

Project Strategy Report



Issued: November 2016

Developed by: Town of Indian Trail Engineering Department

Dalton Pierce, Engineering Technician

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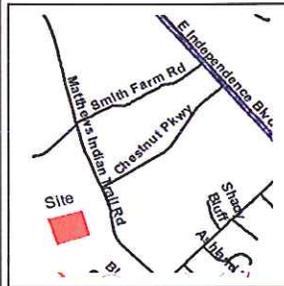
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Municipal Project: Indian Trail Town

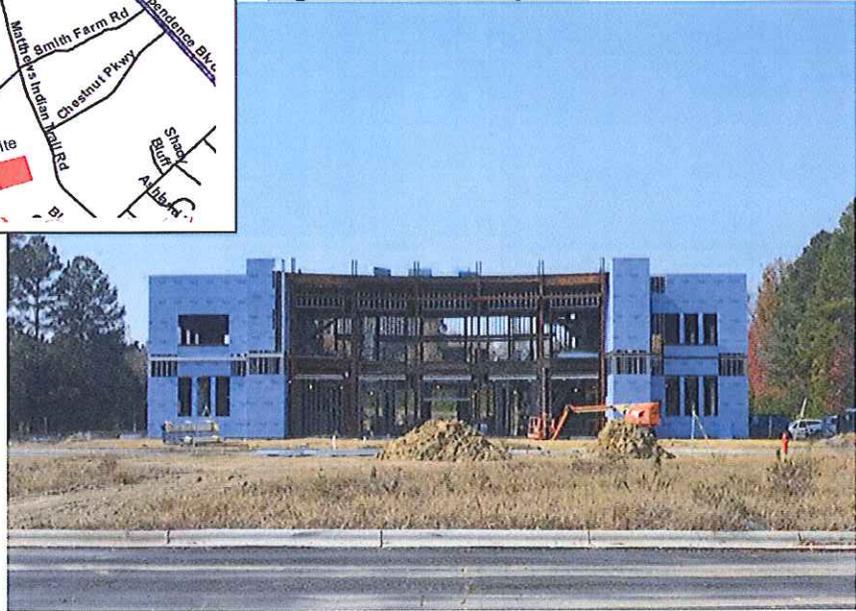


Project Information

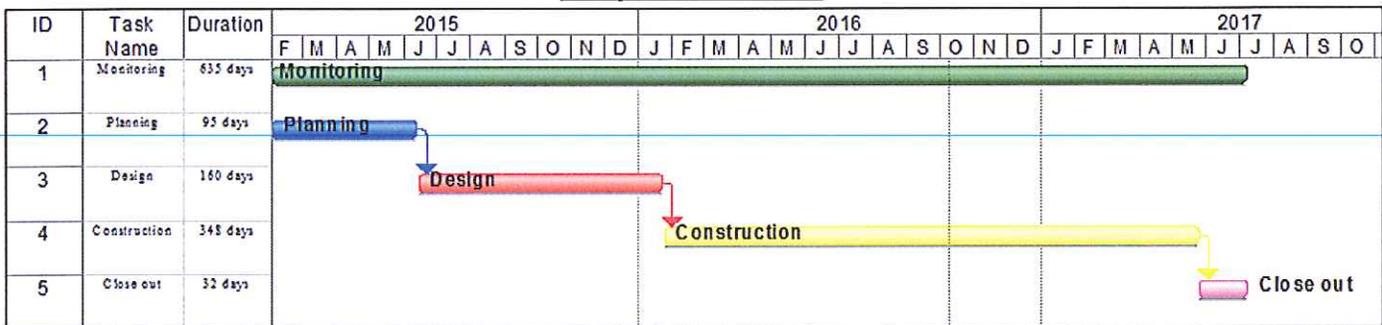
Type: Municipal Building
Budget: \$10 Million
Up-to-Date Expenditure: \$2.5 Million
Funding Source: Town
Project Manager: Town Eng. Dept.
Status: On Schedule
Project Phase: Construction
Consultants: Creech
Contractors: Edifice



