

Checklist for Engineering Plan Review

Name of subdivision or other Development _____

Review by _____ Date _____

- _____ 1. Vicinity Map on Cover Sheet?
- _____ 2. Title Block?
- _____ 3. Engineers Stamp and Signature?
- _____ 4. Streets and Roads?
 - _____ a. Typical Sections?
 - _____ 1) Pavement?
 - _____ a) AC Class?
 - _____ b) Thickness?
 - _____ c) Width?
 - _____ d) Cross-slope?
 - _____ 2) Aggregate Base?
 - _____ a) Grading (1" - 0, etc.) ?
 - _____ b) Thickness?
 - _____ 3) Turnpike?
 - _____ a) Shoulder?
 - _____ (1) Width. Narrower around cul-de-sac?
 - _____ (2) Cross-slope?
 - _____ b) Ditch?
 - _____ (1) Width to C.L.?
 - _____ (2) Entering slope?
 - _____ (3) Backslope?
 - _____ 4) Curbs?
 - _____ a) Type?
 - _____ b) Height of Exposure?
 - _____ c) Aggregate base underneath?
 - _____ d) Weep holes?
 - _____ 5) Sidewalks?
 - _____ a) Location (Curb line or property line)?
 - _____ b) Width?
 - _____ c) Concrete?

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_____ b. Profiles?

- _____ 1) Stationing and scales (vertical and horizontal) ?
- _____ 2) Existing ground at centerline and right-of-way lines?
- _____ 3) Vertical Alignment?
 - _____ a) Grades: centerline for turnpike, top of curb for curbed section?
 - _____ (1) Maximum?
 - _____ (2) Minimum (Including cul-de-sac and curb returns) ?
 - _____ b) Vertical curves?
 - _____ (1) Minimum length?
 - _____ (2) Curve data (stations and elevations of PIVC, BVC, EVC) ?

_____ c. Plans?

- _____ 1) North arrow, scale, street centerline, right-of-way lines, stationing, and street names?
- _____ 2) Horizontal alignment?
 - _____ a) Curves?
 - _____ (1) Minimum radii?
 - _____ (2) Maximum superelevation?
 - _____ (3) Superelevation runoff?
 - _____ (a) Minimum length?
 - _____ (b) Method of obtaining?
 - _____ (c) Shown on profile?
 - _____ (4) Curve data (radius, length, deflection angle, stations of P.C. and P.T..) ?
 - _____ b) Cul-de-sac minimum radii?
 - _____ (1) Entering sac?
 - _____ (2) Around sac?
 - _____ c) Intersections?
 - _____ (1) Sight distances?
 - _____ (2) Angles?
 - _____ (3) Turnpike flare radii?
 - _____ (4) Curb returns?
 - _____ (a) Radii?
 - _____ (b) Wheelchair/bicycle ramps?
- _____ 3) Slope easements required?
- _____ 4) Traffic signs and barricades?
 - _____ a) Shown on plans?
 - _____ b) Note specifying that they are to be furnished and installed by Subdivider/developer/contractor?

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_____ 5) Note specifying that all utilities and utility laterals that will lie under the street must be placed prior to paving of street.

_____ 5. Drainage?

_____ a. Drainage basins and receiving facility, swale, stream or body of water shown?

_____ b. Hydraulic calculations?

_____ 1) Method applicable. Maximum area for rational formula?

_____ 2) Parameters and assumptions?

_____ c. Detention system required?

_____ 1) Hydraulic calculations (methods, parameters, assumptions) ?

_____ 2) Storage basin capacity?

_____ 3) Method of flow restriction?

_____ d. Existing stream or ditch to be piped? Maximum size?

_____ e. Provisions for draining adjacent property?

_____ f. Pipe?

_____ 1) Diameter?

_____ 2) Type (concrete) ?

_____ 3) ASTM type and class?

_____ 4) Rubber gasket joints in roadway?

_____ 5) Crushed rock trench backfill in roadway?

_____ g. Open channel?

_____ 1) New open channels not allowed in UGB?

_____ 2) Typical section?

_____ a) Width?

_____ b) Depth (also see profile) ?

_____ c) Side slopes?

_____ h. Profile?

_____ 1) Existing ground surface?

_____ 2) Finished grade of street, ground, etc.?

_____ 3) Invert with elevations and slopes?

_____ 4) Inlets, cleanouts and manholes?

_____ a) Location by station?

_____ b) Elevation of inverts and rims?

_____ 5) Minimum or maximum cover over pipe?

_____ 6) Maximum depth in open channel?

Checklist for Engineering Plan Review

- _____ i. Plan?
 - _____ 1) Alignment of pipe or ditch with ties to centerline, curb, right-of-way or property lines?
 - _____ 2) Location of inlets, cleanouts and manholes?
 - _____ 3) Curved pipelines?
 - _____ a) Radius
 - _____ b) Maximum joint pull?
- _____ j. Capacity? Free flow (not under head) in pipes?
- _____ k. Velocity?
 - _____ 1) Minimum for self cleaning?
 - _____ 2) Maximum?
 - _____ a) Thrust blocks on pipe?
 - _____ b) Rip Rap or lining in ditches?
- _____ l. Inlets?
 - _____ 1) Type?
 - _____ 2) Type of grate?
 - _____ 3) Maximum spacing?
 - _____ 4) Maximum pipe size?
 - _____ 5) At all low points (including curb returns) ?
 - _____ 6) Maximum depth of catch basins?
- _____ m. Cleanouts/junction boxes and/or manholes?
 - _____ 1) Required at:
 - _____ a) Changes in alignment or grade?
 - _____ b) Lateral connections of lateral pipe > ½ diameter of main line?
 - _____ c) Changes in pipe size?
 - _____ d) Maximum cleaning intervals?
 - _____ 2) Manholes required because of pipe size and/or depth?
- _____ n. Outfalls: Rip or rap or structure to prevent erosion?
- _____ o. Conflicts with sewers or other utilities?
- _____ p. Easements over private property?
 - _____ 1) Minimum width?
 - _____ 2) Extra width required by pipe size, depth or special conditions?
 - _____ 3) Access to easement?