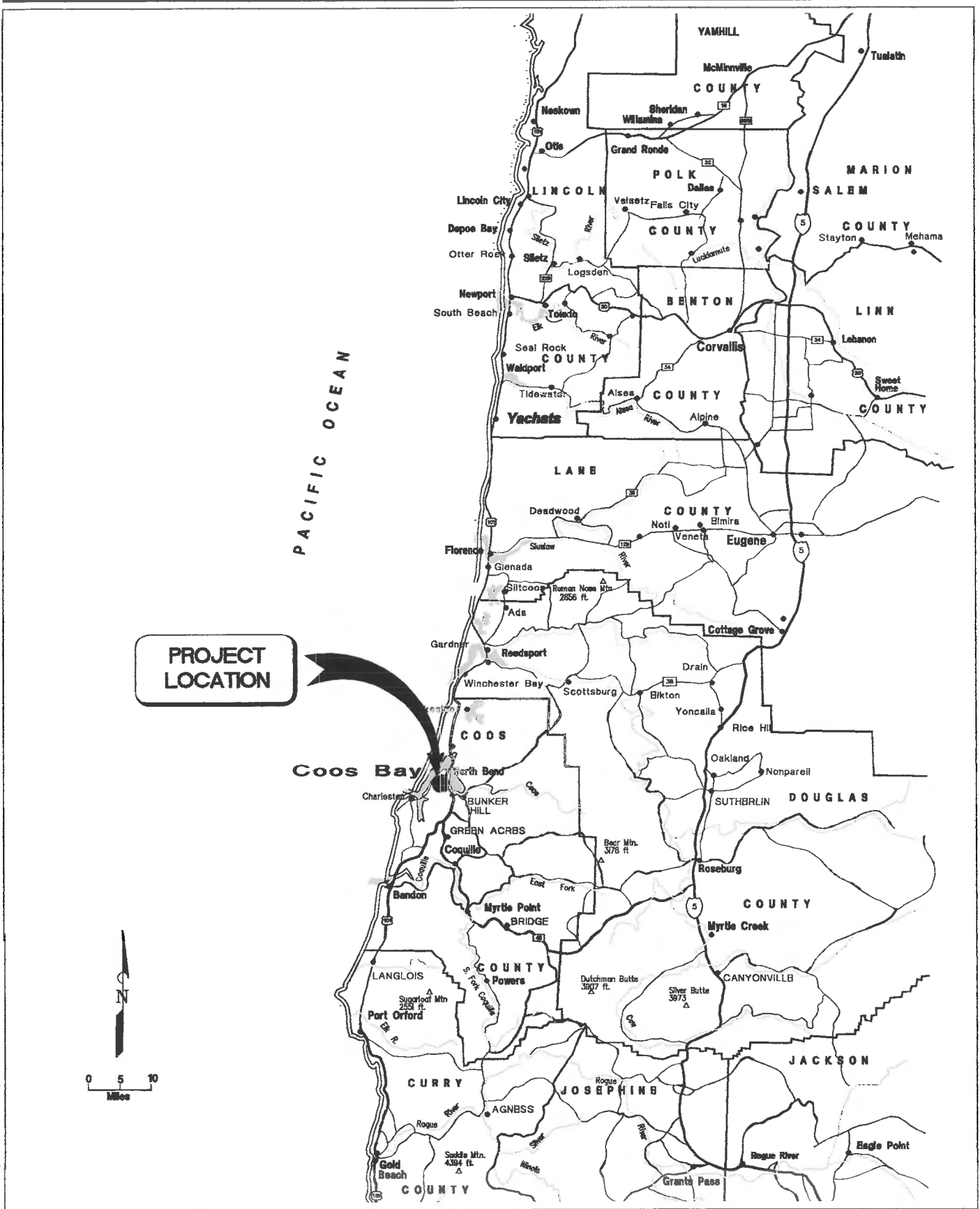


# Maps & Figures

Appendix

# A

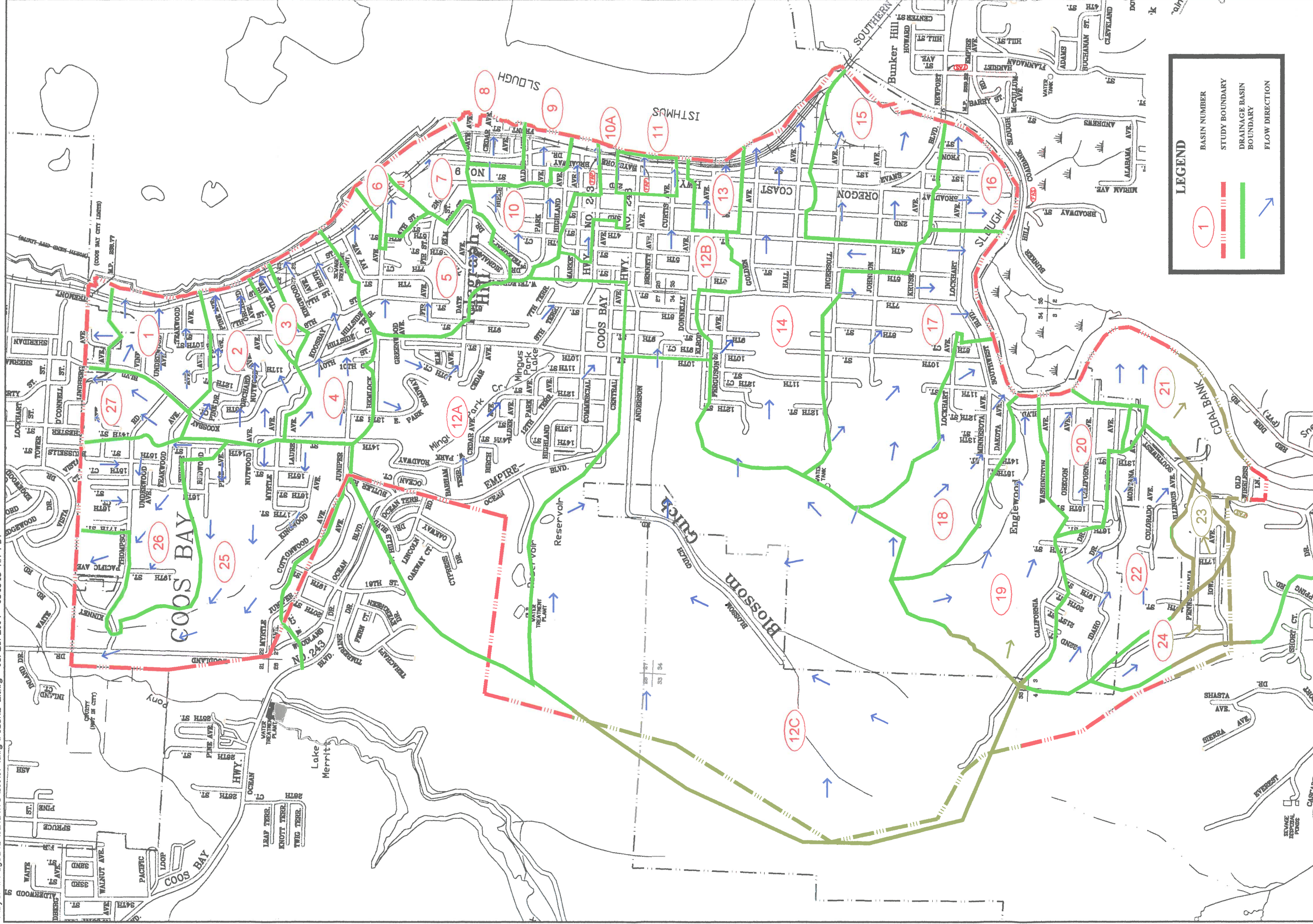
\\Dyer\Projects\0Active\109.07\dwg\FIGURE 1.dwg 05/26/2004 08:09:09 AM PDT



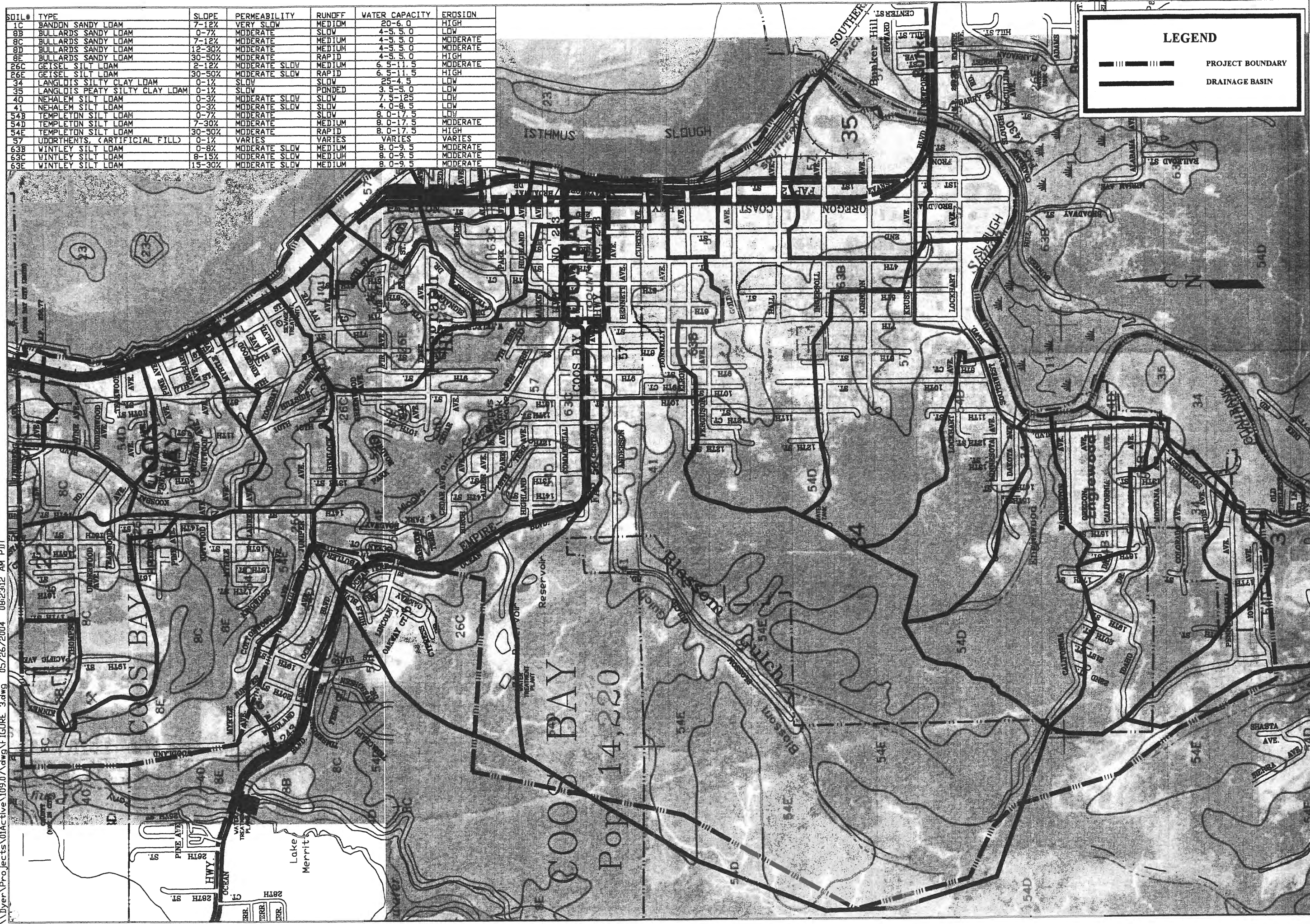
THE DYER PARTNERSHIP  
ENGINEERS & PLANNERS, INC.  
DATE: SEPT., 2004  
PROJECT NO.: 109.07

**COOS BAY STORM WATER MASTER PLAN**  
**PROJECT LOCATION MAP**

FIGURE NO.  
**A-1**



| SOIL# | TYPE                           | SLOPE  | PERMEABILITY  | RUNOFF    | WATER CAPACITY | EROSION   |
|-------|--------------------------------|--------|---------------|-----------|----------------|-----------|
| 1C    | BANDON SANDY LOAM              | 7-12%  | VERY SLOW     | MEDIUM    | 20-6.0         | HIGH      |
| 8B    | BULLARDS SANDY LOAM            | 0-7%   | MODERATE      | SLOW      | 4-5.5.0        | LOW       |
| 8C    | BULLARDS SANDY LOAM            | 7-12%  | MODERATE      | MEDIUM    | 4-5.5.0        | MODERATE  |
| 8D    | BULLARDS SANDY LOAM            | 12-30% | MODERATE      | MEDIUM    | 4-5.5.0        | MODERATE  |
| 8E    | BULLARDS SANDY LOAM            | 30-50% | MODERATE      | RAPID     | 4-5.5.0        | HIGH      |
| 26C   | GEISEL SILT LOAM               | 2-12%  | MODERATE SLOW | MEDIUM    | 6.5-11.5       | MODERATE  |
| 26E   | GEISEL SILT LOAM               | 30-50% | MODERATE SLOW | RAPID     | 6.5-11.5       | HIGH      |
| 34    | LANGLOIS SILTY CLAY LOAM       | 0-1%   | SLOW          | SLOW      | 25-4.5         | LOW       |
| 35    | LANGLOIS PEATY SILTY CLAY LOAM | 0-1%   | SLOW          | PONDED    | 3.5-5.0        | LOW       |
| 40    | NEHALEM SILT LOAM              | 0-3%   | MODERATE SLOW | SLOW      | 7.5-125        | LOW       |
| 41    | NEHALEM SILT LOAM              | 0-3%   | MODERATE SLOW | SLOW      | 4.0-8.5        | LOW       |
| 54B   | TEMPLETON SILT LOAM            | 0-7%   | MODERATE      | SLOW      | 8.0-17.5       | LOW       |
| 54D   | TEMPLETON SILT LOAM            | 7-30%  | MODERATE      | MEDIUM    | 8.0-17.5       | MODERATE  |
| 54E   | TEMPLETON SILT LOAM            | 30-50% | MODERATE      | RAPID     | 8.0-17.5       | HIGH      |
| 57    | UDORTHERTS (ARTIFICIAL FILL)   | 0-1%   | VARIABLES     | VARIABLES | VARIABLES      | VARIABLES |
| 63B   | WINTLEY SILT LOAM              | 0-8%   | MODERATE SLOW | MEDIUM    | 8.0-9.5        | MODERATE  |
| 63C   | WINTLEY SILT LOAM              | 8-15%  | MODERATE SLOW | MEDIUM    | 8.0-9.5        | MODERATE  |
| 63E   | WINTLEY SILT LOAM              | 15-30% | MODERATE SLOW | MEDIUM    | 8.0-9.5        | MODERATE  |



\\Dyer\Projects\DIActive\109.07\dwg\FIGURES FOR REPORT\FIGURE 4.dwg 05/21/2004 10:19:44 AM PDT

