

**CHAPTER THIRTEEN**

**WASTEWATER TREATMENT AND  
COLLECTION SYSTEM**

**CHAPTER THIRTEEN: WASTEWATER TREATMENT AND COLLECTION SYSTEM**

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## **CHAPTER THIRTEEN: WASTEWATER TREATMENT AND COLLECTION SYSTEM**

### **13.1 INTRODUCTION**

Mountain House's wastewater system will include a wastewater collection, treatment and disposal system to serve the entire community. The treatment facilities will include aerated lagoons, preliminary treatment, activated sludge, filtration, disinfection, effluent storage, and if necessary, interim farmland irrigation.

Approximately 80% of the service area will drain by gravity through a backbone collection system to the treatment plant. The remaining 20% of the service area must be pumped to the treatment plant through lift stations and force mains.

The design capacity of the treatment facility and all related components will be 5.68 MGD (average annual flow) at buildout. The treatment processes and facilities will be built in stages appropriate to serve one or more neighborhoods and a balanced amount of industrial/commercial and public uses.

### **13.2 ASSUMPTIONS**

The San Joaquin County Public Works Standards, as listed in Table 13.1: Wastewater Generation Average Daily Flow (ADF), were used to provide conceptual planning estimates for the Mountain House community.

### **13.3 WASTEWATER GENERATION**

Table 5-1 of the San Joaquin County Public Works Standards, "Sewerage Quantities," was used to provide conceptual planning estimates for the expected sewage flows for the Mountain House development. These sewage quantities were compared to the communities of Manteca and Tracy and to the sewage flows that could be expected with the application of water conservation techniques. The basis for flow generated from residential areas is 100 gallons per capita per day (gpcd). This base factor was used in computing average daily flow (ADF) without water conservation measures. Water conservation allowances were then calculated into the base factor. Determination of specific discharge requirements will be determined by the water provider at the time of application to the provider for wastewater hookups. Compliance will be a condition of hookup.

The water conservation allowance was based on information from communities that are presently using these techniques and data available from study sources indicating the savings that have been typical with water conservation. The overall water conservation allowance is described in Chapter Twelve: Potable Water Systems and is conservatively estimated at 14% of the conventional water usage rate.

The County standard for peaking factor has been adopted to reflect maximum flows for the wastewater facilities and include an allowance for infiltration/inflow.

Table 13.1: Wastewater Generation Average Daily Flow (ADF), illustrates the

calculations of the sewage generated from the community with and without conservation for residential, commercial/industrial and school uses. The calculation of sewage generated with the use of conservation techniques is believed to be conservative and shall be verified as the community is developed. The design capacity of the treatment facilities and all related components shall be 5.68 mgd at buildout.

**Implementation:**

- a) Specific Plan Requirements. All Specific Plans except Specific Plan I shall include an evaluation/assessment of actual wastewater generation compared to Table 13.1: Wastewater Generation Average Daily Flow (ADF). In addition, monitoring of sewage generation figures shall be carried out by the MHCSO on a routine basis. Both of these evaluations shall be used to determine whether adjustments to treatment and collection facilities need to be made and how this impacts the schedule of wastewater improvements and sizing.

If wastewater generation specified in the Master Plan is exceeded for a previous Specific Plan, subsequent Specific Plans shall specify additional actions that would be implemented to achieve reduced wastewater generation. In addition, the Master Plan will be revised, if necessary, prior to approval of a Specific Plan to reflect new projected wastewater generation and revised infrastructure facilities to permit increased wastewater generation and disposal.

#### **13.4 WASTEWATER TRUNK COLLECTION SYSTEM**

The trunk pipeline system has been designed in accordance with provisions of Chapter 5, Sewer System Design Standards of the Department of Public Works Improvement Standards, except that wastewater generation factors were revised to account for water conservation as indicated in Table 13.1.

The area to be served by the wastewater trunk collection system is limited to the proposed Mountain House community. Figure 13.1: Wastewater Collection and Treatment Facilities shows the wastewater trunk collection system for the community.

**Objective:** To transport wastewater from all areas within the community to the treatment plant and avoid any adverse impacts on public health and safety.

**Policies:**

- a) Wastewater shall be conveyed to the treatment plant through a pipe network system in a fast and efficient manner.
- b) The collection facilities shall be designed and constructed in such a manner that the health and safety of inhabitants of the community are not adversely affected.

**Implementation:**

- a) Design and Construction. The wastewater trunk collection system shall be installed at the size and locations shown in Figure 13.1. The detailed design and construction of the facilities shall be in accordance with current County Standards and good engineering practices.
- b) Specific Plan Requirements. Each Specific Plan shall indicate which portion of the trunk pipeline system must be installed to adequately serve the specific plan development and what additional facilities are needed to efficiently serve future “upstream” developments. In no case shall future developments be forced to install trunkline extensions through completed developments in order to secure service.
- c) Future Revisions. If in the future there are any revisions to the Land Use Plan, the wastewater generation assumptions, or County standards, a re-analysis of the trunk collection system shall be performed by the MHCSD and changes made to insure that the overall system design continues to meet the minimum requirements of the Master Plan and County Standards.

