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| **TABLE 5-1 FLOOD HAZARD INFORMATION & FLOOD LOADS** | | | |
| **FLOOD HAZARD AREA** | |  | |
| Flood Map Information: Flood Zone:        *(A Floodplain Permit is required for A and V Zones)*  Is the Project Site in a 100-Year Flood Plain? Yes  No  Base Flood Elevation       MSL  Design Flood Elevation       MSL | | Community Number:  Panel Number:  NGVD or FIRM | |
| 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-510, as applicable

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| --- |
| **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:  Architect/Engineer Date |

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:  Engineer or Registered Landscape Architect (Circle one) Date |

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| **TABLE 5-2 SOILS & SITE** | | | |
| **SOILS INVESTIGATION** (If required) | Yes  No  per IBC 1803.2 | | |
| **SOILS CLASSIFICATION** |  | | |
| Site Class | per IBC 1613.3.2 | | |
| Classes Soil of Materials (UCS System) | per IBC 1803.5.1 | | |
| Allowable Footing Bearing Pressure | psf | |  |
| **MINIMUM DESIGN SOIL BEARING LOAD** | psf | | per IBC table 1806.2 |
| **COMPACTION** |  | |  |
| Subgrade:       Percent |  | ASTM D698 ASTM D1557 AASHTO (only for paving & roads) | |
| Base:       Percent |  | ASTM D698 ASTM D1557 AASHTO (only for paving & roads) | |
| Other:       Percent |  | ASTM D698 ASTM D1557 AASHTO (only for paving & roads) | |
| **MINIMUM DESIGN SOIL LATERAL LOAD**       psf per IBC 1610.1 | | | |
| **FOOTINGS** |  | | |
| Undisturbed footings  Compacted Fill Material | Yes  No  Yes  No  per IBC 1804.6 | | |
| **ELEVATIONS** | | | |  |
| 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.

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| **TABLE 5-3 BASIC BUILDING CODE INFORMATION** | | | |
| **CONSTRUCTION CLASSIFICATION** | Type:       (IBC 602) | | |
| **OCCUPANCY CLASSIFICATION** (indicate all)  (Note IBC 504.2) | (IBC 302) | | |
| **MOST RESTRICTIVE OCCUPANCY CLASSIFICATION** | (IBC Tables 504.3, 504.4 & 506.2) | | |
|  |  | | |
| Does building require Incidental Use Area Separation? | Yes  No | (IBC 509.1) |  |
| Does building have Accessory Occupancy (ies)?  If so, what percent of story is Accessory Occupancy? | Yes  No | (IBC 508.2) | SF        % |
| Mixed Occupancy | Yes  No | (IBC 508) |  |
| Non separated | Yes  No | (IBC 508.3) |  |
| Separated | Yes  No | (IBC 506.2.2)  (IBC 506.2.4)  (IBC 508.4) |  |
| Fire Apparatus Access and Water Line | Yes  No | (IFC 503 & 507) |  |
| **OTHER FIRE PROTECTION SYSTEMS, DEVICES or FEATURES**  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.) | | | |

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| **TABLE 5-4 BUILDING AREA** | |
| **AREA LIMIT BY TABLE 506.2 OF IBC** | SF  (area limitation per story) |
| **AREA INCREASES BY SECTION 506.2 AND 506.3 OF IBC**  **EXPLANATION OF INCREASES:** | SF  (maximum modified area per story) |
| **AREA AS ALLOWED IN IBC PER STORY**  Story/Level:  Story/Level:  Story/Level:  Story/Level: | SF (area per story)        SF (area per story)        SF (area per story)        SF (area per story) |
| **TOTAL ALLOWED AREA OF BUILDING**  (summary of all stories) | SF |
| **AREA AS DESIGNED PER STORY**  Story/Level:  Story/Level:  Story/Level:  Story/Level: | SF (area per story)        SF (area per story)        SF (area per story)        SF (area per story) |
| **TOTAL DESIGNED AREA OF BUILDING** | SF |

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| **TABLE 5-5 BUILDING HEIGHT** | | | | |
|  | **AS DESIGNED** | | **AS ALLOWED BY IBC** | |
| In Feet | In Stories | In Feet | In Stories |
| PER TABLE 504.3 |  | N/A |  | N/A |
| PER TABLE 504.4 | N/A |  | N/A |  |
| Total Height, including any Allowable Increase |  |  |  |  |

