

The City's **Engineering Design Standards Manual** 2012 (latest edition) includes:

8.0 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

It should be the intent of the Engineer of Record to utilize Specifications adopted by the Florida Department of Transportation "Standard Specifications for Road and Bridge Construction" (latest edition) and the supplements thereto, be used as the basis for construction of all work and require that all work performed by a contractor within the rights of way under the jurisdiction of the City of Boca Raton be constructed in compliance with said Specifications except as set forth and agreed upon by the City of Boca Raton.

In addition to these Standard Specifications, the Engineer of Record should stipulate Special Conditions and Special Provisions as needed, which pertain to the pertinent items of construction.

SECTION 104

PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION

104-1 Description.

Provide erosion control measures on the project and in areas outside the right-of-way where work is accomplished in conjunction with the project, so as to prevent pollution of water, detrimental effects to public or private property adjacent to the project right-of-way and damage to work on the project. Construct and maintain temporary erosion control features or, where practical, construct and maintain permanent erosion control features as shown in the Plans or as may be directed by the Engineer.

Section 104 continues with additional requirements.

The relevant section of the FDOT Road and Bridge Spec is below.

Work to complete projects for the City is completed by a contractor.

It has been our understanding that through our Contracts and execution of said contracts we are enforcing our NPDES requirements.

Staff can provide a sample of the contracts.

The majority specifically utilize the FDOT standard and specifications, relevant section below:

The City's **Comprehensive Plan**, Infrastructure Element; Stormwater Sub-Element...

POLICY INF.3.2.2 states:

"The City shall, through the site plan review process, including building permit and Public Works Review, ensure that private development does not degrade the function of natural stormwater features." [(9J-5.011(2)(b)5; SRPP 8.1.1.3; SCP 8(b)4)

POLICY INF.3.2.5 states:

"The City shall employ Best Management Practices (BMPs) for control of erosion and sedimentation for all construction activities in order to protect natural waterbodies, watercourses, and wetlands from off-site pollutants."

POLICY INF.3.2.7 states:

"All new development and redevelopment projects shall meet or exceed the following minimum State water quality standards; Chapter 62-40 F.A.C., Chapter 62-302 F.A.C., and Chapter 40C-42 F.A.C. All new development or redevelopment projects shall also meet or exceed minimum environmental protection standards of Palm Beach County and this Comprehensive Plan. Stormwater discharges from all new development and redevelopment projects shall also meet or exceed State water quality standards for Class III Waters as stated in Chapter 62-302 F.A.C. The City shall not be required to conduct water quality sampling or testing of stormwater discharge to receiving waterbodies in order to implement the above standards."

POLICY INF.3.3.3 states:

"Existing land development regulations which require new development or redevelopment to not impact existing development with any off-site stormwater shall remain in effect, and if needed, strengthened consistent with this policy." [9J-5.011(2)(c)4]

POLICY CON.2.1.2 states:

"New development or redevelopment shall include stormwater systems consistent with the water quality level of service set forth in the Stormwater Sub-Element of this Comprehensive Plan."

CITY OF BOCA RATON SITE PLAN REVIEW CHECKLIST

General

G 1 If applicable, please include a copy of the approved site plan in the PWR set and a plan sheet with images (pdf, tiff, etc.) of the Site Plan Approval Resolution(s).

G1 Include a copy of the approved site plan in this PWR plan set.

G1 Please provide a photo image of the Site Plan Approval Resolution listing all conditions for this development.

G 2 Provide a list of all permits and/or permit modifications that will be required by agencies that have jurisdiction and regulatory authority over the project area and proposed improvements (e.g. Palm Beach County, SFWMD, FDOT, FDEP, LWDD, etc) and the anticipated timeframe that those permits will be issued. Permits, approved plans, calculations and all attached documents issued by those agencies must be provided to the Land Development Coordinator and will be formally incorporated and made part of this PWR submittal.

