Agenda

• Infrastructure Plan Update
• Air Quality Analysis Update
• Additional Updates
  – Development & SUPs
  – Landmark Mall and Carpenter Shelter
• Questions & Next Meeting
Roadway Infrastructure Study

• Multimodal Bridge Analysis
• 10% design for the following streets
  – Multimodal Bridge
  – Eisenhower Avenue straightening
  – Farrington Connector
  – Metro Road and Extension
  – Key grid streets west of Van Dorn

• Planning level Cost Estimates
Study Status

• Multimodal Bridge Analysis - Underway
• 10% design
  – Roadway parameters to inform street widths
  – Farrington and Eisenhower Avenue alignment evaluation

• Cost Estimates to be done in coordination with design
Multimodal Bridge - Background

- 2009 - Recommended in Landmark Van Dorn Corridor Plan
- 2015 - Analyzed in Eisenhower West Small Area Plan
  - Norfolk Southern noted that it did not support any of City’s alternatives due to impact of Thoroughbred Bulk Transfer (TBT) facility
- 2016 - Norfolk Southern developed a Preferred Alternative
- 2017 - Memo to Council noted that the NS Preferred Alternative would be further analyzed in EWLVD Infrastructure Plan
- 2017 - ELWVD Roadway Infrastructure Plan began

Bridge has limited funding in CIP, but is still largely unfunded
Multimodal Bridge - Background
Multimodal Bridge Analysis

• Review feasibility of the Norfolk Southern (NS) Preferred Alternative
  – Constructability
  – Impact to NS Operations / TBT facility
  – Connectivity
  – Property impacts and redevelopment
  – Environmental Impacts
  – Phasing
• Consideration of NS Preferred Alternative tying into the future street grid
• Consideration of other alternative touch down points
Feasibility Analysis

• **Property Impacts / Redevelopment**
  – Continue conversations with property owners on alignments and redevelopment potential
  – Clearance allows for continuing current NS operations; Initial review of pier locations looks feasible but continued coordination is needed

• **Constructability**
  – Need to consider impacts during construction, such as existing property operations, truck circulation and utilities
  – Reverse curves may limit type of structure that can be built; Does not allow for a straightened Eisenhower Avenue

• **Connectivity**
  – At northern end, connects well to grid recommended in Landmark/Van Dorn Corridor Plan
  – At southern end, would alter the layout of the proposed street grid recommended in SAP
  – Would not allow for a straightened Eisenhower Avenue / connection to bridge; Phasing would be needed

• **Environmental**
  – Resource Protection Area (RPA) adjacent Backlick Run should be avoided
Alternative Alignment Options

Option 1 – Norfolk Southern Preferred Alternative

Option 2 – Straightened Eisenhower

 Disclaimer: These conceptual options represent preliminary alignments to be further developed.
Option 2 – Straightened Eisenhower

• Pros
  – Limited impacts to UPS Property / Allows bridge to be constructed independently
  – Allows for Eisenhower Avenue to be straightened and connected to bridge
  – Promotes an opportunity to redevelop the WMATA site to a higher and greater use

• Cons
  – Initial phase needed to avoid pedestrian tunnel
  – Redevelopment of WMATA site requires additional analysis to determine future uses, phasing and multimodal access to the station
Property Outreach - Issues

• **Moore & Associates**
  – Alignments and redevelopment potential

• **Virginia Paving**
  – Access to site
  – Redevelopment potential and phasing

• **Norfolk Southern**
  – Impacts to Thoroughbred Bulk Transfer (TBT) facility operations

• **WMATA**
  – Impact to Park & Ride lot and Kiss & Ride lot
  – Redevelopment potential

• **UPS**
  – Alignments and redevelopment potential
Next Steps – Multimodal Bridge

• Short Term
  – Proceed with 10% design for Option 2 in coordination with affected properties
  – Work with City to approve / review design elements and costs

• Longer Term
  – Potential WMATA redevelopment study
  – Continue design and environmental analysis
  – Continue to seek additional funding
Infrastructure Plan Update

Sanitary Sewer
City Sewersheds
Sanitary Sewer Analysis
Sanitary Sewer Analysis

• Current study analyzed trunk sewers
  – Fairfax North Backlick Run Sewer
  – Fairfax South Backlick Run Sewer
  – Fairfax Holmes Run Sewer
  – AlexRenew Holmes Run Trunk Sewer

• Does not include City collector sewers
  – Sewer capacity analysis required as part of DSP/DSUP process
Project Progress

• Sanitary Sewer Hydraulic Model
  – Existing flow data in model
  – City and Fairfax development projections in model
  – Initial model calibration completed and going through QA/QC process between City, AlexRenew and Fairfax County
  • Most important step in the modeling process
Model Calibration Model

Meter I3041 / Link 757

Flow Rate (mgd)

Rainfall (in)

Date/Time

XPSWMM
Meter Data
Rainfall
Sewer Considerations

- Backlick Run Sewers
  - Flows from Fairfax County and plan area
- Holmes Run Sewers
  - Flows from County, plan area, other City flows (upstream and downstream)
- AlexRenew Holmes Run Trunk Sewer
  - Joint use sewer (right-to-use)
- Fairfax Sewers
  - City does not have a designated right-to-use, may require negotiation with County
Project Schedule

• Planned Schedule
  – Notice to Proceed June 2017 - done
  – Winter 2018
    • Assessment of existing capacity and flows
    • Assessment of future flows
    • Identification of capacity constraints
  – Spring 2018
    • Preliminary capacity improvements
    • Preliminary cost, timing, funding strategies
  – Fall 2018
    • Final findings and report
Air Quality Analysis Update
Air Quality Modeling

• COVANTA submitted to VDEQ an Air Permits Form 7 application on November 15, 2017
  – Requesting installation of its proprietary low NOx (LN™) system on all three furnaces to meet RACT requirements for 2008/2015 ozone NAAQS
  – Proposing 110 ppm NOx limit (24-hr average) that represents a **65.8% reduction** compared to the limit used in our previous air quality modeling

• VDEQ is currently reviewing the application and developing a draft permit for public comments sometime this spring/summer
  – 30-day public comment
  – Staff will send the draft permit to EW/LVD Advisory Group when available

• It was decided to expand the air quality modeling to include other areas surrounding the Metro using the new proposed NOx limit
Next Steps & Questions

- This expanded air quality modeling is ongoing and should be completed within the next two months
Additional Updates

Development & SUPs

Landmark Mall & Carpenter Shelter
Development Updates & SUPs

- Cameron Park
- Edsall Shell
- Greenhill CDD
- Virginia Paving SUP

- Upcoming Special Use Permits
  - 4536-4598 Eisenhower Ave.

- Landmark Mall & Carpenter Shelter
Questions & Next Meeting

• Implementation AG Meeting #6
  – New Date and Location