

## INDEPENDENT TESTING LABORATORY & SPECIAL INSPECTIONS

**A.** A GEOTECHNICAL EXPLORATION OF SUBSURFACE CONDITIONS, CONTAINING TEST BORINGS, LABORATORY TEST, ENGINEERING ANALYSIS AND FOUNDATION RECOMMENDATIONS, PERFORMED IS AVAILABLE FOR REVIEW. SEE "EXCAVATION, BACKFILLING & FOUNDATIONS" SECTION.

**B.** EMPLOYMENT OF A TESTING LABORATORY IN NO WAY RELIEVES THE CONTRACTOR OF ANY OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

**C.** CONTRACTOR RESPONSIBILITIES:

**1.** DELIVER TO LABORATORY AT DESIGNATED LOCATION ADEQUATE SAMPLES OF MATERIALS PROPOSED TO BE USED WHICH REQUIRE TESTING, TOGETHER WITH PROPOSED MIX DESIGNS.

**2.** COOPERATE WITH LABORATORY PERSONNEL AND PROVIDE ACCESS TO WORK AND TO MANUFACTURER'S FACILITIES.

**3.** PROVIDE INCIDENTAL LABOR AND FACILITIES TO PROVIDE ACCESS TO WORK TO BE TESTED, TO OBTAIN AND HANDLE SAMPLES AT THE SITE OR AT SOURCE OF PRODUCTS TO BE TESTED, TO FACILITATE TEST AND INSPECTIONS AND FOR STORAGE AND CURING OF TEST SAMPLES.

**4.** NOTIFY LABORATORY OF MATERIAL SOURCES AND FURNISH NECESSARY QUANTITIES OF REPRESENTATIVE SAMPLES OF MATERIALS PROPOSED FOR USE WHICH ARE REQUIRED TO BE TESTED.

**5.** NOTIFY ARCHITECT AND LABORATORY 24 HOURS PRIOR TO EXPECTED TIME FOR OPERATIONS REQUIRING INSPECTION AND TESTING SERVICES.

**6.** ADVISE LABORATORY IN A TIMELY FASHION TO COMPLETE REQUIRED INSPECTION AND TESTING PRIOR TO SUBSEQUENT WORK BEING PERFORMED.

**7.** PAY FOR ALL SUBSEQUENT RE-TESTING OF PRODUCTS OR SYSTEMS FOUND TO BE DEFECTIVE OR OTHERWISE NOT IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS. REMOVE REJECTED PRODUCTS AND REPLACE WITH PRODUCTS OF SPECIFIED QUALITY.

**D.** SPECIAL INSTRUCTIONS:

**1.** THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTOR(S) TO CONDUCT INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF CONSTRUCTION LISTED IN THIS SECTION. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE TO THE INSPECTIONS BEING PERFORMED TO THE SATISFACTION OF THE ENGINEER OF RECORD AND THE BUILDING OFFICIAL. THE SPECIAL INSPECTOR SHALL HAVE EXPERIENCE WITH AT LEAST FIVE OTHER PROJECTS SIMILAR IN NATURE.

**2.** THE PURPOSE OF THE INSPECTIONS SHALL BE TO ENFORCE COMPLIANCE WITH THE CONSTRUCTION DRAWINGS, SPECIFICATIONS, GEOTECHNICAL REPORT AND THE 20XX INTERNATIONAL BUILDING CODE (IBC), SECTION 1704.

**3.** THE FOLLOWING ITEMS REQUIRE INDIVIDUAL TESTS & INSPECTIONS BY THE SPECIAL INSPECTOR AS OUTLINED IN CHAPTER 17 OF THE IBC:

- A. SOIL COMPACTION TESTS
- B. DRILLED PIERS/SPREAD FOOTING BEARING STRATA CONFIRMATION, INSPECTION AND TESTS
- C. CONCRETE COMPRESSIVE STRENGTH TESTS
- D. CONCRETE SLUMP TESTS
- E. CONCRETE AIR CONTENT TESTS
- F. STRUCTURAL STEEL FIELD WELD INSPECTION AND TESTS. INSPECT AND TEST 100% OF FULL PENETRATION WELDS.
- G. STRUCTURAL STEEL BOLTED AND HIGH STRENGTH BOLTED CONNECTION INSPECTION AND TESTS
- H. STEEL JOIST FIELD WELD INSPECTION
- I. STEEL DECK FIELD WELD AND ATTACHMENT INSPECTION

