SECTION 27 - CONSTRUCTION PLAN SUBMITTALS

27-1 Water, Sewer and Storm Drain Plan Submittal Standards

27-1.1 The following shall be submitted with the plans:

- 1. Engineer's Estimate
- 2. Deeds for Easements
- 3. Hydraulic calculations for fire flows

27-1.2 Original drawings shall be:

- 1. 24 inches x 36 inches
- 2. Final plans must be drawn on mylar and copied to a CD.

27-1.3 The cover drawing shall show the following:

- 1. Vicinity Map
- 2. Subdivision Map with Street Names, Scale: 1" = 100'
- 3. General Construction Notes
- 4. Property Lines
- Lot or Parcel Numbers
- 6. North Arrow
- 7. Scale
- 8. Benchmark
- 9. Fee Block
- 10. Legend
- 11. Water Division Signature line
- 12. Fire Department Signature line (if applicable)
- 13. Fresno Irrigation District Signature line (if applicable)
- 14. Underground Service Alert (USA) Note
- 15. Engineer's Name, Address, Telephone, Stamp, Expiration Date, Signature, Date of Signing
- 16. Subdivider's and/or developer's Name & Address
- 17. Complete Title Block
- 18. Sheet Index Numbers
- 19. Easements
- 20. Water System
 - a. Lineal feet of each size of pipe
 - b. Number of Valves
 - c. Number of fire hydrants
 - d. Number of Blow-offs
 - e. Size and number of water services

21. Sanitary Sewer System

- a. Lineal feet of each size of pipe
- b. Size and number of Manholes
- c. Size and number of house branches
- d. Number of lift stations

22. Storm Drain System

- a. Lineal feet of each size of pipe
- b. Size and number of manholes
- c. Number of drain inlets/outlets
- d. Size in acres and location of retention basin used
- e. Number of outfall structures, if any
- f. Hydraulic calculations of runoff generated by the development

27-1.4 Each drawing shall show the following:

- 1. North arrow shall customarily point to the top or right of the drawing
- Scale
- 3. Complete Title Block including street name and project limits
- 4. Engineer's Stamp, Expiration Date, Signature, Date of Signature
- 5. Street names and widths
- 6. Curb patterns and valley gutters
- 7. Lot lines and lot numbers
- 8. Easements
- 9. Sheet numbers for all adjacent sheets

27-1.5 The plan view shall show the following:

- 1. Sanitary Sewer System
 - a. Size of pipe
 - b. Pipe material
 - c. Manhole size and station
 - d. Distance from sewer to property line
 - e. Flow line elevations of all sewers intersecting a manhole
 - f. House branches for each lot with size, length, and station
 - g. Total number and size of all house branches for each street
 - h. Slope of the flow line
 - i. Existing ground and future elevation of street centerline
 - j. Lineal feet of sewer to be installed per sheet
 - k. All sewer stubs, size, and length
 - I. Stationing shall begin from an existing sewer at the lowest point
 - m. Material and Class of Backfill to be Used in Pipe Embedment Zone

2. Water System

- a. Size of pipe
- b. Pipe material
- c. Distance from main to property line
- d. Lineal feet of pipe to be installed per sheet
- e. Fire hydrant with station
- f. Valve locations with size, type and station
- g. Location of water service
- h. Station for T's, crosses, 45 and 90 Ells, etc...
- i. Blow-off size and station
- j. Bearing of main (in easements only)
- k. Water supply wells and mains within 10 feet of a sanitary sewer main shall be indicated on plans.

- 3. Storm Drain System
 - a. Size of pipe
 - b. Pipe material
 - c. Distance from main to property line
 - d. Lineal feet of each size of pipe to be installed per sheet
 - e. Size and number of manholes
 - f. Number of inlets/outlets

27-1.6 The profile view shall show the following:

- 1. Horizontal scale shall be 1" = 40' (1" = 20' may be required if area is congested.)
- 2. Vertical scale shall be 1" = 4'
- 3. Existing and proposed street surface profiles
- 4. All elevations shall be on United States Geodetic Survey (U.S.G.S.) mean sea level datum adjusted to 1970.
- 5. Underground utilities which may conflict
- 6. Sanitary sewer system
 - a. Flow line elevation along center line of sewer
 - b. Size of pipe
 - c. Pipe material
 - d. Slope of the flow line
 - e. Cut in feet and flow line elevation at each manhole
 - f. All manholes and their station
 - g. length, in feet, of sewer to be installed
 - h. Stationing shall begin from an existing sewer at the lowest point.

7. Water System

- a. Top and bottom of the main
- b. Size and material of the main
- c. Slope of the main
- d. Location of all blow-offs, air and vacuum valves, centerlines of intersection streets and other appurtenances with both station and elevation where applicable.
- e. Elevations to nearest 0.10 foot of top of pipe.

27-1.7 Special Construction Near Well Site

Sanitary sewers located within 50 feet of a water supply well shall be constructed of material to prevent contamination of the well.

27-2 STREET PLAN SUBMITTAL STANDARDS

27-2.1 The following shall be submitted with the plans:

- 1. Engineer's Estimate
- 2. Estimate of all Work subject to a fee reimbursement
- 3. All Deeds for Easements and Dedications
- Structural section calculations
- 5. Plans, details, and CIA calculations for ponding basins
- 6. Any necessary plans for construction to be done in conjunction with the construction of the street improvements
- 7. Sanitary sewer, water, and storm drain improvement plans

27-2.2 Original drawing shall be:

- 1. 24 inch x 36 inch
- 2. Final plans must be drawn on mylar and copied to a CD

27-2.3 The cover drawing shall show the following:

- 1. Vicinity Map
- 2. Subdivision Map with Street Names, Scale: 1" = 100'
- 3. General Construction Notes
- 4. Property Lines
- 5. Lot or Parcel Numbers
- 6. North Arrow
- 7. Scale
- 8. Benchmark
- 9. Fee Block
- 10. Legend
- 11. Madera County Signature Block (required only if any part of Work is outside the City and in the County)
- 12. Underground Service Alert (USA) Note
- 13. Engineer's Name, Address, Telephone, Stamp, Expiration Date, Signature, Date of Signature
- 14. Owner's Name and Address
- 15. Complete Title Block
- 16. Typical Section
 - a. Structural Section
 - b. Cross Slopes
 - c. Sidewalk Pattern
 - d. Right-of-Way Width
 - e. Cross sections
 - f. Extent of pavement transition for border streets
- 17. Sheet Index Numbers

27-2.4 Each drawing shall show the following:

- 1. North arrow shall point to the top or right of the drawing
- 2. Scale
- 3. Complete Title Block including street name and project limits
- 4. Engineer's Stamp, Expiration Date, Signature, Date of Signature
- 5. Site Plan, C.U.P., Rezone, Parcel Map, U.G.M., or F.A.U. Number

27-2.5 The plan view shall show the following:

- 1. Scale shall be 1" = 40' or 1" = 20'
- 2. Right-of-way Width
- 3. Street Width Curb face to Curb face
- 4. Sidewalk Pattern
- 5. Valley Gutters
- 6. Lot Lines & Lot Numbers or APN's
- 7. Easements
- 8. Dedications
- 9. Driveway Location & Width
- 10. Existing Utilities