

**TABLE 5-1 FLOOD HAZARD INFORMATION & FLOOD LOADS**

**FLOOD HAZARD AREA**

Flood Map Information: Flood Zone: \_\_\_\_\_ Community Number: \_\_\_\_\_  
 Is the Project Site in a 100-Year Flood Plain? Yes  No  Panel Number: \_\_\_\_\_  
 Base Flood Elevation \_\_\_\_\_ MSL NGVD or FIRM  
 Design Flood Elevation \_\_\_\_\_ MSL IBC 1612.3 and ASCE 24

**NON HIGH-VELOCITY WAVE ACTION**

Elevation of Lowest Proposed Floor \_\_\_\_\_ MSL Meet ASCE 24 Section 2.6.2.1/ 2.6.2.2  
 Dry floodproofing Yes  No  per ASCE 24

**HIGH-VELOCITY WAVE ACTION**

Elevation of bottom of Lowest Horizontal Structural Member of lowest floor \_\_\_\_\_ MSL  
 Flotation resistant Yes  No  per ASCE 24  
 Breakaway wall Yes  No  per ASCE 24

IBC 1612 and SE-~~900~~510, as applicable

**ZONING CERTIFICATION**

"I hereby certify that, to the best of my knowledge, these plans comply with applicable zoning ordinances, and that plans have been submitted to appropriate authority for their review and/or approval."

Signed: \_\_\_\_\_ Date \_\_\_\_\_  
 Architect/Engineer

If the project does not require a National Pollution Discharge Elimination System (NPDES) permit from SCDHEC, include the following certification on the Site Plan(s):

**EROSION AND SEDIMENT REDUCTION/STORMWATER MANAGEMENT**

Designer's Certification:

"I hereby certify that the measures in this plan are designed to control erosion, retain sediment on the site, and manage stormwater in a manner that neither any on-site nor off-site damage or problem is caused or increased, that all structural measures are designed to the minimum standards for health and safety, and that all the provisions of the plan are in compliance with the Regulations contained in Chapter 72, Article 2, SC Code of Regulations (Erosion and Sediment Reduction and Stormwater Management Regulations)."

Signed: \_\_\_\_\_ Date \_\_\_\_\_  
 Engineer or Registered Landscape Architect (Circle one)

<b>TABLE 5-2 SOILS &amp; SITE</b>			
<b>SOILS INVESTIGATION</b> (If required)	Yes <input type="checkbox"/>	No <input type="checkbox"/>	per IBC 1803.2
<b><u>SOILS CLASSIFICATION</u></b>			
Site Class	_____		per IBC 1613.3.2
Classes Soil of Materials (UCS System)	_____		per IBC 1803.5.1
Allowable Footing Bearing Pressure	_____	psf	
<b>MINIMUM DESIGN SOIL BEARING LOAD</b>	_____	psf	per IBC table 1806.2
<b><u>COMPACTION</u></b>			
Subgrade: _____ Percent	<input type="checkbox"/>	ASTM D698	<input type="checkbox"/>
		ASTM D1557	<input type="checkbox"/>
		AASHTO (only for paving & roads)	
Base: _____ Percent	<input type="checkbox"/>	ASTM D698	<input type="checkbox"/>
		ASTM D1557	<input type="checkbox"/>
		AASHTO (only for paving & roads)	
Other: _____ Percent	<input type="checkbox"/>	ASTM D698	<input type="checkbox"/>
		ASTM D1557	<input type="checkbox"/>
		AASHTO (only for paving & roads)	
<b>MINIMUM DESIGN SOIL LATERAL LOAD</b>	_____	psf	per IBC 1610.1
<b><u>FOOTINGS</u></b>			
Undisturbed footings	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Compacted Fill Material	Yes <input type="checkbox"/>	No <input type="checkbox"/>	per IBC 1804.56
<b><u>ELEVATIONS</u></b>			
Elevation of Water Table:	_____		MSL
Elevation of lowest footing:	_____		MSL
Elevation of lowest floor or basement:	_____		MSL

**NOTE:** Where a fire wall is necessary to separate buildings, each building is to be provided individual code criteria tables 5-3 through 5-14. See IBC 503.1.2.