Up-to-Date Progress



Project Schedule



Comments

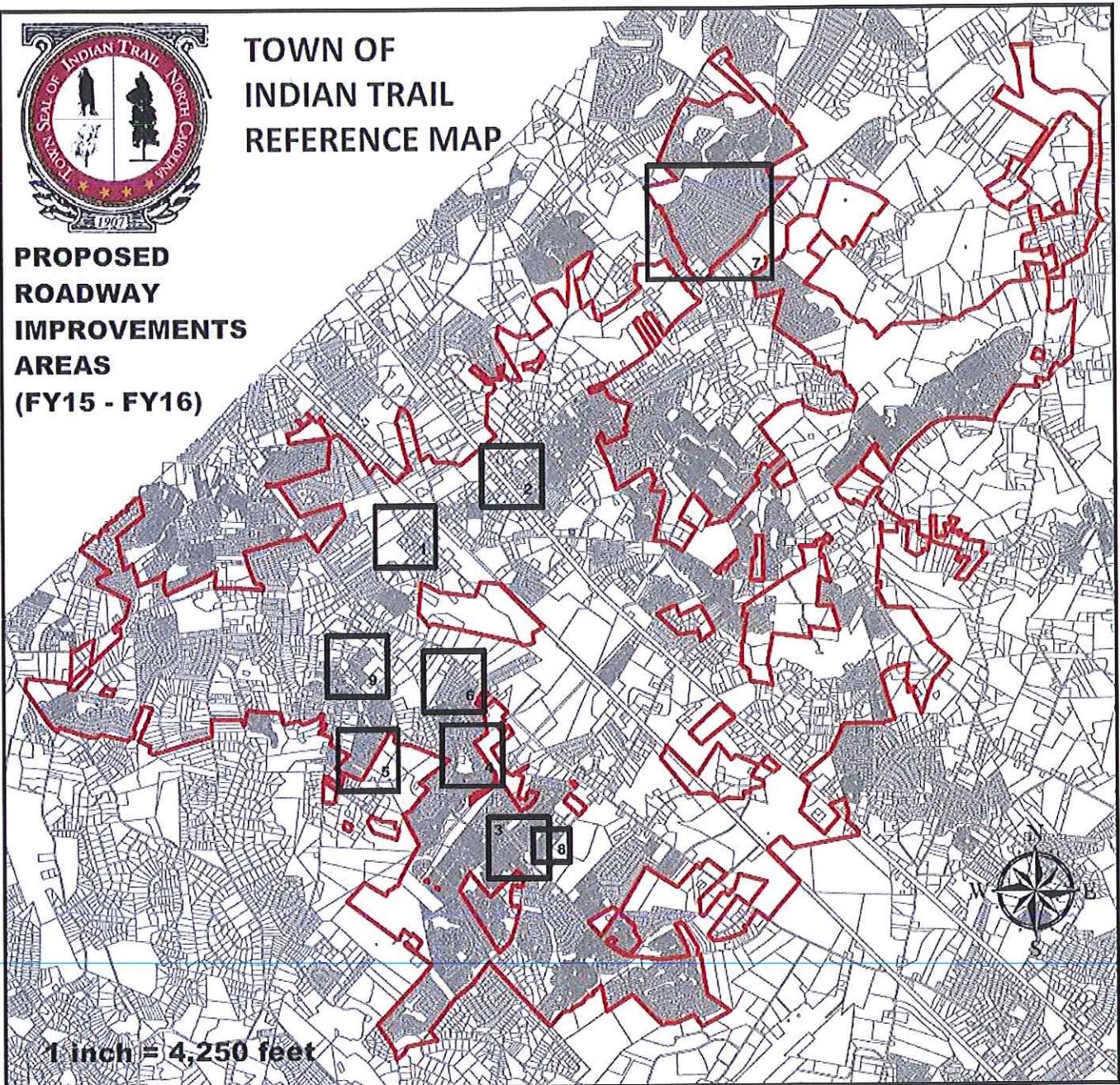
Currently the concrete flooring has been poured into place for all levels of the building. Currently installing interior and exterior wall framing and HVAC duct system. Target complete date is 7-15-2017

Municipal Project: Street Improvement Areas



TOWN OF INDIAN TRAIL REFERENCE MAP

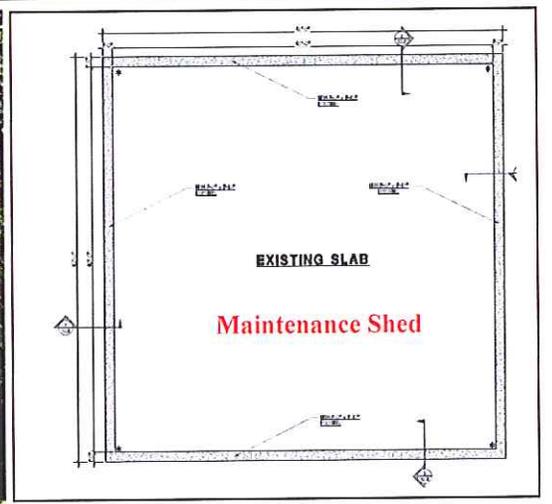
PROPOSED ROADWAY IMPROVEMENTS AREAS (FY15 - FY16)



Areas

- | | | | |
|---------------------------|---|--------------------|---------------------|
| 1) Navajo Trail, VFW Lane | 2) Independence Drive | 3) Pony Tail Drive | 4) Innesbrook Court |
| 6) Mustang Drive | 7) Wynnview Road, Lighthouse way, Fox Hunt Road, Marcus Lane, Gail Dr, Tuckaway Court | | |
| 8) Carissa Court | 9) Pioneer Lane | | |

Municipal Project: Crooked Creek Park Improvements



Summary

Crooked Creek Park improvements will include a splash pad, paved asphalt trails, and a maintenance shed.

