URS

DOCKET	
08-AFC-6	
DATE	MAY 01 2009
RECD.	MAY 04 2009

May 1, 2009

Dockets Unit
California Energy Commission
1516 Ninth Street, MS 4
Sacramento, CA 95814

RE: Willow Pass Generating Station
Application for Certification 08-AFC-06

On behalf of Mirant Willow Pass, LLC, the applicant for the above-referenced Willow Pass Generating Station AFC, we are pleased to submit the enclosed document:

- Three print copies and three CDs of *Response to CEC Data Request 48 (Landscaping)*.

Please include this document in the AFC record.

URS Corporation

Kathy Rushmore
Project Manager

Enclosures

CC: Felicia Miller, California Energy Commission (2 print copies and 2 CDs)
Kristin Vahl, City of Pittsburg (1 print copy)

URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105
Tel: 415.896.5858
Fax: 415.882.9261
www.urscorp.com

URS

To: Proof of Service Distribution
Willow Pass Generating Station AFC
CEC Docket No. 08-AFC-6

The enclosed document is being provided to you on CD either because the size of the electronic document may prevent reliable email service or the printed document is large.

A paper copy of the document can be provided upon request to:

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URS Corporation
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San Francisco, Ca 94105
415-243-3833
Kathy_Rushmore@urscorp.com

Enclosure

cc: Jonathan Sacks, Mirant
Felicia Miller, California Energy Commission

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BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION
FOR THE **WILLOW PASS**
GENERATING STATION

Docket No. 08-AFC-6

PROOF OF SERVICE
(Revised 4/14/2009)

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DECLARATION OF SERVICE

I, Kathy Rushmore, declare that on May 1, 2009, I served and filed copies of the attached *Response to CEC Data Request 48 (Landscaping)*. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[http://www.energy.ca.gov/sitingcases/willowpass/index.html]**. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(*Check all that Apply*)

For service to all other parties:

___ sent electronically to all email addresses on the Proof of Service list;

_X_ by personal delivery or by depositing in the United States mail at San Francisco, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

_X_ **sending two original paper copies and one electronic copy, mailed to the address below:**

OR

____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-AFC-6
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

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

Kathy Rushmore

Response to CEC Data Request 48 (Landscaping)

Application for Certification (08-AFC-6) for WILLOW PASS GENERATING STATION Pittsburg, California

May 2009

Prepared for:

MIRANT℠
WILLOW PASS, LLC

Prepared by:

URS

Printed on 100% Recycled Paper

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RESPONSE TO DATA REQUEST 48

DATA REQUEST 48
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BACKGROUND

Staff has reviewed the photos and simulations for key observation points (KOPs) one through nine (Figures 7.11-2 through 7.11-20). The existing view from KOPs one through six show trees that could provide significant screening for project structures, such as the two heat recovery steam generator stacks (HRSGs). If the trees continue to grow, they could effectively screen the HRSGs from the KOPs; however, the age and growth potential for the relevant trees is unknown. The Applicant has stated their willingness to conduct an additional survey to determine the age of the trees, but has not proposed a landscaping plan to mitigate visual impacts from the project at the selected KOPs.

DATA REQUEST

48. Please provide a draft landscaping plan that would mitigate visual impacts from the project at the selected KOPs.

RESPONSE

In their December 2, 2008 notice, Mirant Willow Pass, LLC (Mirant Willow Pass) initially objected to Data Request 48 on the grounds that the Willow Pass Generating Station (WPGS) project is not expected to have significant visual impacts, because four existing retired generating units at the project site, including four 211-foot-high exhaust stacks and associated boiler structures, will be removed as part of the project, and replaced with two generating units that have 150-foot-diameter, 6-inch-high exhaust stacks. Because the anticipated views of industrial features will be reduced through this project as compared to the existing condition, the project will not result in a significant visual impact, and landscaping is not necessary for mitigation purposes.

Based on subsequent communication with the City of Pittsburg and the issuance of its February 25, 2009 letter recommending landscaping for the WPGS project to comply with City landscaping requirements, Mirant Willow Pass has agreed to provide landscaping plans in accordance with the City's letter. Although Mirant Willow Pass maintains its position that the project is not expected to have significant visual impacts, these landscaping plans are provided to ensure compliance with the City's general standards. The City's letter outlining their recommendations is provided as Appendix A.

Tree Selection and Location

The landscape architect for the project communicated with the City subsequent to issuance of the City's letter in order to clarify the City's recommendations for tree species and locations as outlined in the City's letter. The results of this communication are presented in the Basis of Design Memorandum provided in Appendix B. The resulting landscaping plans prepared by the landscape architect are provided in Appendix C. Visual simulations of each plan are provided in Appendix D.

Noteworthy issues regarding the landscaping plans are outlined below:

- **Offsite Landscaping:** The City has recommended landscaping in some locations that are not part of the WPGS project site, and that will not be owned by Mirant Willow Pass, LLC (Mirant Willow Pass). Some of the locations selected by the City for landscaping are on property that is owned by Mirant Delta, LLC (Mirant Delta), an affiliate of Mirant Willow Pass that is part of the existing Pittsburg Power Plant (PPP) site. To accomplish

the landscaping plan, Mirant Willow Pass will need to obtain easements or similar rights from Mirant Delta in order to install and maintain the plantings described below. The City also has recommended landscaping in an area located over large underground concrete water discharge tunnels owned by Mirant Delta and used in the operation of the PPP. While that area will be within the project site, Mirant Delta will continue to have the right to maintain and operate its discharge tunnels there. For that area, and for the areas that will continue to be owned by Mirant Delta, it will be necessary to ensure that the landscaping itself, as well as the installation and maintenance of the landscaping, will not interfere with Mirant Delta's ongoing operations or its plans for future use and development of its site. Due to those constraints, it will not be possible to install landscaping in all of the areas recommended by the City, as further explained below.

