



TRANSPORTATION & STREET IMPROVEMENTS PROGRAM

Project: Nicholson Drive—Segment 1 (300' South of Ben Hur Road to 400' South of Gourrier Avenue)

Green Light Program ID: L
 Project Length (feet): 8,590
 Existing Typical Section: Two-lane with shoulders
 Proposed Typical Section: Five-lane, curb and gutter

Project Overview

Nicholson Drive, Segment 1 is currently a two-lane roadway with shoulders from Ben Hur Road to Gourrier Avenue. There is a railroad and a bike lane on the west side of the roadway. The proposed typical section is a five-lane curb and gutter roadway with bike lanes on both sides and one sidewalk. The project will provide significantly improved access into and out of the LSU area and downtown Baton Rouge along with an improved connection to the proposed Brightside Lane improvement (GLP Project K).

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In association with:

PBS&J

GOTECH, Inc.

Neel-Schaffer, Inc.

Compliance Consultants, Inc.

Jones Walker, LLP

John C. Doiron
MAI Appraisal Services

Rampart Resources

SSA Consultants, LLC

ASSUMPTIONS

- Assume existing asphalt trail can be removed and replaced by a bike paths within the proposed roadway.
- Assume relocation of the railroad parallel to the project is not an option and that right of way can only be acquired on the east side and right of way costs are included. However, discussions with the Illinois Central Gulf Railroad concerning a joint use agreement to shift a portion of the roadway alignment within the existing railroad right of way, in order to minimize right of way acquisition to the east, are in progress. The right of way costs can be eliminated if a joint use agreement is reached in order to place the roadway within the railroad right of way.
- Project schedule assumes the project will have to go through the NEPA process.
- Project cost estimate assumes a pavement design of 10" Portland cement concrete pavement, 10" limestone aggregate base course, and 12" lime treated subgrade.

UTILITIES

| Possible Utilities | Existing | Adjust / Relocate |
|--------------------------------|----------|-------------------|
| Underground Electric | | |
| Overhead Electric | ● | ● |
| Overhead Electric Transmission | ● | ● |
| Water | ● | ● |
| Sanitary Sewer | ● | ● |
| Telephone | ● | ● |
| CATV | ● | ● |
| Gas Distribution | ● | ● |
| Gas HP Pipeline | ● | |

A subsurface utility investigation (SUE) should be performed, and related cost is included in the Final Engineering cost estimate.

HYDROLOGY / HYDRAULICS

- There is an existing three span bridge at Arlington Creek that will be replaced by a four-span, 76' long proposed bridge.
- Double structures including a 6' x 6' box and a 4' diameter barrel will be replaced with proposed double 8' x 8' culverts.



TRAFFIC

- Project Average Daily Traffic (ADT) for year 2030 is 29,568. The proposed project will provide a Level of Service (LOS) of C for year 2030.

SIGNALIZED INTERSECTIONS

- Existing signal at Gourrier Avenue will not require improvements.
- Based on anticipated traffic, signals will not be required at East Boyd or Ben Hur.
- Reconfiguration of signal at Jennifer Jean / Bob Petit will be required due to the five-lane proposed section along Nicholson. The proposed intersection configuration will include a left-turn lane and a through lane on eastbound Bob Petit; a single through lane on westbound Jennifer Jean; and a left-turn lane and two through lanes on both northbound and southbound Nicholson Drive.
- Reconfiguration of the existing signal at Brightside Lane / Lee Drive will be included in the Brightside Lane project (GLP Project K).

RIGHT OF WAY IMPACTS

- Existing right of way is approximately 80', based on field investigation.
- Anticipated that right of way would only be acquired on the east side, holding the existing west right of way line.
- The five-lane curb and gutter section has a 125' typical proposed right of way width, but due to the limited space through this corridor the right of way width will be 100' on this project. Approximately 20 additional feet of right of way will be acquired on the east side along the project length. There is vacant land on the east side, south of Jennifer Jean (except at the Ben Hur Road intersection).

ENVIRONMENTAL CONCERNS

- Potential wetlands should be evaluated in the areas of the three drainage crossings (minor tributaries). One acre estimated for environmental mitigation.
- Bridge stream crossing between Ben Hur Road and Brightside Lane will require a permit.
- There are two gas stations within the project limits including an old gas station at Jennifer Jean and a Circle K at Brightside.
- There are oil and gas wells on the east side of Nicholson.
- An old church lies within project limits.
- A noise study may be required, but mitigation is unlikely.

SOILS

- Project area soils are poorly drained and clayey.



COST ESTIMATE

| | | | |
|-------------------------------------|--------------------------------------|----|------------|
| Project Description: | Five-lane, curb and gutter | | |
| Project Length: | 8590 Feet (1.63 miles) | | |
| | CONSTRUCTION COST | | |
| Section 200 - | Earthwork | \$ | 920,555 |
| Section 300 - | Base and Subbase Courses | \$ | 2,466,292 |
| Section 400 - | Surface Courses | \$ | - |
| Section 500 - | Pavements | \$ | 4,856,680 |
| Section 600 - | Structures | \$ | 351,120 |
| Section 700 - | Drainage Work | \$ | 4,655,760 |
| Section 800 - | Sanitary Sewer Work | \$ | 400 |
| Section 905 - 906 | Pavement Markings & Signalization | \$ | 1,264,200 |
| Section 907 - 911 | Concrete Curbs & Sidewalks | \$ | 515,392 |
| | SUBTOTAL CONSTRUCTION COST (2006 \$) | \$ | 15,030,399 |
| MOBILIZATION | | \$ | 1,202,432 |
| | SUBTOTAL | \$ | 16,232,830 |
| CONTINGENCY & UNFORESEEN CONDITIONS | | \$ | 3,246,566 |
| | SUBTOTAL | \$ | 19,479,397 |
| | TOTAL CONSTRUCTION COST (2006 \$) | \$ | 19,479,397 |
| UTILITY RELOCATIONS | | \$ | 665,565 |
| TESTING | | \$ | 486,985 |
| LIGHTING, LANDSCAPING, SEEDING | | \$ | 779,176 |
| ENVIRONMENTAL STUDY | | \$ | 195,000 |
| ENGINEERING | | \$ | 1,947,940 |
| ENVIRONMENTAL MITIGATION | | \$ | 220,000 |
| RIGHT-OF-WAY | | \$ | 16,623,581 |
| | SUBTOTAL | \$ | 40,397,643 |
| PROGRAM & CONSTRUCTION MANAGEMENT | | \$ | 2,019,882 |
| | TOTAL PROJECT COST (2006 \$) | \$ | 42,417,525 |

Comments:

- Unit costs are assumed to include contractor overhead, profit and mark-ups
- Environmental mitigation will include environmental and protection of cultural resources
- Mobilization is expected to be 8% of construction cost
- Contingency and Unforeseen Conditions are expected to be 20% of construction cost
- Testing is expected to be 2.5% of construction cost
- Lighting, Landscaping, and Seeding is expected to be 4% of construction cost
- Note: Percent Cost is for the GLP Program Average and NOT project specific obligation
- Engineering is expected to be 10% of construction cost
- Program & Construction Management is expected to be 5% of project costs

