

**Greenbelt City Council
Work Session**

**State Highway
Administration
I-495/Greenbelt Metro
Interchange Project**

**Monday
August 22, 2016
8:00 p.m.**

**Council Room
Greenbelt Municipal Building**



Greenbelt Metro Interchange Project

August 22, 2016

AGENDA

- Purpose and Need
- Project History
- Project Sections
- Noise Walls
- Maintenance of Traffic
- Environmental Impacts / Mitigation

PURPOSE AND NEED

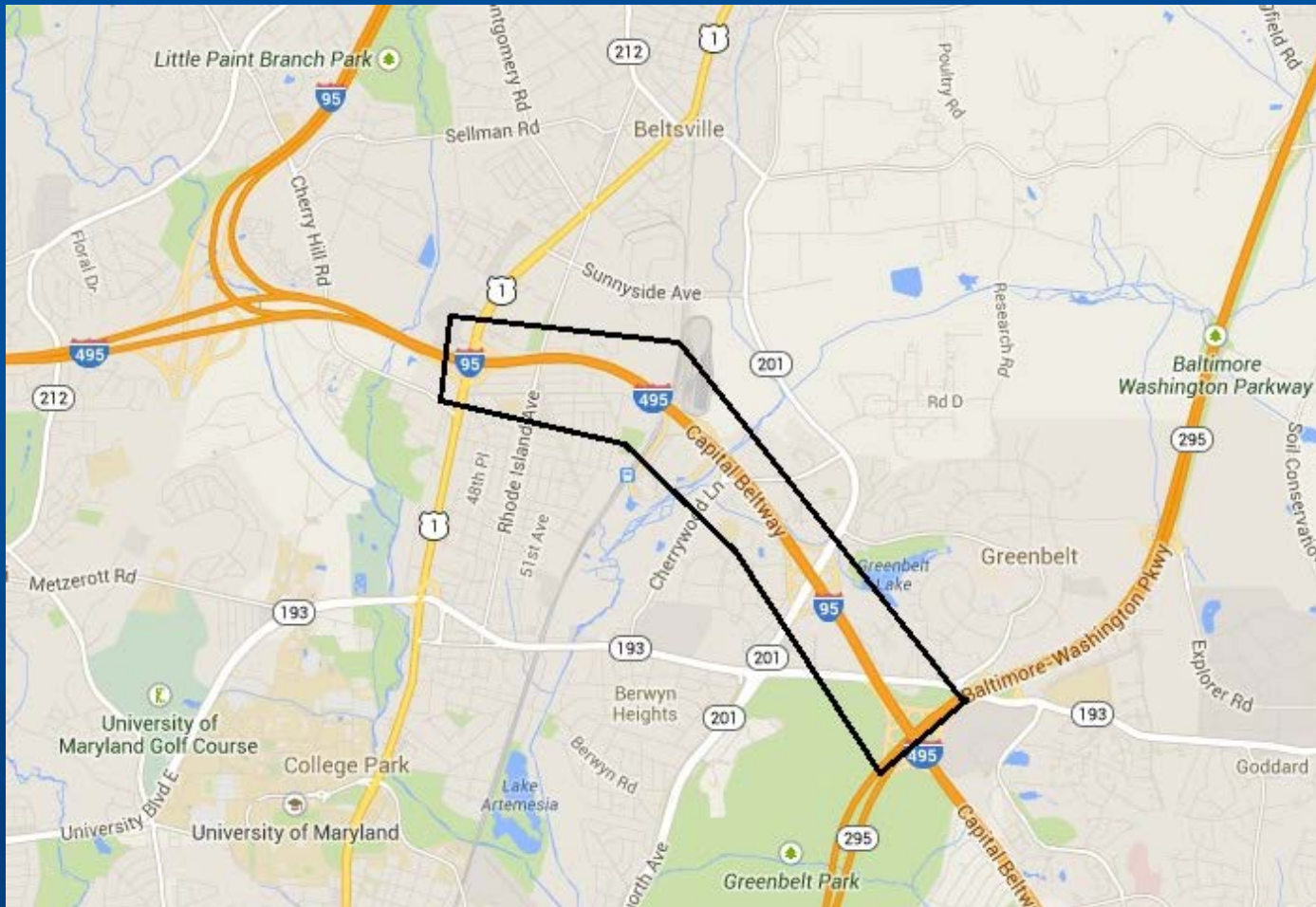
PURPOSE

- To facilitate planned Transit Oriented Development (TOD) and potential FBI headquarters (about 15,000 employees) by providing improved access to the Greenbelt Metro Station
- Improve operations along I-95/495

