

APPLICATION FOR SITE APPROVAL OF SEWAGE COLLECTION FACILITIES  
(Required if Serving More Than Twenty Persons)

(Submit two copies of Application with one set of design calculations, plans, and specifications unless state grant is involved; then submit two copies of everything.)

Applicant: City of Grand Junction and Mesa County

Address: City Hall, Grand Junction, Colorado 81501

(The following must be completed by the applicant or his designated representative.)

A. LIFT STATION:

1. Is site located in 1% (100 yr.) floodplain? N/A. On a separate sheet of paper describe protective measures to be taken.
2. Distance to nearest residences? \_\_\_\_\_
3. What steps are being taken to minimize or prevent overflows? \_\_\_\_\_

Where will overflow discharge to? \_\_\_\_\_

4. Is there a warning system in case of equipment failure? \_\_\_\_\_  
Is standby power provided? \_\_\_\_\_

B. SEWERS OR INTERCEPTORS: See Attachment A

1. Size	Length	Maximum Capacity
(Pipe diameter)	(in feet)	

2. Schematic diagram. Attach a schematic diagram showing sewage collection facility. This should include the hydraulic capacities and ownership of all collection sewers and treatment plants within five miles.
3. At the present time, the subsequent receiving sewers or interceptors are carrying a peak flow of N/A and flowing at a depth of N/A  
(flow in cfs) (in inches)
4. Will the additional load from this proposed sewer or interceptor bring the sewage treatment works to within 95 percent of peak hydraulic capacity?  
N/A. If so, identify what part of the sewage treatment works.

Will the additional load cause raw sewage to be discharged to the waters of the State? Some highly diluted storm water flows on peak days.

5. Distance to the nearest water line: \_\_\_\_\_

6. Will the sewer replace existing septic tank and leach field systems? Yes

If so, please identify them. Homes located along F Road or Patterson Avenue, 24 1/2 Road, and River Road.

C. GENERAL INFORMATION:

1. Proposed lift station, sewer or interceptor, when fully developed, will generate the following additional load:

Hydraulic (MGD) 12.5 Organic (BOD<sub>5</sub>) 254 mg/l

D. CONSULTING ENGINEER: Henningson, Durham & Richardson, Inc.

Consulting engineer's mailing address and telephone: 310 Capitol Life Center Denver, Colorado 80203 (303) 861-1300

(Section E to be completed by facility providing treatment.)

E. TREATMENT TO BE PROVIDED:

1. Name of wastewater treatment facility to handle waste. Persigo Wash Water Pollution Control Plant

Type of wastewater treatment facility: Activated Sludge

2. Design capacity of wastewater treatment plant:

Hydraulic (MGD) 12.5 Organic (BOD<sub>5</sub>) 254 mg/l

3. Present load to plant:

Hydraulic (MGD) N/A Organic (BOD<sub>5</sub>) N/A

4. Proposed lift station, sewer or interceptor, when fully developed, will increase plant load to:

Hydraulic (MGD) N/A Organic (BOD<sub>5</sub>) N/A

This will bring the loading of the plant to \_\_\_\_\_ percentage of hydraulic and \_\_\_\_\_ percentage of organic capacity.

5. If an existing treatment plant has unused capacity, how much of this unused capacity has been obligated to other proposed developments? N/A

[Signature] City Engineer  
Signature and Title

F. SIGNATURE OF GOVERNMENTAL OFFICIALS

The undersigned have reviewed the proposal for the location of the above-described wastewater treatment facility and recommend approval or disapproval in spaces provided below:

<u>Date</u>	<u>Recommend Approval</u>	<u>Recommend Disapproval</u>	<u>No Comment</u>	<u>Signature of Representative</u>
8-22-77	AKJ			<u>Quinn R. Jensen</u> Local Government (Cities, Towns, and Sewer Districts)
8-22-77	DJR			<u>Howard Roland</u> Board of County Commissioners
8-22-77	RLK			<u>Frank R. Boyden</u> Local Health Authority
8-22-77	CMD			<u>C. McDonald</u> City/County Planning Agency
8-23-77	JH			<u>Jack L. ...</u> Regional Planning Agency
8-23-77	JH			<u>Jack L. ...</u> Council of Government

