

**FORMER HYOSUNG TIRE PLANT
REDEVELOPMENT
FEASIBILITY STUDY**

PREPARED BY WAUKESHAW DEVELOPMENT INC.

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I. Study Overview and Goals

The intent of this study is to assist the Town of Scottsville in determining the best future use for the former Hyosung tire plant located at 800 Bird St., Scottsville, VA. The plant sits on 61.47 acres along the banks of the James River. Waukeshaw Development was contracted by the Town of Scottsville to prepare a financial and architectural analysis to determine the feasibility of redeveloping the site. To do this, Waukeshaw conducted a review of current zoning ordinances, environmental site conditions, market conditions, and community surveys to provide a holistic approach to redevelopment.

The building was originally constructed in 1944 by the Defense Plant Corporation to produce tire fabric and tire cord used to manufacture tires for the war effort during World War II. At its peak, the plant employed more than 300 people. It remained in use for the purpose of tire material production under various owners until its closing in 2009, which was accompanied by the loss of more than 100 jobs. In 2011, the plant was sold to the Virginia Land Company.

Waukeshaw Development was asked to conduct this redevelopment study with the proposed end-use being a mixed-use development. This is due to the fact that the building is no longer suitable for heavy industrial use, and there are multiple commercial and residential needs in the Scottsville market. Since the facility was built in 1944, industrial development and manufacturing has changed drastically, and the industry at large has begun to evaluate their location decisions based on specific criteria that the Hyosung property does not meet. The Central Virginia Economic Development Partnership toured the building in early 2019 and cited several reasons that support this conclusion.

One key restriction of the building is ceiling height. The Hyosung building's ceiling height of 15-feet in the manufacturing areas is very low relative to the needs of modern manufacturers. Modern facilities are built with at least 22-foot ceilings to accommodate newer equipment, production and distribution practices. Additionally, the factory location is not ideal for industrial use due to its lack of convenient access to main transportation

arteries such as I-64, I-95, and I-81. Generally, manufacturers locate their facilities two to five miles away from a major transportation route, or at most ten miles if it is located on a 4-lane divided highway. The factory is more than 50 miles from I-81, more than 20 miles from I-64, and more than 40 miles from I-95. The current structure would also require a significant amount of fit-up work to be completed before it would be suitable for a new industrial tenant, and industrial tenants are generally looking for move-in ready buildings where they are required to do very little fit-up work.

Waukeshaw based its study on information about the site and the Scottsville market provided by both the property owner and the Town of Scottsville, along with its own research. It also used information made available by the Thomas Jefferson Regional Planning District, the Piedmont Housing Alliance, and other community partners interested in the future of this project.

Using its experience in adaptive reuse, historic tax credit development, and economic development, Waukeshaw's ultimate goal is to present a redevelopment plan that leads to the creation of a valuable resource for the entire greater Scottsville area, and a plan of finance for a potential developer. The plan endeavors to go beyond providing an option for the town of how to address a blighted property, but rather attempts to harness Scottsville's unique attributes to make it a hub for community and economic development for generations to come.

II. Executive Summary

The former Hyosung building is a classic "white elephant" industrial building in the small, rural community of Scottsville, VA. While the town seeks adaptive reuse of the structure, the challenges are enormous. The size of the building presents an outsized investment relative to the population and existing demand of any kind; the infrastructure and building conditions make it obsolete for manufacturing use; it is located in a flood zone, and protected by a maintenance-heavy dyke; the site will be abnormally expensive to maintain; and it is privately held, with a wide disconnect between the current owner's perceived value of the property, and the actual value of the property when derived from

the total investment required to bring it to its highest and best use, even after all incentives are considered.

Redevelopment will require much creativity, deployment of state and federal historic tax credits and other incentives, a multitude of grants and special financing, and participation and commitment from multiple end users, both residential and commercial. The property should be viewed as an assemblage of many convergent spaces under one roof, and special legal constructs - such as meticulously considered tax credit ownership structures, tax credit development phasing, and the creation of commercial condominiums to facilitate special financing - should all be seriously considered.

Within this analysis, Waukeshaw does not contemplate an outcome with any one large unique end user, such as a hospital, as it would be presumptuous and premature to do so here. Rather, we have looked at the commercial space as housing various 'generic' commercial end users of many kinds, from office to light industrial, and a mixture of Low Income Housing Tax Credit (LIHTC) and market rate housing. Still, were a single end user to lease the space (or a large portion of it) the 'building blocks' of this analysis will remain relevant, and would simply be modified to that outcome.

III. Market Research

A viable redevelopment plan and analysis for this property must take market and community conditions into account. Below is a summary of the data available that has helped inform the proforma.

A. Summary of community surveys and proposed concepts

The Scottsville community has known this property as one that's been vacant and unused for more than a decade. A variety of outcomes and opinions about redevelopment options have been suggested based on perceived community needs. In the summer of 2019, the Town of Scottsville solicited responses from

community members to a survey discussing their general satisfaction with certain components of life in Scottsville and the reasons they live there. Below is a summary of survey results and redevelopment suggestions that have been made over the years:

Proposed Uses Apart from 2019 Survey:

- a. Recreational entertainment facility such as paintball, shooting range, skating rink
- b. Medical offices and a potential partnership with Sentara Medical Group
- c. Campus for Piedmont Virginia Community College
- d. Food hub/food production
- e. Mixed-use retail + housing
- f. Mixed-use office + housing
- g. Housing in general at varying age ranges and price points
- h. Affordable Housing
- i. Dining establishments
- j. New small business space, from basic retail to specialty services
- k. Open space and inclusive recreation options for all ages (gym, multi-sport facility)

Relevant Survey Results Summary:

The survey was shared with the community online and paper copies were mailed to Scottsville residents. 131 people responded to the survey ranging in age from 18 years old to 65+ with the following breakdown:

- 5.3% age 18-25
- 18.6% age 26-35
- 19.38% age 36-45
- 13.95% age 46-55
- 21.71% age 56-65
- 20.93% age 65+

Half of the respondents had lived in Scottsville for more than 15 years at the time the survey was taken, while about 25% had lived there for 6 to 15 years, and nearly 21% had lived there for 2 to 5 years.

When asked why respondents lived in Scottsville, 24% said it was because they were born and raised there, and 20% said because of the rural setting. Another 15% answered they were “attracted to house/property” and 9% answered “affordable housing.”

Participants were asked to rate the characteristics of Scottsville on a scale of “good,” “average,” or “poor” and the outcome of this question depicts a very useful image of Scottsville’s strengths. 76% of those who took the survey rated the Town’s “family atmosphere” as “good”, while 24% rated it average, and no one rated it “poor.” 41% rated Scottsville housing affordable, and 51% rated it as average. Only 7% said that was a poor quality of Scottsville. 45% of respondents said that it has good access to adjacent communities and 44% rated that as average, while only 11% rated that as poor.

Additionally, community members were asked to rate different types of housing in terms of priority for the Scottsville area. 37% said that single-family housing is a high priority and 27.64% responded that a mixed-use apartment and commercial facility is a high priority. Residential housing for those age 55+ and assisted living housing were both rated as high priorities by 30.4% of participants.

Finally, the survey asked participants to rate the priority of recruiting different kinds of commercial functions to town, and there was a wider spread of responses on this question. Interestingly, nearly 55% said that recruiting offices, medical services, and technology to Scottsville was a high priority. 47.5% said that there is a significant need for support for those who operate home businesses and/or telework. 45% responded that basic retail shops and services are the highest priority. Nearly 32% of people said restaurants and night life are a high priority, while almost 27% responded that light manufacturing is a high

priority, and 25% said that tourist-oriented specialty shops and services are a high priority.

Based on these data points, one can draw several conclusions about how the citizens of Scottsville view the direction of the town's future. It is clear that while many people in the Scottsville community were born and raised locally and that is a significant reason for why they still live there, a large portion of the population moved to the area for its family-friendly character, rural attributes, affordable housing prices, unique properties, and convenient location.

Furthermore, while some residents are focused on the next phase of living (55+, assisted living), others may be more focused on homeownership. Some may be just starting out or downsizing and willing to live in an apartment in a mixed-use setting.

What is also fascinating is the mixed response as to which kind of commercial use is most lacking from the community. While many residents have varying opinions about what kind of commercial space is most needed in Scottsville, it is obvious that the community is open to new businesses.

While we always enjoy hearing the wants and desires of the community, success of the redevelopment will ultimately come from attracting businesses that polled members of the community might not yet be able to conceive. A redeveloped property might provide a much cheaper alternative to craft makers and light industrial users currently priced out of the Charlottesville market. It might also serve as a space for homegrown businesses not yet formed. Regardless, given the scale and location of the factory, this site provides Scottsville an opportunity to create a resource that meets many of those needs at once if planned for appropriately.

B. Summary of Housing Market Conditions in the Greater Charlottesville Region

Waukeshaw envisions at least part of the Hyosung building programmed to accommodate one- and two-bedroom apartments. To determine the demand for housing in the market in the greater Charlottesville area, Waukeshaw reviewed the Comprehensive Regional Housing Study and Needs Assessment that was published by the Central Virginia Regional Housing Partnership of the Thomas Jefferson Planning District Commission in March of 2019.

The assessment explains that the housing trend in the region is such that demand for housing has been outpacing supply, despite a great deal of new residential construction occurring in and around the City of Charlottesville. This has caused rents and home prices to rise rapidly as vacancy rates decrease. For context, the assessment states “rent in major apartment complexes in the urban area grew 5.8% annually over the past two years and 4% annually since 2012, averaging \$1,321 per month.” This trend has caused many of those making an average income for the area to be edged out of the housing market or has forced them to go beyond their means to pay rent.

These circumstances have inherently made it increasingly difficult for those in need of affordable housing to secure a place to live. For the purposes of the assessment, affordable housing is defined as housing that requires a household to spend 30% or less of their income for housing. Some in need of affordable housing are spending up to 50% of their income on housing. The assessment states that “in the four rural counties, 2,000 renters are paying more than 30% of income, including 940 who are paying half or more of their income in gross rent.”

Additionally, the study found that most residents in rural areas commute 10-45 minutes to work. More and more people are moving out of the city to save money on rent. However, this effect has diminishing returns as the distance between work and home grows. With a drive of approximately 19 miles one-way to get to Charlottesville, a tenant saves \$441 on their housing costs on average (assumes a cost of \$.58/mile for 20 days/month). With a distance of 20 miles from

downtown Scottsville to downtown Charlottesville (one way), one could argue that a savings of \$441 per month would be well worth the longer commute.

It is clear that the housing market in the greater Charlottesville area is on an upward trend, and Scottsville has the opportunity to capitalize on this trend and fill a housing gap for those in need of affordable and market-rate housing. It is ultimately up to the eventual developer whether to incorporate low-income housing into the business model, but there is a definite need in the market. Furthermore, some iteration of low-income housing tax credits may financially benefit the project.

C. Summary of Findings in 2018 Mixed-Use Mixed-Income Study

In 2018, consultants Arnett Muldrow & Associates prepared a Mixed-Use Mixed-Income (MUMI) Study for the Town of Scottsville to help provide insight into market conditions in Scottsville and to craft a redevelopment plan for the former tire plant. The study included a variety of data analyses and surveys to understand the commercial and residential markets in Scottsville.

The survey found that most residents own their home and work in Charlottesville, with the next highest number of participants working in Scottsville. There were a variety of proposed uses for the tire plant, including but not limited to indoor recreation and entertainment such as a movie theater, skating rink, YMCA, indoor pool, and brewery. The survey also found that participants were open to a mixed-use building with apartments, office space, retail and recreation. The community identified several services needed in Scottsville including vocational training, a small business incubator, daycare/preschool, and an educational institution of some kind.

The group also conducted a zip code survey to study the origins of people coming through Scottsville. It found that 47% of local business patrons were Scottsville locals, while 13% came from the rest of Albemarle County, and

another 13% came from Buckingham County. According to the study, these results “indicate that while Scottsville’s market is growing its overall base remains localized.” After analyzing market leakage, the study states that the highest industries for economic opportunity in Scottsville are “general merchandise” followed by restaurants, grocery, health and personal care.

Finally, the MUMI studied the housing market in the greater Charlottesville region and specifically in Scottsville. The outcomes of the MUMI 2018 study and the 2019 Comprehensive Regional Housing Study are similar: Housing costs in Albemarle County and the Charlottesville area have been rising as supply cannot keep pace with demand. There is little new construction going on outside of Charlottesville, and Scottsville has the opportunity to capitalize on this trend by filling the gap in the market for more affordable, dense residential development.

IV. Plan of Finance, Proforma Cash Flow, and Funding Sources

A. Proforma Cash Flow

To create a financeable business case for redevelopment, we propose attacking the problem by first breaking down the building into commercial and residential components. Within this construct, we envision 12 - 14 potential commercial tenant spaces, further dividing the tenancy (and risk) among many end users, versus one large one. In the residential component of the building, we envision 100 residential units, in the form of one- and two-bedroom units, ranging from 600 +/- SF to 1,000+/- SF. Further, we envision these being financed under the 4% LIHTC program, which offers capped rents for a portion of tenants earning a certain fraction of the median income, and provides important equity to the project that would be difficult to otherwise attract.

An important consideration to this construct is that certain LIHTC financing does not allow for a commercial component. Thus we suggest further structuring the project using a condominium arrangement, with each use (residential and commercial) falling under its own commercial condominium. This would

effectively create two different properties under one roof, each owned by a sub-entity of a master entity. This way, the tax credits and other incentives would be separately and independently generated by each entity, with the equity then summed and fed back to the master entity.

We have made many assumptions as we estimated the total cost, income and operating expense of the project. Chief among them are the following:

- Unknown and varied commercial end users with B or M-1 uses
- No tenant upfit has been considered. Commercial delivered as 'Warm Shell'
- Generic residential rents at approx. \$800/month, averaged
- Existing infrastructure currently available at the site is adequate
- No additional budgeting for environmental remediation

We are projecting syndication of the federal tax credits in the range of \$0.75 and Virginia state historic tax credits at approximately \$0.80 gross. An equity gap of more than \$2,000,000 has been identified using the existing proforma, requiring Developer equity and/or incentive capital of approximately \$2,232,928.

It is important to note that many developers with speculative projects and/or in unproven markets use tenant upfit incentives, rent breaks, etc. to attract commercial tenants to their projects. There is no equity to account for this in the proforma, and a strong case could be made for necessary additional incentive capital to be attracted to the project to account for shortfalls in the operating income due to commercial tenant incentives and higher than usual vacancy.

Please refer to Exhibit A for the completed proforma.

B. Summary of Potential Funding Sources

The former Hyosung plant may be a good fit for several state funding mechanisms such as grant or loan programs intended to encourage economic development. These kinds of funding sources can help offset the amount of traditional financing or equity a developer needs to incorporate into a project and makes good use of dedicated state and federal dollars intended to attract investment to unlikely communities. Some or all of these incentives could be deployed to assist in offsetting the Developer equity, or tenant incentives, described herein.

It is important to note that several programs administered through the State of Virginia require that the applicant be a local government or economic development authority, although they may permit partnership with private and nonprofit entities. Since the property is currently under private ownership, this should be taken into consideration when determining the way grant and loan applications are structured for this property.

The Industrial Revitalization Fund (IRF), administered by the Virginia Department of Housing and Community Development (DHCD), may be a strong source of funding for this project. The IRF leverages local and private resources to achieve market-driven redevelopment of vacant and deteriorated industrial and commercial properties. The program is targeted toward vacant non-residential structures whose poor condition creates physical and economic blight to the surrounding area in which the structure is located. Eligible properties include those formerly used for manufacturing, warehousing, mining, transportation and power production. An IRF award may be structured as a grant or a loan with a maximum amount of \$600,000.

The site may also be eligible for funds from the Virginia Brownfields Restoration & Economic Redevelopment Assistance Fund (VBAF) to offset the cost of

environmental investigation and remediation work. The program offers Site Assessment and Planning Grants with a maximum amount of \$50,000, and Site Remediation Grants with a maximum amount of \$500,000. More information about this program is available in Section VIII.

The Vibrant Communities Initiative is another potential funding opportunity for this project. The Vibrant Communities Initiative (VCI) combines multiple funding sources to support local or regional transformational community-based projects including affordable housing and community and/or economic development components. An important note for this funding source is the requirement to incorporate an affordable housing component into the project. The funds available for this source change annually, so it is difficult to say what the maximum award amount could be in any given year.

The recently developed GO Virginia program may also be worth investigating as a potential funding source for the project. GO Virginia is overseen by DHCD and has the mission of supporting programs to encourage more high-paying jobs through incentivized partnerships between business, education, and government to diversity and strengthen the Virginia economy. Scottsville and Albemarle County fall within GO Virginia Region 9, which also consists of the City of Charlottesville, and the counties of Culpeper, Fauquier, Fluvanna, Greene, Louisa, Madison, Nelson, Orange, and Rappahannock. Any funding request to the GO Virginia Board would require collaboration with some of the other counties or cities within Region 9.

Finally, Albemarle County has a strong economic development program and may act as a project partner as the structure of this redevelopment is established. Albemarle County is focused on many factors as they enact Project ENABLE, their strategic economic development plan to propel the County forward through 2022. Several goals set forth in Project ENABLE link directly to the Scottsville project. One of these goals is to build awareness among young people of local career opportunities. Creating modern housing will be a huge asset in promoting

Albemarle County's offerings for young professionals. Another goal of the plan is to encourage the attraction of private capital and direct investment. This project would certainly meet this goal by attracting investment through the redevelopment of the property.

In addition to the County's planning goals supporting the Scottsville project, it also offers the ENABLE grant program, which is intended to assist projects that infuse private investment into the County. The former Hyosung plant redevelopment project would be considered a "Pinnacle Project" within the context of the ENABLE program, meaning it fits within the County's development area and promotes placemaking, mixed-use, and redevelopment opportunities. At this point in time the Town of Scottsville is not located within the County's mapped development areas, however it could be considered the development area for the southern district of Albemarle County. According to the ENABLE program documents, "the grant program is supported by the net increase in property tax revenue generated by the incentivized project. After all annual installments have been allocated, it is expected that the County will receive the full value in return from the private capital investment - through increased and/or diversified tax base, employment opportunities, "spin off" economic activities, or the like. Grant installments are based on the annual increased tax revenue generated to the Albemarle County. The annual installment is equal to no more than 100 percent of the increased property tax revenue to Albemarle County, while the remaining increased property tax revenue effectively contributes to the County's general revenue collections. It is anticipated that a project aided by an ENABLE Grant otherwise would not have been started or completed ("but for"), or occur timely, or would be significantly different in scope or scale without the incentive."

Additionally, there are a variety of tax credit programs that this project may qualify for, depending on how it is developed. One such program is the New Market Tax Credit Program. The NMTC Program is intended to help encourage investment in low-income communities experiencing a lack of investment as evidenced by

vacant commercial properties, outdated manufacturing facilities, and inadequate access to education and healthcare service providers. The NMTC Program attracts private capital into low-income communities by permitting individual and corporate investors to receive a tax credit against their federal income tax in exchange for making equity investments in specialized financial intermediaries called Community Development Entities (CDEs). The credit totals 39% of the original investment amount and is claimed over a period of seven years. The Scottsville census tract qualifies for this program.

Given the age of the building, the project may also qualify for Historic Tax Credits (HTC). To qualify, the building must be listed on the National Register of Historic Places. To do this, it must be associated with a “period of significance” in history. The former tire plant is likely to qualify as it was constructed to help manufacture tires for the war effort during World War II. The products that came out of this building made a tangible contribution to an important time in American and world history. The building must be nominated to be listed on the Register, which requires approval from the Department of Historic Resources. If the nomination is approved, the building is considered eligible for Historic Tax Credits.

It is Waukeshaw’s recommendation that any developer new to HTC work consider engaging with an HTC consultant experienced in adaptive reuse projects. It can be challenging for a developer with limited HTC experience to parse out qualified costs and to determine how the tax credits fit into the project capital stack.

One way to accomplish the redevelopment of the former Hyosung plant with HTCs may be to implement a five-year phasing plan for the project. When a project is phased, the tax credits are distributed over a five-year period during which portions of the project are completed until the project is done. Below is an example of how the phases could be broken out to accomplish the project with HTCs:

Phase I: Conduct work to prepare the main factory building on the site. Remediate hazardous materials, perform structural work to secure the building frame.

Phase II: Complete the redevelopment of the residential portion of the main factory building. Lease this space.

Phase III: Complete the redevelopment of the commercial portion of the main factory building. Lease this space.

Phase IV: Conduct work to prepare the ancillary buildings on the site. Remediate hazardous materials, perform structural work to secure the building frames.

