



# METCALF ENERGY CENTER

A joint development of Calpine & Bechtel

#13758

DOCKET	
99-AFC-3	
DATE	FEB 29 2000
RECD.	FEB 29 2000

February 29, 2000

Paul Richins  
Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

RE: Metcalf Energy Center (99-AFC-3): Data Responses, Set 1G and Set 3D

Dear Mr. Richins:

Documents previously submitted in response to Data Requests from Data Set 1 have been revised. The Riparian Corridor Biotic Assessment and Tree Removal Plan, Revision 1 (Attachment BR-26R) was previously submitted on February 15, 2000 along with the AFC Supplement C materials. Attached hereto, we are submitting the Impact Analysis for Metcalf Energy Center NO<sub>x</sub> Emissions, Revision 1 (Attachment BR-32R) and the revised Planned Development Zoning Application documents (dated February 16, 2000) that are in response to the City of San Jose's comment letter on the original filing. These documents are included as Attachment LU-50 R1, parts 1 and 2. Part 1 is the letter to the City and Part 2 is the plan set. Five (5) full-size plan sets are being submitted to the Commission.

Also, in response to the California Energy Commission Staff's Data Requests 3-207, 3-208, and 3-209 (Data Set 3) we are submitting additional information about alternative sites near Sunol and Fremont-Serra that were identified by CEC staff at the December 16, 1999 Alternatives Workshop.

Sincerely,

Ken Abreu  
Development Manager  
Metcalf Energy Center

Enclosure



## METCALF ENERGY CENTER

A joint development of Calpine & Bechtel

99-AFC-3

FEB 29 2000

February 29, 2000

Paul Richins  
Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

RE: Metcalf Energy Center (99-AFC-3): Data Responses, Set 1G and Set 3D

Dear Mr. Richins:

Documents previously submitted in response to Data Requests from Data Set 1 have been revised. The Riparian Corridor Biotic Assessment and Tree Removal Plan, Revision 1 (Attachment BR-26R) was previously submitted on February 15, 2000 along with the AFC Supplement C materials. Attached hereto, we are submitting the Impact Analysis for Metcalf Energy Center NO<sub>x</sub> Emissions, Revision 1 (Attachment BR-32R) and the revised Planned Development Zoning Application documents (dated February 16, 2000) that are in response to the City of San Jose's comment letter on the original filing. These documents are included as Attachment LU-50 R1, parts 1 and 2. Part 1 is the letter to the City and Part 2 is the plan set. Five (5) full-size plan sets are being submitted to the Commission.

Also, in response to the California Energy Commission Staff's Data Requests 3-207, 3-208, and 3-209 (Data Set 3) we are submitting additional information about alternative sites near Sunol and Freemont-Serra that were identified by CEC staff at the December 16, 1999 Alternatives Workshop.

Sincerely,

Ken Abreu  
Development Manager  
Metcalf Energy Center

Enclosure

**STATE OF CALIFORNIA**  
**Energy Resources Conservation**  
**and Development Commission**

In the Matter of:	)	Docket No. 99-AFC-3
	)	
Application for Certification for the Metcalf	)	PROOF OF SERVICE
Energy Center [Calpine Corporation and Bechtel	)	(REVISED 01/04/2000)
Enterprises, Inc.]	)	
_____	)	

I, Nancy Michaelis-Rambin, declare that on February 29, 2000, I deposited in the United States mail, copies of the attached documents:

Metcalf Energy Center (99-AFC-3):

Data Responses, Set 1G and Set 3D

in Sacramento, CA with first class postage thereon fully prepaid and addressed to the following:

DOCKET UNIT

Sent original and 12 copies to the following address:

CALIFORNIA ENERGY COMMISSION  
Attn: Docket No. 99-SIT-3  
DOCKET UNIT, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512

In addition to the documents sent to the Commission Docket Unit, also sent individual copies of all documents to:

## APPLICANT

Ken Abreu  
Calpine Corporation  
6700 Koll Center Parkway, Suite 200  
Pleasanton, CA 94566

### Counsel for Applicant

Jeffrey D. Harris, Esq.  
Ellison & Schneider  
2015 H Street  
Sacramento, CA 95814

## INTERVENORS

### California Unions for Reliable Energy (CURE)

Marc D. Joseph  
Lizanne Reynolds  
Adams, Broadwell, Joseph &  
Cardozo  
651 Gateway Boulevard, Suite 900  
South San Francisco, CA 94080

City of Morgan Hill  
David Jenkins, City Manager  
Council Member Cynthia J. Cook  
Council Member Steve Tate  
17555 Peak Avenue  
Morgan Hill, CA 95037

Elizabeth Cord  
Santa Teresa Citizens Action Group  
286 Sorenta Way  
San Jose, CA 95119-1437

Scott & Donna Scholz  
6464 San Anselmo Way  
San Jose, CA 95119-1928

Jeffrey Wade  
7293 Forsum Road  
San Jose, CA 95138

Californians for Renewable Energy  
c/o Michael E. Boyd  
821 Lakeknoll Drive  
Sunnyvale, CA 94089

Paul R. Burnett  
1960 Llagas Rd.  
Morgan Hill, CA 95037

Robert F. Williams  
7039 Via Pradera  
San Jose, CA 95139-1152

T.H.E. P.U.B.L.I.C.  
William J. Garbett, Agent  
P.O. Box 36132  
San Jose, CA 95158-6132

James L. Cosgrove  
321 Viscaino Way  
San Jose, CA 95116

Michael Murphy  
6188 Ansdell Way  
San Jose, CA 95123

Michael A. Grothus  
484 Curie Drive  
San Jose, CA 95123

Rancho Santa Teresa Swim & Racquet  
Club

John E. Wiktorowicz, Ph.D.  
6416 San Anselmo Way  
San Jose, CA 95116

## INTERESTED AGENCIES

Laurel Prevetti  
Planning Department  
City of San Jose  
801 N. First Street, Room 400  
San Jose, CA 95110

Kent Edens, Planning Services  
City of San Jose  
801 N. First Street, Room 400  
San Jose, CA 95110

Independent System Operator  
Steve Mavis, Manager  
151 Blue Ravine Road  
Folsom, CA 95630

James McDonald, Principal  
Encinal Elementary School  
9530 N. Monterey Rd.  
Morgan Hill, CA 95037

Supervisor Don Gage  
Santa Clara County  
70 West Hedding  
San Jose, CA 95110

Councilmember Charlotte Powers  
City of San Jose  
801 North First Street  
San Jose, CA 95110

William deBoisblanc, Director  
Permit Services  
Bay Area Air Quality Mgmt. District  
939 Eillis Street  
San Francisco, CA 94109

David Salsbery  
Santa Clara Valley Water District  
5750 Almaden Expressway  
San Jose, CA 95118-3686

Michael Lopez, Planning Office  
Santa Clara County Govt. Center  
70 West Hedding, East Wing, 7th  
Floor  
San Jose, CA 95110-1705

Electricity Oversight Board  
Gary Heath, Executive Director  
770 L Street, Suite 1250  
Sacramento, CA 95814

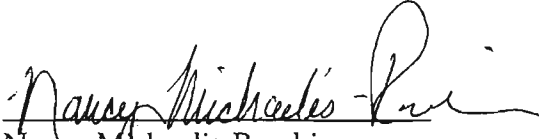
Dave Morse  
CPUC - Office of Ratepayer  
Advocates  
770 L Street, Suite 1050  
Sacramento, CA 95814

Michelle Geary  
Guadalupe-Coyote Resource  
Conservation District  
888 North First Street, Room 204  
San Jose, CA 95112

Janis Moore, Planner II  
City of San Jose  
801 N. First St., Room 400  
San Jose, CA 95110-1795

California Air Resources Board  
(CARB)  
Project Assessment Branch  
P.O. Box 2815  
Sacramento, CA 95812

I declare that under penalty of perjury that the foregoing is true and correct.

  
Nancy Michaelis-Rambin

**METCALF ENERGY CENTER (99-AFC-3)  
DATA REQUESTS AND RESPONSES  
SET 1G**

(Responses to Data Requests: 26, 32, AND 50)

Submitted to:

CALIFORNIA ENERGY COMMISSION

Submitted by:

CALPINE/BECHTEL

February 29, 2000

**Metcalf Energy Center  
Data Requests and Responses (99-AFC-3)  
SET 1G**

**Technical Area:** Biological Resources  
**CEC Author:** Linda Spiegel  
**MEC Author:** Debra Crowe; Albert Cox

**ISSUE:** The City of San Jose's Riparian Corridor Policy Study, a supplement to the General Plan, provides policy guidelines for development along riparian corridors within the Urban Service Area. The Urban Service Area includes the proposed Metcalf power plant site. Several aspects of the Metcalf power plant proposal conflict with these guidelines. These include:

- Guideline 1C: Development next to riparian areas should be set back 100 feet from the outside edge of the riparian habitat edge. The edge is defined as the dripline of trees, outer boundary of riparian vegetation or top of bank, whichever is greater. The Metcalf power plant site is located adjacent to Fisher Creek. Page 8.2-22 of the AFC states that the north and west sides of the plant will be set back 65 feet from Fisher Creek. Page 8.2-44 states that a 10-foot wide area around the fence line will be kept cleared of vegetation using a herbicide, which will reduce the set back area to 55 feet.
- Guideline 3A: Remnant riparian species (such as Valley oak trees) should be retained in the development plan.
- Guideline 6B: Vegetation removal in riparian areas should only be performed for necessary floodway maintenance or to remove exotic plants. The AFC calls for the removal of 85 Significant Trees along the riparian corridor (page 8.2-19 and Table 8.2-34), including Valley oak, walnut, and coast live oak.
- Guideline 7B: Direct surface drainage should be directed away from the riparian corridor and applicable Santa Clara Valley Nonpoint Source (NPS) Pollution Control Program Best Management Practices used to control water quality. Pages 8.2-23 and 8.2-27 states that stormwater drainage overflow will be pumped into Fisher Creek.

Other Guidelines pertain to chemical use and storage, landscaping, lighting and other visual impacts.

The Riparian Corridor Policy Study states that setback exceptions may be considered under limited circumstances. The plan also calls for the completion of a riparian corridor biotic assessment for development projects that are located within a riparian corridor (Appendix C of the plan).

26. Please submit the completed biotic assessment of the riparian corridor, as required by the Policy Study, to CEC and the City of San Jose.

**Metcalf Energy Center**  
**Data Requests and Responses (99-AFC-3)**  
**SET 1G**

**Response:** A Draft Riparian Corridor Biotic Assessment for MEC was submitted on October 1, 1999, as Attachment BR-26 (Data Set 1E). Because of the change in the site plan that moved all of the MEC facilities out of the 100-foot riparian setback area, AFC Supplement C was prepared to address the impacts of that change. The Riparian Corridor Biotic Assessment and Tree Removal Plan, Revision 1, was submitted on February 15, 2000, along with the AFC Supplement C materials.

**ISSUE:** The power plant site is located in the Santa Clara Valley, which is surrounded by the Santa Cruz Mountains on the west and the Diablo Range on the east. These mountain ranges along with Tulare Hill, located immediately north by northwest of the site, support serpentine soils and serpentine bunchgrass communities, a California Department of Fish and Game sensitive habitat. These soils also support several serpentine endemic species (species confined to this soil type), many of which are federally listed. Threats to serpentine community types include nitrogen loading from industrial developments. Serpentine soils are low in nitrogen, which helps restrict growth of invasive non-native plant species. Nitrogen deposition from the power plant (in the form of nitrate) may promote the growth of non-native species that would compete with the native plant species. Studies have shown that competition with non-natives can lead to extirpation of serpentine endemics. Figures 8.1-5a and 8.1-5c of the AFC shows the prevailing wind direction from the power plant for annual and second quarter (blooming season) time periods to be northwest, or towards Tulare Hill. Tulare Hill has populations of the Santa Clara Valley dudleya (federally endangered) and several host plant species for the bay checkerspot butterfly (federally threatened) and Opler's longhorn moth (federal species of special concern), all serpentine endemics. The predicted maximum 1-hour  $\text{NO}_x$  emission concentrations is  $72.6 \text{ ug/m}^3$ , with infrequent concentrations of  $204.7 \text{ ug/m}^3$  during emergency and test operations (page 8.2-43). Mitigation measures proposed (page 8.2-51) include managing  $\text{NO}_x$  emissions at 2.5 ppm to minimize nitrogen loading on the serpentine soils. Page 8.2-43 of the AFC states that the conversion of  $\text{NO}_x$  to nitrate will occur away from Tulare Hill and, therefore, no impacts are expected. However, serpentine soils occur throughout the surrounding landscape. Staff feels there is no supporting analysis to justify that these concentrations will not result in adverse nitrogen loading over a period of time.

32. Please provide a detailed impact analysis of nitrogen deposition on the surrounding serpentine soils and associated sensitive plant and animal resources. (Also see Air Quality Data Requests 7 and 8).

