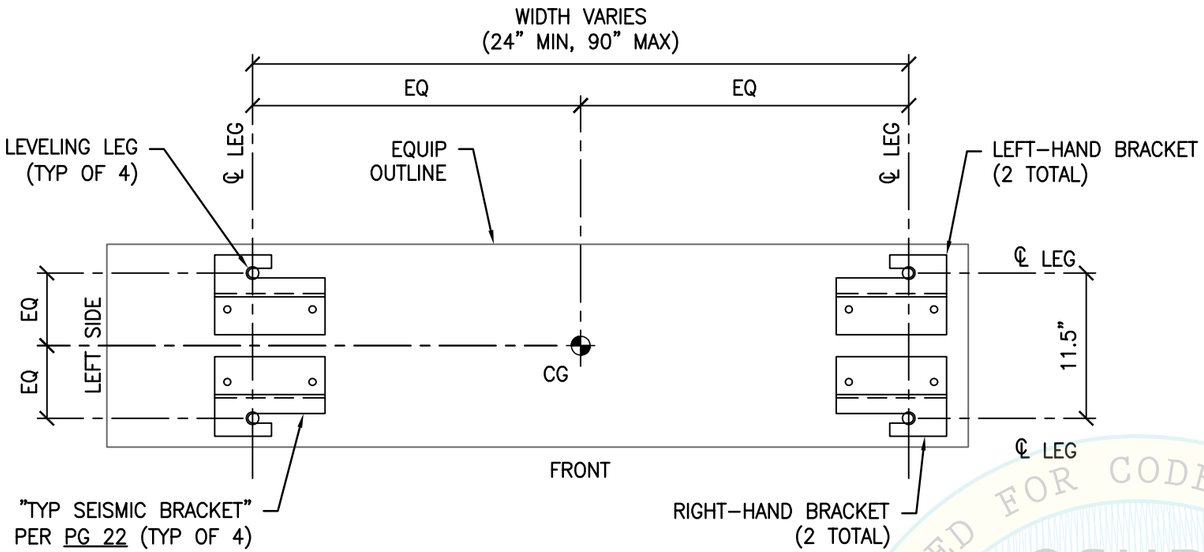
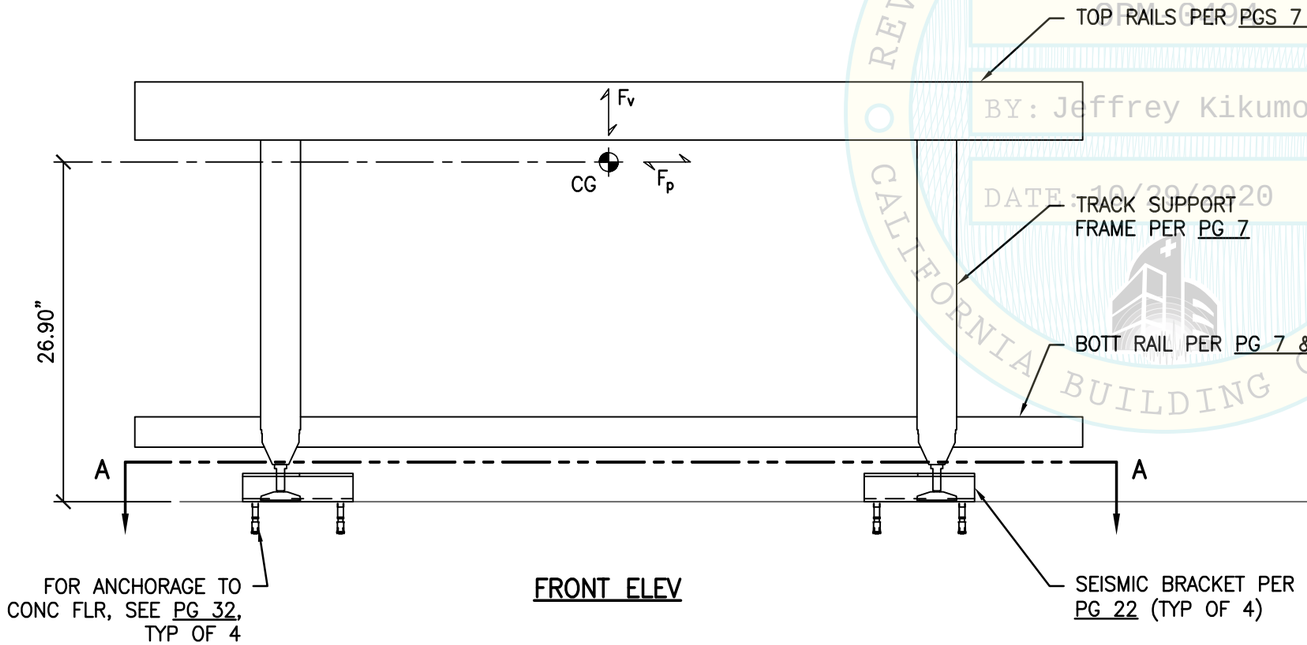


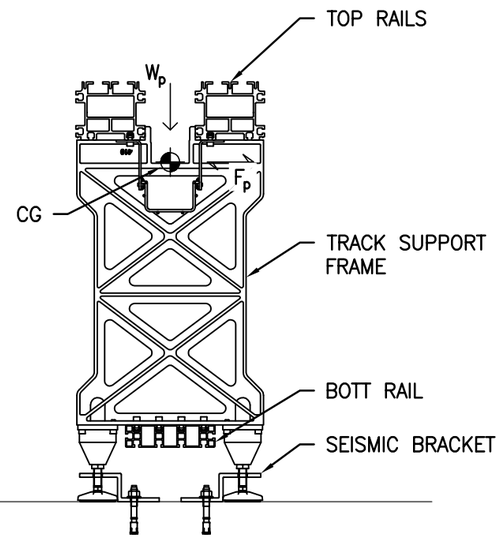
BASE PLAN A-A

	MAX ANCHOR FORCES AT LRFD AT LEVELING LEG[1]		
	T_{max}	C_{max}	V_{max}
CASE 1 [3]	1362	1584#	508#
CASE 2 [2]	748#	969#	286#

1. ECCENTRICITY & PRYING ACTION MUST BE CONSIDERED BASED ON THE SEISMIC BRACKET CONFIGURATION.
2. INCLUDES OVERSTRENGTH FACTOR (Ω_o).
3. OVERSTRENGTH FACTOR (Ω_o) MUST BE APPLIED FOR ANCHORAGE TO CONC.



FRONT ELEV



RIGHT SIDE ELEV

NOTE:
A DISTANCE OF 5.5" BTW AB OF ADJ BRACKETS IS ACCEPTABLE.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: TYPICAL TRACK MODULE
BASE PLAN & ELEVATIONS

ABBOTT
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EQUIPMENT SUPPORTS & ATTACHMENTS

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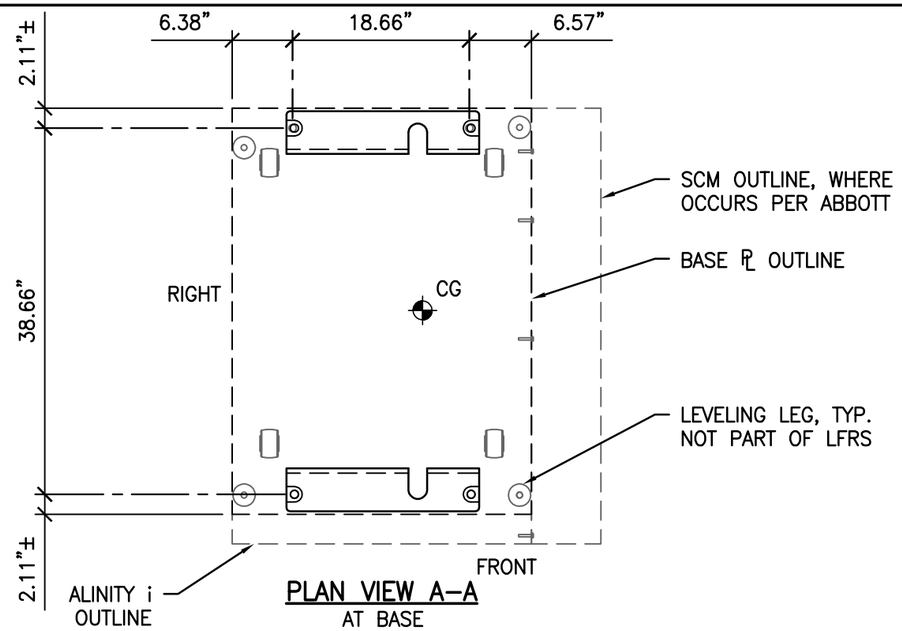
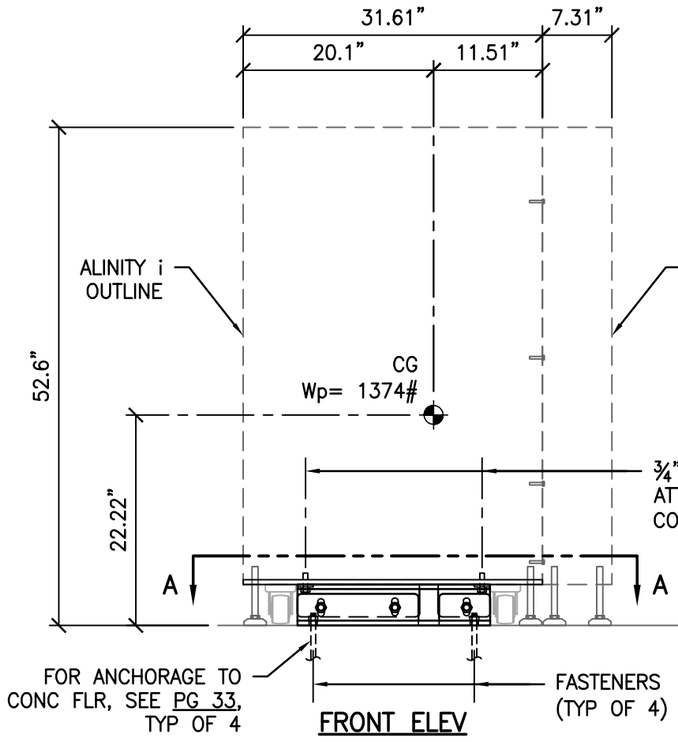
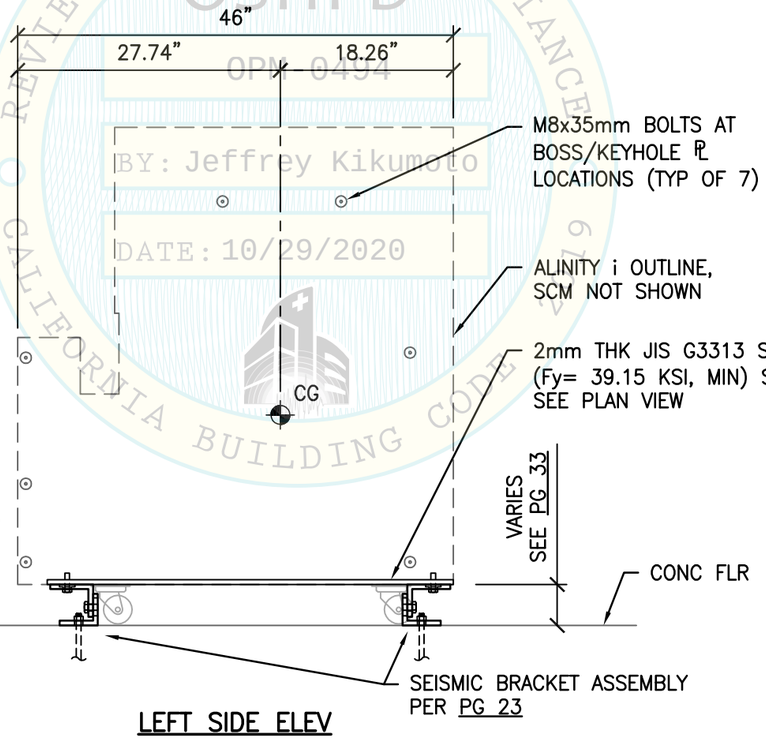
	MAX ANCHOR FORCES AT LRFD AT EA COMPONENT ATTACHMENT TO SUPPORT		
	T_{max}	C_{max}	V_{max}
CASE 1	2192#	3199#	1169#
CASE 2	791#	1798#	438#



