

**Design Specifications:**

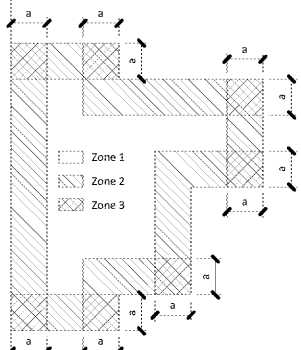
- ASCE 7-10
- AISC 360-05
- AISC 341-05
- AISI S100-07
- ANS/AF&PA NDS-05

**Design Loads:**

<b>Roof Loads:</b>	<b>Wind Loads:</b>	<b>Seismic Loads:</b>	
• Dead Load: 26 psf	• Occupancy: II	• Ie: 1.0	
• Live Load: 20 psf	• Velocity: 115 mph	• Se: 0.078 g	
	• Exposure: C	• S1: 0.038 g	
	• Iw: 1.0	• Site Class: D (Assumed)	
		• Sds: 0.083 g	
		• Sd1: 0.061 g	
		• Seismic Design Category: A	
		• Seismic Force-Resisting System: L.F.S.W.	
		• Design Base Shear: C <sub>s</sub> *W	
		• C <sub>s</sub> : 0.0553	
		• R <sub>t</sub> : 2.5	
		• Analysis Procedure Used: E.L.F.P.	

**Design Loading Notes:**

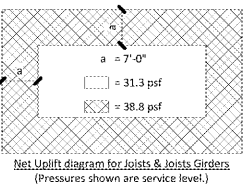
1. Dead load shown includes collateral load of 3 psf.
2. See components and cladding table for design wind pressures.
3. See net uplift diagram for joist due to wind pressures.



Zone	Effective Wind Area (sq ft)	Max. +VE Pressure (psf)	Max. -VE Pressure (psf)
1 - Roof Interior	10	17.9	-44.0
1 - Roof Interior	25	16.4	-42.6
1 - Roof Interior	50	16.0	-41.4
1 - Roof Interior	≥ 100	16.0	-40.3
2 - Roof Edge	10	17.9	-73.9
2 - Roof Edge	25	16.4	-63.5
2 - Roof Edge	50	16.0	-55.6
2 - Roof Edge	≥ 100	16.0	-47.8
3 - Roof Corner	10	17.9	-111.2
3 - Roof Corner	25	16.4	-86.0
3 - Roof Corner	50	16.0	-66.9
3 - Roof Corner	≥ 100	16.0	-47.8
4 - Wall Interior	10	40.3	-43.7
4 - Wall Interior	50	36.2	-39.5
4 - Wall Interior	200	32.6	-35.9
4 - Wall Interior	≥ 500	30.2	-33.6
5 - Wall Edge	10	40.3	-53.7
5 - Wall Edge	50	36.2	-45.4
5 - Wall Edge	200	32.6	-38.3
5 - Wall Edge	≥ 500	30.2	-33.6

**Components & Cladding Wind Zone Diagram**

1. The components & cladding (C&C) wind pressures shown assume a mean roof height of 40'-0" above finished floor elevation. All components shall be designed to resist the provided pressures, which shall be clearly defined on all shop drawings. Refer to wind zone diagram for zone locations. Plus and minus signs signify pressures acting toward and away from surfaces, respectively.



2. The components & cladding wind zone diagram is generalized to show all possible conditions. The diagram shape may not match the specific layout for this project.
3. a = 7 ft
4. Internal Pressure Coefficient = -0.18

- General:**
1. The structural systems shown on these documents have been designed for the final, in place usage of the structure based on the intended occupancy and code requirements. While general constructability has been considered, the structural systems have not been designed to accommodate specific construction means and methods that might be utilized by the Contractor.
  2. The Contractor shall field verify all existing dimensions prior to fabrication.
  3. The Contractor shall notify the Engineer of any observed discrepancies in dimensions, detailing, or other items as shown on the plans or specified prior to proceeding with work relating to said discrepancies.
  4. The Contractor shall not alter or modify work shown on the structural drawings without receiving written approval from the Engineer.
  5. The Contractor shall be responsible for supplying shop drawings for misc. structural steel and post installed anchors. Shop drawings must be reviewed for conformance with the means, methods, techniques, sequences, and operations of construction, and safety precautions and programs incidental thereto, all of which are the sole responsibility of the Contractor, and shall be stamped "approved" by the Contractor prior to submittal. Shop drawings submitted without the Contractor's stamped approval will be returned "rejected". All shop drawings shall be reviewed by the Structural Engineer prior to construction.
  6. See architectural, mechanical, and electrical drawings for other pertinent information related to the structural work and coordinate as required. These structural drawings are intended to be included in a complete set of construction documents, including but not limited to, architectural drawings, civil drawings, and mechanical/electrical/plumbing drawings. Contractor shall verify coordination of these drawings with contents of above drawing sets specified and only proceed with bidding and construction after such has taken place.
  7. The Contractor is responsible for verifying all existing dimensions and conditions of the existing building and reporting discrepancies from the assumed conditions shown on the structural drawings to the Engineer of record prior to fabrication and erection of any member.

