

I-85 and South Perry St Bridge Incident



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Jul 30	31	Aug 1 AREA BRIDGE INSPECTION MEETING - AREA OFFICE	2 TRAFFIC SIGNAL MEETING - AREA OFFICE	3 30% SCOPE REVIEW; ELMORE COUNTY; REGION OFFICE	4	5
6	7 SICK CHILD; GOD'S COUNTRY - COOSA COUNTY ALABAMA	8 PLAN-IN-HAND BULLOCK COUNTY; AREA OFFICE	9 DISTRICT TEMPORARY TRAFFIC CONTROL REVIEW - DISTRICT 1 RESURFACING SCOPE OF WORK - DISTRICT 1; AUTAUGA / ELMORE COUNTIES	10 INTERSTATE PENINSULA TELECONFERENCE MEETING; REGION OFFICE TRAFFIC IMPACT STUDY - AUBURN PERMIT; DISTRICT 6 - LEE COUNTY	11	12
13	14 INTERSTATE PENINSULA MEETING (REGION DISCUSSION); REGION OFFICE TOP SECRET PERMIT ACCESS MEETING; REGION OFFICE	15 INTERSTATE SIGN MEETING; REGION OFFICE PLAN - IN - HAND; AUTAUGA COUNTY; AREA OFFICE	16 INTERSTATE PENINSULA MEETING; REGION OFFICE	17 ON-SITE PERMIT ACCESS MEETING; LEE COUNTY	18 FISHING WITH THE BOYS - THE GREAT BLUE OCEAN	19
20 FISHING WITH THE BOYS - THE	21 ON-SITE PERMIT MEETING - DISTRICT 5	22 AREA PERMIT DISCUSSION - AREA OFFICE DISTRICT TEMPORARY TRAFFIC CONTROL REVIEW - DISTRICT 3	23 MAINTENANCE MANAGEMENT - MONTGOMERY	24	25	26
27	28 PERSONELL MEETING; AREA OFFICE	29 JESSE'S PERSONAL DAY - REST AND RELAXATION; COOSA COUNTY ALABAMA	30	31 DISTRICT TEMPORARY TRAFFIC CONTROL REVIEW - DISTRICT 4	Sep 1	2

Why is my calendar important?

Work Summary

- District Meetings- 7 Days
- Area Meetings- 4 Days
- Region Meetings- 5 Days
- Permit Meetings- 2 Days
- Personnel Meetings- 1 Day
- Maintenance Management
 - 3 LONG Days

Jesse's Summary

- Sick Child- 1 Day
- Fishing with the boys- 4 Days
- Jesse's Personal Day- 1 Day



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August 29
6:00 AM



August 29
7:25 AM



August 29
7:25 AM

Four vehicle collision including a tractor trailer hauling lumber occurred on I-85 South at milepost 0.9 at the South Perry Street bridge overpass



Initial Response Teams

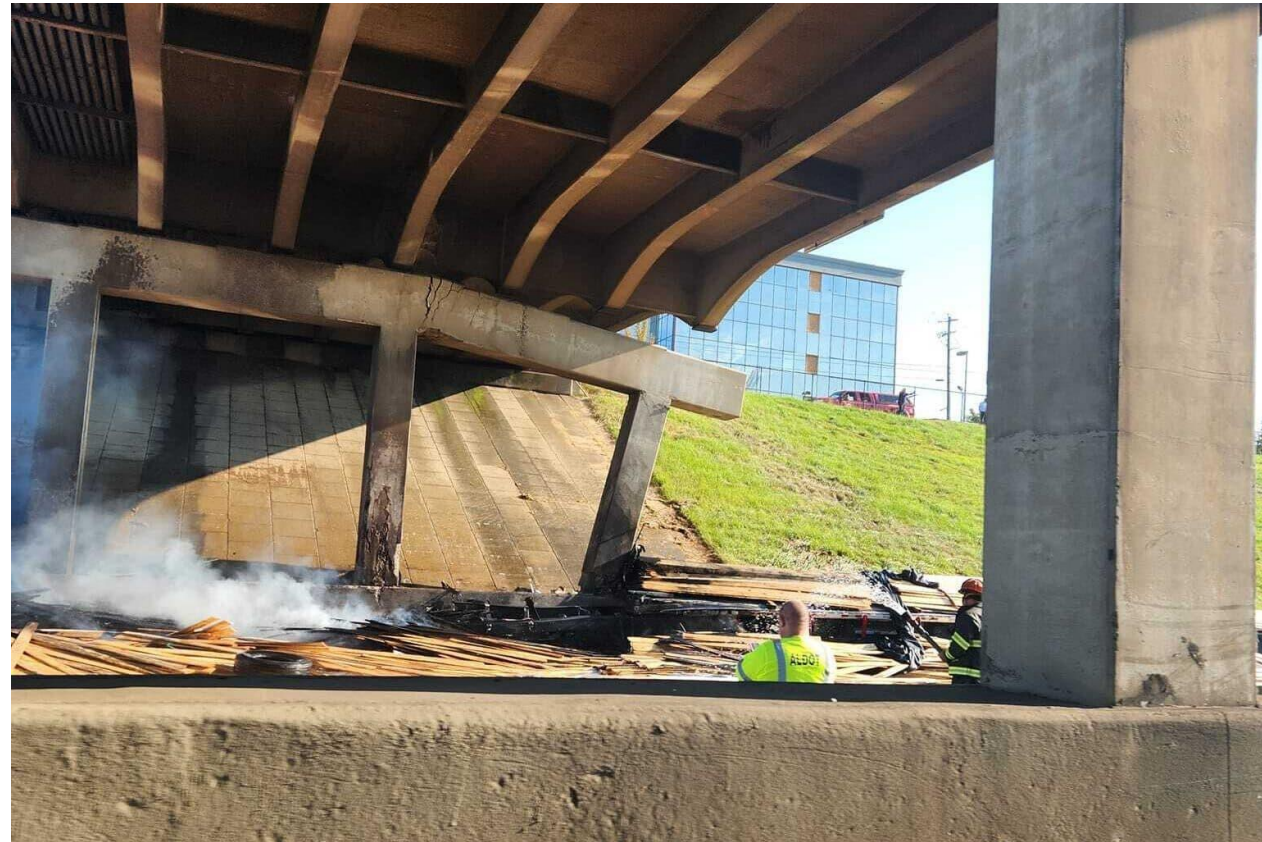
- All members of the Area Maintenance staff were called into action
 - District, Bridge, Operations, Traffic, Hazardous Materials, and even Permits
- Montgomery Fire and Rescue
- Montgomery Police Department
- Alabama Law Enforcement Agency (ALEA)
- City of Montgomery Maintenance Department
- Contractors
 - McInnis Construction
 - Scott Bridge Company
 - Newell & Bush
 - Bridge Builders of Alabama
- ALDOT EBIT Team
- ALDOT Leadership and various Bureaus

