



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY
APPLICATION #: OPM-0496-19

OSHPD Preapproval of Manufacturer's Certification (OPM)

Type: [X] New [ ] Renewal [ ] Update to Pre-CBC 2013 OPA Number:

Manufacturer Information

Manufacturer: BD Life Sciences
Manufacturer's Technical Representative: Tong Zhou
Mailing Address: 7 Loveton Circle, Sparks, MD 21152
Telephone: 410-316-4932 Email: Tong\_zhou@bd.com

Product Information

Product Name: BD Kiestra™ - BarcodA/Inoqua System
Product Type: Clinical microbiology automation
Product Model Number: BarcodA, Inoqua FA, Inoqua SA, Inoqua SA with BSC
General Description: BD Kiestra™ BarcodA/Inoqua System automates the clinical microbiology processes in Pipetting and streaking patient samples on different media plates.

Applicant Information

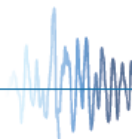
Applicant Company Name: BD Life Sciences
Contact Person: Tong Zhou
Mailing Address: 7 Loveton Circle, Sparks, MD 21152
Telephone: 410-316-4932 Email: tong\_zhou@bd.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2019.

Signature of Applicant: [Signature] Date: June 21, 2018

Title: Staff Systems Engineer Company Name: BD Life Sciences

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

**Registered Design Professional Preparing Engineering Recommendations**

Company Name: CYS Structural Engineers, Inc.

Name: Dieter T. Siebald California License Number: SE 4346

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-  
(Separate application for OSP is required)
- Special Seismic Certification is not preapproved

**Certification Method(s)**

- Testing in accordance with:  ICC-ES AC156  FM 1950-16
- Other\* (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): \_\_\_\_\_

**List of Attachments Supporting the Manufacturer's Certification**

- Test Report  Drawings  Calculations  Manufacturer's Catalog
- Other(s) (Please Specify): Manufacturer's Certified Outline Drawings

**OFFICE USE ONLY – OSHPD APPROVAL VALID FOR CBC 2019 & ALL PRE-2019 CODE BASED PROJECTS**

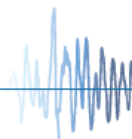
Signature:  Date: 3/6/2020

Print Name: Jeffrey Kikumoto

Title: Structural Engineer

Condition of Approval (if applicable): \_\_\_\_\_

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"



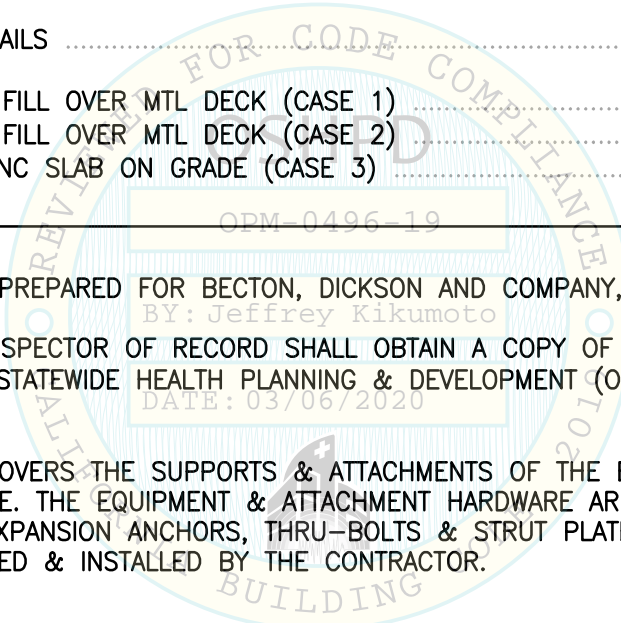
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**NOTES:**

1. THESE DRAWINGS ARE PREPARED FOR BECTON, DICKSON AND COMPANY, SPARKS, MARYLAND.
2. THE CONTRACTOR & INSPECTOR OF RECORD SHALL OBTAIN A COPY OF THIS PRE-APPROVAL FROM THE OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT (OSHPD) PRE-APPROVAL PROGRAMS WEBSITE.
3. THIS PRE-APPROVAL COVERS THE SUPPORTS & ATTACHMENTS OF THE EQUIPMENT TO THE SUPPORTING STRUCTURE. THE EQUIPMENT & ATTACHMENT HARDWARE ARE SUPPLIED BY THE MANUFACTURER. THE EXPANSION ANCHORS, THRU-BOLTS & STRUT PLATES SHOWN IN THIS OPM SHALL BE SUPPLIED & INSTALLED BY THE CONTRACTOR.



SHEET TITLE: TABLE OF CONTENTS



**CYS STRUCTURAL ENGINEERS, INC.**

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 SACRAMENTO, CA 95833

TEL (916) 920-2020  
 www.cyseng.com

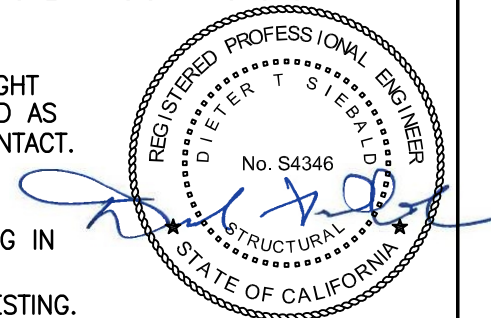
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**GENERAL NOTES:**

1. THIS OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION (OPM) IS BASED ON THE CBC 2019. THE DEMAND (DESIGN FORCES) FOR USE W/ THIS OPM SHALL BE BASED ON THE CBC 2019.
2. IT IS THE RESPONSIBILITY OF THE SEOR FOR A SITE SPECIFIC PROJECT TO VERIFY:
  - A. THE ADEQUACY OF THE NEW OR EXISTING STRUCTURE TO RESIST THE FORCES & WT SPECIFIED FOR EA EQUIP IN ADDITION TO ALL OTHER LOADS. PROVIDE & DESIGN SUPPLEMENTARY MEMBERS AS REQ.
  - B. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY SLAB EDGES OR OPGS.
  - C. THAT THE FLR ANCHORS ARE LOCATED AT AN ADEQUATE DISTANCE FROM ANY NEW OR EXISTING ANCHORS. THE SPCG SHOWN IN THE TEST LOADS TABLE ON PG 3 IS THE REQ MIN SPCG OF THE GIVEN DIA ANCHORS. THE REQ SPCG FROM ANCHORS OF OTHER DIAMETERS & EMBEDMENTS MAY VARY & SHALL BE EVALUATED BY THE SEOR.
  - D. THAT THE INSTALLATION IS IN CONFORMANCE W/ THE CBC 2019 & W/ THE DETAILS SHOWN IN THIS PRE-APPROVAL.
  - E. THAT THE ACTUAL EQUIP'S WT, CENTER OF GRAVITY (CG) LOCATION, ANCHOR LOCATIONS, ANCHOR DETAILS, & THE MATERIAL & GAGE OF THE EQUIP WHERE ATTACHMENTS ARE MADE, AGREE W/ THE INFO SHOWN ON THE PRE-APPROVAL DOCUMENTS.
  - F. THAT THE CONC SLAB TO WHICH THE EQUIP IS ANCHORED SHALL MEET THE REQUIREMENTS OF THE APPLICABLE ICC REPORT & THIS OPM.
3. EXPANSION ANCHORS INSTALLED IN NWC OR SLWC SHALL BE CARBON OR STAINLESS STEEL HILTI KB-TZ EXPANSION ANCHORS AS NOTED COMPLYING W/ ESR-1917 REISSUED SEPTEMBER 2019.
  - A. INSTALLATION: INSTALL THE EXPANSION ANCHORS IN ACCORDANCE W/ THE REQUIREMENTS GIVEN IN THE ICC EVALUATION REPORT FOR THE SPECIFIC ANCHOR & THE PARAMETERS GIVEN IN THE TABLE ON PG 3.
  - B. JOB TESTING: FOR VERIFYING SATISFACTORY INSTALLATION WORKMANSHIP, PERFORM JOBSITE TESTING IN ACCORDANCE W/ THE TEST LOAD TABLE PROVIDED IN THIS DOCUMENT. TORQUE TEST 50% OF THE INSTALLED ANCHORS. ALL TESTS SHALL BE CONDUCTED IN THE PRESENCE OF THE SPECIAL INSPECTOR. TESTING & SPECIAL INSPECTION OF EXPANSION ANCHORS SHALL BE PERFORMED BY THE FACILITY OWNER PER CBS 1704A & 1910A.5 & CAC 7-149. ALL REPORTS SHALL BE SENT TO THE INSPECTOR OF RECORD, OWNER & THE ARCHITECT OR ENGINEER IN RESPONSIBLE CHARGE. 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 EQUIP INSTALLATION, HOWEVER NUT SHALL BE RETORQUED TO INSTALLATION TORQUE AFTER EQUIPMENT INSTALL. ALSO REFER TO 2019 CBC 1910A.5 "TESTS FOR POST-INSTALLED ANCHORS IN CONCRETE".
  - C. FAILURE/ACCEPTANCE CRITERIA: THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:
    - **TORQUE WRENCH METHOD:** THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS:  
 WEDGE TYPE: ONE-HALF (1/2) TURN OF THE NUT.
  - D. AVOID DAMAGING (E) STL REINF IN CONC SLAB WHEN INSTALLING CONC EXPANSION ANCHORS.
  - E. PROVIDE FOR FULL THRD ENGAGEMENT OF NUT & WASHER.
4. BOLTS THRU CONC ON MTL DECK:
  - A. BOLTS SHALL BE TORQUED BY 3/4 TURN OF THE NUT AFTER SNUG TIGHT CONDITION IS ACHIEVED, UNO. THE SNUG TIGHT CONDITION IS DEFINED AS THE TIGHTNESS REQ TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
  - 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 IN ACCORDANCE W/ REQUIREMENTS FOR POST-INSTALLED ANCHORS. THRU-BOLTS W/ STL TO STL CONN IN TENSION DO NOT REQUIRE TESTING.



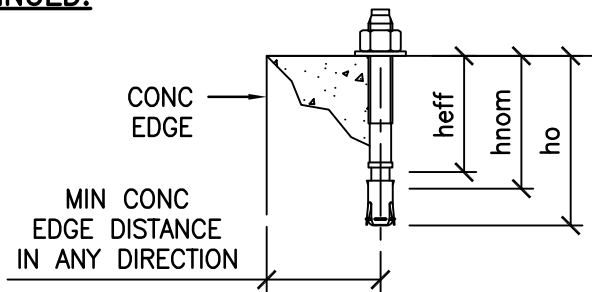
SHEET TITLE: GENERAL NOTES

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**GENERAL NOTES CONTINUED:**



CONDITION OF ANCHORAGE	ANCHOR DIA & TYPE (INCH)	INSTALLATION EMBED (INCH) hnom	EFFECTIVE EMBED (INCH) hef	HOLE DEPTH (INCH) ho	MIN CONCRETE THK (INCH) h	MIN CONCRETE EDGE DISTANCE (INCH)	MIN ANCHOR SPCG (INCH)	TEST TORQUE (FT-LBS)
CASE 1 STRUT R'S	3/8 KB-TZ	1 13/16	1 1/2	2	3/4	6	6 3/4*	25
CASE 2, 3	1/2 KB-TZ	2 3/8	2	2 5/8	3/4, 4	10	3	40

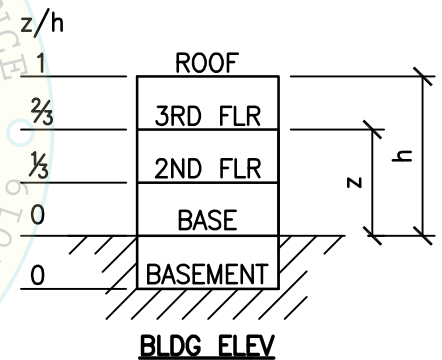
\* PARALLEL W/ MTL DECK FLUTES

5. THREE (3) CASES OF ATTACHMENT ARE SPECIFIED & PRESENTED IN THIS PRE-APPROVAL:

**CASE 1:** ATTACHMENT DTLS LOCATED AT UPPER FLRS ABV THE BASE OF A BLDG. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 3/4" SLWC TOPPING OVER 3" DEEP MIN 20 GA MTL DECK (f'c = 3000 PSI, MIN). ANCHORS SHALL BE A36 STL THRD ROD THRU CONCR FILL & MTL DECK.

**CASE 2:** ATTACHMENT DTLS LOCATED AT UPPER FLRS ABV THE BASE OF A BLDG. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 3/4" SLWC TOPPING OVER 3" DEEP MIN 20 GA MTL DECK (f'c = 3000 PSI, MIN). ANCHORS SHALL BE CARBON STL & INTO CONCR FILL.

