

STAUNTON CROSSING

An Economic Development Business Plan



FEBRUARY 2019

PREPARED FOR:

City of Staunton
116 W Beverley St.
Staunton, VA 24401

PREPARED BY:

Timmons Group
1001 Boulders Parkway, Suite 300
Richmond, Virginia 23225
804.200.6962
804.560.1016 fax
www.timmons.com

Approved by the
Economic Development Authority
on August 22, 2019

STAKEHOLDER PARTICIPANTS & CONSULTANTS

STAUNTON CITY COUNCIL

Mayor Carolyn W. Dull
Vice Mayor Ophie Kier
Erik D. Curren
James J. Harrington
R. Terry Holmes
Brenda O. Mead
Andrea Oakes
Douglas L. Guynn

EDA

Bob Baldygo
Bruce Elder
Greg Campbell
Dave Metz
Doug Noland
Bill Sibert
Cheri Moran
Wick Vellines

CITIZEN VOLUNTEERS

Jay Langston
Peter Wray
Ray Burkholder
Fulton Sensabaugh
Brian Freeman
Jim VanDerzee
Vickie Coyner
Don Byers

Garett Smith
Kenneth Venable
Amy Wratchford
John Downey
Ty Buckman
Joseph Mills
Adam Campbell
Jamison Strasser

Courtland Robinson
John Loftus
Andrew Larsen
Allen Dahl
Thomas Dahl
Scott Goldenberg
Nancy Armstrong

CITY OF STAUNTON STAFF

Steven Rosenberg
Steve Owen
Billy Vaughn
Amanda DiMeo
Nickie Mills
Tom Sliwoski
Ruth Jones
Rodney Rhodes
Dave Irvin

CONSULTANT TEAM

Timmons Group – Tim Davey PE
Timmons Group – Dave Anderson PE AICP

Table of Contents

INTRODUCTION.....	1
Executive Summary	1
Summary List of Recommendations	2
THE STAUNTON CROSSING PLAN	4
General.....	4
Site Overview	5
Programming & Concepts	5
The Master Plan	5
Planning Priorities	5
Planning Priority Outcomes.....	8
The Plan – Option 1	10
The Plan – Option 2	11
The Zones	13
Recommendation 1. Demolish Existing Buildings.....	15
Recommendation 2. Build New VDOT Road	15
Recommendation 3. ROI Analysis	17
Recommendation 4. Tier 4 Site Readiness Certification	17
Getting to Tier 4 – The Elements	19
Recommendation 5. Develop Marketing Plan.....	23
Recommendation 6. Draft Design Guidelines Agreements	24
Recommendation 7. Draft Covenants & Restrictions	24
Recommendation 8. Real Estate Strategies (Control)	25
Recommendation 9. Data Center Tax Strategies	25
DESIGN/DEVELOPMENT CONSIDERATIONS.....	26
Conclusion.....	32
MASTER PLAN	33
APPENDICES	36
APPENDIX A – RECOMMENDATION TIMELINE.....	37
APPENDIX B – STAKEHOLDERS	38
APPENDIX C – STAKEHOLDER SURVEY.....	39
APPENDIX D – VDOT ROAD AGREEMENT & PRELIMINARY PLANS	40
APPENDIX E – TIER 2 SITE READINESS CERTIFICATION.....	41
APPENDIX F – TIER 4 SERVICES	42
APPENDIX G – ZONING DISTRICT INFORMATION	43

INTRODUCTION

Executive Summary

The City of Staunton (City) has successfully invested in the land acquisition of approximately 300 acres, known as **Staunton Crossing**. The City hopes to develop the site into a high-tax revenue producing property, produce jobs and a strong economic development presence commensurate with the valuable location of the property. Funding from the Virginia Department of Transportation has already been received to develop the spine road network through the site. Additionally, numerous plans have been created to help identify highest and best use opportunities for the site.



Combining past planning with new analysis, the City hired Timmons Group to develop an overall business plan for the Staunton Crossing Site. This business plan includes an updated conceptual plan, along with the accompanying infrastructure analysis, financial analysis, and marketing strategies for the site.

Timmons Group first worked with City Staff to run an interactive meeting in September 2018 where stakeholders were allowed to provide active input into the conceptual planning of the site. Stakeholders participated in an exercise of siting various land uses, such as industrial – logistics, retail, etc., which allowed Timmons Group to better understand the existing preferences of local leaders, while helping the stakeholders learn the impacts of land use choices. The exercise included discussions about employment, tax revenues, and identifying significant physical drivers of the site that would impact the best use and outcome.

Timmons Group reconvened a second stakeholder meeting in early December to share an anticipated best land use plan strategy, and to discuss the cursory impacts and challenges that would be part of making that plan a reality. Discussion centered around infrastructure, including water, sewer, and roads, and the dual concern of not only onsite issues, but offsite impacts and improvements that might be needed.

Stakeholders were then asked to provide final comments and preferences via an online survey, ensuring that all concerns of the stakeholders could be heard regarding details of the site and the marketing of the property. Those survey results are attached as an appendix to this report.

Resulting from the data collection, stakeholder review, and in-depth understanding of the property, Timmons Group has prepared a Master Plan for Staunton Crossing that will guide the marketing and business plan efforts. An employment center and manufacturing hub, along with potential data center space, this Master Plan will provide great jobs and a strong tax revenue. Further, its presence along the I-81 and I-64 corridor will make a strong statement about its strong business climate that matches the overall high quality of life in Staunton.



At full build-out, this master plan has the potential to generate \$4 million in annual tax revenue and over 3,000 high-wage jobs for the local economy. In this business plan, Timmons Group shows multiple ways in which the full buildout of Staunton Crossing can be achieved, balancing the need for clear vision with flexibility as prospects come to the table.

Timmons Group recommends several market-based strategies for maximizing the potential of Staunton Crossing represented in the master plan. The priority list of recommendations is below, followed by detailed information supporting the recommendations. Timmons Group also provides timelines and budget estimates for recommended City expenditures in the appendix of this report.

Summary List of Recommendations

- **Demolish Existing Buildings**

Though currently proposed and funded, the actual process of removing the buildings is very important to the beginning of the transformation of the property. The demolition should come with strategic public relations to further the message both locally and nationally that big things are planned for Staunton Crossing. It is also a potential milestone that may catch the attention of a business for whom Staunton Crossing is well suited.

- **Build new VDOT Road**

VDOT is in the process of road design for the connector road from Route 250 through to Valley Center Drive. Care should be taken to coordinate with VDOT on specific needs for Staunton Crossing and to incorporate into the design those things that are important, and to avoid “highway” design approach that may actually hurt opportunities for proper access and handling of stormwater, etc. The road construction is currently on track for completion in 2022.

Construction of this road, coupled with the demolition of the old hospital buildings will further announce the message that Staunton Crossing is “ready-for-business”, even though other measures must be incorporated to ensure success in landing appropriate prospects.

- **ROI Market Analysis**

Meeting the correct market capacity with the opportunity of Staunton Crossing is as important as anything else. If the goals of developing the 330 acres in an intensity and density of use that exceeds the market, then the return on the investments of city infrastructure may not be fully realized.

- **Tier 4 Site Readiness**

Paramount in the search for a successful development of Staunton Crossing is the confirmed “readiness” to move swiftly when prospects arrive and are interested in locating. The current Tier 2 status (using the VEDP readiness indicators) is not adequate to do business with the large users and manufacturers that the City seeks. To be ready, a Tier 4 level of readiness needs to be achieved.

- **Develop Marketing Plan**

This Business Plan provides a roadmap for Staunton Crossing that ensures expansive and sustainable growth in the short term, with an eye to long-term opportunities. The City should develop a Marketing plan that identifies these value propositions and drives the message for the park to a wide audience. The unique assets of Staunton Crossing needs to be rolled into professional marketing materials designed to reach prospects, Corporate CEO's, Site Selection Experts, Preferred Developers, Industrial Developers, Enterprise Data Center decision makers, and Data Center Developers.

- **Draft Design Guidelines Agreements**
Development agreements protect the City and the business through a mutual understanding of what each is responsible during initial design and construction for to create a cohesive and quality business center.
- **Draft Covenants and Restrictions**
Covenants and restrictions should be in place to ensure that the ongoing tenant/owner operational guidelines are met in Staunton Crossing. These covenants and restrictions will act to ensure the value of the property through clear rules and responsibilities by the businesses, particularly as businesses evolve.
- **Real Estate Strategies (Control)**
Additional property that is needed or desired for full buildout should be controlled as soon as possible.
- **Data Center Tax Strategies**
Staunton Crossing is well suited for a portion of its acreage to be dedicated to data center use, providing a great tax base for the City. The city should consider a special tax rate that is both favorable in the competitive world of data centers and improves the revenue potential to the City.

Measures For Success

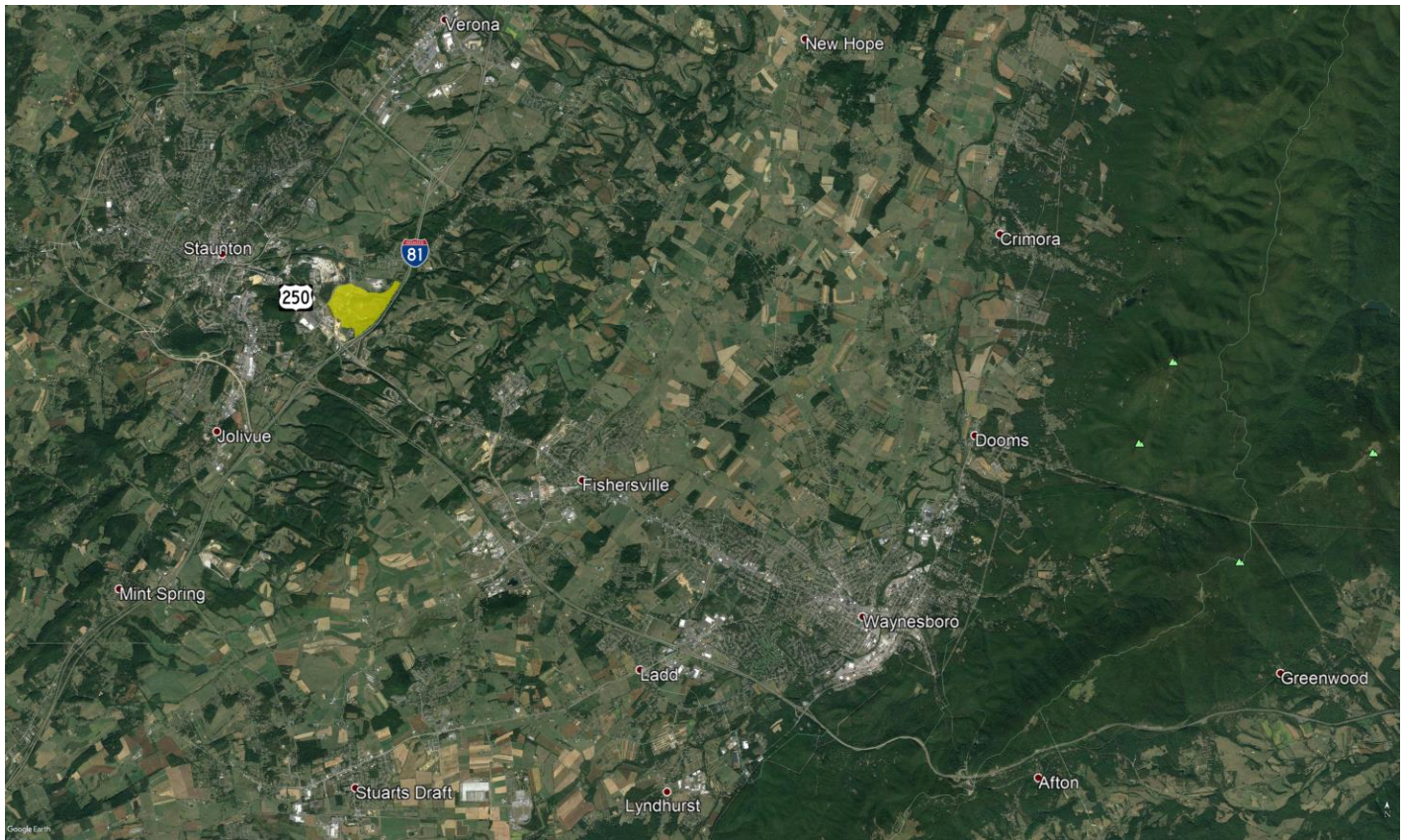
There will be several ways to measure success of this Plan. Primary metrics will be timeline and cost driven for investments made to maximize prospect awareness and interest. Marketing metrics shall be established in terms of events and outreach, and total prospect communication touches. Results shall be measured by square feet of development commitments, as well as conversion rate of prospects to buyers/tenants.

These recommendations are further detailed in this study, and timelines are included as Appendix A.

THE STAUNTON CROSSING PLAN

General

Staunton Crossing is optimally located at the intersection of Route 250 and Highway 81. The site is 3 miles from downtown Staunton, 25 miles from Harrisonburg and, 37 miles from Charlottesville.



Surrounding the site are industrial land uses to the northwest, residential to the northeast, and vacant land to the east across Interstate 81. Immediately adjacent to the site on the south is newly developed retail Phase 1 of Staunton Crossing, including the first Tru by Hilton and a Marriott Farfield Inn. Across Route 250 from Phase 1 is a new commercial development, Frontier Center. Tenants expected include Aldi, Bojangles', Chick-fil-A, and McDonald's.

Site Overview

The approximately 300-acre site includes the Old Western State Hospital and the master plan includes the potential of additional parcels along Frontier Drive owned by Nutty et al. These parcels are discussed in the recommendations section as to purpose of acquisition. Of the total acreage, approximately 245 acres are developable, while approximately 55 acres remains undevelopable due to environmental constraints, such as protected areas and steep slopes.

In addition, the site is surrounded by sewer, water, and stormwater infrastructure, however points of connection within the site do not exist and must be addressed with any new development on site.

Steps toward building the road infrastructure have been made with the eight million dollar investment by VDOT into a road connecting Route 250 to Valley Center Dr, through the middle of Staunton Crossing.

Programming & Concepts

As mentioned the site has many constraints such as, the planned VDOT road, the existing rail line, and environmental restraints. Understanding these constraints and the overarching goal of the City for a high tax-revenue producing property, the Team was able to allocate industries to the parts of Staunton Crossing that would produce the highest and best use in terms of jobs and tax revenue. This distribution of industry resulted in two conceptual master plans.

The Master Plan

Planning Priorities

A significant part of a successful marketing program is establishing a clear vision through a master plan. The master plan serves as a visual roadmap to the public as to what the City intends for the property. It provides a general expectation of what the expected build-out capacity of the property is, and it establishes the general goals of land use types. Much like a comprehensive plan lays out the future vision of a city or county, the master plan sets the future vision for Staunton Crossing.

Timmons Group has approached the master planning of the property based on several principal criteria. These criteria include several factors. Most significantly, Timmons Group has prepared the Master Plan with the following priorities:

1. *Existing Projects underway*
2. *Topography/Environmental*
3. *Land Use*
4. *Transportation/Traffic*
5. *Infrastructure Efficiency*
6. *Stakeholder Feedback/Input*

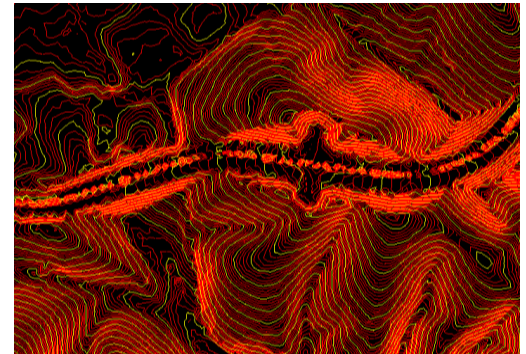
1. Existing Projects Underway

The Master Plan begins with the assumption that the city is moving forward on several important projects, including the VDOT road that is currently under design. The Master Plan also is informed by other offsite activity, including Frontier Center. The goal is to synergize on what is already happening in and around the area, and to complement, not compete against, other activity in the area.

2. Topography/Environmental

Topography plays a significant role in master planning large scale developments. Steep slopes are plentiful on the property, with some slopes exceeding 40%. Significant costs can result from earthmoving required to create large pad developments. This cost can be further escalated if subsurface rock is found close to the surface.

Environmental issues, such as floodways, wetlands, and other jurisdictional creeks and streams help to further identify where development should or shouldn't go.



3. Land Use

There are several land use types that were evaluated in the preparation of the master plan. The uses evaluated are as follows:

Residential (multi-family) – This use type considered includes apartments (for rent) and townhome or condominium (for sale) use types.

Retail – There are several types of retail development, from large-scale shopping centers to small stand-alone shops. With the growth of online retail and how it is changing trends of consumer buying habits, consideration was made as to what specific type of retail should be marketed.

Office – Like retail, several new markets are emerging in how office use is being delivered. Most of these new trends are responding to the next generation of small businesses, including incubator and flexible spaces that serve as both residential and office. Staunton Crossing identifies the type of office that is most marketable and complementary to the other uses. Whether freestanding individual offices, or corporate headquarters, the Master Plan allows the flexibility for those office types to happen here.

Industrial-Logistics – Product warehousing and the need for reducing supply-chain timelines has produced a robust market for accessible spaces for both large and small-scale warehousing. Much attention is garnered by the mega-site (million plus square foot) facilities such as Amazon and other distribution companies. Staunton Crossing has the potential to be attractive to some of the largest logistics users in the industry.

Industrial-Data Center – Data Centers are housing the exponentially expanding industry of cloud computing and digital information storage. These building spaces usually provide fewer job opportunities, but the highly-valued machinery and equipment in these buildings provides a high-tax revenue opportunity for localities.

Industrial-Advanced Manufacturing – Highly sought for a reason, advanced manufacturing facilities generally provides localities with an important blend of high-paying jobs and high taxable revenues. It is a highly competitive marketplace, particularly in areas where job-creation is a priority.



4. Transportation/Traffic

Significant to the successful buildout is properly managing traffic and the impacts that will come with the development of the site. All traffic in and out of Staunton Crossing must travel along Richmond Avenue, so making correct decisions about trucks, vehicles, transit, and pedestrians is critical.

5. Infrastructure Efficiency

While there are many options for how Staunton Crossing could be developed, each of these options have different challenges regarding infrastructure. Master Plan decisions were evaluated on minimizing the cost of the infrastructure that the City may need to construct to successfully attract the end-user to select Staunton.

6. Stakeholder Feedback/Input

Staunton Crossing is one of the most significant development opportunities for the City. There are many stakeholders with a variety of backgrounds and interests that are all important in helping determine best what is needed for the future of Staunton. Both public and private sector stakeholders have been engaged throughout the process to help inform the Master Plan.

Stakeholder Meeting #1

Timmons Group hosted a first Stakeholder Meeting on November 8, 2018. Thirty stakeholders, including city elected officials, city staff, and private business men and women were in attendance.

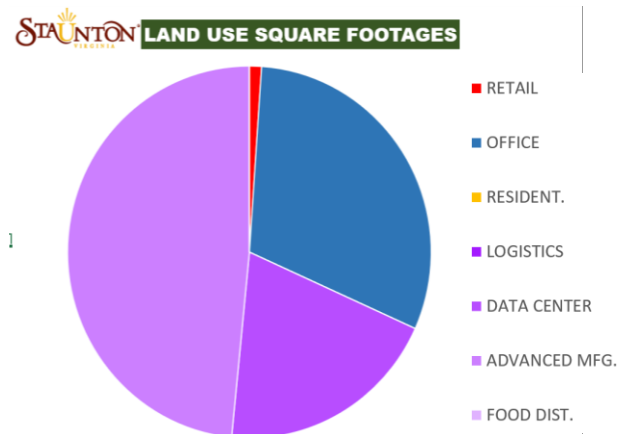


At this meeting, stakeholders were divided into three groups to participate in an interactive exercise to help visualize the physical implications of land use decisions. In the exercise, models of various use types, including residential, retail, office and a variety of industrial use, were placed on a map of Staunton Crossing with a goal of “building out” the property.

The results of the exercise were then analyzed so that other impacts, including potential job creation and tax revenue, could be compared and discussed.

Stakeholder Meeting #2

On December 11, 2018, Timmons Group convened a second stakeholder meeting to review the rough Master Plan concept that was taking shape, based on the planning principles listed above. The stakeholders were able to compare the Timmons Group plan to what the tables had produced in November, allowing for questions and discussion that followed to be focused on the impacts of one use versus another. An example of such conversation was the exclusion of residential altogether from the Timmons Group Master Plan, where some stakeholders had previously identified residential as a possible use.



Additionally, Timmons Group reviewed with the stakeholders the infrastructure improvements that should be expected for Staunton Crossing to reach its potential. These included water, sewer, and road improvements that would be needed to properly market the site.

The full list of invited stakeholders for both meetings is shown in Appendix B.

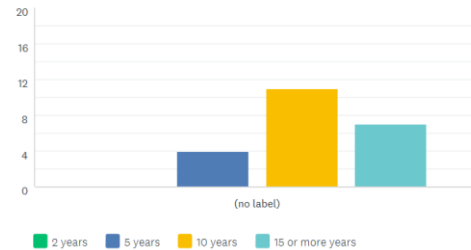
Stakeholder Survey

The first and second meetings clarified many elements of opportunity and expectations in Staunton Crossing. In order to ensure that there was an opportunity for all stakeholder ideas, questions, and issues to be heard, Timmons Group provided a stakeholder survey comprised of sixteen questions in several general categories, including Phasing, Use Types, Infrastructure, Finance, and Marketing.

The results of the survey are included as Appendix C.

How many years should it take the city to recoup the future investments made in Staunton Crossing (not including land costs)?

Answered: 22 Skipped: 6



Planning Priority Outcomes

Below are listed planning decisions that were made based on the assessment of priorities listed below.

Regarding Existing Projects Underway, The Plan should:

1. Inform VDOT road project of appropriate locations for commuter parking.
2. Complement Frontier Center in selection of uses close to Richmond Avenue.
3. Address the demolition of the existing buildings on site.

Regarding Topography/Environmental, The Plan should:

1. Avoid land use bays that require significant grading.
2. Maximize the FAR expectation of use in the area of the existing hospital site (flat slopes)
3. Strategically use open space for stormwater mitigation management.

Regarding Land Use, The Plan should:

4. Prioritize securing Advanced Manufacturing opportunities.
5. Include specific location for Data Center opportunities.
6. Exclude any residential development options.
7. Seek to balance two options, a large user that takes the entire site and one that allows for planned takedown by several unrelated users.
8. Limit retail uses to those complementary to Frontier Center and Staunton Crossing Phase 1 and uses that would be desired by those working in Staunton Crossing.
9. Limit warehouse and logistics uses to those connected to primary Advanced Manufacturing uses.

Regarding Transportation/Traffic, The Plan should:

1. Minimize adverse impacts of trucking on Richmond Avenue.
2. Provide sufficient access through multiple site entry points.

Regarding Infrastructure Efficiency, The Plan should:

1. Provide utility (sewer & water) capacity for full buildout options that balance the City's ability to invest.
2. Minimize pumping requirements for onsite sanitary sewer.
3. Make any water tank visible to take advantage of I-81 highway marketing.
4. Permit both a large single user or multiple smaller users with same/similar core infrastructure.

Regarding Stakeholder Feedback/Input, The Plan should:

1. Incorporate the values of the City and previous plans where appropriate.
2. Provide the best balance of long and short-term goals for the City.
3. Minimize the timeline for a successful ROI for the City.
4. Balance jobs and tax revenues.

The Plan – Option 1



Option 1 provides a buildout plan that is made up of advanced manufacturing, data center, office flex and small retail.

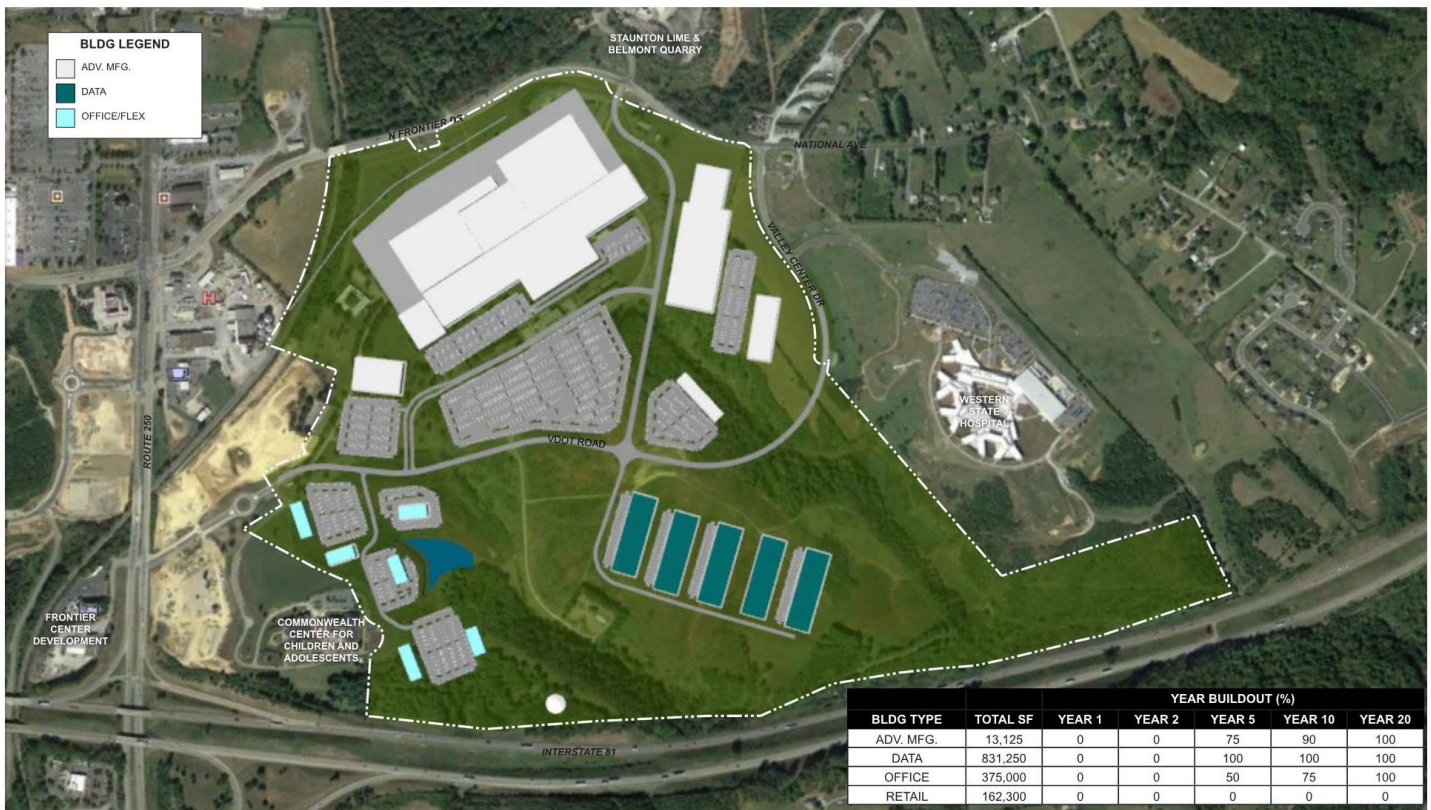
Option 1 Overview

This master plan achieves a good balance of economic development through a balance of advanced manufacturing, office and office/flex, and data center use. The plan assumes that there is no one “anchor” major user, but rather several significant businesses that create a vibrant business park over time.

This option envisions a full buildout within 20 years, but significant activity does not arrive until five years or after. The development assumes a steady growth of all use types, from years 5-20, with the exception being a one-time construction and completion of the data center section of the development.

A small component of retail is shown to annunciate the importance that retail is not the priority, rather a complementary provider of services needed by those employed at Staunton Crossing. Other retail centers nearby will provide the bulk of other services, such as food and lodging.

The Plan – Option 2



Option 2 provides a buildout plan showing a significant industry user as the anchor, along with a campus approach that might come with that industry. Other uses include data center, and office uses.

Option 2 Overview

This master plan calls for the same general level of economic development through a balance as Option 1 with a key organizational difference. The plan assumes that there is a key “anchor” major user that is a manufacturer (or advanced manufacturer), and that the bulk of Staunton Crossing grows through directly or indirectly related business to the anchor use.

This option envisions full buildout within the same 20 year timeframe as Option 1, but because of the anchor user, we anticipate the uses not beginning to take shape until year 5, but with significant activity once started. significant activity does not arrive until five years or after. While this option shows the same spacial location of the data center , the anchor user may choose to use that space for additional manufacturing or office use associated with the business.

Retail is not included in this option as large-scale employers often include retail, including food and personal services, as part of attracting and retaining employees.

One Master Plan. Multiple Options.

The two options serve as guidance documents for both planning the development and in marketing the property.

The City will be marketing to a broad audience and needs a plan that provides both clarity and flexibility in responding to the demand of prospects. This is easily done when the property is vacant and the development is first underway. But as the development continues, each subsequent development pad or site becomes more challenging and can potentially change the trajectory, and return on City investment, if not properly managed.

The two options shown are indicators of how flexibility in Staunton Crossing is achieved, while at the same time identifying the overall scheme of what uses should go where and how infrastructure can best be managed to maintain that certainty/flexibility mix.

Using the planning priorities, we established seven zones for potential development. These zones are made up of characteristics including topo, access, and the like, and come together in an overall plan that can be very attractive to a single user needing the full site, to multiple users in a few different industry categories, or many separate and independent uses. The Plan will help guide the City and prospect as to where the best fit is in the overall growth plan, without sacrificing future capacity of the development.

The two options also show a general consistency with expectations of yield and cost. These yields and costs are further identified in context to the development timeline expectation of the full park buildout. Each option, whether it be the multiple user approach or the anchor major tenant approach, will require similar actions by the City to ensure that the property is prepared for potential prospects.

City Revenues and Employment

With either Option of the Master Plan, the City stands to gain significantly in both job creation and taxable revenue. The table below shows the buildout scenario with each Option showing taxes and jobs.

For comparison, there is a row showing the difference between the two. It shows that job creation would expectedly be greater with multiple businesses, particularly more offices, in Staunton Crossing. However, the expectation of taxable revenues with a “mega” or anchor tenant (1MSF or larger) would likely yield higher total tax revenues. These estimates are preliminary and are not to be construed as guaranteed employment or tax numbers for the development. It should give a good approximation for the magnitude of expected impact once Staunton Crossing is completed.

BUILDOUT COMPARISON - TAX REVENUE & JOBS

	R.E. TAXES LAND	R.E. TAXES BUILDING	M&T/DATA TAXES	TOTAL TAXES	TOTAL JOBS
OPTION 1	\$ 26,000	\$ 2,068,000	\$ 1,886,000	\$ 3,979,000	3250
OPTION 2	\$ 28,000	\$ 2,174,000	\$ 2,084,000	\$ 4,286,000	2630
DIFFERENCE (%)	-7%	-5%	-10%	-7%	24%

The Zones

The physical makeup of Staunton Crossing can be broken down into different zones shown below. These zones and their specific characteristics, including locational and natural elements, helps further identify the important aspects of land use consideration for each.



\\N\Ing\Logos\30x42.jpg

Zone A

Land Use Priority – 1.Advanced Manufacturing

Priority Characteristic – Highest value, pad-ready, adjacency to rail

Primary Challenge – This space will dictate how the rest of the property develops more than any other.

Zone B

Land Use Priority – 1.Advanced Manufacturing, Office, Logistics

Priority Characteristic – Adjacency to Frontier Drive and Zone A.

Primary Challenge – Not properly addressing connection into site from Frontier Drive will impact future development capacity and interest in the marketplace.

Zone C

Land Use Priority – 1.Advanced Manufacturing, Office, Logistics

Priority Characteristic – Flat land, easily developed, least accessible and visible.

Primary Challenge – Early stage prospects wanting stand-alone Valley Center Drive will reduce the potential for connected development to Zone A, particularly regarding higher level security.

Zone D

Land Use Priority – Office/Advanced Manufacturing Flex

Priority Characteristic – Topographically segregated by new VDOT road

Primary Challenge – Grading challenges due to the natural topography

Zone E

Land Use Priority – Office

Priority Characteristic – Easily accessible to Richmond Avenue, Significant topography

Primary Challenge – Topographic challenges and coordination of best water line/water tank alignment.

Zone F

Land Use Priority – Data Center, Advanced Manufacturing Flex

Priority Characteristic – Significant topography, segregated from Zones west of VDOT Road

Primary Challenge –

Zone G

Land Use Priority – Open Space

Priority Characteristic – Softens the edge of the development along I-81

Primary Challenge – Utility infrastructure, land geometry and topography all challenge the viable development of this site.

Recommendation 1. Demolish Existing Buildings

Funds have been secured for the demolition of the historic hospital structures. The demolition of these buildings represents a highly visible opportunity for the announcement that the new Staunton Crossing development is underway.

The process of demolition should be considered the first phase of marketing, and the City should consider opportunities to incorporate public awareness of the demolition.

The city might consider a “Wrecking ball celebration and countdown”, to include an onsite event, remarks by elected officials highlighting the future of Staunton Crossing, and a “countdown” to the dozing. The mayor or city manager could participate in the actual driving of the dozer into the first building. The key is to make noise, literally and figuratively, on this date to receive good public exposure in print, online, and network media.



Demolition offers a significant public relations and marketing opportunity.

Beyond the fun of public relations, demolition can be a very important and potentially challenging phase. Most importantly, efforts should be made to compress the demolition into as short a window as possible, and every effort should be made to finalize demolition during the summer or fall months.

Recommendation 2. Build New VDOT Road

Through SmartScale funding, Staunton Crossing’s spine road is under design to connect Richmond Avenue (Route 250) through the property to Valley Center Drive. The road, when finished, will allow for full marketing of the entire property as fully accessible and ready for development. The grant funding for the 4000 foot new roadway totaled \$8.78 million to cover both design and construction. The agreement for the road project is included as Appendix D, along with current status of preliminary plans of the road.

In addition to the road itself, the project will include a ten foot shared use (pedestrian & bicycle) path and an approximately 100 space park and ride commuter lot and transit stop for the city’s BRITE transit system.

Guiding VDOT

In order to maximize the benefit to the future development of Staunton Crossing, the City needs to actively review and if needed, challenge the road design as VDOT prepares the construction documents as part of the agreement. VDOT will not necessarily understand the fundamentals to how the road will integrate into the uses of Staunton Crossing. Coordination is essential in maximizing the efficiency and efficacy of the new road and path network.

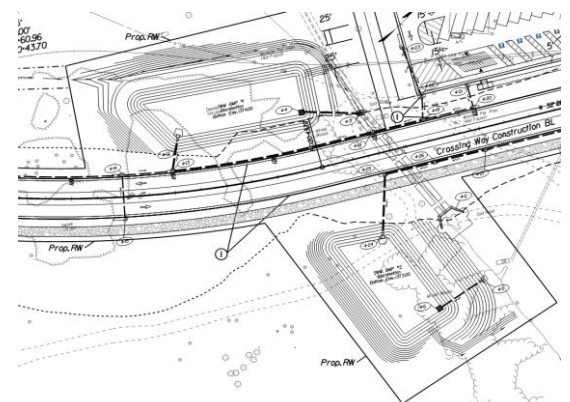
The principal challenges that the City needs to ensure fit the needs of Staunton Crossing are detailed below:

1. **Stormwater Management** – Stormwater plans for the road are typically treated as a stand-alone measure to mitigate for the imperviousness impacts of the road itself, not the surrounding development. The result is often pockets of small BMPs, including extended detention ponds and infiltration structures that disrupt the linear nature of the road.

The independent design of the BMPs for the road is not intended to reduce or otherwise treat runoff from the development itself. The City should seek to incorporate this

stormwater function into an overall stormwater

management plan (described as Environmental Strategies Plan) for the entire project in which the VDOT stormwater can be accounted for, reducing the roadside presence of BMPs and increase in efficiency for the overall project. Working with VDOT, the appropriate BMP(s) can be constructed to handle the initial road compliance, while preparing for the development to come.



VDOT stormwater should be part of bigger SWM strategy.

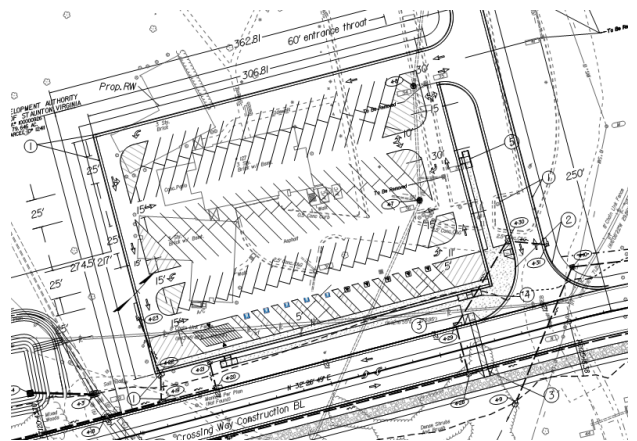


BMP management will help improve land use.

2. **Park and Ride Lot Location** – The proposed park and ride lot is a valuable asset to the development, particularly given the goal of increasing the connectedness of the property to downtown Staunton via the BRITE transit system. It provides an additional opportunity for there to be energy added to the

development of Staunton Crossing through putting commuters in close proximity to services that may come along with the development, including retail use near Richmond Avenue.

The value of having the park and ride facility needs to be paired with the appropriate location of the site in context with the overall development goals of the property. In context with this report, the City should steer the development of the park and ride to the most appropriate location in the site. Currently, the proposed location of the lot is on a significant and important redevelopment opportunity, and an alternative location closer to Richmond Avenue should be considered and coordinated. Because VDOT is trying to facilitate the park and ride as efficiently to the new road as possible, the potentially best sites for a park and ride may not be considered, as they would not front the new road.



The City should consider whether to coordinate a location change that better serves the site, even if that causes the CIP contribution requirement for the City to change slightly to pay for an access road that may be needed. Ultimately, there are opportunities to expand and evolve the park and ride facility into the retail or office context of development as the park grows and matures.

Recommendation 3. ROI Analysis

The magnitude of what can and should be built in Staunton Crossing should be based on a sensible analysis of what the future development should be. Infrastructure construction projects need to attract and serve the target market, but also should expect to pay for themselves in a reasonable time. Timmons Group recommends an ROI Analysis to anticipate returns of investment capital so that the public can be confident of how additional investment into Staunton Crossing is being managed.

An analysis of expected return on investment (ROI) will validate the market capacity for land uses, and the expected buildout timeline that can be expected. The analysis will provide an expected payback time for the City's investment of planning, design, marketing, and infrastructure construction, by estimating the projected revenues expected through utility rates, annual real estate taxes, machinery and tools taxes, sales taxes, and professional personal property taxes. This analysis will also help to determine whether the City can afford to contribute land at no cost to specific prospects, or whether the land transactional costs are important for a positive ROI.

Some municipalities focus their ROI projections on direct investment only. Timmons Group recommends that both direct and indirect investment be analyzed for Staunton Crossing to capture the full impact of this transformational City project.

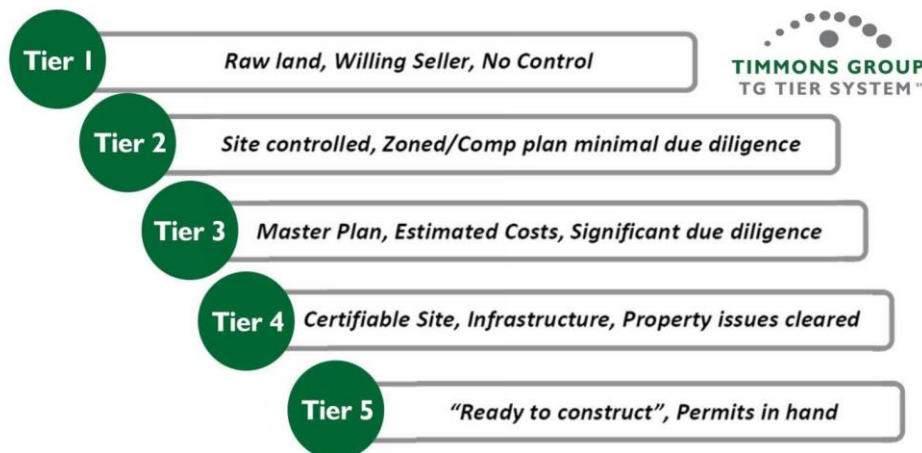
Recommendation 4. Tier 4 Site Readiness Certification

Overview of Site Readiness

In early 2017, Timmons Group confirmed the Staunton Crossing property as a Tier 2 Certified Site in accordance with the Virginia Business Ready Sites Program Standards. The tiered categories indicate a level of preparedness for development that allows industries looking for industrial and research sites to quickly identify potential sites for expansion and/or relocation. The system is used and recognized by the Virginia Economic Development Partnership (VEDP) and an important tool for Staunton as it continues to market the property.



The goal is for Staunton Crossing to achieve Tier 4 status over the next eighteen months.



The Tier System is broken into six levels, with Tier 5 identifying the most prepared properties, with all infrastructure, grading, permits, and other site development considerations in place. At the other end of the preparedness scale is Tier 0, indicating no land or control of a property for which an entity seeks to have a development. This chart summarizes readiness that is expected of the top five tiers.