Phase IV: Complete the redevelopment of the ancillary buildings into commercial units. Lease this space.

There are many ways to organize a phased project. Developers will sometimes phase a project to help mitigate perceived financial risk for investors. Given the extremely large size of the site and small size of Scottsville, investors may have reservations regarding whether the building will fill up and generate income. They may still be skeptical after reviewing the numerous market studies that have been completed in recent years. By completing the project in phases and leasing each section over time, a developer can produce evidence that a building will generate income and investors are more likely to have confidence and continue to invest in the project. This removes the speculative nature of the investment.

As noted in Section II Part B, there is growing demand for affordable housing in the Charlottesville market. If a developer wants to include affordable housing as part of this project, they may be eligible for Low-Income Housing Tax Credits (LIHTC). The federal LIHTC program is sponsored by the U.S. Treasury Department and administered in Virginia by Virginia Housing Development Authority (VHDA). It encourages the development of affordable rental housing by providing owners a federal income tax credit. It also provides incentive for private investors to participate in the construction and rehabilitation of housing for low-income families.

All of these funding sources may help offset the amount of money a developer would need to invest in this project either out of pocket, or what they will need to request from traditional lending institutions in loans.

C. Branding

One important component that will contribute immensely to the success of this redevelopment project is the ultimate brand of the project. With so many potential uses on one site, it will be important to provide a sense of cohesion to the property to ensure that it feels thoughtful and interesting.

In its experience, Waukeshaw has found that a strong brand can be built on things like quirky community details, property history, or a single powerful idea. Connecting the brand to the local community not only makes the project unique for the end user, but it gives the community itself a sense of ownership and familiarity that can help build support for the project and keep locals engaged in the long-term.

An example of this kind of branding is in Waukeshaw's recently completed mixed-use project in Wilson, NC called Whirligig Station. Wilson is the home of folk artist Vollis Simpson, who specialized in making whirligigs from salvaged materials. His works are featured across the street from Waukeshaw's property in downtown Wilson at a place called Whirligig Park. It is a focal point of the community and a truly unique attraction. Waukeshaw chose a name that speaks to the park and the community's history and then designed a brand theme that honors the essence of Simpson's work. The visual brand is executed in everything from apartment numbers to common spaces to bathroom tiles. The smallest details are designed to exemplify the brand, making it feel like a place that is uniquely Wilson.

As has been recognized as part of this study, the former tire plant has a rich history, as does the Town of Scottsville. The developer who takes this project on will have a treasure of ideas to draw on in creating a brand for the property.

V. Preliminary Design Concepts and Basic Rendering Sketches

Waukeshaw is recommending a redevelopment option that plans for one hundred LIHTC (4%) residential units and twelve to fourteen commercial spaces of varying sizes, as illustrated by the proforma. Please see Exhibit B for Waukeshaw's preferred proposed layout.

As evidenced in this layout, the main factory building is divided roughly in half with commercial space closest to the main entryway of the building and residential units behind that. The commercial area has a grand lobby entrance for patrons and employees, while the apartments have several different entry points around the perimeter of the building. The six commercial spaces at the "front" of the building would likely be fit up to cater to office users (including medical offices) or service providers, which would have complementary hours of operation and noise levels for the adjacent apartments.

The "rear" portion of the property where the ancillary buildings are located is designed to remain separate from the main building as to accommodate light industrial commercial uses.

Parking is dispersed throughout the property to facilitate convenient access to different sections of the campus.

When considering visual concepts for this property, Waukeshaw feels that the work completed by the University of Virginia School of Architecture and McDowell Espinosa Architects in 2018 is an excellent example of what could become of the former Hyosung plant (Exhibit C). In Sketch 1 (page 23) in this study, the concept of introducing a "main street" within the building is one that Waukeshaw has

successfully used in multiple adaptive reuse projects in the past. Creating a feeling of being outside while remaining inside a building is a unique way to work with a large building and bring natural light in while complying with requirements set forth by the Virginia Department of Historic Resources (DHR). This technique must be employed carefully and meaningfully if it were to be used.

To comply with DHR requirements, the envelope of the building must remain essentially the same and therefore little would change on the exterior of the building from its current state other than superficial improvements like landscaping.

While the remaining sketches divert from Waukeshaw's recommendation in terms of density by proposing public open spaces, the designs are excellent in providing a visual context for the redeveloped property.

Waukeshaw has also provided three other layouts for the property as options for the Town, however the proforma and cash flow analysis is not based on those layouts. Please see Exhibit D for those additional options.

VI. Code and Zoning Assessment for Proposed Options

A. Current Zoning Assessment

As the zoning ordinance currently stands in Scottsville, there is not enough density permitted to accomplish the highest and best use of the property. As a result of the architectural and financial analysis Waukeshaw has completed, it has been determined that site could accommodate a combination of 100 residential units or approximately 85,000 square feet, and roughly 82,500 square feet of commercial space if it were to be redeveloped as a mixed-use facility.

The current ordinance states that “for a parcel served by both a central water supply and a central sewer system, the minimum area requirements of the district

in which such parcel is located shall apply.” Therefore, the density permitted in Scottsville is dependent on the district for which the land is zoned.

Based on this information, it is clear that changes need to be made to the zoning ordinance to accommodate the density possible at this site and to be able to maximize its redevelopment potential. Section B will discuss the avenues that the Town can pursue to make these changes and a grant program the Town may pursue to assist with the cost of doing this work.

For reference, below is a summary of some key features of the existing residential and commercial zoning districts as they relate to this project. The content is not all encompassing, but rather intended to show how the current zoning cannot accommodate the best redevelopment option for this property.

a. VR-Village Residential:

- i. There is currently no language allowing “multifamily” development. The highest residential density housing permitted is for single, duplex, triplexes, quadraplexes, townhouses.
- ii. Gross density allowance is .7 DU/acre in all development areas.
- iii. The minimum lot size in the conventional development area is 60,000 SF, 40,000 SF in cluster development area, and 7,500 SF in a cluster development area that is served by public water/sewer.
- iv. Cluster development is defined as an arrangement of structures on adjoining lots in groupings allowing closer spacing than would be generally permitted under ordinance requirements for lot widths or area with the decrease in lot width or area compensated by maintenance of equivalent common open space. In the case of the former Hyosung plant, cluster development would not apply because the kind of residential development in question would be classified as apartments all

located on one property, rather than stand-alone structures located on adjacent lots.

v. The maximum structure height is 35 FT.

b. Residential-R3:

- i. There is currently no language allowing “multifamily” development.
- ii. The district allows 3 DU/acre in conventional and cluster development areas.
- iii. The minimum lot size is 14,500 SF in the conventional development area or 9,700 SF in cluster development area. The maximum structure height is 35 Ft.

c. Commercial District-C

- i. The Commercial District allows for by-right zoning of a variety of business functions ranging from retail and eating establishments to offices, public facilities, and service-oriented businesses. Additional commercial functions are allowed but subject to Special Use Permits.
- ii. Housing of any kind in this district may be considered by a Special Use Permit process. There is currently no language allowing “multifamily” development with the exception of an allowance for “garden apartments.” The definition of “garden apartments” is not available in the ordinance, but it is defined elsewhere as “a multiple-unit low-rise dwelling having considerable lawn or garden space.” This definition would not apply to any residential use at the former Hyosung plant if it were to be an adaptive reuse project. Outside of this reference to multifamily housing, the highest residential density housing permitted is for single, duplex, triplexes, quadraplexes, townhouses.

d. Light Industry-LI

- i. The Light Industry district permits the manufacturing of a multitude of products, as well as a variety of other commercial

functions. The zoning ordinance states the LI district is created to “permit industries, offices and limited commercial uses which are compatible with and do not detract from surrounding districts.”

- ii. This district allows the presence of dwellings as a special use but does not specify density for those dwellings.
- iii. The district does not currently permit retail or dining establishments.

B. Future Zoning Recommendations

As discussed in Section A, the Town will need to amend the current zoning ordinance to accommodate the highest and best use of the former Hyosung plant. None of the existing zoning districts permit enough density to construct the amount of housing or commercial uses that the site can support. The original ordinance was written in 1996 and has since been amended. This project provides an opportunity to make the most of an important property and amend the code to accommodate modern business and residential functions.

There are several different methods the Town could employ to rezone this property. The site itself is currently zoned Light Industrial, and the building itself is zoned Heavy Industrial. The Town could choose to rezone the building as Light Industrial. The Planning Commission could then amend the Light Industrial regulations to accommodate multi-family housing, dining and retail establishments. While this would be a significant change to the district, the former tire plant is the only property zoned LI in the Town of Scottsville. Therefore, while making changes to the district would inherently alter some of the character of the district, it would only affect this property which is no longer being used in the way for which it was originally zoned. As has been noted earlier in this study, this site provides Scottsville the opportunity to create an economic hub for the region and embracing the chance to maximize the use of this site through zoning changes will make an important impact on

the future of the Town. These changes can depict the vision Scottsville has for itself for generations to come.

The purpose of maintaining the property as Light Industrial rather than changing it to Commercial zoning is to allow for some modern, cottage industries that are still considered “light manufacturing” but can co-exist with other commercial functions and residences. This includes businesses like breweries, small food producers, artisans, etc. The current zoning also allows for professional offices and dwellings but does not specify the density of housing. It will be key to add a provision that permits higher density housing in this zone than is allowed anywhere else in the community. Adding retail and dining establishments would also enhance the commercial functions permitted and give the developer an opportunity to attract businesses in which the community has expressed an interest.

An example of higher density housing could be the allowance of multifamily dwellings on a minimum lot size of 12,000 square feet, with a limitation of 24 dwelling units per acre. This example is taken from the zoning of Vinton, VA, where Waukeshaw recently completed an adaptive reuse project converting a former school into 83 market-rate apartments. While the Vinton community and Scottsville community are very different, the scale of the housing potential at the factory site is comparable to that of which was built in Vinton.

Alternatively, the Town could amend the zoning code to allow for Planned Unit Developments (PUDs). A PUD is a “type of development and the regulatory process that permits a developer to meet overall community density and land use goals without being bound by existing zoning requirements. PUD is a special type of floating overlay district which generally does not appear on the municipal zoning map until a designation is requested. This is applied at the time a project is approved and may include provisions to encourage clustering of buildings, designation of common open space, and incorporation of a variety of building types and mixed land uses. A PUD is planned and built as a

unit thus fixing the type and location of uses and buildings over the entire project. Potential benefits of a PUD include more efficient site design, preservation of amenities such as open space, lower costs for street construction and utility extension for the developer and lower maintenance costs for the municipality,” (University of Wisconsin Stevens Point, Center for Land Use Education). Given the diversity of commercial uses that the Scottsville community has expressed interest in, creating the opportunity to implement a PUD at the project site could be a great zoning solution.

Making changes to zoning can be a lengthy and involved process that should be approached thoughtfully. Fortunately, the VHDA makes the Community Impact Grant Program available to Virginia communities, which “offers local governments resources towards community revitalization and encourages the development of mixed-use/mixed-income properties, which often anchor community development efforts and spur economic growth.” Scottsville would have the opportunity to apply for Development Code Analysis subset of this grant program, which gives the Town the opportunity to work with the Incremental Development Alliance (IDA) to establish the best course of action for determining and enacting changes to the zoning ordinance. The Development Code Analysis is “the examination of specific lots in a particular neighborhood of a city, or an entire small municipality, to determine what infrastructure or regulatory factors may be inhibiting development goals. A locality must be willing to pull apart their building codes, ordinances, and zoning; and take a deep dive in evaluating inefficiencies.” (VHDA). The IDA, which would be a partner in this process, is a group of development professionals that helps communities strengthen their neighborhoods through small-scale real estate projects.

Ultimately, the decision to rezone the property and the manner in which to do it is up to the Town of Scottsville and the Planning Commission, but it is absolutely necessary if the property will be redeveloped into anything other than an industrial site.

VII. Parking Analysis for Proposed Options

A. Current Parking Regulations in Town of Scottsville

To ensure a feasible design is proposed, this report considers existing site conditions including the available parking at the former Hyosung plant, and whether that is enough to comply with the parking requirements set forth in the zoning ordinance as it currently exists. Below is basic information taken from the ordinance explaining the design and density requirements. As the parking requirements in Scottsville are different depending on the use, it is difficult to determine the exact number of parking spaces that will be required once the site is redeveloped and programmed. For the purpose of this study, general parking regulations for commercial retailers, industrial users, office users, and multifamily housing complexes are provided.

The information in this study is simply a sampling of what the developer can expect to provide in parking for potential tenants, and it is not all-encompassing. Given that caveat, Waukeshaw has determined that there is enough space within the current lot acreage for parking to serve a mixed-use building. As a general rule of thumb, parking can be developed at a rate of approximately 300 spaces per acre as needed, contingent upon topographic and other important conditions. Since the property is 61 acres and less than 5 acres of that space is taken up by physical structures, there is enough room to expand parking. The site currently has a large lot of 160 parking spaces. The preferred architectural layout accommodates 239 spaces if new parking is created in existing paved lots. This would meet the needs of the apartments, which will require an estimated 220 parking spaces. Parking on newly cleared land would need to be created to accommodate parking for the commercial uses.

Alternatively, cooperative parking could be permitted by the Scottsville Planning Commission if proper steps are taken to ensure the permanent availability of

such space. This would allow for residential and commercial users to share parking spaces. The specific language is available below.

One consideration that the developer must consider when planning space for additional site parking is the Town's open space requirements. The zoning ordinance states that not more than 80% of allocated open space can be located within the FEMA 100-year floodplain (Section 4.6.3.3). As the property currently stands, the entire site is mapped within the 100-year floodplain and will remain as such until further study is completed and a Letter of Map Revision is submitted to FEMA, according to the work completed by Timmons Group.

Please find a sampling of parking design and density regulations below.

a. Design:

- i. Parking space required under the provisions of the current parking ordinance may be provided cooperatively for two or more uses in a development or for two or more individual uses, subject to arrangements that will assure the permanent availability of such space as such arrangements are approved by the Planning Commission.
- ii. The amount of such combined space shall be equal to the sum of the amounts required for the separate uses. The Planning Commission may reduce the amount of space required for a church or for a meeting place of a civic, fraternal or similar organization or other uses under the provisions of a combined parking area by reason of different hours of normal activity than those of other uses participating in the combination.
- iii. Parking areas shall be designed to facilitate unimpeded flow of on-site traffic in circulation patterns readily recognizable and predictable to motorists and pedestrians. Parking areas shall be arranged in a fashion to encourage pedestrian access to buildings and to minimize internal automotive movement.

Facilities and access routes for deliveries, service and maintenance shall be separated, where practical, from public access routes and parking areas. Direct, unobstructed access ways for emergency vehicles to and around buildings and uses shall be provided as specified by the Town fire official. Speed bumps, gates and other impediments to emergency access shall be prohibited unless otherwise recommended by the fire official in a particular case.

- iv. Where minimum parking or loading space is not specified herein for particular uses/structures or mixes of uses, or where conflicts exist between schedule and general requirements, the Zoning Administrator, in consultation with the Planning Commission, shall determine requirements appropriate to the use/structure guided by characteristics of the proposed use including anticipated employment, number of residents and/or visitors, by requirements for similar uses or mixes and other relevant considerations. More specifically, the Zoning Administrator shall be guided by the following for uses not specified in section 4.11.6.6.2.

b. Use and Density Examples:

- i. For each commercial use of a retail character: One (1) space per employee plus one (1) space per each three hundred (300) square feet of floor area open to the public, but in all cases a minimum of three (3) customer spaces.
- ii. For uses of an industrial character: One (1) space per employee plus a minimum of three (3) customer spaces.
- iii. Offices: Business, Administrative, Professional: One (1) space per employee plus one (1) space per five hundred (500) square feet of net office area, but in all cases a minimum of three (3) customer spaces.

- iv. Dwelling, Attached [Multi-family (Apartment Complex); Townhouse; Patio House; Duplex; Quadraplex]: Two (2) spaces per dwelling unit plus ten percent (10%) of the total required per dwelling unit.

B. ADA Parking Regulations

Another important consideration when evaluating parking needs is the ability to accommodate ADA parking. One limiting factor about the site is that the majority of the parking is located on the far side of the berm that protects the levee system to the south of the plant. Separating this section of parking from the building is a large staircase that goes over the top of the berm. After reviewing ADA parking requirements, it is clear that this parking location is not ADA compliant. Below are the ADA Parking guidelines as issued by the Mid-Atlantic ADA Center, as well as those included in Scottsville's zoning ordinance.

a. ADA Parking Guidelines:

- i. The ADA Parking Guidelines Location section, provided by the ADA National Network, states that "An accessible route must always be provided from the accessible parking to the accessible entrance. An accessible route never has curbs or stairs, must be at least 3 feet wide, and has a firm, stable, slip-resistant surface. The slope along the accessible route should not be greater than 1:12 in the direction of travel." Therefore, the parking on the far side of the levee cannot qualify as ADA compliant.
- ii. According to the Town of Scottsville zoning ordinance, the number, location, signage and other specifications of handicapped parking shall be subject to County Building Official approval in accordance with ADA requirements and the Statewide Uniform Building Code.

C. Recommendations

The site as it currently sits does not have enough space dedicated to parking to accommodate a mixed-use building. However, there is enough acreage on the property to develop more parking while meeting open space requirements.

Regarding ADA parking, the existing parking space closest to the main factory building should be dedicated as accessible parking spots. The final number of ADA parking spaces required should confirm to the standard defined in the zoning ordinance. As designed, 8 ADA spaces are needed to meet the requirements for the residential section of the building. Additional parking may be required if cooperative parking is not permitted.

Next steps to determining the location and total parking capacity on the site would be to do a topographic survey, and identify strategic, accessible locations around the building that would be ideal for parking. The ADA spaces should be distributed throughout the site to accommodate the variety of locations and entry points on site.

VIII. Environmental Conditions Review and Recommendations

According to the records provided for this study, the former Hyosung plant was subject to two Phase I Environmental Site Assessments (ESAs), one conducted by Environ International Corporation in 2002 and another conducted by Froehling & Robertson Co. in 2011. The reports make clear that what is available for review now is not the full scope of environmental work that was completed on the site. Waukeshaw is operating with the understanding that at least one Phase II ESA was completed on the site by the reference to soil samplings in the Phase I ESAs.

Below is a brief summary of what was found in each environmental investigation.

A. 2002 Phase I Environmental Site Assessment Key Findings

- a. The manufacturing use of the property had the potential to impact the soil and groundwater conditions, testing was recommended.
- b. In 2002, it was stated that to remove all of the asbestos on site, it would cost \$500,000. To just remove the friable material, it would cost \$6,000 with an annual \$5,000 maintenance cost.
- c. The factory is 170,000 SF for the manufacturing area and 30,000 SF of attached warehouse space. Ancillary buildings include the boiler house, waste oil storage building, emergency firewater pump building, water tower, latex storage building, and miscellaneous storage sheds.
- d. The building flooded twice, once on June 22, 1972 and again on November 6, 1985. A dike was built in the late 1980s. According to existing flood maps in place at the time the ESA was conducted, the building is located within the 100-year floodplain.
- e. There are 3 wetland areas present on the property.
- f. There are two manmade lakes on the site, one is used as a reservoir for fire protection water.
- g. There are natural springs on the site that feed into a creek that runs under the factory.
- h. There are no known wells on the site.
- i. There are no underground storage tanks on site. There were above ground storage tanks used for raw materials, waste and fuels.

B. 2011 Phase I Environmental Site Assessment Key Findings

- a. There was documentation of chlorinated solvent contamination on the property but no record of clean-up. Contamination was at two locations: SB09 in the chemical unloading area and at SB12, which was the former location of underground storage tank used to store hot stretch dip waste. Report states that both underground storage units were closed and decommissioned but made no mention of closure reports.
- b. Report states that chlorinated solvent use was discontinued before 1990.

- c. There are indications of natural degradation of solvents and limited impacts to shallow ground water.
- d. TPH was detected at testing location SB01 in the soil (former varsol tank location). Report states that no groundwater was in contact with impacted soils at that location. The full report including lab results and boring locations was not available.
- e. There is a 2002 LTANKS and LUST listing for one closed pollution complaint (2003-60SS). The complaint was filed due to TPH and DRO concentration of 230 mg/kg reported in the vicinity of a former 250-gallon AST. Subsequently, 80.33 tons of petroleum-impacted soils were removed from the site from effected boring locations.
- f. There were no Sanborn fire maps available.
- g. There were some areas of the interior floors that were stained with petroleum. It was recommended those areas be cleaned and potentially that the wooden floors be removed.