**Response:** A detailed impact analysis of nitrogen deposition on surrounding serpentine soils and plants was submitted to the Energy Commission and Proof-of-Service list on October 8, 1999, and docketed on October 12, 1999. Since then a revised  $\text{NO}_x$  Deposition Study has been requested in Data



**Metcalf Energy Center  
Data Requests and Responses (99-AFC-3)  
SET 1G**

Request 3-214 (Data Set 3) and Data Request 238 (Data Set 4), which requests that deposition to water bodies be included. In response to these data requests, and to assess the changes to air modeling from the Supplement C site plan, the Impact Analysis for Metcalf Energy Center NO<sub>x</sub> Emissions, Revision 1 is included as Attachment BR-32R.

**Metcalf Energy Center  
Data Requests and Responses (99-AFC-3)  
SET 1G**

**Technical Area:** Land Use  
**CEC Author:** Eric Knight  
**MEC Author:** Valerie Young

**ISSUE:** In addition to a General Plan Amendment, the MEC will require a zoning change from Agricultural (A) to a Planned Development overlay (A[PD]). In the AFC, Calpine/Bechtel states that it will submit designs and plans for the zoning request to the City of San Jose in June 1999 (AFC, page 8.4-12).

50. Please provide a copy of all information submitted to the City of San Jose for the zone change. If the request has not been submitted to the City, please indicate when the request will be made, and submit copies of all materials at that time.

**Response:** In Data Response Set 1A (filed on August 23, 1999) Calpine/Bechtel provided a copy of the Planned Development Zoning and Rezoning Application that was filed with the City of San Jose on August 12, 1999. Since then, Calpine/Bechtel received a letter from the City with comments on the application and Calpine/Bechtel has made minor site changes described in AFC Supplement C (filed on February 15, 2000). Consequently, on February 16, 2000, Calpine/Bechtel

**METCALF ENERGY CENTER (99-AFC-3)  
DATA REQUESTS AND RESPONSES  
SET 1G**

(Responses to Data Requests: 26, 32, AND 50)

Submitted to:

CALIFORNIA ENERGY COMMISSION

Submitted by:

CALPINE/BECHTEL

February 29, 2000

**Metcalf Energy Center  
Data Requests and Responses (99-AFC-3)  
SET 1G**

**Technical Area:** Biological Resources  
**CEC Author:** Linda Spiegel  
**MEC Author:** Debra Crowe; Albert Cox

**ISSUE:** The City of San Jose's Riparian Corridor Policy Study, a supplement to the General Plan, provides policy guidelines for development along riparian corridors within the Urban Service Area. The Urban Service Area includes the proposed Metcalf power plant site. Several aspects of the Metcalf power plant proposal conflict with these guidelines. These include:

- Guideline 1C: Development next to riparian areas should be set back 100 feet from the outside edge of the riparian habitat edge. The edge is defined as the dripline of trees, outer boundary of riparian vegetation or top of bank, whichever is greater. The Metcalf power plant site is located adjacent to Fisher Creek. Page 8.2-22 of the AFC states that the north and west sides of the plant will be set back 65 feet from Fisher Creek. Page 8.2-44 states that a 10-foot wide area around the fence line will be kept cleared of vegetation using a herbicide, which will reduce the set back area to 55 feet.
- Guideline 3A: Remnant riparian species (such as Valley oak trees) should be retained in the development plan.
- Guideline 6B: Vegetation removal in riparian areas should only be performed for necessary floodway maintenance or to remove exotic plants. The AFC calls for the removal of 85 Significant Trees along the riparian corridor (page 8.2-19 and Table 8.2-34), including Valley oak, walnut, and coast live oak.
- Guideline 7B: Direct surface drainage should be directed away from the riparian corridor and applicable Santa Clara Valley Nonpoint Source (NPS) Pollution Control Program Best Management Practices used to control water quality. Pages 8.2-23 and 8.2-27 states that stormwater drainage overflow will be pumped into Fisher Creek.

Other Guidelines pertain to chemical use and storage, landscaping, lighting and other visual impacts.

The Riparian Corridor Policy Study states that setback exceptions may be considered under limited circumstances. The plan also calls for the completion of a riparian corridor biotic assessment for development projects that are located within a riparian corridor (Appendix C of the plan).

26. Please submit the completed biotic assessment of the riparian corridor, as required by the Policy Study, to CEC and the City of San Jose.

**Metcalf Energy Center**  
**Data Requests and Responses (99-AFC-3)**  
**SET 1G**

**Response:** A Draft Riparian Corridor Biotic Assessment for MEC was submitted on October 1, 1999, as Attachment BR-26 (Data Set 1E). Because of the change in the site plan that moved all of the MEC facilities out of the 100-foot riparian setback area, AFC Supplement C was prepared to address the impacts of that change. The Riparian Corridor Biotic Assessment and Tree Removal Plan, Revision 1, was submitted on February 15, 2000, along with the AFC Supplement C materials.

**ISSUE:** The power plant site is located in the Santa Clara Valley, which is surrounded by the Santa Cruz Mountains on the west and the Diablo Range on the east. These mountain ranges along with Tulare Hill, located immediately north by northwest of the site, support serpentine soils and serpentine bunchgrass communities, a California Department of Fish and Game sensitive habitat. These soils also support several serpentine endemic species (species confined to this soil type), many of which are federally listed. Threats to serpentine community types include nitrogen loading from industrial developments. Serpentine soils are low in nitrogen, which helps restrict growth of invasive non-native plant species. Nitrogen deposition from the power plant (in the form of nitrate) may promote the growth of non-native species that would compete with the native plant species. Studies have shown that competition with non-natives can lead to extirpation of serpentine endemics. Figures 8.1-5a and 8.1-5c of the AFC shows the prevailing wind direction from the power plant for annual and second quarter (blooming season) time periods to be northwest, or towards Tulare Hill. Tulare Hill has populations of the Santa Clara Valley dudleya (federally endangered) and several host plant species for the bay checkerspot butterfly (federally threatened) and Opler's longhorn moth (federal species of special concern), all serpentine endemics.

The predicted maximum 1-hour NO<sub>x</sub> emission concentrations is 72.6 ug/m<sup>3</sup>, with infrequent concentrations of 204.7 ug/m<sup>3</sup> during emergency and test operations (page 8.2-43). Mitigation measures proposed (page 8.2-51) include managing NO<sub>x</sub> emissions at 2.5 ppm to minimize nitrogen loading on the serpentine soils. Page 8.2-43 of the AFC states that the conversion of NO<sub>x</sub> to nitrate will occur away from Tulare Hill and, therefore, no impacts are expected. However, serpentine soils occur throughout the surrounding landscape. Staff feels there is no supporting analysis to justify that these concentrations will not result in adverse nitrogen loading over a period of time.

32. Please provide a detailed impact analysis of nitrogen deposition on the surrounding serpentine soils and associated sensitive plant and animal resources. (Also see Air Quality Data Requests 7 and 8).

**Response:** A detailed impact analysis of nitrogen deposition on surrounding serpentine soils and plants was submitted to the Energy Commission and Proof-of-Service list on October 8, 1999, and docketed on October 12, 1999. Since then a revised NO<sub>x</sub> Deposition Study has been requested in Data

**Metcalf Energy Center  
Data Requests and Responses (99-AFC-3)  
SET 1G**

Request 3-214 (Data Set 3) and Data Request 238 (Data Set 4), which requests that deposition to water bodies be included. In response to these data requests, and to assess the changes to air modeling from the Supplement C site plan, the Impact Analysis for Metcalf Energy Center NO<sub>x</sub> Emissions, Revision 1 is included as Attachment BR-32R.

**Metcalf Energy Center  
Data Requests and Responses (99-AFC-3)  
SET 1G**

**Technical Area:** Land Use  
**CEC Author:** Eric Knight  
**MEC Author:** Valerie Young

**ISSUE:** In addition to a General Plan Amendment, the MEC will require a zoning change from Agricultural (A) to a Planned Development overlay (A[PD]). In the AFC, Calpine/Bechtel states that it will submit designs and plans for the zoning request to the City of San Jose in June 1999 (AFC, page 8.4-12).

50. Please provide a copy of all information submitted to the City of San Jose for the zone change. If the request has not been submitted to the City, please indicate when the request will be made, and submit copies of all materials at that time.

**Response:** In Data Response Set 1A (filed on August 23, 1999) Calpine/Bechtel provided a copy of the Planned Development Zoning and Rezoning Application that was filed with the City of San Jose on August 12, 1999. Since then, Calpine/Bechtel received a letter from the City with comments on the application and Calpine/Bechtel has made minor site changes described in AFC Supplement C (filed on February 15, 2000). Consequently, on February 16, 2000, Calpine/Bechtel

**METCALF ENERGY CENTER***A joint development of Calpine & Bechtel*

February 16, 2000

Richard Buikema  
City of San Jose  
Department of Planning, Building, and Code Enforcement  
801 N. First Street, Room 400  
San Jose, CA 95110

Subject: Metcalf Energy Center Planned Development Rezoning, Prezoning, and  
Annexation (City File Nos. PDC99-08-071 and Riverside No. 49)

Dear Richard:

The purpose of this letter is to submit the revised PD Zoning plan set for the Metcalf Energy Center (MEC) and to respond to the City's comments on our initial PD Zoning submittal. This submittal reflects a revised site plan that places the MEC completely outside of the 100-foot riparian corridor setback. We have also adopted a new visual treatment for the project that responds to Planning Staff's interpretation of the structure height limitation for the Public/Quasi-Public General Plan designation. We appreciate the time that Planning Department staff have spent with us over the past several months to address the City's concerns about our initial PD Zoning submittal.

The City's comments on our initial PD Zoning submittal were transmitted to us in your letter dated September 28, 1999. That letter also incorporated the City's comments on the project that were contained in the Planning Department's August 18 letter to the California Energy Commission (CEC) on our Application for Certification (AFC). The September 28 letter also forwarded copies of three memos from the City's Environmental Services, Fire, and Public Works Departments. The contents of the Fire Department and Environmental Services Department memos were incorporated into the City's August 18, 1999 letter to the CEC.

Numerous issues addressed in the City's August 18 letter were incorporated by the CEC into its Data Request - Set #2, which was submitted to Calpine/Bechtel on September 24, 1999. Per the request in your September 28 letter, to assist you in finding those responses we have prepared the attached table (City Concerns Addressed by CEC Data Requests) identifying the Data Request number, where in the City's August 18 letter the issue is referenced, and where the specific response can be found in documents you should already have received from the CEC.

In this letter, we specifically address the City's six primary issues. These are:

- Project Access
- Riparian Corridor Policy Study Compliance
- Water Storage Facilities
- Trails and Pathways
- Structure Heights
- Tree Removal



With regard to the City's comments under the heading of "COMPLETENESS OF YOUR APPLICATION", Items 1 through 9 of those comments are addressed in this revised PD Zoning submittal. Item 10 of the list relates to the legal description required for the Calpine/Bechtel Annexation application. We are preparing the required legal description and final map for the Annexation, and will submit revised materials for that application under separate cover. Item 11 of the list relates to the signatures required for our applications. We will comply with the City's requirement to have the signatures in place prior to any City public hearings on the project. With regard to the Public Works Department memo, many of the issues raised are of the type usually dealt with at the PD Permit stage of the project. Others are addressed in the attached revised PD Zoning submittal. The remaining issues are the subjects of ongoing discussion with Public Works staff.

## **PROJECT ACCESS**

### **Proposed Interim Access**

The City has expressed concerns regarding the proposed vehicular access to the site across the Union Pacific Railroad (UPRR) tracks at the existing private grade crossing at Blanchard Road, particularly with regard to safety issues and emergency vehicle access. As was explained at our meeting on October 18, 1999 with Planning Department Staff, the Blanchard Road grade crossing will be improved with signal lights and gates as would be appropriate for a public grade crossing for a dedicated City street.

Calpine/Bechtel submitted an application to the UPRR for the proposed crossing improvements on July 12, 1999. The proposed crossing design that has been submitted to UPRR meets both UPRR and CPUC design requirements for a safe crossing, as well as meeting City design standards. The proposed improvements include widening and improving the grade of Blanchard Road on both sides of the crossing, a new signal warning system with crossing gates, and installation of concrete panels and asphalt paving between the rails within the crossing.

At a meeting with members of the City's Public Works Department staff on November 10, 1999, we provided to them the plan and profile drawings of the proposed grade crossing improvements that were included in our application to the UPRR. The proposed crossing improvements are also now shown on Sheet 6 of the PD Zoning submittal. On December 8, 1999, we conducted an examination of the Blanchard Road grade crossing and the MEC site with members of City Planning, Public Works, and Environmental Services staffs. At that time the City staff members present did not indicate any specific remaining concerns about the proposed site access.