PLAN VIEW A–A
AT BASE



FRONT ELEV



LEFT SIDE ELEV

NOTES:
1. STIFFENER ℄ & LEVELING LEGS NOT SHOWN IN ALL VIEWS FOR CLARITY.
2. SEISMIC BRACKET & HARDWARE SHALL BE FURNISHED & INSTALLED BY THE GENERAL CONTRACTOR, UNO.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY i MODULE
BASE PLAN & ELEVATIONS

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

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Rev	Description	Date

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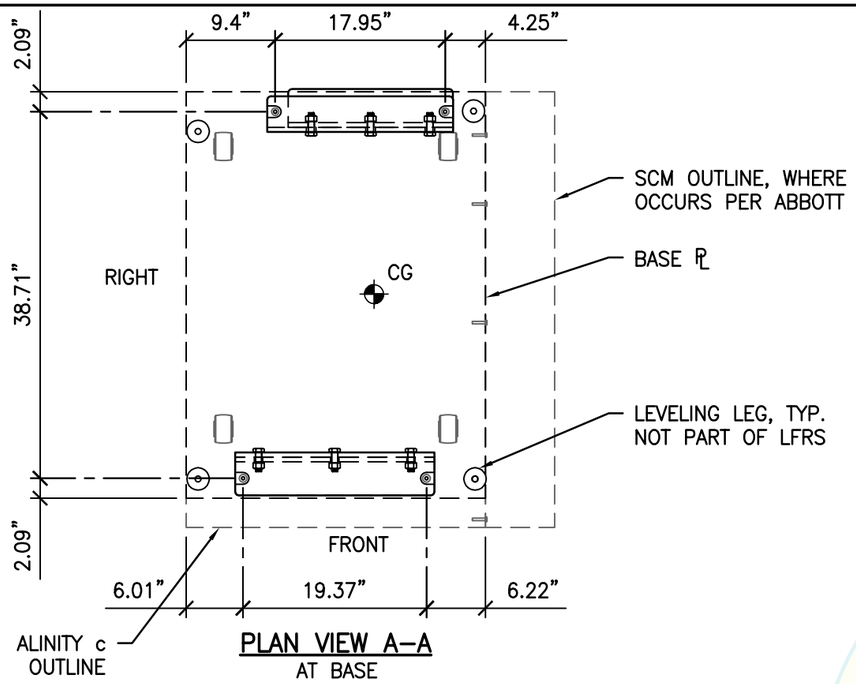
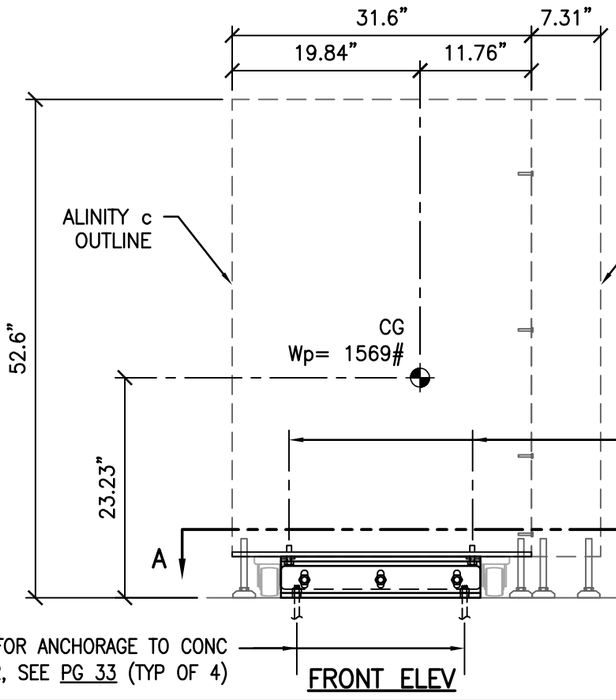
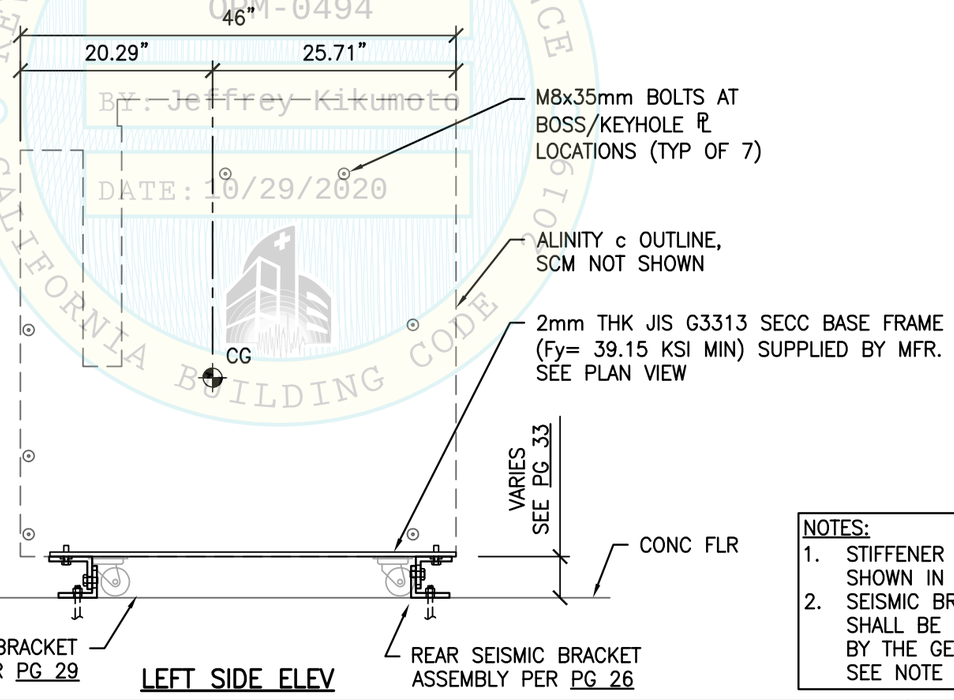


PLAN VIEW A–A
AT BASE



FRONT ELEV



LEFT SIDE ELEV

	MAX ANCHOR FORCES AT LRFD AT EA COMPONENT ATTACHMENT TO SUPPORT		
	T_{max}	C_{max}	V_{max}
CASE 1	2578#	3299#	1448#
CASE 2	881#	1833#	543#

NOTES:
1. STIFFENER ℄ & LEVELING LEGS NOT SHOWN IN ALL VIEWS FOR CLARITY.
2. SEISMIC BRACKET & HARDWARE SHALL BE FURNISHED & INSTALLED BY THE GENERAL CONTRACTOR, UNO. SEE NOTE 3 ON PG 1.

