

1 **4.1 AESTHETIC/VISUAL RESOURCES**

2 This Section describes the existing visual resources in the Project area and
3 assesses the visual impacts that could potentially occur as a result of the Project's
4 construction and operation. Visual or aesthetic resources are generally defined as
5 both the natural and built features of the landscape that contribute to the public's
6 experience and appreciation of the environment. Depending on the extent to which
7 a Project's presence will alter the perceived visual character and quality of the
8 environment, visual or aesthetic impacts may occur. Descriptions and analysis in
9 this Section are based on the review of proposed Project maps, site visits,
10 photographs of the Project area, and the review of appropriate planning documents.

11 **4.1.1 Environmental Setting**

12 The proposed 40-mile long pipeline lies in the Central Valley of California and
13 traverses in an east to west direction through unincorporated, predominately
14 agricultural areas of Yolo, Sutter, Sacramento, and Placer counties. The Project
15 area ranges in elevation from approximately 15 to 255 feet, and consists of a
16 relatively flat topography with the exception of the rolling hill topography of the
17 Dunnigan Hills area in Yolo County.

18 The proposed alignment of the pipeline parallels existing county and farm roads to
19 the maximum extent feasible; however, some portions will cross through agricultural
20 lands containing crops. Views of the entire Project area consist mostly of
21 agricultural lands, fields, and orchards as well as occasional trees, houses and
22 farming-related structures and implements. Immediate views of the Project area
23 west of the Sacramento River, near Line 406 and 407 West, consist mainly of row
24 crops, irrigated pasture, orchards, and grazing lands. Additionally, the pipeline
25 would cross under three large electrical transmission lines. Project areas near the
26 east end of the pipeline are currently experiencing rapid urban development and
27 population growth. This area currently consists of rice fields, non-native annual
28 grasslands and seasonal and vernal pool wetlands. Commercial and residential
29 developments are planned in the areas surrounding Line 407 East and the
30 Powerline Road Distribution Feeder Main (DFM) and are located in Placer, Sutter,
31 and Sacramento counties. The Project's eastern termination point is located at the
32 northwestern corner of Baseline Road and Fiddymont Road. Residential
33 developments have recently been built on properties to the northeast, southeast and
34 southwest of the same intersection. While the project is located within the City of

1 Roseville's sphere of influence, the adjacent developments are located within the
2 city limits.

3 Hydrology features in much of the Project area have been significantly modified for
4 agricultural uses. Existing water features mainly consist of irrigation canals, ditches,
5 and intermittent creeks. Two large water features, the Sacramento River and the
6 Knights Landing Ridge Cut, bisect the Project area. The Sacramento River runs in
7 an approximate northwest to southeast direction and forms the border between
8 eastern Yolo County and western Sutter and Sacramento counties. The river is
9 approximately 400 to 450 feet wide in the Project area. The Knights Landing Ridge
10 Cut, approximately 5 miles west of the Sacramento River, also runs in a northwest to
11 southeast direction. Neither the Sacramento River nor the Knights Landing Ridge
12 Cut can be seen from the Project area except along the tops of the levees that
13 separate them from the surrounding agricultural lands.

14 The proposed pipeline would travel through the Yolo Bypass Wildlife Area,
15 Sacramento River Ranch Conservation Bank, and the Huffman East, Huffman West,
16 Vestal, and Atkinson tracts of the Natomas Basin Habitat Conservation Plan Area.
17 Viewsheds within these areas contain rice fields, row crops, wetlands, and a small
18 area of oak woodlands.

19 Views surrounding the Project area include the Mayacamas Mountain Range, (part
20 of the Coast Range), which runs in a north-south direction in western Yolo County.
21 To the east the Sierra Nevada Mountain range, which also runs in a north-south
22 direction, can be seen in the distance from Project areas east of the Dunnigan Hills.
23 Additionally, the Sutter Buttes, a circular mountainous region of approximately 75
24 square miles, can be seen to the north from portions of the pipeline on a clear day.

25 **Scenic Routes**

26 There are no State designated scenic highways within the Project viewshed
27 (Caltrans 2008). However, the Yolo County General Plan identifies County Roads
28 (CR) 116, 16, and 117 as scenic routes and together they are identified as the
29 Sacramento Northern River Scenic Route.

30 Additionally, Sacramento County's General Plan designates Garden Highway, which
31 runs along the crown of the Sacramento River's eastern levee from the Sacramento
32 city limits north to the Sutter County line, as a protected scenic corridor.

1 4.1.2 Regulatory Setting

2 Federal

3 There are no Federal regulations related to aesthetics that are relevant to the
4 Project.

5 State

6 *California Department of Transportation*

7 The California Scenic Highway Program is intended to preserve and protect scenic
8 highway corridors from change that would diminish the aesthetic value of lands
9 adjacent to highways. A highway may be designated scenic depending upon how
10 much of the natural landscape can be seen by travelers, the scenic quality of the
11 landscape, and the extent to which development intrudes upon the traveler's
12 enjoyment of the view. A scenic corridor is the land generally adjacent to and visible
13 from the highway and is identified using a motorist's line of vision. The corridor
14 protection program seeks to encourage quality development that does not degrade
15 the scenic value of the corridor.