**CASE 3:** ATTACHMENT DTLS LOCATED AT OR BLW THE BASE OF A BLDG. THE FLRS ARE ASSUMED TO BE BUILT OF A MIN 4" NWC SLAB (f'c = 3000 PSI, MIN). ANCHORS SHALL BE CARBON STL.



DATE: 03/06/2020



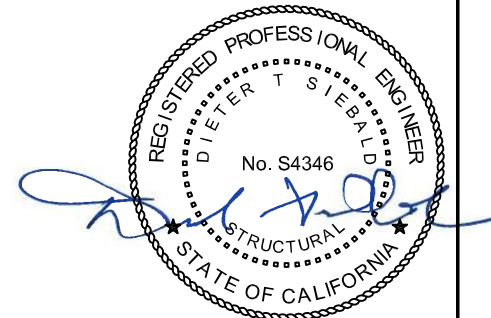
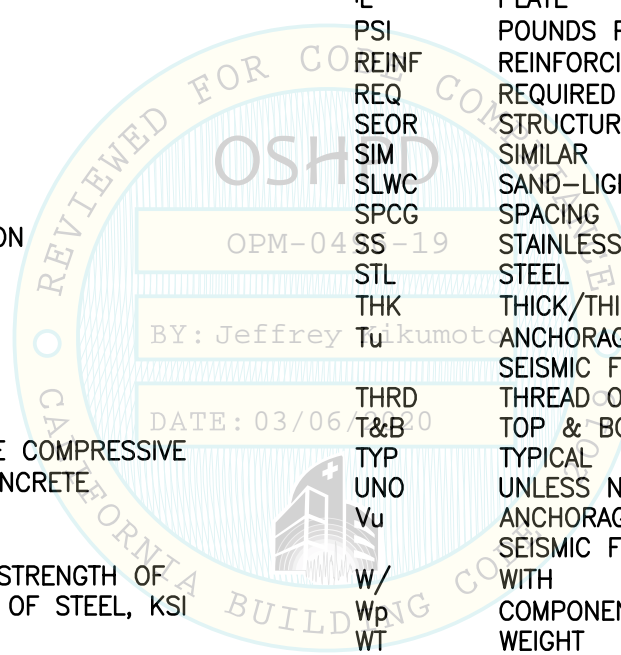
SHEET TITLE: GENERAL NOTES (CONTINUED)

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**ABBREVIATIONS:**

@	AT	MFR	MANUFACTURER
AB	ANCHOR BOLT	MAX	MAXIMUM
ABV	ABOVE	MIN	MINIMUM
ADJ	ADJACENT	mm	MILLIMETER
AISC	AMERICAN INSTITUTE FOR STEEL CONSTRUCTION	MTL	METAL
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	NO. (#)	NUMBER OR POUNDS
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	NWC	NORMAL WEIGHT CONCRETE
BLDG	BUILDING	OP	OPERATING
BLW	BELOW	OPG	OPENING
BOTT	BOTTOM	OPM	OSHPD PRE-APPROVAL OF MANUFACTURER'S CERTIFICATION
BYD	BEYOND	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING & DEVELOPMENT
CBC	CALIFORNIA BUILDING CODE	PERP	PERPENDICULAR
CG	CENTER OF GRAVITY	PG	PAGE
Ⓢ	CENTERLINE	PL	PLATE
CONC	CONCRETE	PSI	POUNDS PER SQUARE INCH
CONN	CONNECTION	REINF	REINFORCING/REINFORCEMENT
COORD	COORDINATE	REQ	REQUIRED
DBL	DOUBLE	SEOR	STRUCTURAL ENGINEER OF RECORD
DIM	DIMENSION	SIM	SIMILAR
DTL	DETAIL	SLWC	SAND-LIGHTWEIGHT CONCRETE
DIA (ϕ)	DIAMETER	SPCG	SPACING
(E)	EXISTING CONDITION	SS-19	STAINLESS STEEL
EA	EACH	STL	STEEL
EE	EACH END	THK	THICK/THICKNESS
ELEV	ELEVATION	Tu	ANCHORAGE TENSION REACTION DUE TO SEISMIC FORCE AT LRFD
EQ	EQUAL	THRD	THREAD OR THREADED
EQUIP	EQUIPMENT	T&B	TOP & BOTTOM
EXTR	EXTERIOR	TYP	TYPICAL
f'c	MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE	UNO	UNLESS NOTED OTHERWISE
FLR	FLOOR	Vu	ANCHORAGE SHEAR REACTION DUE TO SEISMIC FORCE AT LRFD
FT (')	FOOT/FEET	w/	WITH
Fy	SPECIFIED YIELD STRENGTH OF REINFORCING, PS OF STEEL, KSI	Wp	COMPONENT OPERATING WEIGHT
GA	GAUGE	WT	WEIGHT
HSS	HOLLOW STRUCTURAL SECTION		
ICC	INTERNATIONAL CODE COUNCIL		
IN (")	INCH		
INFO	INFORMATION		
KG	KILOGRAM		
KSI	KIPS PER SQUARE INCH		
LBS	POUNDS		
LRFD	LOAD AND RESISTANCE FACTOR DESIGN		



SHEET TITLE: ABBREVIATIONS

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**DESIGN CRITERIA:**

1. SUPPORT & ATTACHMENT DESIGN IS PER 2019 CBC AT LRFD LEVEL FORCES.

OTHER MECHANICAL OR ELECTRICAL COMPONENTS PER TABLE 13.6-1 OF  
 ASCE 7-16 SUPPLEMENT #1 & ERRATA:

$q_p = 1.0$        $R_p = 1.5$        $I_p = 1.5$        $\Omega_0 = 1.5$  (FOR CONC ANCHORS ONLY)

$W_p$  AS NOTED ON DRAWINGS

UPPER FLRS ABV THE BASE OF BLDG

CASE 1:

FA, SB, SA:       $S_{Ds} \leq 2.50$        $F_p = 2.50 W_p$        $z/h \leq 0.75$   
 SA W/ BSC:       $S_{Ds} \leq 1.80$        $F_p = 1.80 W_p$        $z/h \leq 0.75$

CASE 2:

FA, SB, SA:       $S_{Ds} < 1.20$        $F_p = 0.96 W_p$        $z/h \leq 0.50$   
 SA W/ BSC:       $S_{Ds} \leq 0.70$        $F_p = 0.56 W_p$        $z/h \leq 0.50$

FLRS AT OR BLW THE BASE OF BLDG

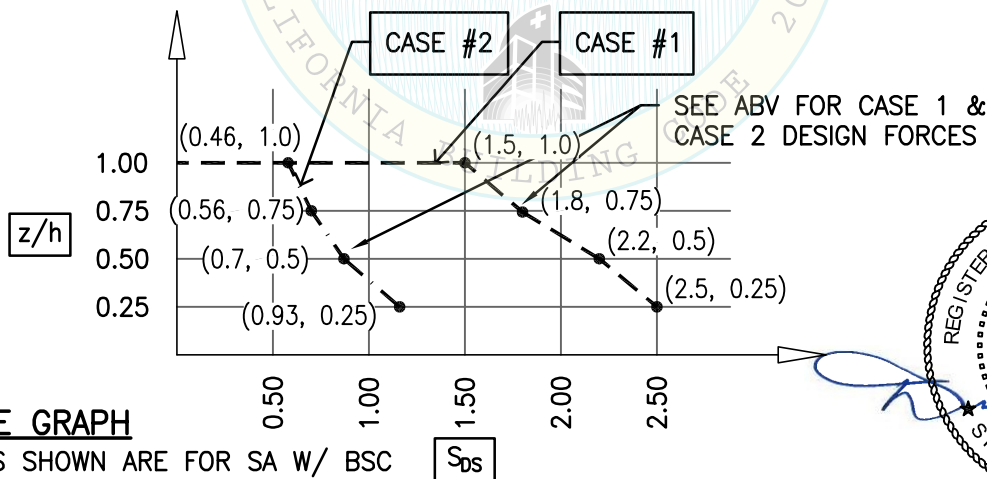
CASE 3:

FA, SB, SA:       $S_{Ds} \leq 2.50$        $F_p = 1.13 W_p$        $z/h = 0$   
 SA W/ BSC:       $S_{Ds} \leq 1.90$        $F_p = 0.86 W_p$        $z/h = 0$

LOAD COMBINATIONS

$(0.9 - 0.2 S_{Ds}) D - \Omega_0 F_p$  (FOR MAX TENSION)  
 $(1.2 + 0.2 S_{Ds}) D + \Omega_0 F_p$  (FOR MAX COMPRESSION)

2. THIS PRE-APPROVAL MAY BE USED ONLY AT GEOGRAPHICAL LOCATIONS IN THE STATE OF CALIFORNIA  
 WHERE  $S_{Ds}$  AND  $z/h$  IS LESS THAN OR EQ TO THE VALUES NOTED ABV.