<b>TABLE 5-3 BASIC BUILDING CODE INFORMATION</b>			
<b>CONSTRUCTION TYPE CLASSIFICATION</b>	Type: _____ (IBC 602)		
<b>OCCUPANCY CLASSIFICATION</b> (indicate all) (Note IBC <del>506.5</del> 504.2)	_____ (IBC 302)		
<b><u>MOST RESTRICTIVE OCCUPANCY GROUP</u></b> (indicate most restrictive) <b><u>CLASSIFICATION</u></b>	_____ (IBC <del>Table 503</del> Tables 504.3, 504.4 & 506.2)		
Does building require Incidental Use Area Separation?	Yes <input type="checkbox"/> No <input type="checkbox"/>	(IBC 509.1)	
Does building have Accessory Occupancy (ies)? If so, what percent of story is Accessory Occupancy?	Yes <input type="checkbox"/> No <input type="checkbox"/>	(IBC 508.2)	_____ SF _____ %
Mixed Occupancy	Yes <input type="checkbox"/> No <input type="checkbox"/>	(IBC 508)	
Non separated	Yes <input type="checkbox"/> No <input type="checkbox"/>	(IBC 508.3)	
Separated	Yes <input type="checkbox"/> No <input type="checkbox"/>	<del>(IBC 508.4)</del> <del>(IBC 506.5)</del> <u>(IBC 506.2.2)</u> <u>(IBC 506.2.4)</u>	
<u>Fire Apparatus Access and Water Line</u>	<u>Yes <input type="checkbox"/> No <input type="checkbox"/></u>	<u>(IFC 503 &amp; 507)</u>	
<b>OTHER FIRE PROTECTION SYSTEMS, DEVICES or FEATURES</b> If the building has any special or notable fire protection or safety feature or hazard the designers should list them here, describe the performance characteristics and refer to locations in construction documents. (e.g. fire extinguishers, smoke-evacuation/control/compartments. Note IBC 414.1.3.)			

TABLE 5-4 BUILDING AREA	
<b>AREA LIMIT BY TABLE 503.506.2 OF IBC</b> (Do not indicate increases for sprinklers & street frontage.)	_____ SF (area limitation per story)
<b>AREA INCREASES BY SECTION 506.2 AND 506.3 OF IBC</b>  <b>EXPLANATION OF INCREASES:</b> _____	_____ SF (maximum modified area per story)
<b>AREA MODIFICATION FROM EQUATION 5-1 OF AS ALLOWED IN IBC PER STORY</b> (Insert equation from IBC 506.1 with completed calculations in this box. Repeat equation for each story of differing occupancies, IBC 506.5.2.)  Story/Level: _____ Occupancy: _____ _____ _____ Story/Level: _____ Equation 5-1: $Aa = At + [At \times If] + [At \times Is]$ ..... Is].....  Story/Level: _____ Occupancy: _____ _____ _____ Equation 5-1: $Aa = At + [At \times If] + [At \times Is]$ .....  Story/Level: _____ Occupancy: _____ _____ _____ Equation 5-1: $Aa = At + [At \times If] + [At \times Is]$ .....  Story/Level: _____ Occupancy: _____ _____ _____ Equation 5-1: $Aa = At + [At \times If] + [At \times Is]$ .....  Aa = Allowable area per story (square feet). At = Tabular area per story in accordance with Table 503 If = Area increase factor due to frontage (percent) as calculated in accordance with Section 506.2.  Is = Area increase due to sprinkler protection as calculated in accordance with Section 506.3.	_____ SF (maximum modified area per story)  _____ SF (maximum modified area per story)  _____ SF (maximum modified area per story)  _____ SF (maximum modified area per story)
<b>TOTAL ALLOWED AREA OF BUILDING</b> (summary of all stories)	_____ SF
<b>AREA AS DESIGNED PER STORY</b>  Story/Level: _____ Story/Level: _____ Story/Level: _____ Story/Level: _____	_____ SF (area per story) _____ SF (area per story) _____ SF (area per story) _____ SF (area per story)
<b>TOTAL DESIGNED AREA OF BUILDING</b>	_____ SF

TABLE 5-5 BUILDING HEIGHT				
	AS DESIGNED		AS ALLOWED BY IBC	
	In Feet	In Stories	In Feet	In Stories

<del>Without any Allowable Increase (per IBC Table 503)PER TABLE 504.3</del>	_____	<del>N/A</del> _____	_____	<del>N/A</del> _____
<del>Allowable Height Increase (per IBCPER TABLE 504.2)4</del>	<del>N/A</del> _____	_____	<del>N/A</del> _____	_____
Total Height, including any Allowable Increase	_____	_____	_____	_____

