

**TOWN OF DAVIE
ENGINEERING DIVISION
FINAL ENGINEERING PLAN REVIEW CHECKLIST**

Project Name: _____ Project #: _____

Surveyor/Engineer: _____ Phone: _____

Developer: _____ Phone: _____

Submittal Date: _____ Review Date: _____

No.	Requirements and Conformance	YES	NO
A	Plan Adequacy and Completeness		
1	Provide engineering plan with sheet size 24" x 36", north point arrow and scale no smaller than 1" = 60'.		
2	Provide cover sheet with sheet index.		
3	Include copies of the approved site plan with the engineering set.		
4	Include topographic survey with the engineering set. Topographic surveys must show existing street, road right-of-way, dedications, easements, waterways or lakes, structures and other existing physical features in or adjoining the proposed site.		
5	Provide a copy of the approved plat or recorded plat with the engineering sets.		
6	Include geometrical control plan, pavement turning radius, parking island radius, parking space and parking drive aisles dimensions with the engineering set.		
7	Photometric plans provided for new commercial developments.		
8	Additional comments.		
B	Roadways and Pavements		
1	Roadway and pavement design shall be in conformance with the Town of Davie, FDOT, Manual of Uniform Traffic Control Devices and Broward County Engineering Standards.		
2	Provide minimum road crown elevation.		
3	Provide a minimum of 24-foot wide pavement for all public streets.		
4	Provide 5-foot wide concrete sidewalk on both sides of the public road right-of-way (or 4-foot is required for rural life style).		
5	Provide minimum 1.5-inch thick Type S-1 or S-3 asphalt concrete surface course to be paved in two (2) lifts.		
6	Provide minimum 8-inch lime rock base for local residential street, driveway and minimum 6-inch limerock base for parking area.		
7	Provide minimum 12-inch stabilized subgrade for local residential street, driveway and parking area.		
8	Provide limerock of Miami oolite, minimum of 70% of carbonates of calcium and magnesium (60% for local street) and LBR 100.		
9	Provide density tests for limerock and subgrade with 98% maximum dry density per AASHTO T-180.		
10	Provide pavement restoration, if required.		

No.	Requirements and Conformance	YES	NO
11	Provide minimum 0.4% longitudinal slope for roadway and parking.		
12	Remove organics, & unsuitable materials, if required.		
13	Additional comments.		
C	Traffic Engineering		
1	Information shown on plans matches Traffic Study conclusions.		
2	Provide clear traffic sight triangles at the driveway entrances in conformance with the Town of Davie Land Development Code, Sec. 12-205(6) (b) and FDOT standards.		
3	Provide traffic control plan including stop sign, stop bar, striping & marking.		
4	Provide 10 feet by 30 feet turnout if driveway is in excess of 500 ft.		
5	Show graphically the proper turning for fire trucks.		
6	Show fire lanes where applicable.		
7	Additional comments.		
D	Stormwater Management and Drainage System		
1	Provide paving, grading, drainage plan, directions of drainage flow.		
2	Provide minimum building first floor finished elevations		
3	Submit storm management calculations utilizing South Florida Water Management method for storm management and rational formula for storm sewer design in accordance with Central Broward Water Control District.		
4	Provide dimensions for retention area and cross-sections.		
5	Provide minimum storm sewer diameter of 15-inches.		
6	Provide minimum of 8-foot wide street swale, 6-inch deep and longitudinal slope of 0.4%.		
7	Provide storm water pollution prevention plan including all details of erosion and sediment controls.		
8	Provide location of temporary construction entrance and details.		
9	Provide cross-sections and profile sections for the proposed site versus existing ground within and adjacent to the site.		
10	Additional comments.		
E	Water Distribution System		
1	Provide water main of 6-inch diameter minimum. Water main shall be either ductile iron pipe (DIP) or polyvinyl chloride (PVC).		
2	Provide DIP water main with cement seal coat conforming to ANSI/AWWA C151/A21.51.		
3	Provide PVC water main conforming to ANSI/AWWA C900 and push rubber gasket joints.		
4	Submit needed fire flow using I.S.O. criteria and pressure calculations.		
5	Provide hydrostatic test at 150 psi for 2 hours and maximum length of pipe tested is 2,000 feet.		
6	Maximum leakage allowable $L = \frac{SD \sqrt{P}}{148,000}$		
7	Provide bacteriological tests conforming to ANSI/AWWA C651 for installed water main. Sampling points shall be provided at intervals of 1,200 feet maximum.		

