GTPICTIPAL DEGIGN VALUES

All values reported are unfactored and	strength level, unless noted otherwise	
Gravity Design Data		Value
Dead Loads:		
Electronic Sign		800 #
Wind Design Data	Value	
Design Wind Speed (3-sec gust	110 mph	
Design Wind Speed (3-sec gust), V _{ASD}	85 mph
Risk Category		Ш
Exposure Category		-C
Applicable Internal Pressure C	oefficient	± 0.18
Design Wind Pressure(s) for Co (Not specifically designed by the Reg modified by applicable factors per A	listered Design Professional, and to be	qz = 24.8 psf
Earthquake Design Data		Value
Risk Category		Ш
Importance Factor, Ie		1.25
Mapped Spectral Response Ac	ccelerations	S= 1.073 g S= 0.398 g
Site Class		D
Spectral Response Coefficient	9	Sps= 0.766 g Spi= 0.426 g
Seismic Design Category		D
Analysis Procedure Used	Equivalent Lateral Force Proced (ASCE 7, 12.8)	dure
Basic Seismic-Force Resisting System	Bearing wall systems: Wall sheat structural panels	hed with wood
Response Modification Fac	tor	R= 3
Seismic Response Coefficie	ent	C₅= 0.323
Design Base Shear		V= C5 WD
Geotechnical Design Data	а	Value
Geotechnical Report prepared 2013 California Building Code, (l by: Chapter 18A	
Allowable Soil Bearing Pressur	e (DL + LL)	1500 psf
Design Passive Pressure, Pp		100 pcf
Design Skin Friction, fs		100 psf

commencement of the work." ACI 318: 3.5, 7.1-7.7, IBC 1910.4

ACI 318: 5.11-5.13, IBC 1910.9 ACI 318: 18.20, 18.18.4

e. ACI 318: 8.1.3, 21.2.8, IBC 1908.5, 1909.1

ACI 318: 3.8.6, 8.1.3, 21.2.8, IBC 1909.1

o. CBC Section 1705.3 and Table 1705.3

ACI 318: CH. 4, 5.2-5.4, IBC 1904.2, 1910.2, 1910.3

ACI 318: 5.9, 5.10, IBC 1910.6, 1910.7, 1910.8

ASTM C172, ASTM C31, ACI 318: 5.6, 5.8, IBC 1910.10

d. AWS DI.4, ACI 318, 3.5.2

ACI 318: CH. 16 m. ACI 318: 6.2 n. ACI 318: 6.1.1

Specific requirements for Special Inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2 or other requirements. Where specific requirements are not provided, Special Inspection requirements shall be specified by the Registered Design Professional and shall be approved by the Building Official prior to the

All values reported are unfactored ar	nd strength level, unless noted otherwise	
Gravity Design Data		Value
Dead Loads:		in a Colombia de la companience de colombia companience de colombia de colombi
Electronic Sign		800 #
Wind Design Data	Value	
Design Wind Speed (3-sec gu	110 mph	
Design Wind Speed (3-sec gu	st), V _{ASD}	85 mph
Risk Category		Ш
Exposure Category		-C
Applicable Internal Pressure	Coefficient	± 0.18
Design Wind Pressure(s) for ((Not specifically designed by the Ro modified by applicable factors per	qz = 24.8 psf	
Earthquake Design Dato		Value
Risk Category		Ш
Importance Factor, Ie	Importance Factor, Ie	
Mapped Spectral Response Accelerations		S= 1.073 g S= 0.398 g
5ite Class		D
Spectral Response Coefficie	Spectral Response Coefficients	
Seismic Design Category		D
Analysis Procedure Used	Equivalent Lateral Force Proced (ASCE 7, 12.8)	dure
Basic Seismic-Force Resisting System	Bearing wall systems: Wall sheat structural panels	hed with wood
Response Modification Fo	actor	R= 3
Seismic Response Coeffic	ient	C ₅ = 0.323
Design Base Shear		V= C5 WD
Geotechnical Design Da	Value	
Geotechnical Report prepare	ed by:	

