

River's End Staging Area (RESA)

15 1st Street, Seal Beach, Orange County

Permit/LCP #: 5-10-220

Analyst: Fernie Sy, South Coast District (Long Beach)

Hearing Date: October 5, 2011

Hearing Result: Approved

Applicant/Project Name: City of Seal Beach, River's End Staging Area (RESA)

Project Location: 15 1st Street, Seal Beach, Orange County, CA.

Project Status:

Construction Complete? Yes

Condition Compliance Complete? Yes

Recommend Enforcement? No.

Recommend Follow up? Yes, low priority.

Project Description:

The proposed work at the River's End Staging Area (RESA) consists primarily of landscape improvements, new/renovated sidewalks, new asphalt paving, signage, lighting, picnic bench facilities, [trash storage areas, vegetated strips,] and a series of low seat walls to block wind blown sand from reaching the RESA. Improvements to the San Gabriel River Trail consist primarily of trail resurfacing, striping, signage, fencing, landscaping and irrigation. [The San Gabriel Trail is a pedestrian and bikeway which terminates at RESA parking lot.]

Excerpted details from the staff report for the permit:

"River's End Staging Area (RESA) Improvements

In general, the proposed on-site components would consist primarily of landscaping improvements (and associated irrigation facilities), new/renovated sidewalks, new asphalt paving, signage, lighting, picnic/bench facilities, and a series of seat walls that will also block wind-blown sand from reaching the RESA. More specifically, the project would consist of the following:

...

- 3) The existing 114-space parking lot would be repaved in some areas and restriped to include 115-parking spaces, five (5) of which would be Americans with Disabilities Act (ADA) -compliant. The lot would feature three (3) primary parking aisles, each separated by vegetated drainage swales serving as a water quality feature. These swales would also include lighting facilities and landscaping;

...

In total, the proposed project would increase the amount of paved area by 7,709 square feet (for a site total of 83,730 square feet) and landscaping by 16,422 square feet (for a site total of 48,242 square feet). The proposed RESA improvements are approximately 0.61-acre larger than the existing improvements. This occurs mostly in the sandy areas on the Southeast corner of the project area, a small amount on the East side, and a very small amount on the Southwest corner. Additionally, approximately 0.23 acre of sandy beach will be paved with new sidewalk/hardscape."

Staff report

Staff report from August 25th, Item W13a, CDP 5-20-220, hearing date September 7, 2011. Staff report can be found at: <http://documents.coastal.ca.gov/reports/2011/9/W13a-9-2011.pdf>

Contacted local government representative?: Yes. David Spitz, Associate City Engineer, City of Seal Beach.

Contacted owner’s representative?: Yes, same as local government.

Table 1. Contact Log:

| DATE (2012) | PERSON | ROLE | SUBJECT | COMMENTS |
|-------------|-------------|---|---|---|
| May 5, 2012 | Fernie Sy | CCC analyst | Introduce project, provide project details and WQMP. | Development approved as a Waiver due to the merits of the WQ BMPs |
| May 4 2012 | David Spitz | City of Seal Beach, Associate City Engineer | Introduce project, provide project details and arrange for visit. | Open to meeting at the site; only recently completed. |
| May 10 2012 | David Spitz | | Site Visit | Joined at site by the City’s Stormwater consultant. |

History of Permitting

Coastal Commission approved CDP No. 5-10-220 with conditions at the hearing dated September 7, 2011.

On April 12, 1996, the Commission approved De-Minimus Waiver No. 5-96-036-[City of Seal Beach] for the conversion of a partially completed basketball court (with dimensions of 120’ x 60’, surrounded by a 4’ x 8’ curb) to a sailboard rigging area, removal of existing rubble from the site, replace it with top soil, install an irrigation system, plant sod grass, construct an 18” high curb at the South end, and install a rinse area at the South end.

WQ issues: Parking lot and service equipment storage zone runoff, loose trash from restaurant and beach-goers.

Water quality permit conditions:

During Construction conditions:

- 6. CONSTRUCTION STAGING PLAN;
- 10. CONSTRUCTION BEST MANAGEMENT PRACTICES;
- 11. LOCATION OF DEBRIS DISPOSAL SITE; and
- 12. STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

Post-Construction conditions:

Within the 115-space parking lot proposed on-site, the project would include two (2) grass-lined water quality swales that would divide the three (3) aisles of parking available to recreational users. Also, the windsurf rinse facility will be drained into a perforated PVC pipe encased in gravel. The project would also include long-term operational BMPs in compliance with National Pollutant Discharge Elimination Systems (NPDES) Waste Discharge Requirements that could include, among others:

- 1) regular plaza/sidewalk cleaning;
- 2) maintenance of trash storage areas;
- 3) regular landscape maintenance;
- 4) installation of an efficient landscape irrigation system; and
- 5) maintenance of proposed grass-lined swales.