C. Phase II Environmental Site Assessment Recommendation

Based on the information available in the Phase I ESAs and the historical use of the property, Waukeshaw recommends that a new Phase II Environmental Site Assessment be conducted to provide current data. This will provide the developer and the Town with a complete understanding of the environmental site conditions and any remediation needed to bring the site within environmental compliance standards.

For a very basic Phase II study, the cost estimate is \$6,785 as prepared by Commonwealth Environmental Associates. Please see Exhibit E for the full proposal. To assist with the cost of this assessment work, the project could qualify for a Site Assessment and Planning grant from the Virginia Brownfields Restoration & Economic Redevelopment Assistance Fund (VBAF), administered by the Virginia Economic Development Partnership. Site assessment and planning funds can be used for several kinds of work including environmental and

cultural resource site assessments, development of remediation and reuse plans, necessary removal of human remains, treatment of grave sites, treatment of significant archaeological resources, stabilization or restoration of structures listed on or eligible for the Virginia Historic Landmarks Register, demolition and removal of existing structures, or other site work necessary to make a site or certain real property usable for new economic development. The maximum site assessment grant available is \$50,000.

If an assessment identifies the need for remediation work at the site, there may be an opportunity for the project to also receive a site remediation grant. The maximum remediation grant is \$500,000. It is important to note that only political subdivisions of the Commonwealth of Virginia, including counties, cities, towns, industrial/economic development authorities, and redevelopment and housing authorities, may apply for grants from the VBAF Program. The current private property owner would not be eligible to apply for these funds.

The Phase II proposal was provided by Commonwealth Environmental Associates, Inc. based in Richmond, VA. The proposal includes conducting soil boring at five locations on the property to extract soil and/or groundwater samples and the collection of two soil vapor samples. This sampling is to determine if there is any threat of the infiltration of vapors into the structure from subsurface solvent on the subject property. The proposal also includes a chemical analysis of samples taken.

IX. Additional Limitations and Considerations

A. Building Access

The comment has been made in several different settings that access to the former Hyosung Plant from Route 20 is limited and this could be problematic for redevelopment plans. As noted in Part I Section E, this study assesses the site for redevelopment based on existing infrastructure and does not propose new

infrastructure solutions. However, it should be noted that access to the site and building requires additional consideration by the party that ultimately develops this property.

While the factory was operational, it housed 100-300 employees. Therefore, Bird Street saw a fairly high level of traffic on a daily basis compared to most residential neighborhoods. However, shift-oriented travel by employees is very different than the kind of travel that would result from a mixed-use building. Residential and commercial traffic to and from the building is likely to be much more sporadic and varied throughout the day than the vehicular flow associated with a traditional manufacturing facility.

It has also been noted that vehicular traffic on Route 20 has increased significantly since the factory stopped operating in 2009. Therefore, it would be more difficult for potential users of the site to turn onto Route 20, which has the opportunity to cause backed-up traffic on Bird St. on a regular basis, especially at peak travel hours. It is Waukeshaw's recommendation that the Town and the ultimate developer of this site consult with the Virginia Department of Transportation on these issues.

B. Acquisition Cost

The former Hyosung plant has been under private ownership by the Virginia Land Company and its subsidiary, Lower Bird Street LLC, since 2011. The current owners have expressed an interest in selling the property and do not appear to have plans to pursue redeveloping the property at the time this study is being conducted.

Waukeshaw is operating under the assumption that the owner will want to sell the building to any future owners or developers. The entity that ultimately pursues the redevelopment of this property should take a few factors into consideration when negotiating an acquisition price.

First is the cost to carry the factory site. Based on information provided by the current property owner, carrying costs associated with the ownership of this property include property taxes, utility costs, property insurance, emergency flood services, landline phone service (required for fire safety), and landscaping costs. These costs total approximately \$32,000 per month.

Another factor to consider is the current state of the property. Anyone purchasing the property must take into consideration any deterioration of the site that has occurred over the last decade, including roof conditions, the cost of environmental remediation, or other factors that may require a substantial initial investment to bring the building out of disrepair.

It is ultimately up to a prospective buyer to determine what the factory site is worth. Developers will inevitably determine acquisition prices by 'backing into' a valuation based on a proforma detailing the cost of constructing a project to its highest and best use. In our test case proforma, there is an equity shortfall of more than \$2,000,000 using an acquisition price of \$850,000, or just under \$5/SF in shell condition. If additional equity can be attracted to the project to close the gap, the acquisition price might be justified. Otherwise, it is likely near or below \$0.

C. Floodplain Location

According to existing FEMA flood maps from 1976, the former Hyosung plant is currently entirely located in the 100-year floodplain and would be inundated in the event of a flood. Timmons Group reviewed the data available and determined that further investigation and a new flood study are required to determine if the plant is actually protected by new flood mitigation infrastructure that was implemented after 1976. If Timmons' new models were to determine that the site would be protected in the event of a flood, a Letter of Map Revision (LOMR)

would need to be submitted to FEMA and approved. According to Timmons, this process typically takes 6-12 months.

Ultimately, owning and developing a property in the 100-year floodplain with modern weather patterns is risky and another factor that detracts from the overall value of the property. It is difficult to consider the viability of a development without concrete information about the property's flood risk. Waukeshaw recommends that the floodplain investigation be done early on in the redevelopment process so that any developer taking on this project understands the flood risk to the property. This will also have impacts on the project costs in relation to flood insurance and potentially design and materials choices in the construction process.

D. Ownership Structure and Partnership

If developed according to what is proposed in this study, the redevelopment of the former Hyosung plant is likely to cost at least \$25 MM. As outlined in Part IV Section C, the goal is to bring down the cost of development compared to the ultimate value of the building. Private developers have the ability to tap into the tax credits listed, however many state grant programs are not open to private entities. Generally, only political subdivisions of the Commonwealth of Virginia, including counties, cities, towns, industrial/economic development authorities, and redevelopment and housing authorities are authorized recipients of these grants.

Therefore, if a developer chooses to pursue grants to offset the cost of redevelopment, they will need to partner with an entity that is able to accept those grant funds. The most natural partner is the Town of Scottsville, which has commissioned this study and encouraged the community to engage with the redevelopment of this property. Other partners could include Albemarle County Economic Development or the Central Virginia Partnership for Economic Development. Additionally, if it were determined that affordable housing would be

a major project component, the Piedmont Housing Alliance (PHA) could be a project partner. The PHA already has a presence in Scottsville with the Scottsville School Apartment property.

Ultimately, a creative ownership structure will need to be established to allow a private developer to conduct the project and the partner entity to accept the funds. In its experience, Waukeshaw Development has entered into these partnerships in several different ways. Often times, the community will own the building while the capital stack is compiled, and it then transfers ownership of the property to the developer when construction begins.

Regardless of how the project funding is established, a partnership between the Town of Scottsville and the developing entity will be crucial to the success of this project. This partnership will be key when determining a plan for financing, building road access, zoning, and continuing to build community support for the project.

Generally speaking, Waukeshaw proposes that the building be split into two commercial condominiums, each owned by a separate entity that will transact its own 'deal' and syndicate its own tax credits. Each entity then shall either employ a 'master-tenant' structure for syndication, or a 'single-tier' structure, with the choice dependent on the overall evaluation in consultation with experienced tax credit attorneys and CPAs.

X. Conclusion

The former Hyosung plant in Scottsville exemplifies a question that communities across the country are grappling with: whether to let their unused industrial sites languish or give them a second life. Many white elephant sites have successfully been redeveloped. Whether this is possible for the former tire plant will be dependent on several factors.

While it is clear that there is community support and demand potential in the greater Scottsville market for a mixed-use building, those factors are not enough to bring a project to fruition. It will be key to attract a developer who is willing to take on the risk of this project and collaborate with the Town to make this project a success.

Furthermore, all important analyses of the property must be done first to help the developer identify that level of risk and understand the full scope of what it will take to accomplish this project.

First and foremost, the new floodplain analysis must be completed. This will inform what can be done to the building with the risk of flooding and will have an impact on project costs. A Phase II Environmental Site Assessment must be completed as well to identify any potential environmental or hazardous material issues and remediation needs. Additionally, the Town will need to determine how it would like to address zoning the property. As discussed, there are several ways to accomplish higher density zoning for that site. This may be an area where the Scottsville Planning Commission and a developer can collaborate to achieve the zoning that will make the best use of the property.

The financial analysis shows that syndicating tax credits and deploying traditional bank financing does allow the potential for a successful outcome at the property. While there are many funding sources that can help enhance the equity available to the project, in order to allow for some tenant upfit, incentives, etc., there still may be a portion of the budget that a developer would need to invest to see the project through to a successful outcome.

The Town and the Scottsville community have done a great deal of work to show that they are invested in seeing Scottsville succeed and that they have a vision for the future. Ultimately it is up to the individual developer whether it is worth it to take on this project and if the long-term revenue will make it a profitable choice.

Exhibit A: Proforma Cash Flow

All figures subject to change

10-YEAR PERFORMANCE AND VALUATION

10-Year Performance	Permanent Financing Amt	\$8,249,531
	P/I Payment	\$50,659
	Amort	25
	Rate	5.50%
	Cap Rate	6.50%
	Vacancy	6.0%

Assumptions:

<u>Rent Escalation</u>	103%
<u>Expense Escalation</u>	103%

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>	<u>Year 10</u>
GROSS RENTS	\$ 1,378,588	\$ 1,419,946	\$ 1,462,544	\$ 1,506,420	\$ 1,551,613	\$ 1,598,161	\$ 1,646,106	\$ 1,695,489	\$ 1,746,354	\$ 1,798,745
VACANCY	\$ 82,715	\$ 85,197	\$ 87,753	\$ 90,385	\$ 93,097	\$ 95,890	\$ 98,766	\$ 101,729	\$ 104,781	\$ 107,925
<u>Rents Net of Vacancy</u>	\$ 1,295,873	\$ 1,334,749	\$ 1,374,791	\$ 1,416,035	\$ 1,458,516	\$ 1,502,272	\$ 1,547,340	\$ 1,593,760	\$ 1,641,573	\$ 1,690,820
<u>Other Income (Late fees, pet rents, etc)</u>	\$ 28,140	\$ 28,984	\$ 29,854	\$ 30,749	\$ 31,672	\$ 32,622	\$ 33,601	\$ 34,609	\$ 35,647	\$ 36,716
<u>Gross rents</u>	\$ 1,324,013	\$ 1,363,733	\$ 1,404,645	\$ 1,446,784	\$ 1,490,188	\$ 1,534,894	\$ 1,580,940	\$ 1,628,369	\$ 1,677,220	\$ 1,727,536
<u>TOTAL EXPENSE</u>	\$ 653,738	\$ 673,350.49	\$ 693,551.00	\$ 714,357.53	\$ 735,788.26	\$ 757,861.90	\$ 780,597.76	\$ 804,015.69	\$ 828,136.17	\$ 852,980.25
<u>NOI</u>	\$ 670,274	\$ 690,383	\$ 711,094	\$ 732,427	\$ 754,400	\$ 777,032	\$ 800,343	\$ 824,353	\$ 849,084	\$ 874,556
<u>P/I Debt Service</u>	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912	\$ 607,912
<u>Cash Flow</u>	\$ 62,362	\$ 82,471	\$ 103,182	\$ 124,515	\$ 146,488	\$ 169,120	\$ 192,431	\$ 216,441	\$ 241,171	\$ 266,644
<u>Value of Project</u>	\$ 10,311,914		\$ 10,939,909		\$ 11,606,150					
<u>Loan Value at XLTV</u>	80% \$ 8,249,531		\$ 8,751,927		\$ 9,284,920					
	75% \$ 7,733,935									
	73% \$ 7,527,697									
<u>Debt Coverage Ratio</u>	110%		117%		124%					

BUDGET - RENTAL OPERATIONS

INCOME

	<i>MTD Actual</i>	<i>YTD Actual</i>	
RENT INCOME			
Rent Income	112,537	\$ 1,350,448	
Parking Income			
LESS: Concessions			
NET RENT INCOME	\$ 112,537	\$ 1,350,448	
OTHER INCOME			
Non-Refundable Pet Fees	\$ -	\$ -	
Application Fee Income	\$ 400.00	\$ 4,800.00	
Parking Fees	\$ -	\$ -	
Power/Utils/upgrades	\$ 1,500.00	\$ 18,000.00	INTERNET SPEED
NSF Fees	\$ 200.00	\$ 2,400.00	
Misc Income	\$ 250.00	\$ 1,500.00	
Late Fees	\$ 120.00	\$ 1,440.00	
TOTAL OTHER INCOME	\$ 2,470.00	\$ 28,140.00	2.08%
TOTAL INCOME	\$ 115,007	\$ 1,378,588.00	

EXPENSES

DIRECT EXPENSES	WHOLE BUILDING		
Repairs and Maintenance	\$ 5,000.00	\$ 60,000	
Cleaning/Janitorial	\$ 1,500.00	\$ 18,000	
Landscape/Grounds Maint/Snow R	\$ 6,000.00	\$ 72,000	
Insurance	\$ 2,500.00	\$ 30,000	
Legal	\$ 416.67	\$ 5,000	
Management Fees	\$ 8,271.53	\$ 99,258	
Utilities	\$ 10,000.00	\$ 120,000	
Trash Disposal	\$ 1,000.00	\$ 12,000	
Miscellaneous Fees & Expenses	\$ 300.00	\$ 3,600	
Extermination	\$ 150.00	\$ 1,800	
Security/Fire Monitoring	\$ 340.00	\$ 4,080	
Office Expenses/Postage/Delivery	\$ 50.00	\$ 600	
Advertising & Marketing	\$ 500.00	\$ 6,000	
Accounting and Bookkeeping	\$ 500.00	\$ 6,000	
Bank Service Charges	\$ 300.00	\$ 3,600	
RE Tax	\$ 13,483	\$ 161,800	20M Valuation
Replacement reserves	\$ 4,167	\$ 50,000	
TOTAL EXPENSES	\$ 54,478	\$ 653,738	

NET OPERATING INCOME (NO VACANCY)

\$ 724,849.66

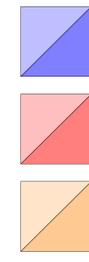
SOURCES AND USES

USES			
Acquisition	\$	850,000	
COMMERCIAL CONDO 1			
Construction--Hard	\$	7,046,235	
Construction--Soft	\$	1,169,466	
Construction Interest	\$	599,999	
Contingency	\$	704,624	
Project Management	\$	450,000	
TOTAL USES - COMMERCIAL		10,820,324	82,000 SF \$131.96 \$/SF
RESIDENTIAL CONDO 2			
Construction--Hard	\$	10,000,000	100000 SF
Construction--Soft	\$	2,500,000	
Construction Interest	\$	650,000	
Contingency	\$	500,000	
Project Management	\$	500,000	
TOTAL USES - RESIDENTIAL	\$	14,150,000	\$ 141.50 \$/SF
TOTAL USES	\$	24,970,324	

SOURCES			
COMMERCIAL CONDO 1			
PERMANENT FINANCING (COMM AND RES)	\$	8,249,531	
State Credit Equity	\$	2,362,039	
Federal Credit Equity	\$	1,749,658	
DEQ Remediation Grant	\$	295,000	
TOTAL SOURCES - COMMERCIAL		12,656,228	
RESIDENTIAL CONDO 2			
State Credit Equity	\$	2,558,320	
Federal Credit Equity	\$	3,277,848	
LIHTC Equity	\$	4,245,000	LIHTC equity
IRF		TBD	
DEQ Remediation		TBD	
OTHER GRANTS		TBD	
DEVELOPER EQUITY	\$	2,232,928	
TOTAL SOURCES - RESIDENTIAL	\$	12,314,096	
TOTAL SOURCES	\$	24,970,323	

**Exhibit B: Preferred
Architectural Layout
Proposal**

**Prepared by Cornerstone
Architects**


COMMERCIAL
1 BEDROOM APARTMENT
2 BEDROOM APARTMENT



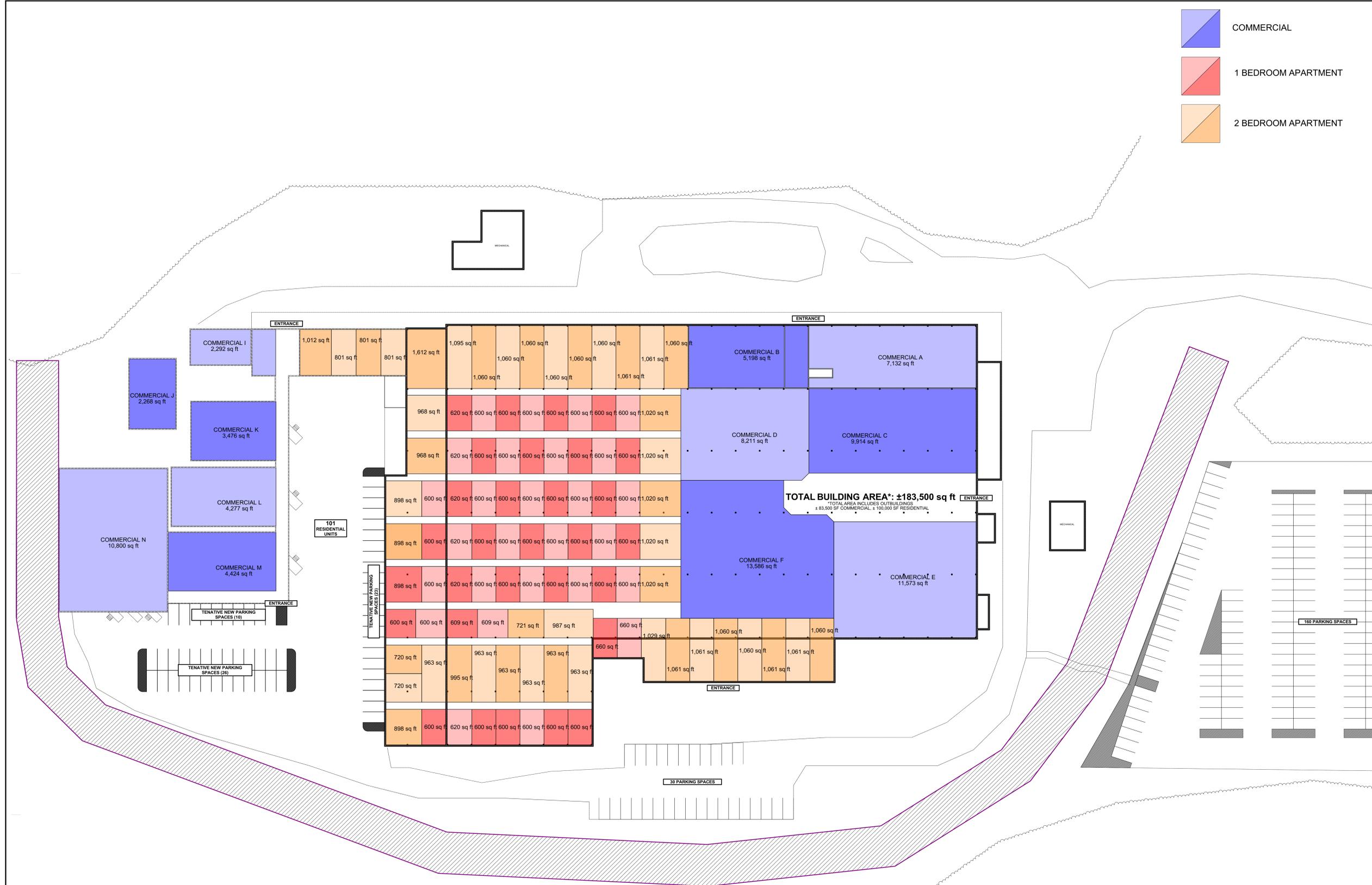
CORNERSTONE
 ARCHITECTURE AND INTERIOR DESIGN
 23 WEST BROAD STREET SUITE 200 RICHMOND, VIRGINIA 23220
 TELEPHONE: 804.353.3051
 WEBSITE: WWW.CSARCH.COM

CONSULTANTS

SEAL

NOT FOR CONSTRUCTION

WAKESHAW
SCOTTSVILLE PLANT
APARTMENTS
 SCOTTSVILLE, VIRGINIA 24590



C:\Users\cpellon\Desktop\190568.00 SCOTTSVILLE PLANT\SCOTTSVILLE PLANT.bpn - Tuesday, October 29, 2019 - 1:44 PM - cpellon

13 **LAYOUT 3**
 SK-06 SCALE: 1/32" = 1'-0"