As a site moves up the Tier ladder, the risk of issues coming up during the development process come down. This is one of the most important characteristics that industry is looking for in their expansion, no surprises and the ability to get their developments up and running in a fast moving and technologically evolving environment. Tier 4 brings certainty. And certainty brings business.

Staunton Crossing is currently identified as Tier 2 based on site elements including ownership, accessibility, zoning, land features (topography, wetlands), access to utilities, and more. The January 2017 report certifying Staunton Crossing is included in Appendix E.

The challenge in moving from Tier 2 to Tier 4 readiness includes elements that are relatively easy to accomplish and nearly all in the control of the City. Below are the general elements that should be in place for Tier 3 and Tier 4. Each of these tasks will help move the actual readiness of the property for development to where it needs to be to provide the market positioning Staunton Crossing needs on the national and global stage.

*“Tier 4 brings
certainty. And
certainty brings
business.”*

To achieve **Tier 3** Status, a site shall have the following items in place and/or completed:

- Site for Sale / Under Option / Owned by Client
- Industrial or Commercial Zoning
- Preliminary Geotechnical Report
- Land survey (ALTA/boundary/topo)
- Phase 1 ESA
- Develop Master Plan
- Floodplain Study
- Cultural Resources Study
- Threatened & Endangered Species Study
- Wetlands Delineation w/ Valid COE Confirmation (within 5 years)
- Site Development cost estimate (Infrastructure & Pad Ready)
- Natural gas Preliminary Engineering / Routing Study (if applicable)
- Electric Preliminary Engineering / Routing Study (if applicable)
- Transportation Preliminary Engineering (road, rail, entrance)
- Traffic Impact Study (if necessary)



Once Tier 3 status is achieved, the following items are required to achieve **Tier 4** status:

- Construction Plans Approved - Water system improvements
- Construction Plans Approved - Wastewater system improvements
- Construction Plans Approved - Transportation Improvements
- Construction Plans Approved - NG system design (if applicable)
- Construction Plans Approved - Stormwater design (if applicable)
- Construction Plans Approved - Electric Power design (if applicable)
- Wetlands & environmental permitting complete w/ mitigation
- Development of covenants and restrictions
- Construction Complete or Permits for Infrastructure Improvements such that construction can be completed w/in 12 months
- ALL off-site Easements Acquired for Infrastructure Improvements



Getting to Tier 4 – The Elements

Site for Sale/Under Option

The majority of the property in Staunton Crossing is under the control of the Economic Development Authority of the City of Staunton. Additional properties of consideration that may provide additional value to the City can and should be considered. Due to the nature of development deals and the importance of confidentiality in the land acquisition process, specific sites are not included in this report. Timmons Group will work directly with the City Economic Development staff to ensure that those properties of interest are evaluated in a timely manner.

Industrial or Commercial Zoning

The property is currently not appropriately zoned for the expectations of land use. The City, as the applicant, will need to rezone the properties to the appropriate district. Currently the parcels are zoned a mix of conditional B-2 (General Business) and conditional I-1 (Light Industrial) zoning.

The Staunton Crossing property is within the Entrance Corridor Overlay District, which is intended to ensure compatibility of development with the Comprehensive Plan along the Richmond Avenue corridor. (among other city corridors) Protections of the overlay district include design standards and approval requirements for building, landscape, signage, and streetscape design over and above the standard development approval process. This overlay will remain a requirement of the property, even with the underlying zoning district change. Care should be taken in rezoning the Staunton Crossing property to consider means by which the development can undergo an expedited review or otherwise compressed timelines for approvals. This will be an important marketing strategy for creating interest in the site as one that can be brought online in the shortest possible timeframe. The Corridor Overlay District chapter of the code is included as part of Appendix G for reference.

In order to best position the property for Economic Development marketing, Timmons Group recommends that the property be rezoned to the I-3 (Planned Industrial) district, with express conditions to permit data centers, which currently do not have a defined listing in any of the zoning categories. I-3 zoning will allow the greatest flexibility in uses that are expected in Staunton Crossing, without creating the potential public concern that may come from zoning the property I-2 (Heavy Industrial). The zoning district chapter for the industrial uses are included as part of Appendix G for reference.

Preliminary Geotechnical Report

The purpose of a preliminary geotechnical services report is to establish a broad overview of subsurface conditions with regard to suitability of on-site soils for re-use as fill and supporting new structures. Because of the scale of Staunton Crossing, understanding the composition of the soil and its suitability for construction purposes is essential. These preliminary services will not be sufficient to provide design-phase geotechnical recommendations, but they will allow for the City and prospect alike to know the general makeup of the soils and what expectations there will be regarding earthmoving and soil preparation costs.

Land Survey (ALTA/ACSM Land Title Survey)

The City should have a prepared survey indicating the undisputed boundary of the Staunton Crossing parcels. An American Land Title Association (ALTA) Survey provides all relevant information regarding the physical boundary, any improvements made to the property, and provides clarity on any legal or title issues that may impact the property ownership. ALTA surveys are increasingly viewed as the gold standard for property surveys and is recommended for the City to have in marketing the Staunton Crossing development.

Phase 1 Environmental Site Assessment

A Phase 1 Environmental Site Assessment (Phase 1) is a determination of potential contaminants to a site. The site may have air, soil, groundwater, and/or building contamination that impacts the site and that may require additional study and mitigation plans if contaminants are found.

A Phase 1 is important and expected for the City to perform in the marketing of the Staunton Crossing property, especially since the property is a redevelopment of a historic hospital site. The potential for environmental contamination or other liabilities is higher in redevelopment sites because of the activity. Because of the already anticipated razing of the existing hospital sites and the contaminants that they may hold (asbestos, USTs etc.), the City should closely monitor and document the demolition and disposal process of the existing buildings so that it can be included in the Phase 1 ESA update after the closure of the demolition process.

Floodplain Study

While the FEMA flood maps show that the Staunton Crossing property is a low flood risk site, it is important to certify the extent to which stormwater flow might inundate portions of the property to benefit the marketing of the site.

Cultural & Historic Resources/Threatened & Endangered Species Study

It will be important to establish that no encumbrances to development exist by things such as archaeological sites, cemeteries, endangered animal habitats, or significant historical sites when marketing Staunton Crossing. A check of the many databases of information is a standard approach to identifying whether there are areas of concern. Additionally, field work that will be part of other tasks in preparing the property to achieve Tier 4 certification, will provide an opportunity to see something

directly in the field that may warrant additional study. While it is unlikely that encumbrances exist on this property, certifying that fact will help the overall competitiveness of the marketing plan.

Wetlands Delineation w/ Valid COE Confirmation

One of the most important site constraints to a potential purchaser is the wetlands and Waters of the U.S.(WOUS), two features under the regulatory authority of the Army Corps of Engineers (COE), a federal agency. Wetlands and WOUS determination should be done early and confirmation of their location by the COE will provide the foundation for wetland permitting for the projects in Staunton Crossing. The timelines for approvals at the federal level can be unpredictable, and so this process is recommended early to ensure that the boundaries and limits of federal jurisdiction are known.

Site Development Cost Estimate

Based on topography, environmental, geotechnical, and other constraints, there can be a large range of site development costs. These costs, which are generally considered the cost to physically construct the pads, parking, and other related development improvements, can be identified by a cost per acre developed.

Based on our assessment of the property, there are two overall development cost regimes; one is to the west of the future Staunton Crossing Parkway extension by VDOT, the other is to the east, and is based primarily on the topographic differences in the two. An assessment of the generally expected cost to develop the Staunton Crossing property is included in Appendix H.

Regional Stormwater Management Plan

The new environmental regulations in Virginia have reduced the value of large scale best management practices and elevated the importance of green strategies and other technologies. Strategies such as open space management and groundwater reuse can be tools that Staunton Crossing would benefit from in the competitive marketplace of industrial sites. As important as it is to understand the environmental and stormwater management strategies, the greater value for the marketing program is the confidence of prospects that the approach will result in faster timelines to market and certainty that the environmental quality approach is thought through by the locality.

The additional market benefit of the environmental strategies plan is the announcement to the prospects that they are participating in a locality that both recognizes the importance of sound environmental principles in development AND one that doesn't want those principles to bog down the economic efforts of the city.

Preliminary Gas/Power Engineering Study

Staunton Crossing is served by Dominion Power. It is near the edge of the service territory for Dominion, and coordination of sites, easements, and power agreements is important as the site is marketed.

Natural Gas is also available directly to and through the site. The development will benefit from having direct agreements in place with, power, gas, and fiber providers. Coordination will be required as the utility companies prepare their study for what infrastructure additions will be needed.

Traffic Impact Study

Staunton Crossing's new VDOT road through the center of the property will provide a great new asset for carrying the car and truck traffic for the development. A traffic study was performed in Phase 1 of Staunton Crossing.

Typically, developments that generate more than 5000 vehicle trips per day (initial analysis estimates a potential 17,000 vehicles per day at buildout) require a VDOT 527 Traffic Study. The purpose of this study is to inform the locality of the impact to the road system when a land use is changed. Because the VDOT road project is underway, and because the property already has business use zoning in place, we believe that the City should seek to eliminate the need for any additional traffic studies.

Onsite Water Plans

Construction Documents for creating a loop in the existing city water line system the onsite link between Richmond Avenue and Valley Center Drive. This waterline will provide redundancy to the system as well as be the primary feed to a future elevated water tank.

The optimum water line will be located along the final VDOT road alignment.

Onsite Water Tank Plans

An elevated water storage tank should be in place ready to construct to provide the required flows, including both domestic and emergency fire flows that will be needed for industrial use, especially the high-water uses of data centers and advanced manufacturing operations.

Onsite Sanitary Sewer Plans

Construction documents for an onsite trunk sewer system that will open the entire property for development. Preliminary review of the property assumes that a combination of gravity lines with a single pump station can provide the access needed to service the entire site.

Wetlands & Environmental Permitting

State and Federal permitting and mitigation plans for all impacts expected for the overall site. It is expected that road crossings will generate the primary permanent impacts and that utility infrastructure will generate temporary impacts that require both USACOE and DEQ permits.

Recommendation 5. Develop Marketing Plan

Staunton Crossing is well situated at intersection of two major interstate corridors and has the promise to provide superior sites for technology and manufacturing-related industries. These assets need to be rolled into professional marketing materials designed to reach prospects, Corporate CEO's, Site Selection Experts, Preferred Developers, Industrial Developers, Enterprise Data Center decision makers, and Data Center Developers. The Center has the promise and ability to surpass any other industrial/employer center in Virginia if marketed consistently, strategically, and effectively.

This Business Plan provides a roadmap for Staunton Crossing that ensures expansive and sustainable growth in the short term, with an eye to long-term opportunities. The City should develop a Marketing plan that identifies these value propositions and drives the message for the park to a wide audience. The marketing plan should include target industries, competitive analysis, messaging, strategies, tactics, costs, and timeline for achieving that goal. The Marketing Plan should also be a dynamic, living document that is re-visited frequently to update:

Assets Unique to Staunton Crossing

Of the many value propositions of Staunton Crossing, there are significant assets that are well suited for the marketing of the property including:

- Access to the marketplace Hampton Roads, Washington, DC, I-81 Supply Chain
- Two major interstates, VA Inland Port, and Rail
- Low Business Cost (improved by low taxation rates)
- Quality of Life (expected for high-paying manufacturing employees)

Strategic Opportunities (Partnerships/Alliances)

In addition to directly communicating with targeted segments, an important part of your marketing plan is to develop and maintain partnerships and alliances with key strategic partners who can refer business, support your efforts and provide insights and recommendations to help the Center grow. These include:

- Virginia Economic Development Partnership
- Shenandoah Valley Partnership
- Dominion Power & Shenandoah Valley Electric Cooperative
- Buckingham Branch Railroad

The Brand

The Marketing Plan should be the keeper of the brand that carries across all marketing platforms, including promotional materials, social media, video materials, and development signage.

Dedicated Resources

The Marketing Plan should evaluate establishing a specific position in the Economic Development Department to focus solely on Staunton Crossing marketing and development

Measurement & Evaluation

With every development and marketing endeavor it is important to develop key metrics at the beginning of the process and to track achievements on a regular basis. The end goal is a completely developed and occupied center with supporting retail and ongoing accomplishments of the tenants. However, at the beginning of this process, tracking the number of meetings, inquiries, and press mentions will be more appropriate and will provide a sense of accomplishment and forward movement for all stakeholders.

The marketing Plan should have performance metrics for one, two, five, ten and twenty year timelines. These metrics should include, at a minimum, jobs, tax revenues, and square footage under development.

There should also be an annual review to specifically look at what, if any, changes need to be considered to the Master Plan to ensure that it remains relevant to the overall goals of the City.

Recommendation 6. Draft Design Guidelines Agreements

Developer agreements need to be in place to control and protect the interests of both the City and the businesses that locate in Staunton Crossing.

As master developer of Staunton Crossing, it will be important for the City to prepare agreements that identify roles and responsibilities of the project, similar to how a lease agreement sets the table for the relationship between landlord and tenant. Beyond simply identifying financial responsibilities which are part of the purchase agreement, these development agreements will spell out who is responsible for what. It includes requirements for architecture, landscaping, and signage. It spells out general timeline expectations, site development obligations (cleanliness, construction traffic, etc.). Much like HOA documents in a planned residential community, these documents will provide confidence in the potential buyers and tenants that the City has thought through details that will ensure a sound development project.

Recommendation 7. Draft Covenants & Restrictions

In addition to the development agreement, the covenants and restrictions spells out from an operational perspective what is and is not allowed in the development, and how those responsibilities might be charged. It sets forth details and in some cases metrics for how appropriate use is measured. For instance, noise levels may be a restriction that is placed on the site, limiting business activity to a certain decibel level to the surrounding area. Hours of operation might be another.

Covenants may include responsibility for maintenance of the internal landscape and stormwater management structures, or the fees that will be charged by the City for maintenance. The covenants also identify how the management of the overall Staunton Crossing development will be structured, and the role that the tenant might play in that management.

As the development builds, and as technology and emerging markets continue to develop at a rapid pace, the businesses located in Staunton Crossing will be evolving as well. Restrictions on use, and how the use of a building or a zone in the development might be retooled is one of the many important elements of protecting the long-term success, and thus, the return on investment for the City of Staunton.

Recommendation 8. Real Estate Strategies (Control)

Any real estate needed for the full buildout of the property, including any strategic acquisitions needed to increase the efficiency of buildout should be evaluated early to allow for the appropriate value and negotiation to follow.



Property Control

The properties that are represented as Staunton Crossing include several parcels that are not currently controlled by the City. There are nine parcels owned by the Nutty family, totaling approximately seven acres.

The potential for a win-win transaction of the Nutty properties is enhanced by the positioning of the property for higher value through the rezoning, and any land deal with the current property owners should be contingent on zoning, a fixed price relative to the City's sale price, and a commitment for immediate transfer (without title exception) once zoning takes place. Through this process, the city will be able to promote the property without exception, the full property ready for fast-track construction.

Recommendation 9. Data Center Tax Strategies

The City of Staunton currently has no special data center tax, and machinery found in the data centers is taxed at the current rate of \$1.24. Staunton should consider creating a separate Data Center tax rate that identifies the industry as one that is specifically desired in Staunton and also allows for flexibility (depreciation, etc.) in data center prospect gathering that may differ from other types of manufacturing.

In 2017, Henrico county dramatically reduced its taxation of Data Centers from \$3.50 per \$100 of assessed equipment value to \$0.40 per \$100. This nearly ninety percent reduction in taxation on Data Centers sent a serious message to the industry, and Henrico is currently building a new Facebook data center. While many factors weigh into final decisions, it is clear that the financial impact of this reduction made a significant mark in helping Facebook with its decision to build its \$1 billion data center there.

DESIGN/DEVELOPMENT CONSIDERATIONS

The two buildout options allow the review and identification of the areas in which the City needs to prioritize its infrastructure readiness efforts, including sewer, water, road connections, and open spaces. The ability to provide succinct planning zones that permits multiple buildout scenarios is vital to the needed flexibility in marketing the property to a variety of prospects.

The total buildout square footages and utility usage rates are shown below. Velocity in development will depend on the City providing assurance to prospects that the infrastructure will be available in a short and defined timeline.

OPTION 1				
USE TYPE	TOTAL SF	WATER USE	SEWER USE	VEHICLE TRIPS
RETAIL	15,000	1,500 GPD	1,200 GPD	900 VPD
OFFICE	605,000	60,000 GPD	36,300 GPD	11,127 VPD
ADV MFG	845,000	211,250 GPD	169,000 GPD	5,231 VPD
DATA	375,000	187,500 GPD	65,625 GPD	375 VPD
	1,840,000	460,250 GPD	272,125 GPD	17,633 VPD

OPTION 2				
USE TYPE	TOTAL SF	WATER USE	SEWER USE	VEHICLE TRIPS
OFFICE	440,000	33,000 GPD	26,400 GPD	6,410 VPD
ADV MFG	1,375,000	266,250 GPD	213,000 GPD	5,945 VPD
DATA	375,000	187,500 GPD	65,625 GPD	375 VPD
	2,190,000	486,750 GPD	305,025 GPD	12,731 VPD

Infrastructure Priorities

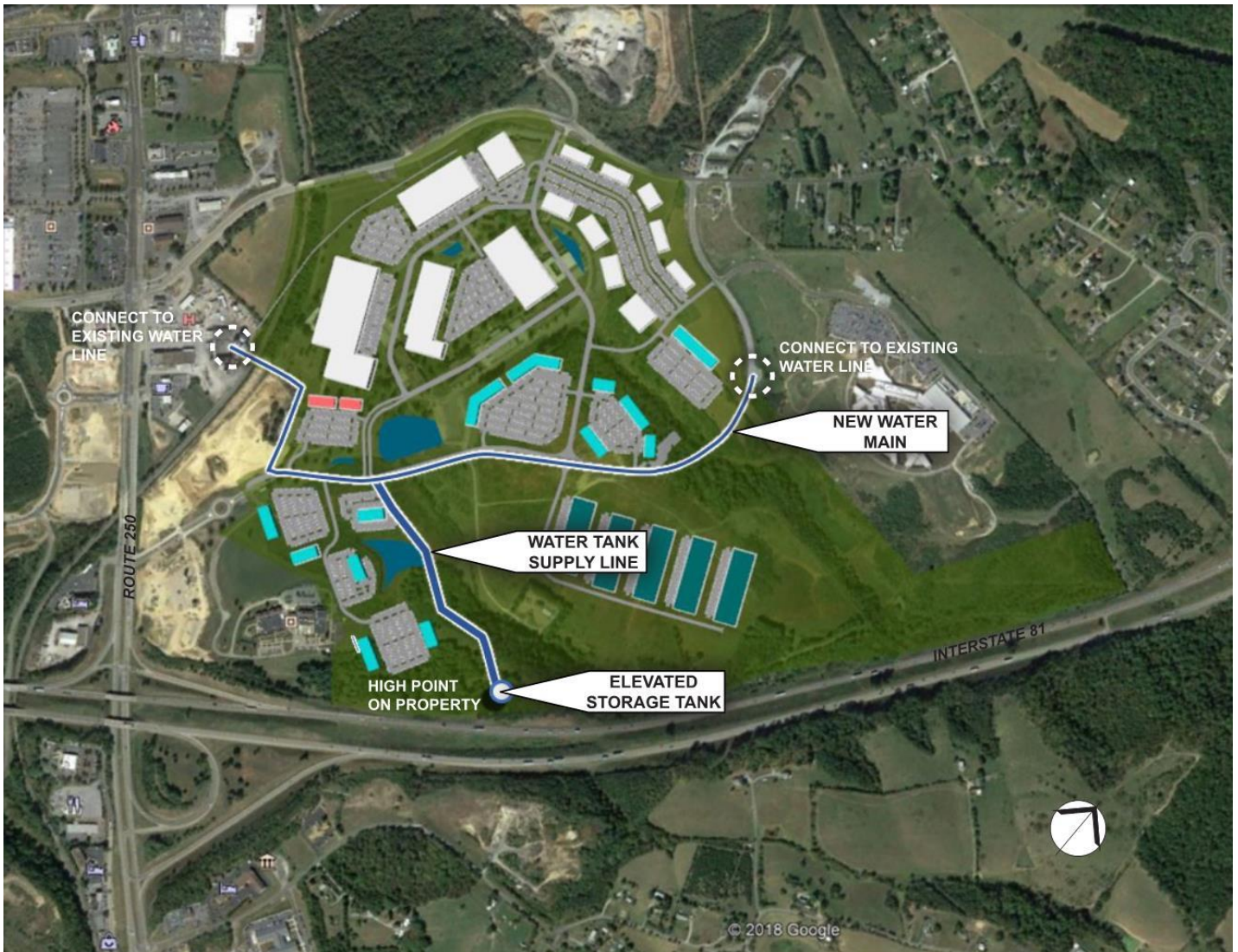
Water – Prospects need to know that pressure and capacity are adequate for their needs. Nothing else matters more than water, particularly in the area of manufacturing and data center pursuits.

Sewer – Prospects will assume that the capacity of the City is there to treat sanitary sewer flows. It is up to the City to ensure that this capacity to move high effluent flows is available and at what cost.

Roads – While the VDOT road is a great open door to the marketing of the site, identifying the strategic access points that allows the City to coordinate multiple opportunities without disrupting the overall vision is critical.

Stormwater/Environmental - Prospects know that environmental and stormwater regulations can be significant drivers in project delays. The City should proactively address this concern.

WATER

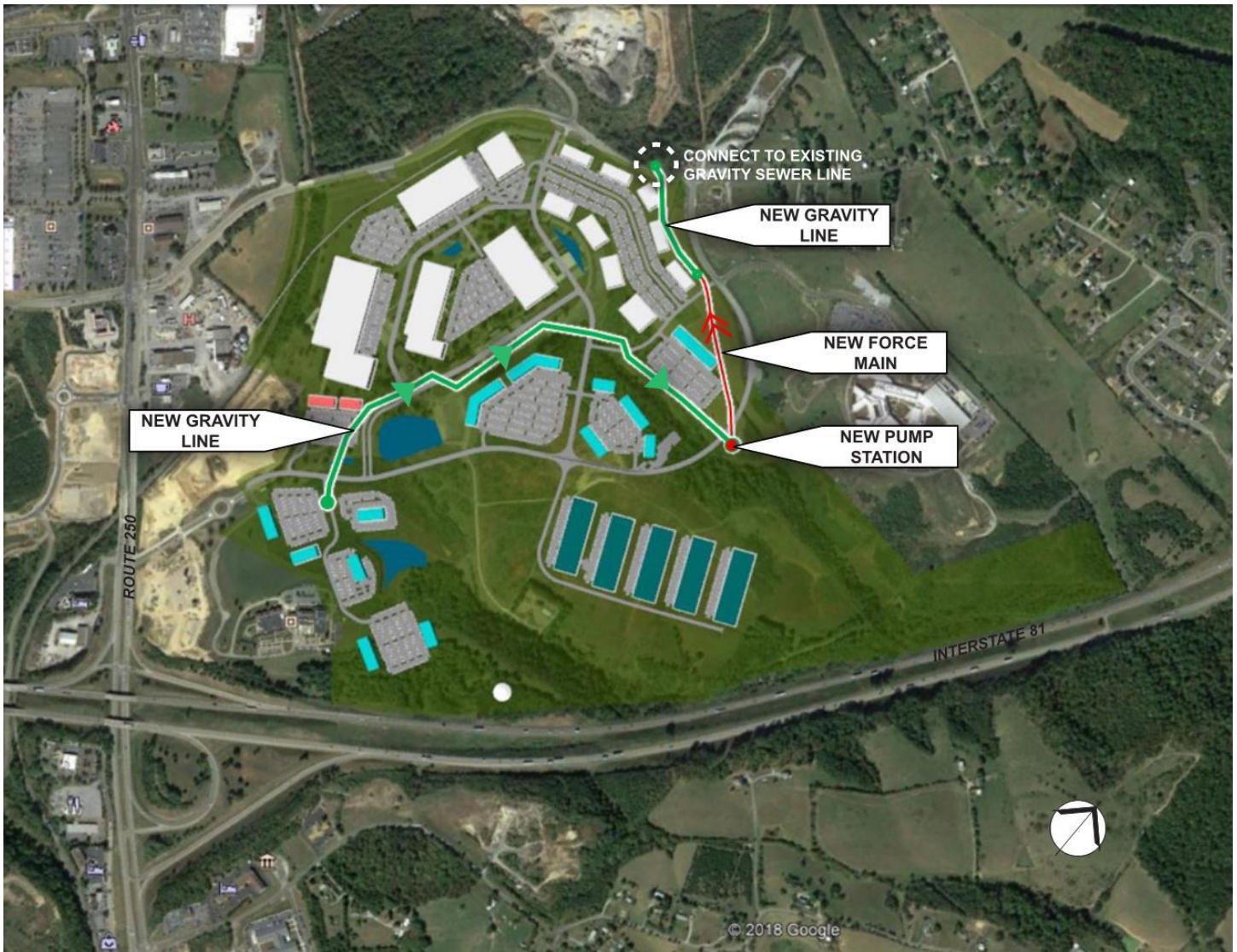


A **connecting water main** that creates a loop from near Richmond Avenue to Valley Center Drive will help assure that flows are what they need to be in the development, and also will improve redundancy in the overall City's system.

A **water tank** will be needed (size to be determined) to ensure that the heavy manufacturing users and data centers will have what they need to operate.



SEWER - ONSITE



A single pump station in Staunton Crossing will provide the capture point in the development from which all of the users can connect.

A **central gravity line** in Staunton Crossing will serve as the artery that connect each of the land development bays to the pump station.

An exiting gravity sewer line will provide the connection to the existing sanitary sewer along Frontier Drive. This service may ultimately be designed as a continuation of a force main, depending on construction cost and easement acquisition needs.

SEWER – ONSITE (continued)



Strategically thinking of where the development zoned in the property are, and using the topography to the site's advantage, the master onsite sanitary sewer system is designed recognizing the importance of minimizing pump stations and length of gravity line. The resulting sewer plan is flexible and aligns with other corridors to not inhibit future development as the business center evolves.

The reduced scale of infrastructure needed also allows for a single phase construction that opens the entire property for use. This approach also allows for the entire property to potentially develop at the same time, connecting to the same system.

SEWER – OFFSITE SYSTEM UPGRADES



The offsite sanitary sewer system will need to be upgraded during the buildout of Staunton Crossing. As part of being ready for the expansion when it is needed, the offsite system should be designed, including alignments, property and easement needs, and whether the more appropriate upgrade is gravity or force main. Whichever selection is made, the determination on sizing can be made as the marketing of the property yields success with tenants. If the first tenant takes the entire property (similar to Option 2) and the ultimate sewer needs are understood, the City may choose to install smaller lines, but the alignment being selected will prevent any delays in being ready for the user.

If the development unfolds like Option 1, the City should install the conservative design to ensure that capacity will be met for the future opportunities.

FLEXIBILITY IN MARKETING. CLARITY IN INFRASTRUCTURE.



The detail of review in planning Staunton Crossing allows Staunton to effectively market to many prospects with a consistent message that the infrastructure works. Both Option 1 and Option 2 have the same infrastructure zones so when a decision is made to select one portion of the property, there is no impact to the overall marketing of the remaining parcels.

Identifying clear infrastructure zones also helps to effectively design the plans in getting to the Tier 4 site readiness status that is so important to successfully marketing this property.

Conclusion

Staunton Crossing is poised to play a significant role in economic development for the City of Staunton, based on its combination of natural assets and the political will to make the most of the assets.

This business plan includes **nine significant recommendations** that, if carried out by the City in a timely fashion, will enhance the City's chance of success in winning new business to the area.

The City already has successful steps that have been taken, most notably the securing of Smartscale funding for the **new road** through the property. This is a significant marker in the development of the property. Demolition of the property's outdated hospital buildings is an additional opportunity to announce that Staunton Crossing is open for business.

The **Master Plan** is the basis from which the business plan should develop, including everything from the marketing plan to the infrastructure design projects.

Of significant early importance is a study to determine the potential return on investment for the City. This will ensure that the master plan and its vision is suitably aligned both with what the capacity for economic development and the City's appetite for infrastructure improvements to achieve that capacity.

Timelines of getting in a position to market the project successfully are important to watch and to minimize where possible. Though the VDOT road may take as much as two years to complete, the City should get the other recommendations completed so that there are fewer potential objections or delays down the road.

Proper follow through on the recommendations of this business plan will cement the position of the Staunton as a destination known for its great quality of life, including a great economy and financially sound future.

Estimated potential timelines for each recommendation are shown in Appendix A.

	2019		2020		2021		2022		2023		2024		2025	
RECOMMENDATIONS	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
1. DEMOLISH BLDG														
2. VDOT ROAD														
3. ROI STUDY														
4. TIER 4 READINESS														
5. MARKETING PLAN														
6. DESIGN GUIDELINES														
7. COVENANTS														
8. REAL ESTATE CONTROL														
9. DATA CENTER TAX														

MASTER PLAN

[THIS PAGE INTENTIONALLY BLANK]



STAUNTON CROSSING

MASTER PLAN OPTION 1





STAUNTON CROSSING
MASTER PLAN OPTION 2



APPENDICES

APPENDIX A – RECOMMENDATION TIMELINE

	2019		2020		2021		2022		2023		2024		2025	
RECOMMENDATIONS	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
1. DEMOLISH BLDG														
2. VDOT ROAD														
3. ROI STUDY														
4. TIER 4 READINESS														
5. MARKETING PLAN														
6. DESIGN GUIDELINES														
7. COVENANTS														
8. REAL ESTATE CONTROL														
9. DATA CENTER TAX														

Generally, the recommendations can be accomplished in the timeframes shown above. If this schedule is followed, then we would expect that the year 2021 is significant in opportunity to provide prospects with the assurance that Staunton Crossing is viable and ready. There are two significant issues to note regarding the schedule as shown.

VDOT Road Construction – We show a timeline for the VDOT road project very conservatively, knowing that there can and will be administrative and construction delays. Because the VDOT road project is coordinated by the Commonwealth, there is a possibility that the timeline may grow beyond what is shown. Given the need for potential tenants to know the road is on its way to completion, we believe that by the end of 2020 (which is significant because other recommendations complete then), prospects will have a high level of confidence that the road can be completed within 12-18 months of that time.

The Marketing Plan shows continued efforts for years following the end of 2020. This is to remind the City that marketing will be a dynamic and changing process. As prospects become tenants, there will be a need to modify and update the marketing plan accordingly. We anticipate the potential completion of the initial marketing plan by the end of 2020.

APPENDIX B – STAKEHOLDERS

Kick-Off Meeting Invitation List

	<u>Participant</u>	<u>Representing</u>	<u>Email</u>
City Council	Terry Holmes	City Council	holmesrt@ci.staunton.va.us
	Carolyn Dull	Mayor	DullCW@ci.staunton.va.us
	Andrea Oaks	Member	oakesaw@ci.staunton.va.us
	Ophie Kier	Vice Mayor	KierOA@ci.staunton.va.us
	Brenda Mead	Member	meadbo@ci.staunton.va.us
	James Harrington	Member	harringtonjj@ci.staunton.va.us
	Erik Curren	Member	currened@ci.staunton.va.us
	Douglas L. Guynn	City Attorney	GuynnDL@ci.staunton.va.us
EDA	Bob Baldygo	Chair	rbaldygo@yahoo.com
	Bill Sibert	Vice Chair	wfs@cfw.com
	Bruce Elder	Member	rustdlr@yahoo.com
	Cheri Moran	Member	cmoran@cfw.com
	Greg Campbell	Member	gcampbell@flyshd.com
	Dave Metz	Member	dmetz@ntelos.net
	Wick Vellines	Member	wick@vcgg.com
	Doug Noland	Attorney	ndn@bnrplc.com
City Staff	Steven Rosenberg	Deputy City Manager	rosenbergsl@ci.staunton.va.us
	Steve Owen	City Manager	OwenSF@ci.staunton.va.us
	Ruth Jones	Public Information Officer	jonesre@ci.staunton.va.us
	Billy Vaughn	Economic Development Director	vaughnwl@ci.staunton.va.us
	Amanda DiMeo	Economic Development Specialist	dimeoah@ci.staunton.va.us
	Nickie Mills	City Engineer	millsnd@ci.staunton.va.us
	Rodney Rhodes	City Planner	rhodesrs@ci.staunton.va.us
	Tom Sliwoski	Public Works Director	SliwoskiTC@ci.staunton.va.us
Regional & State EDO's	Jay Langston	Shenandoah Valley Partnership	jangston@theshenandoahvalley.com
	Courtland Robinson	Shenandoah Valley Partnership	crobinson@theshenandoahvalley.com
	John Loftus	VEDP	JLoftus@vedp.org
	Andrew Larsen	VEDP	ALarsen@vedp.org
Phase I Developers	Allen Dahl	Staunton Crossing Partners LLC	Allenpdahl@gmail.com
	Thomas Dahl	Staunton Crossing Partners LLC	Thomas@hhmgmt.net
	Scott Goldenberg	Staunton Crossing Partners LLC	Scott@hhmgmt.net

Stakeholders Meeting Invitation List

December 13, 2018

Participant	Representing	Email
City Council	Carolyn Dull	DullCW@ci.staunton.va.us
	Brenda Mead	meadbo@ci.staunton.va.us
	Douglas L. Guynn	GuynnDL@ci.staunton.va.us
EDA	Bob Baldygo	rbaldygo@yahoo.com
	Bruce Elder	rustdlr@yahoo.com
	Greg Campbell	gcampbell@flyshd.com
	Dave Metz	dmetz@ntelos.net
	Doug Noland	ndn@bnrplc.com
City Staff	Steven Rosenberg	rosenbergsl@ci.staunton.va.us
	Steve Owen	OwenSF@ci.staunton.va.us
	Billy Vaughn	vaughnwl@ci.staunton.va.us
	Amanda DiMeo	dimeoah@ci.staunton.va.us
	Nickie Mills	millsnd@ci.staunton.va.us
	Tom Sliwoski	SliwoskiTC@ci.staunton.va.us
SVP	Jay Langston	jangston@theshenandoahvalley.com
Phase I Developers	Peter Wray	phwray@trianglererealtors.net
	Ray Burkholder	rburkholder@balzer.cc
	Fulton Sensabaugh	fsensabaugh@kjellstromandlee.com
Railroad	Brian Freeman	brian.freeman@buckinghambranch.com
	Jim VanDerzee	Jim.vanDerzee@buckinghambranch.com
CCCA	Vickie Coyner	Vickie.Coyner@dbhds.virginia.gov
	Don Byers	Don.Byers@dbhds.virginia.gov
Staunton School Board	Garett Smith	gsmith@staunton.k12.va.us
	Kenneth Venable	kvenable@staunton.k12.va.us
	Amy Wratchford	awratchf@staunton.k12.va.us
Higher Education	John Downey	downeyj@brcc.edu
	Ty Buckman	Mary Baldwin
Staunton Planning Commission	Joseph Mills	josephrmills@comcast.net
	Adam Campbell	acampbell97@gmail.com
VDOT	Jamison Strasser	VDOT

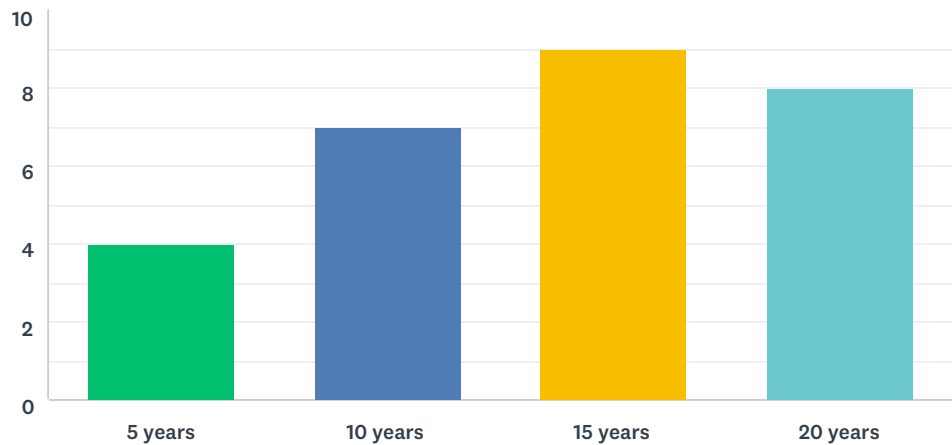
Total

30

APPENDIX C – STAKEHOLDER SURVEY

Q1 What is the appropriate expectation for the build-out of Staunton Crossing?

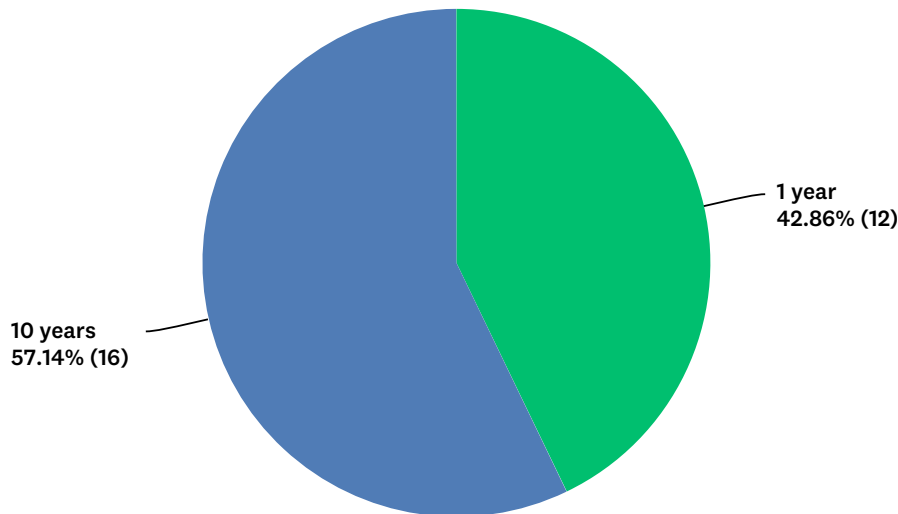
Answered: 28 Skipped: 0



ANSWER CHOICES	RESPONSES	
5 years	14.29%	4
10 years	25.00%	7
15 years	32.14%	9
20 years	28.57%	8
TOTAL		28

Q2 If you had to choose, is it more important to have the first tenant in 1 year or the entire development built out in 10 years (measured after the demolition of the buildings)?

Answered: 28 Skipped: 0

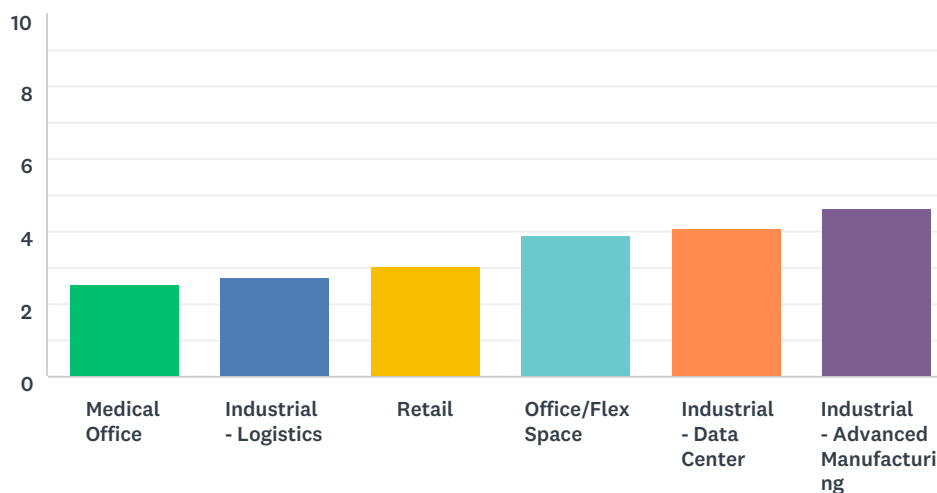


ANSWER CHOICES	RESPONSES	
1 year	42.86%	12
10 years	57.14%	16
TOTAL		28

#	ADDITIONAL COMMENTS	DATE
1	While it is more acceptable to have a tenant in one year it is unacceptable to have just the one or even feel comfortable with that. There must be no less than most of the 20 plus acres already under construction and tenants moving in within the year.	1/27/2019 3:28 PM
2	Do it right, with the right tenants	1/26/2019 7:57 AM
3	One of the buildings, The Stribling Building, could be renovated soon with a tenant in there within the year.	1/25/2019 8:37 PM
4	More important to have the proper kind of tenants than filling space.	1/16/2019 5:53 PM
5	I wasn't certain if the first tenant in 1 year meant the next tenant after the ones we already have.	1/16/2019 12:16 PM
6	If the first tenant is a major business investment, then this is my opinion.	1/16/2019 10:02 AM

Q3 Please rank the the following use types you hope to see in Staunton Crossing, with number one being the most desired.