16 State Scenic Highways are classified as either "eligible" or "officially designated."
17 The status of a State Scenic Highway changes from eligible to officially designated
18 when the local jurisdiction adopts a scenic corridor protection program, applies to the
19 California Department of Transportation (Caltrans) for scenic highway approval, and
20 receives notification from Caltrans that the highway has been officially designated as
21 a scenic highway. When a city or county nominates an eligible scenic highway for
22 official designation, it must identify and define the scenic corridor of the highway.
23 The agency must also adopt ordinances to preserve the scenic quality of the corridor
24 or document such regulations that already exist in various portions of local codes.
25 These ordinances make up the scenic corridor protection program. Minimum
26 requirements for scenic corridor protection include:

- 27 • Regulation of land use and density of development;
- 28 • Detailed land and site planning;
- 29 • Control of outdoor advertising (including a ban on billboards);
- 30 • Careful attention to and control of earthmoving and landscaping;
- 31 • Careful attention to design and appearance of structures and equipment; and

- 1 • Undergrounding of utility lines.

2 **Local**

3 *Yolo County General Plan*

4 The following polices related to aesthetics from the Yolo County General Plan were
5 considered in this analysis:

- 6 • **Policy OS 9:** Yolo County shall plan to maintain scenic highways and
7 waterways or riverbank corridor areas of scenic value as part of its open space
8 preservation program and shall use persuasion and regulation to that end.

- 9 • **Policy OS 10:** Landscape Ordinance: Yolo County shall adopt a landscape
10 ordinance and one purpose of such ordinance will be to preserve and enhance
11 open spaces.

- 12 • **Policy CON 27:** Landscaping/Screening: Yolo County shall require assured
13 landscaping between certain uses which may otherwise conflict. Landscaping
14 shall be required along freeways, between commercial, industrial, and
15 residential uses, in public road frontage setback areas, and in parking areas.

16 *Sutter County General Plan*

17 The following polices related to aesthetics from the Sutter County General Plan were
18 considered in this analysis:

- 19 • **Policy 1.H-1:** The County shall require that new development be designed to
20 utilize vegetation for screening structures and parking areas.

- 21 • **Policy 1.H-3:** The County shall require that design and development standards
22 be applied to all industrial and commercial areas to improve the aesthetic
23 appearance of those developments.

24 *Sacramento County General Plan*

25 The following polices related to aesthetics from the Sacramento County General
26 Plan were considered in this analysis:

- 27 • **Policy PF-71:** Locate and design production and distribution facilities so as to
28 minimize visual intrusion problems in urban areas and areas of scenic and/or
29 cultural value, including the following:

- 1 - Recreation and historic areas;
- 2 - Scenic highways;
- 3 - Landscape corridors;
- 4 - State or Federal designated wild and scenic rivers;
- 5 - Visually prominent locations such as ridges, designated scenic corridors,
- 6 and open viewsheds;
- 7 - Native American sacred sites.

8 • **Policy PF-72:** Locate and design energy production and distribution facilities in
9 a manner that is compatible with surrounding land uses by employing the
10 following methods when appropriate to the site:

- 11 - Visually screen facilities with topography and existing vegetation and
12 install landscaping consistent with surrounding land use zone
13 development standards where appropriate, except where it would
14 adversely affect photovoltaic performance or interfere with power-
15 generating capability.
- 16 - Provide site-compatible landscaping.
- 17 - Minimize glare through siting, facility design, non-reflective coatings, etc.
- 18 - Site facilities in a manner to equitably distribute their visual impacts in the
19 immediate vicinity.

20 Scenic Highway Goals

- 21 1. To preserve and enhance the aesthetic quality of scenic roads without
22 encouraging unnecessary driving by personal automobile.

23 Scenic Highways Objectives

- 24 1. To take necessary steps to preserve and enhance the scenic qualities of the
25 Garden Highway.
- 26 2. To extend County scenic corridor protection to additional specific scenic
27 roads in the rural portions of the County.
- 28 3. To strengthen the provisions of scenic corridor regulations so as to further
29 protect the aesthetic values of the County's freeways and scenic roads.
- 30 4. To place a low priority on facilitation of pleasure auto driving and to
31 encourage use of other modes of transportation.

1 Scenic Highways Polices

- 2 1. To strengthen the scenic corridor provisions of the Zoning Code to require
3 design review of all signs and other structures within the corridor.
- 4 3. To fully enforce all sign controls in the scenic corridors.
- 5 4. To retain the scenic qualities of scenic corridors by avoiding unnecessary
6 widening, straightening, or major reconstruction of scenic routes.
- 7 9. To investigate the desirability of requesting the State to designate the Garden
8 Highway as an Official County Scenic Highway.
- 9 17. To investigate in coordination with other County agencies the provision of
10 distinctive planting schemes, vista points, and picnic areas along scenic
11 corridors.