## **13.5 WASTEWATER TREATMENT PLANT**

### **13.5.1 Wastewater Treatment Process**

This section discusses the wastewater treatment process, including the plant design, and treatment methods. Effluent disposal and reclamation are discussed in the MHCSD’s Development Standards.

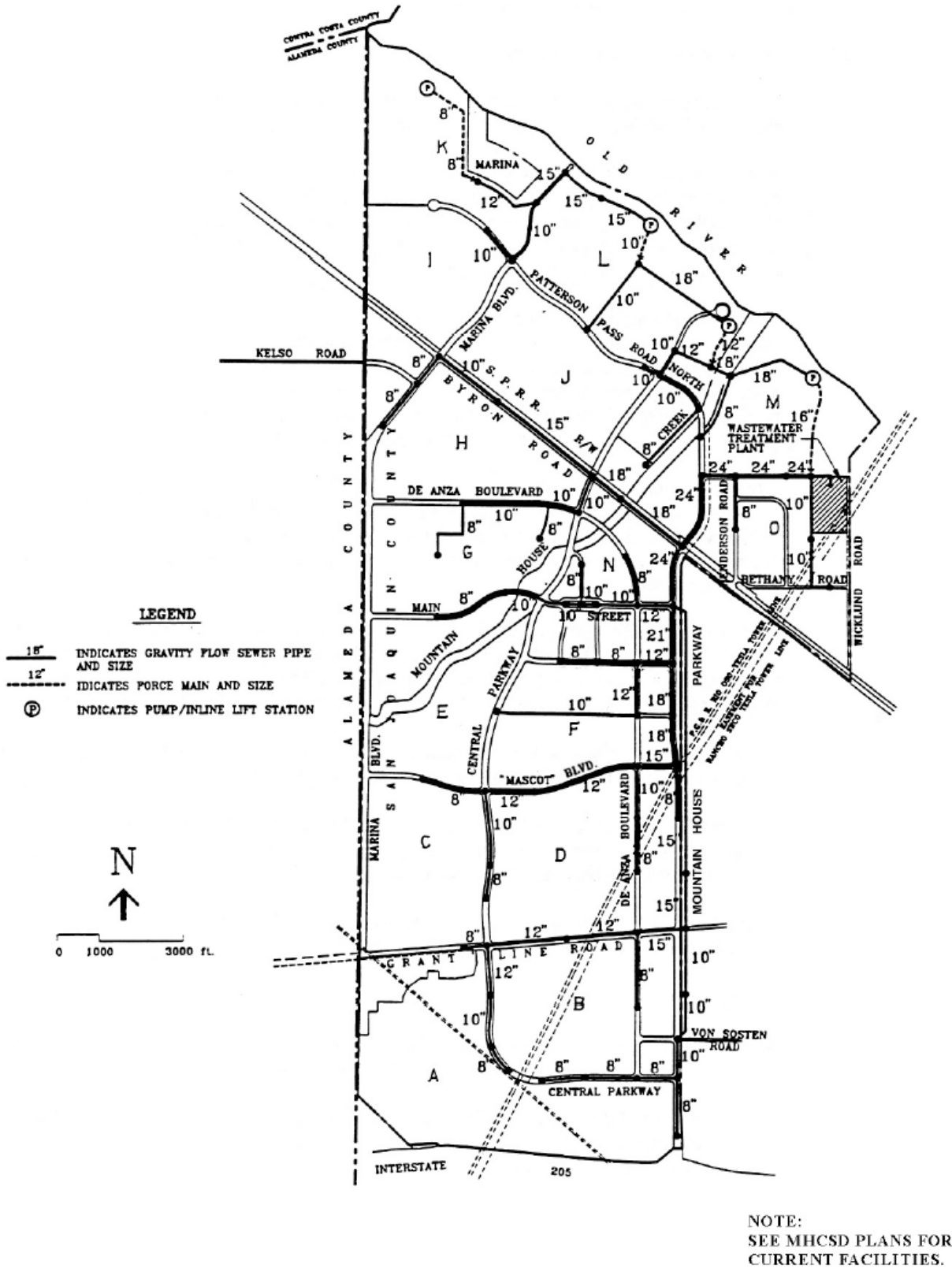
Wastewater from the early phases of the community’s development will be treated in aerated lagoons with additional treatment (including disinfection) depending on how the treated wastewater is disposed of or used. It is anticipated that the aerated lagoons would not be used for treatment longer than at 10% buildout of the community. Later phases of development will utilize processes such as activated sludge which are more suitable for larger volumes of wastewater.

The level of treatment may vary over the buildout of the community depending on the changes in community needs, regulations and advances in treatment technology. It is presently contemplated that tertiary treatment may be used at the outset. The planned treatment level at buildout shall be tertiary, suitable for regulatory approved reuse and river discharge.

Treatment plant reliability is tightly controlled by a number of agencies, including the Federal Environmental Protection Agency (EPA), California Regional Water Quality Control Board (Regional Board), and Department of Health Services (DHS). These agencies set standards for the disposal of treated wastewater by reuse (agricultural, industrial, municipal) and by discharge to surface waters such as Old River. The standards set forth include consideration, both directly and indirectly, of the issue of wastewater treatment reliability.