At the suggestion of the City's Public Works Department staff, the new crossing signal system will be coordinated with the existing traffic signals at the intersection of Blanchard Road and Monterey Road to further enhance the safety of the grade crossing. We intend to maintain close contact with City Public Works staff, and are prepared to respond to any questions or suggestions they may have.

In a letter to CH2MHILL dated August 11, 1999, the California Public Utilities Commission (CPUC) confirmed that the proposed improvements to the Blanchard Road grade crossing are not subject to CPUC approval. A copy of this letter is attached to the Public Works Department memorandum that is attached to the Planning Department's letter to the CEC dated August 18, 1999. As noted in the referenced CPUC letter, CPUC staff will review

Calpine/Bechtel's proposed crossing design plans, and will provide input to Calpine/Bechtel and UPRR if CPUC Staff finds that any additional safety improvements are required. CPUC also stated in its letter to CH2MHILL that it would assert jurisdiction over the proposed crossing improvements only if Calpine/Bechtel, UPRR, and the City could not reach an agreement regarding the required improvements.

This will be the permanent access road for the MEC unless we can successfully develop the additional access road described below.

### **Proposed Permanent Access**

Calpine/Bechtel has been pursuing an alternative access to the MEC site from Santa Teresa Boulevard. An initial meeting with the adjoining property owners was held on October 28, 1999 to discuss this issue. No agreement on permanent access across their land was reached at that time. We will continue to pursue this alternative route to Santa Teresa Boulevard. However, even if the outcome of those discussions is positive, the development of the road system in the proposed Coyote Valley Research Park may not support our schedule. Therefore, the proposed access across the improved Blanchard Road grade crossing must remain our primary access.

We would appreciate any assistance the City can provide in encouraging the adjacent property owners to work with Calpine/Bechtel, such that the build-out of roadways in the Coyote Valley Research Park (CVRP) area is optimal from the long-term view of the City. At such time as an alternative access to Santa Teresa Boulevard can be obtained, use of the Blanchard Road grade crossing as the primary access to the MEC will be discontinued. However, the residents along Blanchard Road will require ingress/egress via the improved grade crossing until other permanent ingress/egress becomes available to them.

Our proposed Land Use Plan (see Sheet 2) now identifies the possibility of future access to the site via a connection through the CVRP to Santa Teresa Boulevard. In addition, we have included a Master Utilities Plan (see Sheet 11) for the PD Zoning, which indicates the currently proposed locations of domestic water, recycled water, industrial wastewater, and natural gas pipelines. This Sheet also identifies the proposed CVRP circulation plan (as currently contained in the PD Zoning application for that project dated February 4, 2000) on file with the City Planning Department. We request that the PD Zoning for MEC approve both the primary access at the Blanchard Road grade crossing and a possible future access through the CVRP. If CVRP were developed, we would connect to the street system that is built as part of that development, and locate the utilities that would otherwise have gone through farmland within the street system right-of-way. If CVRP were not developed, we would want to build an access road over the water pipeline right-of-way.

It is important to note that the traffic volumes over the Blanchard Road grade crossing will be very low compared to typical crossings of this type in San Jose. Once the facility is operational, it will generate approximately 38 trips per day. These trips will be generated by employees (approximately 24 full-time employees working in shifts over a 24-hour schedule), trade people, vendors, and delivery services. On average, there will be two truck deliveries to the project site per day.

The peak traffic period will occur during construction of the facility. As noted in Section 10 of our AFC, Traffic and Transportation, the peak construction workforce will be approximately 328 persons, who will generate an additional 505 daily trips during the

construction period. Construction-related truck deliveries will also occur during the construction period. Off-site staging and parking areas will be provided immediately south of the site, and traffic crossings of the railroad tracks will be controlled with maximum consideration for safety. We will also close down the existing at-grade crossing at the site, further improving traffic safety in the area.

Delivery of heavy facility components will be by rail. As noted in the AFC, we have submitted an application to UPRR for construction of a temporary rail spur from the existing UPRR tracks that run along the eastern side of the site for the movement of heavy equipment modules onto the site during construction of MEC. This would eliminate the need to transport any of these very large and heavy loads over City streets and the Blanchard Road grade crossing.

### **Emergency Access**

Emergency access to the MEC will be provided via the improved grade crossing at Blanchard Road and the MEC access road. Emergency response to the site may also be provided by use of the future roads of the CVRP, existing farm roads south of the site, or by medical helicopter, for which there is adequate landing space near the MEC. There would be two possible situations in which emergency vehicles would need to access the MEC site: 1) accidents or health emergencies involving employees, visitors, or delivery personnel; and 2) fire events at the facility. As described in Section 8.7 of the AFC, Worker Health and Safety, comprehensive industrial health and safety programs will be implemented by Calpine/Bechtel and its contractors to mitigate hazards and comply with applicable regulations. These programs will cover both the construction and operation phases of the project. Details of these programs are presented in the AFC.

### **RIPARIAN CORRIDOR POLICY STUDY COMPLIANCE**

The MEC site is adjacent to the Fisher Creek riparian corridor. City Planning Staff expressed concern that the site plan originally proposed did not comply with the City's Riparian Corridor Development Guidelines. These Guidelines state that:

*All buildings, other structures (with the exception of bridges and minor interpretive node structures), impervious surfaces, outdoor activity areas (except for passive or intermittent activities) and ornamental landscaped areas should be separated a minimum of 100 feet from the edge of the riparian corridor (or top of bank, whichever is greatest).*

Planning Staff has indicated that, in its view, an exception to the policy (as requested in our original PD Zoning Application) would not be appropriate for this type of project or at the subject location. City Planning Staff therefore requested that the site plan be revised to depict the boundaries of the Fisher Creek riparian corridor and incorporate a full 100-foot riparian corridor setback area. As discussed in previous meetings with Planning Staff, we believe our original submittal was consistent with the Exception policies contained in the Guidelines. However, in our desire to comply with City policies, we have revised our plan at considerable expense to both construction and maintenance complexity to meet the Planning Staff's interpretation of those policies.

The revised site plan depicted in the attached revised PD Zoning drawings excludes all permanent MEC facilities from the 100-foot riparian corridor setback zone. We have worked

diligently to arrive at the new site plan, which, like our original submittal, includes substantial landscaping and riparian restoration features and enhancements. A revised copy of the Riparian Corridor Biotic Assessment reflecting the revised site plan was provided on February 15, 2000 via the CEC's proof-of-service process.

## **WATER SUPPLIES AND WATER STORAGE FACILITIES**

The City has requested clarification on the proposed water supply and storage facilities to fulfill the back-up water supply requirements of the plant, including that required for cooling and fire suppression purposes. The City has also stated that it does not support the use of Tulare Hill for any permanent facilities or activities associated with the MEC, with the exception of the required modification of the existing transmission tower to which the power lines from the MEC will connect.

### **Construction on Tulare Hill**

To answer the latter concern first, we do not propose to site any MEC facilities on either the flat or hillside lands on the west and north sides of Fisher Creek. In fact, the land on the north side of Fisher Creek is the property of PG&E, and is not available to us for construction of any new facilities. The only activities that will occur on the west/north sides of Fisher Creek are habitat restoration, landscape planting and maintenance work, and connection to the transmission tower by PG&E.

### **Water Supplies**

The preferred back-up water supply is domestic water supplied by either San Jose Municipal Water (MUNI) or the Great Oaks Water Company. Discussions are continuing with both potential suppliers to determine which will be selected to supply domestic water and back-up cooling water to MEC. San Jose MUNI has indicated a willingness to provide back-up cooling water from its wells 21, 22, and 23, but has not yet provided the requested "will-serve" letter. The Santa Clara Valley Water District (SCVWD) has indicated in a letter dated January 7, 2000, that using groundwater for short-term (i.e., up to one month) back-up cooling water supply will not adversely affect the North Coyote Valley groundwater basin. Great Oaks Water Company has provided Calpine/Bechtel with a "will-serve" letter, and has offered to provide short-term back-up supply from wells throughout its network, which includes wells outside the Coyote Valley. Great Oaks also indicated that with its proposed system expansion (discussed below), it could provide domestic water as a temporary or interim supply in place of recycled water in case the recycled water supply line is not available at the time MEC goes into service.

Great Oaks Water Company has advised us that it is planning to develop three well sites in north Coyote Valley and an interconnection to its existing water main in Santa Teresa Boulevard. Great Oaks has indicated that the new system would supply new customers in the valley, augment its capacity, and provide improved system reliability and efficiency. The exact locations of these planned new wells and the alignment of the new interconnection pipeline have not been determined, but Great Oaks has advised us that the wells would likely be located in or near the utility easement along the west side of Monterey Road, between Bailey Road and Blanchard Road.

Great Oaks has further advised us that they estimate each of their new wells will produce up to 2,500 gpm (for a total of 7,500 gpm, or 10.8 MGD). Surplus water from the other 16

Great Oaks wells outside Coyote Valley could also be imported into north Coyote Valley via the new interconnection pipeline. Considering other potential new Coyote Valley customers Great Oaks plans to serve, Great Oaks indicates its expanded system would be capable of supplying up to 5,000 gpm to MEC on a continuous basis.

MEC is committed to using recycled water as its primary source of cooling tower makeup water. However, a temporary arrangement with one of the two candidate purveyors of domestic water may be necessary to accommodate a potential delay in the availability of recycled water to the area, whether because of construction delays or interruption of recycled water supply. Because discussions are still in progress, a specific water purveyor has not yet been determined. At this point in time, using onsite wells is not a preferred option.

### **Water Storage**

MEC would not store back-up cooling water on site, but instead would use potable water supplied by either San Jose MUNI or Great Oaks as a back-up water supply.

### **Water for Fire Protection**

As stated in Section 2.2.12 of the AFC, a dedicated fire water storage supply with a capacity of at least 240,000 gallons will be maintained on-site in a fire water storage tank. This quantity of water inventory is dictated by and consistent with the National Fire Protection Association (NFPA) standards.

Great Oaks Water Company has indicated that the San Jose Fire Department normally requires 4,500 gpm for 4 hours of fire protection for its total system. Great Oaks has advised us that if all of its pumps are running (i.e., no disruption in power), it could provide 8,000 to 9,000 gpm to the MEC area with the tanks and pumps in its system. Great Oaks has also advised us that even if there were a widespread power outage, Great Oaks could still supply 4,500 gpm from its system from pumping stations that have emergency power generators, thus satisfying the 4-hour fire protection requirement in addition to the proposed on-site tankage.

### **TRAILS AND PATHWAYS**

Because the revised site plan now provides a 100-foot setback along the Fisher Creek riparian corridor, an area along that corridor on the south/east side of the creek could be designated for future trail improvements. However, several questions regarding trail designation in this area remain to be answered. For example, would the proposed Coyote Valley Research Park development to the south include a trail/pathway system to which the MEC trail would connect? If so, we would want to know the location of that trail to ensure that the two segments are compatible and connected. We understand that because Fisher Creek is a stormwater drainage channel managed by the SCVWD, they may have requirements or restrictions for trail placement and usage that would have to be accommodated by any trail plans proposed by MEC and CVRP. Calpine/Bechtel would expect the City to take the lead in coordinating its trail plans with SCVWD's access and maintenance requirements prior to finalizing any trail designations. We hope to address these issues with City Parks and Planning Staff members during our planned meeting and site tour on February 18, 2000.

## **STRUCTURE HEIGHTS**

Planning Staff have indicated that the maximum building height allowed under Public/Quasi-Public General Plan designation is 95 feet. The City's General Plan does allow, however, for different height limits to be established in the context of project review for structures other than buildings where substantial height is "intrinsic to the function of the structures" and where such structures are located to avoid significant adverse effects on adjacent properties.

As shown on Sheets 8 and 9 of the attached PD Zoning plan set, all of the buildings on the MEC site meet the 95 feet height limit. Only the Heat Recovery Steam Generator (HRSG) stack, which has a height of 145 feet, and some HRSG external piping, vent silencers and their support structures extend above the City's height limit. For reference purposes, the existing 230 kilovolt PG&E transmission tower located to the north and nearest the site is 174 feet tall above its foundations.

The HRSG stacks are intrinsic to the function of the HRSG. The 145-foot height of the HRSG stacks was determined by air quality modeling as that required to provide for adequate dispersion of plant emissions under all meteorological conditions. Based on the results of the air quality modeling performed for the MEC, the 145-foot stacks will prevent significant local air quality impacts.

Location of some of the HRSG external piping, vent silencers, and their support structures above the level of the HRSG steam drums is necessary to the function of the HRSGs. The piping conveys steam that is generated by each drum to its destination. Since steam is generated at the highest levels in the HRSG due to its density being less than that of water, the steam drums must be located at the highest parts of the HRSG, and steam lines must originate at the tops of the steam drums. Operational and industry code requirements also dictate that steam drums have vent and pressure safety relief valves that release steam from the tops of the drums. Silencers, which appear as cylindrical elements at the ends of vertical pipe sections are required for the steam vents. A structural steel cage is necessary to carry the weight of these piping and silencing systems and to restrain these components from movement under wind and seismic loads.

