REHABILITATION OF I-95 FROM I-495 TO NORTH OF BRANDYWINE RIVER BRIDGE

PRE-PROPOSAL MEETING FOR CM/GC SERVICES

CHASE CENTER ON THE RIVERFRONT
WILMINGTON, DELAWARE
JULY 22, 2019
9:00 AM
PURPOSE AND NEED

- Maintain and preserve the I-95 Corridor in a state of good repair
- Ensure a 30 year service life extension to avoid more costly and traffic disrupting repairs
- Enhance safety along the I-95 Corridor
- Improve roadway efficiency to lessen traffic congestion
- Implement improvements in the City of Wilmington to lessen traffic congestion
PROJECT OVERVIEW

- Extends from I-495 / I-95 split to US 202 (Concord Pike)
- Rehabilitation of 17 bridges (over 2 miles)
- Rehabilitation of over 3 miles of pavement
- Reconstruction of 7 at-grade exit / entrance ramps to I-95
PROJECT LOCATION/LIMITS
PROJECT AERIAL – 17 BRIDGES
LEGEND

Ramp B = Aerial ramp to be removed from service
Ramp A = Aerial ramp to be rehabilitated
Ramp C = Aerial ramp to be replaced (new Ramp ‘D’)
Ramp J = At-grade ramp to be reconstructed
DRONE VIDEO OF PROJECT LIMITS
CM/GC: PROJECT GOALS

- Improve the corridor infrastructure to provide a minimum of 30 years of relatively maintenance free service life.
- Provide extensive public outreach during design and construction.
- Use accelerated construction techniques and other innovative solutions to efficiently meet the Required Project Constraints.
CM/GC: REQUIRED PROJECT CONSTRAINTS

- Utilize long-term single lane closures on I-95 for a maximum of 2 years or better
- Sequence ramp closures to ensure ingress and egress in/out of Wilmington is maintained
- Maintain the project budget
- Align concrete pavement joints with the lane striping
- Align longitudinal joints in the LMC overlays with the lane striping
CM/GC: KEY ISSUES

▪ Maintain a safe work zone for workers and the travelling public
▪ Limit the overall traffic impact on City and I-95 commuters
▪ Initiate timely coordination with Amtrak and Norfolk Southern RRs
▪ Coordinate with resource agencies (e.g., DNREC, USACE, etc.)
▪ Maintain coordination with public, businesses, government, etc.
▪ Optimize CPM schedule to achieve high quality, maximum value, and timely project completion
▪ Provide the maximum opportunity to use innovative design and construction practices
▪ Maintain public trust and confidence
PATH FORWARD

- Add e-mail address for all correspondence: dot-ask@state.de.us
- Do not contact any project team member(s) until CM/GC is awarded
- Statement of Qualifications
  - Due: 27 August 2019 prior to 2:00 PM Local Time
- Submit Statement of Qualifications to:
  - Contract Administration – RFP CM/GC
    Delaware Department of Transportation
    Administration Building
    800 Bay Road
    Dover, DE 19901
- Finalize Design w/ input from Construction Manager (CM)
  - Re-inspect and test bridges
- Start construction in March 2021 (estimated)
1-95 CORRIDOR HISTORY

- 1964: Original construction
- 1978: Widened median, built MLK Blvd Ramps and placed LMC Overlay
- 2001: Maintenance repairs
- 2014: DelDOT initiated the I-95 Corridor Project
- Breakout contracts
  - Cantilever & Overhead Signs (2020)
  - 2nd Street On-ramp Improvements (2020)
  - Bearing Replacements (2020)
  - Substructure Repairs (2023)
- 2021 – 2023: I-95 Corridor Project
**PROJECT TIMELINE**

**SEPTEMBER 2014**
Project Design Begins

**JULY 2015 – OCTOBER 2016**
Preliminary / Concept Plans

**SEPTEMBER 2014 – JULY 2015**
Inspection and Testing Phase

**MARCH 2017**
Value Engineering Study

**OCTOBER 2016 – PRESENT**
Final Design Phase

**JULY 2018 – JUNE 2023**
Public Outreach Campaign

**JULY 2019**
CM/GC RFP

**JANUARY 2020 – MAY 2021**
Breakout Contracts Constructed
2nd Street On-ramp, Bearings, & Sign Structures

**MARCH 2021 – JUNE 2023**
I-95 Corridor Project Constructed

**JUNE 2023 – JUNE 2025**
Underbridge Repair Contract Constructed
INSPECTION & TESTING PHASE

- 2014/2015 design level inspection completed
  - Detailed hands-on inspection
  - Impact Echo
  - Concrete Cores
    - Compressive Strength
    - Water Soluble Chloride Ions
    - Petrographic and Air Void Analysis
  - Paint adhesion testing
- July 2015 Design Level Inspection Report
  - Repair recommendations
  - Design recommendations
- Future testing
  - Deck
  - Schedule TBD
VALUE ENGINEERING STUDY