**TABLE 5-6 BUILDING DESIGN OCCUPANT LOAD**

		A	B	C	D
STORY/ LEVEL	FUNCTION OF SPACE <sup>(1)</sup>	FLOOR AREA <sup>(2)</sup> (NSF or GSF)	MAX AREA ALLOWED PER OCCUPANT <sup>(3)</sup> (NSF or GSF)	OCCUPANTS ON FLOOR FOR THIS FUNCTION <sup>(4)</sup>	DESIGN OCCUPANT LOAD <sup>(5)</sup>
—	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	<b>Subtotal Design Occupant Load for This Story</b>				
—	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	<b>Subtotal Design Occupant Load for This Story</b>				
—	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	<b>Subtotal Design Occupant Load for This Story</b>				
—	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	—	—	—	—	
	<b>Subtotal Design Occupant Load for This Story</b>				
<b>TOTAL BUILDING DESIGN OCCUPANT LOAD</b>					— <sup>(6)</sup>

**FOOTNOTES:**

1. Provide the complete name of the Function of Space using the left column of Table 1004.1.2 of the IBC <sup>(1)</sup>
2. Design Area per each occupant of this Function on this Story in either Gross (GSF) or Net (NSF) Square Footage <sup>(2)</sup>
3. Allowed Floor Areas in SF per Occupant per right column in Table 1004.1.2 of the IBC <sup>(3)</sup>
4. Divide Column A (2) by Column B (3) for each function and enter result, rounded up to the nearest whole person <sup>(4)</sup>
5. Subtotal all Column C values for this floor to yield the Design Occupant Load <sup>(5)</sup>
6. Total Building Design Occupant Load –sum of all Column D value <sup>(6)</sup>

<b>TABLE 5-7 GENERAL FIRE PROTECTION REQUIREMENTS</b>		
<b>SEPARATIONS</b>		
Fireblocking Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC Section 718
Draftstopping Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC Section 718
Smoke Control System Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC Section 909
Smoke Barriers Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC <del>Sections</del> Section 407 and 408
Smoke Partitions Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC Section 407 <del>and 408</del>
Fire Partition Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC Section 708
Fire Barrier Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IBC Section 707
<b>ALARM &amp; DETECTION</b>		
Fire Alarm System Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC Section 907
Emergency Alarm System Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC 908
<b>SUPPRESSION</b>		
Standpipes Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC Section 905
Sprinklers Required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC Section 903
Sprinklers Provided	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____
Portable extinguishers required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC 906
Other suppression systems required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC 904
Smoke & heat vents required	Yes <input type="checkbox"/> No <input type="checkbox"/>	per IFC 910
<b>OTHER: (Indicate other provided fire and life safety features not listed above, if any)</b>		
_____		
_____		
_____		
_____		
_____		

**TABLE 5-8 FIRE RESISTANCE RATING OF BUILDING ELEMENTS**

BUILDING ELEMENT	RATING AS REQUIRED (in hours)	RATING AS DESIGNED (in hours)	TESTING AGENCY & DESIGN NO. (UL, FM, etc)	DESIGNERS WALL/PARTITION KEY CODE
<u>Primary</u> Structural Frame (per IBC Table 601)	—	—	—	
Bearing Walls Exterior Interior (per IBC Table 601)	— =	— =	— =	— =
Nonbearing Walls & Partitions Exterior Interior (per IBC Table 601 & 602) Note footnote “e.” from <del>table</del> Table 601.	— =	— =	— =	— =
Floor Construction including supporting beams & joists (per IBC Table 601)	—	—	—	
Roof Construction including supporting beams & joists (per IBC Table 601)	—	—	—	
Fire Walls (per IBC Section 706)	—	—	—	—
Fire Barriers (per IBC Section 707)	—	—	—	—
Shaft Enclosures (per IBC Section 713)	—	—	—	—
Fire Partitions (per IBC Section 708)	—	—	—	—
Opening & Protective Listing by Category (fire shutters, doors, etc. per IBC Section 716)	—	—	—	—
Others (as required by Designer)	—	—	—	—



