

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT**

Project Type: <u>Operational</u>	P.I. Number: _____
GDOT District: <u>7</u>	County: <u>DeKalb</u>
Federal Route Number: <u>278</u>	State Route Number: <u>10</u>
Project Number: _____	

The project will provide operational and safety improvements along US 278/SR 10, East College Avenue/North Avondale Road from Sam's Crossing to Ashton Place. Improvements will include raised medians, traffic-controlled pedestrian crossings, and sidewalks.

Submitted for approval:

Consultant Designer & Firm	Date
Local Government Sponsor	Date
State Program Delivery Engineer	Date
GDOT Project Manager	Date

Recommendation for approval:

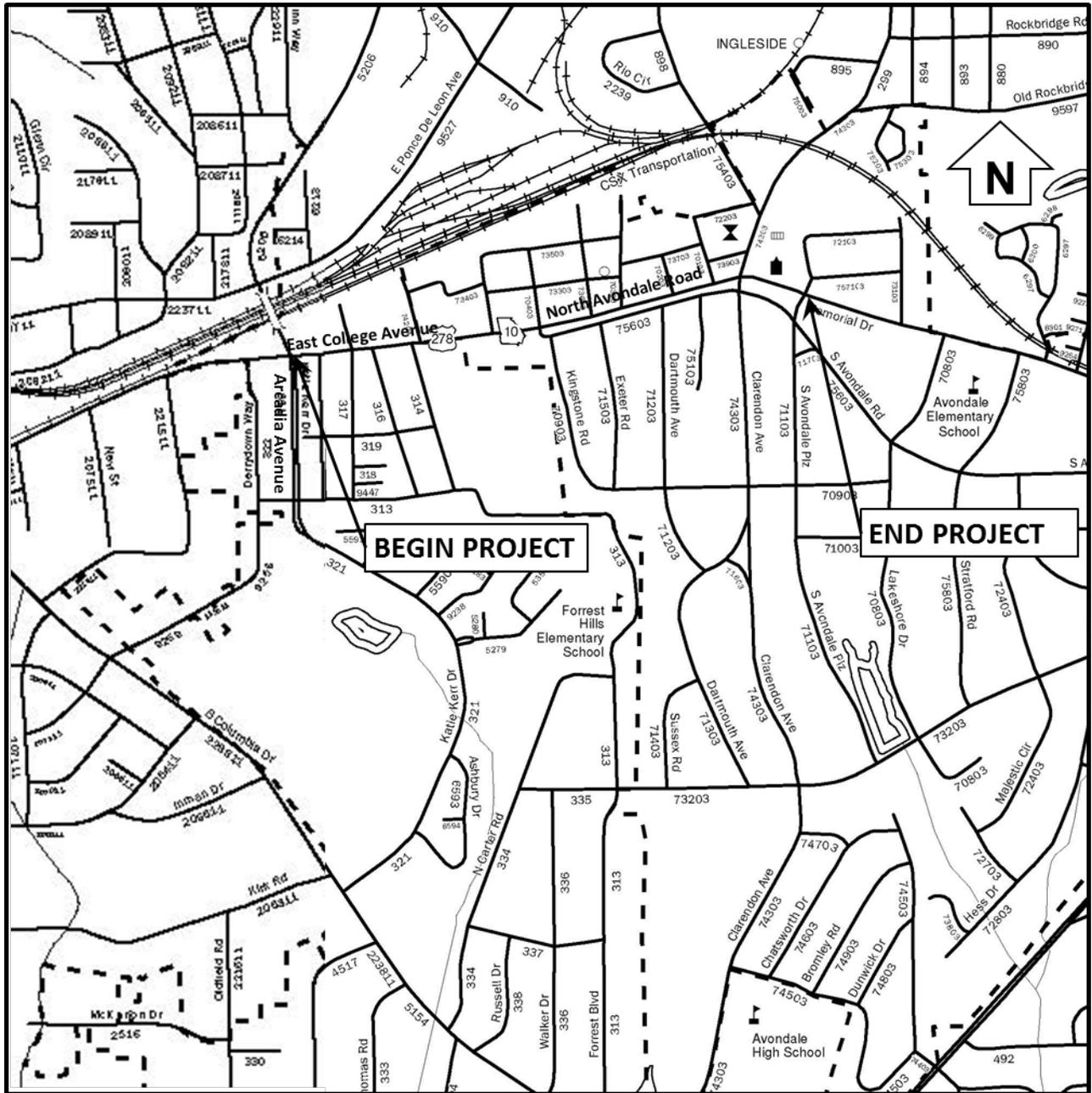
State Environmental Administrator	Date
State Traffic Engineer	Date
Project Review Engineer	Date
State Utilities Engineer	Date
District Engineer	Date