G. ADDITIONAL INFORMATION MAY BE REQUIRED BY THE DISTRICT ENGINEER.

8-22-77  
Date

Quinn R. Jensen  
Signature of Applicant

ATTACHMENT A

B. Sewers or Interceptors

	<u>Pipe Diameter</u> <u>Inches</u>	<u>Length</u> <u>Feet</u>	<u>Maximum</u> <u>Capacity</u>
PARADISE HILLS - PHASE II	15	920	2.63 MGD
INTERCEPTOR SEWER	18	4,815	5.60 MGD
RIVER ROAD INTERCEPTOR	48	4,937	29.89 MGD
SEWER	54	21,150	40.99 MGD

APPLICATION FOR STATE APPROVAL OF NEW SEWAGE TREATMENT PLANT  
(Required if Serving More Than Twenty Persons)  
(Submit in Duplicate)

Applicant: City of Grand Junction and Mesa County

Address: City Hall, Grand Junction, Colorado 81501

A. Information Regarding Project Submitted for Review:

1. Briefly describe on a separate sheet of paper the justification for locating the sewage treatment works on this particular site. This should include, but is not necessarily limited to, a description of the present and possible development of the site location and service area.

2. Size and type of treatment facility proposed:

MGD 12.5 PE served: 105,585 % Industrial: 10%  
~~MGD~~ (Gal/day) (Population equivalent)

% Domestic: 90% Proposed class of facility: A

Class of operator required: Class A

3. Location of facility: Map See Attached Maps

Attach a map of the area which includes the following:

- (a) 25-mile radius: all sewage treatment works;
- (b) 5-mile radius: domestic water supply intakes; N/A
- (c) 1-mile radius: habitable buildings, location of potable water wells, and an approximate indication of the topography.

4. Wastes will be discharged to:

Watercourse Colorado River via Persigo Wash  
(Name of watercourse)

Classification of watercourse B2

Subsurface disposal Land

Evaporation Other

5. If the discharge is to a watercourse, what is the waste load allocation for that watercourse? See Attachment A

What is the remaining wasteload allocation uncommitted in the basin?  
(See 303(e) and 306 Plans) \_\_\_\_\_

6. Does your proposed facility require lift station anywhere in the plant or service area? Yes
7. What is the zoning for the proposed service area? Mesa County Consolidated zoning area  
 Present zoning of site area? Agricultural & Forestry - Transitional District (AF-T)  
 Zoning within a 1-mile radius of site? \_\_\_\_\_  
 Please explain zoning: AF-T to north, west & south; Commercial (c) to northeast and Tourist District (T) to each
8. What is the distance downstream from the discharge to the nearest domestic water supply intake? None from Grand Junction to Colorado & Utah state line.  
 Owner and address: \_\_\_\_\_  
 \_\_\_\_\_  
 What is the distance downstream from the discharge to the nearest non-domestic water supply intake? 105 miles Moab, Utah  
 Name and address: \_\_\_\_\_  
 \_\_\_\_\_
9. Sewer lines: Approximate number of feet: N/A  
 Sizes: \_\_\_\_\_
10. Who has the responsibility for operating the facility? \_\_\_\_\_  
City of Grand Junction and Mesa County  
 What is the legal status of the responsible party? \_\_\_\_\_  
Agreement not negotiated
11. Who owns the land upon which the facility will be constructed? \_\_\_\_\_  
City of Grand Junction  
 Please attach copies of the document creating authority in the applicant to construct the proposed facility.
12. Estimated project cost: \$14,005,600  
 Who is financially responsible for the facility? \_\_\_\_\_  
Federal Funding 75%, City & County 25%  
 What is the method of finance? General obligation or revenue bonds

13. Are there any major land developers involved in the development of the proposed service area? See Attachment B

Give the name, address, and percentage of service area developed by any person if that percentage of development is greater than 10 percent.