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| **TABLE 5-6 BUILDING DESIGN OCCUPANT LOAD** | | | | | |
|  |  | **A** | **B** | **C** | **D** |
| **STORY/ LEVEL** | **FUNCTION OF SPACE (1)** | **FLOOR AREA (2)**  **(NSF or GSF)** | **MAX AREA ALLOWED PER OCCUPANT (3) (NSF or GSF)** | **OCCUPANTS ON FLOOR FOR THIS FUNCTION (4)** | **DESIGN OCCUPANT LOAD (5)** |
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| **Subtotal Design Occupant Load for This Story** | | | |  |
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| **Subtotal Design Occupant Load for This Story** | | | |  |
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| **Subtotal Design Occupant Load for This Story** | | | |  |
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| **Subtotal Design Occupant Load for This Story** | | | |  |
| **TOTAL BUILDING DESIGN OCCUPANT LOAD** | | | | | **(6)** |
| **FOOTNOTES:** | | | | | |
| 1. Provide the complete name of the Function of Space using the left column of Table 1004.1.2 of the IBC (1) | | | | | |
| 1. Design Area per each occupant of this Function on this Story in either Gross (GSF) or Net (NSF) Square Footage (2) | | | | | |
| 1. Allowed Floor Areas in SF per Occupant per right column in Table 1004.1.2 of the IBC (3) | | | | | |
| 1. Divide Column A (2) by Column B (3) for each function and enter result, rounded up to the nearest whole person (4) | | | | | |
| 1. Subtotal all Column C values for this floor to yield the Design Occupant Load (5) | | | | | |
| 1. Total Building Design Occupant Load –sum of all Column D value (6) | | | | | |

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| **TABLE 5-7 GENERAL FIRE PROTECTION REQUIREMENTS** | | |
| **SEPARATIONS** | | |
| Fireblocking Required | Yes  No | per IBC Section 718 |
| Draftstopping Required | Yes  No | per IBC Section 718 |
| Smoke Control System Required | Yes  No | per IBC Section 909 |
| Smoke Barriers Required | Yes  No | per IBC Section 407 and 408 |
| Smoke Partitions Required | Yes  No | per IBC Section 407 |
| Fire Partition Required | Yes  No | per IBC Section 708 |
| Fire Barrier Required | Yes  No | per IBC Section 707 |
| **ALARM & DETECTION** | | |
| Fire Alarm System Required | Yes  No | per IFC Section 907 |
| Emergency Alarm System Required | Yes  No | per IFC 908 |
| **SUPPRESSION** | | |
| Standpipes Required | Yes  No | per IFC Section 905 |
| Sprinklers Required | Yes  No | per IFC Section 903 |
| Sprinklers Provided | Yes  No |  |
| Portable extinguishers required | Yes  No | per IFC 906 |
| Other suppression systems required | Yes  No | per IFC 904 |
| Smoke & heat vents required | Yes  No | per IFC 910 |
| **OTHER: *(Indicate other provided fire and life safety features not listed above, if any)*** | | |
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| **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** |
| Primary 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 “d” from 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) |  |  |  |  |

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| **TABLE 5-9 STRUCTURAL DESIGN INFORMATION** | | | | |
| **RISK CATEGORY:** | | | IBC Table 1604.5 | |
| **LIVE LOADS** | | | | |
| Floor Live Load(s) - List the Fll for each occupancy/use.  Occupancy/Use:       Fll =       PSF  Occupancy/Use:       Fll =       PSF  Occupancy/Use:       Fll =       PSF  Occupancy/Use:       Fll =       PSF | | | | |
| Roof Live Load | Rll = | PSF |  | |
| Ground Snow Load | pg = | PSF | IBC Figure 1608.2 ( or ASCE 7) | |
| **WIND LOADS** | | | | |
| Analysis Procedure: | | | ASCE 7 or IBC 1609.6 |  |
| Ultimate Design Wind Speed: VULT =       MPH | | | IBC Fig’s. 1609.3(1)-(3) | |
| Exposure Category: | | | IBC 1609.4.3 | |
| Internal Pressure Coefficient: GCpi = | | | ASCE 7 | |
| External Pressure Coefficient: GCp = | | | ASCE 7 | |
| Protection of Openings Required Yes  No | | | IBC 1609.1.2 | |
| If “Yes”, check one: Impact Resistant Glazing  Impact Resistant Covering | | | | |
| **SEISMIC LOADS** | | | | |
| Seismic Importance Factor: Ie = | | | ASCE 7 Table 1.5-2 | |
| Site Class: | | | IBC 1613.3.2 | |
| Mapped Spectral Response Accelerations: | | | Ss = | S1 = |
| Design Spectral Response Acceleration Parameters: | | | SDS = | SD1 = |
| Seismic Design Category: | | | IBC Tables 1613.3.5(1) & 1613.3.5(2) | |
| Basic Seismic Force Resisting System: | | | ASCE 7 Chapter 12 | |
| Design Base Shear:       KIPS | | | | |
| Seismic Response Coefficient(s): Cs = | | | ASCE 7 | |
| Response Modification Factor(s): R = | | | ASCE 7 | |
| Analysis Procedure: | | | | |
| **ARCHITECTURAL-MECHANICAL-ETC. LOADS**  Provide as applicable: architectural items, mechanical, plumbing, etc. per ASCE 7 | | | | |
| **SPECIAL LOADS**  Provide as applicable: abnormal items, moving loads, impact, hoisting, etc. per ASCE 7 | | | | |

