DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
TIA PROJECT CONCEPT REPORT

Project Type:	Overpass	P.I. Number:	0011840 & 0011841
GDOT District:	5	County:	Wayne
Federal Route Number:	N/A	State Route Number:	SR169

PI#0011840 – This project will construct an overpass over the Norfolk Southern Railroad in Jesup, GA and relocate 0.8 miles of SR169.
PI#0011841 – This project will re-align the intersection of Sunset Blvd and SR169 and add left and right turn lanes to the all legs of the intersection. In addition, it will widen SR169 to 3 lanes from the end of PI#0011840 to Sunset Blvd. The project is approximately 0.3 miles in length.

Submitted for approval:

TIA

Moreland Altobel — 11/4/13
District Engineer/Consultant & Firm — DATE

Local Government Representative — 1/15/14
DATE

TIA Project Manager — 1/15/14
DATE

TIA Program Manager — 1/23/14
DATE

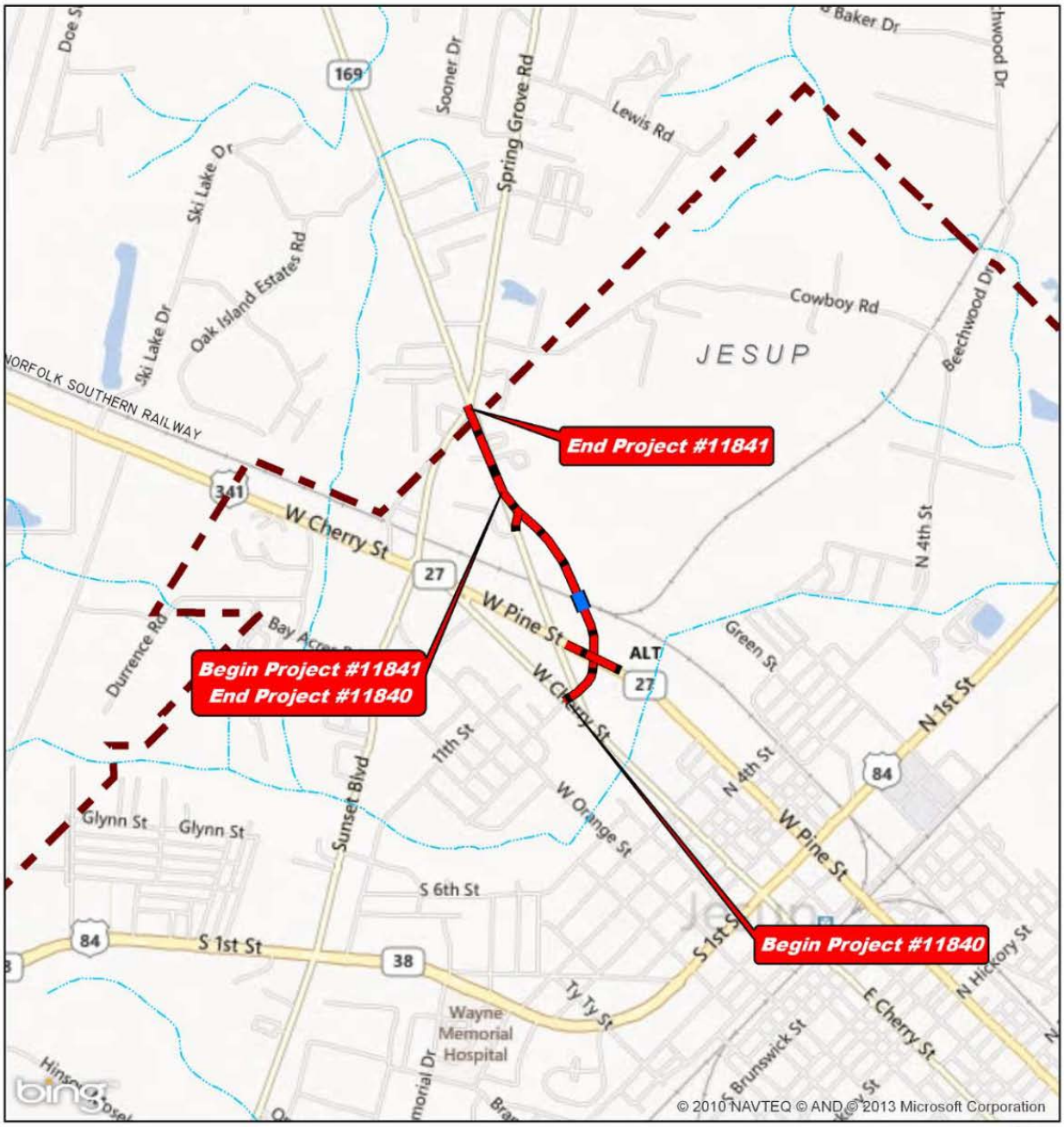
GDOT TIA Regional Coordinator (Tim Matthews) — 1/23/2014
DATE

GDOT State TIA Administrator
DATE

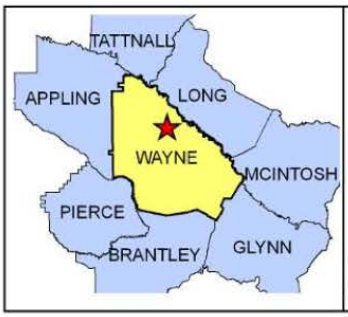
Approval:

Concur: _____ 1/23/14
GDOT Director of Engineering — DATE

Approve: _____ 3/24/14
GDOT Chief Engineer — DATE



7-25-13



Project Alignment

Project Bridge

0 2,050 4,100 Feet

Project Location Map

Wayne County, Georgia

N

PLANNING & BACKGROUND DATA

Description of the proposed project:

PI#0011840: The proposed project would relocate SR 169 from approximately 215 feet south of Lane Bridge Circle to West Cherry Street. The project proposes to realign the existing 2-lane SR 169 to overpass the Norfolk Southern railroad. The existing railroad crossing would be closed. The roadway will consist of 2-12' travel lanes with the required auxiliary lanes from the beginning of the project to station 132+50. At this point the roadway will taper to 3 lane section (2-12' travel lanes and a 14' flush median) to match the typical section for PI#0011841 and provide a left turn lane onto the existing southbound SR169. The roadway would have rural shoulders with open ditches. The total length of the relocation of SR 169 would be approximately 0.8 miles.

PI#0011841: The proposed project will re-align the intersection of Sunset Blvd and SR169 and add left and right turn lanes to the all legs of the intersection. In addition, it will widen SR169 to 3 lanes (2-12' travel lanes and a 14' flush median) from the end of PI#0011840 to Sunset Blvd. The roadway would have rural shoulders with open ditches. The project is approximately 0.3 miles in length.

Federal Oversight: ☐ Exempt ☐ State Funded ☒ Other (TIA Funded)

MPO: *MPO Name* None MPO Project ID RC09-000089, RC09-000090

Regional Commission: Heart of Georgia RC RC Project ID RC09-000089, RC09-000090

Congressional District(s): 1

Projected Traffic: AADT
Current Year (2009): 6,700 Open Year (2018): 9,500 Design Year (2038): 11,000

Traffic Projections Performed by: Moreland Altobelli Associates, Approved by GDOT

Functional Classification (Mainline): Urban Minor Arterial Street

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

Will Context Sensitive Solutions procedures be utilized? ☒ No ☐ Yes

DESIGN AND STRUCTURAL DATA –

Features: SR169 from Beginning of Project #0011840 to the end of the Proposed Bridge

Feature	Existing	Standard*	Proposed
Typical Section			
- **Number of Lanes**	**2**	**2**	**2**
- **Lane Width(s)**	**12’**	**11’-12’**	**12’**
- **Median Width & Type**	**None**	**None/14’ Flush**	**None**
- **Outside Shoulder or Border Area Width**	**10’**	**8’/4’ Paved**	**10’/6.5’ Paved**
- **Outside Shoulder Slope**	**6%**	**6%**	**6%**
- **Sidewalks**	**None**	**None**	**None**
- **Auxiliary Lanes**	**N/A**	**N/A**	**At major intersections**
- **Bike Lanes**	**None**	**4’**	**Available on Paved Shoulder**
- **Posted Speed**	**45 MPH**		**35 MPH**
Design Speed	**45 MPH**	**45 MPH**	**35 MPH**
Min Horizontal Curve Radius			**340’**
Superelevation Rate	**4%**	**4%**	**4%**
Grade	**2%**	**7%**	**7%**
Access Control	**By Permit**	**By Permit**	**By Permit**
Right-of-Way Width	**100’**	**N/A**	**100’-250’**
Maximum Grade – Crossroad	**4%**	**4%**	**4%**
Design Vehicle	**N/A**	**WB40/Bus40**	**WB50**

Features: SR169 from the end of the Proposed Bridge to the end of Project #0011840

Feature	Existing	Standard*	Proposed
Typical Section			
- Number of Lanes	2	2	2
- Lane Width(s)	12'	11'-12'	12'
- Median Width & Type	None	None/14' Flush	None/14' Flush
- Outside Shoulder or Border Area Width	10'	8'/4' Paved	10'/6.5' Paved
- Outside Shoulder Slope	6%	6%	6%
- Sidewalks	None	None	None
- Auxiliary Lanes	N/A	N/A	At major intersections
- Bike Lanes	None	4'	Available on Paved Shoulder
- Posted Speed	45 MPH		45 MPH
Design Speed	45 MPH	45 MPH	45 MPH
Min Horizontal Curve Radius			340'
Superelevation Rate	4%	4%	4%
Grade	2%	7%	7%
Access Control	By Permit	By Permit	By Permit
Right-of-Way Width	100'	N/A	100'-250'
Maximum Grade – Crossroad	4%	4%	4%
Design Vehicle	N/A	WB40/Bus40	WB50

Major Structures:

Structure ID	Existing	Proposed
Bridge #1		*288' long, 43.25' wide (out to out) bridge over Norfolk Southern Railroad*
Wall #1		*Located along SR169 south of Norfold Southern Railroad on the east side of the roadwoy. Maximum height of 30' to avoid wetland impacts.*

Major Interchanges/Intersections:
SR169 @ West Cherry Street (SR27/US341)
SR169 @ Pine Street
SR169 @ Sunset Blvd

Utility Involvements:

- Electricity: Georgia Power and Satilla EMC
- Cable: Comcast
- Gas: Atlanta Gas Light
- Telephone: Alma Telephone, MCI and AT&T
- Water and Sewer: City of Jesup Water and Sewer Authority
- Railroad: Norfolk Southern

Public Interest Determination Policy and Procedure recommended (Utilities)? ☒ No ☐ Yes

SUE Required: ☒ No ☐ Yes

Railroad Involvement: Yes. Norfolk Southern Railroad

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

Warrants met: ☒ None ☐ Bicycle ☐ Pedestrian ☐ Transit

Right-of-Way:

Required Right-of-Way anticipated: ☐ No ☒ Yes ☐ Undetermined

Easements anticipated: ☐ None ☒ Temporary ☐ Permanent ☐ Utility ☐ Other

		PI#00011840	PI#0011841
Anticipated number of impacted parcels:		18	14
Displacements anticipated:	Total:	3	2
	Businesses:	1	0
	Residences:	2	2
	Other:	0	0

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: None

Design Variances to GDOT Standard Criteria anticipated: *None*

ENVIRONMENTAL DATA

Anticipated Environmental Document:

GEPA: ☒ **NEPA:** ☐ CE ☐ PCE

Project 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
Is a Carbon Monoxide hotspot analysis required?	☒ No	☐ Yes

MS4 Compliance – Is the project located in an MS4 area? ☒ No ☐ Yes

Environmental Permits/Variances/Commitments/Coordination anticipated:

A preliminary environmental inventory was conducted which included field surveys and review of applicable federal and state databases. Based on this preliminary information, the proposed project would potentially impact some wetlands. Although precise impact data is unavailable at this time, it is anticipated that a Section 404 Permit would be required.

NEPA/GEPA Comments & Information: The project will impact approximately 2 acres of wetlands. The project has been screened for historic resources and none were determined to be eligable. An archeology study will be perfomed. Based on surrounding projects no impacts are anticipated. A Public Hearing Open House (PHOH) will be held.

PROJECT RESPONSIBILITIES

Project Activities:

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

Lighting required: ☒ No ☐ Yes

Other projects in the area:

0004293 Sunset BLVD from US301 to SR169 (Long Range)
0012502 West Orange Street (Maintenance)

Other coordination to date: Norfolk Southern Railroad requested that the bridge be constructed so that a third set of railroad tracks and a service road would be accommodated.

Project Cost Estimate and Funding Responsibilities: PI#0011840

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
By Whom	Wayne County	Wayne County	Wayne County	GDOT	Wayne County	
$ Amount	$250,000	$2,089,000	$841,000	$6,692,647	$63,000	$9,935,647
Date of Estimate	7/26/2013	6/25/2013	7/26/2013	7/25/2013	7/25/2013	

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

Project Cost Estimate and Funding Responsibilities: PI#0011841

	Breakdown of PE	ROW	Reimbursable Utility	CST*	Environmental Mitigation	Total Cost
By Whom	Wayne County	Wayne County	Wayne County	GDOT	Wayne County	
$ Amount	$153,400	$476,000	$297,000	$1,819,837	$0	$2,746,237
Date of Estimate	7/26/2013	6/25/2013	7/26/2013	7/26/2013	7/25/2013	

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

ALTERNATIVES <u>No-Build Alternative</u>

The no-build alternative is an alternative in which Wayne County would take no action to construct the project. Traffic congestion and operational problems would increase on SR 169 (Lane Bridge Road) because the existing two-lane roadway would continue to experience extreme delay due to the railroad blockages.

<u>Grade Separation of SR 169 on existing alignment</u>

This alternative proposed to construct a grade separation of SR 169 over Norfolk Southern railroad at its existing location. This alternative was eliminated from consideration due to the impact to businesses and residences along SR 169 and the inability to maintain SR 169 traffic during construction.