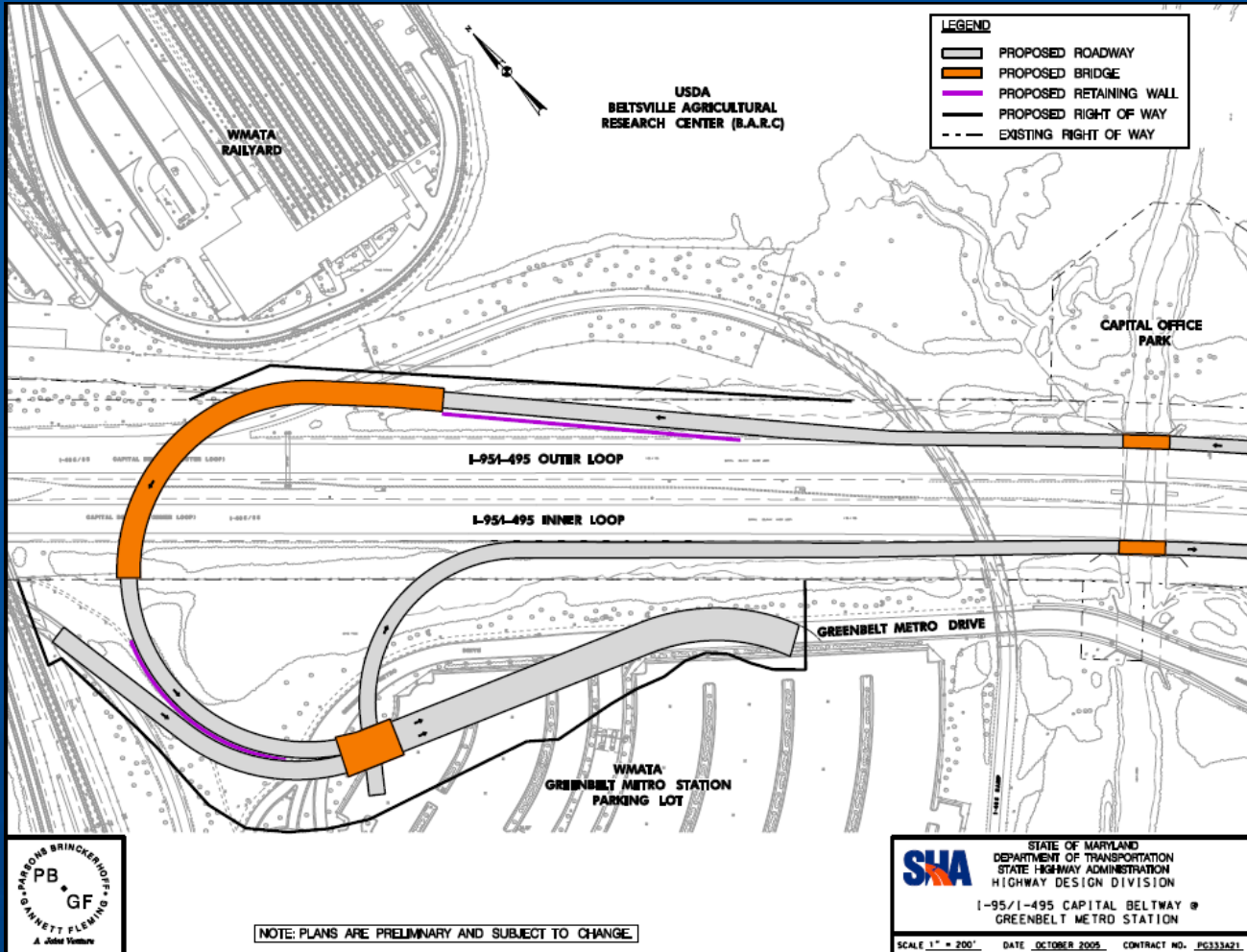
NEED

- To provide sufficient level of access and mobility to support development efforts in the Greenbelt Metro Station Area.
- Congestion along I-95/495
- System preservation along I-95/495