SPECIAL INSPECTION

s reported are unfactored ar	nd strength level, unless noted otherwise	Cara a construent de monte para característica de despetado en 1900 de 1900 de 1900 de 1900 de 1900 de 1900 de			
ty Design Data			GENERAL NOTES		
d Loads:					
Electronic Sign		800 #	1.	All Special Inspection shall be provided in accordance with CBC Sectil 1704 and 1705.	
Design Data		Value			
gn Wind Speed (3-sec gu	yst), V _{ult}	IIO mph	2.	Where Special Inspection is required, all inspection or testing shall provided by an "approved agency" in accordance with CBC Section 170:	
gn Wind Speed (3-sec gu		85 mph	100 00000000000000000000000000000000000	1703.1 and 1704.1.	
Category		Ш	2	Grazial lucrachase shall know navands of increashing. The Grazial lucrach	
sure Category		-0	3.	Special Inspectors shall keep records of inspections. The Special Inspect shall furnish inspection reports to the Authority Having Jurisdiction, and	
licable Internal Pressure	Coefficient	± 0.18	2000000	the Architect or Engineer of Record. Reports shall indicate that wo	
ign Wind Pressure(s) for Components & Cladding specifically designed by the Registered Design Professional, and to be ried by applicable factors per ASCE 7) QUAKE Design Data		qz = 24.8 psf	oopenaresouromaterateraterateraterateraterateraterater	inspected was done in conformance to approved construction documen Discrepancies shall be brought to the immediate attention of the contract for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the Authority Having Jurisdiction and	
		Value	1000000	the Architect or Engineer of Record prior to the completion of that pho	
Category		 ш 	and control of the co	of work. A final report documenting required Special Inspections of correction of any discrepancies noted in the inspections shall be submitted.	
rtance Factor, Ie	· .	1.25	electronical	at a point in time agreed upon by the permit applicant and the Autho	
oed Spectral Response	ed Spectral Response Accelerations S:		,	Having Jurisdiction prior to the start of work.	
Class		D	4.	Special Inspectors shall be approved by local Authority Having Jurisdiction accordance with CBC Section 1704.2.1.	
tral Response Coefficie	nts	Sos= 0.766 g Sos= 0.426 g	5.	5. Local Authority Having Jurisdictions may require Special Inspec	
nic Design Category		D	944	"Special Cases" in accordance with CBC Section 1705.1.1	
ysis Procedure Used	Equivalent Lateral Force Procedure (ASCE 7, 12.8)		6.	Contractor's responsibility: Each contractor responsible for the construct of a Main Lateral-Force-Resisting System, listed in the Statement	
c Seismic-Force sting System	Bearing wall systems: Wall sheat structural panels	wall systems: Wall sheathed with wood al panels		Special Inspection shall submit a written statement of responsibility to the Authority Having Jurisdiction and the owner prior to the commencement work on the system or component. The contractor's statement	
Response Modification Factor Seismic Response Coefficient Design Base Shear echnical Design Data		R= 3	PER SERVICE SE	responsibility shall contain the following:	
		C ₅ = 0.323		 A. Acknowledgement of awareness of the special requirements contain in the statement of special inspections; 	
		V= Cs WD		B. Acknowledgement that control will be exercised to obtain conforman	
		Value		with the construction documents approved by the authority hav jurisdiction;	
				Grandware Conservation to a sharp the state of the state	