- MPO Area: This project is consistent with the MPO adopted Regional Transportation Plan (RTP)/Long Range Transportation Plan (LRTP).
- Rural Area: This project is consistent with the goals outlined in the Statewide Transportation Plan (SWTP) and/or is included in the State Transportation Improvement Program (STIP).

State Transportation Planning Administrator	Date
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County: DeKalb

PROJECT LOCATION MAP



County: DeKalb

PLANNING AND BACKGROUND

Project Justification Statement:

- As part of a 2015 project solicitation by the Atlanta Regional Commission, improvements to US 278/SR 10, East College Avenue/North Avondale Road/North Avondale Plaza was submitted by the City of Avondale Estates, as a project that would preserve existing roadway capacity while adding safety improvements and pedestrian enhancements. East College Avenue/North Avondale Road is a four-lane, undivided roadway with a center turn lane.
- The corridor is lacking a continuous, connected sidewalk system to access residential and commercial areas as well as the Avondale Estates MARTA station, which is less than 0.7 miles from the City Center. The current roadway configuration and lack of pedestrian amenities prohibit comfortable, safe walking and biking in the area. The project will add corridor-wide sidewalks, medians with pedestrian islands and traffic controlled pedestrian crossings.
- The project limits begin at Sams Crossing/Arcadia Avenue and extend to Ashton Place for a total of 0.75 miles. The project terminates at Ashton Place due to the proposed Rectangular Rapid Flashing Beacon just east of Ashton Place.
- The major performance goals of the project are to control speeds and improve vehicular and pedestrian safety through enhanced crossings and sidewalks.
- (Approved by the Office of Planning on _____)

Existing conditions: US 278/SR 10, East College Avenue/North Avondale Road is a four-lane roadway with a flush median. Curb and gutter are provided along a portion of the north side of the roadway from Sam's Crossing to Pine Street. Granite curb is provided along the remainder of the north side and along the south side of the roadway within the project limits. There is existing sidewalk along the north side of the roadway from Sam's Crossing to Hillyer Avenue and from Olive Street to Clarendon Road. The only sidewalk on the south side of the roadway is along the 400 foot frontage of the Avondale Station Apartments. The following intersections with US 278/SR 10 are signalized: Sam's Crossing/Arcadia Avenue, Livingstone Place, Twin Oaks Drive, Pine Street/South Avondale Road, Oak Street, Clarendon Avenue/North Clarendon Avenue.

Other projects in the area:

- STP-0002-00(669), DeKalb County Intersection Improvements
- P.I. No. M004544, SR 10 from SR 8 to SR 154 in DeKalb County, Maintenance

MPO: Atlanta Regional Commission (ARC)

TIP #: if applicable

TIA Regional Commission: Not a TIA Project

Congressional District(s): 4

Federal Oversight: PoDI Exempt State Funded Other

Projected Traffic: AADT _____ 24 HR T: 5%

Current Year (2013): 21060 Open Year (20XX): _____ Design Year (2024): 23300

Traffic Projections Performed by: Nelson/Nygaard Consulting Associates

Functional Classification (Mainline): Urban Minor Arterial Street

Complete Streets - Bicycle, Pedestrian, and/or Transit Standard Warrants:

Warrants met: None Bicycle Pedestrian Transit

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project? No Yes

County: DeKalb

Pavement Evaluation and Recommendations

Preliminary Pavement Evaluation Summary Report Required? No Yes
 Preliminary Pavement Type Selection Report Required? No Yes
 Feasible Pavement Alternatives: HMA PCC HMA & PCC

DESIGN AND STRUCTURAL

Description of the proposed project: Project will add medians, traffic-controlled pedestrian crossings, and sidewalks along a 0.75-mile extent of US 278/SR 10 in the City of Avondale Estates. The primary changes to typical section include new sidewalks to fill current gaps and portions of raised medians to provide pedestrian refuge.

