

## ART Operations and Maintenance Facility

Arlington County is building a new facility in the industrial area adjacent to Shirlington Road to support the needs of Arlington Transit (ART). The project addresses the needs for operations, maintenance, parking and administration of the County's growing ART bus fleet and transit service.

Community meetings were held online in December 2020 on the concept plan. Feedback was also collected online and by sharing information and meeting with nearby Civic Associations and the Transit Advisory Committee. Below are answers to questions asked by stakeholders throughout the first part of the community engagement process.

[More information can be found on the project webpage.](#)

### Questions & Answers

Questions have been sorted into four categories: Background, Environment, Concept Plan and General. The left-hand column indicates questions by source:

- These questions were received at the December 2020 Green Valley Civic Association (GVCA) meeting, via email and the online feedback form.
- These questions were received at the December 2020 Public Facilities Review Committee (PFRC) meeting.

### Background

- **What is the zoning of the site? Is it industrial? Is the entire area east of Shirlington Road adjacent and across from the site industrial?**  
The site is zoned M-1 Industrial. The entire area on both sides of the Shirlington Access Road is M-1 Industrial.
- **Confirm number of buses in the current ART fleet, where they are currently stored, how many buses are being programmed for this site, and what is the ART bus fleet growth.**  
Currently, 78 buses are in the ART fleet. 53 are currently stored at the Shirlington Road site and 25 are stored at the ART Light Maintenance Facility on South Eads Street. 68 - 76 buses are being programmed for the Shirlington Road site. Recent modifications have been made to the South Eads Street site to accommodate up to 40 buses. ART's fleet is expected to grow to 100-110 buses during the next 20 years.
- **Were other sites considered?**  
Yes, other sites were considered including a site in Springfield, Virginia. The Shirlington Road site was selected based on a need to reduce non-revenue cost, land availability within the County to accommodate ART's needs, and ART's use of the site since 2017.
- **Was there consideration given to using different county sites, such as the Trades Center?**  
The Trade Center is fully occupied serving the County's various maintenance fleet and functions. There are no other County properties suitable for the proposed functions.
- **Why was this location selected? Shirlington Road is already congested and this will make the problem worse.**

This location was selected as it was the only available parcel of land appropriately zoned to meet ART's needs. ART has been using the site for operations since 2017.

- **Why is the project scope limited to parking and maintaining buses? Is there a possibility to co-locate on the site other critically needed amenities?**

The County used state transit funds to purchase the property, which requires special considerations of uses other than transit are allowed on the site. Any shared uses on the site must be considered in the context of operational, safety and security requirements of transit service for ART.

## Environment

- **What is an RPA?**

The RPA (Resource Protection Area) is a minimum 100-foot buffer from County streams, which have restrictions on land development.

- **Any thought given to providing more buffer for the RPA?**

We are working with the restrictions of the existing RPA buffers.

- **Does this view (the updated concept plan) with maintenance bays nearest the street mean more pollution for the residents of the neighborhood?**

The ART buses are compressed natural gas (CNG) vehicles, with fewer pollutants than diesel buses. ART is exploring future procurement of electric buses that would further reduce emissions. The maintenance building and buses are on the east parcel, further from the residential neighborhoods and adjacent to I-395.

- **Will the entire fleet be converted to electric buses? How quickly will this conversion occur?**

The County is currently developing a comparative analysis of electric vs. internal combustion engines, reviewing emerging electric bus technologies among various manufacturers and talking with other transit agencies who have implemented electric buses to understand their lessons learned.

The County is currently exploring the feasibility of an electric bus pilot. A pilot is dependent upon several factors, including but not limited to: funding for bus(es), charging infrastructure, maintenance and any necessary retrofits; the type of electric bus technology that could be supported on an existing grid and the electric fuel mix used to support such grid; a location to charge and maintain electric bus(es) in coordination with Dominion Energy; and a location to store electric batteries. The conversion to electric is dependent on many factors as well, including but not limited to: the electric power grid network, ability to perform within the ART service area, number of buses required to perform and the facility to store, charge and maintain buses and bus batteries.

- **What will the impact of electric conversion be to the site? Will they have to completely reconfigure to add a transmission station and/or charging stations? When do they plan to do this? What does the system do with the pollution collected?**

We are providing provisions for future bus fleet electrification. The exact configuration and needs will be developed in the future.

