PART 1: GENERAL

1.01 SUMMARY

A. Design of streets, roads, walks, trails, and parking lots needs to reflect Cornell’s priorities for safety, universal design, complete streets and sustainability. The goal of all construction should include providing safe and universal access on the campus including across streets, through intersections, and from parking lots and bus stops to buildings. Design needs to consider not only the pavement standards, but also include proper lighting, grading and drainage. Sustainable (e.g., permeable, warm mix) pavement and associated drainage mitigation options and appropriate landscaping shall be provided.

B. Exceptions to the following standards must be approved by the Cornell Planning and Transportation offices.

1.02 WALKS

A. Walks along a road or street curb will be constructed of concrete.

B. Minimum width of a walk is 8’ (eight feet) and 10’ (ten feet) where pedestrian traffic volume is higher. Minimum 5’ (five foot) radii required at intersections. Ramps with a slope not greater than 1:12 are preferable to stairs for mechanical snow removal. Walks should be continuous across driveways and must comply with CU Design and Construction Standards for accessibility.

1.03 CROSSWALKS

A. Must be marked in the piano key style in accordance with the Cornell University Standard Detail 7.1.3 - Stop Bar and Crosswalk (12” wide bars with 24” wide space between each bar running parallel with the roadway) and comply with CU Design and Construction Standards for accessibility.

1.04 MID-BLOCK CROSSWALKS

A. The location and design of all mid-block crosswalks shall be approved by the Campus Planning and Transportation Offices and Facilities Engineering.

1. Raised mid-block crosswalks shall be level with the top of adjacent street curbs, constructed of asphalt, a minimum of 10 feet wide, and designed and marked per CU Standard Detail 1.4.7.

2. Street-level mid-block crosswalks shall conform to section 1.03 above.
1.05 FIRE APPARATUS ACCESS WALKS

A. All walks identified as Fire Apparatus Access Walks on map “Exhibit E – Site Plan, Cornell University Variance Application for Temporary Structures #2015 – 0101” shall be constructed per CU Standard Detail 1.5.8 and to support 75,000 vehicle load.

B. Horizontal and Vertical geometries and filet radii at walk intersections shall be approved by Ithaca Fire Department. Materials and other design features shall be approved by the Campus Planning and Transportation Offices and Facilities Engineering.

1.06 CURBS, DROPPED CURBS AND CURB RAMPS

A. Curbs

1. All curbing shall be granite.
2. Dimensions and construction per standard details.
3. Locations: along margins of all roads, drives, driveways, perimeters of parking areas and islands.
4. Temporary parking lots: salvaged granite.

B. Dropped curbs and curb ramps are required on all new or rehabilitated walks. Dropped ramps are required from all accessible parking spaces to the accessible path of travel. All curbs and curb ramps must comply with CU Design and Construction Standards for Accessibility and the Uniform Accessibility Standard (UAS), 2010 ADA Standards for Accessible Design, New York State Uniform Fire Protection and Building Code (NYSUFPBC) and ICC/ANSI A117.1-2003, and the American National Standards Institute (ANSI).

1.07 PARKING LOTS/PARKING SPACES

A. Parking lots shall be paved with asphalt and curbed with granite. Their dimensions and orientation shall suit the specific site conditions. Generally, 90° parking spaces are the best, but on occasion 45°, 60°, or 180° (parallel) spaces are permitted. Driving aisles shall be no less than 24’ (twenty-four feet). All 90° parking spaces shall be 8.5’ wide x 16’ long (with overhang) or 8.5’ wide x 18’ long (without overhang).

B. Accessible parking spaces shall also be 8.5’ x 16’ or 18’, with an 8.5’ access aisle on at least one side. Dropped curb ramp shall be provided from accessible parking to accessible paths of travel.

C. Parking markings, vertical signage for the parking space, and “no parking any time” sign for the access aisle shall comply with Cornell general parking and accessible parking striping details, refer to CU Standard Details 7.1.1 and 7.1.2.
D. Appropriate screening and shading must be provided and meet at minimum the requirements of the jurisdiction where the parking will be located.

E. Wheel Stops

1. Not generally used on campus.
2. Materials, dimensions, construction per Cornell Standard Details.
   a. Precast concrete or recycled plastic shall be installed on central campus.
   b. Timer curbing acceptable in outlying and natural areas.

3. Wheel stop shall be installed centered on the parking space.

1.08 ROADS/DRIVES

A. All road design work shall consult the Cornell Campus Master Plan for the individual streetscape design which may include bike lanes, bus stops, walkways, lighting, stormwater management and tree/vegetative buffers. Minimum width for two-way main roads or streets is 24' (twenty-four feet). The resulting standard dimension, curb to curb, is 34’ (thirty-four feet) and includes the two 12’ (twelve foot) lanes and two 5’ (five foot) bike lanes. Minimum width for major two-way service drives is 22' (twenty-two feet). Minimum width for minor two-way service drives is 20' (twenty feet). Minimum width for one-way traffic is 12' (twelve feet).

1.09 BIKE LANE

A. A dedicated bike lane must be a minimum of 5’ wide and comply with Cornell bike lane pavement marking detail. The edge line of the designated bike lane shall be striped white to separate the lane from the roadway. The Bike Man symbol (white, 40” wide and 78” tall) shall be applied at the start of a bike lane and every 80 feet thereafter, refer to Standard Detail 7.1.5.

1.10 SHARED WALKWAY AND DISMOUNT ZONES

A. Bike Man symbols (white, 24” x 48”) will be used to mark shared walkways. The dismount zones will have the international “NO” symbol in red applied over the white Bike Man symbol.
1.11 SNOW PLOWING AND STORAGE

A. Provide access for snow removal equipment and space where snow can be piled. Snow on Campus pavements is plowed and moved aside. It is not picked up or hand shoveled except on stairs. Special attention should be given to loading docks and other critical areas. Pull-off lanes shall have at least a 10' (ten foot) radius at the points of curvature. This smooth transition will allow efficient snow plowing and street cleaning.

1.12 CONCRETE ENTRANCE SLABS

A. All concrete entrance slabs at points of impaired accessibility to campus structures, or at other flush with finished floor conditions, shall be supported on structural foundations and tied to the structure in such a manner as to preclude vertical displacement through resistance to shear of concrete reinforcement, i.e., dowel reinforcement rods from entrance slab to structure and grout, if required.