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DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY c MODULE
BASE PLAN & ELEVATIONS

ABBOTT
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EQUIPMENT SUPPORTS & ATTACHMENTS

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Rev	Description	Date

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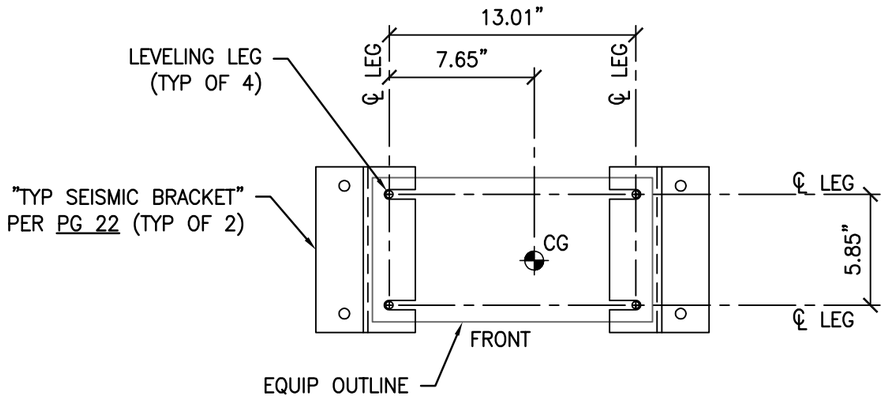
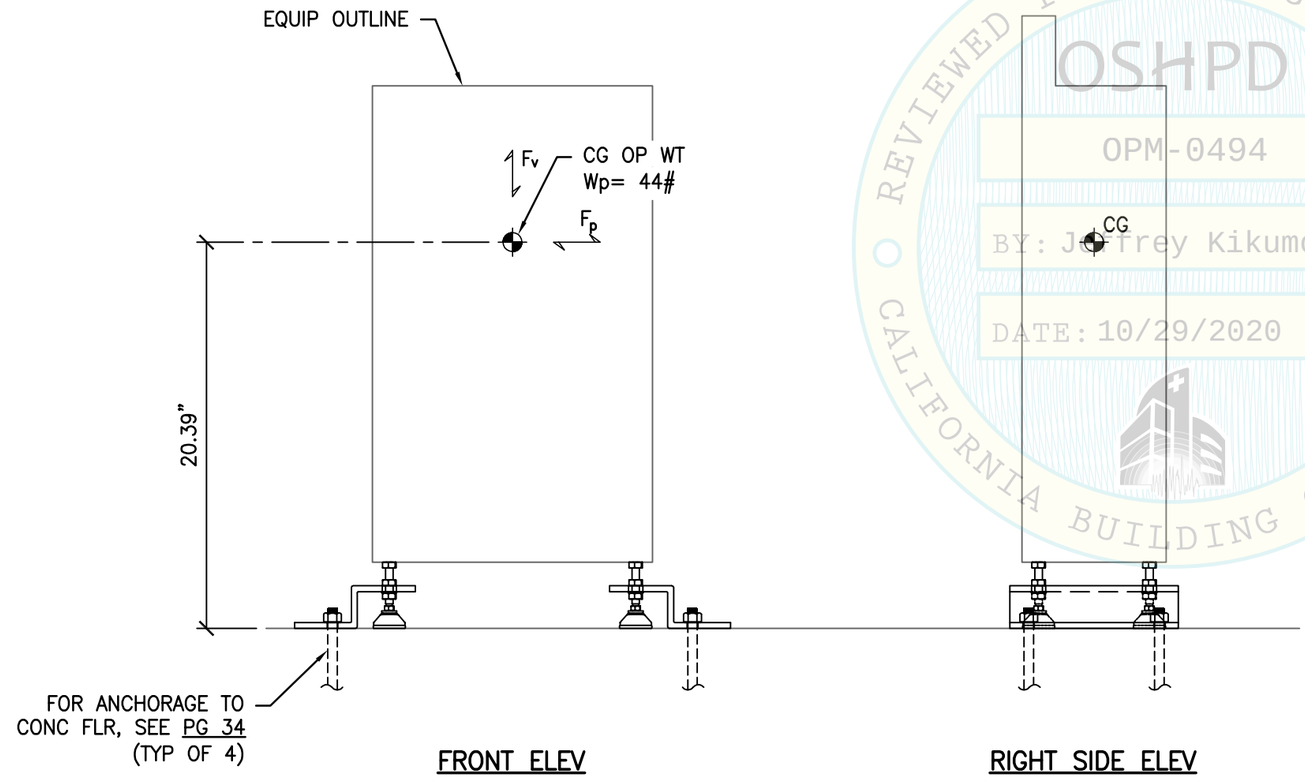


BASE PLAN VIEW



FRONT ELEV

RIGHT SIDE ELEV

	MAX ANCHOR FORCES AT LRFD AT LEVELING LEG[1]		
	T_{max}	C_{max}	V_{max}
CASE 1 [3]	394#	436#	104#
CASE 2 [2]	218#	261#	59#

1. ECCENTRICITY & PRYING ACTION MUST BE CONSIDERED BASED ON THE SEISMIC BRACKET CONFIGURATION.
2. INCLUDES OVERSTRENGTH FACTOR (Ω_o).
3. OVERSTRENGTH FACTOR (Ω_o) MUST BE APPLIED FOR ANCHORAGE TO CONC.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: INTERFACE MODULE
BASE PLAN & ELEVATIONS

ABBOTT
ALINITY i & c INSTRUMENTS
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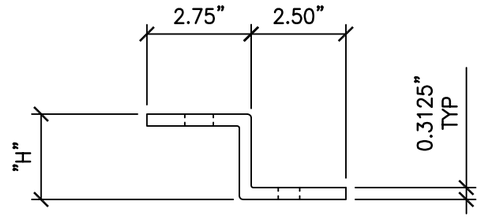
INTERFACE MODULE SEISMIC BRACKET:

NOTE:
FOR INFO NOT SHOWN OR NOTED, SEE TYP SEISMIC BRACKET DTL



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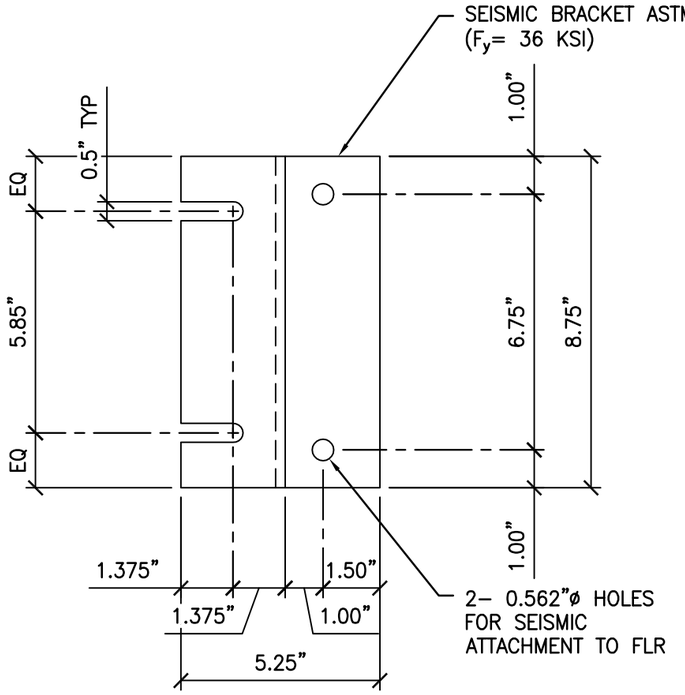


PLAN

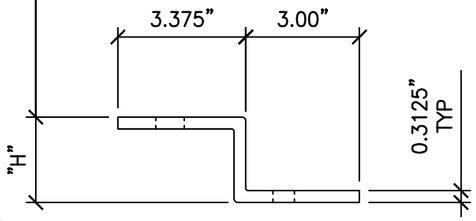
TYP TRACK SEISMIC BRACKET DETAIL:

"H" VARIES TO ACCOMMODATE VERT ADJUSTMENT OF THE COMPONENT FOR LEVELING PURPOSES AS MEASURED FROM THE FLR TO THE BOTT OF THE COMPONENT PER THE CASE 1 & CASE 2 FLR TO COMPONENT CLEARANCES AS FOLLOWS:

BRACKET A: "H" = 2.25" FOR 2.25" ≤ CLR ≤ 3.50"

BRACKET B: "H" = 3.50" FOR 3.50" ≤ CLR ≤ 4.25"

NOTES:
1. FOR CASE 1 & CASE 2 ANCHORAGE TO FLR, SEE PGS 32 & 33 FOR THE TYP TRACK MODULE & INTERFACE MODULE RESPECTIVELY.
2. BRACKET LAYOUT SHALL BE FOLLOWED AS SHOWN ON PLANS ON PG 18.
3. LEFT–HAND BRACKET SHOWN. SEE BASE PLAN A–A ON PG 18 FOR RIGHT–HAND BRACKET CONFIGURATION.
4. GENERAL CONTRACTOR SHALL PROVIDE & INSTALL SEISMIC BRACKET.



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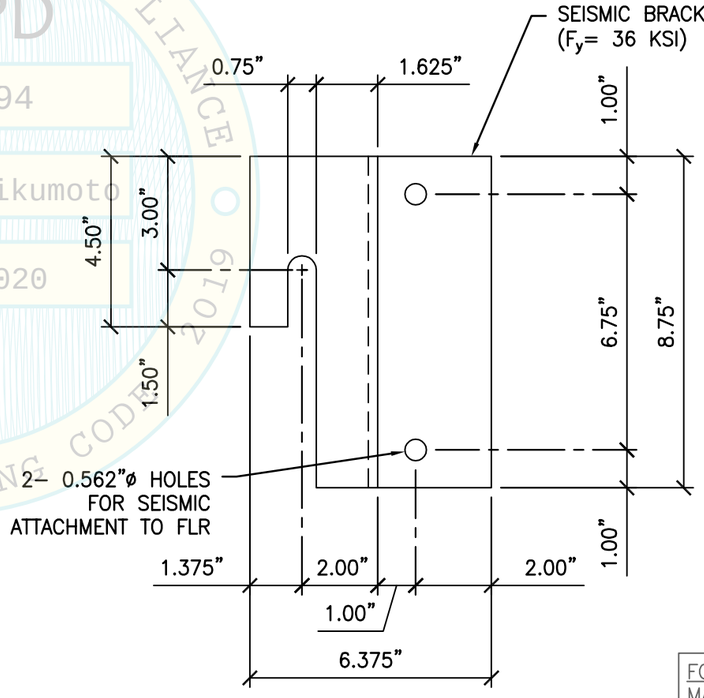

PLAN

FOR ABBOTT USE:
MAX TRACK HT
PER BRACKET
A = 888mm
B = 920mm

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: TYPICAL TRACK MODULE & INTERFACE MODULE SEISMIC BRACKET FABRICATION DETAIL