- **KOP 1:** The City recommended installation of additional palm trees within a landscaping "gap" at the northern side of the PPP site. However, this landscaping gap is due to the presence of underground concrete discharge tunnels that are owned by Mirant Delta and used in connection with the operation of existing Units 5 and 6 of the PPP. The locations of these underground tunnels are shown in Figure 1, provided in Appendix C. Additional details regarding the tunnels, including depth below ground and diameter, are provided in Appendix B. As noted above, Mirant Delta will not allow Mirant Willow Pass to install new landscaping in areas where it could interfere with existing or potential future infrastructure. Nonetheless, existing oleander shrubs are present just north of the PPP fenceline that could be used for screening, rather than new plantings. These shrubs are thinned and trimmed regularly by the City, which restricts their height and foliage density. If the trimming of the oleanders is stopped, they will develop denser new foliage and provide a solid tall evergreen screen. Without further trimming, this "oleander hedge" can reach 20 to 25 feet in height in several years. Therefore, rather than planting new trees, which is considered infeasible in this area, Mirant Willow Pass will request that the City stop thinning and trimming the existing oleander shrubs to permit their continued growth. These shrubs will provide visual screening for the pedestrian walkway and picnic areas located within Riverview Park directly north of the fenceline.

- **KOP 6:** The City originally recommended new pepper trees at this location. However, pepper trees have the potential to become invasive; therefore, upon further communication with the City, Raywood ash were recommended by the City instead.

Landscape Plan Simulations

Appendix D provides simulations showing: (1) simulations of the WPGS project without landscaping and as presented in the AFC; (2) simulations of the WPGS project and landscaping 5 years after planting for KOPs 2 and 6; and (3) simulations of the WPGS project and landscaping at maturity for KOPs 1, 2, and 6. The simulations are described below in further detail.

KOP 1

Southeast views from KOP 1 represent recreational users on a trail built on a marina breakwater accessible from Riverview Park, approximately 0.3 mile from the project site (a foreground view). The simulated view, Figure 7.12a in Appendix D, illustrates the screening provided by simulating the growth or maturity of several of the existing palms. Additionally, the oleanders north of the fenceline were not trimmed for height in this view. This would provide additional partial screening when the project is viewed from KOP 1. As noted above, total screening of this

view is not considered feasible due to the limitations of the underground discharge tunnels in this area. Overall, changing how the City maintains the oleanders would provide additional screening of the lower structures. This, along with the maturity of the existing palms, though not dramatic, provides for a reduction in the visibility of the project.

KOP 2

Views from KOP 2 represent the views specifically from a local church, and more generally from a residential area adjacent to the PPP. Viewers in this area already have a low level of project visibility, with foreground views that are partially to fully screened by an earthen berm, existing vegetation, and existing aboveground storage tanks (see Figure 7.11-13 in Appendix D). The first simulated view, Figure 7.11-13a in Appendix D, illustrates the 5-five year growth period of two Aleppo pines planted adjacent to the existing Aleppo pines in the view, which offer less additional screening when compared to the existing environment. The actual size of Aleppo pine can be difficult to estimate because its height and diameter growth can be slow during the first 10 years, but then accelerate to three times faster in the following period, until reaching a maximum height of 50 feet. It is estimated that the growth rate would be 1 to 2 (up to 3) feet per year, making a 5-year-old Aleppo Pine at least 10 feet in height.

The second simulation, Figure 7.11-13b in Appendix D, shows the landscape plant growth of the Aleppo Pines after 20 years of growth. From this simulation, it is apparent that the growth and maturity of the two proposed Aleppo Pines with the surrounding vegetation (the expected growth of the existing pines were also simulated to match maturity), will completely block the view of the proposed project from KOP 2.

KOP 6

Views from KOP 6 are representative of moderate-sensitivity viewers traveling east on Willow Pass Road, a road that provides access to several residential areas, local business, and industrial areas. Figure 7.11-17a in Appendix D illustrates a simulated middleground view (1.3 miles) near a bend in the road with a series of 5-year-old Raywood ashes planted along Willow Pass Road to block sensitive views. The tree appears to be approximately 15 feet high, but the Raywood ash is a fast grower and can reach heights of 35 feet with canopies 25 feet wide, which makes it a good street tree and important for blocking sensitive views. From this KOP, the tree placement completely blocks views of the proposed project, and the only change apparent in the simulation is the removal of the retired Units 1 through 4 of the PPP.

The second simulation, Figure 7.11-17b in Appendix D, shows the landscape plant growth of the Raywood ashes after 20 years of growth. Views to the background include prominent views of the existing PPP facilities. Units 5 through 7 of the PPP are visually co-dominate with, if not subordinate to, the vegetation in this view, and the WPGS facility would be completely screened in the middleground by the Raywood ash.

Appendix A
City of Pittsburg's Landscaping Recommendations

City of Pittsburg
Development Services Department – Planning Division
Civic Center - 65 Civic Avenue, Pittsburg, CA 94565

Telephone (925) 252-4920 • FAX: (925) 252-4814

DOCKET
08-AFC-6
DATE FEB 25 2009
RECD. FEB 25 2009

February 25, 2009

James Adams, Environmental Planner II
California Energy Commission (CEC) – Environmental Office
1516 9th Street, MS 40
Sacramento, CA 95814-5504

RE: Landscaping Recommendations for the Willow Pass Generating Station

Dear Mr. Adams,

I have spoken with our public works department and found out some information regarding existing landscaping within some of the Key Observation Point (KOP) areas, as identified in the CEC Application for Certification for the proposed Willow Pass Generating Station. Below you will find my recommendations for landscaping within each of the KOP (1 through 6) areas, along with a brief explanation for the recommendation. All recommendations below would be consistent with the landscaping requirements contained within the Pittsburg Municipal Code (PMC) sections 18.54.115, 18.54.130, and 18.84.300-335, for landscaping within the IG (General Industrial) District.