Of the total PE that you indicated in No. 2, how many of those PE's are presently existing? 60,000; are presently committed? 32,500. How many PE's are proposed? 105,585

14. Names and addresses of all water and sanitation districts within 5 miles of proposed wastewater treatment facility site and proposed service area:

See Attachment B

Attach separate sheet of paper if necessary.

15. What is the relationship of this facility to any Area-wide (208) Plans or Basin (303(e)) Plans? (Contact Planning Section, Water Quality Control Division.) Colorado River Basin 303(e) Plan

208 Plan Underway

16. Is the facility in an area subject to flooding? No

If so, what precautions are being taken? \_\_\_\_\_

Has the flood plain been designated by the Colorado Water Conservation Board, Department of Natural Resources? \_\_\_\_\_

If so, what is that designation? \_\_\_\_\_

17. List other sites other than the proposed site that were considered. \_\_\_\_\_

N/A

18. Are there any available laboratories for your use? \_\_\_\_\_

If so, give name and location of lab. \_\_\_\_\_

Grand Junction Laboratories

435 North Avenue, Grand Junction, Colorado 81501

19. Attach proof that Copy of this application was sent by certified mail to each of the following federal agencies, requesting their comment.

(a) United States Forest Service, Director of Watershed, Soils and Minerals Management, 11177 West 8th Avenue, Lakewood, CO 80225.

(b) National Park Service, Office of Cooperative Activities, Rocky Mountain Regional Office, 655 Parfet Street, P. O. Box 25287, Denver, CO 80225.

(c) Bureau of Land Management, State Director (SAL Planning), Room 700, Colorado State Park Building, 1600 Broadway, Denver, CO 80203

Please note: These federal agencies do not need to be contacted if the site that is being proposed bears no relationship to any of the lands, streams, lakes, or rivers operated by these agencies. The burden is on the applicant to show that the proposed site does not affect anything within the jurisdiction of these agencies.

20. Please attach proof of mailing to Director of State Parks, 1313 Sherman, Denver, CO 80203. The same criterion applies here as in No. 19.

21. Consulting engineer: Henningson, Durham & Richardson Inc. of Colorado

Address: 310 Capitol Life Center, Denver, Colorado 80203

Telephone: 303/861-1300

22. Please include all additional factors that might help the Water Quality Control Commission make an informed decision on your application for site approval.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date 8-22-1977

Quinn R. Jensen  
Signature of Applicant

WQCC approved 1/77  
WQ-3(rev. 3-77-40)



B. SIGNATURE OF GOVERNMENTAL OFFICIALS

The undersigned have reviewed the proposal for the location of the above-described wastewater treatment facility and recommend approval or disapproval in spaces provided below:

<u>Date</u>	<u>Recommend Approval</u>	<u>Recommend Disapproval</u>	<u>No Comment</u>	<u>Signature of Representative</u>
<u>8-22-77</u>	<u>[Signature]</u>	_____	_____	<u>[Signature]</u> Local Government (Cities, Towns, and Sewer Districts)
<u>8-22-77</u>	<u>[Signature]</u>	_____	_____	<u>[Signature]</u> Board of County Commissioners
<u>8-22-77</u>	<u>[Signature]</u>	_____	_____	<u>[Signature]</u> Local Health Authority
<u>8-22-77</u>	<u>[Signature]</u>	_____	_____	<u>[Signature]</u> City/County Planning Agency
<u>8-23-77</u>	<u>[Signature]</u>	_____	_____	<u>[Signature]</u> Regional Planning Agency
<u>8-23-77</u>	<u>[Signature]</u>	_____	_____	<u>[Signature]</u> Council of Government

C. Natural Hazards:

Comments of State Geologist regarding possible natural hazards: Outwash of Colorado River and Pecos - Wash Flood Plains.  
Possible compaction of soils under load.  
Specific site investigation of soils before construction and design takes place.