STUDY AREA



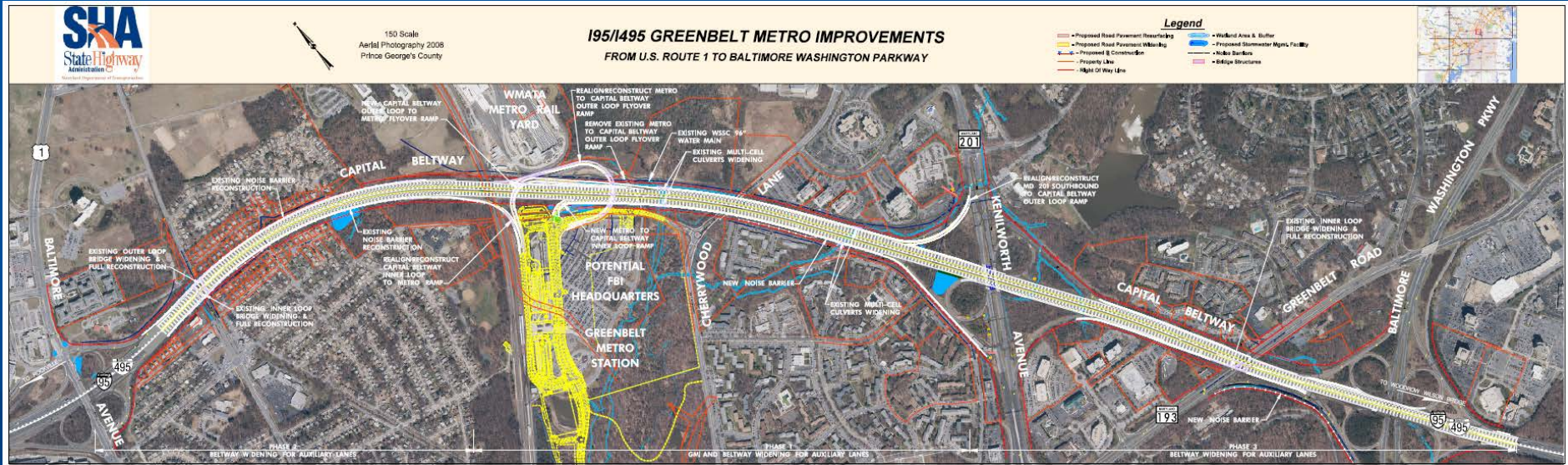
2005 SHA PROJECT PLANNING CONCEPT



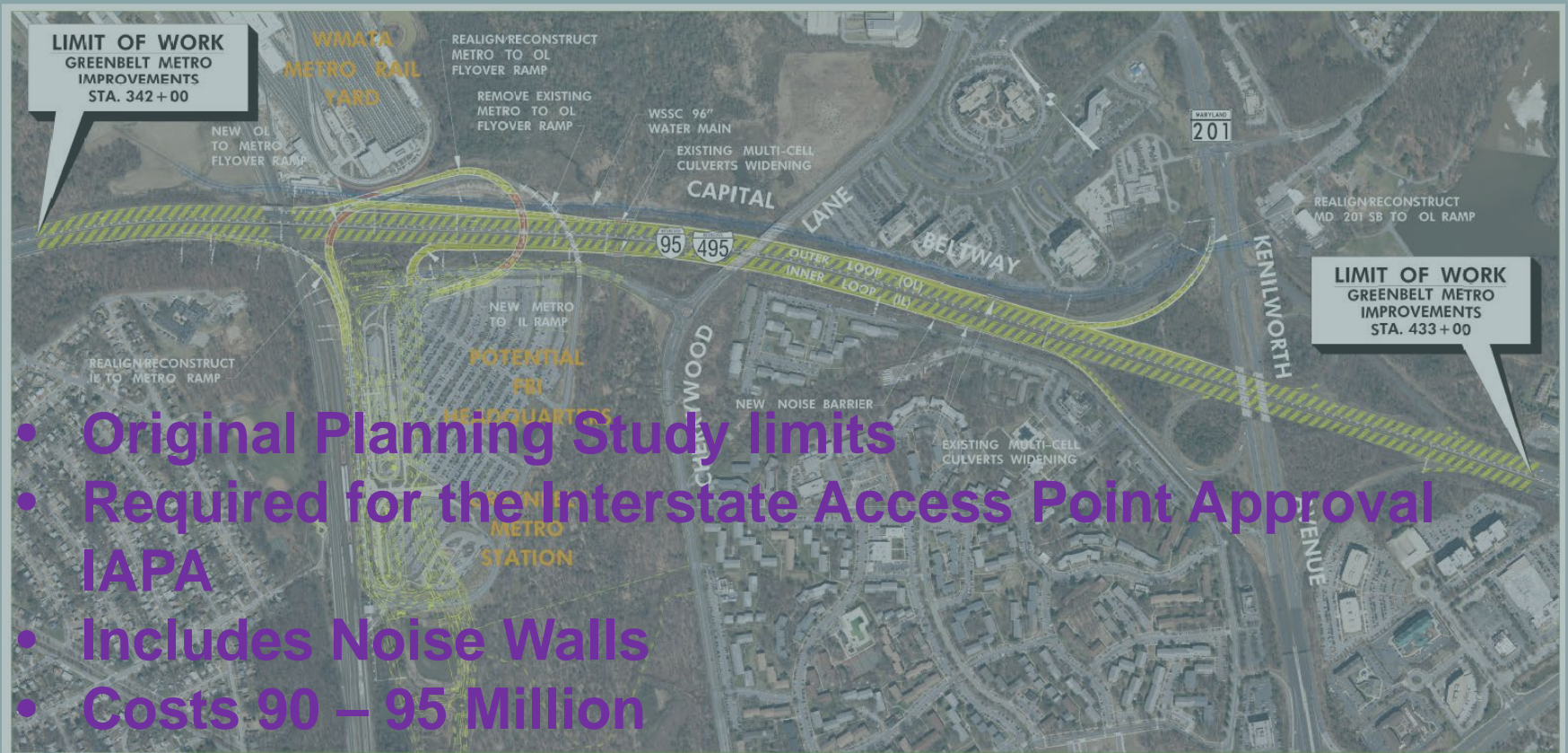
CHANGES SINCE 2005

- Traffic volumes have increased on I-95/495 since 2005
- Change in the site development plans (FBI)
- Value Engineering Study – December 2005
- Additional Studies conducted by SHA
- Identification of System Preservation needs
- Avoidance of WSSC's 96" Water Line
- SHA using "Construction Management at Risk" (CMAR) procurement

I – 95/495 GREENBELT METRO IMPROVEMENTS






CURRENT GREENBELT METRO INTERCHANGE PROJECT



- Original Planning Study limits
- Required for the Interstate Access Point Approval IAPA
- Includes Noise Walls
- Costs 90 – 95 Million

