

Warner Park Parking Lot Reconstruction

City of Madison

Narrative Description

Description of the Project

Over the course of the next 3 years, the City of Madison will be reconstructing the existing parking lot at Warner Park. The Parks Division worked with the City of Madison Engineering and Traffic Engineering Divisions on the new design following the criteria listed below:

Design Criteria-Warner Park parking Lot Reconstruction:

1. The new design should consider and incorporate the parking lot design guidelines/features in the approved Northside Neighborhood Plan where applicable
2. The new design will efficiently and economically break down into multiple phases to lessen the impact on the capital budget
3. The new design will meet all City of Madison parking lot requirements
4. Every attempt should be made to keep the same asphalt footprint yet minimize loss of parking stalls or if possible, increase the number of parking stalls.
5. The new design will attempt to lessen the impact of storm water runoff on the existing wetlands in Warner Park
6. The new design will keep people from using the park as a cut through from Sherman Ave. to Northport Dr.
7. The new design will incorporate better pedestrian access from each parking bay to facilities that are serviced by the parking lot
8. The new design will incorporate pedestrian/bike access through and/or adjacent to the parking lot and connecting to the existing pedestrian/bike path systems throughout the park.
9. The new design will attempt to lessen the large parking lot “feel” by breaking up the large lot into smaller lots and incorporating residential street design standards to the entrance road.

The old layout was very inefficient with wider than normal drive aisles. The drive aisles were also oriented north/south requiring all inner parking lot movement to go in and out of the main drive aisle causing conflicts between cars looking for parking spots and cars leaving the facility. The new design shifts traffic flow east/west and limits access to the parking lots to 3 intersections. This should result in better traffic flow all around. By changing the orientation and incorporating “typical” aisle widths we were able to fit more parking stalls onto less pavement, allowing us to incorporate storm water ponds and much better pedestrian access throughout.

The project will be broken down into 3 phases as follows:

Phase 1 – Fall/2010

- build 2 storm water ponds
- install all new storm sewer for all 3 phases
- pulverize Bay 3 and use recycled base course from the future pond areas (they were parking lot) as base course for bay 3 of the new parking lot

The purpose of the proposed stormwater ponds is to treat stormwater runoff from the parking lot during and after reconstruction before it goes into the lagoon. The location for the proposed ponds is on the east side of the Warner Lagoons, approximately 1000 feet south of the Warner Recreation Center and is City-owned. One of the ponds is located in an existing lawn area and the other is in existing parking lot which will be removed and the granular material recycled.

Currently, the parking lots drain through storm sewer directly to the lagoons with no treatment of any kind. The storm pipe was installed sometime between 1976 and 1980. As this project is a resurfacing project with no sub-grade work it is exempt from the treatment requirements of NR-151. However, the City has chosen to treat this project as a reconstruction project under NR-151 and is therefore subject to the required 40% TSS reduction, and these ponds are the means by which that requirement will be met. The proposed ponds are located adjacent and discharge to the Warner Lagoons, which have been determined to be a water of the state.

Proposed improvements will consist of limited trees/brush clearing within the grading limits of the pond, constructing berms and excavating the ponds to the grades shown, and installation of piping and the concrete outlet structures as shown on the plans. For both ponds, inflow to the ponds will come from outfalls from the parking lot storm sewer. The primary outflow structure from the ponds discharges to a 24" pipe that discharges at essentially the same location as the existing storm sewer system.

The ponds are designed as a complete system and they have a large equalizer pipe between them to allow the full volume of the pond system to be utilized by the combined storm sewer system. The watershed draining to the ponds includes the parking area (11.5 acres) and portions of the baseball diamond and soccer areas (10 acres) for a total area of 21.5 acres with an average CN of 87. SLAMM calculations (attached) indicate that these ponds remove 4775.75 lbs/yr of TSS or a total of 64.86% of the TSS associated with this drainage area. Oil and grease control will be provided with inlet filters and polypropylene pillows.

The 10-year flood elevation on Lake Mendota is 851.00 with the summer max water level on Lake Mendota being 850.1. We have set the normal water level of the ponds at the summer max of 850.1 and as the water level in ponds will rise and fall significantly more quickly than the level of the lake/lagoon as a whole it can be expected that pressure flow will stop backwater from the lake from entering the ponds during periods of normal lake levels. However, the City does not control the lake levels and there have been periods of extended high-water on Lake Mendota during the recent past. During those events it is expected that the elevation of the lake/lagoon and pond will rise together. This type of elevation rise is the same situation that is experienced throughout the downtown/isthmus area and should not be unexpected in areas immediately adjacent to the lake.

Phase 2 – Spring/Fall/2011

- finish bay 3 in spring
- stop construction until after Rhythm and Booms and the Mallards baseball season
- in fall reconstruct the roadway and reconstruct Bay 2

Phase 3 – Spring/Fall/2012

- construct bay 5 in spring
- stop construction until after Rhythm and Booms and the Mallards baseball season
- in fall reconstruct Bay 1 and 4
- install all off parking lot asphalt bike/pedestrian paths
- finish landscaping of all islands and walkways

Start to work on Phase 1 is the first or second week of October, 2010 with completion in December. Work on the Public Works Contract for Phase 2 will begin this fall and the contract will be out for bid in January, 2011, with completion in November, 2011. Work on the Public Works Contract for Phase 3 will begin fall of 2011 and be out for bid in January of 2012. Completion of phase 3 will be November, 2012. The narratives for phase 2 and 3 will be revised/updated prior to the start to work on those phases.