**USAGE GRAPH**

VALUES SHOWN ARE FOR SA W/ BSC

SHEET TITLE: DESIGN CRITERIA



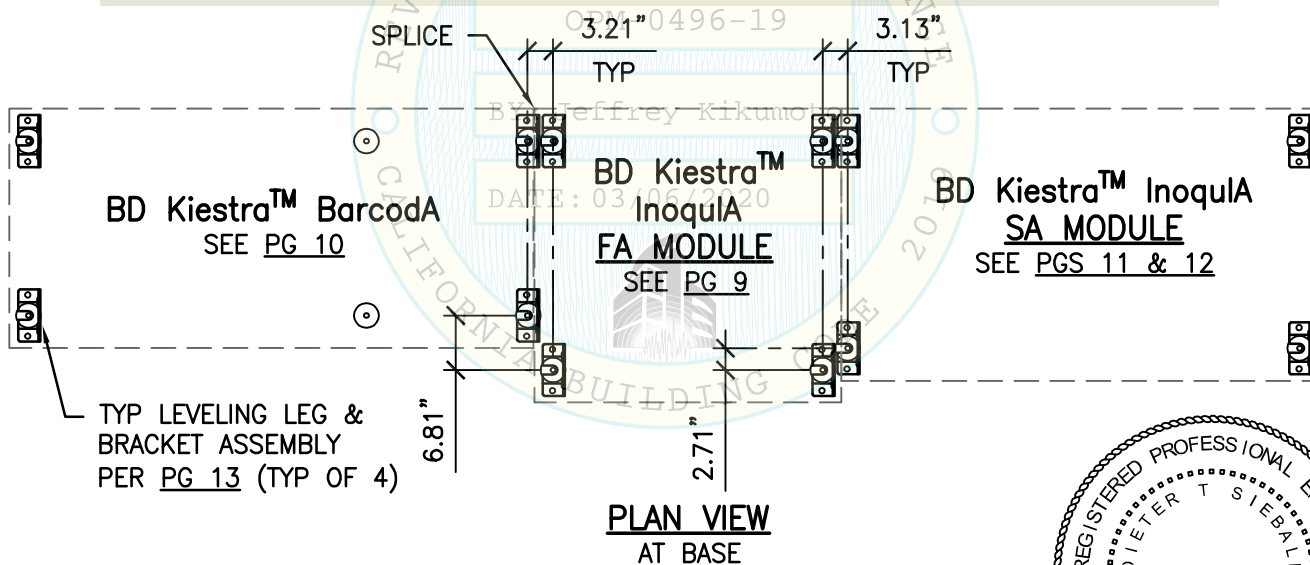
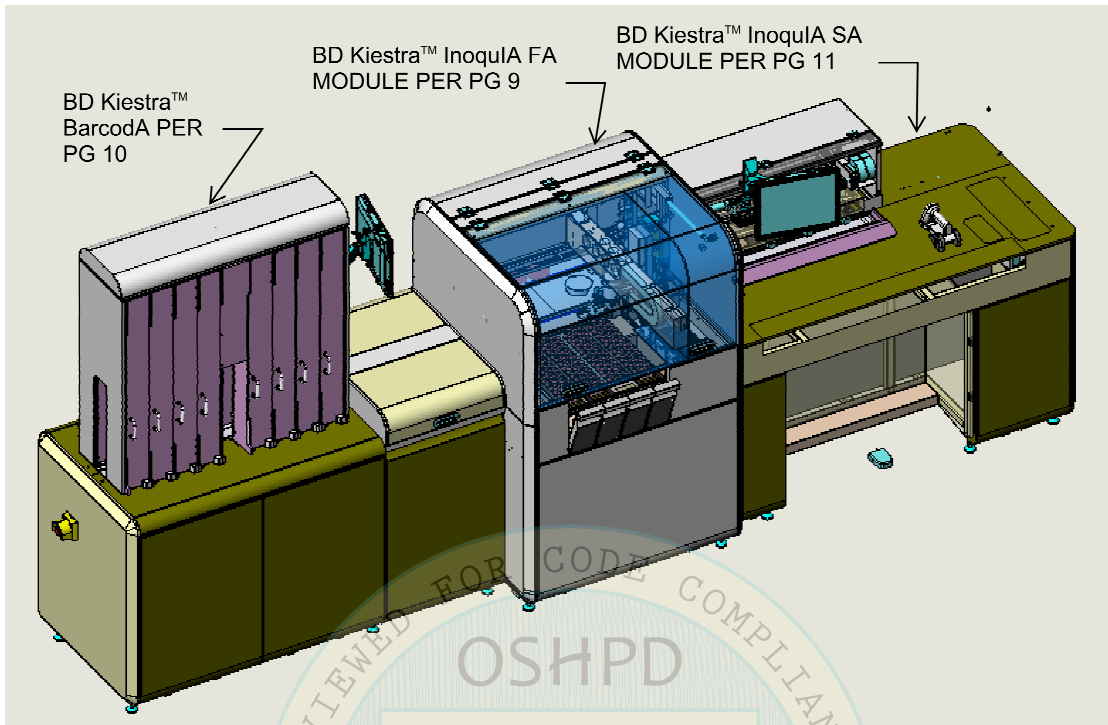
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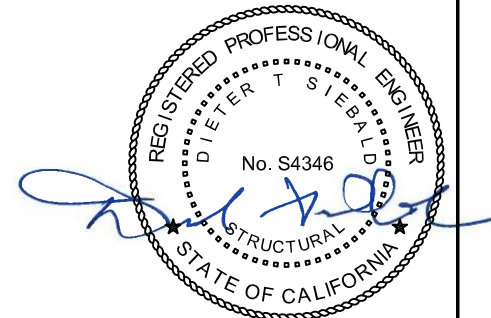
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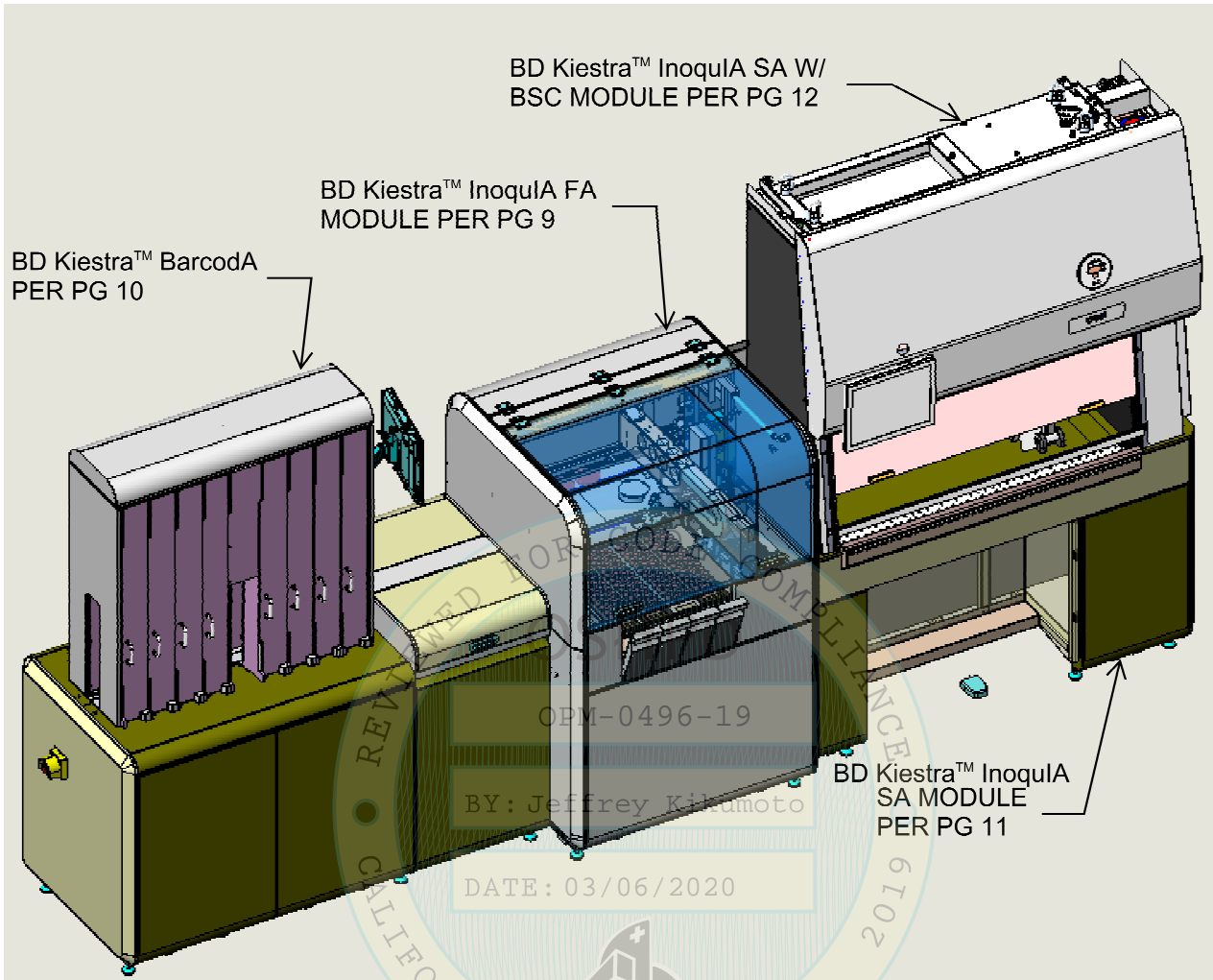
**NOTE:**  
 MODULES ARE INTERCONNECTED VIA STL PLATES  
 W/ 4- SOCKET HEAD CAP SCREWS.  
 EA MODULE IS DESIGNED AS A STAND ALONE UNIT.



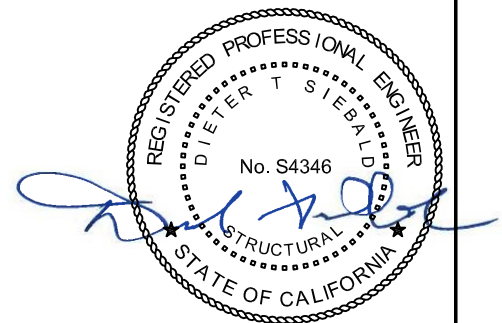
SHEET TITLE: BD Kiestra™ BarcodA/InoqUA CONFIGURATIONS  
 FA & SA W/O BSC

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 FA & SA W/ BSC



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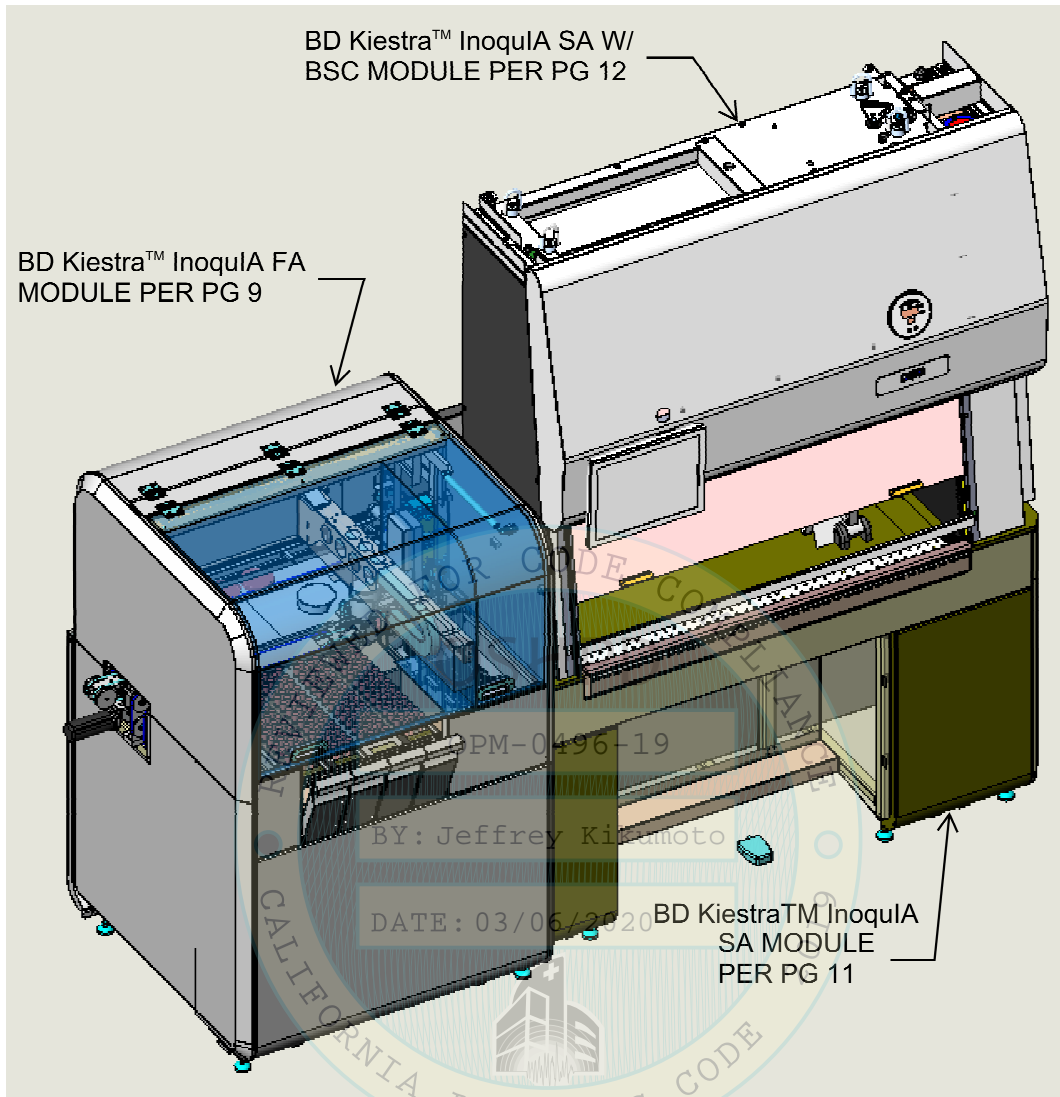
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 FA & SA W/ BSC