KOP 1: I've checked with our public works department and they do not know why there is a landscaping "gap" at the location shown in the photo simulation. Based on this, staff would still recommend additional palm trees be planted within the landscaping "gap" to match the existing line of palms on either side; however, the applicant should first verify the depth and location of the underground water discharge pipes before finalizing any landscape plans that involve the planting of new palm trees. Staff also recommends the installation of some climbing vines or other dense shrubbery along the fence line at this location.

KOP 2: The photo simulation for this site shows one tall prominent tree in the center (possibly a pine?). After inspecting the site, staff recommends that the same type of tree be planted on either side (to the north and south) of the tree in the simulation. Two new trees should adequately screen the new towers from not only the parking lot (location of KOP 2), but also from the street, driveway entrance, and neighboring houses.

KOP 3: A site inspection indicated that new trees had recently been planted along the west side of Bayside Drive, at the location of KOP 3. According to the city's public works staff, the new trees that have been planted are camphor trees and they should grow to a height of approximately 25 to 30 feet and they should have a canopy spread of approximately 25 to 30 feet. Since the trees are located in the landscape strip right behind the light pole (as seen in the photo simulation), and since the light pole is approximately 14 to 16 feet tall, staff feels confident that the existing trees will eventually

PROOF OF SERVICE (REVISED 02/23/09) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 03/02/09
AA

City of Pittsburg
Development Services Department – Planning Division
Civic Center - 65 Civic Avenue, Pittsburg, CA 94565

Telephone (925) 252-4920 • FAX: (925) 252-4814

grow tall enough to completely screen the new towers, and therefore, staff does not recommend any new trees at KOP 3.

KOP 4: According to the city's public works staff, the trees that are existing along either side of Bayside Drive (between Front St. & 2nd Street) are a combination of raywood ash and camphor trees. Those trees are definitely not full grown yet. Once they are full grown they should reach a height of approximately 40 feet. Also, the public works staff does not believe that there is adequate space within these landscape strips to install any new trees, especially palm trees. Based on the physical constraints at this site (lack of space), staff does not believe that there is any available location that trees could be planted to screen the new towers. Since there is no space for new trees and since the existing trees still have a substantial amount of growing to do, staff does not recommend any new trees to screen the view from KOP 4.

KOP 5: While KOP 5 indicates an important view of the project site from a residential neighborhood, in order to block the view of the new towers from this KOP, trees would need to be planted along Willow Pass Road underneath the PG&E transmission line corridor. Planting trees in this location is not ideal, due to the low height of the power lines and the potential for tree limbs to interfere with power lines. As a result, staff recommends that no new trees be planted in this area.

KOP 6: KOP 6 also indicates another important view from the same neighborhood as KOP 5 (above); however, since this KOP is further down the street (to the west), tree plantings for KOP 6 are not limited because of the transmission line corridor. According to the city's public works department, the existing trees along the north side of Willow Pass Road are California pepper trees. Staff recommends that new California pepper trees be planted along the north side of Willow Pass Road, starting just north of 1215 Willow Pass Road, and continue down to the western edge of the PG&E transmission line corridor. The trees should be planted approximately every 60 feet.

If you have any questions or need any further clarification regarding the recommendations presented above, please do not hesitate to contact me via phone at (925) 252-6941, or via email at kvahl@ci.pittsburg.ca.us.

Sincerely,

Kristin Vahl
Associate Planner

Appendix B
Basis of Design Memorandum

URS

BASIS OF DESIGN MEMORANDUM
VIEW SCREEN LANDSCAPING
FOR
WILLOW PASS GENERATING STATION

PREPARED BY
GEORGE STRNAD, ASLA
URS CORPORATION

APRIL 30, 2009

1. GENERAL

The landscape design is based on a letter with Landscaping Recommendations for the Willow Pass Generating Station (WPGS) sent by the City of Pittsburg Associate Planner, Ms. Kristin Vahl, to the CEC Visual Resources technical lead, Mr. James Adams, on February 25, 2009. Additional information subsequently received via e-mail from Ms. Vahl is described below.

The City has recommended landscaping in some locations that are not part of the WPGS project site, and that will not be owned by Mirant Willow Pass, LLC (Mirant Willow Pass). Some of the locations the City landscaping are on property owned by Mirant Delta, LLC (Mirant Delta), [an affiliate of Mirant Willow Pass] that is part of the existing Pittsburg Power Plant (PPP) site. To accomplish the landscaping plan, Mirant Willow Pass will need to obtain easements or similar rights from Mirant Delta in order to install and maintain the plantings described below. The City also has recommended landscaping in an area located over large underground concrete water discharge tunnels owned by Mirant Delta and used in the operation of the PPP. Although that area will be within the project site, Mirant Delta will continue to have the right to maintain and operate its discharge tunnels there. For that area, and for the areas that will continue to be owned by Mirant Delta, it will be necessary to ensure that the landscaping itself as well as the installation and maintenance of the landscaping will not interfere with Mirant Delta's ongoing operations or its plans for future use and development of its site. Due to those constraints, it will not be possible to install landscaping in all of the areas recommended by the City, as further explained below.

KOP 1

The City of Pittsburg recommendations for viewpoint KOP 1 were to provide additional palm trees in the landscaping gap to match the existing line of palm trees. Additionally, the City requested climbing vines or shrubs along the fence of the PPP site.

A number of large cooling water discharge tunnels owned by Mirant Delta and used in the operation of the existing PPP are located directly below the planting strip along the fence in this area (refer to Figure 1 in Appendix C for their location), described further below.