MOUNTAIN HOUSE MASTER PLAN

Table 13.1: Wastewater Generation Average Daily Flow (ADF)				
LAND USE DESIGNATION	Gross Area in Acres	Expected Dwelling Units (DU)(4)	Daily Sewage Generation Rate in gallons per dwelling unit (gal/du)(1)	Cumulative Sewage Generation Rate (gallons)
<b>RESIDENTIAL (du/ac)</b>				
RVL Residential/Very Low	57.8	121	312	37,752
R/L Residential/Low	1073.1	4,829	312	1,506,648
R/L Residential/Low --Active Adult	131.8	593	312	185,016
R/M Residential/Medium	969.2	5,898	270	1,592,460
R/M Residential/Medium--Active Adult	13.5	81	270	21,870
R/MH Residential/Medium High	186.8	2,615	200	523,000
R/MH Residential/Medium High--Active Adult	14.0	196	200	39,200
R/MH Residential/Medium High--Senior Housing	0.0	-	200	-
R/H Residential/High	62.1	1,242	200	248,400
R/H Residential/High--Senior Housing	0.0	-	200	-
M/X Mixed Use (I-205)				
M/X Mixed Use (Town Center)	0.0	200	200	40,000
<b>SUBTOTAL</b>	<b>2,508.3</b>	<b>15,775</b>		<b>4,194,346</b>
<b>ADDITIONAL &amp; BONUS UNITS</b>				
Additional Units (Town Center)		240	200	48,000
Bonus Units (For R/H Housing)		90	200	18,000
<b>SUBTOTAL</b>		<b>330</b>		<b>66,000</b>
<b>COMMERCIAL</b>				
C/N Neighborhood	12.6		2,000	25,200
C/C Community	98.5		2,000	197,000
C/G General	39.5		2,000	79,000
C/FS Freeway Service	24.8		2,000	49,600
C/O Office	51.1		2,000	102,200
C/R Recreation (Golf Club, Rec Ctr)	10.9		2,000	21,800
M/X Mixed Use (I-205)	16.0		2,000	32,000
M/X Mixed Use (Town Center and Old River)	54.1		2,000	108,200
<b>SUBTOTAL</b>	<b>307.5</b>			<b>615,000</b>
<b>INDUSTRIAL</b>				
I/L Limited Industrial (N. of Byron)	57.0		1,600	91,200
I/L Limited Industrial (N. of Byron--Expansion)	37.7		1,600	60,320
I/L Limited Industrial (S. of Byron)	155.0		1,600	248,000
I/G General Industrial	56.1		1,600	89,760
I/G General Industrial--Expansion Area	55.8		1,600	89,280
<b>SUBTOTAL</b>	<b>361.6</b>			<b>578,560</b>
<b>OPEN SPACE:</b>	Negligible and allowed for in other acreage estimates.			
<b>SCHOOLS</b>				
P K-8	176.0		3,000	528,000
P High School	46.5		4,500	209,250
<b>SUBTOTAL</b>	<b>222.5</b>			<b>737,250</b>
<b>PUBLIC:</b>	Negligible and allowed for in other acreage estimates.			
<b>TOTAL WITHOUT CONSERVATION</b>				<b>6,191,156</b>
Sewage Generation, gallons per capita per day (gpcd) (3)				<b>151</b>
<b>CONSERVATION SAVINGS (2)</b>				<b>866,762</b>
<b>TOTAL WITH CONSERVATION</b>				<b>5,324,394</b>
Sewage Generation, gallons per capita per day (3)				<b>130</b>
Comments:				
1) Based on San Joaquin County Public Works Standards.				
2) Based on conservation savings of 14%.				
3) Per capita is based on a Master Plan population of 41,089				
4) Dwelling units are Expected Units, between the minimum and maximum densities.				



**FIGURE 13.1 – WASTEWATER COLLECTION AND TREATMENT FACILITIES**

Compliance with regulatory agencies' regulations is controlled through a permitting process, monitoring, field testing and periodic permit renewal.

**Objective:** To ensure that wastewater treatment processes be selected, designed, constructed, and operated to provide adequate treatment capacity and water quality for the method(s) of disposal throughout project buildout.

**Objective:** To provide not only process reliability but flexibility to adapt the process to meet the needs and technology of the future.

**Policy:**

- a) Initial treatment processes shall be selected to meet the effluent quality required by economically feasible use of reclaimed water and river discharge.
- b) Treatment processes shall be selected based on the most cost-effective process that meets regulatory requirements and yields the highest amount of beneficial and economically feasible reuse of reclaimed wastewater as well as river discharge.
- c) Expansion of the wastewater treatment plant shall be constructed and completed before development exceeds the existing capacity.

**Implementation:**

- a) Engineering Report. The required Engineering Report shall be completed, and appropriate permits obtained from the regulatory agencies prior to the Final Map of the first subdivision.
- b) Initial Treatment. For Specific Plan I, the initial level of treatment may be secondary level treatment aerated lagoons or other higher level treatment processes approved by the regulatory agencies. It is presently contemplated that the initial level of treatment will be tertiary.
- c) Ultimate Treatment. No later than at the buildout of Specific Plan I a high volume activated sludge or equivalent treatment process shall be constructed in phases to serve all future community wastewater treatment needs. The aerated lagoons will be replaced by the new facilities. The decommissioned aerated lagoons will serve as storage reservoirs for the ultimate treatment process.
- d) Disinfection of Effluent. In all cases effluent shall be subject to disinfection before discharge or reuse.
- e) Use Permit. A Use Permit shall be required for the wastewater treatment plant. The permit application shall include a schedule for design, construction, and permitting for the plant to ensure that the wastewater treatment and reclamation facilities would be operational prior to issuance of a permit for construction of any building.