<u>Grade Separation of Relocated SR 169 (35 mph Concept) (Preferred Alternative)</u>

This alternative consists of the relocation of SR 169 with a 35 mph design speed. This design alternative maintains traffic on SR 169 and is more cost effective. The design minimizes impacts to businesses and residences and avoids extensive reconstruction of US 341 (West Pine Street). See attached plan.

Grade Separation of Relocated SR 169 (45 mph)

No practical design could be developed to allow a 45 mph design speed. This is largely due to the proximity of the railroad crossing to West Pine Street. The vertical alignment as well as superelevation to match West Pine Street was not achievable.

In conclusion, the grade separation of relocated SR 169 with a 35 mph design speed was recommended because the other alternatives would involve higher construction costs; require more maintenance of traffic; incur greater right-of-way impacts and in the case of the no-build alternative, fail to meet the need and purpose of the project.

Investment Report – TIA Stated Benefit:

Because SR 169 currently crosses the railroad at grade, traffic flow is impeded by passing trains, potentially creating traffic delays. Project 0011840 provides for an overpass to be constructed over the existing railroad tracks. The addition of the overpass will eliminate the traffic delays caused by passing trains, thus reducing the potential for rear end collisions. The flow of freight through the area to the Georgia ports will also improve. Moreover, the new railroad overpass and the respective congestion mitigation may impact the locally economy positively with the following enhancements:

- Improved travel times
- Better access to jobs
- Greater efficiency/reliability of the transportation network

Widening SR 169 from the proposed railroad overpass to Sunset Boulevard will properly connect this section to future widening to be done on SR 169 north of Sunset Boulevard, providing consistency of the roadway construction through the area. This provides an alternative route for Sunset Boulevard by reducing congestion when the railroad blocks Sunset Boulevard. The widening also provides the same benefits as those listed for the overpass.

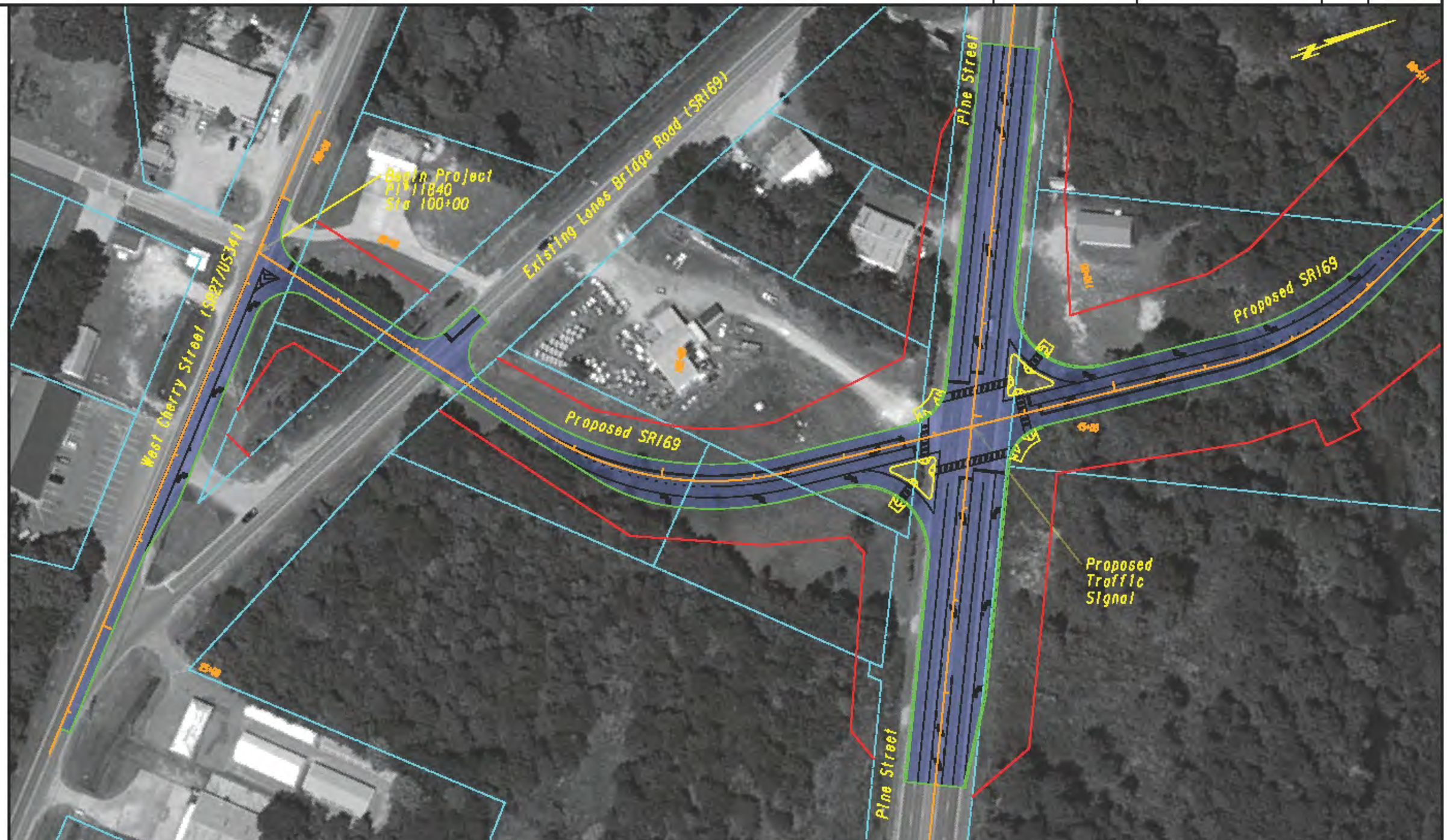
Comments/additional information:

Attachments:

1. Concept Layout
2. Typical sections
3. Cost Estimates
4. Traffic diagrams or projections
5. Intersection Skew Angle Justification
6. Sight Distance

Concept Layout

County	Project Number	Sheet No.	Total Sheets



SCALE IN FEET

0 100 200 400

MAPELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:		

CENTERLINE
EDGE OF PAVEMENT
STRIPING
PROPOSED PAVEMENT
PROPOSED RIGHT OF WAY
PROPOSED CONCRETE ISLAND

REVISION DATES

GEORGIA DEPARTMENT
OF TRANSPORTATION

OFFICE:

CONCEPT PLAN

SR169 FROM SUNSET BLVD TO MS*729080R PI*0011841
SR169 RAILROAD OVERPASS PI*0011840

7/26/13

DRAWING No. 13-01

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS

SCALE IN FEET

0 100 200 400

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CHECKED BY:		
SUPERVISED BY:		

CENTERLINE
EDGE OF PAVEMENT
STRIPING
PROPOSED PAVEMENT
PROPOSED RIGHT OF WAY
PROPOSED CONCRETE ISLAND

REVISION DATES		

GEORGIA DEPARTMENT OF TRANSPORTATION

OFFICE:

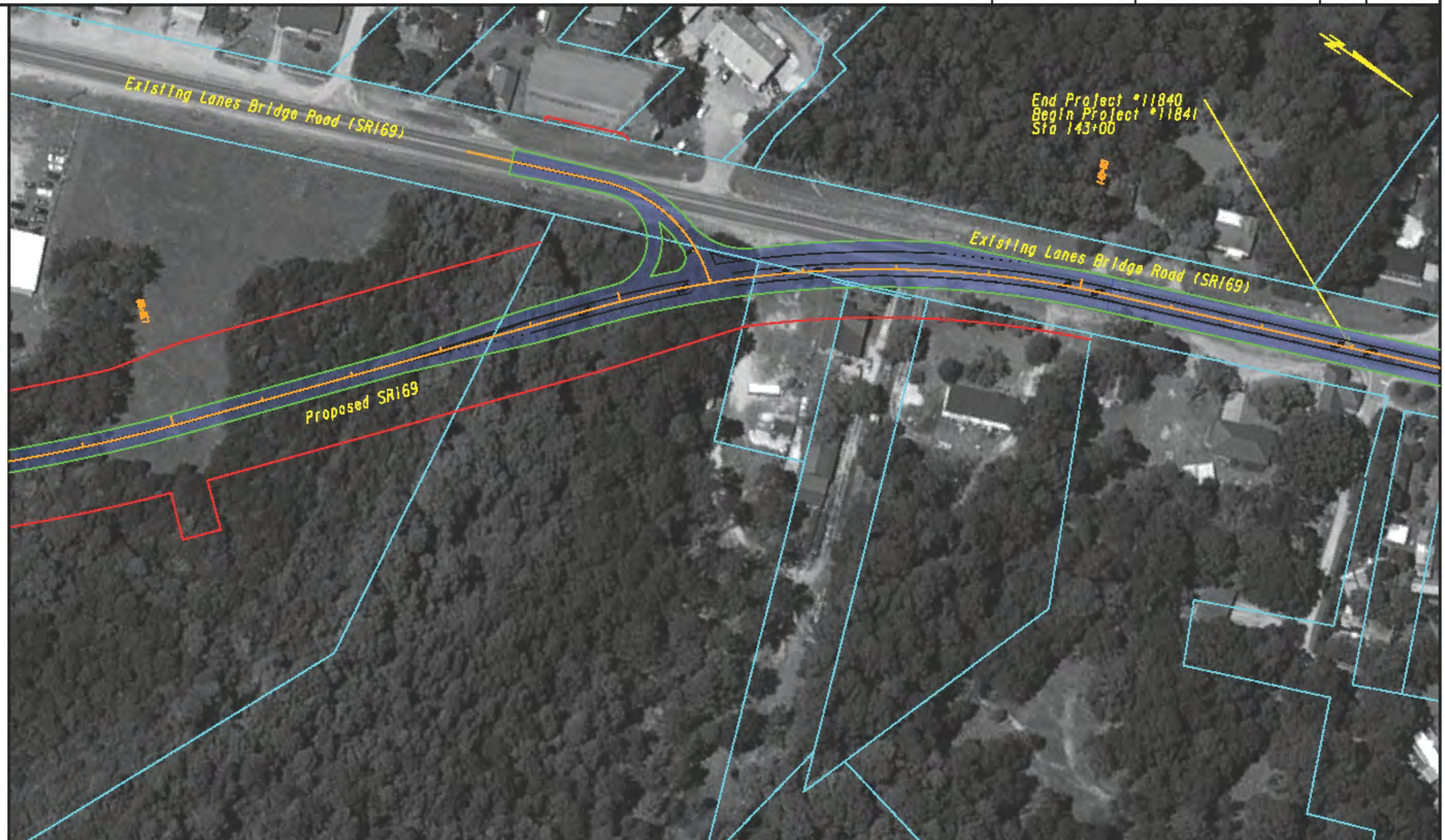
CONCEPT PLAN

SR169 FROM SUNSET BLVD TO MS*729080N PI#0011841
SR169 RAILROAD OVERPASS PI#0011840

7/26/13

DRAWING No. 13-02

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS



SCALE IN FEET

0 100 200 400

MAPELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:		

CENTERLINE
EDGE OF PAVEMENT
STRIPING
PROPOSED PAVEMENT
PROPOSED RIGHT OF WAY
PROPOSED CONCRETE ISLAND

REVISION DATES

GEORGIA DEPARTMENT OF TRANSPORTATION

OFFICE:

CONCEPT PLAN

SR169 FROM SUNSET BLVD TO MS#729080A PI#0011841
SR169 RAILROAD OVERPASS PI#0011840

7/26/13

DRAWING No. 13-03

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS

SCALE IN FEET

0 100 200 400

MAYELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:		

CENTERLINE
EDGE OF PAVEMENT
STRIPING
PROPOSED PAVEMENT
PROPOSED RIGHT OF WAY
PROPOSED CONCRETE ISLAND

REVISION DATES		

GEORGIA DEPARTMENT OF TRANSPORTATION

OFFICE:

CONCEPT PLAN

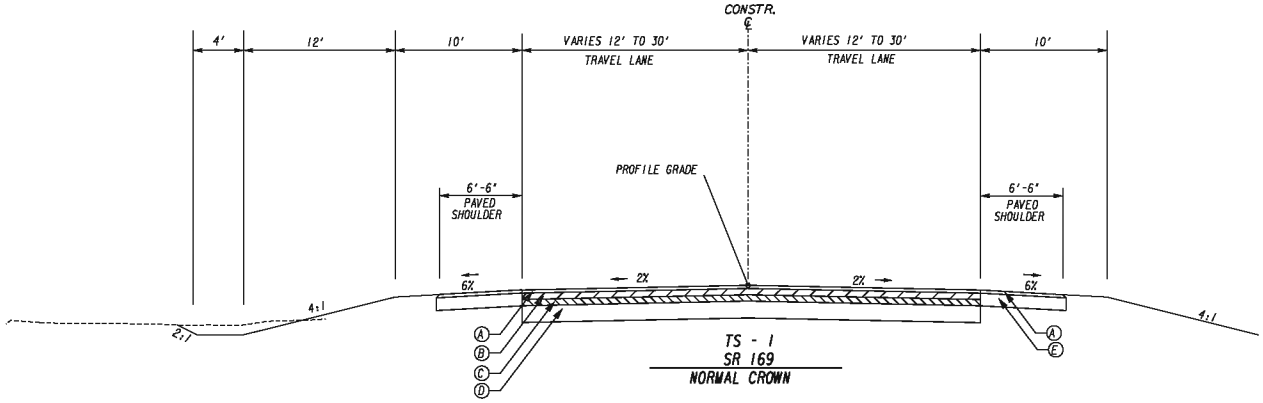
SR169 FROM SUNSET BLVD TO RS#729080A PI#0011841
SR169 RAILROAD OVERPASS PI#0011840

7/26/13

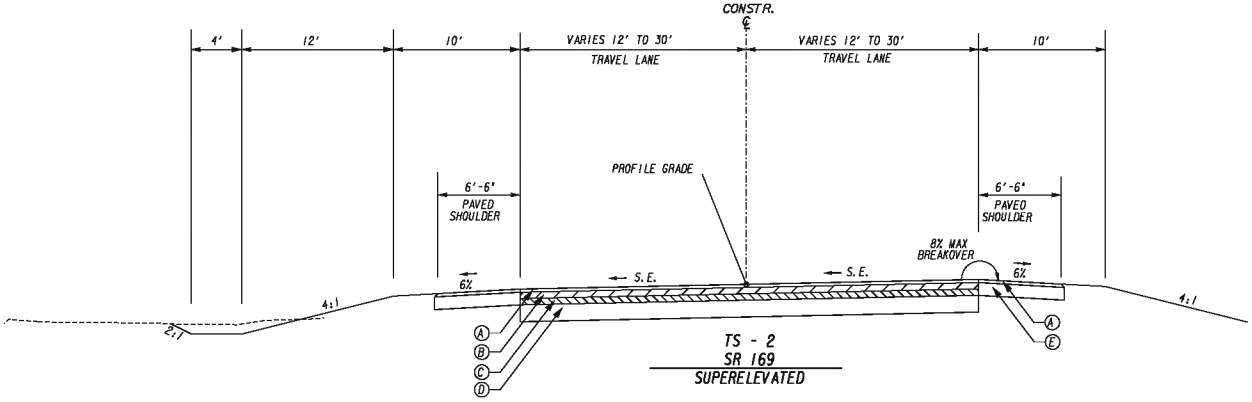
DRAWING No. 13-04

Typical Sections

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	P.I.# 0011840 & 0011841		



TS - 1
SR 169
NORMAL CROWN



TS - 2
SR 169
SUPERELEVATED

SLOPE CONTROL TABLE		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1 *	OVER 10'	OVER 10'

* GUARDRAIL TO BE INSTALLED ADJACENT TO FILL SLOPES GREATER THAN 2:1.