MARK	DATE	DESCRIPTION

PROJECT NO: 190XX.PP
 MODEL FILE: SCOTTSVILLE PLANT.bpn
 START DATE: XXXX/XXXX
 PROJECT MANAGER: DPP
 PRINCIPAL IN CHARGE: ERQ

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SHEET TITLE
BUILDING LAYOUT 3

SK-06

**Exhibit C: Scottsville Tire Factory Adaptive
Reuse Study**

**Prepared by the University of Virginia
School of Architecture and McDowell
Espinosa Architects**

Scottsville Tire Factory Adaptive Reuse Study

University of Virginia School of Architecture / mcdowellespinosa architects

commissioned by Town of Scottsville

September 2018, **draft 09061018**



contents

Project Background / History

Scale Comparisons

Existing Conditions

Adaptive Reuse Precedents

Sketch 1 — Central Street

Sketch 2 — Corner Anchors

Sketch 3 — Rooftop Pavilions

Sketch 4 — Building Heightening

Sketch 5 — The Donut

Sketch 6 — Courtyards

Alternative Affordable Housing Precedents

Sketch 7 — High Density Housing Scheme (75 Units)

Sketch 8 — Medium Density Housing Scheme (30 Units)

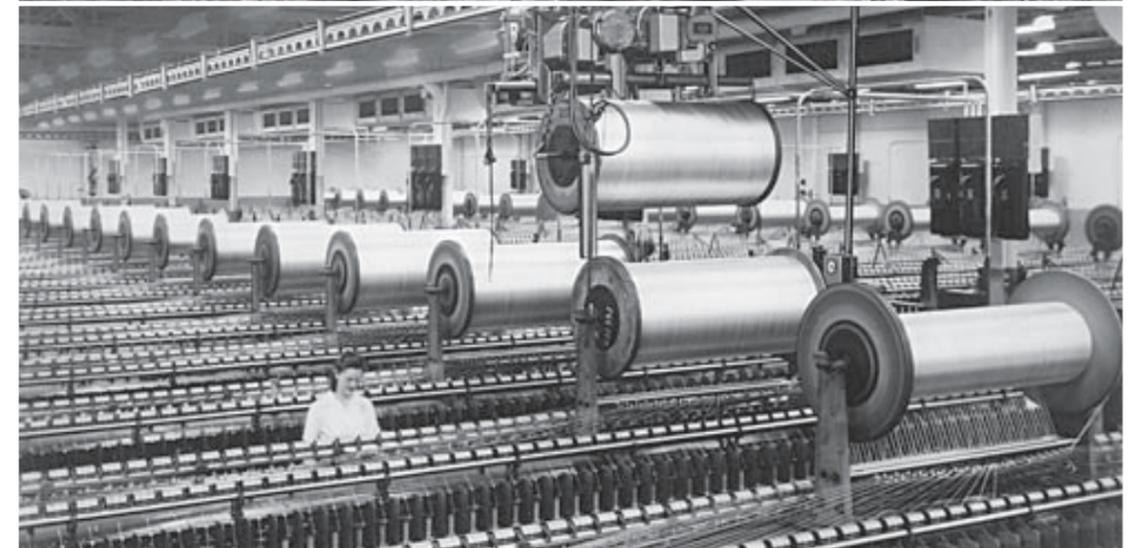
Sketch 9 — Low Density Housing Scheme (10 Units)

Sketch 10 — Wetlands

Design Team
Estaban Chavez, Sam Johnson, Seth McDowell, Todd Stovall

Background + History

Located on 51 acres in Albermarle County and built in 1944, the Scottsville Tire Plant was built by the Defense Plant Corporation to help the United States' war effort. Was built and designed to provide tire fabric and produced rayon tire cord required in heavy duty tires. Plant was bought by Uniroyal at the end of World War II and produced nylon and polyester tire cord fabric and fiberglass fabric. In 1958, the Hot Stretch Treating unit was added to the plant. Since then, the plant has benefited from periodic expansion and modernization programs including the 1968 enlargement of the weaving department and air conditioning of the entire plant. The peak employment period for the Uniroyal plant was in the late 60s and early 70s when it employed 340 people. In 1972 the plant began production for The People's Republic of China. The customer list expanded to include clients on five continents. In 1986 the Scottsville Plant became part of the joint venture between Uniroyal inc and the B.F. Goodrich Company. In 1990 the UGTC was purchased by The Michelin Group. In 2002 the plant was sold to the Hyosung America,inc. The plant provided about 100 jobs at the time it closed in 2009.



Site + Context



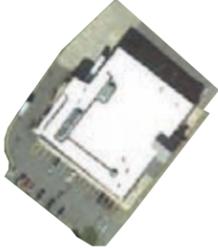
Scale Comparison



Scottsville Tire Factory



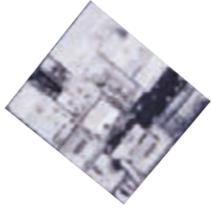
IX Industrial Park



Food Lion



Dollar General



Brooklyn Brewery



McIntire Plaza



Eastworks

Distance to Downtown Comparison



Scottsville Tire Factory



IX Industrial Park

Existing Conditions

Scottsville Tire Factory				
Issues			Strengths	
Type	Title	Description	Title	Description
Site	Approach	Small Road leading to structure	Parking	Amply space for parking
	Orientation	Only points of entry are stair over levy from employee parking and the gated entry way which faces onto back corner of building		
	Vegetation	Dense forestation between river and site		
	Visibility	Hard to see from town - maybe river?	Visibility	Could be seen from river? "Lighthouse" type deal
	Traffic Flow	Hard building to circle to get to parking		
			Paths	Nice walking path - particularly tie levees into existing walk
	Flooding	Potential flooding - unsure		
Structure	Little natural light	Sparse, low windows on perimeter or structure, no skylights on roof		
	Accessibility	Raised ground floor on all sides	Accessibility	Floor surface is even throughout, built for heavy loads
	Loading	Loading dock openings are all relatively small	Structural Strength	Probably oversize structure - could support additional roof loads, or could have column spacing reduced
	Entrance	No 'proper' entrance - potential from some view corridors upon entry		
	Floor-Ceiling Ht.	Height of building is limitation to modern industrial uses		
			Openness	Something nice about seeing through the whole grand spce
			Scale	Can support a variety of scaled programs
			Data	Could be good as just a storage type space
Project	Scale	Community does not have sense of buidling/site size	Public Support	Public wants something more interesting than single use industry
	Phasing	Timing of various aspects of project are uneven		
	Sellability	Hard to convey usage?		

Existing Conditions, exteriors



Existing Conditions, exteriors



Existing Conditions, towers



Existing Conditions, landscapes



Existing Conditions, views out



Existing Conditions, interiors



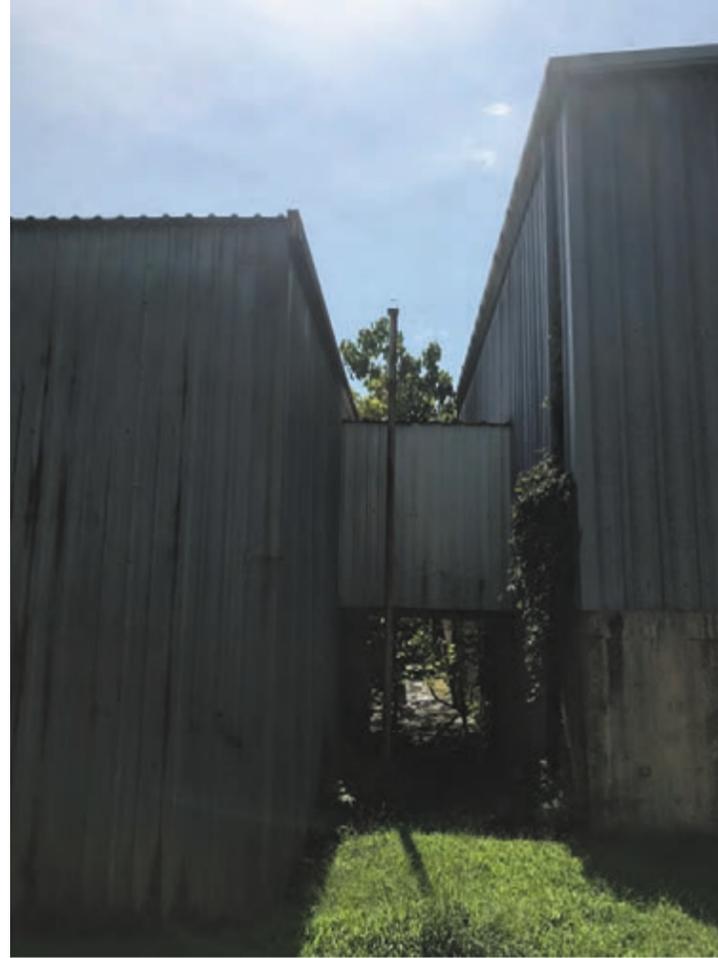
Existing Conditions, sheds



Existing Conditions, high ground site



Existing Conditions, connections



Adaptive Reuse Precedents

Antoniny Manor Intervention / NA NO WO Architekci / Healthcare and Residential Building for Elderly



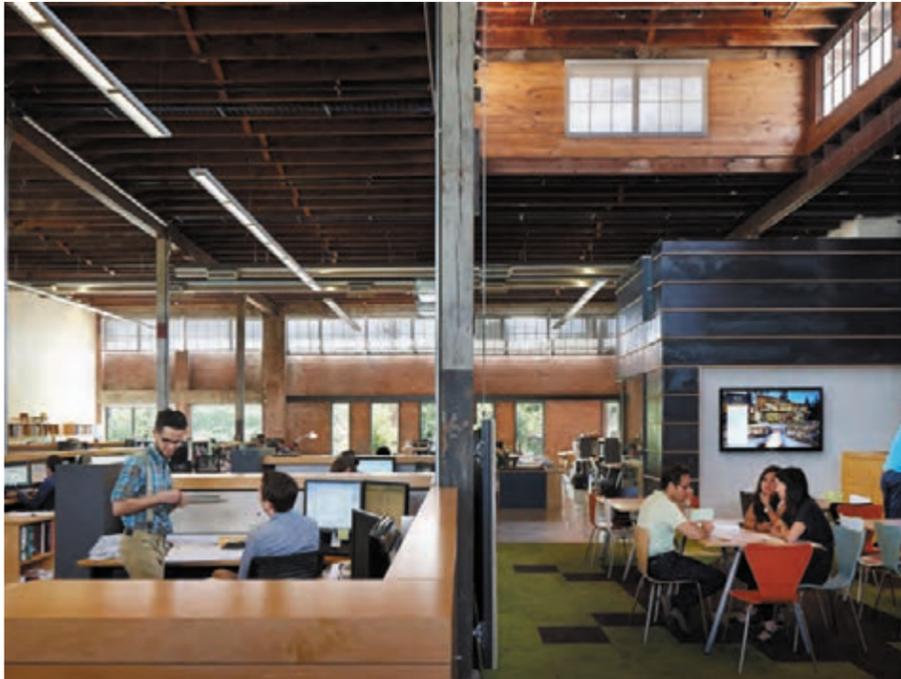
Adaptive Reuse Precedents

Ford Assembly Building / MWDL Architects / Mix Use incl Entertainment, Dining, and office space



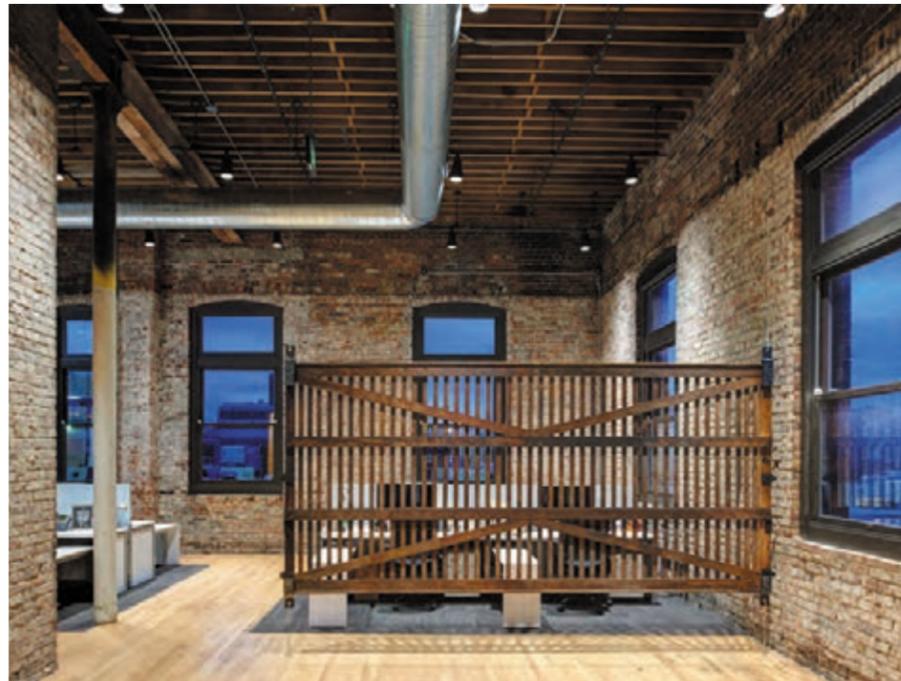
Adaptive Reuse Precedents

Hughes Warehouse Adaptive Reuse / Overland Partners / Office Spaces



Adaptive Reuse Precedents

Market One / Neumann Monson / Office Spaces



Adaptive Reuse Precedents

The Goat Farm Arts Center / Mix Use incl Entertainment, Living, and Startups / Non Profits



- Located in historic industrial complex
- Artists live onsite / donate pieces of art
- Rentable event spaces available
- Rentable retail spaces available

Program Development

PROGRAM	QUANTITY	SIZE	NOTES / REQUIREMENTS	SOURCE OF NEED	PARKING REQUIRED
EDUCATIONAL / TECHNOLOGY ANCHOR PROGRAM (MIND)					
Potential partners include: PVCC, UVA, Public Schools					
PUBLIC / FRONT OF HOUSE ZONES					
Entry Vestibule		300	To include security check		
Trade School Shops / Studios		0		Online Survey (Educational Facility)	
Classrooms	5	0			
Auditorium		0			
Computer Lab / Internet Café		0			
Printing, Copy Center		0			
Visual Arts Studio	0	0			
Music Studio	0	0			
Art Collaborative		0		Online Survey	
Tech Start-up Resource Center		0			
Research Incubator		0			
Childcare Facility		0		Online Survey	
Theater (Film / Drive-In)		0		Online Survey	
Co-Working Spaces		0		On-line Survey	
		0			
PRIVATE / BACK OF HOUSE ZONES					
Workroom		210	include 2 staff workstations and storage closet		
Administration Offices		0			
Network Closet		100			
Storage		0			
Janitor's Closet/Maintenance Storeroom		100	Include a mop sink, and storage for cleaning equipment and supplies, ladder, roof rake and shelving for light bulbs, plunger, trash bags, toilet paper etc.		
		0			
EDUCATIONAL TOTAL (NET)		710			
HEALTH CARE ANCHOR PROGRAM (BODY)					
Potential partners include: Martha Jefferson, UVA, YMCA					
PUBLIC / FRONT OF HOUSE ZONES					
Rural Health Clinic		6,000	Med Express Square Footage Charlottesville	Online Survey	
Emergency Clinic		5,000			
Mental Health Clinic		5,000			
Fitness Gym (YMCA)		15,000	Average for Gyms at UVA suggestions for this include: bowling, skating, swimming, (Average Aquatic Addition to Gyms at UVA)	Online Survey	
Sports Gym (YMCA)		15,000		Online Survey	
Dietitian		0			
Dental Clinic		0		Online Survey	
Pharmacy		0		Online Survey / Retail Leakage of \$9.5 million	
PRIVATE / BACK OF HOUSE ZONES					
Locker Rooms		0			
Examination Rooms		0			
Deliveries		0			
		0			
Emergency Drop-off		0			
Nurse / Doctor Offices		0			
Storage		0			
HEALTH CARE TOTAL (NET)		46,000			
PRODUCTION / ECONOMIC ANCHOR PROGRAM (TRADE)					
Potential partners include: Local Food, UVA, Public School System					
PUBLIC / FRONT OF HOUSE ZONES					
Grocery Store		15,000	SqFt of Average Aldi Grocery Stores / Up to 6,800k square feet of demand in trade areas.	Online Survey / Retail Leakage of \$9.6 million	
Farmers Market		5,000	Size of Existing Scottsville Pavilion Up to 26k sf of demand in trade areas (about 3 Dollar General-type stores)		
General Merchandise Store		26,000	Retail space of up to 35,000 (general estimate based on 50% of potential capture of current retail demand)	Retail Leakage of \$18.6 / Online Survey for Wal-Mart	
		0			
		0			
		0			
		0			
PRIVATE / BACK OF HOUSE ZONES					
Canning Facility (Minimum)		4,000	UCDavis Pilot Plant Facility PDF Reference		
Storage (Dry, Equipment, Refrigeration, Freezer)(Minimum)		1,500			
		0			
PRODUCTION / ECONOMIC TOTAL (NET)		\$1,500			
BUILDING CORE					
Elevator	2	75			
Service Elevator		100			
Elevator Room	2	65			
Fire Stair	2	500			
Public Restrooms	2 per floor	400			
BUILDING CORE TOTAL (NET)		1,140			
TOTAL NET INTERIOR AREA		99,350			
TOTAL GROSS INTERIOR AREA		119,220	Plus 20% allowance for mechanical areas, circulation, structure, etc.		

Program Areas should not fluctuate more than +/- 10% of designated requirements

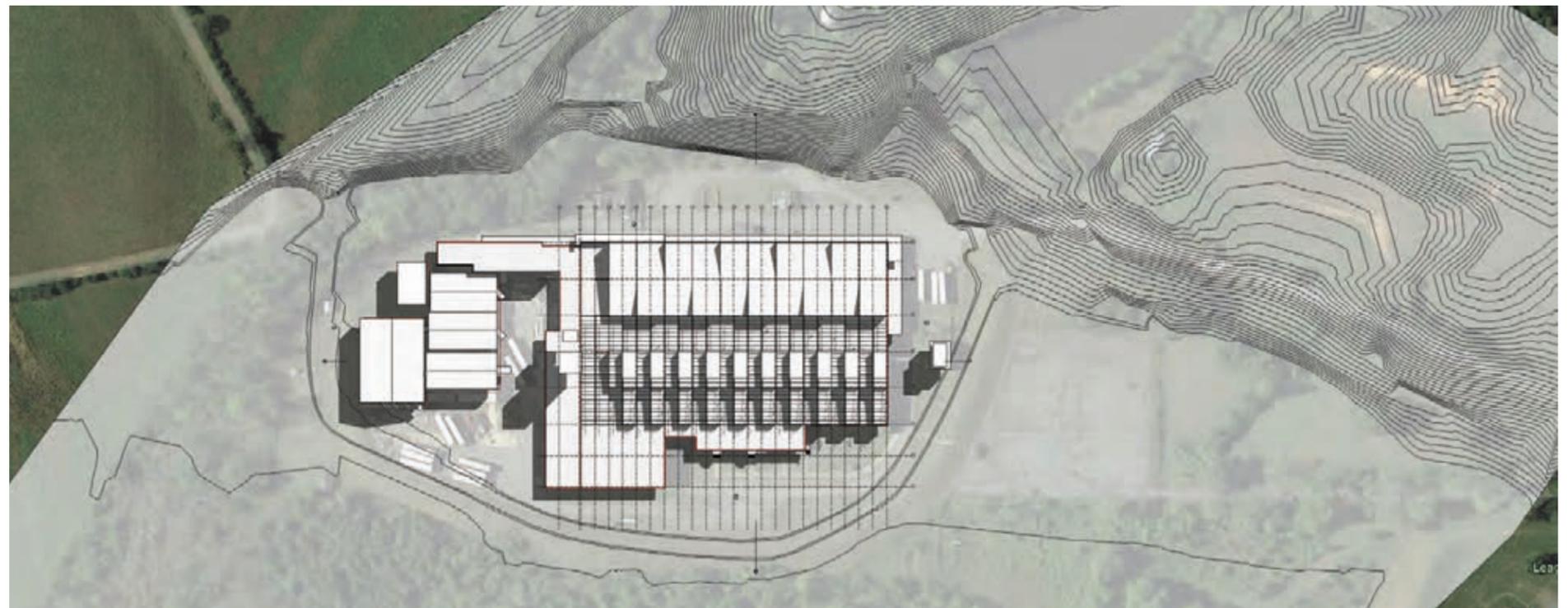
AFFORDABLE HOUSING					
Scottsville has the opportunity to capitalize on regional market trends by targeting development of smaller units in a denser development than is currently being built County wide.					
24590 - Scottsville = 75 new households/units PTA = 112 new households/units (including 24590)					
SINGLE FAMILY HOUSES					
Average Single Family Housing		1500			
Small Single Family housing 2-3 Bedrooms		0	Largest perceived need from survey 25%; Price: \$150,000 - \$200,000 Amenities: yard, access to greenspace, parking, access to recreation	Online Survey	
Mid-Size Single Family Housing 3 Bedrooms		0	2nd Largest perceived need from survey 19%	Online Survey	
		0			
		0			
SPECIALTY HOUSING					
Independent Senior Housing		1500	3rd Largest perceived need from survey 14%	Online Survey	
Assisted Senior Housing	0	1000			
Care Senior Housing	0	500			
		0			
		0			
		0			
		0			
		0			
RENTABLE APARTMENTS					
Average Rentable Apartment		1000	Survey respondents expressed the need for rental ranges of \$500-1000/month. Current median rent in Scottsville is approximately \$763/mo.	Market study	
Hostel / Short term Lodging		0		Online Survey	
		0			
		0			
HOUSING TOTAL (NET)		5500			
LANDSCAPE / OUTDOOR PROGRAMS					
Dog Park				Online Study	
Walking trails				Online Study	

Sketch 1 — Center Street

Scheme looks at introducing a central, public, pedestrian street through the tire factory. This allows a front and back access to rentable, smaller units. Central street becomes a means to get natural light to middle of factory. Options can be to remove roof in center bay to create open air corridor or to introduce skylights or clerestory.