Major Structures: N/A

Mainline Design Features: US 278/SR 10, East College Avenue/North Avondale Road, Minor Urban Arterial

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	4	4	4
- Lane Width(s)	10 - 12-ft	11 - 12-ft	10-11-ft**
- Median Width & Type	10 - 11-ft Flush	14-ft Flush	10 - 11-ft Flush**
- Outside Shoulder or Border Area Width	8 - 12-ft	10 - 16-ft	10 - 12-ft
- Outside Shoulder Slope	2%	2%	2%
- Inside Shoulder Width	n/a	n/a	n/a
- Sidewalks	Intermittent 5-ft wide, 2-ft buffer and 4-ft wide, 4-ft buffer	5-ft wide, 6-ft desirable buffer	6-ft wide, 2-ft buffer, 8-ft wide, 2-ft buffer, 10-ft wide
- Auxiliary Lanes	n/a	11 - 12-ft	10-ft**
- Bike Lanes	n/a	n/a	n/a
Posted Speed	35 mph		35 mph
Design Speed	35 mph	45 mph	35 mph
Min Horizontal Curve Radius	300-ft	711-ft	400-ft
Maximum Superelevation Rate	n/a	4%	Normal Crown***
Maximum Grade	1.89%	6%	1.89%
Access Control	Permitted Access	Permitted Access	Permitted Access
Design Vehicle	n/a	SU	WB-40 or Bus-40
Pavement Type	HMA	n/a	HMA

*According to current GDOT design policy if applicable

**Lane widths proposed as 10-ft in order to minimize property and environmental impacts

***AASHTO Superelevation for Low-Speed Urban Streets

Major Interchanges/Intersections:

- Sam's Crossing/Arcadia Avenue is signalized
- North Clarendon Avenue/Clarendon Avenue is signalized

Lighting required: No YesOff-site Detours Anticipated: No Yes Undetermined

County: DeKalb

Transportation Management Plan [TMP] Required: No Yes
 If Yes: Project classified as: Non-Significant Significant
 TMP Components Anticipated: TTC TO PI

Design Exceptions to FHWA/AASHTO controlling criteria anticipated:

FHWA/AASHTO Controlling Criteria	No	Undetermined	Yes	Appvl Date (if applicable)
1. Design Speed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Lane Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Shoulder Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Bridge Width	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Horizontal Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Superelevation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Vertical Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Grade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Stopping Sight Distance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Cross Slope	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Vertical Clearance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Lateral Offset to Obstruction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13. Bridge Structural Capacity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Design Variances to GDOT Standard Criteria anticipated:

GDOT Standard Criteria	Reviewing Office	No	Undetermined	Yes	Appvl Date (if applicable)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1. Access Control/Median Openings	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Intersection Sight Distance	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Intersection Skew Angle	DP&S	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Rumble Strips	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Safety Edge	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Median Usage	DP&S	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. Roundabout Illumination Levels	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Complete Streets	DP&S	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. ADA & PROWAG	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. GDOT Construction Standards	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. GDOT Drainage Manual	DP&S	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
13. GDOT Bridge & Structural Manual	Bridges	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

VE Study anticipated: No Yes Completed – Date:

UTILITY AND PROPERTY

Temporary State Route needed: No Yes Undetermined

Railroad Involvement: N/A

Utility Involvements:

Electrical distribution – Georgia Power

County: DeKalb

Ecology: Reconnaissance of the project area resulted in the following findings: no Waters of the US, no state waters subject to state buffer requirements, no state or federally protected species observed, and no habitat for protected species.

