



RIGHT OF WAY COST ESTIMATING

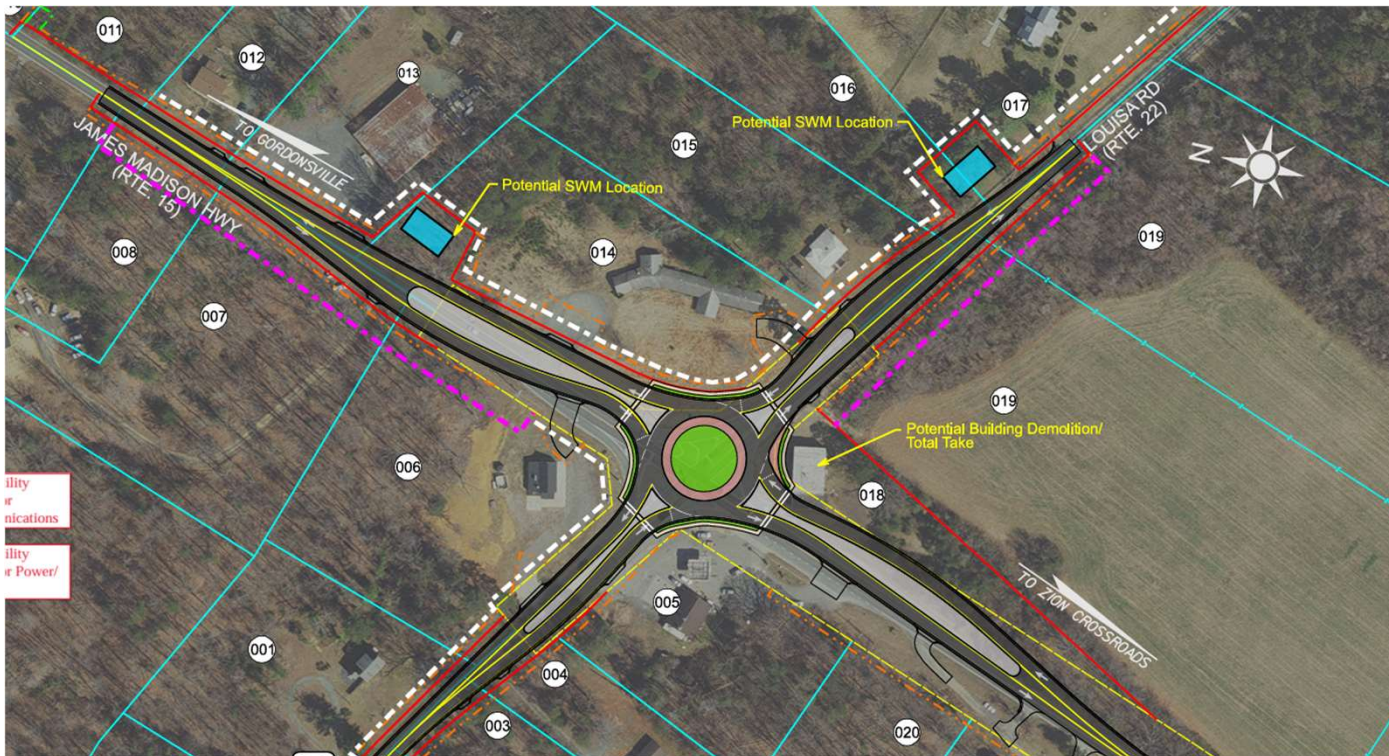
Best Practices & Special Considerations for Right of Way Estimates

| Carl Blake — Right of Way Plan Review Manager, Southeast Region
Thomas Atkins — Right of Way Cost Estimator, Northeast Region

March 11, 2025

Overview of the Right of Way Cost Estimate Process

Sketch



What a Sketch needs:

- Property lines
- Parcel Numbers
- Proposed Fee RW lines
- Proposed Temporary easements
- Proposed Permanent easements

The project can and will change but if the designer thinks its needed then show it. It is best to estimate the money now than get a surprise later. All VDOT RW Cost Estimates are treated the same.

Drainage, Building/improvement Impacts can impact the RW estimate a lot.

Datasheet

PROJECT NAME: US 15 & Route 22 Roundabout			4/2/2024					
COUNTY: Louisa								
PARCEL NO.	PIN/TAXMAP	DESCRIPTION	FEE			EASEMENTS		
			TOTAL ACRES	FEE TAKING SF	FEE REMAINDER ACRES	PERMANENT SF	UTILITY SF	TEMPORARY SF
001	21 9 B	WELLS, THELMA & DALLAS	2.150	3890	0.000	0	0	2265
002	21 4 C1	RAMEY, DAVID A	1.728	1315	0.000	0	0	881
003	60C-A-50	WEEKS, JAMES C & WANDA JEAN	1.569	4046	1.476	0	0	1323
004	21 4 C3	BOYCE, ROSA	1.460	3490	1.380	0	0	1168
005	21 A C4	HOLLEY, JUNE	1.534	230	1.529	0	0	2607
006	21 81	ANILE, SALVATORE	2.555	3162	2.482	0	0	3883
007	21 28	MORRIS INVESTMENTS LLC	0.886	8903	0.682	0	0	2860
008	21 28D	MORRIS INVESTMENTS LLC	1.033	3811	0.946	0	0	1622
009	21 80	MORROW-RIGGAN, MARYLIN	1.550	781	1.532	0	0	352
010	21 10 B	QUILLEN, JILL FAULCONER ET ALS	0.332	117	0.329	0	0	152
011	21 10 A	SIMMS, JUNE O TRUSTEE OF THE	0.354	4437	0.252	609	0	1008
012	21 85	SHORT, MONTE C & RITA W	1.000	3257	0.925	0	0	1316
013	21 84	POWER WELD CONSTRUCTION CORP	2.112	6765	1.957	0	0	2095