## **TREE REMOVAL**

The City has expressed concern about the removal of mature trees to accommodate construction of the MEC. Particular emphasis has been placed on the preservation of any designated heritage trees, Keesling walnuts, oak trees, and trees located within the required riparian corridor setback area. Sheet 4 of the revised PD Zoning submittal shows the revised tree survey and riparian corridor diagram. The table on Sheet 4 shows that there are 161 trees on the site, and that 80 of these will be impacted. None of the riparian species will be affected, and no oak trees or other heritage trees will be removed.

Sheet 10 of the PD Zoning submittal shows the revised landscape plan for the new site layout. As shown on Sheet 10, a significant amount of new landscaping will be added to the site, along with riparian restoration and plantings, and reestablishment of the wetland area northwest of the site. We believe that this plan substantially addresses the City's concern about tree removal.

Mr. Richard Buikema  
City of San Jose  
February 16, 2000  
Page 8

Once again, Calpine/Bechtel sincerely appreciates the City's considerable efforts in coordinating the review of our proposed Metcalf Energy Center. We firmly believe that the proposed plant modifications described in this letter and the attached plan set address all of the key issues raised by City staff, and significantly improve the overall project. We look forward to continuing to work closely with the City in the review of this project.

Sincerely,

METCALF ENERGY CENTER

A handwritten signature in cursive script, appearing to read "Curt Hildebrand".

Curt Hildebrand  
Vice President – Project Development

# City Concerns Addressed by CEC Data Requests

## METCALF ENERGY CENTER

Data Request Number	Text of CEC Data Request	Discipline	Date Response Submitted to CEC	Data Response Set	Where Referenced In City's 8/18/99 Letter
26	26. Please submit the completed biotic assessment of the riparian corridor, as required by the Policy Study, to CEC and the City of San Jose.	Biology	1-Oct-99	1E	p. 6
27	27. Please provide a detailed plan for enhancing the Fisher Creek riparian corridor and adjacent wetland.	Biology	1-Oct-99	1E	p. 6
28	28. Please describe the Best Management Practices that will be implemented to ensure high water quality standards of the storm water drainage into Fisher Creek.	Biology	23-Aug-99	1A	p. 7
30	30. Please provide the results of the arborist's impact analysis and the mitigation and monitoring plan. If the mitigation and monitoring plan is inconsistent with the Riparian Corridor Plan, please provide an explanation of why and how these conflicts will be resolved.	Biology	1-Oct-99	1E	p. 7
32	32. Please provide a detailed impact analysis of nitrogen deposition on the surrounding serpentine soils and associated sensitive plant and animal resources. (Also see Air Quality Data Requests 7 and 8).	Biology	8-Oct-99	Separate Cover	p. 8
33	33. Please describe what measures will be taken to ensure proper management of Tulare Hill can be successfully implemented.	Biology	12-Oct-99	Separate Cover	p. 8
34	34. Please provide the methodology and results of the surveys mentioned above.	Biology	1-Oct-99	1E	p. 8
48a	48. In the Application for Certification, Section 8.12.3, a Protocol for analysis of public vulnerability to an accidental ammonia release was provided. Please provide the results of the vulnerability analysis described in Section 8.12.3.	Haz. Materials	23-Aug-99 & 17 Sep-99	1A & 1D	p. 13, 17
69	69. Please provide the telephone records for communications with Wendy Bettel, Sonia Bradley, Don Jackson, Jim McClure, Mike Schenone, Debbie Nelson, and Martell Talor.	Socioeconomics	23-Aug-99	1A	p. 13
85	85. The AFC (p.8.11-15) describes the measures to be taken to minimize off-site effects of nighttime lighting for the project. However, the description does not include the use of switches, timers, or sensors. Please explain whether such devices are planned to be part of the nighttime lighting system.	Visual Resources	23-Aug-99	1A	p. 9
90(a)	90. Quantified estimates of the expected maximum and average height and width. a. The data, assumptions, and calculations used to derive these estimates, including the model used.	Visual Resources	3-Sep-99	1C	p. 16
90(b)(i)	b. Quantified estimates of the expected frequency of occurrence and duration, specifying: i. the number of hours that the plume will be visible, for each hour of the day per year;	Visual Resources	3-Sep-99	1C	p. 16
90(b)(ii)	ii. the total number of hours per year that the plume will be visible;	Visual Resources	3-Sep-99	1C	p. 16
90(b)(iii)	iii. the percentage of the total number of hours per year that the plume will be visible;	Visual Resources	3-Sep-99	1C	p. 16
90(b)(iv)	iv. the percentage of the total number of hours per year that the plume will be visible;	Visual Resources	3-Sep-99	1C	p. 16
90(b)(v)	v. the percentage of daylight hours per year that the plume will be visible.	Visual Resources	3-Sep-99	1C	p. 16



# City Concerns Addressed by CEC Data Requests

## METCALF ENERGY CENTER

Data Request Number	Text of CEC Data Request	Discipline	Date Response Submitted to CEC	Data Response Set	Where Referenced in City's 8/18/99 Letter
90(c)	c. The data, assumptions, and calculations used to derive these estimates, including the model used.	Visual Resources	3-Sep-99	1C	p. 16
91(a)	91. In regard to the HRSO exhaust stack plumes, please provide the following information: a. Quantified estimates of the expected maximum and average height and width.	Visual Resources	3-Sep-99	1C	p. 16
91(b)	b. The data, assumptions, and calculations used to derive these estimates, including the model used.	Visual Resources	3-Sep-99	1C	p. 16
91(c)(i)	c. Quantified estimates of the expected frequency of occurrence and duration, specifying: i. the number of hours that the plume will be visible, for each hour of the day per year;	Visual Resources	3-Sep-99	1C	p. 16
91(c)(ii)	ii. the total number of hours per year that the plume will be visible;	Visual Resources	3-Sep-99	1C	p. 16
91(c)(iii)	iii. the percentage of the total number of hours per year that the plume will be visible;	Visual Resources	3-Sep-99	1C	p. 16
91(c)(iv)	iv. the number of daylight hours per year that the plume will be visible; and	Visual Resources	3-Sep-99	1C	p. 16
91(c)(v)	v. the percentage of daylight hours per year that the plume will be visible.	Visual Resources	3-Sep-99	1C	p. 16
91(d)	d. The data, assumptions, and calculations used to derive these estimates, including the model used.	Visual Resources	3-Sep-99	1C	p. 16
95	95. Please describe in general how the project will comply with the City of San Jose's Riparian Corridor Policy Study guidelines for building and fixture design and landscaping.	Visual Resources	3-Sep-99	1C	p. 9
113	113. Please explain what the status is of the Phase II ESA and when MEC plans to submit the results of the assessment to CEC staff.	Waste Management	3-Sep-99	1C	p. 18
141	141. Submit addition analysis assuming complete build-out of the already planned Coyote Valley Campus Industrial Development and residential development to the south of Bailey Road.	Water Resources	17-Sep-99 & 1-Oct-99	1D, 1E	p. 2
155	155. Please provide a complete analysis of potential erosion and water quality impacts to Fisher Creek resulting from storm water outfalls from the discharge pipe and runoff specific to the proposed Metcalf Energy Center.	Biological Resources	25-Oct-99	2B	p. 7, 8, 14
159	159. Please identify which trees in the project area are or could qualify as, Significant and/or Heritage trees by the city or county. Provide this information on a map and in a table similar to those shown on Land Use Plan - 4, Tree Survey in the applicant's PD-Zoning application to the City of San Jose.	Biological Resources	15-Oct-99	2A	p. 7
172	172. The City of San Jose indicated that the Coyote Ranch is located within 1/2 mile from the project site and it is downwind. Please provide a discussion of possible air quality impacts and effects of steam vapor emission/condensations on this cultural resource.	Cultural Resources	25-Oct-99	2B	p. 9

# City Concerns Addressed by CEC Data Requests

## METCALF ENERGY CENTER

Data Request Number	Text of CEC Data Request	Discipline	Date Response Submitted to CEC	Data Response Set	Where Referenced in City's 8/18/99 Letter
175	175. Please provide a discussion of the on-site emergency response capability and the emergency response contingency plan that would be implemented during the 30 minute period before the San Jose Fire Department arrives in the event of an accidental hazardous materials release.	Hazardous Mat.	25-Oct-99	2B	p. 23
176	176. Please describe how the Metcalf Energy Center will comply with all the requirements of the 1999 San Jose Fire Code applicable to hazardous materials handling at the facility.	Hazardous Mat.	25-Oct-99	2B	p. 23
178	178. Please provide information on noise compliance in a summary table that is divided or separated into three subsections to address requirements of each of the three agencies (City, County and CEC). For each subsection, please specify the noise impact thresholds pertaining to which agency will be used. A summary section could be included that would discuss the result of the three analyses.	Noise	15-Oct-99	2A	p. 12
180	180. Page 8.5-17, Last paragraph: It is stated that the MEC meets the 55 Leq requirement at the property line and that the octave band requirements at the property line have not been analyzed. Please define/identify what the octave band requirements are and describe their use. Please provide the appropriate octave band requirement analysis.	Noise	12-Nov-99	2C	p. 12
182	182. Please provide a complete Noise Impact Analysis report, including any modeling information and calculations. Since the City of San Jose noise standards are based on noise levels measured in decibels using DNL, the AFC noise analysis should include a separate noise level analysis using DNL. A map should also be included to illustrate measured noise levels (in DNL) overlaid on a 1:1,000 scale map containing property line information. The analysis should include a) noise impacts for construction and operation; b) from periodic start-ups and shut-downs; c) noise associated with the initial two week commissioning of the plant; d) an analysis of potential impacts from both ground and airborne vibration on nearby sensitive receptors during construction and operation; and e) an assessment of the typical high-pressure steam blow activity that is generally addressed separately because of the high noise levels and potential for significant noise impact.	Noise	12-Nov-99	2C	p. 11
195	195. Please provide a detailed evaluation of the project's potential visual impacts on the future CVUR.	Visual Resources	25-Oct-99	2B	p. 2
196	196. Please provide a detailed assessment of the visual impacts of the proposed above-ground transmission lines.	Visual Resources	15-Oct-99	2A	p. 15
197	197. Please clearly describe the rationale for all of the determinations of significance of visual impacts of the project using these significance criteria.	Visual Resources	15-Oct-99	2A	p. 15

# City Concerns Addressed by CEC Data Requests

## METCALF ENERGY CENTER

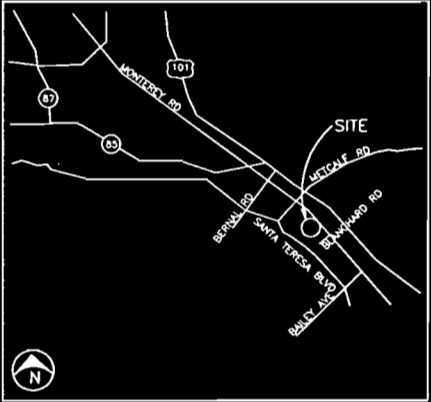
Data Request Number	Text of CEC Data Request	Discipline	Date Response Submitted to CEC	Data Response Set	Where Referenced In City's 8/18/99 Letter
198	198. Please provide a detailed description of the applicability of, and rationale for, the visual quality rating system developed by Buhyoff et al. 1994 that is used for this analysis.	Visual Resources	15-Oct-99	2A	p. 15
199	199. Please provide a detailed description of the visual quality ratings identified in Table 8.11-1 as they apply specifically to the visual resources of the project area.	Visual Resources	15-Oct-99	2A	p. 15
200	200. Please clarify or modify and provide detailed justifications for all visual quality ratings identified for specific views and visual resources in the AFC.	Visual Resources	15-Oct-99	2A	p. 15
201	201. In regard to the City's comments, please clarify whether the project would obstruct a scenic view or vista.	Visual Resources	15-Oct-99	2A	pp. 16-17
202	202. Please describe how the project would or would not be compatible with the designation of Highway 101 as a Rural Scenic Corridor and Landscaped Throughway in the City of San Jose's 2020 General Plan Scenic Routes and Trails Diagram.	Visual Resources	15-Oct-99	2A	pp. 16-17
203	203. Please specifically include the City's recognition of the scenic values in the area of KOP 5 by its designation of Highway 101 as a Rural Scenic Corridor and Landscaped Throughway in your revised discussion of the visual quality rating for KOP 5.	Visual Resources	15-Oct-99	2A	pp. 16-17
204	204. Please describe how the project would or would not be compatible with the City of San Jose's identification of the project area as a major southern gateway to the City of San Jose.	Visual Resources	15-Oct-99	2A	pp. 16-17
205	205. In addition to the information requested in staff's Data Request #96, please provide a detailed analysis of the visual impacts and proposed mitigation for views of the project from Fisher and Coyote Creeks based on the City's designation of these areas as Trails and Pathway Corridors in the San Jose 2020 General Plan Scenic Routes and Trails Diagram.	Visual Resources	15-Oct-99	2A	pp. 16-17
211	211. Please provide a detailed discussion of the use of a more efficient reverse osmosis unit for water treatment. If a more efficient unit can be used, please provide a revised water balance reflecting the changes in water flows from using a more efficient unit. Also identify the likely water quality of the reverse osmosis reject water and the corresponding changes in the wastewater quality.	Soils and Water	25-Oct-99	2B	p. 18
212	212. Please provide an evaluation of using reclaimed water for other purposes such as toilets, filter backwash, etc. Also identify the potential reclaimed water demand for each potential uses and any design changes necessary to implement such a use.	Soils and Water	25-Oct-99	2B	p. 19
214	214. Please identify potential mitigation measures that can be implemented by the project to reduce or remove project-related increases in recycled water quality.	Soils and Water	25-Oct-99	2B	p. 21
3-215	Please provide a total number of how many of each of these ordinance trees will be lost.	Biology	4-Jan-00	3B	p. 7