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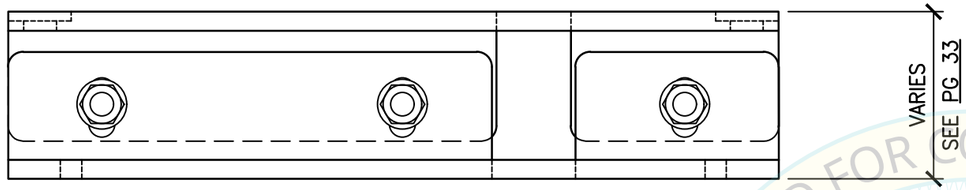
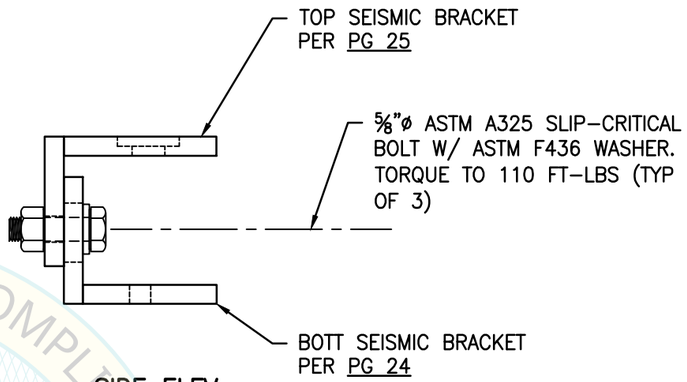
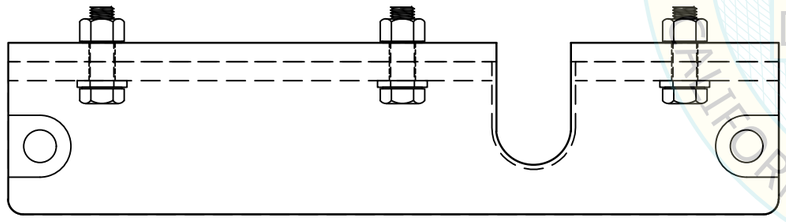
SEISMIC BRACKET ASSEMBLY:



ELEV



SIDE ELEV



PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY i MODULE SEISMIC BRACKET ASSEMBLY DETAIL	Rev	Description	Date
ABBOTT ALINITY i & c INSTRUMENTS EQUIPMENT SUPPORTS & ATTACHMENTS			

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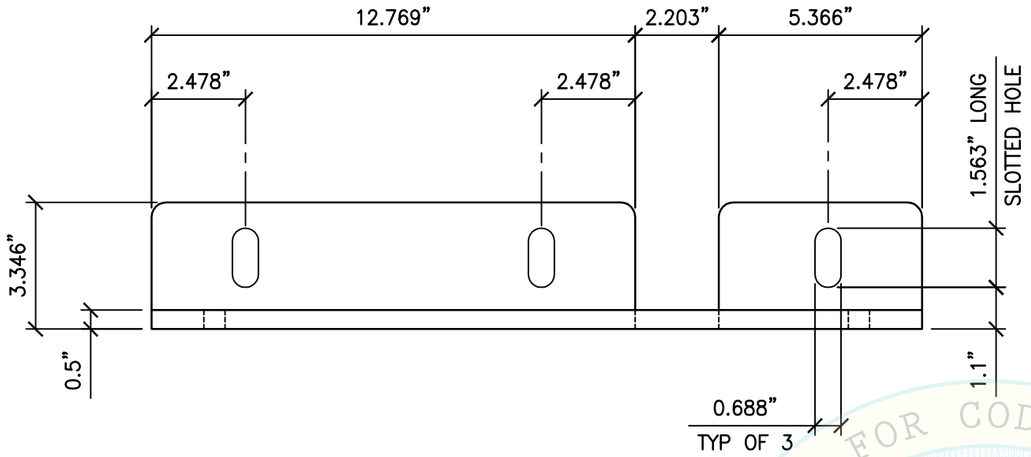
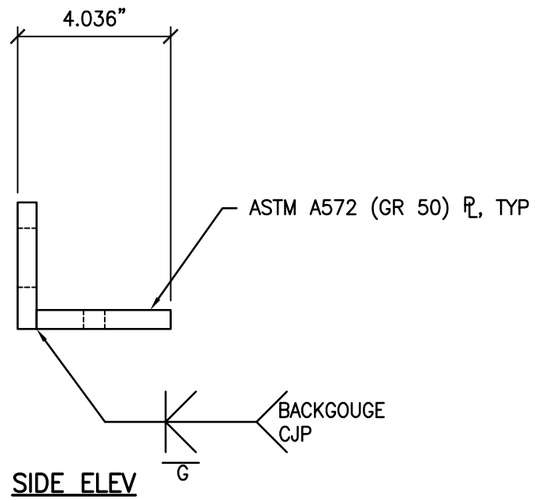
BOTTOM BRACKET DETAIL:



ELEV



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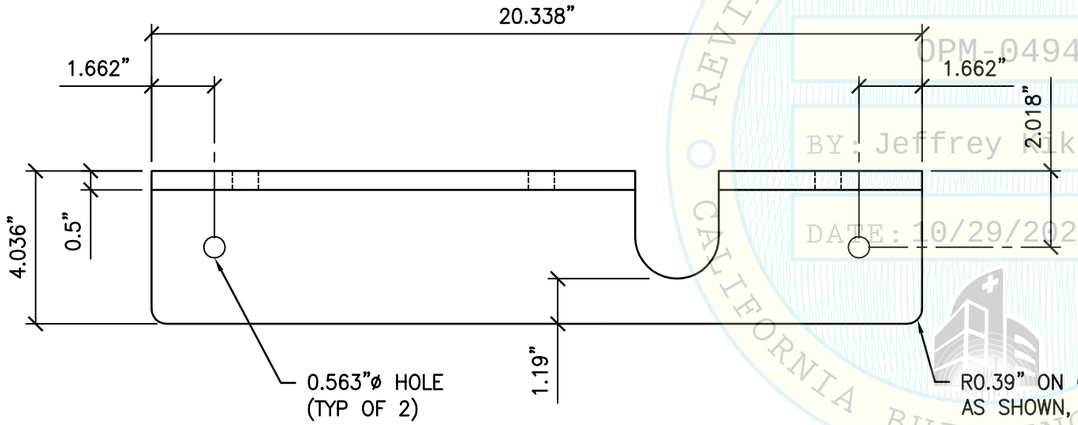

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY i MODULE
BOTTOM SEISMIC BRACKET FABRICATION DETAIL

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
www.cyseng.com

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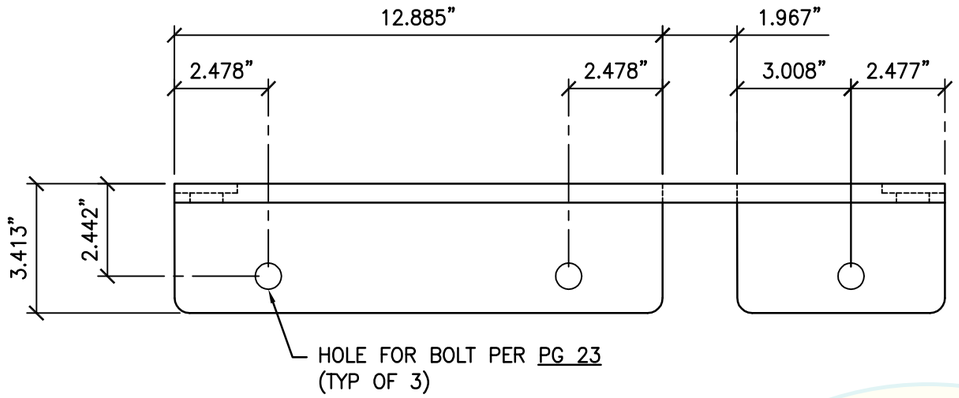
TOP BRACKET DETAIL:



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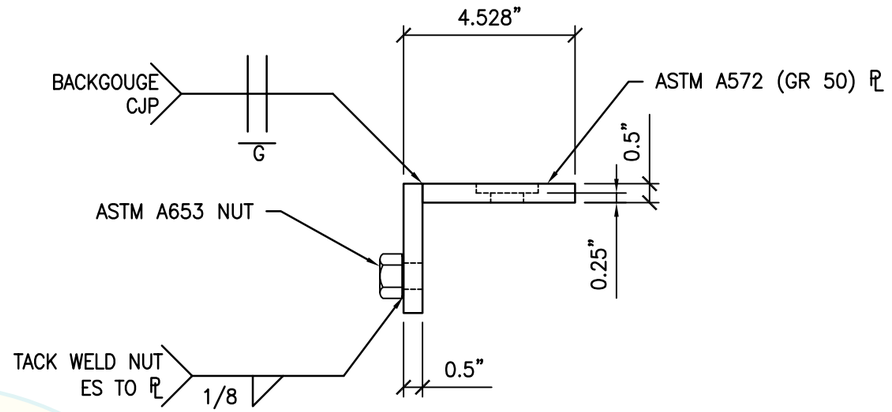