**TABLE 5-10 PLUMBING INFORMATION**

<b><u>WATER SYSTEM:</u></b> Service Line Size: _____ Inches				
Peak Flow: _____ GPM				
Total Demand: _____ No. Fixture Units				
<b><u>SANITARY SEWER SYSTEM:</u></b> Loading: _____ GPD				
Service Line Size: _____ Inches				
Slope: _____ min inches/ft				
<b><u>MINIMUM PLUMBING FIXTURES REQUIRED/PROVIDED</u></b> (Per IPC Section 403 & Table 403.1)				
Occupancy Classification(s) (as shown in Table 5-3): _____				
Total Building Design Occupant Load (as shown in Table 5-6): _____				
<b>1.</b> Occupancy: _____ Total Load for this Occupancy: _____ Male: _____ Female: _____				
	<b>Male-REQUIRED</b>	<b>Male-PROVIDED</b>	<b>Female-REQUIRED</b>	<b>Female-PROVIDED</b>
Water Closets	_____	_____	_____	_____
Lavatories	_____	_____	_____	_____
Urinals*	_____	_____	_____	_____
<b>OTHER FIXTURES (Per IPC Section 403 &amp; Table 403.1)</b>			<b>REQUIRED</b>	<b>PROVIDED</b>
Drinking Fountains			_____	_____
Unisex Toilet			_____	_____
Service Sink			_____	_____
Other (list) _____			_____	_____
<b>2.</b> Occupancy: _____ Total Load for this Occupancy: _____ Male: _____ Female: _____				
	<b>Male-REQUIRED</b>	<b>Male-PROVIDED</b>	<b>Female-REQUIRED</b>	<b>Female-PROVIDED</b>
Water Closets	_____	_____	_____	_____
Lavatories	_____	_____	_____	_____
Urinals*	_____	_____	_____	_____
<b>OTHER FIXTURES (Per IPC Section 403 &amp; Table 403.1)</b>			<b>REQUIRED</b>	<b>PROVIDED</b>
Drinking Fountains			_____	_____
Unisex Toilet			_____	_____
Service Sink			_____	_____
Other (list) _____			_____	_____
<b>3.</b> Occupancy: _____ Total Load for this Occupancy: _____ Male: _____ Female: _____				
	<b>Male-REQUIRED</b>	<b>Male-PROVIDED</b>	<b>Female-REQUIRED</b>	<b>Female-PROVIDED</b>
Water Closets	_____	_____	_____	_____
Lavatories	_____	_____	_____	_____
Urinals*	_____	_____	_____	_____
<b>OTHER FIXTURES (Per IPC Section 403 &amp; Table 403.1)</b>			<b>REQUIRED</b>	<b>PROVIDED</b>
Drinking Fountains			_____	_____
Unisex Toilet			_____	_____
Service Sink			_____	_____
Other (list) _____			_____	_____

\* Urinals – See IPC 419.2

**TABLE 5-11 MECHANICAL INFORMATION**

**AIR COMFORT SYSTEMS**

Overall Thermal Transfer Value (OTTV): \_\_\_\_\_ BTU/(HR x °F x SF)  
 Building Cooling Load: \_\_\_\_\_ SF / Ton  
 Building Heating Load: \_\_\_\_\_ BTU/(HR x SF)

**OTHER LOADING FEATURES**

Glass: \_\_\_\_\_ U Factor: \_\_\_\_\_ Window to wall ratio: \_\_\_\_\_  
 Insulation Values: \_\_\_\_\_ Roof: \_\_\_\_\_ Exterior Walls: \_\_\_\_\_

Outside Air minimum while occupied: \_\_\_\_\_ CFM \_\_\_\_\_ Occupants

**MECHANICAL SYSTEMS, SERVICE SYSTEMS & EQUIPMENT**

Briefly describe mechanical system: \_\_\_\_\_

(The above data shall be considered a minimum and any special attribute required to meet the mechanical codes.)

**TABLE 5-12 ELECTRICAL INFORMATION**

**SERVICE TRANSFORMER:**       By Utility Company       By Agency  
 (if by Agency) \_\_\_\_\_ KVA Primary  
 \_\_\_\_\_ Voltage/Phase

**ELECTRICAL SERVICE INFORMATION**

Service Voltage/Phase: \_\_\_\_\_ Amperes  
 Service Entrance Conductors Size: \_\_\_\_\_ Quantity per Phase  
 Total Connected Load: \_\_\_\_\_ KVA  
 Estimated Maximum Demand: \_\_\_\_\_ KVA  
 Available Fault Current in Symmetrical Amperes: \_\_\_\_\_  
 Interrupting Capacity of Service Overcurrent Device: \_\_\_\_\_  
 Grounding Electrode System Components: \_\_\_\_\_ (NEC 250)