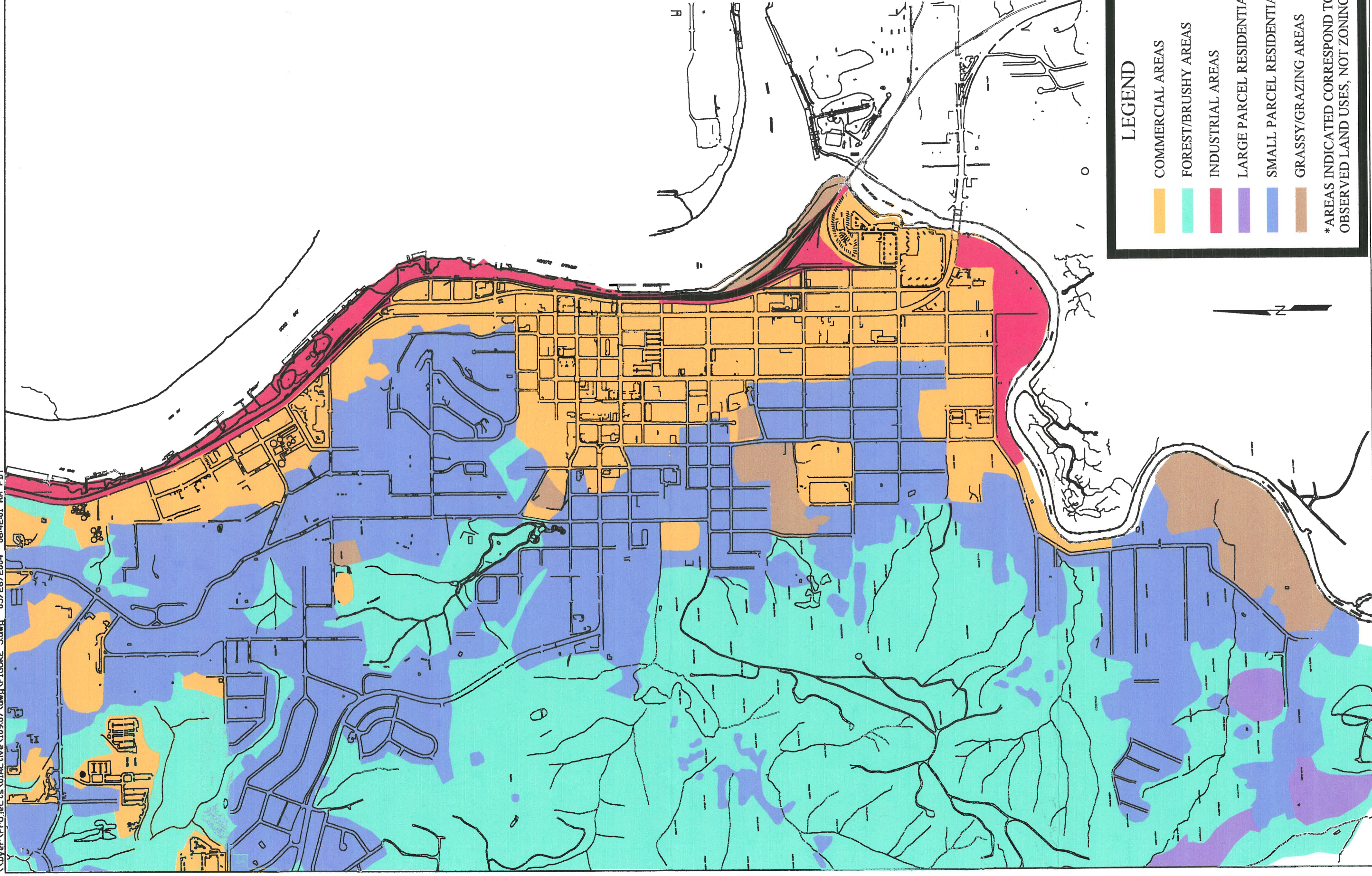


**LEGEND**

- FEMA 100 YEAR FLOOD BOUNDARY
- ELEVATIONS UNDER 8'
- ELEVATIONS BETWEEN 8' AND 9'
- ELEVATIONS BETWEEN 9' AND 10'
- ELEVATIONS BETWEEN 10' AND 11'

\*ELEVATIONS FROM 1988 DATUM

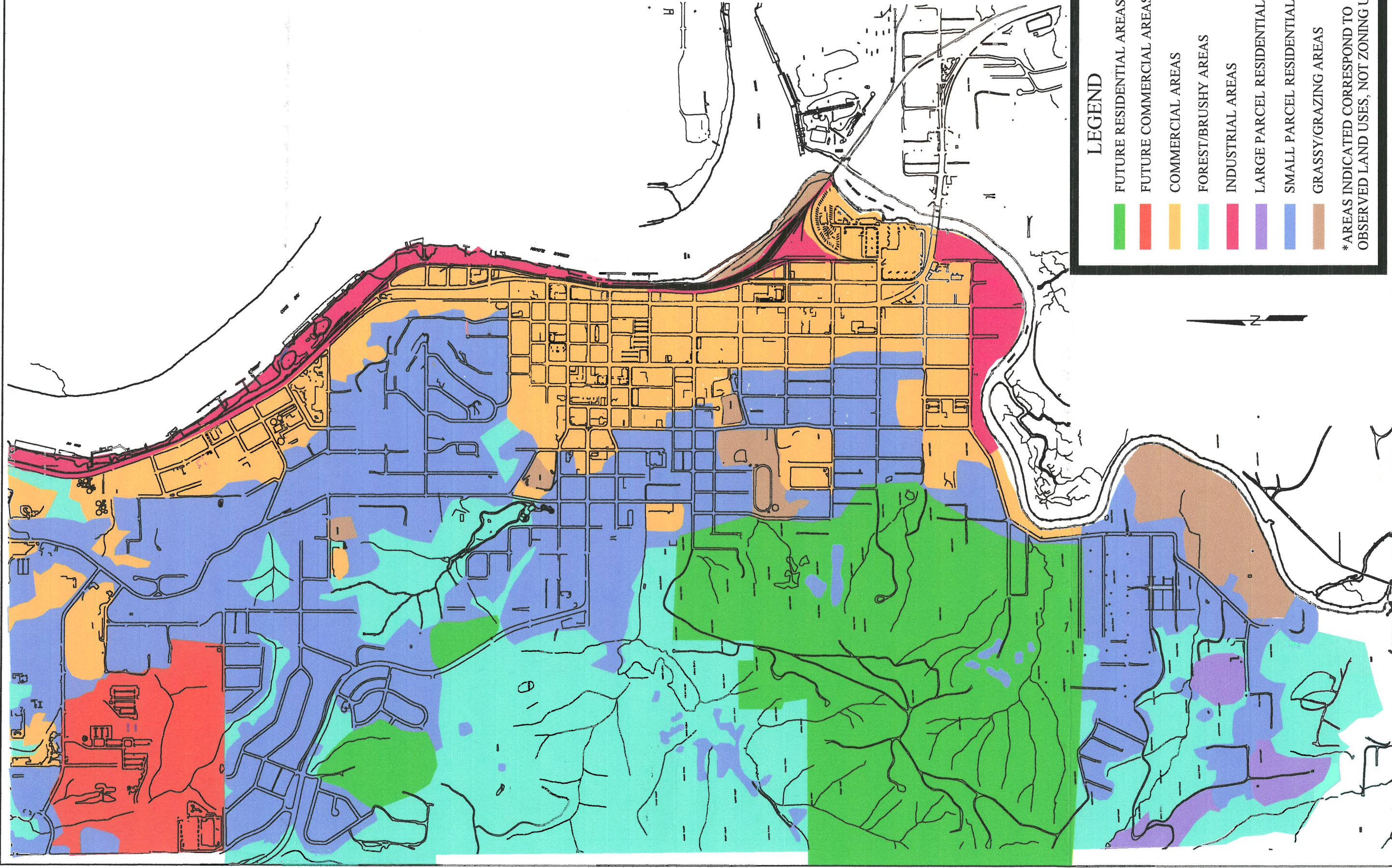
\\Dyer\Projects\01Active\10907\dwg\FIGURE 5.dwg 05/26/2004 08:42:01 AM PDT



**LEGEND**

- COMMERCIAL AREAS
- FOREST/BRUSHY AREAS
- INDUSTRIAL AREAS
- LARGE PARCEL RESIDENTIAL
- SMALL PARCEL RESIDENTIAL
- GRASSY/GRAZING AREAS

\*AREAS INDICATED CORRESPOND TO OBSERVED LAND USES, NOT ZONING USES

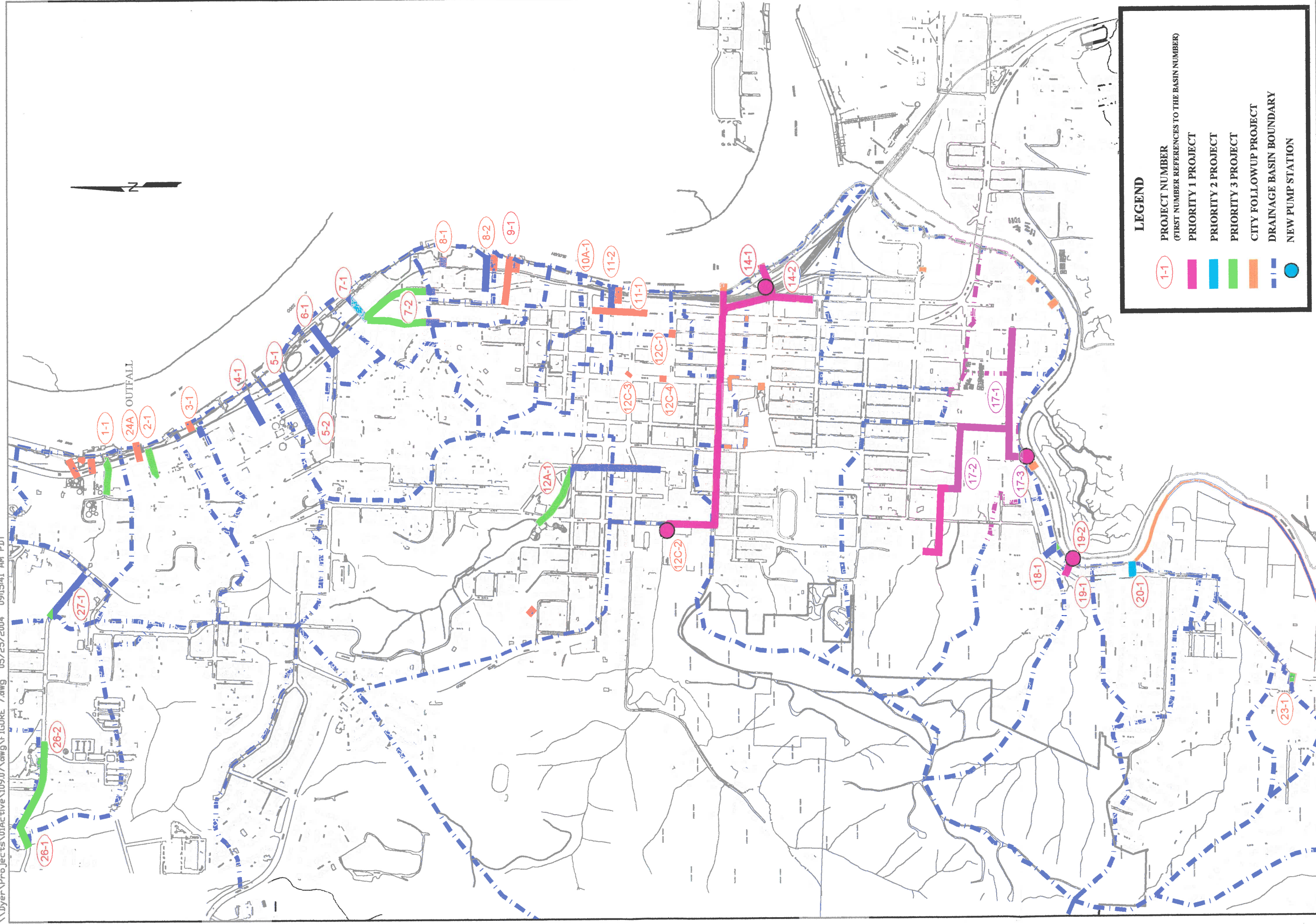


**LEGEND**

- FUTURE RESIDENTIAL AREAS
- FUTURE COMMERCIAL AREAS
- COMMERCIAL AREAS
- FOREST/BRUSHY AREAS
- INDUSTRIAL AREAS
- LARGE PARCEL RESIDENTIAL
- SMALL PARCEL RESIDENTIAL
- GRASSY/GRAZING AREAS

\*AREAS INDICATED CORRESPOND TO OBSERVED LAND USES, NOT ZONING USES

\\Dyer\Projects\01Active\109.07\dwg\FIGURE 7.dwg 05/25/2004 09:15:41 AM PDT



**LEGEND**

- PROJECT NUMBER  
(FIRST NUMBER REFERENCES TO THE BASIN NUMBER)
- PRIORITY 1 PROJECT
- PRIORITY 2 PROJECT
- PRIORITY 3 PROJECT
- CITY FOLLOWUP PROJECT
- DRAINAGE BASIN BOUNDARY
- NEW PUMP STATION