Programming Potentials:

- 10 Commercial / Office spaces to North side of Factory. 4,000 SF each.
- 10 Live / Work Units on South side of factory.
- 2,000 SF Residential Units
- 1,000 SF Work/Studio Units
- Live Work Units offer housing on upper level with work space at Factory Floor level.



Sketch 1 — Center Street

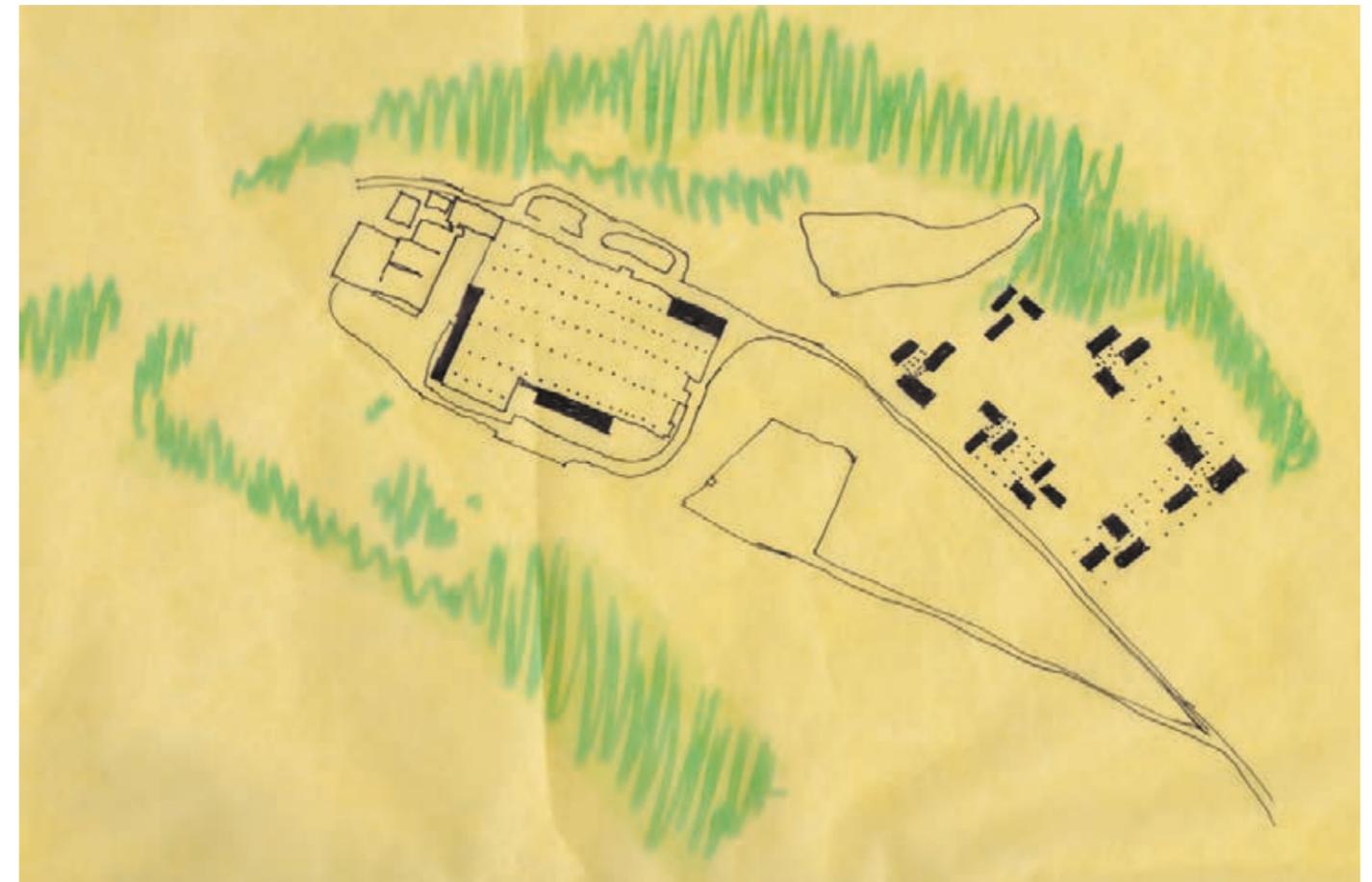
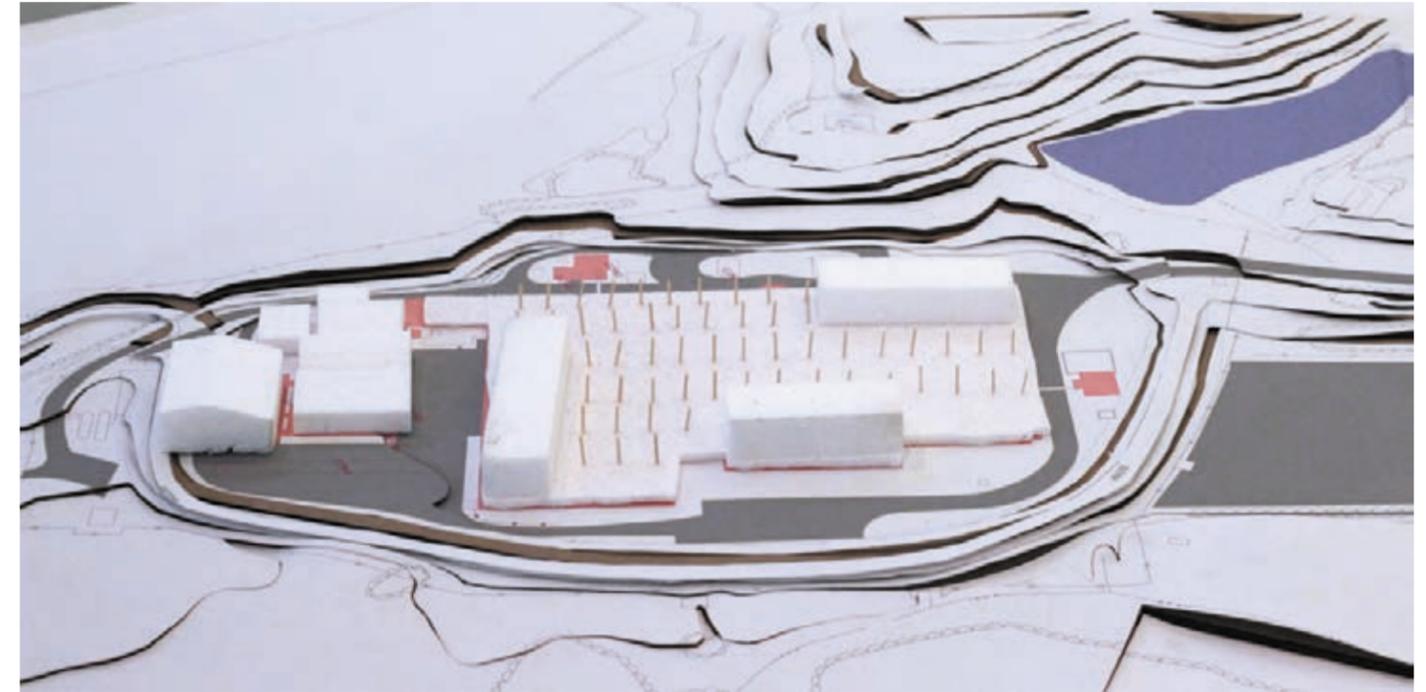


Sketch 2— Corner Anchors

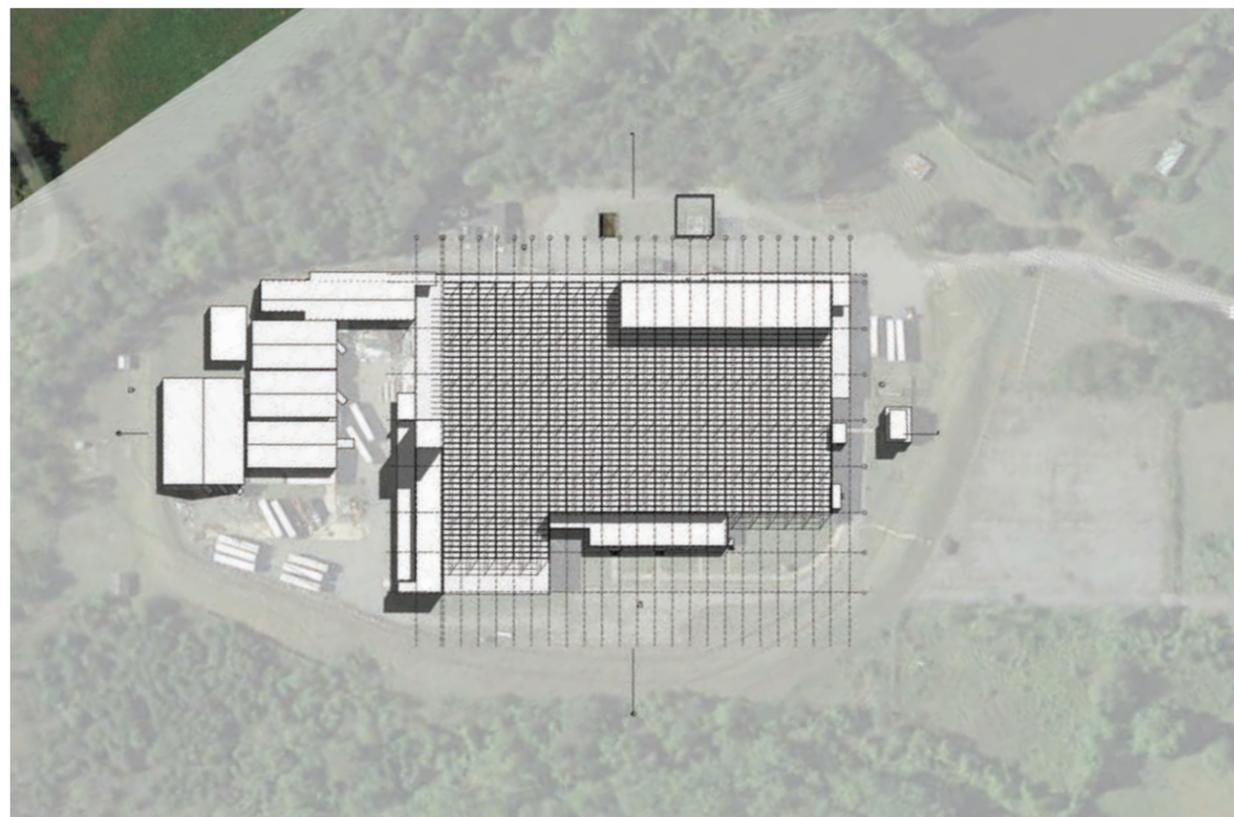
Scheme looks at establishing 3 anchor spaces that would host 3 primary, permanent tenants. The anchor spaces are distributed around the factory to allow each anchor tenant to have a “face” of the factory. This distribution also allows the anchors to frame a flexible, open, shared central space in the factory. The anchor spaces introduce a medium scale of leasable space to Scottsville (+/- 12,000 SF each) — a scale not currently available downtown or uptown.

Programming Potentials:

- 3 Office / Institutional Program Anchors of 12,000 SF each.
- 1 Large Flexible Market space of 100,000 SF
- 1 Flexible Performance / Cafe / Auditorium Space of 11,000 SF.
- Housing clusters structured in a similar arrangement



Sketch 2— Corner Anchors

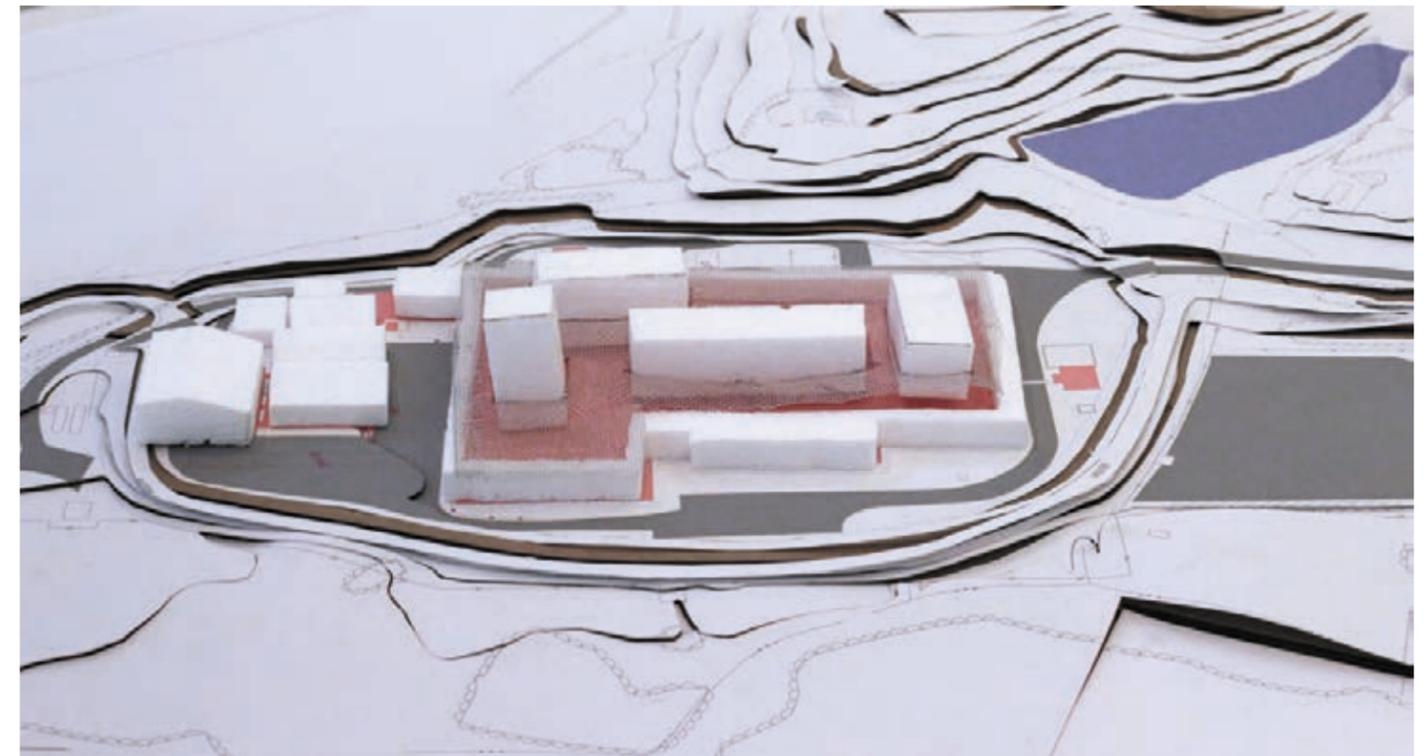
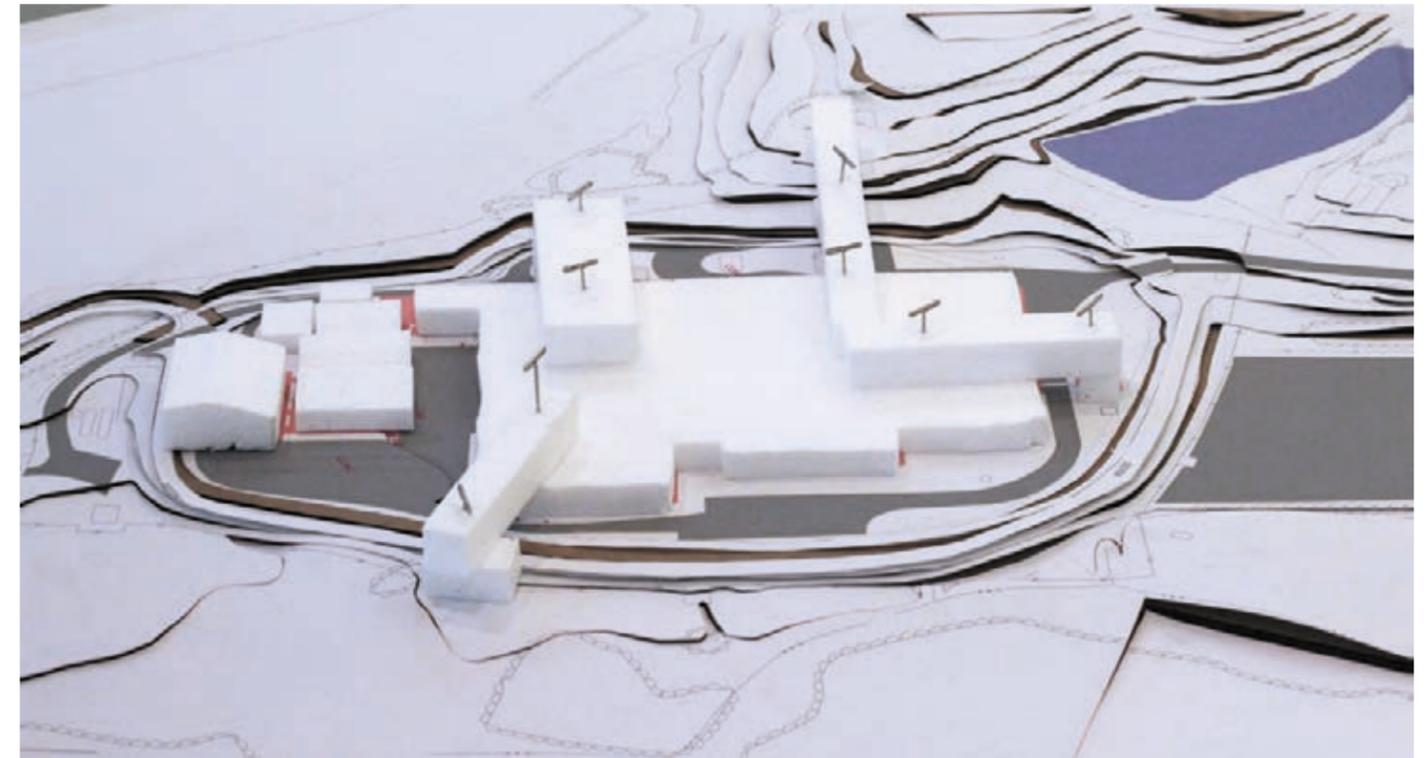


Sketch 3— Rooftop Pavilions

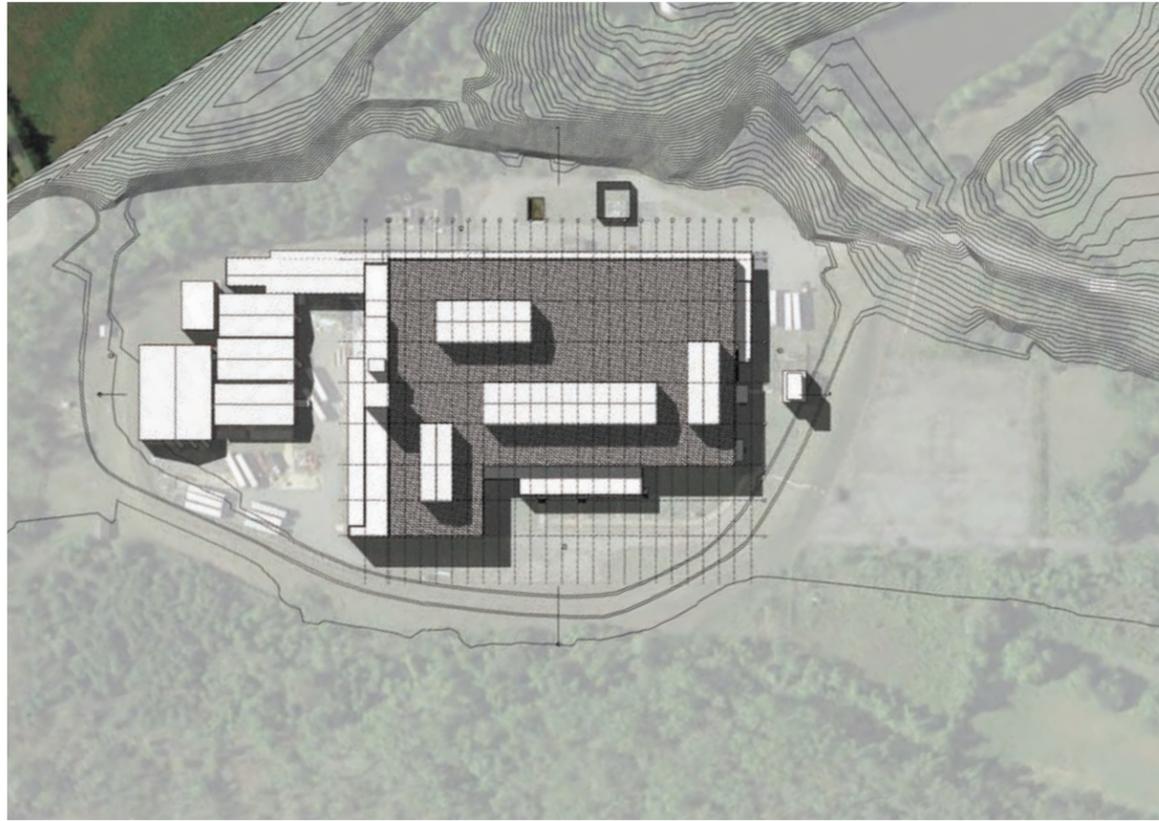
Scheme looks at building affordable residential units on the roof of the existing factory. These rooftop pavilions would take advantage of view corridors to the town, the river, and adjacent farmland. This arrangement could establish a live/work scenario with studios, offices or shops below the rooftop living spaces. The Live/Work units are cluster around 4 zones allowing for common space to be shared both on the factory floor and on the roof. The existing factory roof would be converted to a green roof and serve as an elevated “lawn” for the residents.