SENERAL NOTES			STEEL CONSTRUCT	TON ^{ab}	Part of the second
All Special Inspection shall be provided 1704 and 1705.	in accordance with	CBC Section	Verification and Inspect	ion Continuo	ous Period
Where Special Inspection is required,	all inspection or tes	atina shall be	Material verification of structure	al steel & cold-formed steel d	eck
provided by an "approved agency" in ac 1703.1 and 1704.1.	cordance with CBC	Section 1702.1,	For structural steel, identif to conform to AISC 360.	ication markings	
Special Inspectors shall keep records of shall furnish inspection reports to the Athe Architect or Engineer of Record.	uthority Having Juriso Reports shall indica	diction, and to ate that work	2. Material verification of col deck:	ld-form steel	
inspected was done in conformance to Discrepancies shall be brought to the import of the correction. If the discrepancies are shall be brought to the attention of the	ediate attention of t not corrected, the	the contractor discrepancies	 a. Identification markings for the standards specification 	ied in the	
the Architect or Engineer of Record prior of work. A final report documenting correction of any discrepancies noted in	required Special Ins	spections and	b. Manufacturer's certified	d test reports.	
at a point in time agreed upon by the Having Jurisdiction prior to the start of w	permit applicant and	the Authority	3. Inspection of welding:		
Special Inspectors shall be approved by		Jurisdiction in	a. Cold formed steel decl	k:	
accordance with CBC Section 1704,2.1.			I) Floor and roof deck i	welds ^c	
Local Authority Having Jurisdictions mo "Special Cases" in accordance with CBC 9	y require Special 1 ection 1705.1.1	nspection for	b. Reinforcing steel: ^d		
Contractor's responsibility: Each contract of a Main Lateral-Force-Resisting Suspecial inspection shall submit a written	stem, 'listed in the statement of respoi	Statement of Insibility to the	 Verification of weldab reinforcing steel other A706. 	oility of than ASTM	√
Authority Having Jurisdiction and the own work on the system or component. responsibility shall contain the following: A. Acknowledgement of awareness of the inthe statement of special inspection. B. Acknowledgement that control will be	The contractor's he special requireme 5;	statement of ents contained	 Reinforcing steel res and axial forces in int special moment frame elements of special s of concrete and shea 	termediate and ss, and boundary structural walls	
with the construction documents a jurisdiction;			3) Shear reinforcement	✓	
C. Procedures for exercised control we the method and frequency of repo	ithin the contractor's orting and the distr	organization, ibution of the	4) Other reinforcing ste	el	I
reports; and D. Identification and qualifications of the	person(s) exercisin		Inspection tasks prior to welding	3	
and their position(s) in the organization Refer to Special Inspection requirement		s not included	l. Welding procedure specific available	cations (WSPs)	
herein. ONCRETE CONSTRUCTION)		 Manufacturer certifications consumables available 	for welding	
Page 1 and A transfer			3. Material identification (type	e/grade)	/
erification and Inspection	Continuous	Periodic	4. Welder identification system	m ^e	/
Inspection of reinforcing steel including prestressing tendons, and placement.		✓	 Fit-up of groove welds (inc geometry) Joint preparation, dimens 	sions, cleanliness,	✓
Inspection of reinforcing steel welding in accordance with Table 1705.2.2. item 2b. ^d		60000000000000000000000000000000000000	tacking, backing type and		
Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is			 6. Configuration and finish of 7. Fit-up of fillet welds Dimensions, cleanliness, to 		✓ ✓
used. ^e				acking	<u> </u>
Inspection of anchors post installed in hardened concrete members. ^{b,f}		/	8. Check welding equipment Inspection tasks during welding		
Verifying use of required design mix.9		/	I. Use of qualified welders		,
At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the	✓		Control and handling of we consumables Packaging, exposure con		✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
concrete. ^h			3. No welding over cracked t	cack welds	
Inspection of concrete and shotcrete placement for proper application techniques.	✓		4. Environmental conditions Wind speed within limits, p temperature	precipitation and	
Inspection for maintenance of specified curing, temperature and techniques. ^J		✓	5. WPS followed Settings on welding equip	oment, travel	
Inspection of prestressed concrete: k a. Application of prestressing forces b. Grouting of bonded prestressing tendons in the Seismic Force-Resistin System	√		speed, selected welding shielding gas type/flow ro applied, interpass tempe maintained min./max.).prop (F, V, H, OH)	materials, ate, preheat rature	\
Erection of precast concrete members.		/	6. Welding techniques Interpass and final clean within profile limitations	ing, each pass	√
Verification of In-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams		/ /	Inspection tasks after welding		
and structural slabs. ^m			l. Welds cleaned	P	
Inspect formwork for shape, location and dimensions of the concrete member being formed."		 	Size, length and location of the second	ance criteria	
<u>otes: Concrete Construction</u> Where applicable, see also CBC Section seismic resistance	705.11, Special Inspec	tions for	Crack prohibition, weld/boccrater cross section, weld size, undercut, porosity		