Legend

-  - Proposed 195/495 Widening & Greenbelt Metro Improvements
-  - Proposed Resurfacing
-  - Proposed Bridge Structure

195/495 GREENBELT METRO IMPROVEMENTS
 PRIORITY 1 - GREENBELT METRO INTERCHANGE &
 BELTWAY WIDENING FOR AUXILIARY LANES TO MD 201

PRELIMINARY
 SUBJECT TO REVISION

TRAFFIC ANALYSIS

Greenbelt Metro Interchange Project
VISSIM Comparison - True No-Build vs. Priority 1 Improvements
SHA DSED - May 8, 2015

Scenario	Peak Hour Travel Time (sec)				Free Flow		Total Delay (Vehicle-Hour)				Total Peak Hour Delay Per Day (Vehicle-Hours)
	AM		PM		Travel Time (sec)		AM		PM		
	IL I-495	OL I-495	IL I-495	OL I-495	IL I-495	OL I-495	IL I-495	OL I-495	IL I-495	OL I-495	
2040 True No-Build	513	263	563	568	228	232	692	65	848	834	2440
2040 Priority 1	486	256	611	389	228	232	662	53	1024	412	2151

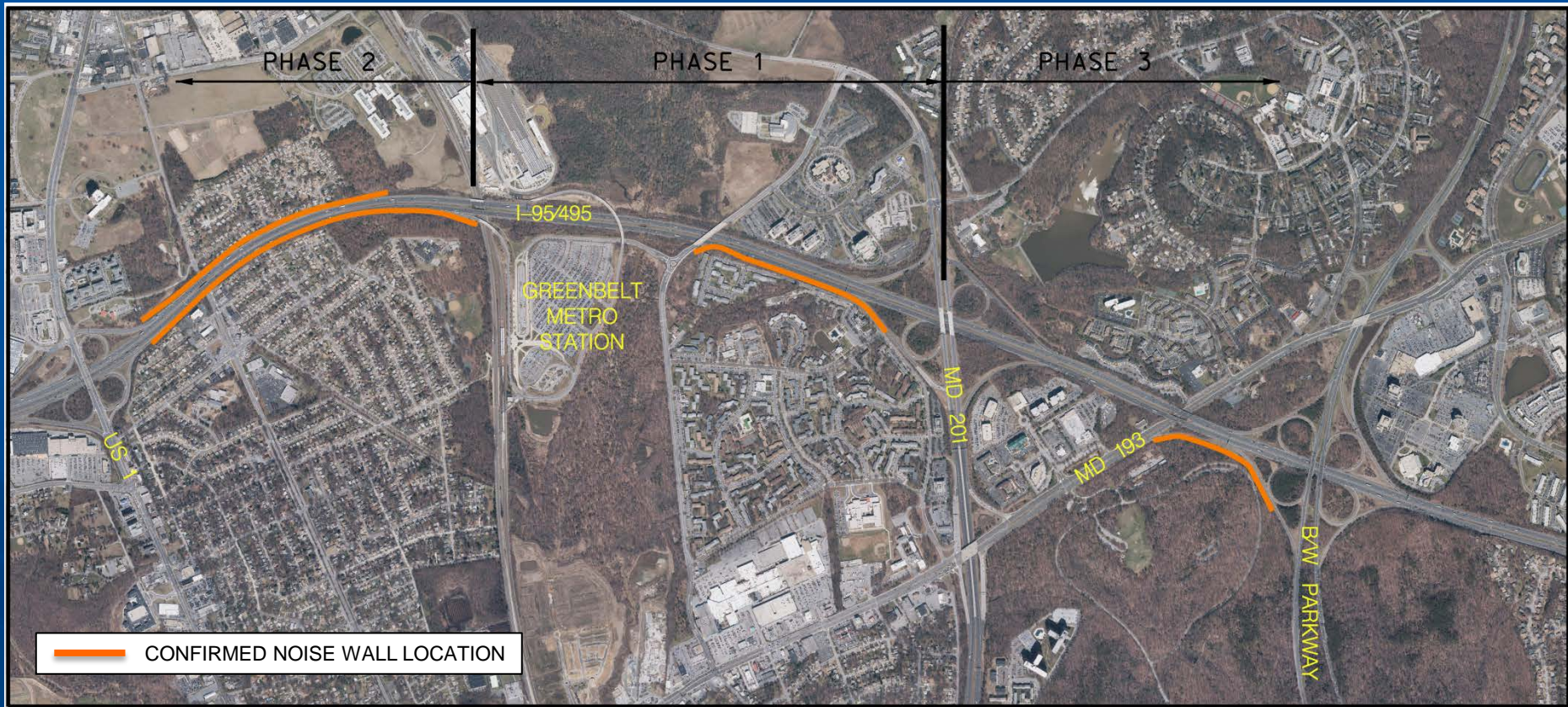
Notes: 1. "True No-Build" includes some development at Greenbelt Metro site, but no FBI traffic and no new ramps.

2. "Priority 1" includes FBI traffic, new ramps at the Greenbelt Metro interchange, and full auxiliary lanes between Greenbelt and MD 201.