Programming Potentials:

- 25,000 SF of Affordable Housing on the Roof
- 25,000 SF of Commercial, Office, Studio space at the ground.
- 100,000 SF of Common, Amenity Space on Ground
- 100,000 SF of Lawn, Recreational space on Roof



Sketch 3— Rooftop Pavilions



Sketch 3— Rooftop Pavilions

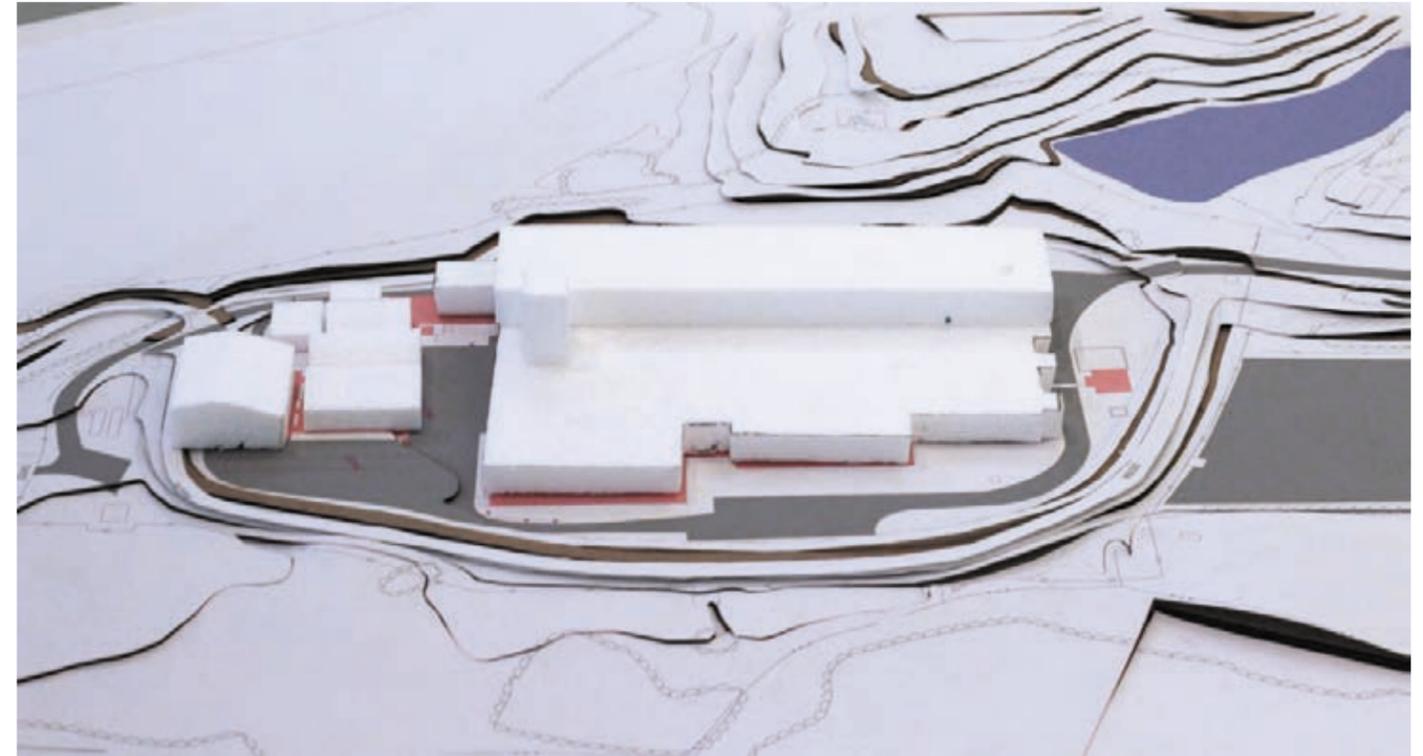


Sketch 4— Building Heightening

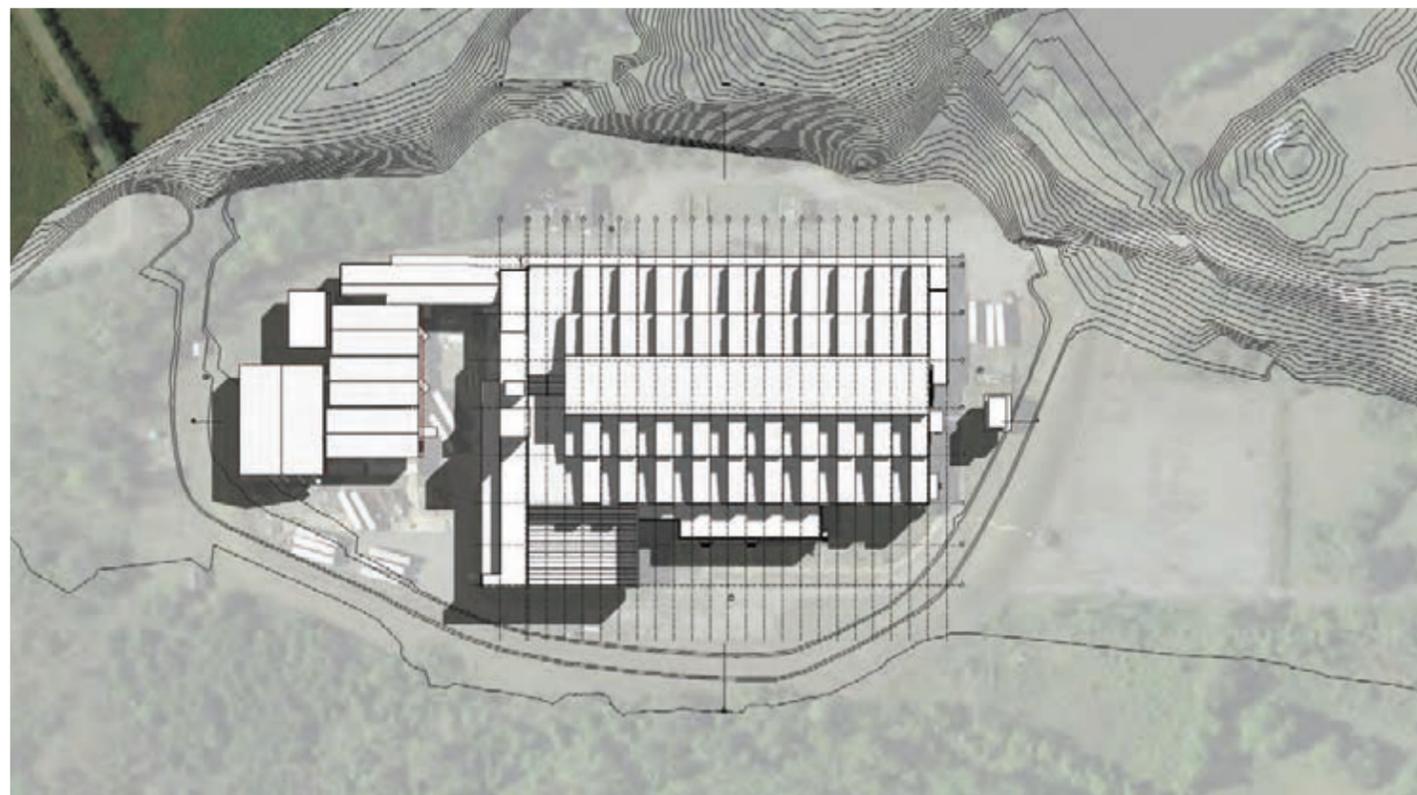
This scheme looks at adding another level to the factory which would support new, affordable housing on the site. The strategy arranges the second level of housing around a clerestory space that connects the ground level with the housing level. This double height space is illuminated with daylight that streams in from the clerestory. The ground level could take on any of the configurations discussed in other schemes.

Programming Potentials:

- 20 Housing Units on Level 2 of Factory. 3,000 SF per Unit.
- Existing Factory Floor used for any program discussed.
- Potential to link Live/Work.



Sketch 4— Building Heightening

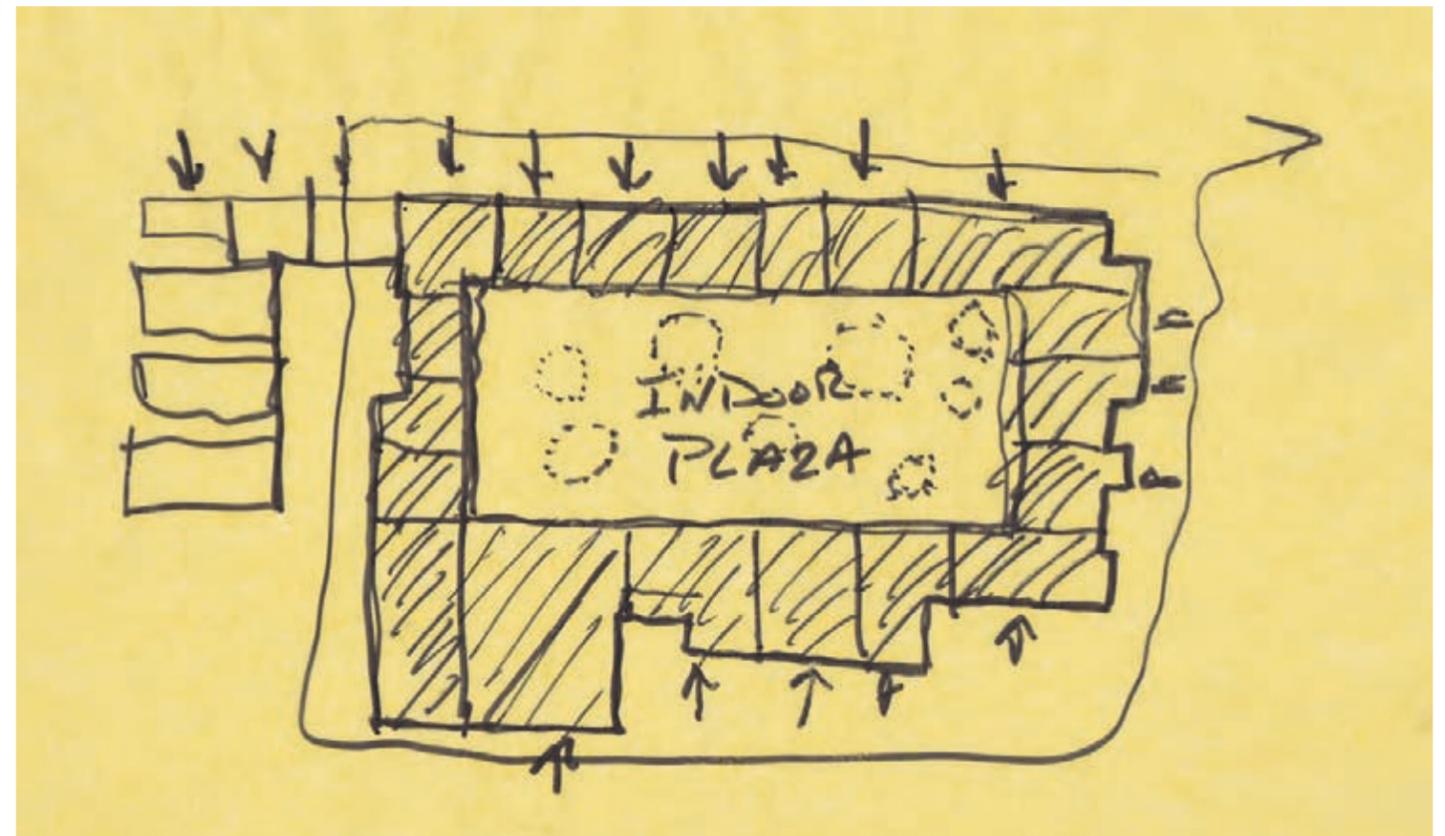
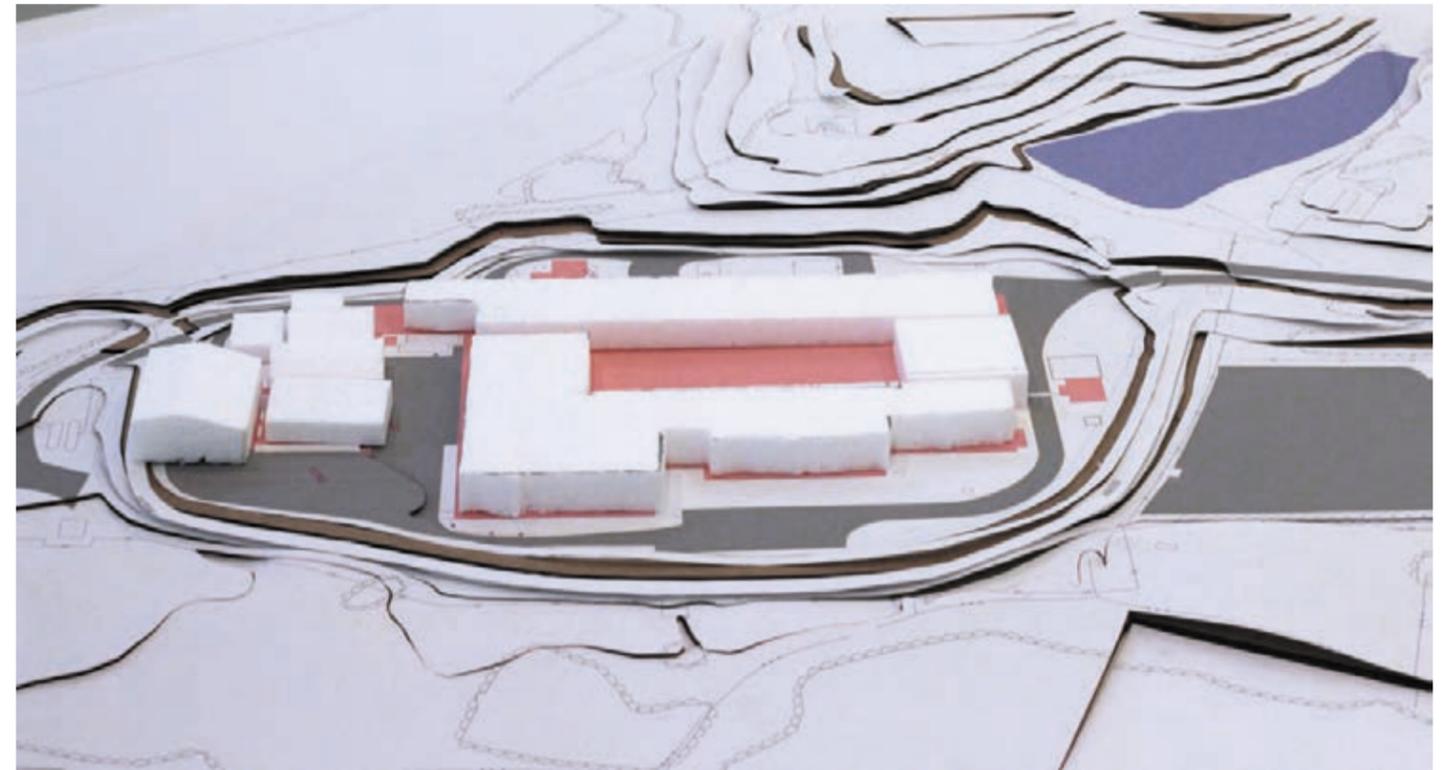


Sketch 5— Donut

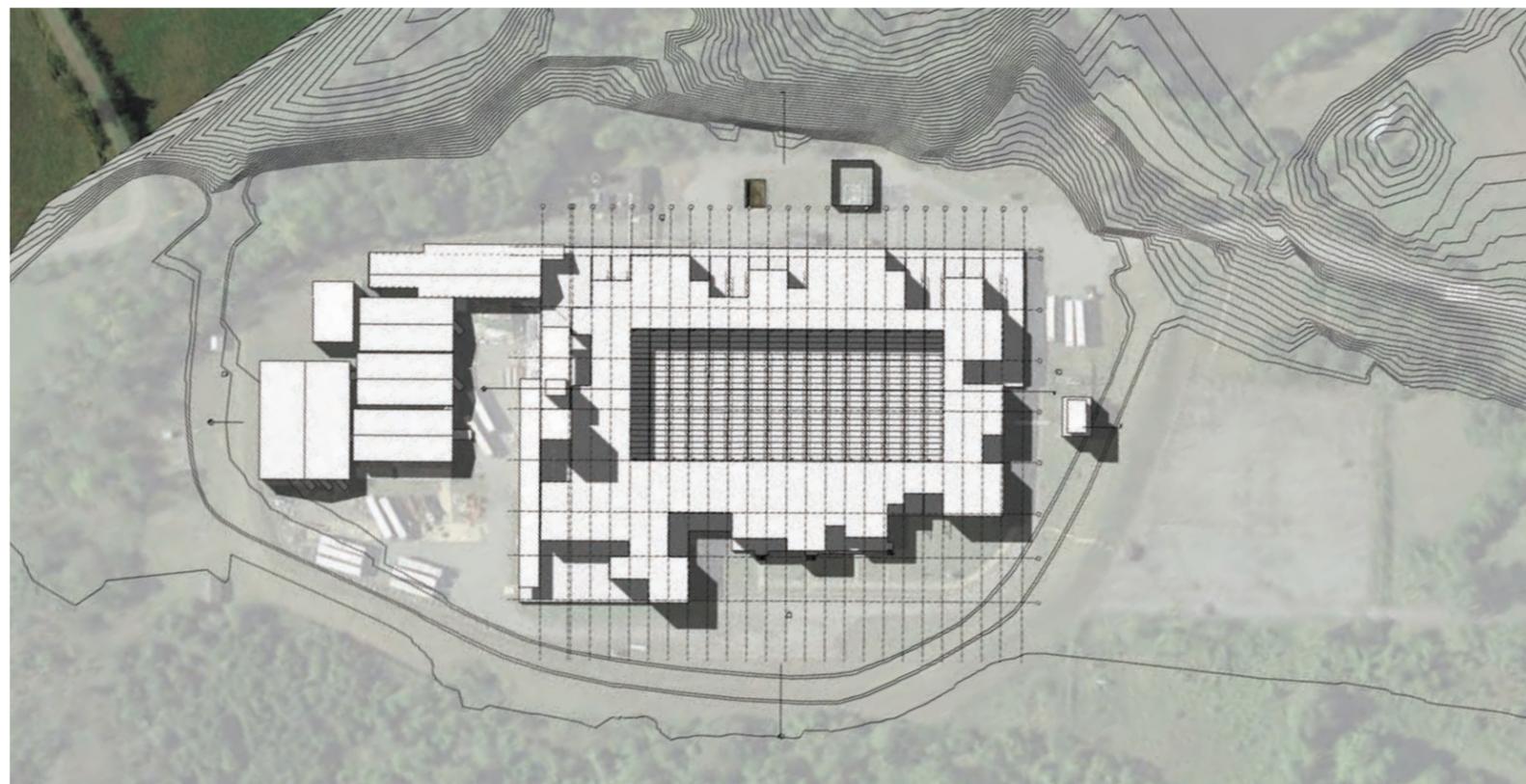
This scheme examines the central area of the factory as a piazza, a shared interior court with natural light created by removing the roof or introducing large skylights. Positioned around the perimeter of the factory are small units that could be used for commercial, educational, institutional, light industrial or even residential purposes. This enables every tenant to have access to an external facade and the internal piazza. Just like the Italians do it, this piazza also could have a tower overlooking the public space.