(A) 165*/SY RECYCLED ASPH CONC 12.5mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME
(B) 330*/SY RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(C) 330*/SY RECYCLED ASPH CONC 25mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL
(E) GR AGGR BASE CRS, 6 INCH, INCL MATL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
SUPERVISED BY:	WILLIAM OIAL P.E.

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

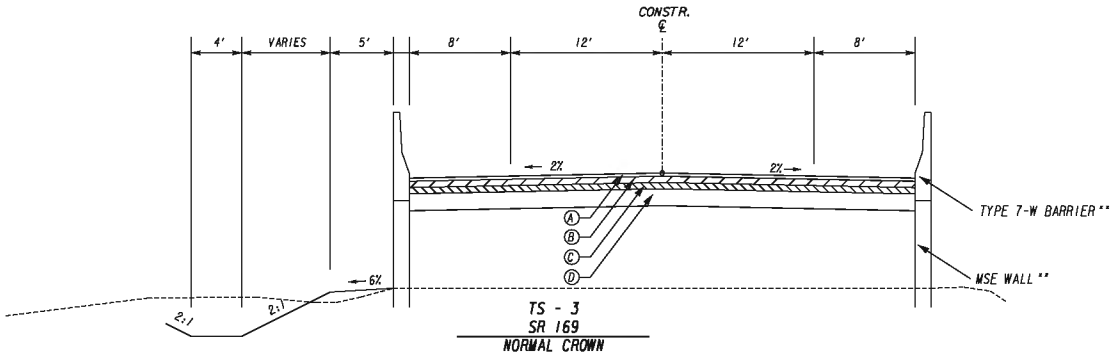
SR 169 RAILROAD OVERPASS & SUNSET BLVD INTERSECTION

P.I.# 0011840 & 0011841

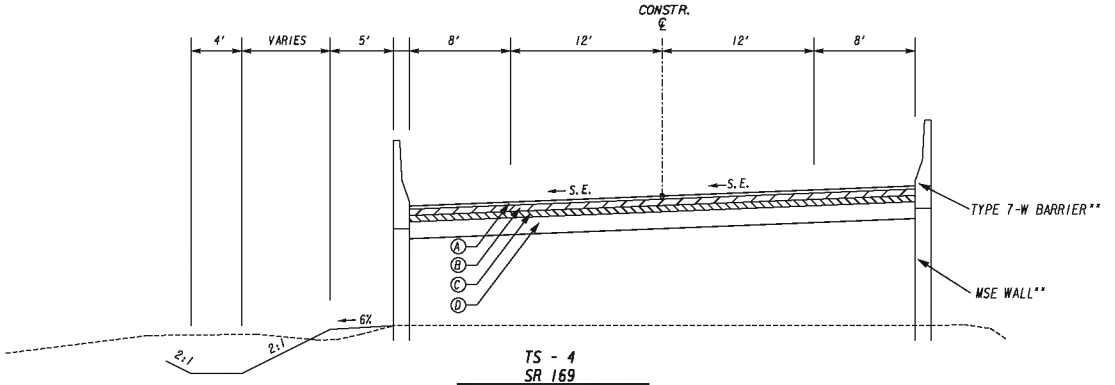
09-19-13

DRAWING No.
5-001

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	P.I.# 0011840 & 0011841		



TS - 3
SR 169
NORMAL CROWN



TS - 4
SR 169
SUPERELEVATED

SLOPE CONTROL TABLE		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1 *	OVER 10'	OVER 10'

* GUARDRAIL TO BE INSTALLED ADJACENT TO FILL SLOPES GREATER THAN 2:1.

** SEE WALL PLANS FOR BARRIER AND WALL SPECIFICATIONS.

(A) 165#/SY RECYCLED ASPH CONC 12.5mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME
(B) 330#/SY RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(C) 330#/SY RECYCLED ASPH CONC 25mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:	WILLIAM DIAL P.E.	

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

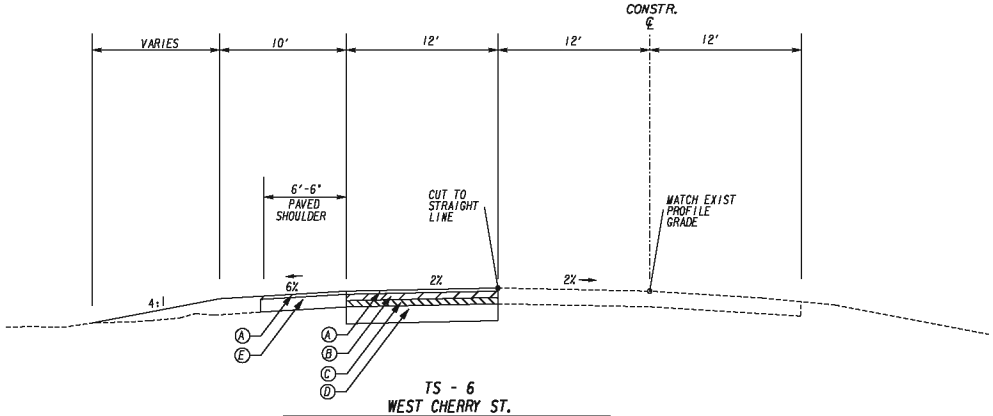
SR 169 RAILROAD OVERPASS & SUNSET BLVD INTERSECTION

P.I.# 0011840 & 0011841

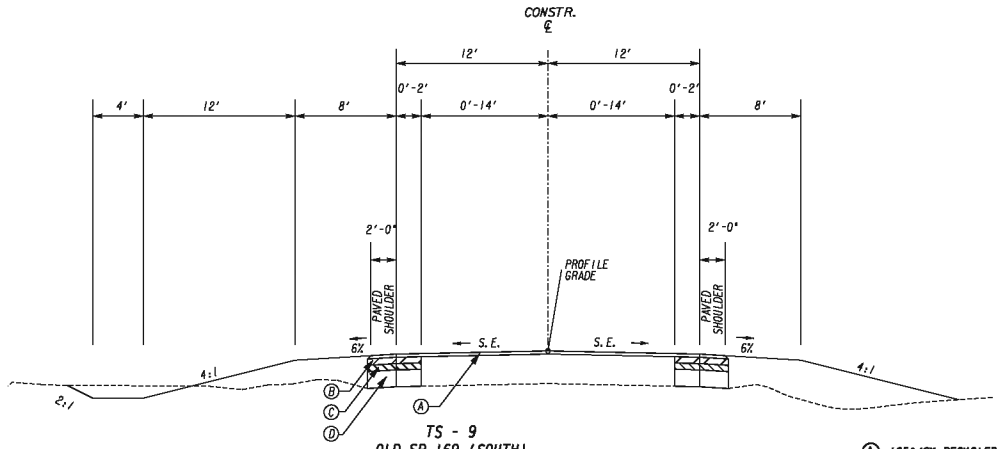
09-19-13

DRAWING No. 5-002

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	P.I.# 0011840 & 0011841		



TS - 6
WEST CHERRY ST.
NORMAL CROWN
MILLING, OVERLAY AND WIDENING



TS - 9
OLD SR 169 (SOUTH)
SUPERELEVATED
MILLING AND OVERLAY
SEE PLAN SHEETS FOR APPLICATION OF SUPERELEVATION
N.T.S.

SLOPE CONTROL TABLE		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1 *	OVER 10'	OVER 10'

* GUARDRAIL TO BE INSTALLED ADJACENT TO FILL SLOPES GREATER THAN 2:1.

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(B) 330*/SY RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(C) 330*/SY RECYCLED ASPH CONC 25mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL
(E) GR AGGR BASE CRS, 6 INCH, INCL MATL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:	WILLIAM DIAL P.E.	

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

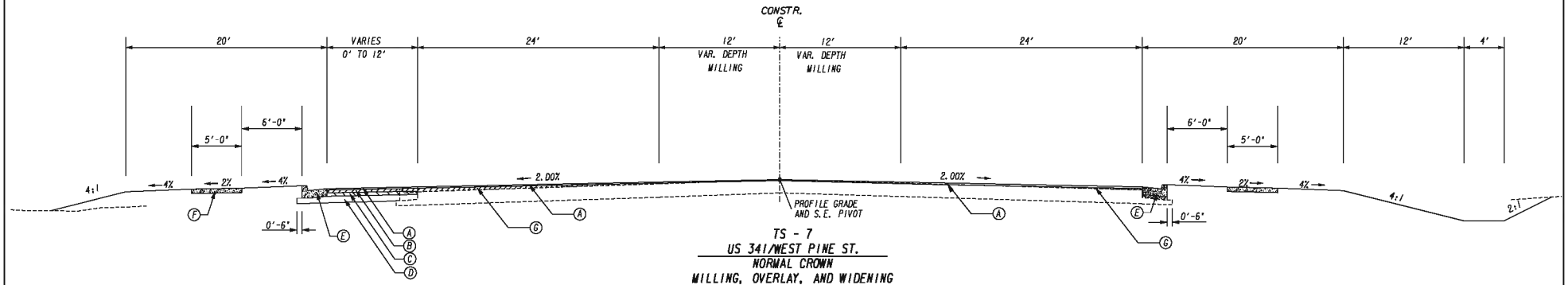
SR 169 RAILROAD OVERPASS & SUNSET BLVD INTERSECTION

P.I.# 0011840 & 0011841

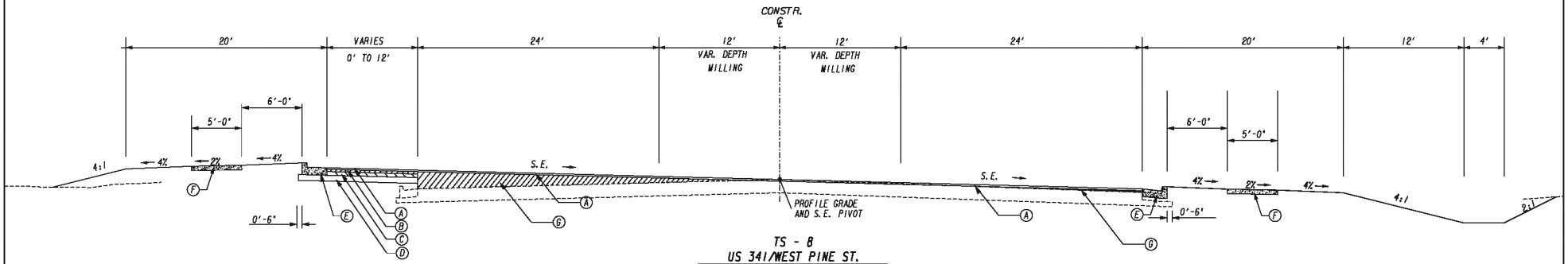
09-19-13

DRAWING No.
5-003

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	P.I.# 0011840 & 0011841		



TS - 7
US 341/WEST PINE ST.
NORMAL CROWN
MILLING, OVERLAY, AND WIDENING



TS - 8
US 341/WEST PINE ST.
SUPERELEVATED
MILLING, OVERLAY, AND WIDENING

SLOPE CONTROL TABLE		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1 *	OVER 10'	OVER 10'

* GUARDRAIL TO BE INSTALLED ADJACENT TO FILL SLOPES GREATER THAN 2:1.

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(B) 330*/SY RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(C) 330*/SY RECYCLED ASPH CONC 25mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL
(E) 8" X 30" CONCRETE CURB & GUTTER, GA STD. 9032B, TYPE 2 CURBFACE
(F) 4" CONCRETE SIDEWALK
(G) LEVELING

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:	WILLIAM DIAL P.E.	