NOISE BARRIERS

Potential Noise Barrier Locations

NOISE BARRIERS



MAINTENANCE OF TRAFFIC

Maintenance of Traffic Critical Points

MAINTENANCE OF TRAFFIC



ENVIRONMENTAL IMPACTS

Environmental Impacts / Mitigation

ROADWAY ENVIRONMENTAL IMPACTS

Wetlands:	1.69 Acres Permanent 0.64 Acres Temporary
Streams:	3,049 Linear Feet Permanent 603 Linear Feet Temporary
Floodplains:	7.44 Acres
Forest:	13.55 Acres (will be replanted offsite)

PROPOSED MITIGATION

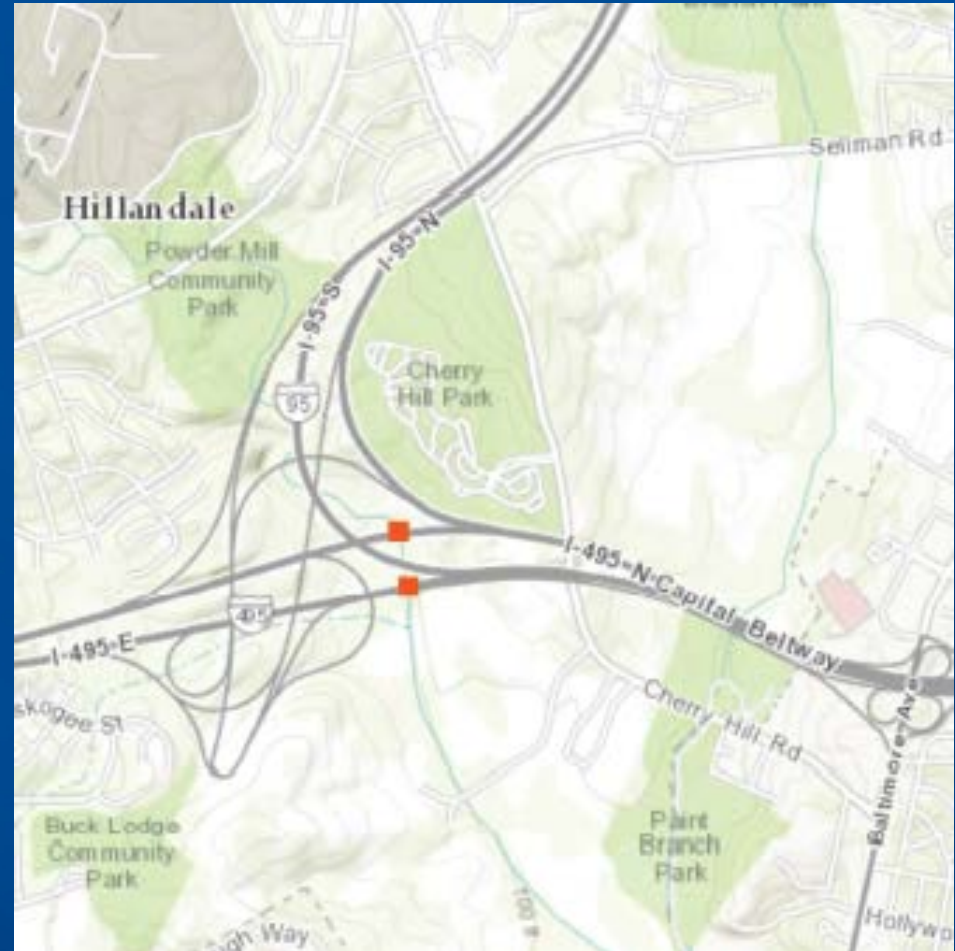
- Paint Branch at I-495
 - Fish Passage Improvement
 - 2,470 Linear Feet of Stream
- Beltsville Agricultural Research Center
 - Wetland Creation and Stream Restoration
 - 2,500 Linear Feet of Stream
 - 5.31 Acres of Wetland
- Any excess mitigation to be used for future projects

SITE SELECTION PROCESS

- Narrowed down from 952 potential sites within Anacostia watershed
- Coordinated with environmental agencies throughout and developed mitigation package based on agency feedback

PAINT BRANCH FISH PASSAGE

- Suggested by resource agencies
- Address complete fish blockages at I-495 culverts