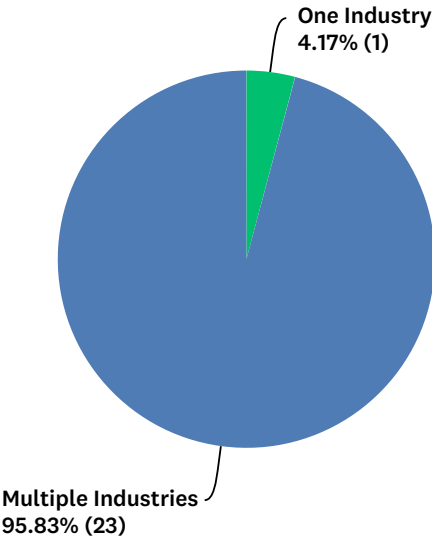
Answered: 24 Skipped: 4



	1	2	3	4	5	6	TOTAL	SCORE
Medical Office	4.17% 1	4.17% 1	16.67% 4	16.67% 4	33.33% 8	25.00% 6	24	2.54
Industrial - Logistics	0.00% 0	20.83% 5	4.17% 1	29.17% 7	20.83% 5	25.00% 6	24	2.75
Retail	20.83% 5	0.00% 0	25.00% 6	4.17% 1	16.67% 4	33.33% 8	24	3.04
Office/Flex Space	12.50% 3	25.00% 6	25.00% 6	20.83% 5	12.50% 3	4.17% 1	24	3.92
Industrial - Data Center	20.83% 5	25.00% 6	16.67% 4	20.83% 5	12.50% 3	4.17% 1	24	4.08
Industrial - Advanced Manufacturing	41.67% 10	25.00% 6	12.50% 3	8.33% 2	4.17% 1	8.33% 2	24	4.67

Q4 Would you prefer to see one industry type or multiple industry types in Staunton Crossing?

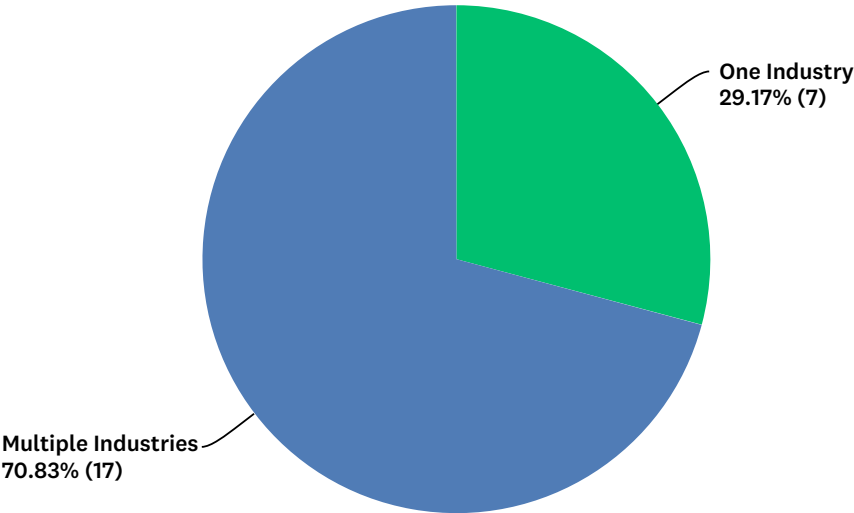
Answered: 24 Skipped: 4



ANSWER CHOICES		RESPONSES	
One Industry		4.17%	1
Multiple Industries		95.83%	23
TOTAL			24

Q5 If it takes one industry to build out in 10 years or multiple industries to build out in 20 years, which do you prefer in Staunton Crossing?

Answered: 24 Skipped: 4

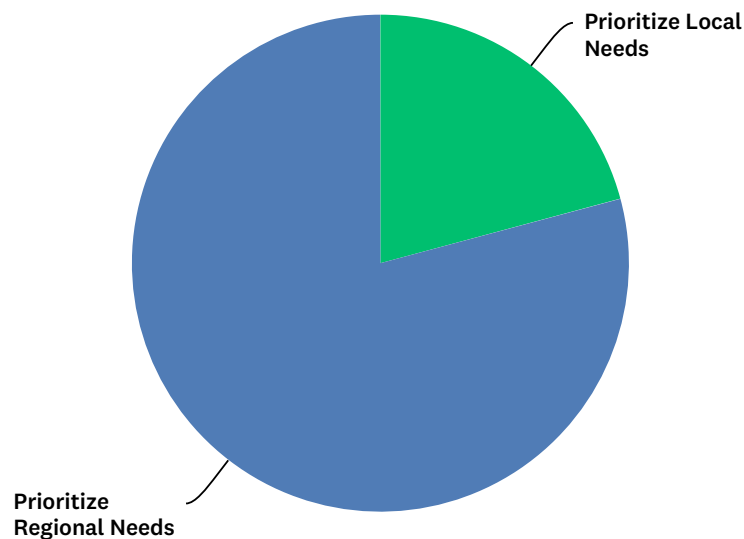


ANSWER CHOICES		RESPONSES	
One Industry		29.17%	7
Multiple Industries		70.83%	17
TOTAL			24

#	ADDITIONAL COMMENTS	DATE
1	Neither of these are acceptable.	1/27/2019 3:31 PM
2	Would think that it would be progressive that some industries would be less than 20 years with final build out in 20 years	1/25/2019 11:51 AM
3	Diversification offers greater sustainability.	1/16/2019 5:55 PM
4	Faster buildout should result in faster return on investment.	1/16/2019 10:04 AM

Q6 Should Staunton Crossing retail services prioritize local or regional needs?

Answered: 24 Skipped: 4

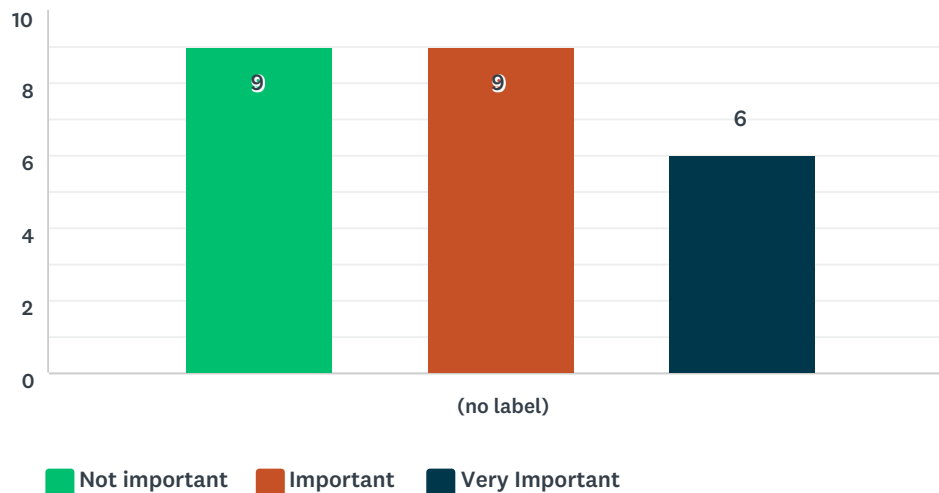


ANSWER CHOICES		RESPONSES	
Prioritize Local Needs		20.83%	5
Prioritize Regional Needs		79.17%	19
TOTAL			24

#	ADDITIONAL COMMENTS	DATE
1	At a crossing of 2 interstates, please make it regional	1/26/2019 8:00 AM
2	Would attract a larger audience. Think destination retail.	1/16/2019 5:55 PM
3	If it met regional needs it would include meeting local needs.	1/16/2019 12:18 PM
4	We already have retail center developments to support regional needs.	1/16/2019 10:04 AM
5	We want people from all over to come to Staunton and need to come to Staunton.	1/15/2019 11:35 AM

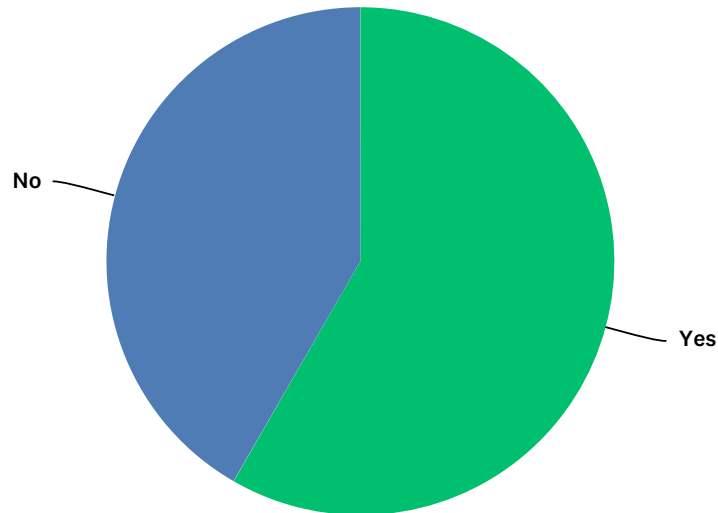
Q7 How important would a water tank visible on I-81 be to building the brand of Staunton Crossing (while providing needed water to the development)?

Answered: 24 Skipped: 4



Q8 Should the parcels directly adjacent to the existing rail line be limited to rail-dependent industries when marketing the property?

Answered: 24 Skipped: 4

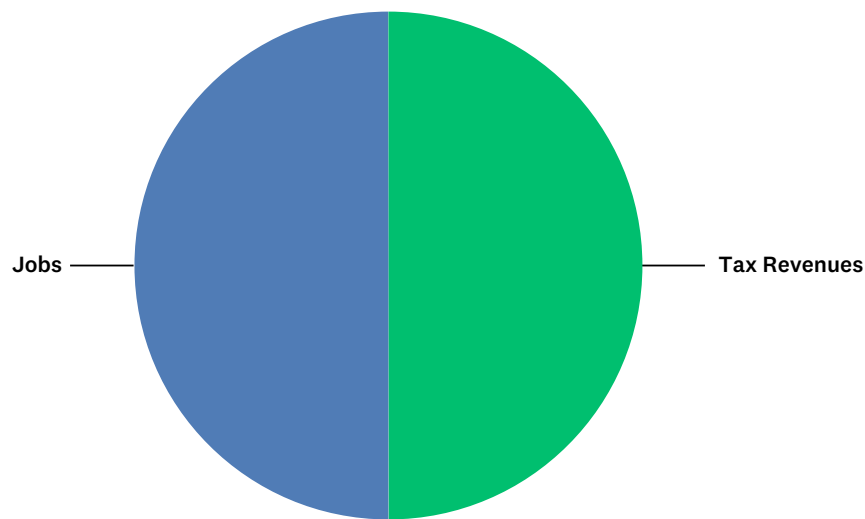


ANSWER CHOICES	RESPONSES	
Yes	58.33%	14
No	41.67%	10
TOTAL		24

#	ADDITIONAL COMMENTS	DATE
1	With hundreds of acres, please reserve at least a portion.	1/26/2019 8:01 AM
2	Makes the most sense to attract manufacturing etc. to those sites and not let them be used by other non-rail dependent industries unless it was an industry that was going to use the entire section of the site.	1/25/2019 11:55 AM
3	This is a depends answer; the preference would be to use the rail siding, but I wouldn't foreclose the "offer one can't refuse"	1/22/2019 11:45 AM
4	Not completely limited but a good idea to market those parcels to rail industries	1/18/2019 3:23 PM
5	Initially - first four years.	1/18/2019 2:53 PM
6	Having a rail-served site will give us a competitive advantage for projects that require rail. Rail projects tend to bring high-paying jobs and large capital investment.	1/17/2019 2:39 PM
7	If at all possible. There is a serious lack of rail properties in Virginia.	1/16/2019 5:56 PM
8	I answered yes but that doesn't mean to eliminate other possibilities forever. If some deal is good enough, we should take it.	1/16/2019 12:19 PM
9	I think this should be a factor, but if we have a potential tenant who brings the investment we are looking for in every other way, we should be open to this.	1/16/2019 10:06 AM

Q9 Which is more important of the two, tax revenues or jobs?

Answered: 24 Skipped: 4

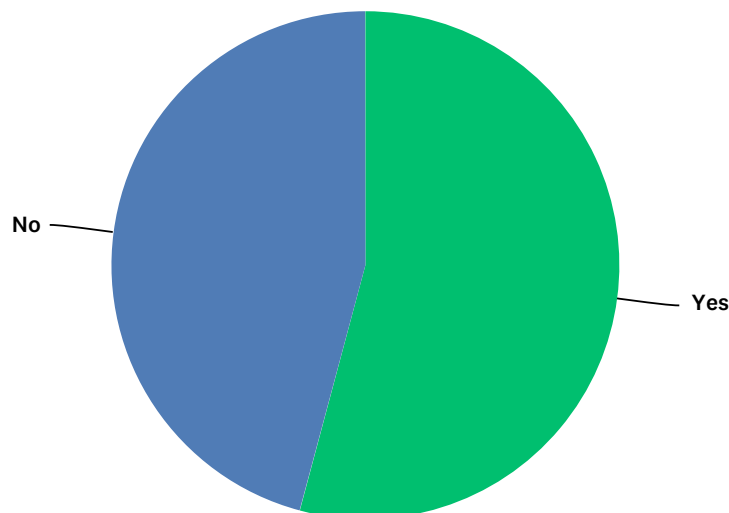


ANSWER CHOICES	RESPONSES	
Tax Revenues	50.00%	12
Jobs	50.00%	12
TOTAL		24

#	ADDITIONAL COMMENTS	DATE
1	I find these questions very limiting with a lack of desire to move the city forward.	1/27/2019 3:34 PM
2	Jobs will help to generate more tax revenue from individuals with income earned from jobs.	1/25/2019 11:57 AM
3	Thinking just for the locality, the revenue is important, but really an unfair question to pose in an either/or fashion. Won't have the tax revenue without the jobs, although technological sophistication is the manufacturing sector is decreasing the jobs/\$ investment ratio.	1/16/2019 5:59 PM
4	We need jobs that are career-type and pay wages high enough to raise a family. The tax revenues will follow.	1/16/2019 12:21 PM
5	Jobs are a priority, but the Tax Revenues have to be there to get the desired ROI.	1/16/2019 10:08 AM
6	Both right up there together.	1/15/2019 11:37 AM

Q10 Would you prefer to see job producing industry, even if it impacted the potential increase in tax revenues?

Answered: 24 Skipped: 4

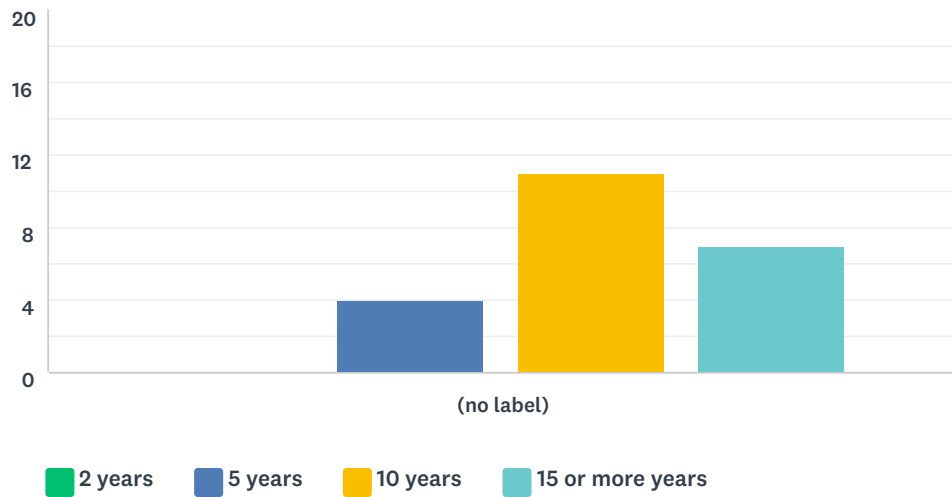


ANSWER CHOICES	RESPONSES	
Yes	54.17%	13
No	45.83%	11
TOTAL		24

#	ADDITIONAL COMMENTS	DATE
1	Without question, jobs is more important for the secondary impact of housing and other critical dependencies	1/26/2019 8:03 AM
2	I don't think they are mutually exclusive.	1/22/2019 11:46 AM
3	Lower paying jobs do not equal or offset the high multiplier of high wage paying businesses.	1/16/2019 5:59 PM
4	If the industry provides good paying jobs, it should help the City, so this should be factored into the thinking and planning on this issue.	1/16/2019 10:08 AM
5	As long as that impact is a positive one.	1/15/2019 11:37 AM

Q11 How many years should it take the city to recoup the future investments made in Staunton Crossing (not including land costs)?

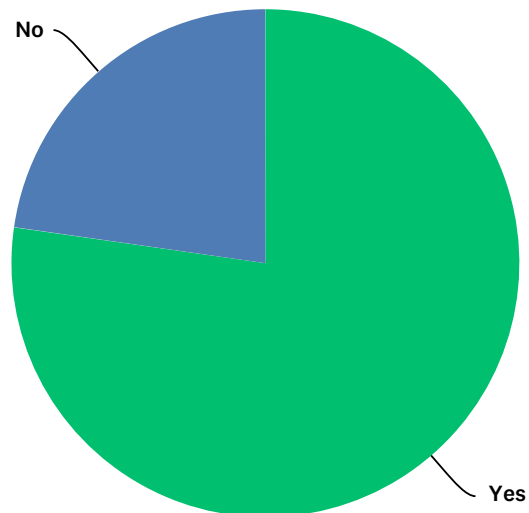
Answered: 22 Skipped: 6



	2 YEARS	5 YEARS	10 YEARS	15 OR MORE YEARS	TOTAL	WEIGHTED AVERAGE
(no label)	0.00%	18.18%	50.00%	31.82%	22	3.14
	0	4	11	7		

Q12 Should the city proactively invest in public infrastructure to maximize the exposure of the Staunton Crossing site?

Answered: 22 Skipped: 6

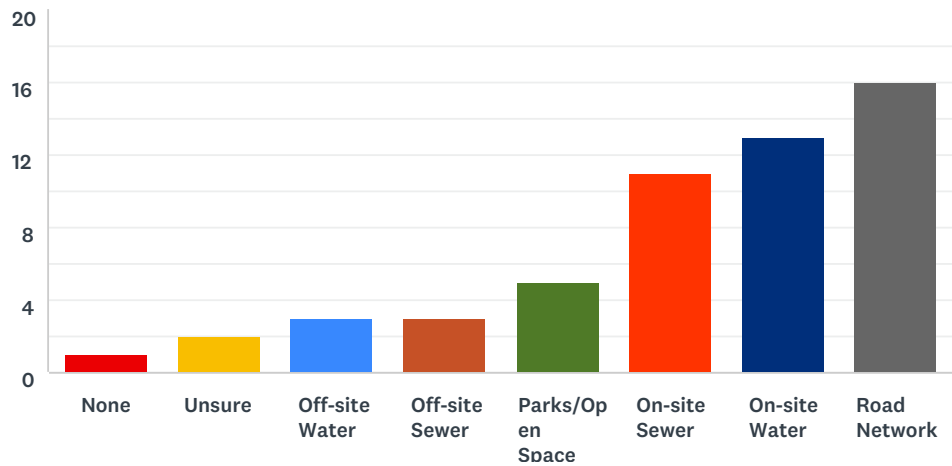


ANSWER CHOICES	RESPONSES	
Yes	77.27%	17
No	22.73%	5
TOTAL		22

#	ADDITIONAL COMMENTS	DATE
1	To sites only	1/27/2019 3:35 PM
2	It doesn't happen without public investment. Too many other communities are already doing it.	1/26/2019 8:05 AM
3	Not just for Staunton Crossing but all along Richmond Avenue to the underpass.	1/18/2019 3:08 PM
4	And hopefully the city can apply for grants and leverage private funding to help. No doubt it'll be expensive. 5 years is a nice sounding ROI, just don't know if it's feasible.	1/16/2019 6:01 PM
5	If possible, without neglecting other city priorities totally.	1/16/2019 12:23 PM
6	It seems that our competition has development ready sites, with the infrastructure waiting for good tenants. I do think we need to invest wisely, but we need at least to have detailed infrastructure plans, if not construction drawings and permits in hand.	1/16/2019 10:11 AM

Q13 Please identify the infrastructure you feel the city should invest in for the Staunton Crossing site.

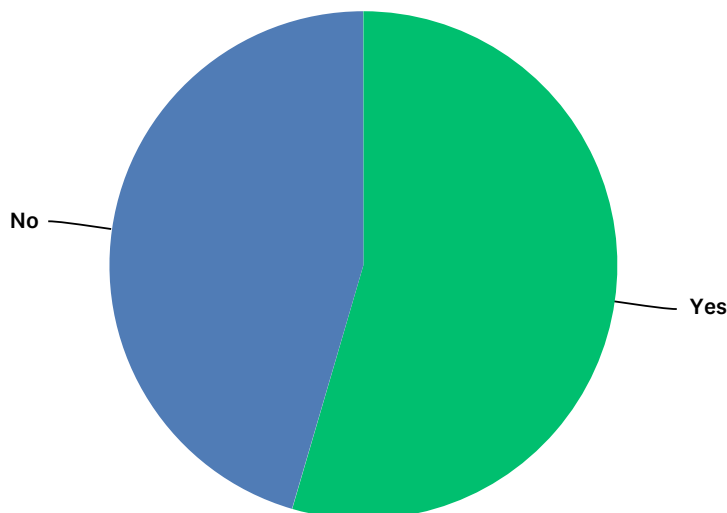
Answered: 22 Skipped: 6



ANSWER CHOICES	RESPONSES	
None	4.55%	1
Unsure	9.09%	2
Off-site Water	13.64%	3
Off-site Sewer	13.64%	3
Parks/Open Space	22.73%	5
On-site Sewer	50.00%	11
On-site Water	59.09%	13
Road Network	72.73%	16
Total Respondents: 22		

Q14 Should additional incentives be provided to prospects once initial investments are achieved?

Answered: 22 Skipped: 6



ANSWER CHOICES	RESPONSES	
Yes	54.55%	12
No	45.45%	10
TOTAL		22

#	ADDITIONAL COMMENTS	DATE
1	There might be exceptions for Amazon.	1/22/2019 11:47 AM
2	Depending upon business sector, yes. It doesn't have to be a giveaway, but it can be advanced depreciation of the M&T for example.	1/16/2019 6:01 PM
3	The more we invest in preparing the site, the less we should offer as incentives. If someone wanted to start a project today, I would be more inclined to offer greater incentives than after we tear down buildings, do water/sewer improvements, road building, etc.	1/16/2019 12:23 PM
4	Don't really have an opinion, but if incentives are offered, they should provide a real ROI to the City.	1/16/2019 10:11 AM
5	Slight tax breaks.	1/15/2019 11:38 AM

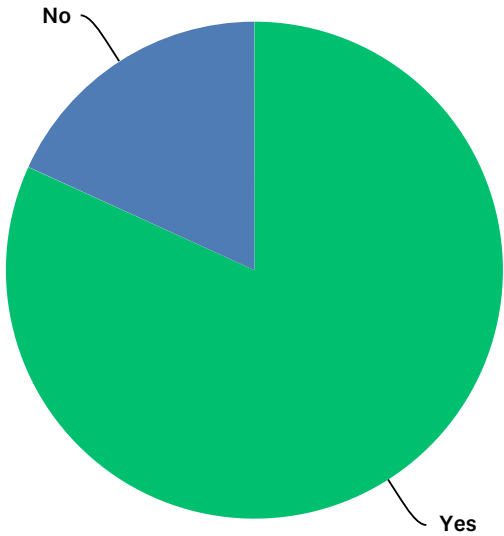
Q15 What specific companies would you like to see in Staunton Crossing?

Answered: 22 Skipped: 6

#	RESPONSES	DATE
1	Not necessary to try to have a "specific" company	1/27/2019 3:37 PM
2	data center	1/26/2019 8:05 AM
3	Medical services and a retirement high-end community.	1/25/2019 9:11 PM
4	Unsure of specific but possibly some international companies also	1/25/2019 12:03 PM
5	I don't have any preference	1/22/2019 11:47 AM
6	Goggle, Amazon, etc. I have no idea.	1/19/2019 5:39 PM
7	growing companies that will last and hopefully expand over time creating more jobs and revenue	1/18/2019 3:43 PM
8	Relatively small businesses (50 employees) with growth potential.	1/18/2019 3:12 PM
9	Sentara/Carilion	1/17/2019 5:00 PM
10	Unsure	1/17/2019 2:51 PM
11	Alternative energy manufacture and distribution Electric vehicle manufacture and sale Specially medical treatment center	1/17/2019 8:35 AM
12	Professional business services, manufacturing, logistics	1/16/2019 6:02 PM
13	Financially stable and growing companies	1/16/2019 3:59 PM
14	open to anything that doesn't pollute air, water, etc.	1/16/2019 12:24 PM
15	No opinion.	1/16/2019 10:11 AM
16	Manufacturing Companies	1/15/2019 7:54 PM
17	Amazon Fulfillment Center	1/15/2019 4:30 PM
18	No preference	1/15/2019 3:16 PM
19	Intel	1/15/2019 2:40 PM
20	would not limited beyond identified target sectors	1/15/2019 11:47 AM
21	Macy's or something along those lines.	1/15/2019 11:39 AM
22	Fortune 500 type	1/15/2019 11:24 AM

Q16 Is a Staunton Crossing marketing plan one of the city's top 3 priorities in the next 12 to 24 months?

Answered: 22 Skipped: 6



ANSWER CHOICES		RESPONSES	
Yes		81.82%	18
No		18.18%	4
TOTAL			22

APPENDIX D – VDOT ROAD AGREEMENT & PRELIMINARY PLANS

URBAN PROJECT CONSTRUCTION AGREEMENT

Project Number	UPC	Project/Street name	Local Government
U000-132-350	111048	Staunton Crossing Extension	City of Staunton

THIS AGREEMENT, made and executed in triplicate as of this _____ day of _____, 2017, between the COMMONWEALTH OF VIRGINIA, DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the "DEPARTMENT" or "VDOT" and the CITY OF STAUNTON, hereinafter referred to as the "MUNICIPALITY".

WHEREAS, the Commonwealth Transportation Board and MUNICIPALITY have allocated funds for Staunton Crossing Project extending Crossing Way through the Staunton Crossing development site and connect to Valley Center Drive, Project # U000-132-350 ; UPC #111048, hereinafter referred to as the "Project"; and

WHEREAS, the MUNICIPALITY has requested that the DEPARTMENT design and construct this project, and the DEPARTMENT has agreed to perform such work; and

NOW THEREFORE, in consideration of the premises and mutual covenants and agreements contained herein, the parties hereto agree as follows:

A. The DEPARTMENT shall:

1. Complete the project as identified in this agreement, advancing such work diligently based upon the schedule identified in Appendix A.
2. Perform or have performed for, all preliminary engineering ("PE"), right-of-way acquisition ("Right of Way"), construction, contract administration, and inspection services activities for the project as required.
3. Provide the MUNICIPALITY a payment schedule for the municipality's share of estimated project costs for PE and Right of Way and for Construction, in accordance with the tabulation provided in Appendix A, and as follows:
 - a) For the estimated MUNICIPALITY share, the estimated costs and payment schedule for PE and Right of Way will be determined after project scoping
 - b) For the estimated MUNICIPALITY share of construction costs, prior to the award of the construction contract, Appendix A will be modified to reflect estimated construction costs

4. Remit invoices to the MUNICIPALITY for sums owed by MUNICIPALITY in accord with the amounts and schedule set forth in Appendix A.
5. Upon completion of the project, reconcile MUNICIPALITY payments (based on MUNICIPALITY's estimated share of costs) against actual project costs allocable to the MUNICIPALITY, and reimburse MUNICIPALITY for any overpayments by the MUNICIPALITY or remit an invoice to MUNICIPALITY for any underpayment/amount still owed by the MUNICIPALITY.

B. The MUNICIPALITY shall:

1. Remit payments to the DEPARTMENT,, in accordance with the amounts and schedule provided in Appendix A, within 30 days of receipt of an invoice issued by the DEPARTMENT .
2. After project completion, operate and maintain the Project, or cause it to be operated and maintained, in accord with applicable DEPARTMENT guidance and standards and in a manner satisfactory to the DEPARTMENT or its authorized representatives and make ample provision each year for such operation and maintenance.
3. After completion of the Project or any part thereof, not permit any reduction in the number of or width of traffic lanes, or any additional median crossovers and enlargement of existing median crossovers, or any alterations to channelization islands, without the prior written approval of the DEPARTMENT.
4. Erect informational, regulatory and warning signs, curb and pavement or other markings and traffic signals in conformance with the standards shown in the current edition of the Manual on Uniform Traffic Control Devices unless otherwise directed or approved by the DEPARTMENT, in writing.
5. Not permit additional access points other than those access points designated on the Project plans, without prior written approval of the DEPARTMENT. MUNICIPALITY understands and agrees that Right of Way for the Project was acquired, in contemplation of rights of access being restricted to points designated on the Project plans.

C. Nothing in this Agreement shall obligate the parties hereto to expend or provide any funds in excess of funds agreed upon in this Agreement, which are set forth as estimates in Appendix A, or as shall have been included in an annual or other lawful appropriation. In the event the cost of a Project is anticipated to exceed the

allocation shown for such respective Project, both parties agree to cooperate in providing additional funding for the Project or to terminate the Project before its costs exceed the allocated amount, however the DEPARTMENT and the MUNICIPALITY shall not be obligated to provide additional funds beyond those appropriated pursuant to an annual or other lawful appropriation.

- D. Should the project be cancelled due to action or inaction by the MUNICIPALITY, the MUNICIPALITY shall be responsible for reimbursement of all funds in accordance with Section 33.2-214 of the Code. The MUNICIPALITY will also be responsible for any costs associated with claims and liabilities due to the early termination of any construction contract(s) or improvement(s) issued pursuant to this AGREEMENT.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY BLANK

IN WITNESSETH WHEREOF, the parties sign and cause this AGREEMENT to be executed by their duly authorized officers.

CITY OF STAUNTON, VIRGINIA:



Stephen F. Owen

Typed or printed name of signatory



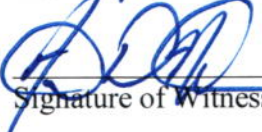


City Manager

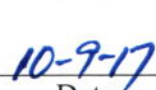
Title



Date



Signature of Witness



Date



NOTE: The official signing for the LOCALITY must attach a certified copy of his or her authority to execute this agreement.

COMMONWEALTH OF VIRGINIA, DEPARTMENT OF TRANSPORTATION:

Chief of Policy
Commonwealth of Virginia
Department of Transportation

Date

Signature of Witness

Date

Attachment

UPC 111048 Appendix A

VDOT Administered Urban Appendix A

Date: 7/27/2017

Project Number: U000-132-350

UPC: 111048

CFDA#

20.205 Locality:

Project Location ZIP+4: 24401-5069

Locality DUNS# 057931552

Locality Address (incl ZIP+4):
116 West Beverly Street
Staunton, VA 24401-4279

Project Narrative

Scope: The Staunton Crossing Project extend Crossing Way through the Staunton Crossing development site and connect to Valley Center Drive.

From: Intersection of Rte. 250

To: Valley Center Drive

Locality Project Manager Contact info: Nickie Mills -- (540) 332-3804

Department Project Coordinator Contact Info: Scott Alexander -- (540) 332-7758

Project Estimates

Phase	Estimated Project Costs	Estimated Start Date (month/day/year)	Estimated End Date (month/day/year)	Total Number of Months per Phase
Preliminary Engineering	\$840,470	8/15/2017	12/8/2020	40
Right of Way & Utilities	\$0			0
Construction	\$7,924,500	12/8/2020	12/15/2022	24
Total Estimated Cost	\$8,764,970	Total Months =		64
Estimate for Billing	\$8,764,970			

Project Cost and Reimbursement

Phase	Project Allocations	Funds type (Choose from drop down box)	Local % Participation for Funds Type	Local Share Amount	Monthly Locality Payment to VDOT (Local Share Amount divided by Months above)
Preliminary Engineering	\$83,612	Urban Formula	0.00%	\$0	\$ -
	\$756,858	Urban Formula	2.00%	\$15,137	\$ 380.65
				\$0	\$ -
Total PE	\$840,470			\$15,137	\$ 380.65
Right of Way & Utilities	\$0			\$0	#DIV/0!
				\$0	#DIV/0!
				\$0	#DIV/0!
Total RW	\$0			\$0	#DIV/0!
Construction	\$1,116,915	Urban Formula	2.00%	\$22,338	\$ 921.80
	\$6,807,585	HPP funds	0.00%	\$0	\$ -
				\$0	\$ -
Total CN	\$7,924,500			\$22,338	\$ 921.80
Total Estimated Cost	\$8,764,970			\$37,475	#DIV/0!

Total Maximum Reimbursement / Payment by Locality to VDOT

\$37,475

Total Maximum Reimbursement by VDOT to Locality (Less Local Share and VDOT Expenditures)

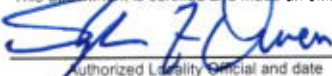
Project Financing

Urban Formula (Federal)	Urban Formula (State Including Match)	Urban Formula (Local Match)	HB1887 High Priority Funds		Aggregate Allocations (A+B+C+D+E)
\$710,365	\$1,225,470	\$37,800	\$6,807,590	\$0	\$8,781,225

Program and project Specific Funding Requirements

- The project will be constructed and maintained in accordance with VDOT's Urban Manual (List Appropriate Guide or Manual)
- This project shows a surplus of funds of \$16,255 due to additional Urban Formula. This will allow some of the HB1887 funds to be released if needed.
- Reimbursement for eligible expenditures shall not exceed funds allocated each year by the Commonwealth Transportation Board in the Six Year Improvement Program.
- The locality will be billed the locality share above beginning at the project scoping phase for the estimated PE. The billing will be adjusted to include the Construction estimate beginning at the award date. (if applicable)
- This Appendix A supersedes any previously listed funding schedule.
- VDOT has billed \$ - (dollar amount) the locality for this project as of (date)
- VDOT has received \$ - (dollar amount) from the locality for this project as of (date)
- The locality shall make equal payments to VDOT as follow: \$ 380.65 over 40 months.

This attachment is certified and made an official attachment to this document by the parties to this agreement


 Authorized Locality Official and date

 Stephen F. Owen
 Typed or printed name of person signing

 Authorized VDOT Official
 Recommendation and Date

Typed or printed name of person signing

PROJECT MANAGER *Thomas Maranda, PE* ... (540) 332-7756 ... (Staunton District)
SURVEYED BY, DATE *Rice Associates* ... (703) 968-3200 ... 04/24/18
DESIGN BY *Thomas Aloner, PE* ... (804) 786-1560 ... (Central Office)
SUBSURFACE UTILITY BY, DATE *Rice Associates* ... (703) 968-3200 ... 04/24/18

FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
OPENROADS Computer Identification No. 111048

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

CITY OF STAUNTON
STAUNTON CROSSING EXTENSION
FROM: INTERSECTION OF RTE 250
TO: VALLEY CENTER DRIVE

CONVENTIONAL SIGNS	
STATE LINE	-----
COUNTY LINE	-----
CITY/TOWN OR VILLAGE	-----
RIGHT OF WAY LINE	-----
FENCE LINE	x-----x
UNFENCED PROPERTY LINE	-----
FENCED PROPERTY LINE	x-----x
WATER LINE	~~~~~
SANITARY SEWER LINE	- - - - -
GAS LINE	- - - - -
ELECTRIC UNDERGROUND CABLE	- - - - -
TRAVELED WAY	=====
GUARD RAIL	=====
RETAINING WALL	=====
RAILROADS	=====
BASE OR SURVEY LINE	-----
LEVEE OR EMBANKMENT	=====
BRIDGES	=====
CULVERTS	=====
DROP INLET	=====
POWER POLES	=====
TELEPHONE OR TELEGRAPH POLES	=====
TELEPHONE OR TELEGRAPH LINES	=====
HEDGE	=====
TREES	=====
HEAVY WOODS	=====
GROUND ELEVATION	=====
GRADE ELEVATION	=====

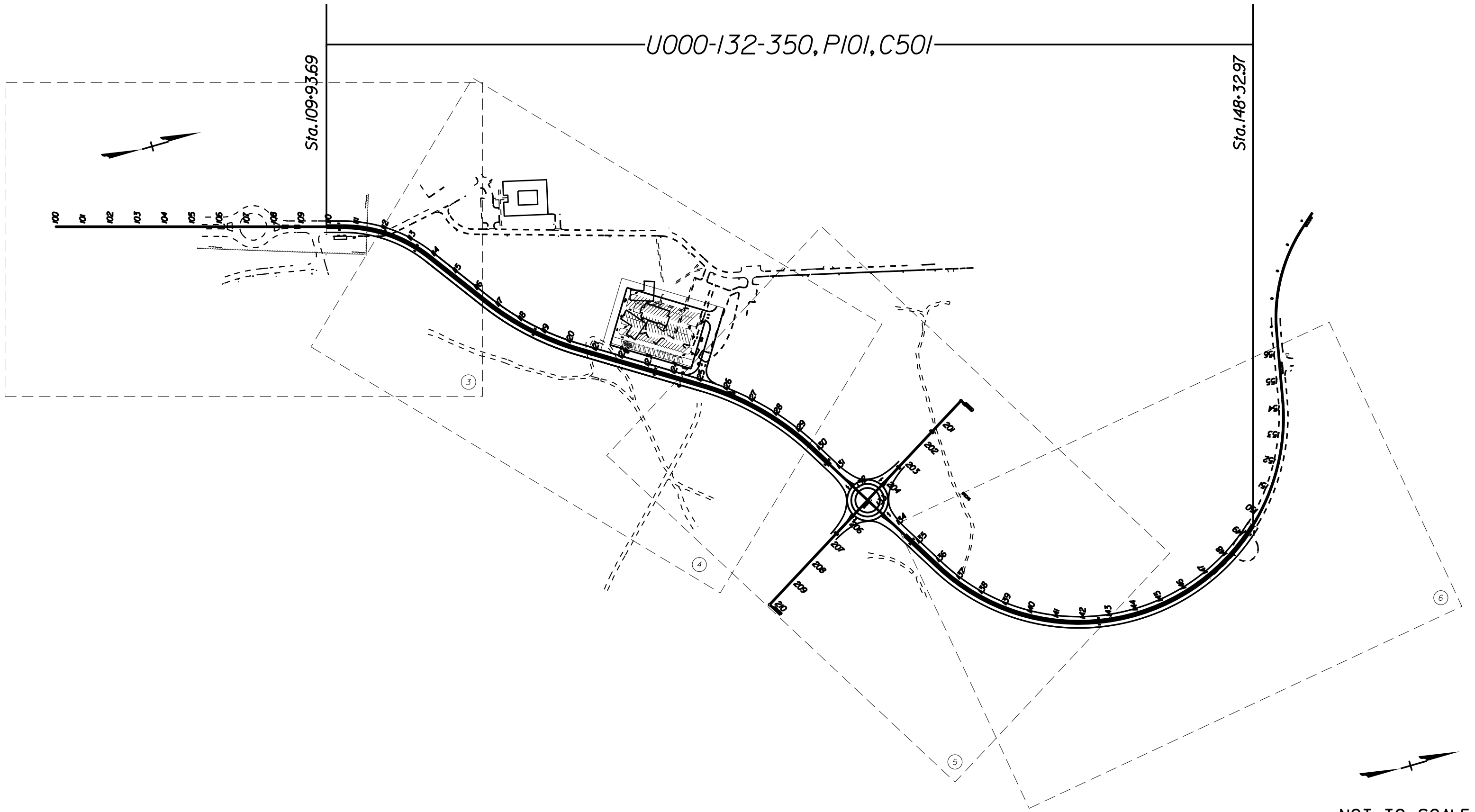
THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2016 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC 5.11 ULS, EXCEPT WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.



Population 23,746 (2010 Census)										NOT TO SCALE		
STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	EQUALITIES	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		BRIDGE PROJECT NO.	TYPE PROJECT	DESCRIPTION
					FEET	FEET	MILES	FEET	MILES			
U000-132-350	P101	STP-5132	PENG	111048		3839.28	0.727	3839.28	0.727		PREL.ENG.	FROM: INTERSECTION OF RTE 250 TO: VALLEY CENTER DRIVE
	C501		1000	111048		3839.28	0.727	3839.28	0.727		CONSTRUCTION	FROM: INTERSECTION OF RTE 250 TO: VALLEY CENTER DRIVE

Project Lengths are based on Crossing Way Extension Baseline

STATE	FEDERAL AID	STATE		SHEET NO.
	PROJECT	ROUTE	PROJECT	
V.A.	(SEE TABULATION BELOW FOR SECTION NUMBERS)	U000	U000-132-350 (SEE TABULATION BELOW FOR SECTION NUMBERS)	1

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
URBAN COLLECTOR (GS-7) - 40 MPH DESIGN SPEED	
	Fr: Intersection of Rte. 250 To: Valley Center Drive
ADT	N/A
ADT	9250
DHV	TBD
D (%) (design hour)	TBD
T (%) (design hour)	TBD
V (MPH)	*

* See Plan and Profile Sheets for horizontal and vertical curve design speed.