### NOTES:

**1.** PROVIDE A SET OF 4 TEST SAMPLES FOR EVERY 75 CY OF BUT NOT LESS THAN 1 TEST SAMPLE FOR EVERY 5,000 SF OF SLAB OR WALL SURFACE AREA. MONITOR SLUMP AND AIR CONTENT OF CONC. AND NOTIFY DELIVERY DRIVER IF SLUMP DEVIATES MORE THAN 1" FROM SPEC'D VALUE.

**2.** ALL DRILLED AND EPOXIED ANCHORS (REBAR BOLTS, THREADED RODS ETC.) SHALL BE PULL TESTED TO 110% FOR NO LESS THAN 3 MIN.

**3.** ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.

**4.** CORRECT DEFICIENCIES IN WORK THAT TEST REPORTS AND INSPECTIONS INDICATE DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

**5.** PROVIDE THE ENGINEER OF RECORD (EOR) COPIES OF ALL SPECIAL INSPECTIONS SO A SPECIAL INSPECTIONS REPORT CAN BE PREPARED FOR OBTAINING A CERTIFICATE OF OCCUPANCY.

## CONCRETE MASONRY UNIT (CMU) LINTEL SCHEDULE

MASONRY OPENING	U-BLOCK	REINFORCING
LESS THAN 4'-0"	8" x 8"	(2) #4
4'-0" BUT LESS THAN 5'-0"	8" x 8"	(2) #5
5'-0" BUT LESS THAN 6'-0"	8" x 8"	(2) #6
GREATER THAN 6'-0"	-	RE: PLAN FOR DETAILS

**A.** PROVIDE 8" MINIMUM BEARING EACH END FOR CMU LINTELS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.

**B.** CURVE CMU LINTEL AND REINFORCING FOR THE RADIUS OF THE WALL WHERE OCCURRING AND PROVIDE 1"-4" MINIMUM BEARING EACH END.

## MASONRY

**A.** CONSTRUCT REINFORCED MASONRY IN ACCORDANCE WITH "SPECIFICATION FOR MASONRY STRUCTURES", ACI 530.1A/SC308. MASONRY ALLOWABLE DESIGN STRESSES ARE BASED UPON REQUIRING NO SPECIAL INSPECTION.

**B.** ALL CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N, TYPE 1 MINIMUM FACE THICKNESS SHALL BE 1.25". ALL WALLS ARE LIGHT WEIGHT BLOCKS (105 PCF OR LESS).

**C.** REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. ALL BOLTS USED FOR ANCHORAGE SHALL BE ASTM A307 HEADED BOLTS.

**D.** MASONRY STRENGTH (F<sub>m</sub>) AT 28 DAYS SHALL BE A MINIMUM OF 2,000 PSI. USE TYPE M OR S MORTAR. MASONRY UNITS SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2800 PSI. GROUT SHALL CONFORM TO ASTM C476. GROUT STRENGTH SHALL BE AT LEAST 2800 PSI.

**E.** PROVIDE MORTAR BED OR WEB BETWEEN GROUTED BED AND HOLLOW CELL. USE FULL HEAD AND BED JOINTS.

**F.** UNLESS SHOWN OTHERWISE, ALL CMU WALLS TO BE REINFORCED WITH #5 BARS @ 24" IN GROUTED CELLS.

**G.** UNLESS SHOWN ON DETAILS, PROVIDE #6 LADDER OR TRUSS HORIZONTAL JOINT REINFORCEMENT AT 16" O.C. PROVIDE 2-#6 AT ALL JAMBS AND ENDS OF WALLS.

**H.** GROUT SOLID THE FIRST CELL ON EITHER SIDE OF DOOR OPENINGS, UNLESS OTHERWISE NOTED. PROVIDE 8" U-BLOCK CMU LINTEL WITH #6 BEARING EACH END, REINFORCE WITH (2) #4 BOTTOM.