THE DYER PARTNERSHIP  
ENGINEERS & PLANNERS

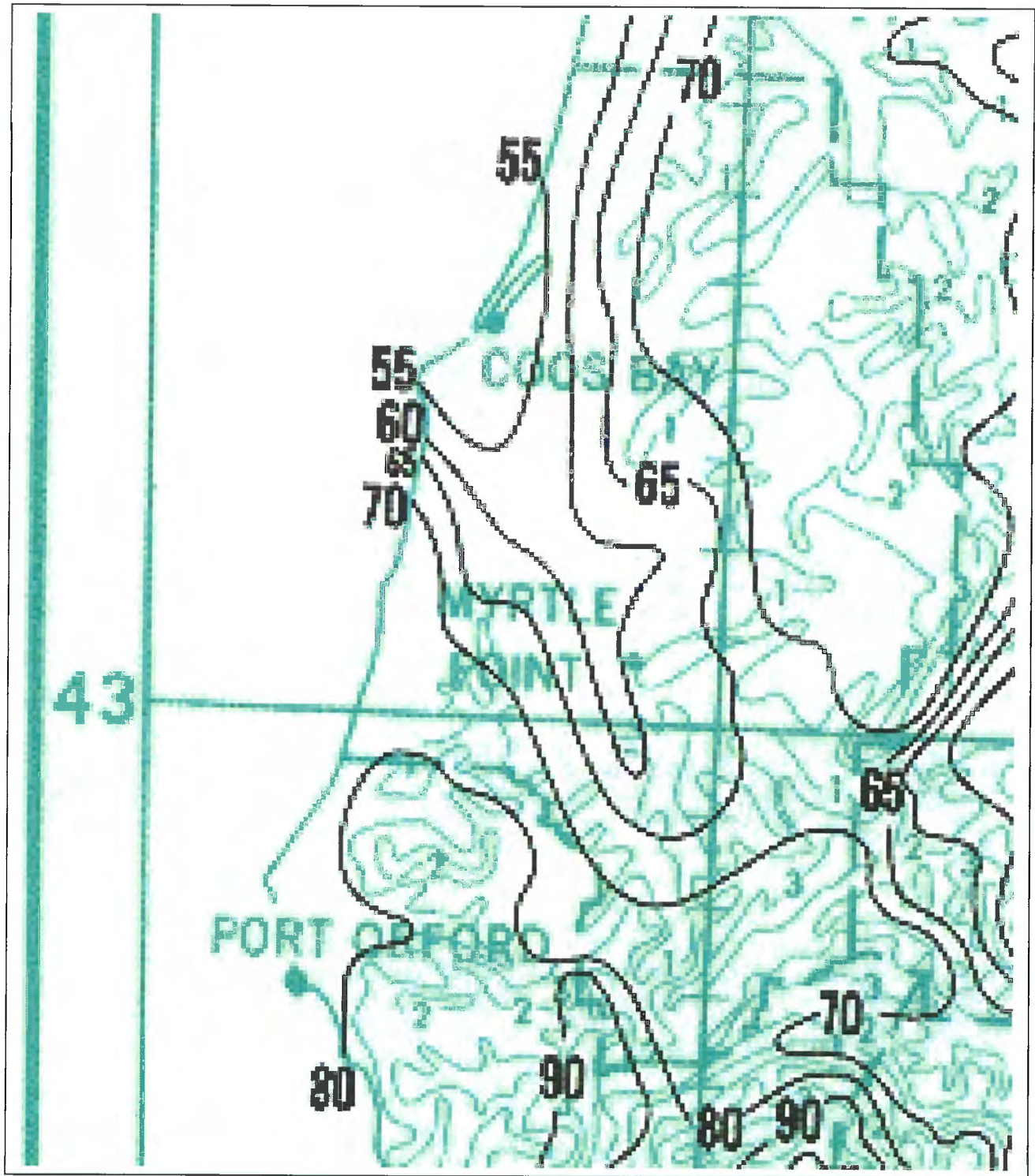
DATE: SEPT, 2004

PROJECT NO.: 109.07

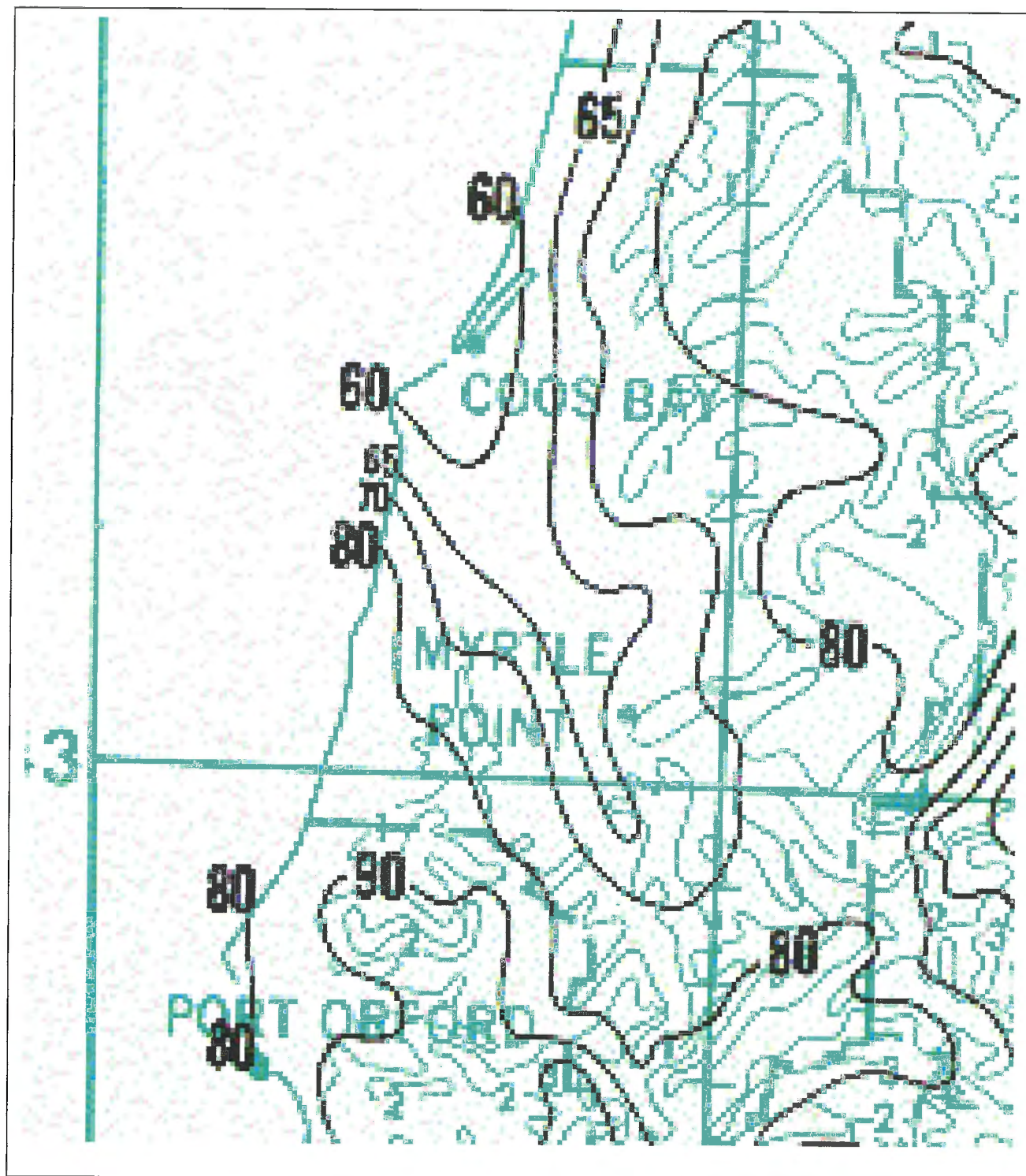
COOS BAY STORM WATER MASTER PLAN  
STORMWATER PROJECT PRIORITY MAP

FIGURE NO.  
A-7

Coos Bay Isopluvial lines 25 Year – 24 Hour



Coos Bay Isopluvial lines 50 Year – 24 Hour



# Existing System Maps

Appendix

**B**

# Photos



**TIDEGATE 1**



**TIDEGATE 2**



**TIDEGATE 3A**



**TIDEGATE 3B**



**TIDEGATE 3C**



**TIDEGATE 4**



**TIDEGATE 5**



**TIDEGATE 6**



## TIDEGATE 7



## SEDIMENT BASIN 7



## TIDEGATE 7A

Sediment basin side of outfall 7A.  
tidegate was not accessible at time  
of study due to fences and brambles.



**TIDEGATE 8**



**TIDEGATE 9**



**TIDEGATE 10**



holes in pipe

**TIDEGATE 11**



Wood Culvert

**TIDEGATE 12 (Mill Slough Box)**



**TIDEGATE 12 (Mill Slough Box)**



**TIDEGATE 13**



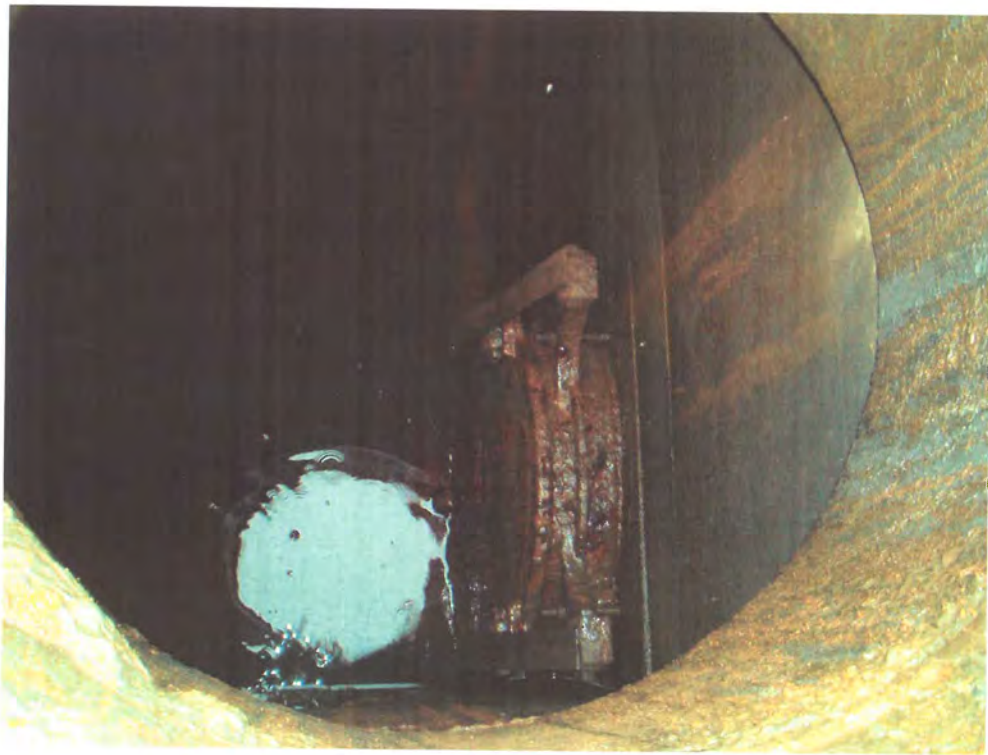
**TIDEGATE 14 WITH TIDEGATE 14A UNDER IN HEADWALL**



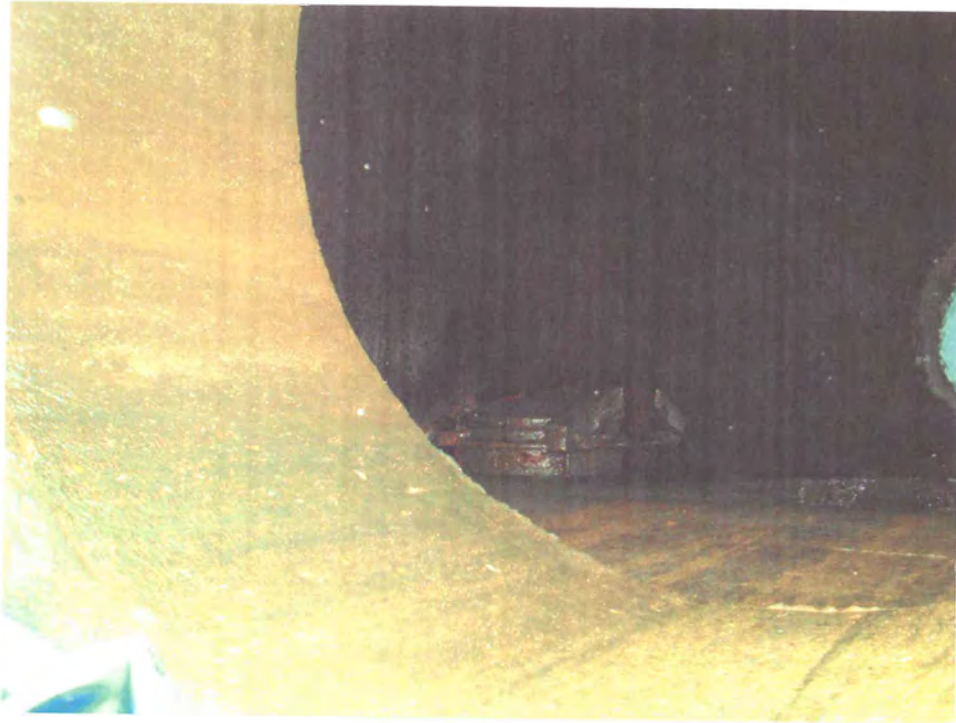
**OUTFALL 14B**



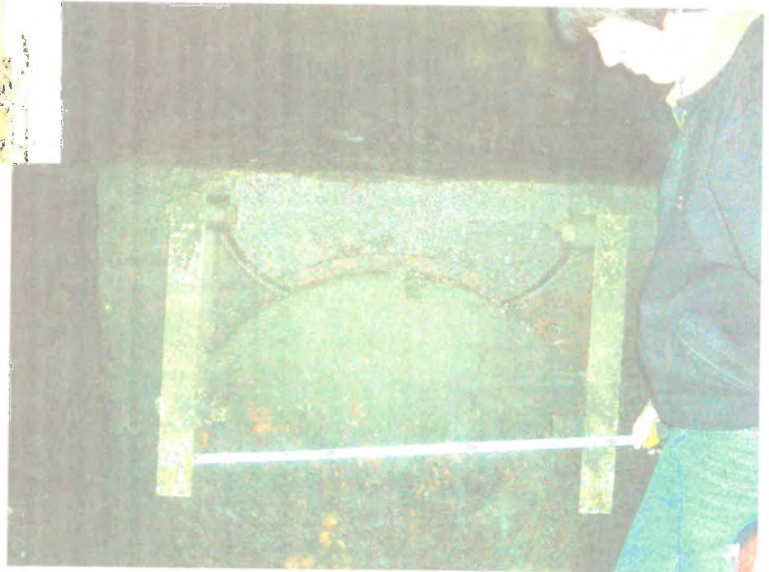
**TIDEGATE 15A**



TIDEGATE 15B



TIDEGATE 16



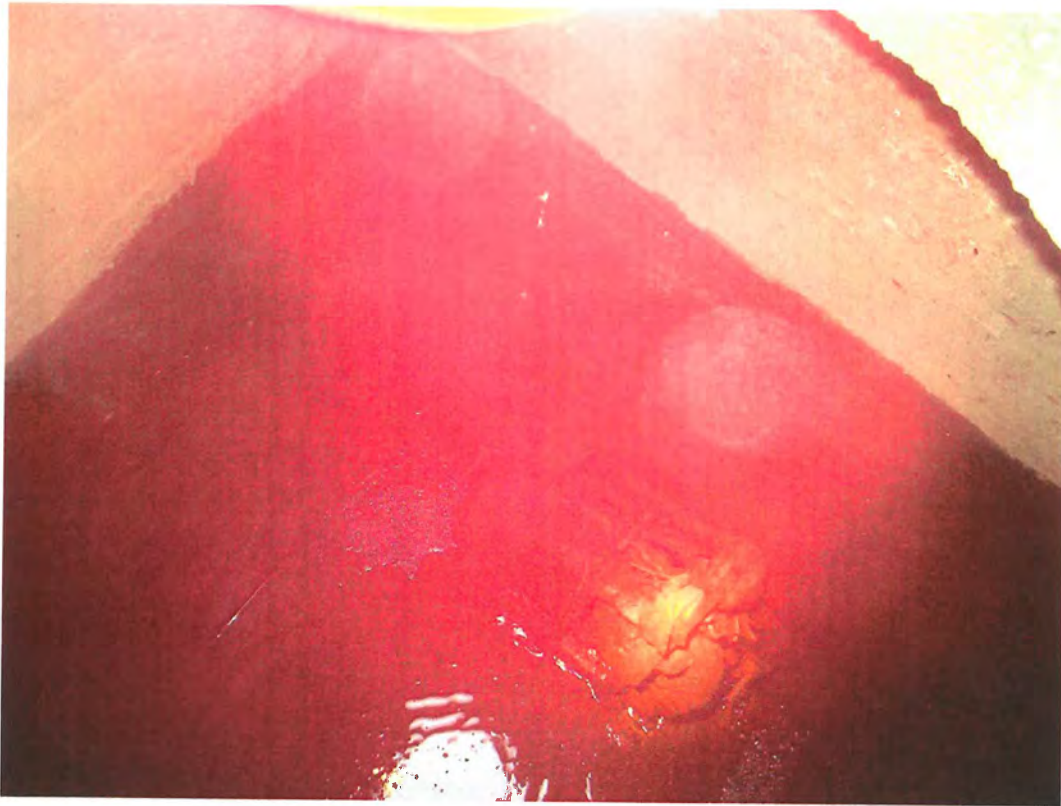
**TIDEGATE 17**



**TIDEGATE 18**

Tidegate no longer exists

**TIDEGATE 19**



**TIDEGATE 20**



**PRIOR TIDEGATE 21 VAULT & OUTFALL**



**TIDEGATE 22**



**TIDEGATE 23**



**TIDEGATE 24**



**OUTFALL 26**



**OUTFALL 26A**



**TIDEGATE 27**



# Computer Model

Appendix

D

**SUBCATCHMENT 1**                      **Basin 1**

PEAK= 23.04 CFS @ 8.39 HRS, VOLUME= 10.28 AF

| ACRES | CN |               |
|-------|----|---------------|
| 9.20  | 92 | Commercial    |
| 8.00  | 88 | Industrial    |
| 14.20 | 75 | Small Res.    |
| 8.60  | 60 | Forest/Brushy |
| 40.00 | 78 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min)                |
|---|------------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=950' s=.164 '/'  | Upper Area | 8.0                     |
| CURVE NUMBER (LAG) METHOD<br>L=555' s=.0032 '/' | Lower Area | 37.3                    |
| Total Length= 1505 ft                           |            | -----<br>Total Tc= 45.3 |

**SUBCATCHMENT 2**                      **Basin 2**

PEAK= 20.58 CFS @ 8.60 HRS, VOLUME= 9.93 AF

| ACRES | CN |                |
|-------|----|----------------|
| 11.27 | 92 | Commercial     |
| 2.10  | 88 | Industrial     |
| 21.86 | 75 | Small Lot Res. |
| .35   | 60 | Forest/Brushy  |
| 35.58 | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min)                |
|---|------------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=1400' s=.148 '/' | Upper Area | 10.5                    |
| CURVE NUMBER (LAG) METHOD<br>L=790' s=.0025 '/' | Lower Area | 51.0                    |
| Total Length= 2190 ft                           |            | -----<br>Total Tc= 61.5 |

**SUBCATCHMENT 3 Basin 3**

PEAK= 3.34 CFS @ 8.46 HRS, VOLUME= 1.51 AF

| ACRES | CN |                |
|-------|----|----------------|
| 2.00  | 92 | Commercial     |
| 3.40  | 75 | SMALL LOT RES. |
| 5.40  | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min)       |
|---|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=591' s=.168 '/'  | Upper Area | 4.9            |
| CURVE NUMBER (LAG) METHOD<br>L=745' s=.0027 '/' | Lower Area | 46.8           |
| Total Length= 1336 ft                           |            | Total Tc= 51.7 |