G 4 For Downtown developments, see notes at the bottom of this standard comment form.

G 5 Please confirm if this project will be constructed, permitted and occupied in one phase.

Drainage

Provide on Sheet C1 a calculation for the Equivalent Residential Units (ERUs) for the development. The ERUs will be used to determine the City's Stormwater Management Utility (SMU) fee that will be billed on a bi-monthly basis. This fee is adjusted annually in October based on the local Consumer Price Index data. The note should be in bold font and boxed in so that it stands out on the plan. To meet the requirement, please provide a list of all the water utility billing meters associated with the entire site. The applicant should provide the ERUs associated with each meter for the existing condition and the proposed breakdown for storm water utility billing.

Methodology for determining the number of Equivalent Residential Units (ERUs)

Single Family property: Each single-family property shall be considered one (1) ERU.

Multifamily Residential Property: Each multifamily unit shall be considered as 0.6 ERU.

Nonresidential property: The monthly utility fee for all nonresidential properties shall be billed and calculated in accordance with the following formula:

ERUs = Impervious Area in square feet / 2,837

A minimum value of one (1) ERU shall be assigned to each nonresidential property. The ERU's shall be shown in bold 12 point font on paving/grading/drainage plan, along with supporting information such as total project area, impervious and pervious areas, number of units, and any other pertinent information needed to determine ERUs.

D1b. Advisory Comment: Prior to requesting a temporary, partial, or final certificate of occupancy for any building, provide a water service utility account number that is to be used by the City for the periodic stormwater utility billing. The City will not be responsible for prorating the fee among multiple owners/tenants.

D1b. Advisory Comment: Prior to requesting a temporary, partial or final certificate of occupancy for any building, provide two separate water service (or other) utility account numbers that are to be used by the City for the periodic billing for the residential and retail developments. The City will charge the total bi-monthly SMU fee for the developments to this account and will not be responsible for prorating the fee among multiple owners/tenants.

D3 Provide sufficient information on the grading plan to support the data and assumptions stated in the drainage calculations. This information typically consists of typical sections at the driveways and property lines, spot elevations, depiction of the perimeter berm, type of ground cover, proposed walls, harmonization with adjacent grades, etc.

D3 Please show all existing stormwater facilities for this site and provide a statement from the engineer of record that the system is performing as originally design along with documentation supporting that determination.

D4 Revise the control structure detail to show that the bleeder mechanism is constructed integrally with the structure (i.e. not bolted on or easily removable).

D5 For all storm drain structures, provide a detail and callout to install manhole covers with the inscription "Storm Drain". All structures having sumps should provide a weep hole.

D6 Provide calculations demonstrating compliance with the master drainage permit governing this project and all applicable stormwater regulations, along with a statement from the engineer of record verifying that said calculations are consistent with the most recent grading plan submitted under this PWR application. A brief narrative should preface the calculations. As a guideline the narrative should provide the items that are listed below, as applicable:

- An overview and background on how the existing system was designed and permitted
- Permit numbers of any previous permits issued by SFWMD and LWDD on the project site (please attach any drawings if applicable).
- An overview of the main components of the existing stormwater management system and how they function (such as age of the system, conveyance methods, detention/retention systems, approved connection stubs, control structures, control elevations, allowable discharge rates, water quality measures, etc.).
- A statement from the engineer of record affirming that he/she has conducted preliminary investigations and due diligence and certifying that the existing system is functioning as originally designed.
- An overview of how this project will tie into and modify the existing permitted system.
- Any other information that may be relevant to the stormwater design and permitting of the project.

D8 Provide details for the construction of new swales in the City's ROW. The top two feet of soil should be replaced with lawn sand and the finished swale centerline elevations (to top of sod) should be about 3 inches below the edge of pavement.

