# MANUAL OF PRACTICE ADMINISTRATIVE REVISIONS

Chapter 1: Administrative Procedures - No revisions

Chapter 2: Preliminary Plat - No revisions

Chapter 3: Final Plat – No revisions

Chapter 4: Minor Plat – No revisions

## Add Chapter 5: Certificate of Exemption

Chapter 6: Construction Plans and Specifications - No revisions

Chapter 7: Subdivision Construction Inspection and Bonding - No revisions

Chapter 8: Location and Geometric Requirements for Streets, Sidewalks, Crosswalks,

Driveways, and Alleys – No revisions

Chapter 9: Vehicular Access Control Standards - No revisions

**Revise Section 9.02 B.5.d. to read as follows:** Residential driveways shall not be less than ten (10) feet nor more than sixteen (16) feet in width at any point in the required front yard, measured at a right angle to the centerline thereof, provided that if there is a garage on the premises that is wider than sixteen (16) feet as measured between the outer edges of any overhead doors on said garage, then the driveway serving said garage shall not exceed that dimension in width.

Add Section 9.02 B.5.e. Commercial / industrial driveways shall not exceed 35 ft. wide at the tangent to the curb radii (at the throat). Commercial / industrial driveways in excess of 35 ft. wide may be approved by the City Engineer if the owner can demonstrate the following:

- 1. The owner has made efforts to minimize the required driveway widths while meeting code requirements.
- 2. The requested driveway width is the minimum width necessary as illustrated by the vehicular turning movement of the largest vehicle requiring access to the site.

Add Section 9.02 B.9. Lot Frontage on a Public Street: Each lot shall have at least thirty (30) feet of frontage on the public street unto which it has a right to take access, unless otherwise designated in the table below.

Land Use	Lot Type	Minimum Lot Frontage
Residential	*Common lot line – Townhouse, Rowhouse	18'
Residential	Cul-de-sac	10'
Residential	Lots on short radius	10'
	curves	

\* For definitions of *dwelling, common lot line; townhouse;* and *rowhouse*, see the City of Champaign Zoning Ordinance, Chapter 37 of the Municipal Code.

#### Chapter 10: Pavement Standards

Add Section 10.02 B.4. Trucks or heavy equipment shall not travel on any pavement subgrade after final testing prior to pavement construction with the exception of proof roll testing.

Add Section 10.02 B.5. Pavement subgrade material shall not be removed, placed or disturbed after pavement subgrade compaction and stability testing has been completed prior to pavement construction. Additional testing is required if the pavement subgrade is disturbed and/or material is removed from or placed on the pavement subgrade after approved compaction and stability testing.

Add Section 10.02 E.1.c.vii. Tie Bars: Epoxy-coated tie bars shall be installed in drilled holes along the vertical edge of the first lane placed as specified on the plans.

Add Section 10.02 E.1.d. When street pavement is constructed by full width or half width slip form paving methods, the contractor shall "box out" around proposed storm inlets that lie within the combination curb and gutter section with concrete forms.

#### Chapter 11: Sidewalk Standards

**Revise Section 11.02 G.2. to read as follows:** *Cross Slope* (transverse slope) standard shall be 2% (1/4 in. per ft.) downward in the direction of the back of curb.

- Chapter 12: Traffic Control and Traffic Regulatory Signage No revisions
- Chapter 13: Right-of-way Lighting Standards No revisions
- Chapter 14: Traffic Signal Standards No revisions
- Chapter 15: General Utility Requirements No revisions

#### Add Chapter 16: Dedication and Vacation of Easements and Right-of-way

- Chapter 17: Storm Sewer Standards No revisions
- Chapter 18: Sanitary Sewer Standards No revisions
- Chapter 19: Hydrologic Design Standards No revisions
- Chapter 20: Culvert and Ditch Standards No revisions
- Chapter 21: Earthwork Standards No revisions
- Chapter 22: Erosion Control NPDES Standards No revisions
- Chapter 23: Detention Basin Standards

**Revise Section 23.02 D.4.f. to read as follows**: To minimize erosion caused by wave action, shoreline stabilization shall be required around all wet bottom detention basins. Shoreline stabilization shall extend down the sideslope to an elevation 1-foot below the normal water surface elevation and up the sideslope to an elevation 1-foot above the normal water surface elevation. Approved shoreline stabilization methods include riprap revetment constructed in accordance with the requirements of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition; cast-in-place portland cement concrete retaining walls; or modular concrete block retaining walls.