- February 28 and March 1, 2017
- Implementation Committee reviewed the recommendations of the VE Committee
- Total approximate cost savings: $56M
CONTRACT DOCUMENTS

- Preliminary Plans – October 2016
- Semi-Final Plans – February 2018
  - Available now on the DelDOT bids website
    http://bids.delaware.gov/bids_detail.asp?i=5803&DOT=Y
  - Three Volumes (Appendix C in RFP)
- Final Plans – To be developed in conjunction with CM/GC team
BREAKOUT CONTRACTS
PROPOSED BREAKOUT CONTRACTS

- Procured via design-bid-build
- All breakout contracts are currently in final design
- CM/GC may submit competitive bids on each contract
- CM/GC is expected to work with the breakout contractors as necessary
PROPOSED BREAKOUT CONTRACTS

- T201907002 – Cantilever and Overhead Sign Structures, I-95
  - Estimated construction 2020

- T201907402 – Rehabilitation of I-95, 2\textsuperscript{nd} Street On-Ramp Improvements (\textit{aka} Ramp ‘D’)
  - Estimated construction duration spring 2020 – summer 2021

- T201907404 – Rehabilitation of I-95, Bearing Replacements
  - Estimated construction duration summer 2020 – summer 2021

- T201907403 – Rehabilitation of I-95, Viaduct Substructure Repairs
  - Estimated construction duration summer 2023 – summer 2025
PROJECT SCOPE OF REPAIRS
BRIDGES
BR 1-748, 748N & 748S (WILMINGTON VIADUCT)

- Replace LMC bridge deck overlay
  - ~10,000 cubic yards of LMC overlay
  - ~100,000 square yards of hydrodemolition
- Reconstruct ~ 15,000 LF of parapets
- Replace or eliminate ~11,000 LF of roadway joints
  - UHPC link slabs
- Replace approach slabs
- Miscellaneous structural repairs
BR 1-749 (RAMP A)

- Exit 6 to Maryland Avenue
- Deck replacement
  - Span 1A is over Amtrak
  - Deck-over at Abutment
  - Replace Approach Slab
BR 1-744, 1-745, AND 1-746

- Replace LMC overlay
- Replace joints
- Construct deck-over at abutments
- Replace approach slabs
- Paint superstructures
BR 1-758E, F, G, AND H

- Replace LMC Overlay
- Replace Joints
- Deck-over at Abutments
- Replace Approach Slabs
- Replace Bridge Mounted OH-4 (1-758H)
BR 1-751 – BR 1-757 OVERPASSES

- Clean and paint steel superstructures
BRANDYWINE RIVER BRIDGE – BR 1-759
PROPOSED BRIDGE REPAIRS – BR 1-759

- Replace existing LMC overlay with new LMC overlay
- Total surface hydrodemolition
PROPOSED BRIDGE REPAIRS – BR 1-759

- Replace existing finger joints with new finger joints
PROPOSED BRIDGE REPAIRS – BR 1-759

- Replace 156 steel rocker bearings with steel reinforced elastomeric bearings
Strengthen piers with fiber reinforced polymer wrap.
PROPOSED BRIDGE REPAIRS – BR 1-759

- Repair steel end diaphragms
- Replace approach slabs
- Clean and paint existing steel
- Modifications to the drainage system
- Add seismic restrainers at two piers
- Concrete sealing substructure and barrier
BRIDGE ACCESS

- BR 1-744 over Christina River - Barge and/or Scaffolding
BRIDGE ACCESS

- BR 1-745 over N/S RR – Amtrak Access Road
  - Permit required from Amtrak ~30 days to acquire
BRIDGE ACCESS

- Wilmington Viaduct and Ramp bridges
  - Local streets
  - Temporary access road from Beech Street
  - Majority of work within DelDOT ROW
PROJECT SCOPE OF REPAIRS
ROADWAY
PROPOSED ROADWAY REPAIRS