**Structural Engineer Site Observations:**

1. The contract structural drawings & specifications represent the finished structure, and exist as shown specifically shown, do not indicate the method or means of construction. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequences.
2. The Engineer shall not have control nor charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures, for safety precautions and programs in connection with the work. The acts or omission of the Contractor, subcontractor, or any other person performing the work, or the failure of any of them to carry out the work in accordance with the contract documents, shall be the responsibility of the Contractor.

**Post-Installed Anchors:**

1. Post-Installed anchors shall only be used where specified in the construction documents.
2. The Contractor shall obtain written approval from the Engineer prior to installing post-installed anchors for mis-placed anchors.
3. Care shall be taken with placing post-installed anchors to avoid damaging existing reinforcement.
4. The holes shall be drilled and cleaned in accordance with the manufacturer's specifications.
5. Post-installed anchors shall meet ACI 318 Appendix D criteria. The following are acceptable post-installed anchors:
  - a. Hilti KIH-EZ
  - b. Powers AC108+ Gold
  - c. Simpson Strong-Tie SET-XP
  - d. Or Approved Equivalent

All adhesive anchoring systems referred to in these drawings shall be one of the following:

- a. Hilti KIH-EZ
- b. Powers Wedge Bolt+
- c. Simpson Strong-Tie Titan HD
- d. Or Approved Equivalent

**Structural Steel:**

1. All structural steel shall conform to the following:

Miscellaneous Steel: ASTM A36

**Light Gauge Metal Framing:**

1. All light gauge structural studs, track and accessories shall be designed in accordance with the latest edition of the American Iron and Steel Institute (AISI) "Specification for the Design of Cold-Formed Steel Structural Members, and shall be of type, size, gage and spacing shown on the drawings.
2. All 16 gage and heavier studs and joists shall be formed from corrosion-resistant steel corresponding to the requirements of ASTM A446, with a minimum yield strength of 50 ksi. All 18 gage and lighter studs, joists, track and accessories shall be formed from corrosion-resistant steel corresponding to the requirements of ASTM A446, with a minimum yield strength of 33 ksi.
3. Prior to fabrication of framing, the Contractor shall submit fabrication and erection drawings to the Architect/Engineer for approval.
4. Prefabricated panels shall be square, with components attached in a manner to prevent racking and minimize distortion while lifting. The Contractor shall provide temporary bracing where required.
5. All framing components shall be cut square for attachment to perpendicular members, or as required, for angular fit against abutting members. Splicing of axial loaded members is not permitted.
6. Axially loaded studs shall be installed in a manner which will assure that their ends are positioned against the inside of the track web prior to fastening. Studs shall be securely fastened to both flanges of the top and bottom track.
7. Fastening of components shall be with self-drilling screws or welding. Wire tying of components shall not be permitted. Screws shall be of sufficient size to ensure the strength of connection. All connections shall be made with a minimum of (2) #10 screws or 1/8" fillet weld two inches long. All welds shall be touched up with a zinc-rich paint.
8. Tracks shall be securely anchored to the supporting structure as shown on the drawings. Abutting lengths of tracks shall be securely anchored to a common structural element, butt-welded or spliced together.
9. Wall stud bridging shall be attached in a manner to prevent stud rotation. Bridging rows shall be spaced according to manufacturer's specifications or recommendations. 4'-0" maximum spacing between rows of bridging.
10. Provision for structure vertical movement shall be provided where indicated on the drawings.
11. Minimum thickness values of framing specified in gage values on drawings are as follows:

Minimum Design Thickness (in.)	Design Thickness (in.)	Inside Corner Radius (in.)	Gage No. (Reference Only)
18	0.0188	0.0843	25
27	0.0283	0.0796	22
30	0.0312	0.0781	20 - Drywall
33	0.0346	0.0764	20 - Structural
43	0.0451	0.0712	18
54	0.0566	0.0849	16
68	0.0713	0.1069	14
97	0.1017	0.1525	12