Issues on arrival at scene

Traffic



Bridge



Traffic Issues

- I-85 South was closed
 - Never good
- It was closed at rush hour
 - Really not good
 - AADT- 125, 000
- Detours were needed
- Open the interstate



Bridge Issues

- South Perry Street bridge was closed
 - Even local traffic was hesitant on crossing the bridge
- Bridge had received significant damage
- Remove debris
 - Can be a lengthy process (especially after a large collision)
 - This was needed to determine the extent of bridge damage
- Determine the extent of the bridge damage
 - EBIT on site
 - Collision damage
 - Fire damage
- Determine a repair for the bridge
 - This was based on the extent of the bridge damage
 - Timeline for this item would be a huge factor



“Relax. Look Around. Make A Call.”



Traffic Operations

Two key activities working together

- Detour all I-85 South at Exit 6 (Eastern Boulevard)
- Detour all I-85 South at Exit 1 (Union Street/South Street)



Traffic Operations

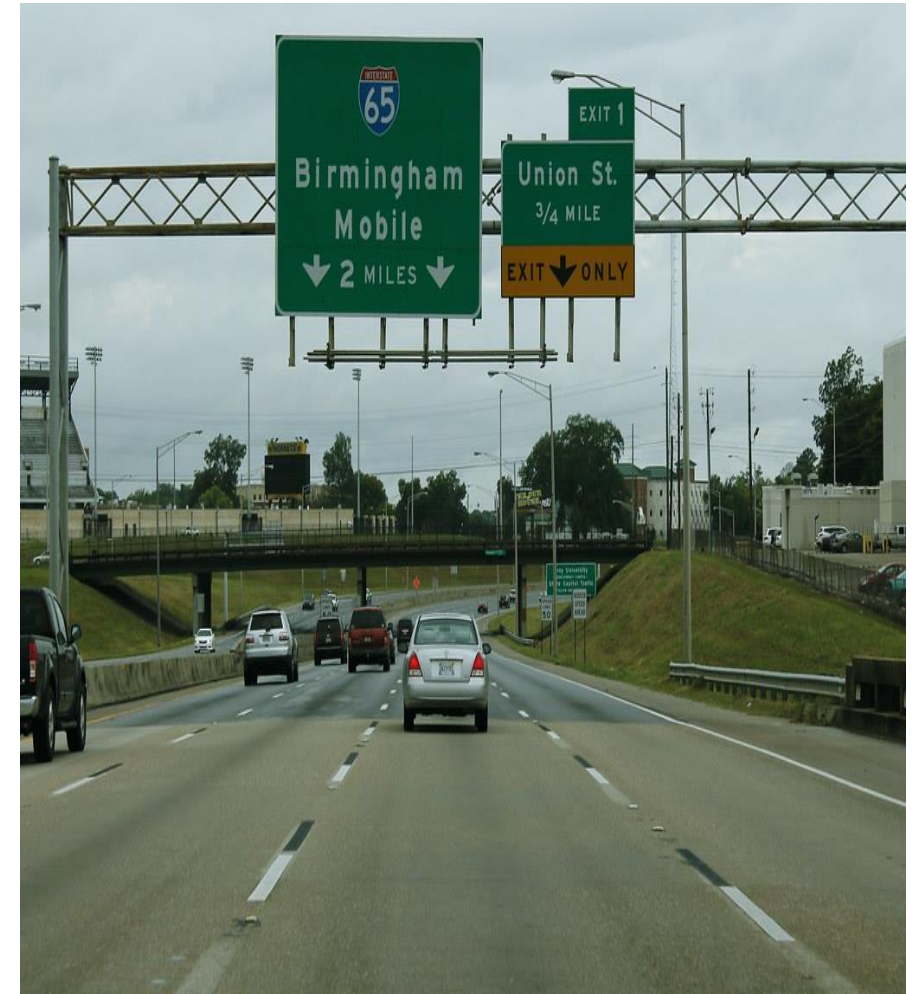
Exit 6- Eastern Boulevard (US-231/AL-21)

