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**AESTHETIC TREATMENT CONCEPT**  
**17th STREET CANAL INTERIM CLOSURE STRUCTURE**



## 17<sup>th</sup> Street Canal

### Concept Summary

#### Site Program

The 17<sup>th</sup> Street Canal Interim Pump Station site is unique among the three sites in that it is located among an eclectic group of land uses in a highly visible and accessible location. The surrounding land uses range from commercial and institutional along Old Hammond Highway, to residential and recreational along West End Blvd. The structure of the pump station itself is very conspicuous in its placement along Old Hammond Highway, causing passersby to take notice of the structure as they cross the 17<sup>th</sup> Street Canal Bridge. The location is also notable because of its siting at the border between Orleans and Jefferson Parishes, and the site acts as a natural nodal point in the circulation for the area.

Because of the site's importance as connection point for recreational circulation along the lakefront, the concept plan also includes a bicycle / jogging path linkage across the canal, restoring a connection that existed previous to Hurricane Katrina which was displaced due to the siting of the pump station, and which is consistent with municipal planning efforts. In conjunction with the restored recreational linkage, restoration of some natural habitat areas along the lake edge nearby could be accomplished by the community through a separate effort.

Removal of townhomes immediately adjacent to the east side floodwall in the Mariner's Cove development, and conversion to a landscape buffer will mitigate impacts of the pump station to that community as well as provide an opportunity for public visitation. However, this mitigation work will be done as a separate project in conjunction with the future townhouse building demolition.

#### Aesthetic Approach

Unlike the Orleans and London Avenue Canals, the 17<sup>th</sup> Street Canal pump station ties into the surrounding city fabric and does not require such heavy screening, nor is there adequate space where screen planting could be accommodated. The surrounding area has a much more urbanized character, and other elements of the adjacent lakefront present a strong maritime character so that the infrastructure of the pump station appears less conflicting with its environment. The aesthetic approach will thus focus on augmenting the existing character of the site and to exploit the naturalistic setting of the west side of the site.

One exception to this approach will be the treatment at the north side of the Mariner's Cove site, where aesthetic mitigation will focus on hiding the pump station through vegetative screening for the benefit of

the quality of life of this residential area.

#### Conceptual Plan

The conceptual landscaping plan for the 17<sup>th</sup> Street Canal Pump Station consists of three primary zones, including:

- The area on the east side of the canal, fronting on Old Hammond Highway, currently consists of a service vehicle access road along the floodwall. The road is built up precipitously against a row of condemned townhouses on the edge of the Mariner's Cove neighborhood. Although the current landscaping plan does not address the modifications to this area, another future mitigation project will involve demolition of these townhouse units along the floodwall, and landscaping should be designed to screen these areas from the adjacent residents. In addition, this area is an appropriate location to accommodate by the public. In concept, a visitor parking and overlook area could be provided without disturbance to the adjoining residential areas.
- The area along the north and west sides of the Mariner's Cove neighborhood is impacted by unobstructed views of the back of the pump station and a service yard belonging to the Corps of Engineers. The concept calls for relocating the existing pump station perimeter fence, and removing some area of existing concrete paving on the Mariner's Cove side, in order to increase the space in which screen planting can be installed.
- The area on the peninsula to the northwest of the pump station is a naturalized area controlled by the Corps of Engineers which is not currently being utilized. This area will be designed to accommodate a bicycle / jogging path link from the Jefferson Parish lakefront levee to the recreation areas of West End and Lakeshore Drive. Restoration of the pre-existing pedestrian bridge across the canal mouth from the peninsula to West End is a key component of this plan. The area on the peninsula outside of the restored path will be restored with cleanup of debris left over from emergency work by the corps and naturalized tree planting. Further habitat restoration could be accomplished by others.

#### Design Features

The 17<sup>th</sup> Street Canal Pump Station site is complex in its relationship to the surrounding areas. Unlike the other two Pump Stations, there is no clearly defined visual boundary to the site and the whole pump station complex is not visible from any one particular location; thus the site is difficult to comprehend visually and spatially. Because of this situation, the design features to be implemented in the aesthetic treatment will respond individually to the different built conditions at each of the three zones as outlined in the previous paragraphs.