Upon implementation of on-site Best Management Practices (BMPs) as required by the NPDES regulations, impacts in regards to long-term operations would be reduced. However, there was no information (beyond the basic size calculations) of the primary treatment control BMPs (i.e. bioswales and “porous landscape detention”). Information on the BMP designs including plant palette, soil or soil amendment types used to capture pollutants and maintenance plans for these BMPs is needed. Therefore, it is necessary to impose SPECIAL CONDITION NO. 13, which requires the applicant to submit two (2) sets of a Final Water Quality Management Plan (WQMP). The Final Water Quality Management Plan shall meet water quality goals such as use of appropriate structural and non-structural BMPs designed to treat, infiltrate, or filter the runoff from all surfaces and activities on the development site and that runoff from all roofs, parking areas, maintenance areas and driveways shall be collected and directed through a system of structural BMPs and/or gravel filter strips or other vegetated or media filter devices.

Condition 13: FINAL WATER QUALITY MANGEMENT PLAN (WQMP)

Appropriate structural and non-structural BMPs (site design, source control and treatment control) shall be designed and implemented to minimize water quality impacts to surrounding coastal waters;

- Impervious surfaces, especially directly connected impervious areas, shall be minimized, and alternative types of pervious pavement shall be used where feasible;
- Irrigation and the use of fertilizers and other landscaping chemicals shall be minimized;
- Trash, recycling and other waste containers, as necessary, shall be provided. All waste containers anywhere within the development shall be covered, watertight, and designed to resist scavenging animals.
- All runoff from the vehicle wash station shall be collected through the proposed wash rack and sand/oil separator and discharged only through the sewer system.
- Runoff from all roofs, walkways, driveway and parking areas shall be collected and directed through a system of structural BMPs including vegetated areas and/or gravel filter strips or other vegetated or media filter devices. The system of BMPs shall be designed to 1) trap sediment, particulates and other solids and 2) remove or mitigate contaminants (including trash, debris and vehicular fluids) through infiltration, filtration and/or biological uptake. The drainage system shall also be designed to convey and discharge runoff from the developed site in a non-erosive manner;
- Post-construction structural BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs;
- All BMPs shall be operated, monitored, and maintained for the life of the project and at a minimum, all structural BMPs shall be inspected, cleaned-out, and where necessary, repaired at the following minimum frequencies: (1) prior to October 15th each year; (2) during each month between October 15th and April 15th of each year and, (3) at least twice during the dry season;
- Debris and other water pollutants removed from structural BMP(s) during clean-out shall be contained and disposed of in a proper manner;

It is the permittee’s responsibility to maintain the drainage system and the associated structures and BMPs according to manufacturer’s specifications.

Water quality reports:

A Water Quality Management Plan was submitted prior to the issuance of the Coastal Development Permit, September 26, 2011, which provided further descriptions of the BMPs utilized and the infiltration and vegetated filtration mechanisms specifically designed to remove vehicular contaminants and other typical urban runoff pollutants. The WQMP accounted for the following: BMP descriptions, inspection & Maintenance Responsibilities for the BMPs, and educational materials utilized.

Site Visit: Staff: Tamara Doan Date: May 10, 2012

Observations:

Construction of upgraded parking lot area, including: associated road/ driveways; parking areas and vegetated infiltration areas; including curbs and gutters, installation of storm drain inlets (completed Spring 2012).

| BMP # | Description | Observations * | Grade */ Follow Up |
|-------|--|---|--------------------|
| 1 | All Paved areas graded to direct flows to vegetated infiltration strips, bioswales, to allow for infiltration of surface runoff from the roadways & parking areas. | All parking and driveway areas were graded so they drained to the vegetated swale areas. The drain inlets along the driveway that dropped down to the parking area were directed to vegetated areas along the sidewalk [Photo 1]. The flat parking area was divided into three columns of parking spaces, with two infiltration areas between the rows of parking [Photo 2-3]. The walkways and sidewalk areas were directed to grassed areas [Photo 4-5], and the windsurf/surfboard wash down area drained to grassed areas. [Photo 6, 8-9] | A |
| 2 | Trash containers designed to prevent scavenging and wind blown distribution. | Trash and Recycling containers installed in the redesigned parking and recreation areas were covered by incorporated aluminum covers. However, all the beach trash receptacles were plastic drums with no lids, and trash was observed in the beach areas [Photo 4-5]. | B |

Grades in relation to CCC and RWQCB requirements: A - Clearly Exceeds Reqts.; B- Clearly Meets Reqts.; C - Appears to Meet Reqts. (Need Info); D - Does Not Appear to Meet Reqts. (Need Info); F - Clearly Does Not Meet Reqts. (Consider Enforcement)

Follow up (details for follow up in the Comments Section: None required; Date by which follow up is recommended; Enforcement recommended; Other.