# City Concerns Addressed by CEC Data Requests

## METCALF ENERGY CENTER

Data Request Number	Text of CEC Data Request	Discipline	Date Response Submitted to CEC	Data Response Set	Where Referenced In City's 8/18/99 Letter
237	Please identify the location of these water storage facilities and discuss their design, construction and maintenance. If no such facilities will be built, please explain why and how the applicant has responded to the City's concerns.	Water	11-Jan-00	4A	p.23

PLANNED DEVELOPMENT ZONING FOR  
**METCALF ENERGY CENTER**  
A JOINT DEVELOPMENT OF CALPINE AND BECHTEL  
SAN JOSE, CALIFORNIA  
FEBRUARY 2000  
PDZ No. \_\_\_\_\_



AREA MAP  
SCALE: NTS

TABLE OF CONTENTS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LAND USE PLAN
3	LAND USE PLAN NOTES
4	TREE SURVEY & RIPARIAN CORRIDOR DIAGRAM
5	CONCEPTUAL SITE PLAN-1
6	CONCEPTUAL SITE PLAN-2
7	CONCEPTUAL GRADING AND DRAINAGE PLAN
8	CONCEPTUAL BUILDING ELEVATION-1
9	CONCEPTUAL BUILDING ELEVATION-2
10	CONCEPTUAL LANDSCAPE PLAN
11	MASTER UTILITIES PLAN

DEVELOPMENT SCHEDULE

ESTIMATED CONSTRUCTION START	JANUARY 2001
ESTIMATED OCCUPANCY	JANUARY 2003

ZONING INFORMATION

EXISTING ZONING  
CITY OF SAN JOSE = A  
SANTA CLARA COUNTY = A-20  
  
PROPOSED ZONING  
A(PD)

(NOTE: PORTION OF PROPERTY WITHIN SANTA CLARA COUNTY TO BE ANNEXED TO THE CITY OF SAN JOSE UNDER SEPARATE APPLICATION)

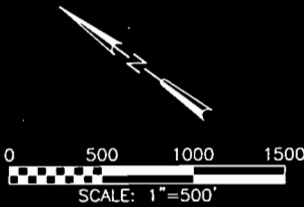


NOTE  
AERIAL PHOTO TAKEN IN 1997

LOCATION MAP  
SCALE: 1"=500'

TABLE OF USE & AREA INFORMATION

A. TOTAL ACRES OF SUBJECT PROPERTY	GROSS	20 AC±
	PUBLIC STREET DEDICATION	0
	NET	20 AC±
B. TOTAL NUMBER OF BUILDING/STRUCTURE UNITS		16
C. TOTAL AMOUNT OF FLOOR SPACE FOR NON-RESIDENTIAL USE		SEE F. BELOW
D. TOTAL AMOUNT OF SURFACE AREA FOR OFF-STREET PARKING		12,000 SF
	PERCENTAGE OF SITE AREA	0.1%
E. TOTAL NUMBER OF OFF-STREET PARKING REQUIRED PROVIDED		XX
		20
F. TOTAL FOOTPRINT AREA OF	BUILDINGS	26,020 SF
	FACILITIES	204,220 SF
	TOTAL FOOTPRINT	230,240 SF
	PERCENTAGE OF SITE AREA	26%
G. LANDSCAPE AREA	TOTAL HILLSIDE AREA	N/A
	TOTAL FENCED AREA	N/A
	TOTAL LANDSCAPE AREA	608,969 SF
	PERCENTAGE OF SITE AREA	69%
H. DENSITY	NUMBER OF DWELLING UNITS PER NET ACRE	N/A
	FLOOR AREA RATIO	N/A
I. ASSESSOR'S PARCEL NUMBERS	708-29-03 (PORTION)	
	708-23-002,003	



DSGN  
DR  
CHK  
APVD

1 2/15/00

REVISED PER COMMENTS

SH VY

BY APVD

REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

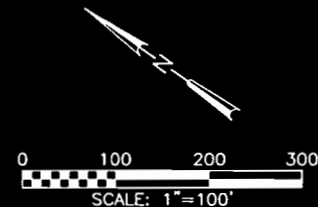
THIS DOCUMENT IS THE PROPERTY OF CH2M HILL. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

METCALF ENERGY CENTER  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C  
TITLE SHEET

SHEET 1 OF 11  
DWG NO.  
DATE 2/15/00  
PROJ NO. 151687





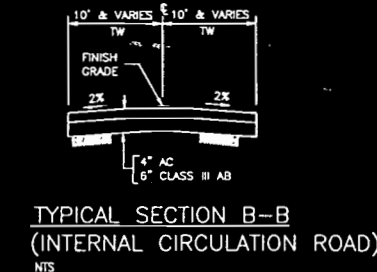
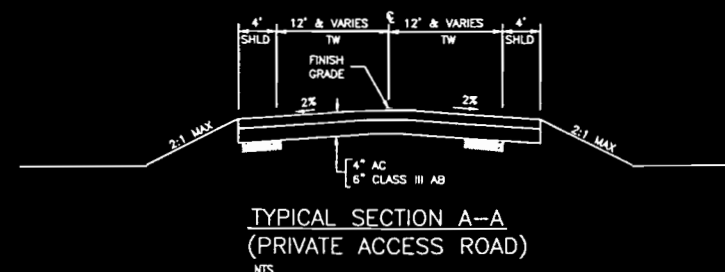
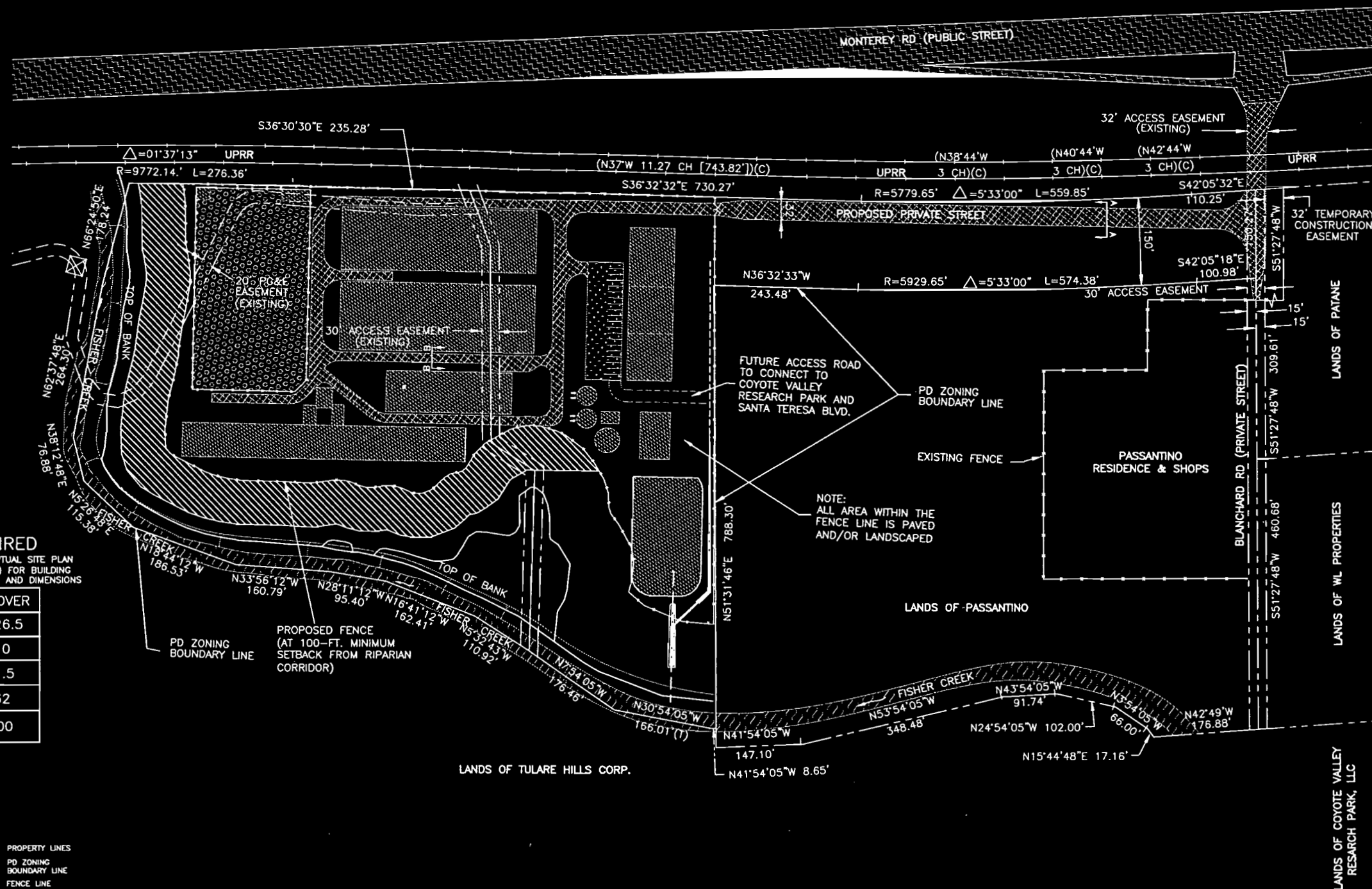
(NOTE: ALL AREA WITHIN PD ZONING BOUNDARY TO BE PRIVATE USE AREA FOR METCALF ENERGY CENTER.)

# LAND USE TABLE(600 MW NATURAL GAS-FIRED COMBINED CYCLE POWER PLANT) REFER TO CONCEPTUAL SITE PLAN (SHEETS 7 AND 8) FOR BUILDING USE DESCRIPTIONS AND DIMENSIONS

USE	AREA (ACRES)	% COVER
ENERGY FACILITIES & BUILDINGS	5.3	26.5
PRIVATE ROAD & DRIVEWAY	1.95	10
PARKING	0.3	1.5
LANDSCAPING & OPEN SPACE	12.45	62
TOTALS	20	100

## LEGEND

	PRIVATE ROAD		CREEK		PROPERTY LINES
	PUBLIC ROAD		BUILDINGS AND FACILITIES		PD ZONING BOUNDARY LINE
	FACILITIES ON GRAVEL SURFACE		TEMPORARY CONSTRUCTION ACCESS		FENCE LINE
	PARKING AREA				



1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408)436-4909



DSGN					
DR					
CHK					
APVD					
NO.	1	DATE	2/15/00	REVISION	REVISED PER COMMENTS
BY	SH	APVD	VY		

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

THIS DRAWING IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**METCALF ENERGY CENTER**  
SAN JOSE, CALIFORNIA

**GENERAL DEVELOPMENT PLAN - EXHIBIT C**  
**LAND USE PLAN**

SHEET	2 OF 11
DWG NO.	
DATE	2/15/00
PROJ. NO.	151687

NOTES

1. WATER POLLUTION CONTROL PLANT NOTE

PURSUANT TO CHAPTER 15.12 OF THE SAN JOSE MUNICIPAL CODE:

AS THE RESULT OF THE GRANTING OF ANY LAND DEVELOPMENT APPROVALS AND APPLICATIONS WHEN AND IF THE CITY MANAGER MAKES A DETERMINATION THAT THE CUMULATIVE SEWAGE TREATMENT DEMAND ON THE SAN JOSE-SANTA CLARA WATER POLLUTION CONTROL PLANT REPRESENTED BY APPROVED LAND USES IN THE AREA SERVED BY SAID PLANT WILL CAUSE THE TOTAL SEWAGE TREATMENT DEMAND TO MEET OR EXCEED THE CAPACITY OF THE SAN JOSE-SANTA CLARA WATER POLLUTION CONTROL PLANT TO TREAT SUCH SEWAGE ADEQUATELY AND WITHIN THE DISCHARGE STANDARDS IMPOSED ON THE CITY BY THE STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD FOR THE SAN FRANCISCO BAY REGION, SUBSTANTIVE CONDITIONS DESIGNED TO DECREASE SANITARY SEWAGE ASSOCIATED WITH ANY LAND USE APPROVAL MAY BE IMPOSED BY THE APPROVING AUTHORITY.