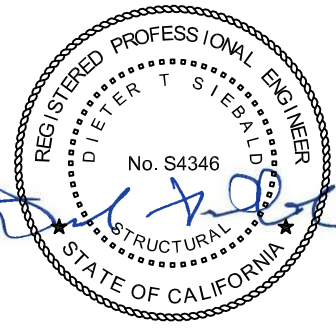
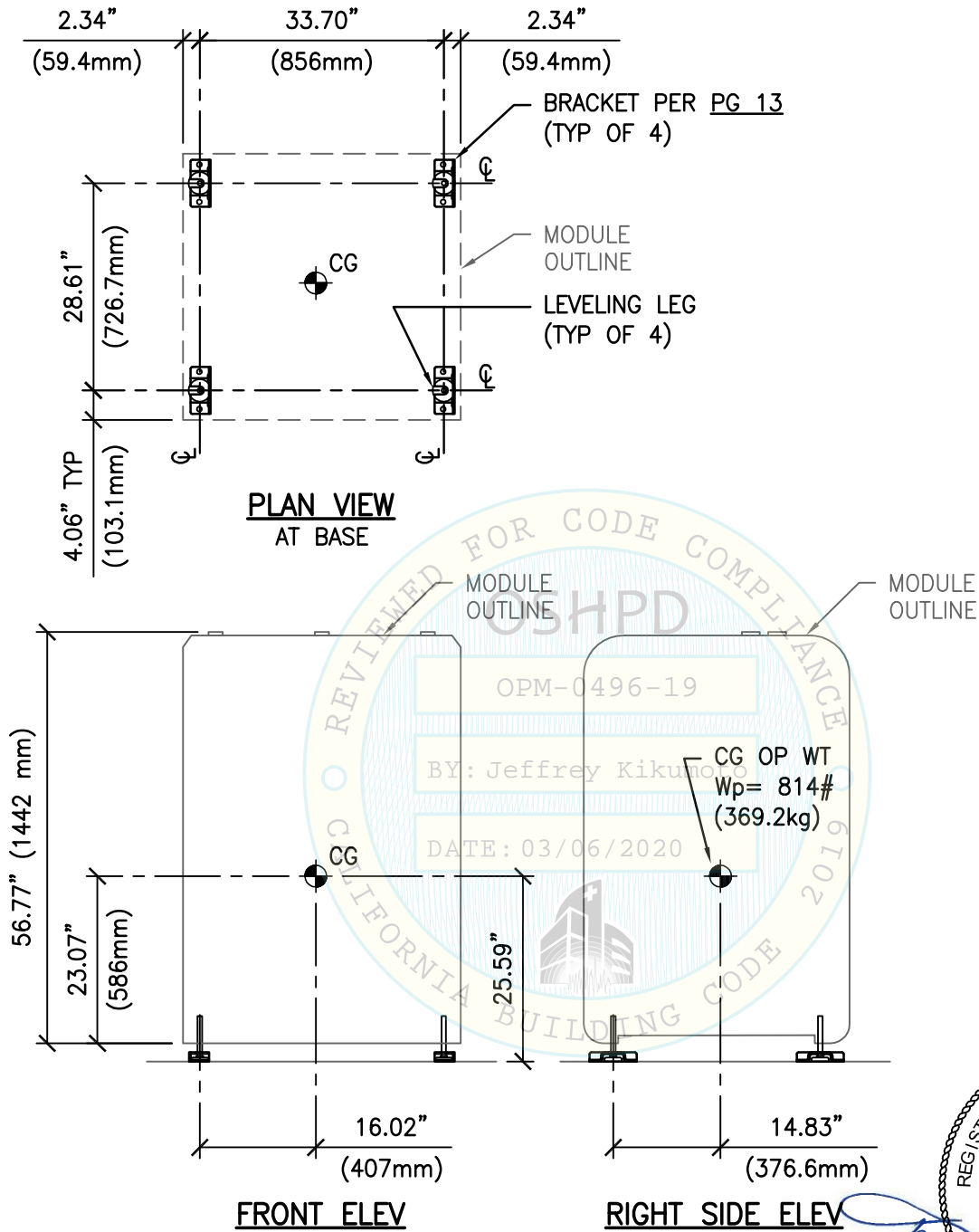
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SHEET TITLE: BD Kiestra™ InoquiA FA MODULE  
 PLAN VIEW & ELEVATIONS



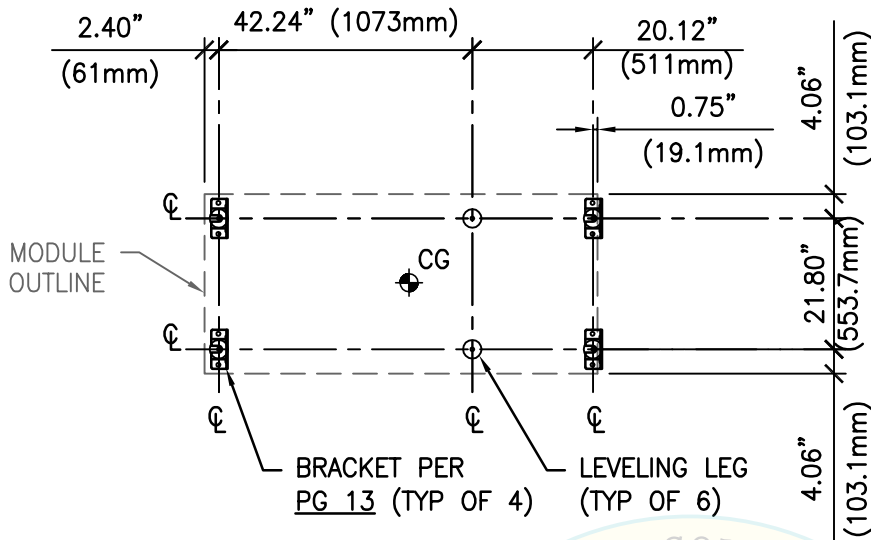
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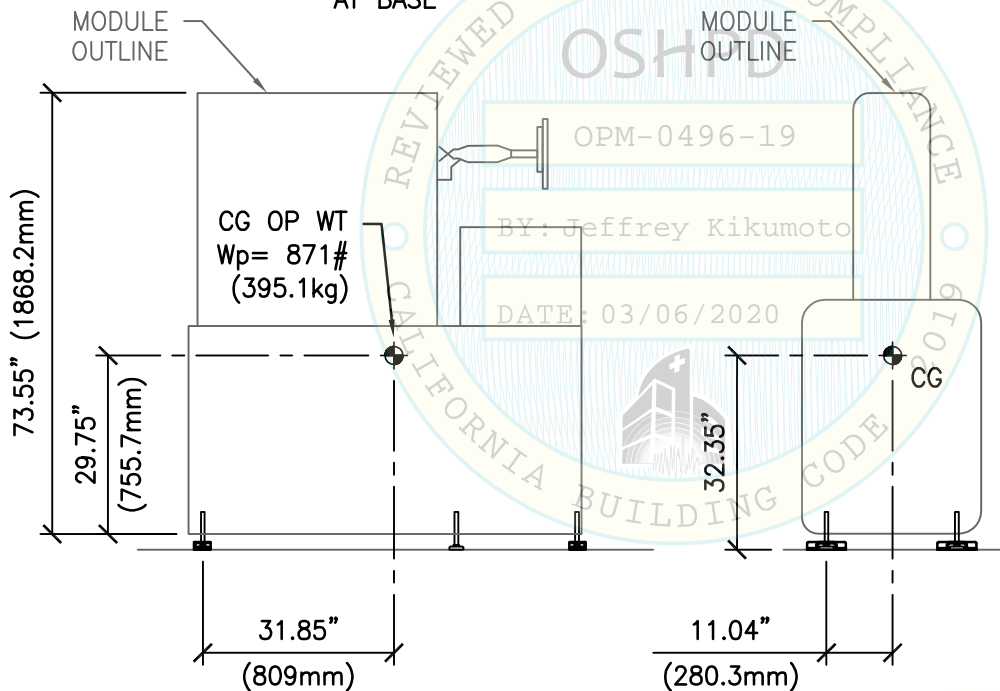
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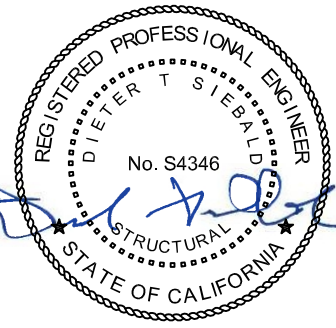
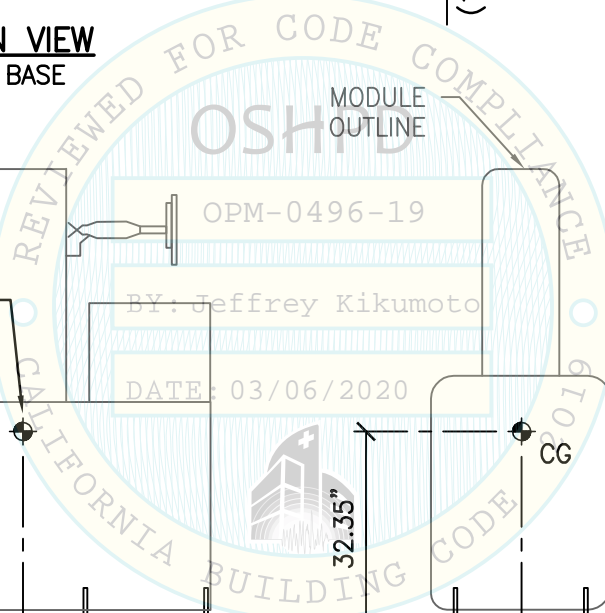


**PLAN VIEW  
AT BASE**



**FRONT ELEV**

**RIGHT SIDE ELEV**



SHEET TITLE: BD Kiestra™ BarcodA  
PLAN VIEW & ELEVATIONS



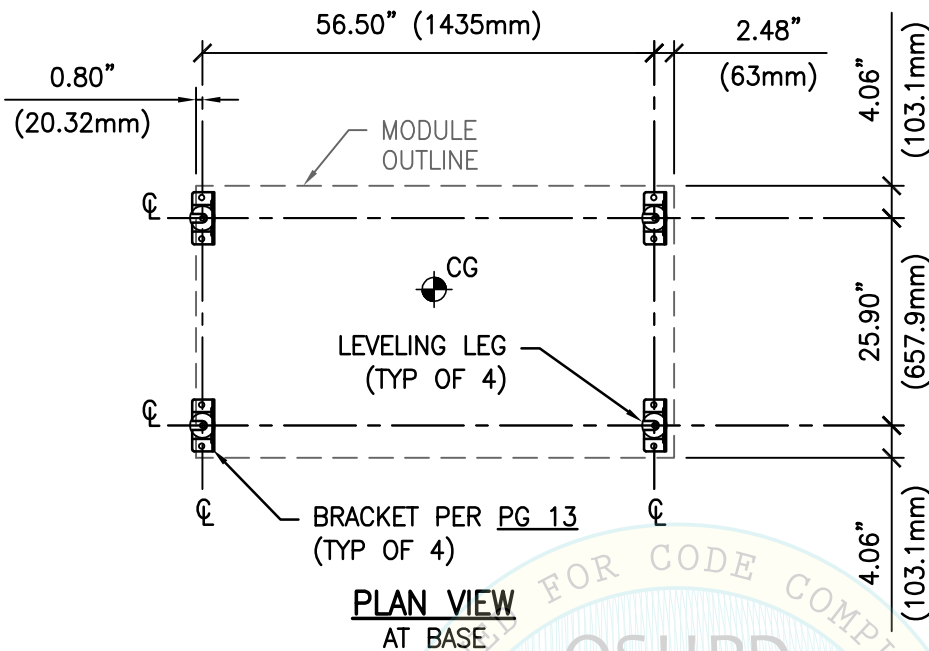
**CYS STRUCTURAL ENGINEERS, INC.**

2495 NATOMAS PARK DRIVE, SUITE 650  
SACRAMENTO, CA 95833

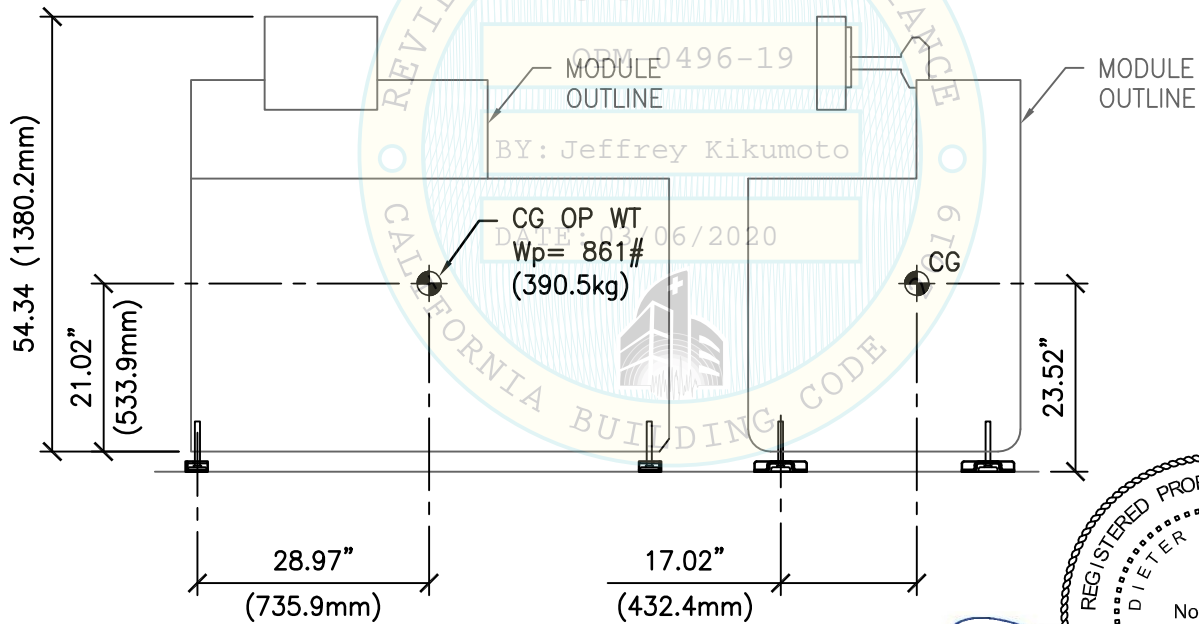
TEL (916) 920-2020  
www.cyseng.com

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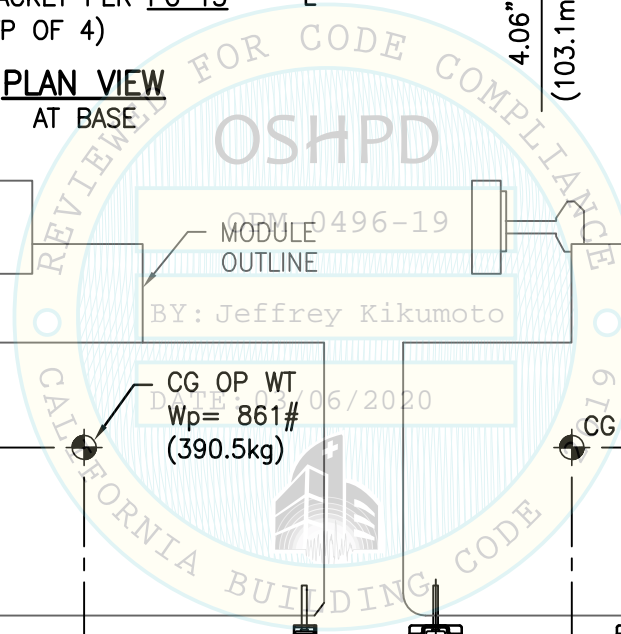