Programming Potentials:

- 70,000 SF of leasable space that can be subdivided into a range of sizes.
- 30,000 SF Piazza used for common activities.
- Tower used for projection / entertainment



Sketch 5— Donut

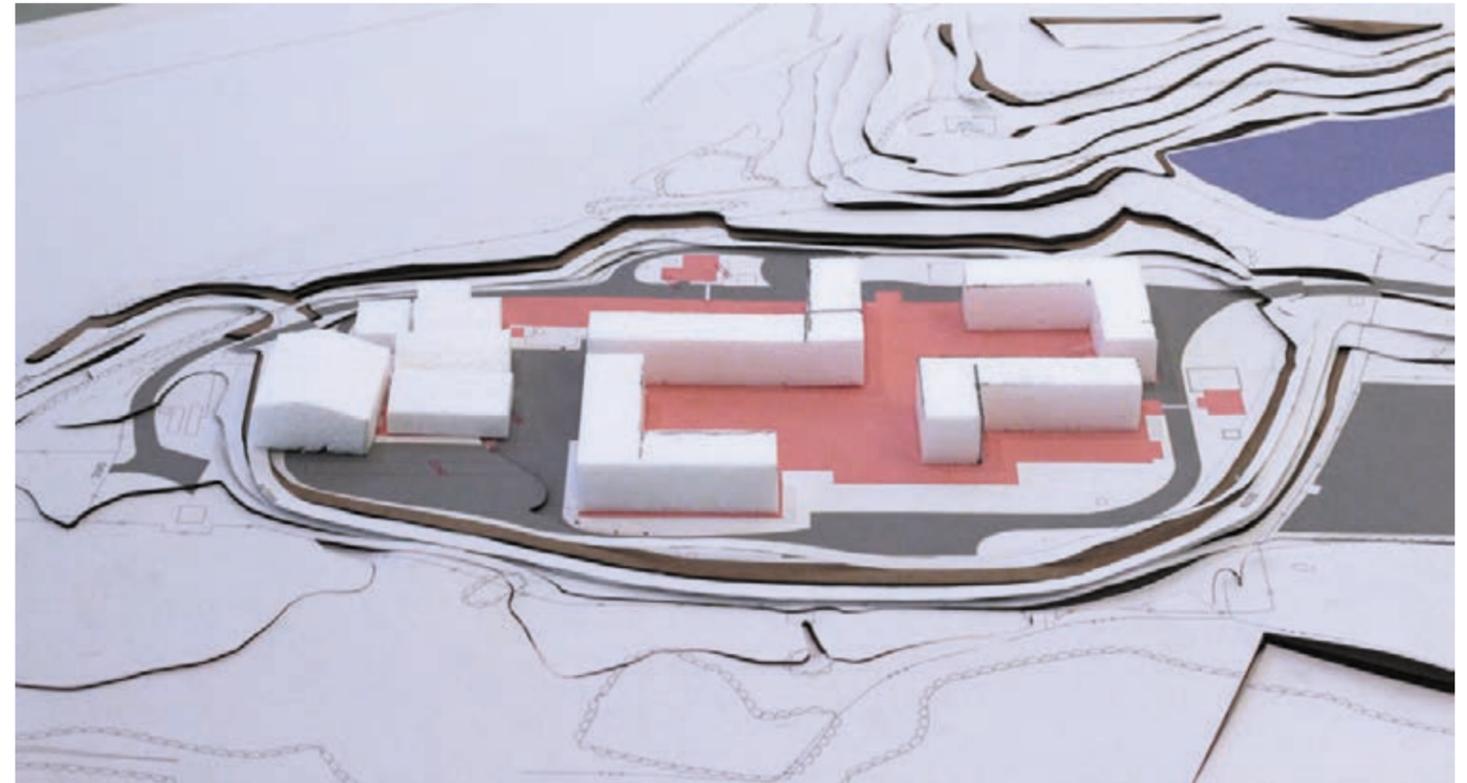


Sketch 6— Courtyards

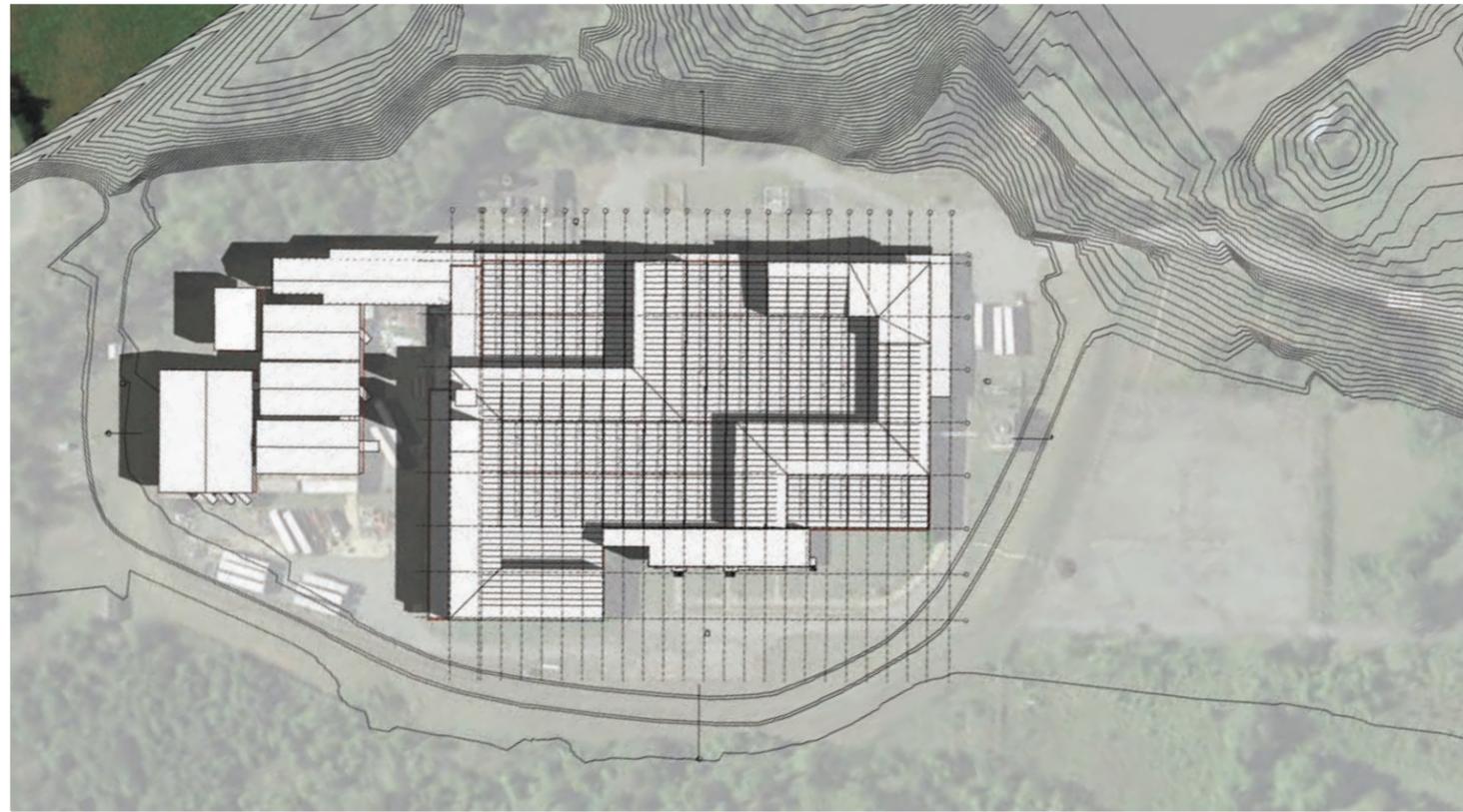
This scheme uses an L module to position commercial, office, studio or making space around indoor/outdoor courtyards. Some of the courts are interior facing and some step back from existing building envelope.

Programming Potentials:

- 70,000 SF of leasable space that can be subdivided into a range of sizes.
- 30,000 SF Piazza used for common activities.



Sketch 6— Courtyards



Housing Precedents

Fleinvær Refugium / Rintala Eggertsson Architects / Artist Residency



Resort like conditions
Minimal impact on natural
surrounding
Gives the feeling of a historical
fishing village

Housing Precedents

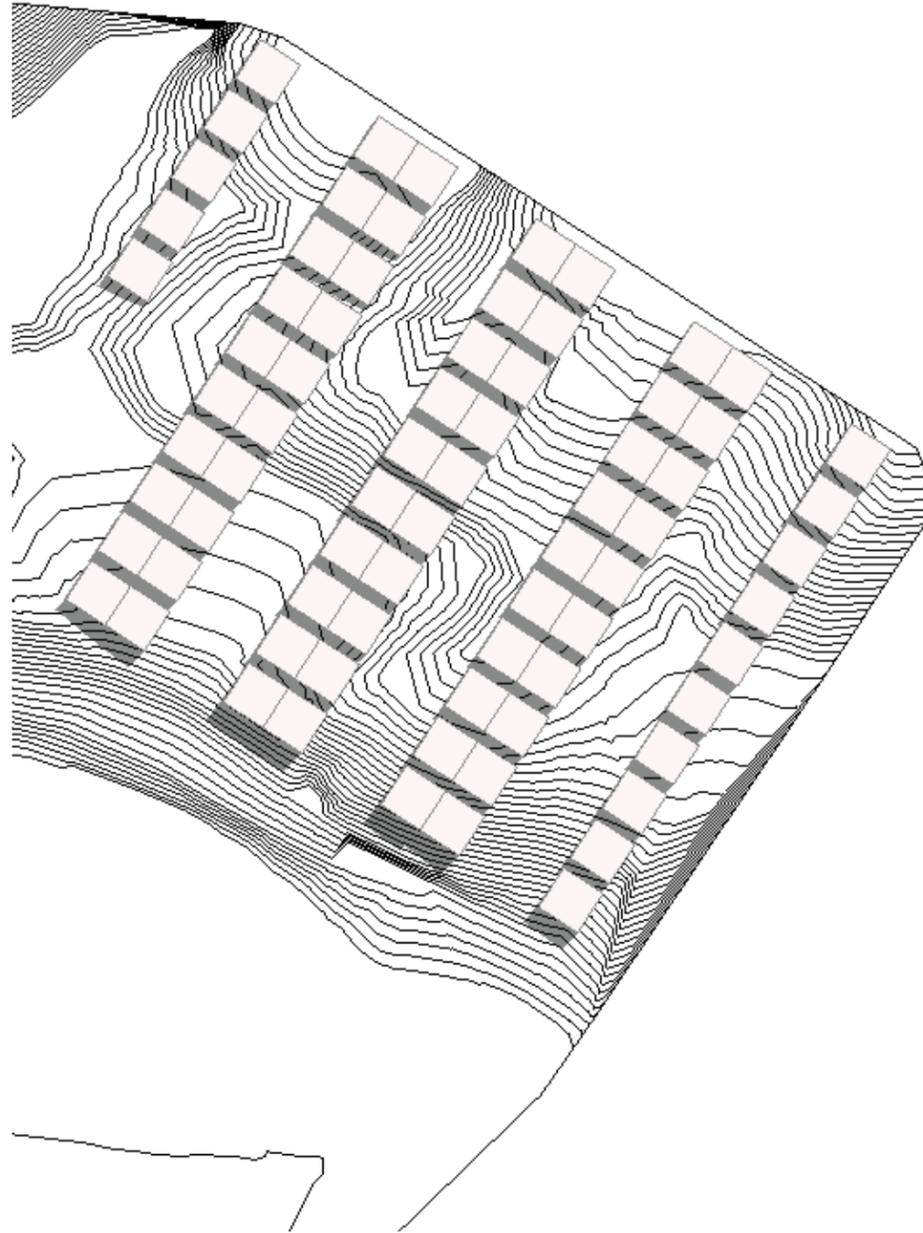
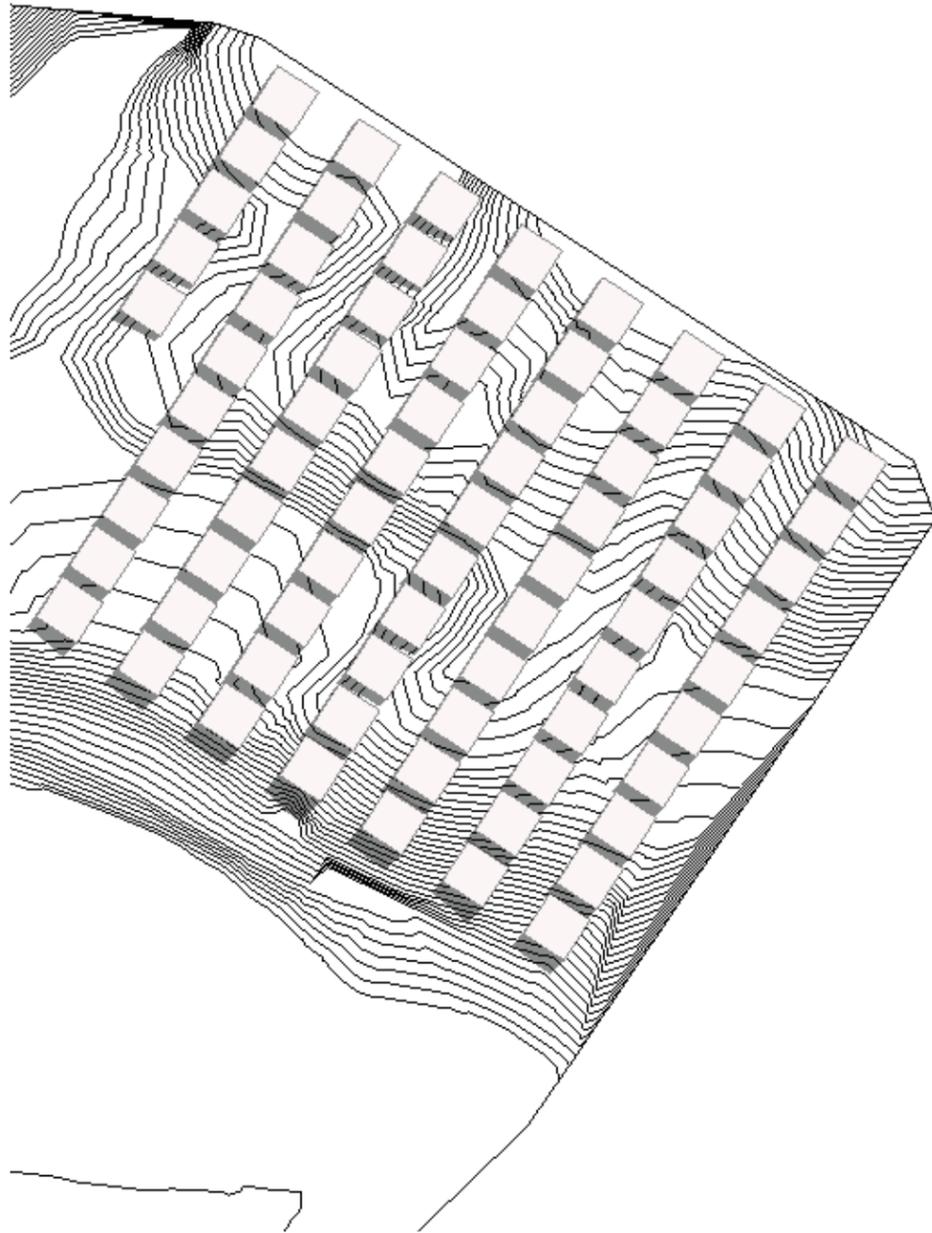
The Pierre House / Olson Kundig Architects / Single Family Residence



Melts into the landscape to hide from view
Views towards the lake

Housing Study - Max

Scheme 1 & 2 / 75 Individual Single Family Units



Scheme Stats

Buildings Square Footage: 120,000

Service Road Square Footage: 39,200

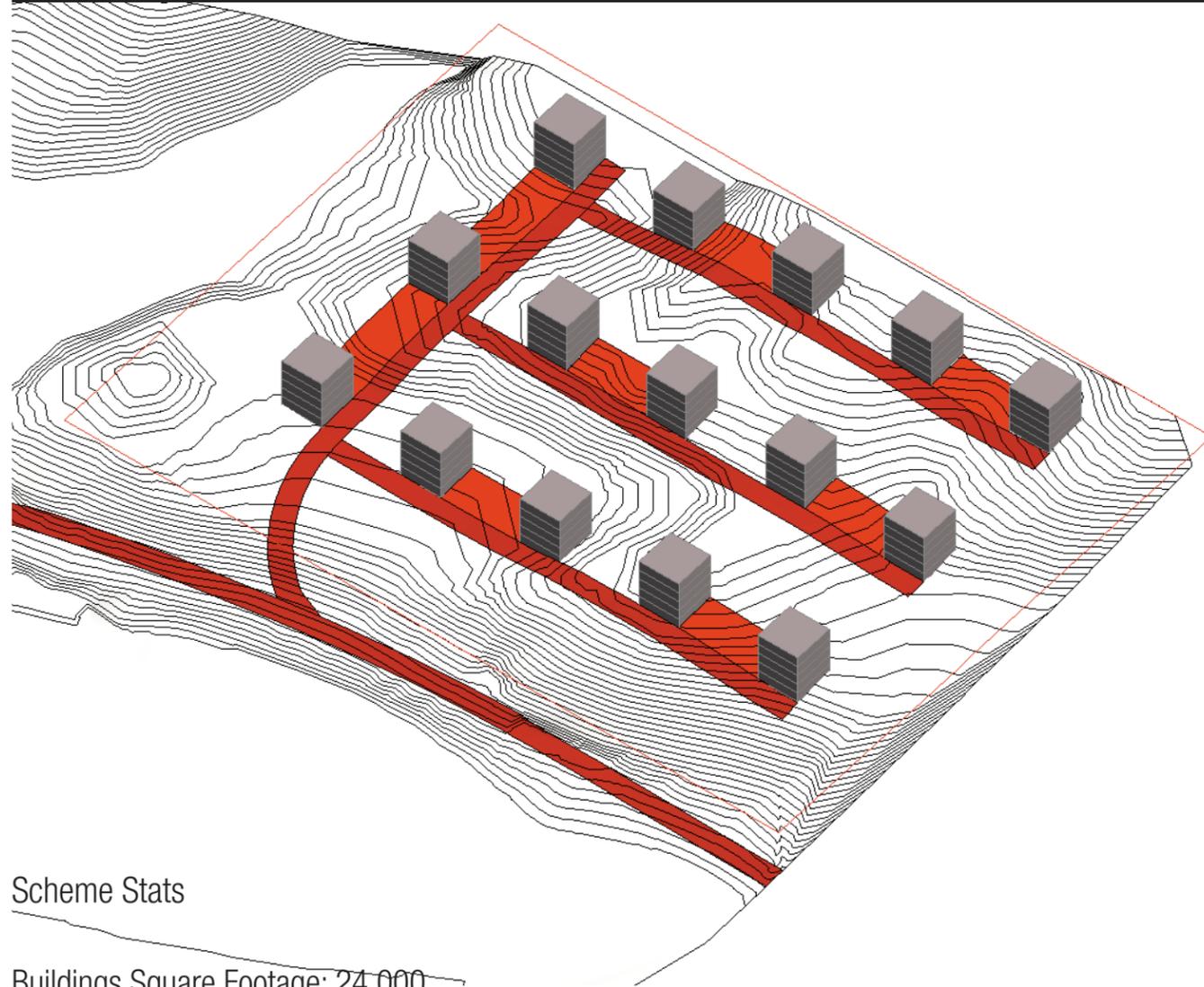
Private Space Per House: 1,200

Total Private Square Footage: 90,000

Total Remaining Square Footage: 146,800

Housing Study - Max

Scheme 3 / 75 Units, 15 Buildings, 5 Units Per Buildings / 2 9'x18' Parking Spaces per Unit