Key features of the design in each of the zones will include:

- The area on the east side of the canal will at some time in the future be modified by acquisition and demolition of the townhomes immediately adjacent to the floodwall. It is recommended that upon the demolition of these structures, that the area have additional fill material applied to slope up toward the pump station site access road, and that this slope then be planted with evergreen screening hedge to benefit the Mariner's Cove neighborhood. In Addition, the provision of visitor parking and an overlook area should be considered. This work is not included in the scope of the current project.
- There is very little space around the back side of the east pump house or the adjacent fenced service yard with which to plant screening materials to benefit the Mariner's Cove properties. The fence around the yard should be moved at least 20 feet to the north, so that screen planting can be accommodated along the Mariner's Cove site. Near the corner of the pump station, a 20 foot section of the existing concrete strip of parking on the street within Mariner's Cove should be removed in order to accommodate an evergreen screen planting there.
- The area to the west and northwest of the pump station will be distinctly different from the other zones in the design. This area is visually removed from the more publicly seen sides of the pump station, and is defined primarily by its natural character and proximity to the lake. The key feature will be an asphalt bicycle path to replace the circulation path which previously existed in the location of the current pump station. There is currently no linkage between the Jefferson Parish and Orleans Parish lakefront bike paths since this link was removed, so this plan will restore that link. The remaining land on the peninsula can remain open space, and will become a community and environmental benefit if restored as a natural habitat area, with native trees and other plant materials attractive to waterfowl and fisheries. The area will be designed as a low maintenance landscape, which will be allowed to revert back to somewhat natural conditions.

#### Implementation and Maintenance Considerations

There are a number of critical steps that will need to be taken in order to implement the 17<sup>th</sup> Street Canal Design concept plan described in this report. These steps include the following:

- The area on the east side of the canal will be altered by the demolition of the existing condemned townhomes in Mariner's Cove which are to be acquired by the USACE. The space created by these demolitions will become a prime component in the aesthetic mitigation for that neighborhood. We recommend that the Corps of Engineers proceed quickly with this acquisition and demolition so that landscaping of the area may proceed. Due to the difference in timing of the two projects,

this landscaping work is not included in this project proposal at this time.

- The area along the lakeshore on the northwest side of the pump station, which includes the peninsula to be improved as a natural habitat area is currently an open area without any significant built elements or constraints that would prevent the landscape design as proposed. The area is separated from the pump station by a tall metal sheet pile wall that serves as part of the flood protection system. To the immediate west of the site is the Coast Guard facility and parking area. There is currently no one managing the site, so landscape improvements would have to be managed by the Corps of Engineers, though it is possible that an entity such as the Lake Pontchartrain Basin Foundation may be interested in lending support to this effort since the site will be utilized for a habitat area. An open area will be maintained within 30 feet of the sheet pile wall in order to maintain access to that wall by a mobile crane that will need access to the floodgates.
- The preexisting pedestrian bridge across the 17th St. Canal in this area was damaged by Hurricane Katrina, and was the subject of a FEMA worksheet, but the bridge was subsequently removed in entirety by the Corps of Engineers. FEMA and the Corps should coordinate the restoration of this bridge with Orleans and Jefferson Parish officials.