D9 The plans need to clearly indicate that the strip between the proposed berms and sidewalk need to be sodded, irrigated, and maintained and that no shrubs, mulch or other loose materials will be allowed in that area. Applicant needs to confirm that the owners and successors shall be responsible for maintaining this area in perpetuity to prevent erosion and transport of sediment or other landscaping materials into the right-of-way.

Erosion Control

EC 1 Advisory Note: Submittal of the erosion control plan. The City is responsible for monitoring and enforcing NPDES regulations for private development construction projects in accordance with its MS4 permit. Accordingly, at time of construction, we will request that the contractor submit an erosion control plan specific to the construction phasing and operations for this site.

EC 2 Advisory Note: A sediment control plan was not submitted with the PWR plans. The City is responsible for monitoring and enforcing NPDES regulations for private development construction projects in accordance with its MS4 permit. Accordingly, at time of construction, we will request that the contractor submit an erosion control plan specific to the construction phasing and operations for this site.

EC 2 Please add the notes below to Sheet SPP2:

- Contractor shall provide advance notice Elsa Tellez, the City's Engineering Inspection Manager (561 416-3424) and implement the Stormwater Pollution Prevention Plan (SWPPP) prior to starting construction that involves any soil disturbing activities (including site grading, clearing, tree removals and demolition).
- The SWPPP plan shall generally employ the best management practices and follow the details and specifications in the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual.
- The Contractor shall provide a start date along with a copy of a detailed SWPPP to Elsa Tellez.
- The Contractor shall be responsible for providing weekly reports to the assigned City Engineering inspector and updating the SWPPP to correct deficiencies.

EC 3 Provide a copy of the Notice of Intent to use the Generic Permit for Stormwater Discharge from Large and Small Construction Activities (CGP), and the FDEP response. Alternatively, the NOI/response may be provided by the contractor prior to issuance of a building permit.

EC 4 Advisory Note: Compliance with the FDEP's "Generic Permit for the Discharge of Produced Ground Water from a Non-Contaminated Site Activity" (FDEP Document No. 62-621.300(2)) shall be required for any dewatering operations.

Geometrics, Parking and Circulation

Geo 1 Advisory Comment: Prior to issuance of a Certificate of Occupancy for any habitable structure, the City will request that the architect or structural engineer of record provide a letter certifying that the constructed accessible routes and facilities meet the following:

- All applicable federal and state ADA requirements and standards; and,
- The minimum standards for dimensions, slopes and vertical clearances as set forth in Chapter 12 of the City's Engineering Design Standards Manual

Geo 1 Please show ADA routes from the buildings to the public sidewalk and ADA parking spaces.

Geo 1 Please inspect the existing sidewalk on Congress Avenue and repair any damage and bring areas that do not meet ADA standards into compliance.

Geo 1 Provide header curb at all driveways within the right-of-way that do not have curbing. The header curb shall have minimum dimensions of 12" wide by 10" deep and shall be constructed with minimum 2,500 psi concrete and 1 - #4 grade 60 reinforcing bar (centered).

Geo 1 Show sight triangles at all driveways on the PGD and LS plans, in accordance with the Florida Green Book Standards.

Construction Mitigation

CM 1 Provide a note directing the contractor to provide a construction mitigation plan and narrative prior to issuance of a construction permit for the main building. Construction shall be prosecuted in a manner that minimizes disruption to sidewalks and travel on Palmetto Park Road and Federal Highway. The plan and narrative also need to address how impacts to the safety and inconvenience of surrounding residents, businesses and the public will be minimized, including but not limited to the following areas:

- Construction schedule, phasing, staging and storage
- Construction fencing, ingress/egress, and sight triangles
- Construction personnel parking - If an off-site location is secured for this purpose, verify that a tram or shuttle will be provided between the construction site and the parking area(s) and provide a copy of the *- with the property owner.
- Covered pedestrian walkways and/or detours - If covered walkways will be used, contractor shall provide complete plans, including structural, lighting, etc.
- Construction traffic routes, delivery schedules
- Dust control and street cleaning daily
- Installation of temporary utilities and lighting for construction
- Temporary lighting/spillover
- Hours of work – adherence to City's noise ordinance
- Proposed road closures / detours – Coordinate with the Traffic Division (and FDOT if detour routes impact Federal Highway).