**SUBCATCHMENT 4 Basin 4**

PEAK= 50.41 CFS @ 8.32 HRS, VOLUME= 21.52 AF

| ACRES | CN |               |
|-------|----|---------------|
| 20.61 | 92 | Commercial    |
| 2.30  | 88 | Ind           |
| 52.13 | 75 | Small Lot Res |
| 6.00  | 60 | Forest/Brushy |
| 81.04 | 79 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)       |
|---|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=1170' s=.112 '/' | Top     | 11.1           |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.075 '/'  | Middle  | 8.7            |
| CURVE NUMBER (LAG) METHOD<br>L=1080' s=.027 '/' | Lower   | 21.2           |
| Total Length= 2920 ft                           |         | Total Tc= 41.0 |

**SUBCATCHMENT 5**                      **Basin 5**

PEAK= 34.88 CFS @ 8.54 HRS, VOLUME= 16.80 AF

| ACRES | CN |           |
|-------|----|-----------|
| 10.30 | 92 | Comm      |
| 0.00  | 88 | Ind       |
| 55.40 | 75 | Small Res |
| 65.70 | 78 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)                |
|---|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=1520' s=.137 '/' | Upper   | 12.8                    |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.025 '/'  | Middle  | 15.5                    |
| CURVE NUMBER (LAG) METHOD<br>L=450' s=.004 '/'  | Lower   | 28.2                    |
| Total Length= 2640 ft                           |         | -----<br>Total Tc= 56.5 |

**SUBCATCHMENT 6**                      **Basin 6**

PEAK= 4.43 CFS @ 8.12 HRS, VOLUME= 1.59 AF

| ACRES | CN |      |
|-------|----|------|
| .61   | 92 | Comm |
| 3.92  | 88 | Ind  |
| 4.53  | 89 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)                |
|--|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=150' s=.51 '/'  | Upper   | .7                      |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.004 '/' | Lower   | 26.7                    |
| Total Length= 820 ft                           |         | -----<br>Total Tc= 27.4 |

**SUBCATCHMENT 7 Basin 7**

PEAK= 19.80 CFS @ 8.05 HRS, VOLUME= 6.87 AF

| ACRES | CN |            |
|-------|----|------------|
| 5.96  | 92 | Commercial |
| 8.05  | 88 | Ind        |
| 8.20  | 75 | Small Res  |
| 22.21 | 84 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=525' s=.49 '/'  | Upper   | 2.4            |
| CURVE NUMBER (LAG) METHOD<br>L=540' s=.009 '/' | Lower   | 18.0           |
| Total Length= 1065 ft                          |         | Total Tc= 20.4 |

**SUBCATCHMENT 8 Basin 8 (Report Basin 9)**

PEAK= 15.13 CFS @ 7.97 HRS, VOLUME= 4.96 AF

| ACRES | CN |           |
|-------|----|-----------|
| 2.40  | 92 | Comm      |
| 11.00 | 88 | Ind       |
| 1.00  | 75 | Small Res |
| 14.40 | 88 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=963' s=.088 '/' | Upper   | 7.9            |
| CURVE NUMBER (LAG) METHOD<br>L=445' s=.031 '/' | Lower   | 7.2            |
| Total Length= 1408 ft                          |         | Total Tc= 15.1 |

**SUBCATCHMENT 9 Basin 9 (Report Basin 8)**

PEAK= 14.08 CFS @ 7.84 HRS, VOLUME= 4.47 AF

| ACRES | CN |      |
|-------|----|------|
| 7.29  | 92 | Comm |
| 5.02  | 88 | Ind  |
| 12.31 | 90 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=420' s=.045 '/' | Total   | 5.3      |

SUBCATCHMENT 10 Basin 10

PEAK= 24.28 CFS @ 8.16 HRS, VOLUME= 9.27 AF

| ACRES | CN |           |
|-------|----|-----------|
| 9.60  | 92 | Comm      |
| .70   | 88 | Ind       |
| 23.40 | 75 | Small REs |
| 33.70 | 80 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)                |
|--|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=725' s=.31 '/'  | Upper   | 4.4                     |
| CURVE NUMBER (LAG) METHOD<br>L=761' s=.024 '/' | Middle  | 16.5                    |
| CURVE NUMBER (LAG) METHOD<br>L=300' s=.027 '/' | Lower   | 7.4                     |
| Total Length= 1786 ft                          |         | -----<br>Total Tc= 28.3 |

SUBCATCHMENT 11 Basin 11 (Report Basin-DELETED)

PEAK= 4.25 CFS @ 8.01 HRS, VOLUME= 1.43 AF

| ACRES | CN |            |
|-------|----|------------|
| 3.00  | 92 | Commercial |
| .85   | 88 | Ind        |
| 3.85  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=480' s=.004 '/' | Length  | 18.8     |

SUBCATCHMENT 13 Basin 13 (Report Basin 11)

PEAK= 7.44 CFS @ 8.22 HRS, VOLUME= 2.84 AF

| ACRES | CN |            |
|-------|----|------------|
| 1.51  | 88 | Industrial |
| 6.19  | 92 | Commercial |
| 7.70  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=440' s=.001 '/' | Length  | 35.1     |

SUBCATCHMENT 14 Basin 14 (Report Basin 13)

PEAK= 17.28 CFS @ 8.03 HRS, VOLUME= 5.86 AF

| ACRES | CN |               |
|-------|----|---------------|
| 13.60 | 92 | Comm          |
| 2.00  | 88 | Ind           |
| .20   | 61 | Brushy Fields |
| 15.80 | 91 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=867' s=.009 '/' | Length  | 20.1     |

SUBCATCHMENT 15 Basin 15 (Report Basin 14)

PEAK= 59.26 CFS @ 8.78 HRS, VOLUME= 31.41 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 36.00  | 92 | Comm          |
| 7.00   | 88 | Industrial    |
| 20.80  | 61 | Grassy Fields |
| 27.00  | 75 | Future Res.   |
| 33.00  | 75 | Res           |
| 123.80 | 78 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2030' s=.118 '/'  | Upper   | 17.3     |
| CURVE NUMBER (LAG) METHOD<br>L=1280' s=.0187 '/' | Middle  | 30.1     |
| CURVE NUMBER (LAG) METHOD<br>L=1100' s=.021 '/'  | Lower   | 25.2     |

Total Length= 4410 ft Total Tc= 72.6

SUBCATCHMENT 16 Basin 16 (Report Basin 15)

PEAK= 68.27 CFS @ 8.29 HRS, VOLUME= 27.22 AF

| ACRES | CN |            |
|-------|----|------------|
| 68.10 | 92 | Comm       |
| 2.40  | 88 | Industrial |
| 3.52  | 75 | Small Res  |
| 74.02 | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min) |
|---|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=1800' s=.007 '/' | Length  | 40.9     |

SUBCATCHMENT 17 Basin 17 (Report Basin 16)

PEAK= 24.14 CFS @ 8.43 HRS, VOLUME= 10.36 AF

| ACRES | CN |            |
|-------|----|------------|
| 11.75 | 92 | Commercial |
| 17.25 | 88 | Industrial |
| 29.00 | 90 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 50.9     |
| L=1025' s=.002 '/'        |         |          |

SUBCATCHMENT 18 Basin 18 (Report Basin 17)

PEAK= 122.4 CFS @ 8.17 HRS, VOLUME= 45.27 AF

| ACRES  | CN |                |
|--------|----|----------------|
| 31.00  | 92 | Commercial     |
| 6.25   | 90 | Industrial     |
| 44.00  | 87 | Small Lot Res. |
| 51.00  | 87 | Future Res.    |
| 132.25 | 88 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 12.9     |
| L=2160' s=.12 '/'         |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 17.7     |
| L=1400' s=.032 '/'        |         |          |

Total Length= 3560 ft Total Tc= 30.6

**SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet**

PEAK= 158.8 CFS @ 8.71 HRS, VOLUME=101.87 AF

| ACRES  | CN |                    |
|--------|----|--------------------|
| 491.00 | 60 | Brushy/Forest      |
| 28.00  | 75 | Residential        |
| 141.00 | 75 | Future Residential |
| 660.00 | 64 |                    |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 60.9     |
| L=8050' s=.187 '/'        |         |          |

**SUBCATCHMENT 2 Mingus Drainage**

PEAK= 66.86 CFS @ 11.70 HRS, VOLUME= 57.94 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 84.00  | 60 | Brushy Forest |
| 180.00 | 75 | Small Res     |
| 36.00  | 92 | Commercial    |
| 300.00 | 73 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 49.0     |
| L=3631' s=.05 '/'         |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 197.6    |
| L=1800' s=.001 '/'        |         |          |

Total Length= 5431 ft Total Tc= 246.6

**SUBCATCHMENT 3 Down town Blossom**

PEAK= 53.32 CFS @ 8.40 HRS, VOLUME= 22.55 AF

| ACRES | CN |                     |
|-------|----|---------------------|
| 60.00 | 92 | Commercial Downtown |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 48.9     |
| L=2775' s=.009 '/'        |             |          |

**SUBCATCHMENT 19 Basin 19 (Report Basin 18)**

PEAK= 71.19 CFS @ 8.10 HRS, VOLUME= 25.24 AF

| ACRES | CN |             |
|-------|----|-------------|
| 3.50  | 92 | COMMERCIAL  |
| 21.00 | 87 | RESIDENTIAL |
| 51.00 | 87 | Future Res. |
| 75.50 | 87 |             |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment    | Tc (min)       |
|--|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.14 '/' | UPPER AREA | 12.3           |
| CURVE NUMBER (LAG) METHOD<br>L=610' s=.017 '/' | LOWER AREA | 12.9           |
| Total Length= 2740 ft                          |            | Total Tc= 25.2 |

**SUBCATCHMENT 21 Basin 21 (Report Basin 20)**

PEAK= 35.77 CFS @ 7.98 HRS, VOLUME= 11.75 AF

| ACRES | CN |     |
|-------|----|-----|
| 35.00 | 87 | Res |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment     | Tc (min) |
|---|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.094 '/' | Segment ID: | 15.0     |

**SUBCATCHMENT 22 Basin 22 (Report Basin 21)**

PEAK= 1.81 CFS @ 7.89 HRS, VOLUME= .62 AF

| ACRES | CN |     |
|-------|----|-----|
| 2.53  | 76 | Res |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment     | Tc (min) |
|--|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=570' s=.126 '/' | Segment ID: | 6.4      |

SUBCATCHMENT 23 Basin 23 (Report Basin 22)

PEAK= 36.51 CFS @ 8.34 HRS, VOLUME= 18.55 AF

| ACRES  | CN |        |
|--------|----|--------|
| 50.00  | 75 | Res    |
| 55.00  | 60 | Forest |
| 105.00 | 67 |        |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 38.9     |
| L=3840' s=.12 '/'         |             |          |

SUBCATCHMENT 24 Basin 24 (Report Basin 23)

PEAK= 7.04 CFS @ 8.09 HRS, VOLUME= 2.97 AF

| ACRES | CN |        |
|-------|----|--------|
| 8.00  | 75 | Res    |
| 8.00  | 60 | Forest |
| 16.00 | 68 |        |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 20.1     |
| L=1450' s=.09 '/'         |             |          |

SUBCATCHMENT 25 Basin 25 (Report Basin 24)

PEAK= 12.97 CFS @ 8.14 HRS, VOLUME= 5.57 AF

| ACRES | CN |                       |
|-------|----|-----------------------|
| 11.78 | 68 | Large Lot Residential |
| 6.00  | 60 | Forest                |
| 11.22 | 75 | Small Lot Res.        |
| 29.00 | 69 |                       |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 24.5     |
| L=2175' s=.11 '/'         |             |          |

**SUBCATCHMENT 27**                      **Basin 27 (Report Basin 25)**

PEAK= 102.2 CFS @ 8.21 HRS, VOLUME= 39.36 AF

|        |    |                   |                           |
|--------|----|-------------------|---------------------------|
| ACRES  | CN |                   |                           |
| 26.00  | 92 | COMMERCIAL        | SCS TR-20 METHOD          |
| 30.00  | 75 | RES               | TYPE IA 24-HOUR           |
| 16.00  | 60 | FOREST            | RAINFALL= 5.5 IN          |
| 56.00  | 92 | Future Commercial | SPAN= 0-24 HRS, dt=.1 HRS |
| 128.00 | 84 |                   |                           |

|                           |             |          |
|---------------------------|-------------|----------|
| Method                    | Comment     | Tc (min) |
| CURVE NUMBER (LAG) METHOD | Segment ID: | 33.2     |
| L=3530' s=.053 '/'        |             |          |

**SUBCATCHMENT 28**                      **Basin 28 (Report Basin 26)**

PEAK= 51.42 CFS @ 8.16 HRS, VOLUME= 19.54 AF

|       |    |                   |                           |
|-------|----|-------------------|---------------------------|
| ACRES | CN |                   |                           |
| 11.50 | 92 | Comm              | SCS TR-20 METHOD          |
| 43.00 | 75 | Res               | TYPE IA 24-HOUR           |
| 14.50 | 92 | Future Commercial | RAINFALL= 5.5 IN          |
| 69.00 | 81 |                   | SPAN= 0-24 HRS, dt=.1 HRS |

|                           |             |          |
|---------------------------|-------------|----------|
| Method                    | Comment     | Tc (min) |
| CURVE NUMBER (LAG) METHOD | Segment ID: | 28.7     |
| L=2500' s=.05 '/'         |             |          |

**SUBCATCHMENT 29**                      **Basin 29 (Report Basin 27)**

PEAK= 6.15 CFS @ 7.88 HRS, VOLUME= 1.99 AF

|       |    |          |                           |
|-------|----|----------|---------------------------|
| ACRES | CN |          |                           |
| 6.40  | 84 | Res/Comm | SCS TR-20 METHOD          |
|       |    |          | TYPE IA 24-HOUR           |
|       |    |          | RAINFALL= 5.5 IN          |
|       |    |          | SPAN= 0-24 HRS, dt=.1 HRS |

|                           |             |          |
|---------------------------|-------------|----------|
| Method                    | Comment     | Tc (min) |
| CURVE NUMBER (LAG) METHOD | Segment ID: | 7.2      |
| L=500' s=.05 '/'          |             |          |

**SUBCATCHMENT 1**                      **Basin 1**

PEAK= 26.66 CFS @ 8.38 HRS, VOLUME= 11.72 AF

| ACRES | CN |               |
|-------|----|---------------|
| 9.20  | 92 | Commercial    |
| 8.00  | 88 | Industrial    |
| 14.20 | 75 | Small Res.    |
| 8.60  | 60 | Forest/Brushy |
| 40.00 | 78 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min) |
|---|------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=950' s=.164 '/'  | Upper Area | 8.0      |
| CURVE NUMBER (LAG) METHOD<br>L=555' s=.0032 '/' | Lower Area | 37.3     |

Total Length= 1505 ft      Total Tc= 45.3

**SUBCATCHMENT 2**                      **Basin 2**

PEAK= 23.56 CFS @ 8.60 HRS, VOLUME= 11.24 AF

| ACRES | CN |                |
|-------|----|----------------|
| 11.27 | 92 | Commercial     |
| 2.10  | 88 | Industrial     |
| 21.86 | 75 | Small Lot Res. |
| .35   | 60 | Forest/Brushy  |
| 35.58 | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min) |
|---|------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=1400' s=.148 '/' | Upper Area | 10.5     |
| CURVE NUMBER (LAG) METHOD<br>L=790' s=.0025 '/' | Lower Area | 51.0     |

Total Length= 2190 ft      Total Tc= 61.5

**SUBCATCHMENT 3 Basin 3**

PEAK= 3.82 CFS @ 8.46 HRS, VOLUME= 1.71 AF

| ACRES | CN |                |
|-------|----|----------------|
| 2.00  | 92 | Commercial     |
| 3.40  | 75 | SMALL LOT RES. |
| 5.40  | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min)       |
|---|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=591' s=.168 '/'  | Upper Area | 4.9            |
| CURVE NUMBER (LAG) METHOD<br>L=745' s=.0027 '/' | Lower Area | 46.8           |
| Total Length= 1336 ft                           |            | Total Tc= 51.7 |