- What Datasheet Needs:**
- Match the sketch
 - Parcel numbers
 - Tax Map Numbers
 - Fee Right of Way areas
 - Temporary Easements areas
 - Permanent Easement Areas

Example of a Parcel by Parcel Breakdown

PARCEL #	001	TAX MAP #	41A33A 1	Zoning	C3	LAND	\$ 11,300	
ASSESSMENT	LAND	\$ 2,162,900	\$ 4.50			BUILDING	\$ -	
	IMPROV.	\$ 3,238,900				IMPROVEMENTS	\$ -	
		SUBJ. SIZE	11.034			DAMAGES	\$ 1,000	
EST. FMV. PER	SF/AC/SM	\$ 5.20						
ACQUISITION				%		TOTAL		\$ 12,300
	FEE	5	SF/AC/SM		\$ 100			
	Temp/ Utility		SF/AC/SM		\$ -			
	PDE		SF/AC/SM		\$ -			
	UTILITY	3.553	SF/AC/SM	30%	\$ 5,600			
	TCE	3.553	SF/AC/SM	30%	\$ 5,600			
	-Type:							
251 SOUTHGATE SHOPPING CENTER; SOUTHGATE CULPEPER LLC; Valued at \$2,500,000; Improvements: None given at this time.; Damages: Property pins- \$1,000.								
PARCEL #	002	TAX MAP #	41A33A 3B	Zoning	C3	LAND	\$ 55,400	
ASSESSMENT	LAND	\$ 283,600	\$ 10.50			BUILDING	\$ -	
	IMPROV.	\$ 502,500				IMPROVEMENTS	\$ 11,700	
		SUBJ. SIZE	0.62			DAMAGES	\$ 11,000	
EST. FMV. PER	SF/AC/SM	\$ 14.81						
ACQUISITION				%		TOTAL		\$ 78,100
	FEE	1,576	SF/AC/SM		\$ 23,400			
	Temp/ Utility		SF/AC/SM		\$ -			
	PDE		SF/AC/SM		\$ -			
	UTILITY	3.590	SF/AC/SM	30%	\$ 16,000			
	TCE	3.590	SF/AC/SM	30%	\$ 16,000			
	-Type:							
ABDEL-JALIL, AHMAD JAMIL ET UX; Valued at \$400,000. Improvements: Landscaping- \$1,500; 2 X Lamp Post- \$2,000; Elaborate 2X2 wood sign- \$4,000; 2,800 sqft of asphalt- \$4,200; Damages: Temporary loss of 10 parking spots-\$10,000; Property pins-\$1,000.								

- Need to include all possible improvements and damages. **Based on the design at the time.**
- Must use Fair Market Value for the Price per SF. **(NOT Assessed Value)**
- State estimate assumptions on each parcel.
- It is suggested to use the VDOT cost estimate worksheet or similar format.
- VISIT the Site! If a site visit is not possible, Google Maps can be a decent alternative, but it should be the exception not the rule and the date should be considered as things on the ground can be very different from the last time Google's satellite, streetview captured the parcels.
- Use the County GIS/Assessment to find information for a particular parcel.

RW Costs

	VALUE	AREA	\$/SF
Proposed Right of Way	\$ 116,100	10,005.000	\$ 11.60419790
Proposed Prescriptive Right of Way	\$ -	0.000	#DIV/0!
Proposed Permanent Drainage Easement	\$ 148,400	20,413.000	\$ 7.26987704
Proposed Permanent Utility Easement	\$ 170,200	36,724.000	\$ 4.63457140
Proposed Temporary Construction Easement	\$ 163,900	34,685.000	\$ 4.72538561
Total Cost of Fee ROW and Easements:	\$ 598,600		
Buildings	\$ -		
Improvements	\$ 61,705		
Damages	\$ 29,500		
Total Costs (Land + Above)	\$ 689,805		
Administrative Settlements (35%)	\$ 172,460		
Condemnation increment (25%)	\$ 241,440.00		
Court Costs Range: (\$30,000-\$125,000)/Per Parcel	\$ 150,000.00		
ROW Admin Cost: \$15,000/parcel	\$ 315,000.00		
Total Admin and P.E Costs	\$ 878,900.00		
*Estimated Total Acquisitions	0		
*Estimated Parcel Count	21		
Commercial Relocation Costs	\$ -		
Residential Relocation Costs	\$ -		
Hazmat Costs	\$ -		
Demolition Costs	\$ -		
Grand Total with Relo Costs (No Utility Costs)	\$ 1,568,705.00		
Contingency 25%	\$ 392,180.00		
ROW Grand Total with Contingency:	\$ 1,960,885.00		