CM 1 Provide a note on the plans advising the contractor that the City will request a detailed construction mitigation plan and narrative prior to issuance of a construction permit for the main building. The construction shall be prosecuted in such a manner that disruption to sidewalks and vehicular travel on City's Right-of-Way is minimized. The plan and narrative also need to address how impacts to the safety and inconvenience to surrounding residents, businesses and the public will be minimized. Following are examples of items that are typically of interest:

- a. Construction schedule, phasing, staging and storage
- b. Construction fencing, ingress/egress, and sight triangles
- c. Construction personnel parking - If an off-site location is secured for this purpose, verify that a tram or shuttle will be provided between the construction site and the parking area(s) and provide a copy of the agreement with the property owner.
- d. Construction traffic routes, delivery schedules
- e. Dust control and street cleaning daily
- f. Temporary lighting/spillover
- g. Hours of work – adherence to City’s noise ordinance
- h. Proposed closures / detours affecting vehicular or pedestrian travel.

Advisory comment: Prior to starting construction, provide a video survey to Mike Dyko to document pre-existing conditions in the right-of-way. Any damage caused by construction will need to be repaired (or bonded) prior to issuance of a C.O., up to and including milling and resurfacing of the street, if warranted. This shall not preclude the City from demanding immediate remedy of any major safety issues created in the right-of-way due to construction.

Construction shall be prosecuted in such a manner as not limit the use of the on-street parking or public sidewalks on Palmetto Park Road.

SA 1 The proposed geometric configuration does not provide adequate access for trash pickup service by the City. Given that this development plan would not support the turning requirements of a City vehicle, we will request that a private hauler be retained by the association to provide this service. This will be a standing condition of PWR that needs to be memorialized in the HOA’s Declaration of Covenants, Conditions and Restrictions. Please verify any additional requirements for adequacy of emergency fire access with our Fire Department.

SA 1 Please advise if the applicant will be using a private hauler. If the applicant chooses to use a private hauler, the association’s declarations, covenants and restrictions will need to memorialize that the City will not be responsible for solid waste collection and that all associated costs are the responsibility of the association, including the solid waste disposal fee.

SA 2 All solid waste containers shall be stored in an approved storage area or enclosure and shall be located to facilitate a direct approach by the collection vehicle. Please indicate the dumpster location(s) on the plans and include a detail that meets or exceeds the visual screening provided by the dumpster enclosure detail in the City’s Engineering Design Standards Manual. The layout and geometry for dumpster access need to be configured so that backing maneuvers do not exceed 50 feet.

SA 3

Dedications/Agreements

Show any improvements that are being proposed to be under City maintenance responsibility and show demarcation of maintenance responsibility on the plans. Show all applicable easements.

Any proposed modifications to existing city-owned improvements right-of-way need to be coordinated with appropriate department (Recreation Services for trees, LS and irrigation, Engineering for street furniture, receptacles, Traffic for street lighting).

TENTATIVE PLAT REVIEW

The tentative plat shall show all of the facts and data required by the city to determine whether the proposed layout of the land in the subdivision is satisfactory from the standpoint of public interest, as per City Code Section 28-1742. At least the following information shall be a part of or shall be submitted with the tentative plat:

- (a) Proposed subdivision name approved by the clerk of the circuit court for the county, identifying title, name of the city, and section, township and range;
- (b) Name and address of the record owner, subdivider and person preparing the tentative plat;
- (c) Location of property lines, existing easements, buildings, watercourses and other essential features;
- (d) The names of abutting subdivisions and the names of owners of record of adjacent acreage;
- (e) The location of existing public utilities and storm drains on the property to be subdivided;
- (f) Locations, names and present widths of existing and proposed public or private rights-of-way, easements for access or other purposes, parks, other open public spaces, and similar facts regarding the immediate adjacent property;
- (g) Any desired changes in the use, height, area and density districts or other zoning regulations applicable to the area to be subdivided, and any boundaries of such districts affecting the tract, all parcels of land proposed to be dedicated to public use and the conditions of such dedications;