12 *Placer County General Plan*

13 The following polices related to aesthetics from the Placer County General Plan
14 were considered in this analysis:

- 15 • **Policy 1.E.1:** The County shall only approve new industrial development that
16 has the following characteristics: e. Minimal adverse effects on scenic routes,
17 recreation areas, and public vistas.
- 18 • **Policy 1.K.1:** The County shall require that new development in scenic areas
19 e.g., river canyons, lake watersheds, scenic highway corridors, ridgelines, and
20 steep slopes, is planned and designed in a manner which employs design,
21 construction, and maintenance techniques that: a. Avoids locating structures
22 along ridgelines and steep slopes; b. Incorporates design and screening
23 measures to minimize the visibility of structures and graded areas; c. Maintains
24 the character and visual quality of the area.
- 25 • **Policy 1.K.2:** The County shall require that new development in scenic areas
26 be designed to utilize natural landforms and vegetation for screening
27 structures, access roads, building foundations, and cut and fill slopes.
- 28 • **Policy 1.K.4:** The County shall require that new development incorporates
29 sound soil conservation practices and minimizes land alterations. Land
30 alterations should comply with the following guidelines: a. Limit cuts and fills; b.
31 Limit grading to the smallest practical area of land; c. Limit land exposure to the
32 shortest practical amount of time; d. Replant graded areas to ensure
33 establishment of plant cover before the next rainy season; and e. Create

1 grading contours that blend with the natural contours on-site or with contours
2 on property immediately adjacent to the area of development.

3 • **Policy 1.K.5:** The County shall require that new roads, parking, and utilities be
4 designed to minimize visual impacts. Unless limited by geological or
5 engineering constraints, utilities should be installed underground and roadways
6 and parking areas should be designed to fit the natural terrain.

7 • **Policy 1.O.9:** The County shall discourage the use of outdoor lighting that
8 shines unnecessarily onto adjacent properties or into the night sky.

9 **4.1.3 Significance Criteria**

10 An adverse impact on aesthetic and visual resources is considered significant and
11 would require mitigation if the proposed Project would:

12 1. Cause inconsistency with adopted visual resource management (VRM) plans
13 or local ordinances. In those areas where no VRM plans exist, impacts were
14 determined by examining the study area for sensitive viewsheds, areas of
15 high user volumes, and areas of unique visual resources. Sensitive
16 resources were then examined on a case-by-case basis to determine the
17 level of impact. Significant visual impacts would be those that dominate the
18 viewshed from sensitive locations and change the character of the landscape
19 both in terms of physical characteristics and land uses;

20 2. Result in a substantial adverse effect on a scenic area or vista;

21 3. Substantially damage scenic resources, including, but not limited to, trees,
22 rock outcroppings, and historic buildings within a State scenic area or
23 highway;

24 4. Substantially degrade the existing visual character or quality of the site and its
25 surroundings; or

26 5. Create a new source of substantial light or glare that would adversely affect
27 day or nighttime views in the area.

28 **4.1.4 Applicant Proposed Measures**

29 No Applicant Proposed Measures (APMs) have been identified by PG&E related to
30 aesthetics and visual resources.

1 **4.1.5 Impact Analysis and Mitigation**

2 **Impact Discussion**

3 Construction of the proposed pipeline would result in temporary visual changes in
4 the landscape related to the presence of construction equipment, materials, and
5 work crews. The resulting pipeline would be buried with minimal necessary
6 aboveground facilities such as valve stations. Since a large majority of the pipeline
7 traverses rural, sparsely populated agricultural lands, visual changes would not be
8 noticeable by, or affect a substantial portion of the local population. The limited
9 population affected by views of the temporary construction and resulting stations and
10 pipeline markers are not considered sensitive viewers. Construction-related
11 activities would be visible to vehicles traveling along roads paralleling the pipeline
12 and to residences in proximity of the Project (less than 200 feet). Areas of the
13 pipeline's construction that are considered aesthetically sensitive would be traversed
14 utilizing horizontal directional drilling (HDD), in place of trenching, in order to
15 minimize effects. These areas would include, but are not limited to, Knights Landing
16 Ridge Cut, the western and eastern edges of the Yolo Bypass, and the Sacramento
17 River.

18 Upon completion of the pipeline, all areas of construction would be restored in
19 accordance with pre-arranged landowner requirements that would include, but are
20 not limited to, soil decompaction, and reseeded to current existing conditions. As
21 discussed in Section 4.4, Biological Resources, riparian areas, including trees,
22 would not be affected as HDD methods would be used in these areas. If native,
23 landmark, or heritage trees are removed or impacted during construction, they would
24 be replaced according to mitigation measures set forth in Section 4.4, Biological
25 Resources. Furthermore, APM BIO-17 Right-of-Way (ROW) Restoration Plan
26 ensures that impacts to all vegetation are minimized and adequately mitigated to the
27 satisfaction of the permitting agencies, property owners, and/or habitat managers.
28 Restoration of vegetation in agricultural fields and landscaped areas would be
29 negotiated with the landowners and would result in restoration of temporarily
30 disturbed areas to conditions similar to preconstruction conditions.

31 Permanent changes in the aesthetics of the area would include the installation of
32 aboveground line markers, cathodic protection test stations, and the construction of
33 six stations containing necessary apparatus for pipeline operation. The pipeline
34 would be marked in rural areas with aboveground line markers approximately 8 feet
35 in height, white and orange in color (Figure 4.1-1), and spaced so that one marker

1 can be seen in each direction of the pipeline from any point along the ROW. Test
2 stations would be approximately 4 feet in height and orange in color. In non-rural
3 areas, the pipeline would not be marked with aboveground markers and test stations
4 would be installed in vaults flush with the ground.