The splash pad is being funded as part of the town's PARTF grant. The Parks & Recreation department is in the process of obtaining permits.

The 800 feet of paved asphalt trails are to be completed at the park. The project is not out for bid yet.

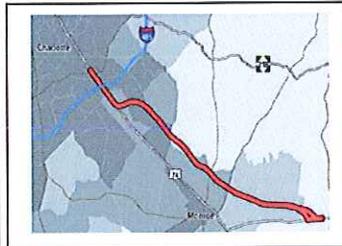
The maintenance shed will be made of metal with concrete flooring. The 41 x 41 shed is estimated to cost \$66,000 and to be completed by the end of 2016.

Transportation Project: US 74

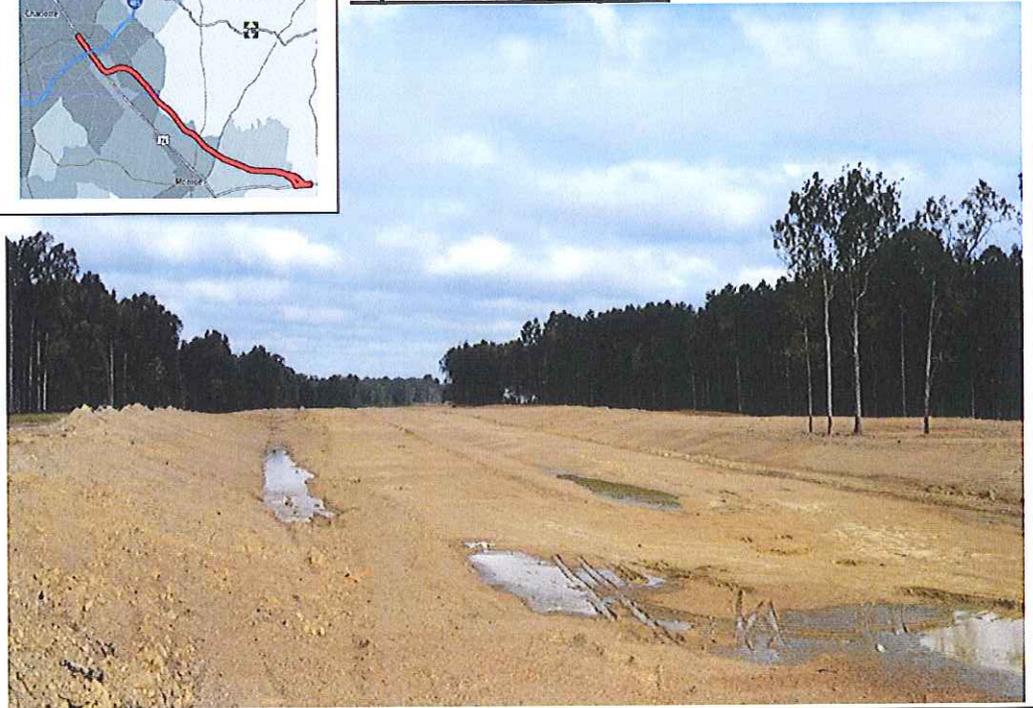


Project Information

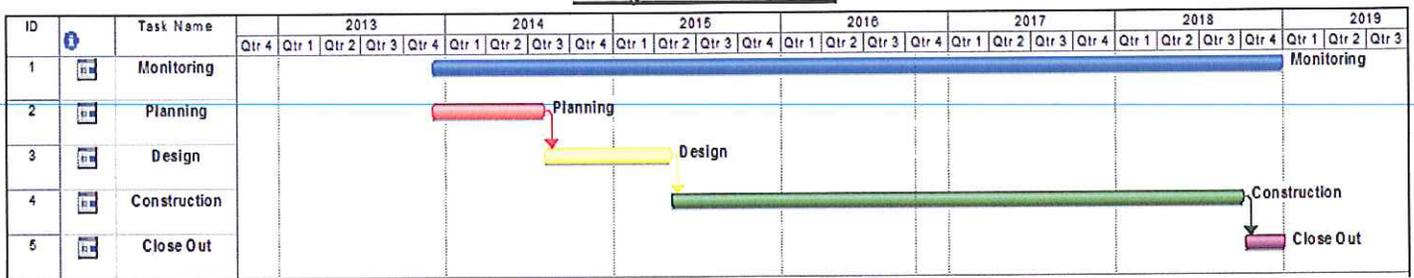
Type: State Transportation
Budget: \$1.09 Billion
Up-to-Date Expenditure:
 \$363.4 Million
Funding Source: State
Project Manager: NCDOT
Status: On Time
Project Phase: Construction
Consultants:
Contractors:



Up-to-Date Progress



Project Schedule



Comments

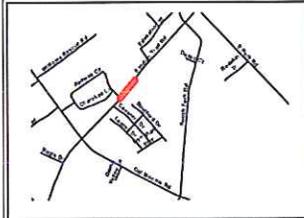
Construction of the Bypass is ongoing with continuous progress occurring daily towards completion.