The open space identified by the City in KOP 1 exists due to the presence of four underground discharge tunnels that support the operation of PPP Units 5 and 6. The tops of these reinforced concrete tunnels are at an approximate depth of 8 to 12 feet below the existing grade. The diameter of the tunnels range from approximately 7 to 10 feet. These reinforced concrete tunnels were constructed in the 1960s and were not designed or constructed to support the weight of significant additional surface loads. Although a few trees currently exist in the area of the tunnels, there are unit operations concerns about installing new trees on top of and/or near the primary discharge tunnels of Pittsburg Units 5 and 6. In the case of a Canary Island date palm tree, the expected weight of a mature palm tree can approach 15 tons, and this load would be concentrated in the area of planting because of the natural root system of these palm trees. The majority (85 percent) of the date palm root system is typically distributed within a spherical area with an

approximately 6.6-foot diameter, while additional roots can extend up to 82 feet horizontally and 20 feet vertically into the ground (Munier 1973). The Urban Forest Ecosystems Institute's SELECTREE plant information database, maintained by the College of Agriculture at California Polytechnic State University, San Luis Obispo, California, rates the root damage potential of Canary Island date palm tree as moderate. However, the damage and invasiveness potential could become high when the palm trees are drought-stressed, and their roots are exploring deeper soil layers to tap into the water table.

Photo 1: View of the western part of existing landscaping at KOP 1 from the Mirant Delta side looking northwest. Oleander shrubs are present on the northern side of the fenceline, but are currently thinned and trimmed, which limits their screening qualities.

Because of the design and age of the reinforced-concrete tunnels, the weight of the palm trees, and the potential of the palm tree root system to penetrate into the discharge tunnels and interfere with existing equipment used for monitoring temperature, volume, and water quality of the discharge, it is not feasible to plant palm trees or other similar trees on top of or in the immediate vicinity of the discharge tunnels, due to substantial risk of damage and/or blockage of the tunnels, which would interfere with the operations of PPP Units 5 and 6.

Therefore, rather than new plantings, there are existing oleander shrubs directly north of the PPP fenceline that could provide additional screening (See Photo 1 above). The existing oleander shrubs appear to be regularly thinned and trimmed at the level of the top of the fenceline and along their sides, thus currently providing minimal screening. This trimming is also limiting the foliage density of the shrubs. Oleander shrubs, even in their natural conditions, develop good, dense foliage on their outside; however, they have only sparse leaf growth and twigs inside of their crown. When the outer foliage is clipped away, the shrubs temporarily lose their screening qualities. If the trimming of the oleanders is stopped, they are regularly lightly irrigated on a regular basis; and soil around them is fertilized; then they will quickly develop dense new foliage, and provide a solid tall evergreen screen. Without further trimming, this "oleander hedge" can reach up to 20 to 25 feet in height in several years. The tallest oleanders in California have exceeded 30 feet in height. The shrub is considered to be fast growing under normal conditions, and its growth rate is up to 36 inches per year.

Photo 2: View of the eastern part of the existing conditions at KOP 1 from the Mirant side looking northeast.

KOP 2

The City of Pittsburg recommends planting two additional Aleppo pine trees (*Pinus haleppensis*) on each side of the existing large Aleppo pine for this view area. The two additional trees are shown on Figure 2 in Appendix C. It is recommended that they be planted on the Mirant Delta side of the fence, on top of the existing large berm, to achieve maximum screening effect. It is also recommended that they be initially irrigated; however, due to their drought resistance, they will not need additional irrigation beyond the second year after planting. Photo 3 shows the current conditions in this area.

Photo 3: Current conditions at KOP 2. Photo taken from parking lot looking west.

KOP 6

The City of Pittsburg recommendation for the landscaping along the northern side of Willow Pass Road from Rockspray Circle (1215 Willow Pass Road) to the western edge of the PG&E transmission line corridor is to supplement the existing scattered pepper trees with new, evenly spaced trees. Their letter recommends placing pepper trees approximately every 60 feet along the north side of the road.

There is a potential for the pepper trees to become invasive, therefore, upon further communication with Kristin Vahl and the Pittsburg Department of Public Works, the City suggested the use of Raywood ash or Chinese pistache instead of pepper trees. Because the area where these trees would be planted would be primarily near or within a roadside swale, Chinese pistache may not be appropriate to provide sufficient screening because of its small size. This species is also not very tolerant of inundated soils.

Raywood ash, which is a much larger tree, would be capable of providing quick screening. Raywood ash is also well adapted to adverse environmental conditions, which may occur at this site, and which may include both seasonal inundation in the winter and substantial drought conditions during the hot and windy summers. At the request of the City, proposed new trees have been placed further away from Willow Pass Road than the existing trees to prevent their encroachment into the roadway. Proposed trees have been set back from 18 to 25 feet (as measured from the Willow Pass Road westbound lane pavement striping on the north side). The distance of existing California pepper trees from the roadside edge varies from 10 to about 18 feet. The proposed trees would be planted on the outside of the existing Mirant Delta fence. Even though they would be set back further from Willow Pass Road than the existing trees, they would still be planted on Mirant Delta's property, because the fence is set from 10' to 15' back from the actual property line (which is closer to Willow Pass Road then the fence). The areas on the Mirant Delta side of the fence do not appear appropriate for planting because in some cases there is an existing road, in other cases there are wetlands located in the area (Photo 4).