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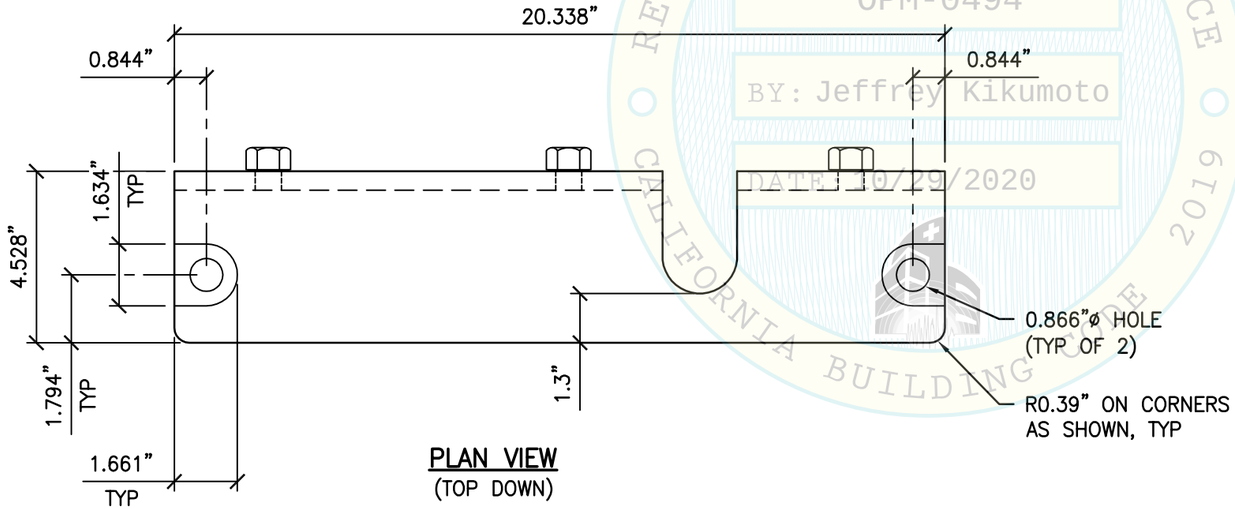

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY i MODULE TOP SEISMIC BRACKET FABRICATION DETAIL	Rev	Description	Date
ABBOTT ALINITY i & c INSTRUMENTS EQUIPMENT SUPPORTS & ATTACHMENTS			
CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020 SACRAMENTO, CA 95833 www.cyseng.com			

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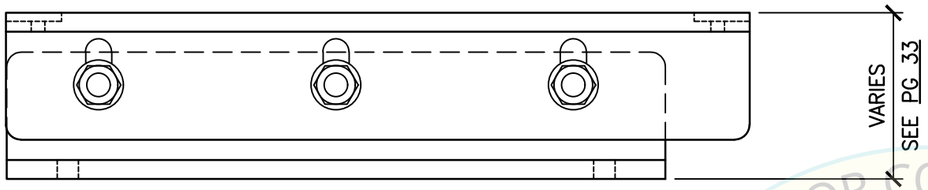
REAR BRACKET ASSEMBLY:



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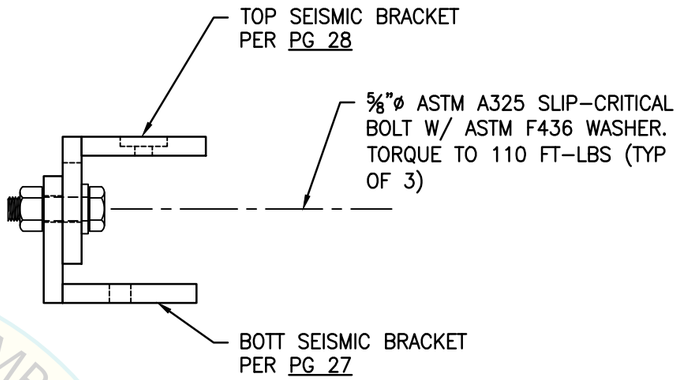

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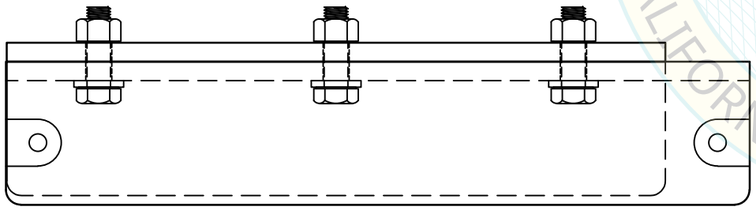

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY c MODULE
REAR SEISMIC BRACKET ASSEMBLY DETAIL

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
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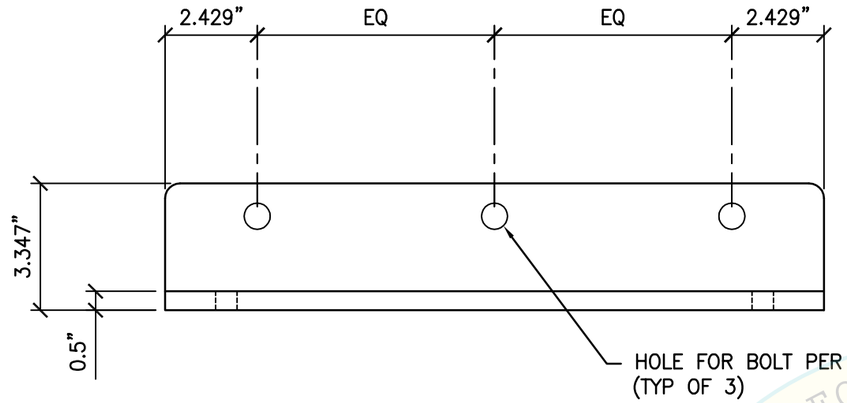
BOTTOM BRACKET DETAIL:



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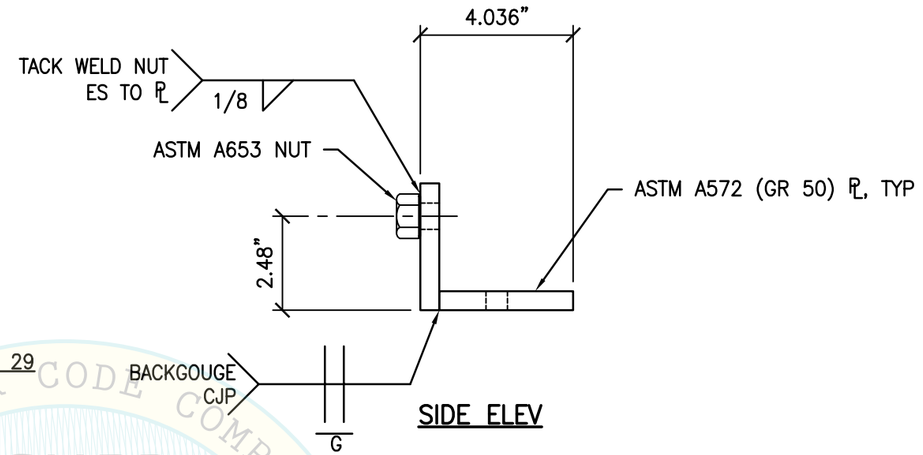

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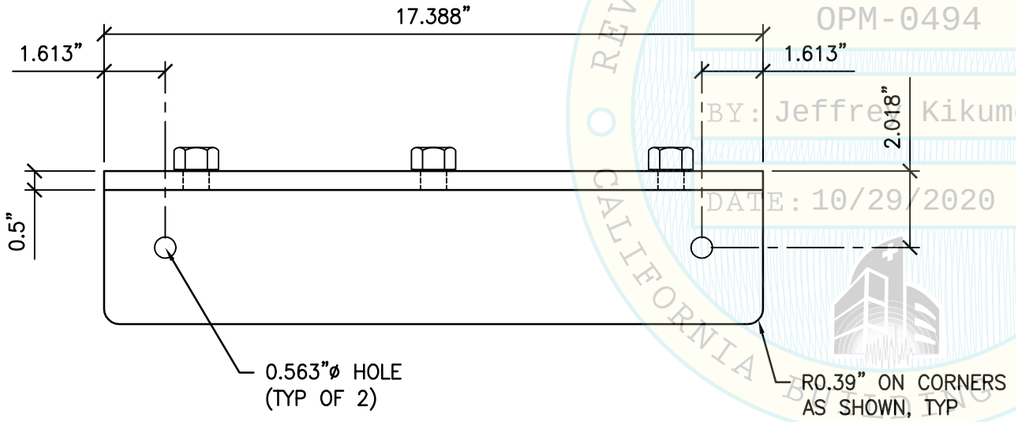

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY c MODULE REAR BOTTOM SEISMIC BRACKET FABRICATION DETAIL	Rev	Description	Date
ABBOTT ALINITY i & c INSTRUMENTS EQUIPMENT SUPPORTS & ATTACHMENTS			
CYS STRUCTURAL ENGINEERS, INC. 2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020 SACRAMENTO, CA 95833 www.cyseng.com			

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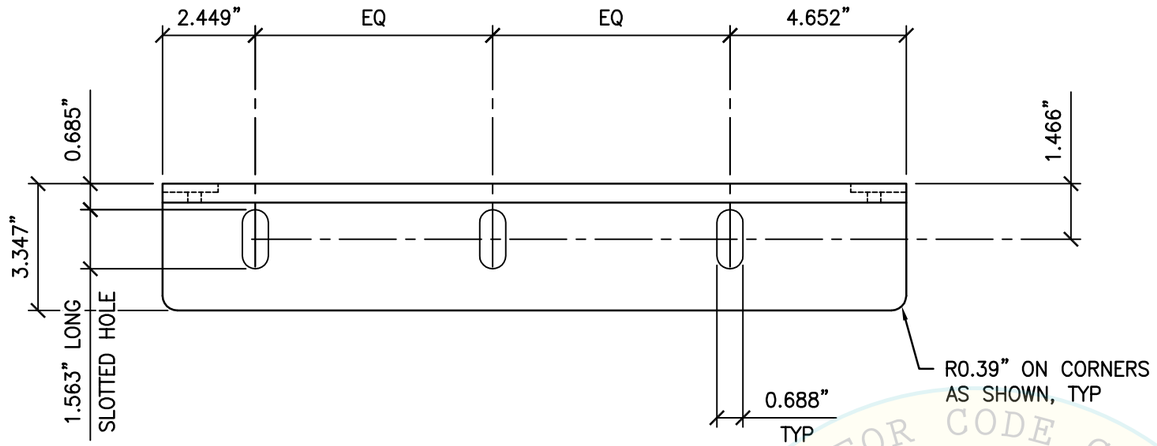
TOP BRACKET DETAIL:



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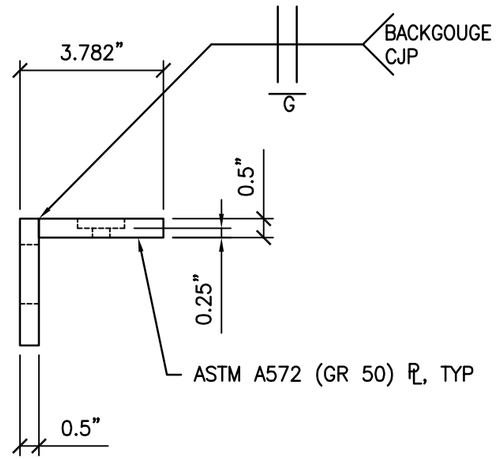

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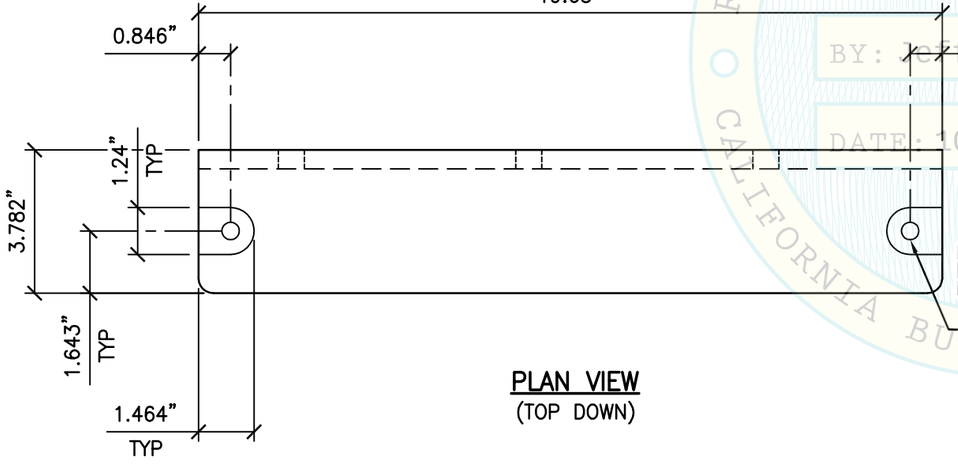

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY c MODULE
REAR TOP SEISMIC BRACKET FABRICATION DETAIL

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
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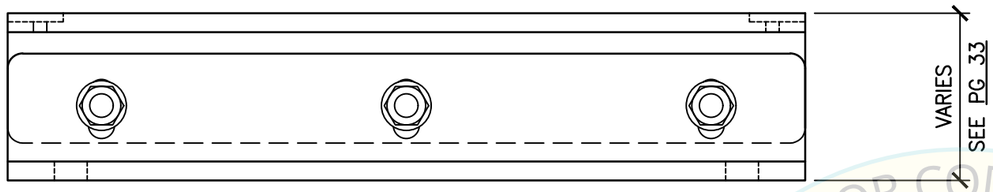
FRONT BRACKET ASSEMBLY:



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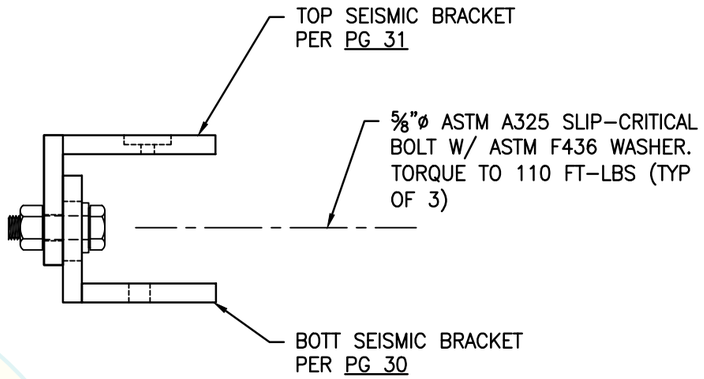

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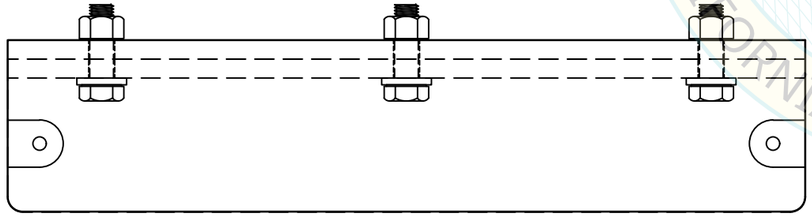

PLAN VIEW
(TOP DOWN)

SHEET TITLE: ALINITY c MODULE FRONT SEISMIC BRACKET ASSEMBLY DETAIL	Rev	Description	Date
ABBOTT ALINITY i & c INSTRUMENTS EQUIPMENT SUPPORTS & ATTACHMENTS			

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020
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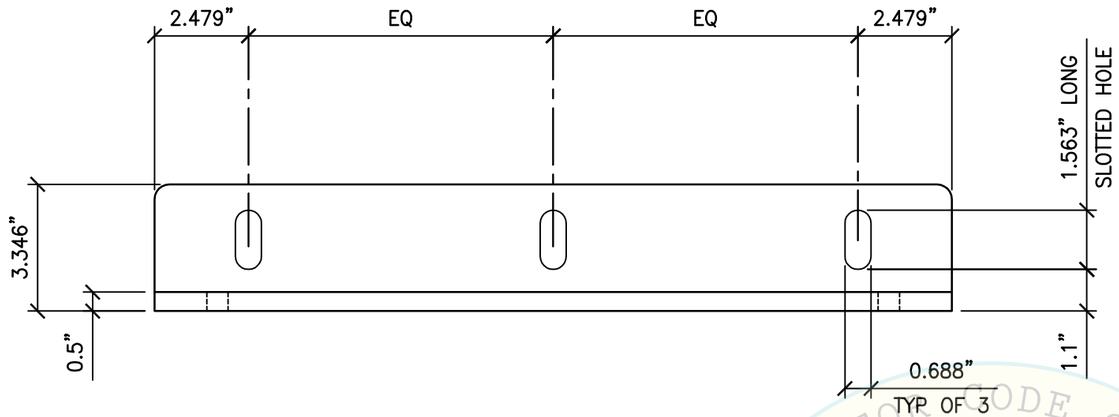
BOTTOM BRACKET DETAIL:



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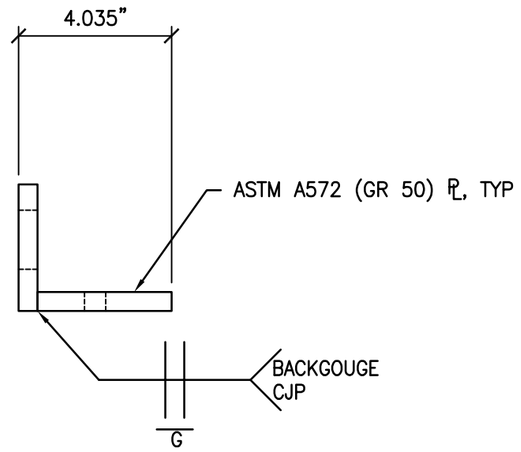

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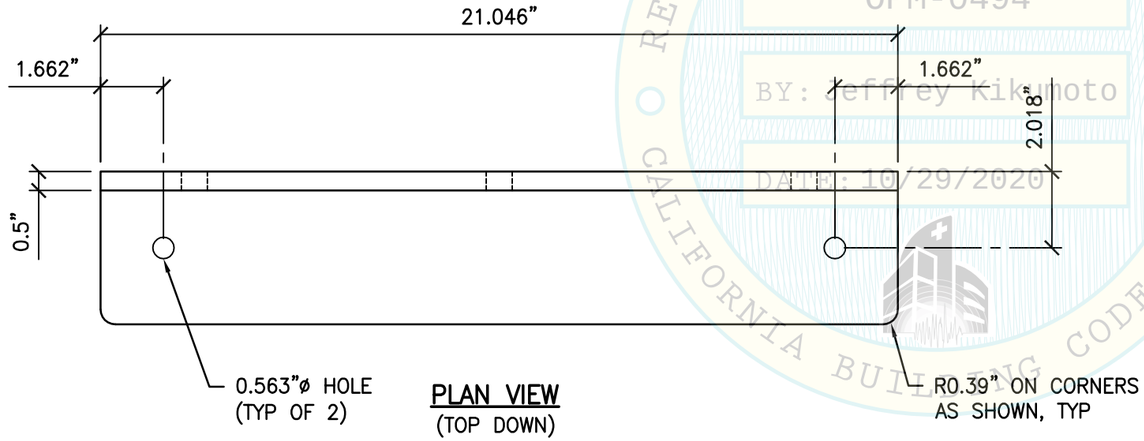

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY c MODULE
FRONT BOTTOM SEISMIC BRACKET FABRICATION DETAIL

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020
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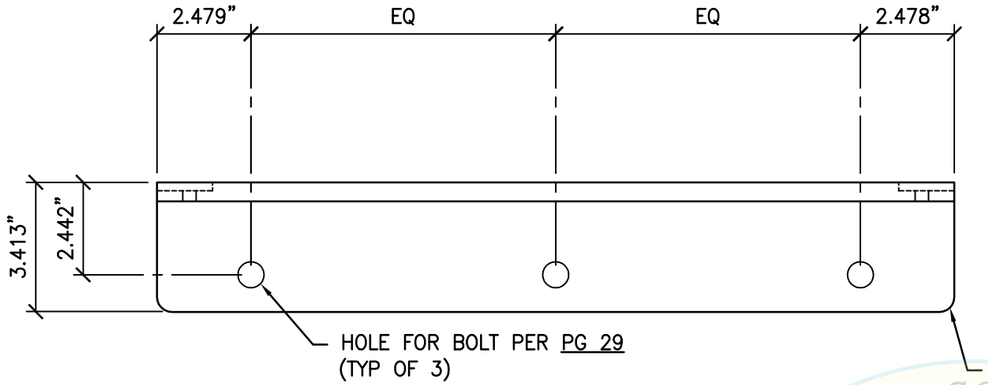
TOP BRACKET DETAIL:



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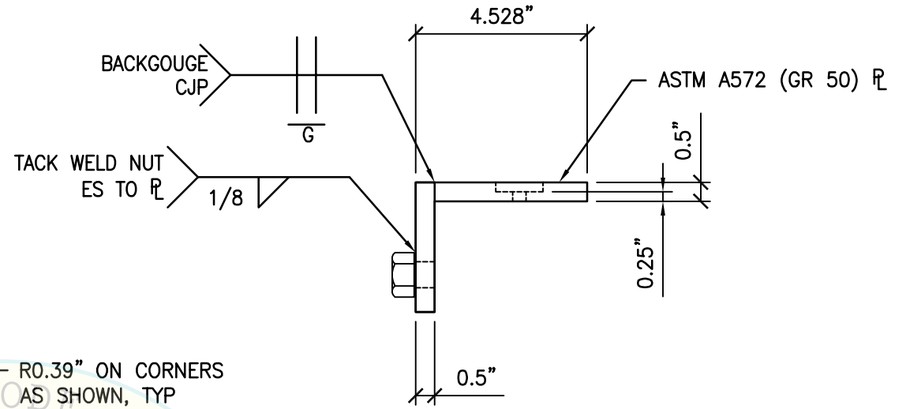

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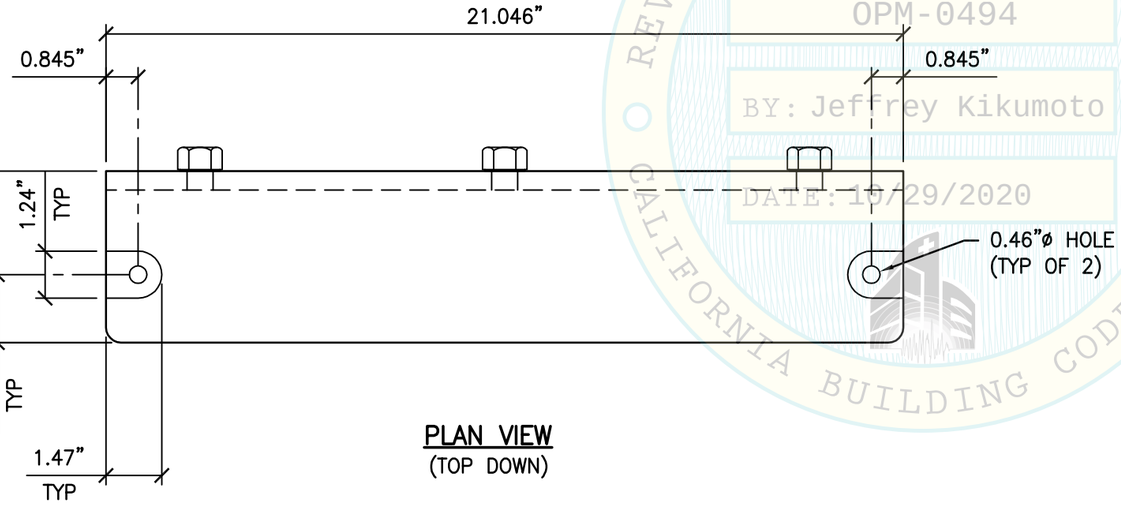

PLAN VIEW
(TOP DOWN)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY c MODULE
FRONT TOP SEISMIC BRACKET FABRICATION DETAIL

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
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Rev	Description	Date

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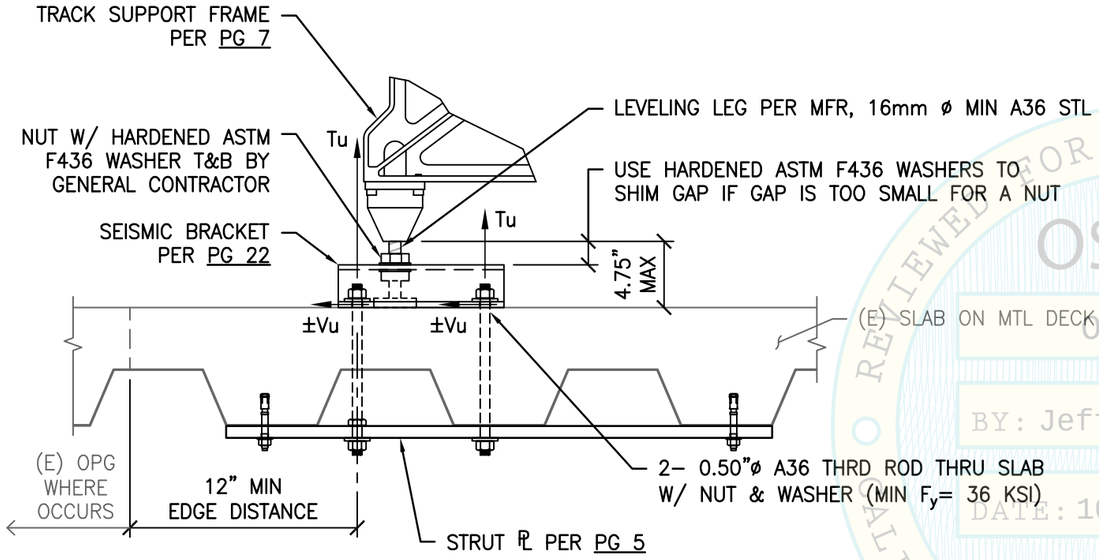
	MAX ANCHOR FORCES AT LRFD AT EA AB	
	Tu	Vu
CASE 1 z/h ≤ 1.0	2808#	364#

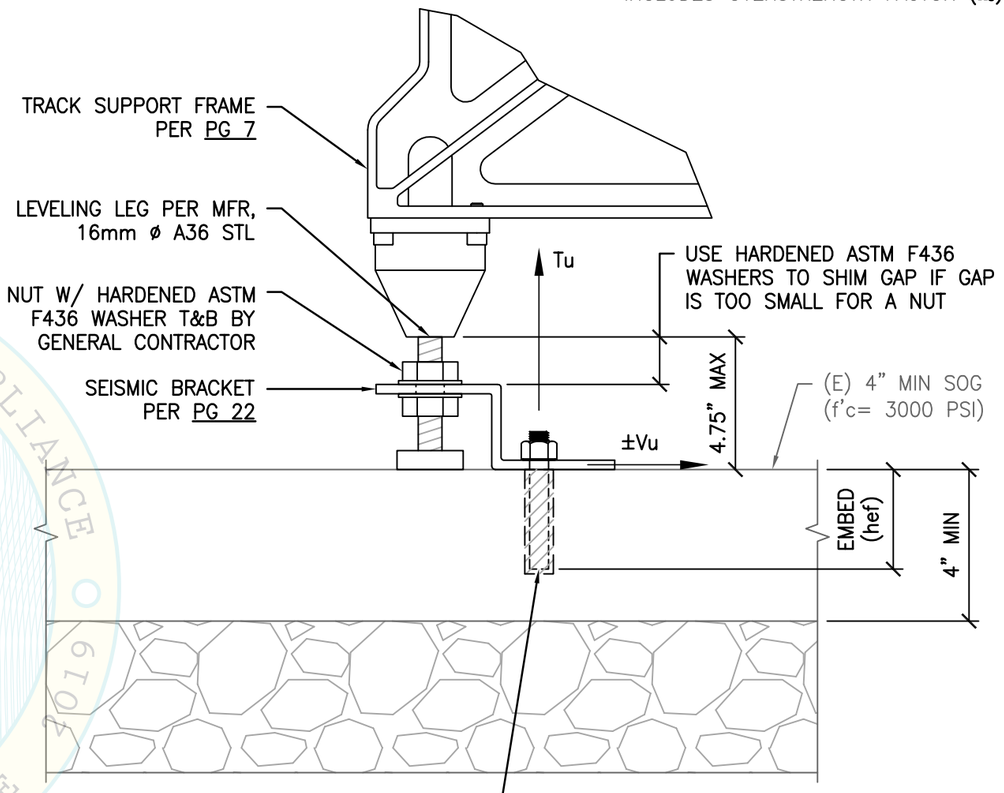
OVERSTRENGTH FACTOR (Ω_o) MUST BE APPLIED TO Vu FOR ANCHORAGE TO CONC.



CASE 1 – SUSPENDED FLR W/ THRU–BOLTS

	MAX ANCHOR FORCES AT LRFD AT EA AB	
	Tu	Vu
CASE 2 z/h = 0	1098#	92#

INCLUDES OVERSTRENGTH FACTOR (Ω_o)



CASE 2 – SOG

(SLAB AT OR BLW GRADE)