Transportation Project: Indian Trail Bridge



Project Information

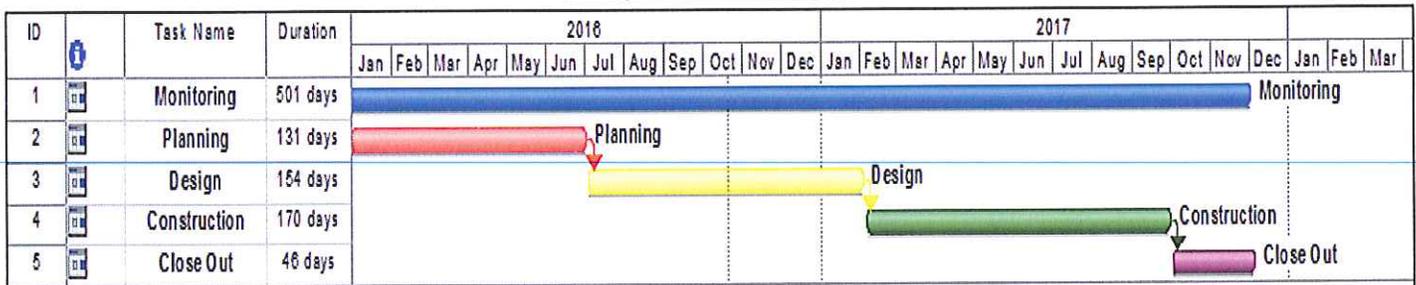
Type: Bridge
Budget: \$2.00 Million
Up-to-Date Expenditure:
 \$1.65 Million
Funding Source: State
Project Manager: NCDOT
Status: On time. Expected to open November 2016
Project Phase: Construction
Consultants: Sealand
Contractors: Sealand



Up-to-Date Progress



Project Schedule



Comments

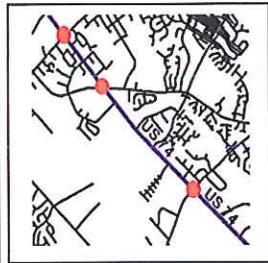
Construction is complete. Asphalt is being laid. Completion and the opening of bridge to occur mid November of 2016.



Transportation Project: US 74 Super Streets

Project Information

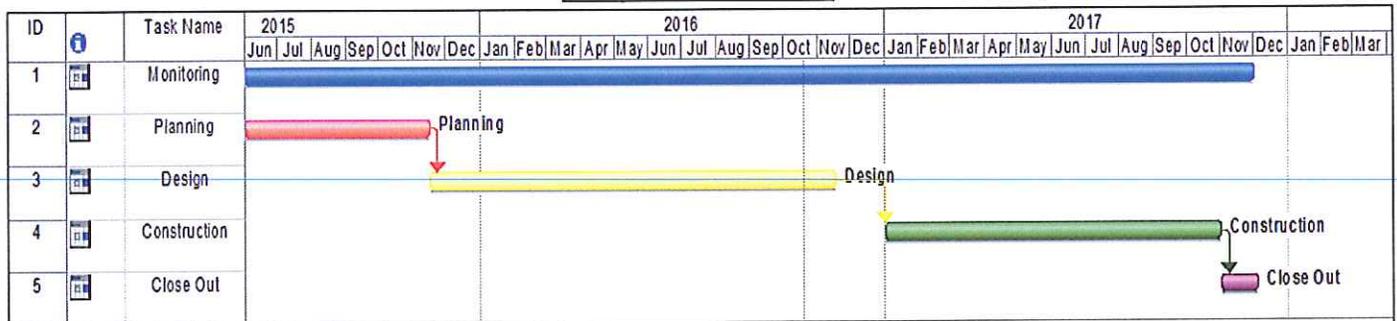
Type: Intersection
Budget: \$7.12 Million
Up-to-Date Expenditure: \$1.2 Million
Funding Source: State
Project Manager: NCDOT
Status: Delayed. Expected to open in FY17
Project Phase: Design
Consultants: Unknown
Contractors: Unknown



Up-to-Date Progress



Project Schedule



Comments

Design phase of project is still in progress in order for construction to start in FY 17. The intersections are Indian Trail-Fairview Road, Unionville-Indian Trail Road, Faith Church Road and Sardis Church/Wesley Chapel Stouts Road.

