

III. DOCUMENTATION

Design calculations shall be presented at the time plans for storm drainage facilities are submitted for approval. These calculations shall include:

A. DRAINAGE MAP

Showing:

- 1. All lines and inlet points.
- 2. Drainage areas contributing to each inlet point.
- 3. Designations for the above.

B. STORM CALCULATION SHEET

SEE STORM DRAIN DESIGN SHEETS A & B (SD-25, 26)

- 1. Drainage area in acres.
- 2. Time of concentration.
- 3. Runoff coefficient for each area.
- 4. Flow rate to each structure.
- 5. Flow rate and velocity in each pipe.
- 6. Pipe diameter, length and slope.
- 7. Invert (inside low point) elevation of each pipe at structure.
- 8. Depth and width of flow in gutters.
- 9. Depth of flow in open channels.
- 10. List of assumptions, if any, which affect the design.

C. DETENTION BASIN CALCULATIONS

Showing:

- 1. Drainage area in acres.
- 2. Weighted volume coefficient.
- 3. Ten-year and 50-year rainfall in inches.
- 4. Ten-year and 50-year volumes for basins with interruptible outlet in acre-feet.

ENGINEERING DEPARTMENT

CITY OF MERCED, CALIF.

STORM DRAIN DESIGN

SD-20

DRAWN: K. E.

APPROVED BY:

DATE

ENG.

Steve M. Stroud

8-5-91

REVISED

CITY ENGINEER

SHEET

OF

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