- All Southbound ramps closed and traffic detoured
- Installed traffic control devices ahead of and at Exit 6
- Region staff was a great asset
- Began continuous contact with Mrs. Brantley Kirk
- Detour in place and operational by noon August 29

Traffic Operations

Exit 1- Union Street

- Closed South Perry Street bridge overpass
- Closed South Lawrence Street bridge overpass
- Closed South Court Steet bridge overpass
- Closed all intersecting city streets to South Street
- All signals in flash along the corridor
- Installed traffic control on I-85 at Exit 1



Traffic Operations

Exit 1- Union Street



Traffic Operations

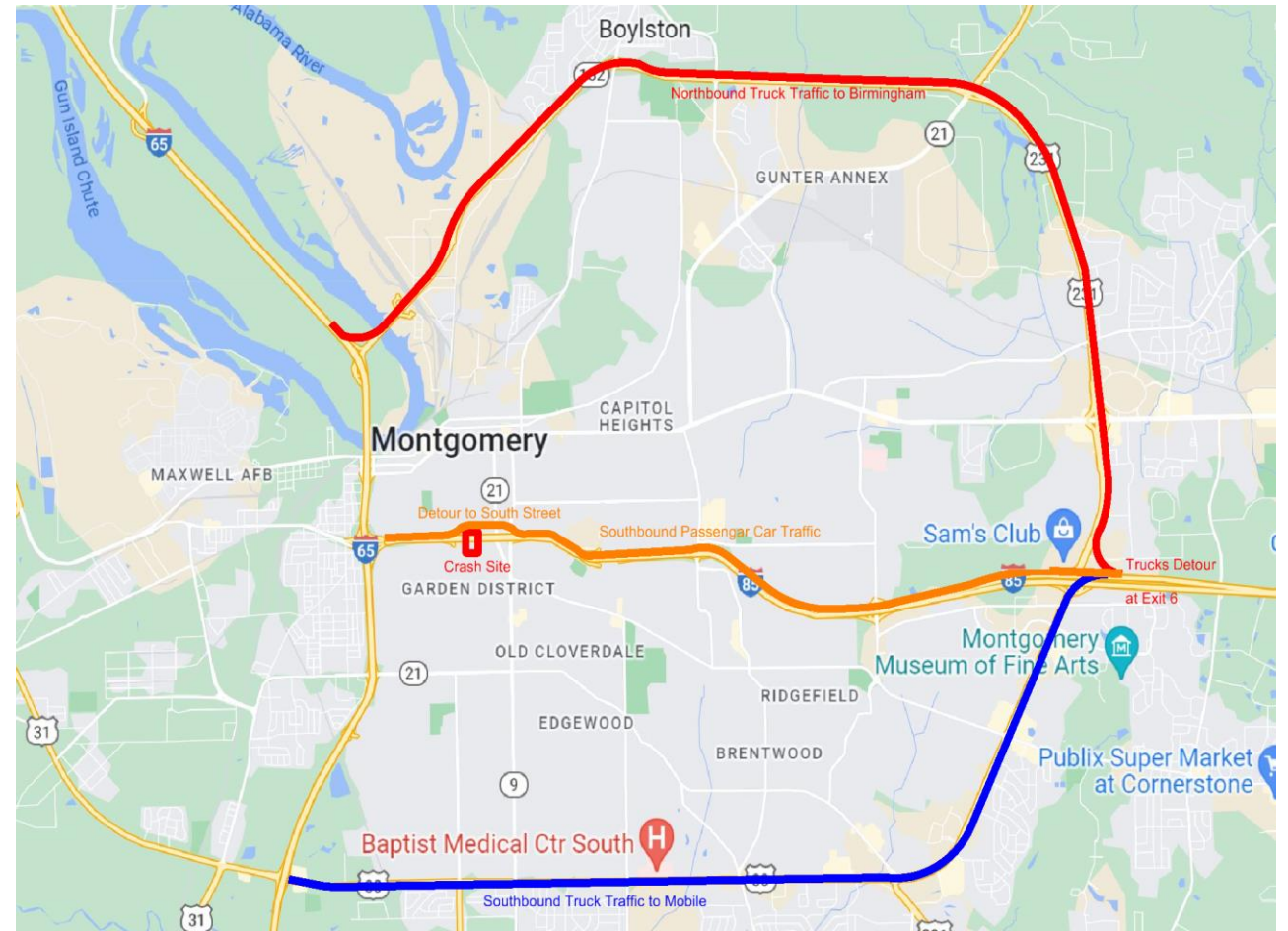
Final Traffic Pattern

- I-85 South passenger traffic detoured onto Exit 1 off ramp
 - Travel South Street for approximately ½ mile to reenter I-85 South at Exit 1 entrance ramp
- I-85 South truck traffic detoured at Exit 6- Eastern Boulevard
- Huge group effort to put in place
 - District Staff
 - Area Staff
 - Region Staff
 - Mrs. Brantley Kirk
 - City of Montgomery
 - Maintenance Department
 - Police Department
 - ALEA