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

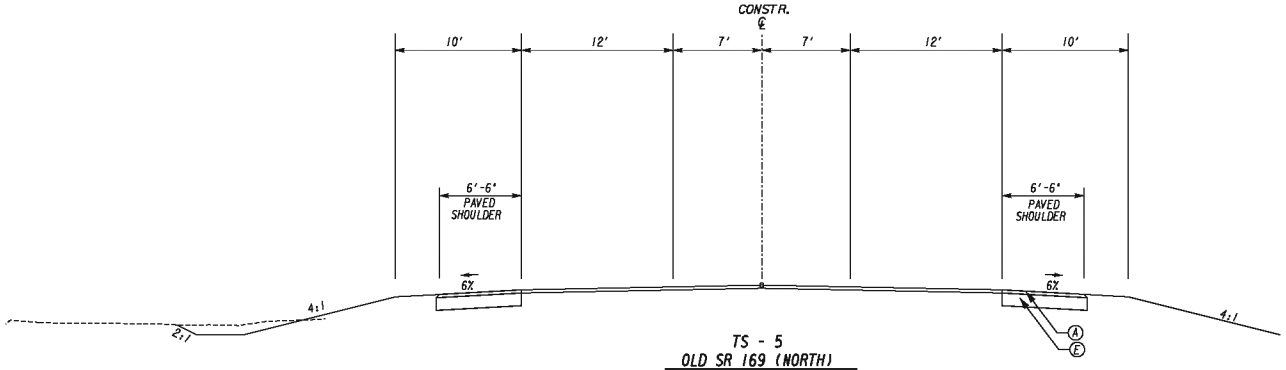
SR 169 RAILROAD OVERPASS & SUNSET BLVD INTERSECTION

P.I.# 0011840 & 0011841

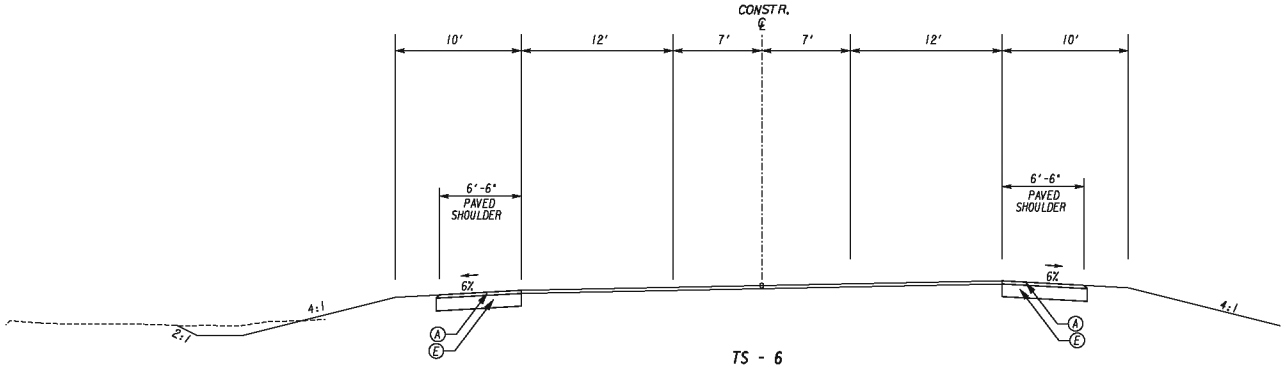
09-19-13

DRAWING No. 5-004

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	P.I.# 0011840 & 0011841		



TS - 5
OLD SR 169 (NORTH)
NORMAL CROWN



TS - 6
OLD SR 169 (NORTH)
SUPERELEVATED

SLOPE CONTROL TABLE		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1 *	OVER 10'	OVER 10'

GUARDRAIL TO BE INSTALLED ADJACENT TO FILL SLOPES GREATER THAN 2:1.

(A) 165#/SY RECYCLED ASPH CONC 12.5mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME
(B) 330#/SY RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(C) 330#/SY RECYCLED ASPH CONC 25mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	
SUPERVISED BY:	WILLIAM DIAL P.E.

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

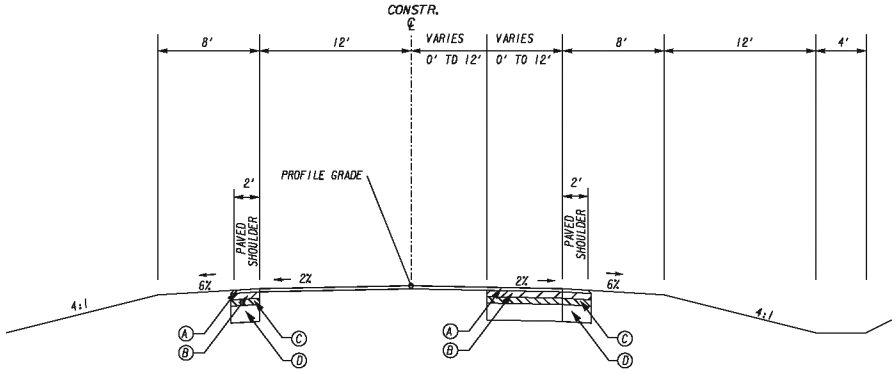
SR 169 RAILROAD OVERPASS & SUNSET BLVD INTERSECTION

P.I.# 0011840 & 0011841

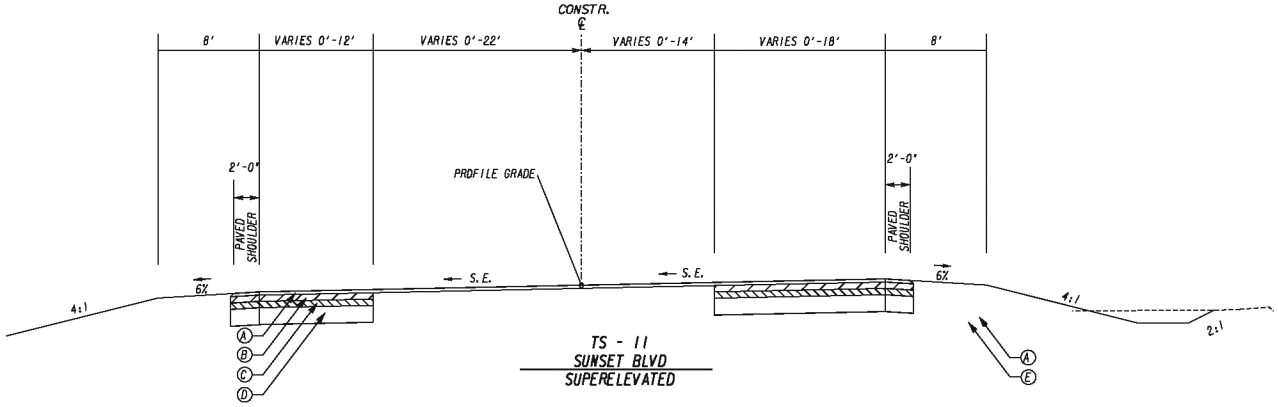
09-19-13

DRAWING No.
5-005

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	P.I.# 0011840 & 0011841		



TS - 10
SUNSET BLVD
NORMAL CROWN



TS - 11
SUNSET BLVD
SUPERELEVATED

SLOPE CONTROL TABLE		
SLOPE	CUT	FILL
4:1	0-10'	0-10'
2:1 *	OVER 10'	OVER 10'

GUARDRAIL TO BE INSTALLED ADJACENT TO FILL SLOPES GREATER THAN 2:1.

(A) 165#/SY RECYCLED ASPH CONC 12.5mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME
(B) 330#/SY RECYCLED ASPH CONC 19mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(C) 330#/SY RECYCLED ASPH CONC 25mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:	WILLIAM DIAL P.E.	

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

SR 169 RAILROAD OVERPASS & SUNSET BLVD INTERSECTION

P.I.# 0011840 & 0011841

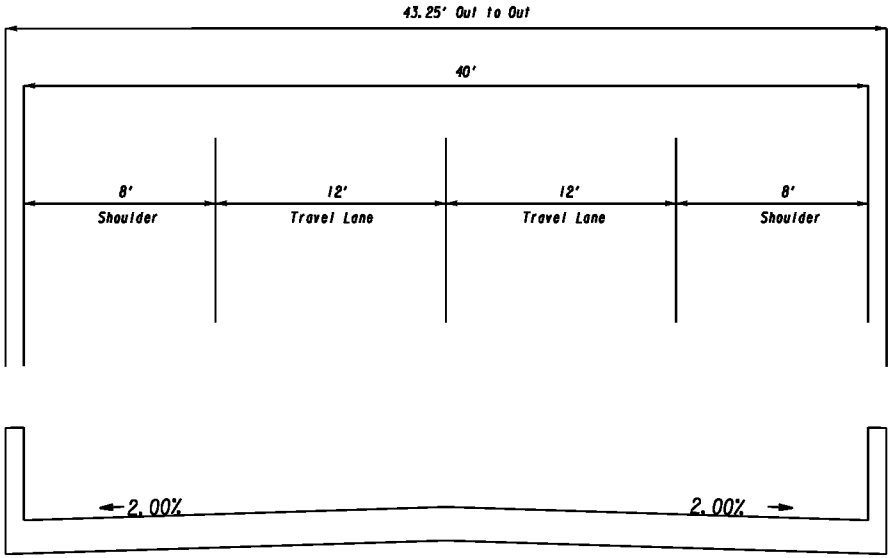
09-19-13

DRAWING No. 5-006

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
Wayne	PI#0011840 & PI#0011841		

TYPICAL SECTION

NOT TO SCALE



Bridge Over Norfolk Southern Railraod

MORELAND-ALTOBELLI ASSOC., INC.
(912) 963-1112

DESIGNED BY:		
DRAWN BY:		
CHECKED BY:		
SUPERVISED BY:	WILLIAM DIAL P.E.	

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE:

TYPICAL SECTIONS

DRAWING No. 5-02

Cost Estimates

STATE HIGHWAY AGENCY

DATE : 07/25/2013
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0011840 SPEC YEAR: 01
DESCRIPTION: SR 169 RAILROAD OVERPASS - WAYNE COUNTY

ITEMS FOR JOB 0011840

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0000	001-1000		LS	Railroad Force Account Agreement	1.000	300000.00	300000.00
0005	150-1000		LS	TRAFFIC CONTROL - 1	1.000	206050.00	206050.00
0010	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	55869.29	55869.29
0014	210-0100		LS	GRADING COMPLETE - 1	1.000	1413042.00	1413042.00
0015	310-5100		SY	GR AGGR BS CRS 10IN INCL MATL	11500.000	20.79	239115.36
0020	402-3113		TN	RECYL AC 12.5MM SP,GP1/2,BM&HL	4400.000	69.84	307320.60
0025	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	8400.000	63.99	537532.13
0030	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	4800.000	74.48	357545.76
0035	413-1000		GL	BITUM TACK COAT	2200.000	3.08	6795.14
0040	432-0206		SY	MILL ASPH CONC PVMT/ 1.50" DEP	2700.000	4.08	11036.33
0045	433-1000		SY	REINF CONC APPROACH SLAB	430.000	152.28	65481.66
0050	436-1000		LF	ASPH CONC CURB - 1	1300.000	9.28	12076.81
0055	441-0016		SY	DRIVEWAY CONCRETE, 6 IN TK	500.000	36.37	18188.08
0060	441-0104		SY	CONC SIDEWALK, 4 IN	130.000	39.00	5070.03
0065	441-0748		SY	CONC MEDIAN, 6 IN	270.000	42.89	11582.86
0070	441-4030		SY	CONC VALLEY GUTTER, 8 IN	20.000	69.44	1388.92
0075	441-6740		LF	CONC CURB & GUTTER/ 8"X30" TP7	1700.000	12.74	21666.45
0080	446-1100		LF	PVMT REF FAB STRIPS, TP2,18 INCH WIDTH	740.000	4.69	3471.77
0085	634-1200		EA	RIGHT OF WAY MARKERS	66.000	89.68	5919.29
0090	641-1100		LF	GUARDRAIL, TP T	90.000	50.70	4563.60
0095	641-1200		LF	GUARDRAIL, TP W	1900.000	15.08	28661.99
0100	641-5001		EA	GUARDRAIL ANCHORAGE, TP 1	2.000	648.00	1296.02
0105	641-5012		EA	GUARDRAIL ANCHORAGE, TP 12	2.000	1765.04	3530.08
0110	207-2003		CY	IMPERF TRENCH BKFILL MATL TP 3	27.000	41.44	1119.02
0115	441-0304		EA	CONC SPILLWAY, TP 4	1.000	1868.30	1868.30
0120	441-0600		CY	CONC HEADWALLS	27.000	962.50	25987.50
0125	500-3101		CY	CLASS A CONCRETE	1.000	357.49	357.49
0130	550-1180		LF	STM DR PIPE 18",H 1-10	350.000	27.51	9628.73
0135	550-1240		LF	STM DR PIPE 24",H 1-10	160.000	39.74	6358.41
0140	550-1300		LF	STM DR PIPE 30",H 1-10	430.000	45.87	19727.83
0145	550-1360		LF	STM DR PIPE 36",H 1-10	70.000	56.33	3943.42
0150	550-1364		LF	STM DR PIPE 36",H 25-30	190.000	107.39	20405.11

0155	550-1422	LF	STM DR PIPE 42",H 15-20	110.000	85.21	9373.31
0160	550-1423	LF	STM DR PIPE 42",H 20-25	150.000	86.00	12900.00
0165	550-2180	LF	SIDE DR PIPE 18",H 1-10	130.000	27.57	3584.42
0170	550-3418	EA	SAFETY END SECTION 18",SD,4:1	4.000	366.65	1466.61
0175	550-4118	EA	FLARED END SECT 18 IN, SIDE DR	4.000	534.47	2137.91
0180	550-4224	EA	FLARED END SECT 24 IN, ST DR	4.000	530.05	2120.21
0185	550-4242	EA	FLARED END SECT 42 IN, ST DR	2.000	956.76	1913.53
0190	576-1010	LF	SLOPE DRAIN PIPE, 10 IN	200.000	23.92	4784.60
0195	577-1100	EA	METAL DR INLET - CMPLT ASSMBLY	4.000	1087.36	4349.47
0200	611-3010	EA	RECONSTR DROP INLET, GROUP 1	1.000	1577.23	1577.23
0205	611-3030	EA	REC STORM SEW MANHOLE, TYPE 1	2.000	1124.24	2248.50