**PLAN VIEW**  
 AT BASE



**FRONT ELEV**

**RIGHT SIDE ELEV**



SHEET TITLE: BD Kiestra™ InoquiA SA MODULE  
 PLAN VIEW & ELEVATIONS



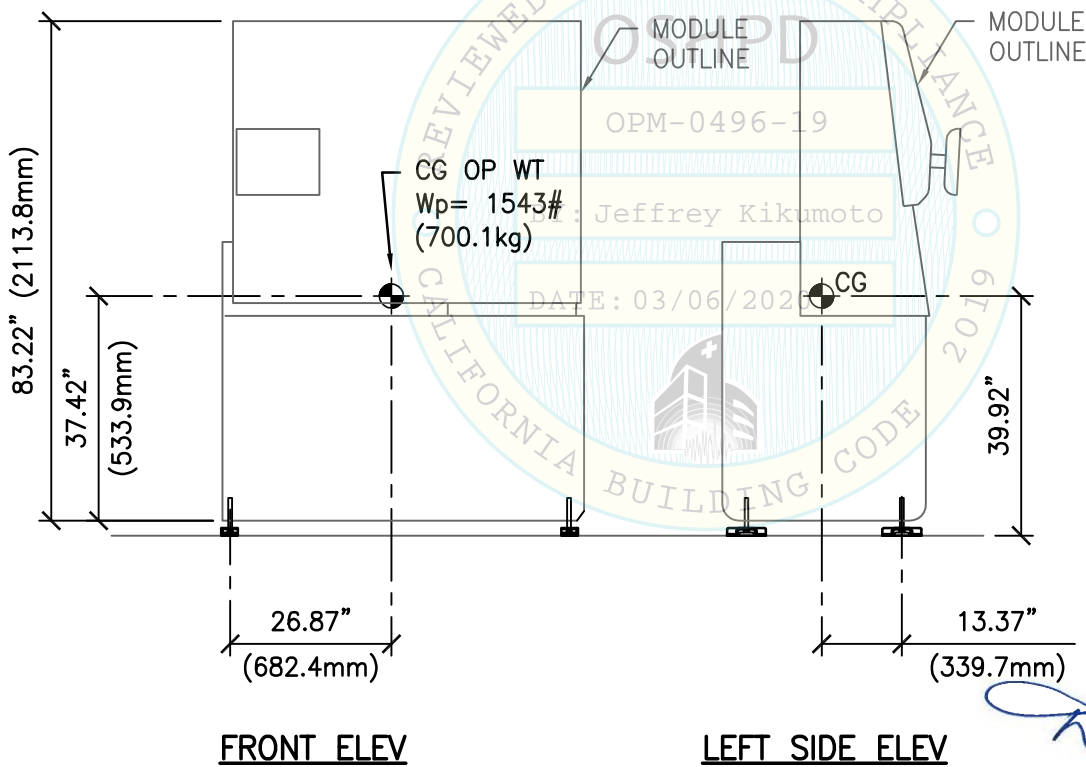
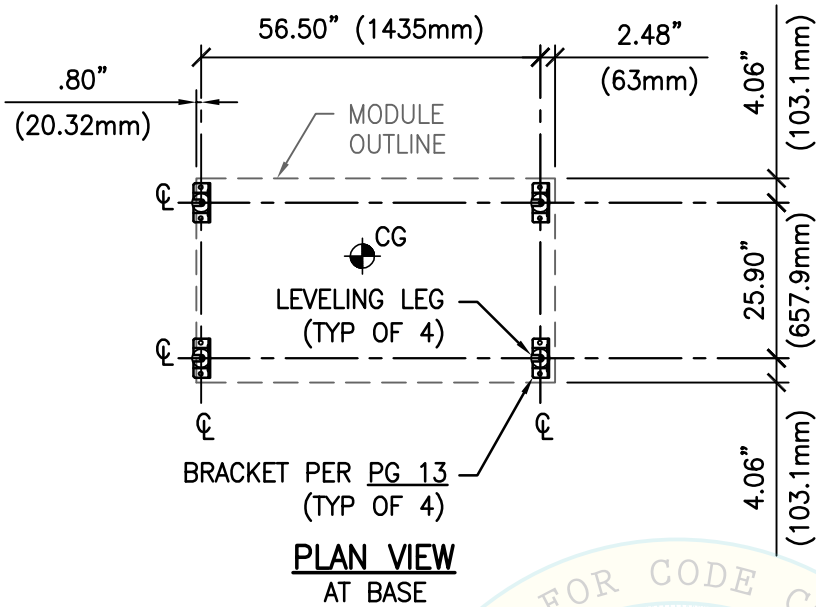
**CYS STRUCTURAL ENGINEERS, INC.**

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SHEET TITLE: BD Kiestra™ InoquiA SA W/ BSC MODULE  
PLAN VIEW & ELEVATIONS



**CYS STRUCTURAL ENGINEERS, INC.**

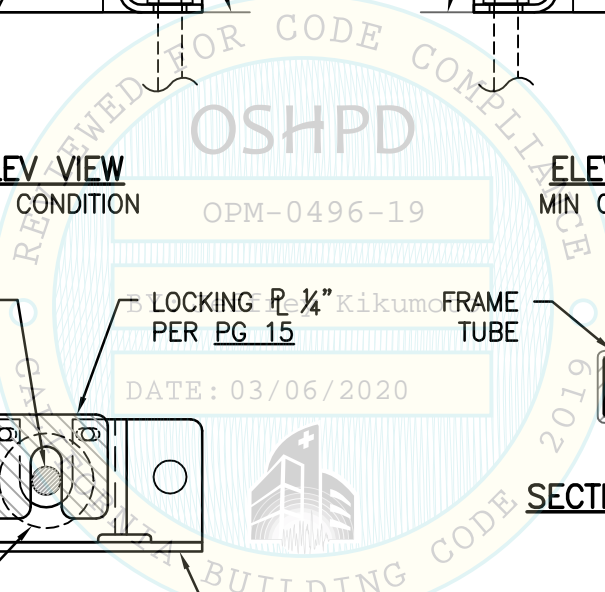
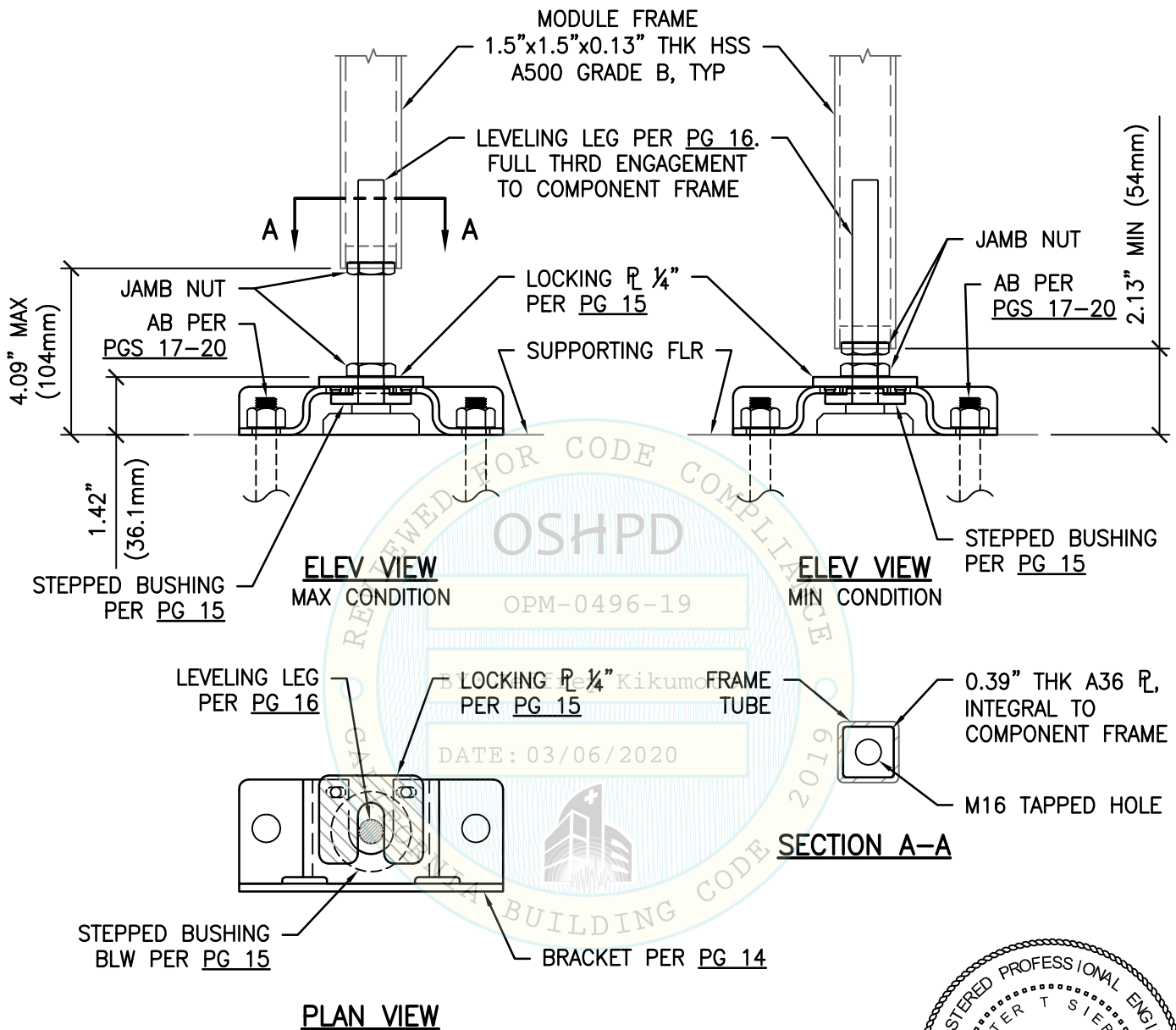
2495 NATOMAS PARK DRIVE, SUITE 650  
SACRAMENTO, CA 95833