Traffic Operations

Final Traffic Pattern

- Operational by 3:00 p.m. August 29
- Traffic was handled
 - Sigh of relief



Bridge Operations

Initial Unknowns

- South Perry Street bridge was closed
- Bridge was significantly damaged
- Contractors notified of emergency work
 - McInnis Construction
 - Scott Bridge Company
 - Newell & Bush
 - Bridge Builder's of Alabama
- ALDOT EBIT team arrived on site to assess bridge damage

Bridge Operations

Debris Removal

- Needed to determine full extent of damage
- City of Montgomery Maintenance Department



Bridge Operations

Bridge Damage

Determined that the bridge column and a portion of the bridge cap received substantial damage



Bridge Operations

Bridge Damage



Bridge Operations

Determining Bridge Damage

- Remove all damaged portions of the bridge
 - Determine full extent of bridge damage
 - Determine full scope of bridge repair
- Solution
 - Replace bridge to previous condition
 - Include repouring cap and column

Bridge Operations

Letting Process: Two separate phases

- **Emergency Work- Force Account**

- Temporary shoring (Located on I-85 South)
- Removal of damaged bridge sections
 - To determine full extent of damage
- Temporary shoring (located on backslope)
- Install traffic control devices
 - Allows bridge work to progress
 - Open two lanes of traffic

- **Contract Work- Lowest Bid**

- Jack the bridge
- Rebuild cap and column
- Rebuild crash wall
- Install guardrail and rebuild curb
- Mill and replace OGFC layer
- Traffic strip

Bridge Operations

Emergency Work

- McInnis Construction arrived on site
- Cleared to begin emergency bridge repairs
- Force Account
- McInnis Construction
 - collaborated with Newell & Bush and Bridge Builders of Alabama
- Emergency Work
- \$443,076.52

Bridge Operations

Emergency Work

- Bridge deemed stable once emergency work was complete
- Allowed two left lanes to be open to traffic
 - Opened to traffic August 30 at 10:00 am
- HUGE sigh of relief

Bridge Operations

Lowest Bid

- Bids went out September 1 at 3:30 p.m.
- Awarded based on lump sum
- Work to progress around the clock
- Plans developed by Region staff

Bridge Operations

Lowest Bid

- Contract was awarded on September 5 at 5:00 pm to McInnis Construction
- \$841,294.68
- All contractual items turned over to Area Construction staff
- South Perry Street bridge opened the afternoon of September 12
- All lanes on I-85 South opened the morning of September 14

Summary

Crash occurred August 29th at 7:25 am

- Exit 6 detour installed August 29th at noon
- Exit 1 detour installed August 29th at 3:00 pm
- Emergency work
 - Initiated August 29th at 10:00 am
 - Completed August 30th at 10:00 am
- I-85 South open to two lanes August 30th at 10:00 am
 - Approximately 24 hours later
- South Perry Street bridge opened September 12th
 - Approximately two weeks later
- All lanes open on I-85 South morning of September 14th
 - Approximately two weeks later

Lessons Learned

- Trust your people
- Communication
 - Brantley Kirk and Ty Tyler most useful during the entire event
- Working together towards a common goal
 - ALDOT staff and Bureaus
 - State contractors
 - City of Montgomery staff