2. DEVELOPMENT STANDARDS

PUBLIC/QUASI PUBLIC

SETBACKS

6' MIN. SETBACK FROM EAST PROPERTY LINE  
70' MIN. SETBACK FROM SOUTH PROPERTY LINE  
100' SETBACKS FROM RIPARIAN CORRIDOR  
(NORTH & WEST PROPERTY LINES)

BUILDING HEIGHT

145 FT & 1 STORY MAX HEIGHT FOR STACKS  
30 FT & 1 STORY MAX HEIGHT FOR BUILDINGS

PARKING RATIO

1 %

MINIMUM LOT SIZE

20 ACRES±

3. INFRASTRUCTURE

PRIVATE INFRASTRUCTURE TO MEET OR EXCEED PUBLIC IMPROVEMENT STANDARDS.

UTILITY AND/OR FUTURE ACCESS ROAD EASEMENTS ARE NOT YET IN TITLE AND WILL BE OBTAINED EITHER THROUGH NEGOTIATION OR CONDEMNATION.

4. ENVIRONMENTAL MITIGATION & PERFORMANCE STANDARDS

ARCHAEOLOGICAL MITIGATION

ANY DISTURBANCE OR REMOVAL OF NATIVE AMERICAN BURIALS WILL BE TREATED PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA. THE SANTA CLARA COUNTY CORONER SHALL BE NOTIFIED AND SHALL MAKE A DETERMINATION AS TO WHETHER THE REMAINS ARE NATIVE AMERICAN. IF THE CORONER DETERMINES THAT THE REMAINS ARE NOT SUBJECT TO HIS AUTHORITY, HE SHALL NOTIFY THE NATIVE AMERICAN HERITAGE COMMISSION WHO SHALL ATTEMPT TO IDENTIFY DESCENDANTS OF THE DECEASED NATIVE AMERICAN. IF NO SATISFACTORY AGREEMENT CAN BE REACHED AS TO THE DISPOSITION OF THE REMAINS PURSUANT OF THIS STATE LAW, THEN THE LANDOWNER SHALL RE-INTER THE HUMAN REMAINS AND ITEMS ASSOCIATED WITH NATIVE AMERICAN BURIALS ON THE PROPERTY IN A LOCATION NOT SUBJECT TO FURTHER SUBSURFACE DISTURBANCE.

IF ARCHEOLOGICAL MATERIAL IS ENCOUNTERED DURING CONSTRUCTION, EXCAVATION SHALL BE STOPPED AND A QUALIFIED ARCHEOLOGIST SHALL BE RETAINED TO EVALUATE AND MITIGATE THE SITUATION.

NOISE

MITIGATION MEASURES INCLUDE A 66' HIGH SOUND WALL FOR COMBUSTION TURBINE, AND A 32' HIGH SOUND WALL FOR STEAM TURBINE.

NO ADVERSE IMPACT IS EXPECTED DUE TO THE NORMAL OPERATION OF THE FACILITY. THE BACKGROUND NOISE LEVEL WILL NOT INCREASE BY MORE THAN 5 dBA (BARELY NOTICEABLE INCREASE) AT THE NEAREST RESIDENCE AT NIGHT.

TREE MITIGATION:

TREES IN EXCESS OF 18" IN DIAMETER WILL BE REPLACED AT A RATIO OF 4:1 WITH 24" BOX TREES.  
TREES BETWEEN 12" & 18" IN DIAMETER WILL BE REPLACED AT A RATIO OF 2:1 WITH 24" BOX TREES.  
TREES OF LESS THAN 12" IN DIAMETER WILL BE REPLACED AT A RATIO OF 1:1 WITH 15 GALLON TREES.  
TREES SHOULD BE SELECTED FROM APPENDIX B & C OF THE CITY OF SAN JOSE'S LANDSCAPE AND IRRIGATION GUIDELINES.

5. ADDITIONAL MITIGATION

(ADDITIONAL MITIGATIONS AND CONDITIONS OF APPROVAL TO BE DETERMINED THROUGH CEQA - EQUIVALENT DOCUMENT CERTIFIED BY CALIFORNIA ENERGY COMMISSION)

1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408)436-4909



DSGN	
DR	
CHK	
APVD	

1	2/15/00
NO.	DATE

REVISED PER COMMENTS
REVISION

SH	VY
BY	APVD

REUSE OF DOCUMENTS
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.
CH2M HILL

VERIFIED SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

METCALF ENERGY CENTER  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C  
LAND USE PLAN  
NOTES

SHEET 3 OF 11
DWG NO.
DATE 2/15/00
PROJ NO. 151687

SYMBOL	CODE	TREE TYPE	NO. OF TREES	IMPACTED TREES
△	CB	COFFEE BERRY	2	2
○	EW	ENGLISH WALNUT	6	5
○	BW	BLACK WALNUT	47	34
●	ELD	ELDER BERRY	32	32
✱	PL	PLUM	3	3
○	W	WILLOW, BW, ELD (RIPARIAN CORR.)	39	0
⊗	VO	VALLEY OAK	27	0
⊕	CW	COTTON WOOD	1	0
		ALMOND	2	2
		PEAR	1	1
		OLIVE	1	1
		TOTAL	161	80

NOTE:

**NOTE:**  
ALL TREES WITHIN THE FENCE LINE  
WILL BE REMOVED OR RELOCATED

LEGEND

x	x	x
x	x	x
x	x	x

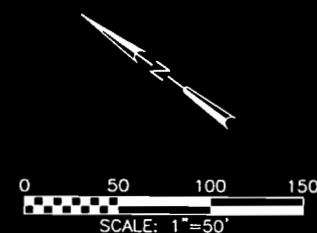
EXISTING WETLANDS (TO BE RESTORED)



RIPARIAN CORRIDOR 100' SETBACK AREA

—X— FENCE LINE

FENCE LINE



1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408)436-4909



DSGN
DR
CHK
APVR

1	2/15/00
NO.	DATE

REVISED PER COMMENTS

---

REVISION

SH	VY
RY	APVD

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL, AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

VERIFIED BY: [REDACTED]

BAR IS ONE INCH ON ORIGINAL DRAWING.

0 [REDACTED]

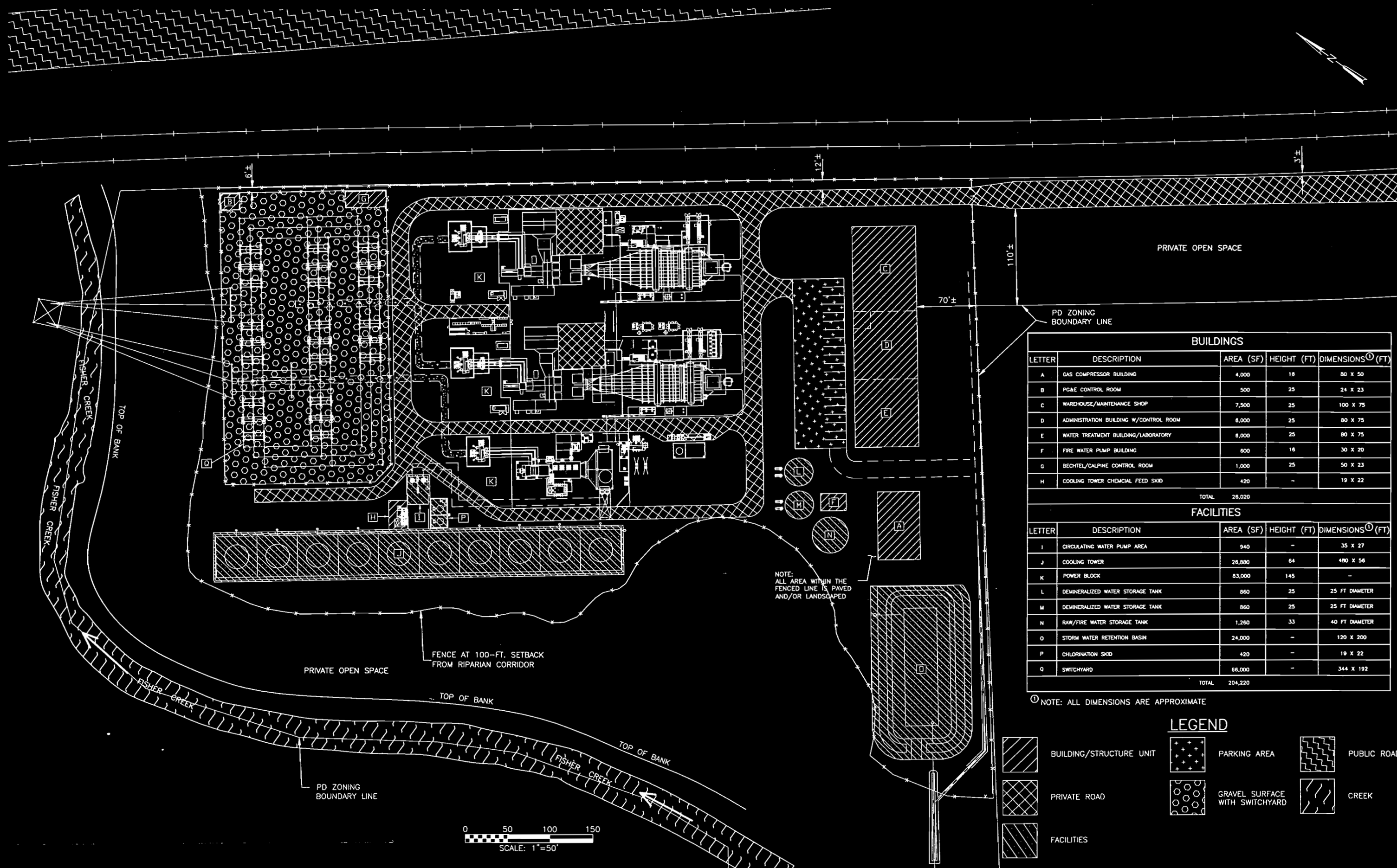
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**METCALF ENERGY CENTER**  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C  
TREE SURVEY & RIPARIAN  
CORRIDOR DIAGRAM