0210	611-8000	EA	ADJUST CATCH BASIN TO GRADE	1.000	1302.63	1302.63
0215	668-1100	EA	CATCH BASIN, GP 1	9.000	1987.17	17884.58
0220	668-1110	LF	CATCH BASIN, GP 1, ADDL DEPTH	6.000	179.76	1078.59
0225	163-0232	AC	TEMPORARY GRASSING	5.000	149.00	745.04
0230	163-0240	TN	MULCH	50.000	232.61	11630.74
0235	163-0300	EA	CONSTRUCTION EXIT	5.000	1302.75	6513.75
0240	163-0503	EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 3	29.000	350.95	10177.56
0245	163-0520	LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	320.000	13.52	4327.97
0255	163-0550	EA	CONS & REM INLET SEDIMENT TRAP	13.000	190.54	2477.02
0260	165-0010	LF	MAINT OF TEMP SILT FENCE, TP A	6200.000	0.82	5117.73
0265	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	3225.000	0.72	2346.96
0270	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	1210.000	1.05	1276.77
0275	165-0087	EA	MAINT OF SILT CONTROL GATE, TP 3	29.000	91.24	2646.20
0280	165-0101	EA	MAINT OF CONST EXIT	5.000	353.05	1765.27
0285	165-0105	EA	MAINT OF INLET SEDIMENT TRAP	13.000	80.28	1043.75
0290	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	2.000	227.46	454.94
0295	167-1500	MO	WATER QUALITY INSPECTIONS	24.000	1162.66	27904.06
0300	171-0010	LF	TEMPORARY SILT FENCE, TYPE A	12400.000	2.08	25886.61
0305	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	6450.000	3.13	20214.49
0310	441-0204	SY	PLAIN CONC DITCH PAVING, 4 IN	30.000	37.46	1123.97
0315	603-2180	SY	STN DUMPED RIP RAP, TP 3, 12"	470.000	58.13	27322.91
0320	603-7000	SY	PLASTIC FILTER FABRIC	490.000	3.64	1784.35
0325	700-6910	AC	PERMANENT GRASSING	10.000	587.29	5872.94
0330	700-7000	TN	AGRICULTURAL LIME	30.000	48.51	1455.56
0340	700-8000	TN	FERTILIZER MIXED GRADE	10.000	506.80	5068.09
0345	700-8100	LB	FERTILIZER NITROGEN CONTENT	480.000	2.79	1342.12
0350	710-9000	SY	PERM SOIL REINFORCING MAT	280.000	4.27	1197.92
0360	716-2000	SY	EROSION CONTROL MATS, SLOPES	17000.000	1.35	23022.08
0365	636-1020	SF	HWY SGN,TP1MAT,REFL SH TP3	115.000	13.98	1608.85

0370	636-1033	SF	HWY SIGNS, TP1MAT,REFL SH TP 9	270.000	19.11	5160.67
0375	636-2070	LF	GALV STEEL POSTS, TP 7	70.000	8.78	615.14
0380	636-2080	LF	GALV STEEL POSTS, TP 8	410.000	8.70	3567.79
0385	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	25.000	69.57	1739.29
0390	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	12735.000	0.33	4292.71
0395	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	10185.000	0.30	3059.98
0400	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	160.000	3.86	617.80
0405	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	1270.000	1.68	2137.47
0410	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	1830.000	0.20	374.60
0415	653-3502	GLF	THERMO SKIP TRAF ST, 5 IN, YEL	785.000	0.24	189.44
0420	653-6004	SY	THERM TRAF STRIPING, WHITE	30.000	3.29	98.81
0425	654-1001	EA	RAISED PVMT MARKERS TP 1	145.000	3.50	508.73
0430	654-1003	EA	RAISED PVMT MARKERS TP 3	110.000	3.49	384.67
0435	657-1085	LF	PRF PL SD PVT MKG,8",B/W,TP PB	830.000	5.52	4583.32
0440	657-6085	LF	PRF PL SD PVMT MKG,8",B/Y,TPPB	830.000	5.12	4256.97
0445	639-2002	LF	STEEL WIRE STRAND CABLE, 3/8"	450.000	3.43	1544.03
0450	639-4003	EA	STRAIN POLE, TP III	4.000	5744.02	22976.12
0455	647-1000	LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	150000.00	150000.00
0475	500-1006	LS	SUPERSTR CONCRETE, CL AA, BR NO - BRIDGE LUMP SUM	1.000	1632960.00	1632960.00

ITEM TOTAL 5806716.77

INFLATED ITEM TOTAL 5806716.77

TOTALS FOR JOB 0011840

ESTIMATED COST:	5806716.77
CONTINGENCY PERCENT (10.0):	580671.68
ESTIMATED TOTAL:	6387388.45

NOTE: The item totals include all alternate items. The estimated totals include only the low cost alternate items.

PROJ. NO.	SR169 Overpass	CALL NO.
P.I. NO.	0011840	
DATE	7/26/2013	

INDEX (TYPE)	**DATE**	**INDEX**
REG. UNLEADED	Jul-13	$ 3.352
DIESEL		$ 3.772
LIQUID AC		$ 572.00

Link to Fuel and AC Index:
http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)				**302016**	**$**	**302,016.00**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	915.20		
Monthly Asphalt Cement Price month project let (APL)			$	572.00		
Total Monthly Tonnage of asphalt cement (TMT)				880		

ASPHALT	**Tons**	**%AC**	**AC ton**
Leveling	0	5.0%	0
12.5 OGFC	0	5.0%	0
12.5 mm	4400	5.0%	220
9.5 mm SP	0	5.0%	0
25 mm SP	8400	5.0%	420
19 mm SP	4800	5.0%	240
	17600		**880**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$**	**3,242.97**	**$**	**3,242.97**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	915.20		
Monthly Asphalt Cement Price month project let (APL)			$	572.00		
Total Monthly Tonnage of asphalt cement (TMT)				9.449222028		

Bitum Tack Gals	gals/ton	tons
2200	232.8234	9.44922203

PROJ. NO.	SR169 Overpass	CALL NO.	
P.I. NO.	0011840		
DATE	7/26/2013		

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	915.20	
Monthly Asphalt Cement Price month project let (APL)			$	572.00	
Total Monthly Tonnage of asphalt cement (TMT)				0	

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.	0	0.20	0	232.8234	0
Double Surf.Trmt.	0	0.44	0	232.8234	0
Triple Surf. Trmt	0	0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT	**$**	**305,258.97**

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date: 6/25/2013 Project:
Revised: County: Wayne
PI: 0011840
Description: SR169 over the Railroad
Project Termini: East of Spring Grove Road to West Cherry Street
Existing ROW: Varies
Parcels: 18 Required ROW: Varies

Land and Improvements		$1,550,320.50
Proximity Damage	*$0.00*	
Consequential Damage	*$40,647.00*	
Cost to Cures	*$30,000.00*	
Trade Fixtures	*$5,000.00*	
Improvements	*$275,000.00*	
Valuation Services		$66,312.50
Legal Services		$124,650.00
Relocation		$131,000.00
Demolition		$55,000.00
Administrative		$161,000.00
TOTAL ESTIMATED COSTS		$2,088,283.00
TOTAL ESTIMATED COSTS (ROUNDED)		***$2,089,000.00***

Preparation Credits	Hours	Signature

Prepared By: CG#: (DATE)
Approved By: CG#: (DATE)

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

allsop

Moreland Altobelli Associates, Inc.
67 Brampton Road
Garden City, Georgia 31408
Phone: 912-963-1112 Fax: 912-963-1120

Preliminary Mitigation Cost Estimate

Project:	**SR169 Overpass**
	PI No. 0011840
Prepared By:	Matt Chamblee
Prepared On:	07/25/13

Date	07/25/69
MA Project No.	WAY1301
CC: Project File	

As requested for the concept cost estimate of the subject project, a preliminary mitigation cost estimate has been prepared as detailed below. The cost estimate is based on an anticipated cost of $4,500 per wetland credit and $45 per stream credit.

Wetlands Credits	Cost	Stream Credits	Cost
14	$63,000	0	$0
Total Cost	$63,000		

STATE HIGHWAY AGENCY

DATE : 07/26/2013
PAGE : 1

JOB ESTIMATE REPORT

JOB NUMBER : 0011841 SPEC YEAR: 01
DESCRIPTION: SR169 @ SUNSET BLVD

ITEMS FOR JOB 0011841

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	150-1000		LS	TRAFFIC CONTROL - PI0011841	1.000	50000.00	50000.00
0010	201-1500		LS	CLEARING & GRUBBING - PI0011841	1.000	75000.00	75000.00
0015	210-0100		LS	GRADING COMPLETE - PI0011841	1.000	112000.00	112000.00
0020	310-5100		SY	GR AGGR BS CRS 10IN INCL MATL	18950.000	20.79	393970.50
0025	318-3000		TN	AGGR SURF CRS	250.000	25.51	6377.50
0030	402-1812		TN	RECYL AC LEVELING,INC BM&HL	1400.000	75.22	105308.00
0035	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	1850.000	63.99	118381.50
0040	402-3141		TN	RECYL AC 12.5 MM SP,GP 1 OR 2,INCL BM	1469.000	69.84	102594.96
0045	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	1485.000	74.48	110602.80
0050	413-1000		GL	BITUM TACK COAT	4730.000	3.08	14568.40
0055	441-0016		SY	DRIVEWAY CONCRETE, 6 IN TK	1490.000	36.37	54191.30
0060	441-0748		SY	CONC MEDIAN, 6 IN	1125.000	39.00	43875.00
0065	550-1240		LF	STM DR PIPE 24",H 1-10	200.000	39.74	7948.00
0070	550-2180		LF	SIDE DR PIPE 18",H 1-10	1200.000	27.57	33084.00
0075	550-3324		EA	SAFETY END SECTION 24",STD,4:1	4.000	530.05	2120.20
0080	550-3618		EA	SAFETY END SECTION 18",SD,6:1	48.000	366.55	17594.40
0085	603-7000		SY	PLASTIC FILTER FABRIC	100.000	2.93	293.00
0090	634-1200		EA	RIGHT OF WAY MARKERS	65.000	89.68	5829.20
0095	643-8200		LF	BARRIER FENCE (ORANGE), 4 FT	500.000	2.31	1155.00
0100	441-0104		SY	CONC SIDEWALK, 4 IN	120.000	42.89	5146.80
0105	163-0232		AC	TEMPORARY GRASSING	12.000	149.00	1788.00
0110	163-0240		TN	MULCH	150.000	232.61	34891.50
0115	163-0300		EA	CONSTRUCTION EXIT	4.000	1302.75	5211.00
0120	165-0101		EA	MAINT OF CONST EXIT	4.000	353.05	1412.20
0125	165-0010		LF	MAINT OF TEMP SILT FENCE, TP A	2000.000	0.82	1640.00
0130	165-0030		LF	MAINT OF TEMP SILT FENCE, TP C	2000.000	0.72	1440.00
0135	167-1000		EA	WATER QUALITY MONITORING AND SAMPLING	2.000	227.46	454.92
0140	167-1500		MO	WATER QUALITY INSPECTIONS	24.000	1162.66	27903.84
0145	171-0010		LF	TEMPORARY SILT FENCE, TYPE A	4000.000	2.08	8320.00
0150	171-0030		LF	TEMPORARY SILT FENCE, TYPE C	4000.000	3.13	12520.00
0155	700-6910		AC	PERMANENT GRASSING	6.000	587.29	3523.74
0160	700-7000		TN	AGRICULTURAL LIME	10.000	48.51	485.10
0165	700-8000		TN	FERTILIZER MIXED GRADE	5.000	506.80	2534.00
0170	700-8100		LB	FERTILIZER NITROGEN CONTENT	2500.000	2.79	6975.00
0175	710-9000		SY	PERM SOIL REINFORCING MAT	1500.000	4.27	6405.00
0180	716-2000		SY	EROSION CONTROL MATS, SLOPES	1500.000	1.35	2025.00
0185	636-1020		SF	HWY SGN,TP1MAT,REFL SH TP3	300.000	13.98	4194.00
0190	636-1033		SF	HWY SIGNS, TP1MAT,REFL SH TP 9	300.000	19.11	5733.00

0195	636-2070	LF	GALV STEEL POSTS, TP 7	100.000	8.78	878.00
0200	636-2080	LF	GALV STEEL POSTS, TP 8	100.000	8.70	870.00
0205	653-0120	EA	THERM PVMT MARK, ARROW, TP 2	22.000	69.57	1530.54

0210	653-1501	LF	THERMO SOLID TRAF ST 5 IN, WHI	2000.000	0.33	660.00
0215	653-1502	LF	THERMO SOLID TRAF ST, 5 IN YEL	8000.000	0.30	2400.00
0220	653-1704	LF	THERM SOLID TRAF STRIPE,24",WH	124.000	3.86	478.64
0225	653-3501	GLF	THERMO SKIP TRAF ST, 5 IN, WHI	800.000	0.20	160.00
0230	653-6004	SY	THERM TRAF STRIPING, WHITE	500.000	3.29	1645.00
0235	653-6006	SY	THERM TRAF STRIPING, YELLOW	600.000	3.29	1974.00
0240	654-1002	EA	RAISED PVMT MARKERS TP 2	300.000	3.50	1050.00
0245	647-1000	LS	TRAF SIGNAL INSTALLATION NO - SR169@SUNSET	1.000	150000.00	150000.00
0250	653-1804	LF	THERM SOLID TRAF STRIPE, 8",WH	1270.000	1.68	2133.60