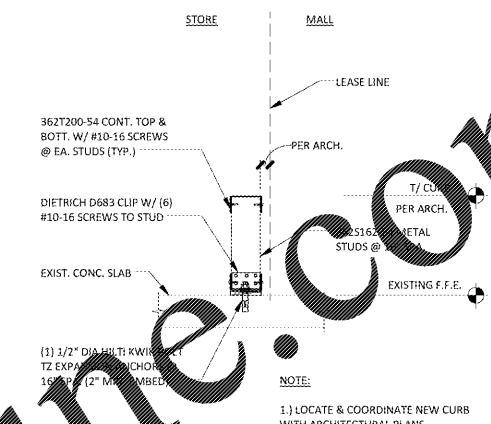
NOTE: Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site based on Section A3.4 of the 1996 AISI Specification.

**Special Inspector:**

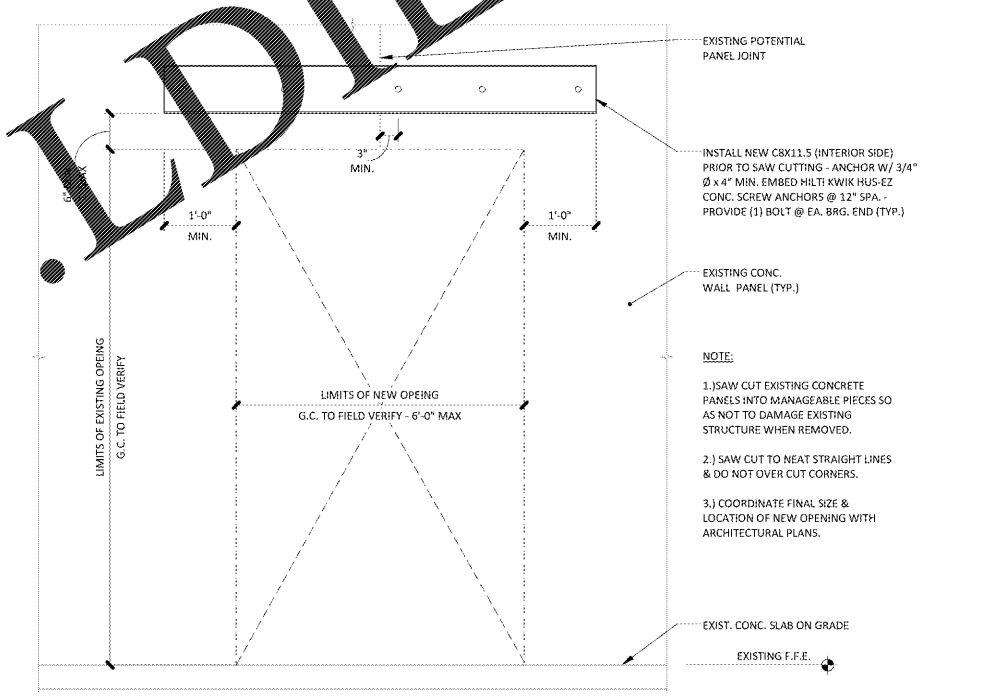
1. The following items require special inspection in accordance with the building code:
  - a. Bolts & anchors embedded in concrete
  - b. Structural steel bolting
  - c. Post-installed anchors in concrete
2. The Contractor shall request special inspection for items listed above prior to those items becoming inaccessible & non-reversible by the erection of the work.
3. The Special Inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, in inspecting the particular type of construction or operation requiring special inspection.
4. The Special Inspector shall observe the work assigned for conformance with the approved design drawings and specifications.
5. The Special Inspector shall furnish inspection reports to the Building Official, the Engineer and Architect of record and other designated persons. All discrepancies shall be brought to the immediate attention of the Contractor for correction, then if uncorrected, to the proper design authority and to the Building Official.
6. The Special Inspector shall submit a final signed report stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the governing building codes.