Transportation Project: Rogers Road Sidewalk



Project Information

Type: Sidewalk

Budget: \$990,000

Up-to-Date Expenditure: \$402,329.75

Funding Source: Town & State

Project Manager: Town

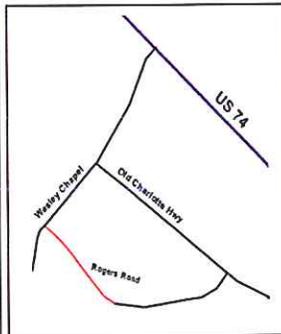
Status: Completion is delayed by one month

Project Phase: Construction

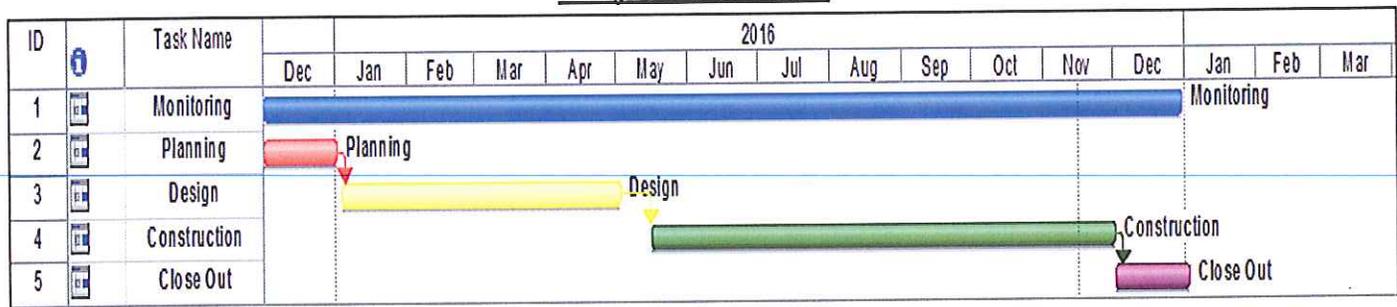
Consultants: Ally Williams Carmon & King

Contractors: W.M Warr & Son

Up-to-Date Progress



Project Schedule



Comments

Construction is eighty percent complete with continuous progress to reach completion in December 2016.

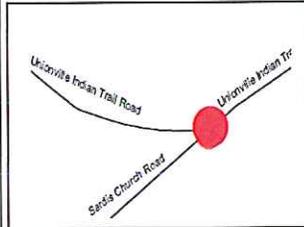
Transportation Project: Unionville and Sardis Intersection



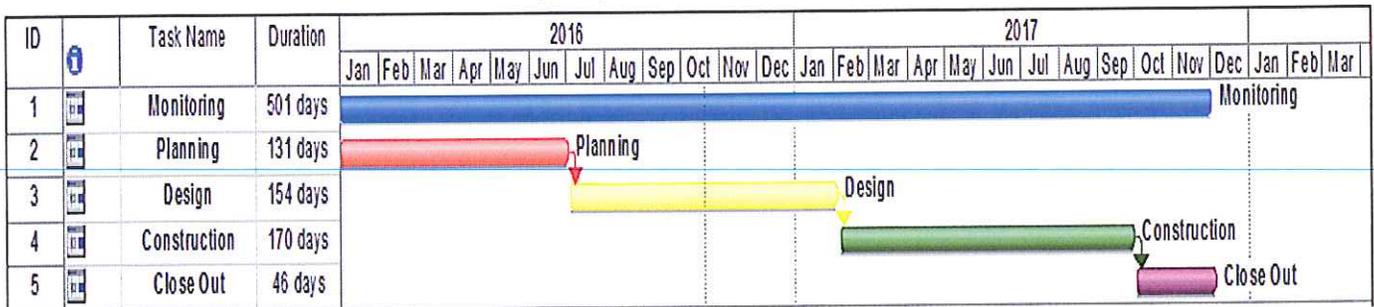
Project Information

Type: Round-a-bout
Budget: \$2.94 Million
Up-to-Date Expenditure: \$660,000
Funding Source: Town & State
Project Manager: Town
Status: On time
Project Phase: Design
Consultants: STV
Contractors: Unknown

Up-to-Date Progress



Project Schedule



Comments

Design of round-a-bout is underway for this intersection.