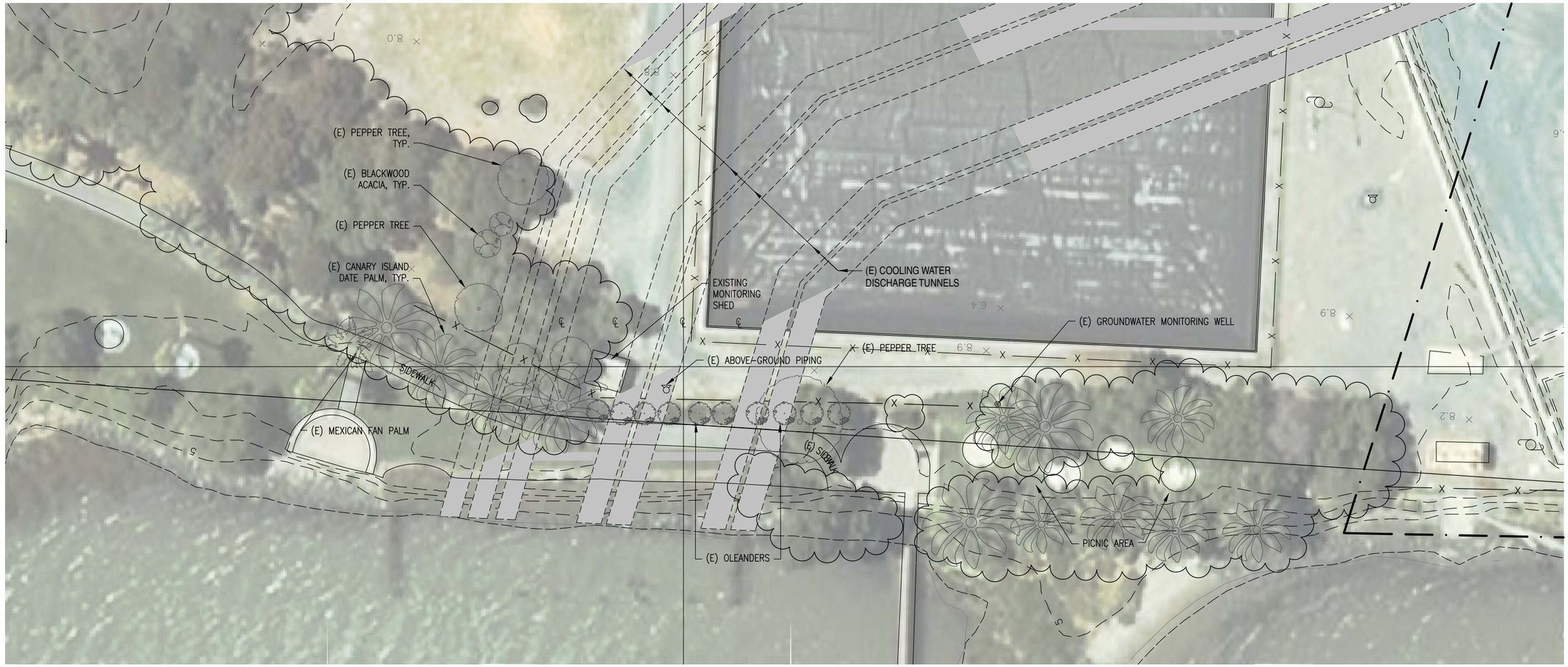
Photo 4: View of the north side of Willow Pass Road with a 4-foot-high 4-strand barbed-wire fence in the roadside swale and a wetland canal beyond fence.

Because of the drought resistance of Raywood ash trees and the proximity to the water table, the proposed trees could survive with manual or truck irrigation during the first year. There are no utility lines indicated on any of the drawings available at the time of this design that would interfere with the tree planting. The landscape contractor, however, would be required to contact an appropriate utility location company prior to any digging.

2. REFERENCES

MUNIER, P. 1973. Le Palmier-dattier-Techniques agricoles et productions tropicales; Maison Neuve et Larose, 217pp; Paris.

Appendix C
Existing Landscaping and Underground Tunnels at KOP 1 and Landscaping Plans for KOP 2 and KOP 6



Not for Construction

0 10 20
Scale in Feet

KOP 1: EXISTING LANDSCAPING AND UNDERGROUND TUNNELS

Willow Pass Generating Station
Mirant Willow Pass, LLC
Pittsburg, California

May 2009
28067343

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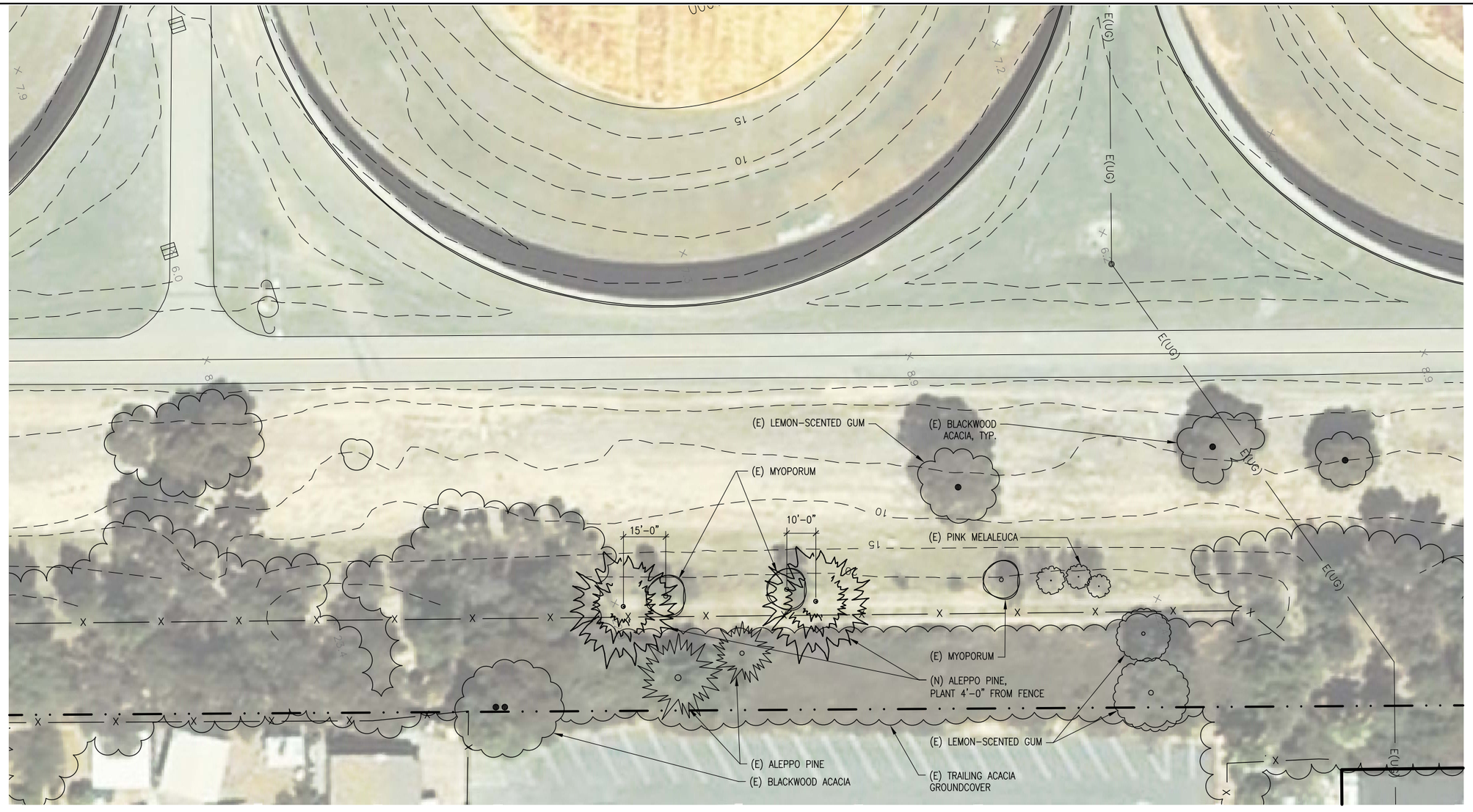
FIGURE 1