5 The six aboveground stations would include the Capay Metering Station,
6 approximately one acre in area, located at the connection of Line 400 and 401 and
7 Line 406; the Yolo Junction Pressure Limiting Station, approximately 100 feet by 127
8 feet in area, located at the connection of Line 406 and Line 172A; the Baseline Road
9 Pressure Regulating Station, approximately 84 feet by 145 feet in area, located at
10 the junction of Line 407 and Line 123 near Roseville; the Powerline Road Pressure
11 Regulating Station, approximately 40 feet by 102 feet in area, near corner of
12 Powerline Road and West Elverta at the Powerline Road DFM terminus; the
13 Powerline Road Main Line Valve with an area of approximately 100 feet by 100 feet
14 at the intersection of Riego Road and Powerline Road; and the Baseline/Brewer
15 Road Main Line Valve Station, approximately 50 feet by 50 feet in area, located west
16 of the intersection of Brewer Road and Baseline Road. Refer to Figures 2-3, 2-4, 2-
17 5, and 2-6 in Section 2.0, Project Description, for locations. All of the pressure
18 limiting and regulating stations that are readily visible by the public would be
19 enclosed by a fence with lathing of a color appropriate to the surrounding landscape.
20 An example of an aboveground station is shown in Section 2.0, Project Description,
21 Figure 2-8.

22 *Visual Resource Management Plans and Local Ordinances*

23 The Project would not cause inconsistency with adopted visual resource
24 management (VRM) plans or local ordinances. In those areas where no VRM plans
25 exist, impacts were determined by examining the study area for sensitive viewsheds,
26 areas of high user volumes, and areas of unique visual resources. Much of the
27 viewshed is sparsely populated. Areas at the eastern end of the pipeline that are
28 more densely populated do not offer views of unique visual resources. Significant
29 visual impacts would be those that dominate the viewshed from sensitive locations
30 and change the character of the landscape in terms of physical characteristics and
31 land uses. Because the pipeline would be buried and because the valve stations
32 would be located in areas that have already been disturbed for agricultural or utility
33 infrastructure uses, minimal changes would be made to the viewshed and character
34 of the landscape. Potential impacts would be less than significant (Class III).

1 *Scenic Areas or Vistas*

2 The proposed Project crosses the Sacramento River, which is designated as a
3 scenic corridor under the Scenic Highways Element of the Sacramento County
4 General Plan. However, the proposed pipeline crosses the river approximately 1
5 mile north of the Sacramento County line in Yolo and Sutter counties. The Yolo
6 County General Plan requires the maintenance of waterways and riverbank corridors
7 as areas of scenic value. The Sutter County General Plan does not include specific
8 regulations regarding the scenic values of the Sacramento River. In light of these
9 regulations, the Sacramento River and its adjoining levees should be considered
10 and protected as a scenic area.

11 At the location of the proposed pipeline, the river is flanked by levees of
12 approximately 21 to 28 feet in height on both sides. The proposed pipeline will cross
13 beneath both the levees and the river utilizing HDD technology in order to minimize
14 visual and other impacts. HDD sites would not be visible from the river. HDD sites
15 on each side of the river would be visible from the top of the levees; however,
16 because Project construction is temporary and HDD sites would be removed upon
17 completion, potential visual impacts are less than significant (Class III).

18 *Scenic Resources*

19 The Project would not substantially damage scenic resources, including, but not
20 limited to, trees, rock outcroppings, and historic buildings within a state scenic area
21 or highway. No scenic resources within state scenic areas or highways are within
22 viewable proximity to the Project.

23 There are no State designated scenic highways within the Project viewshed.
24 However, the Yolo County General Plan identifies portions of CR-116, CR-16, and
25 CR-117 as the Sacramento Northern River Scenic Route. The section of the
26 proposed pipeline that would cross CR-117 would be installed underground via
27 HDD, and therefore would not permanently alter the viewshed from any county
28 roads. Additionally, Sacramento County's General Plan designates Garden
29 Highway, which runs along the crown of the Sacramento River's eastern levee from
30 the Sacramento city limits north to the Sutter County line, as a protected scenic
31 corridor. While the proposed pipeline would cross Garden Highway, it would do so
32 approximately 1 mile north of the Sutter County line and therefore outside of the
33 designated scenic corridor.



Photograph 1: Example of Electrolysis Test Station.



Photograph 2: Example of Pipeline Marker.

Source: MBA 2008.



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Figure 4.1-1 Aboveground Pipeline Marker and Test Station

1 This portion of the pipeline would also be installed underground via HDD, and
2 therefore would not permanently alter the viewshed from the road. Potential impacts
3 would be less than significant (Class III).

4 **Impact AES-1: Degrade the Existing Visual Character or Quality of the Site and**
5 **Its Surroundings**

6 **The Project would substantially degrade the existing visual character or**
7 **quality of the site and its surroundings (Potentially Significant, Class II).**

8 Construction activities for the proposed Project would be short term, resulting in a
9 temporary, and therefore less than significant, impact to visual character. The
10 Project includes minimal aboveground facilities, such as valve and pressure limiting
11 stations, which would be located in areas that have previously been disturbed for
12 agricultural or utility infrastructure uses. Mitigation is proposed in Section 4.8,
13 Hydrology and Water Quality, to require flood-proofing of any structures as required
14 for placement within a 100-year floodplain. Both the Powerline Road Pressure
15 Regulating Station and the Powerline Road Main Line Valve structures would be
16 constructed within the 100-year floodplain and would be no more than 10 feet in
17 height without the flood-proofing. The mitigation requires that the structures be
18 raised approximately 1 foot above the 100-year storm flood profile level. While the
19 ultimate height is unknown at this time, there is a single residence approximately
20 750 feet southeast of the Powerline Road Pressure Regulating Station, and there
21 are no residences near the Powerline Road Main Line Valve. Therefore, the
22 additional height would not result in an impact to aesthetic/visual resources. Also,
23 since the viewshed surrounding the proposed pipeline has been modified for
24 agricultural and residential uses, the line markers and valve stations would not be
25 considered a significant change to the existing visual character.