SHEET	4 OF 11
DWG NO.	
DATE	2/15/00
PROJ NO.	151687





1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408)436-4909



DSGN  
DR  
CHK  
APVD

1 2/15/00  
NO. DATE

REVISED PER COMMENTS  
REVISION

SH VY  
BY APVD

#### REUSE OF DOCUMENTS

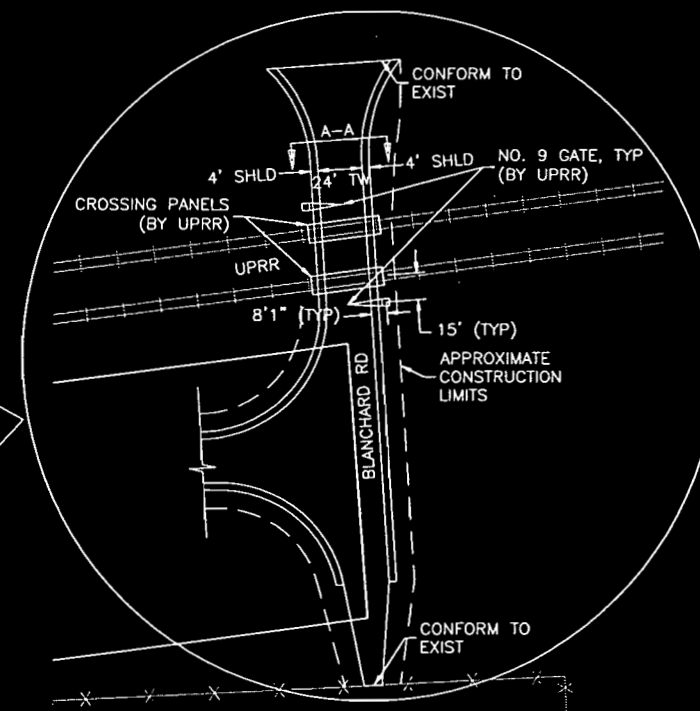
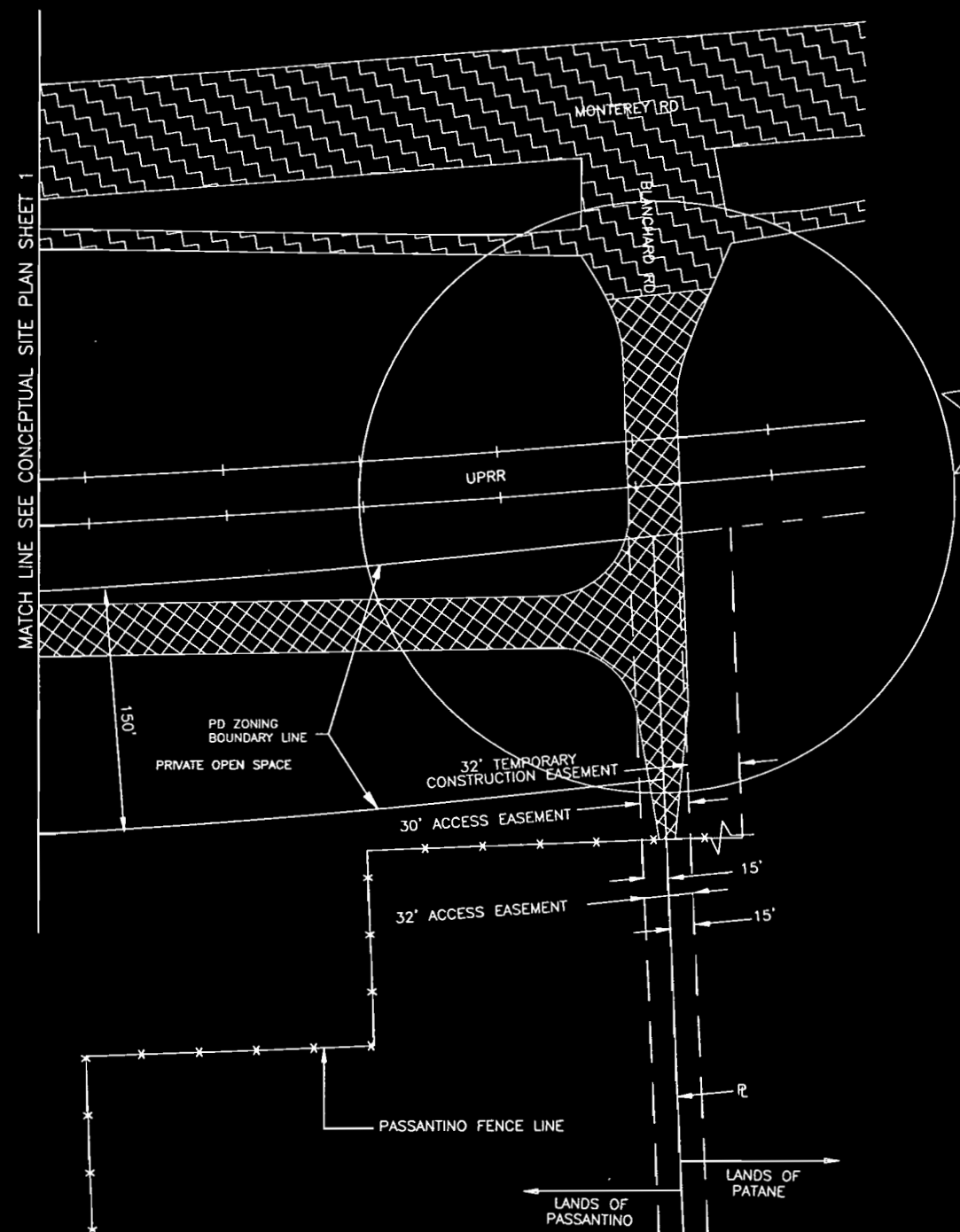
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

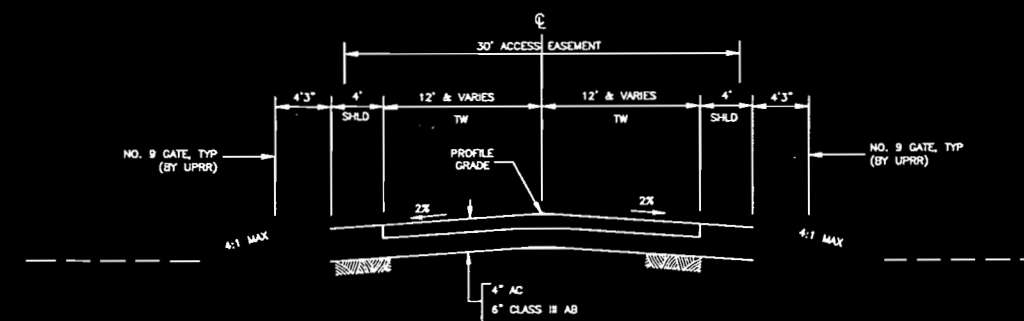
METCALF ENERGY CENTER  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C  
CONCEPTUAL SITE PLAN  
SHEET 1 OF 2

SHEET 5 OF 11  
DWG NO.  
DATE 2/15/00  
PROJ NO. 151687



RAILROAD CROSSING



TYPICAL SECTION A-A  
NTS

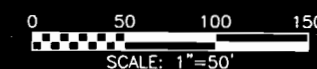
LEGEND



PRIVATE ROAD



PUBLIC ROAD



1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408)436-4909



DSGN	
DR	
CHK	
APVD	

NO.	1	DATE	2/15/00	REVISED PER COMMENTS	SH	YY
				REVISION	BY	APVD

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

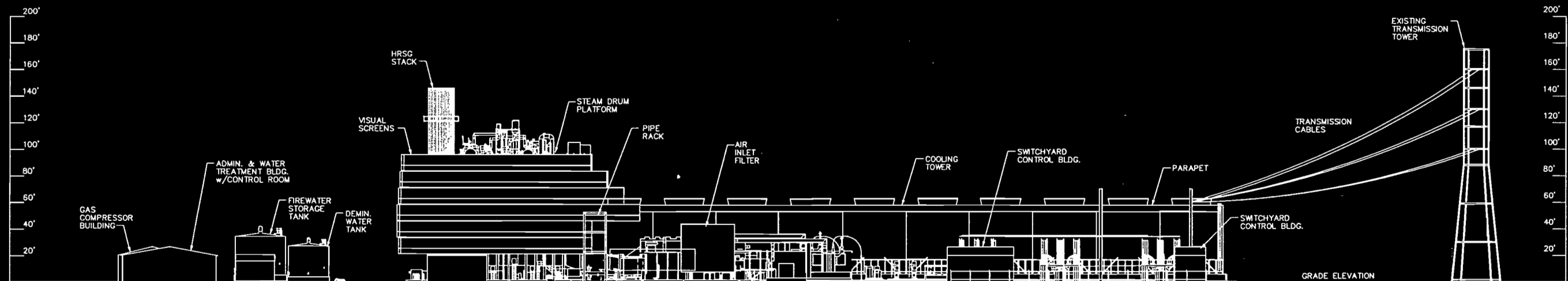
**DESIGN SCALE**  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
0 1'  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**METCALF ENERGY CENTER**  
SAN JOSE, CALIFORNIA

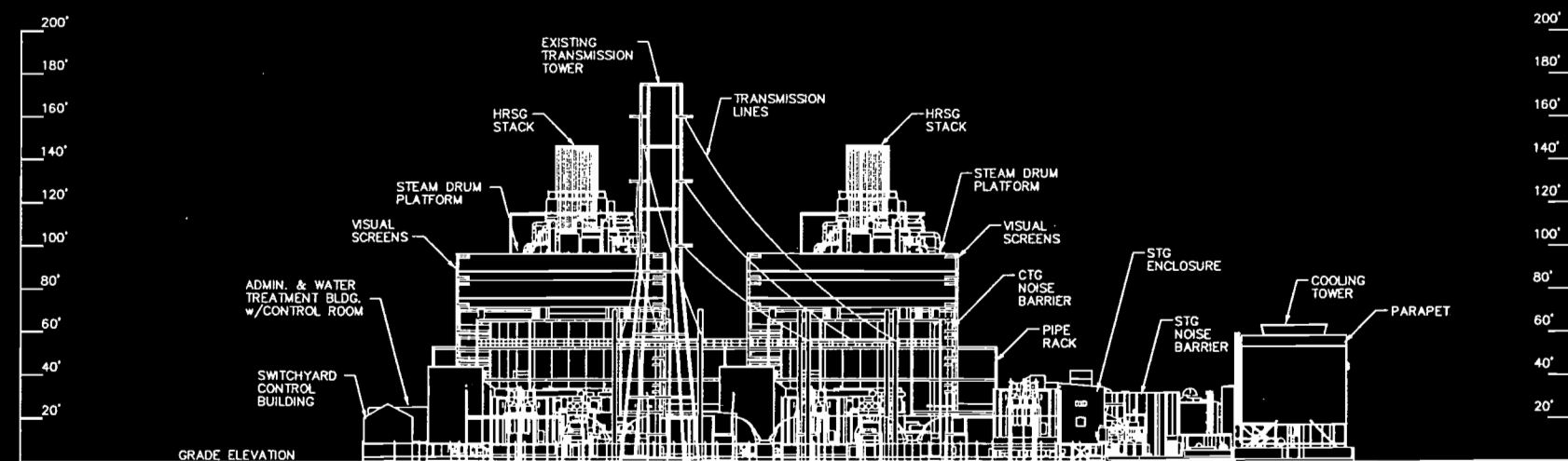
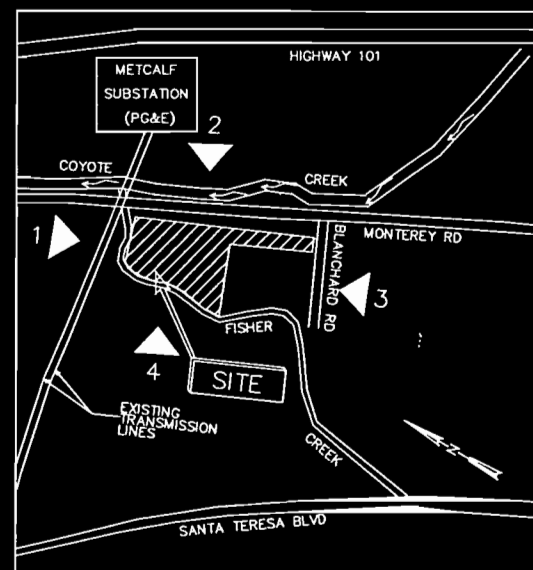
**GENERAL DEVELOPMENT PLAN - EXHIBIT C**  
**CONCEPTUAL SITE PLAN**  
**SHEET 2 OF 2**

**SHEET 6 OF 11**  
**DWG NO.**  
**DATE** 2/15/00  
**PROJ NO.** 151687





ELEVATION LOOKING WEST  
(VIEW 2)



ELEVATION LOOKING SOUTH  
(VIEW 1)