Recommend approval: X

Recommend disapproval: \_\_\_\_\_

Date: 8/24/77

[Signature]  
 Signature  
 Engineering Geologist

B. SIGNATURE OF GOVERNMENTAL OFFICIALS

The undersigned have reviewed the proposal for the location of the above-described wastewater treatment facility and recommend approval or disapproval in spaces provided below:

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8-22-77	<i>DEJ</i>			<i>[Signature]</i> Local Government (Cities, Towns, and Sewer Districts)
8-22-77	<i>WJR</i>			<i>[Signature]</i> Board of County Commissioners
8-22-77	<i>[Signature]</i>			<i>[Signature]</i> Local Health Authority
8-22-77	<i>and</i>			<i>[Signature]</i> City/County Planning Agency
8-23-77	<i>[Signature]</i>			<i>[Signature]</i> Regional Planning Agency
8-23-77	<i>[Signature]</i>			<i>[Signature]</i> Council of Government

C. Natural Hazards:

Comments of State Geologist regarding possible natural hazards: Outbreak of Colorado River and Pecos-Wash Flood Plains - possible compaction of soils under load. Specific site investigation of soils before construction and design takes place.

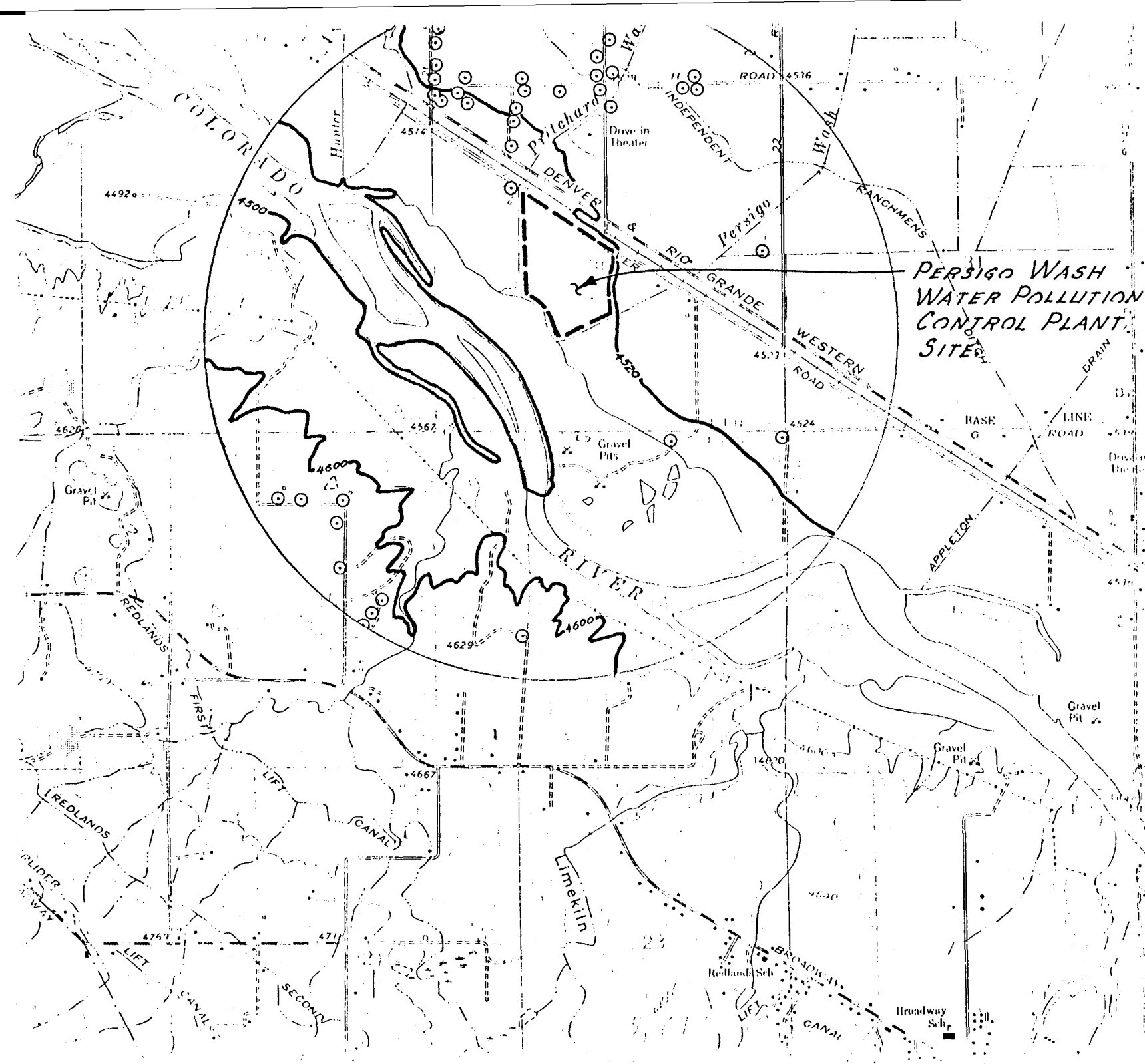
Recommend approval: X

Recommend disapproval: \_\_\_\_\_

Date: 8/24/77

*[Signature]*  
Signature  
Engineering Geologist

WQCC approved 1/77  
WQ-3 (rev. 3-77-40)



⊙ HABITABLE BLDGS  
W/ POSSIBLE  
POTABLE WATER  
WELLS.

PERSIGO WASH  
WATER POLLUTION  
CONTROL PLANT  
SITE

1 MILE RADIUS  
MAP



## COLORADO DEPARTMENT OF HEALTH

4210 EAST 71TH AVENUE • DENVER, COLORADO 80220 • PHONE 388-6111

Anthony Robbins, M.D., M.P.A. Executive Director

April 11, 1977

Mr. J. E. Abbott, Vice-President  
 Henningson, Durham, & Richardson  
 310 Capitol Life Center  
 Denver, Colorado 80203

RE: Grand Junction/Mesa County, 201 Facility Plan Up-Date

Dear Jim:

In response to your letter of April 7, 1977, and our subsequent meeting. I will try to outline the Division's position on the required effluent standards for the Grand Junction treatment plant (or plants).