Transportation Project: Chestnut Parkway



Project Information

Type: Municipal Transportation

Budget: \$3.31 Million

Up-to-Date Expenditure: \$210,000

Funding Source: Town

Project Manager: Town

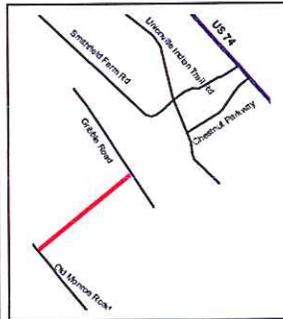
Status: On Time

Project Phase: Design

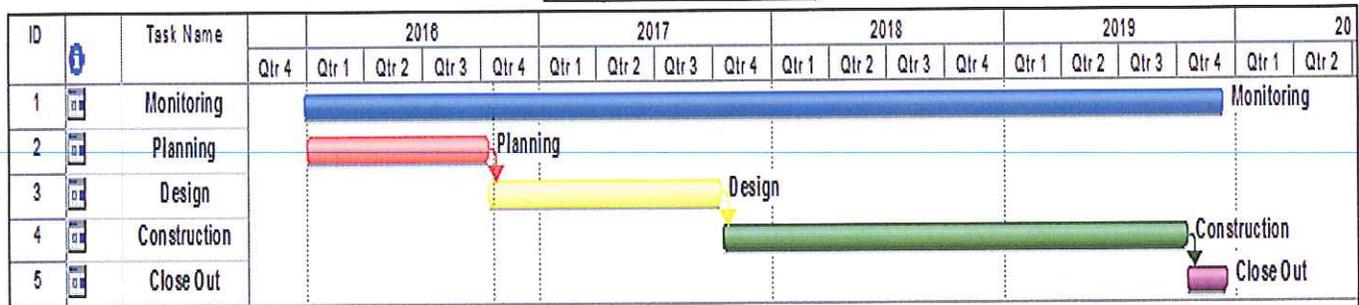
Consultants: R.S &H

Contractors: Unknown

Up-to-Date Progress



Project Schedule



Comments

Design stage is underway for the parkway.

Transportation Study: Wesley Chapel-Stouts Road



Project Background

SR 1377 (Wesley Chapel Road/Wesley Chapel - Stouts Road) is a two-lane roadway connecting US-74(W Hwy 74) and SR 1009 (Old Monroe Road / Old Charlotte Highway). It serves as an important connector from the Sun Valley area to US 74 connecting residents, businesses, commercial and industrial uses with multiple unsignalized intersections and driveway connections, as well as an at-grade railroad/roadway crossing with CSX Transportation. Four public schools (Shiloh Elementary, Sun Valley Elementary, Sun Valley Middle, and Sun Valley High Schools) are also located within the corridor. 2015 AADTs along the corridor are between 16,400 and 18,700 vehicles per day traveling along Wesley Chapel-Stouts Road.

The Town continues to emphasize a multi-modal transportation solution. Due to its variety of land uses along Wesley Chapel-Stouts Road, as well as planned and proposed land use changes and development, managing growth and development needs will be crucial to addressing transportation and land use compatibility and ensuring long-term viability of Wesley Chapel-Stouts Road.

Project Objective

The objective is to develop a multi-modal transportation plan that is complementary to the existing and future surrounding land uses while being practical and suitable for implementation by the Town of Indian Trail. This integrated transportation and land use plan should integrate existing and projected land use patterns with strategic transportation needs and improvements along Wesley Chapel-Stouts Road to account for future growth and managing access and volumes. The plan should reflect and support the development objectives of the Town to ensure that the traffic needs will be addressed as the Town continues to grow along Wesley Chapel-Stouts Road.

Desired End Product

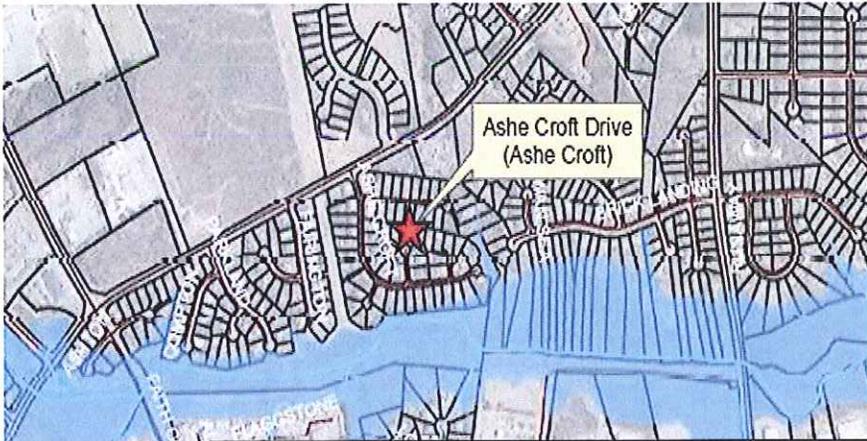
The plan will represent an overall vision for mobility and development along the corridor by using complete street strategies, and will include implementation strategies and performance criteria that support the vision as well as the 2014 Town of Indian Trail Comprehensive Plan. Specifically, the end product of this study should include the following:

- Review and summary of previous and existing transportation studies
- A clear role in a functional design requirement(s)
- An inventory of existing land use patterns, practices and regulations along Wesley Chapel-Stouts Road
- Projected future land use patterns along Wesley Chapel-Stouts Road
- Guide the Town on future land use development patterns, identifying steps and tools to educate and inform local citizens and policymakers on the importance of smart growth and land use policies
- Assess economic development along the corridor
- An access management plan for the corridor that relates to the future land use development



Stromwater Study: Ashe Croft

Vicinity Map



Looking Upstream – Between 4112 Ashe Croft Dr. and 4021 Brookforest Ln.