PFI PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

TIER 1 PROJECT	
RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION	
DATE	DISTRICT PLANNING AND INVESTMENT MANAGER
APPROVED FOR RIGHT OF WAY ACQUISITION	
DATE	DISTRICT PROJECT DEVELOPMENT ENGINEER
APPROVED FOR RIGHT OF WAY ACQUISITION	
DATE	DISTRICT ENGINEER/ADMINISTRATOR
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
DATE	DISTRICT PLANNING AND INVESTMENT MANAGER
DATE	DISTRICT PROJECT DEVELOPMENT ENGINEER
APPROVED FOR CONSTRUCTION	
DATE	DISTRICT ENGINEER/ADMINISTRATOR

Copyright 2018, Commonwealth of Virginia

PROJECT MANAGER *Thomas Marada, PE* (540) 332-7746 (Staunton District)
SURVEYED BY, DATE *Rice Associates* 703-968-3200 04/27/18
DESIGN BY *Thomas Algaer, PE* (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

TYPICAL SECTIONS

(Not to Scale)

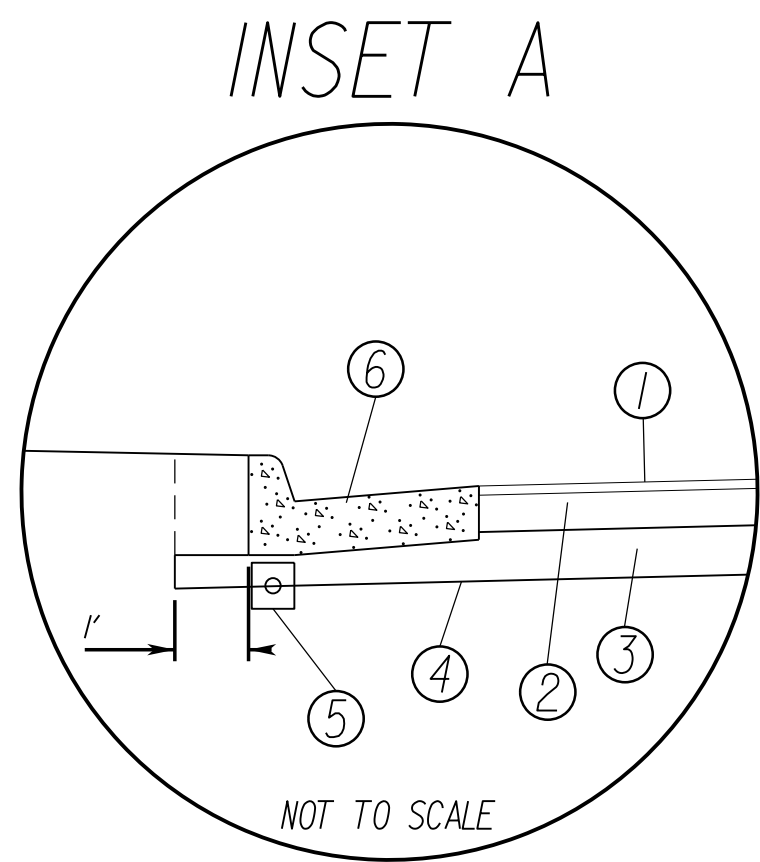
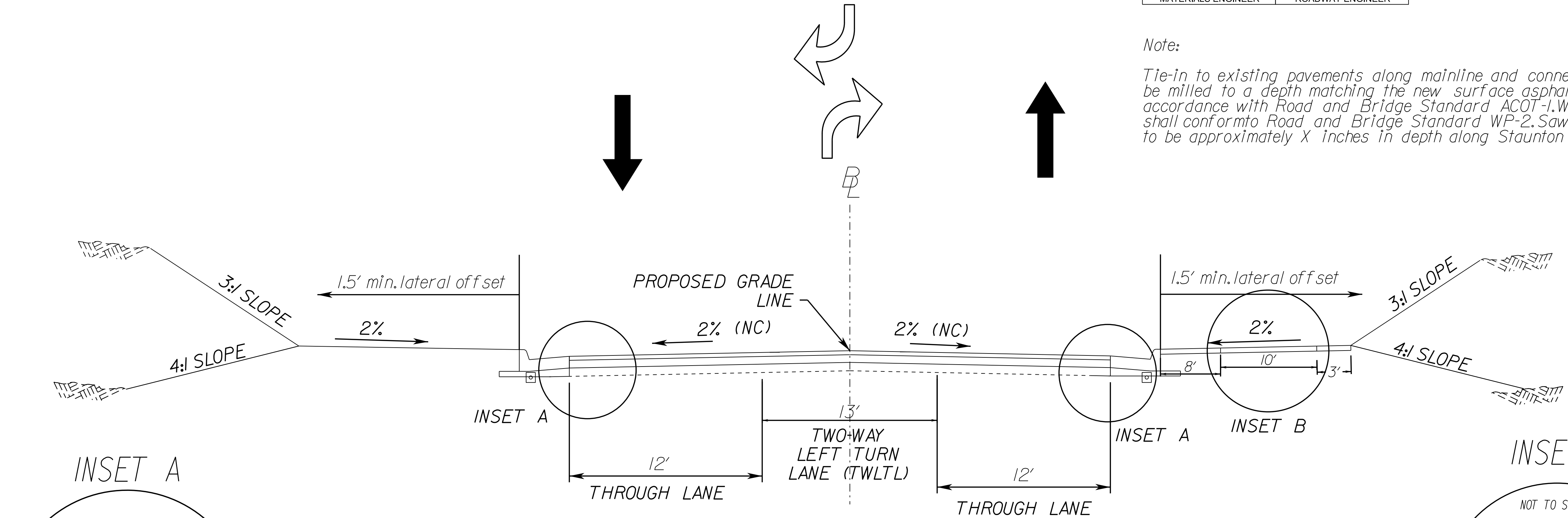
STAUNTON CROSSING WAY EXTENSION

GS-7 - Urban Collector (40 MPH Design Speed)

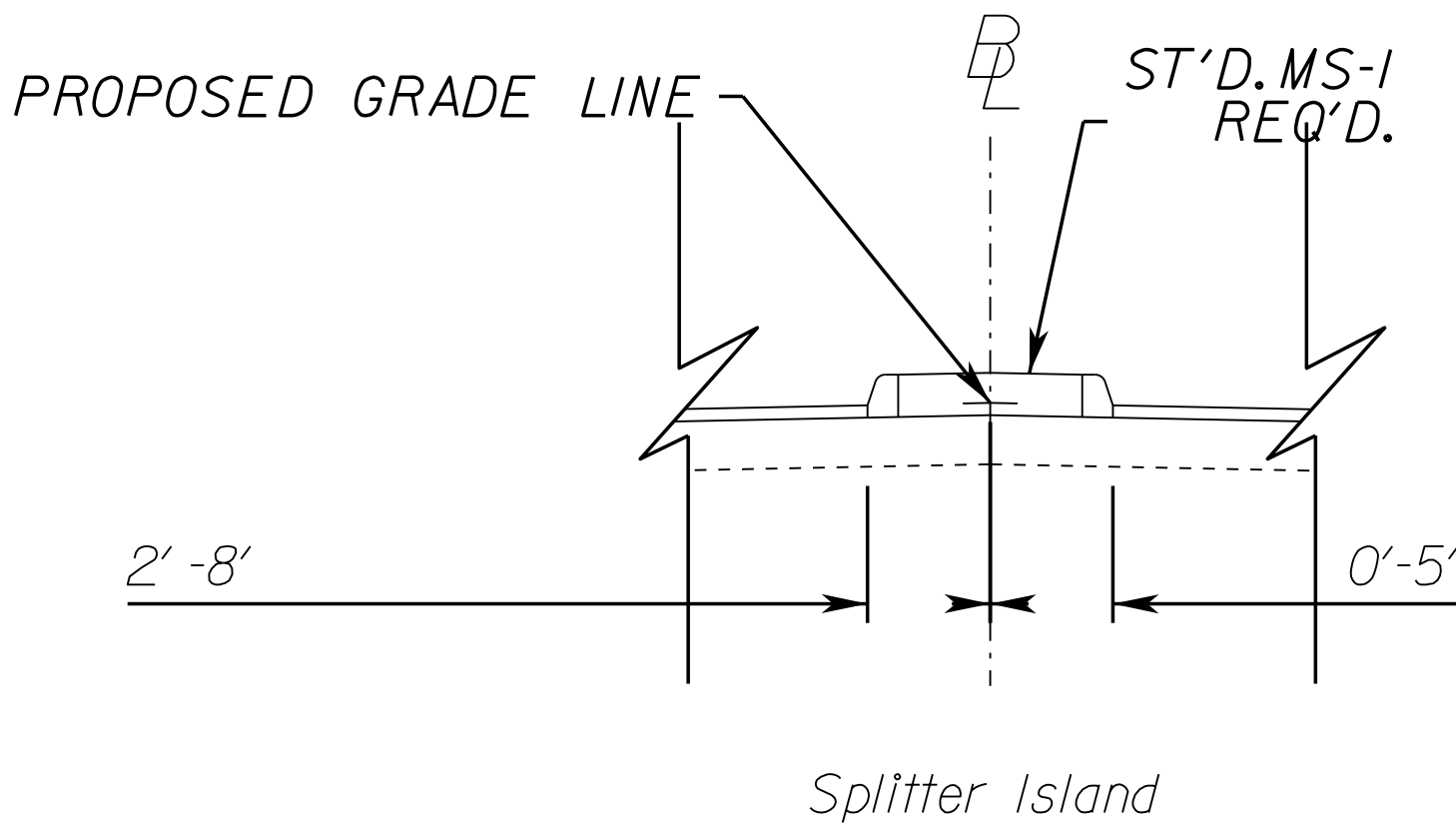
		REVISED	STATE	STATE		SHEET NO.
			ROUTE	PROJECT		
			VA.	000	U000-132-350,P101,C501	
		DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT				
VDOT Materials Division Staunton, Virginia MATERIALS ENGINEER	VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER					

Note:

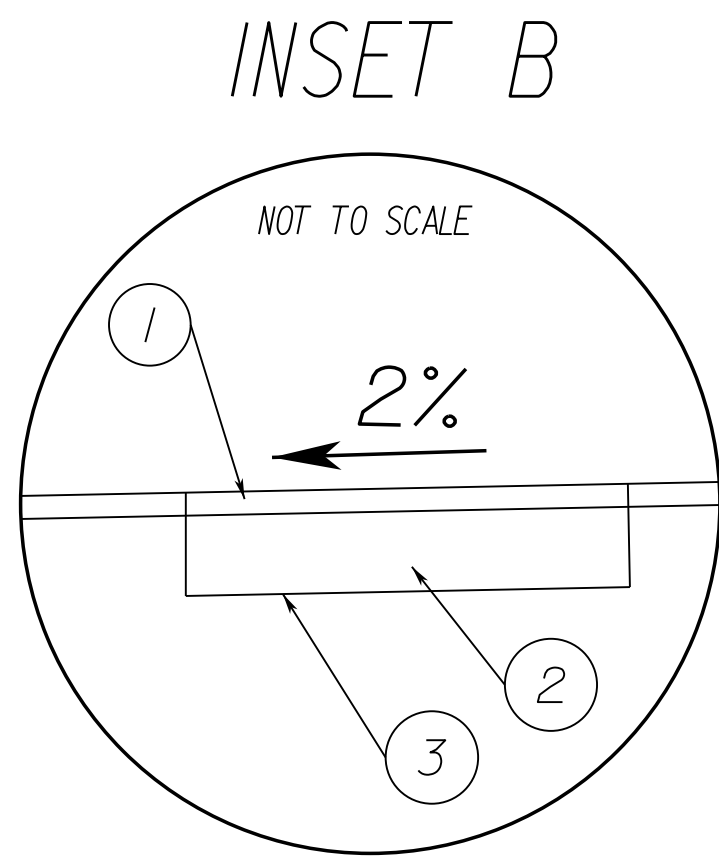
Tie-in to existing pavements along mainline and connectors shall be milled to a depth matching the new surface asphalt course in accordance with Road and Bridge Standard ACOT-1. Widening shall conform to Road and Bridge Standard WP-2. Sawcut is expected to be approximately X inches in depth along Staunton Connector Mainline



- ① 1.5" ASPHALT CONCRETE SURFACE, TYPE SM-9.5A @ 165 LB/SY
- ② 5.0" ASPHALT CONCRETE BASE, TYPE BM-25.0A @ 550 LB/SY
- ③ 7.0" AGGREGATE BASE MAT'L., TYPE 1 NO. 21B
- ④ SUBGRADE STABILIZATION GEOTEXTILE FABRIC
- ⑤ ST'D UD-3 REQ'D
- ⑥ ST'D CG-6 REQ'D



Sta. 130+87.28 - Sta. 131+88.28
Sta. 133+38.28 - Sta. 134+39.28



- ① 2.0" ASPHALT CONCRETE SURFACE, TYPE SM-9.5AL @ 220 LB/SY
- ② 6.0" AGGREGATE BASE MAT'L., TYPE 1 NO. 21B
- ③ SUBGRADE STABILIZATION GEOTEXTILE FABRIC

PFI PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

SCALE	PROJECT	SHEET NO.
0 50' 100'	U000-132-350	2A

PROJECT MANAGER Thomas Marcano, PE (540) 332-7746 (Staunton District)
SURVEYED BY, DATE R/lee Associates 703-968-3200 04/27/18
DESIGN BY Thomas Alger, PE (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

TYPICAL SECTIONS

(Not to Scale)

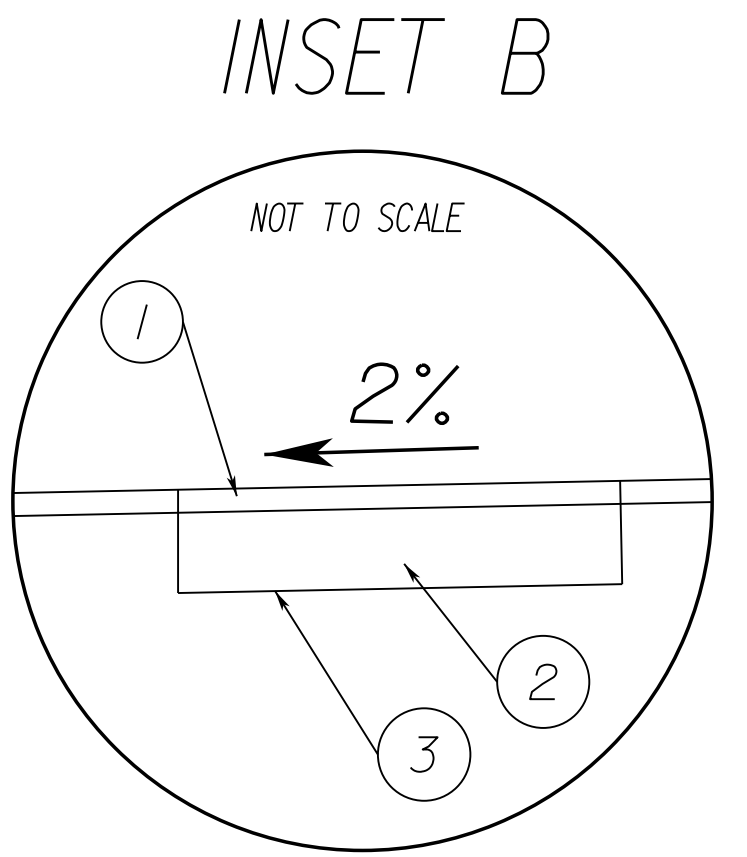
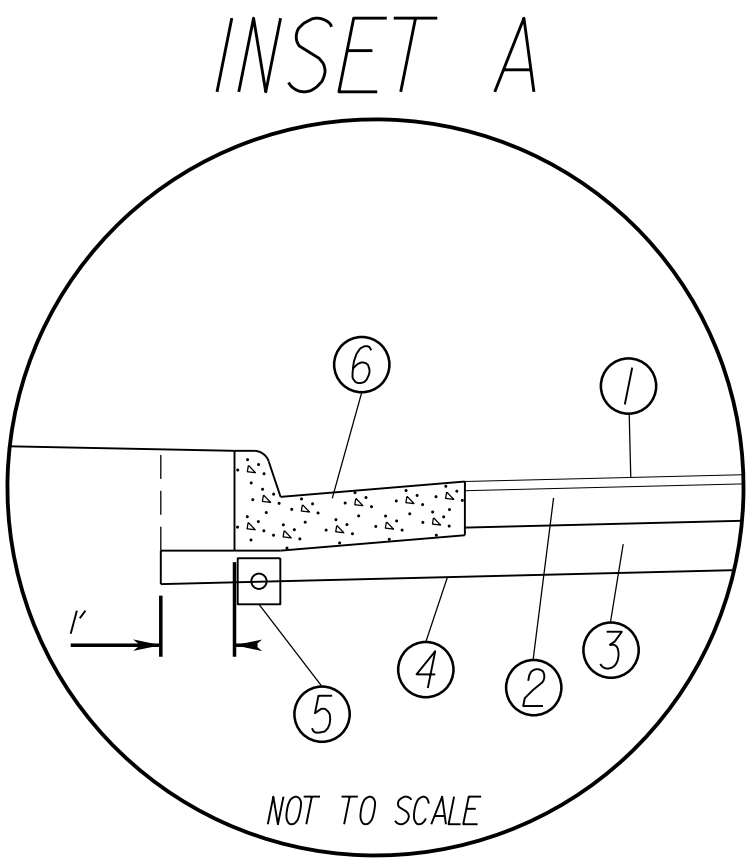
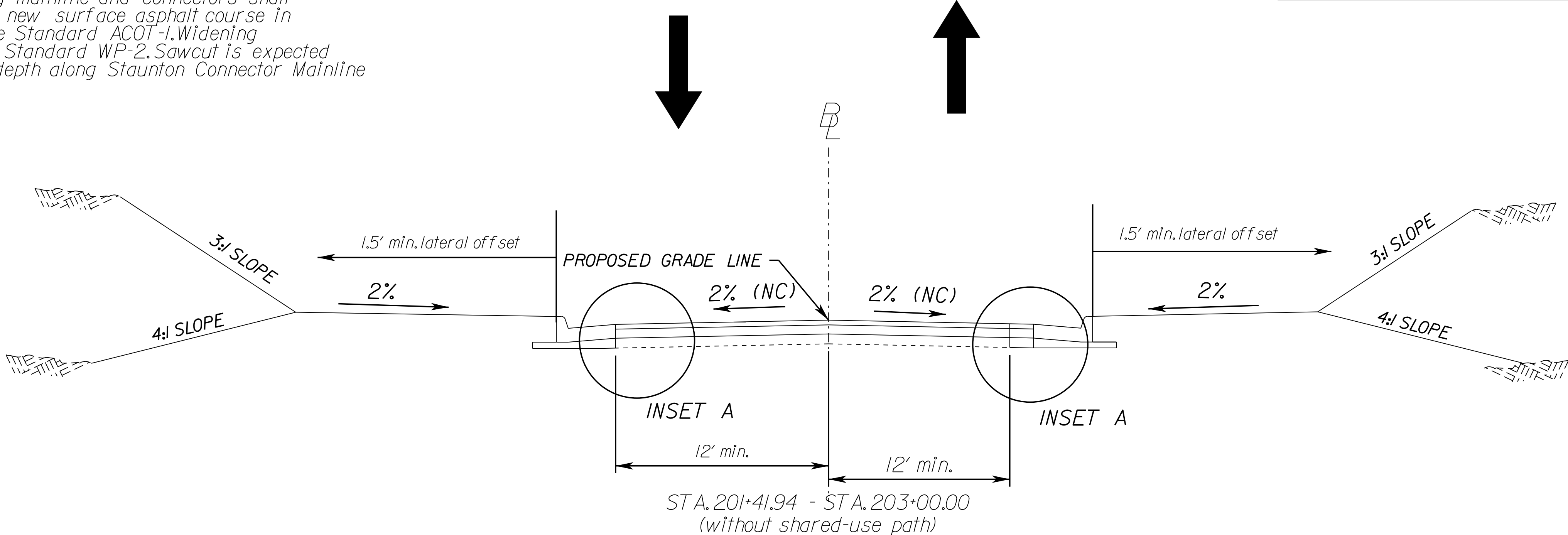
CONNECTION (TBD)

GS- 8 Urban Local (35 MPH Design Speed)

		REVISED	STATE	STATE		SHEET NO.
				ROUTE	PROJECT	
			VA.	000	U000-132-350,P101, C501	
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT						
VDOT Materials Division Staunton, Virginia MATERIALS ENGINEER	VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER					

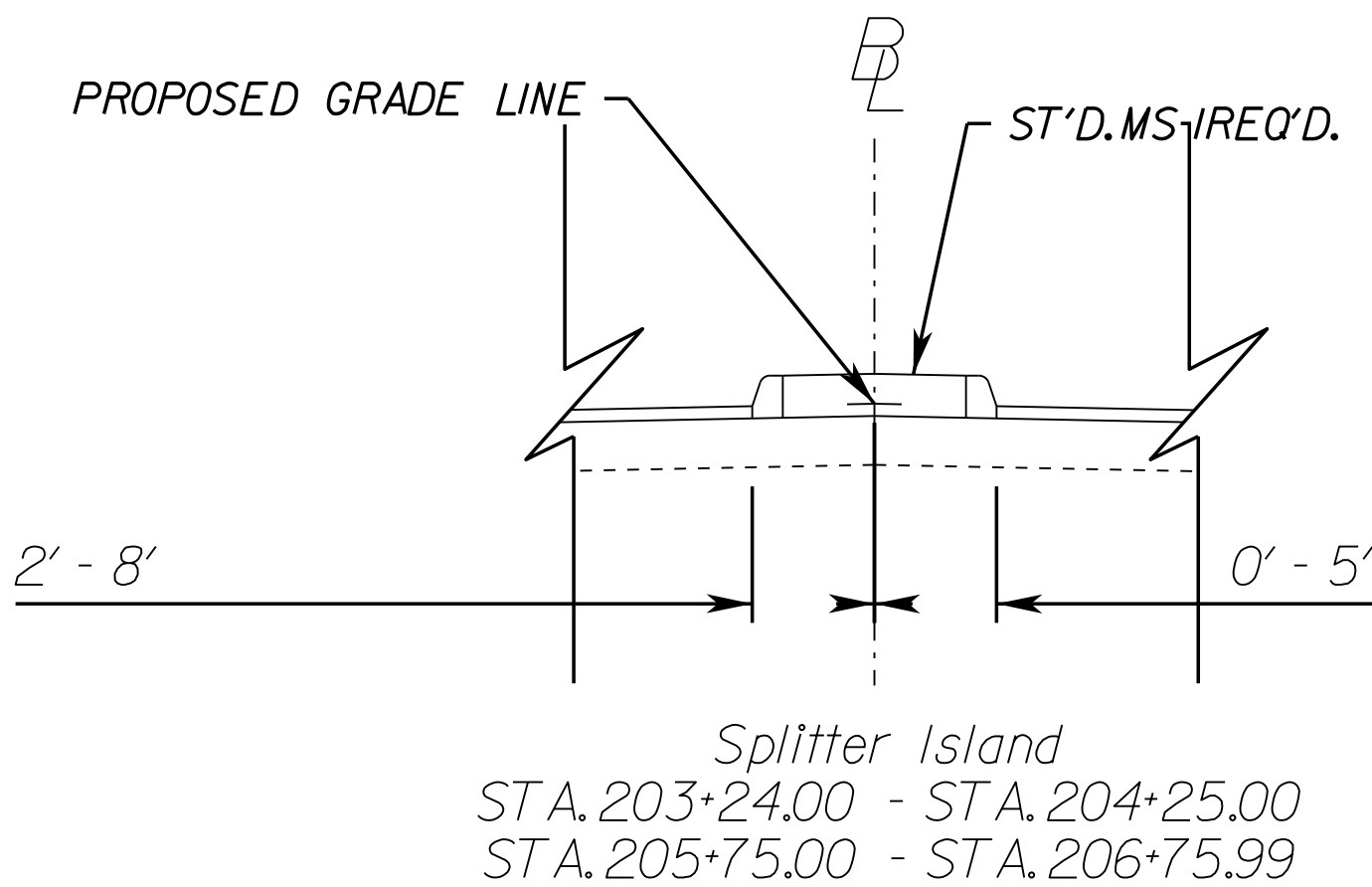
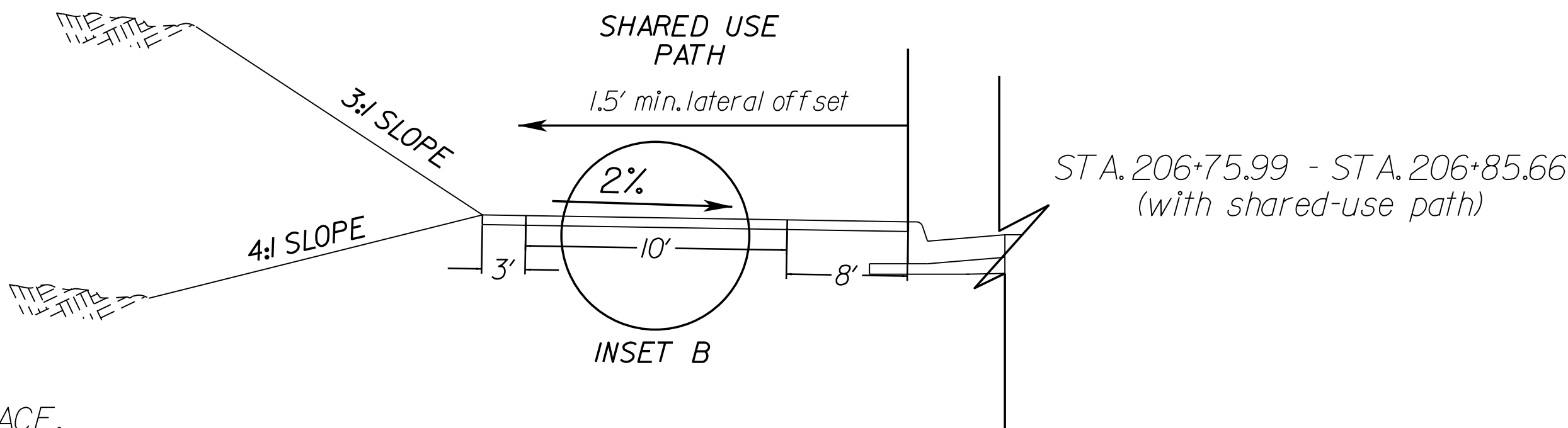
Note:

Tie-in to existing pavements along mainline and connectors shall be milled to a depth matching the new surface asphalt course in accordance with Road and Bridge Standard ACOT-1. Widening shall conform to Road and Bridge Standard WP-2. Sawcut is expected to be approximately X inches in depth along Staunton Connector Mainline



- 1.5" ASPHALT CONCRETE SURFACE, TYPE SM-9.5A @ 165 LB/SY
- 5.0" ASPHALT CONCRETE BASE, TYPE BM-25.0A @ 550 LB/SY
- 7.0" AGGREGATE BASE MAT'L., TYPE 1 NO. 21B
- SUBGRADE STABILIZATION GEOTEXTILE FABRIC
- ST'D UD-3 REQ'D
- ST'D CG-6 REQ'D

- 2.0" ASPHALT CONCRETE SURFACE, TYPE SM-9.5AL @ 220 LB/SY
- 6.0" AGGREGATE BASE MAT'L., TYPE 1 NO. 21B
- SUBGRADE STABILIZATION GEOTEXTILE FABRIC



PFI PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

PROJECT MANAGER Thomas Marcano, PE (540) 332-7746 (Staunton District)
SURVEYED BY, DATE R/ce Associates 703-968-3200 04/27/18
DESIGN BY Thomas Alger, PE (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

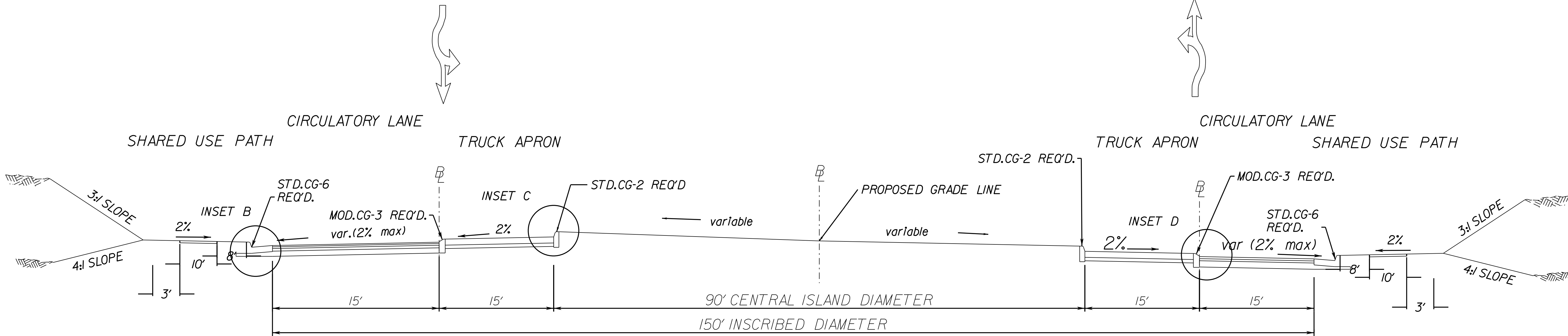
TYPICAL SECTIONS

(Not to Scale)

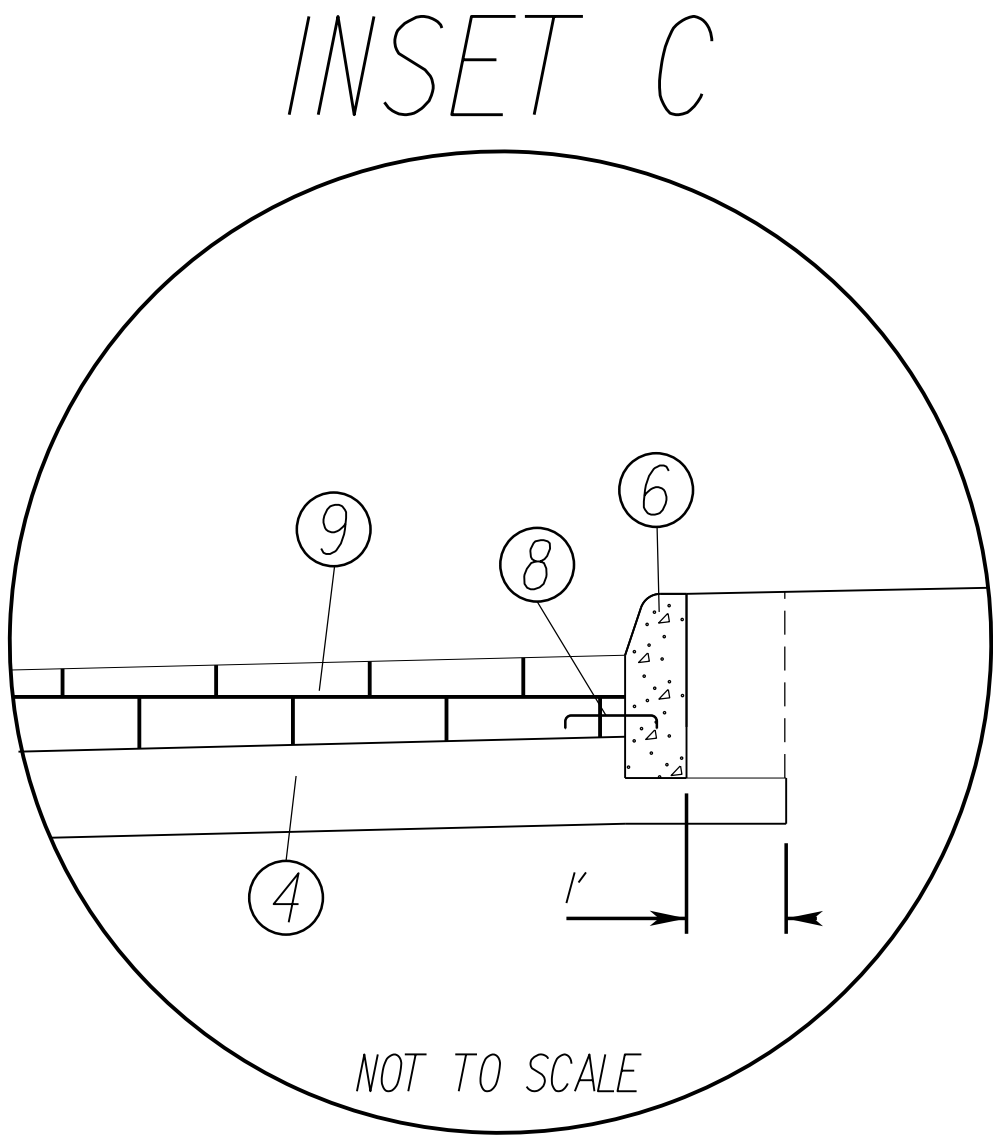
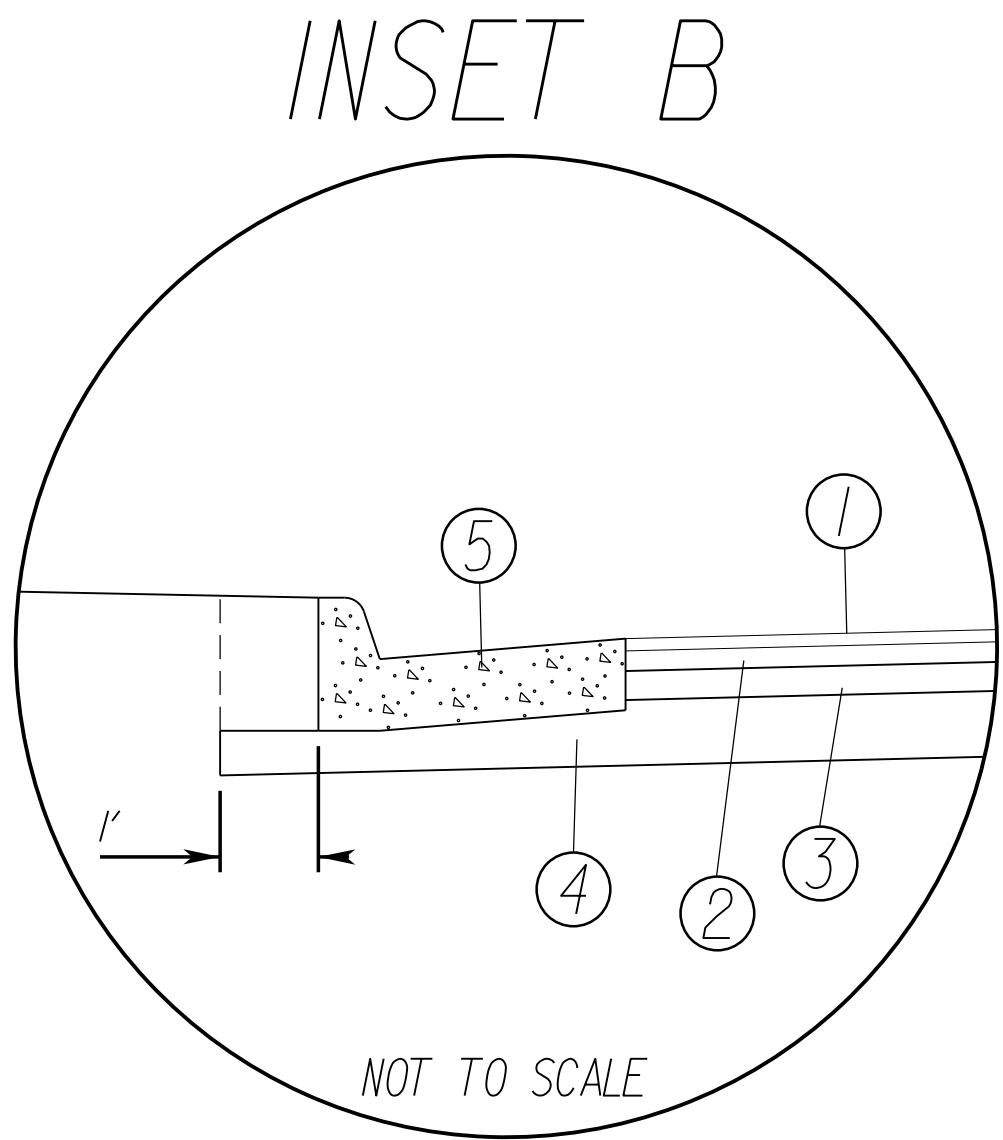
ROUNDAABOUT

(25 MPH Design Speed)

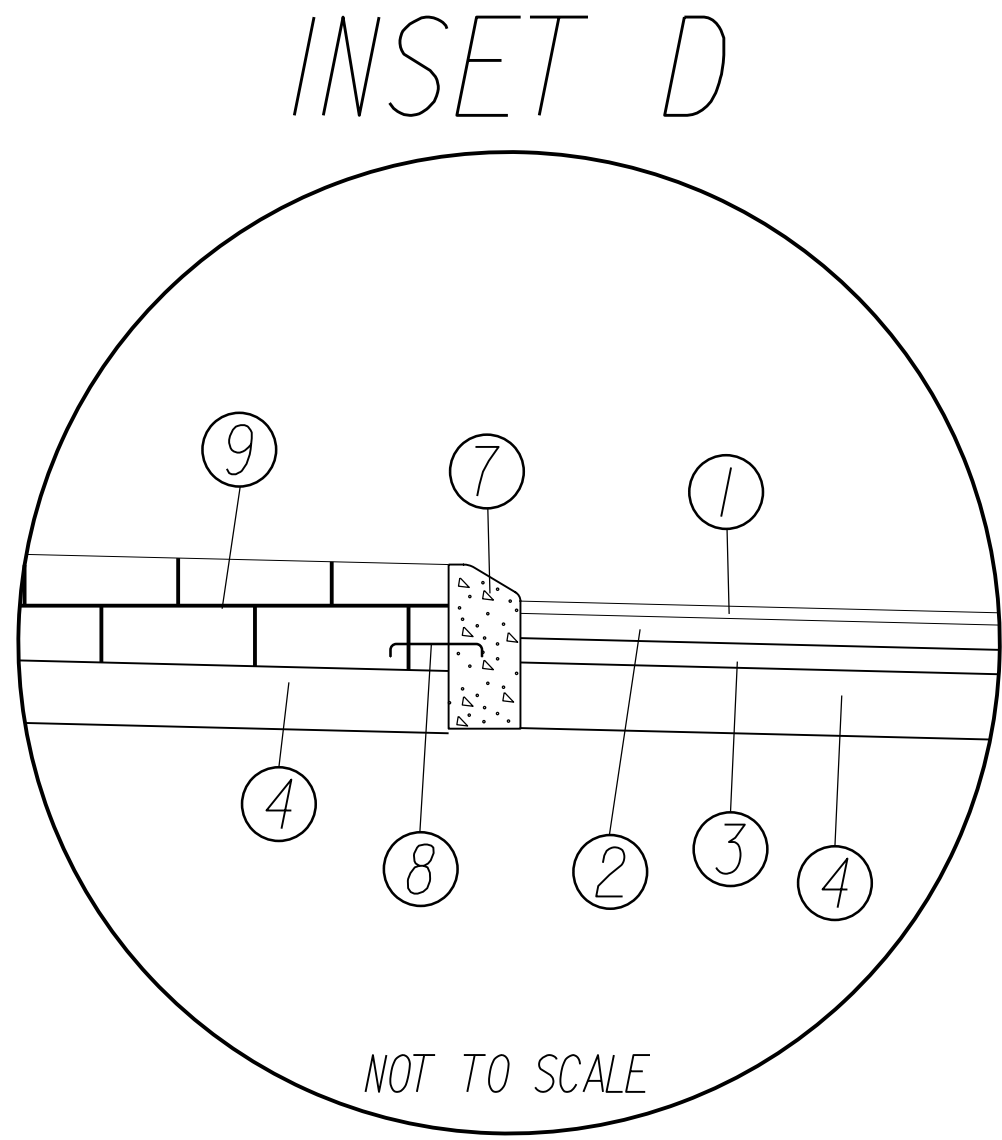
		REVISED	STATE	STATE		SHEET NO.
			ROUTE	PROJECT		
			VA.	000	U000-132-350,P101,C501	
		DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT				
VDOT Materials Division Staunton, Virginia MATERIALS ENGINEER	VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER					



MAINLINE STA. 131+88.28 + STA. 133+38.28
CONNECTION STA. 204+25.00 - STA. 205+75.00



- ① 1.5" ASPHALT CONCRETE SURFACE, TYPE SM-9.5A @ 165 LB/SY
- ② 2" ASPHALT CONCRETE INTERMEDIATE, TYPE IM-19.0A @ 220 LB/SY
- ③ 2.5" ASPHALT CONCRETE BASE, TYPE BM-25.0A @ 275 LB/SY
- ④ 6.0" AGGREGATE BASE MAT'L, TYPE 1 NO. 21B
- ⑤ STD.CG-6 REQ'D.
- ⑥ STD.CG-2 REQ'D.
- ⑦ MOD.CG-3 REQ'D.
- ⑧ LONGITUDINAL TIE DEVICE "J"-BAR, SEE DETAIL ON SHEET 2.
- ⑨ 8.0" STD.PR-2 (JOINT PLAIN CONCRETE PAVEMENT) REQ'D.