**I.** EMBED ALL BOLTS IN FULL GROUTED CELL. PLACE BOLTS IN SAME VERTICAL CELL AS REINFORCING IF POSSIBLE. MINIMUM EMBEDDED LENGTH IS ONE-HALF WIDTH OF CELL.

**J.** UNLESS SHOWN ON DETAILS, PROVIDE (2) #6 HORIZONTAL REINFORCEMENT IN FULLY GROUTED CELL AT 48" OC VERTICALLY.

**K.** GROUT SOLID THE FIRST CELL ON EACH LEVEL & ROOF. REINFORCE WITH HORIZONTAL AS PER DETAILS.

## COLD-FORMED METAL FRAMING:

**A.** PROVIDE COLD-FORMED METAL FRAMING, INCLUDING TRUSSES, STUDS, JOIST, TRACK, RUNNERS, LINTELS, CLP ANGLES, REINFORCEMENTS, SHOES, BLOCKING, AND BRIDGING, COMPLETE WITH ALL FASTENERS, AND ACCESSORIES NEEDED FOR A COMPLETE AND FINISHED INSTALLATION.

**B.** THE STRUCTURAL DRAWINGS INDICATE THE GENERAL CONFIGURATION OF FRAMING FOR TYPICAL CONDITIONS ONLY. FINAL CONFIGURATION OF DETAILS AS WELL AS ALL SUPPLEMENTARY FRAMING TO OBTAIN THE ROOF PROFILES SHOWN ON THE PLANS SHALL BE AS DETERMINED BY DESIGN.

**C.** COLD-FORMED METAL FRAMING SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN IRON AND STEEL INSTITUTE (AISI) PUBLICATION, "SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION. PROVIDE STEEL FOR RAFTERS, JOISTS, STUDS AND ACCESSORIES CONFORMING TO ASTM A1003, GRADE 50, STRUCTURAL QUALITY STEEL SHEET FORMED TO "C" SHAPES, UNPUNCHED WITH STIFFENED FLANGES.

**D.** ALL STRUCTURAL MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL CORRESPONDING TO THE REQUIREMENTS OF ASTM A653 AND A585, GRADE C, WITH A MINIMUM YIELD STRENGTH OF 50 KSI FOR STUDS AND JOISTS AND GRADE A, 33KSI, FOR RUNNERS. ALL STRUCTURAL MEMBERS SHALL BE ZINC COATED MEETING ASTM A525, G-60, OR EQUIVALENT. TYPICAL.

**E.** FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS OR BY WELDING. SCREWS AND WELDS SHALL BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. ALL WELDS SHALL BE TOUCHED-UP WITH A ZINC-RICH PAINT.

**F.** SUBMIT SHOP DRAWINGS FOR ALL FRAMING PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER, AND CALCULATIONS, SIGNED AND SEALED BY SAID ENGINEER, FOR REVIEW PRIOR TO ERECTION OF ANY COLD-FORMED METAL FRAMING.

**G.** TEMPORARY BRACING, WHERE REQUIRED, SHALL BE PROVIDED UNTIL ERECTION IS COMPLETE.

**H.** THE INFORMATION PROVIDED SHALL TAKE INTO ACCOUNT AND SHOW ALL SPECIAL DESIGN, FRAMING AND CONNECTION REQUIREMENTS SUCH AS AT CONCENTRATED LOADS, UNBALANCED OR UNSYMMETRICAL LOAD CONDITIONS, AND OTHER NON-TYPICAL FRAMING DETAILS.

**I.** SPLICES IN FRAMING COMPONENTS, OTHER THAN RUNNER TRACK, SHALL NOT BE PERMITTED.

**J.** BLOCKING SHALL BE PROVIDED AT SUPPORTS WHERE JOISTS ARE NOT OTHERWISE RESTRAINED FROM ROTATION.

**K.** BUTTING LENGTHS OF RUNNER TRACK SHALL BE BUTT-WELDED, SPLICED OR EACH LENGTH SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT. RUNNER TRACK SHALL BE SECURELY ANCHORED TO THE SUPPORTING STRUCTURE.