Looking Downstream – 4004 Brookforest Ln.



Looking Upstream – Between 4000 Beaverbrook Dr. and 4017 Brookforest Ln.

Summary

The Town of Indian Trail requested US Infrastructure of Carolina, Inc. (USI) to perform a drainage analysis for the area located in the Ashe Croft Drive Drainage Study. The project is located in the backyards of the properties west of Brookforest Lane and was identified by citizen concerns of flooding due to the upstream development currently under construction. The Union Grove Subdivision development is located north of Unionville Indian Trail Road adjacent to the Ashe Croft Subdivision. The initial planning phase of the project consisted of an analysis of the existing storm drain system to identify any deficiencies and to develop proposed improvement alternatives for the drainage system.

There were two hydrologic flow scenarios were considered for the analysis of the existing storm drainage systems. An existing land use (existing) and future land use (future) flow scenario was developed utilizing the Rational Method to derive the 2-year, 10-year, 25-year, 50-year, and 100-year storm event flows for evaluation of the existing pipe and channel systems.

The existing channel has a confined flow path as well. Private property amenities impact the functionality of the channel. Retaining walls (timber, modular block, etc.), privacy fences, decks, and swimming pools have been constructed by private property owners well into the main flow path of the channel. Many private utilities such as power, telephone, and cable also have service features located along the channel that may be impacted by any future improvements.

Stormwater Study: First Avenue



Vicinity Map



Summary

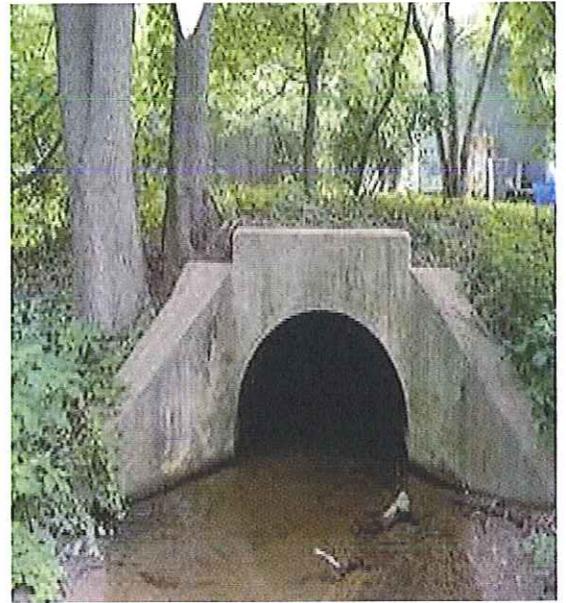
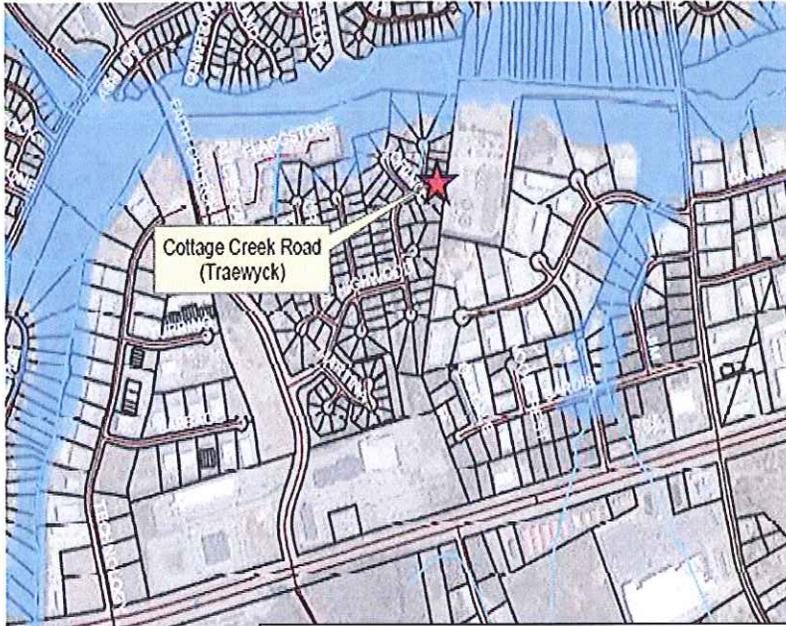
The Town of Indian Trail requested US Infrastructure of Carolina, Inc. (USI) to perform a drainage analysis for the area located in Green Meadows Study. The project is located in the backyards of the properties along First Avenue Lane and was identified by citizen concerns of flooding. The initial planning phase of the project consisted of an analysis of the existing storm drain system to identify any deficiencies and to develop proposed improvement alternatives for the drainage system.