- ~17,000 LF of new guardrail
- Replace or mill/overlay pavement
  - ~22,000 tons bituminous concrete
  - ~54,000 square yards of 12" PCC pavement
- Replace PCC safety barriers
  - ~14,500 linear feet of 42" single face
  - ~6,000 linear feet of 42" double face
PROPOSED ROADWAY REPAIRS

- 10\textsuperscript{TH} Street overpass incurs frequent impacts
- Re-profile I-95 north of Viaduct
- Full depth replacement with concrete pavement
PROPOSED ROADWAY REPAIRS

- Re-surfacing I-95 south of the Viaduct
  - “Shave & Pave”
- Barrier reconstruction
- Shoulder reconstruction
- Drainage pipe lining
- Upgraded guardrail
PROPOSED ROADWAY REPAIRS – RAMPS

- Ramp reconstruction
  - 12” PCC pavement
  - Minor grading/geometric improvements
  - Safety improvements
PROPOSED ROADWAY REPAIRS – RAMPS

- Pavement box ~ existing pavement box excavation
- Rock elevation varies
  - Conflicts with guardrail posts and drainage pipes
- MOT – Staggered ramp closures
QUESTION AND ANSWER
BREAK – 15 MINUTES
PUBLIC OUTREACH
PUBLIC OUTREACH

- Key component of the project during design and construction
- CM is expected to be integral to the outreach program
- Public Workshops
- Community Advisory Groups (quarterly)
- Wilmington Initiatives (yearly)
- Local communities and businesses
- Legislative briefings
PUBLIC OUTREACH VIDEO

EXPECT DELAYS. PLAN AHEAD.

DelDOT

WRA
CPM SCHEDULE
Project Requirements
- 2-year clock starts at beginning of Stage 1A (shoulder work on mainline I-95)
- Weekend work as needed
- Limited nightwork

Schedule mirrors MOT stages
CPM SCHEDULE OVERVIEW

- Schedule developed using Primavera P6 Professional v15.2
- 1,880 activities
- Based on DelDOT calendar
  - 5-day work week
  - Weekends, holidays, inclement weather are non-workdays
- Schedule assigns specific calendars to weather sensitive work
  - LMC
  - WMA
- Crew sizes based on available work zone(s) and site access
  - Long hours, weekends, and/or double shifts may be required
- CPM Schedule reviewed by DelDOT and independent constructability reviewer
MAINTENANCE OF TRAFFIC (MOT)
I-95 TRAFFIC DATA

- Origin- Destination Information
  - 4% to 12% thru traffic
    - I-95 operates as a “local” roadway
    - I-495 much higher thru traffic percentage
  - 1/3 of traffic has origin or destination to/from US 202
I-95 TRAFFIC DATA

Traffic Volumes

AM Peak Period

- Over 5,100 vehicles entering the work area from the south
  - Approximately 4,500 of those vehicles have a destination of either Exits 6, 7 or 8
- Over 4,900 vehicles entering the work area from the north
- Over 4,000 vehicles leaving the work area heading south
- Over 3,500 vehicles leaving the work area heading north
I-95 TRAFFIC DATA

- Traffic Volumes
  - PM Peak Period
    - Over 3,800 vehicles entering the work area from the south/north
    - Over 5,200 vehicles leaving the work area heading south
    - Over 5,100 vehicles leaving the work area heading north
      - 3,000 vehicles destined to US 202
MOT – CONSIDERATIONS AND RESTRICTIONS

- Traffic
  - Limit impacts to I-95 traffic
    - Maximum of 2 years of long-term lane closures on I-95
  - Limit impacts to City of Wilmington
    - Maintain ingress and egress
    - Staggered ramp closures
  - Keep new Ramp D open
  - Lateral offset of TCB to work zone
  - Minimize/eliminate split traffic stages
MOT – CONSIDERATIONS AND RESTRICTIONS

- Joint Locations
  - Bridge deck overlay
  - Concrete pavement (mainline at-grade lanes)
WORK ZONE IMPACTS

- I-95
  - Shoulder closures
  - Lane shifts
  - Long-term single lane closures
  - Short-term single and double lane closures
  - Entrance/Exit ramp closures
  - Contraflow
    - NB traffic on SB road
    - SB traffic on NB road
    - MLK Jr Blvd on ramp
  - Stage changes
WORK ZONE IMPACTS