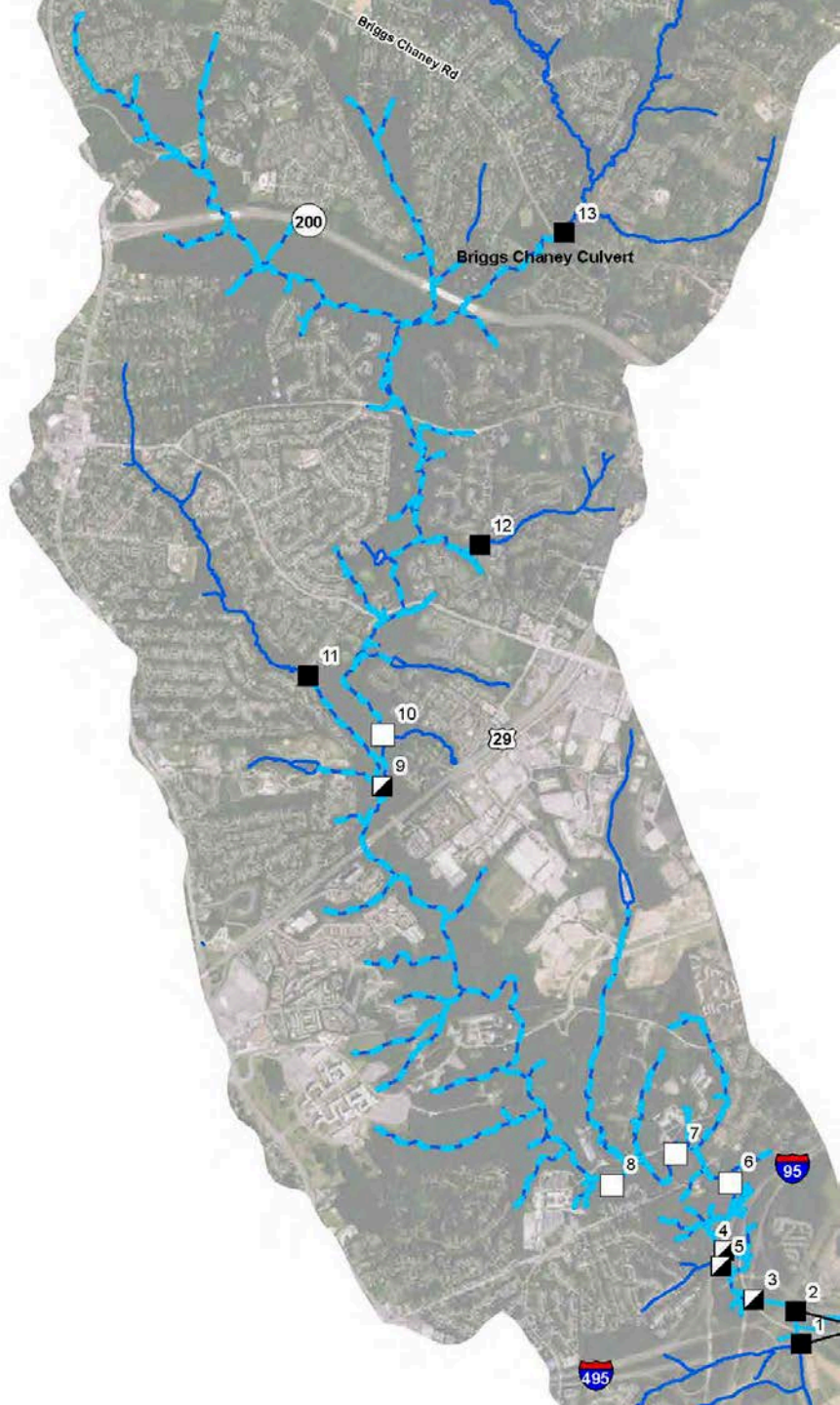
PAINT BRANCH FISH PASSAGE



- 1 foot drop at downstream end
- Water too shallow and rapid
- Lack of adequate resting habitat