As you know the present stream classification for the Colorado River below Grand Junction is B<sub>2</sub>, or water suitable for fish and other aquatic life. Under this classification, and for the size of plant proposed, ammonia removal would be required during critical times of the year. The only way to remove the ammonia reduction requirement would be for the Colorado Water Quality Control Commission to reclassify approximately 3 miles of the Colorado River below Grand Junction to B<sub>2</sub>-C and except the NH<sub>3</sub> criteria of 0.02 mg/l un-ionized NH<sub>3</sub>. We in the Division are doubtful the Commission would do this, and if they did, we are doubtful the EPA would approve it because of the concern for some endangered species of fish life in the Colorado River.

Therefore, we suggest H.D.R. consider NH<sub>3</sub> reduction, as outlined in the Basin plan, in their preliminary engineering plans. I think we pretty well discussed the various alternative configuration of plants (one regional vs. two smaller plants) in our meeting yesterday.

Future effluent requirements for the discharges are expected to be as follows:

BOD <sub>5</sub>	30 mg/l (30day average), 45 mg/l (7day average)
SS	30 mg/l (30day average), 45 mg/l (7day average)
NH <sub>3</sub>	765#/day segment allocation (Grand Valley Canal diversion to Utah State line).
Fecal Coliform	6000 (30day average), 12000 (7day average)
Cl <sub>2</sub> residual	0.2 mg/l or less

Very truly yours,

FOR DIRECTOR, WATER QUALITY CONTROL DIVISION

*Kenneth W. Webb*  
 Kenneth W. Webb, P.E., Chief  
 Water Quality Management Planning Section

KWW/emf



13. Developers:

Bray & Co.  
1015 North 7th Street  
Grand Junction, Colorado 81501

The Ridges Development Corp.  
2721 North 12th Street  
Grand Junction, Colorado 81501

Embassy Homes  
3026 Patterson Road  
Grand Junction, Colorado 81501

Junction Corporation  
652 White Avenue  
Grand Junction, Colorado 81501

14. Sanitation Districts

The Ridges Water & Sanitation District  
2721 North 12th Street  
Grand Junction, Colorado 81501