- (h) The width and location of any street or other public way shown upon the official map or the master plan, within the area to be subdivided, and the width, location, grades of all streets or other public ways proposed by the developer;
- (i) Typical cross section of the proposed grading, roadways, sidewalks, canals, ditches and topographic conditions;
- (j) Date, north arrow and graphic scale;
- (k) Legal description and map of survey of tract boundary made and certified by a state-registered land surveyor or engineer;
- (l) Location of closest available city water supply system;
- (m) Location of closest available public sewage disposal systems;
- (n) Provision for collecting and discharging surface drainage;
- (o) Preliminary design of bridges or culverts which may be required;
- (p) The proposed lot lines with approximate dimensions and in the case of odd- or irregular-shaped lots, suggested location of buildings; show square footage of each lot in a rectangle within each lot;
- (q) The proposed location of sidewalks, curbs, gutters, water mains, sanitary sewers, storm drains, manholes, inlets, underground conduits and seawalls, and the sizes and shapes and types thereof, the character, width and depth of pavement and sub-base, and other items controlled by the engineering design standards manual;
- (r) The location of proposed permanent utility easements which shall not be less than 12 feet in width, except as indicated in section 26-124. Such easements shall provide satisfactory access to an existing public right-of-way or other public open space shown upon the tentative plat or upon the official map. Permanent drainage easements shall also be shown;
- (s) Where the tentative plat submitted covers only a part of the subdivider's entire holding, a sketch of the prospective future street system of the unsubdivided part shall also be submitted and the street system of the unsubmitted part will be considered in the light of adjustments and connections with the street system of the part submitted;
- (t) A plat application on the form prescribed by the development services department;

(u) An environmental survey, an aerial photograph, or other reliable depiction of the environmental characteristics of the site.

(Code 1966, § 19-7(b); Ord. No. 4068, § 1, 1-12-93; Ord. No. 4122, § 44, 9-28-93; Ord. No. 4170, § 27, 9-27-94)

Sec. 26-53. Filing copies of tentative plat and plat application.

(1) The subdivider shall file 18 blueprints and 1 reproducible copy of the tentative plat with the development services department, together with 2 copies of the plat application.

(2) An application for an approval of a tentative plat shall be deemed abandoned 30 days after the date the department of development services notifies the applicant of any deficiencies contained in the application or the proposed tentative plat. The department of development services may, upon written request and justification by the applicant, grant not more than (1) 30-day extension. At the expiration of the 30-day period, or any extension thereof, the application shall automatically expire and become null and void. Permit fees and charges paid at the time of application, and plan check fees, shall be refunded, except that an administrative fee shall be retained.

(Code 1966, § 19-7(c); ; Ord. No. 4170, § 27, 9-27-94; Ord. No. 4320, § 11, 4-8-97)

SINGLE FAMILY HOMES

- Provide sufficient grading information on the civil plan to support the data and assumptions stated in the drainage note. This information consists of typical sections at the property boundary, spot elevations, perimeter grading elevations, harmonization with adjacent grades ((show off-site grades along property boundary), etc.

- Show roof drainage layout and indicate how the roof runoff ultimately discharges into the proposed stormwater management system.

- Advisory Note: The applicant/owner will be responsible for correcting any adverse impacts caused by existing and proposed conditions that are not captured on these plans, before and after issuance of a Certificate of Occupancy.

- If there are questions or concerns, you may contact Andre Bigatao directly at (561) 416-3485 or via e-mail at abigatao@myboca.us.