- f) Wastewater Flow Rate. The Use Permit application for the wastewater treatment plant shall describe a wastewater flow rate monitoring plan and specify the actions that would be taken if wastewater flow rates exceeded projections made in the Master Plan.
- g) Reclaimed Water Treatment. Treatment facilities shall be laid out to accommodate additional treatment processes that would be required for reclaimed water used with potential for public contact.
- h) Open Space and Golf Course Re-use. The feasibility of using reclaimed water for irrigation of the golf course(s) and other public open space areas such as parks shall be reevaluated as changes in wastewater treatment technology occur and shall be considered to the extent economically feasible by the MHCSO.

### 13.5.2 Siting Criteria

The site of the wastewater treatment facilities was selected to take advantage of the topography. Wastewater from the majority of the development area can flow by gravity to the wastewater treatment facilities.

The site was also selected because it is the most isolated location from populated land uses within the community. The agricultural and open space uses east of the site (outside the project boundary) will remain. Light and general industrial uses are planned to the northwest and south.

Wastewater lift stations are necessary to convey wastewater from certain parts of the community to the wastewater treatment plant. Generally, such facilities are primarily below-ground and are not noticed by the casual public.

Figures 13.2 and 13.3 illustrate the location and layout of the wastewater treatment facility and its relationship to other public uses.

**Objective:** Wastewater treatment facilities shall have minimal aesthetic or visual impact on surrounding areas.

**Policy:**

- a) The facilities shall not appear to be a wastewater treatment plant to the casual observer.

**Implementation:**

- a) Location. The wastewater treatment facility shall be located in an area where the surrounding planned land uses are industrial.
- b) Siting. The wastewater treatment facility shall be sited so that the facility cannot be seen from a major arterial roadway.
- c) Undergrounding. To the degree feasible, above ground structures and elevated piping shall be minimized.

- d) Landscaping. Landscaping shall be designed to screen the perimeter of the site except where adjacent to other public land uses.
- e) Structure Design. To the degree feasible, structures shall be designed to appear as industrial buildings rather than utility structures.

### 13.6 ODORS

In wastewater treatment plants, odors may develop from a number of sources including hydrogen sulfide and other odorous compounds, screenings and unwashed grit, scum, organically overloaded biological treatment processes, sludge thickeners, and sludge drying beds. With proper attention to design details and good housekeeping, odor development can be greatly minimized.

Figure 13.4: Odor Impacts of the Wastewater Treatment Facility illustrates the odor impacts expected at the wastewater treatment facility.

**Objective:** Odor from the wastewater treatment plant shall not be detectable at the boundary line of adjacent private property.

**Policy:**

- a) The approach taken for odor control shall include: (1) design details and good housekeeping to eliminate odor sources, (2) control of the raw wastewater discharged to the treatment plant, (3) the use of covers or chemicals if needed to control odors, and (4) selection of processes that favor odor reduction.

**Implementation:**

- a) Plant Design. Odor control measures shall be incorporated in the plant design. Measures shall include selection of process and operations with low odor potential, properly sized units to maintain conservative process loading, and enclosing the principle sources of odors such as headworks. Odor treatment systems shall be provided to neutralize off-gasses collected from enclosures.
- b) Setbacks. Storage ponds and sludge basins shall be setback from property lines a minimum of 20 feet.
- c) Odor Studies. Odor studies shall be conducted to identify the type and magnitude of odor sources, meteorological conditions, dispersion characteristics and adjacent developments if odor problem develops following startup and operation of the treatment facilities.
- d) Monitoring. Odor production shall be monitored following plant startup. If required, unit processes such as the sludge drying beds may be covered, or chemicals may be used, to control or eliminate odors.