\*per IBC Chapter 16 and ASCE 7 -- Information may be shown on initial Structural Sheet of the drawings or on Sheet with other code information. List floor design loads on structural plans.

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| **TABLE 5-10 PLUMBING INFORMATION** | | | | |
| **WATER SYSTEM**: Service Line Size:       Inches | | | | |
| Peak Flow:       GPM | | | | |
| Total Demand:       No. Fixture Units | | | | |
| **SANITARY SEWER SYSTEM**: Loading:       GPD | | | | |
| Service Line Size:       Inches  Slope:       min inches/ft | | | | |
| **MINIMUM PLUMBING FIXTURES REQUIRED/PROVIDED** (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): | | | | |
| 1. Occupancy:       Total Load for this Occupancy:       Male:       Female: | | | | |
|  | **Male-REQUIRED** | **Male-PROVIDED** | **Female-REQUIRED** | **Female-PROVIDED** |
| Water Closets |  |  |  |  |
| Lavatories |  |  |  |  |
| Urinals\* |  |  |  |  |
| **OTHER FIXTURES (Per IPC Section 403 & Table 403.1)** | | | **REQUIRED** | **PROVIDED** |
| Drinking Fountains | | |  |  |
| Unisex Toilet | | |  |  |
| Service Sink | | |  |  |
| Other (list) | | |  |  |
| 1. Occupancy:       Total Load for this Occupancy:       Male:       Female: | | | | |
|  | **Male-REQUIRED** | **Male-PROVIDED** | **Female-REQUIRED** | **Female-PROVIDED** |
| Water Closets |  |  |  |  |
| Lavatories |  |  |  |  |
| Urinals\* |  |  |  |  |
| **OTHER FIXTURES (Per IPC Section 403 & Table 403.1)** | | | **REQUIRED** | **PROVIDED** |
| Drinking Fountains | | |  |  |
| Unisex Toilet | | |  |  |
| Service Sink | | |  |  |
| Other (list) | | |  |  |
| 1. Occupancy:       Total Load for this Occupancy:       Male:       Female: | | | | |
|  | **Male-REQUIRED** | **Male-PROVIDED** | **Female-REQUIRED** | **Female-PROVIDED** |
| Water Closets |  |  |  |  |
| Lavatories |  |  |  |  |
| Urinals\* |  |  |  |  |
| **OTHER FIXTURES (Per IPC Section 403 & Table 403.1)** | | | **REQUIRED** | **PROVIDED** |
| Drinking Fountains | | |  |  |
| Unisex Toilet | | |  |  |
| Service Sink | | |  |  |
| Other (list) | | |  |  |

\* Urinals – See IPC 419.2

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| **TABLE 5-11 MECHANICAL INFORMATION** | | |
| **AIR COMFORT SYSTEMS** | | |
| Overall Thermal Transfer Value (OTTV):       BTU/(HR x oF 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 | | |
| **MECHANCIAL 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.)

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| **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.

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| **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 2015 International Building Code. Any deviations from the requirements of Section 1705 must be approved by OSE   |  | | --- | |  | | | | | |
| **PROJECT NAME:** | | | | |
|  | | | | |
| **PROJECT NUMBER:** | | | | |
|  | | | | |
| **MATERIAL** | **TYPE OF INSPECTION** | **FREQUENCY** | **SPECIFICATION REFERENCE** | **INSPECTION BY** |
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*(Insert in Project Manual)*