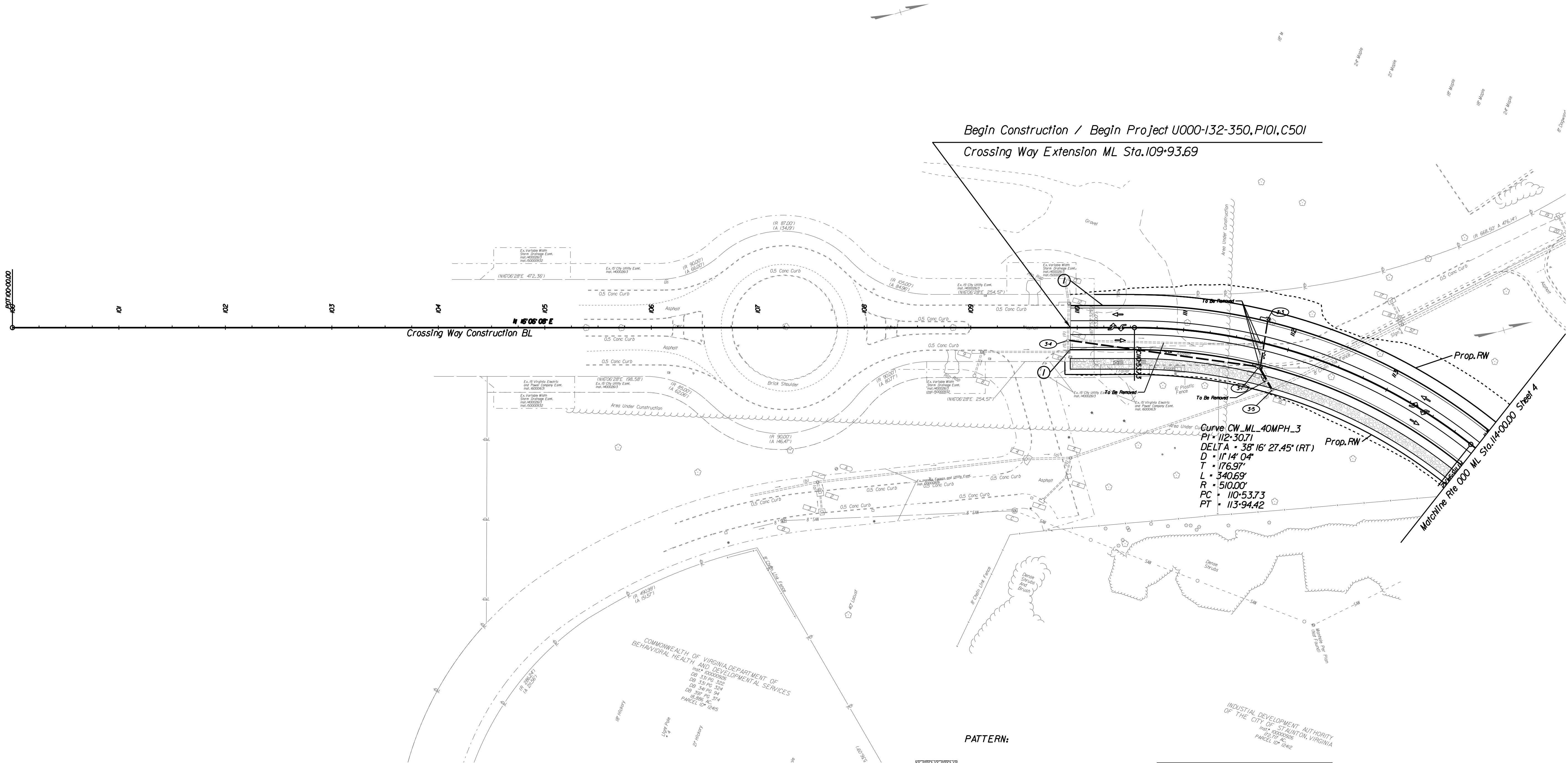


PFI PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

PROJECT MANAGER *Thomas Marada, PE* (540) 332-7746 (Staunton District)
SURVEYED BY, DATE *Rice Associates* 703-968-3200 04/21/18
DESIGN BY *Thomas Alger, PE* (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

		REVISED	STATE	STATE		SHEET NO.
			ROUTE	PROJECT		
			VA.	000	U000-132-350,P101, C501	3
		DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT				
VDOT Location and Design Richmond, Virginia HYDRAULICS ENGINEER	VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER					



LEGEND:

- ① S'd CG-6 Req'd
- ② Rad CG-6 Req'd
- ③ S'd CG-12A, Detectable Warning Surface Req'd
- ④ S'd CG-12B, Detectable Warning Surface Req'd
- ⑤ S'd CG-12C, Detectable Warning Surface Req'd

PATTERN:	
	10' wide Shared Use Path
	splitter Island
	truck apron
	central Island
	Hydraulic Cement Concrete Sidewalk 4

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Mainline Profile	3A
Drainage Descr.	

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

SCALE
0 50' 100'

PROJECT
U000-132-350

SHEET NO.
3

PROJECT MANAGER *Thomas Macardo, PE - 15401332-7756 - (Staunton District)*
SURVEYED BY, DATE *Rice Associates - 17031968-3200 - 04/24/18 - - - - -*
DESIGN BY *Thomas Alger, PE - 18041786-1560 - (Central Office) - - - - -*
SUBSURFACE UTILITY BY, DATE *WWW - - - - -*

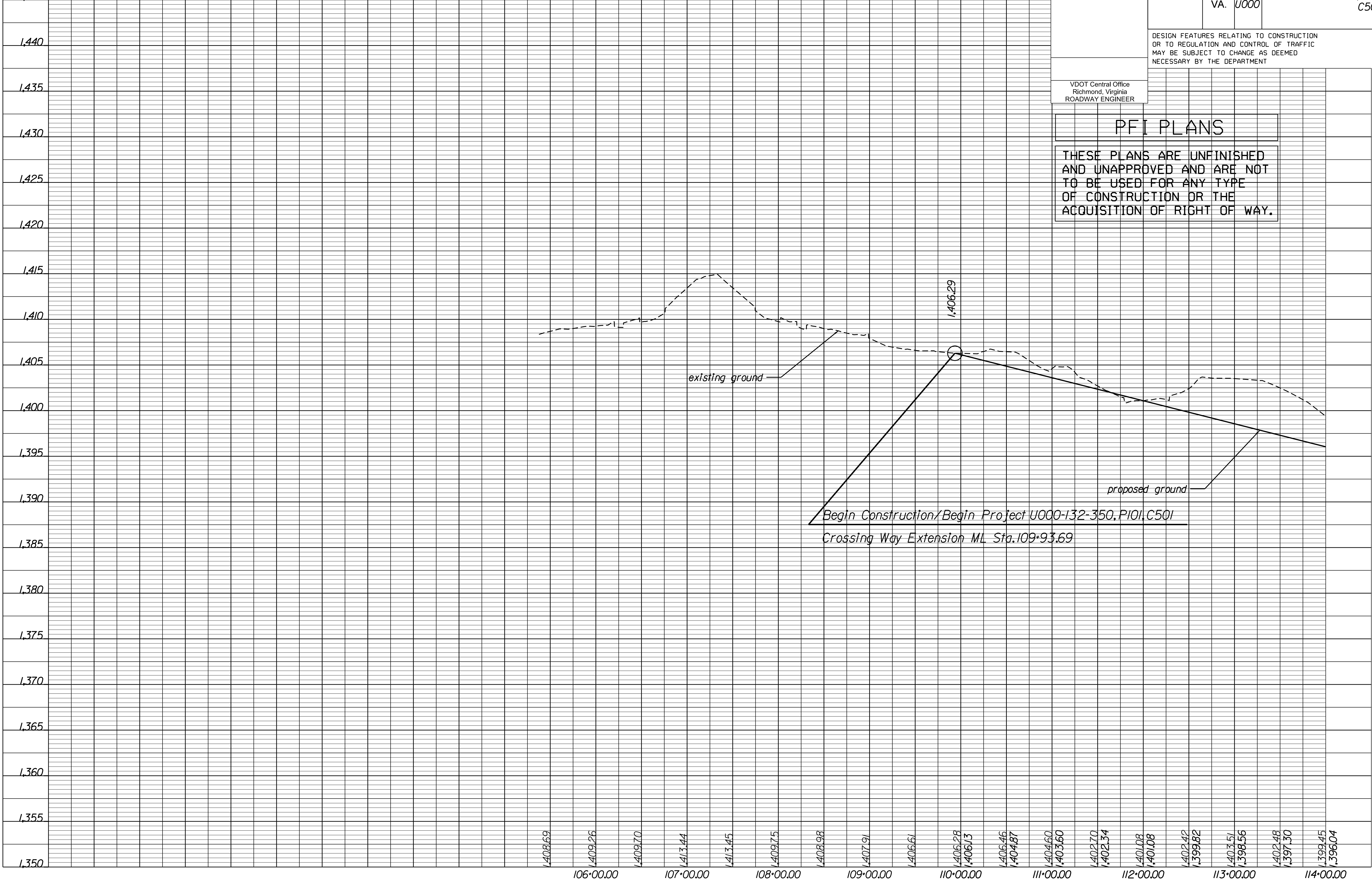
REVISED	STATE	STATE		SHEET NO.
	ROUTE	PROJECT		
	VA.	U000	U000-132-350, P101 C501	3A

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

VDOT Central Office
Richmond, Virginia
ROADWAY ENGINEER

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.



PROJECT
0000-132-350

SHEET NO.
3A

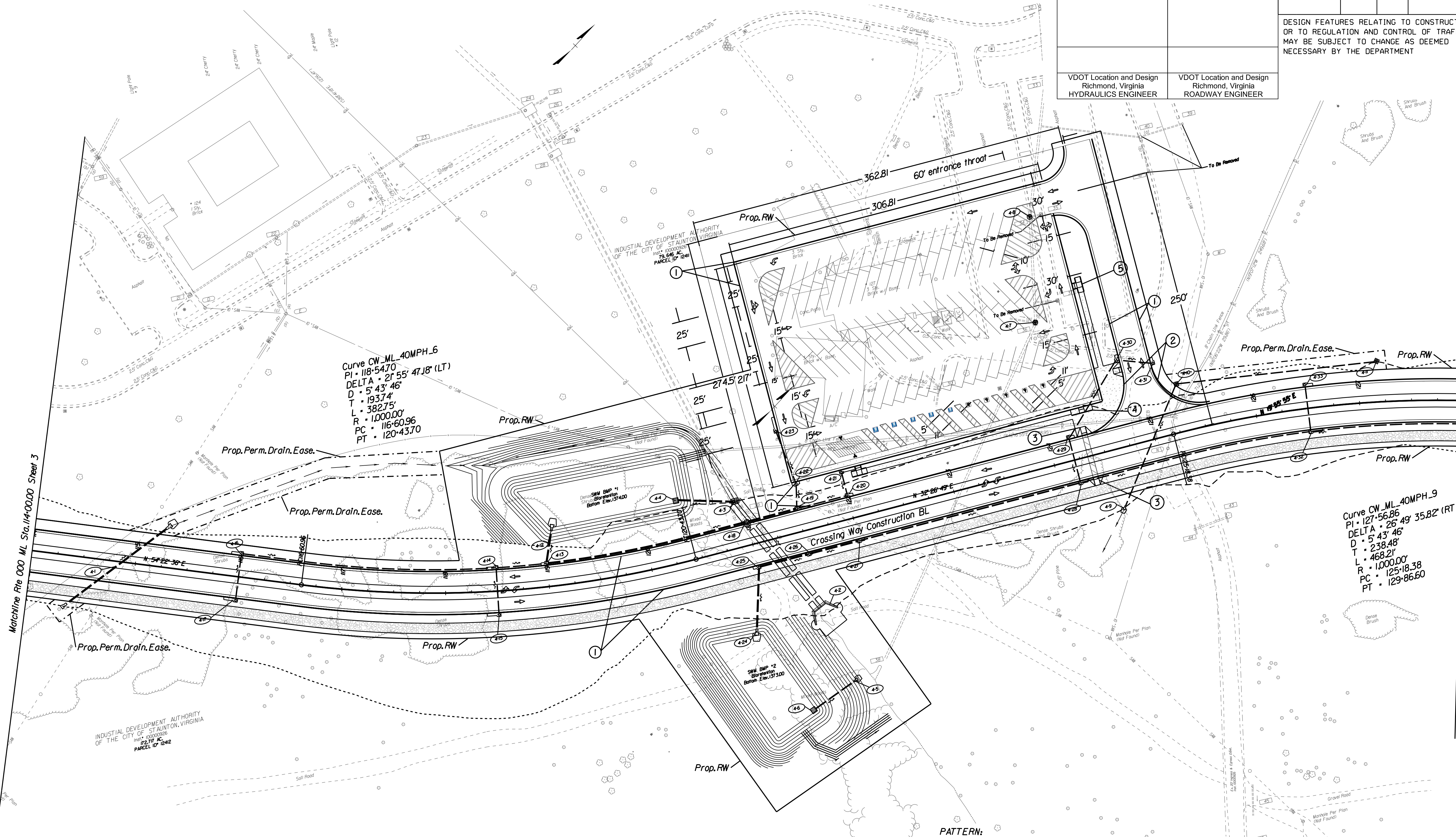
PROJECT MANAGER Thomas Marada, PE (540) 332-7746 (Staunton District)
SURVEYED BY, DATE R/ce Associates 703-968-3200 04/27/18
DESIGN BY Thomas Alger, PE (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

REVISED	STATE	ROUTE	STATE PROJECT	SHEET NO.
	VA.	000	U000-132-350, P101, C501	4

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

VDOT Location and Design
Richmond, Virginia
HYDRAULICS ENGINEER

VDOT Location and Design
Richmond, Virginia
ROADWAY ENGINEER



Curve CW ML 40MPH_6
PI = 118+54.70
DELTA = 21° 55' 47.18" (LT)
D = 5' 43' 46"
T = 193.74'
L = 382.75'
R = 1,000.00'
PC = 116+60.96
PT = 120+43.70

Curve CW ML 40MPH_9
PI = 127+56.86
DELTA = 26° 49' 35.82" (RT)
D = 5' 43' 46"
T = 238.48'
L = 468.21'
R = 1,000.00'
PC = 125+18.38
PT = 129+86.60

LEGEND:

- ① S'd CG-6 Req'd
- ② Rad CG-6 Req'd
- ③ S'd CG-12A, Detectable Warning Surface Req'd
- ④ S'd CG-12B, Detectable Warning Surface Req'd
- ⑤ S'd CG-12C, Detectable Warning Surface Req'd

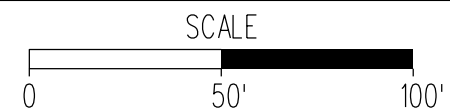
- PATTERN:
- 10' wide Shared Use Path
 - splitter Island
 - truck apron
 - central Island
 - Hydraulic Cement Concrete Sidewalk 4"

REFERENCES
(PROFILES, DETAIL & DRAINAGE
DESCRIPTION SHEETS, ETC.)

Mainline Profile 4A
Drainage Descr.

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.



PROJECT
U000-132-350

SHEET NO.
4

PROJECT MANAGER Thomas Macardo, PE - 15401332-7756 - (Staunton District)
SURVEYED BY, DATE Rice Associates - 17031968-3200 - 04/24/18 -
DESIGN BY Thomas Alger, PE - 18041786-1560 - (Central Office) -
SUBSURFACE UTILITIES DATE WWW -

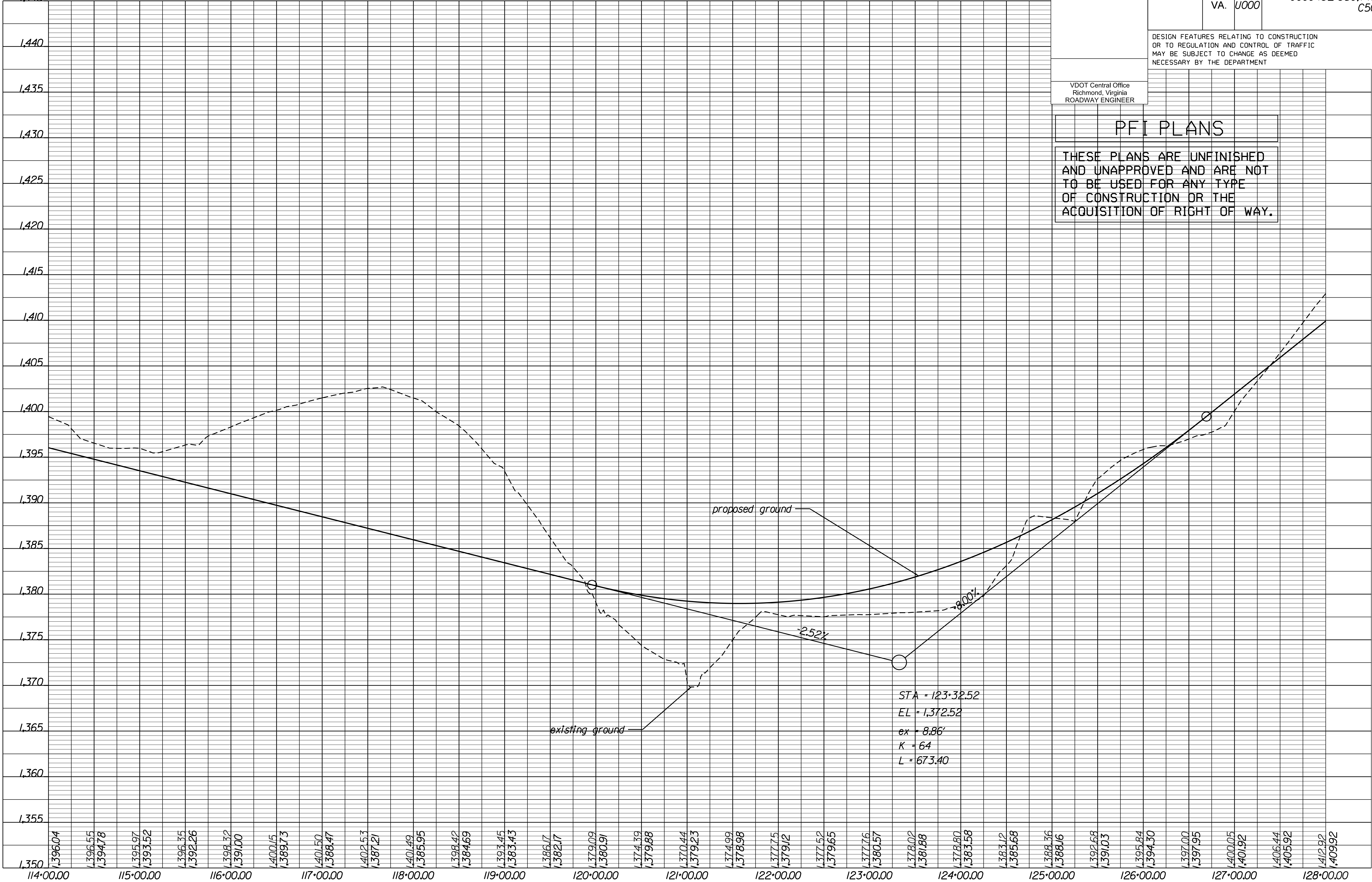
REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	U000	U000-132-350, P101 C501	4A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

VDOT Central Office
Richmond, Virginia
ROADWAY ENGINEER

PFI PLANS

THESE PLANS ARE UNFINISHED AND UNAPPROVED AND ARE NOT TO BE USED FOR ANY TYPE OF CONSTRUCTION OR THE ACQUISITION OF RIGHT OF WAY.

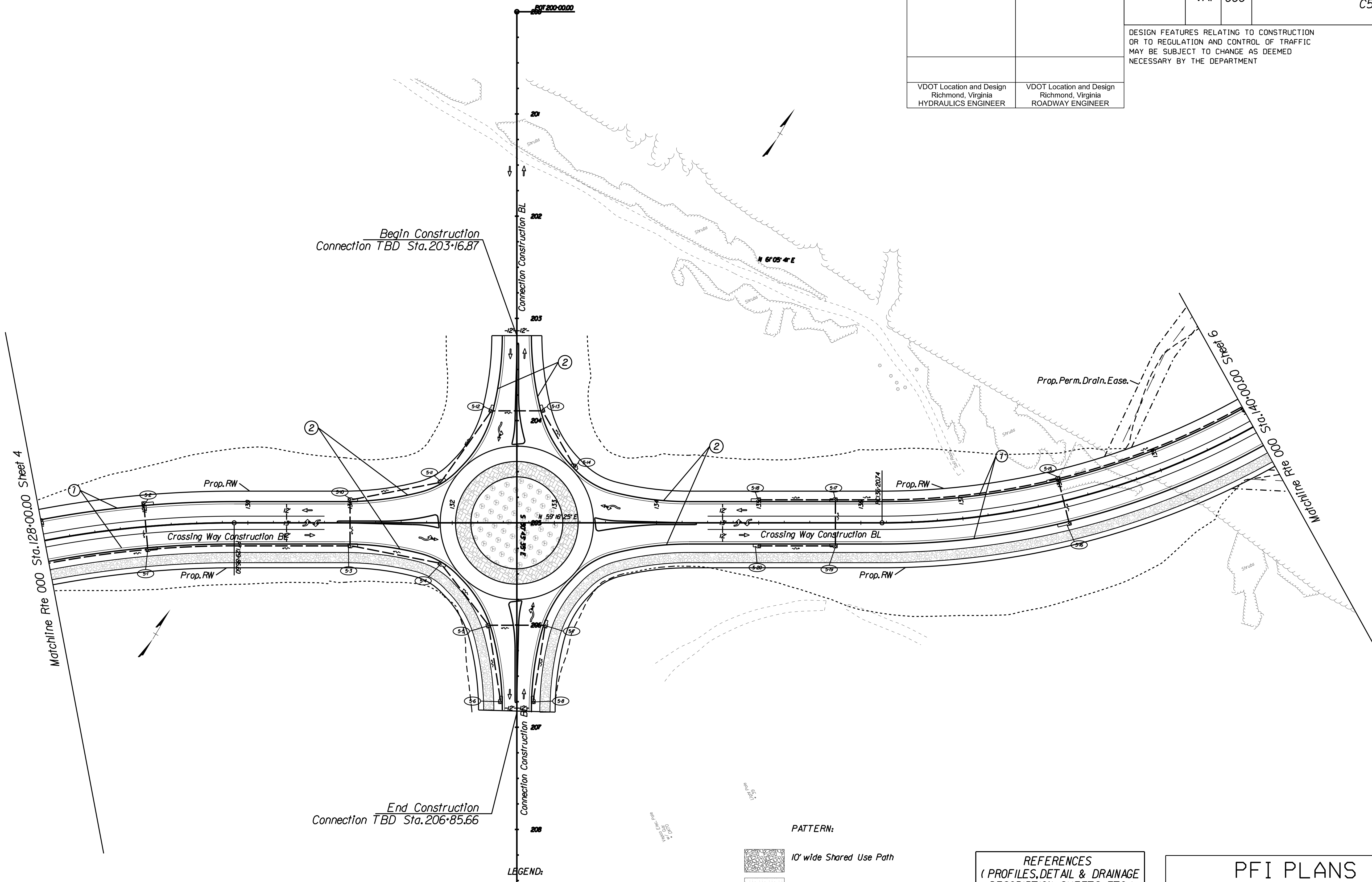


PROJECT
U000-132-350

SHEET NO.
4A

PROJECT MANAGER: Thomas Marcano, PE (540) 332-7746 (Staunton District)
SURVEYED BY, DATE: Rice Associates, 703-968-3200, 04/27/18
DESIGN BY: Thomas Alger, PE (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

		REVISED	STATE	STATE		SHEET NO.
			ROUTE	PROJECT		
			VA.	000	U000-132-350,P101, C501	5
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT						
VDOT Location and Design Richmond, Virginia HYDRAULICS ENGINEER	VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER					



End Construction
Connection TBD Sta. 206+85.66

LEGEND:

- ① S'd CG-6 Req'd
- ② Rad CG-6 Req'd
- ③ S'd CG-12A, Detectable Warning Surface Req'd
- ④ S'd CG-12B, Detectable Warning Surface Req'd
- ⑤ S'd CG-12C, Detectable Warning Surface Req'd

PATTERN:

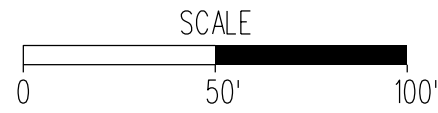
- 10' wide Shared Use Path
- splitter Island
- truck apron
- central Island
- Hydraulic Cement Concrete Sidewalk 4"

REFERENCES
(PROFILES, DETAIL & DRAINAGE
DESCRIPTION SHEETS, ETC.)

Mainline Profile 5A
Drainage Descr.

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.



PROJECT
U000-132-350

SHEET NO.
5

PROJECT MANAGER Thomas Macardo, PE - 15401332-7756 - (Staunton District)
SURVEYED BY, DATE Rice Associates - 17031968-3200 - 04/24/18 -
DESIGN BY Thomas Alger, PE - 18041786-560 - (Central Office) -
SUBSURFACE UTILITY BY, DATE WWW -

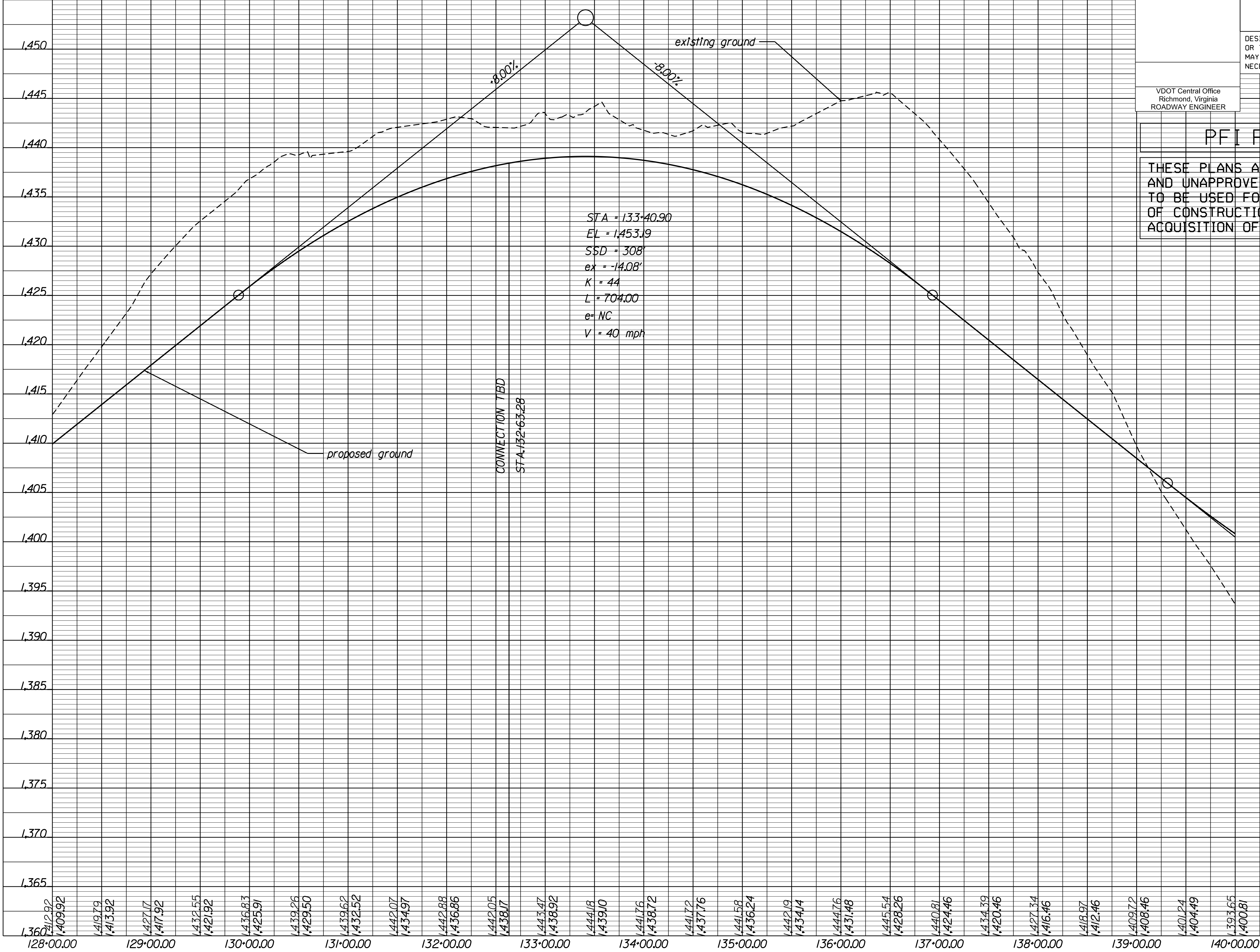
REVISED	STATE	STATE		SHEET NO.
	ROUTE	PROJECT		
	VA.	U000	U000-132-350, P101 C501	5A

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

VDOT Central Office
Richmond, Virginia
ROADWAY ENGINEER

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

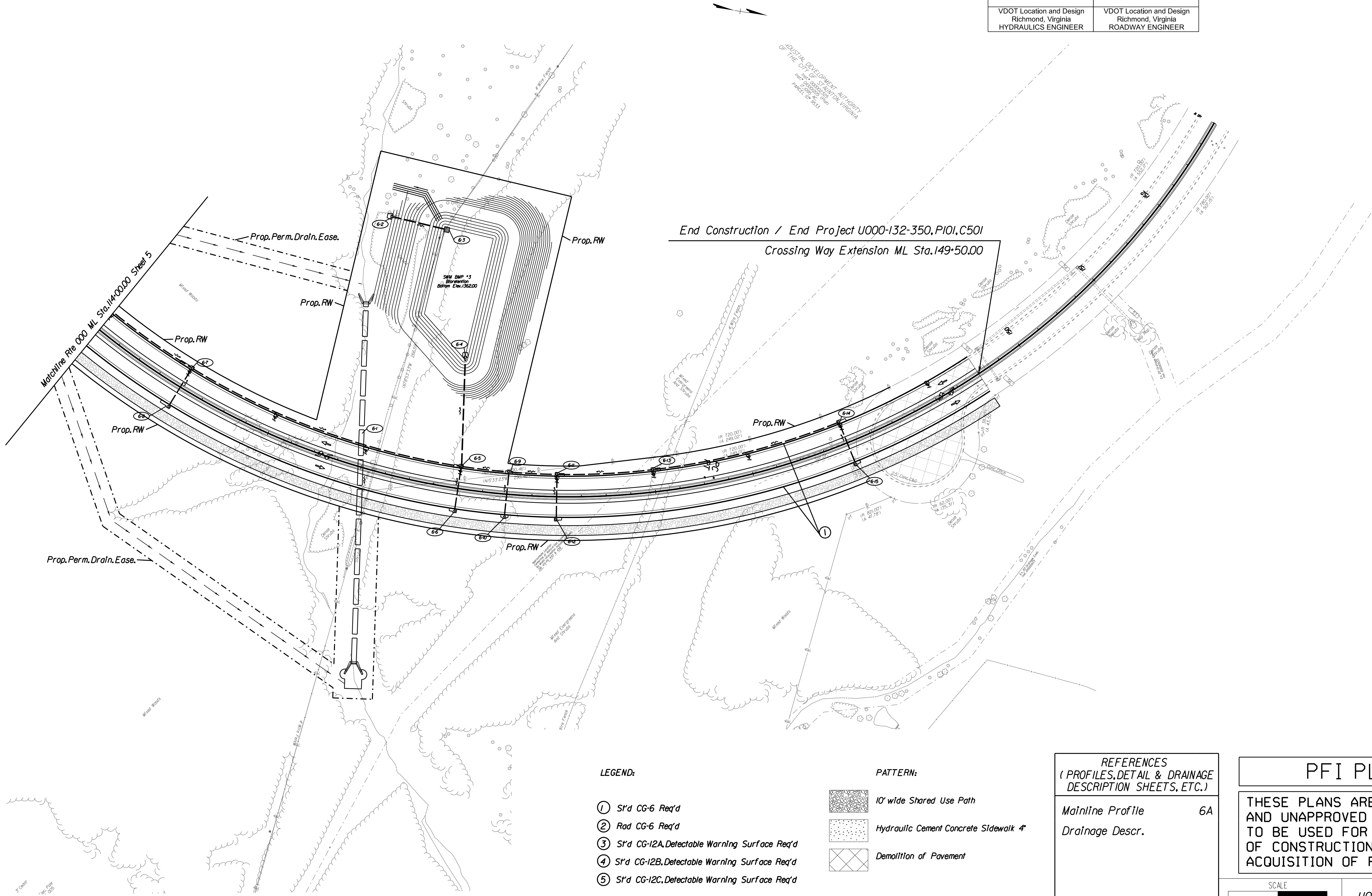


PROJECT
U000-132-350

SHEET NO.
5A

PROJECT MANAGER Thomas Marcano, PE (540) 332-7746 (Staunton District)
SURVEYED BY, DATE Rice Associates 703-968-3200 04/27/18
DESIGN BY Thomas Alger, PE (804) 786-1560 (Central Office)
SUBSURFACE UTILITY BY, DATE

		REVISED	STATE	STATE		SHEET NO.
			ROUTE	PROJECT		
			VA.	000	U000-132-350,P101, C501	
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT						
VDOT Location and Design Richmond, Virginia HYDRAULICS ENGINEER	VDOT Location and Design Richmond, Virginia ROADWAY ENGINEER					



LEGEND:

- ① S'd CG-6 Req'd
- ② Rad CG-6 Req'd
- ③ S'd CG-12A, Detectable Warning Surface Req'd
- ④ S'd CG-12B, Detectable Warning Surface Req'd
- ⑤ S'd CG-12C, Detectable Warning Surface Req'd

PATTERN:

- 10' wide Shared Use Path
- Hydraulic Cement Concrete Sidewalk 4"
- Demolition of Pavement

REFERENCES
(PROFILES, DETAIL & DRAINAGE
DESCRIPTION SHEETS, ETC.)

Mainline Profile 6A
Drainage Descr.

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

SCALE
0 50' 100'

PROJECT
U000-132-350

SHEET NO.
6

PROJECT MANAGER Thomas Macardo, PE - 15401332-7756 - (Staunton District)
SURVEYED BY, DATE Rice Associates - 17031968-3200 - 04/24/18 -
DESIGN BY Thomas Alger, PE - 180417861560 - (Central Office) -
SUBSURFACE UTILITY BY, DATE WWW -

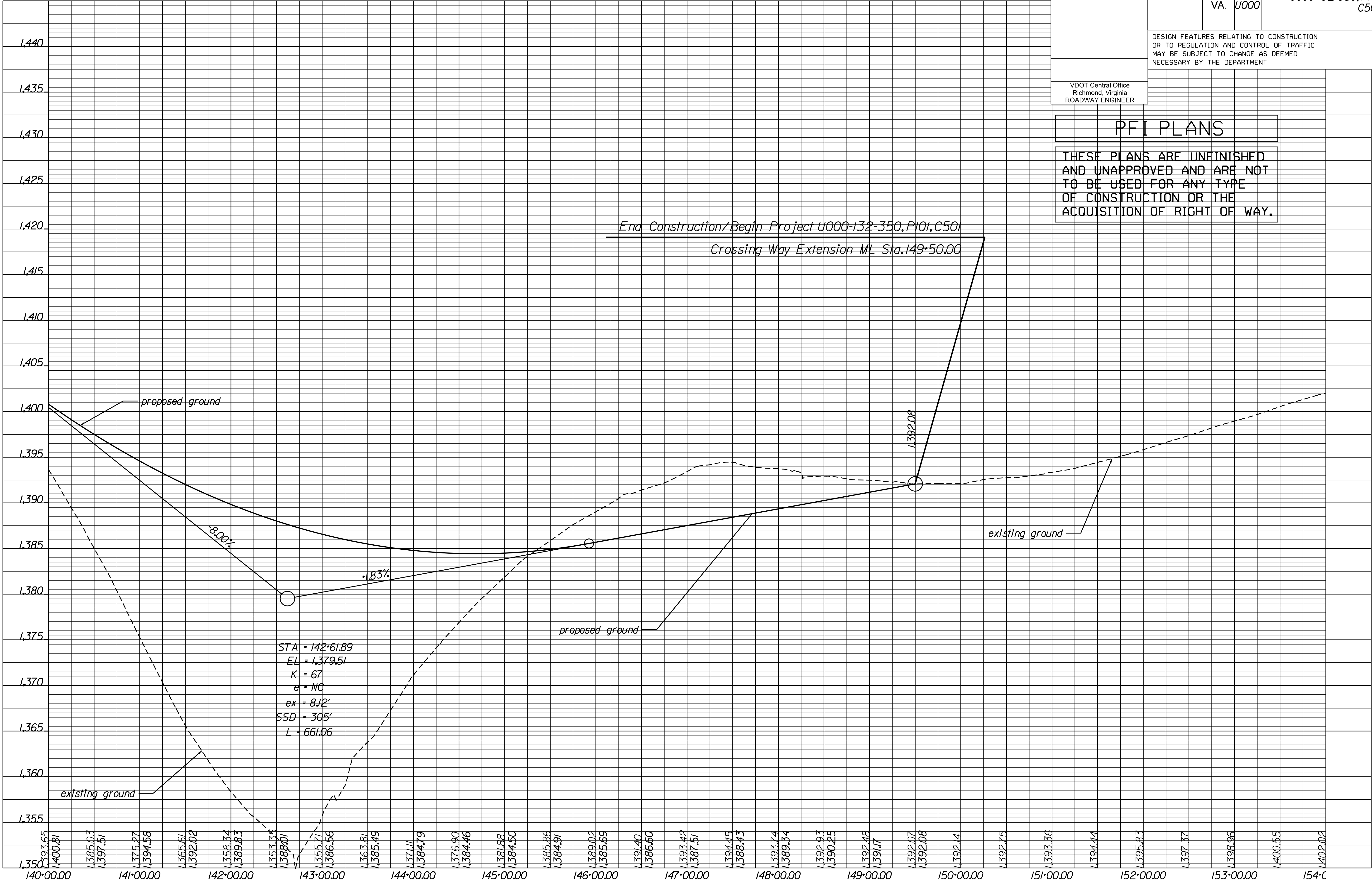
REVISED	STATE	STATE		SHEET NO.
		ROUTE	PROJECT	
	VA.	U000	U000-132-350, P101 C501	6A

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

VDOT Central Office
Richmond, Virginia
ROADWAY ENGINEER

PFI PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.



PROJECT
U000-132-350

SHEET NO.
6A

APPENDIX E – TIER 2 SITE READINESS CERTIFICATION

VIRGINIA BUSINESS READY SITES PROGRAM: STAUNTON CROSSING SITE

City of Staunton, Virginia



January 31, 2017



Contact: Tim Davey, PE | Principal
1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
804.200.6954 phone | 804.560.1438 fax | tim.davey@timmons.com

TABLE OF CONTENTS

Report

Site Characterization Letter	1
Gap Analysis & Road Map	2

Exhibits

Aerial	5
Environmental	6
Topography	7
Zoning	8
Utilities	9
Schematic Buildout Analysis	10

Appendices

Site Characterization Tier Level Ranking Criteria	11
Site Evaluation & Analysis Questionnaire	12
Data Source Information Summary	16

SITE CHARACTERIZATION LETTER

January 31, 2017

Mr. William Vaughn, Executive Director
City of Staunton Economic Development Authority
116 West Beverley Street
Staunton, Virginia 24402

**Re: Tier 2 Site Certification for Staunton Crossing
Located in Staunton, VA**

Dear Mr. Vaughn,

Thank you for the opportunity to work with the City of Staunton on the Site Certification of the Staunton Crossing site in Staunton, VA.

After an extensive review of the information provided on the above referenced property and verification of utility capacities and availability to the site, we are pleased to inform you that we are certifying the overall Staunton Crossing site as a

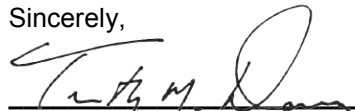
Tier 2 Certified Site in accordance with the Virginia Business Ready Sites Program Standards.

In order to be certified as a Tier 2 Certified Site, the park must have a willing seller, be identified by the City in the comprehensive plan and have zoning in place for industrial uses in order to appropriately plan for future improvements. Due diligence, planning, and construction has been performed on Phase I which would qualify at a higher tier level; however, the entire site must receive this same level of planning in order to count for certification. Timmons Group strongly recommends prioritizing the demolition of existing buildings on site as funding is available. In order for the site to meet the requirements for a Tier 3 site, per the VBRSP, the following needs to be completed:

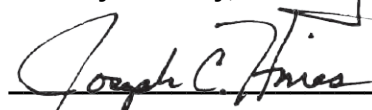
1. Geotechnical Survey and Report
2. Land Survey (ALTA, Boundary, 1' Topo)
3. Phase I ESA (in addition to Phase I)
4. Floodplain Study (in addition to Phase I)
5. Cultural Resources Study
6. Threatened & Endangered Species Study
7. COE Wetlands Delineation and Confirmation (in addition to Phase I)
8. Preliminary Engineering Cost Estimates (in addition to Phase I)
9. Preliminary Engineering Report (PER) with Transportation and Utility Analysis (in addition to Phase I)

Thank you again for the opportunity to work with the City of Staunton on this site certification. Should you have any questions or need any additional information, please don't hesitate to contact me at your convenience.

Sincerely,



Timothy M Davey, PE



Joseph C. Hines, PE, MBA



GAP ANALYSIS & ROAD MAP

Site Summary

The Staunton Crossing site is located in the southeastern part of the City of Staunton, adjacent to U.S. 250 and Interstate 81 and near Interstate 64. Primary access to the site comes directly from U.S. 250, Richmond Avenue. The site consists of approximately 333 acres of land with only one land owner – City of Staunton. Currently, the zoning on the site is Business and Industrial (B-2 & I-1) which allows for industrial development, commercial and some office.

Phase I and Phase II have been studied recently in detail as a part of a preliminary engineering and master plan report. These master planning efforts were considered in evaluating the current Tier Level for the Staunton Crossing site.