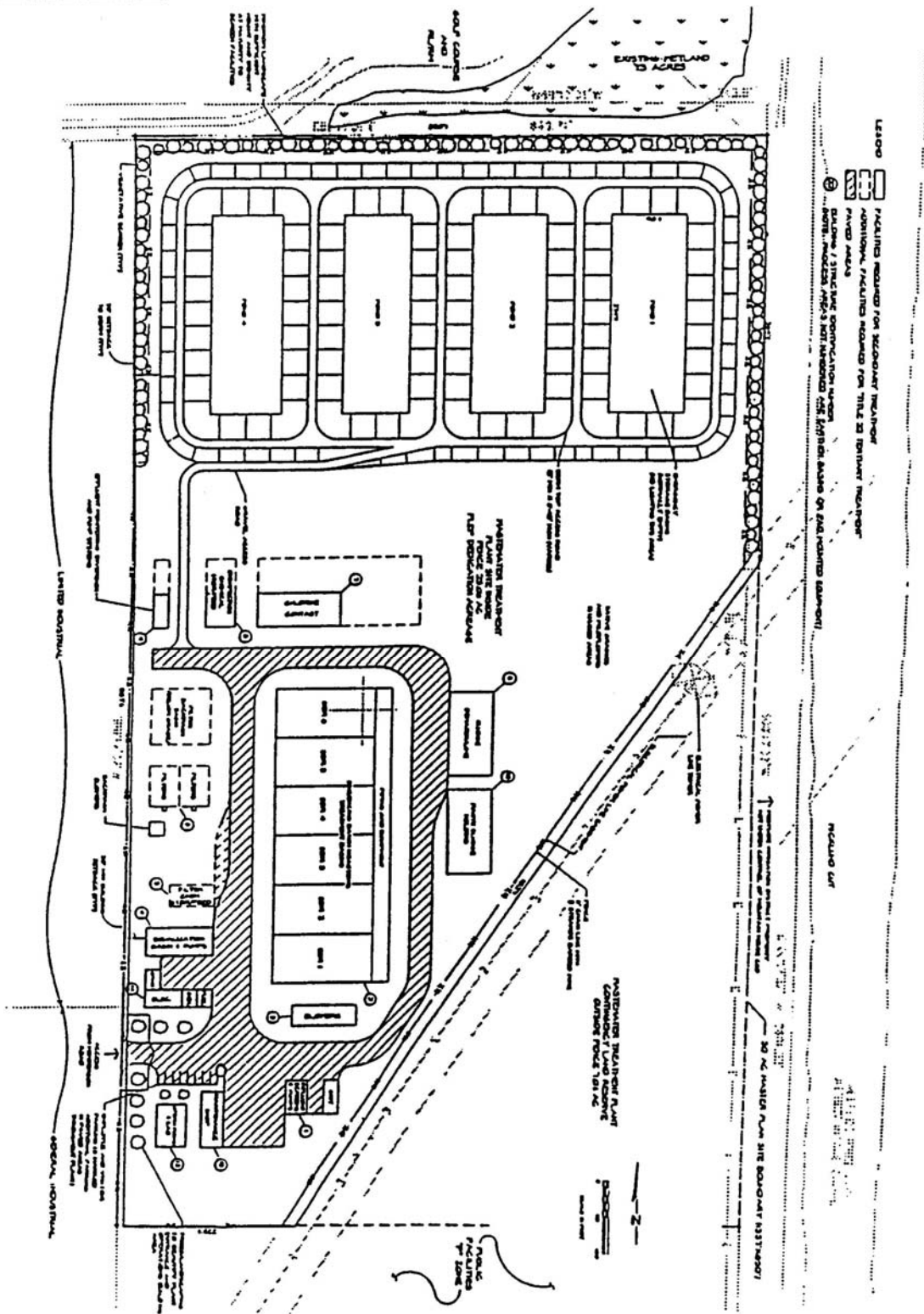
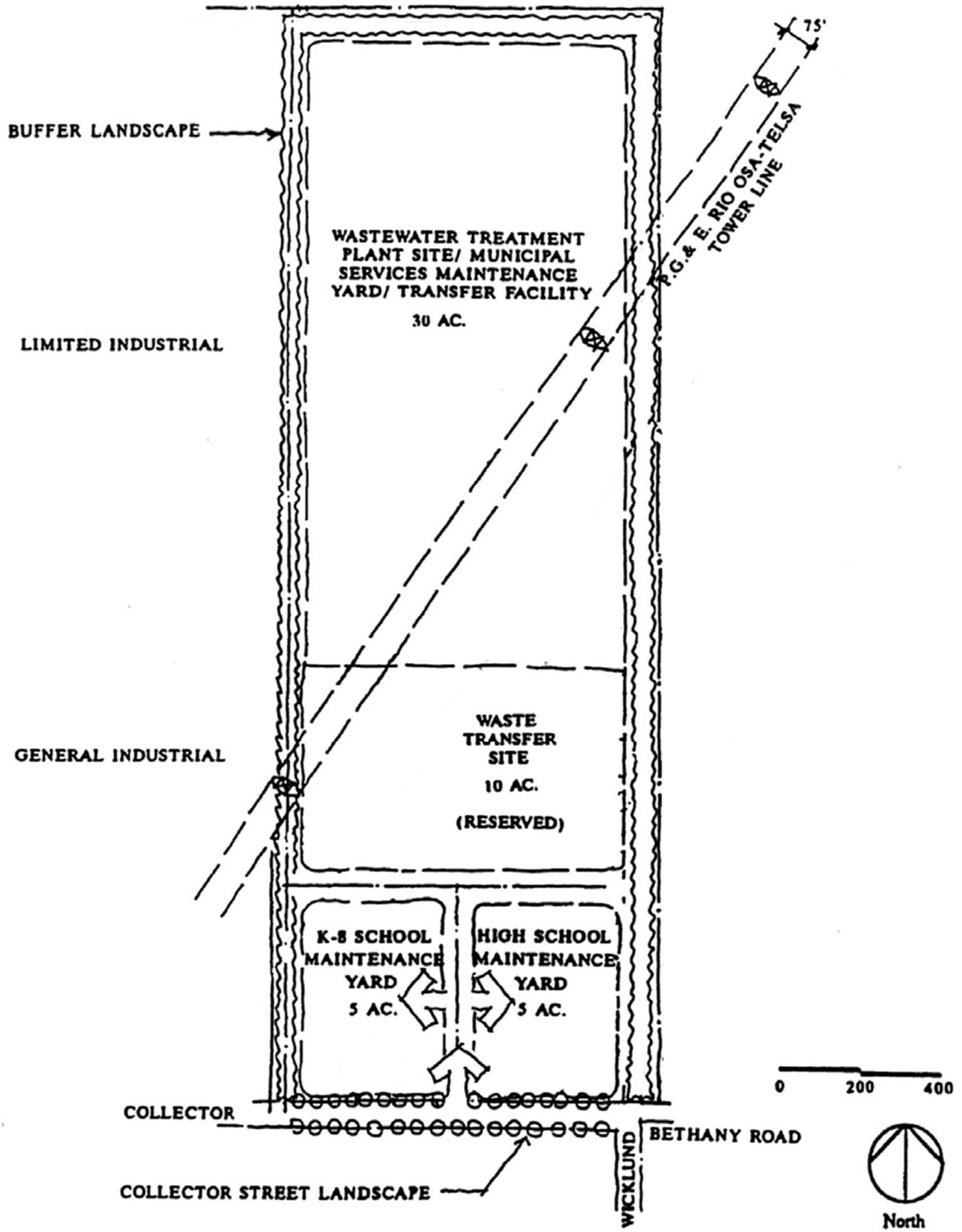