PAINT BRANCH FISH PASSAGE

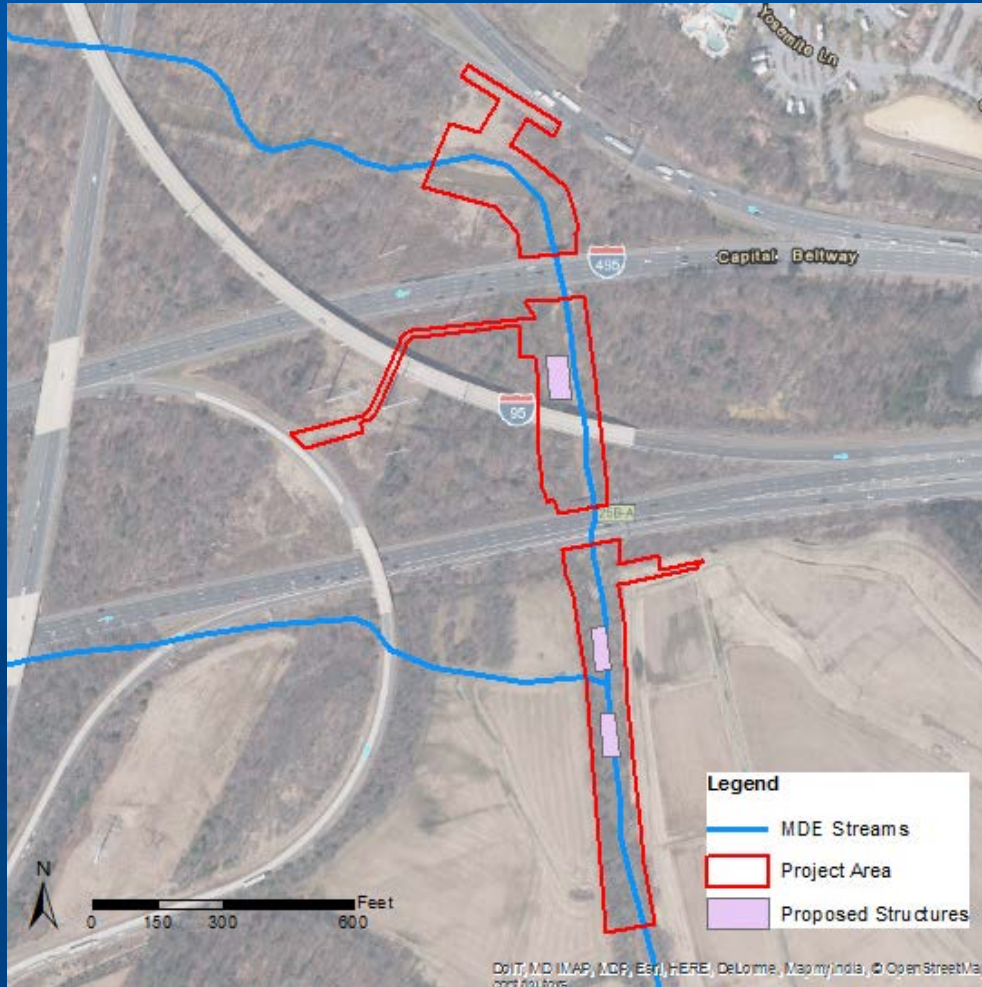




PAINT BRANCH - PROJECT GOALS

- Fully open 0.64 miles of stream
- Partially open ~ 7.5 miles of main stem Paint Branch, ~19.5 miles of tributary
- High quality fish habitat
- Aim to pass residential and migratory fish

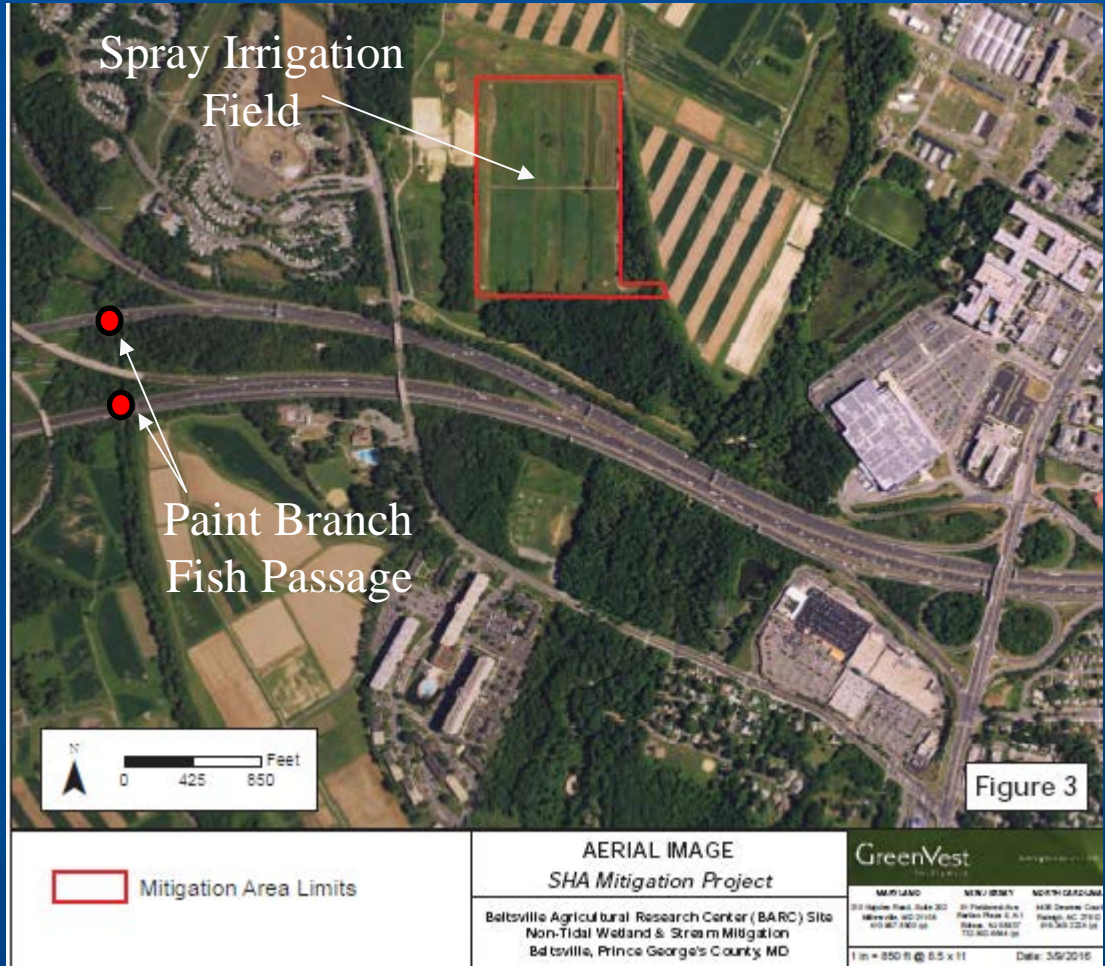
PAINT BRANCH FISH PASSAGE - CONCEPT



- Nature-like design - low-maintenance
- Construct riffle grade controls – incrementally raise stream elevation
- Backwater culverts just enough to allow passage