From an industrial development and commercial perspective, the Staunton Crossing site has excellent overall size, is located adjacent to two major interstates and has good proximity to existing utility infrastructure. Only a small portion of the site's area is unusable due to the presence of utility easements, environmental hazards, and topographically unfeasible land, resulting in approximately 85% (280 ac) of the site considered developable under the parameters of this study.

In evaluating the site for its industrial buildout potential, approximately 2,290,000 SF was estimated to fit onto the site within the given developable land constraints. This resulted in a yield of approximately 6,876 SF/Acre for the site, which is considered excellent and lands in the upper bracket for industrial and commercial sites. The primary reason for the high yield is that the uses designated in the master plan include multiple floors of office space rather than typical, single-story industrial uses.

In order to evaluate the current level of readiness, the following elements were considered:

- Acreage/Developable Acreage
- Potential Development Yield
- Location/Accessibility
- Rail Accessibility
- Ownership
- Zoning/Land Use
- Topography
- Restricted Land Coverage
- Resource Protection Area
- Wetlands
- Floodplains
- Waterbodies
- Streams
- Wet Utility Access (i.e. Water, Sewer)
- Dry Utility Access (i.e. Natural Gas, Power)
- Roads/Infrastructure

Site Name		Staunton Crossing
Total Acreage		333
Yield (SF)		2,290,000
Zoning / Land Use		B-2 / I-1
Direct Access	4 Lane Rd.	Yes
	Water	Yes
	Sewer	Yes
	Natural Gas	Yes

Summary of Wet Utility Infrastructure

According to the City of Staunton's database, an existing 10" waterline runs along the western property line and Phase I development proposes to extend this line to Crossing Way. There is also a 10" water main running along Valley Center Drive on the northern side of the property, and another 10" line along the western side of the property that serves the rest of the site. Ultimately, a new waterline is needed to loop the system with additional

GAP ANALYSIS & ROAD MAP

lines serving the various developable land bays. As stated in the master plan, an existing 12" sanitary sewer line runs along the western side of the property adjacent to the railroad tracks and drains towards Fishersville. According to the Augusta County Service Authority, this line has an estimated 375,000 GPD capacity. Gravity sewer extensions are planned for Phase II of Staunton Crossing and will flow to the Fishersville line. There is also an existing 8" sewer line running along National Avenue on the north side of the property. It is recommended that a master plan or preliminary engineering report be prepared, specifically for future phases, in order to evaluate all wet utility infrastructure and needs in greater detail.

Summary of Dry Utility Infrastructure

Existing power information was not provided nor available as part of this study but the site does fall under Dominion Virginia Power jurisdiction. According to the City, a 2" and 10" Columbia Gas of Virginia line exists on site. Fiber optic availability is unknown. It is recommended that a master plan or preliminary engineering report be prepared in order to evaluate all dry utility infrastructure and needs in greater detail.

Summary of Transportation and Access

The master plan proposes all access to the Staunton Crossing site to come directly from U.S. 250, Richmond Avenue, with secondary access from North Frontier Drive for industrial-related traffic. The site is located directly adjacent to Interstate 81 and nearby Interstate 64 so it is ideally located for vehicular access. Phase I roadway, turn lane, and signal improvements were completed in 2016 to improve access from U.S. 250 and to accommodate future volume.

Road Map

The Tier Level analysis of the City of Staunton, Staunton Crossing site currently identifies the site as a Tier 2 Level of readiness. Although a preliminary engineering report and extensive due diligence have been performed recently as a part of the initial phase of development, several factors are holding the Staunton Crossing site back from a Tier 3, most importantly the presence of existing buildings and infrastructure to be demolished. Archaeological studies, cultural resources review, threatened and endangered species survey, and preliminary infrastructure development are also needed to advance to a Tier 3 Level but Timmons Group recommends that demolition of existing features be the first priority as capital improvement funding is made available. Without this further due diligence and planning, it cannot be cleared of potential risks for future commercial and industrial development. It is highly recommended that the demolition, additional due diligence and planning be completed on this site prior to larger infrastructure improvement investments in order to solidify its value as a prime commercial and industrial site in the region.

GAP ANALYSIS & ROAD MAP

Site Readiness Road Map



Tier 0

Have Nothing & Need to Find Sites

Tier 1

Raw Land, Willing Seller, No Control

Tier 2

Site Controlled, Zoned/Comp Plan, Minimal Due Diligence

Next Steps to Achieve Tier 3:

- Geotechnical Survey and Report
- Land Survey (ALTA, Boundary, 1' Topo)
- Phase I ESA (in addition to Phase I)
- Floodplain Study (in addition to Phase I)
- Cultural Resources Study
- Threatened & Endangered Species Study
- COE Wetlands Delineation and Confirmation (in addition to Phase I)
- Preliminary Engineering Cost Estimates (in addition to Phase I)
- Preliminary Engineering Report (PER) with Transportation and Utility Analysis (in addition to Phase I)

Tier 3

Master Plan, Estimated Costs, Significant Due Diligence

Tier 4

Certifiable Site, Infrastructure, Property Issues Cleared

Tier 5

"Ready to Construct", Permits in hand



STAUNTON CROSSING SITE

CITY OF STAUNTON, VA - AERIAL

Aerial imagery data from VITA

Parcel, Zoning and utility data from Locality & Survey Road & Rail data from VGIN



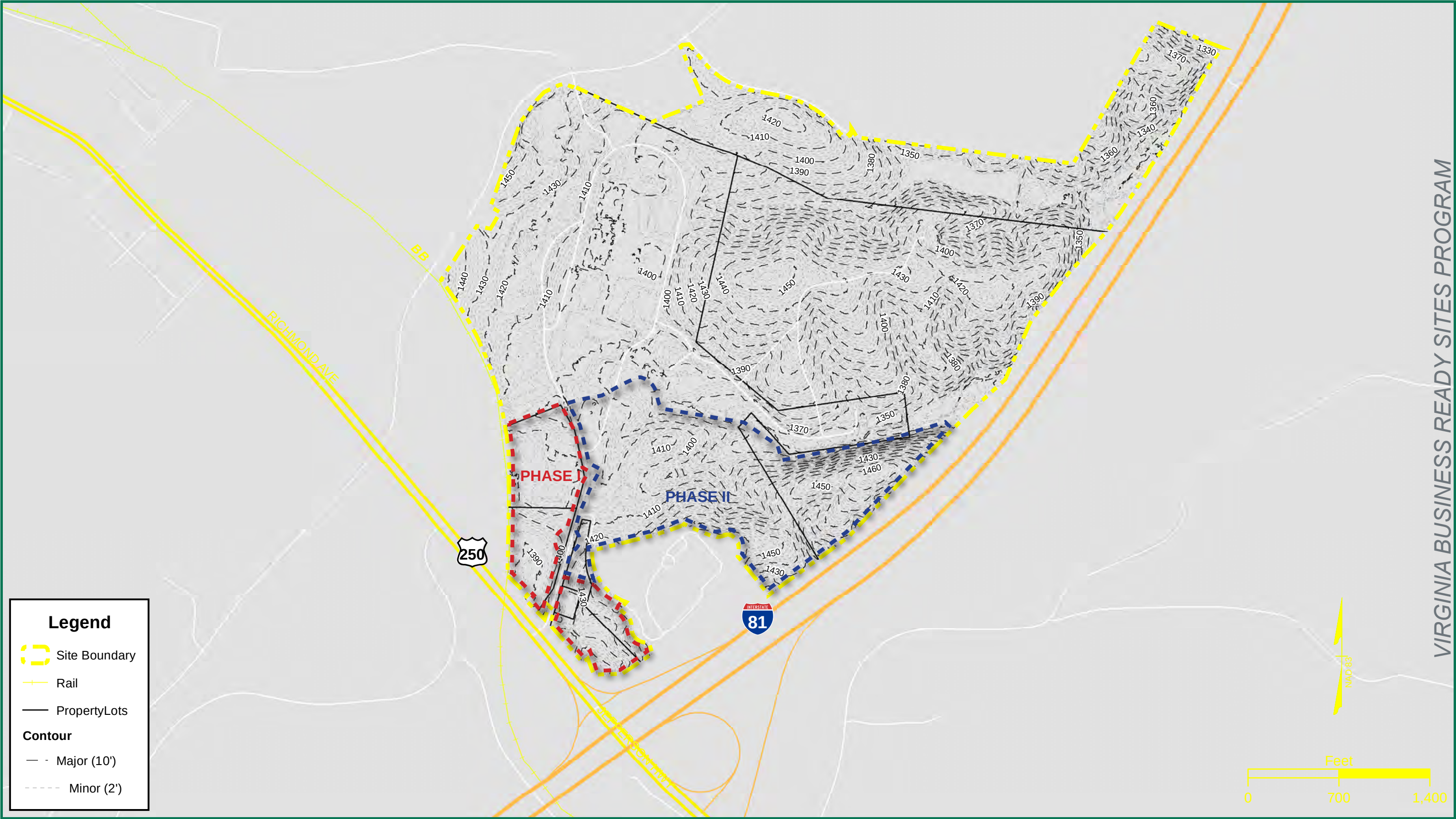
STAUNTON CROSSING SITE

CITY OF STAUNTON, VA - ENVIRONMENTAL

Aerial imagery data from VITA
Parcel, Zoning and utility data from Locality & Survey

Wetlands data from NWI
Floodplain data from FEMA

Road & Rail data from VGIN
Hydrology data from NHD

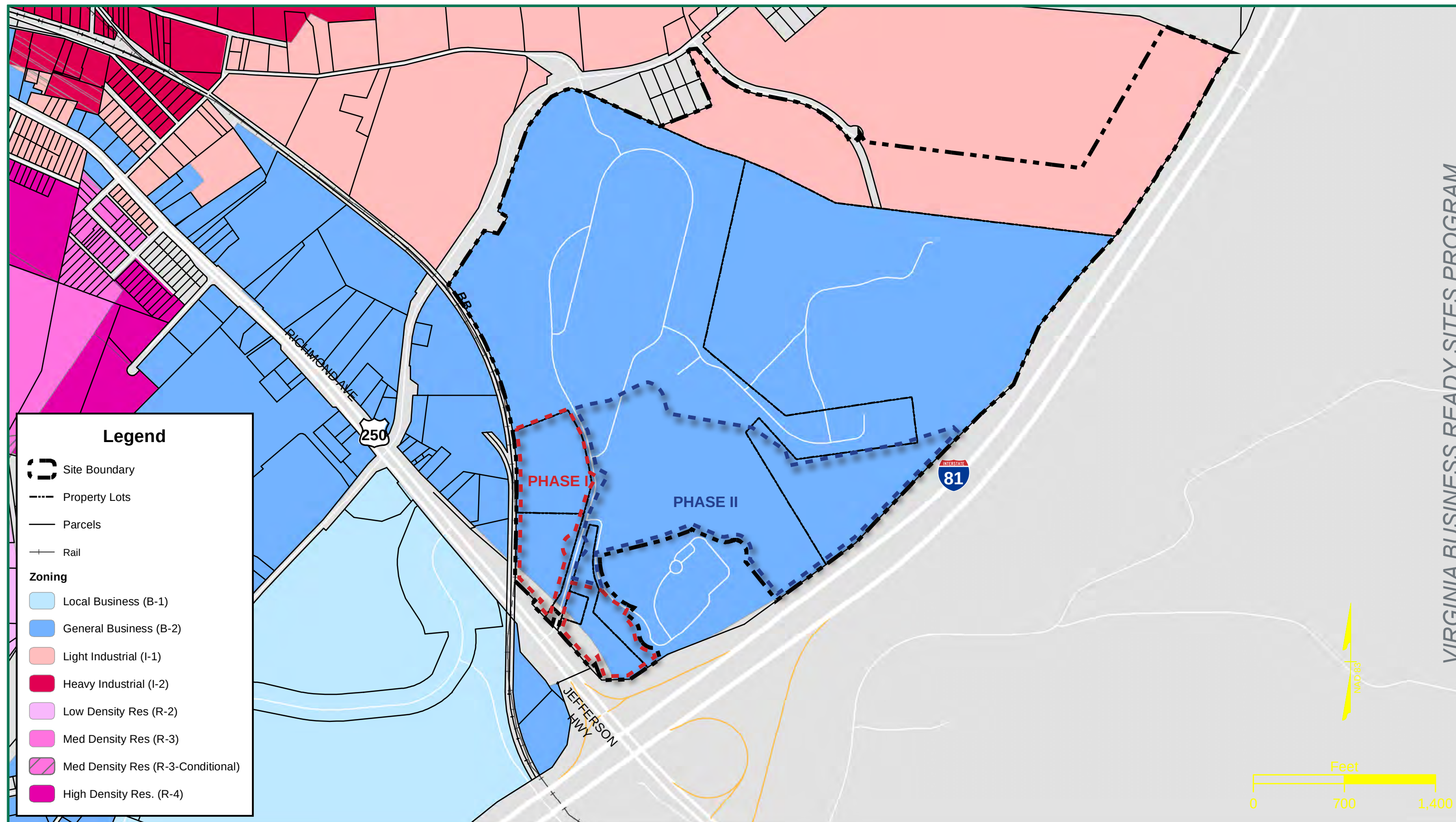


VIRGINIA BUSINESS READY SITES PROGRAM

STAUNTON CROSSING SITE

CITY OF STAUNTON, VA - TOPOGRAPHY

Parcel, Zoning and utility data from Locality & Survey Road & Rail data from VGIN Topographic data from VA LiDAR





STAUNTON CROSSING SITE

CITY OF STAUNTON, VA - UTILITIES

Parcel and utility data from Locality & Survey

Road & Rail data from VGIN

SITE CHARACTERIZATION TIER LEVEL RANKING CRITERIA

Site Characterization Tier Level Ranking Criteria

As summarized in the application, the Virginia Business Ready Sites Program (VBRSP) was established pursuant to § 2.2-2238 C. of the Code of Virginia of 1950, as amended, to identify and assess the readiness of potential industrial or commercial sites in the Commonwealth of Virginia for marketing for industrial or commercial economic development purposes. The first step in determining a site's readiness begins with an assessment to quantify the level of existing development and the additional recommendations to market the site for industrial or commercial economic development purposes.

Timmons Group relies on industry leading civil engineers and economic development professionals to carry out a strategic and complex evaluation of each site in order to determine the appropriate Site Characterization Tier Level Ranking as developed by Timmons Group, adopted by VBRSP and reiterated below:

Tier 1: *Site under (a) public ownership, (b) public/private ownership, or (c) private ownership which such private owner(s) agreeable to marketing the site for economic development purposes and to allowing access to the property for site assessment and marketing purposes, but at no established sales price.*

Comprehensive plan reflects site as appropriate for industrial or commercial development and use, but site is not zoned as such. Site has minimal or no infrastructure. Minimal or no due diligence has been performed.

Tier 2: *Site under (a) public ownership, (b) public/private ownership, or (c) private ownership with an option agreement or other documentation of a commitment by the private owner(s) to a competitive sales price, to permit access to the site for site assessment, construction, and marketing, and to market the site for industrial or commercial economic development purposes. Comprehensive Plan reflects site intended for industrial or commercial development and use, but site is not zoned as such and a rezoning hearing needs to be scheduled. Site has minimal or no infrastructure. Minimal or no due diligence has been performed.*

Tier 3: *Site is zoned for industrial or commercial development and use. Site has minimal or no infrastructure. Due diligence including, among other things, a wetlands survey with Army Corps of Engineers approval within the last five years, geotechnical borings, boundary and topographical survey, cultural resources review, an Endangered Species review, and a Phase I Environmental Site Assessment, has been completed. Estimated costs of development have been quantified.*

Tier 4: *All infrastructure is in place or will be deliverable within 12 months. All permit issues have been identified and quantified.*

Tier 5: *All permits are in place and the site is ready for a site disturbance permit from the locality in which the site is located.*

SITE EVALUATION & ANALYSIS QUESTIONNAIRE

Tier System Evaluation & Site Ranking

Site Evaluation and Analysis Questionnaire

Date: 1/31/2017

Locality: City of Staunton, VA (Economic Development Authority)

Site Name: Staunton Crossing

Property Address: 1249 Richmond Ave., Staunton, VA 24401

Contact Person & Information for Locality: William "Billy" Vaughn, Executive Director

Current Property Owner: Economic Development Authority of the City of Staunton

Current Contact Information for Property Owner: (540) 332-3869 vaughnwl@ci.staunton.va.us

Property Information:

Description	Answer	Comments
Overall Property Size (total acreage)	333 AC	
Largest Contiguous Parcel / Developable acreage*	100 AC 280 AC	approximated
Site Access (Main Road)	Route 250 – Richmond Ave.	
Closest 4 lane Highway (Route & Distance)	Route 250 – Richmond Ave. 0 feet	Intersection at entrance
Current Zoning	B-2 & I-1	
Enterprise Zone (Y/N)	No	
Technology Zone (Y/N)	No	
Rail Served Site (Y/N)	Yes	Need future spur
CC&R's in place	No	
Existing Building in Place (Y/N)	No	Will be demolished immediately
Size of Building	N/A	Multiple buildings at Hospital
Yr Building Constructed	N/A	
Verification of Property Control / Ownership	Provided	Publicly owned

* Developable acreage shall be defined as acreage minus wetlands, setbacks, easements and other site encumbrances.

SITE EVALUATION & ANALYSIS QUESTIONNAIRE

Due Diligence Items:

Description	Completed (Y/N)	Date Completed	Comments
Boundary Survey	Yes	2/28/2009	Entire site
Subdivision Survey	Yes	2/26/2016	Phase 1
Phase 1 ESA	Yes	8/31/2009	
Archeological Report (either Ph 1 or cultural resources report clearing the site)	No		
Threatened & Endangered Species Survey	No		
Preliminary Geotechnical report	No		
Topographic Survey (1' contours)	No		
Current Wetlands Delineation & COE Confirmation (w/in 5 yrs)	No		
FEMA Floodplain Map with site boundary or Floodplain Study (100-yr and/or 500-yr) & FEMA Approval	No		
Existing wetlands / stream permit with COE and/or DEQ	Yes	2016	For 25 AC Phase I area

Site Features (answer as best as possible):

Description	Answer	Comments
Maximum Elevation	1470	
Minimum Elevation	1325	
Ground cover (wooded, fields, etc.)	Mixed	Woods, fields, post developed
Slope Analysis / Topography (as percent of site)		
Flat (1-3% avg slope)	13%	
Gently sloping / rolling (3-5% avg slope)	11%	
Moderate sloping / rolling (5-10% avg slope)	25%	
Extensive terrain (10%+ avg slope)	51%	
Bodies of water present (streams, creeks, wetlands)	2 streams	w/ riparian buffers
In the flood zone (Y / N)	No	Zone X, area of minimal flooding
Easements / Right of ways identified	Yes	

SITE EVALUATION & ANALYSIS QUESTIONNAIRE

Basic Infrastructure Requirements

Wet Utilities:

Water Service Provider: City of Staunton (Public)

Contact Info (Name/Address/Phone): (540) 332-3860

City of Staunton Public Works, P.O. Box 58, Staunton, VA 24402-0058

Sewer Service Provider: City of Staunton (Public)

Contact Info (Name/Address/Phone): (540) 332-3860

City of Staunton Public Works, P.O. Box 58, Staunton, VA 24402-0058

Description	Answer	Comments
Water Service Provider	City of Staunton (Public)	
Water System Design Capacity	724,000 GPD	Based on PER
Current Water Usage (Avg Daily Flow & Peak)	N/A	
Water Capacity Available	724,000 GPD	
Water line size at site (or distance to site) / Available pressure	Two ex. 10" lines	Currently serving site, additional infrastructure needed
Nearest Water Tank / Size	1 mile, 200,000 Gallon	Due west of site @ Betsy Bell Rd.
Sewer Service Provider	City of Staunton (Public)	
Sewer System Design Capacity	724,000 GPD	Based on PER
Sewer Capacity Available	575,000 GPD	Based on PER
Sewer Line Size at site (or distance to site)	12" and 8"	

Dry Utilities:

Power Service Provider: Dominion Virginia Power

Contact Info (Name/Address/Phone): 1(866) 366-4357

P.O. Box 26666, Richmond, VA 23261

Telecom Service Provider(s): Verizon

Contact Info (Name/Address/Phone): Verizon 1(855) 391-9047

703-713 E. Grace St., Richmond, VA 23219

Natural Gas Provider: Columbia Gas of Virginia

Contact Info (Name/Address/Phone): 1(800) 543-8911

1809 Coyote Dr., Chester, VA 23836

SITE EVALUATION & ANALYSIS QUESTIONNAIRE

Description	Answer	Comments
Power Service:	Dominion Virginia Power	
Nearest Substation	Information unavailable	No info provided or not readily attainable
Nearest Transmission Line	Information unavailable	No info provided or not readily attainable
Transmission Line Size (kV)	Information unavailable	No info provided or not readily attainable
Existing Capacity	Information unavailable	No info provided or not readily attainable
Natural Gas:	Columbia Gas of Virginia	
Nearest Natural Gas Line / Size	10" and 2"	Existing on site
Telecom:	Verizon	
Nearest Fiber Optic Line	Information unavailable	No info provided or not readily attainable
Dark Fiber Available	Information unavailable	No info provided or not readily attainable

Engineering / Study Documents

Description	Completed (Y/N)	Date Completed	Comments
Site Master Plan	Yes	2016	PER
Traffic Studies / Assessments	Yes	2013	PER
Water & Sewer Studies / PER with cost estimates to provide service to the site	Yes	2016	PER
Stormwater Studies / PER	Yes	2016	Master plan only
Grading Cost Estimates	No		
Road & Entrance Design	Yes	2016	Ph. I constructed, extension to Valley Center Drive master planned
Water & Sewer Design	Yes	2016	Ph. I constructed
Other Engineering & Study Documents?			

DATA SOURCE INFORMATION SUMMARY

Data Layers	Source Description
Site Boundary	<i>Created from a CAD Drawing File</i>
Parcels	<i>City GIS Layers (2016)</i>
Zoning	<i>City GIS Layers (2016)</i>
County Boundary	<i>Virginia Geographic Information Network (State)</i>
Waterlines	<i>Field Survey GIS Layers from City (2016)</i>
Sewerlines	<i>Field Survey GIS Layers from City (2016)</i>
Wetlands	<i>National Wetlands Inventory (State)</i>
Floodplains	<i>Federal Emergency Management Agency (State)</i>
Topo	<i>LiDAR Generated (VA LiDAR - 2012 - 2' Contours)</i>
Roads	<i>Virginia Geographic Information Network (State)</i>
Rails	<i>Statewide</i>
Slope	<i>LiDAR Generated (VA LiDAR - 2012 - 2' Contours)</i>
Streams	<i>National Hydrology Dataset (State)</i>
Waterbodies	<i>National Hydrology Dataset (State)</i>
Rivers	<i>National Hydrology Dataset (State) - None on-site</i>
Aerial	<i>VITA Most Recent Imagery (REST)</i>

Notes:

APPENDIX F – TIER 4 SERVICES

LAND SURVEYING SERVICES

8-10 WEEKS FOR COMPLETION

APPROXIMATE COST – \$65,180

Objective of the following scope is to provide land survey services for support of planning and design effort for further development of the Staunton Crossing project area, consisting of approximately 340 Acres generally located north of Richmond Avenue at the eastern extents of the City limits, and adjacent to the west line of the I-81 corridor. Area of focus reaches from the current retail gateway along Richmond Avenue north to existing Valley Center Drive, and includes a proposed connecting road corridor between these existing access routes. Portions of the site contain remnant structures of the former Western State Hospital facility, which are proposed to be demolished and removed.

S01: Boundary Survey – Total Fee \$24,700

Timmons Group will perform a Boundary Survey of multiple parcels of land comprising the Staunton Crossing site and generally bound by the current extent of Crossing Way and the Commonwealth Center for Children & Adolescents to the South, CSX Railway, North Frontier Drive, and National Avenue to the west, Valley Center Drive and lands of the Commonwealth of VA (new Western State) to the north, and I-81 to the east. Parcels to surveyed include the following:

Primary Site Parcels in the name of 'Economic Development Authority of the City of Staunton:

<u>City Parcel ID</u>	<u>Address</u>	<u>Area +/-</u>	<u>Zoned</u>
12412	1249 Richmond Avenue	196.261 AC.	B-2
12411	100 N. Frontier Drive	79.646 AC.	B-2
9533	102 Valley Center Drive	17.109 AC.	I-1
12417	109 Valley Center Drive	0.16 AC.	I-2

Smaller, Incidental Parcels along National Avenue, as follows:

<u>City Parcel ID</u>	<u>Owner</u>	<u>Address</u>	<u>Area +/-</u>	<u>Zoned</u>
10168	Mykel Nutty	302 National Ave.	0.52 AC.	B-2
10163	Mykel Nutty	302-A National Ave.	0.52 AC.	B-2
10160	Cheri Lyn Nutty et al	304 National Ave.	0.55 AC.	B-2
10174	Cheri Lyn Nutty et al	304-A National Ave.	0.52 AC.	B-2
10170	Cheri Lyn Nutty et al	306 National Ave.	0.55 AC.	B-2
10165	Cheri Lyn Nutty et al	306-A National Ave.	0.52 AC.	B-2
10171	Cheri Lyn Nutty et al	308 National Ave.	0.73 AC.	B-2
10158	Cheri Lyn Nutty et al	308-A National Ave.	0.61 AC.	B-2
10172	Mykel A. Nutty et al	300 National Ave.	2.50 AC.	B-2

Basis of datum will be NAD83 (NA 2011) / NAVD88, checking and/or matched to City monuments, as feasible.

Boundary: Effort will adhere to Virginia DPOR 18VAC10-20-370 standards with regard to boundary survey procedures. Fee includes initial land record and roadway plan research relative to subject and adjoining parcel boundaries. Research of easements affecting the site will also be performed in conjunction with boundary and ownership research. It is the recommendation of this scope that an 'ALTA / NSPS Land Title Survey' (ALTA) be performed subsequent or simultaneous to this proposed boundary survey task (See Task S04 below). If ALTA survey is not performed incidental to the

boundary survey, it is recommended that a title report be provided for complete representation of encumbrances relative to the subject parcels; in lieu of a title report, no guarantee can be provided that all encumbrances affecting the site are presented. All boundary data will be exhibited within the proposed design survey mapping for appropriate exhibition. Any missing corner monumentation shall be set.

S02: Topographic Survey of Site w/ Aerial LiDAR – Total Fee \$12,960

Timmons Group will provide (aerial) topographic survey via aerial photo and LiDAR capture of the complete site with appropriate overlap of parcel boundaries (25' ±). The aerial LiDAR component refers to the use of an airborne, calibrated laser performing terrain range and bearing measurement yielding high-accuracy data. Basis of datum will be NAD83 (NA2011), NAVD88 with ground control established through installation of ground targets and double observation utilizing GPS RTK (or Fast-Static, post-processed GPS, dependent upon site conditions) . Additional flight parameters as follows:

- Simultaneous digital stereo aerial photo + LiDAR acquisition
- 1 foot contour interval with DTM
- Planimetrics and topographic mapping at scale of 1"=50'
- Color digital orthoimagery @ 0.25' resolution

In addition to the overlap noted, data capture will include key primary roadways where fronting or adjoining the site parcel, for access considerations, and being Valley Center Drive and North Frontier Drive / National Avenue. The existing traffic circle and areas north along the existing road corridor will also be included in the proposed mapping. See attached 'Figure A' for overview of topographic extents.

S03: Supplemental Topographic / Field-Location Survey – Total Fee \$20,700

Within this task, Timmons Group will perform thorough site review and provide supplemental, field-run survey of any areas which may require additional detail or clarification beyond aerial capture. These areas may include the following features incidental to the design corridor:

- Proposed roadway connection points;
- Proposed stream or waterway crossings;
- Existing storm and sanitary structures/facilities;
- Above-ground utilities not captured or obscured from aerial mapping;
- Underground utility features at surface (water valves, Gas witness markers, etc.);
- Underground utility features as-marked by Miss Utility via 72 Hr. / 811 ticket**;
- Areas deemed obscured from aerial mapping, if any.

Effort considers site investigation following receipt of aerial mapping and may also rely on direction from design team with regard to any specific or known site constraints.

** In order to understand impacts of existing underground utilities, Timmons Group will coordinate marking of utilities via Miss Utility ticket requests.

Note: Underground Utility Designation (SUE) is not presented within this scope due to complexities of existing but abandoned infrastructure at the vacant Western State facility and/or with the assumption that the abandoned systems may have been previously considered,

*understood, and mapped concurrent to past demolition plan efforts. Formal SUE **can** be provided upon request, if needed.*

S04 : 'ALTA / NSPS Land Title Survey' – Total Fee \$6,820

Timmons Group will prepare an 'ALTA / NSPS Land Title Survey' plat of the above-referenced parcels, as listed in the above Task S01. Survey will be based on the current 2016 'Minimum Standard Detail Requirements for ALTA / NSPS Land Title Surveys' and will conform to Table A items contained therein, as follows: 1, 2, 3, 4, 6(a-b)*, 8, 9, 11**, 13, 14, and 16. Table A, Item 5 (topography, site relief) may be included in the Table A contingent upon authorization of the optional 'Task S02 Topographic Site Survey'. Any specific Table A items required by client or client's representatives can be included upon request, but contingent upon consideration of impact to fee outlined.

**Please note that Table A, Item 6(a-b) addresses listing and graphic depiction of zoning details and setbacks, respectively, and that provision of a zoning report by the client will be necessary. Date and source of report is required.*

***Table A, Item 11 addresses location of existing utilities. A Miss Utility locate ticket will be initiated prior to initial site visit, and utilities will be located as marked. Utilities deemed private and/or not marked cannot be located. Effort will include review of site areas for surface indication of utilities (and connections along or adjoining public roads). No guarantee can be provided that all underground utilities can/will be located.*

PRELIMINARY GEOTECHNICAL REPORT

5-6 WEEKS FOR COMPLETION

APPROXIMATE COST – \$18,000

Our proposed scope of preliminary geotechnical services will consist of subsurface exploration, performance of laboratory testing on representative soils, and preparation of a preliminary geotechnical engineering report. The exploration will consist of widely-spaced borings in order to provide preliminary site grading and preliminary building support recommendations. The exploration will not be sufficient to provide design-phase recommendations. Our assumptions and proposed tasks are discussed below.

Assumptions

The following assumptions have been made regarding fieldwork. If these assumptions are not correct, we request the opportunity to revise our scope and fee prior to authorization.

- We assume the fieldwork can be conducted during the normal business hours of 7:30 AM to 6 PM and on weekdays.
- We assume there are no private underground utilities at the site.

Field Exploration

The field exploration will consist of the following:

- A geotechnical professional will perform a site reconnaissance and locate borings in the field using GPS equipment.
- We will contact MISS Utility to mark existing underground utilities near boring locations. We assume there are no private underground utilities at the site.
- Perform twenty (20) Standard Penetration Test (SPT) borings with a mechanical drill rig in accordance with ASTM D1586. Borings will be performed to depths of 20 feet, or auger refusal, whichever occurs first. Boring depths are referenced to the existing ground surface. Total proposed drilling is 400 feet.
- Within borings, split-spoon samples will be collected in conjunction with SPT testing. Split-spoon samples will be collected at 2-foot depth intervals in the top 10 feet and at 5-foot intervals thereafter.
- Upon completion of borings, borehole water levels will be recorded, and the boreholes will be backfilled with drill cuttings up to the original ground surface. Soil samples will be returned to our office for visual classification and laboratory testing. Excess soil cuttings will be spread on the ground surface.
- The site appears to have been clear cut in recent years and likely has relatively new and dense vegetative growth. We expect that some of the borings can be performed along existing trails, however we expect a bulldozer will likely be needed to clear access to borings in heavily vegetated areas.

Laboratory Testing

We will perform laboratory testing on representative split-spoon soil samples for the purpose of classifying the soils and estimating geotechnical engineering properties. We plan to perform Atterberg limits, grain size analyses, natural moisture content, Standard Proctor, and CBR tests.

Preliminary Geotechnical Engineering Report

A preliminary geotechnical engineering report will be prepared based on performed borings, laboratory testing, and our engineering analysis. The report will include the following:

- Site plan showing borings locations of the exploration.
- Description of the exploration sampling methods as well as soil test boring logs.
- Water levels encountered in the borings.
- Depths to auger refusal, if encountered.
- Laboratory test results
- Depth and location of unsuitable materials, if encountered in borings.
- Preliminary foundation recommendations for anticipated structures on the site. We expect future structures on the site could range from single-story to multi-story buildings.
- General information regarding site preparation including re-use of on-site soils as fill, identification of deleterious soils encountered in the borings, impact of weather and construction equipment on grading, fill compaction recommendations, and preparation of soil subgrades.
- Seismic site classification recommendation in general accordance with the current International Building Code.

PRELIMINARY TRANSPORTATION ENGINEERING

2-3 WEEKS FOR COMPLETION

APPROXIMATE COST – \$7,500 to \$10,000

The scoped traffic work is being provided in support of the revised master plan for the Staunton Crossing Business Park. It is anticipated that this work will identify potential geometric improvements, and associated costs, related to the currently proposed land uses and conceptual site plan. The following tasks are associated with this work:

- Review the traffic assessment that was previously prepared (2013) for the Staunton Crossing Business Park.
- Review the traffic assessment that was prepared for the commercial portion of Staunton Crossing Business Park in 2016 by Ramey Kemp & Associates.
- Prepare trip generation estimates for the current master plan using the most current plan provided by the design team and information from the Institute of Traffic Engineers (ITE) Trip Generation Manual, 10th Edition.
- Distribute site-generated traffic onto the adjacent existing road network based on the proposed internal road network, location/function of the land bays, and proposed tie in points.
- Compare projected site and total traffic volumes for the current master plan against those that were previously prepared.
- Evaluate the appropriateness and need of previously identified road improvements and revise recommendations for geometric improvements accordingly.
- Prepare preliminary, planning level cost estimated for identified geometric improvements.
- Prepare a technical memorandum that summarizes the assumptions, approach, findings, and recommendations associated with the revised Staunton Crossing Business Park master plan.

VDOT 527 TRAFFIC IMPACT STUDY

4-6 MONTHS FOR COMPLETION

APPROXIMATE COST – \$35,000 to \$45,000

VDOT requires any rezoning of property that increases traffic by 5,000 VPD to incorporate a Chapter 527 Traffic Impact Analysis (TIA) that provides information to the locality as to the impact of the land-use decision. It is not clear until the time of rezoning whether the recent road design and traffic studies already administered will serve as sufficient. If required as the project proceeds to rezoning, the completion of a Chapter 527 will require the following:

- Preparation and submittal of scoping documents.
- Attendance at a scoping meeting to agree upon study intersections and parameters.
- Collecting new traffic data at the study intersections.
- Analysis background and total/buildout conditions for multiple years.
- Preparing a VDOT compliant TIA and addressing subsequent comments.
- Assumption that ten (10) intersections will be required for study

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

4-6 WEEKS FOR COMPLETION

APPROXIMATE COST – \$21,800

Phase I Environmental Site Assessment (ESA) - Total Fee \$4,000

Timmons Group will perform a Phase I Environmental Site Assessment in full compliance with the scope and limitations of the American Society of Testing and Materials (ASTM) Standard Practice E 1527-05. Any deviations from this Standard Practice will be noted and explained in the report. Timmons Group will order and review reasonably ascertainable environmental regulatory database information and historical information per the American Society of Testing Materials (ASTM) Standard E 1527-05 prior to the site reconnaissance. If facilities/areas of environmental concern are identified on the database report(s) and/or historical information which may include, but is not limited, to historic topographic maps and historic aerial photography, these facilities/areas will be inspected more intensively during the site reconnaissance.

Site reconnaissance will be conducted and will consist of walking the perimeter of the property to make note of the subject property and adjoining properties' uses. The interior of the property will be inspected by walking transects across the property. In addition, interiors of any existing buildings (if accessible through arrangements with the client) will be inspected to identify recognized environmental conditions and/or areas of potential environmental concern. Recognized environmental conditions and areas of potential environmental concern will be documented photographically.

In addition, records on file with the Virginia Department of Environmental Quality and/or the locality for facilities with recognized environmental conditions or with areas of potential environmental concern will be reviewed and risk(s) associated with these facilities will be assessed, if reasonably ascertainable.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by CERCLA, the user or party seeking to use Practice E 1527-05 must complete the ASTM E1527-05 User Questionnaire provided by Timmons Group. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete and forfeiture of CERCLA protection.

An environmental liens search must be completed for the subject property. An environmental lien is a charge, security or encumbrance on title to a property to secure the payment of a cost, damage, debt obligation or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum projects. Environmental liens searches can be conducted by the user or Timmons Group.

Interviews with the objective to obtain information indicating recognized environmental conditions in connection with the property will be conducted with the present owner, the user and one or more state and/or local agency officials. If the present owner has owned the property for two (2) years or less, an interview will be conducted with past owner. Additional interviews may be conducted with past owners, occupants, key site managers/operators and neighbors. Interviews will be conducted with those people that are reasonably ascertainable.

Upon completion of the site reconnaissance, file reviews, and interviews, a report of the findings of the Phase I ESA will be prepared in accordance with ASTM E 1527-05. Included within the Phase I ESA report will be recommendations for additional investigations such as a Phase II Environmental Site Assessment, if warranted.

The performance of this Phase I Environmental Site Assessment specifically excludes any subsurface investigations, lead-based paint inspections, asbestos inspections, mold inspections, radon investigations, chain-of-title reports/investigations, cultural resources investigations, or any sample collection and analysis.

THREATENED & ENDANGERED SPECIES REVIEW

6 WEEKS FOR COMPLETION
APPROXIMATE COST – \$1,500

Threatened and Endangered Species Review - Total Fee \$1,250

Timmons Group will utilize spatial dataset information from the Wildlife Environmental Review Map Service (WERMS) to provide additional information on critical wildlife resources for managing risk as it relates to threatened and endangered species. The WERMS data will be used to load project shapefiles into the system and place a 2 mile offset of the project boundary to extract specific species and other feature class information that is provided by the WERMS service. Timmons Group will coordinate with the Department of Conservation and Recreation's Division of Natural Heritage (DCR) for a review of its Biotics Data System for occurrences of natural heritage resources within and in the vicinity of the project area. Natural Heritage Resources are defined as habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations. A processing fee of \$125 is required for this service and has been included in the fee provided above. Timmons Group will also incorporate VAFWIS and IPAC search information to generate a memorandum report which encompasses all potential Flora and Fauna that may affect the project. Recommendations for mitigating any potential species that may affect the project will be included in the memorandum report.

CULTURAL RESOURCES STUDY

4 WEEKS FOR COMPLETION
APPROXIMATE COST – \$1,000

Cultural Resource Review - Total Fee \$750

Timmons Group will conduct a Virginia Department of Historic Resources (VDHR) cultural and historical resources data search and compile the information into a Memorandum Report. This information will be utilized to help determine appropriate actions necessary for further Architectural and Archeological analyses that may be required for on-site development.

WETLANDS DELINEATION AND COE CONFIRMATION

4-6 WEEKS FOR COMPLETION

APPROXIMATE COST – \$1,000

Wetland Delineation - Total Fee \$5,500

Timmons Group will review existing, readily obtainable environmental information on the site such as USGS mapping, aerial photography, NWI mapping and soil survey information. A wetland delineation of the subject property will be performed in accordance with the 1987 U.S. Army Corps of Engineers (COE) Wetland Delineation Manual and appropriate Regional Supplement. The flagged wetland limits will be GPS located for mapping purposes (Note that this GPS location is for confirmation and planning purposes and is not a substitute for traditional field survey and that in the event wetlands and streams may be impacted by the project the limits should be located by traditional survey means). A preliminary wetland delineation map showing the approximate size, shape and location of wetlands and or waters of the U.S. present on the subject property will then be prepared.

Wetland Confirmation - Total Fee \$3,800

Timmons Group will facilitate the confirmation of wetland locations through wetland flagging and submittal of a Jurisdictional Determination (JD) package to the U.S. Army Corps of Engineers (COE). This package will consist of a narrative, wetland delineation map and wetland delineation field data sheets. Timmons Group will conduct a site visit with the COE to review the site conditions, flagged wetland limits and confirm findings. A Jurisdictional Determination (JD) letter for the wetland delineation will be obtained from the COE.

WETLAND IMPACT PERMITTING W/ MITIGATION

4 MONTHS FOR COMPLETION

APPROXIMATE COST – \$7,000

Wetland Impact Permitting (17-SPGP-01 Permit)

Timmons Group will prepare Joint Permit Application (JPA) Package to gain project authorization under the requirements of a State Programmatic General Permit (12-SPGP-01) for submittal to the Virginia Department of Environmental Quality (DEQ), the U.S. Army Corps of Engineers (COE), and the Virginia Marine Resources Commission (VMRC). The JPA will provide a narrative description that depicts the purpose and need for the proposed project, describes the alternatives considered, and justifies the jurisdictional impacts associated with the project. Exhibits that depict the proposed jurisdictional impacts associated with the project and a detailed impacts summary for the proposed project will be included in the JPA Package. Unified Stream Methodology (USM) Assessments to quantify the compensation requirements for proposed stream impacts will be conducted for inclusion and discussion in the JPA as needed. Analysis of mitigation alternatives sufficient to satisfy the compensatory mitigation requirements to support the project commensurate with permit requirements will be provided. Responses to Requests for Additional Information (RAI) will be prepared to answer any questions posed by the regulatory agencies during their consideration of the JPA. Negotiation of SPGP issuance will be undertaken to gain regulatory approval of the project. The fee provided above assumes impacts will be less than 1/10th acre of wetland impact and less than 300 linear feet of stream impact.