History: A screening for historic resources was conducted. One National Register-listed historic district was identified – Avondale Estates Historic District. Forty-nine historic resources were identified along the corridor. Two grassed areas comprising the Avondale Plaza and a three-block long hedgerow are within the historic district. Any impacts to historic resources are anticipated to result in a *de minimis* determination. Additional research and documentation, and SHPO concurrence are required for the properties outside of the historic district boundary.

Archeology: A screening for archeological resources has not been conducted at this time. A check of the Georgia Archaeological Sites Files would be conducted to identify any previously recorded sites within a one-kilometer radius of the project area. Additionally, a field study would be conducted and a Phase I Archeology Assessment would be completed and submitted for SHPO concurrence.

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes

Is the project located in an Ozone Non-attainment area? No Yes

Carbon Monoxide hotspot analysis: Required Not Required TBD

The project would be exempt from PM2.5 hotspot requirements. A CO hotspot analysis would not be required based on project type.

Noise Effects: No capacity improvements would be included; therefore, no noise modeling would be required. A Type III Noise Impact Assessment would be prepared.

Public Involvement: A Public Information Open House will be required.

Public Outreach held to date:

March 11, 2013: Walkability Study Audit and Presentation

Summer 2013: Community Survey-Downtown Master Plan

Downtown Master Plan Community Meeting #1: September 19, 2013

Downtown Master Plan- GDOT/MARTA Meetings: October 7, 2013

Downtown Master Plan Community Meeting #2: October 23, 2013

Downtown Master Plan Community Meeting #3: November 14, 2013

Stakeholder Meetings-Downtown Master Plan: Throughout the Study

Demonstration Project and Presentation: December 6, 2014

Feasibility Study Final Presentation: March 19, 2015

Major stakeholders: Citizens, business owners, property owners, GDOT, MARTA, City of Decatur, traveling public.

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: None.

Early Completion Incentives recommended for consideration: No Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Meeting: Has not been held.

Concept Meeting: Has not been held.

Other coordination to date: City of Avondale Estates met with GDOT District 7 on the following dates: 10/7/2013, 8/14/2014, 12/6/2014, and 3/16/2015.

County: DeKalb

Project Activity	Party Responsible for Performing Task(s)
Concept Development	City of Avondale Estates
Design	City of Avondale Estates
Right-of-Way Acquisition	GDOT
Utility Relocation	GDOT
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	City of Avondale Estates
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

Project Cost Estimate Summary and Funding Responsibilities:

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmenta I Mitigation	Total Cost
Funded By	City of Avondale Estates/GDOT					
\$ Amount	\$160,000	\$1,020,000	\$0	\$1,600,000	\$0	\$2,780,000
Date of Estimate	April 2015					

*CST Cost includes: Construction, Engineering and Inspection, Contingencies and Liquid AC Cost Adjustment.

ALTERNATIVES DISCUSSION**Alternative selection:**

Preferred Alternative: Maintain four travel lanes and introduce medians in portions of the existing center turn lane to provide pedestrian refuge islands including traffic controlled pedestrian crossings. Provide sidewalks throughout the project corridor.

Estimated Property Impacts:		Estimated Total Cost:	\$2,780,000
Estimated ROW Cost:	\$1,020,000	Estimated CST Time:	12 months

Rationale: The preferred alternative meets the goals of improving vehicular and pedestrian safety through enhanced crossings and sidewalks.

No-Build Alternative:

Estimated Property Impacts:	0	Estimated Total Cost:	\$0
Estimated ROW Cost:	\$0	Estimated CST Time:	n/a

Rationale: This alternative was not selected as is does not accomplish the goals of the project.

Alternative 1: Reduce current five-lane typical section to a three-lane section with on-street bicycle lanes and enhanced sidewalk and planter areas.

Estimated Property Impacts:	0	Estimated Total Cost:	Not available
Estimated ROW Cost:	\$0	Estimated CST Time:	n/a

Rationale: This alternative was not selected due to the resulting undesirable levels of intersection delay.

