River Mountains Solar

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Visual Resources

Existing Environment

The project site consists of 130 acres on a broad alluvial fan on the western slope of the River Mountains, immediately north of the River Mountains Water Treatment Facility (WTF). The project site is within the boundaries of the River Mountains WTF. Prior conceptual plans for the facility showed membrane softening demineralization activities occurring on the easterly portions of the project site; however, these activities were never initiated, and the site remains undeveloped. The site is covered with low-lying desert vegetation. Public recreational trails bound the site to the north (Burkholder Trail) and to the east (River Mountains Loop Trail). Also along the east, and to the south, are high-tension powerlines. The entire site is fenced with chainlink or a combination of chainlink with masonry pilaster.

Project Impacts

To evaluate project impacts on visual resources, photo-realistic visual simulations were prepared from Key Observation Points (KOPs) in the site vicinity. KOPs are intended to provide representative views of the site from various viewpoints in the surrounding community.

Table 1 lists each of the selected KOPs and the viewpoints they represent. KOPs are mapped in Figure 1 below.

<table>
<thead>
<tr>
<th>KOP</th>
<th>Location</th>
<th>Representative Viewpoints</th>
</tr>
</thead>
<tbody>
<tr>
<td>KOP 1</td>
<td>Equestrian Park South</td>
<td>Recreational users of Equestrian Park South</td>
</tr>
<tr>
<td>KOP 2</td>
<td>Intersection of Newport Drive and Magic Way</td>
<td>Residential areas west of Magic Way</td>
</tr>
<tr>
<td>KOP 3</td>
<td>Intersection of Venice Avenue and Magic Way</td>
<td>Residential areas west of Magic Way</td>
</tr>
<tr>
<td>KOP 4</td>
<td>Intersection of Burkholder Trail and River Mountains Loop Trail</td>
<td>Recreational users of the Burkholder and River Mountains Loop Trails</td>
</tr>
<tr>
<td>KOP 5</td>
<td>Burkholder Trail, 250 Feet East of the Intersection with Orleans Street</td>
<td>Recreational users of the Burkholder Trail, and scattered residential development.</td>
</tr>
<tr>
<td>KOP 6</td>
<td>700 Feet Southeast of Intersection of Horizon Drive and Horizon Ridge Parkway</td>
<td>Long-distance views from residential neighborhoods.</td>
</tr>
<tr>
<td>KOP 7</td>
<td>Southern Edge of Mission Hills Park</td>
<td>Long-distance views from parkland and residential neighborhoods.</td>
</tr>
<tr>
<td>KOP 8</td>
<td>Intersection of Paseo Verde Parkway and Forfar Street</td>
<td>Long-distance views from residential neighborhoods.</td>
</tr>
</tbody>
</table>

Figure 2a is the existing view from KOP 1, looking northeast from Equestrian Park South, about 1.25 miles southeast of the project site. Views from this KOP are experienced by recreational users of the park. Figure 2b is the simulated, post-development view from this location. As shown in the simulation, the distance of the project site and the relatively low height of the major project features (solar panels) would result in the facility being largely imperceptible. Only a dark band of panels would be visible in the
distance. These panels are a minor element of the landscape compared to the River Mountains in the background. Further reducing the visual impact of the project from this viewpoint are other manmade features, including powerlines and fencing, which are a more substantial and visible feature in the environment. The project’s impacts on views from this KOP would be not be significant.

Figure 3a is the existing view from KOP 2, looking east from the intersection of Newport Drive and Magic Way, about 0.6 mile southwest of the project site. Views from this KOP are experienced primarily by drivers on Magic Way, as well as from residential areas west of Magic Way. Figure 3b is the simulated, post-development view from this location. As shown in the simulation, and similar to KOP 1, the project would appear as only a dark band in the distance, of approximately the same height as existing fencing. Fencing along the site’s western edge consists of chainlink with masonry pilasters, with the pilasters being visible from this viewpoint. Natural features (River Mountains) and manmade infrastructure (powerlines) are a substantially more important elements of the viewshed, and the project would not significantly impact views from this KOP.

Figure 4a is the existing view from KOP 3, looking east from the intersection of Venice Avenue and Magic Way, about 0.5 mile west of the project site. Similar to KOP 2, views from this KOP are experienced primarily by drivers on Magic Way and from residential areas west of Magic Way. Figure 4b is the simulated, post-development view from this location. As shown in the simulation, and similar to KOPs 1 and 2, the project would appear as only a dark band in the distance, of approximately the same height as existing fencing. The project would not impede views of the River Mountains from this viewpoint, and would have a smaller visual impact than the existing high-tension powerlines.