- City of Wilmington Streets
  - I-95 lane closures increase demand on these primary diversion routes
    - Market Street (South Wilmington & 16th Street/18th Street area)
    - Walnut Street (South Wilmington)
    - Maryland Avenue
    - Northeast Boulevard/12th Street (in area of Brandywine Creek)
    - Augustine Cut-off
    - Washington Street/Baynard Boulevard
  - Short-term single and double lane closures
  - Contraflow
    - MLK Jr Blvd (associated with MLK Jr Blvd ramp contraflow)
WORK ZONE IMPACTS

- Roadway Closures & Detours
  - Long-term ramp closures
    - 1 – NB Exit 6 (Maryland Ave)
    - 2 – NB Exit 7 (Delaware Ave)
    - 3 – SB Exit 7B (Delaware Ave)
    - 4 – SB Exit 7A (Delaware Ave)
    - 5 – SB Exit 6 (MLK Jr Blvd)
    - 6 – MLK Jr Blvd on-ramps to NB/SB
    - 7 – Adams St / 10th St on-ramp to NB
    - 8 – SR 52 / Adams St on-ramp to NB
    - 9 – SR 52 / Jackson St on-ramp to SB
  - Short-term road closures
    - 5 – SB Exit 6 (MLK Jr Blvd)
    - 10 – SB mainline “CD” lane
TRAFFIC MITIGATION PLAN

- Incident Management Plan
  - Accidents/disabled vehicles
  - Snow events
- Active Traffic Management System
  - Variable message signs
  - DelDOT traffic app
- Revise signal timings in City
- City street improvements
  - Repaving (ongoing)
  - ADA ramps
TRAFFIC MANAGEMENT SYSTEM

- Real-time work zone information
  - Congestion / Delay
  - Alternate routes
- Regional Deployment of PVMS
- Utilize existing VMS
- Traffic data
  - Utilize DelDOT's existing traffic detectors
  - Other traffic detector deployments?
  - Third Party?
- System responsibility to be determined
  - Contractor?
  - DelDOT?
  - Combination?
MOT – SCOPE OF WORK

▪ Standard temporary traffic control devices
  ▪ Temporary P.C.C. Safety Barrier
    ▪ ~39,000 feet standard
    ▪ ~8,000 feet pinned
    ▪ ~100,000+ feet relocated

▪ Temporary guide signing

▪ Temporary crossovers

▪ Temporary Paving
  ▪ Temporary roadway
  ▪ Cross-slope adjustment / wedge and level

▪ Temporary traffic signals
  ▪ MLK Jr Blvd at Washington St
MOT – OVERALL STAGING
MOT – STAGE 1A

- Construction
  - Median barrier replacement
  - Median shoulder reconstruction
  - Temporary crossovers
    - 3 on mainline and MLK Jr. Blvd
  - Roadway reconstruction
    (mainline left side and ramps)

- MOT
  - 1 lane closed each direction on I-95 (I-495 to US 202)

- Closures and Detours
  - NB Exit 7 (Delaware Ave) closed

29,000+ feet TCB
2.25 Mile Work Area
MOT – STAGE 1A

- **Construction**
  - Median barrier replacement
  - Median shoulder reconstruction
  - Temporary crossovers
    - 3 on mainline and MLK Jr. Blvd
    - 2 for ramp access
  - Roadway reconstruction (mainline left side and ramps)

- **MOT**
  - 1 lane closed each direction on I-95 (I-495 to US 202)

- **Closures and Detours**
  - NB Exit 7 (Delaware Ave) closed

**Legend**

- STAGE 1A WORK AREA

29,000+ feet TCB
2.25 Mile Work Area
MOT – STAGE 1A

SOUTHERN STAGE 1 CONSTRUCTION

NORTHERN STAGE 1 CONSTRUCTION
MOT – STAGE 1B

- Construction
  - SB right shoulder reconstruction
  - Roadway reconstruction (mainline right side and ramps)

- MOT
  - 1 lane closed each direction on I-95 (I-495 to US 202)

- Closures and Detours
  - NB Exit 7 (Delaware Ave) closed
  - SB Exit 7A (Delaware Ave) closed
  - SR 52 / Jackson St on-ramp to SB closed

16,000+ feet TCB
1.5 Mile Work Area
**MOT – STAGE 1B**

- **Construction**
  - SB right shoulder reconstruction
  - Roadway reconstruction (mainline right side and ramps)