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: TYPICAL TRACK MODULE SUPPORT & ATTACHMENT DETAILS

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
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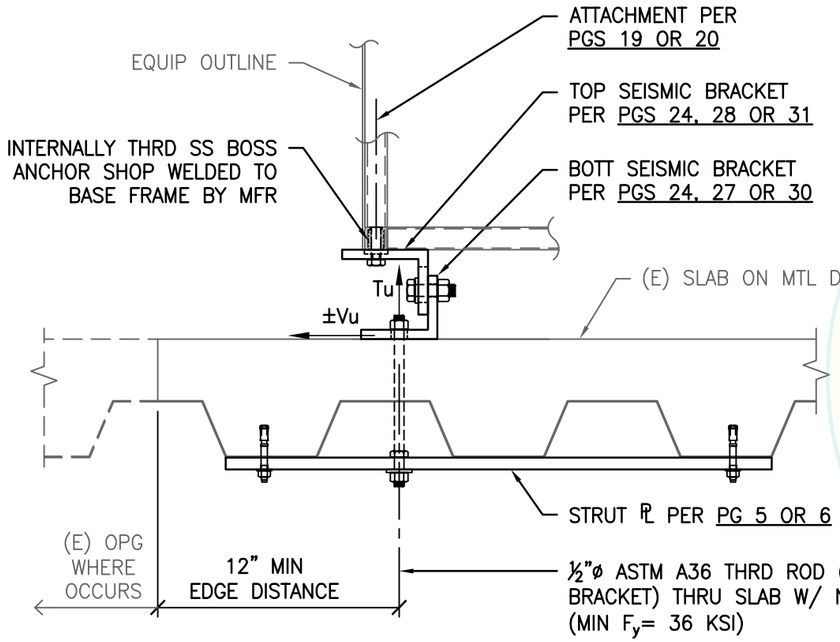
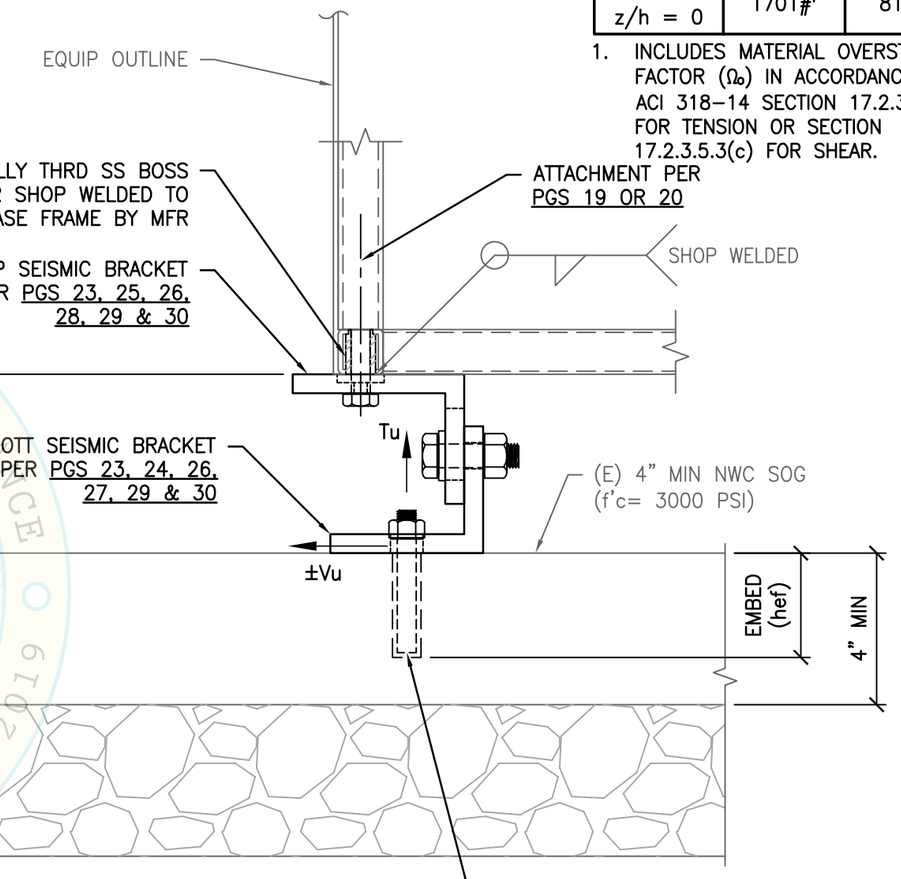
	MAX ANCHOR FORCES AT LRFD AT EA AB	
	Tu	Vu
CASE 1 $z/h \leq 1.0$	3131#	2173#[1]
CASE 2 $z/h = 0$	1701#[1]	815#[1]

1. INCLUDES MATERIAL OVERSTRENGTH FACTOR (Ω_o) IN ACCORDANCE W/ ACI 318–14 SECTION 17.2.3.4.3(d) FOR TENSION OR SECTION 17.2.3.5.3(c) FOR SHEAR.



CASE 1 – SUSPENDED FLR W/ THRU–BOLTS



CASE 2 – SOG
(SLAB AT OR BLW GRADE)

NOTE:
SUPPORTS & ATTACHMENTS INSTALLATION BY GENERAL CONTRACTOR.

REGISTERED PROFESSIONAL ENGINEER
DIETER T SIEBALD
No. S4346
STRUCTURAL
STATE OF CALIFORNIA

SHEET TITLE: ALINITY i & c MODULE
SUPPORT & ATTACHMENT DETAILS

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650
SACRAMENTO, CA 95833
TEL (916) 920-2020
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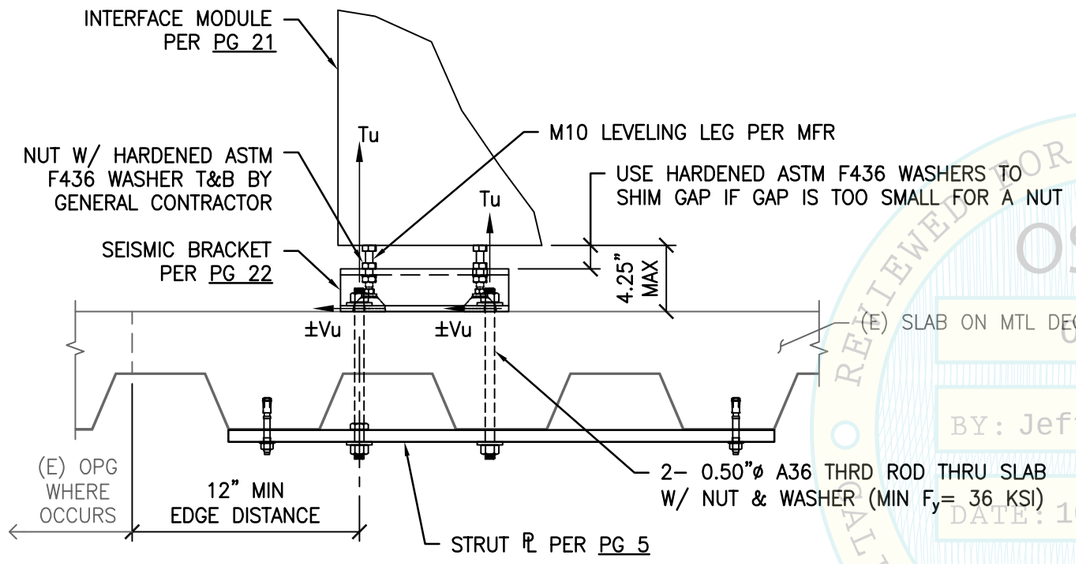
	MAX ANCHOR FORCES AT LRFD AT EA AB	
	Tu	Vu
CASE 1 z/h ≤ 1.0	1138#	72#

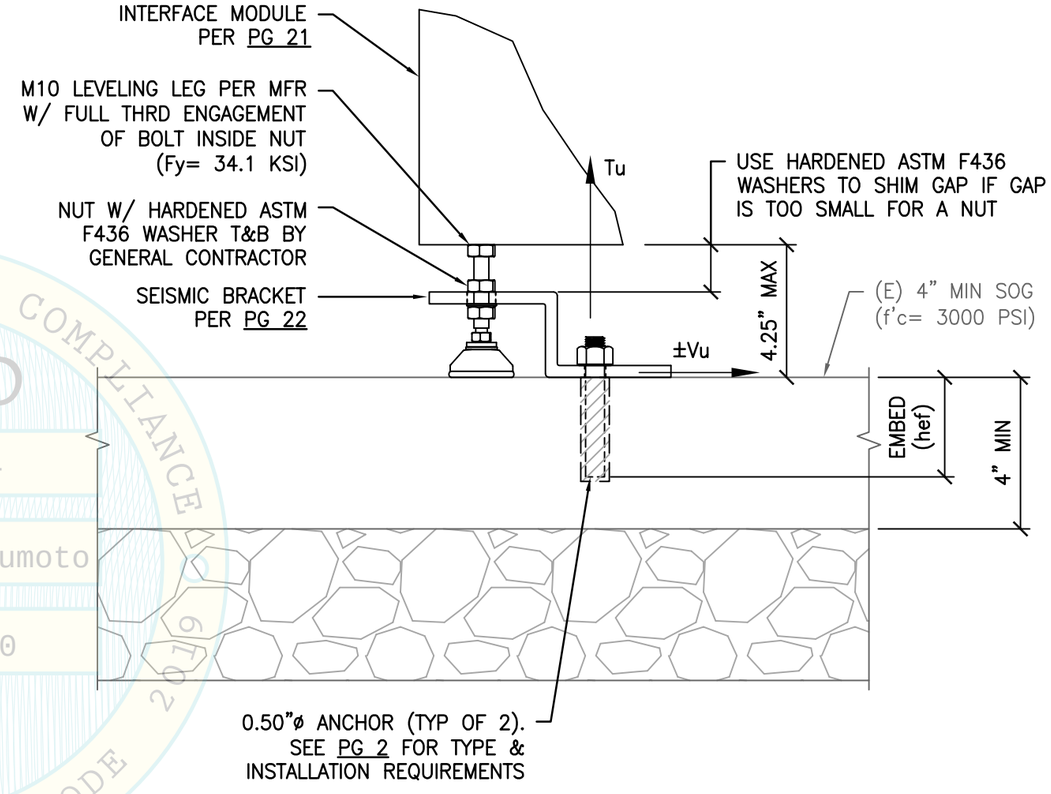
OVERSTRENGTH FACTOR (Ω_o) MUST BE APPLIED TO Vu FOR ANCHORAGE TO CONC.



CASE 1 – SUSPENDED FLR W/ THRU–BOLTS

	MAX ANCHOR FORCES AT LRFD AT EA AB	
	Tu	Vu
CASE 2 z/h = 0	632#	41#

INCLUDES OVERSTRENGTH FACTOR (Ω_o)



CASE 2 – SOG

(SLAB AT OR BLW GRADE)

REGISTERED PROFESSIONAL ENGINEER DIETER T SIEBALD No. S4346 STRUCTURAL STATE OF CALIFORNIA

SHEET TITLE: INTERFACE MODULE SUPPORT & ATTACHMENT DETAILS

ABBOTT
ALINITY i & c INSTRUMENTS
EQUIPMENT SUPPORTS & ATTACHMENTS

CYS STRUCTURAL ENGINEERS, INC.
2495 NATOMAS PARK DRIVE, SUITE 650 TEL (916) 920-2020
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