- **If the fleet is going from CNG to electric, will that decrease the number of maintenance bays needed?**  
 No. It is not anticipated that the number of bays will be decreased. The number of bays was determined using transit maintenance standards based on fleet size.
- **Will there be solar panels on the building?**  
 The buildings will be solar ready as part of the project, so the roofs will be designed to support photovoltaic panels. Arlington will be engaging a third party to install solar panels via a power-purchase agreement.
- **Will there be a vegetative roof?**  
 A vegetative roof is under consideration. The design team will be reviewing cost implications, the effect on stormwater calculations, and LEED certification opportunities.
- **How will the exhaust and fluids on the site be addressed?**  
 The bus exhaust will be captured and exhausted with vehicle exhaust reels and building mechanical exhaust systems. Buses on site use compressed natural gas (CNG), which is a cleaner burning fuel compared to diesel.

The bus/vehicle fluids will be stored in above-ground bulk fluid tanks that are double-walled for secondary containment. The fluids will be piped to hose reels in the bus repair bays to service the buses. Waste fluids (oil and coolant) will be captured and stored in above-ground double-wall bulk fluid tanks in the building. The waste fluids will be collected on a routine (monthly) basis by a vendor.
- **For the next PFRC meeting please provide more information about how you are addressing storm water management and the RPA issues.**  
 This will be addressed in the next meeting.

## Concept Plan

- **Is the Alternate Concept Plan fairly settled? What is the probability of significant change?**  
 The facility type and functions have been established to meet the operational efficiency requirements of ART. Refinement of the design is proceeding.
- **Can we see the heights of buildings on each site?**  
 The building heights will be presented at the next meeting on February 16.
- **How many maintenance repair bays are there?**  
 There will be 8 vehicle bays.
- **What are stacking opportunities?**  
 Operations will be located above the maintenance building, which will create a partial third floor. The administration building on the west parcel will be reduced from four to three floors as a result.

- **Has structured bus parking been considered?**  
 Yes. Arlington looked at various test-fit options. The structured bus parking option was inefficient, costly, and its height would exceed zoning requirements.
- **Could cars be parked above the buses?**  
 Parking employee personal vehicles above the buses presents engineering and safety challenges. This would intermingle bus and employee personal vehicle traffic at the east parcel, which only has one ingress/egress location and would be a major safety concern. Engineering wise, the structure would need to be significantly larger to allow buses to safely turn and maneuver. A larger structure is not feasible for the site and would increase the cost of the project. The current design has personal vehicles in a parking structure adjacent to the administration building on the west parcel, with the operations and maintenance building and buses on the east parcel.
- **Could the Administration and Operation functions be located on top of the Maintenance Building?**  
 Yes, such functions could be located on top of the maintenance building. Upon further review, the operations functions have been relocated to an area on top of the maintenance building utilizing an eastern section on the third floor. The administration area will remain on the western parcel to improve employee safety by reducing the number of individuals walking through the maintenance and bus storage parcel during the day. As well, keeping the administration area on the western parcel will allow for consistent aesthetics across the maintenance, administration and the north side of the parking structure.
- **Can the east parcel be denser so that the west parcel is no longer needed?**  
 The three parcels were acquired for ART Operations and Maintenance. For the efficiency and safety of ART operations, the east parcel will focus on maintenance, operations and storage of buses. The west parcel will separate employee personal vehicles into a parking structure and administration functions. The administration building location will provide necessary oversight of the bus and maintenance yard.
- **Can the CubeSmart access road be acquired or swapped?**  
 No. Arlington had engaged CubeSmart but could not reach a reasonable agreement.
- **Even though space is limited, can alternate bus-only entry/exits be explored, beyond via Shirlington Road?**  
  
 Exiting onto Shirlington Road is the only option available for these parcels of land.
- **The Parking Structure is an issue at the intersection.**  
 Design concepts will be developed to show how the intersection will be addressed.
- **Can you show pedestrian movement on site?**  
 This will be addressed in the next meeting on February 16.
- **Will there be a new gas line on site?**  
 The project will not add a gas line, as there is an existing gas line on site.

## General

- **What other experience does Stantec have in terms of designing and constructing a facility in similar terrain?**

Stantec has designed maintenance and operations facilities throughout the U.S. and Canada on various sites and terrain. By positioning the maintenance building on the north side of the site, which has the highest elevation, it will be out of the flood plain and on a flatter part of site.

- **Will more information be posted on the project page?**

Yes. All meeting materials will be available on the project page.

- **Please make images that can be enlarged in the presentation. The current photo is too small to identify the boundaries of the parcels of land.**

The presentation materials will be available on the project page.