26 Construction of the Project would require the removal of vegetation prior to trenching
27 activities. APM BIO-17, as provided in Section 4.4, Biological Resources,
28 specifically ensures that impacts to vegetation are minimized and adequately
29 mitigated to the satisfaction of the permitting agencies, property owners, and/or
30 habitat managers. Restoration of vegetation in agricultural fields and landscaped
31 areas would be negotiated with the landowners and would result in restoration of
32 temporarily disturbed areas to conditions similar to preconstruction conditions,
33 thereby minimizing affects to visual resources caused by the removal of vegetation.
34 Furthermore, if native trees are removed or impacted during construction they would

1 be replaced according to BIO MM-2b, BIO MM-2c, and BIO MM-2d set forth in
2 Section 4.4, Biological Resources.

3 The replanting of deep-rooted vegetation, such as orchards and vineyards, would
4 not be allowed within 15 feet on either side of the pipeline. This restriction may
5 result in a substantial impact to the visual character of an area where deep-rooted
6 vegetation currently exists. Of specific concern is the removal of vegetation that
7 currently screens rural residences along the proposed pipeline. Since landscaping
8 vegetation is often non-native it would not be protected by mitigation set forth in
9 Section 4.4, Biological Resources. Should such vegetation be removed and
10 replacement restricted, the visual character of the Project site would be significantly
11 changed as seen from the adjoining residence(s).

12 Mitigation Measures for Impact AES-1: Degrade the Existing Visual Character or
13 Quality of the Site and Its Surroundings

14 **MM AES-1 Replanting of Screening Vegetation.** If deep-rooted vegetation
15 that provides visual screening or acts as a visual resource to
16 adjoining residences is removed, it shall be replaced in accordance
17 with APM BIO-17. If the replanting of deep-rooted vegetation is not
18 allowed within the permanent easement of the proposed pipeline,
19 appropriate vegetation shall be replanted in a location outside the
20 permanent easement but in a location that would recreate the
21 visual screening and visual quality previously provided by the
22 removed vegetation.

23 Rationale for Mitigation

24 The replanting of deep-rooted vegetation in a location outside the permanent
25 easement but in a location that would recreate the visual quality provided by the
26 removed vegetation would ensure that the visual character of the Project site, as
27 seen by adjoining residences, would not be significantly impacted. Impacts would
28 be reduced to less than significant.

29 **Impact AES-2: Create New Source of Light or Glare**

30 **The Project would create a new source of substantial light or glare that would**
31 **adversely affect day or nighttime views in the area (Potentially Significant,**
32 **Class II).**

1 Lighting at the pressure limiting, pressure regulating, and metering stations
2 proposed for the Project would be minimal and would be used in emergency
3 situations only.

4 At the 12 locations along the proposed pipeline where HDD would be implemented,
5 lighting would be utilized to allow continuous, 24-hour construction operations. A
6 light plant would be stationed at the entry and exit points of each HDD section and
7 would consist of four 1,000-watt fixtures. Each site would be continuously under
8 construction between two to four weeks. While the majority of HDD sites are located
9 within rural agricultural areas, some sites may be located in proximity to rural
10 households. Continuous construction requiring the use of light plants (mobile pole
11 lighting) could result in light trespass onto nearby homes. While light trespass would
12 be temporary, the contrast to rural lighting conditions typically found along the
13 pipeline would result in a significant source of light.

14 Mitigation Measures for Impact AES-2: Create New Source of Light or Glare

15 **MM AES-2 Light Shielding and Positioning Away from Residences.** HDD
16 sites within close proximity of rural residences that would utilize
17 lighting and operate between dusk and dawn shall be required to
18 appropriately shield and direct all lighting away from nearby rural
19 residences in order to reduce light trespass to the maximum extent
20 feasible. Lighting shall be positioned and shielded to provide
21 adequate nighttime illumination for construction workers while
22 minimizing affects on nearby homes.

23 Rationale for Mitigation

24 Implementation of directional and shielded lighting would reduce light trespass onto
25 nearby residences thereby reducing the temporary intrusion of construction lighting.
26 Impacts would be reduced to less than significant.

27 **4.1.6 Impacts of Alternatives**

28 A No Project Alternative as well as twelve options have been proposed for the
29 alignment in order to minimize or eliminate environmental impacts of the proposed
30 Project and to respond to comments from nearby landowners. The twelve options,
31 labeled A through L, have been analyzed in comparison to the portion of the
32 proposed route that would be avoided as a result of any of the options. Descriptions
33 of the options can be found in Section 3.0, Alternatives and Cumulative Projects,
34 and the options are depicted in Figure 3-2A through 3-2K.