**SUBCATCHMENT 4 Basin 4**

PEAK= 58.11 CFS @ 8.32 HRS, VOLUME= 24.48 AF

| ACRES | CN |               |
|-------|----|---------------|
| 20.61 | 92 | Commercial    |
| 2.30  | 88 | Ind           |
| 52.13 | 75 | Small Lot Res |
| 6.00  | 60 | Forest/Brushy |
| 81.04 | 79 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)       |
|---|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=1170' s=.112 '/' | Top     | 11.1           |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.075 '/'  | Middle  | 8.7            |
| CURVE NUMBER (LAG) METHOD<br>L=1080' s=.027 '/' | Lower   | 21.2           |
| Total Length= 2920 ft                           |         | Total Tc= 41.0 |

SUBCATCHMENT 5

Basin 5

PEAK= 40.37 CFS @ 8.53 HRS, VOLUME= 19.16 AF

| ACRES | CN |           |
|-------|----|-----------|
| 10.30 | 92 | Comm      |
| 0.00  | 88 | Ind       |
| 55.40 | 75 | Small Res |
| 65.70 | 78 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)                |
|---|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=1520' s=.137 '/' | Upper   | 12.8                    |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.025 '/'  | Middle  | 15.5                    |
| CURVE NUMBER (LAG) METHOD<br>L=450' s=.004 '/'  | Lower   | 28.2                    |
| Total Length= 2640 ft                           |         | -----<br>Total Tc= 56.5 |

SUBCATCHMENT 6

Basin 6

PEAK= 4.95 CFS @ 8.12 HRS, VOLUME= 1.77 AF

| ACRES | CN |      |
|-------|----|------|
| .61   | 92 | Comm |
| 3.92  | 88 | Ind  |
| 4.53  | 89 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)                |
|--|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=150' s=.51 '/'  | Upper   | .7                      |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.004 '/' | Lower   | 26.7                    |
| Total Length= 820 ft                           |         | -----<br>Total Tc= 27.4 |

**SUBCATCHMENT 7**                      **Basin 7**

PEAK= 22.37 CFS @ 8.05 HRS, VOLUME= 7.72 AF

| ACRES | CN |            |
|-------|----|------------|
| 5.96  | 92 | Commercial |
| 8.05  | 88 | Ind        |
| 8.20  | 75 | Small Res  |
| 22.21 | 84 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=525' s=.49 '/'  | Upper   | 2.4            |
| CURVE NUMBER (LAG) METHOD<br>L=540' s=.009 '/' | Lower   | 18.0           |
| Total Length= 1065 ft                          |         | Total Tc= 20.4 |

**SUBCATCHMENT 8**                      **Basin 8 (Report Basin 9)**

PEAK= 16.91 CFS @ 7.97 HRS, VOLUME= 5.53 AF

| ACRES | CN |           |
|-------|----|-----------|
| 2.40  | 92 | Comm      |
| 11.00 | 88 | Ind       |
| 1.00  | 75 | Small Res |
| 14.40 | 88 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=963' s=.088 '/' | Upper   | 7.9            |
| CURVE NUMBER (LAG) METHOD<br>L=445' s=.031 '/' | Lower   | 7.2            |
| Total Length= 1408 ft                          |         | Total Tc= 15.1 |

**SUBCATCHMENT 9**                      **Basin 9 (Report Basin 8)**

PEAK= 15.65 CFS @ 7.83 HRS, VOLUME= 4.97 AF

| ACRES | CN |      |
|-------|----|------|
| 7.29  | 92 | Comm |
| 5.02  | 88 | Ind  |
| 12.31 | 90 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=420' s=.045 '/' | Total   | 5.3      |

TYPE IA 24-HOUR RAINFALL= 6.0 IN

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SUBCATCHMENT 10

Basin 10

PEAK= 27.88 CFS @ 8.15 HRS, VOLUME= 10.52 AF

| ACRES | CN |           |
|-------|----|-----------|
| 9.60  | 92 | Comm      |
| .70   | 88 | Ind       |
| 23.40 | 75 | Small REs |
| 33.70 | 80 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=725' s=.31 '/'  | Upper   | 4.4      |
| CURVE NUMBER (LAG) METHOD<br>L=761' s=.024 '/' | Middle  | 16.5     |
| CURVE NUMBER (LAG) METHOD<br>L=300' s=.027 '/' | Lower   | 7.4      |

Total Length= 1786 ft Total Tc= 28.3

SUBCATCHMENT 11

Basin 11 (Report Basin-DELETED)

PEAK= 4.71 CFS @ 8.01 HRS, VOLUME= 1.58 AF

| ACRES | CN |            |
|-------|----|------------|
| 3.00  | 92 | Commercial |
| .85   | 88 | Ind        |
| 3.85  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=480' s=.004 '/' | Length  | 18.8     |

SUBCATCHMENT 13

Basin 13 (Report Basin 11)

PEAK= 8.25 CFS @ 8.22 HRS, VOLUME= 3.15 AF

| ACRES | CN |            |
|-------|----|------------|
| 1.51  | 88 | Industrial |
| 6.19  | 92 | Commercial |
| 7.70  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=440' s=.001 '/' | Length  | 35.1     |

**SUBCATCHMENT 14 Basin 14 (Report Basin 13)**

PEAK= 19.16 CFS @ 8.03 HRS, VOLUME= 6.50 AF

| ACRES | CN |               |
|-------|----|---------------|
| 13.60 | 92 | Comm          |
| 2.00  | 88 | Ind           |
| .20   | 61 | Brushy Fields |
| 15.80 | 91 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 20.1     |
| L=867' s=.009 '/'         |         |          |

**SUBCATCHMENT 15 Basin 15 (Report Basin 14)**

PEAK= 58.69 CFS @ 8.89 HRS, VOLUME= 32.68 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 36.00  | 92 | Comm          |
| 7.00   | 88 | Industrial    |
| 20.80  | 61 | Grassy Fields |
| 27.00  | 60 | Forest        |
| 33.00  | 75 | Res           |
| 123.80 | 75 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 18.9     |
| L=2030' s=.118 '/'        |         |          |
| CURVE NUMBER (LAG) METHOD | Middle  | 32.9     |
| L=1280' s=.0187 '/'       |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 27.5     |
| L=1100' s=.021 '/'        |         |          |

Total Length= 4410 ft Total Tc= 79.3

**SUBCATCHMENT 16 Basin 16 (Report Basin 15)**

PEAK= 75.73 CFS @ 8.29 HRS, VOLUME= 30.20 AF

| ACRES | CN |            |
|-------|----|------------|
| 68.10 | 92 | Comm       |
| 2.40  | 88 | Industrial |
| 3.52  | 75 | Small Res  |
| 74.02 | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 40.9     |
| L=1800' s=.007 '/'        |         |          |

**SUBCATCHMENT 17**                      **Basin 17 (Report Basin 16)**

PEAK= 26.85 CFS @ 8.42 HRS, VOLUME= 11.52 AF

| ACRES | CN |            |
|-------|----|------------|
| 11.75 | 92 | Commercial |
| 17.25 | 88 | Industrial |
| 29.00 | 90 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min) |
|---|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=1025' s=.002 '/' | Length  | 50.9     |

**SUBCATCHMENT 18**                      **Basin 18 (Report Basin 17)**

PEAK= 90.15 CFS @ 8.34 HRS, VOLUME= 38.81 AF

| ACRES  | CN |                |
|--------|----|----------------|
| 31.00  | 92 | Commercial     |
| 6.25   | 90 | Industrial     |
| 44.00  | 87 | Small Lot Res. |
| 51.00  | 60 | Forest         |
| 132.25 | 78 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min) |
|---|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2160' s=.12 '/'  | Upper   | 18.1     |
| CURVE NUMBER (LAG) METHOD<br>L=1400' s=.032 '/' | Lower   | 24.7     |

Total Length= 3560 ft      Total Tc= 42.8

**SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet**

PEAK= 156.7 CFS @ 8.80 HRS, VOLUME=106.34 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 491.00 | 60 | Brushy/Forest |
| 28.00  | 75 | Residential   |
| 141.00 | 60 | Brushy Forest |
| 660.00 | 61 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min) |
|---|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=8050' s=.187 '/' | Length  | 65.8     |

**SUBCATCHMENT 2 Mingus Drainage**

PEAK= 78.59 CFS @ 11.67 HRS, VOLUME= 67.09 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 84.00  | 60 | Brushy Forest |
| 180.00 | 75 | Small Res     |
| 36.00  | 92 | Commercial    |
| 300.00 | 73 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min) |
|---|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=3631' s=.05 '/'  | Upper   | 49.0     |
| CURVE NUMBER (LAG) METHOD<br>L=1800' s=.001 '/' | Lower   | 197.6    |

Total Length= 5431 ft Total Tc= 246.6

**SUBCATCHMENT 3 Down town Blossom**

PEAK= 58.99 CFS @ 8.39 HRS, VOLUME= 24.97 AF

| ACRES | CN |                     |
|-------|----|---------------------|
| 60.00 | 92 | Commercial Downtown |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment     | Tc (min) |
|---|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2775' s=.009 '/' | Segment ID: | 48.9     |

Data for Coos Bay 19-25

TYPE IA 24-HOUR RAINFALL= 6.0 IN

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SUBCATCHMENT 19

Basin 19 (Report Basin 18)

PEAK= 34.30 CFS @ 8.39 HRS, VOLUME= 16.74 AF

| ACRES | CN |               |
|-------|----|---------------|
| 3.50  | 92 | COMMERCIAL    |
| 21.00 | 87 | RESIDENTIAL   |
| 51.00 | 60 | Forest/Brushy |
| 75.50 | 69 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment    | Tc (min)       |
|--|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.14 '/' | UPPER AREA | 21.3           |
| CURVE NUMBER (LAG) METHOD<br>L=610' s=.017 '/' | LOWER AREA | 22.5           |
| Total Length= 2740 ft                          |            | Total Tc= 43.8 |

SUBCATCHMENT 21

Basin 21 (Report Basin 20)

PEAK= 40.12 CFS @ 7.97 HRS, VOLUME= 13.13 AF

| ACRES | CN |     |
|-------|----|-----|
| 35.00 | 87 | Res |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment     | Tc (min) |
|---|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.094 '/' | Segment ID: | 15.0     |

SUBCATCHMENT 22

Basin 22 (Report Basin 21)

PEAK= 2.10 CFS @ 7.88 HRS, VOLUME= .71 AF

| ACRES | CN |     |
|-------|----|-----|
| 2.53  | 76 | Res |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment     | Tc (min) |
|--|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=570' s=.126 '/' | Segment ID: | 6.4      |

Data for Coos Bay 19-25

TYPE IA 24-HOUR RAINFALL= 6.0 IN

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SUBCATCHMENT 23 Basin 23 (Report Basin 22)

PEAK= 44.63 CFS @ 8.33 HRS, VOLUME= 21.75 AF

| ACRES  | CN |        |
|--------|----|--------|
| 50.00  | 75 | Res    |
| 55.00  | 60 | Forest |
| 105.00 | 67 |        |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 38.9     |
| L=3840' s=.12 '/'         |             |          |

SUBCATCHMENT 24 Basin 24 (Report Basin 23)

PEAK= 8.54 CFS @ 8.08 HRS, VOLUME= 3.47 AF

| ACRES | CN |        |
|-------|----|--------|
| 8.00  | 75 | Res    |
| 8.00  | 60 | Forest |
| 16.00 | 68 |        |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 20.1     |
| L=1450' s=.09 '/'         |             |          |

SUBCATCHMENT 25 Basin 25 (Report Basin 24)

PEAK= 15.64 CFS @ 8.13 HRS, VOLUME= 6.49 AF

| ACRES | CN |                       |
|-------|----|-----------------------|
| 11.78 | 68 | Large Lot Residential |
| 6.00  | 60 | Forest                |
| 11.22 | 75 | Small Lot Res.        |
| 29.00 | 69 |                       |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 24.5     |
| L=2175' s=.11 '/'         |             |          |

Data for Coos Bay 19-25

TYPE IA 24-HOUR RAINFALL= 6.0 IN

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SUBCATCHMENT 27

Basin 27 (Report Basin 25)

PEAK= 58.04 CFS @ 8.48 HRS, VOLUME= 29.25 AF

| ACRES  | CN |            |
|--------|----|------------|
| 26.00  | 92 | COMMERCIAL |
| 30.00  | 75 | RES        |
| 72.00  | 60 | FOREST     |
| 128.00 | 70 |            |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 50.5     |
| L=3530' s=.053 '/'        |             |          |

SUBCATCHMENT 28

Basin 28 (Report Basin 26)

PEAK= 44.85 CFS @ 8.24 HRS, VOLUME= 18.63 AF

| ACRES | CN |               |
|-------|----|---------------|
| 11.50 | 92 | Comm          |
| 43.00 | 75 | Res           |
| 14.50 | 60 | Forest/Brushy |
| 69.00 | 75 |               |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 34.3     |
| L=2500' s=.05 '/'         |             |          |

SUBCATCHMENT 29

Basin 29 (Report Basin 27)

PEAK= 12.81 CFS @ 7.98 HRS, VOLUME= 5.07 AF

| ACRES | CN |          |
|-------|----|----------|
| 6.40  | 84 | Res/Comm |
| 18.60 | 60 |          |
| 25.00 | 66 |          |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 12.1     |
| L=500' s=.05 '/'          |             |          |

TYPE IA 24-HOUR RAINFALL= 5.5 IN

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## SUBCATCHMENT 1

## Basin 1

PEAK= 23.04 CFS @ 8.39 HRS, VOLUME= 10.28 AF

| ACRES | CN |               |
|-------|----|---------------|
| 9.20  | 92 | Commercial    |
| 8.00  | 88 | Industrial    |
| 14.20 | 75 | Small Res.    |
| 8.60  | 60 | Forest/Brushy |
| 40.00 | 78 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min) |
|---|------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=950' s=.164 '/'  | Upper Area | 8.0      |
| CURVE NUMBER (LAG) METHOD<br>L=555' s=.0032 '/' | Lower Area | 37.3     |

Total Length= 1505 ft      Total Tc= 45.3

## SUBCATCHMENT 2

## Basin 2

PEAK= 20.58 CFS @ 8.60 HRS, VOLUME= 9.93 AF

| ACRES | CN |                |
|-------|----|----------------|
| 11.27 | 92 | Commercial     |
| 2.10  | 88 | Industrial     |
| 21.86 | 75 | Small Lot Res. |
| .35   | 60 | Forest/Brushy  |
| 35.58 | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min) |
|---|------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=1400' s=.148 '/' | Upper Area | 10.5     |
| CURVE NUMBER (LAG) METHOD<br>L=790' s=.0025 '/' | Lower Area | 51.0     |

Total Length= 2190 ft      Total Tc= 61.5

TYPE IA 24-HOUR RAINFALL= 5.5 IN

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## SUBCATCHMENT 3

## Basin 3

PEAK= 3.34 CFS @ 8.46 HRS, VOLUME= 1.51 AF

| ACRES | CN |                |
|-------|----|----------------|
| 2.00  | 92 | Commercial     |
| 3.40  | 75 | SMALL LOT RES. |
| 5.40  | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min)       |
|---|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=591' s=.168 '/'  | Upper Area | 4.9            |
| CURVE NUMBER (LAG) METHOD<br>L=745' s=.0027 '/' | Lower Area | 46.8           |
| Total Length= 1336 ft                           |            | Total Tc= 51.7 |

## SUBCATCHMENT 4

## Basin 4

PEAK= 50.41 CFS @ 8.32 HRS, VOLUME= 21.52 AF

| ACRES | CN |               |
|-------|----|---------------|
| 20.61 | 92 | Commercial    |
| 2.30  | 88 | Ind           |
| 52.13 | 75 | Small Lot Res |
| 6.00  | 60 | Forest/Brushy |
| 81.04 | 79 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)       |
|---|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=1170' s=.112 '/' | Top     | 11.1           |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.075 '/'  | Middle  | 8.7            |
| CURVE NUMBER (LAG) METHOD<br>L=1080' s=.027 '/' | Lower   | 21.2           |
| Total Length= 2920 ft                           |         | Total Tc= 41.0 |