McInnis

CONSTRUCTION, LLC



South Perry Street
Bridge Repair

Arrival on Scene



Shore Tower Fabrication



Tower completion
and hydraulic jack
installation





Main towers complete
at 9:00 am on August 30th

Cap and Column Demo



Cap and Column Demo





Column Before and After

Installation of 3rd tower



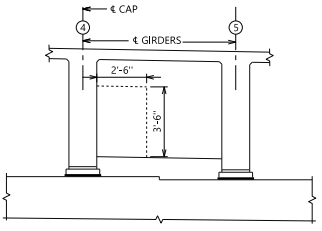
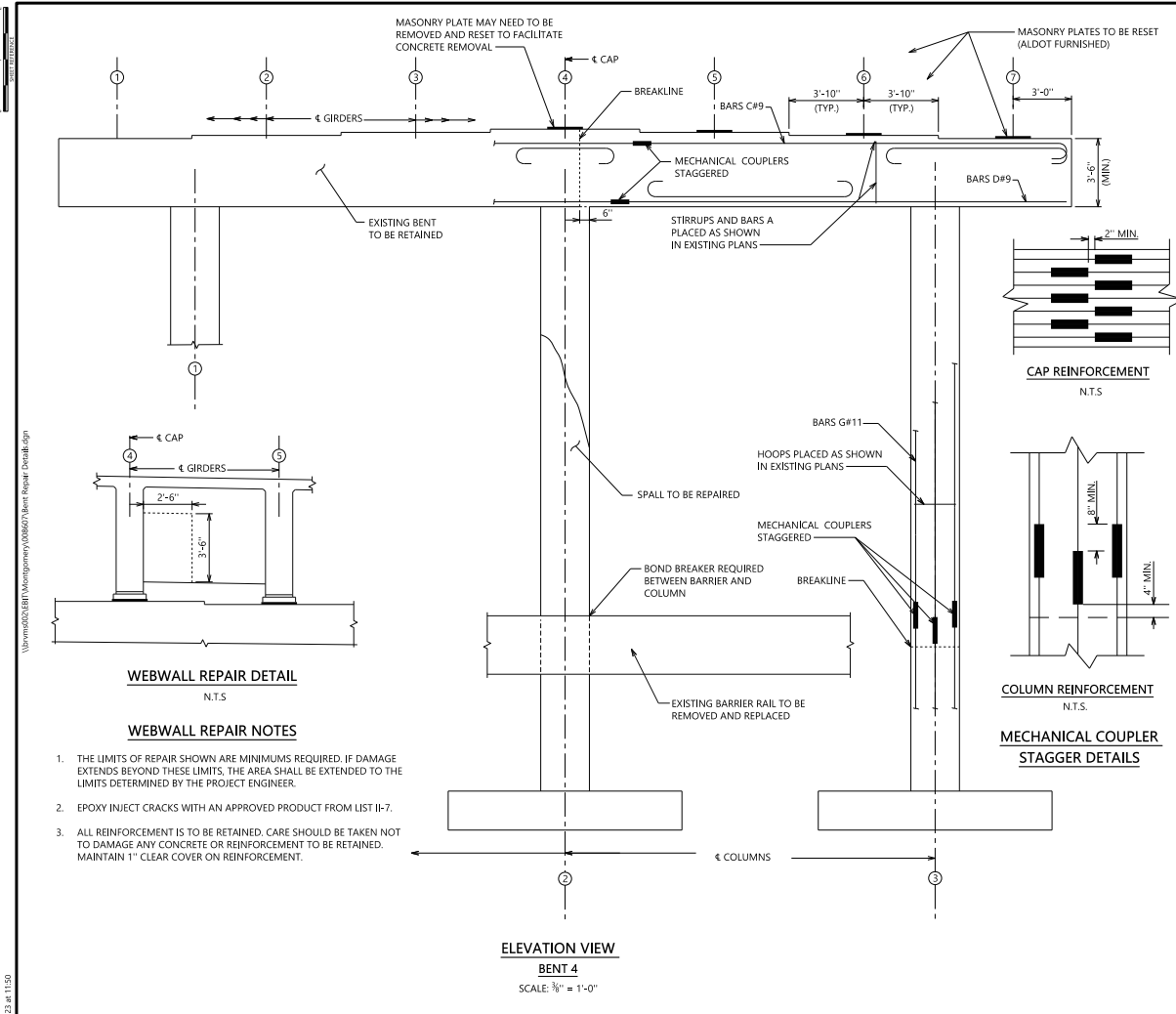
Force Account
Complete



Contract Work



REFERENCE PROJECT NO.	FISCAL YEAR	SHEET NO.
99-706-510-685-301	2023	11



WEBWALL REPAIR DETAIL
N.T.S.

WEBWALL REPAIR NOTES

1. THE LIMITS OF REPAIR SHOWN ARE MINIMUMS REQUIRED. IF DAMAGE EXTENDS BEYOND THESE LIMITS, THE AREA SHALL BE EXTENDED TO THE LIMITS DETERMINED BY THE PROJECT ENGINEER.
2. EPOXY INJECT CRACKS WITH AN APPROVED PRODUCT FROM LIST II-7.
3. ALL REINFORCEMENT IS TO BE RETAINED. CARE SHOULD BE TAKEN NOT TO DAMAGE ANY CONCRETE OR REINFORCEMENT TO BE RETAINED. MAINTAIN 1" CLEAR COVER ON REINFORCEMENT.

NOTES

1. CURRENT ALDOT STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION SHALL APPLY.
2. NO EQUIPMENT SHALL BE PARKED ON THE SPANS ABOVE THE DAMAGED BENT.
3. REFERENCE EXISTING PLANS FOR MORE DETAILS.
4. WORKING DRAWINGS OUTLINING PROCEDURES FOR FALSEWORK AND RAISING THE BRIDGE SHALL BE SUBMITTED IN ACCORDANCE WITH ARTICLE 105.02 OF THE STANDARD SPECIFICATIONS.

BENT REPAIR PROCEDURES

1. TO FACILITATE REMOVAL OF EXISTING CONCRETE, SAW CUT A MAXIMUM OF 1" DEEP ALONG BREAKLINES PRIOR TO REMOVING ANY CONCRETE. THE HAMMER SIZE SHALL BE LIMITED TO 35 POUNDS. CARE SHALL BE TAKEN NOT TO DAMAGE THE CONCRETE AND STEEL REINFORCEMENT TO BE RETAINED. ALL EXISTING REINFORCEMENT SHALL BE RETAINED AND THOROUGHLY CLEANED.
2. CUT AND STRAIGHTEN BARS C#9 AND D#9 IN CAP AND BARS G #11 IN COLUMN AS NEEDED.
3. SPLICE IN NEW BARS IN THE CAP AND COLUMN WITH MECHANICAL COUPLERS. THE SPLICES SHALL BE STAGGERED. COUPLERS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
4. REPLACE ALL CAP AND COLUMN REINFORCEMENT AS SHOWN IN EXISTING PLANS. SEE BRIDGE SHEET E3.
5. ALL REBAR SHOULD BE CLEAN AND EPOXY ADHESIVE APPLIED TO ROUGHENED CONCRETE.
6. PLACE FORMWORK.
7. POUR 4,000 PSI CONCRETE AND RESET BEARING PLATES. CONCRETE SHOULD ATTAIN 3,000 PSI STRENGTH IN 24 HOURS.
8. WRECK FORMWORK AFTER CONCRETE REACHES A STRENGTH OF 3,000 PSI.
9. EPOXY INJECT CRACKS AND PATCH WEBWALL WITH APPROVED NON-SHRINK GROUT FROM LIST II-33. MAINTAIN 1" CL. COVER ON REINFORCEMENT.
10. PATCH COLUMN 2 WITH APPROVED NON-SHRINK GROUT FROM LIST II-33. MAINTAIN 3" CLEAR COVER.
11. AS A LAST ORDER OF WORK ALL CONCRETE SURFACES OF BENT, EXISTING AND NEW, AND REPAIRED WEBWALL SHALL BE CLEANED AND A CLASS II SURFACE FINISH APPLIED.