- When doing an estimate, **Administrative Costs, Administrative Settlements, Condemnation and Court Costs, plus Relocation Costs (if applicable), need to be included. If you wish to learn more about these costs please check out our ROW and Utility Cost Estimate Guide which can found on the external VDOT Site.**
- **Friendly reminder; CONTINGENCY is to cover for unknown costs. Such as minor plan changes, missing easements (that should be there), high impacts to improvements, etc. (see Right of Way Cost Estimate Guide for recommended Contingency amounts).**

RW Cost Estimate Guide



Right of Way Cost Estimate Guide

Version: 7.00

This guide has been developed to provide greater depth and direction when preparing Right of Way and Utility Cost Estimates. It provides discussion and examples on how to prepare Right of Way Cost Estimates. In addition, Appendices are attached to provide a glossary of terms specific to Eminent Domain and Right of Way.

It should be noted that the information provided in this guide does not set policy. The information is presented to assist the Estimator with evaluating and solving common issues that may surface when preparing R/W Cost Estimates. The Estimator should know and comply with VDOT's Right of Way and Utilities Manual. If there are questions regarding a specific issue this guide does not address, or requires clarification please contact the Regional Right of Way Manager of the Appraisal Section or the Regional R/W Cost Estimator.

Comments and suggestions for improving the Right of Way Cost Estimate Guide are welcomed and they may be directed to the Regional Right of Way Manager -Appraisals or the Regional Right of Way Cost Estimators (District Office).

If the reader would like to learn more about VDOT Right of Way and Utility policies, please click on the links below.

State Right of Way Manual: [RW-Manual.pdf \(virginiadot.org\)](#)

State Utility Manual: [Utility Manual10012014.pdf \(virginiadot.org\)](#)

- The RW Cost Estimate Guide is a tool to assist estimators when formulating Estimates.
- The main purpose of this guide is to keep RW estimates consistent across the whole state regardless of who does the estimate.

Documentation Needed for VDOT RW to VALIDATE an Estimate

In addition to a sketch/plan sheet that has linework and RW Datasheet, Estimates must include a Parcel by Parcel estimate worksheet, which must reflect details of the estimate for each parcel, for VDOT RW to validate.

Resource: Chapter 1, Section 1.11 of the VDOT Cost Estimating Manual outlines Right of Way and Utility Estimates. Internal requirements for VDOT RW to prepare an estimate is listed under Section 1.11.1 and Requirements for Validating an External estimate request is outlined under Section 1.11.2.

Special Considerations for Right of Way Cost Estimating

1. State Law Verses Federal Law



VS.



- Whether it is a State-funded project or a Federally-funded project, Right of Way is not treated differently.
- For Right of Way: State law mirrors Federal law.
- If the designer follows the LAP manual and/or the State ROW & Utility manual, they will be complying with the law.

2. Donation and Proffers

Federal Law:

An owner whose real property is being acquired may, **after** being fully informed by the agency of the right to receive just compensation for such property, donate such property or any part thereof, any interest therein, or any compensation paid therefore, to the agency as such owner shall determine. The agency is responsible for ensuring that an appraisal of the real property is obtained unless the owner releases the agency from such obligation, except as provided in § 24.102(c)(2).

State Law:

A person whose real property is being acquired in accordance with this article may, **after** the person has been fully informed of his right to receive just compensation for such property, donate such property, and part thereof, any interest therein, or any compensation paid therefor to a state agency, as such person shall determine.

RW Stance on Donations and Proffers

- Private Landowners: Right of Way is NOT to consider donations from private landowners as they are entitled to compensation. Additionally, they may request an appraisal to determine their donation for tax purposes, which is a cost to the project. Unless the donated rights of way are already recorded, we are going to include the cost of acquisition from these parcels in our Right of Way Estimate.
- Localities: Regarding donations from Localities/Municipalities/County/City-owned properties; unless we have a signed letter from someone of authority from said Locality/Municipality/County or City agreeing to donate the needed rights of way at no expense to the Commonwealth, we are NOT going to consider those as donations and the costs of acquisition will be included in the Right of Way Estimate.
- Developers: Regarding potential proffers/dedications from a developer is, unless there is already a dedications recorded in the land records OR there is an absolute enforceable document requiring their proffer/dedication at our request, at no expense to the Commonwealth, we will include the cost of acquiring right of way from their property. Keep in mind VDOT typically can not enforce proffers.

4. Acquisitions on Federal Property

Basic Requirements

- Depending on the Agency, this will vary
- Basic Requirements include;
 - Title Report
 - Valuation
 - Acquisition plats with metes and bounds
 - Narrative descriptions for each acquisition type
 - Administrative costs/fees
 - TIME!