- **MOT**
  - 1 lane closed each direction on I-95 (I-495 to US 202)

- **Closures and Detours**
  - NB Exit 7 (Delaware Ave) closed
  - SB Exit 7A (Delaware Ave) closed
  - SR 52 / Jackson St on-ramp to SB closed

**16,000+ feet TCB**

**1.5 Mile Work Area**
MOT – STAGE 1C

- **Construction**
  - Roadway reconstruction (SB mainline center)
- **MOT**
  - Limited deceleration lane SB Exit 6 (MLK Jr Blvd)

- **Closures and Detours**
  - SB Exit 6 (MLK Jr Blvd) closed (short-term)
MOT – STAGE 2A

- **Construction**
  - Bridge work (NB)
  - Deck overlay (NB)
  - Roadway reconstruction (NB mainline and ramps)

- **MOT**
  - 1 lane closed each direction on I-95 (I-495 to US 202)
  - Temporary crossovers in use
  - Contraflow
    - NB traffic on SB road
    - MLK Jr Blvd on/off ramp
    - MLK Jr Blvd (temporary traffic signal)

- **Closures and Detours**
  - SB Exit 7A (Delaware Ave) closed
  - NB Exit 6 (Maryland Ave) closed
  - MLK Jr Blvd on-ramps to NB/SB closed
  - SR 52 / Adams St on-ramp to NB closed

33,000+ feet TCB
3.5 Mile Work Area
**MOT – STAGE 2A**

- **Construction**
  - Bridge work (NB)
  - Deck overlay (NB)
  - Roadway reconstruction (NB mainline and ramps)

- **MOT**
  - 1 lane closed each direction on I-95 (I-495 to US 202)
  - Temporary crossovers in use
  - Contraflow
    - NB traffic on SB road
    - MLK Jr Blvd on/off ramp
    - MLK Jr Blvd (temporary traffic signal)

- **Closures and Detours**
  - NB Exit 6 (Maryland Ave) closed
  - SB Exit 7A (Delaware Ave) closed
  - MLK Jr Blvd on-ramps to NB/SB closed
  - SR 52 / Adams St on-ramp to NB closed

*33,000+ feet TCB
3.5 Mile Work Area*
MOT – STAGE 2B

**Construction**
- Bridge work (NB)
- Deck overlay (NB)
- Roadway reconstruction (NB mainline and ramps)

**MOT**
- Same as Stage 2A with modified ramp closures

**Closures and Detours**
- SB Exit 6 (MLK Jr Blvd) closed
- SB Exit 7A (Delaware Ave) re-opened
MOT – STAGE 3A

- Construction
  - Bridge work (SB left side)
  - Deck overlay (SB left side)
  - Roadway reconstruction (SB left side and ramps)

- MOT
  - 1 lane closed each direction on I-95 (I-495 to US 202)
  - Temporary crossovers in use
  - Contraflow
    - SB traffic on NB road

- Closures and Detours
  - SB Exit 7B (Delaware Ave) closed
  - MLK Jr Blvd on-ramps to NB/SB closed
  - SB mainline “CD” lane (short-term)

- 39,000+ feet TCB
- 2.5 Mile Work Area
Construction
- Bridge work (SB left side)
- Deck overlay (SB left side)
- Roadway reconstruction (SB left side and ramps)

MOT
- 1 lane closed each direction on I-95 (I-495 to US 202)
- Temporary crossovers in use
- Contraflow
  - SB traffic on NB road

Closures and Detours
- SB Exit 7B (Delaware Ave) closed
- MLK Jr Blvd on-ramps to NB/SB closed
- SB mainline “CD” lane (short-term)
MOT – STAGE 3B

- Construction
  - Bridge work (SB right side)
  - Deck overlay (SB right side)
  - Roadway reconstruction (SB right side and ramps)

- MOT
  - 1 lane closed each direction on I-95 (I-495 to US 202)
  - Temporary crossovers in use
  - Contraflow
    - SB traffic on NB road

- Closures and Detours
  - SB Exit 7B (Delaware Ave) closed
  - Adams St / 10th St on-ramp to NB closed
  - MLK Jr Blvd on-ramps to NB/SB reopened
- MOT – STAGE 3C

- Construction
  - Deck overlay (sub-stage needed to keep new Ramp D open at all times)