**ABBREVIATIONS LIST**

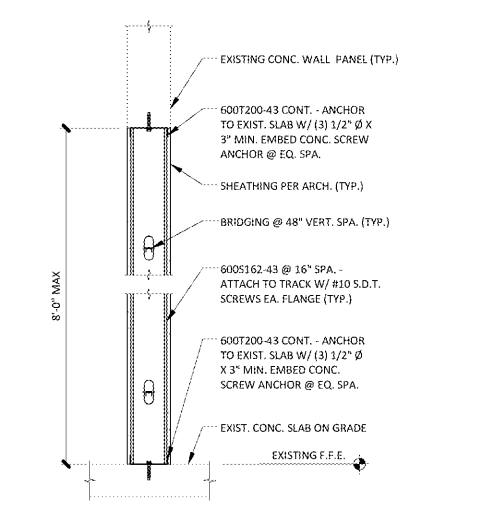
&	AND
@	AT
°	DEGREES
=	EQUALS
'	FEET
>	GREATER THAN
≥	GREATER THAN OR EQUAL TO
"	INCHES
<	LESS THAN
≤	LESS THAN OR EQUAL TO
-	MINUS, NEGATIVE
+	PLUS
±	PLUS OR MINUS
A.F.F.	ABOVE FINISHED FLOOR
ALT.	ALTERNATE
ARCH.	ARCHITECT
BLDG.	BUILDING
BM.	BEAM
B.O.S.	BOTTOM OF STEEL
BOT.	BOTTOM
C.J.	CONTROL/CONSTRUCTION JOINT
C.L.	CENTER LINE
C.M.U.	CONCRETE MASONRY UNIT
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
COORD.	COORDINATE
CTR.	CENTER
DIA.	DIAMETER
DN.	DOWN
DWG.	DRAWING
E.J.	EXPANSION JOINT
E.O.R.	ENGINEER OF RECORD
EA.	EACH
EL.	ELEVATION
ELEV.	ELEVATION
ENG.	ENGINEER
EQ.	EQUAL
EQUIP.	EQUIPMENT
ET CETERA	ET CETERA
EXIST.	EXISTING
EXT.	EXTERIOR
F.A.	FACE
F.B.E.	FOOTING BEARING ELEVATION
F.F.E.	FINISHED FLOOR ELEVATION
F.S.	FAR SIDE
FT.	FOOT/FEET
FTG.	FOOTING/FOUNDATION
G.C.	GENERAL CONTRACTOR
GALV.	GALVANIZED
GYP.	GYP-SIM
HORIZ.	HORIZONTAL
IN.	INCHES
I.B.E.	JOIST BEARING ELEVATION
JO.	JOINT
L.F.	LINEAR FEET
LB.	POUND
L.H.	LONG LEG HORIZONTAL
L.L.V.	LONG LEG VERTICAL
M.B.M.	METAL BUILDING MANUFACTURER
M.E.P.	MECHANICAL ELECTRICAL PLUMBING
MAX.	MAXIMUM
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.A.	NOT APPLICABLE
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
Ø	DIAMETER
P.E.M.E.	PROFESSIONAL ENGINEERED MECHANICAL ENGINEERING
PL.	PLAIN
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
R	RADIUS
REQ.	REQUIRED
SF	SQUARE FEET
SIM.	SIMILAR
SPAL	SPACING
SPEC.	SPECIFICATION
SQ.	SQUARE
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
THRU.	THROUGH
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W.W.F.	WELDED WIRE FABRIC
WT.	WEIGHT
W/	WITH
W/O	WITHOUT



TYPICAL CURB DETAIL | 01  
3/4" = 1'-0" S1.0



TYPICAL NEW OPENING IN EXIST. CONCRETE WALL PANEL - LINTEL DETAIL | 02  
3/4" = 1'-0" S1.0



TYPICAL METAL STUD INFILL - 4'-0" MAX OPENING | 03  
3/4" = 1'-0" S1.0

**NEW STORE**

**OLD NAVY**

REPS. I.D.: 0000054156

STORE NUMBER: 4458

STORE LOCATION: VINELAND 8231 VINELAND AVENUE SUITE 2151 ORLANDO, FLORIDA

DESIGN TYPE: P3  
GENERATION: 170/12  
PROTO TYPE DATE: 07/18/16  
OPENING: 2017

CONSULTANT INFO:  
**BSE STRUCTURAL ENGINEERS**  
BSE Structural Engineers LLC  
11320 West 9th Street  
Lenexa, Kansas 66214  
Phone: 913.492.7400  
www.BSEStructural.com  
Project No: 17-100

PROFESSIONAL STAMP:  
STEPHEN R. BURSE  
LICENSE  
No. 0054308  
FLORIDA  
PROFESSIONAL ENGINEER

ARCHITECT INFO:  
**B | R | R**  
ARCHITECT OF RECORD: BBR ARCHITECTURE, INC.  
6700 ANTHONY PLAZA, SUITE 300, MERRIAM, KANSAS 66204

ISSUE TYPE:  
PERMIT/BID: 04/07/17

REVISIONS:

DRAWN BY: JCO  
A/E JOB NUMBER: 65013011

TITLE SHEET:  
**GENERAL NOTES & TYPICAL DETAILS**  
SHEET NUMBER: S1.0

Order Plans @