**L.** MEMBER PERFORMANCE:

**1.** RAFTERS AND HEADERS: VERTICAL DEFLECTION IS LIMITED TO 1/240 OF THE SPAN.

**2.** STUDS: HORIZONTAL DEFLECTION IS LIMITED TO 1/240 OF THE SPAN (TYPICAL); FOR BRICK VENEER 1/600 OF THE SPAN.

**M.** PROVIDE MEMBERS WITH THE FOLLOWING MINIMUM SECTION PROPERTIES:

SECTION	GAUGE	I <sub>x</sub> (MOMENT OF INERTIA)	S <sub>x</sub> (SECTION MODULUS)	F <sub>y</sub> (YIELD STRENGTH)
3.58"	18	0.710 IN <sup>4</sup>	0.392 IN <sup>3</sup>	33 KSI
6"	18	2.317 IN <sup>4</sup>	0.772 IN <sup>3</sup>	33 KSI
8"	18	4.635 IN <sup>4</sup>	1.159 IN <sup>3</sup>	33 KSI
3.58"	16	0.873 IN <sup>4</sup>	0.482 IN <sup>3</sup>	50 KSI
6"	16	2.863 IN <sup>4</sup>	0.954 IN <sup>3</sup>	50 KSI
8"	16	5.740 IN <sup>4</sup>	1.435 IN <sup>3</sup>	50 KSI

**N.** COLD-FORMED METAL ROOF TRUSS SPACING IS TO BE 48" ON CENTER, UNLESS NOTED OTHERWISE.

**O.** RESISTANCE TO BENDING AND ROTATION ABOUT THE MINOR AXIS SHALL BE PROVIDED BY HORIZONTAL STRAPPING, BLOCKING OR COLD-ROLLED CHANNEL BRACING AS REQUIRED BY THE MANUFACTURER.

**P.** COLD-FORMED METAL ROOF TRUSSES ARE TO BE DESIGNED FOR THE CODE LIVE LOADS AS SPECIFIED IN THE FIRST SECTION ON THIS SHEET. THIS LOAD IS TO BE APPLIED TO THE TOP CHORD OF THE TRUSS. IN ADDITION, THE FOLLOWING SUPERIMPOSED SERVICE LOADS ARE TO BE APPLIED:

TOP CHORD DEAD LOAD = 10 PSF (SHEATHING, ROOFING, ETC.)  
BOTTOM CHORD DEAD LOAD = 5 PSF (CEILING, MISC.)

**Q.** THE MAXIMUM ALLOWABLE DEFLECTIONS FOR THE COLD-FORMED METAL ROOF TRUSSES ARE AS FOLLOWS:

L/240 UNDER TOTAL LOAD  
L/360 UNDER LIVE LOAD

**R.** COLD-FORMED METAL TRUSSES: SHOP DRAWINGS AND CALCULATIONS BEARING A REGISTERED ENGINEER'S CERTIFICATION SHALL BE SUBMITTED FOR REVIEW AND SHALL CONTAIN THE FOLLOWING INFORMATION FOR EACH TRUSS TO BE PROVIDED:

- A.** COMPLETE ERECTION DRAWINGS SHOWING LOCATION AND SPACING OF ALL FRAMING MEMBERS.
- B.** SIZE AND GAGE OF ALL MEMBERS.
- C.** DETAIL DRAWINGS OF ALL PREFABRICATED ASSEMBLIES.
- D.** LOADING CONDITIONS USED IN DESIGN.
- E.** CALCULATED FORCES FOR ALL MEMBERS.
- F.** ANCHORAGE DETAILS, CONNECTION DETAILS, SPLICE DETAILS AND TEMPORARY AND PERMANENT BRACING.