- MOT
  - Lane shift and stop condition for Ramp D
MOT – STAGE 4

- **Construction**
  - Remove temporary crossovers
  - Permanent median barrier

- **MOT**
  - All lanes open SB
  - 1 lane closed NB (Adams St / 10th St on-ramp to north of Brandywine River Bridge)

- 20,000+ feet TCB
- 0.67 Mile Work Area
MOT – STAGE 4

- Construction
  - Remove temporary crossovers
  - Permanent median barrier

- MOT
  - All lanes open SB
  - 1 lane closed NB (Adams St / 10th St on-ramp to north of Brandywine River Bridge)

20,000+ feet TCB
0.67 Mile Work Area
• 3 Proposed CCTV
• 3 Proposed RWIS
• ~4 miles (entire project limits) of proposed fiber conduit pathway
  ▪ Drops to all existing and proposed devices along limits
• Typical DelDOT ITMS installation approach
  ▪ Project contractor completes underground infrastructure and foundations
  ▪ DelDOT on-call installs cabling, poles, devices, cabinets
- Full lighting system replacement
  - 109 Light Poles
  - 16 Underpass lights
  - All new electrical system
    - 2 Control centers
    - New 3 phase electric services
- Brandywine River Bridge LED Upgrade (36 luminaires)
- Ramp D tie-in
SIGNING

- 3 new overhead sign structures
  - 1 bridge mounted
  - 2 ground mounted
- 7 existing sign structures with modified signs
- 7 existing structures to be removed (not shown)

- Tubular arch design
- Drilled shaft foundations
- Structures built in T201907002 (sign structure breakout)
SIGNING

- 3 new overhead sign structures
  - 1 bridge mounted
  - 2 ground mounted
- 7 existing sign structures with modified signs
- 7 existing structures to be removed (not shown)

- Tubular arch design
- Drilled shaft foundations
- Structures built in T201907002 (sign structure breakout)
PROJECT RISKS
RISKS

- Risks to the project schedule and budget must be managed
- The CM must work with DelDOT, the Design teamer, and ICE to develop strategies to retire, mitigate, or allocate allowance items to address each Risk item
- Bridge Nos. 1-748 and 1-749 are over Norfolk Southern and Amtrak railroads
- N/S Railroad track is a very low volume spur
- Amtrak’s Northeast Corridor has 3 active tracks under I-95
RISKS – RAILROADS

- Work over Amtrak and Norfolk Southern
- Demolition shield installation and removal (track time)
- Clearance to Amtrak catenary wires
RISKS – RAILROADS

- Risk Reduction Measures:
  - Engineering Agreement in place
  - Kick-off meeting with Amtrak June 2019
  - RFI Process in place
  - Ability to get pre-approval of shop drawings prior to construction
RISKS – DECK CONDITION

- Deck testing was performed in 2014/2015
  - Overlay and structural deck may have incurred additional deterioration

- Risk Reduction Strategy
  - Additional testing to be performed in fall/winter 2019 to re-confirm condition of the structural deck
RISKS – HIGHWAY

- I-95 south of Wilmington Viaduct built on marsh
  - Dewatering
- I-95 north of the Wilmington Viaduct built on rock
  - Pavement box and underdrains
  - Lighting and ITMS conduit installation
RISKS – WILDLIFE

- Migratory Birds BR 1-745
  - Active nests and mating couples cannot be disturbed during breeding season (April 15th – August 1st)

- Possible Risk Mitigation Strategies
  - Bird Netting
  - Work or remove nests outside of breeding season
RISKS - NOISE

- City of Wilmington Noise Ordinance
  - 8:00 am – 7:00 pm Mon. – Fri.
  - 9:00 am – 7:00 pm Sat.
  - 10:00 am – 5:00 pm Sun.
  - Noise waiver requests

- Restrictions during local events
  - Blue Rock baseball games

- Prohibited nighttime activities
  - Pile driving
  - Hydrodemolition
  - Jackhammers
RISKS – BR 1-759

- Brandywine Park Impacts
  - Brandywine Creek
  - Raceway adjacent to river
  - Trails and parking lot
The following information will be available on the DelDOT website:
- This presentation
- 2015 Design Level Inspection Report including testing data
- Geotechnical Report
- Rock Ripability Memo
- Stormwater Management Report
- Traffic Management Plan (TMP)
- Special Provisions
- VE Study Report

Additional information is available upon request!
QUESTION AND ANSWER SESSION
SITE WALK