Fruitvale Sanitation District  
2887 North Avenue  
Grand Junction, Colorado 81501

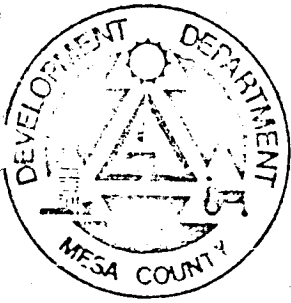
Clifton Sanitation District  
137 3rd Street  
Clifton, Colorado 81501

Clifton Sanitation District No. 2  
3222 Highway 6 & 24  
Grand Junction, Colorado 81501

Central Grand Valley Sanitation District  
3029 "D" Road  
Grand Junction, Colorado 81501

CITY - COUNTY  
DEVELOPMENT DEPT.

P.O. BOX 897 - GRAND JUNCTION COLORADO - 81501  
DIAL 303 243-9200 ext. 343



Grand Junction Planning - Mesa County Planning - Building Department

August 23, 1977

Mr. Dick Bowman  
Water Quality Control Commission  
P. O. Box 1687 -  
Grand Junction, CO 81501

Dear Dick:

The Valleywide Sewer Committee is comprised of individuals representing all sewer districts and departments in the valley and were appointed by the Mesa County Commissioners to serve on a valleywide sewer advisory committee. This committee analyzed the type of sewer treatment facility that they would advise for the joint City of Grand Junction and the surrounding urbanized Mesa County area.

The Valleywide Sewer Committee advised the Mesa County Planning Commission that the facility described on the attached site plan application would be in the best interest of this community. The Mesa County Planning Commission accepted that advice along with the advice of the 201 facility plan addressing the location of the plant. The Mesa County Planning Commission recommended to the County Commissioners to accept the report of the Valleywide Sewer Committee, the mechanical plant located as described, and that the water is to be re-used in the area if at all possible.

The Mesa County Commissioners and the City of Grand Junction accepted this recommendation and called for implementation. This plant located at 22 Road and I-70 will serve the needs of this community in the forthcoming years.

Very truly yours,

*Conni Mc Donough*  
Conni McDonough  
Development Director

CMD:bc

cc: City Engineering, Duane Jensen

# GRAND JUNCTION FACILITIES PLAN

## LEGEND

- ..... GRAND JUNCTION CITY LIMITS
- GRAND JUNCTION FACILITY PLANNING AREA BOUNDARY
- SELECTED ALTERNATE CLIFTON AREA (ALT. 2)
- REDLANDS- GRAND JUNCTION (ALT. 1)