Alternative shoreline stabilization methods may be submitted to the City Engineer for review and approval. Any proposed shoreline stabilization method shall be reviewed and approved by the City Engineer prior to installation.

#### Chapter 24: Right-of-way Street Tree Standards

**Revise Section 24.01 B.2. to read as follows:** City installation: The City will require a payment of \$300.00 per tree to contract for new subdivision planting. (This cost will be subject to change to accommodate future price changes.)

Standand Attachment 24.02: The table approved and non-approved trees was updated.

Chapter 25: Right-of-way and Private Site Design Construction Standards – No revisions

#### Add Section 25.02 D.

- D. Specifications Applicable to Ramps That Provide Vehicular Access to Underground and Above Ground Parking Facilities: All construction shall conform to the Municipal Code of the City of Champaign.
  - 1. Number of Ramps:
    - a. Sites with parking facilities that provide twenty-five (25) or fewer parking spaces shall have, at a minimum, one (1) access ramp that is 10 ft. or greater in width.
    - b. Sites with parking facilities that provide twenty-six (26) or more parking spaces shall have, at a minimum, one (1) access ramp that is 18 ft. or greater in width to facilitate two-way traffic. Sites with parking facilities that provide twenty-six (26) or more parking spaces may have two (2) or more one-way access ramps that are 10 ft. or greater in width, in lieu of one (1) access ramp that is 18 ft. or greater in width..
  - 2. *Width:* Ramp widths shall be measured from face to face of any side curbs, walls or structures, and shall be the width of actual driving surface. On sites providing twenty-six of more parking spaces, ramps less than 18 ft. in width shall be posted for one-way traffic. On sites where a single ramp less than 18' ft. wide is allowed, signage shall be posted warning drives of potential oncoming ramp traffic.
  - 3. *Landing Area:* All ramps shall have a landing area at a maximum slope of 6%. The landing area shall have a minimum length of 10 ft. measured from the intersection of the ramp and the property line of the site.
  - 4. *Slope:* Excluding the landing area, the maximum slope of the ramp shall not exceed 12%. Vertical curves shall be used to provide smooth transitions at all changes in slope.

- 5. Sight Distance: All ramps shall have adequate sight stopping distance to ensure public safety. All ramps shall have at least 10 ft. sight triangles along right-of-way lines, through which drivers can see pedestrians in the right-of-way. All sight clear zones are to be extended from 1 ft. to 9 ft. above the nearest edge of sidewalk. The site clear zones are illustrated in attachment 25.09 (d). Elements shall be included in the site design that will prevent vehicular traffic from traveling through the sight clear zones.
- 6. *Minimum Height:* The current Building Code minimum height requirement for parking structures of 7 ft. shall apply to parking ramps.

#### Add Chapter 26: University District Streetscape Standards

Appendix "A" Sanitary Sewer Standards-UCSD 2000 – No revisions

Appendix "B" 1998 City of Champaign Stormwater Regulations – No revisions

Appendix "C" Subdivision Improvement Performance Bond Templates – No revisions

## Add Appendix "D" Material Standards

#### Add Appendix "D" Section 200.00 Cast-In-Place Concrete

#### 200.00 CAST-IN-PLACE CONCRETE

## 201.0 INTRODUCTION

The primary objective of these concrete materials and testing standards is to provide high quality and long lasting infrastructure for the City of Champaign. These regulations are intended to maximize service life and minimize maintenance costs for all newly installed concrete infrastructure constructed under City jurisdiction.

#### 202.0 CONSISTENCY OF TESTING

Uniform testing requirements will apply to all Portland Cement Concrete delivered to job sites regardless of the source of the concrete product, that is, central-mix plants or truck-mixed. Further standards are defined by City contract specifications and plans, and by the standards set forth in the City Manual of Practice.

#### 202.1 INSPECTOR REQUIREMENTS

The requirements for inspectors are outlined in section 7.01 of Manual of Practice Chapter 7. All inspectors shall be certified by IDOT to have passed the IDOT Level 1 PCC Inspection Training Course. Inspectors are required to test the concrete as per the most recent IDOT specifications and procedure manuals. Any inspector performing testing shall be trained in the appropriate ASTM testing standard. Contractors and/or developers will be required to facilitate proper testing techniques by providing an adequate number of capable inspectors to match the pace of concrete placement, and cooperating with the inspectors to enable proper testing. The requirements of section 210.1 apply to City contracted work and work by private developers.