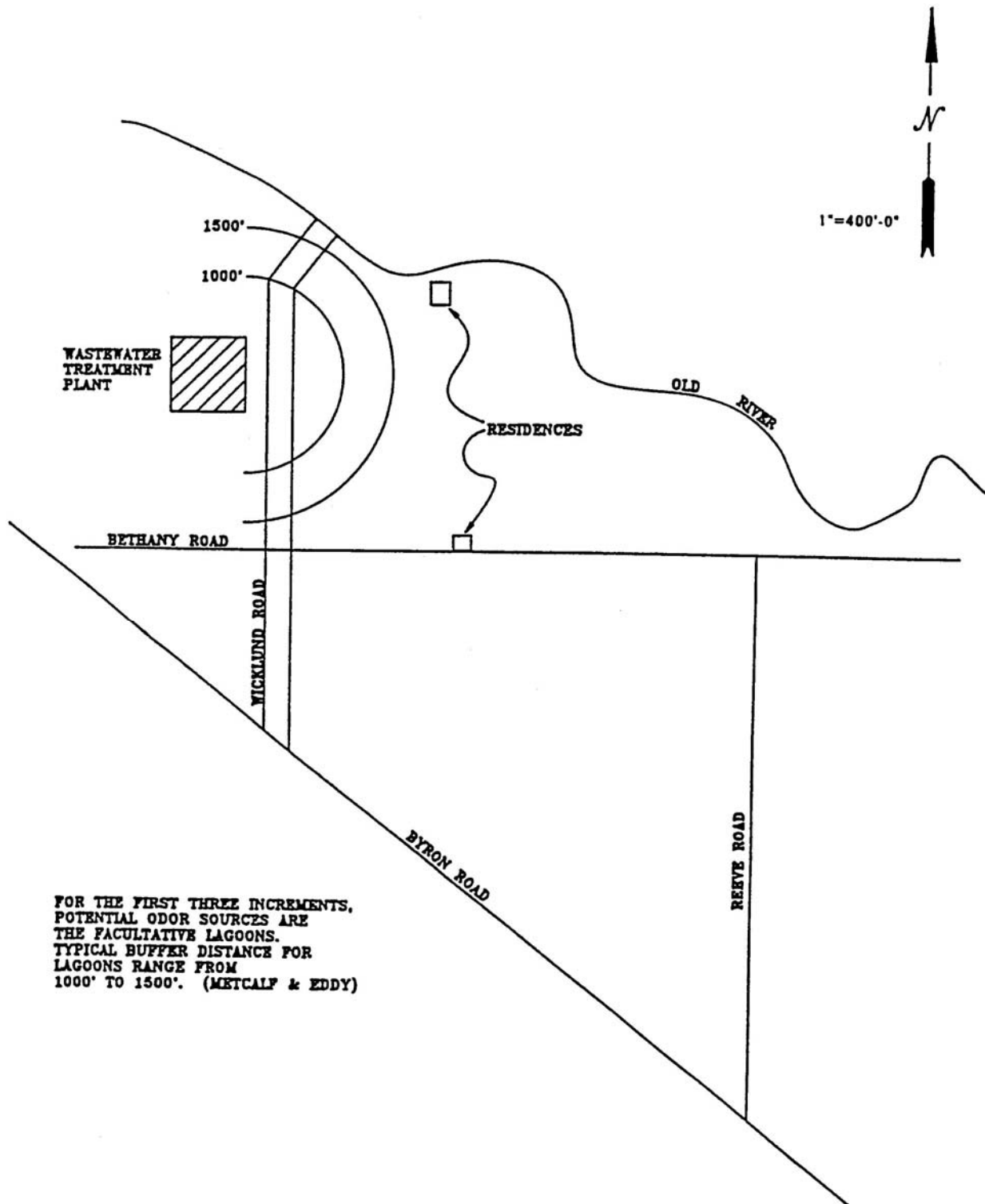