5/1/09 vsa/hk ..T:\Mirant Pittsburg-Willow Pass\Graphics\Data Requests\Landscaping\Fig 1_KOP1 existing.ai



Not for Construction

PROPOSED TREE LEGEND				
SYMBOL	LATIN NAME	COMMON NAME	CONTAINER SIZE	AMOUNT
	PINUS HALEPENSIS	ALEPPO PINE	15 GAL.	2

MAGNETIC

0 10 20
Scale in Feet

KOP 2: LANDSCAPING PLAN

Willow Pass Generating Station
Mirant Willow Pass, LLC
Pittsburg, California

May 2009
28067343

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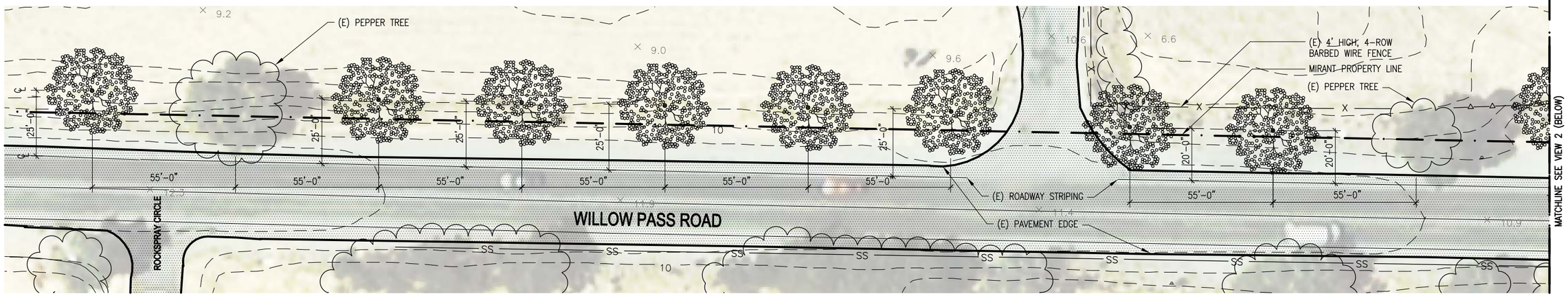
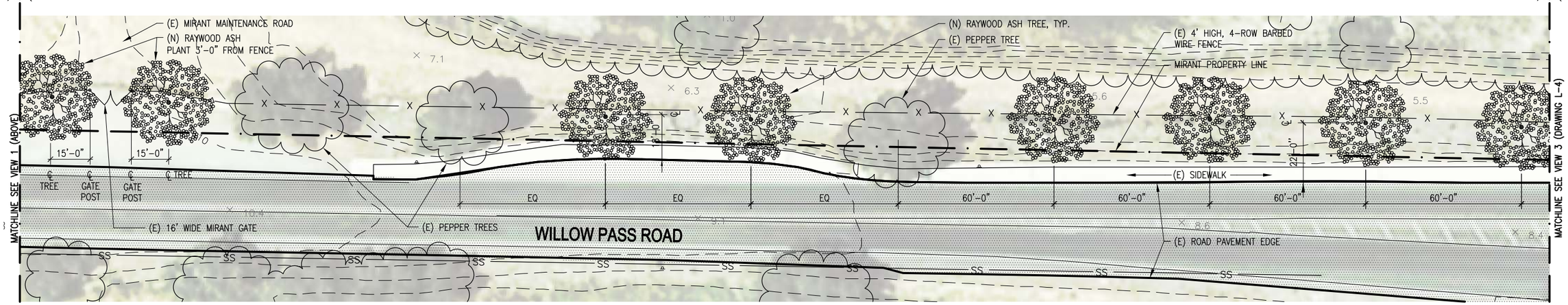
FIGURE 2

5/1/09 vsa/hk ..T:\Mirant Pittsburg-Willow Pass\Graphics\Data Requests\Landscaping\Fig 2_KOP2 landscp plan.ai



SEGMENT 1

(WILLOW PASS ROAD)



Not for Construction

SEGMENT 2

(WILLOW PASS ROAD)

Scale in Feet: 0 10 20

PROPOSED TREE LEGEND				
SYMBOL	SCIENTIFIC NAME	COMMON NAME	CONTAINER SIZE	AMOUNT
	FRAXINUS OXYCARPA	RAYWOOD ASH	15 GAL	15