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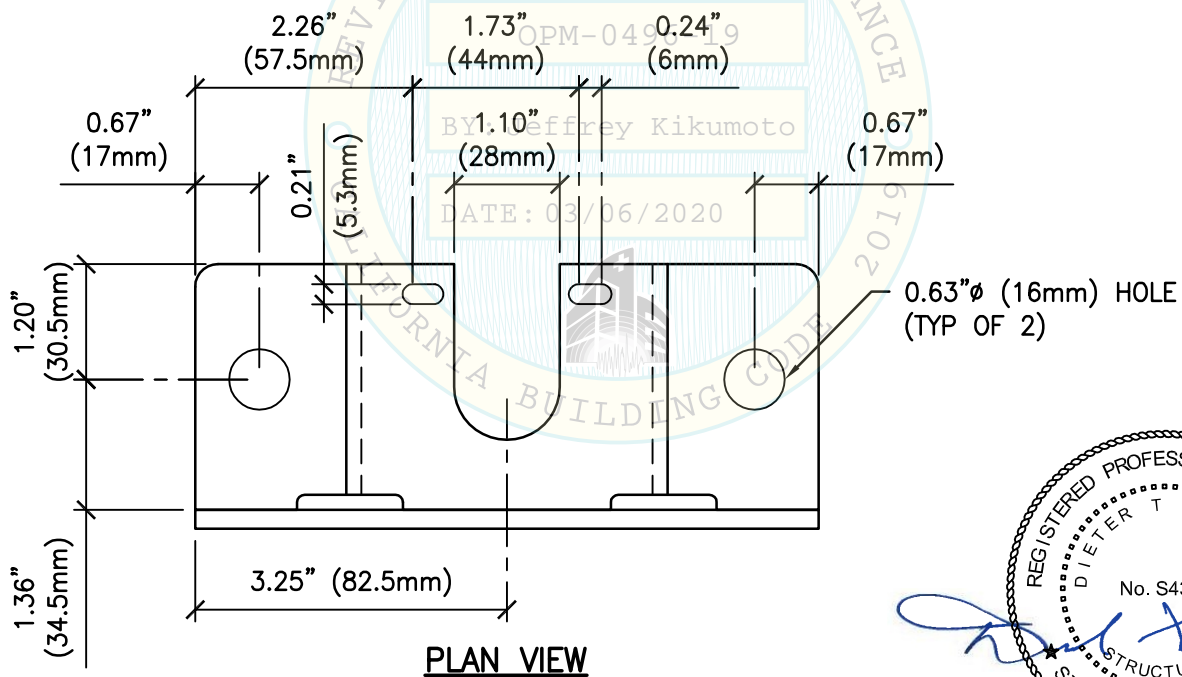
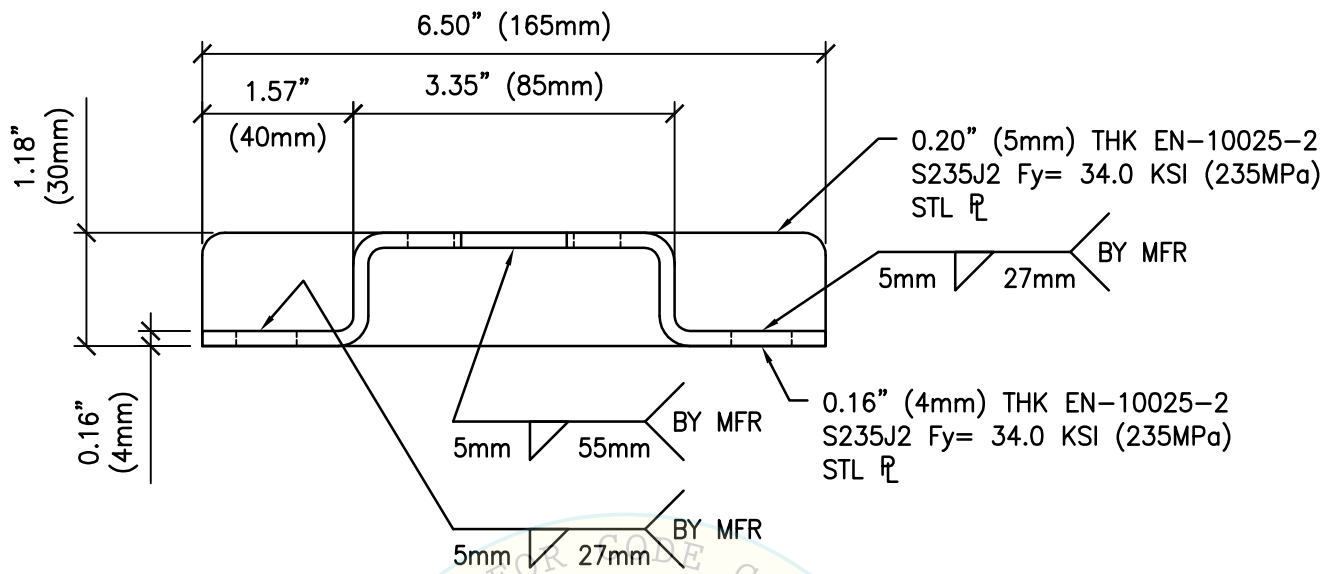




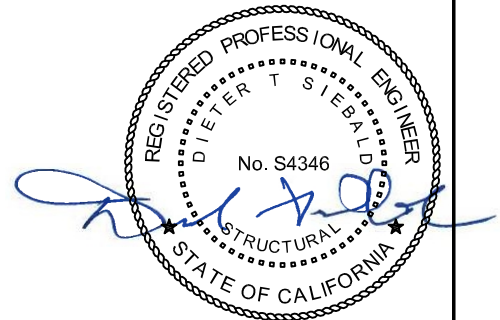
SHEET TITLE: BRACKET ASSEMBLY DETAIL

<p><b>CYS STRUCTURAL ENGINEERS, INC.</b>                  2495 NATOMAS PARK DRIVE, SUITE 650                  SACRAMENTO, CA 95833</p>	Job No: 17118
	Date: 03-06-2020
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L:\Jobs17\17118 BD Kiestra - BarcodA-InoquiA System\STRU\S1\_BarcodA-InoquiA.dwg Time:Mar06,2020-09:10am Login:cmachom DimScale:1 LTScale:6



REVIEWER FOR CODE COMPLIANCE  
 OSHPD  
 OPM-0496-19  
 BY Jeffrey Kikumoto  
 DATE: 03/06/2020



SHEET TITLE: BRACKET DETAIL



**CYS STRUCTURAL ENGINEERS, INC.**

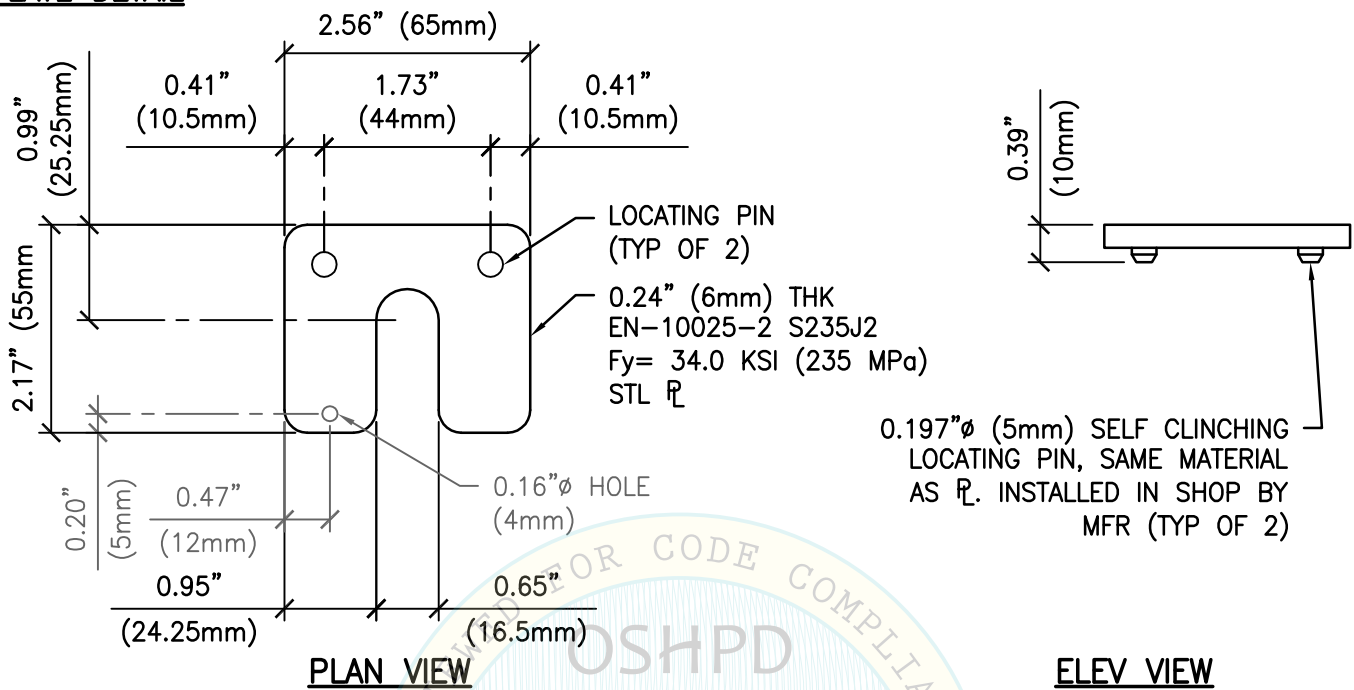
2495 NATOMAS PARK DRIVE, SUITE 650  
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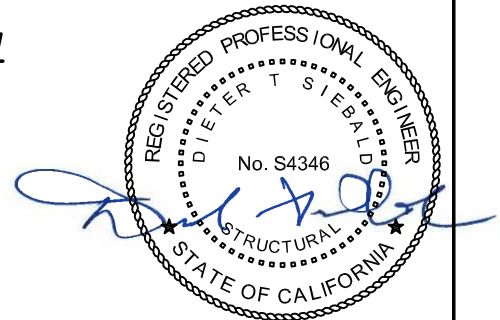
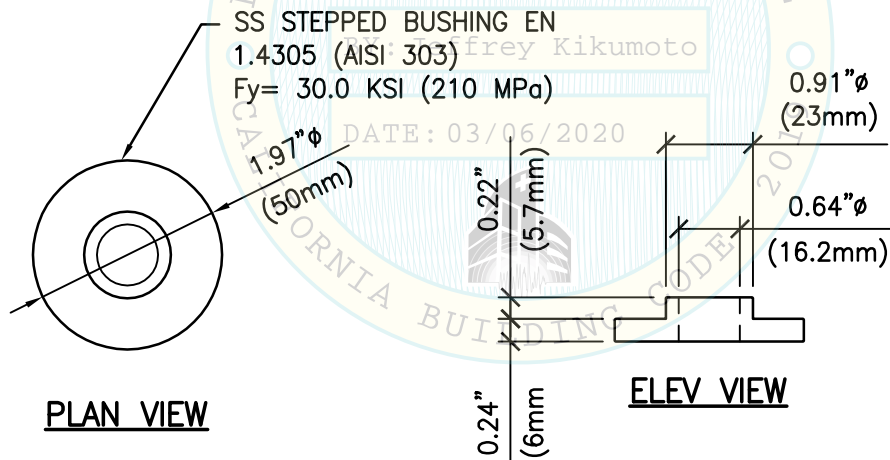
Job No:	17118
Date:	03-06-2020
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**PLATE DETAIL**