## STRUCTURAL ABBREVIATIONS

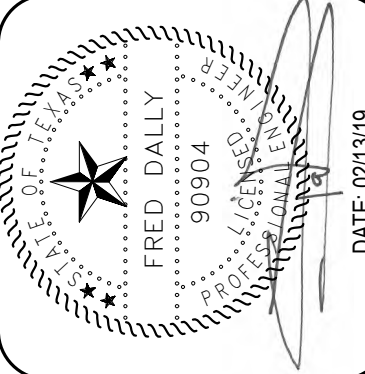
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	ELEC	ELECTRICAL	PLF	POUNDS PER LINEAR FOOT
ACI	AMERICAN CONCRETE INSTITUTE	ELEV	ELEVATOR	PLUMB	PLUMBING
ADDL	ADDITIONAL	EQ	EQUAL(LY)	PROJ	PROJECTION
ADJ	ADJACENT	EW	EACH WAY	PSI	POUNDS PER SQUARE INCH
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	EXIST	EXIST	PSF	POUNDS PER SQUARE FOOT
AISI	AMERICAN IRON AND STEEL INSTITUTE	EXP	EXPANSION	R	RIGHT, RISER, RADIUS
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE	FD	FLOOR DRAIN	RO	ROOF DRAIN
APPROX	APPROXIMATE(LY)	F.F.E.	FINISH FLOOR	RE	REFER
AR	ANCHOR ROD	FND	ELEVATION FOUNDATION	REF	REFERENCE
ARCH	ARCHITECTURAL	FS	FAR SIDE	RENF	REINFORCEMENT (D), (ING), (MENT)
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS	FT	FEET, FOOT	REQD	REQUIRED
ASTM	AMERICAN SOCIETY OF TESTING MATERIALS	FTG	FOOTING	REV	REVISION
AWS	AMERICAN WELDING SOCIETY	GA	GAUGE	RH	RIGHT HAND
BM	BEAM (MILD REINFORCE)	GALV	GALVANIZED	RO	ROUGH OPENING
BC	BOTTOM CHORD	GB	GRADE BEAM	S	SOUTH, SLAB
BLDG	BUILDING	HORIZ	HORIZONTAL	SCHED	SCHEDULE(D)
BOD	BOTTOM OF DECK	HP	HIGH POINT	SDI	STEEL DECK INSTITUTE
BOT	BOTTOM	HR	HOUR	SECT	SECTION
BT	BASE PLATE	HSS	HOLLOW STRUCTURAL SECTION	SF	SQUARE FEET
BRG	BEARING	ID	INSIDE DIAMETER	SHT	SHEET
BPL	BENT PLATE	IN	INCHES	SM	SIMILAR
BS	BOTH SIDES	IT	JOINT	SJI	STEEL JOIST INSTITUTE
C	CHANNEL COMPRESSION	K	KIPS, JOIST SERIES	SL	SLOPE
CAMB	CAMBER	KB	KNEE BRACE	SPA	SPACE
CIP	CAST IN PLACE	L	SPAN, LEFT, STEEL ANGLE	SPEC(S)	SPECIFICATION(S)
CL	CENTER LINE	Ld	DEVELOPMENT LENGTH	SQ	SQUARE
CLR	CLEAR	LG	LENGTH, LONG	STD	STANDARD
COL	COLUMN	LH	LEFT HAND	STF	STIFFENER
CONC	CONCRETE	LL	LIVE LOAD	STR	STIRRUP
CONT	CONTINUOUS	LLBB	LONG LEG BACK TO BACK	STL	STEEL
CPL	CAP PLATE	LLH	LONG LEG HORIZONTAL	STR	STRUCTURAL
CS	CARBON STEEL	LLV	LONG LEG VERTICAL	T	TOP, TENSION
CSJ	CONSTRUCTION JOINT	LP	LOW POINT	T & B	TOP & BOTTOM
CTJ	CONTROL JOINT	LW	LONG WAY	T & G	TONGUE AND GROOVE
D	DEPTH	MC	MOMENT CONNECTION, MISC CHANNEL	TEMP	TEMPERATURE
DET	DETAIL	MAX	MAXIMUM	THK	THICKNESS
DF	DRILLED FOOTING	MATL	MATERIAL	TOC	TOP OF CONCRETE
DIA	DIAMETER	MECH	MECHANICAL	TOF	TOP OF FOOTING
DIAG	DIAGONAL	MFG(S)	MANUFACTURER(S)	TOL	TOP OF EDGE
DIM	DIMENSION	MO	MASONRY OPENING	TOP	TOP OF PANEL
DL	DEAD LOAD	MS	MILD STEEL	TOS	TOP OF STEEL
DN	DOWN	MT	STRUCTURAL TEE CUT FROM MISC STL	TOT	TOTAL
DO	DITTO	N	NORTH	TOW	TOP OF WALL
DWG	DRAWING	NIC	NOT IN CONTRACT	TRO(S)	TREAD(S)
DWL	DOWEL	NO	NUMBER	TOJ	TOP OF JOIST
E	EAST	NOM	NOMINAL	TYP	TYPICAL
EA	EACH	NTS	NOT TO SCALE	UL	UNDERWRITERS LABORATORY
EAF	EACH FACE	OC	ON CENTER	UNF	UNIFORM
EJ	EXPANSION JOINT	OD	OUTSIDE DIAMETER	UNF	UNIFORM
EL	ELEVATION	OPNG	OPENING	UNF	UNIFORM
		OPP	OPPOSITE	WL	WIND LOAD, WATER LEVEL, WORKING LINE
		PL	PLATE	WP	WATER PROOF, WORKING POINT