KOP 6: LANDSCAPING PLAN

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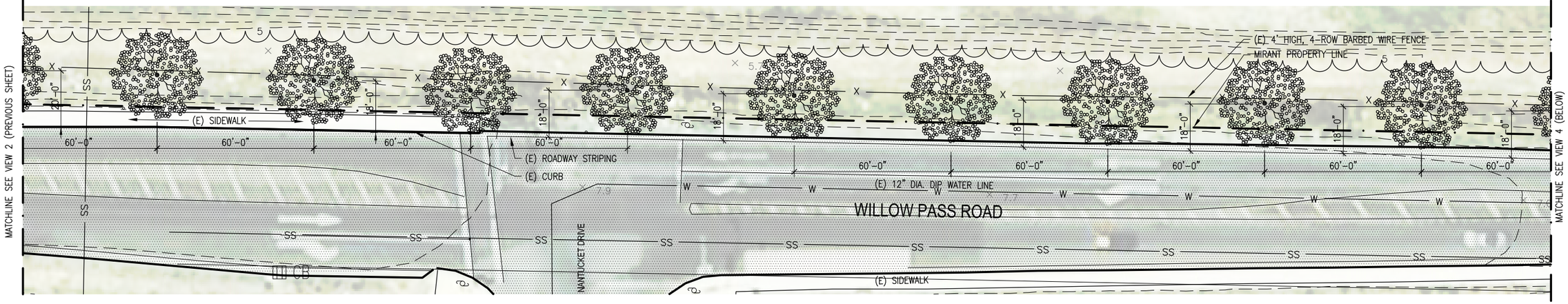
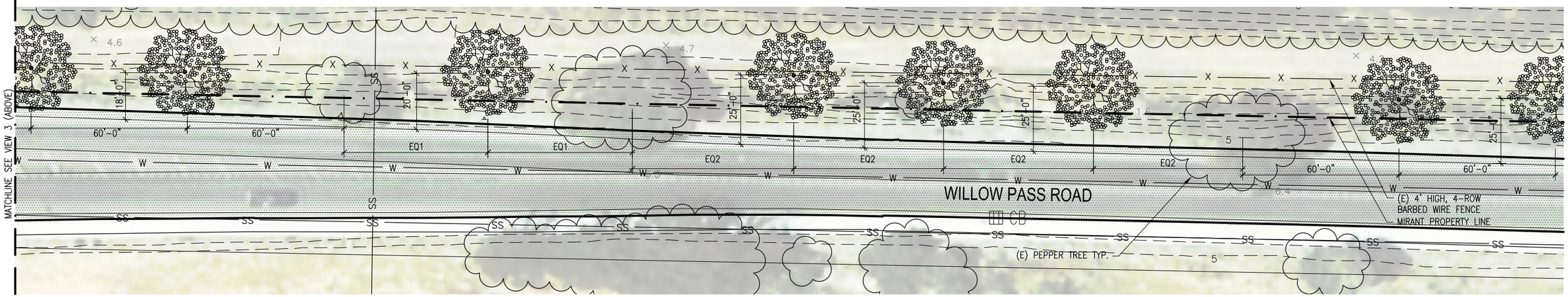
FIGURE 3A

5/1/09 vsa/hk ..T:\Mirant Pittsburg-Willow Pass\Graphics\Data Requests\Landscaping\Fig 3A_KOP6 landscaping plan.ai



SEGMENT 3

(WILLOW PASS ROAD)



SEGMENT 4

(WILLOW PASS ROAD)

Not for Construction

Scale in Feet: 0, 10, 20

PROPOSED TREE LEGEND				
SYMBOL	SCIENTIFIC NAME	COMMON NAME	CONTAINER SIZE	AMOUNT
	FRAXINUS OXYCARPA	RAYWOOD ASH	15 GAL	17

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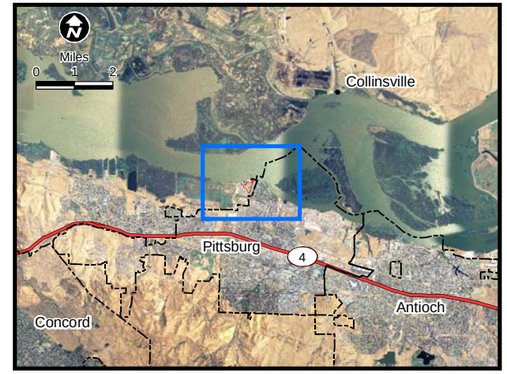
FIGURE 3B

5/1/09 vsa/hk ..T:\Mirant Pittsburg-Willow Pass\Graphics\Data Requests\Landscaping\Fig 3B_KOP6 landscaping plan.ai

Appendix D
Visual Simulations Showing: No Landscaping, With New Landscaping (Growth 5 Years After Planting), and With New Landscaping (Growth at Landscaping Maturity)



Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demolition Area
- City Boundary (Prior to Recent Annexation of PPP Site)
- State Route
- KOP Location

Photograph Information

Time of photograph:	10:17 AM
Date of photograph:	May 15, 2008
Distance to project:	0.31 mile
Weather condition:	Clear
Viewing direction:	Southwest
Latitude:	38° 2’ 32.37” N
Longitude:	121° 53’ 19.23” W

Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area shown in yellow.

KOP 1: VIEW FROM MARINA BREAKWATER SIMULATION SHOWING PROJECT (NO NEW LANDSCAPING)

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FIGURE 7.11-12

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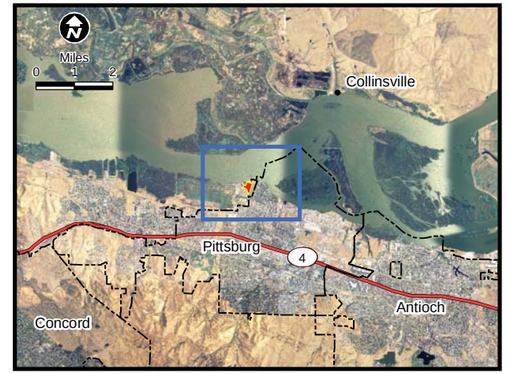

Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demolition Area
- City Boundary
- State Route
- KOP Location

Photograph Information

Time of photograph:	10:17 AM
Date of photograph:	May 15, 2008
Distance to project:	.31 miles
Weather condition:	Clear
Viewing direction:	Southwest
Latitude:	38° 2' 32.37" N
Longitude:	121° 53' 19.23" W

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area is shown in yellow.