US Infrastructure of Carolina, Inc. (USI) found that there were two hydrologic flow scenarios were considered for the analysis of the existing storm drainage systems. An existing land use (existing) and future land use (future) flow scenario was developed utilizing the Rational Method to derive the 2-year, 10-year, 25-year, 50-year, and 100-year storm event flows for evaluation of the existing pipe and channel systems.

Stormwater Study: Treawyck



Vicinity Map



Summary

USInfrastructure of Carolina, Inc. (USI) completed a drainage study for the Cottage Creek Road. The project was identified due to citizen reported flooding along the backyards of the properties between Cottage Creek Road and the Wastewater Treatment Plant to the south. Existing System Analysis found that a drainage system consists of approximately 1,000' of channel from Trego Lane to the FEMA floodplain. The Rational Method shall be utilized to develop existing landuse and future (built-out) landuse flows for five (5) storm events (2-year, 10-year, 25-year, 50-year, and 100-year). The existing channel analysis (1,000'+/-) shall be performed for existing and future flow scenarios using the 100-year FEMA floodplain tailwater conditions. This will help us to understand if the floodplain is impacting channel performance. An overflow analysis shall be performed as part of this proposal.. A table shall be prepared identifying potential house flooding locations along the channel segment. The table shall include but not limited to the address, storm event, WSEs, etc.

Section 5: Planning Studies



Section 6: Park Studies



Section 7: Completed Studies



7:1 WESLEY CHAPEL-STOUTS ROAD 19
7:2 ASHE CROFT..... 21
7:3 FIRST AVE 22
7:4 TREA WYCK 23

Section 8: Town Sites Maintenance

BUILDING/GROUNDS/PARKS MAINTENANCE (PUBLIC WORKS):

- Routine maintenance performed on Admin., Civic, Cultural Arts bldg, fields & grounds.
- Construction division received a new snow plow.
- Crooked Creek Park trails and maintenance shed are in procurement phase.

STREETS, SIDEWALKS & STORMWATER MAINTENANCE (PUBLIC WORKS):

- Still working on Town's Land Development Manual.
- Stormwater requests backlog is developed. All locations have been evaluated and prioritized.
- 1st Ave. pavement repair is complete.
- Resurfacing/Reclamation contract is on schedule.

Section 9: Development Site Inspection

CONSTRUCTION SITE INSPECTIONS:

1. NCSECU Bldg.:	Steel frame structure erection is still ongoing. Interior sidewalk begun.
2. Waste Pro Facility:	Parking lot graded and curb installed and working on interior finishing
3. Caliber Collision:	Complete
4. Outdoor Storage:	Gravel parking lot is complete. Working on main entrance.
5. Duhlab Med. Offices:	Building framing and parking lot is complete.
6. Charter School:	Temporary C/O is approved
7. Sheridan Amenity Ctr	Pool is 70% complete
8. Sun-Valley Bldgs.	Construction on Bldg. 22 is still ongoing.
9. Goodyear	Building is complete. still working on utilities.
10. First Baptist Church	Completed stormwater work. Other site work hasn't begun.
11. Austin Village Subd.	Mass grading ongoing.
12. Sardis Corner Car Wash	Footings are in and erecting started.
13. MCA Classrooms	Interior finishes still ongoing.
14. Bershire Partners	Building is erected. Working on grading of parking lot/sidewalk
15. Triple L Holdings	Permit was approved. No work has commence.
16. Bonterra Ph. III Subd.	Less than 10 homes left to be built.
17. Crismark Subd.	Homebuilding in Phase 4 & 5. Could be built out by end of the year.
18. Glen Oaks Apartment	Working on main entrance and secondary entrance/road. Interior finishes on buildings ongoing.
19. Fieldstone Farms	Housing is complete. Working with developer on street acceptance.
20. Union Grove Subdivision	Phase 1 streets are constructed. NCDOT roadway improvements 95% complete. Homebuilding has begun.
21. Deerstyne Subdivision.	Housing has been completed for a while. Developer working on street repairs in the coming weeks for street acceptance.
22. Blanchard Farms Subdivision	Homebuilding ongoing. Should be completed by the end of the year.
23. Cahill Office Buildings	Initial site inspections are complete. Developer working on punch list.
24. Valvoline	Building construction starting. Underground work is completed. Curb/Sidewalk began.