FIGURE 13.2 – WASTEWATER TREATMENT PLANT SITE LAYOUT



**FIGURE 13.3 – WASTEWATER TREATMENT AND PUBLIC USE SITE AREA**



**FIGURE 13.4 – ODOR IMPACTS OF THE WASTEWATER TREATMENT FACILITY**

- e) Standards. As applied to industrial and commercial uses, control of the raw wastewater characteristics and strength at its source shall be accomplished by the adoption of discharge limits that are rigorously enforced through strong Sewer Use and Pretreatment Standards. In addition to strong standards, an aggressive public education program shall be implemented to educate the community on what may be discharged to the sewer and on waste minimization issues. Sewer use and pretreatment standards shall be developed by the MHCSD when potential non-standard sewer uses are proposed by individual applicants for Sewer capacity. Typically, these will be special industrial users requiring pre-treatment processes.

### 13.7 NONRESIDENTIAL DISCHARGES

As a general rule, if the potable supply water used by a community is acceptable for irrigation uses, then the treated wastewater generated by the community will also be of acceptable quality for irrigation. However, this is provided nonresidential waste does not significantly degrade the wastewater with trace metals, compounds associated with industrial processes or excessive salts.

Objective: To ensure that raw wastewaters discharged to the treatment facilities shall not limit treated effluent disposal or reuse options.

**Policy:**

- a) Nonresidential wastewater discharged to the treatment facilities shall have characteristics similar to residential wastewater.

**Implementation:**

- a) Standards. Sewer use and pretreatment standards shall be implemented to regulate wastewater discharges to the plant prior to the issuance of a building permit to a user with discharges.
- b) Discharge Permit. A permit-to-discharge shall be required for certain categories of nonresidential dischargers. The criteria for such permits shall be established prior to the issuance of a building permit for a user with non-residential type discharges.
- c) Discharge Limitations. Discharge limitations shall be established, and pretreatment shall be required of dischargers who otherwise would not meet these limits.
- d) Public Education. A public outreach and education program shall be implemented to inform dischargers of what is allowed for discharge to the sewer, and to emphasize waste minimization concepts and techniques.

### 13.8 SLUDGE DISPOSAL

Until the activated sludge treatment facilities are in operation, sludge will decompose in the aerated lagoons. With the startup of the activated sludge treatment facilities, sludge will need to be treated and disposed of. It is anticipated that at buildout, with secondary treatment only, total sludge generation will be around 11,000 pounds of dry solids per day.

At the federal level, land disposal, surface disposal and incineration of sludge is regulated by 40 CFR Part 503. Landfilling of sludge is regulated by solid waste disposal criteria in 40 CFR Part 257.

On the state level, sludge reuse/disposal is regulated by the State Water Resources Control Board (SWRCB), the Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB). Discharge of wastes to land in California is regulated by the SWRCB according to California Code of Regulations (CCR) Title 23, Division 3, Chapter 15. Chapter 15 applies to disposal of sludge in landfills and dedicated land but does not regulate beneficial use programs such as soil amendment or composting with sludge. The "Manual of Good Practice for Landspreading of Sewage Sludge" (April 1983) provides guidelines for reuse of sludge as a soil amendment. The California Integrated Waste Management Act of 1989 (AB 939) contains several major provisions and incentives for diverting solid waste (including sludge) from landfills. The California Integrated Waste Management Board is in the process of drafting guidelines for composting with sewage sludge.

Proper disposal alternatives cannot be identified until sludge is classified. Classification requires the assessment of the level of toxic compounds in the sludge. Once classified, a number of alternatives are available to the Mountain House community for sludge disposal. These include landfilling of sludge, land application, dedicated land disposal, and composting. However, until sludge is available to be classified, landfilling will be required. Sufficient sludge to merit classification will not be produced for at least seven years after the first home is built.

Selecting the best method of sludge disposal is to be based on sludge quality, regulatory constraints, implementability, environmental and public health risk, public acceptability, self-sufficiency, reliability and economics.

**Objective:** To provide for appropriate disposal of wastewater sludge.

**Policies:**

- a) Wastewater sludge shall be disposed of in the most economical and beneficial manner possible and in accordance with appropriate regulations.
- b) Sludge quality from the project shall not limit sludge reuse options. This shall be accomplished via effective pre-treatment, public education, recycling programs, and additional treatment, if necessary.

**Implementation:**

- a) Initial Sludge Disposal. Sludge disposal options shall be evaluated as early as possible, not later than one year after the startup of the permanent secondary treatment process, to allow for early identification of disposal options. Evaluation shall include sludge characterization, survey of potential sites where sludge may be used as a soil amendment, and assessment of viability of the compost market.
- b) Initial Wastewater Sludge Disposal Plan. Within one year after the startup of the permanent secondary treatment process, the Community Service District shall submit an Initial Wastewater Sludge Disposal Plan to the County and other appropriate agencies for review and approval. The Plan shall document the sludge characterization findings, a detailed impact/benefit analysis of sludge disposal options, and a proposed sludge disposal method for the duration of the current Specific Plan.
- c) Interim Disposal. Until sludge is classified, the sludge shall be disposed of in the Foothill or another acceptable landfill. Sludge shall meet non-hazardous classification and be dried for disposal in a landfill.
- d) Classification. As soon as sludge is available to obtain representative samples, the sludge shall be assessed for waste classification and the alternatives of land application, dedicated land disposal and composting, shall be analyzed based on such factors as current regulations, sludge constituents, land availability, demand for compost and cost to implement.
- e) Evaluation. Sludge disposal alternatives shall be evaluated and selected at least six months before disposal is required.
- f) Sludge Disposal Program. The Development Permit for the wastewater treatment plant shall include a community-wide program/method for sludge disposal, that will identify sludge disposal options through the buildout of the community.
- g) Changes in Methods of Sludge Disposal. In all Specific Plans where wastewater treatment sludge requires disposal, the Specific Plans shall identify the proposed method(s) of sludge disposal for the duration of the plans. The MHCSO may subsequently adopt other sludge disposal options providing the new method(s) will achieve an equivalent or higher degree of environmental and public health protection, as determined by the County, and meets all applicable regulatory requirements. The County shall be notified of the proposed change in disposal method at least six months prior to implementation.