1 **No Project Alternative**

2 Under the No Project Alternative, no natural gas pipeline would be constructed. As
3 such, this alternative would cause no impacts to aesthetics and visual resources.
4 The No Project Alternative would result in no impacts compared to the proposed
5 Project.

6 **Option A**

7 Option A would shift approximately 14 miles of pipeline from the more densely
8 populated rural area around Line 406 to the sparsely populated area to the north.
9 Under Option A, the alternative Capay Metering station would be moved
10 approximately 1.5 miles north of where it would be placed under the proposed
11 Project.

12 Under both Option A and the proposed Project, the majority of the construction
13 activities would be occurring within agricultural parcels or parallel agricultural parcel
14 boundaries. Option A and the proposed Project would cross a similar distance of
15 Dunnigan Hills. In addition, both Option A and the proposed Project would parallel
16 agricultural parcel boundaries when not bisecting agricultural fields or the Dunnigan
17 Hills area. Both Option A and the proposed Project would utilize HDD to cross under
18 I-505 and I-5. There are no residences within 200 feet of the I-505 HDD crossing
19 under Option A or the proposed Project.

20 Approximately 7.25 miles of construction would bisect open areas or agricultural
21 lands under Option A, approximately 1 mile less than would occur under the
22 proposed Project. Option A would increase the total distance of Line 406
23 construction adjacent to rural roadways by approximately 1 mile, thereby increasing
24 the potential for aesthetics impacts to viewers traveling along roadways.

25 Under Option A, only one residence would be located within 200 feet of the pipeline
26 construction, whereas eight residences would be located within 200 feet of
27 construction for the proposed Project. Under Option A, the nearest residence to an
28 HDD crossing would be located approximately 490 feet away from the HDD
29 construction pit. The residence nearest the proposed Project's HDD crossing would
30 be located approximately 100 feet from the HDD construction pit. Therefore, the
31 potential construction-related aesthetics impacts on nearby residences would be
32 slightly less under Option A than for the proposed Project.

1 Aesthetic impacts of Option A would be slightly less than under the proposed
2 project. However, similar to the proposed project, impacts associated with Option A
3 would be potentially significant (Class II). Implementation of MM AES-1 and AES-2
4 would be required to reduce impacts to less than significant.

5 **Option B**

6 Option B would shift approximately 6.5 miles of pipeline from the more densely
7 populated rural area around Line 406 to the sparsely populated area to the north.
8 Under Option B, the alternative Capay Metering station would be moved
9 approximately 1.5 miles north of where it would be placed under the proposed
10 Project.

11 Under both Option B and the proposed Project, a portion of the construction
12 activities would be occurring within agricultural parcels or parallel agricultural parcel
13 boundaries. Both Option B and the proposed Project would utilize HDD to cross
14 under I-505. There are no residences within 200 feet of the I-505 HDD crossing
15 under Option B or the proposed Project.

16 Approximately 3.4 miles of construction would bisect open areas or agricultural lands
17 under Option B, approximately 2 mile less than would occur under the proposed
18 Project. Option B would increase the total distance of Line 406 construction
19 adjacent to rural roadways by approximately 3 miles, thereby increasing the potential
20 for aesthetics impacts to viewers traveling along roadways.

21 There are no residences located within 200 feet of the pipeline construction under
22 Option B or proposed Project. Therefore, the potential construction-related
23 aesthetics impacts on nearby residences would be identical under Option B as for
24 the proposed Project.

25 Aesthetic impacts of Option B would be slightly more than under the proposed
26 project. However, similar to the proposed project, impacts associated with Option B
27 would be potentially significant (Class II). Implementation of MM AES-1 would be
28 required to reduce impacts to less than significant.

29 **Option C**

30 Option C would shift approximately 1 mile of pipeline from bisecting two agricultural
31 fields to approximately 750 feet north to parallel the agricultural field boundaries.
32 Under Option C, the Capay Metering station would be remain in the same location
33 as under the proposed Project.

1 Under both Option C and the proposed Project, the construction activities would be
2 occurring exclusively in agricultural lands. Option C and the proposed Project would
3 cross under CR-85, thereby creating the potential for aesthetics impacts to viewers
4 traveling along the road. Option C does not increase the visibility of construction
5 activities to viewers along CR-85; therefore, the potential impacts to viewers remains
6 the same as for the proposed Project.

7 There are no residences located within 200 feet of the pipeline construction under
8 Option C or proposed Project. Therefore, the potential construction-related
9 aesthetics impacts on nearby residences would be identical under Option C as for
10 the proposed Project.

11 Aesthetic impacts of Option C would be similar to the proposed project. Similar to
12 the proposed project, impacts associated with Option C would be potentially
13 significant (Class II). Implementation of MM AES-1 would be required to reduce
14 impacts to less than significant.

15 **Option D**

16 Option D would shift a nearly 2-mile portion of pipeline from bisecting ten agricultural
17 fields located between CR-17 and CR-19, to the agricultural field boundaries near
18 CR-17.

19 Approximately one third of a mile of construction would be along parcel boundaries
20 of open areas or agricultural lands under Option D, approximately 1.3 mile less than
21 would occur under the proposed Project. Option D would increase the total distance
22 of Line 406 construction adjacent to rural roadways by almost 1.5 miles, thereby
23 increasing the potential for aesthetics impacts to viewers traveling along CR-17.