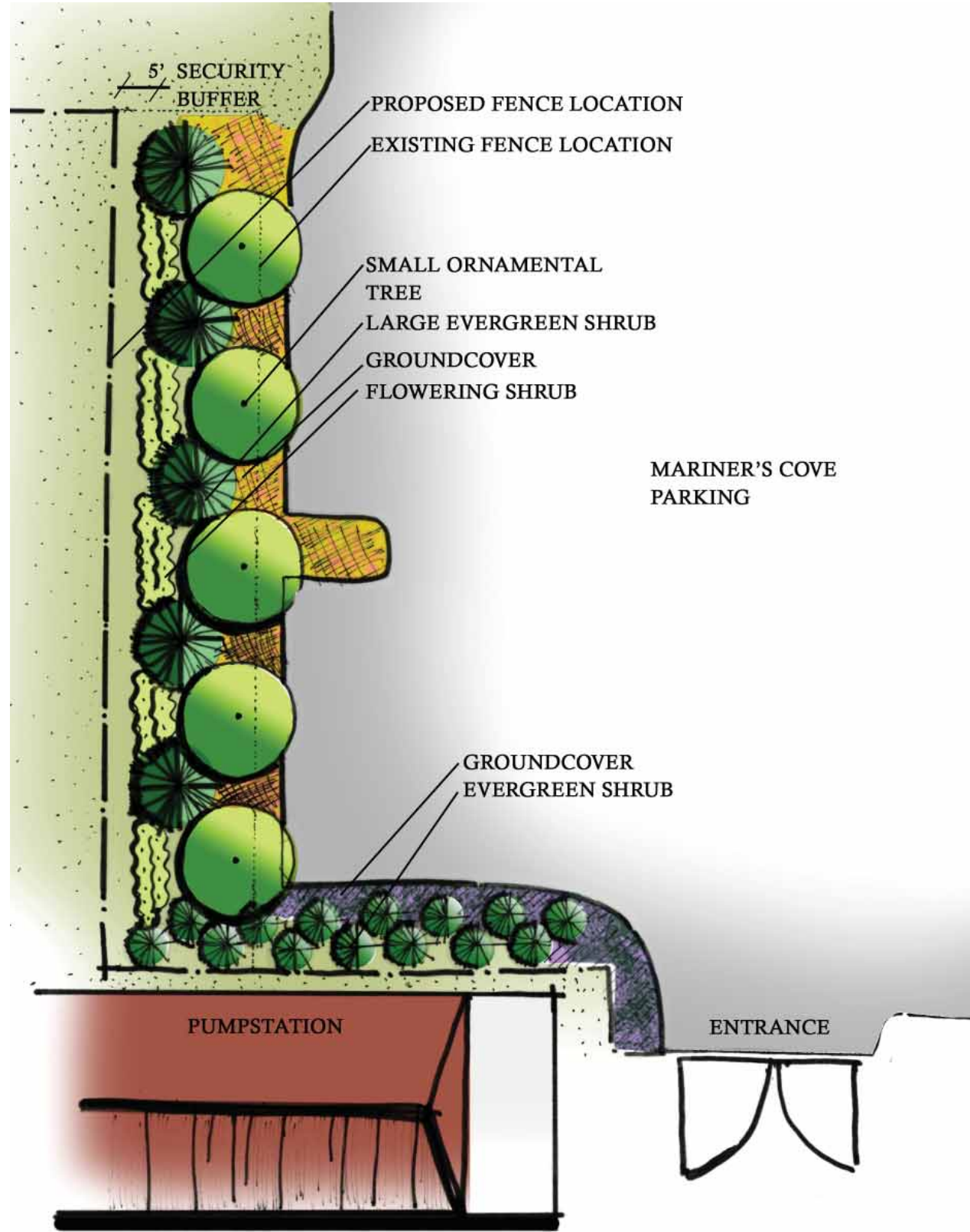
#### **Security Factors**

Two inter-related security factors affect the site design process – perimeter fencing, and standoff distances. Inventory and site analysis of the three ICS stations indicates that there has been inconsistent application of these security factors at the facilities. While this is not unexpected when one considers the variable site conditions at each site and the emergency construction schedule for all three facilities, it has complicated the design process. In general, this landscape mitigation plan includes aesthetic mitigation measures that can be accomplished without disturbing existing security fences. These concerns are further explored in USACE Operational Review section later in this document.