Figure 5a is the existing view from KOP 4, looking south from the intersection of Burkholder Trail and River Mountains Loop Trail, about 200 feet north of the project site. Views from this KOP are experienced by recreational users of the two trails. Figure 5b is the simulated, post-development view from this location. It is noted the simulation presents worst-case views, with solar panels upright at their maximum height, which would be experienced only at dawn and dusk. As shown in the simulation, the project would become an important element of the viewshed from this viewpoint. The solar field would be clearly noticeable, replacing desert vegetation with industrial equipment. However, long-distance views of the Las Vegas Valley and the McCullough Range would not be significantly impacted from this viewpoint. Further reducing impacts are the existing, substantial manmade features in the viewshed, including several high-tension powerlines and a chainlink fence with barbed wire. For these reasons, the project would not result in a significant visual impact from this viewpoint.

Figure 6a is the existing view from KOP 5, looking southeast from a point 250 feet east of the intersection of Burkholder Trail and Orleans Street, about 0.6 mile west of the project site. Views from this KOP are experienced by recreational users of the Burkholder Trail, as well as scattered residences in the vicinity of the viewpoint. Figure 6b is the simulated, post-development view from this location. As shown in the simulation, the project would be a minor element of the viewshed from this viewpoint. The solar field would be visible only as a dark blue line in the distance. Additionally, the presence of existing, substantial manmade features in the viewshed, including several high-tension powerlines, notably reduces the visual impact of the project relative to existing conditions. For these reasons, the project would not result in a significant visual impact from this viewpoint.
Figure 7a is the existing view from KOP 6, looking northeast from a point 700 feet southeast of the intersection of Horizon Drive and Horizon Ridge Parkway, on the west side of Interstate 515, about 3.5 miles southwest of the project site. Views from this KOP are experienced by the urbanized, residential areas of Henderson, which are generally east of this viewpoint. Figure 7b is the simulated, post-development view from this location. As shown in the simulation, the project would be visible in the distance as a dark blue patch on the horizon, at the base of the River Mountains. The project would not significantly stand out on the horizon, as urban development in the foreground has a much greater visual impact. Additionally, the project is located only at the base of the River Mountains, and does not impede long-distance views of the foothills or upper reaches of the mountains. For these reasons, the project would not result in a significant visual impact from this viewpoint.

Figure 8a is the existing view from KOP 7, looking northeast from along the southern edge of Mission Hills Park, on San Gabriel Avenue about 300 feet east of College Drive, and 3 miles southwest of the project site. Views from this KOP are experienced by recreational users of the park, as well as lower-density residential areas to the southwest. Figure 8b is the simulated, post-development view from this location. As shown in the simulation, the project would be visible in the distance as a dark blue patch on the horizon, at the base of the River Mountains. The project would not significantly stand out on the horizon, as the facility is at approximately the same elevation as the park and intervening urban development has a much greater visual impact. Additionally, the project is located only at the base of the River Mountains, and does not impede long-distance views of the foothills or upper reaches of the mountains. For these reasons, the project would not result in a significant visual impact from this viewpoint.

Figure 9a is the existing view from KOP 8, looking east from the intersection of Paseo Verde Parkway and Forfar Street, about 5 miles west of the project site. Views from this KOP are experienced by the urbanized, residential areas of Henderson, which generally surround the viewpoint. Figure 9b is the simulated, post-development view from this location. As shown in the simulation, the project would be visible in the distance as a dark blue patch on the horizon, at the base of the River Mountains. The project would not significantly stand out on the horizon, as intervening urban development has a much greater visual impact. Additionally, the project is located only at the base of the River Mountains, and does not impede long-distance views of the foothills or upper reaches of the mountains. For these reasons, the project would not result in a significant visual impact from this viewpoint.
Figure 1. Simulation Viewpoint Locations.
Figure 2a. KOP 1 – Existing View. Looking northeast from Equestrian Park South.

Figure 2b. KOP 1 – Simulated View.
Figure 3a. KOP 2 – Existing View. Looking east from intersection of Newport Drive and Magic Way.

Figure 3b. KOP 2 – Simulated View.
Figure 4a. KOP 3 – Existing View. Looking east from intersection of Venice Avenue and Magic Way.

Figure 4b. KOP 3 – Simulated View.
Figure 5a. KOP 4 – Existing View. Looking south from intersection of Burkholder Trail and River Mountains Loop Trail.

Figure 5b. KOP 4 – Simulated View.
Figure 6a. KOP 5 – Existing View. Looking southeast from Burkholder Trail, 250 Feet East of Orleans Street Intersection.

Figure 6b. KOP 5 – Simulated View.
Figure 7a. KOP 6 – Existing View. Looking northeast from a point 700 feet southeast of the Horizon Drive and Horizon Ridge Parkway intersection (3.5 miles southwest of site).

Figure 7b. KOP 6 – Simulated View.
Figure 8a. KOP 7 – Existing View. Looking northeast from the southern edge of Mission Hills Park (3 miles southwest of site).

Figure 8b. KOP 7 – Simulated View.
Figure 9a. KOP 8 – Existing View. Looking east from intersection of Paseo Verde Parkway and Forfar Street (5 miles west of site).

Figure 9b. KOP 8 – Simulated View.