**STEPPED BUSHING DETAIL**



SHEET TITLE: PLATE DETAIL & STEPPED BUSHING DETAIL



**CYS STRUCTURAL ENGINEERS, INC.**

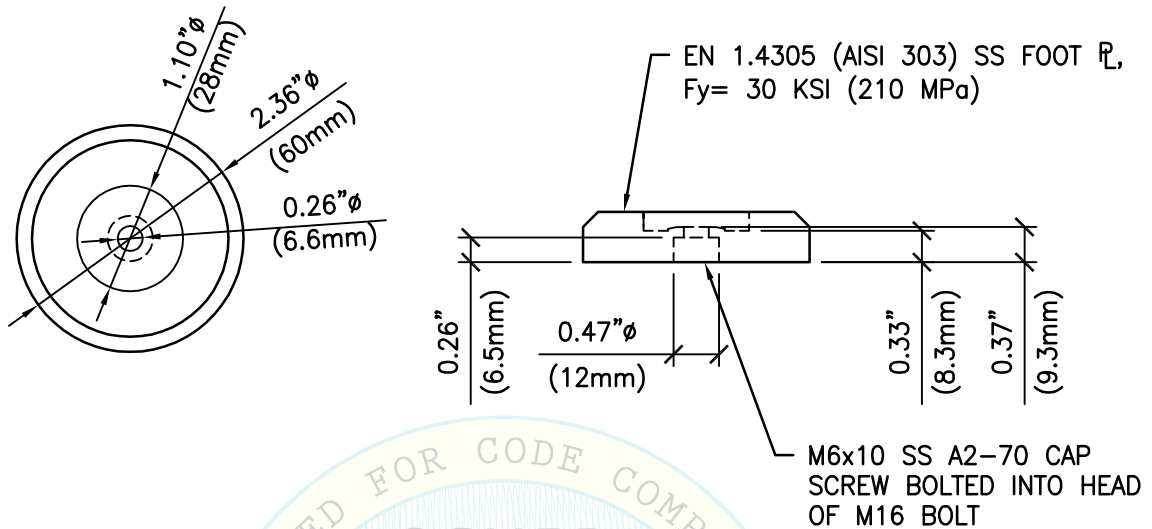
2495 NATOMAS PARK DRIVE, SUITE 650  
 SACRAMENTO, CA 95833

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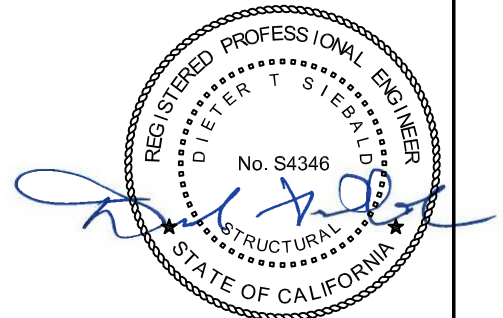
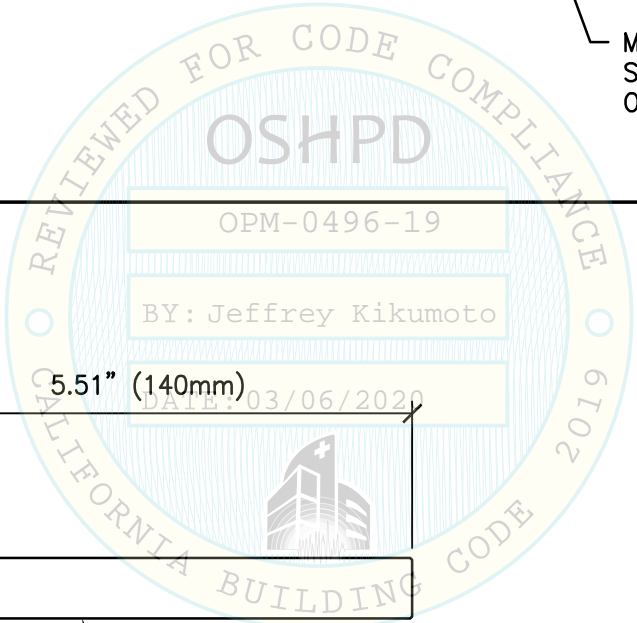
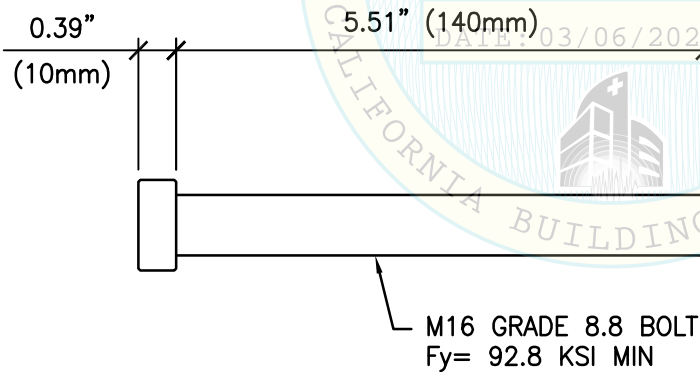
Job No:	17118
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**FOOT PLATE DETAIL**



**THREADED BOLT DETAIL**



SHEET TITLE: LEVELING LEG DETAIL



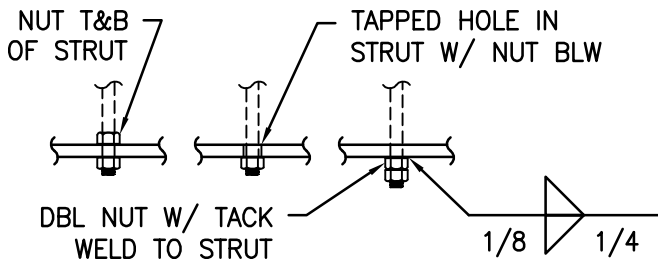
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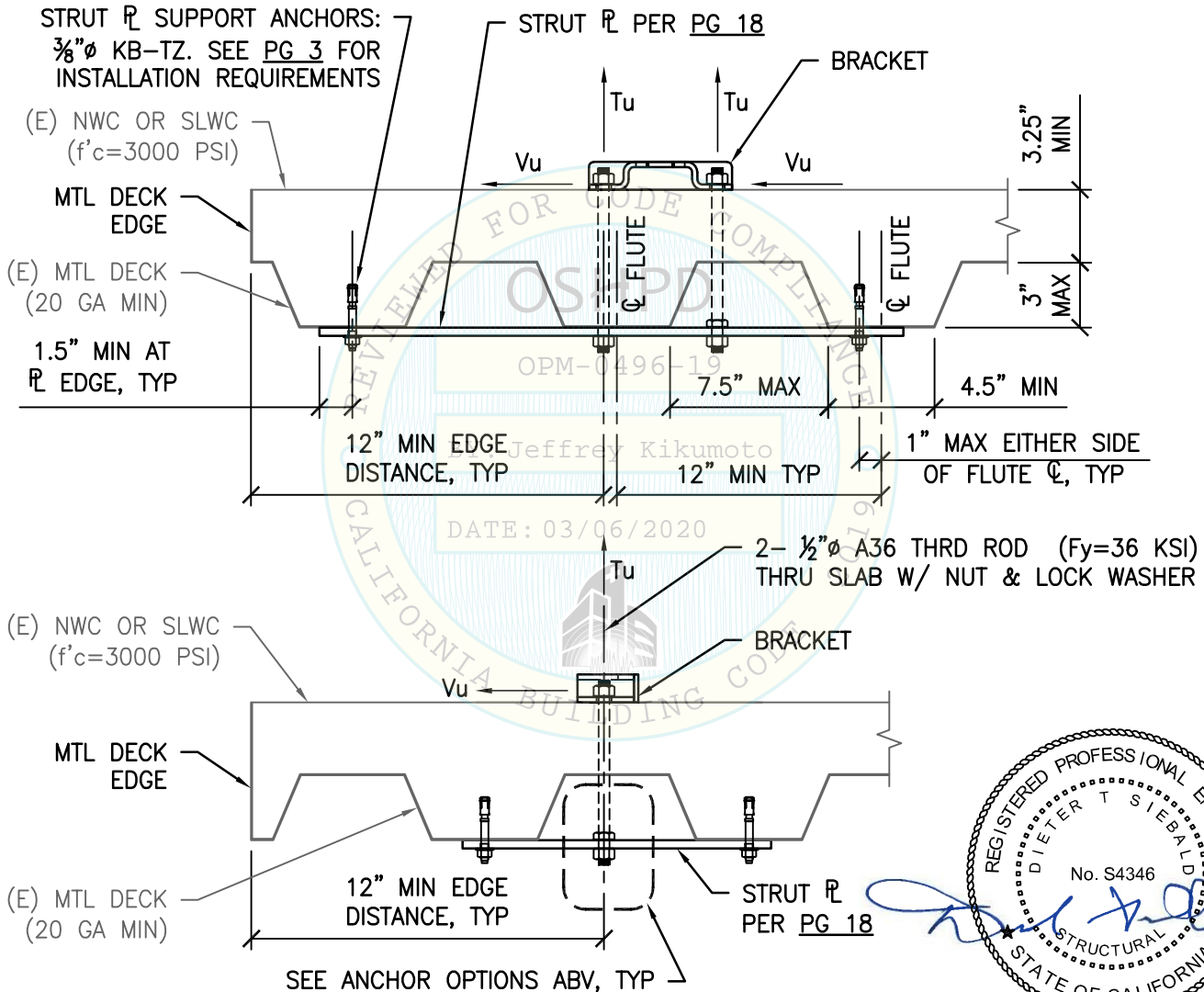
L:\Jobs\17118 BD Kiestra - BarcodA-InoquiA System\STRU\S1\_BarcodA-InoquiA.dwg Time:Mar06,2020-09:10am Login:cmachom Dimscale:1 LTScale:6



**ANCHOR OPTIONS**

MAX ANCHOR FORCES AT LRFD AT EA AB (LBS)		
	Tu	Vu
CASE 1 z/h ≤ 0.75	1676#	656#

(Ω<sub>o</sub> = 1.5) OVERSTRENGTH FACTOR IS APPLIED TO SHEAR FORCE



SHEET TITLE: ATTACHMENT DETAIL  
CONCRETE FILL OVER METAL DECK (CASE 1)



**CYS STRUCTURAL ENGINEERS, INC.**

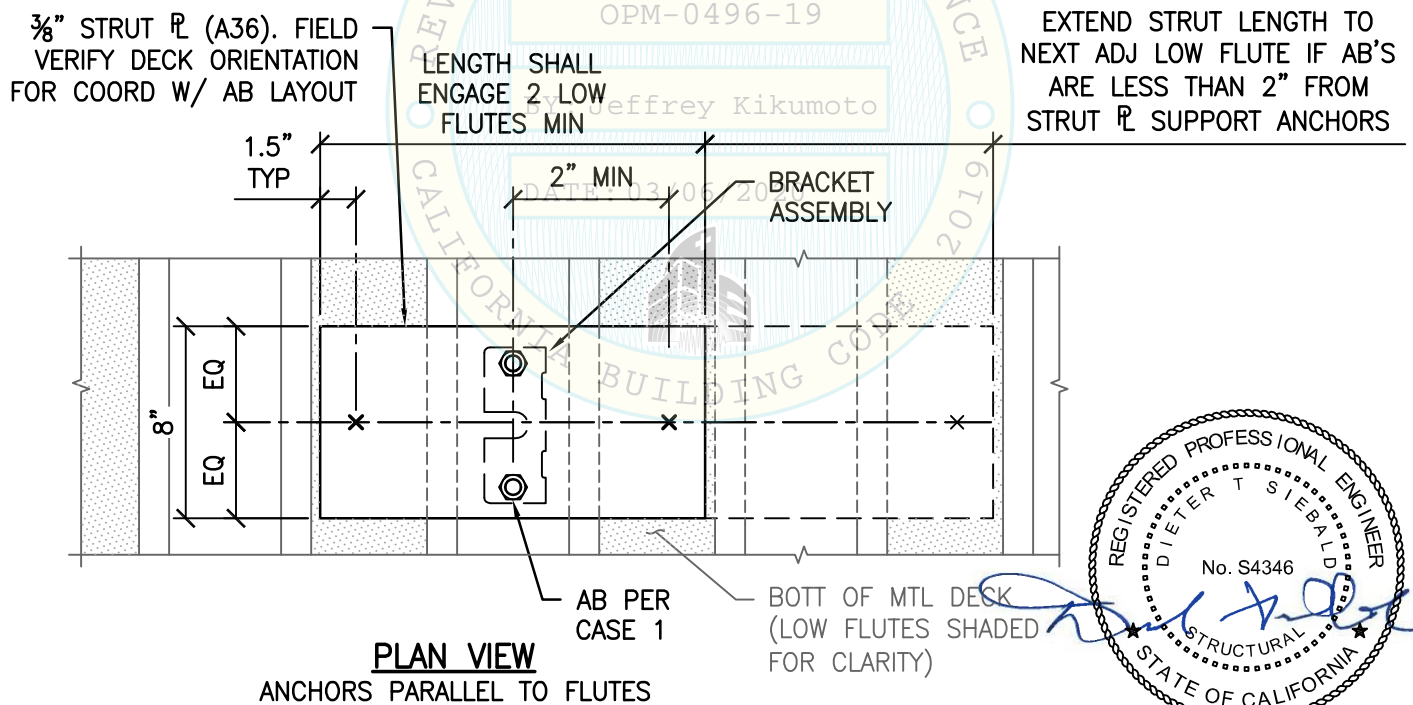
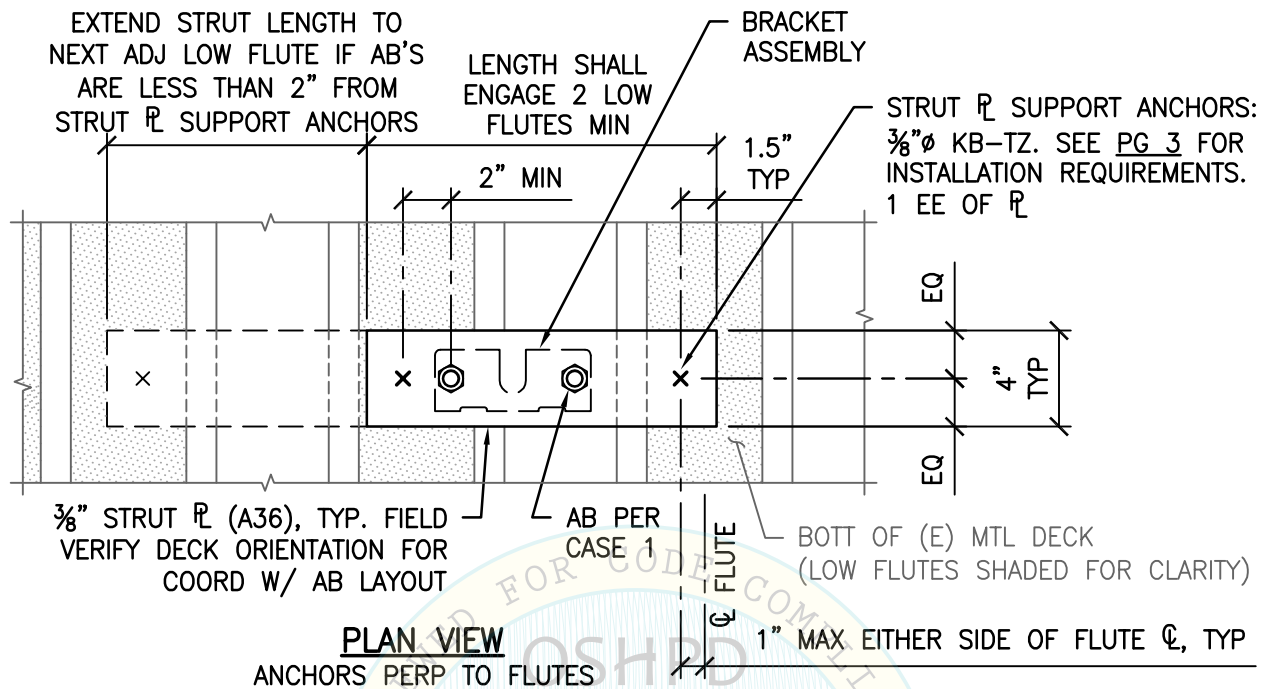
2495 NATOMAS PARK DRIVE, SUITE 650  
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Job No:	17118
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L:\Jobs\17\17118 BD Kiestra - BarcodA-InoquiA System\STRU\S1\_BarcodA-InoquiA.dwg Time:Mar06,2020-09:10am Login:cmcnachom DimScale:1 LTScale:6