Tips for Success

- **Planning & Early Initiation**
 - **Contact Federal Landowner as early as possible**
 - **Make sure that the Agency's Real Estate team is involved, not just Engineering**
- **Prioritize these parcels in the survey and appraisal process**
- **Alternative solutions to clear the parcel**
 - **MOUs**
 - **Rights of Entry**
 - **Federal Land Transfers/Highway Easement Deed**

Things to Remember

- **Eminent Domain is not on the table.**
 - Supremacy Clause - Article VI, Paragraph 2 of the U.S. Constitution
- **Clearing these parcels will likely be a lengthy process**
 - **Schedule R/W phase accordingly**
 - Depending on the Agency/what is being acquired, 9-18+ months is common
 - **Expect that the project may need to be open to RW charges even after construction**
- **Limitations to types of rights/conveyances that can be acquired**
 - **EX: Army Corps. of Engineers will not convey fee right of way**

Federal Land Transfer/Highway Easement Deed

- Incorporated into Right of Way Manual in 2024
- Should accelerate acquisition process in cases where applicable
- Toolkit - Federal Land Transfers - Real Estate – FHWA
 - https://www.fhwa.dot.gov/real_estate/flt/toolkit/

Reach out to Central Office Special Negotiations

- **Matt Southall**
 - Matthew.Southall@VDOT.Virginia.gov
 - 804-396-0684
- **Qadree Lewis**
 - Qadree.Lewis@Vdot.Virginia.gov
 - 804-786-7459

4. Railroad Coordination

- The railroads prefer one sole point of contact from the preliminary phase of projects to completion of projects.
- This point of contact is responsible for coordination with the railroads and should be involved as early as possible.
- Safety is the railroads greatest concern at all times.
- Railroad must approve plans prior to executing a project agreement.
- Railroads will not normally incur any direct cost from our projects (Preliminary and Construction Force Accounts will be determined and approved).
- The process for getting a construction agreement can take 18+ months

Introducing a Project to the Railroad

- Prior to plans and schematics being developed, an introduction package is sent to the railroad introducing the project and asking for future needs at the project location.
- The future needs of this location may have some influence on the project development. (ex. A corridor that will be used for high-speed rail, double stacks, additional tracks, or future service road)
- Approval of the preliminary Force Account Estimate occurs for the railroad based on the complexity of project.

Reviews

- **Project documents detailing proposed work are submitted to the railroad for review (review period approx. 45-60 days).**
- **Railroad review comments must be addressed in writing back to the railroad before the project can progress.**
- **Easement & design packages can be submitted concurrently.**
- **For minor projects or no plan projects provide the railroad documents demonstrating scope of work and location relative to the tracks (marked up drawing).**
- **The railroad's Public Project Site is a good source to retrieve samples of right of entries, agreements and project documents.**

Railroad Cost to the Project

- **Project cost incurred by the railroad will be charged to your project from the preliminary phase to completion of construction.**
- **There will be two Force Account Estimates. One for the preliminary reviews and one for construction phase.**
- **Approval of the Force Account Estimates and written notice to proceed is required prior to work beginning.**
- **The Force Account Estimate must be deposited with the Class I Railroads, and at the discretion of the short line railroads.**

Advertisement Packages Contain the following Documents

- Fully executed construction agreement or right of entry.
- Construction right of entry application to be filled out by contractor prior to beginning construction.
- Railroad construction requirements.
- Railroad Special Provision – insurance requirements.
- Construction Force Account Estimate breakdown.
- CSX requires a fully executed deed of easement. The other railroads do not at this time.

Project Close-Out

- Upon completion of project construction the railroad will inspect their right of way. Any unfavorable conditions will be reported for correction. Once the right of way is accepted by the railroad a letter shall be submitted stating the same.
- Final railroad charges may be received up to a year after completion of the project. If there is money left in the Force Account Estimate, it will be reimbursed to the project.

Key Points to Remember

- **Projects will not be considered cleared for advertisement until a fully executed agreement is in place.**
- **Right of entries must be in hand prior to entering railroad right of way (allow time to receive right of entry - can take up to 4-6 months).**
- **All railroads have been experiencing extreme flagging delays. Factor additional time in procuring a flagger for any work where one is necessary. Norfolk Southern has moved to a Direct-Hire flagging model.**
- **Do not accelerate ad schedules without consulting the railroad. Railroads will not compress handling of project to accommodate a sooner ad date as they are working on multiple projects across the state and other states.**
- **Vertical and horizontal alignments (clearance) are set by the railroad and will not be compromised by your project.**

Key Points to Remember

- **Don't design a project that calls for the introduction of a new crossing unless you prepared to close three existing public crossing.**
- **Drainage should never be directed or increased toward railroad tracks.**
- **Railroads do not like pedestrian facilities or trails, when they approve them expect additional design specifications and costs.**
- **Plan changes and revision can potentially start the review process over.**
- **Equipment and machinery used during construction that could foul/impact railroad right of way (No storage).**
- **Proposed construction access to the site that impacts rail right of way has to be approved by the railroad (generally contractor responsibility).**
- **Beware of project impacts to railroad warning devices. Will be charged to project expense if changes/upgrades are needed because of your project.**

5. State Institutions Coordination

- VDOT cannot acquire permanent easements from other COV properties, with few exceptions.
- If fee is to be acquired, Department of General Services would be third-party to the transfer.