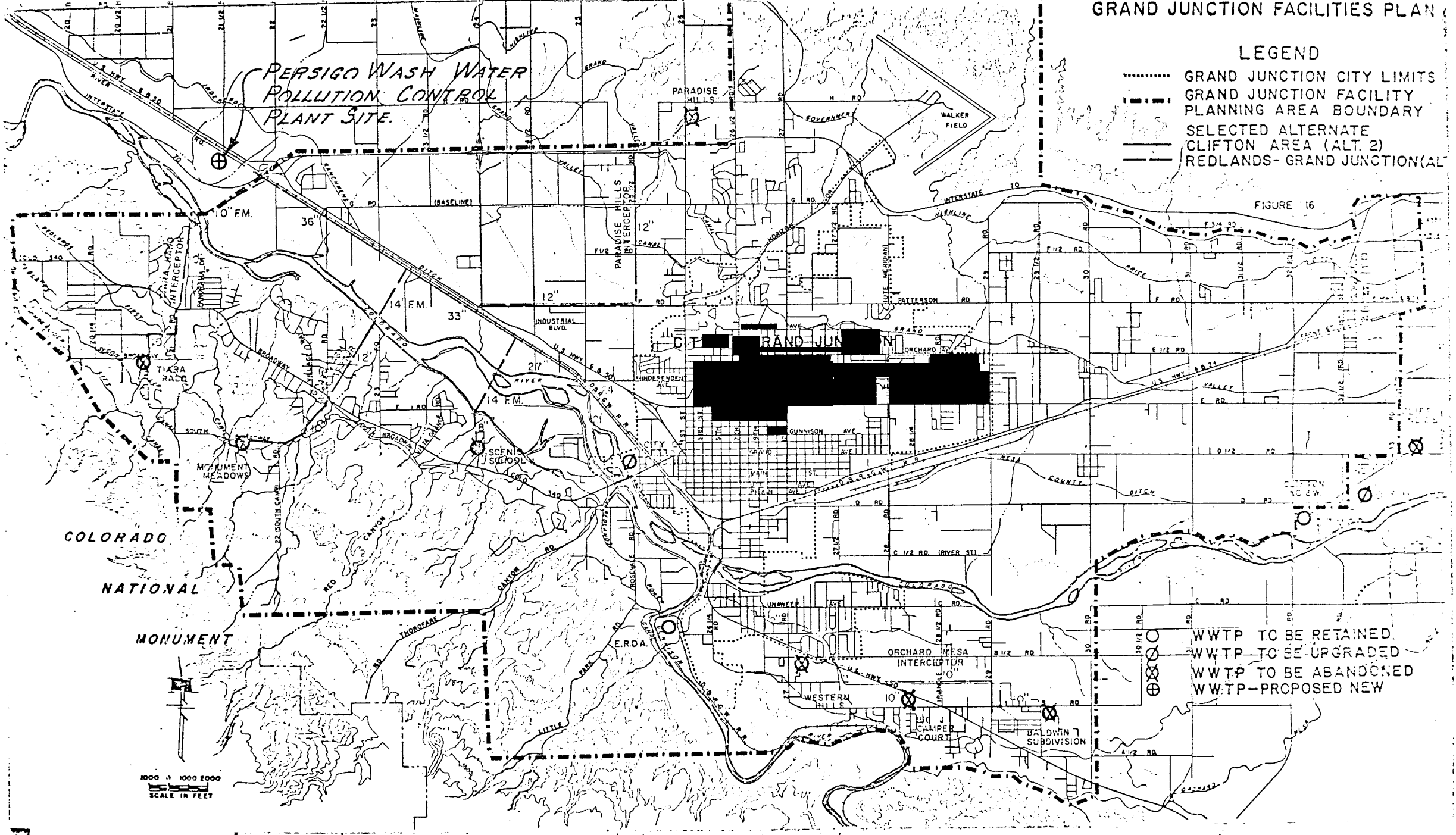
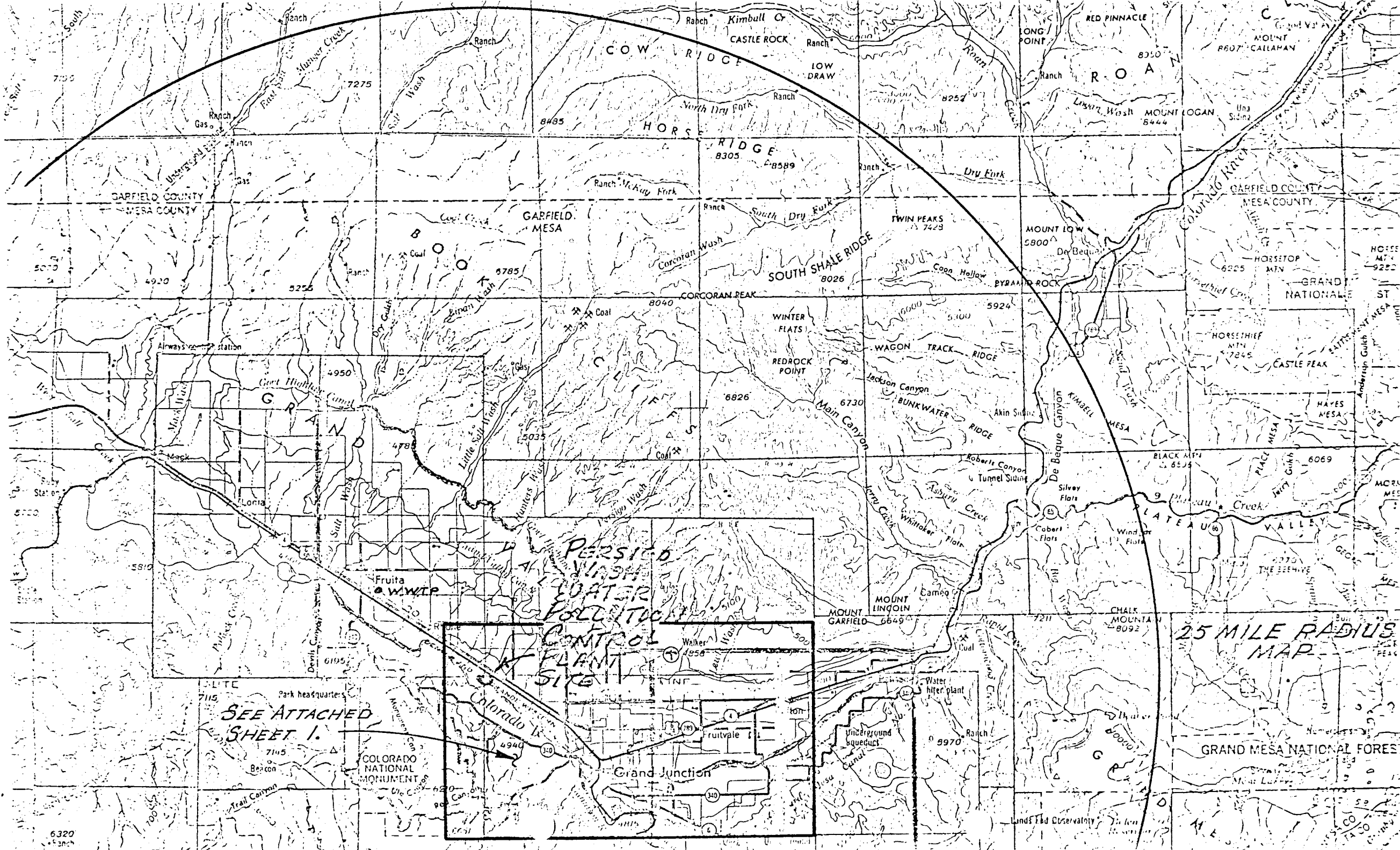
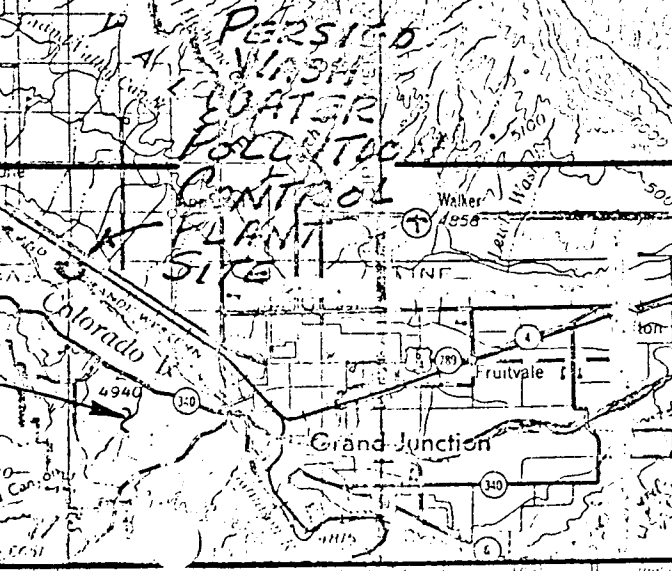


FIGURE 16

○ WWTP TO BE RETAINED.  
 ○● WWTP TO BE UPGRADED  
 ○X WWTP TO BE ABANDONED  
 ⊗ WWTP-PROPOSED NEW



SEE ATTACHED SHEET I.



25 MILE RADIUS MAP

GRAND MESA NATIONAL FOREST