ITEM TOTAL	1551276.64
INFLATED ITEM TOTAL	1551276.64

TOTALS FOR JOB 0011841

ESTIMATED COST:	1551276.64
CONTINGENCY PERCENT (10.0):	155127.66
ESTIMATED TOTAL:	1706404.30

PROJ. NO.	SR169@Sunset	CALL NO.
P.I. NO.	0011841	
DATE	7/26/2013	

INDEX (TYPE)	**DATE**	**INDEX**
REG. UNLEADED	Jul-13	$ 3.352
DIESEL		$ 3.772
LIQUID AC		$ 572.00

Link to Fuel and AC Index:
http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)				**106460.64**	**$**	**106,460.64**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	915.20		
Monthly Asphalt Cement Price month project let (APL)			$	572.00		
Total Monthly Tonnage of asphalt cement (TMT)				310.2		

ASPHALT	**Tons**	**%AC**	**AC ton**
Leveling	1400	5.0%	70
12.5 OGFC	0	5.0%	0
12.5 mm	1469	5.0%	73.45
9.5 mm SP	0	5.0%	0
25 mm SP	1850	5.0%	92.5
19 mm SP	1485	5.0%	74.25
	6204		**310.2**

BITUMINOUS TACK COAT

Price Adjustment (PA)			**$**	**6,972.39**	**$**	**6,972.39**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	915.20		
Monthly Asphalt Cement Price month project let (APL)			$	572.00		
Total Monthly Tonnage of asphalt cement (TMT)				20.31582736		

Bitum Tack Gals	gals/ton	tons
4730	232.8234	20.3158274

PROJ. NO.	SR169@Sunset	CALL NO.	
P.I. NO.	0011841		
DATE	7/26/2013		

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				**0**	**$ -**
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	$	915.20	
Monthly Asphalt Cement Price month project let (APL)			$	572.00	
Total Monthly Tonnage of asphalt cement (TMT)				0	

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.	0	0.20	0	232.8234	0
Double Surf.Trmt.	0	0.44	0	232.8234	0
Triple Surf. Trmt	0	0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT	**$**	**113,433.03**

GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY

Date:	6/25/2013	Project:	CSHpp-0007000(567)
Revised:		County:	Wayne
		PI:	0011841
Description:	SR169 at Sunset Blvd		
Project Termini:			
		Existing ROW:	Varies
Parcels:	12	Required ROW:	Varies

Land and Improvements		$145,687.50
Proximity Damage	*$0.00*	
Consequential Damage	*$30,000.00*	
Cost to Cures	*$15,000.00*	
Trade Fixtures	*$5,000.00*	
Improvements	*$0.00*	
Valuation Services		$46,062.50
Legal Services		$83,100.00
Relocation		$64,000.00
Demolition		$30,000.00
Administrative		$106,500.00
TOTAL ESTIMATED COSTS		$475,350.00
TOTAL ESTIMATED COSTS (ROUNDED)		***$476,000.00***

Preparation Credits	Hours	Signature

Prepared By: _____ CG#: _____ (DATE)

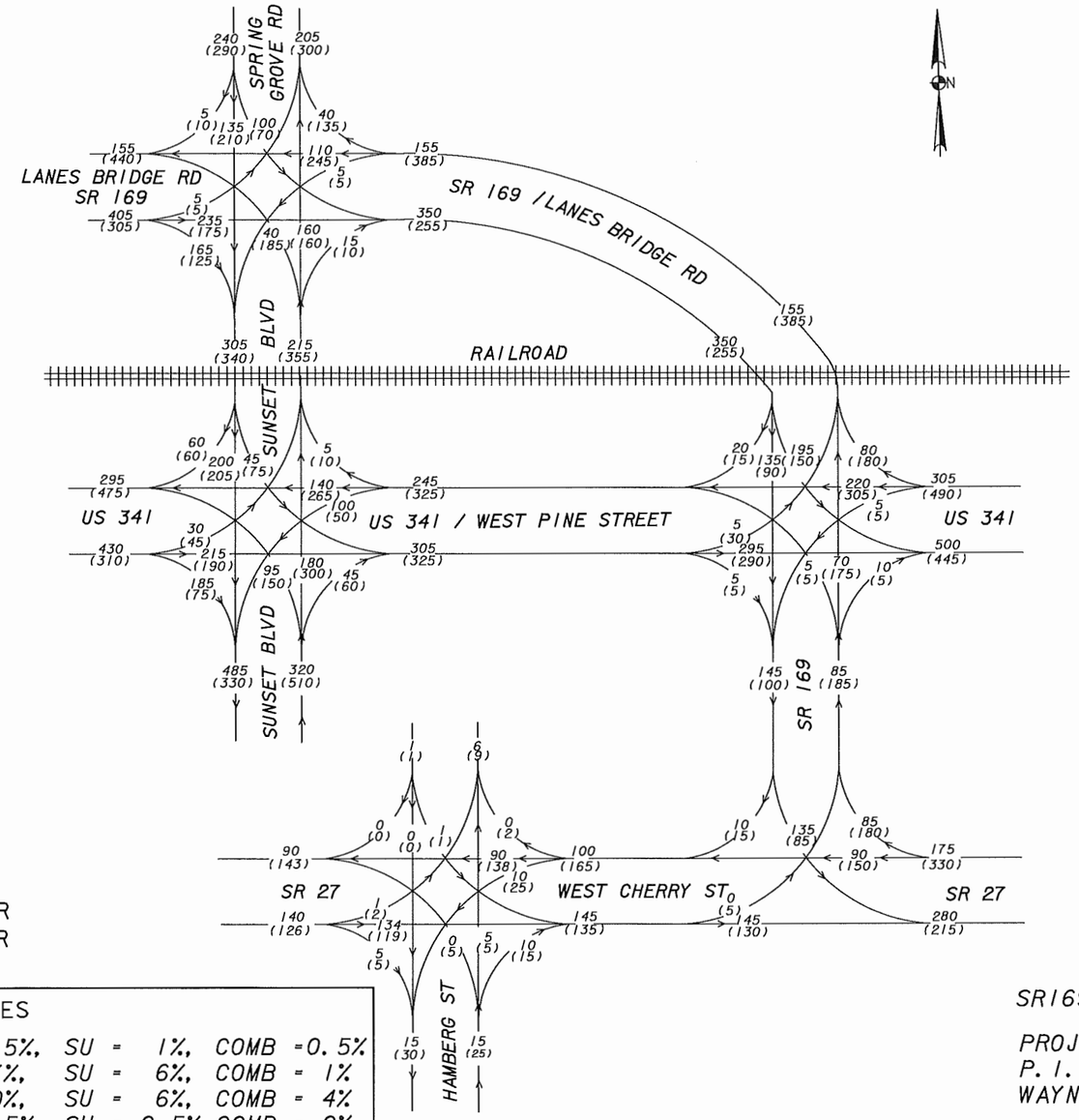
Approved By: _____ CG#: _____ (DATE)

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate

allsop

Traffic Diagrams

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00 AM PEAK HOUR
(00) PM PEAK HOUR

TRUCK PERCENTAGES

SR 169 / LANES BRIDGE RD	T = 1.5%,	SU = 1%,	COMB = 0.5%
SUNSET BLVD	T = 7%,	SU = 6%,	COMB = 1%
US 341 / WEST PINE ST	T = 10%,	SU = 6%,	COMB = 4%
SR 27 / WEST CHERRY ST	T = 0.5%,	SU = 0.5%,	COMB = 0%

SR169 RAILROAD OVERPASS

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

DESIGN BY:	CMH
DRAWN BY:	CMH
CHECKED BY:	XXX
SUPERVISED BY:	M. J. SHEEHAN P. E.

WAYNE COUNTY
GEORGIA

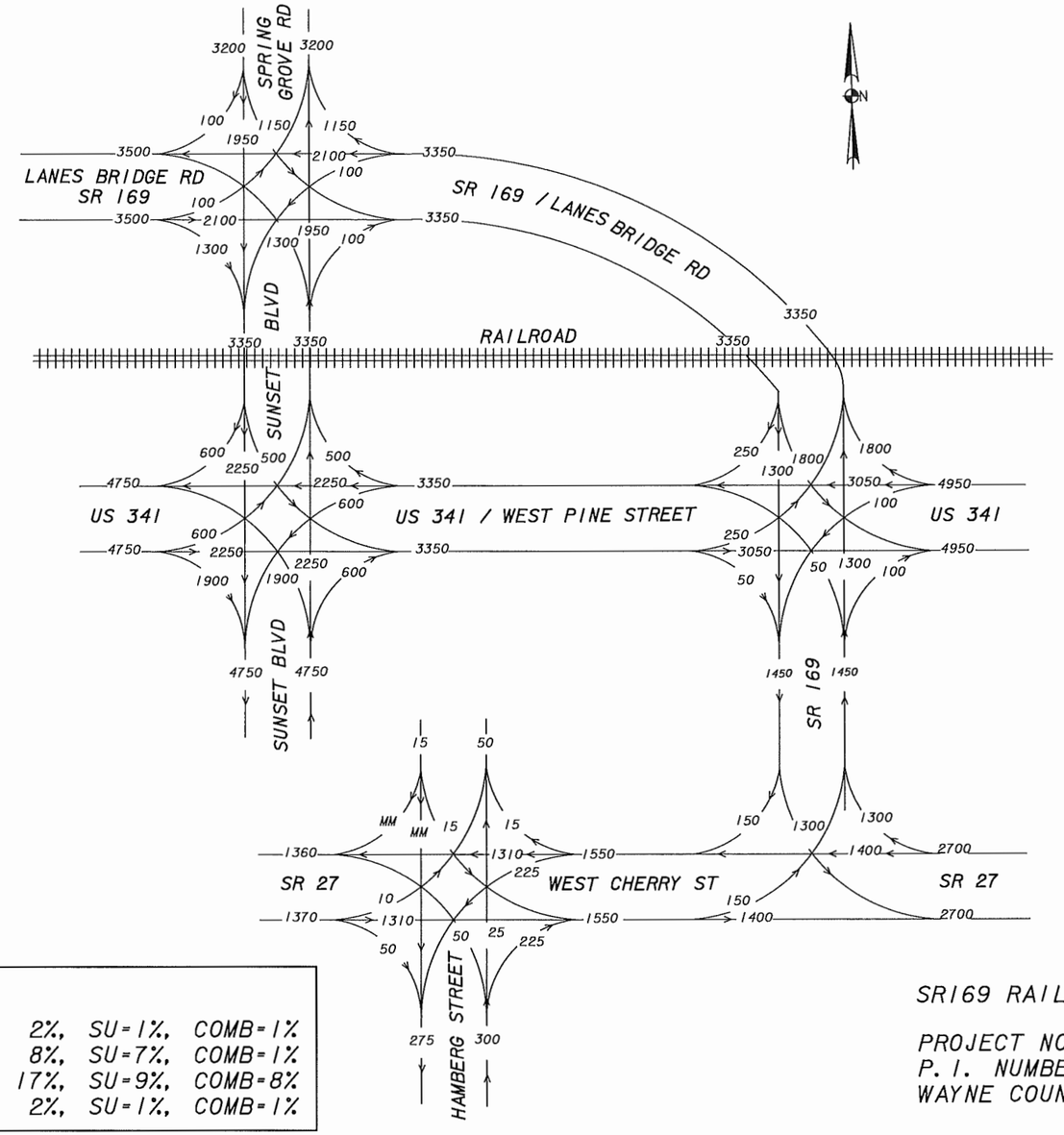
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2009 EXISTING
PEAK HOUR TRAFFIC

DRAWING No. 10-01

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00 YEAR 2009 EXISTING ADT

TRUCK PERCENTAGES

SR 169 / LANES BRIDGE RD	24-HR T = 2%,	SU=1%,	COMB=1%
SUNSET BLVD	24-HR T = 8%,	SU=7%,	COMB=1%
US 341 / WEST PINE ST	24-HR T = 17%,	SU=9%,	COMB=8%
SR 27 / WEST CHERRY ST	24-HR T = 2%,	SU=1%,	COMB=1%