KOP 1: VIEW FROM MARINA BREAKWATER SIMULATION SHOWING PROPOSED PROJECT WITH EXISTING PALMS MATURED 20 YEARS AND OLEANDERS NOT TRIMMED FOR HEIGHT

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FIGURE 7.11-12a

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Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demo Area
- City Boundary (Prior to Recent Annexation of PPP Site)
- State Route
- KOP Location

Photograph Information

Time of photograph:	10:04 AM
Date of photograph:	May 15, 2008
Distance to project:	0.16 mile
Weather condition:	Clear
Viewing direction:	West
Latitude:	38° 2’16.52”N
Longitude:	121°53’23.56”W

Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area shown in yellow.

KOP 2: VIEW FROM STEWART MEMORIAL METHODIST CHURCH SIMULATION SHOWING PROJECT (NO NEW LANDSCAPING)

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FIGURE 7.11-13

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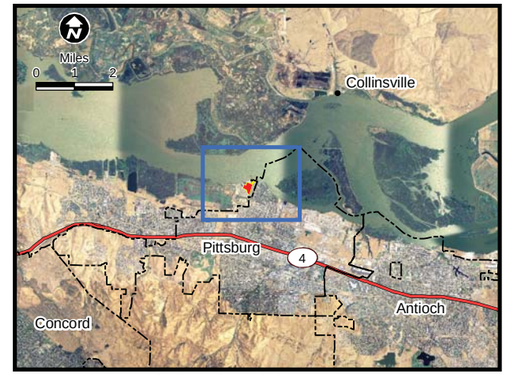

Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demo Area
- City Boundary
- State Route
- KOP Location

Photograph Information

Time of photograph:	10:04 AM
Date of photograph:	May 15, 2008
Distance to project:	.16 miles
Weather condition:	Clear
Viewing direction:	West
Latitude:	38° 2’ 16.52” N
Longitude:	121° 53’ 23.56” W

Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area is shown in yellow.

KOP 2: VIEW FROM STEWART MEMORIAL METHODIST CHURCH SIMULATION SHOWING PROPOSED PROJECT AND LANDSCAPING 5 YEARS AFTER PLANTING

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FIGURE 7.11-13a

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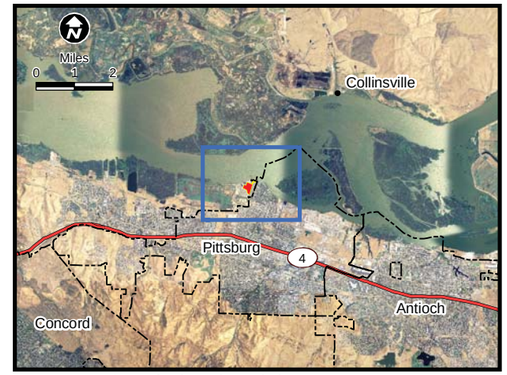

Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demo Area
- City Boundary
- State Route
- KOP Location

Photograph Information

Time of photograph:	10:04 AM
Date of photograph:	May 15, 2008
Distance to project:	.16 miles
Weather condition:	Clear
Viewing direction:	West
Latitude:	38° 2’ 16.52” N
Longitude:	121° 53’ 23.56” W

Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area is shown in yellow.

KOP 2: VIEW FROM STEWART MEMORIAL METHODIST CHURCH SIMULATION SHOWING PROPOSED PROJECT AND EXISTING AND NEW LANDSCAPING AT MATURITY (20 YEARS)

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FIGURE 7.11-13b

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Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demolition Area
- City Boundary (Prior to Recent Annexation of PPP Site)
- State Route
- KOP Location

Photograph Information

Time of photograph:	2:32 PM
Date of photograph:	May 16, 2008
Distance to project:	1.33 miles
Weather condition:	Clear
Viewing direction:	Northeast
Latitude:	38° 1 ’46.20” N
Longitude:	121° 54’ 52.45” W

Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area shown in yellow.

KOP 6: VIEW FROM WILLOW PASS ROAD SIMULATION SHOWING PROJECT (NO NEW LANDSCAPING)

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FIGURE 7.11-17

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Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demolition Area
- City Boundary
- State Route
- KOP Location

Photograph Information

Time of photograph:	2:32 PM
Date of photograph:	May 16, 2008
Distance to project:	1.33 miles
Weather condition:	Clear
Viewing direction:	Northeast
Latitude:	38° 1’ 46.20” N
Longitude:	121° 54’ 52.45” W

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Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area is shown in yellow.

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KOP 6: VIEW FROM WILLOW PASS ROAD SIMULATION SHOWING PROPOSED PROJECT AND LANDSCAPING 5 YEARS AFTER PLANTING

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Willow Pass Generating Station
Mirant Willow Pass, LLC
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FIGURE 7.11-17a

Area of enlarged map below

Viewpoint Location Maps

Legend

- Proposed Project Area
- Demolition Area
- City Boundary
- State Route
- KOP Location

Photograph Information

Time of photograph:	2:32 PM
Date of photograph:	May 16, 2008
Distance to project:	1.33 miles
Weather condition:	Clear
Viewing direction:	Northeast
Latitude:	38° 1’ 46.20” N
Longitude:	121° 54’ 52.45” W

Photograph is intended to be viewed 10 inches from viewer’s eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph’s area is shown in yellow.

KOP 6: VIEW FROM WILLOW PASS ROAD SIMULATION SHOWING PROPOSED PROJECT AND NEW LANDSCAPING AT MATURITY (20 YEARS)

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FIGURE 7.11-17b

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