## STRUCTURAL LEGEND

	PRECAST CONCRETE PANEL		BEAM	CONNECTED TO A ROLLED SHAPE COLUMN WITH A STANDARD WELDED MOMENT CONNECTION STANDARD AISC ROLLED SHAPE BEAM
	SPREAD FOOTING MARK		10K1	STANDARD 'K' SERIES JOIST
	PLINTH MARK		JL	STEEL ANGLE BACK TO BACK
	COLUMN MARK		C	STANDARD ROLLED CHANNEL
	CONTINUOUS WALL FOOTING MARK			HOLLOW STRUCTURAL SECTION
	BASEMENT WALL MARK			STANDARD STEEL PIPE
	RETAINING WALL MARK		Ø	DIAMETER
	BASE PLATE MARK		#	NUMBER (BAR SIZE)
	STRUCTURAL STEEL COLUMN SPLICE TYPE		□	SQUARE
	STRAIGHT SHAFT DRILLED PIER/FOOTING			SLAB DEPRESSION AND AMOUNT
	MILD REINFORCED CONCRETE BEAM MARK		DATUM	ELEVATION FROM DATUM
	MILD REINFORCED CONCRETE JOIST MARK		DM	DIMENSION TO FACE COLUMN GRID OR CENTER LINE
	SPAN DIRECTION OF A MILD REINFORCED CONCRETE SLAB WITH MAIN REINFORCING MARK S1			ANGLE IN DEGREES, MINUTES AND SECONDS
	DECK			REVISION MARK
	SPECIAL OPEN WEB STEEL JOIST 'K' SERIES WITH 5 KIPS END SHEAR			SECTION OR DETAIL REFERENCE (DRAWN AS DETAIL 1 ON SHEET S101)
	STANDARD AISC ROLLED SHAPE OF W27x84 AT ELEVATION 24'-0" FROM DATUM			SECTION OR DETAIL REFERENCE (DRAWN AS DETAIL 1 ON SHEET S101)
	STANDARD AISC ROLLED SHAPE OF W27x84 WITH 1" UPWARD CAMBER			SECTION OR DETAIL REFERENCE (DRAWN AS DETAIL 1 ON SHEET S101)
	STANDARD AISC ROLLED SHAPE OF W27x84 WITH 20 KIPS BEAM END SHEAR			BUILDING GRID LINES "2" AND "B"
	STANDARD AISC ROLLED SHAPE OF W27x84 WITH 10 HEADED SHEAR CONNECTORS EQUALLY SPACED			
	STANDARD AISC ROLLED SHAPE OF W27x84 WITH 20 HEADED SHEAR CONNECTORS EQUALLY SPACED			
	STANDARD AISC ROLLED SHAPE OF W27x84 WITH 10 CONNECTORS / 6 CONNECTORS			
	STANDARD AISC ROLLED SHAPE OF W27x84 WITH 15KIPS OF AXIAL LOADING			

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STRUCTURAL GENERAL CRITERIA  
**10,720 SF Retail Shell**  
SPRING STUEBNER @ SPRING PLAZA  
SPRING, TEXAS 77389

SCALE: NOTED	PROJECT: 19-017	DATE: 02/13/19	<b>S102</b>
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