SR169 RAILROAD OVERPASS

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

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WAYNE COUNTY
GEORGIA

REVISION DATES

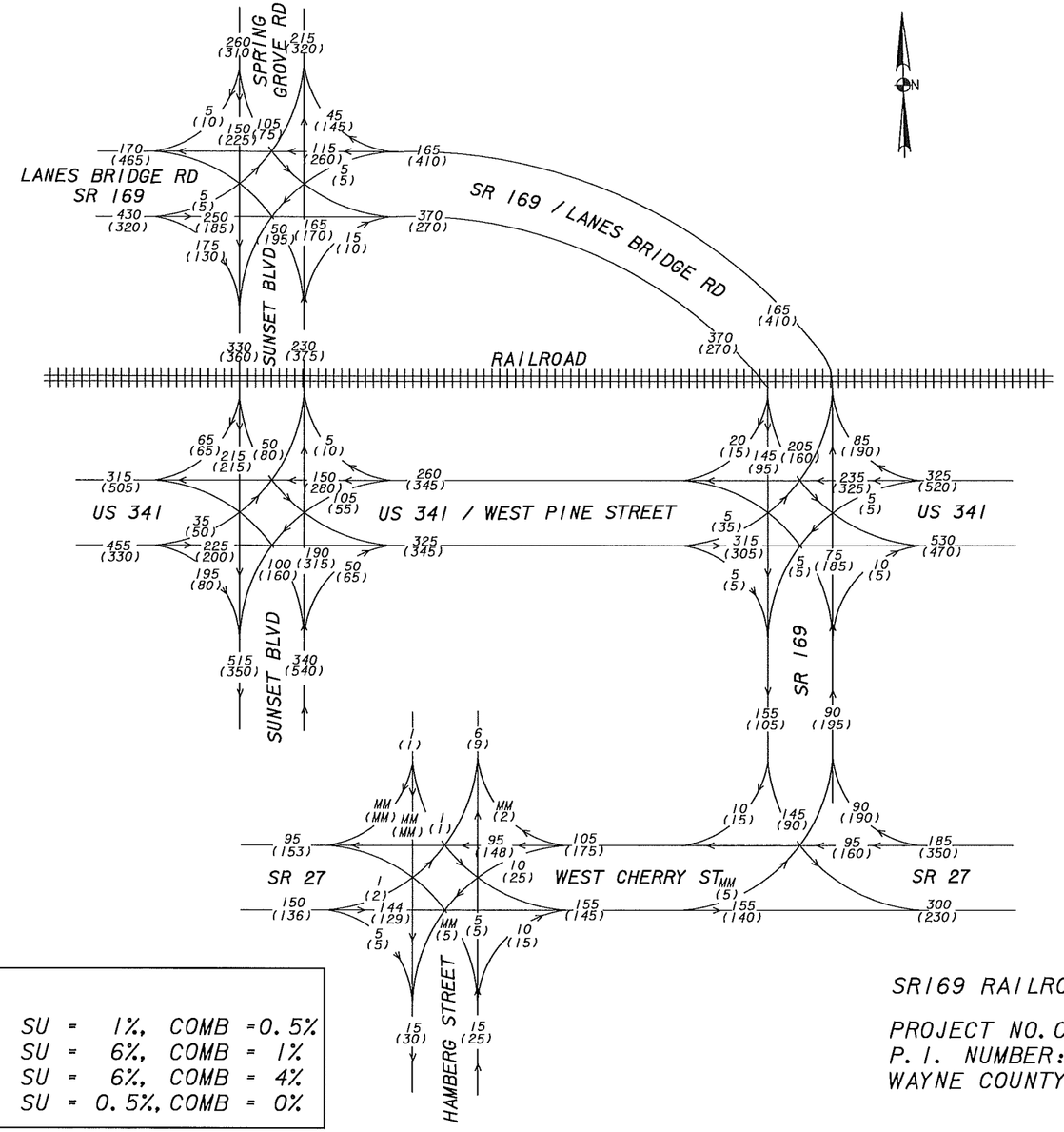
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2009 EXISTING ADT

DRAWING No. 10-02

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00	AM PEAK HOUR
(00)	PM PEAK HOUR
MM	MINOR MOVEMENT

TRUCK PERCENTAGES

SR 169 / LANES BRIDGE RD	T = 1.5%,	SU = 1%,	COMB = 0.5%
SUNSET BLVD	T = 7%,	SU = 6%,	COMB = 1%
US 341 / WEST PINE ST	T = 10%,	SU = 6%,	COMB = 4%
SR 27 / WEST CHERRY ST	T = 0.5%,	SU = 0.5%,	COMB = 0%

SR169 RAILROAD OVERPASS

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

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WAYNE COUNTY
GEORGIA

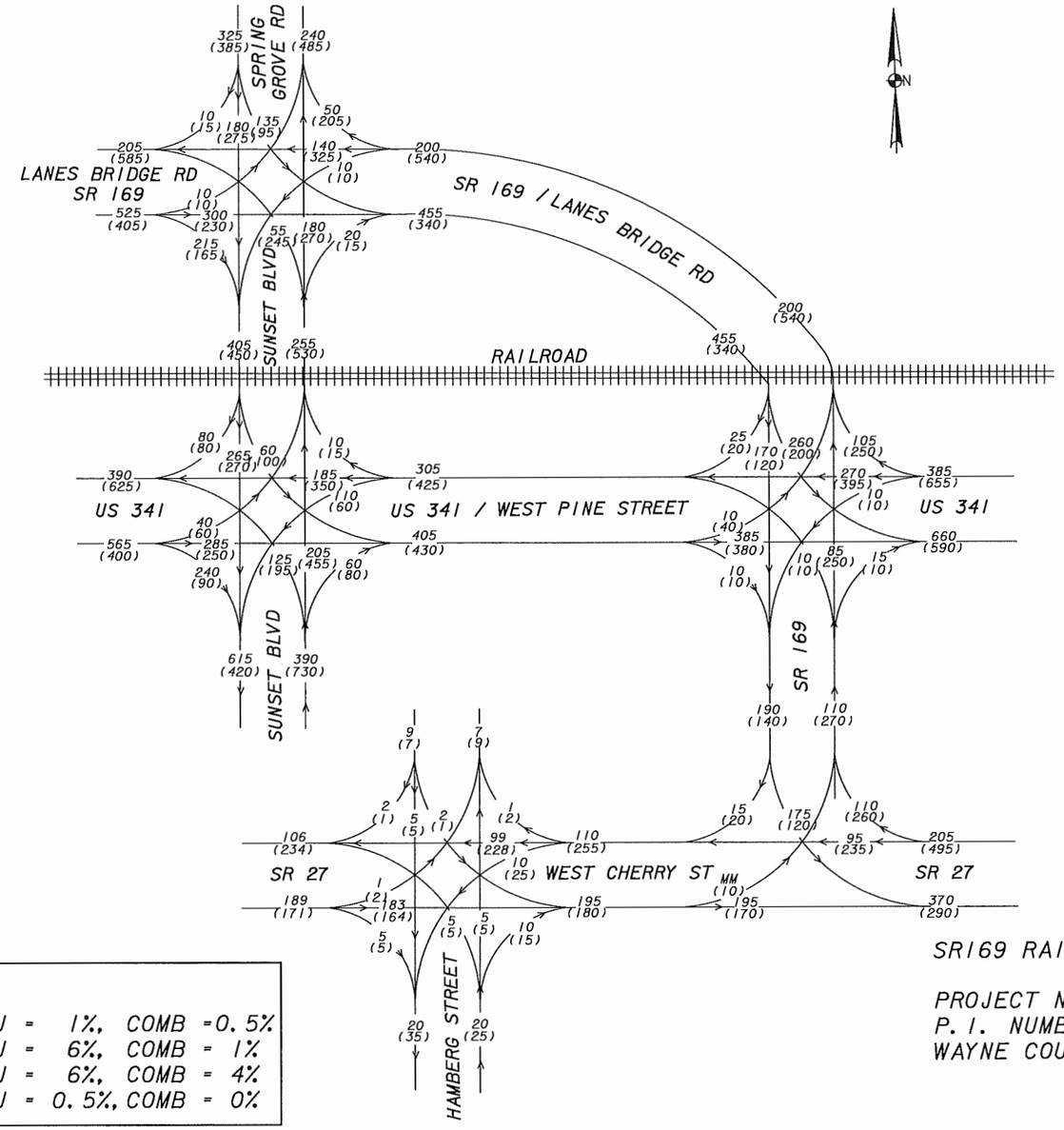
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2018 NO-BUILD
PEAK HOUR TRAFFIC

DRAWING No. 10-03

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00 AM PEAK HOUR
(00) PM PEAK HOUR
MM MINOR MOVEMENT

TRUCK PERCENTAGES

SR 169 / LANES BRIDGE RD	T = 1.5%,	SU = 1%,	COMB = 0.5%
SUNSET BLVD	T = 7%,	SU = 6%,	COMB = 1%
US 341 / WEST PINE ST	T = 10%,	SU = 6%,	COMB = 4%
SR 27 / WEST CHERRY ST	T = 0.5%,	SU = 0.5%,	COMB = 0%

SR169 RAILROAD OVERPASS

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

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SUPERVISED BY:	M. J. SHEEHAN P. E.

WAYNE COUNTY
GEORGIA

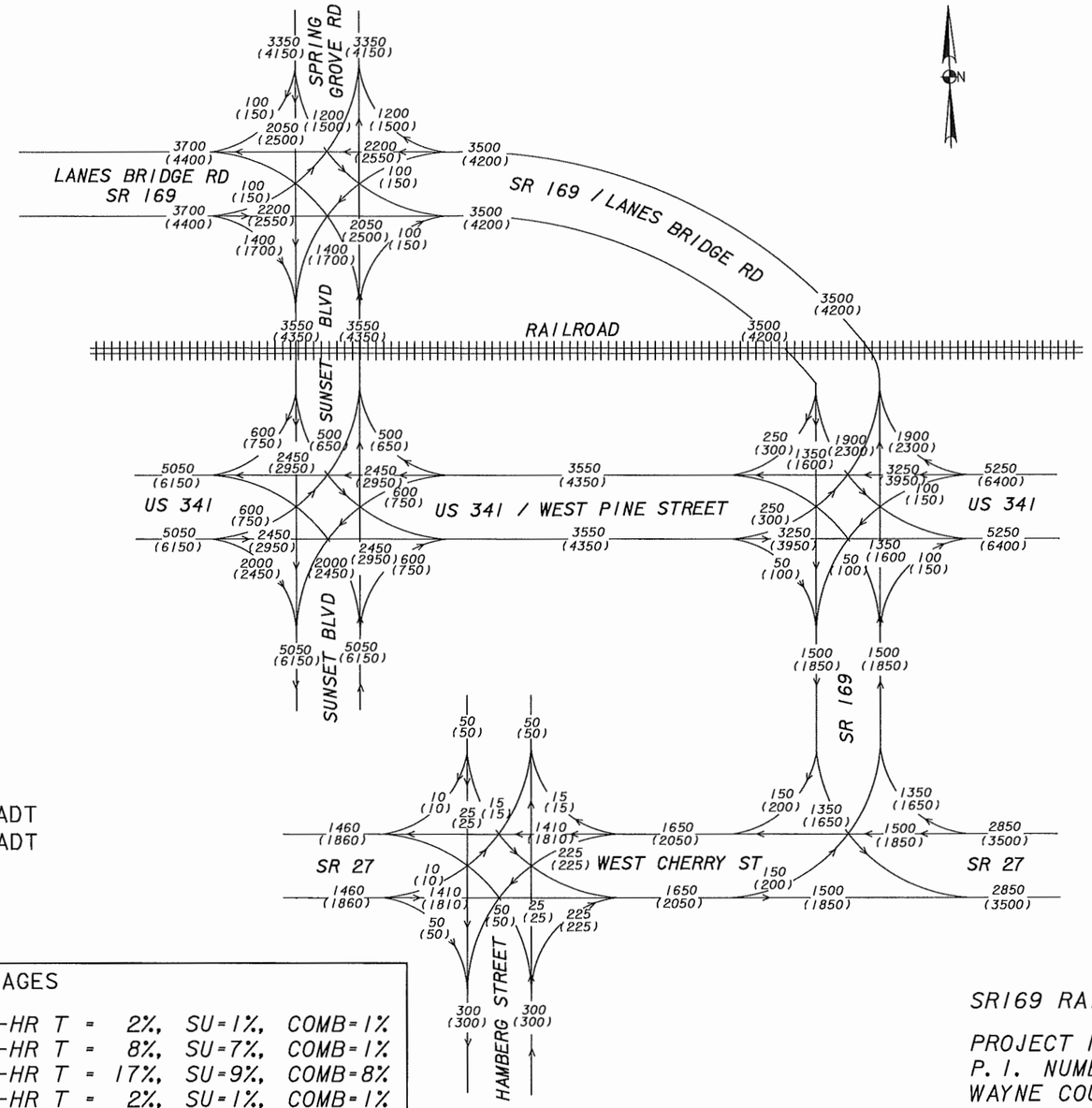
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2038 NO-BUILD
PEAK HOUR TRAFFIC

DRAWING No. 10-04

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00 YEAR 2018 NO-BUILD ADT
(00) YEAR 2038 NO-BUILD ADT

TRUCK PERCENTAGES

SR 169 / LANES BRIDGE RD	24-HR T = 2%,	SU=1%,	COMB=1%
SUNSET BLVD	24-HR T = 8%,	SU=7%,	COMB=1%
US 341 / WEST PINE ST	24-HR T = 17%,	SU=9%,	COMB=8%
SR 27 / WEST CHERRY ST	24-HR T = 2%,	SU=1%,	COMB=1%

SR169 RAILROAD OVERPASS

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

DESIGN BY:	CMH
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WAYNE COUNTY
GEORGIA