6. Military Bases

One of three things can happen when negotiating with a Military base:

- **Donation**
- **We pay for the right of way acquisition.**
- **We pay for the right of way and buy replacement land.**

Keep in mind this decision is up to the Base Commander.

It's best to estimate as if the land will need to be purchased and replacement land will be required until determined otherwise.

7. Park Land 4(F) vs 6(F)

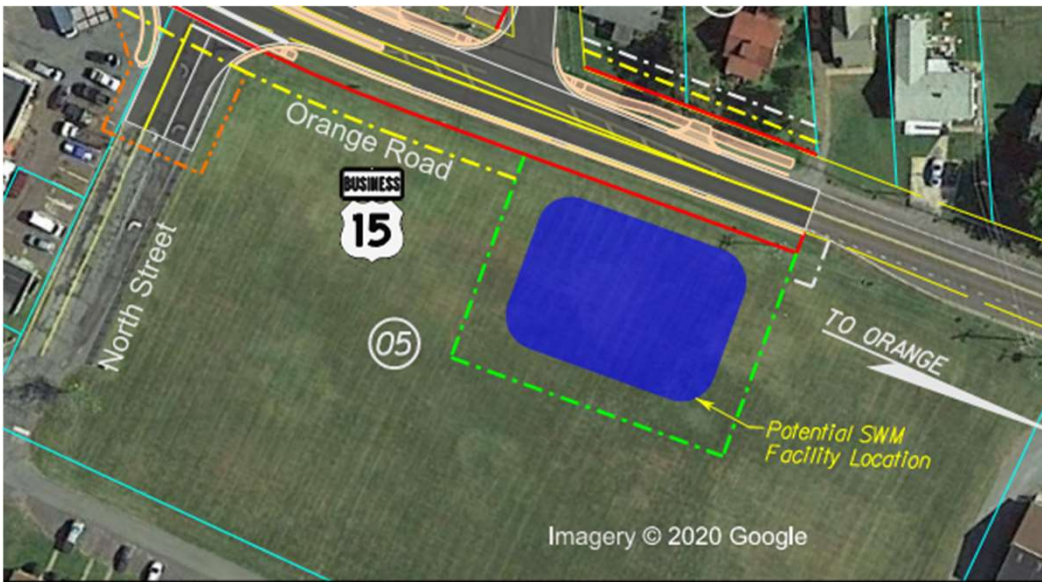
LAW Legislative Reference	SECTION 4(f) Section 4(f) of DOT Act	SECTION 6(f) Land and Water Conservation Fund Act, Section 6(f)
Purpose	Avoid use of public parks, waterfowl and wildlife refuges and significant historic sites	Preserve, develop and assure the quality and quantity of outdoor parks and recreation areas and refuges for present and future generations
Applies to	US Department of Transportation projects	Federal projects
Affects	Significant public parks, recreation areas, wildlife and waterfowl refuges, and all significant historic sites "used" for a highway project	All projects that impact recreational lands purchased or improved with land and water conservation funds
General Procedures	Must avoid using protected areas, if feasible and prudent; if 4(f) properties are used, must include all possible planning to minimize harm	Secretary of Interior must approve any conversion of property acquired or developed with assistance under this Act
Coordination with	DOI, DOA, HUD, State Preservation Officer, State or local agencies with jurisdiction	DOI, state agencies

Park Land: RW Estimating

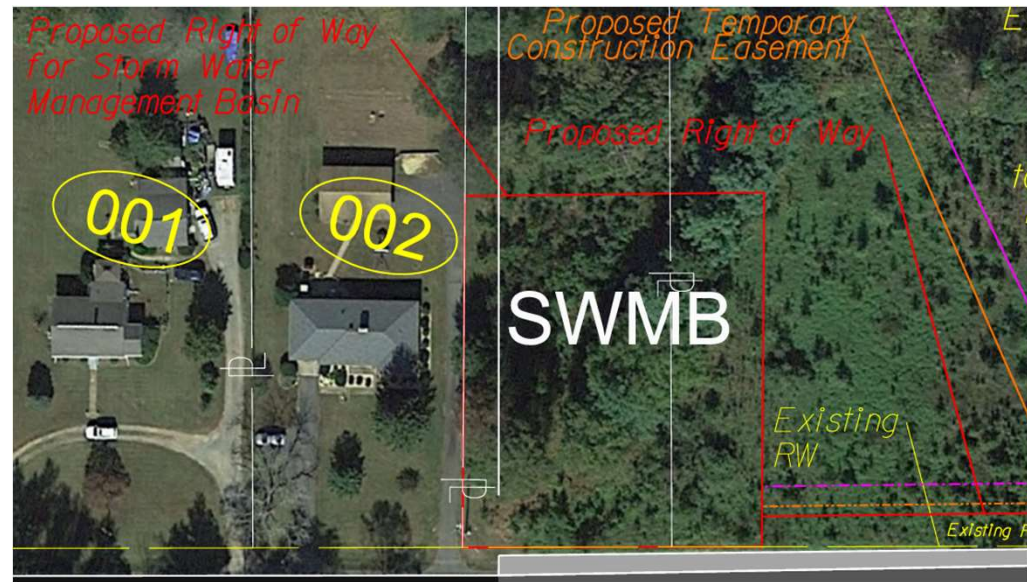
For Section 4(F) treat the park like any other landowner and pay them.

