

STIPULATION FOR REUSE
 ANY DRAWING REUSED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS AT THE USER'S RISK. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN ANY REUSED DRAWING. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR OBTAINING ALL NECESSARY INFORMATION FROM THE ORIGINAL PROJECT RECORDS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE ORIGINAL PROJECT RECORDS. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INFORMATION FROM THE ORIGINAL PROJECT RECORDS.

CONSULTANTS
ELISON GAGE & ASSOCIATES, PLLC
 1000 W. BROADWAY, SUITE 100
 CHARLOTTE, NC 28202
 (704) 375-1000
 ENGINEER OF RECORD

ANDERSON, SOUTH CAROLINA
 CLUB NO: 6463
 JOB NUMBER: 184003
 PHOTO: 5048-102

ISSUE BLOCK

CHECKED BY: BKE
 DRAWN BY: MRW
 PROTO CYCLE: 10/26/19
 DOCUMENT DATE: 08/09/19

NOT FOR CONSTRUCTION

GENERAL STRUCTURAL INFORMATION

SHEET: FSS0

LDILine.com

STATEMENT OF SPECIAL INSPECTIONS

SPECIAL INSPECTIONS ARE REQUIRED TO BE PERFORMED BY THE OWNER'S CONSTRUCTION TESTING LABORATORY (CTL). REFER TO APPENDIX B OF THE PROJECT SPECIFICATIONS FOR THE FOLLOWING INFORMATION REGARDING THE REQUIREMENTS OF SPECIAL INSPECTIONS:

1. THE MATERIALS, SYSTEMS, COMPONENTS AND WORK REQUIREMENTS TO HAVE SPECIAL INSPECTIONS
2. THE TYPE AND EXTENT OF EACH SPECIAL INSPECTION
3. THE TYPE AND EXTENT OF EACH TEST
4. ADDITIONAL SPECIAL INSPECTION REQUIREMENTS AND/OR SEISMIC RESISTANCE (WHEN APPLICABLE)
5. THE FREQUENCY OF SPECIAL INSPECTIONS AND TESTS

THE SPECIAL INSPECTION REQUIREMENTS ARE BASED ON CHAPTER 10 OF THE IBC. THE EXEMPTIONS ALLOWED FOR CONSTRUCTION ON CHAPTER 10 OF THE IBC, THE EXEMPTIONS ALLOWED FOR CONSTRUCTION ON CHAPTER 10 OF THE IBC, THE EXEMPTIONS ALLOWED FOR CONSTRUCTION ON CHAPTER 10 OF THE IBC.