BARC SPRAY IRRIGATION FIELD

- Purchase mitigation credits from Green Vest
- Wetland creation
- Stream restoration

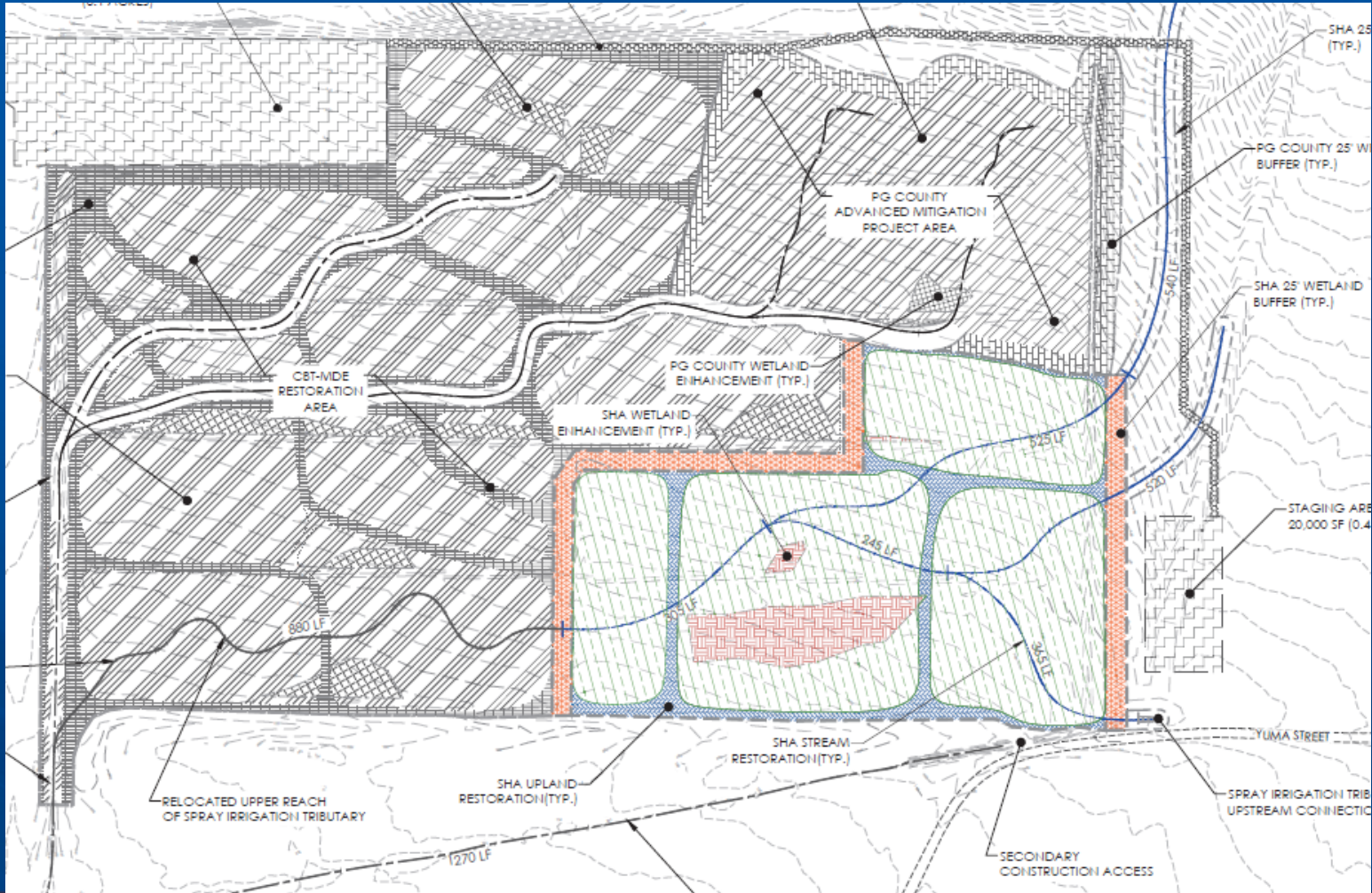


BARC SPRAY IRRIGATION FIELD - PROPOSED IMPROVEMENTS

- Former headwater wetland that was ditched for agriculture
- Taken out of production decades ago
- Adjoining projects
 - Separate construction and timeline
 - Independent hydrology
 - Integrated to increase ecological value of the whole



BARC SPRAY IRRIGATION FIELD - CONCEPT



PROJECT SCHEDULE

Public Meeting Held:	December 9, 2015
Semi-Final Review:	January 20, 2016
NEPA Reevaluation	
Approval:	August 4, 2016
Final Plans:	September 2016
PS&E Plans:	January 2017
Notice to Proceed:	May 2017

FBI DEVELOPMENT SCHEDULE

Site Selection: December 2016
Headquarters Completed: by Dec. 31, 2022

GREENBELT METRO INTERCHANGE PROJECT



AUGUST 22, 2016