JACKING NOTES

1. GIRDERS SHALL BE SUPPORTED DURING ALL PHASES OF CONSTRUCTION.
2. GIRDERS SHALL BE RAISED SIMULTANEOUSLY NO MORE THAN 1" ABOVE BEARING ELEVATIONS.
3. DIFFERENTIAL VERTICAL MOVEMENT BETWEEN ADJACENT GIRDERS SHALL BE LESS THAN 1/2".
4. LOWER GIRDERS SIMULTANEOUSLY ONTO RESET BEARINGS.
5. REMOVE JACKS AND FALSE BENT SUPPORTS.

BEARING ELEVATIONS

GIRDER 1	268.571
GIRDER 2	268.730
GIRDER 3	268.890
GIRDER 4	269.049
GIRDER 5	268.890
GIRDER 6	268.730
GIRDER 7	268.571

BEARING ELEVATIONS SHOWN ARE ON TOP OF CAP AT G GIRDER AND G BEARING. BEARING ELEVATIONS HAVE BEEN CALCULATED BASED ON EXISTING PLANS AND MAY NEED ADJUSTMENTS TO ENSURE CAP STEPS ARE SYMMETRICAL ABOUT THE G OF CAP. FIELD VERIFY ELEVATIONS OF CAP AT GIRDER 1-4 AND ADJUST ELEVATIONS AT GIRDER 5-7 ACCORDINGLY.

ELEVATION VIEW
BENT 4
SCALE: 3/8" = 1'-0"