For Section 6(F) treat them like any other landowner and pay them. However, include costs of replacement land.

8. Storm Water Management Pond (Fee VS Easement)

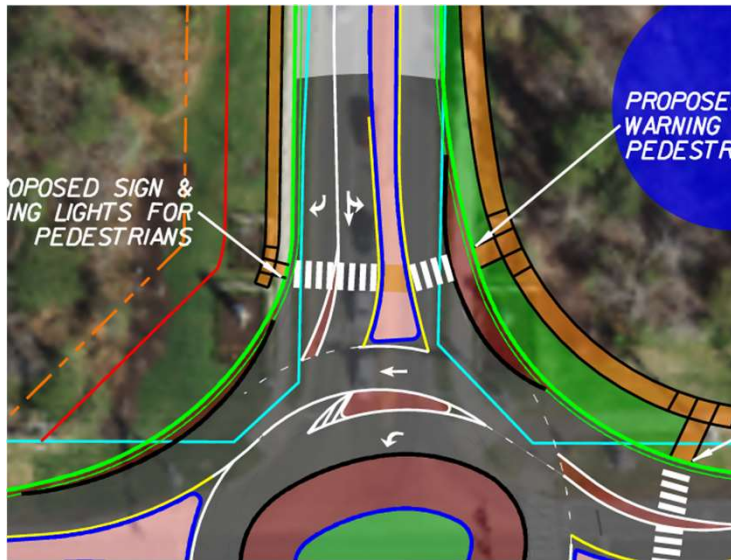


Property located in an urban area.