SUBCATCHMENT 5

Basin 5

PEAK= 34.88 CFS @ 8.54 HRS, VOLUME= 16.80 AF

| ACRES | CN | Comm      |
|-------|----|-----------|
| 10.30 | 92 | Comm      |
| 0.00  | 88 | Ind       |
| 55.40 | 75 | Small Res |
| 65.70 | 78 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min) |
|---|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=1520' s=.137 '/' | Upper   | 12.8     |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.025 '/'  | Middle  | 15.5     |
| CURVE NUMBER (LAG) METHOD<br>L=450' s=.004 '/'  | Lower   | 28.2     |

Total Length= 2640 ft      Total Tc= 56.5

SUBCATCHMENT 6

Basin 6

PEAK= 4.43 CFS @ 8.12 HRS, VOLUME= 1.59 AF

| ACRES | CN | Comm |
|-------|----|------|
| .61   | 92 | Comm |
| 3.92  | 88 | Ind  |
| 4.53  | 89 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=150' s=.51 '/'  | Upper   | .7       |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.004 '/' | Lower   | 26.7     |

Total Length= 820 ft      Total Tc= 27.4

**SUBCATCHMENT 7 Basin 7**

PEAK= 19.80 CFS @ 8.05 HRS, VOLUME= 6.87 AF

| ACRES | CN |            |
|-------|----|------------|
| 5.96  | 92 | Commercial |
| 8.05  | 88 | Ind        |
| 8.20  | 75 | Small Res  |
| 22.21 | 84 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=525' s=.49 '/'  | Upper   | 2.4            |
| CURVE NUMBER (LAG) METHOD<br>L=540' s=.009 '/' | Lower   | 18.0           |
| Total Length= 1065 ft                          |         | Total Tc= 20.4 |

**SUBCATCHMENT 8 Basin 8 (Report Basin 9)**

PEAK= 15.13 CFS @ 7.97 HRS, VOLUME= 4.96 AF

| ACRES | CN |           |
|-------|----|-----------|
| 2.40  | 92 | Comm      |
| 11.00 | 88 | Ind       |
| 1.00  | 75 | Small Res |
| 14.40 | 88 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=963' s=.088 '/' | Upper   | 7.9            |
| CURVE NUMBER (LAG) METHOD<br>L=445' s=.031 '/' | Lower   | 7.2            |
| Total Length= 1408 ft                          |         | Total Tc= 15.1 |

**SUBCATCHMENT 9 Basin 9 (Report Basin 8)**

PEAK= 14.08 CFS @ 7.84 HRS, VOLUME= 4.47 AF

| ACRES | CN |      |
|-------|----|------|
| 7.29  | 92 | Comm |
| 5.02  | 88 | Ind  |
| 12.31 | 90 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=420' s=.045 '/' | Total   | 5.3      |

SUBCATCHMENT 10

Basin 10

PEAK= 24.28 CFS @ 8.16 HRS, VOLUME= 9.27 AF

| ACRES | CN |           |
|-------|----|-----------|
| 9.60  | 92 | Comm      |
| .70   | 88 | Ind       |
| 23.40 | 75 | Small REs |
| 33.70 | 80 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=725' s=.31 '/'  | Upper   | 4.4      |
| CURVE NUMBER (LAG) METHOD<br>L=761' s=.024 '/' | Middle  | 16.5     |
| CURVE NUMBER (LAG) METHOD<br>L=300' s=.027 '/' | Lower   | 7.4      |

Total Length= 1786 ft Total Tc= 28.3

SUBCATCHMENT 11

Basin 11 (Report Basin-DELETED)

PEAK= 4.25 CFS @ 8.01 HRS, VOLUME= 1.43 AF

| ACRES | CN |            |
|-------|----|------------|
| 3.00  | 92 | Commercial |
| .85   | 88 | Ind        |
| 3.85  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=480' s=.004 '/' | Length  | 18.8     |

SUBCATCHMENT 13

Basin 13 (Report Basin 11)

PEAK= 7.44 CFS @ 8.22 HRS, VOLUME= 2.84 AF

| ACRES | CN |            |
|-------|----|------------|
| 1.51  | 88 | Industrial |
| 6.19  | 92 | Commercial |
| 7.70  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=440' s=.001 '/' | Length  | 35.1     |

**SUBCATCHMENT 14 Basin 14 (Report Basin 13)**

PEAK= 17.28 CFS @ 8.03 HRS, VOLUME= 5.86 AF

| ACRES | CN |               |
|-------|----|---------------|
| 13.60 | 92 | Comm          |
| 2.00  | 88 | Ind           |
| .20   | 61 | Brushy Fields |
| 15.80 | 91 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 20.1     |
| L=867' s=.009 '/'         |         |          |

**SUBCATCHMENT 15 Basin 15 (Report Basin 14)**

PEAK= 50.11 CFS @ 8.90 HRS, VOLUME= 28.46 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 36.00  | 92 | Comm          |
| 7.00   | 88 | Industrial    |
| 20.80  | 61 | Grassy Fields |
| 27.00  | 60 | Forest        |
| 33.00  | 75 | Res           |
| 123.80 | 75 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min)       |
|---------------------------|---------|----------------|
| CURVE NUMBER (LAG) METHOD | Upper   | 18.9           |
| L=2030' s=.118 '/'        |         |                |
| CURVE NUMBER (LAG) METHOD | Middle  | 32.9           |
| L=1280' s=.0187 '/'       |         |                |
| CURVE NUMBER (LAG) METHOD | Lower   | 27.5           |
| L=1100' s=.021 '/'        |         |                |
| Total Length= 4410 ft     |         | Total Tc= 79.3 |

**SUBCATCHMENT 16 Basin 16 (Report Basin 15)**

PEAK= 68.27 CFS @ 8.29 HRS, VOLUME= 27.22 AF

| ACRES | CN |            |
|-------|----|------------|
| 68.10 | 92 | Comm       |
| 2.40  | 88 | Industrial |
| 3.52  | 75 | Small Res  |
| 74.02 | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 40.9     |
| L=1800' s=.007 '/'        |         |          |

TYPE IA 24-HOUR RAINFALL= 5.5 IN

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SUBCATCHMENT 17

Basin 17 (Report Basin 16)

PEAK= 24.14 CFS @ 8.43 HRS, VOLUME= 10.36 AF

| ACRES | CN |            |
|-------|----|------------|
| 11.75 | 92 | Commercial |
| 17.25 | 88 | Industrial |
| 29.00 | 90 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 50.9     |
| L=1025' s=.002 '/'        |         |          |

SUBCATCHMENT 18

Basin 18 (Report Basin 17)

PEAK= 77.89 CFS @ 8.35 HRS, VOLUME= 34.04 AF

| ACRES  | CN |                |
|--------|----|----------------|
| 31.00  | 92 | Commercial     |
| 6.25   | 90 | Industrial     |
| 44.00  | 87 | Small Lot Res. |
| 51.00  | 60 | Forest         |
| 132.25 | 78 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 18.1     |
| L=2160' s=.12 '/'         |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 24.7     |
| L=1400' s=.032 '/'        |         |          |

Total Length= 3560 ft      Total Tc= 42.8

**SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet**

PEAK= 121.9 CFS @ 8.84 HRS, VOLUME= 88.87 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 491.00 | 60 | Brushy/Forest |
| 28.00  | 75 | Residential   |
| 141.00 | 60 | Brushy Forest |
| 660.00 | 61 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 65.8     |
| L=8050' s=.187 '/'        |         |          |

**SUBCATCHMENT 2 Mingus Drainage**

PEAK= 66.86 CFS @ 11.70 HRS, VOLUME= 57.94 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 84.00  | 60 | Brushy Forest |
| 180.00 | 75 | Small Res     |
| 36.00  | 92 | Commercial    |
| 300.00 | 73 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 49.0     |
| L=3631' s=.05 '/'         |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 197.6    |
| L=1800' s=.001 '/'        |         |          |

Total Length= 5431 ft Total Tc= 246.6

**SUBCATCHMENT 3 Down town Blossom**

PEAK= 53.32 CFS @ 8.40 HRS, VOLUME= 22.55 AF

| ACRES | CN |                     |
|-------|----|---------------------|
| 60.00 | 92 | Commercial Downtown |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 48.9     |
| L=2775' s=.009 '/'        |             |          |

**SUBCATCHMENT 19 Basin 19 (Report Basin 18)**

PEAK= 28.41 CFS @ 8.40 HRS, VOLUME= 14.36 AF

| ACRES | CN |               |
|-------|----|---------------|
| 3.50  | 92 | COMMERCIAL    |
| 21.00 | 87 | RESIDENTIAL   |
| 51.00 | 60 | Forest/Brushy |
| 75.50 | 69 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment    | Tc (min)       |
|--|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.14 '/' | UPPER AREA | 21.3           |
| CURVE NUMBER (LAG) METHOD<br>L=610' s=.017 '/' | LOWER AREA | 22.5           |
| Total Length= 2740 ft                          |            | Total Tc= 43.8 |

**SUBCATCHMENT 21 Basin 21 (Report Basin 20)**

PEAK= 35.77 CFS @ 7.98 HRS, VOLUME= 11.75 AF

| ACRES | CN |     |
|-------|----|-----|
| 35.00 | 87 | Res |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment     | Tc (min) |
|---|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.094 '/' | Segment ID: | 15.0     |

**SUBCATCHMENT 22 Basin 22 (Report Basin 21)**

PEAK= 1.81 CFS @ 7.89 HRS, VOLUME= .62 AF

| ACRES | CN |     |
|-------|----|-----|
| 2.53  | 76 | Res |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment     | Tc (min) |
|--|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=570' s=.126 '/' | Segment ID: | 6.4      |

TYPE IA 24-HOUR RAINFALL= 5.5 IN

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**SUBCATCHMENT 23 Basin 23 (Report Basin 22)**

PEAK= 36.51 CFS @ 8.34 HRS, VOLUME= 18.55 AF

| ACRES  | CN |        |
|--------|----|--------|
| 50.00  | 75 | Res    |
| 55.00  | 60 | Forest |
| 105.00 | 67 |        |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 38.9     |
| L=3840' s=.12 '/'         |             |          |

**SUBCATCHMENT 24 Basin 24 (Report Basin 23)**

PEAK= 7.04 CFS @ 8.09 HRS, VOLUME= 2.97 AF

| ACRES | CN |        |
|-------|----|--------|
| 8.00  | 75 | Res    |
| 8.00  | 60 | Forest |
| 16.00 | 68 |        |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 20.1     |
| L=1450' s=.09 '/'         |             |          |

**SUBCATCHMENT 25 Basin 25 (Report Basin 24)**

PEAK= 12.97 CFS @ 8.14 HRS, VOLUME= 5.57 AF

| ACRES | CN |                       |
|-------|----|-----------------------|
| 11.78 | 68 | Large Lot Residential |
| 6.00  | 60 | Forest                |
| 11.22 | 75 | Small Lot Res.        |
| 29.00 | 69 |                       |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 24.5     |
| L=2175' s=.11 '/'         |             |          |

TYPE IA 24-HOUR RAINFALL= 5.5 IN

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**SUBCATCHMENT 27**                      **Basin 27 (Report Basin 25)**

PEAK= 48.36 CFS @ 8.49 HRS, VOLUME= 25.15 AF

| ACRES  | CN |            |
|--------|----|------------|
| 26.00  | 92 | COMMERCIAL |
| 30.00  | 75 | RES        |
| 72.00  | 60 | FOREST     |
| 128.00 | 70 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 50.5     |
| L=3530' s=.053 '/'        |             |          |

**SUBCATCHMENT 28**                      **Basin 28 (Report Basin 26)**

PEAK= 38.29 CFS @ 8.24 HRS, VOLUME= 16.23 AF

| ACRES | CN |               |
|-------|----|---------------|
| 11.50 | 92 | Comm          |
| 43.00 | 75 | Res           |
| 14.50 | 60 | Forest/Brushy |
| 69.00 | 75 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 34.3     |
| L=2500' s=.05 '/'         |             |          |

**SUBCATCHMENT 29**                      **Basin 29 (Report Basin 27)**

PEAK= 6.15 CFS @ 7.88 HRS, VOLUME= 1.99 AF

| ACRES | CN |          |
|-------|----|----------|
| 6.40  | 84 | Res/Comm |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 5.5 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 7.2      |
| L=500' s=.05 '/'          |             |          |

**SUBCATCHMENT 1**                      **Basin 1**

PEAK= 26.66 CFS @ 8.38 HRS, VOLUME= 11.72 AF

| ACRES | CN |               |
|-------|----|---------------|
| 9.20  | 92 | Commercial    |
| 8.00  | 88 | Industrial    |
| 14.20 | 75 | Small Res.    |
| 8.60  | 60 | Forest/Brushy |
| 40.00 | 78 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                           | Comment           | Tc (min)                |
|----------------------------------|-------------------|-------------------------|
| <b>CURVE NUMBER (LAG) METHOD</b> | <b>Upper Area</b> |                         |
| L=950' s=.164 '/'                |                   | 8.0                     |
| <b>CURVE NUMBER (LAG) METHOD</b> | <b>Lower Area</b> |                         |
| L=555' s=.0032 '/'               |                   | 37.3                    |
| Total Length= 1505 ft            |                   | -----<br>Total Tc= 45.3 |

**SUBCATCHMENT 2**                      **Basin 2**

PEAK= 23.56 CFS @ 8.60 HRS, VOLUME= 11.24 AF

| ACRES | CN |                |
|-------|----|----------------|
| 11.27 | 92 | Commercial     |
| 2.10  | 88 | Industrial     |
| 21.86 | 75 | Small Lot Res. |
| .35   | 60 | Forest/Brushy  |
| 35.58 | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                           | Comment           | Tc (min)                |
|----------------------------------|-------------------|-------------------------|
| <b>CURVE NUMBER (LAG) METHOD</b> | <b>Upper Area</b> |                         |
| L=1400' s=.148 '/'               |                   | 10.5                    |
| <b>CURVE NUMBER (LAG) METHOD</b> | <b>Lower Area</b> |                         |
| L=790' s=.0025 '/'               |                   | 51.0                    |
| Total Length= 2190 ft            |                   | -----<br>Total Tc= 61.5 |

SUBCATCHMENT 3 Basin 3

PEAK= 3.82 CFS @ 8.46 HRS, VOLUME= 1.71 AF

| ACRES | CN |                |
|-------|----|----------------|
| 2.00  | 92 | Commercial     |
| 3.40  | 75 | SMALL LOT RES. |
| 5.40  | 81 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment    | Tc (min)       |
|---|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=591' s=.168 '/'  | Upper Area | 4.9            |
| CURVE NUMBER (LAG) METHOD<br>L=745' s=.0027 '/' | Lower Area | 46.8           |
| Total Length= 1336 ft                           |            | Total Tc= 51.7 |

SUBCATCHMENT 4 Basin 4

PEAK= 58.11 CFS @ 8.32 HRS, VOLUME= 24.48 AF

| ACRES | CN |               |
|-------|----|---------------|
| 20.61 | 92 | Commercial    |
| 2.30  | 88 | Ind           |
| 52.13 | 75 | Small Lot Res |
| 6.00  | 60 | Forest/Brushy |
| 81.04 | 79 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)       |
|---|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=1170' s=.112 '/' | Top     | 11.1           |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.075 '/'  | Middle  | 8.7            |
| CURVE NUMBER (LAG) METHOD<br>L=1080' s=.027 '/' | Lower   | 21.2           |
| Total Length= 2920 ft                           |         | Total Tc= 41.0 |