ALABAMA DEPARTMENT OF TRANSPORTATION



REVISIONS	BIN(S)	COUNTY(S)	REPAIRS TO S. PERRY STREET BRIDGE OVER I-85 SOUTHBOUND LANES
	008607	MONTGOMERY	

BENT 4 REPAIR DETAILS AND NOTES

DESIGNER: HNGW
BRIDGE SHEET NO. 1 OF 1

PLOTTED: 11/29/23 at 11:50

V:\mtd\2023\11\Montgomery\008607\Bent Repair Detail.dwg



Column Construction



Cap Construction





S. Perry St MILE 0.9

HC3

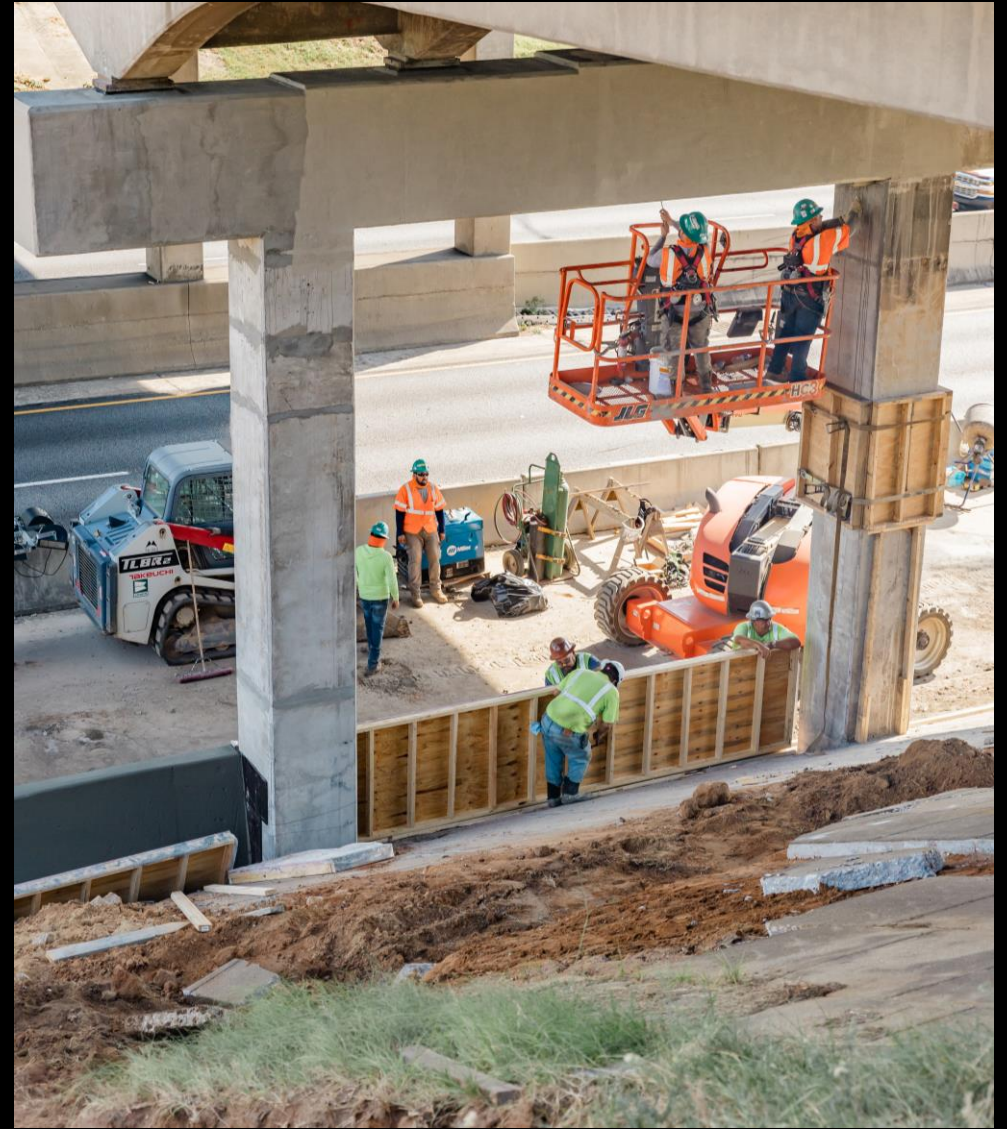
Bridge Jacking



Tower Removal



Barrier Wall





Slope Repair



S. Perry

SHARP CURVE AHEAD
40 MPH MAX

Court



Completion

I-85 and South Perry St Bridge Incident

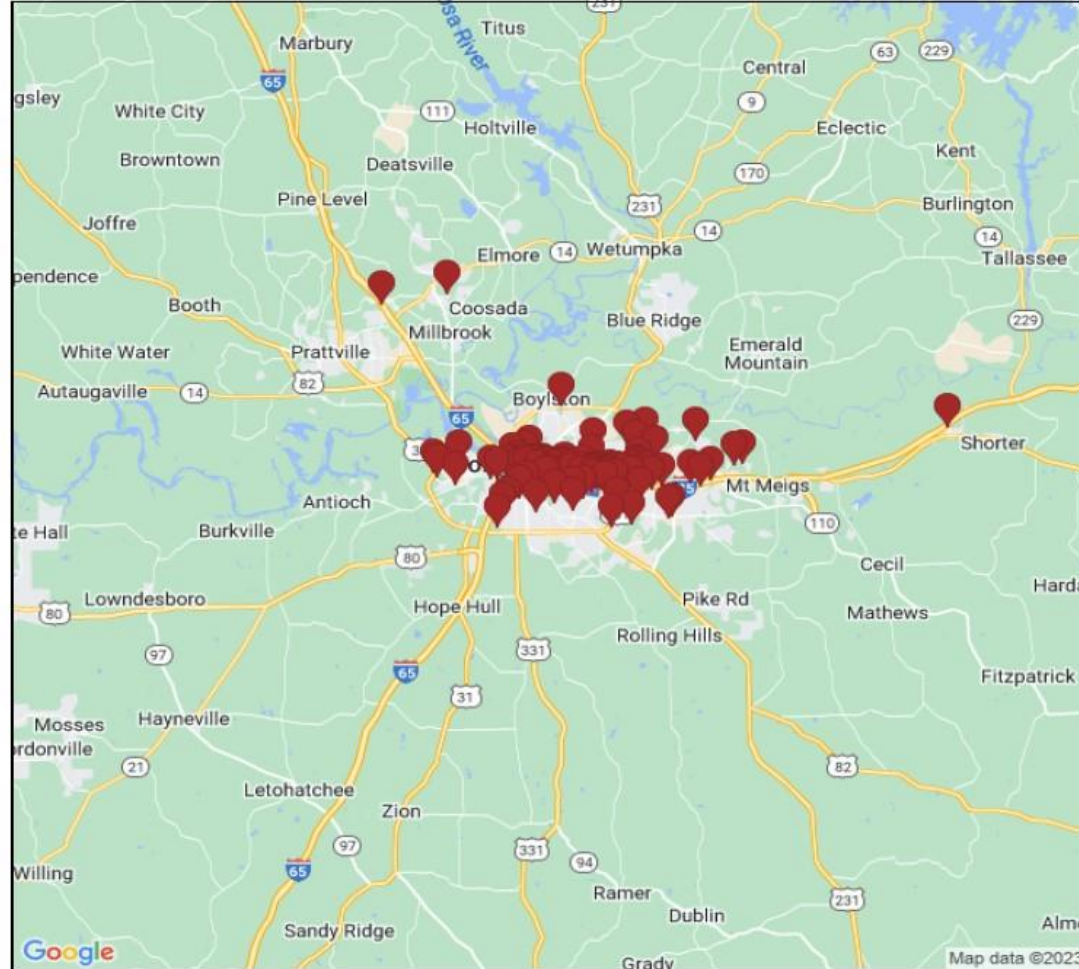
External and Internal
Communications



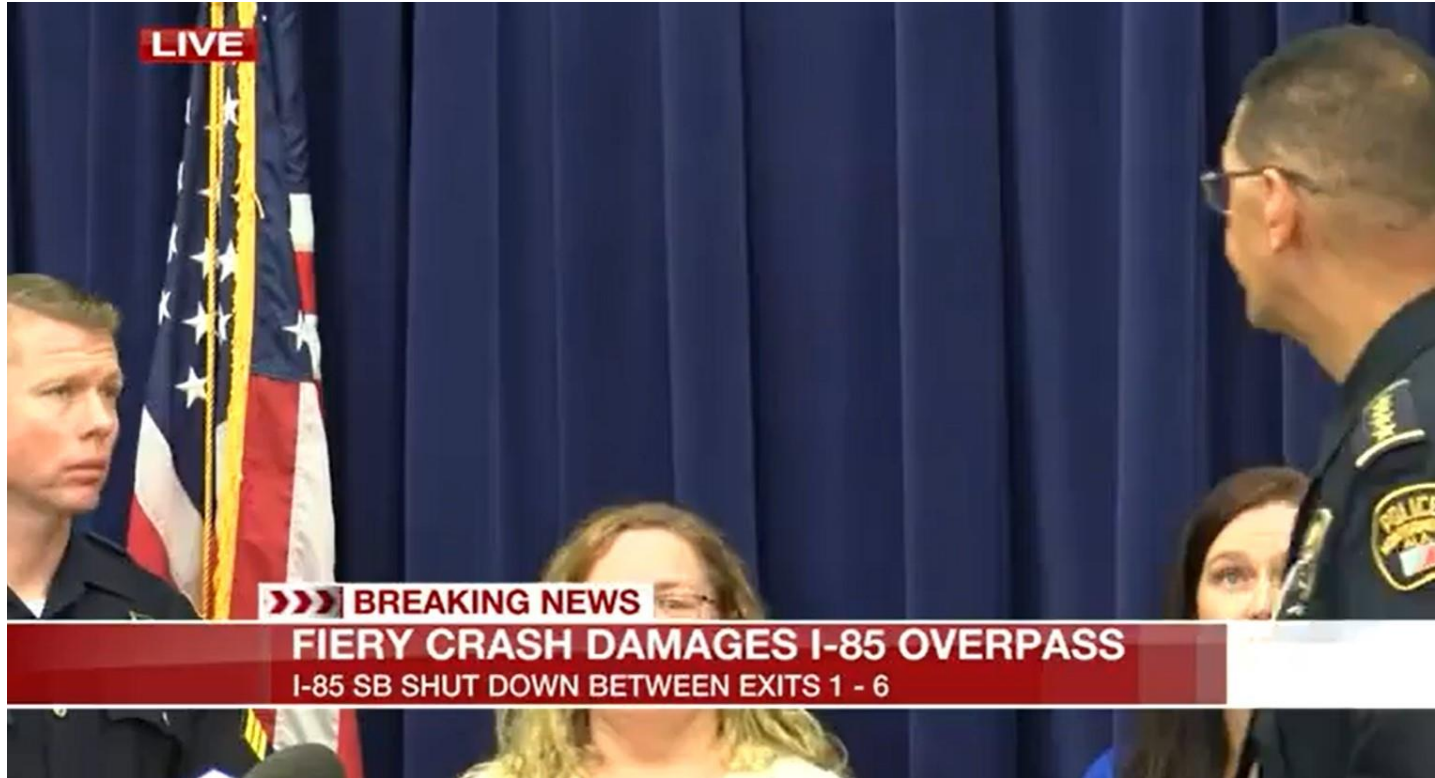
August 29, 2023

ALDOT: I-85 S MM 1 closed. Detour Exit 1/ Union Str.

Major crash on I-85 south at MM 1 all lanes are closed. Detour route at Exit 1/ Union Str. onto South East Street then back to I-85 South. Please use caution when traveling through this area.



August 29, 2023



Kent Wheeler · 1:29

I love the lady in the white for keeping a smile . they asking her the same question over and over ... I'm guessing they wanted to let their boss know they at the press conference. LoL. 😂



5w Like Reply



Karen Blackmon Stacey · 9:58

Kent Wheeler they ask the dumbest questions that are common sense for most people!



4w Like Reply

August 30, 2023



August 31, 2023



Labor Day Weekend



FOR IMMEDIATE RELEASE
September 1, 2023

South Perry Street bridge remains closed; emergency repairs complete

MONTGOMERY, Ala. – Contractors with the Alabama Department of Transportation have completed emergency repairs to the South Perry Street bridge over Interstate 85 south in Montgomery.

The South Perry Street bridge will remain closed to all vehicles and pedestrians until permanent repairs are finished.

ALDOT has completed the inspection of the bridge and is finalizing plans that will take bids and be awarded on Tuesday afternoon with work to begin as soon as possible. The permanent repairs are expected to take approximately three weeks.

Two lanes on I-85 South will remain open through the weekend and during repairs.

Motorists should seek alternate routes or expect delays when traveling I-85 South and be mindful of people and equipment in the area.

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September 5, 2023



September 12, 2023



ALDOT Southeast Region

@ALDOT_SERegion



ALDOT is reopening the South Perry Street bridge!!! Other work on I-85 South will continue but the S. Perry St. bridge is open to traffic.



3:09 PM · Sep 12, 2023 · 2,757 Views

September 15, 2023