**13.9 REQUIREMENTS AND PERMITS**

The Central Valley Regional Water Quality Control Board requires a Report of Waste Discharge (ROWD) application to be filed. The ROWD must contain information on proposed treatment and disposal methods, as well as the projected effluent quality. The



California Department of Health Services requires an Engineering Report to be filed for disposal by reuse or reclamation.

Prior to any waste discharge or reclamation, a Waste Discharge Permit must be obtained from the Central Valley Regional Water Quality Control Board. When sludge will also be disposed of, the Waste Discharge Permit must also contain a provision for disposal of the dried sludge.

## **13.10 PHASING AND COSTS**

### **13.10.1 Capital Facility Cost and Phasing**

Wastewater collection, treatment, and ancillary facilities are estimated to cost approximately \$60 million. Collection facilities have been designed to the extent possible to be phased in increments to correspond to the residential neighborhoods, except that the first Specific Plan will require additional connecting lines because it is not contiguous with the treatment plant. Initial treatment and storage facilities have been sized at about 10% of the community's buildout. This will serve one residential neighborhood and a corresponding balance of commercial, industrial, and other non-residential land uses.

The initial aerated lagoons and pumps will be sized to satisfy the demands of the first neighborhood. They will be replaced with a higher volume treatment facility upon commencement of the second Specific Plan, and will be expandable to accommodate future development phases. All line sizing will be engineered to handle through flows from successive neighborhoods in accordance with the Master Plan. Cost and phasing assumptions are discussed in more detail in the Public Financing Plan (PFP).

### **13.10.2 Operations and Maintenance**

Wastewater facilities will be maintained by the MHCSD. In the first few years, aerated lagoons, which require minimal maintenance, will be used. A properly designed gravity sewer system will require only routine maintenance in the initial years. Maintenance personnel, vehicles, and equipment may be shared with other facility maintenance responsibilities to achieve overall service staffing efficiency and cost reductions. Operation and maintenance costs are included in the fiscal analysis included in the PFP.

Certain services such as testing, and maintenance may be contracted out in the early stages until on-site personnel and facilities can be provided.

## **13.11 SPECIFIC PLAN REQUIREMENTS**

The following list is a compilation of all Specific Plan requirements contained in this chapter.

- a) Wastewater Generation Assessment. All Specific Plans except Specific Plan I shall include an evaluation/assessment of actual wastewater generation

compared to Table 13.1: Wastewater Generation Average Daily Flow (ADF). In addition, monitoring of sewage generation figures shall be carried out by the MHCSO on a routine basis. Both of these evaluations shall be used to determine whether adjustments to treatment and collection facilities need to be made and how this impacts the schedule of wastewater improvements and sizing.

If wastewater generation specified in the Master Plan is exceeded for a previous Specific Plan, subsequent Specific Plans shall specify additional actions that would be implemented to achieve reduced wastewater generation. In addition, the Master Plan will be revised, if necessary, prior to approval of a Specific Plan to reflect new projected wastewater generation and revised infrastructure facilities to permit increased wastewater generation and disposal.

- b) Trunk Pipeline System. Each Specific Plan shall indicate which portion of the trunk pipeline system must be installed to adequately serve the Specific Plan development and what additional facilities are needed to efficiently serve future “upstream” developments. In no case shall future developments be forced to install trunkline extensions through completed developments in order to secure service.
- c) Wastewater Treatment. For Specific Plan I, the initial level of treatment may be secondary level treatment aerated lagoons or other higher level treatment processes approved by the regulatory agencies. It is presently contemplated that the initial level of treatment will be tertiary. No later than at the buildout of Specific Plan I, a high volume activated sludge or equivalent treatment process shall be constructed in phases to serve all future community wastewater treatment needs. The aerated lagoons will be replaced by the new facilities. The treatment process shall provide at least secondary level treatment sufficient for on-site surface irrigation of non-food crops.
- d) Sludge Disposal. In all Specific Plans where wastewater treatment sludge requires disposal, the Specific Plans shall identify the proposed method(s) of sludge disposal for the duration of the plans. The MHCSO may subsequently adopt other sludge disposal options providing the new method(s) will achieve an equivalent or higher degree of environmental and public health protection, as determined by the County, and meets all applicable regulatory requirements. The County shall be notified of the proposed change in disposal method at least six months prior to implementation.