**SUBCATCHMENT 5**                      **Basin 5**

PEAK= 40.37 CFS @ 8.53 HRS, VOLUME= 19.16 AF

| ACRES | CN |           |
|-------|----|-----------|
| 10.30 | 92 | Comm      |
| 0.00  | 88 | Ind       |
| 55.40 | 75 | Small Res |
| 65.70 | 78 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method  | Comment | Tc (min)                |
|---|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=1520' s=.137 '/' | Upper   | 12.8                    |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.025 '/'  | Middle  | 15.5                    |
| CURVE NUMBER (LAG) METHOD<br>L=450' s=.004 '/'  | Lower   | 28.2                    |
| Total Length= 2640 ft                           |         | -----<br>Total Tc= 56.5 |

**SUBCATCHMENT 6**                      **Basin 6**

PEAK= 4.95 CFS @ 8.12 HRS, VOLUME= 1.77 AF

| ACRES | CN |      |
|-------|----|------|
| .61   | 92 | Comm |
| 3.92  | 88 | Ind  |
| 4.53  | 89 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)                |
|--|---------|-------------------------|
| CURVE NUMBER (LAG) METHOD<br>L=150' s=.51 '/'  | Upper   | .7                      |
| CURVE NUMBER (LAG) METHOD<br>L=670' s=.004 '/' | Lower   | 26.7                    |
| Total Length= 820 ft                           |         | -----<br>Total Tc= 27.4 |

**SUBCATCHMENT 7 Basin 7**

PEAK= 22.37 CFS @ 8.05 HRS, VOLUME= 7.72 AF

| ACRES | CN |            |
|-------|----|------------|
| 5.96  | 92 | Commercial |
| 8.05  | 88 | Ind        |
| 8.20  | 75 | Small Res  |
| 22.21 | 84 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=525' s=.49 '/'  | Upper   | 2.4            |
| CURVE NUMBER (LAG) METHOD<br>L=540' s=.009 '/' | Lower   | 18.0           |
| Total Length= 1065 ft                          |         | Total Tc= 20.4 |

**SUBCATCHMENT 8 Basin 8 (Report Basin 9)**

PEAK= 16.91 CFS @ 7.97 HRS, VOLUME= 5.53 AF

| ACRES | CN |           |
|-------|----|-----------|
| 2.40  | 92 | Comm      |
| 11.00 | 88 | Ind       |
| 1.00  | 75 | Small Res |
| 14.40 | 88 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=963' s=.088 '/' | Upper   | 7.9            |
| CURVE NUMBER (LAG) METHOD<br>L=445' s=.031 '/' | Lower   | 7.2            |
| Total Length= 1408 ft                          |         | Total Tc= 15.1 |

**SUBCATCHMENT 9 Basin 9 (Report Basin 8)**

PEAK= 15.65 CFS @ 7.83 HRS, VOLUME= 4.97 AF

| ACRES | CN |      |
|-------|----|------|
| 7.29  | 92 | Comm |
| 5.02  | 88 | Ind  |
| 12.31 | 90 |      |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=420' s=.045 '/' | Total   | 5.3      |

**SUBCATCHMENT 10**                      **Basin 10**

PEAK= 27.88 CFS @ 8.15 HRS, VOLUME= 10.52 AF

| ACRES | CN |           |
|-------|----|-----------|
| 9.60  | 92 | Comm      |
| .70   | 88 | Ind       |
| 23.40 | 75 | Small RES |
| 33.70 | 80 |           |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min)       |
|--|---------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=725' s=.31 '/'  | Upper   | 4.4            |
| CURVE NUMBER (LAG) METHOD<br>L=761' s=.024 '/' | Middle  | 16.5           |
| CURVE NUMBER (LAG) METHOD<br>L=300' s=.027 '/' | Lower   | 7.4            |
| Total Length= 1786 ft                          |         | Total Tc= 28.3 |

**SUBCATCHMENT 11**                      **Basin 11 (Report Basin-DELETED)**

PEAK= 4.71 CFS @ 8.01 HRS, VOLUME= 1.58 AF

| ACRES | CN |            |
|-------|----|------------|
| 3.00  | 92 | Commercial |
| .85   | 88 | Ind        |
| 3.85  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=480' s=.004 '/' | Length  | 18.8     |

**SUBCATCHMENT 13**                      **Basin 13 (Report Basin 11)**

PEAK= 8.25 CFS @ 8.22 HRS, VOLUME= 3.15 AF

| ACRES | CN |            |
|-------|----|------------|
| 1.51  | 88 | Industrial |
| 6.19  | 92 | Commercial |
| 7.70  | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method   | Comment | Tc (min) |
|--|---------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=440' s=.001 '/' | Length  | 35.1     |

**SUBCATCHMENT 14**                      **Basin 14 (Report Basin 13)**

PEAK= 19.16 CFS @ 8.03 HRS, VOLUME= 6.50 AF

| ACRES | CN |               |
|-------|----|---------------|
| 13.60 | 92 | Comm          |
| 2.00  | 88 | Ind           |
| .20   | 61 | Brushy Fields |
| 15.80 | 91 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 20.1     |
| L=867' s=.009 '/'         |         |          |

**SUBCATCHMENT 15**                      **Basin 15 (Report Basin 14)**

PEAK= 68.58 CFS @ 8.77 HRS, VOLUME= 35.82 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 36.00  | 92 | Comm          |
| 7.00   | 88 | Industrial    |
| 20.80  | 61 | Grassy Fields |
| 27.00  | 75 | Future Res.   |
| 33.00  | 75 | Res           |
| 123.80 | 78 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 17.3     |
| L=2030' s=.118 '/'        |         |          |
| CURVE NUMBER (LAG) METHOD | Middle  | 30.1     |
| L=1280' s=.0187 '/'       |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 25.2     |
| L=1100' s=.021 '/'        |         |          |

Total Length= 4410 ft      Total Tc= 72.6

**SUBCATCHMENT 16**                      **Basin 16 (Report Basin 15)**

PEAK= 75.73 CFS @ 8.29 HRS, VOLUME= 30.20 AF

| ACRES | CN |            |
|-------|----|------------|
| 68.10 | 92 | Comm       |
| 2.40  | 88 | Industrial |
| 3.52  | 75 | Small Res  |
| 74.02 | 91 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 40.9     |
| L=1800' s=.007 '/'        |         |          |

**SUBCATCHMENT 17 Basin 17 (Report Basin 16)**

PEAK= 26.85 CFS @ 8.42 HRS, VOLUME= 11.52 AF

| ACRES | CN |            |
|-------|----|------------|
| 11.75 | 92 | Commercial |
| 17.25 | 88 | Industrial |
| 29.00 | 90 |            |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 50.9     |
| L=1025' s=.002 '/'        |         |          |

**SUBCATCHMENT 18 Basin 18 (Report Basin 17)**

PEAK= 136.9 CFS @ 8.17 HRS, VOLUME= 50.52 AF

| ACRES  | CN |                |
|--------|----|----------------|
| 31.00  | 92 | Commercial     |
| 6.25   | 90 | Industrial     |
| 44.00  | 87 | Small Lot Res. |
| 51.00  | 87 | Future Res.    |
| 132.25 | 88 |                |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 12.9     |
| L=2160' s=.12 '/'         |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 17.7     |
| L=1400' s=.032 '/'        |         |          |

Total Length= 3560 ft      Total Tc= 30.6

Data for Blossom FUTURE 50 year  
 TYPE IA 24-HOUR RAINFALL= 6.0 IN  
 Prepared by Applied Microcomputer Systems  
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**SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet**

PEAK= 131.6 CFS @ 8.58 HRS, VOLUME= 72.63 AF

| ACRES  | CN |                    |
|--------|----|--------------------|
| 185.00 | 60 | Brushy/Forest      |
| 28.00  | 75 | Residential        |
| 141.00 | 75 | Future Residential |
| 354.00 | 67 |                    |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Length  | 56.3     |
| L=8050' s=.187 '/'        |         |          |

**SUBCATCHMENT 2 Mingus Drainage**

PEAK= 78.59 CFS @ 11.67 HRS, VOLUME= 67.09 AF

| ACRES  | CN |               |
|--------|----|---------------|
| 84.00  | 60 | Brushy Forest |
| 180.00 | 75 | Small Res     |
| 36.00  | 92 | Commercial    |
| 300.00 | 73 |               |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment | Tc (min) |
|---------------------------|---------|----------|
| CURVE NUMBER (LAG) METHOD | Upper   | 49.0     |
| L=3631' s=.05 '/'         |         |          |
| CURVE NUMBER (LAG) METHOD | Lower   | 197.6    |
| L=1800' s=.001 '/'        |         |          |

Total Length= 5431 ft Total Tc= 246.6

**SUBCATCHMENT 3 Down town Blossom**

PEAK= 58.99 CFS @ 8.39 HRS, VOLUME= 24.97 AF

| ACRES | CN |                     |
|-------|----|---------------------|
| 60.00 | 92 | Commercial Downtown |

SCS TR-20 METHOD  
 TYPE IA 24-HOUR  
 RAINFALL= 6.0 IN  
 SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 48.9     |
| L=2775' s=.009 '/'        |             |          |

Data for Coos Bay 19-25 FUTURE-50 year  
 TYPE IA 24-HOUR RAINFALL= 6.0 IN

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21 May 04

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**SUBCATCHMENT 19 Basin 19 (Report Basin 18)**

PEAK= 79.86 CFS @ 8.10 HRS, VOLUME= 28.22 AF

|       |    |             |                           |
|-------|----|-------------|---------------------------|
| ACRES | CN |             | SCS TR-20 METHOD          |
| 3.50  | 92 | COMMERCIAL  | TYPE IA 24-HOUR           |
| 21.00 | 87 | RESIDENTIAL | RAINFALL= 6.0 IN          |
| 51.00 | 87 | Future Res. | SPAN= 0-24 HRS, dt=.1 HRS |
| 75.50 | 87 |             |                           |

| Method   | Comment    | Tc (min)       |
|--|------------|----------------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.14 '/' | UPPER AREA | 12.3           |
| CURVE NUMBER (LAG) METHOD<br>L=610' s=.017 '/' | LOWER AREA | 12.9           |
| Total Length= 2740 ft                          |            | Total Tc= 25.2 |

**SUBCATCHMENT 21 Basin 21 (Report Basin 20)**

PEAK= 40.12 CFS @ 7.97 HRS, VOLUME= 13.13 AF

|       |    |     |                           |
|-------|----|-----|---------------------------|
| ACRES | CN |     | SCS TR-20 METHOD          |
| 35.00 | 87 | Res | TYPE IA 24-HOUR           |
|       |    |     | RAINFALL= 6.0 IN          |
|       |    |     | SPAN= 0-24 HRS, dt=.1 HRS |

| Method  | Comment     | Tc (min) |
|---|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=2130' s=.094 '/' | Segment ID: | 15.0     |

**SUBCATCHMENT 22 Basin 22 (Report Basin 21)**

PEAK= 2.10 CFS @ 7.88 HRS, VOLUME= .71 AF

|       |    |     |                           |
|-------|----|-----|---------------------------|
| ACRES | CN |     | SCS TR-20 METHOD          |
| 2.53  | 76 | Res | TYPE IA 24-HOUR           |
|       |    |     | RAINFALL= 6.0 IN          |
|       |    |     | SPAN= 0-24 HRS, dt=.1 HRS |

| Method   | Comment     | Tc (min) |
|--|-------------|----------|
| CURVE NUMBER (LAG) METHOD<br>L=570' s=.126 '/' | Segment ID: | 6.4      |

Data for Coos Bay 19-25 FUTURE-50 year  
TYPE IA 24-HOUR RAINFALL= 6.0 IN

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Prepared by Applied Microcomputer Systems

21 May 04

HydroCAD 4.52 001050 (c) 1986-1996 Applied Microcomputer Systems

SUBCATCHMENT 27

Basin 27 (Report Basin 25)

PEAK= 58.04 CFS @ 8.48 HRS, VOLUME= 29.25 AF

| ACRES  | CN |            |
|--------|----|------------|
| 26.00  | 92 | COMMERCIAL |
| 30.00  | 75 | RES        |
| 72.00  | 60 | FOREST     |
| 128.00 | 70 |            |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 50.5     |
| L=3530' s=.053 '/'        |             |          |

SUBCATCHMENT 28

Basin 28 (Report Basin 26)

PEAK= 58.83 CFS @ 8.16 HRS, VOLUME= 22.12 AF

| ACRES | CN |                   |
|-------|----|-------------------|
| 11.50 | 92 | Comm              |
| 43.00 | 75 | Res               |
| 14.50 | 92 | Future Commercial |
| 69.00 | 81 |                   |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 28.7     |
| L=2500' s=.05 '/'         |             |          |

SUBCATCHMENT 29

Basin 29 (Report Basin 27)

PEAK= 6.96 CFS @ 7.87 HRS, VOLUME= 2.24 AF

| ACRES | CN |          |
|-------|----|----------|
| 6.40  | 84 | Res/Comm |

SCS TR-20 METHOD  
TYPE IA 24-HOUR  
RAINFALL= 6.0 IN  
SPAN= 0-24 HRS, dt=.1 HRS

| Method                    | Comment     | Tc (min) |
|---------------------------|-------------|----------|
| CURVE NUMBER (LAG) METHOD | Segment ID: | 7.2      |
| L=500' s=.05 '/'          |             |          |

# Cost Estimates

Appendix

E

Project 12C-1

**Widening of Blossom Box Culvert at 2nd Court**

| <i>Description</i>                      | <i>Quantity</i> | <i>Unit</i> | <i>Unit Price</i> | <i>Total Cost</i> |
|---|-----------------|-------------|-------------------|-------------------|
| Constr. Fac. & Temp. Controls           | All             | LS          | \$15,000          | \$15,000          |
| Dewatering                              | All             | LS          | \$10,000          | \$10,000          |
| Bypass Pumping                          | All             | LS          | \$5,000           | \$5,000           |
| <b>Piling</b>                           |                 |             |                   |                   |
| Furnish Pile Driving Equipment          | All             | LS          | \$15,000          | \$15,000          |
| Furnish Concrete Piles                  | 600             | LF          | \$30              | \$18,000          |
| Drive Concrete Piles                    | 6               | Each        | \$1,200           | \$7,200           |
| Sheet Piling                            | 1000            | SF          | \$30              | \$30,000          |
| Site Excavation                         | All             | LS          | \$15,000          | \$15,000          |
| <b>Pump Station Backfilling</b>         |                 |             |                   |                   |
| - Material                              | 50              | CY          | \$30              | \$1,500           |
| <b>Widening of Existing Box Culvert</b> |                 |             |                   |                   |
| - Reinforced Concrete                   | 10              | CY          | \$550             | \$5,500           |
| - Structural Beams                      | 1               | LS          | \$10,000          | \$10,000          |
| <b>Sitework</b>                         |                 |             |                   |                   |
| - Site Restoration                      | All             | LS          | \$8,000           | \$8,000           |
| - Sidewalks                             | 300             | SF          | \$5               | \$1,500           |
| - Curbs                                 | 30              | LF          | \$15              | \$450             |
| Total Construction Cost                 |                 |             |                   | \$142,150         |
| Contingency                             |                 |             |                   | \$21,400          |
| Administration, Legal                   |                 |             |                   | \$2,900           |
| Land Acquisition                        |                 |             |                   | n/a               |
| Environmental Study / Permits           |                 |             |                   | \$15,000          |
| Engineering                             |                 |             |                   | \$28,500          |
| <b>Total Cost</b>                       |                 |             |                   | <b>\$209,800</b>  |