* Observations include Plan Review information for inaccessible areas of the project.

Discussion/Comments

Staff visited the site with the City’s representatives and reviewed the features of their project, then stayed for some time after they departed to take photographs. Construction is complete for this project. All post-construction BMPs were in-place and functioning reasonably effectively. The developed site was improved significantly. Driveways, parking and loading areas, and surrounding sidewalks and vegetated infiltration areas were all observed. The location of the vegetated areas per the plan diagrams were identified and seemed to be in good working order.

It was observed that the vegetation installed between the paved parking areas was not very successful at the time of the visit. The City's representative explained that the project Operation and Maintenance (O&M) responsibilities was currently in transition between the installation contractor and the City parks department.

The irrigation system for all the grassed areas was observed in operation during the visit, providing insight as to the functionality. It is noted that the spray irrigation for the grassed 'park' areas did come on at approximately 4:00 pm, and rotated from one area to the next, however this was after the City's representative departed. Drainage and infiltration in the grassed 'park' areas of the site was seen to be moderately functional during the visit; the paved area of the driveway and parking areas did not get wet during the visit.

A few issues with this watering regime in practice were observed: 1) this was the windiest part of the afternoon (hence the increased afternoon use of the location by windsurfers) and water seemed to overspray all of the sidewalk areas, creating excessive runoff; 2) so much water was deployed that there was standing water in the grass at the site after the rotation had moved to another sector; and 3) no irrigation was observed for the vegetation in the infiltration strips between the parking rows in the parking lot (where the vegetation was not seen to be successful).

Additionally, it was noted by the City's representative during the first part of the visit that the birds (pigeons and gulls primarily) that visited the site were damaging the grassed areas. It was observed by staff that water did not percolate/infiltrate into the grassed areas adequately; either during the board wash-down activities of visitors, or during the irrigation event. And that once enough water built up in the grass (reached saturation) then the birds would dig 'drinking pits' in the grass, where a freshwater supply was guaranteed [Photo 8-9]. The fact that this could occur was a sign that the design or operation of the 'infiltration' aspect of these areas should be reviewed. If the grass was placed on the sand with minimal soils to provide for root development to support the lawn, then one would expect excess water to infiltrate into the sand quickly, and not allow for the saturated conditions observed. It is recommended that these conditions be followed up with the land manager to resolve the quality of infiltration occurring at the site.

Follow up recommended?: Yes. As this site was newly installed, it would be good to review this site again in 1-2 years to observe success and functionality over time.

Project Status:

Construction Complete? Yes

Condition Compliance Complete? Yes

Recommend Enforcement? No.

Recommend Follow up? Yes, moderate priority; to assure irrigation issues are resolved.

River's End Staging Area Entryway & Parking Lot Photos:



Photo 1.

The newly redesigned parking lot at the RESA site provides vegetated bioswale areas for the infiltration of surface runoff. This view shows the entry driveway in the foreground, the parking lot, and the River's End Café structure at the rear of the lot. In many cases the curbs guide flows to inlets that direct any surface water flows to the bioswale infiltration areas.



Photo 2.

Any surface runoff from the driveway or areas under parked cars is directed through concrete channels to the vegetated areas for infiltration. In this view of one of the center bioswales, there is approximately 2" of mulch placed on top of 2" of grass-seeded soil, on top of the underlying sand.



Photo 3.

The parking lot rows are graded such that any surface water leaving parking rows flows to one of the center bioswales. Early signs of native grass can be seen on the left of the mulched areas. "End cap" planting areas for shrubs and trees are completely curbed and irrigated so that deeper soil profiles can be maintained for those larger plants.

River's End Staging Area Recreational and Parking Lot Areas:



Photo 4.
The far areas of the parking lot are all graded to flow onto vegetated bioswale areas for infiltration.



Photo 5.
Any surface flows from the side walk flow to the grassed infiltration areas and allow for overflows to other areas. All Trash and Recycling containers at the site have lids to limit the amount of scavaging by birds or blow out by winds.



Photo 6.
A windsurfing rigging station was installed with a hose for board wash down. This area is used by both windsurfers and surfers. As well, local birds find the freshwater a great resource.



Photo 7.
During the irrigation event observed, overspray water was blown onto the sidewalk areas and drained back into another of the vegetated areas adjacent to the parking lot.



Photo 8.

After both board wash downs by recreational users and an irrigation event the grass 'park' area became saturated and the birds dug 'drinking pits' to access the fresh water.



Photo 9.

This view shows the fact that the grass is saturated and there is standing water in the holes dug by the birds. This condition indicates that the grass area is not infiltrating all the water that it receives during a no storm event day.