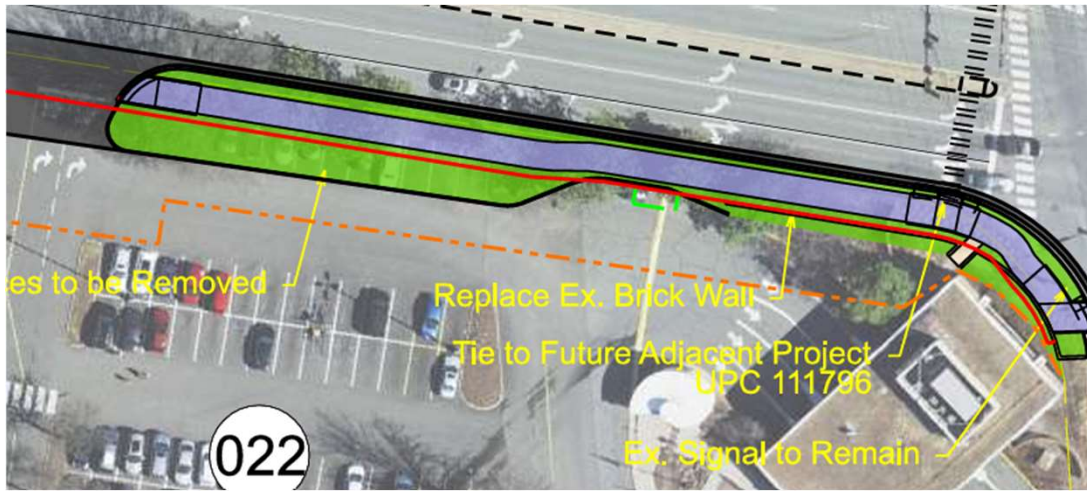


Property located in a rural area

9. Landscaping



10. Parking



11. Direct and Indirect Building Impacts



A

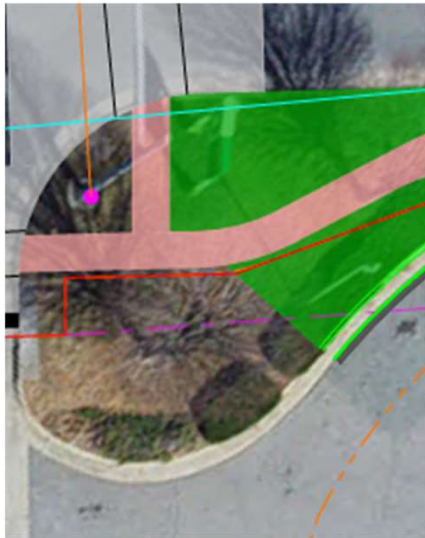


B

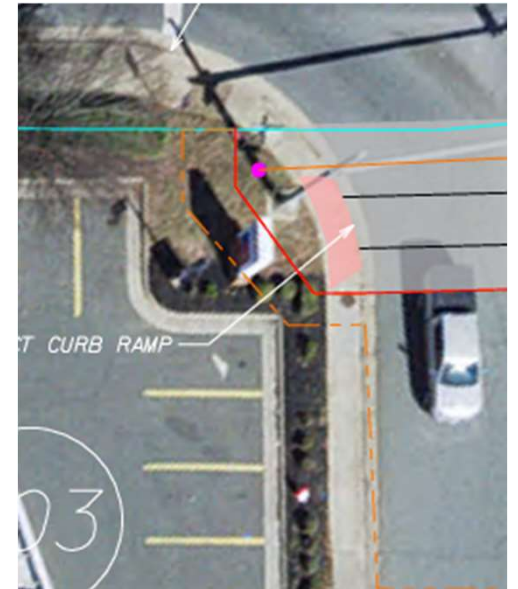


C

12. Signs

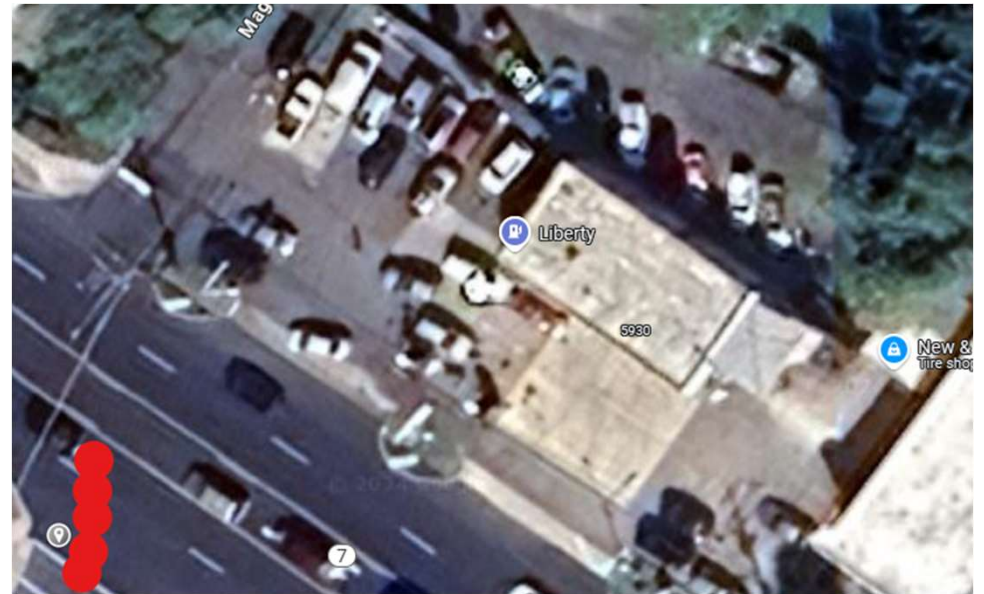
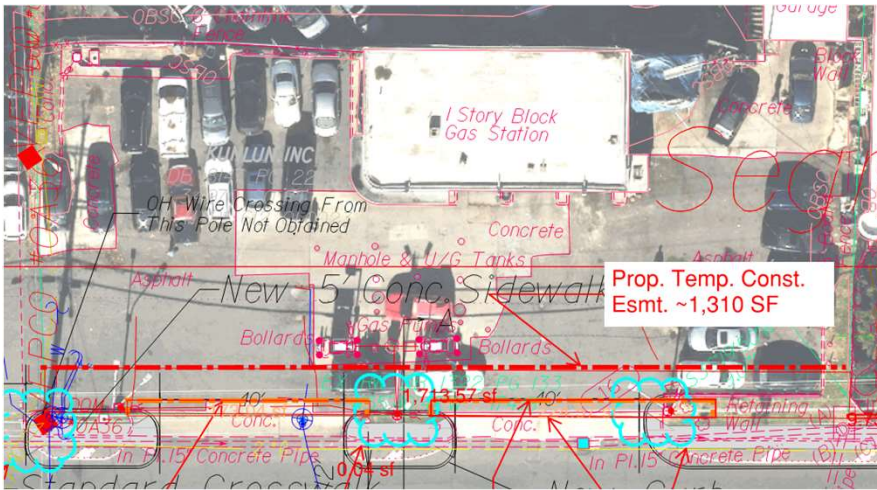


A



B

13. Things to look out for when impacting Fuel Stations



Real World Examples

The Domino Effect...