SHEET TITLE: ATTACHMENT DETAIL  
 CONCRETE FILL OVER METAL DECK (CASE 1)



**CYS STRUCTURAL ENGINEERS, INC.**

2495 NATOMAS PARK DRIVE, SUITE 650  
 SACRAMENTO, CA 95833

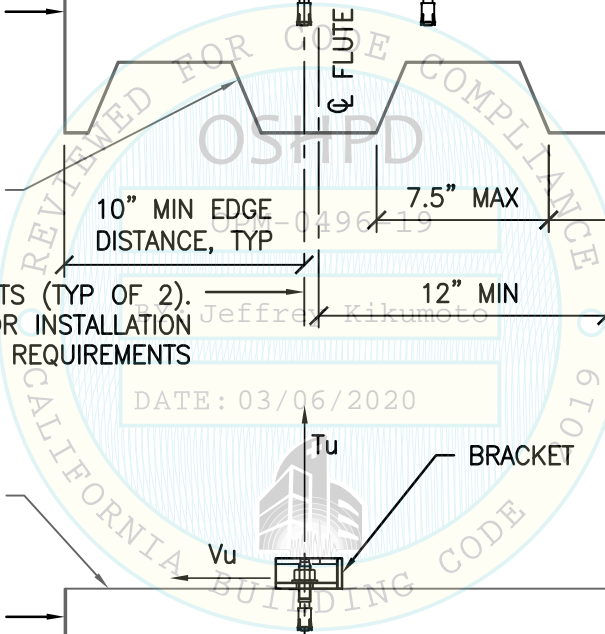
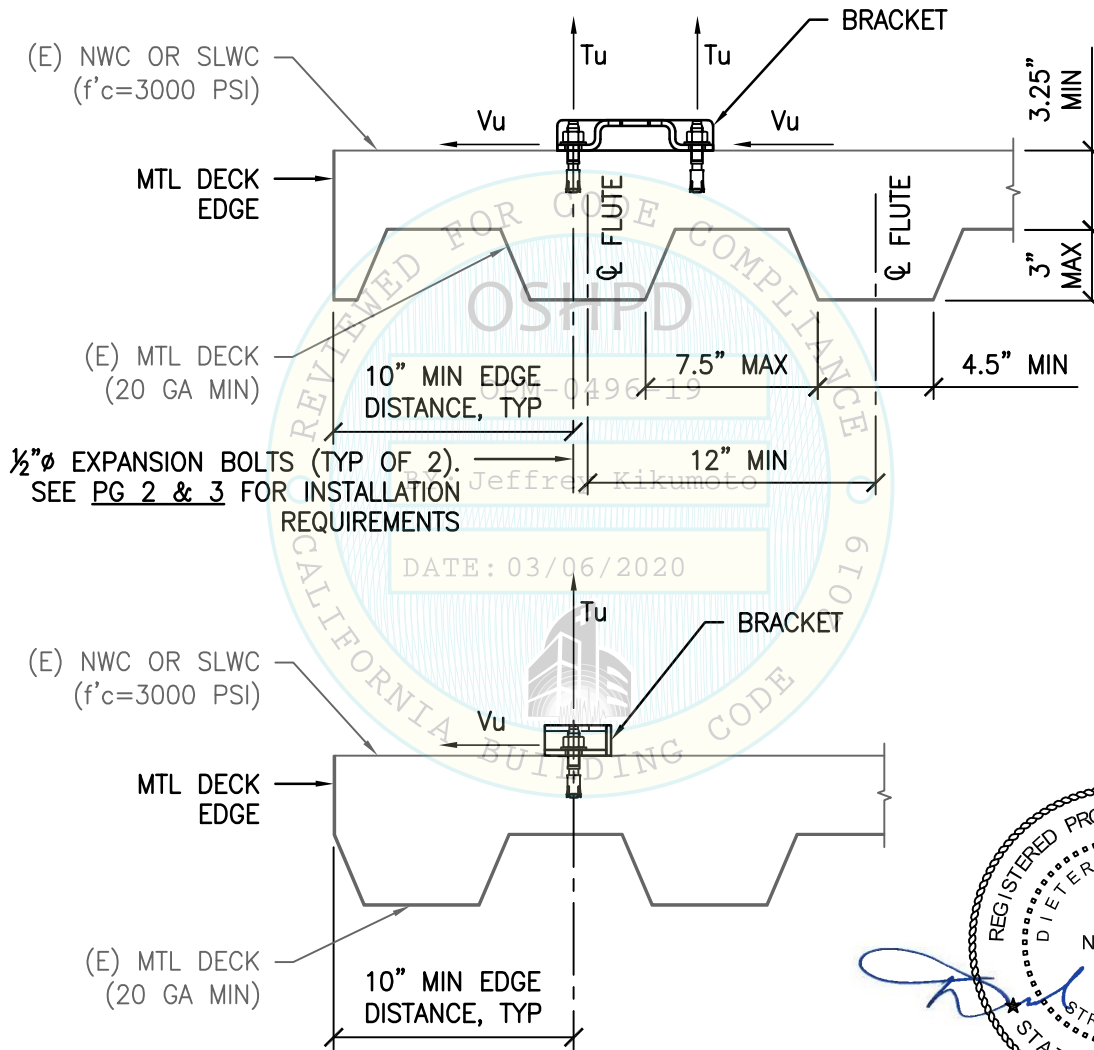
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L:\Jobs\17118 BD Kiestra - BarcodA-InoquiA System\STRU\S1\_BarcodA-InoquiA.dwg Time:Mar06,2020-09:10am Login:cmachom Dimscale:1 L1Scale:6

MAX ANCHOR FORCES AT LRFD AT EA AB (LBS)		
	Tu	Vu
CASE 2 z/h ≤ 0.50	694#	204#

INCLUDES OVERSTRENGTH FACTOR ( $\Omega_0=1.5$ )



SHEET TITLE: ATTACHMENT DETAIL  
 CONCRETE FILL OVER METAL DECK (CASE 2)

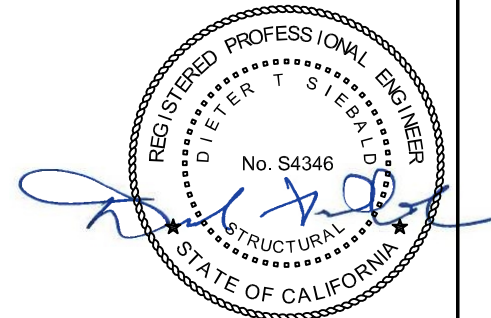
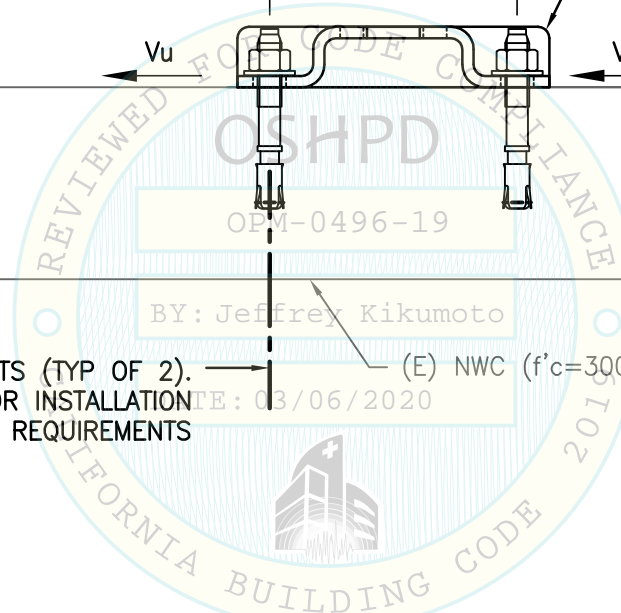
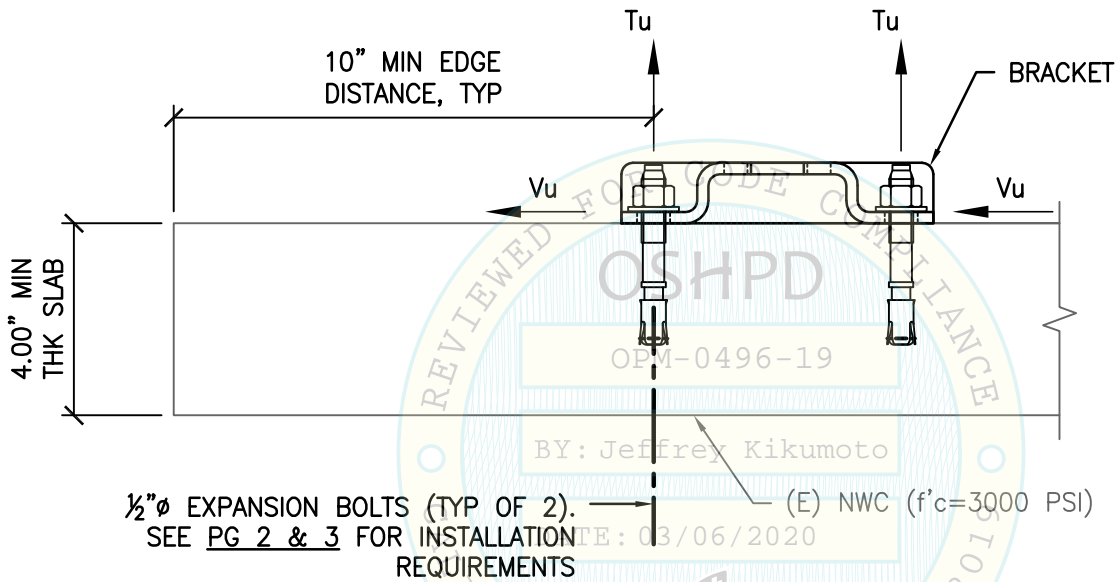
<p><b>CYS STRUCTURAL ENGINEERS, INC.</b>                  2495 NATOMAS PARK DRIVE, SUITE 650                  SACRAMENTO, CA 95833</p>	TEL (916) 920-2020 www.cyseng.com	Job No: 17118 Date: 03-06-2020 Page: 19 of 20
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L:\Jobs17\17118 BD Kiestra - BarcodA-InoquiA System\STRU\S1\_BarcodA-InoquiA.dwg Time:Mar06,2020-09:10am Login:cmachom Dimscale:1 LTSscale:6



MAX ANCHOR FORCES AT LRFD AT EA AB (LBS)		
	Tu	Vu
CASE 3 z/h=0	1171#	311#

INCLUDES OVERSTRENGTH FACTOR ( $\Omega_0=1.5$ )



SHEET TITLE: ATTACHMENT DETAIL  
 4" CONCRETE SLAB ON GRADE (CASE 3)

<p><b>CYS STRUCTURAL ENGINEERS, INC.</b>                  2495 NATOMAS PARK DRIVE, SUITE 650                  SACRAMENTO, CA 95833</p>	TEL (916) 920-2020 www.cyseng.com	Job No: 17118 Date: 03-06-2020 Page: 20 of 20
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L:\Jobs17\17118 BD Kiestra - BarcodA-Inoquia System\STRU\S1\_BarcodA-Inoquia.dwg Time:Mar06,2020-09:11am Login:cmachom Dimscale:1 LTScale:6