8 Document acceptance or rejection of

welded joint or member

~	TEEL CONSTRUCTION ^{ab}		
Ve	rification and Inspection	Continuous	Periodic
—— Mate	erial verification of structural steel \$ cold-fo	rmed steel deck	
	For structural steel, identification markings		./
 2.	to conform to AISC 360. Material verification of cold-form steel		V
	deck:		
	 Identification markings to conform to ASTM standards specified in the approved construction documents. 		✓
	b. Manufacturer's certified test reports.		/
3.	Inspection of welding:		
	a. Cold formed steel deck:		
·····	1) Floor and roof deck welds ^c		✓
	b. Reinforcing steel: d		
	 Verification of weldability of reinforcing steel other than ASTM A706. 		/
	 Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement. 	√	
Oslový svo trA med	3) Shear reinforcement	✓	
	4) Other reinforcing steel		✓
Insp	ection tasks prior to welding		
ļ,	Welding procedure specifications (WSPs) available	✓	
2.	Manufacturer certifications for welding consumables available	✓	
3.	Material identification (type/grade)		/
4.	Welder identification system ^e		✓
5.	Fit-up of groove welds (including joint geometry) Joint preparation, dimensions, cleanliness, tacking, backing type and fit		√
6.	Configuration and finish of access holes		/
7.	Fit-up of fillet welds Dimensions, cleanliness, tacking		/
8.	Check welding equipment		
Insp	ection tasks during welding	,	
 ,	Use of qualified welders		/
2.	Control and handling of welding consumables Packaging, exposure control		/
 З.	No welding over cracked tack welds		
4,	Environmental conditions Wind speed within limits, precipitation and temperature		/
5.	WPS followed Settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature maintained min./max./proper position (F, V, H, OH)		✓
6.	Welding techniques Interpass and final cleaning, each pass within profile limitations		· 🗸
Insp	ection tasks after welding		J
•	Welds cleaned		/
2.	Size, length and location of welds	/	
3.	Welds meet visual acceptance criteria Crack prohibition, weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut, porosity	✓	
4.	Arc strikes	/	
5.	k-Area ^f		
6.	Backing removed and weld tabs removed (if required)	✓	
7.	Repair activies	/	

	TEEL CONSTRUCTION, CONTI	INUED	
Ve	rification and Inspection	Continuous	Period
Insp	ection tasks prior to bolting ⁹		
1.	Manufacturer's certifications available for fastener materials	/	
2.	Fasteners marked in accordance with ASTM requirements		/
3.	Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)		V
4.	Proper bolting procedure selected for joint detail		
5.	Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements		/
6.	Pre-installation certification testing by installation personnel observed and documented for fastener assemblies and methods used		/
7.	Proper storage provided for bolts, nuts, washer and other fastener components		/
Insp	ection tasks during boilting	4	<u> </u>
1.	Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required		/
2.	Joint brought to the snug-tight condition prior to the pretensioning operation		/
	Fastener component not turned by the		
3.	wrench prevented from rotating		1
3.4.	Fasteners are pretensioned in accordance with the RCSC specification, progressing systematically from the most rigid point toward the free edges, see Minimum Bolt Pretension table below		/
4.	Fasteners are pretensioned in accordance with the RCSC specification, progressing systematically from the most rigid point toward the free edges, see Minimum Bolt		/
4.	Fasteners are pretensioned in accordance with the RCSC specification, progressing systematically from the most rigid point toward the free edges, see Minimum Bolt Pretension table below	✓	/
4. Insp	Fasteners are pretensioned in accordance with the RCSC specification, progressing systematically from the most rigid point toward the free edges, see Minimum Bolt Pretension table below ection tasks after bolting Document acceptance or rejection of	can be identified.	Stamps, if u

Group A

(A325, etc.)

28

39

56

103

Group B

(A490, etc.)

15

24

102

121

148

Minimum Bolt Pretension (kips)

Bolt size , inches

2" Diameter

%" Diameter

¾" Diameter

%″ Diameter

16" Diameter

14" Diameter

13%" Diameter

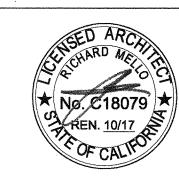
吃" Diameter

l" Diameter

PRIME CONSULTANT

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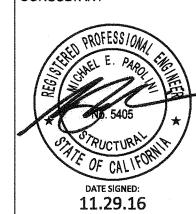


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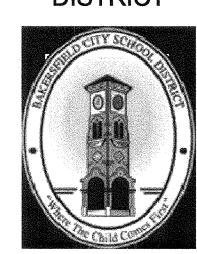
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BAKERSFIELD CITY SCHOOL DISTRICT



NEW MARQUEE AT FRANKILN **ELEMENTARY SCHOOL**

2400 TRUXTON AVENUE BAKERSFIELD, CA 93306

OPSC or OSHPD PROJ. NO):
PROJECT NO:	16125.000
DRAWN BY:	JLMH
CHK'D BY:	JMM
ISSUE DATE:	11/29/2016

SHEET TITLE

STRUCTURAL NOTES

SHEET NUMBER