STORMWATER/ENVIRONMENTAL SERVICES

8-10 WEEKS FOR COMPLETION

APPROXIMATE COST – \$150,000

The purpose of the following scope is to support efforts to advance the Staunton Crossing site from a current stage of Tier 2 readiness toward a Tier 4 stage of site readiness.

Task 1 – Desktop Site Assessment of Existing Conditions, Natural Resources, and Hydrology – Total Fee \$100,000

We will study pre-development land cover conditions, soils, drainage patterns, hydrology, karst mapping, and latest available wetland inventory, as well as any additional readily available GIS data either available in Timmons Group's data repositories, publicly available national datasets, and/or data provided by the City of Staunton. The purpose of the exercise is to develop pre-development hydrology, site outfalls, potential natural resource constraints, and base mapping.

Task 2 – Preliminary VRRM Compliance Calculations.

We will analyze the proposed Staunton Crossing Master Plan from this report to determine strategies to minimize stormwater compliance impacts on future development. We will assume that ultimate site conditions will closely mimic existing drainage patterns for the purposes of minimizing earthwork; however, we recognize the ultimate site topography will be dependent on the final site layouts for the various programmatic categories of ultimate use, i.e., industrial, data center, office complex, etc. Proposed planning level VRRM compliance calculations will be performed based on categories of proposed ultimate development conditions in segmented planning blocks to provide the City with flexibility in stormwater management compliance options. All calculations will be based on Part IIB of the current VA Stormwater Management Regulations, established in 2011 and the current General Construction Permit established in 2014, or 2019, whichever is in effect at the time of Notice to Proceed.

Task 3 – Environmental Strategies.

Based on the results of Tasks 1 and 2, we will prepare detailed strategies to minimize the impact on final tenants to address the Virginia Stormwater Management Regulations. The deliverable will be an Environmental Strategies Guidance document, which will include planning level construction cost implementation data and detailed strategies for complying with VSMP requirements. This task will include submission to the Client for review, draft revisions, presentation to stakeholders, and a final recommendation that will inform a Comprehensive Stormwater Management Plan.

Task 4 – Comprehensive Stormwater Management Plan.

Once the City has provided feedback on appealing environmental strategies outlined in the Guidance document (deliverable of Task 3), we will prepare a Comprehensive Stormwater Management Plan. The Comprehensive Stormwater Management Plan will be presented to Stakeholders for review and approval, prior to engaging the permitting authorities and oversight agencies, i.e., City VSMP staff and DEQ. As defined in the Virginia Administrative Code, 9VAC25-

870 Part I, a “comprehensive stormwater management plan” means a plan, which may be integrated with other land use plans or regulations, that specifies how the water quality components, quantity components, or both of stormwater are to be managed on the basis of an entire watershed or a portion thereof.” The Comprehensive Stormwater Management Plan must be approved by DEQ. If assumptions included in the Comprehensive Stormwater Management Plan change as the site is developed, the plan shall be updated accordingly, and the amendments submitted to the Department (DEQ) for review and approval. Updates and amendments are excluded from this scope but can be addressed at the client’s request.

Task 5 - Floodplain Study – Total Fee \$50,000

The following subtasks will be performed to develop the existing 100-yr floodplains across the site using best available topography:

Task 5A: Hydrologic Analysis

Develop frequency discharges for the 100-year storm for the existing stream channels that run through the project site. Discharge rates will be calculated using the SCS TR55 method.

Task 5B: Hydraulic Analysis

A HEC-RAS steady flow model will be developed to determine the floodplain limits. Manning’s “n” values will be developed using aerial imagery. A model will be developed to delineate the floodplains that currently impact the site. This scope and fee does not include performing field survey work for the channel cross sections, or any culverts/bridges located within the study area.

Task 5C: Floodplain Mapping

Plot the water surface elevations obtained from the water surface profiles on the existing site and GIS topography to illustrate the limits of the 100-year floodplain across the site.

Task 5D: Prepare a Technical Support Data Notebook (TSDN)

We will prepare a Technical Support Data Notebook (TSDN), to include all supporting data used to develop the floodplain mapping.

Note:

- The scope of this work is limited to one iteration of programmatic site layout but will be flexible enough to allow for various detailed configurations as design and development. Major assumptions of final land use and character will be made based on the initial proposed Master Plan and existing drainage patterns.

INFRASTRUCTURE DESIGN SERVICES

WATER SYSTEM DESIGN \$98,000

WASTEWATER SYSTEM DESIGN \$77,000

WATER TANK DESIGN \$270,000

PUMP STATION DESIGN \$87,500

To ensure the best opportunity to attract prospects, it is important that all utility infrastructure be designed and ready for construction. Constructability in 12-18 months is crucial to the success of Staunton Crossing, therefore designs, including all associated agency permits, should be completed and ready for construction when the opportunity presents.

Timmons Group will provide the following scope of services under this proposal for comprehensive water and sewer design services for the Staunton Crossing Development: It is important to note that services such as geotechnical, survey, etc. are required specifically for the infrastructure projects and are not part of services provided in other scope descriptions in this Appendix.

Survey Services

Provide survey services necessary for completion of utility infrastructure design to include the following:

- Property research and mapping where utilities will be in proximity of property limits;
- Supplemental field topo and mapping (at connections to existing utilities and streams);
- Underground utility designation (SUE) and survey/mapping of utility paint;
- Staking bore locations for geotechnical work, and
- Utility easement and dedication plats for water & sewer facilities.

It is assumed that an aerial topographic survey will be prepared for the entire Staunton Crossing Project site. This survey will be used as the basis of developing construction drawings. The aerial survey will be supplemented as indicated above.

Geotechnical Services

Karst Investigation: According to USGS mapping of the site, areas of potential karst (e.g., possible sinkholes or rock solution channels) have been documented in the site vicinity. An investigation to identify karst features must be included in the geotechnical investigations in order to make proper allowances during foundation designs and siting of structures.

Field Exploration

Perform geotechnical field investigations to include but not limited to the following:

- Perform borings of a depth and number as required to make recommendations for foundation designs for Elevated Water Storage Tank and Wastewater Pump Station;
- Measure depth of groundwater at each site;
- If encountered, perform rock sampling at each site at a sufficient depth to determine characteristics of rock materials.

Laboratory Testing

- Perform laboratory testing on representative soil and rock samples for the purpose of classifying the soils and estimating geotechnical engineering properties.
- Perform Atterberg limits, grain size analyses, natural moisture contents, Standard Proctor tests on soil samples;
- Perform unconfined compression strength testing of representative rock core samples.

Geotechnical Engineering Report

A geotechnical engineering report must be prepared based on performed borings, laboratory testing, and engineering analysis. The report must include the following:

- Site plan showing borings locations of the exploration.
- Description of the exploration sampling methods as well as soil test boring logs and rock core logs.
- Water levels encountered in the borings.
- Laboratory test results
- Depth and location of unsuitable materials, if encountered in borings.
- General information regarding site preparation including re-use of on-site soils as fill, identification of deleterious soils encountered in the borings, impact of weather and construction equipment on grading, fill compaction recommendations, and preparation of soil subgrades.
- Foundation recommendations for the proposed elevated water storage tank and pump station structure, including foundation type, embedment, and allowable capacity.

Environmental Services

Provide environmental field investigations and permitting as required to have all construction activities approved for construction. These permits include but are not limited to the following:

- Wetland impact permitting
- Virginia Stormwater Management Program (VSMP)

Water System Modelling

- Prepare a water system model for the Staunton Crossing Development that will be utilized to determine the necessary design pressure / capacities of the system and set the elevation of the Elevated Water Storage Tank.
- Water system model program shall be consistent with the City of Staunton water system model.

- Perform hydrant testing necessary to confirm and calibrate model at the appropriate tie-in points for the City system.

Water Distribution System Design

- Prepare 100% complete Design Drawings, Technical Specifications and Division 1 Contract Documents for water distribution infrastructure. These documents are intended for contract bidding purposes.
- Design shall adhere to Virginia Department of Health (VDH) regulations.
- Obtain approvals from all applicable regulatory agencies.
- Make interim submittals to stakeholders as the project progresses to seek input on design and conformance with the goals of the project.
- Prepare Opinion of Probable Construction Costs (OPCC).

Elevated Water Storage Tank Design

- Prepare 100% complete Design Drawings, Technical Specifications and Division 1 Contract Documents for a 1,000,000 Gallon capacity Composite Style Elevated Water Storage Tank to include an alternative design for a 500,000 Gallon capacity tank at the same site for the purpose of bidding and constructing the project. These documents are intended for contract bidding purposes.
- Design shall adhere to AWWA D100 guidelines and the Virginia Department of Health (VDH) regulations.
- Obtain approvals from all applicable regulatory agencies.
- Make interim submittals to stakeholders as the project progresses to seek input on design and conformance with the goals of the project.
- Prepare Opinion of Probable Construction Costs (OPCC).

Wastewater System Modeling

- Prepare sewer capacity model of offsite gravity sewer extending from the northeast edge of Staunton Crossing Development to the Lewis Creek main trunk sewer.
- Perform field survey to locate sanitary manholes within the study limits and measure pipe invert depths within the study limits, for manholes in which as-built information is not available.
- Analyze several flow scenarios, including existing flows, theoretical capacity, and surcharging/overflowing conditions. Flows should be incrementally increased in subsequent model simulations to determine sewer capacity and surcharging/overflowing conditions.
- Prepare a report that summarizes the modeling effort and presents results in both tabular and graphic Hydraulic Grade Line (HGL) format. Report will indicate design flow thresholds at which improvements will be required to convey design flows to the main trunk sewer.

Wastewater Pump Station Design

- Prepare 100% complete Design Drawings, Technical Specifications and Division 1 Contract Documents for a wastewater pump station. These documents are intended for contract bidding purposes.
- It is anticipated that this station will use self-priming suction lift pumps and controls such as manufactured by Gorman-Rupp; with a pre-cast concrete wetwell, an enclosure consisting of a pre-cast concrete building, and a generator with sound attenuating weather proof enclosure.
- Design shall adhere to Virginia Department of Environmental Quality (VDEQ) regulations.
- Obtain approvals from all applicable regulatory agencies.
- Make interim submittals to stakeholders as the project progresses to seek input on design and conformance with the goals of the project.
- Prepare Opinion of Probable Construction Costs (OPCC).

Wastewater Collection System Design

- Prepare 100% complete Design Drawings, Technical Specifications and Division 1 Contract Documents for a wastewater collection infrastructure. These documents are intended for contract bidding purposes.
- Design shall adhere to Virginia Department of Environmental Quality (VDEQ) regulations.
- Obtain approvals from all applicable regulatory agencies.
- Make interim submittals to stakeholders as the project progresses to seek input on design and conformance with the goals of the project.
- Prepare Opinion of Probable Construction Costs (OPCC).

Program Management / Project Coordination Services

Provide program management and project coordination throughout the design development of the project. Services shall include coordination and communication with City, EDA, VDOT and other related staff throughout the design development of this project and shall run concurrent with design services.

Coordination of Utility Design with SMART SCALE Road Project

Coordinate the design of water and wastewater infrastructure in proximity to the proposed SMART SCALE project with the VDOT and their Engineer. Review design of the SMART SCALE project for consistency with the vision and goals of the Staunton Crossing Development master plans. This work would include attending design coordination meetings with VDOT and/or the EDA as well as providing design reviews at various milestones in the SMART SCALE project development process.

APPENDIX G – ZONING DISTRICT INFORMATION

Chapter 18.83

ENTRANCE CORRIDOR OVERLAY DISTRICT

Sections:

- 18.83.010 Intent.**
- 18.83.020 Purpose of the district.**
- 18.83.030 Applicability.**
- 18.83.040 Approval required.**
- 18.83.050 Approval process.**
- 18.83.060 Development plan review process.**
- 18.83.070 Appeals.**
- 18.83.080 Use limitations.**
- 18.83.090 Design standards.**
- 18.83.100 Severability.**
- 18.83.110 Effective date.**

18.83.010 Intent.

The entrance corridor overlay district is intended to implement the city of Staunton's comprehensive plan's goal of protecting the city's natural, scenic, historic, architectural and cultural resources. This chapter meets the comprehensive plan's goal by protecting and promoting the unique characteristics of the city's natural and built environment leading into the historic districts through assuring site and building design reflecting the natural, scenic, historic, architectural, and cultural resources within view of each corridor. Establishing design standards within this chapter and providing design guidelines for each corridor ensures the compatibility of development, redevelopment, and adaptive reuse proposals with the resources identified in the comprehensive plan, promoting the general welfare of the community by creating attractive human-scaled environments; increasing commerce; improving property values; and increasing public awareness of the natural, scenic, historic, architectural, and cultural resources near and outside the historic preservation districts.

Regulation and guidance of corridor development includes but is not limited to: reducing impacts from development on existing land forms and other natural resources; promoting corridor development design compatible with nearby historic, architectural and cultural

resources; providing pedestrian and vehicular connections from parcel to parcel; improving pedestrian and vehicular connections within each parcel; reducing the prominence of parking lots on the corridors; increasing site plantings; establishing reciprocity between building and site design; fully integrating utilities into building and site structures; regulating the size, intensity, and placement of signs and lighting; and assuring provisions for storm water management are well integrated into site architecture. (Ord. 2008-09).

18.83.020 Purpose of the district.

The entrance corridor overlay district is created for the purpose of providing special regulations in given designated areas of the city to accomplish the intended purposes set forth above. The entrance corridor overlay district shall be in addition to, and shall overlap and overlay, all other zoning districts so that any parcel of land lying in the entrance corridor overlay district shall also lie in one or more of the other zoning districts. All regulation of the underlying zoning districts shall be applicable except as modified by the provisions of this chapter. The provisions applicable to the entrance corridor overlay district shall apply to both modifications of existing structures and landscape as well as new construction within the entrance corridor overlay district. The provisions of the entrance corridor overlay district shall also apply to modifications and new construction by the Staunton city. (Ord. 2008-09).

18.83.030 Applicability.

(1) General. The entrance corridor overlay district is created to preserve and protect corridors along arterial streets or roadways designated as corridors found by city council to be significant routes of travel as shown on the entrance corridor overlay district map, dated February 22, 2008, as maintained in the office of the department of planning and inspection. The entrance corridor overlay district is hereby established upon and along the designated roadways with the design standards contained herein. To the extent that any of the specific areas in the entrance corridor overlay district also are in the H-1 historic preservation district, the provisions of Chapter [18.85](#) SCC, H-1 Historic Preservation District, shall control.

Where there is a conflict between the provisions or requirements of the entrance corridor overlay district and the provisions of any zoning district, the more restrictive provisions shall apply, except when adhering to the most restrictive would defeat the intent of this chapter.

(2) Corridors, Standards and Guidelines. The following arterial streets and highways are designated as corridors for purposes of this chapter and development of design guidelines for each corridor shall be phased with and be applicable and effective as of the date the particular corridor design guidelines are adopted:

- (a) North Augusta Street;
- (b) North Central Avenue;
- (c) Churchville Avenue;
- (d) North Coalter Street;
- (e) Commerce Road;

- (f) Frontier Drive;
- (g) Greenville Avenue;
- (h) North Lewis Street;
- (i) Middlebrook Avenue;
- (j) Richmond Avenue;
- (k) Statler Boulevard;
- (l) U.S. Route 262 and U.S. Route 275;
- (m) West Beverley Street.

(3) The design standards within this chapter shall apply to the corridors upon adoption of this chapter; in addition to these design standards, design guidelines developed for each corridor shall apply upon their ratification.

(4) Zoning Administrator. The zoning administrator or designee shall administer the provisions of this chapter in accordance with the design standards and design guidelines and shall promulgate appropriate design guidelines for each corridor for ratification by the planning commission and city council. The zoning administrator or designee may, from time to time, recommend areas for designation as an entrance corridor overlay district. The zoning administrator or designee shall be advisory to the planning commission, city council and board of zoning appeals in rezonings, special use permits, site development plans, subdivisions, variances and other matters within the entrance corridor overlay district.

(5) Exemptions. The following are exempt from the requirements of this chapter:

- (a) The construction or alteration of detached single-family dwellings and accessory structures on existing individual lots or parcels within the entrance corridor overlay district, provided the lots or parcels have been created and legally recorded prior to the date of the adoption of this chapter;
- (b) Agricultural and forestal buildings where no site plan review is required;
- (c) Interior alterations to a building or structure having no effect on exterior appearance of the building or structure;
- (d) General Maintenance. Activity where no change in design, material, or color is proposed for any built or planted element on the site;
- (e) The construction of ramps and other modifications to serve the handicapped; and
- (f) All federal and state government facilities. (Ord. 2008-09).

18.83.040 Approval required.

No land disturbance, substantial removal of vegetation, building, or structure, including, but not limited to, grading activities, private roadways, parking lots, signs, outbuildings, fences, walls, landscaping, lamp posts, light fixtures and lighting arrangements, shall be constructed, altered or restored within the entrance corridor overlay district unless approved as set forth hereinafter except when deemed insubstantial, due to the scope and nature of the proposed change, by the zoning administrator or designee. (Ord. 2008-09).

18.83.050 Approval process.

(1) Submission of Plan. Prior to commencing any activity set forth in SCC [18.83.040](#), the person, firm, or corporation proposing such activity shall submit a development plan to the zoning administrator or designee for the city of Staunton for review and approval. Applicants shall schedule and participate in an informal meeting with the zoning administrator or designee prior to submitting the plans.

(2) Minimum Requirements for Development Plan. Materials submitted with the application or on subsequent request by the zoning administrator or designee shall include clearly labeled plans, maps, studies, narratives, drawings, and reports depicting or presenting the following, with sufficient copies for necessary referrals and records, unless deemed unnecessary by the zoning administrator or designee due to the scope and nature of the proposed development:

(a) Surveyed property lines;

(b) Tree preservation plan (to scale) to include:

(i) Survey of existing topography and location of existing trees (over three inches in caliper), their species, and caliper and other vegetation per SCC [13.10.010\(6\)\(a\)\(i\)\(E\)\(I\)](#);

(ii) Existing trees and other vegetation to remain;

(iii) Existing trees and other vegetation to be removed; and

(iv) Location, extent, and construction details of proposed protection for existing trees and other vegetation to remain;

(c) A site development plan (to scale) including but not limited to:

(i) Location of all buildings;

(ii) Location, size, and dimensions of all yards and setbacks;

(iii) Location of all site improvements (to include parking areas, entrance drives, travelways, walkways, retaining walls);

(iv) Location of all utility pad fixtures and meters;

- (v) Provisions for stormwater management including all associated structures, channels, or other elements per SCC [13.05.050](#)(2)(a)(i);
 - (vi) Location of all site signage;
 - (vii) Location of all overhead, surface, and underground utilities and equipment;
and
 - (viii) Location of bordering public or private streets or roads and existing, proposed, and/or approved access points;
- (d) A grading plan (to scale) including but not limited to the content of the site development plan as listed in subsection (2)(c) of this section and the following:
- (i) Existing topographic conditions;
 - (ii) Proposed grading; and
 - (iii) Top of wall and bottom of wall elevations for all retaining walls;
- (e) A planting plan (to scale) per SCC [18.175.050](#) to include proposed grading;
- (f) A lighting plan (to scale) including but not limited to the content of the site development plan as listed in subsection (2)(c) of this section and the following:
- (i) Location of all proposed fixtures on the site and on the buildings; and
 - (ii) Lighting schedule including performance specifications and lamping for each fixture;
- (g) A sign proposal.
- (i) Descriptions of all site and building signage including sign type, materials, dimensions, and means of illumination including but not limited to the following:
 - (A) Wall Signs – Channel Letter Signs.
 - (I) Sign materials;
 - (II) Sign area and overall sign height from the ground;
 - (III) Sign length, width and depth;
 - (IV) Linear footage of business frontage;
 - (V) Color name(s) and number(s) of faces, trimcaps and returns;
 - (VI) Style and spacing of letters;
 - (VII) Text to be included on sign;
 - (VIII) Color name(s) and number(s) of graphics;

(IX) Method of attachment (i.e., raceway or mounted directly to wall);

(X) Color name and number of raceway;

(XI) Color names and numbers can be any sufficiently established and verifiable standard color identification system; and

(XII) Accurate physical samples of all colors and materials proposed;

(B) Wall Signs – Cabinet Signs.

(I) Sign materials;

(II) Sign area and overall sign height from the ground;

(III) Sign length, width and depth;

(IV) Linear footage of business frontage;

(V) Style and spacing of letters;

(VI) Text to be included on sign;

(VII) Color name(s) and number(s) of text;

(VIII) Color name(s) and number(s) of graphics;

(IX) Description of frame structure; and

(X) Accurate physical samples of all colors proposed;

(C) Freestanding Signs.

(I) Sign materials;

(II) Overall sign height from the ground;

(III) Cabinet size;

(IV) Base size;

(V) Style and spacing of letters;

(VI) Color name(s) and number(s) of text;

(VII) Color name(s) and number(s) of graphics;

(VIII) Design details of the base;

(IX) Accurate physical samples of all colors proposed; and

(X) Color names and numbers can be any sufficiently established and verifiable standard color identification system.

(h) Architect or artist's renderings, photographs or computer simulation of all proposed structures depicting the front, side and rear elevations describing the architectural treatment of all structural exteriors, including proposed building materials, colors, and signs;

(i) Other information as deemed necessary by the zoning administrator or designee.

(3) General Consideration for Review. In reviewing applications, the city of Staunton shall consider only those design features subject to public view and shall not make any requirements except for the purpose of preventing development which is incompatible with the guidelines established for each corridor subject to this review process. (Ord. 2008-09).

18.83.060 Development plan review process.

All development plans shall be submitted and reviewed according to the following procedures:

(1) An application including a complete development plan per SCC [18.83.050](#) shall be submitted to the zoning administrator or designee.

(2) After submittal, the plan shall be reviewed and processed by the zoning administrator or designee for conformity to the design standards included in this chapter and the design guidelines developed for each corridor. Applicants shall be notified in writing of the zoning administrator's decision of the development plan review, including a list of required revisions, if necessary.

(3) A development plan meeting the requirements of this chapter may be reviewed by the planning commission under the following circumstances:

(a) If the zoning administrator or designee finds that due to the scope, nature or location of the proposed development, planning commission review is necessary or desirable; or

(b) If the applicant and the zoning administrator or designee cannot reach a mutually agreeable understanding regarding any aspect of the development plan.

(4) Should planning commission review be deemed necessary, a complete development plan shall be submitted not less than 35 days before the planning commission meeting at which the applicant seeks planning commission review; applicants shall be notified in writing of the decision by the planning commission review. (Ord. 2008-09).

18.83.070 Appeals.

(1) Any person aggrieved by any decision of the planning commission may appeal such decision to the Staunton city council; provided, that such appeal is filed in writing in the office of the director of the city planning and inspections department within 30 days from the date of the planning commission decision.

(2) Any person aggrieved by any final decision of Staunton city council may appeal such decision by filing a petition in the circuit court of the city of Staunton, setting forth the alleged

illegality of the action of city council, provided the petition is filed in the office of the clerk of the circuit court within 30 days after the final decision of the city council. The filing of the petition shall stay the decision of city council pending the outcome of the appeal to the court, except that the filing of the petition shall not stay the decision of city council if the decision denies the right to raze or demolish a historic landmark, building or structure. The court may reverse or modify the decision of city council, in whole or in part, if it finds upon review that the decision of city council is contrary to law or that its decision is arbitrary and constitutes an abuse of discretion, or it may affirm the decision of city council. (Ord. 2008-09).

18.83.080 Use limitations.

All uses shall be subject to the use limitations set forth in the underlying zoning district. (Ord. 2008-09).

18.83.090 Design standards.

(1) Area and Bulk Regulations. Buildings and structures shall be subject to regulations for lot area, lot width, street frontage, setback, height, yards, maximum or minimum building square footage applicable in the underlying zoning district in which located.

(2) Access to Arterial Roads. When site conditions warrant, provisions shall be established for shared access to arterial roads for existing and future development.

(3) Requirements for Driveways and Parking Lots.

(a) Parking lot layouts shall respond to or re-establish the topographic characteristics of the site.

(b) Parking lots shall not dominate the image of a site.

(c) Parking lots shall be designed to minimize impervious surfaces and mitigate stormwater runoff.

(d) Rip-rap, exposed concrete drainage pipes, and similar drainage structures shall not be located in public view.

(e) The number of access points to parking lots from a street shall relate to other existing curb cuts whenever possible.

(f) Minimum off-street parking requirements may be reduced at the discretion of the zoning administrator or planning commission.

(g) SCC [18.125.010](#) shall apply.

(h) Off-street parking requirements may be reduced by 10 percent for on-street parking within 200 feet of the subject parcel.

(i) Shared parking arrangements may be considered on a space-by-space basis within 200 feet of the subject parcel provided appropriate schedule arrangements can be justified and proof of a legal agreement outlining the conditions of the shared parking arrangement can be provided.

(j) When 50 percent or more of the required parking area is located below or above the building, one story may be added to the maximum total number of stories allowed.

(k) Any amount of parking area greater than required parking shall reflect alternative surface treatment designed to reduce total impervious surface, improve runoff quality, reduce runoff quantity, reduce impacts on local microclimates from heat reflection, and increase total area devoted to plantings thereby reducing impacts of parking areas on natural resources.

(l) Parking lots shall be interconnected on adjacent parcels whenever possible.

(m) Pedestrian access from the sidewalk into individual project sites, as well as within sites and between sites shall be provided.

(n) Roadway design shall be tailored by the zoning administrator or designee to fit the character and functional needs of specific corridors. Roadways shall incorporate traffic calming devices when appropriate as determined by the zoning administrator or designee.

(4) Requirements for New Buildings, Redeveloped Buildings and the Proposed Adaptive Reuse of Existing Buildings.

(a) The design and construction of new buildings, redeveloped buildings, and the adaptive reuse of existing buildings shall be based on but not limited to the scale, mass, height, materials, color, texture, construction methodology, orientation, and manner of negotiating changes in elevation of nearby historic and cultural resources.

(b) Trademark buildings and related features shall be modified to meet the design standards included within this chapter.

(c) Prior to the submission of a proposed plan of demolition, alteration, or removal of existing buildings located in the entrance corridor overlay district, the applicant or his or her representative is encouraged to meet with the zoning administrator or designee concerning the proposed plan of action and submit preliminary studies, a written description, drawings, photographs, and plans of the concept of the proposed action for tentative review, comments, and recommendations.

(5) Planting Requirements. The requirements of Chapter [18.175](#) SCC, Landscaping and Screening, shall apply with the following exceptions:

(a) Site plantings shall reflect design characteristics identified as desirable in the guidelines developed for each corridor.

(b) New development along corridors must incorporate as much of the existing plants as possible.

(c) No grading or other earth disturbing activity, storage of materials, equipment, or refuse shall occur within the drip line of any trees or wooded areas or intrude upon any

other existing features designated for preservation as provided for in the most recent edition of the Virginia Erosion and Sediment Control Handbook.

(d) Plantings of major trees shall equal a minimum 10 percent of the parking and vehicular circulation area. Planting areas provided shall be a minimum of five feet wide.

(e) Plants shall not be used to screen poorly sited utilities; all utilities, site, and building equipment (including but not limited to loading docks, service entrances, dumpsters and other refuse containers) shall be built into the building envelope, be screened with architectural elements such as walls or extended parapets, or built into the site design.

(6) Requirements for Utilities.

(a) All utility lines, such as electric, telephone, CATV or other similar lines, shall be installed underground in the entrance corridor overlay district. This requirement shall apply to lines serving individual sites as well as within the project.

(b) All utilities, site, and building equipment (including but not limited to loading docks, service entrances, dumpsters and other refuse containers) shall be built into the building envelope, be screened with architectural elements such as walls or extended parapets, or built into the site design. Plants shall not be used to screen poorly sited utilities.

(c) Extended parapets and other means of architectural screening shall be used to eliminate rooftop equipment from public view.

(d) Areas designated on approved plans for preservation of existing features shall be clearly and visibly delineated on the site prior to commencement of any grading or other earth disturbance, including trenching or tunneling, and no such activity, grading, or moving of heavy equipment shall occur within such area. The visible delineation of all such features shall be maintained until all construction activity has been completed.

(7) Requirements for Signs, Billboards, and Other Advertising Structures. The requirements of Chapter [18.140](#) SCC, Signs, Billboards and Other Advertising Structures, shall apply with the following exceptions:

(a) Each parcel of property occupied by a building shall be permitted one freestanding sign, which shall not exceed 30 square feet on each face. Automobile service stations shall be permitted an additional twenty square feet on each face to advertise the price of fuel.

(b) Freestanding signs shall be mounted on bases a maximum of three feet high. If the specific location of the sign requires a base of more than three feet to provide adequate visibility, the planning commission may approve a taller base. No freestanding sign shall exceed 15 feet in height from grade.

(c) Freestanding signs for shopping centers shall be allowed 10 square feet of area per business establishment. An additional 25 square feet shall be allowed to identify the

shopping center as a whole. If individual businesses located within the shopping center are not included on the freestanding sign, the sign identifying the shopping center may be 45 feet in area. For the purposes of this chapter, shopping center shall be defined as:

- (i) Groups of two or more stores, personal service shops or restaurants connected by party walls, partitions, canopies or similar features; or
 - (ii) Some or all of the stores, personal service shops or restaurants located in separate buildings designed as a single commercial group sharing common parking areas, vehicular travelways, and walkways designed to encourage customer interchange between the buildings and present the appearance of a continuous commercial area.
- (d) If the nearest point of a freestanding sign is located within five feet of the street right-of-way, its location must be approved by the city's director of public works or designee, who will evaluate the location for site line and other traffic safety considerations.
- (e) The following sign types shall be permitted in the entrance corridor overlay district:
- (i) Externally illuminated signs provided the light source is directed downward;
 - (ii) Internally illuminated channel letters; and
 - (iii) Internally illuminated cabinet signs if the background of the cabinet sign is opaque and appears black at night;
 - (iv) Additional types of signs shall be considered.
- (f) No wall sign shall project beyond the surface of the building or above the roofline of the building; signs shall be appropriately scaled to the building or portion of the building served and should be coordinated with the architecture.
- (g) Inflatable figures and/or signs (still or animated) are not permitted in the entrance corridor overlay district.

(8) Lighting Requirements for Site and Building Exteriors.

- (a) Lighting shall be wholly contained within the site.
- (b) Light poles shall not exceed 24 feet in height.
- (c) Lighting shall be limited to that which is necessary for safety; lighting shall not be used as signage such as up-lighting or down-lighting building elevations, decorative light fixtures, moving or sweeping lights directed towards the sky among other types. (Ord. 2008-09).

18.83.100 Severability.

In the event that any section, subsection, sentence, clause or phrase of this chapter shall be declared or adjudged invalid, such adjudication shall in no manner affect the other sections or sentences, which shall continue in full force and effect as if the section, subsection, sentence, clause or phrase so declared or adjudged invalid were not originally a part thereof. (Ord. 2008-09).

18.83.110 Effective date.

This chapter shall be in full force and effect immediately upon adoption. (Ord. 2008-09).



The Staunton City Code is current through Ordinance 2019-09, passed January 24, 2019.

Disclaimer: The City Clerk's Office has the official version of the Staunton City Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

City Website: <http://www.staunton.va.us/>

City Telephone: (540) 332-3810

[Code Publishing Company](#)

Chapter 18.60 B-2 GENERAL BUSINESS DISTRICT

Sections:

[18.60.010 General description.](#)

[18.60.020 Uses permitted.](#)

[18.60.030 Area regulations.](#)

[18.60.040 Height regulations.](#)

[18.60.050 Off-street parking.](#)

[18.60.060 Off-street loading and unloading regulations.](#)

[18.60.070 Uses permitted on review.](#)

18.60.010 General description.

These districts are composed of land and structures used to furnish a wider range of retail goods and services to satisfy all of the household and personal needs of the residents of a group or community of neighborhoods. Usually located on a thoroughfare or near the intersection of two thoroughfares, these districts are large and are within convenient driving distance of the group of neighborhoods they will serve. The district regulations are designed to permit the development of the districts for their purpose in an open, spacious arrangement by requiring certain minimum yard and area standards to be met, standards that are comparable to those called for in residence districts. To protect the abutting and surrounding residential areas, certain restrictions are placed on uses. It is intended that additional general business districts will be created in accordance with the amendment procedure set forth herein, as they are needed to serve groups of new neighborhoods. (Zoning ordinance Art. 4, § 9).

18.60.020 Uses permitted.

The following uses shall be permitted in the B-2 general business district:

- (1) Any use permitted in the B-1 local business district.
- (2) Auto, manufactured home or truck parking, storage, service and repair shop, or sales lots; provided, that all manufactured homes are in a state of good repair and dismantled or junked cars or trucks unfit for operation on the highways shall not be stored therein. All cars or trucks stored shall have met the most recent state inspection and display the inspection certificate.
- (3) Bakeries employing not more than 10 persons and where products are sold at retail on the

premises.

(4) Cleaning and dyeing plants using not more than two units, neither of which shall exceed 36 inches by 54 inches in size.

(5) Contractors' establishments, offices and display rooms where the business conducted on the premises is entirely within a completely enclosed building and where there is no storage of supplies or equipment on the premises outside the building.

(6) Custom dressmaking, millinery, tailoring, or similar retail trades employing not more than 10 persons on the premises.

(7) Laundry employing not over 10 persons on the premises, excluding owners or drivers.

(8) Plumbing, heating, electric or paperhanging offices and display rooms, where the business conducted on the premises is entirely within a completely enclosed building and where there is no storage of supplies of equipment on the premises outside the building.

(9) Radio or television broadcasting stations, studios, or offices, excepting transmission towers.

(10) Repair services or businesses, including repairing of bicycles, guns, radios, television sets and other home appliances, typewriters, watches, clocks, and shoes; provided, that no equipment of over two horsepower shall be used and provided not over 10 persons are employed on the premises.

(11) Wholesaling from sample stocks only; provided, that no manufacturing or storage for distribution shall be permitted on the premises.

(12) Tire recapping and vulcanizing within a completely enclosed building and with no outdoor storage of tires, discarded rubber, or similar material.

(13) Processing and manufacturing establishments that are not objectionable because of smoke, odor, dust, or noise, but only when such processing and manufacturing is incidental to a retail business conducted on the premises and where not more than 10 persons are employed on the premises in the processing or manufacturing activities.

(14) Parking garages and parking lots.

(15) Commercial, job, and newspaper printing not employing more than 10 persons on the premises.

(16) Utility substations.

(17) Business and vocational schools not involving operations of an industrial character.

(18) Outdoor advertising as regulated in Chapter 18.140 SCC.

(19) Accessory buildings and uses customarily incidental to the above uses.

(20) Co-location of telecommunication antenna and related equipment as regulated in SCC 18.185.020(4). (Zoning ordinance Art. 4, § 9).

18.60.030 Area regulations.

The following requirements shall apply to all uses permitted in this district:

(1) Front Yard. There shall be a first-story setback for all buildings on vehicular streets of not less than five feet.

(2) Side and Rear Yard. There are no specific side or rear yard requirements.

(3) Maximum Lot Coverage.

STORIES	COVERAGE
6	100%
7-12	95%
13-16	90%
17 and over	85%

(Zoning ordinance Art. 4, § 9).

18.60.040 Height regulations.

(1) Except as provided hereinafter in Chapter 18.115 SCC, no building or structure shall exceed six stories or 75 feet in height, whichever is less.

(2) Notwithstanding the foregoing, however, a greater height may be allowed on review by the planning commission and city council in accordance with the provisions of Chapter 18.210 SCC. (Zoning ordinance Art. 4, § 9).

18.60.050 Off-street parking.

Off-street parking is as regulated in Chapter 18.125 SCC. (Zoning ordinance Art. 4, § 9).

18.60.060 Off-street loading and unloading regulations.

Off-street loading and unloading are as regulated in Chapter 18.135 SCC. (Zoning ordinance Art. 4, § 9).

18.60.070 Uses permitted on review.

The following uses may be permitted on review by the planning commission in accordance with provisions contained in Chapter 18.210 SCC:

(1) Group care facility.

(2) Group house.

(3) The following uses may be permitted on review by the city council in accordance with provisions contained in Chapter 18.210 SCC; however, this subsection shall not be considered to be a use permitted on review for purposes in Chapter 18.55 SCC:

(a) Living and/or sleeping quarters in detached accessory buildings and on the ground and basement floors of main buildings.

(b) Multiple-family dwelling.

A proposed use under this chapter is to be considered using the following factors as a guide:

(i) The design of the existing building or the proposed building to be built.

(ii) The historical significance of the structure on the lot or the historical significance of structures in the immediate vicinity.

(iii) The amount of business usage that has at that time already developed in the immediate vicinity of the lot.

(iv) The anticipated immediate new business development expected in the vicinity.

(v) Lot size, topography conditions.

(vi) Compatibility of building design and residential use with nearby buildings and uses.

(vii) Availability of residential amenities such as sidewalks, play areas, and parking.

(viii) Safety considerations, including traffic hazards, security and environmental factors.

(ix) Usable open space available on the property.

(4) Day nurseries, private.

(5) Processing and manufacturing establishments that are not objectionable because of smoke, odor, dust, or noise when the processing and manufacturing activity is conducted entirely within a completely enclosed building and where there is no storage or supplies or equipment on the premises outside the building. (Zoning ordinance Art. 4, § 9).

Chapter 18.75 I-1 LIGHT INDUSTRIAL DISTRICT

Sections:

[18.75.010 General description.](#)

[18.75.020 Uses permitted.](#)

[18.75.030 Area regulations.](#)

[18.75.040 Uses permitted on review.](#)

[18.75.050 Height regulations.](#)

[18.75.060 Minimum off-street parking and loading requirements.](#)

[18.75.070 Landscaping and screening.](#)

[18.75.080 Minimum distance for building construction from any residential or professional district.](#)

[18.75.090 Uses permitted on review.](#)

18.75.010 General description.

These districts are composed of land and structures used for light manufacturing or wholesaling, or suitable for such uses, where the use and its operation do not directly adversely affect nearby residential and business uses. These districts are usually separated from residential areas by business areas or by natural barriers. The district regulations are designed to allow a wide range of industrial activities subject to limitations designed to protect nearby residential and business districts. (Zoning ordinance Art. 4, § 12).

18.75.020 Uses permitted.

Property and buildings in the I-1 light industrial district shall be used only for the following purposes:

- (1) A retail or service use only when it directly serves or is auxiliary to the needs of industrial plants or employees thereof or when it is an adult business, which use shall be permitted solely in an I-1 light industrial zoning district.
- (2) No residential use, except sleeping facilities required by caretaker or night watchman employed on the premises shall be permitted in the I-1 light industrial district.
- (3) Any of the following uses:
 - (a) Business sign as regulated in Chapter 18.140 SCC.
 - (b) Building material sales yard and lumber yard, including the sale of rock, sand, gravel, and

the like as an incidental part of the main business, but not including a concrete batch plant or a transit plant.

(c) Contractor's equipment storage yard or plant, or rental of equipment commonly used by contractors.

(d) Freightage or trucking yard or terminal.

(e) Outdoor storage facilities for coal, coke, building materials, sand, gravel, stone, lumber; open storage of construction contractor's equipment and supplies shall be screened by seven foot obscuring fence, wall, or mass plantings, or otherwise so located as not to be obnoxious to the orderly appearance of the district.

(f) Public utility service yard or electrical receiving or transforming station.

(g) Auction house, except for sale of livestock.

(h) Tire recapping or retreading.

(i) Co-location of telecommunication antenna and related equipment as regulated in SCC 18.185.020(4).

(4) Adult Businesses. In addition to all other requirements, any adult business shall be permitted solely in an I-1 light industrial zoning district and conform to the following requirements:

(a) The business shall be located at least 500 feet away from any residential or agricultural-forestal zoning district, and at least 500 feet from the property line of any land used for any of the following:

- (i) A dwelling;
- (ii) A nursing home, assisted living facility, or similar institution;
- (iii) An adult day care center;
- (iv) A child day care center;
- (v) A public or private school, college or university;
- (vi) A public park;
- (vii) A public or private library, museum or cultural center;
- (viii) A church or other place of worship;
- (ix) A hotel, motel or boardinghouse; and

- (x) Any other adult business.
- (b) Adult merchandise shall not be visible from any point outside the establishment.
- (c) Signs or attention-getting devices for the business shall not contain any words or graphics depicting, describing or relating to specified sexual activities or specified anatomical areas, as defined in SCC 5.40.010.
- (d) The business shall not begin service to the public or any outside activity before 7:00 a.m. local time. Hours of operation for any adult movie theater, adult nightclub or other business providing adult entertainment shall not extend after 1:00 a.m. local time. Hours of operation for any adult bookstore, adult video store, adult model studio, adult store or any other adult business except an adult motel shall not extend after 12:00 midnight local time.
- (e) In any adult business other than an adult motel or adult movie theater, there shall be no viewing of videotapes, computer disks, CD-ROMs, DVD-ROMs, virtual reality devices, Internet sites or files transmitted over the Internet, or similar media characterized by an emphasis on matter depicting, describing or relating to specified sexual activities or specified anatomical areas, as defined in SCC 5.40.010, while on the premises.
- (f) Adult merchandise shall be located in a conspicuously marked separate room or other area inaccessible to persons under 18 years of age with the room configured so that it remains open to plain view at all times.
- (g) The interior of the enclosed premises shall be equipped with overhead lighting fixtures that at all times illuminate every place patrons are permitted access with an illumination of not less than two-foot candles measured at floor level.
- (h) Wide angle mirrors must be used to provide the manager with continuous monitoring of all areas of the establishment.
- (i) All owners, operators, managers, employees, associates and entertainers shall be at least 18 years of age.
- (j) The owner or operator shall operate and maintain a security camera and videotape or digital file system designed and installed by a private security service business licensed by the commonwealth of Virginia. Surveillance cameras shall continuously monitor and record images of all entrances, exits, parking areas and all areas of the establishment where the adult business is conducted, except for the sleeping rooms of an adult motel. Such cameras shall provide clear imagery of the establishment's premises, patrons and their vehicles and of any vehicles otherwise entering the premises. Videotapes or digital file systems recording activities in the areas under surveillance shall be preserved for a period of not less than four months. Authorized representatives of the Staunton police or the Staunton planning

department shall have prompt access to recovery and possession or a complete and accurate copy of such videotapes or digital files upon request.