Another security factor that needs to be addressed at all three ICS locations is the nighttime lighting. The current all-night illumination levels greatly exceed the security requirements

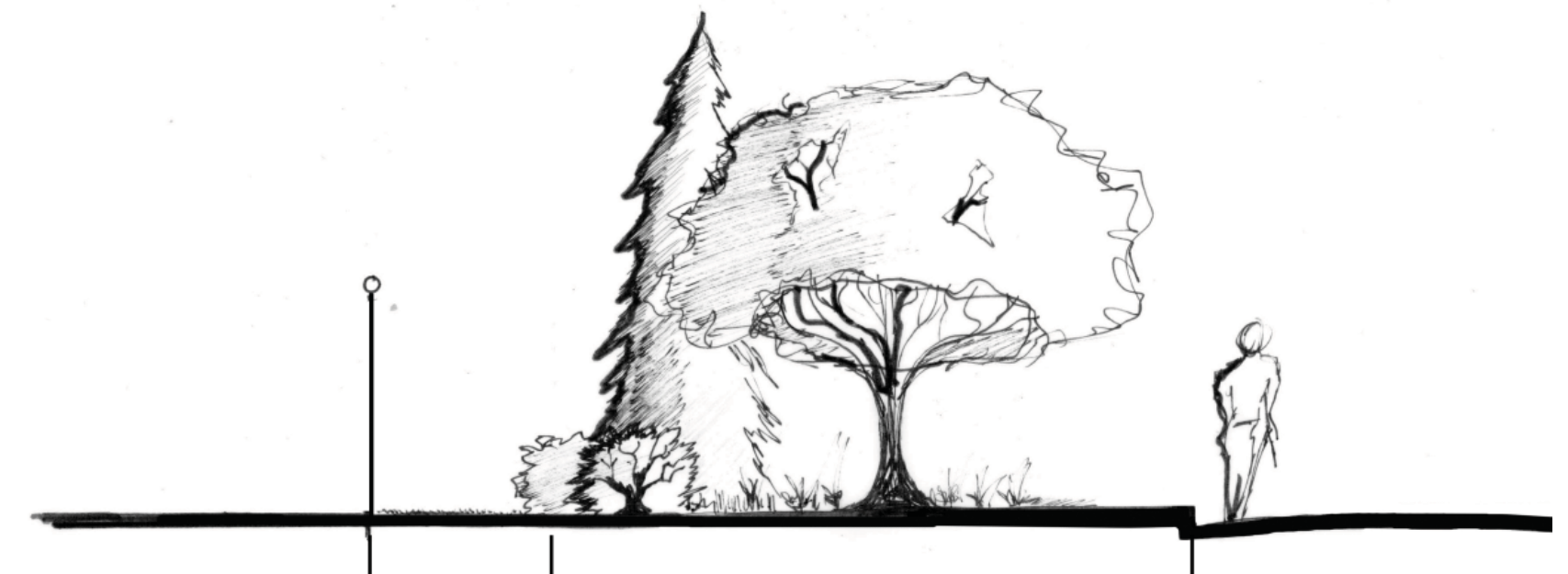
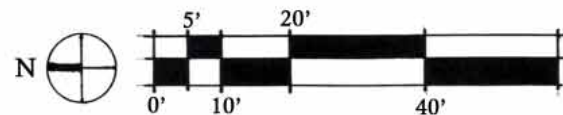
for normal conditions and are designed for the relatively rare occasions when nighttime operations are required. Per section 5-6 of Army Field Manual 3-19.30, “security lighting usually requires less intensity than working lights.” The lighting design of the 17<sup>th</sup> Street ICS station should be revised to provide for a lower level of illumination during non-operational nights. Continuous lighting should be reduced and those fixed lights that must remain on should be revised to avoid bleeding off-site. Extensive use of standby lighting that is not continuously lit should be employed. Such lights could be automatically or manually turned on when suspicious activity is suspected or when nighttime operations are required.





DETAIL PLAN

17th ST CANAL INTERIM CLOSURE



SECTION

17th ST CANAL INTERIM CLOSURE

NOT TO SCALE

Left: Detail Plan showing planting buffer between Mariners Cove and 17th St pumpstation

Below: Section showing planting area that seperates Mariners Cove and the 17th St pumpstation.





**DETAIL PLAN FOR EAST SIDE OF 17TH ST CANAL**  
**POSSIBLE FUTURE TREATMENT CONCEPT**

*Above: Plan showing possible future layout of Mariners Cove screening and 17th St overlook.*