County: DeKalb

Other considerations during concept development: A roundabout was considered at the intersection of Avondale Road and North Clarendon Avenue/Clarendon Avenue to replace the existing signalized intersection configuration. However, the construction of a roundabout at this location would impact the historic plazas.

Comments:

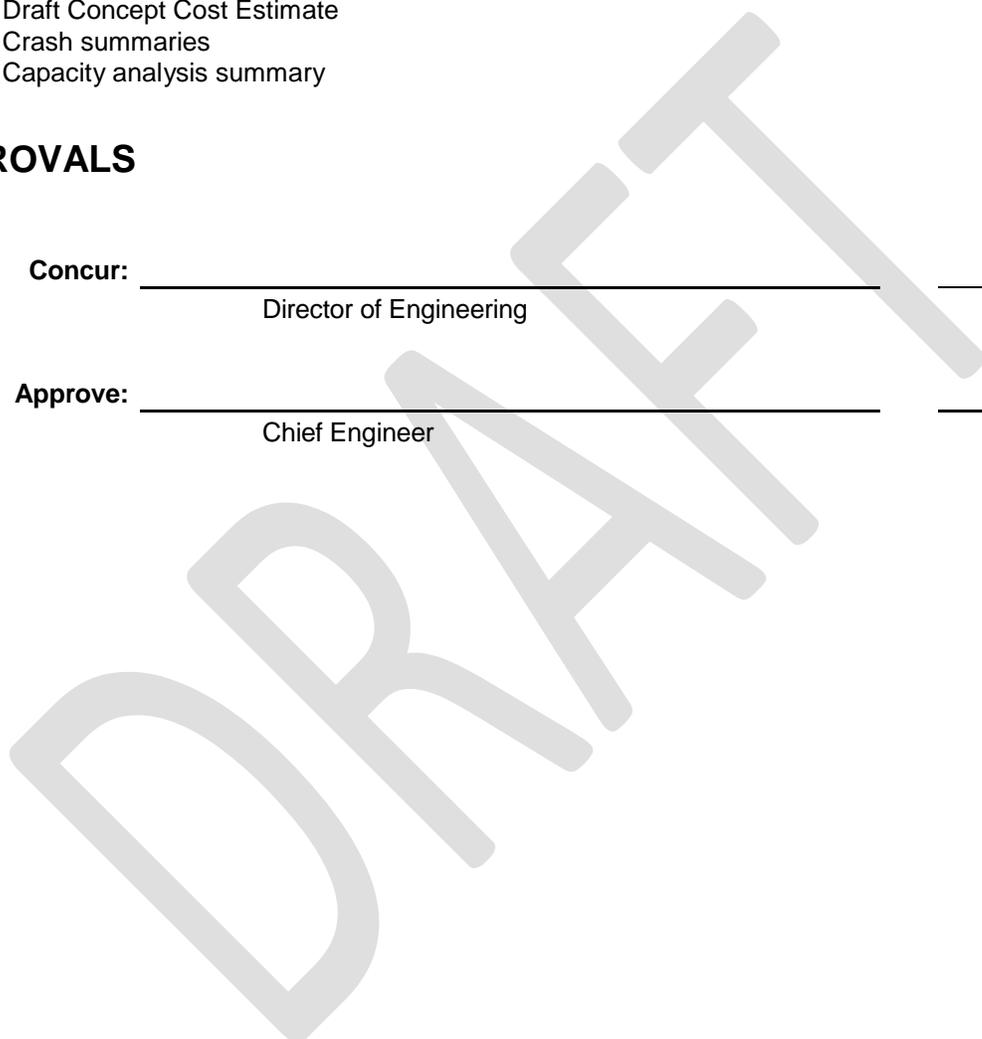
LIST OF ATTACHMENTS/SUPPORTING DATA

- 1. Concept Layout
- 2. Typical sections
- 3. Draft Concept Cost Estimate
- 4. Crash summaries
- 5. Capacity analysis summary

APPROVALS

Concur: _____
Director of Engineering _____ Date _____

Approve: _____
Chief Engineer _____ Date _____



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