(k) The owner or operator shall provide adequate lighting for all entrances, exits and off-street parking areas serving the adult business, and all areas of the establishment where the adult business is conducted, except for the private rooms of an adult motel or the movie viewing areas in an adult movie theater. "Adequate lighting" means sufficient lighting for clear visual and security camera surveillance and recording of all images on the premises at all times one hour before dusk and one hour after dawn.

Unless otherwise defined or required by the context, terms used in this section relating to adult businesses shall have the same meaning as defined in SCC 5.40.010.

If any of the provisions of any subsection, paragraph, subdivision or clause of this section shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any subsection, paragraph, subdivision or clause of this section.

Nothing in the provisions of this subsection shall be applied, construed or interpreted in any way as prohibiting or limiting the prosecution of alleged violation of any obscenity or child pornography laws.

(5) The following uses when conducted within a completely enclosed building:

(a) The manufacture, compounding, processing, packaging, or treatment of such products as bakery goods, candy, cosmetics, dairy products, drugs, perfumes, pharmaceuticals, perfumed toilet soap, toiletries, and food products.

(b) The manufacture, compounding, assembling or treatment of articles of merchandise from the following previously prepared materials: aluminum, bone, cellophane, canvas, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, precious or semi-precious metals or stones, shell, rubber, textiles, tin, iron, steel, wood (excluding sawmill), yarn, and paint not involving a boiling process.

(c) The manufacture of pottery and figurines or other similar ceramic products, using only previously pulverized clay, and kilns fired only by electricity or gas.

(d) The manufacture and maintenance of electric and neon signs, commercial advertising structures, light sheet metal products, including heating and ventilating ducts and equipment, cornices, eaves, and the like.

(e) The manufacture of musical instruments, toys, novelties, and rubber and metal stamps.

(f) Automobile assembling, painting, upholstering, rebuilding, reconditioning, body and fender works, truck repairing and overhauling, tire retreading or recapping, and battery

manufacturing.

(g) The sale, storage, and sorting of junk, waste, discarded or salvaged materials, machinery or equipment, but not including processing.

(h) Blacksmith shop and machine shop.

(i) Foundry casting lightweight nonferrous metal not causing noxious fumes or odors.

(j) Planing mill.

(k) Wholesale or warehouse enterprise.

(6) Buildings, structures, and uses accessory and customarily incidental to any of the above uses. (Ord. 2007-31; Ord. 2007-29. Zoning ordinance Art. 4, § 12).

18.75.030 Area regulations.

The following requirements shall apply to all uses permitted in this district:

(1) Front Yard. All buildings shall set back from all street right-of-way lines not less than 25 feet.

(2) Side Yard. No building shall be located closer than 15 feet to a side lot line, unless said side lot line abuts a residential or professional district, in which case no building shall be located closer than 50 feet to that side lot line.

(3) Rear Yard. No building shall be located closer than 30 feet to a rear lot line, unless such rear lot line abuts a residential or professional district, in which case no building shall be located closer than 50 feet to that rear lot line.

(4) Coverage. Main and accessory buildings and off-street parking and loading facilities shall not cover more than 75 percent of the lot area. (Zoning ordinance Art. 4, § 12).

18.75.040 Uses permitted on review.

The following uses may be permitted on review by the planning commission in accordance with the provisions contained in Chapter 18.210 SCC:

Other uses of the same general character and compatible with those uses permitted in SCC [18.75.020](#), Uses permitted, in this district. (Zoning ordinance Art. 4, § 12).

18.75.050 Height regulations.

No building or structure shall exceed four stories or 45 feet in height, except as hereinafter provided in Chapter 18.115 SCC. (Zoning ordinance Art. 4, § 12).

18.75.060 Minimum off-street parking and loading requirements.

Minimum off-street parking and loading requirements are as regulated in Chapters 18.125 and

18.135 SCC. (Zoning ordinance Art. 4, § 12).

18.75.070 Landscaping and screening.

Landscaping and screening are as regulated in Chapter 18.175 SCC, Landscaping and Screening. (Zoning ordinance Art. 4, § 12).

18.75.080 Minimum distance for building construction from any residential or professional district.

Notwithstanding any minimum setback, rear yard, or front yard requirements hereinabove set forth, no building may be constructed in this district within 50 feet of any residential or professional district. (Zoning ordinance Art. 4, § 12).

18.75.090 Uses permitted on review.

Other uses of the same general character as those listed as uses permitted in this district. (Zoning ordinance Art. 4, § 12).

Chapter 18.80 I-2 HEAVY INDUSTRIAL DISTRICT

Sections:

[18.80.010 General description.](#)

[18.80.020 Uses permitted.](#)

[18.80.030 Uses prohibited.](#)

[18.80.040 Uses permitted on review.](#)

[18.80.050 Area regulations.](#)

[18.80.060 Height regulations.](#)

[18.80.070 Minimum off-street parking and loading requirements.](#)

[18.80.080 Screening and landscaping.](#)

[18.80.090 Minimum distance for building construction from any residential or professional district.](#)

18.80.010 General description.

These districts are composed of land and structures used for heavy manufacturing and related activities or suitable for such uses. Located for convenient access from existing and future arterial thoroughfares and railway lines, these districts are in many instances separated from industrial areas by business or light industrial areas or some type of artificial separation may be required. The district regulations are designed to permit the development of the district for almost any industrial uses, subject to the minimum regulations necessary for the mutual protection of the uses. (Zoning ordinance Art. 4, § 13).

18.80.020 Uses permitted.

Property and buildings in the I-2 heavy industrial district shall be used only for the following purposes:

- (1) Any uses permitted in the I-1 light industrial district.
- (2) Any of the following uses:
 - (a) Emery cloth or sand paper manufacture.
 - (b) Gas (illuminating or heating) manufacture (power plant).
 - (c) Oiled rubber or leather goods manufacture.

- (d) Petroleum, storage of.
- (e) Sauerkraut or pickles, etc., manufacture.
- (f) Sausage manufacture.
- (g) Soda manufacture.
- (h) Automobile wrecking and junk yards.
- (i) Vinegar manufacture.
- (j) Mining, extracting, filling or soil-stripping; provided, that standards for the treatment of the site during and after operations be designated by the planning commission.
- (k) Co-location of telecommunication antenna and related equipment as regulated in SCC 18.185.020(4).

(3) Buildings, structures, and uses accessory and customarily incidental to any of the above uses. (Zoning ordinance Art. 4, § 13).

18.80.030 Uses prohibited.

The following uses are prohibited:

- (1) Abattoirs or slaughterhouses.
- (2) Acid manufacture.
- (3) Ammonia, bleaching powder, or chlorine manufacture.
- (4) Apartment houses, except when adjoining a residential zone.
- (5) Bag cleaning.
- (6) Blast furnace.
- (7) Boiler works.
- (8) Brick, tile or terra cotta manufacture not requiring ovens.
- (9) Candle manufacture.
- (10) Celluloid manufacture.
- (11) Coke ovens.
- (12) Crematory or reduction plant.

- (13) Creosote treatment or manufacture.
- (14) Dextrin, glucose, and starch manufacture.
- (15) Disinfectants, cattle dips, exterminators and insecticides manufacture, not including the compounding of the same.
- (16) Distillation of bones.
- (17) Dyestuff manufacture.
- (18) Fat rendering.
- (19) Fertilizer manufacture, not including compounding.
- (20) Fireworks or explosives manufacture or storage, or the loading of explosives.
- (21) Fish smoke or curing.
- (22) Forge plant.
- (23) Fuel manufacture.
- (24) Gas (illumination or heating) manufacture or storage in excess of 1,000 cubic feet.
- (25) Gelatin, glue, or size manufacture or process involving recovery from fish or animal material.
- (26) Glass manufacture.
- (27) Gunpowder manufacture or storage.
- (28) Hotels and similar inhabitable places.
- (29) Incineration or reduction of garbage, dead animals, outfall, or refuse other than by an authorized public agency.
- (30) Iron, steel, brass, or copper works or foundry.
- (31) Lampblack manufacture.
- (32) Lime, gypsum, plaster of paris manufacture.
- (33) Match manufacture.
- (34) Oil, paint, turpentine, or varnish manufacture.
- (35) Ore reduction.

- (36) Potash or washing soda manufacture.
- (37) Pulp mills.
- (38) Petroleum products, refining, or storage.
- (39) Printing ink manufacture.
- (40) Pyroxylin plastics or celluloid manufacture, or explosive or inflammable cellulose or pyroxylin products manufacture.
- (41) Rendering plant or other comparable processing of fish or animal material.
- (42) Rolling manufacture.
- (43) Salt works.
- (44) Sawmill.
- (45) Smelting or refining of metals.
- (46) Soap manufacture.
- (47) Sulphurous, sulfuric, nitric, or hydrochloric, or other corrosive or offensive acid manufacture or their use except as accessory to a permitted industry.
- (48) Stockyards.
- (49) Shoe polish manufacture.
- (50) Tanning, curing, or storage of raw hides or skins, or leather dressing or coloring.
- (51) Tar distillation or manufacture.
- (52) Tar roofing or waterproofing manufacture.
- (53) Wool pulling or scouring. (Zoning ordinance Art. 4, § 13).

18.80.040 Uses permitted on review.

- (1) Batching plants for asphalt and Portland cement concrete.
- (2) Livestock market and sales pavilions.
- (3) Manufacture of cement, asphalt, lime, plaster, and plaster of paris.
- (4) Feed mills.
- (5) Other uses of the same general character as those uses listed as uses permitted in this I-2

heavy industrial district and those uses listed as uses permitted in the I-1 light industrial district. (Zoning ordinance Art. 4, § 13).

18.80.050 Area regulations.

The following requirements shall apply to all uses permitted in this district:

- (1) Front Yard. All buildings shall set back from all street right-of-way lines not less than 35 feet.
- (2) Side Yard. No building shall be located closer than 15 feet to a side lot line, unless said side lot line abuts a residential or professional district, in which case no building shall be located closer than 75 feet to that side lot line.
- (3) Rear Yard. No building shall be located closer than 30 feet to a rear lot line, unless said rear lot line abuts a residential or professional district, in which case no building shall be located closer than 75 feet to the rear lot line.
- (4) Coverage. Main and accessory buildings and off-street parking and loading facilities shall not cover more than 80 percent of the lot area. (Zoning ordinance Art. 4, § 13).

18.80.060 Height regulations.

No building or structure shall exceed four stories or 45 feet in height, except as hereinafter provided in Chapter 18.115 SCC. (Zoning ordinance Art. 4, § 13).

18.80.070 Minimum off-street parking and loading requirements.

Minimum off-street parking and loading requirements are as regulated in Chapters 18.125 and 18.135 SCC. (Zoning ordinance Art. 4, § 13).

18.80.080 Screening and landscaping.

Screening and landscaping are as regulated in Chapter 18.175 SCC, Landscaping and Screening. (Zoning ordinance Art. 4, § 13).

18.80.090 Minimum distance for building construction from any residential or professional district.

Notwithstanding any minimum setback, rear yard, or front yard requirements hereinabove set forth, no building may be constructed in this district within 75 feet of any residential or professional district. (Zoning ordinance Art. 4, § 13).

Chapter 18.83 ENTRANCE CORRIDOR OVERLAY DISTRICT

Sections:

[18.83.010 Intent.](#)

[18.83.020 Purpose of the district.](#)

[18.83.030 Applicability.](#)

[18.83.040 Approval required.](#)

[18.83.050 Approval process.](#)

[18.83.060 Development plan review process.](#)

[18.83.070 Appeals.](#)

[18.83.080 Use limitations.](#)

[18.83.090 Design standards.](#)

[18.83.100 Severability.](#)

[18.83.110 Effective date.](#)

18.83.010 Intent.

The entrance corridor overlay district is intended to implement the city of Staunton's comprehensive plan's goal of protecting the city's natural, scenic, historic, architectural and cultural resources. This chapter meets the comprehensive plan's goal by protecting and promoting the unique characteristics of the city's natural and built environment leading into the historic districts through assuring site and building design reflecting the natural, scenic, historic, architectural, and cultural resources within view of each corridor. Establishing design standards within this chapter and providing design guidelines for each corridor ensures the compatibility of development, redevelopment, and adaptive reuse proposals with the resources identified in the comprehensive plan, promoting the general welfare of the community by creating attractive human-scaled environments; increasing commerce; improving property values; and increasing public awareness of the natural, scenic, historic, architectural, and cultural resources near and outside the historic preservation districts.

Regulation and guidance of corridor development includes but is not limited to: reducing impacts from development on existing land forms and other natural resources; promoting corridor development design compatible with nearby historic, architectural and cultural resources; providing pedestrian and vehicular connections from parcel to parcel; improving pedestrian and vehicular connections within each parcel; reducing the prominence of parking lots on the corridors; increasing

site plantings; establishing reciprocity between building and site design; fully integrating utilities into building and site structures; regulating the size, intensity, and placement of signs and lighting; and assuring provisions for storm water management are well integrated into site architecture. (Ord. 2008-09).

18.83.020 Purpose of the district.

The entrance corridor overlay district is created for the purpose of providing special regulations in given designated areas of the city to accomplish the intended purposes set forth above. The entrance corridor overlay district shall be in addition to, and shall overlap and overlay, all other zoning districts so that any parcel of land lying in the entrance corridor overlay district shall also lie in one or more of the other zoning districts. All regulation of the underlying zoning districts shall be applicable except as modified by the provisions of this chapter. The provisions applicable to the entrance corridor overlay district shall apply to both modifications of existing structures and landscape as well as new construction within the entrance corridor overlay district. The provisions of the entrance corridor overlay district shall also apply to modifications and new construction by the Staunton city. (Ord. 2008-09).

18.83.030 Applicability.

(1) General. The entrance corridor overlay district is created to preserve and protect corridors along arterial streets or roadways designated as corridors found by city council to be significant routes of travel as shown on the entrance corridor overlay district map, dated February 22, 2008, as maintained in the office of the department of planning and inspection. The entrance corridor overlay district is hereby established upon and along the designated roadways with the design standards contained herein. To the extent that any of the specific areas in the entrance corridor overlay district also are in the H-1 historic preservation district, the provisions of Chapter 18.85 SCC, H-1 Historic Preservation District, shall control.

Where there is a conflict between the provisions or requirements of the entrance corridor overlay district and the provisions of any zoning district, the more restrictive provisions shall apply, except when adhering to the most restrictive would defeat the intent of this chapter.

(2) Corridors, Standards and Guidelines. The following arterial streets and highways are designated as corridors for purposes of this chapter and development of design guidelines for each corridor shall be phased with and be applicable and effective as of the date the particular corridor design guidelines are adopted:

- (a) North Augusta Street;
- (b) North Central Avenue;
- (c) Churchville Avenue;
- (d) North Coalter Street;

- (e) Commerce Road;
- (f) Frontier Drive;
- (g) Greenville Avenue;
- (h) North Lewis Street;
- (i) Middlebrook Avenue;
- (j) Richmond Avenue;
- (k) Statler Boulevard;
- (l) U.S. Route 262 and U.S. Route 275;
- (m) West Beverley Street.

(3) The design standards within this chapter shall apply to the corridors upon adoption of this chapter; in addition to these design standards, design guidelines developed for each corridor shall apply upon their ratification.

(4) Zoning Administrator. The zoning administrator or designee shall administer the provisions of this chapter in accordance with the design standards and design guidelines and shall promulgate appropriate design guidelines for each corridor for ratification by the planning commission and city council. The zoning administrator or designee may, from time to time, recommend areas for designation as an entrance corridor overlay district. The zoning administrator or designee shall be advisory to the planning commission, city council and board of zoning appeals in rezonings, special use permits, site development plans, subdivisions, variances and other matters within the entrance corridor overlay district.

(5) Exemptions. The following are exempt from the requirements of this chapter:

- (a) The construction or alteration of detached single-family dwellings and accessory structures on existing individual lots or parcels within the entrance corridor overlay district, provided the lots or parcels have been created and legally recorded prior to the date of the adoption of this chapter;
- (b) Agricultural and forestal buildings where no site plan review is required;
- (c) Interior alterations to a building or structure having no effect on exterior appearance of the building or structure;
- (d) General Maintenance. Activity where no change in design, material, or color is proposed for any built or planted element on the site;

- (e) The construction of ramps and other modifications to serve the handicapped; and
- (f) All federal and state government facilities. (Ord. 2008-09).

18.83.040 Approval required.

No land disturbance, substantial removal of vegetation, building, or structure, including, but not limited to, grading activities, private roadways, parking lots, signs, outbuildings, fences, walls, landscaping, lamp posts, light fixtures and lighting arrangements, shall be constructed, altered or restored within the entrance corridor overlay district unless approved as set forth hereinafter except when deemed insubstantial, due to the scope and nature of the proposed change, by the zoning administrator or designee. (Ord. 2008-09).

18.83.050 Approval process.

(1) Submission of Plan. Prior to commencing any activity set forth in SCC [18.83.040](#), the person, firm, or corporation proposing such activity shall submit a development plan to the zoning administrator or designee for the city of Staunton for review and approval. Applicants shall schedule and participate in an informal meeting with the zoning administrator or designee prior to submitting the plans.

(2) Minimum Requirements for Development Plan. Materials submitted with the application or on subsequent request by the zoning administrator or designee shall include clearly labeled plans, maps, studies, narratives, drawings, and reports depicting or presenting the following, with sufficient copies for necessary referrals and records, unless deemed unnecessary by the zoning administrator or designee due to the scope and nature of the proposed development:

- (a) Surveyed property lines;
- (b) Tree preservation plan (to scale) to include:
 - (i) Survey of existing topography and location of existing trees (over three inches in caliper), their species, and caliper and other vegetation per SCC 13.10.010(6)(a)(i)(E)(I);
 - (ii) Existing trees and other vegetation to remain;
 - (iii) Existing trees and other vegetation to be removed; and
 - (iv) Location, extent, and construction details of proposed protection for existing trees and other vegetation to remain;
- (c) A site development plan (to scale) including but not limited to:
 - (i) Location of all buildings;

- (ii) Location, size, and dimensions of all yards and setbacks;
 - (iii) Location of all site improvements (to include parking areas, entrance drives, travelways, walkways, retaining walls);
 - (iv) Location of all utility pad fixtures and meters;
 - (v) Provisions for stormwater management including all associated structures, channels, or other elements per SCC 13.05.050(2)(a)(i);
 - (vi) Location of all site signage;
 - (vii) Location of all overhead, surface, and underground utilities and equipment; and
 - (viii) Location of bordering public or private streets or roads and existing, proposed, and/or approved access points;
- (d) A grading plan (to scale) including but not limited to the content of the site development plan as listed in subsection (2)(c) of this section and the following:
- (i) Existing topographic conditions;
 - (ii) Proposed grading; and
 - (iii) Top of wall and bottom of wall elevations for all retaining walls;
- (e) A planting plan (to scale) per SCC 18.175.050 to include proposed grading;
- (f) A lighting plan (to scale) including but not limited to the content of the site development plan as listed in subsection (2)(c) of this section and the following:
- (i) Location of all proposed fixtures on the site and on the buildings; and
 - (ii) Lighting schedule including performance specifications and lamping for each fixture;
- (g) A sign proposal.
- (i) Descriptions of all site and building signage including sign type, materials, dimensions, and means of illumination including but not limited to the following:
 - (A) Wall Signs – Channel Letter Signs.
 - (I) Sign materials;
 - (II) Sign area and overall sign height from the ground;
 - (III) Sign length, width and depth;

- (IV) Linear footage of business frontage;
 - (V) Color name(s) and number(s) of faces, trimcaps and returns;
 - (VI) Style and spacing of letters;
 - (VII) Text to be included on sign;
 - (VIII) Color name(s) and number(s) of graphics;
 - (IX) Method of attachment (i.e., raceway or mounted directly to wall);
 - (X) Color name and number of raceway;
 - (XI) Color names and numbers can be any sufficiently established and verifiable standard color identification system; and
 - (XII) Accurate physical samples of all colors and materials proposed;
- (B) Wall Signs – Cabinet Signs.
- (I) Sign materials;
 - (II) Sign area and overall sign height from the ground;
 - (III) Sign length, width and depth;
 - (IV) Linear footage of business frontage;
 - (V) Style and spacing of letters;
 - (VI) Text to be included on sign;
 - (VII) Color name(s) and number(s) of text;
 - (VIII) Color name(s) and number(s) of graphics;
 - (IX) Description of frame structure; and
 - (X) Accurate physical samples of all colors proposed;
- (C) Freestanding Signs.
- (I) Sign materials;
 - (II) Overall sign height from the ground;

- (III) Cabinet size;
- (IV) Base size;
- (V) Style and spacing of letters;
- (VI) Color name(s) and number(s) of text;
- (VII) Color name(s) and number(s) of graphics;
- (VIII) Design details of the base;
- (IX) Accurate physical samples of all colors proposed; and
- (X) Color names and numbers can be any sufficiently established and verifiable standard color identification system.

(h) Architect or artist's renderings, photographs or computer simulation of all proposed structures depicting the front, side and rear elevations describing the architectural treatment of all structural exteriors, including proposed building materials, colors, and signs;

(i) Other information as deemed necessary by the zoning administrator or designee.

(3) General Consideration for Review. In reviewing applications, the city of Staunton shall consider only those design features subject to public view and shall not make any requirements except for the purpose of preventing development which is incompatible with the guidelines established for each corridor subject to this review process. (Ord. 2008-09).

18.83.060 Development plan review process.

All development plans shall be submitted and reviewed according to the following procedures:

(1) An application including a complete development plan per SCC [18.83.050](#) shall be submitted to the zoning administrator or designee.

(2) After submittal, the plan shall be reviewed and processed by the zoning administrator or designee for conformity to the design standards included in this chapter and the design guidelines developed for each corridor. Applicants shall be notified in writing of the zoning administrator's decision of the development plan review, including a list of required revisions, if necessary.

(3) A development plan meeting the requirements of this chapter may be reviewed by the planning commission under the following circumstances:

- (a) If the zoning administrator or designee finds that due to the scope, nature or location of the proposed development, planning commission review is necessary or desirable; or
- (b) If the applicant and the zoning administrator or designee cannot reach a mutually

agreeable understanding regarding any aspect of the development plan.

(4) Should planning commission review be deemed necessary, a complete development plan shall be submitted not less than 35 days before the planning commission meeting at which the applicant seeks planning commission review; applicants shall be notified in writing of the decision by the planning commission review. (Ord. 2008-09).

18.83.070 Appeals.

(1) Any person aggrieved by any decision of the planning commission may appeal such decision to the Staunton city council; provided, that such appeal is filed in writing in the office of the director of the city planning and inspections department within 30 days from the date of the planning commission decision.

(2) Any person aggrieved by any final decision of Staunton city council may appeal such decision by filing a petition in the circuit court of the city of Staunton, setting forth the alleged illegality of the action of city council, provided the petition is filed in the office of the clerk of the circuit court within 30 days after the final decision of the city council. The filing of the petition shall stay the decision of city council pending the outcome of the appeal to the court, except that the filing of the petition shall not stay the decision of city council if the decision denies the right to raze or demolish a historic landmark, building or structure. The court may reverse or modify the decision of city council, in whole or in part, if it finds upon review that the decision of city council is contrary to law or that its decision is arbitrary and constitutes an abuse of discretion, or it may affirm the decision of city council. (Ord. 2008-09).

18.83.080 Use limitations.

All uses shall be subject to the use limitations set forth in the underlying zoning district. (Ord. 2008-09).

18.83.090 Design standards.

(1) Area and Bulk Regulations. Buildings and structures shall be subject to regulations for lot area, lot width, street frontage, setback, height, yards, maximum or minimum building square footage applicable in the underlying zoning district in which located.

(2) Access to Arterial Roads. When site conditions warrant, provisions shall be established for shared access to arterial roads for existing and future development.

(3) Requirements for Driveways and Parking Lots.

(a) Parking lot layouts shall respond to or re-establish the topographic characteristics of the site.

(b) Parking lots shall not dominate the image of a site.

- (c) Parking lots shall be designed to minimize impervious surfaces and mitigate stormwater runoff.
 - (d) Rip-rap, exposed concrete drainage pipes, and similar drainage structures shall not be located in public view.
 - (e) The number of access points to parking lots from a street shall relate to other existing curb cuts whenever possible.
 - (f) Minimum off-street parking requirements may be reduced at the discretion of the zoning administrator or planning commission.
 - (g) SCC 18.125.010 shall apply.
 - (h) Off-street parking requirements may be reduced by 10 percent for on-street parking within 200 feet of the subject parcel.
 - (i) Shared parking arrangements may be considered on a space-by-space basis within 200 feet of the subject parcel provided appropriate schedule arrangements can be justified and proof of a legal agreement outlining the conditions of the shared parking arrangement can be provided.
 - (j) When 50 percent or more of the required parking area is located below or above the building, one story may be added to the maximum total number of stories allowed.
 - (k) Any amount of parking area greater than required parking shall reflect alternative surface treatment designed to reduce total impervious surface, improve runoff quality, reduce runoff quantity, reduce impacts on local microclimates from heat reflection, and increase total area devoted to plantings thereby reducing impacts of parking areas on natural resources.
 - (l) Parking lots shall be interconnected on adjacent parcels whenever possible.
 - (m) Pedestrian access from the sidewalk into individual project sites, as well as within sites and between sites shall be provided.
 - (n) Roadway design shall be tailored by the zoning administrator or designee to fit the character and functional needs of specific corridors. Roadways shall incorporate traffic calming devices when appropriate as determined by the zoning administrator or designee.
- (4) Requirements for New Buildings, Redeveloped Buildings and the Proposed Adaptive Reuse of Existing Buildings.
- (a) The design and construction of new buildings, redeveloped buildings, and the adaptive reuse of existing buildings shall be based on but not limited to the scale, mass, height,

materials, color, texture, construction methodology, orientation, and manner of negotiating changes in elevation of nearby historic and cultural resources.

(b) Trademark buildings and related features shall be modified to meet the design standards included within this chapter.

(c) Prior to the submission of a proposed plan of demolition, alteration, or removal of existing buildings located in the entrance corridor overlay district, the applicant or his or her representative is encouraged to meet with the zoning administrator or designee concerning the proposed plan of action and submit preliminary studies, a written description, drawings, photographs, and plans of the concept of the proposed action for tentative review, comments, and recommendations.

(5) Planting Requirements. The requirements of Chapter 18.175 SCC, Landscaping and Screening, shall apply with the following exceptions:

(a) Site plantings shall reflect design characteristics identified as desirable in the guidelines developed for each corridor.

(b) New development along corridors must incorporate as much of the existing plants as possible.

(c) No grading or other earth disturbing activity, storage of materials, equipment, or refuse shall occur within the drip line of any trees or wooded areas or intrude upon any other existing features designated for preservation as provided for in the most recent edition of the Virginia Erosion and Sediment Control Handbook.

(d) Plantings of major trees shall equal a minimum 10 percent of the parking and vehicular circulation area. Planting areas provided shall be a minimum of five feet wide.

(e) Plants shall not be used to screen poorly sited utilities; all utilities, site, and building equipment (including but not limited to loading docks, service entrances, dumpsters and other refuse containers) shall be built into the building envelope, be screened with architectural elements such as walls or extended parapets, or built into the site design.

(6) Requirements for Utilities.

(a) All utility lines, such as electric, telephone, CATV or other similar lines, shall be installed underground in the entrance corridor overlay district. This requirement shall apply to lines serving individual sites as well as within the project.

(b) All utilities, site, and building equipment (including but not limited to loading docks, service entrances, dumpsters and other refuse containers) shall be built into the building envelope, be screened with architectural elements such as walls or extended parapets, or built into the site

design. Plants shall not be used to screen poorly sited utilities.

(c) Extended parapets and other means of architectural screening shall be used to eliminate rooftop equipment from public view.

(d) Areas designated on approved plans for preservation of existing features shall be clearly and visibly delineated on the site prior to commencement of any grading or other earth disturbance, including trenching or tunneling, and no such activity, grading, or moving of heavy equipment shall occur within such area. The visible delineation of all such features shall be maintained until all construction activity has been completed.

(7) Requirements for Signs, Billboards, and Other Advertising Structures. The requirements of Chapter 18.140 SCC, Signs, Billboards and Other Advertising Structures, shall apply with the following exceptions:

(a) Each parcel of property occupied by a building shall be permitted one freestanding sign, which shall not exceed 30 square feet on each face. Automobile service stations shall be permitted an additional twenty square feet on each face to advertise the price of fuel.

(b) Freestanding signs shall be mounted on bases a maximum of three feet high. If the specific location of the sign requires a base of more than three feet to provide adequate visibility, the planning commission may approve a taller base. No freestanding sign shall exceed 15 feet in height from grade.

(c) Freestanding signs for shopping centers shall be allowed 10 square feet of area per business establishment. An additional 25 square feet shall be allowed to identify the shopping center as a whole. If individual businesses located within the shopping center are not included on the freestanding sign, the sign identifying the shopping center may be 45 feet in area. For the purposes of this chapter, shopping center shall be defined as:

(i) Groups of two or more stores, personal service shops or restaurants connected by party walls, partitions, canopies or similar features; or

(ii) Some or all of the stores, personal service shops or restaurants located in separate buildings designed as a single commercial group sharing common parking areas, vehicular travelways, and walkways designed to encourage customer interchange between the buildings and present the appearance of a continuous commercial area.

(d) If the nearest point of a freestanding sign is located within five feet of the street right-of-way, its location must be approved by the city's director of public works or designee, who will evaluate the location for site line and other traffic safety considerations.

(e) The following sign types shall be permitted in the entrance corridor overlay district:

- (i) Externally illuminated signs provided the light source is directed downward;
 - (ii) Internally illuminated channel letters; and
 - (iii) Internally illuminated cabinet signs if the background of the cabinet sign is opaque and appears black at night;
 - (iv) Additional types of signs shall be considered.
- (f) No wall sign shall project beyond the surface of the building or above the roofline of the building; signs shall be appropriately scaled to the building or portion of the building served and should be coordinated with the architecture.
- (g) Inflatable figures and/or signs (still or animated) are not permitted in the entrance corridor overlay district.
- (8) Lighting Requirements for Site and Building Exteriors.
- (a) Lighting shall be wholly contained within the site.
 - (b) Light poles shall not exceed 24 feet in height.
 - (c) Lighting shall be limited to that which is necessary for safety; lighting shall not be used as signage such as up-lighting or down-lighting building elevations, decorative light fixtures, moving or sweeping lights directed towards the sky among other types. (Ord. 2008-09).

18.83.100 Severability.

In the event that any section, subsection, sentence, clause or phrase of this chapter shall be declared or adjudged invalid, such adjudication shall in no manner affect the other sections or sentences, which shall continue in full force and effect as if the section, subsection, sentence, clause or phrase so declared or adjudged invalid were not originally a part thereof. (Ord. 2008-09).

18.83.110 Effective date.

This chapter shall be in full force and effect immediately upon adoption. (Ord. 2008-09).

Chapter 18.100
I-3 PLANNED INDUSTRIAL DISTRICT

Sections:

[18.100.010 General description.](#)

[18.100.020 Uses permitted.](#)

[18.100.030 Area regulations.](#)

[18.100.040 Height regulations.](#)

[18.100.050 Minimum off-street parking and loading requirements.](#)

[18.100.060 Signage.](#)

[18.100.070 Screening of outdoor storage.](#)

[18.100.080 Uses prohibited.](#)

18.100.010 General description.

The I-3 district is intended to permit industrial development where the use and its operation do not directly adversely affect nearby residential and business uses. The district regulations are designed to allow a wide range of industrial activities subject to limitations designed to protect nearby residential and business districts. (Zoning ordinance Art. 4, § 17).

18.100.020 Uses permitted.

Within the planned industrial district, no building, structure, or premises shall be used and no building or structure shall be erected or altered until and unless the same has been approved by the planning commission and by city council in accordance with the provisions contained in Chapter 18.210 SCC, and until and unless the following conditions have been complied with.

Uses that may be permitted on review shall be the following:

- (1) A retail or service use only when it directly serves or is auxiliary to the needs of industrial plants or employees thereof.
- (2) Sleeping facilities required by caretaker or night watchman employed on the premises shall be permitted in the I-3 district.
- (3) Any of the following uses:
 - (a) Outdoor storage facilities for building materials, sand, gravel, stone, lumber; open storage of construction contractor's equipment, supplies, and manufactured goods.
 - (b) Offices, businesses, or professional.

- (4) The following uses when conducted within a completely enclosed building:
- (a) The manufacture, compounding, processing, packaging, or treatment of such products as bakery goods, candy, cosmetics, dairy products, drugs, perfumes, pharmaceuticals, perfumed toilet soap, toiletries, and food products.
 - (b) The manufacture, compounding, assembling or treatment of articles of merchandise from the following previously prepared materials; aluminum, bone, cellophane, canvas, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, precious or semi-precious metals or stones, shell, rubber, textiles, tin, iron, steel, wood (excluding sawmill), yarn, and paint not involving a boiling process.
 - (c) The manufacture of pottery and figurines or other similar ceramic products, using only previously pulverized clay, and kilns fired only by electricity or gas.
 - (d) The manufacture and maintenance of electric and neon signs, commercial advertising structures, light sheet metal products, including heating and ventilating ducts and equipment, cornices, eaves, and the like.
 - (e) The manufacture of musical instruments, toys, novelties, and rubber and metal stamps.
 - (f) Auction house, except for sale of livestock.
 - (g) Blacksmith shop and machine shop.
 - (h) Wholesale or warehouse enterprise.
- (5) Buildings, structures, and uses accessory and customarily incidental to any of the above uses.
- (6) There shall have been filed with the planning commission a written application for approval of a contemplated use within said district, which application shall be accompanied with the following information:
- (a) A plot plan indicating the location of present and proposed building, driveways, parking lots, landscaping, screening, and other necessary uses.
 - (b) Preliminary architectural plans for the proposed building or buildings.
 - (c) A description of the business operations proposed in sufficient detail to indicate the effects of those operations in producing excessive auto or traffic congestion or problems of noise, glare, odor, fire, or safety hazards, or other factors detrimental to the health, safety and welfare of the area.
 - (d) Effects of those operations in producing excessive auto or traffic congestion or problems

of noise, glare, odor, fire, or safety hazards, or other factors detrimental to the health, safety, and welfare of the area.

(e) Engineering or architectural plans for the handling of any of the problems of the type outlined in subsection (6)(c) of this section, including the handling of storm water and sewers and necessary plans for the controlling of smoke or other nuisances such as those enumerated under subsection (6)(c) of this section.

(f) Any other information the planning commission or city council may need to adequately consider the effect that the proposed uses may have upon the area, and/or the cost of providing municipal services to the area. (Zoning ordinance Art. 4, § 17).

18.100.030 Area regulations.

The following requirements shall apply to all uses permitted in this district:

- (1) Front Yard. All buildings shall set back from all street right-of-way lines not less than 35 feet.
- (2) Side Yard. No building shall be located closer than 15 feet to a side lot line, unless said side lot line abuts a residential or professional district, in which case no building shall be located closer than 75 feet to that side lot line.
- (3) Rear Yard. No building shall be located closer than 30 feet to a rear lot line, unless such rear lot line abuts a residential or professional district, in which case no building shall be located closer than 75 feet to that rear lot line.
- (4) Coverage. Main and accessory buildings and off-street parking, drives, access roads, service areas and loading facilities shall not cover more than 75 percent of the lot area.
- (5) Buffer Zone. Setback areas shall act as a buffer between adjacent residential and business uses. They shall be fully landscaped and maintained with grass, trees and shrubbery of sufficient height and density to serve as a screen between the planned industrial zone and the residential zone. The buffer zone shall not constitute a site-distance obstruction at street intersections. The buffer zone shall be considered as part of the lot area, but shall not be used for any business purpose such as buildings, parking lots, signs, or any accessory use. The buffer zone, upon completion of the development of any project, shall be at or near the same grade or plane which existed prior to the development of the planned industrial district property, unless otherwise expressly reviewed and approved by the planning commission and by city council. These restrictions shall not apply to that portion of the lot fronting on the major thoroughfares, however all other required landscaping shall apply. (Zoning ordinance Art. 4, § 17).

18.100.040 Height regulations.

No building or structure shall exceed four stories or 45 feet in height, except as hereinafter provided in Chapter 18.115 SCC. (Zoning ordinance Art. 4, § 17).

18.100.050 Minimum off-street parking and loading requirements.

Minimum off-street parking and loading requirements are as regulated in Chapters 18.125 and 18.135 SCC. (Zoning ordinance Art. 4, § 17).

18.100.060 Signage.

Signage is as regulated in Chapter 18.140 SCC. (Zoning ordinance Art. 4, § 17).

18.100.070 Screening of outdoor storage.

Outdoor storage facilities and areas shall be screened by a minimum seven-foot-tall obscuring fence, wall or mass plantings and designed in such a way as to contribute to the orderly appearance of the district. (Zoning ordinance Art. 4, § 17).

18.100.080 Uses prohibited.

The following uses are prohibited:

- (1) Abattoirs or slaughterhouses.
- (2) Acid manufacture.
- (3) Automobile assembling, painting, upholstering, rebuilding, reconditioning, body and fender works, truck repairing and overhauling, tire retreading or recapping and battery manufacturing.
- (4) Ammonia, bleaching powder, or chlorine manufacture.
- (5) Bag cleaning.
- (6) Batching plants for asphalt and portland cement concrete.
- (7) Blast furnace.
- (8) Boiler works.
- (9) Brick, tile or terra cotta manufacture not requiring ovens.
- (10) Candle manufacture.
- (11) Celluloid manufacture.
- (12) Coke ovens.
- (13) Crematory or reduction plant.
- (14) Creosote treatment or manufacture.
- (15) Dextrin, glucose, and starch manufacture.

- (16) Disinfectants, cattle dips, exterminators and insecticides manufacture, not including the compounding of the same.
- (17) Distillation of bones.
- (18) Dyestuff manufacture.
- (19) Fat rendering.
- (20) Feed mills.
- (21) Fertilizer manufacture, not including compounding.
- (22) Fireworks or explosives manufacture or storage, or the loading of explosives.
- (23) Fish smoke or curing.
- (24) Forge plant.
- (25) Foundry casting lightweight nonferrous metal not causing noxious fumes or odors.
- (26) Freightage or trucking yard or terminal.
- (27) Fuel manufacture.
- (28) Gas (illumination or heating) manufacture or storage in excess of 1,000 cubic feet.
- (29) Gelatin, glue, or size manufacture or process involving recovery from fish or animal material.
- (30) Glass manufacture.
- (31) Gunpowder manufacture or storage.
- (32) Hotels and similar inhabitable places.
- (33) Incineration or reduction of garbage, dead animals, outfall, or refuse other than by an authorized public agency.
- (34) Iron, steel, brass, or copper works or foundry.
- (35) Lampblack manufacture.
- (36) Lime, gypsum, cement, asphalt or plaster of paris manufacture.
- (37) Livestock market, auction or sales pavilion.
- (38) Match manufacture.

- (39) Oil, paint, turpentine, or varnish manufacture.
- (40) Ore reduction.
- (41) Planing mill.
- (42) Potash or washing soda manufacture.
- (43) Public utility service yard or electrical receiving or transforming station.
- (44) Pulp mills.
- (45) Petroleum products, refining, or storage.
- (46) Printing ink manufacture.
- (47) Pyroxylin plastics or celluloid manufacture, or explosive or inflammable cellulose or pyroxylin products manufacture.
- (48) Rendering plant or other comparable processing of fish or animal material.
- (49) Residential use.
- (50) Rolling manufacture.
- (51) Sale, storage, and sorting of junk, waste, discarded or salvaged materials, machinery or equipment, but not including processing.
- (52) Salt works.
- (53) Sawmill.
- (54) Smelting or refining of metals.
- (55) Soap manufacture.
- (56) Sulphurous, sulfuric, nitric, or hydrochloric, or other corrosive or offensive acid manufacture or their use except as accessory to a permitted industry.
- (57) Stockyards.
- (58) Shoe polish manufacture.
- (59) Tanning, curing, or storage of raw hides or skins, or leather dressing or coloring.
- (60) Tar distillation or manufacture.
- (61) Tire recapping or retreading.

(62) Tar roofing or waterproofing manufacture.

(63) Wool pulling or scouring. (Zoning ordinance Art. 4, § 17).