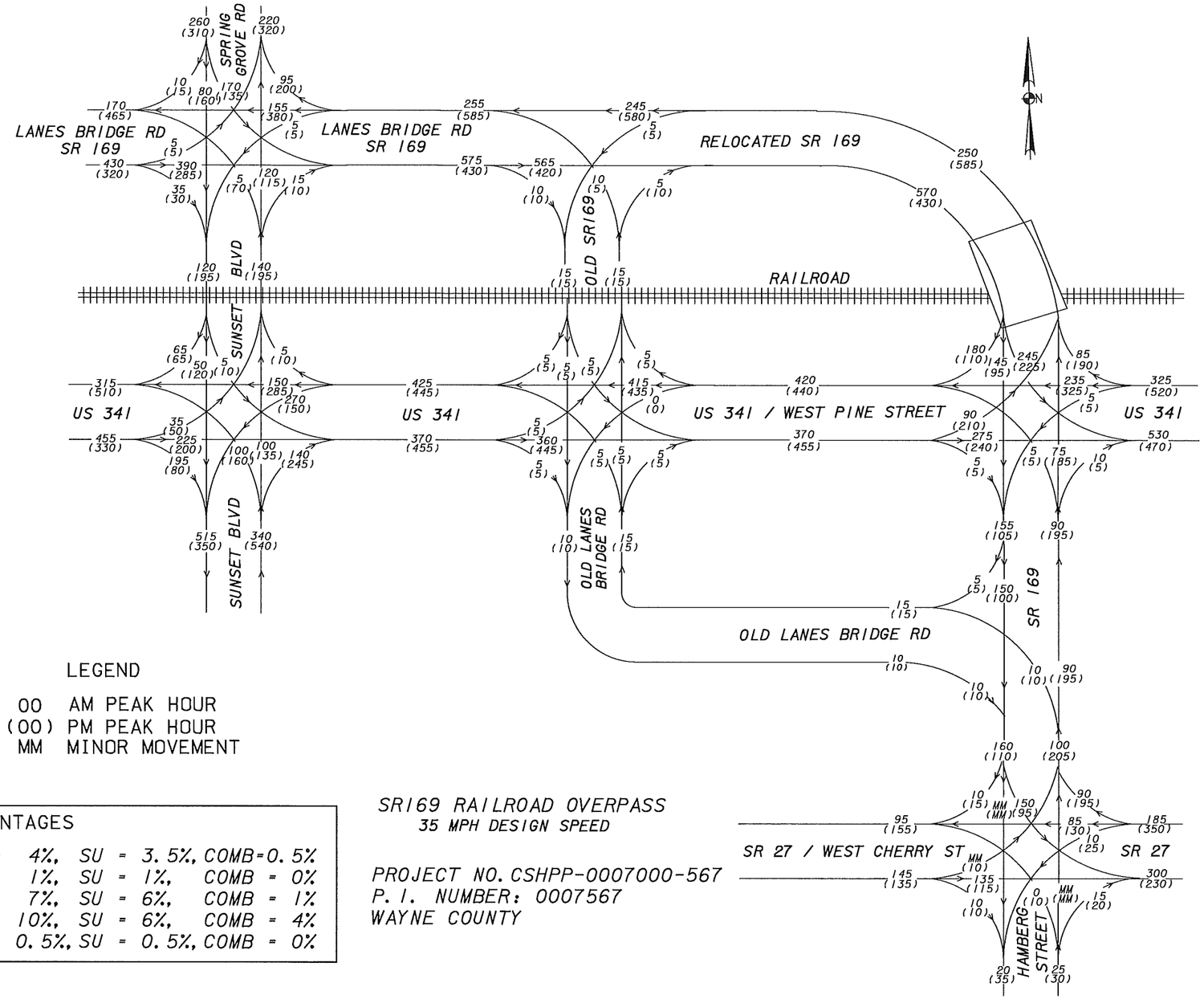
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2018/2038 NO-BUILD ADT

DRAWING No. 10-05

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00 AM PEAK HOUR
(00) PM PEAK HOUR
MM MINOR MOVEMENT

TRUCK PERCENTAGES

SR 169 RELOCATED	T = 4%,	SU = 3.5%,	COMB=0.5%
OLD SR 169	T = 1%,	SU = 1%,	COMB = 0%
SUNSET BLVD	T = 7%,	SU = 6%,	COMB = 1%
US 341 / WEST PINE ST	T = 10%,	SU = 6%,	COMB = 4%
SR 27 / WEST CHERRY ST	T = 0.5%,	SU = 0.5%,	COMB = 0%

SR169 RAILROAD OVERPASS
35 MPH DESIGN SPEED

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

DESIGN BY:	CMH
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WAYNE COUNTY
GEORGIA

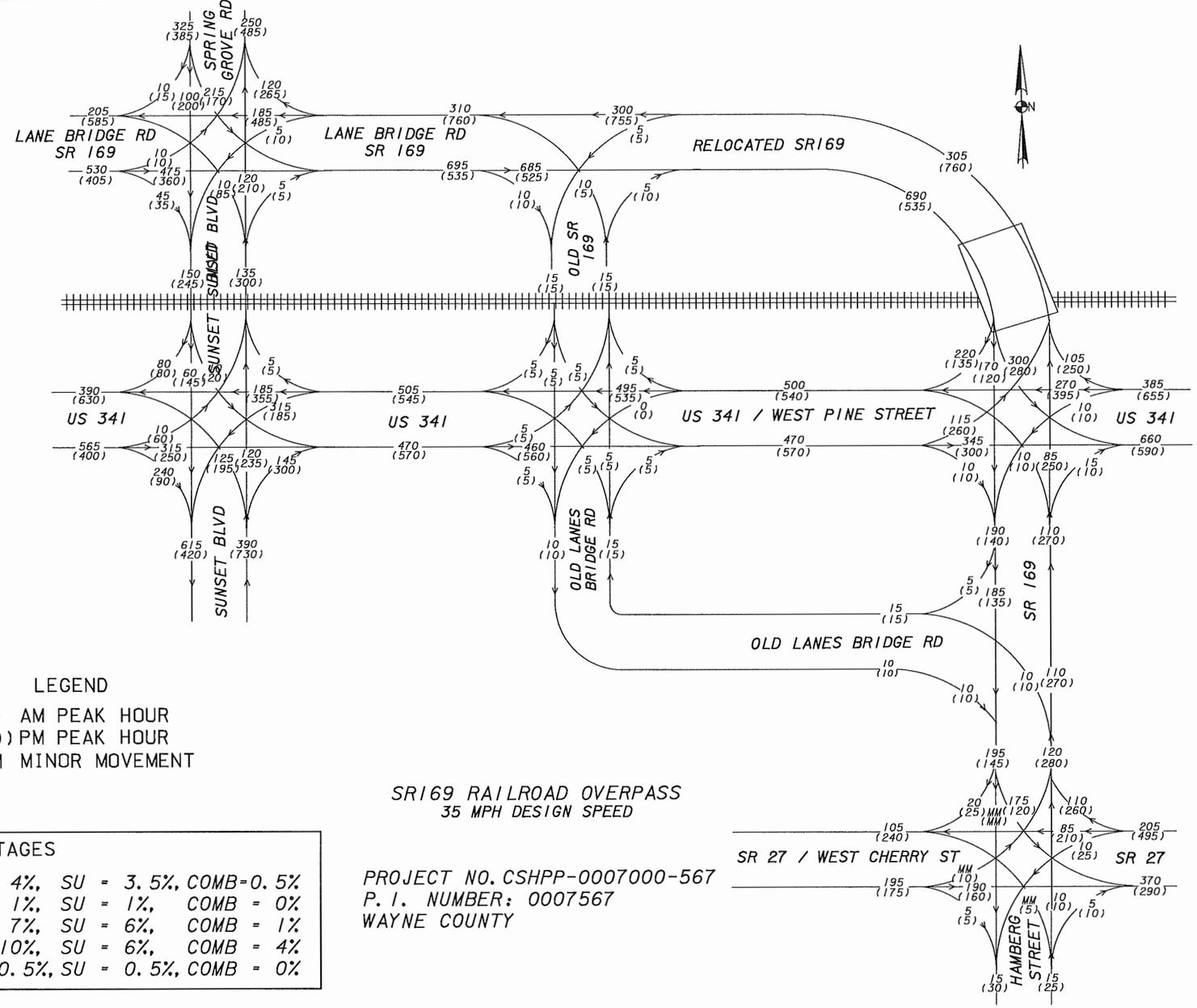
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2018 BUILD
PEAK HOUR TRAFFIC

DRAWING No. 10-06

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



LEGEND

00 AM PEAK HOUR
(00) PM PEAK HOUR
MM MINOR MOVEMENT

SR169 RAILROAD OVERPASS
35 MPH DESIGN SPEED

TRUCK PERCENTAGES

SR 169 RELOCATED	T = 4%,	SU = 3.5%,	COMB=0.5%
OLD SR 169	T = 1%,	SU = 1%,	COMB = 0%
SUNSET BLVD	T = 7%,	SU = 6%,	COMB = 1%
US 341 / WEST PINE ST	T = 10%,	SU = 6%,	COMB = 4%
SR 27 / WEST CHERRY ST	T = 0.5%,	SU = 0.5%,	COMB = 0%

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

MORELAND-ALTOBELLI ASSOC., INC.
(770) 263-5945

DESIGN BY:	CMH
DRAWN BY:	CMH
CHECKED BY:	XXX
SUPERVISED BY:	M. J. SHEEHAN P. E.

WAYNE COUNTY
GEORGIA

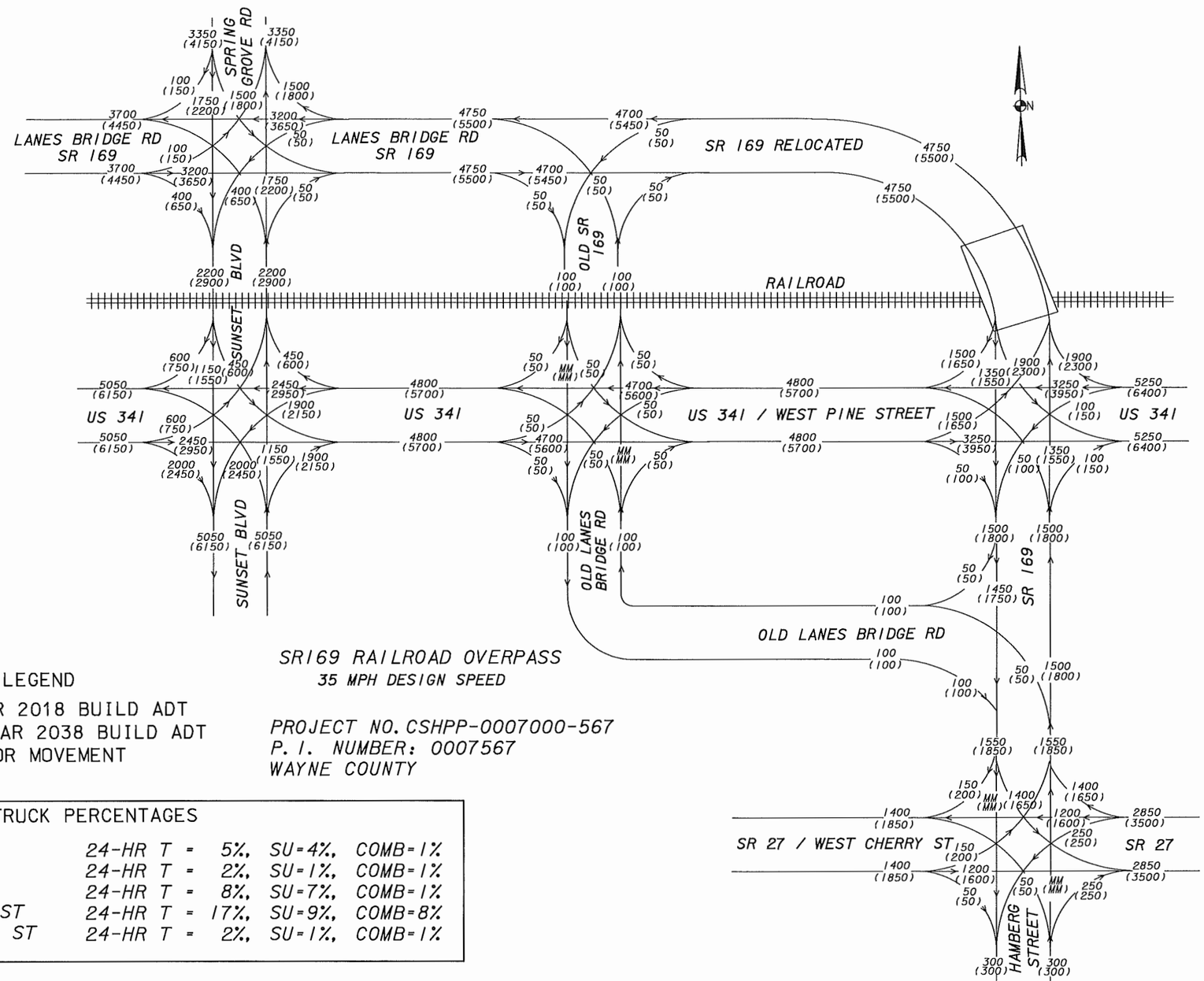
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2038 BUILD
PEAK HOUR TRAFFIC

DRAWING No. 10-07

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
WAYNE	CSSTP-0007-00 (567)		



SR169 RAILROAD OVERPASS
35 MPH DESIGN SPEED

LEGEND

00 YEAR 2018 BUILD ADT
(00) YEAR 2038 BUILD ADT
MM MINOR MOVEMENT

PROJECT NO. CSHPP-0007000-567
P. I. NUMBER: 0007567
WAYNE COUNTY

TRUCK PERCENTAGES

SR 169 RELOCATED	24-HR T =	5%,	SU=4%,	COMB=1%
OLD SR 169	24-HR T =	2%,	SU=1%,	COMB=1%
SUNSET BLVD	24-HR T =	8%,	SU=7%,	COMB=1%
US 341 / WEST PINE ST	24-HR T =	17%,	SU=9%,	COMB=8%
SR 27 / WEST CHERRY ST	24-HR T =	2%,	SU=1%,	COMB=1%

MORELAND-ALTOBELLI ASSOC., INC.
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WAYNE COUNTY
GEORGIA

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TRAFFIC FLOW DIAGRAM
SR 169 RAILROAD OVERPASS
2018/2038 BUILD
AVERAGE DAILY TRAFFIC

DRAWING No. 10-08

Intersection Skew Angle Justification

INTERSECTION SKEW ANGLE JUSTIFICATION :

The existing angle of intersection for SR 169 at Sunset Boulevard/Spring Grove Road is less than 45° with Sunset Boulevard to the west and approximately 35° with Spring Grove Road to the east. The proposed design at this intersection will re-align the centerline of Sunset Boulevard to the left before tying back into the existing baseline. The proposed design will intersect SR 169 at 60°. The proposed alignment will avoid a conflict with a nearby utility substation and will accommodate the increase in left-turn traffic that will be generated from the Spring Grove Road approach using the overpass to avoid the at-grade railroad crossing on Sunset Boulevard.

Sight Distance

SIGHT DISTANCE:

The intersection of SR 169 at US 341/West Pine Street will be signalized. The proposed intersection design with the 70-degree skew exceeds sight distance requirements for a design speed of 35 miles per hour. The stopping sight distance is approximately 1000 feet along SR 169 in the area of the intersection, surpassing the minimum required distance of approximately 250 feet. Eastbound traffic on West Pine Street turning left onto SR 169 have sufficient sight distance to oncoming traffic to complete the turn towards the railroad overpass.