24 Under Option D, five residences would be located within 200 feet of the pipeline
25 construction, whereas no residences would be located within 200 feet of
26 construction for the proposed Project. Therefore, the potential construction-related
27 aesthetics impacts on nearby residences would be greater under Option D than for
28 the proposed Project.

29 Aesthetic impacts of Option D would be greater than under the proposed Project.
30 However, similar to the proposed Project, impacts associated with Option D would
31 be potentially significant (Class II). Implementation of MM AES-1 would be required
32 to reduce impacts to less than significant.

1 **Option E**

2 Option E would shift a portion of pipeline from agricultural fields located between
3 CR-17 and CR-19, to CR-19 to the south.

4 Approximately 0.5 mile of construction would be along parcel boundaries of open
5 areas or agricultural lands under Option E, approximately 1 mile less than would
6 occur under the proposed Project. Option E would increase the total distance of
7 Line 406 construction adjacent to rural roadways by more than 1.5 miles, thereby
8 increasing the potential for aesthetics impacts to viewers traveling along CR-19.

9 Under Option E, three residences would be located within 200 feet of the pipeline
10 construction, whereas no residences would be located within 200 feet of
11 construction for the proposed Project. Therefore, the potential construction-related
12 aesthetics impacts on nearby residences would be greater under Option E than for
13 the proposed Project.

14 Aesthetic impacts of Option E would be greater than under the proposed Project.
15 However, similar to the proposed Project, impacts associated with Option E would
16 be potentially significant (Class II). Implementation of MM AES-1 would be required
17 to reduce impacts to less than significant.

18 **Option F**

19 Option F would shift a north-south portion of pipeline, located northwest of the
20 intersection of CR-17 and CR-96, east by approximately 650 feet.

21 Option F would increase the total distance of Line 406 construction adjacent to rural
22 roadways by less than 0.25 mile thereby slightly increasing the potential for
23 aesthetics impacts to viewers traveling along CR-17.

24 Under Option F, no residences would be located within 200 feet of the pipeline
25 construction, whereas one residence would be located within 200 feet of
26 construction for the proposed Project. Therefore, the potential construction-related
27 aesthetics impacts on nearby residences would be less under Option F than for the
28 proposed Project.

29 Aesthetic impacts of Option F would be slightly less than under the proposed project.
30 However, similar to the proposed project, impacts associated with Option F would be
31 potentially significant (Class II). Implementation of MM AES-1 would be required to
32 reduce impacts to less than significant.

1 **Option G**

2 Option G would relocate the pipeline from the north side of a residential area and
3 bisecting an agricultural field to the south side of the residential area and located
4 along the agricultural field boundary paralleling the roadway. Under both Option G
5 and the proposed Project, the majority of the construction activities would be
6 occurring in or adjacent to agricultural lands. Option G and the proposed Project
7 would parallel a similar distance of country roads.

8 There are three residences located within 200 feet of Option G and the proposed
9 Project. Under Option G, however, the nearest residence would be located
10 approximately 10 feet closer to construction activities than under the proposed
11 Project.

12 Aesthetic impacts of Option G would be slightly more than under the proposed
13 project. However, similar to the proposed project, impacts associated with Option F
14 would be potentially significant (Class II). Implementation of MM AES-1 would be
15 required to reduce impacts to less than significant.

16 **Option H**

17 Option H would shift almost 5.5 miles of pipeline from the more densely populated
18 rural area around Line 407 West to the sparsely populated area to the south. Under
19 Option H, the Powerline Road Main Line Valve, the Powerline Road Pressure
20 Regulating Station, and the DFM alignment would remain the same as under the
21 proposed Project.

22 Under both Option H and the proposed Project, the majority of the construction
23 activities would be occurring adjacent to country roads. Option H and the proposed
24 Project would utilize HDD to cross the West Side of the Yolo Bypass, the Tule
25 Canal, the Sacramento River, and the Spangler Canal. In addition, both Option H
26 and the proposed Project would cross Garden Highway, which, according to the
27 Sacramento County General Plan, is a protected scenic corridor from the
28 Sacramento city limit north to the Sutter County line. Option H and the proposed
29 Project would cross a similar distance of agricultural lands.

30 Option H would decrease the total distance of Line 406 West construction adjacent
31 to rural roadways by approximately 0.5 mile, thereby reducing the potential for
32 aesthetics impacts to viewers traveling along roadways.

1 Under Option H, only one residence would be located within 200 feet of the pipeline
2 construction, whereas five residences would be located within 200 feet of
3 construction for the proposed Project. Under Option H, the nearest residence to an
4 HDD crossing would be located more than 2,000 feet away from the HDD
5 construction pit. The residence nearest the proposed Project's HDD crossing would
6 be located approximately 360 feet from the HDD construction pit. Therefore, the
7 potential construction-related aesthetics impacts on nearby residences would be
8 less under Option H than for the proposed Project.

9 Aesthetic impacts of Option H would be less than under the proposed project.
10 However, similar to the proposed project, impacts associated with Option A would be
11 potentially significant (Class II). Implementation of MM AES-1 would be required to
12 reduce impacts to less than significant.

13 **Option I**

14 Option I would shift approximately 1 mile of pipeline from the more densely
15 populated rural area around Line 407 East along Base Line Road to the sparsely
16 populated rural area to the north.