No.	Requirements and Conformance	YES	NO
8	Provide butterfly valve for water main 12-inch diameter or larger Butterfly valves and operators shall conform to ANSI/AWWA C504 standard for rubber seated B.V.		
9	Provide gate valves for water main less than 12-inch diameter. Gate valves 4-inch and larger shall be iron body, resilient seat, bronze mounted non-rising, double disc conforming to ANSI/AWWA C509.		
10	Provide fire hydrants conforming ANSI/AWWA C502. Fire hydrants shall be Mueller Centurion, Clow Medallion, American Darling with 5-1/4" valve opening.		
11	Provide blue polyethylene tubing conforming to ANSI/AWWA C901. Water service PE pipe shall be SDR9		
12	Provide minimum 30 inches cover for water main and 24 inches minimum for service line.		
13	Provide water distribution details conforming to TOD standards.		
14	Additional comments.		
F	Sewage Collection System		
1	Provide 8-inch diameter polyvinyl chloride pipe (PVC) for gravity sewer mains and 6-inch diameter. PVC shall conform to ASTM D-3034, SDR 35 with push-on rubber gasket joints.		
2	Provide gravity sewer slopes conforming to Broward County DEP guidelines.		
3	Provide 6-inch diameter cleanouts at property lines.		
4	Provide gravity sewer profile, slope and inverts at the sanitary manhole.		
5	Provide minimum 36 inches cover for PVC sanitary sewer main and 30 inches cover for service laterals.		
6	Provide precast concrete manhole conforming to ASTM C-478 type II with 4,000 psi concrete, grade 60 steel, and monolithically poured bases.		
7	Provide 2 coats of 8 mils KOPPER 300-M painted on the inside of manhole, first coat red, second coat black. Provide one coat black on the outside manhole.		
8	Provide lift station and force main design, engineering calculations and sanitary sewer details conforming to TOD utility standards.		
9	Additional comments.		
G	Lighting		
1	Provide details, locations of existing and proposed site lighting system and streetlights conforming to TOD Codes.		
2	Intensity of average maintained illumination not less than one (1) footcandle, and at no point less than one-half (0.5) footcandle measured at grade level.		
3	Parking garage facilities shall provide an average of not less than fifty (50) footcandles at the entrance, ten (10) footcandles in traffic lanes and five (5) footcandles in storage area.		
4	IESNA Lighting Handbook is the standard used for the design.		
5	All lighting shall be controlled by automatic devices.		

No.	Requirements and Conformance	YES	NO
6	Commercial properties provide lighting until at least thirty (30) minutes after any establishment served by the parking area closes OR 11pm to sunrise, whichever is more restrictive.		
7	If security is a concern, install a dimmer or motion sensors that prevents glare and spillover onto adjacent properties or public ROW. Dimmer has 5 minute timer.		
8	Residential properties provide lighting twenty-four (24) hours per day.		
9	Fixtures on residential properties are fully shielded and not visible from other properties.		
10	Area lights shall be full cutoff type luminaires. Fully shielded fixture type to limit spillover onto adjacent property and public rights-of-way. Parcels within Rural Lifestyle or Griffin Corridor Districts require minimum cutoff fixtures.		
11	Plans have a note stating that the lighting installation cannot be placed into permanent use until a letter of compliance from a P.E. has been provided.		
12	Light measured at property line grade level for: Residential property cannot exceed 0.1 footcandle. Commercial property cannot exceed 1 footcandle.		