...When Viewed from Above

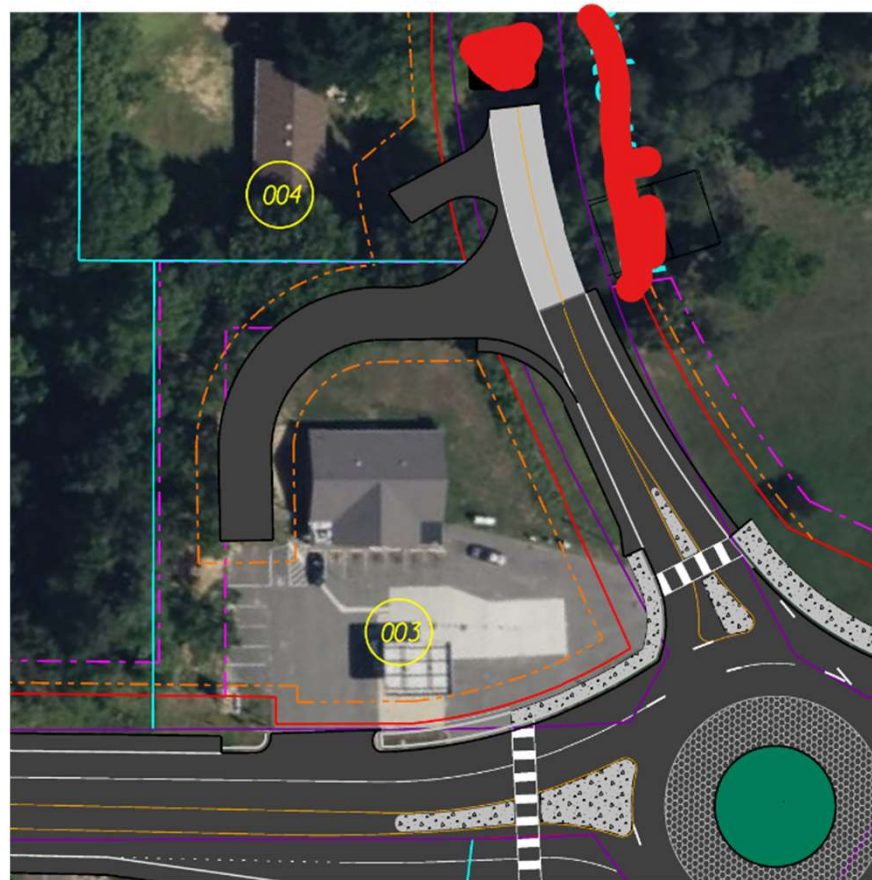
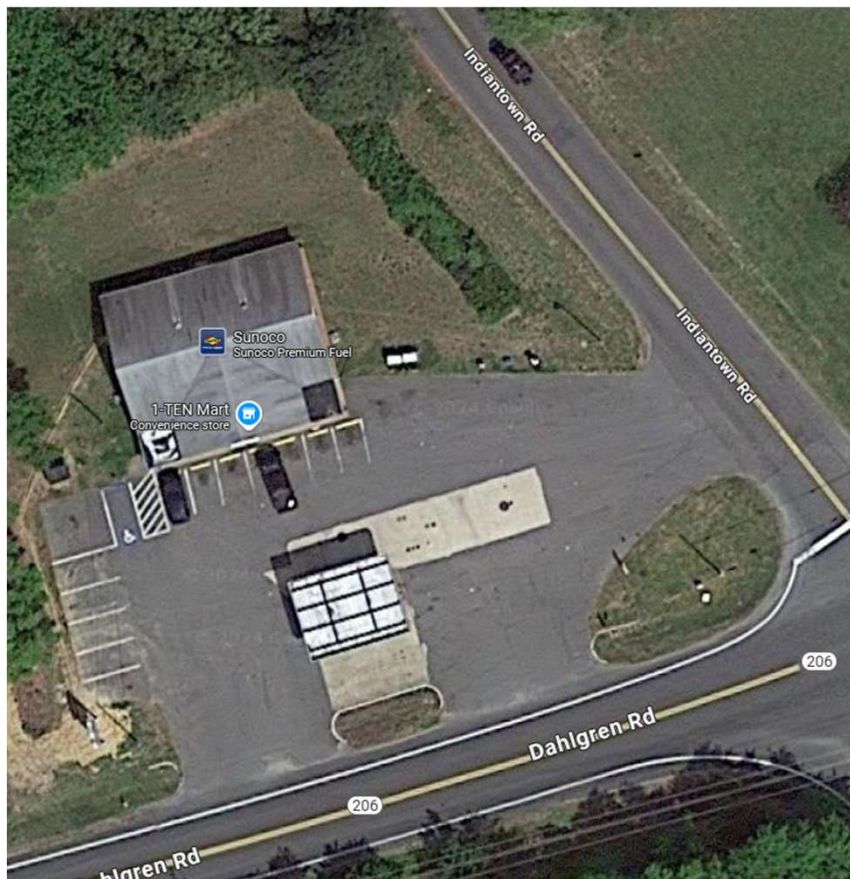


Estimator's Recommendation: Buy the two duplexes.

Damages vs. Total Acquisitions



Impacts Beyond the LOD



Real World Counteroffers and Court Awards

Resources

- [Right of Way Cost Estimate Guide](#): Preparing cost estimates appropriately is key to the success of our program. This guide to our cost estimate process may help those outside the agency.
- [Right of Way Cost Estimation Donation Template](#)
- [Right of Way Cost Estimate Worksheet](#)
- [Utility Manual of Instructions](#)
- [Right of Way Manual of Instructions](#)
- [Guide for property owners and tenants \(En Espanol\)](#)

<https://www.vdot.virginia.gov/doing-business/technical-guidance-and-support/right-of-way-and-utilities/>

- **RW/UT Cost Estimates Reporting Workbook Replacement**
 - Temporary Continued Use of PCES's RW/UT tabs for Current Projects
 - Further Communications to Come

Questions?