LEGEND

HRSG	HEAT RECOVERY STEAM GENERATOR
STG	STEAM TURBINE GENERATOR
CTG	COMBUSTION TURBINE GENERATOR



BECHTEL DWG. #  
P1-0190-002 REV. G

1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408) 436-4909



DSGN	
DR	
CHK	
APVD	

1	2/15/00
NO.	DATE

REVISED PER COMMENTS

REVISION

SH	VY
BY	APVD

REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

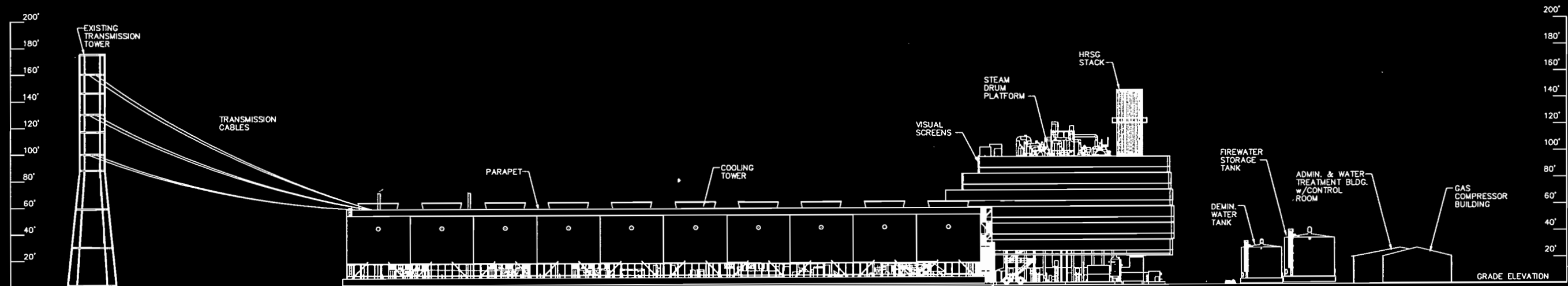
©CH2M HILL

BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

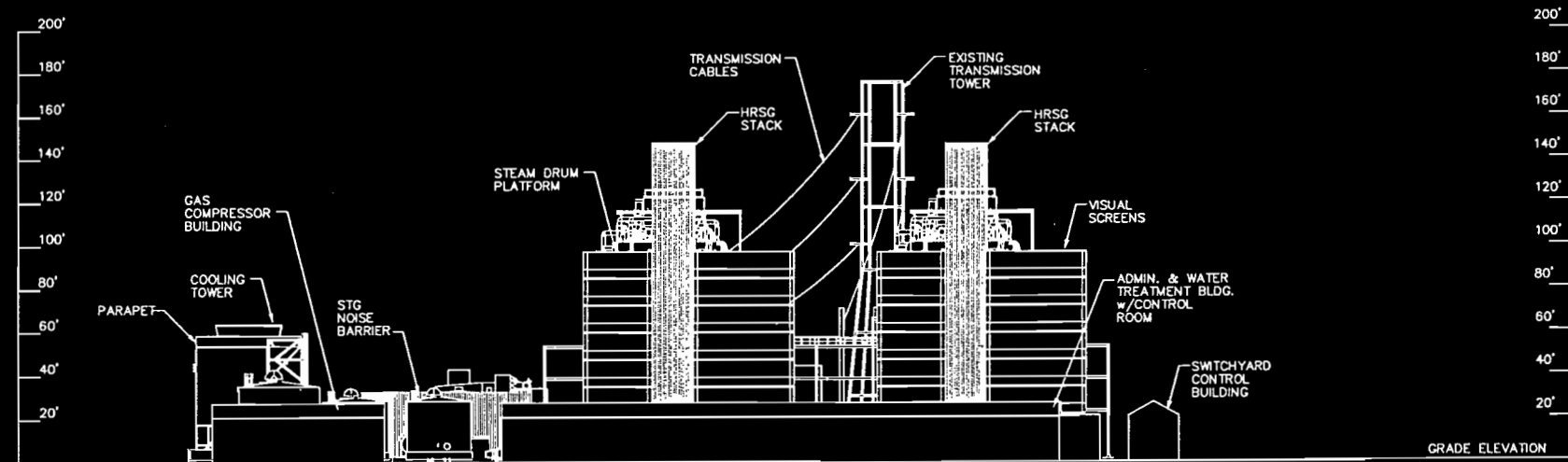
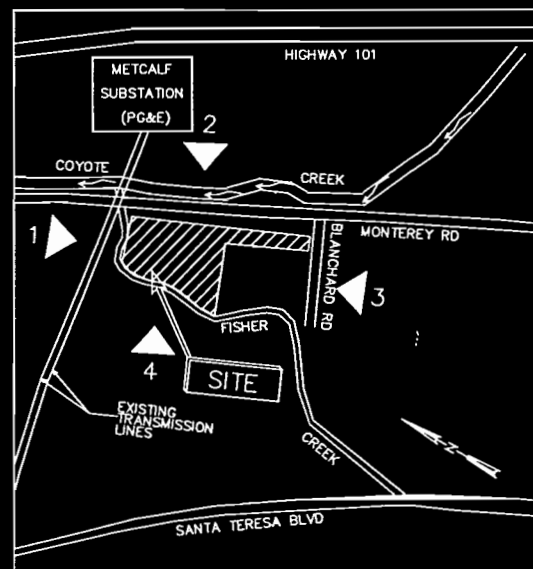
METCALF ENERGY CENTER  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C  
CONCEPTUAL BUILDING ELEVATION  
SHEET 2 OF 2

SHEET 8 OF 11
DWG NO.
DATE 2/15/00
PROJ NO. 151687



ELEVATION LOOKING EAST  
(VIEW 4)



ELEVATION LOOKING NORTH  
(VIEW 3)

LEGEND

HRSG	HEAT RECOVERY STEAM GENERATOR
STG	STEAM TURBINE GENERATOR
CTG	COMBUSTION TURBINE GENERATOR



BECHTEL DWG. #  
P1-0190-001 REV. G

1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408) 436-4909



DSGN	
DR	
CHK	
APVD	

1	2/15/00
NO.	DATE

REVISED PER COMMENTS	
REVISION	

SH	VY
BY	APVD

REUSE OF DOCUMENTS  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

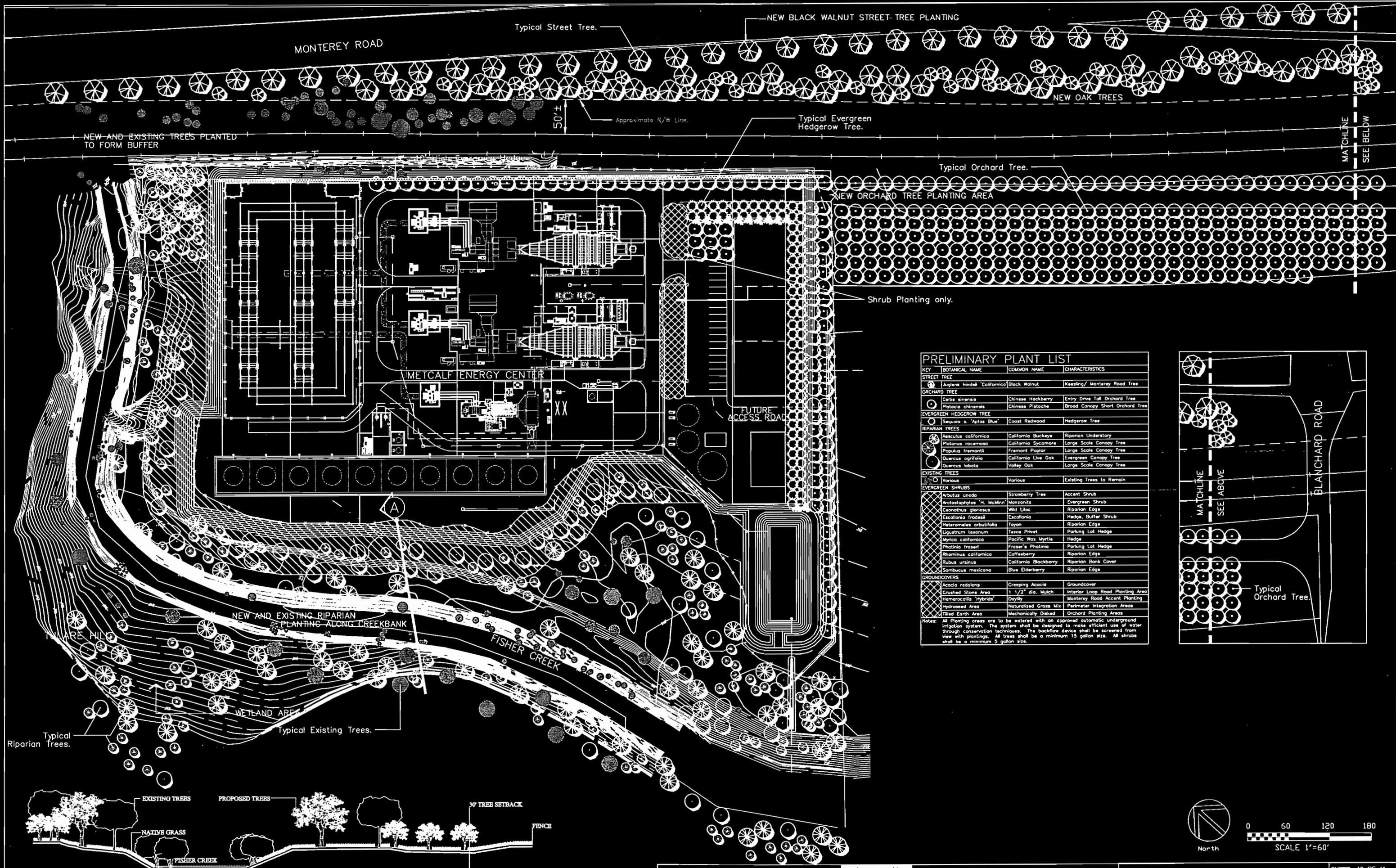
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

METCALF ENERGY CENTER  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C  
CONCEPTUAL BUILDING ELEVATION  
SHEET 2 OF 2

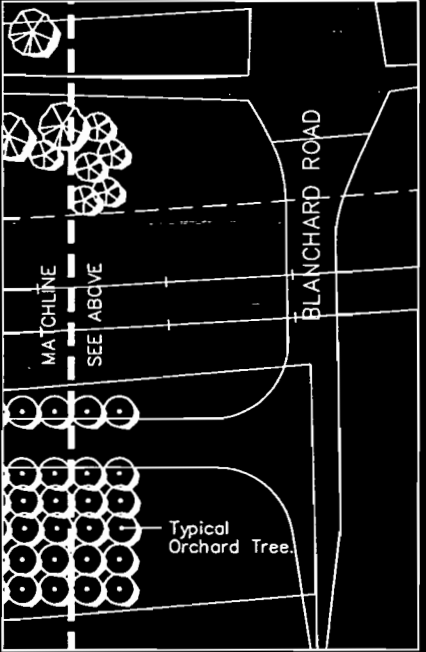
SHEET 9 OF 11
DWG. NO.
DATE 2/15/00
PROJ. NO. 151687





PRELIMINARY PLANT LIST			
KEY	BOTANICAL NAME	COMMON NAME	CHARACTERISTICS
STREET TREE			
⊗	Juglans hindsii 'California'	Black Walnut	Keesling/ Monterey Road Tree
ORCHARD TREE			
⊙	Celtis sinensis	Chinese Hackberry	Entry Drive Tall Orchard Tree
⊙	Pistacia chinensis	Chinese Pistache	Broad Canopy Short Orchard Tree
EVERGREEN HEDGEROW TREE			
⊖	Sequoia s. 'Aptos Blue'	Coast Redwood	Hedgerow Tree
RIPARIAN TREES			
⊗	Asclepias californica	California Buckeye	Riparian Understory
⊗	Pistacia racemosa	California Sycamore	Large Scale Canopy Tree
⊗	Populus fremontii	Fremont Poplar	Large Scale Canopy Tree
⊗	Quercus agrifolia	California Live Oak	Evergreen Canopy Tree
⊗	Quercus lobata	Valley Oak	Large Scale Canopy Tree
EXISTING TREES			
⊗	Various	Various	Existing Trees to Remain
EVERGREEN SHRUBS			
⊗	Arbutus unedo	Strawberry Tree	Accent Shrub
⊗	Arctostaphylos 'H. McMillin'	Manzanita	Evergreen Shrub
⊗	Ceanothus glaucus	Wild Lilac	Riparian Edge
⊗	Escallonia frutescens	Escallonia	Hedge, Buffer Shrub
⊗	Heteromera arbutifolia	Tayon	Riparian Edge
⊗	Ligustrum texanum	Texas Privet	Parking Lot Hedge
⊗	Myrica californica	Pacific Wax Myrtle	Hedge
⊗	Photinia fraseri	Fraser's Photinia	Parking Lot Hedge
⊗	Rhamnus californica	Coffeeberry	Riparian Edge
⊗	Rubus ursinus	California Blackberry	Riparian Bank Cover
⊗	Sambucus mexicana	Blue Elderberry	Riparian Edge
GROUNDCOVERS			
⊗	Acacia redolens	Creeping Acacia	Groundcover
⊗	Crushed Stone Area	1 1/2" dia. Mulch	Interior Loop Road Planting Area
⊗	Hemerocallis 'hybrids'	Daylily	Monterey Road Accent Planting
⊗	Hydroseed Area	Naturalized Grass Mix	Perimeter Integration Areas
⊗	Tiled Earth Area	Mechanically Disked	Orchard Planting Areas

Notes: All Planting areas are to be watered with an approved automatic underground irrigation system. The system shall be designed to make efficient use of water through conservation techniques. The bedflow device shall be screened from view with plantings. All trees shall be a minimum 15 gallon size. All shrubs shall be a minimum 5 gallon size.





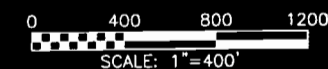


# LEGEND

- SBWR ROUTE (RECYCLED WATER)
- INDUSTRIAL WASTE WATER LINE
- DOMESTIC WATER LINE ROUTES
- NATURAL GAS LINE
- CONCEPTUAL CIRCULATION PLAN FOR COYOTE VALLEY RESEARCH PARK

## NOTE:

CONCEPTUAL CVRP CIRCULATION PLAN SHOWN IS FROM CVRP PD REZONING PLAN SET DATED FEBRUARY 4, 2000 ON FILE WITH THE CITY OF SAN JOSE (PDC NO. 99-06-053). IT IS THE DESIRE OF THE METCALF ENERGY CENTER TO CONNECT THE MEC UTILITIES AND ACCESS ROAD THROUGH THE CVRP TO SANTA TERESA BOULEVARD.



1737 N. FIRST STREET, SUITE #300  
SAN JOSE, CALIFORNIA 95112-4524  
(408)436-4909



DSGN  
DR  
CHK  
APVD

1

2/15/00

REVISED PER COMMENTS

SH

VY

BY

APVD

## REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

CH2M HILL  
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

METCALF ENERGY CENTER  
SAN JOSE, CALIFORNIA

GENERAL DEVELOPMENT PLAN - EXHIBIT C

SHEET 11 OF 11  
DWG NO.  
DATE 2/15/00  
PROJ NO. 151687