DESIGN LOADS

1. BUILDING CODE	2015 IBC
A. DESIGN CODE	2015 IBC
2. SERVICE BUILDING GRAVITY LOADS	PER SERVICE BLDG MFR
A. DEAD LOADS	PER SERVICE BLDG MFR
B. LIVE LOADS	20 PSF MIN OR SNOW LOAD
C. SNOW LOADS	10 PSF
1. GROUND SNOW LOAD (Pg)	10 PSF
2. IMPORTANCE FACTOR (I)	PER SERVICE BLDG MFR
3. SNOW EXPOSURE FACTOR (Ce)	PER SERVICE BLDG MFR
4. ROOF THERMAL FACTOR (Ct)	PER SERVICE BLDG MFR
5. FLAT ROOF SNOW LOAD (P)	PER SERVICE BLDG MFR
3. SERVICE BUILDING LATERAL LOADS	115 MPH
A. WIND LOADS	90 MPH
1. WIND SPEED (3-SECOND GUST)	115 MPH
• ULTIMATE DESIGN WIND SPEED	90 MPH
• BASIC DESIGN WIND SPEED (SERVICE)	90 MPH
2. WIND EXPOSURE CATEGORY	C
3. RISK CATEGORY	PER SERVICE BLDG MFR
4. INTERNAL PRESSURE COEFFICIENT (GC2)	PER SERVICE BLDG MFR
B. SEISMIC LOADS	0.278
1. 5% DAMPED MAPPED ACCELERATION PARAMETER (SS)	0.278
2. 1-SEC PERIOD MAPPED ACCELERATION PARAMETER (S1)	0.106
3. 5% DAMPED SPECTRAL RESPONSE COEFF. (SDS)	0.293
4. 1-SEC PERIOD SPECTRAL RESPONSE COEFF. (SD1)	0.168
5. SITE CLASS	D
6. RISK CATEGORY	PER SERVICE BLDG MFR
7. SEISMIC IMPORTANCE FACTOR (Ie)	PER SERVICE BLDG MFR
8. SEISMIC DESIGN CATEGORY	PER SERVICE BLDG MFR
9. BASIC SEISMIC FORCE RESISTING SYSTEM	PER SERVICE BLDG MFR
10. ANALYSIS PROCEDURE	PER SERVICE BLDG MFR
11. SEISMIC RESPONSE COEFFICIENT (Cs)	PER SERVICE BLDG MFR
12. RESPONSE MODIFICATION COEFFICIENT (R)	PER SERVICE BLDG MFR
13. DESIGN BASE SHEAR (V)	PER SERVICE BLDG MFR
4. CANOPY GRAVITY LOADS	PER CANOPY MFR
A. DEAD LOADS	PER CANOPY MFR
B. LIVE LOADS	20 PSF MIN OR SNOW LOAD
1. CANOPY ROOF LIVE LOAD	20 PSF MIN OR SNOW LOAD
C. SNOW LOADS	10 PSF
1. GROUND SNOW LOAD (Pg)	10 PSF
2. IMPORTANCE FACTOR (I)	PER CANOPY MFR
3. SNOW EXPOSURE FACTOR (Ce)	PER CANOPY MFR
4. ROOF THERMAL FACTOR (Ct)	PER CANOPY MFR
5. FLAT ROOF SNOW LOAD (P)	PER CANOPY MFR
6. LOAD COMBINATIONS WITH SNOW LOAD SHALL ALSO INCLUDE LOADS FROM HIGH/LOW ROOF DRIFTING FROM MAIN BUILDING ROOF. PER CODE.	
5. CANOPY LATERAL LOADS	115 MPH
A. WIND LOADS	90 MPH
1. WIND SPEED (3-SECOND GUST)	115 MPH
• ULTIMATE DESIGN WIND SPEED	90 MPH
• BASIC DESIGN WIND SPEED (SERVICE)	90 MPH
2. WIND EXPOSURE CATEGORY	C
3. RISK CATEGORY	PER CANOPY MFR
B. SEISMIC LOADS	0.278
1. 5% DAMPED MAPPED ACCELERATION PARAMETER (SS)	0.278
2. 1-SEC PERIOD MAPPED ACCELERATION PARAMETER (S1)	0.106
3. 5% DAMPED SPECTRAL RESPONSE COEFF. (SDS)	0.293
4. 1-SEC PERIOD SPECTRAL RESPONSE COEFF. (SD1)	0.168
5. SITE CLASS	D
6. RISK CATEGORY	PER CANOPY MFR
7. SEISMIC IMPORTANCE FACTOR (Ie)	PER CANOPY MFR
8. SEISMIC DESIGN CATEGORY	PER CANOPY MFR
9. BASIC SEISMIC FORCE RESISTING SYSTEM	PER CANOPY MFR
10. ANALYSIS PROCEDURE	PER CANOPY MFR
11. SEISMIC RESPONSE COEFFICIENT (Cs)	PER CANOPY MFR
12. RESPONSE MODIFICATION COEFFICIENT (R)	PER CANOPY MFR
13. DESIGN BASE SHEAR (V)	PER CANOPY MFR

FOUNDATION SUBSURFACE PREPARATION

UNLESS SPECIFICALLY INDICATED OTHERWISE IN THE DRAWINGS AND/OR SPECIFICATIONS, THE LIMITS OF THE SUBSURFACE PREPARATION ARE CONSIDERED TO BE THAT PORTION OF THE SITE DIRECTLY BENEATH AND 2.5 FEET BEYOND THE FUEL STATION SERVICE BUILDING AND CANOPY FOUNDATIONS, AND DIRECTLY BENEATH AND 2.5 FEET BEYOND CANOPY SERVICE BUILDING SLABS. THE LIMITS OF SUBSURFACE PREPARATION SHALL BE SLOPED AWAY FROM THE 2.5 FOOT PERIMETER AT A MINIMUM 1:1 SLOPE.

THE SERVICE BUILDING AND CANOPY FOUNDATIONS, OVER-EXCAVATE TO A MINIMUM OF 12 INCHES BELOW THE BOTTOM OF FOUNDATIONS, 18 INCHES BELOW EXISTING SITE GRADE, OR THE DEPTH REQUIRED TO REMOVE UNDOCUMENTED FILLS, WHICHEVER IS GREATER. THE BOTTOM OF EXCAVATION SHALL BE SCARIFIED 6 INCHES, MOISTURE CONDITIONED TO BETWEEN 1 AND 4 PERCENT ABOVE OPTIMUM AND COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY (ASTM D698). ENGINEERED FILL SHALL BE PLACED TO A MINIMUM OF 1 FOOT BELOW FOUNDATIONS. REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED FOUNDATION THICKNESS.

AT THE SERVICE BUILDING AND CANOPY SLABS, OVER-EXCAVATE TO A MINIMUM OF 12 INCHES BELOW THE BOTTOM OF FOUNDATIONS, 18 INCHES BELOW EXISTING SITE GRADE, OR THE DEPTH REQUIRED TO REMOVE UNDOCUMENTED FILLS, WHICHEVER IS GREATER. THE BOTTOM OF EXCAVATION SHALL BE SCARIFIED 6 INCHES, MOISTURE CONDITIONED TO BETWEEN 1 AND 4 PERCENT ABOVE OPTIMUM AND COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY (ASTM D698). ENGINEERED FILL SHALL BE PLACED TO A MINIMUM OF 1 FOOT BELOW FOUNDATIONS. REFERENCE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR REQUIRED FOUNDATION THICKNESS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ACCURATE MEASUREMENTS FOR ALL OUT AND FILL DEPTHS REQUIRED. ANY PROPOSED EQUIVALENT ALTERNATIVE BASE MATERIAL MUST BE SUBMITTED FOR APPROVAL WITHIN 30 DAYS AFTER AWARD OF CONTRACT. ANY EQUIVALENT ALTERNATIVE SHALL ONLY BE USED IF APPROVED IN WRITING BY THE CEC AND AOR.