17 Approximately 1 mile of construction would bisect open areas or agricultural lands
18 under Option I, whereas the construction of the proposed Project would occur along
19 parcel boundaries paralleling Base Line Road. Option I would decrease the total
20 distance of Line 406 construction adjacent to rural roadways by approximately 0.5
21 mile, thereby reducing the potential for aesthetics impacts to viewers traveling along
22 Base Line Road.

23 Under Option I, four residences would be located within 200 feet of the pipeline
24 construction, whereas eight residences would be located within 200 feet of
25 construction for the proposed Project. Therefore, the potential construction-related
26 aesthetics impacts on nearby residences would be less under Option I than for the
27 proposed Project.

28 Aesthetic impacts of Option I would be less than under the proposed project.
29 However, similar to the proposed project, impacts associated with Option I would be
30 potentially significant (Class II). Implementation of MM AES-1 would be required to
31 reduce impacts to less than significant.

1 **Option J**

2 Option J would shift approximately 1 mile of pipeline from the more densely
3 populated rural area around Line 407 East along Baseline Road to the sparsely
4 populated rural area to the north.

5 More than 1 mile of construction would bisect open areas or agricultural lands under
6 Option J, whereas the construction of the proposed Project would occur along parcel
7 boundaries paralleling Base Line Road. Option J would decrease the total distance
8 of Line 406 construction adjacent to rural roadways by almost 0.25 mile, thereby
9 reducing the potential for aesthetics impacts to viewers traveling along Base Line
10 Road.

11 Under Option J, six residences would be located within 200 feet of the pipeline
12 construction, whereas eight residences would be located within 200 feet of
13 construction for the proposed Project. Therefore, the potential construction-related
14 aesthetics impacts on nearby residences would be less under Option J than for the
15 proposed Project.

16 Aesthetic impacts of Option J would be less than under the proposed project.
17 However, similar to the proposed project, impacts associated with Option J would be
18 potentially significant (Class II). Implementation of MM AES-1 would be required to
19 reduce impacts to less than significant.

20 **Option K**

21 Option K would shift approximately 0.35 mile of pipeline from Base Line Road to the
22 annual grassland to the north.

23 Under Option K, temporary construction activities would be less visible to road traffic
24 located on Base Line Road, where approximately 1,000 feet of the route would not
25 be aligned with the roadway. There are no residences within 200 feet of Option K or
26 the proposed Project. Aesthetic impacts of Option K would be less than under the
27 proposed project. However, similar to the proposed project, impacts associated with
28 Option K would be potentially significant (Class II). Implementation of MM AES-1
29 would be required to reduce impacts to less than significant.

30 **Option L**

31 Under Option L, a portion of the proposed Project adjacent to Base Line Road would
32 be constructed utilizing HDD instead of trenching. Option L would not change the

1 location of the route, but would change the construction method from trenching to
 2 HDD. As discussed in Impact AES-2, HDD construction utilizes nighttime lighting
 3 that may trespass onto nearby homes. However, there are no residences located
 4 near Option L. As such, impacts to aesthetics under Option L would be similar to the
 5 proposed route and would be potentially significant (Class II). Implementation of MM
 6 AES-1 and MM AES-2 would be required to reduce impacts to less than significant.

7 **Table 4.1-1: Comparison of Alternatives for Aesthetics and Visual Resources**

| Alternative | Comparison with Proposed Project |
|---|---|
| No Project | No Impacts |
| Option A | Slightly Fewer Impacts |
| Option B | Slightly Greater Impacts |
| Option C | Similar Impacts |
| Option D | More Impacts |
| Option E | More Impacts |
| Option F | Slightly Fewer Impacts |
| Option G | Slightly Greater Impacts |
| Option H | Fewer Impacts |
| Option I | Fewer Impacts |
| Option J | Fewer Impacts |
| Option K | Fewer Impacts |
| Option L | Similar Impacts |
| Source: Michael Brandman Associates 2009. | |

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9 **4.1.7 Cumulative Projects Impact Analysis**

10 Other projects within this Project's vicinity that would affect aesthetics include road
 11 construction within the Sutter Pointe Specific Plan, the Placer Vineyards Specific
 12 Area Plan, and the Sierra Vista Specific Plan. The concurrent construction of the
 13 aforementioned projects within the vicinity of the natural gas pipeline discussed in
 14 this document would increase the amount of visual disturbance from construction
 15 activities. However, since the natural gas pipeline would be buried upon completion
 16 and the remaining aboveground facilities would be located in areas already
 17 developed by agriculture or utility infrastructure, affects would be temporary and

1 would therefore not contribute to permanent cumulative impacts on aesthetics and
2 visual resources.

3 **4.1.8 Summary of Impacts and Mitigation Measures**

4 Table 4.1-2 presents a summary of impacts on aesthetics and visual resources and
5 the recommended mitigation measures.

6 **Table 4.1-2: Summary of Aesthetics and Visual Resources**
7 **Impacts and Mitigation Measures**

| Impact | Mitigation Measure |
|--|---|
| AES-1. Degrade the existing visual character or quality of the site and its surroundings. | AES-1. Replanting of screening vegetation. |
| AES-2. Create new source of light or glare. | AES-2. Light shielding and positioning away from residences. |
| Source: Michael Brandman Associates 2009. | |

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