## 202.2 FREQUENCY OF TESTING

Tests will be taken at the intervals prescribed by IDOT. If a test fails, the next load will be tested, even if it was not on the schedule to be tested, and testing will continue on every load until the problem is corrected.

## 202.3 WHEN TESTS ARE TAKEN DURING THE POUR

Samples for tests shall not be taken from the first or last 0.1 cubic meter of material. It is not required for the test to come from the middle third of the load. Test procedures are outlined in Illinois Modified AASHTO T141-Sampling Fresh Concrete, IDOT Manual of Test Procedures for Materials.

## 202.4 ACCURACY OF AIR METERS

IDOT requires calibration adequate to insure that the meters are performing properly. If the material supplier, contractor or the City has reason to believe that an air meter is out of calibration, it shall be removed from use until it can be recalibrated or its calibration verified. This removal does not eliminate the requirement to perform air tests. If the contractor or material supplier requests recalibration or calibration verification, said contractor or material supplier shall provide for a certified air meter for the retest.

## 202.5 SAMPLING AND TESTING AT THE PLAT

The City requires that sampling and material testing be performed at the plant in accordance with the IDOT Manual of Test Procedures for Materials.

## 202.6 DELIVERY TRUCKS

All delivery trucks shall be in accordance with article 1020 of the Standard Specifications for Road and Bridge Construction. Delivery trucks transporting truckmixed concrete shall have functional drum counters, which are reset or have starting point recorded with each new load. Failure to have a functional counter is cause for rejecting the load. Concrete shall not be placed unless it has received specified mixing.

## 203.0 QUALITY OF PRODUCT DELIVERED TO THE SITE

Concrete shall be delivered to the site in a consistent form and high quality condition as per the IDOT Standard Specifications for Road and Bridge Construction unless otherwise noted. Repeated and numerous occurrences of concrete being delivered to the site that is outside of the required material specifications may be grounds for that supplier being not allowed to deliver any further concrete to the job site on that particular work day. The quality of the concrete that arrives at the jobsite will be measured as follows:

## 203.1 UNIFORMITY OF THE CONCRETE MIX

Unmixed concrete, known as dough balls, is not allowed to be present in trucks delivered to jobsites. The tolerance for the presence of dough balls in concrete delivered to City job sites is limited to one (1) occurrence in the "first wheel barrow" (defined as approximately the first ¼ cubic yard) of concrete delivered from the first truck of the day. Any additional occurrences of unmixed concrete (dough balls) may be grounds for rejection of that particular truckload of concrete.

## 203.2 AIR CONTENT

Air content shall conform to the requirements of the 2002 IDOT Standard Specification 1020.04, Table 1 for the class of concrete being produced. Generally, the range is 5% to 8% except for PCC pavement patching and railroad crossings, where the range is 4% to 7%. If the air content test result is below the specified range, air entrainment agent shall be added, additional mixing action shall be provided, and a retest shall be performed. If it passes the retest, it may be used, if not, it shall be rejected. If the air content is 1% or less above specification and there is still available time on the mix, the truck may be set aside within specified time and revolution limits and retested. If the air content is more than 1% above the specified range, the load of concrete material will be rejected. The contractor shall identify and provide receipt for the disposition site. Also, if the air is less than minimum (typically 4%), the contractor shall have a maximum of two (2) attempts to correct the air. If the air content is not corrected after the 2<sup>nd</sup> retest, the truck will be rejected.

#### 203.3 <u>SLUMP</u>

Slump shall conform to the requirements of the 2002 IDOT Standard Specification 1020.04, Table 1 for the class of concrete being produced. Attempts to correct out of specification slumps may be made per IDOT standards. No water may be added at the job site, slump may be increased by adding super plasticizer. Note: IDOT has set a limit on water/cement ratio, and water can be added at the site if the delivery tickets include the additional volume of water that can be added without exceeding the water/cement ratio limit.

#### 203.4 STRENGTH

Per Industry Standards. Care shall be taken to prepare and store cylinders per ASTM standards.