EXISTING FOUNDATIONS, SLABS, PAVEMENTS, AND BELOW-GRADE STRUCTURES SHALL BE REMOVED FROM THE FUEL STATION AREA. REMOVE SURFACE VEGETATIONS, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING FILL, AND SOFT OR OTHERWISE UNSATISFACTORY MATERIAL FROM THE FUEL STATION AREA. PROOFROLL EXPOSED SUBGRADE. REMOVE AND REPLACE UNSATISFACTORY AREAS WITH SATISFACTORY MATERIAL. SUBGRADE MATERIAL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIALS AND SHALL MEET THE FOLLOWING REQUIREMENTS:

LOCATION	P.I.	LL
FUEL STATION SERVICE BUILDING AREA	20 MAX	40 MAX
FUEL STATION CANOPY FOUNDATIONS	20 MAX	40 MAX
FUEL STATION CANOPY SLAB	20 MAX	40 MAX

SUBGRADE MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 95 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) AT A MOISTURE CONTENT WITHIN 1 PERCENT ABOVE TO 4 PERCENT ABOVE THE OPTIMUM.

THE FOUNDATION SYSTEM SHALL BE ISOLATED SPREAD FOOTINGS AT CANOPY COLUMNS AND SERVICE BUILDING.

THIS FOUNDATION SUBSURFACE PREPARATION DOES NOT CONSTITUTE A COMPLETE SITE WORK SPECIFICATION. IN CASE OF CONFLICT, INFORMATION COVERED IN THIS PREPARATION SHALL TAKE PRECEDENCE OVER THE WALKMART SPECIFICATIONS. REFER TO THE SPECIFICATIONS FOR SPECIFIC INFORMATION NOT COVERED IN THIS PREPARATION. THIS INFORMATION WAS TAKEN FROM A GEOTECHNICAL REPORT PREPARED BY SALEM ENGINEERING GROUP, INC., DATED FEBRUARY 4, 2019 (GEOTECHNICAL REPORT IS FOR INFORMATION ONLY AND IS NOT A CONSTRUCTION SPECIFICATION).

(07/22/19)

ABBREVIATIONS

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AFF	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ARCH	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWG	AMERICAN WELDING SOCIETY
BFF	BELOW FINISHED FLOOR
BL	BLOCK LINTEL
BM	BEAM
BO	BOTTOM OF
BOM	BOTTOM OF MASONRY
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
CJ	CONTRACTION JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
COND	CONDENSER UNIT
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
DA	DIAMETER
EA	EACH
EDC	ELECTRICAL DISTRIBUTION CENTER
EF	EACH FACE OF EXHAUST FAN
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EW	EACH WAY
FDN	FOUNDATION
FF	FINISHED FLOOR
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
GA	GAUGE
GC	GENERAL CONTRACTOR
GYP	GYP SUM BOARD
H	HEIGHT
HORIZ	HORIZONTAL
H2A	HEADED STUD ANCHOR
HSS	HOLLOW STRUCTURAL SECTION
INFO	INFORMATION
ISO	ISOLATION
JBE	JOIST BEARING ELEVATION
JB	JOIST
JT	JOINT
KSI	KIPS PER SQUARE INCH
L	LENGTH
LB	POUNDS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LSH	LONG SIDE HORIZONTAL
LSV	LONG SIDE VERTICAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTL	METAL
NBS	NOT BY PRECAST SUPPLIER
NIC	NOT IN CONTRACT
NS	NEAR SIDE
NYS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OPG	OPENING
PAF	POWER ACTUATED FASTENER
PC	PRECAST
PCF	POUNDS PER CUBIC FOOT
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLUMB	PLUMB
PMEJ	PREMOB EXPANSION JOINT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
RCU	REINTE CONDITIONING UNIT
REF	REFER TO
REIN	REINFORCING
REQ	REQUIRED
REV	REVERSE
RO	ROUGH OPENING
RTU	ROOF TOP UNIT
SCHED	SCHEDULE
SDI	STEEL DECK INSTITUTE
SIM	SIMILAR
SJI	STEEL JOIST INSTITUTE
SPCS	SPACES
SPECS	SPECIFICATIONS
STL	STEEL
STRUC	STRUCTURAL
T&B	TOP AND BOTTOM
THK	THICKNESS
TO	TOP OF
TOP	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOGB	TOP OF GRADE BEAM
TOM	TOP OF MASONRY
TOP	TOP OF PAVING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TY	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W	WIDTH
WH	WATER HEATER
WP	WORK POINT