**EMERGENCY SERVICE INFORMATION**

Emergency Generator:    Yes     No     \_\_\_\_\_ KVA    \_\_\_\_\_ Voltage/Phase    \_\_\_\_\_ Fuel  
 Exit/Emergency Lights Backup Power       Integral Battery       Generator  
 Fire Alarm System:     Manual     Automatic     Addressable     Class A     Class B

**LIGHTNING PROTECTION PROVIDED**       Yes       No

**COMMUNICATIONS COORDINATED**       Yes       Not Required

Contact DSIT Network/Infrastructure Planning for applicability at (803) 896-0001

**TABLE 5-13 DESIGN-RELATED CONSTRUCTION PERMITS/APPROVALS**

The following list is not all-inclusive of every, permit and standards applicable to each project. Agencies and A/Es must delete non-applicable listings and add others for each specific project.

TYPE OF DEVELOPMENT	SC LAW OR REG.	WHERE TO OBTAIN PERMIT/APPROVAL	STATUS
Air pollutant discharge	48-1-100; R61-62.1	SCDHEC - Air Quality Control	_____
Ambulatory surgical facilities	R61-91	SCDHEC - Health Facilities Construction	_____
Asbestos abatement	R61-86.1	SCDHEC - Air Quality Control	_____
Building construction, Zoning	6-7-10; 6-9-110	Local Authority	_____
Community residential care facilities	R61-84	SCDHEC - Health Facilities Construction	_____
Construction in critical coastal areas	48-39-10, 130, 190	SCDHEC - OCRM	_____
Construction in navigable waters	49-1-16	SCDHEC - Water Pollution Control	_____
Dams and reservoirs	49-11-200; R72-1, 2, 3	SCDHEC - Water Pollution Control	_____
Demolition of Real Property	R61-86.1	SCDHEC - Air Quality Control	_____
Design Review Board (BARs, SC Dept Archives & History, etc.)	Various local	Various local	_____
Educational facilities (K - 12)	59-23-210	SC Dept. of Education – Office of District Facilities Mgmt.	_____
Elevators	41-16-90	SC Department of LLR	_____
Fire Department (Local)	Various local	Servicing Fire Department	_____
Fire Protection Sprinkler	40-10	State Fire Marshal	_____
Fire suppression systems	R71-8303	State Fire Marshal	_____
Floodplains, construction in	OSE Manual Chpt 5	Office of State Engineer	_____
Food service establishments	R61-25	SCDHEC – Local County Health Dept.	_____
Historical building rehabilitation	R12-125	Archives and History, Local Authority	_____
Hospitals & infirmaries	R61-16	SCDHEC - Health Facilities Construction	_____
Road encroachment, local	57-7-60	Local City or County Authority	_____
Road encroachment, state	57-5-1080	Local SCDOT Maintenance Office	_____
Sanitary sewer; treatment & disposal	R61-56, 57	SCDHEC – Domestic Wastewater	_____
Storm water discharge, erosion and sediment control	R61-9; R72-100-108	SCDHEC – Water Pollution Control; State Engineer; Local Authority	_____
Swimming areas, natural public	R61-50	SCDHEC – Water Supply Construction	_____
Swimming pools, public	R61-51	SCDHEC – Water Supply Construction	_____
Underground storage tanks	R61-92	SCDHEC – Groundwater Protection	_____
Waste discharge (sewage, industrial waste, etc.)	48-1-100, 110; R61-9	SCDHEC – Water Pollution Control	_____
Water supply	44-55-40; R61-57, 58	SCDHEC – Water Supply Construction	_____
Wells, Underground injection	R61-71, 87	SCDHEC – Groundwater Protection	_____

For completion of this Table in the Bid Documents Stage it must indicate the status of each permit by insertion of “approved” and date in the status column. If not approved, indicate pending approval, phased approval and who (A/E, Agency, Contractor or Other) is to provide that documentation and anticipated date.

**TABLE 5-14 STATEMENT OF SPECIAL INSPECTIONS**

The Designer(s) of Record shall determine the material and/or work on the project requiring Special Inspections. The Special Inspection requirements shall be based on Section 1705 of the ~~2012~~2015 International Building Code. Any deviations from the requirements of Section 1705 must be approved by OSE

<b>PROJECT NAME:</b> _____				
<b>PROJECT NUMBER:</b> _____				
<b>MATERIAL</b>	<b>TYPE OF INSPECTION</b>	<b>FREQUENCY</b>	<b>SPECIFICATION REFERENCE</b>	<b>INSPECTION BY</b>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

*(Insert in Project Manual)*