## Project 12C-2

**Blossom Pump Station**

| <b>Description</b>              | <b>Quantity</b> | <b>Unit</b> | <b>Unit Price</b> | <b>Total Cost</b> |
|---------------------------------|-----------------|-------------|-------------------|-------------------|
| Constr. Fac. & Temp. Controls   | All             | LS          | \$210,000         | \$210,000         |
| Dewatering                      | All             | LS          | \$25,000          | \$25,000          |
| Bypass Pumping                  | All             | LS          | \$25,000          | \$25,000          |
| Demolition                      | All             | LS          | \$90,000          | \$90,000          |
| <b>Storm Drain Piping</b>       |                 |             |                   |                   |
| 4x6 Box Culvert                 | 70              | LF          | \$600             | \$42,000          |
| New 48" Force Main              | 3300            | LF          | \$150             | \$495,000         |
| <b>Piling</b>                   |                 |             |                   |                   |
| Furnish Pile Driving Equipment  | All             | LS          | \$25,000          | \$25,000          |
| Furnish Concrete Piles          | 1600            | LF          | \$30              | \$48,000          |
| Drive Concrete Piles            | 16              | Each        | \$1,200           | \$19,200          |
| Sheet Piling                    | 5000            | SF          | \$30              | \$150,000         |
| Site Excavation                 | All             | LS          | \$40,000          | \$40,000          |
| <b>Pump Station Piping</b>      |                 |             |                   |                   |
| - Force Main Piping             | All             | LS          | \$5,000           | \$5,000           |
| - Connections, Fittings         | All             | LS          | \$10,000          | \$10,000          |
| - Supports                      | All             | LS          | \$5,000           | \$5,000           |
| <b>Pump Station Backfilling</b> |                 |             |                   |                   |
| - Material                      | 400             | CY          | \$25              | \$10,000          |
| <b>Top Deck / Walls / Etc.</b>  |                 |             |                   |                   |
| - Reinforced Concrete           | 200             | CY          | \$550             | \$110,000         |
| - Grating                       | All             | LS          | \$5,000           | \$5,000           |
| - Fencing                       | 200             | LF          | \$25              | \$5,000           |
| - Slide Gate                    | 1               | Each        | \$5,000           | \$5,000           |
| - Slide Gate Installation       | 1               | Each        | \$1,500           | \$1,500           |
| <b>Building</b>                 |                 |             |                   |                   |
| - Split face block building     | 500             | SF          | \$150             | \$75,000          |
| - Mechanical Louvers            | 2               | Each        | \$5,000           | \$10,000          |
| <b>Electrical</b>               |                 |             |                   |                   |
| - Materials                     | All             | LS          | \$15,000          | \$15,000          |
| - Telemetry / Controls          | All             | LS          | \$12,000          | \$12,000          |
| - Standby Generator             | All             | LS          | \$60,000          | \$60,000          |
| <b>Equipment</b>                |                 |             |                   |                   |
| - Pump                          | 2               | Each        | \$80,000          | \$160,000         |
| - Pump Installation             | 2               | Each        | \$9,000           | \$18,000          |
| - Wetwell Level Monitor         | 1               | Each        | \$5,000           | \$5,000           |
| - 48" Tide Gate                 | 1               | Each        | \$20,000          | \$20,000          |
| - Tide Gate Installation        | 1               | Each        | \$4,000           | \$4,000           |

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| Sitework |
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|                        |     |      |          |          |
|------------------------|-----|------|----------|----------|
| - Site Restoration     | All | LS   | \$17,000 | \$17,000 |
| - Rip Rap              | 100 | CY   | \$50     | \$5,000  |
| - Trash Rack / Screens | 1   | Each | \$60,000 | \$60,000 |

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|                               |             |
|-------------------------------|-------------|
| Total Construction Cost       | \$1,786,700 |
| Contingency                   | \$268,000   |
| Administration, Legal         | \$35,730    |
| Land Acquisition              | \$100,000   |
| Environmental Study / Permits | \$75,000    |
| Pre-Engineering Evaluation    | \$40,000    |
| Engineering                   | \$357,340   |

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|-------------------|--------------------|
| <b>Total Cost</b> | <b>\$2,662,770</b> |
|-------------------|--------------------|

Project 14-1

**Golden Pump Station**

| <i>Description</i>              | <i>Quantity</i> | <i>Unit</i> | <i>Unit Price</i> | <i>Total Cost</i> |
|---------------------------------|-----------------|-------------|-------------------|-------------------|
| Constr. Fac. & Temp. Controls   | All             | LS          | \$40,000          | \$40,000          |
| Dewatering                      | All             | LS          | \$15,000          | \$15,000          |
| <b>Storm Drain Piping</b>       |                 |             |                   |                   |
| AC Pavement R & R               | 40              | LF          | \$50              | \$2,000           |
| 36" Storm Drain Pipe, Dike Xing | 50              | LF          | \$200             | \$10,000          |
| 36" Storm Drain Pipe, Class B   | 100             | LF          | \$110             | \$11,000          |
| <b>Piling</b>                   |                 |             |                   |                   |
| Furnish Pile Driving Equipment  | All             | LS          | \$25,000          | \$25,000          |
| Furnish Concrete Piles          | 800             | LF          | \$30              | \$24,000          |
| Drive Concrete Piles            | 8               | Each        | \$1,200           | \$9,600           |
| Sheet Piling                    | 5000            | SF          | \$30              | \$150,000         |
| Site Excavation                 | All             | LS          | \$30,000          | \$30,000          |
| Manholes                        | 2               | Each        | \$8,000           | \$16,000          |
| <b>Interior Manhole Work</b>    |                 |             |                   |                   |
| - Trash Rack / Screens          | 1               | Each        | \$10,000          | \$10,000          |
| - Grouting                      | 1               | Each        | \$4,000           | \$4,000           |
| <b>Pump Station Piping</b>      |                 |             |                   |                   |
| - Force Main Piping             | All             | LS          | \$5,000           | \$5,000           |
| - Connections, Fittings         | All             | LS          | \$10,000          | \$10,000          |
| - Supports                      | All             | LS          | \$5,000           | \$5,000           |
| <b>Pump Station Backfilling</b> |                 |             |                   |                   |
| - Material                      | 500             | CY          | \$25              | \$12,500          |
| <b>Top Deck / Walls / Etc.</b>  |                 |             |                   |                   |
| - Reinforced Concrete           | 200             | CY          | \$550             | \$110,000         |
| - Grating                       | All             | LS          | \$5,000           | \$5,000           |
| - Fencing                       | 200             | LF          | \$25              | \$5,000           |
| - Slide Gate                    | 1               | Each        | \$5,000           | \$5,000           |
| - Slide Gate Installation       | 1               | Each        | \$1,500           | \$1,500           |
| <b>Building</b>                 |                 |             |                   |                   |
| - Split face block building     | 400             | SF          | \$150             | \$60,000          |
| - Mechanical Louvers            | 2               | Each        | \$5,000           | \$10,000          |
| <b>Electrical</b>               |                 |             |                   |                   |
| - Materials                     | All             | LS          | \$14,000          | \$14,000          |
| - Telemetry / Controls          | All             | LS          | \$12,000          | \$12,000          |
| - Standby Generator             | All             | LS          | \$60,000          | \$60,000          |

**Equipment**

|                          |   |      |          |           |
|--------------------------|---|------|----------|-----------|
| - Pump                   | 2 | Each | \$85,000 | \$170,000 |
| - Pump Installation      | 2 | Each | \$8,000  | \$16,000  |
| - Wetwell Level Monitor  | 1 | Each | \$5,000  | \$5,000   |
| - 36" Tide Gate          | 1 | Each | \$10,000 | \$10,000  |
| - Tide Gate Installation | 1 | Each | \$2,000  | \$2,000   |

**Sitework**

|                    |     |     |          |          |
|--------------------|-----|-----|----------|----------|
| - Site Restoration | All | LS  | \$12,200 | \$12,200 |
| - Access Road      | All | LS  | \$30,000 | \$30,000 |
| - AC Pavement      | 20  | Ton | \$60     | \$1,200  |
| - Rip Rap          | 100 | CY  | \$50     | \$5,000  |

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|-------------------------------|-----------|
| Total Construction Cost       | \$913,000 |
| Contingency                   | \$136,950 |
| Administration, Legal         | \$18,260  |
| Environmental Study / Permits | \$30,000  |
| Land Acquisition              | \$100,000 |
| Engineering                   | \$182,600 |

**Total Cost** **\$1,380,810**

Project 17-3

**7th / Lockhart Pump Station**

| Description                     | Quantity | Unit | Unit Price | Total Cost |
|---------------------------------|----------|------|------------|------------|
| Constr. Fac. & Temp. Controls   | All      | LS   | \$50,000   | \$50,000   |
| Dewatering                      | All      | LS   | \$15,000   | \$15,000   |
| <b>Storm Drain Piping</b>       |          |      |            |            |
| AC Pavement R & R               | 420      | LF   | \$50       | \$21,000   |
| 48" Storm Drain Pipe, Dike Xing | 50       | LF   | \$250      | \$12,500   |
| 48" Storm Drain Pipe, Class C   | 400      | LF   | \$150      | \$60,000   |
| 48" Storm Drain Pipe, Class B   | 150      | LF   | \$120      | \$18,000   |
| <b>Piling</b>                   |          |      |            |            |
| Furnish Pile Driving Equipment  | All      | LS   | \$25,000   | \$25,000   |
| Furnish Concrete Piles          | 800      | LF   | \$30       | \$24,000   |
| Drive Concrete Piles            | 8        | Each | \$1,200    | \$9,600    |
| Sheet Piling                    | 4000     | SF   | \$30       | \$120,000  |
| Site Excavation                 | All      | LS   | \$30,000   | \$30,000   |
| Manholes                        | 3        | Each | \$12,000   | \$36,000   |
| <b>Interior Manhole Work</b>    |          |      |            |            |
| - Trash Rack / Screens          | 1        | Each | \$10,000   | \$10,000   |
| - Grouting                      | 1        | Each | \$4,000    | \$4,000    |
| <b>Pump Station Piping</b>      |          |      |            |            |
| - Force Main Piping             | All      | LS   | \$5,000    | \$5,000    |
| - Connections, Fittings         | All      | LS   | \$10,000   | \$10,000   |
| - Supports                      | All      | LS   | \$5,000    | \$5,000    |
| <b>Pump Station Backfilling</b> |          |      |            |            |
| - Material                      | 400      | CY   | \$25       | \$10,000   |
| <b>Top Deck / Walls / Etc.</b>  |          |      |            |            |
| - Reinforced Concrete           | 200      | CY   | \$550      | \$110,000  |
| - Grating                       | All      | LS   | \$5,000    | \$5,000    |
| - Fencing                       | 200      | LF   | \$25       | \$5,000    |
| - Slide Gate                    | 1        | Each | \$5,000    | \$5,000    |
| - Slide Gate Installation       | 1        | Each | \$1,500    | \$1,500    |
| <b>Building</b>                 |          |      |            |            |
| - Split face block building     | 500      | SF   | \$150      | \$75,000   |
| - Mechanical Louvers            | 2        | Each | \$5,000    | \$10,000   |
| <b>Electrical</b>               |          |      |            |            |
| - Materials                     | All      | LS   | \$15,000   | \$15,000   |
| - Telemetry / Controls          | All      | LS   | \$12,000   | \$12,000   |
| - Standby Generator             | All      | LS   | \$60,000   | \$60,000   |

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| Equipment |
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|                          |   |      |          |           |
|--------------------------|---|------|----------|-----------|
| - Pump                   | 2 | Each | \$90,000 | \$180,000 |
| - Pump Installation      | 2 | Each | \$9,000  | \$18,000  |
| - Wetwell Level Monitor  | 1 | Each | \$5,000  | \$5,000   |
| - 48" Tide Gate          | 1 | Each | \$20,000 | \$20,000  |
| - Tide Gate Installation | 1 | Each | \$4,000  | \$4,000   |

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| Sitework |
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|                    |     |    |         |         |
|--------------------|-----|----|---------|---------|
| - Site Restoration | All | LS | \$8,900 | \$8,900 |
| - Rip Rap          | 50  | CY | \$50    | \$2,500 |

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|-------------------------------|--------------------|
| Total Construction Cost       | \$1,002,000        |
| Contingency                   | \$150,300          |
| Administration, Legal         | \$20,040           |
| Environmental Study / Permits | \$30,000           |
| Land Acquisition              | n/a                |
| Engineering                   | \$200,400          |
| <b>Total Cost</b>             | <b>\$1,402,740</b> |

Project 19-2

**Englewood Pump Station**

| <b>Description</b>              | <b>Quantity</b> | <b>Unit</b> | <b>Unit Price</b> | <b>Total Cost</b> |
|---------------------------------|-----------------|-------------|-------------------|-------------------|
| Constr. Fac. & Temp. Controls   | All             | LS          | \$40,000          | \$40,000          |
| Dewatering                      | All             | LS          | \$15,000          | \$15,000          |
| <b>Storm Drain Piping</b>       |                 |             |                   |                   |
| AC Pavement R & R               | 40              | LF          | \$30              | \$1,200           |
| 36" Storm Drain Pipe, Class C   | 40              | LF          | \$130             | \$5,200           |
| <b>Piling</b>                   |                 |             |                   |                   |
| Furnish Pile Driving Equipment  | All             | LS          | \$25,000          | \$25,000          |
| Furnish Concrete Piles          | 800             | LF          | \$30              | \$24,000          |
| Drive Concrete Piles            | 8               | Each        | \$1,200           | \$9,600           |
| Sheet Piling                    | 4000            | SF          | \$30              | \$120,000         |
| Site Excavation                 | All             | LS          | \$30,000          | \$30,000          |
| Manholes                        | 2               | Each        | \$8,000           | \$16,000          |
| <b>Interior Manhole Work</b>    |                 |             |                   |                   |
| - Trash Rack / Screens          | 1               | Each        | \$10,000          | \$10,000          |
| - Grouting                      | 1               | Each        | \$4,000           | \$4,000           |
| <b>Pump Station Piping</b>      |                 |             |                   |                   |
| - Force Main Piping             | All             | LS          | \$5,000           | \$5,000           |
| - Connections, Fittings         | All             | LS          | \$10,000          | \$10,000          |
| - Supports                      | All             | LS          | \$5,000           | \$5,000           |
| <b>Pump Station Backfilling</b> |                 |             |                   |                   |
| - Material                      | 500             | CY          | \$25              | \$12,500          |
| <b>Top Deck / Walls / Etc.</b>  |                 |             |                   |                   |
| - Reinforced Concrete           | 200             | CY          | \$550             | \$110,000         |
| - Grating                       | All             | LS          | \$5,000           | \$5,000           |
| - Fencing                       | 40              | LF          | \$25              | \$1,000           |
| - Slide Gate                    | 1               | Each        | \$4,000           | \$4,000           |
| - Slide Gate Installation       | 1               | Each        | \$1,500           | \$1,500           |
| <b>Building</b>                 |                 |             |                   |                   |
| - Split face block building     | 400             | SF          | \$150             | \$60,000          |
| - Mechanical Louvers            | 2               | Each        | \$5,000           | \$10,000          |
| <b>Electrical</b>               |                 |             |                   |                   |
| - Materials                     | All             | LS          | \$15,000          | \$15,000          |
| - Telemetry / Controls          | All             | LS          | \$12,000          | \$12,000          |
| - Standby Generator             | All             | LS          | \$60,000          | \$60,000          |

**Equipment**

|                          |   |      |          |           |
|--------------------------|---|------|----------|-----------|
| - Pump                   | 2 | Each | \$85,000 | \$170,000 |
| - Pump Installation      | 2 | Each | \$8,000  | \$16,000  |
| - Wetwell Level Monitor  | 1 | Each | \$5,000  | \$5,000   |
| - 36" Tide Gate          | 1 | Each | \$10,000 | \$10,000  |
| - Tide Gate Installation | 1 | Each | \$3,000  | \$3,000   |

**Sitework**

|                    |     |    |          |                 |
|--------------------|-----|----|----------|-----------------|
| - Site Restoration | All | LS | \$10,000 | <u>\$10,000</u> |
|--------------------|-----|----|----------|-----------------|

|                               |  |  |  |                  |
|-------------------------------|--|--|--|------------------|
| Total Construction Cost       |  |  |  | \$825,000        |
| Contingency                   |  |  |  | \$123,750        |
| Administration, Legal         |  |  |  | \$16,500         |
| Environmental Study / Permits |  |  |  | \$30,000         |
| Land Acquisition              |  |  |  | n/a              |
| Engineering                   |  |  |  | <u>\$165,000</u> |

|                   |  |  |  |                    |
|-------------------|--|--|--|--------------------|
| <b>Total Cost</b> |  |  |  | <b>\$1,160,250</b> |
|-------------------|--|--|--|--------------------|