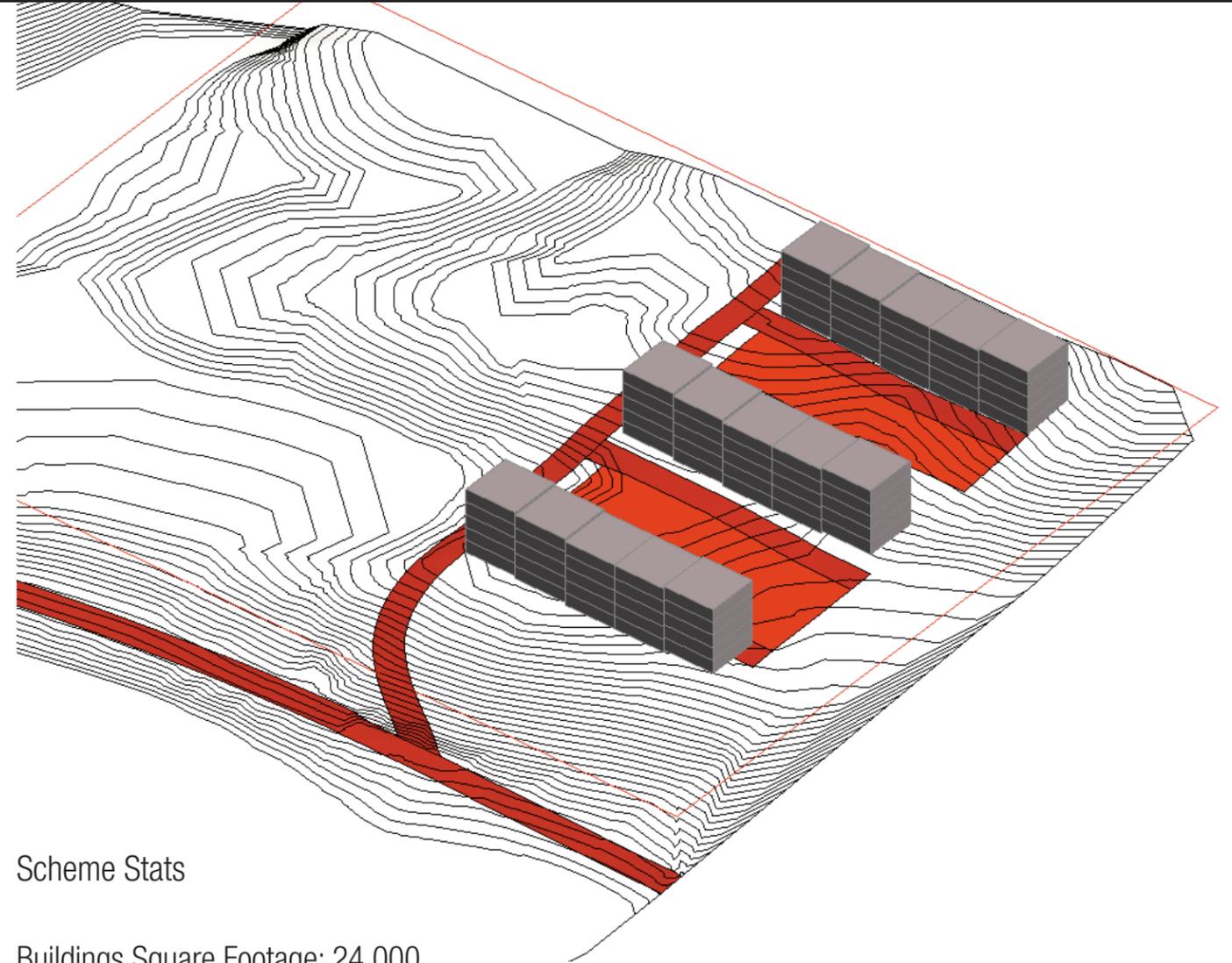
Scheme Stats

Buildings Square Footage: 24,000

Service Road Square Footage: 34,000

Total Parking Square Footage: 24,300

Scheme 4 / 75 Units, 3 Buildings, 25 Units Per Building / 2 9'x18' Parking Spaces per Unit



Scheme Stats

Buildings Square Footage: 24,000

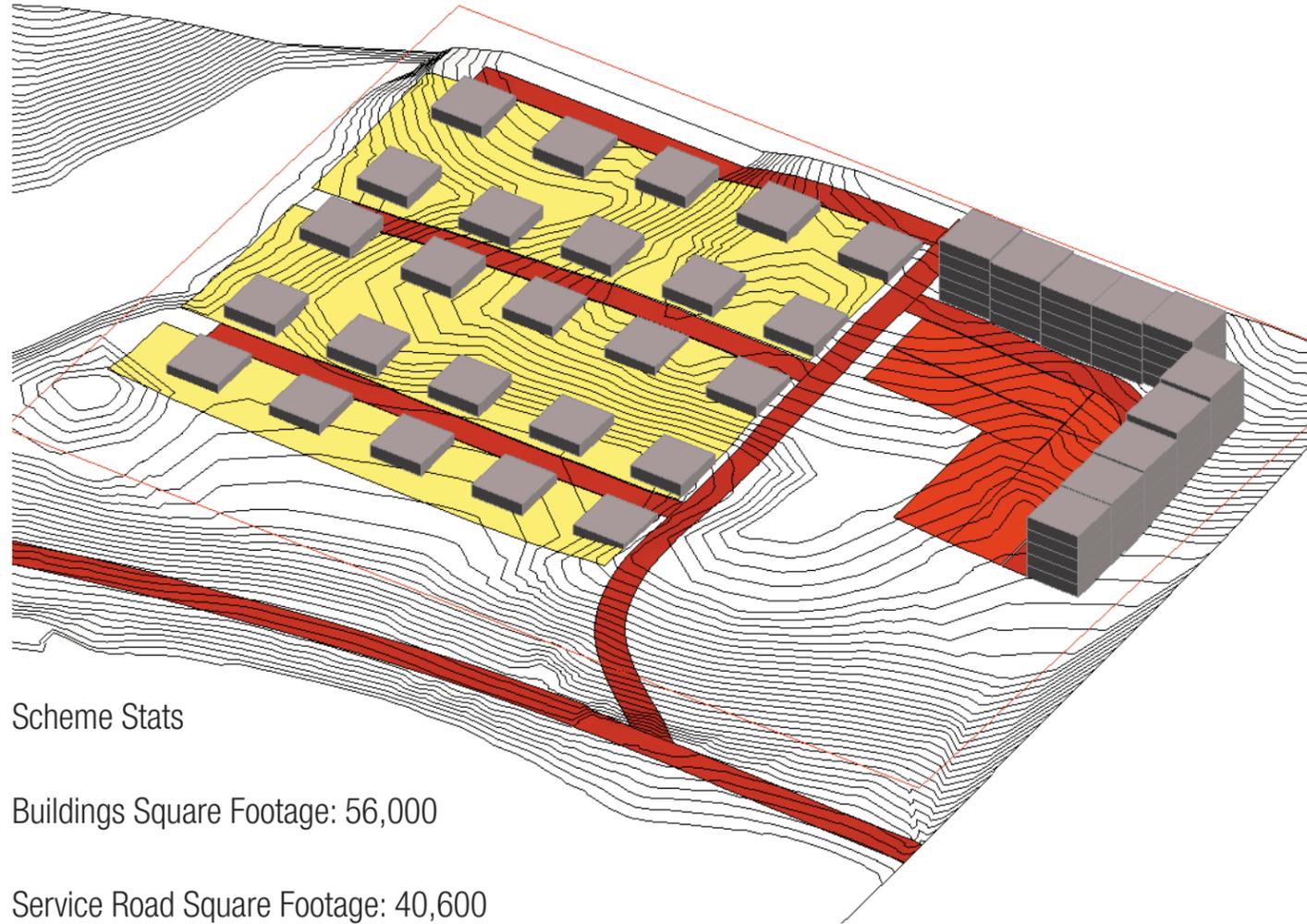
Service Road Square Footage: 20,520

Total Parking Square Footage: 24,300

Housing Study - Max

Scheme 5 / 75 Units, 2 Buildings, 50 Units Per Building, 25 Individual Units

Schemes 6 / 75 Units, 3 Buildings, 5 Units Per Building, 2 Buildings, 25 Units Per Buildings, 10 Individual Units



Scheme Stats

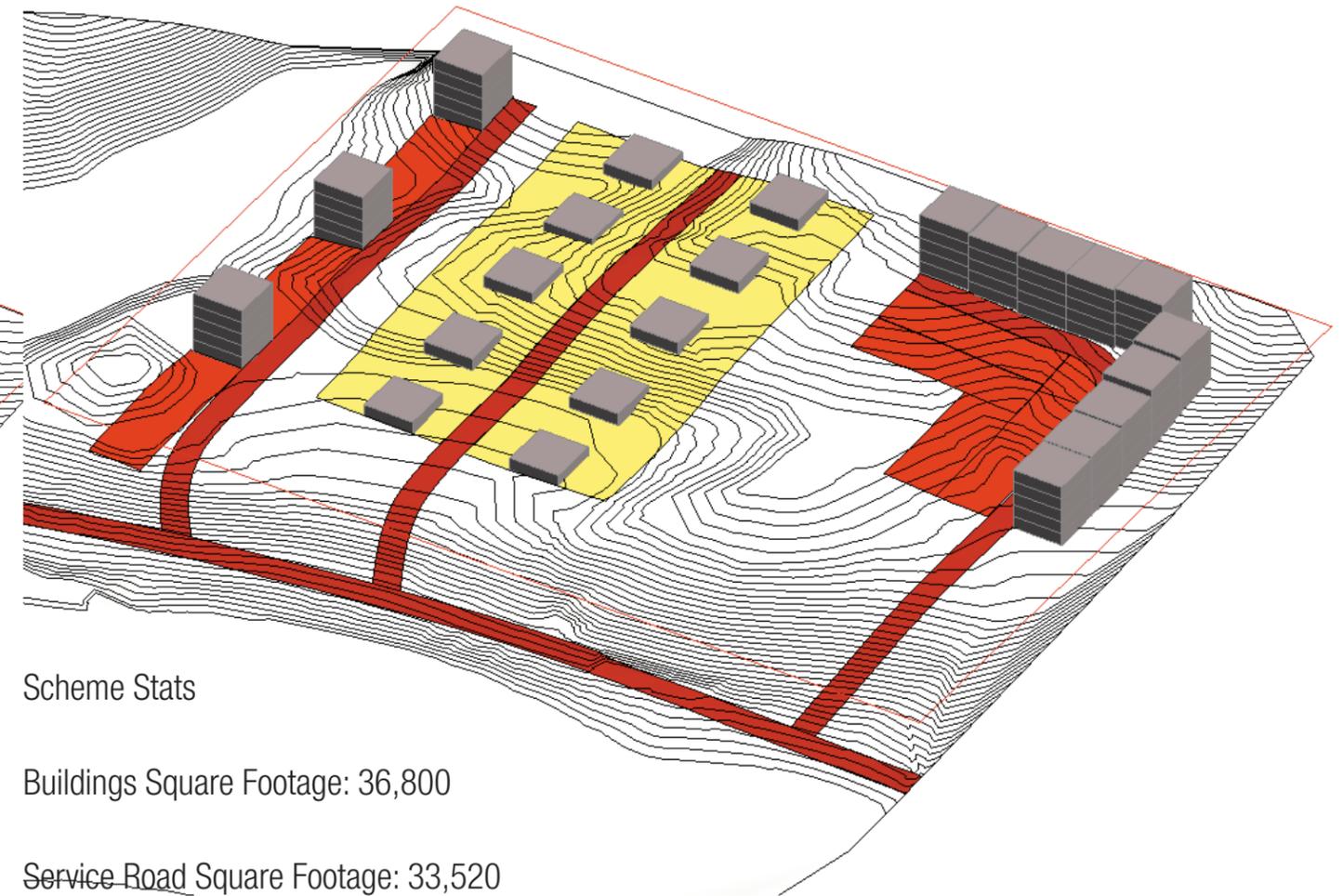
Buildings Square Footage: 56,000

Service Road Square Footage: 40,600

Private Space Per House: 3,600

Total Private Square Footage: 90,000

Total Parking Square Footage: 16,200



Scheme Stats

Buildings Square Footage: 36,800

Service Road Square Footage: 33,520

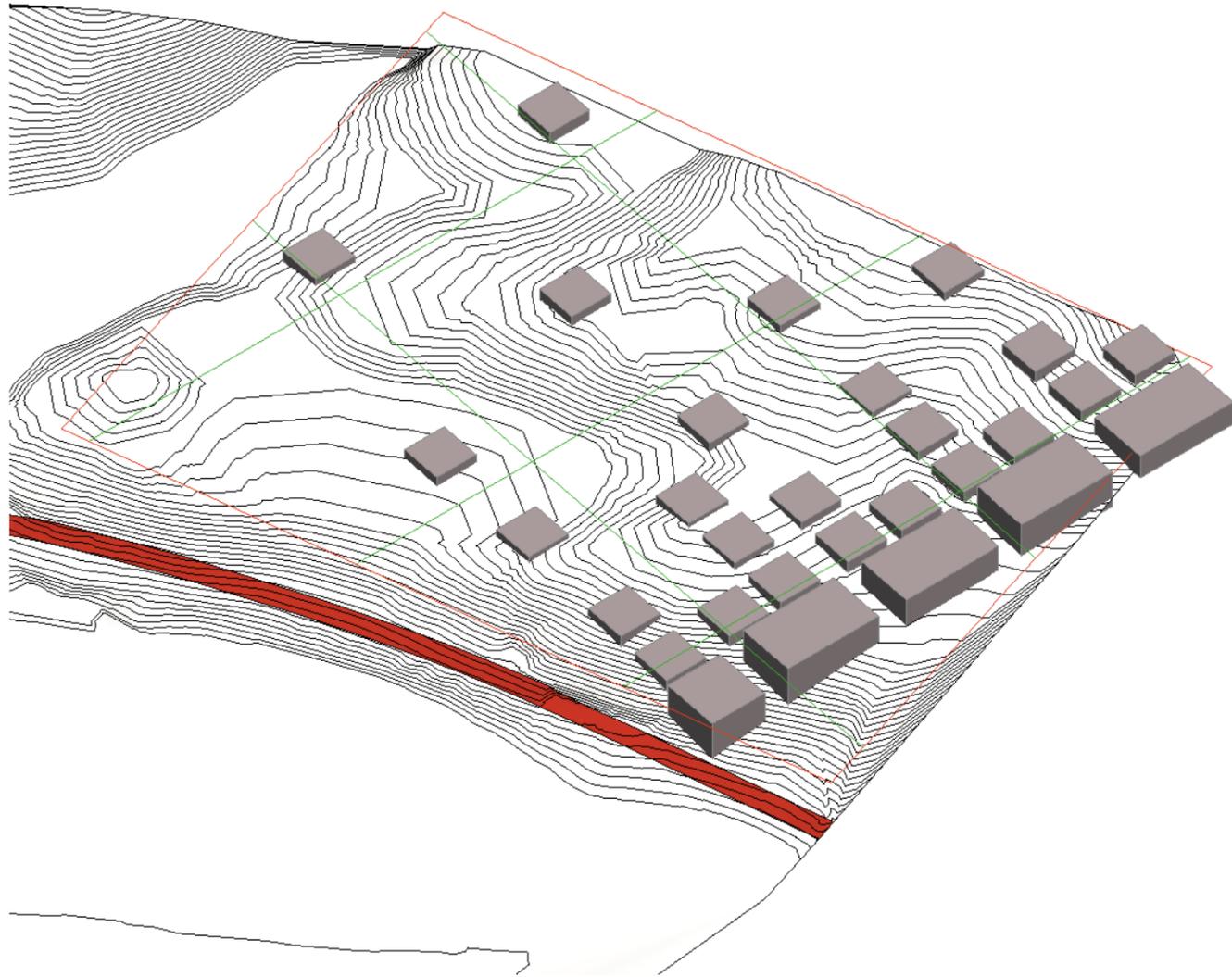
Private Space Per House: 8,800

Total Private Square Footage: 88,000

Total Parking Square Footage: 21,060

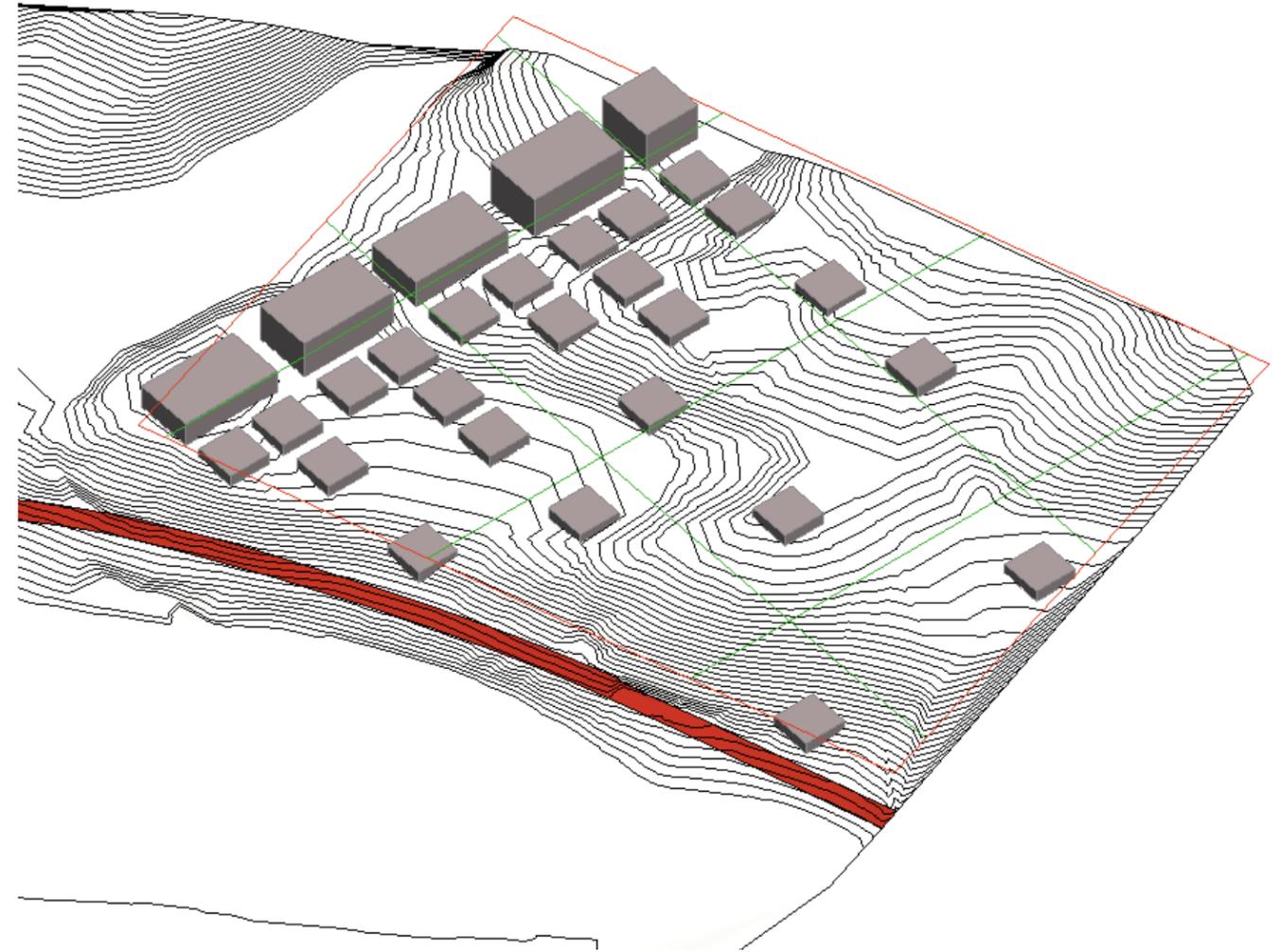
Housing Study - Max

Housing Grid Iterations



Scheme Stats

Buildings follow grid of Scottsville's Historic Downtown. Building Density mimics the density pattern of the historic downtown as the buildings get

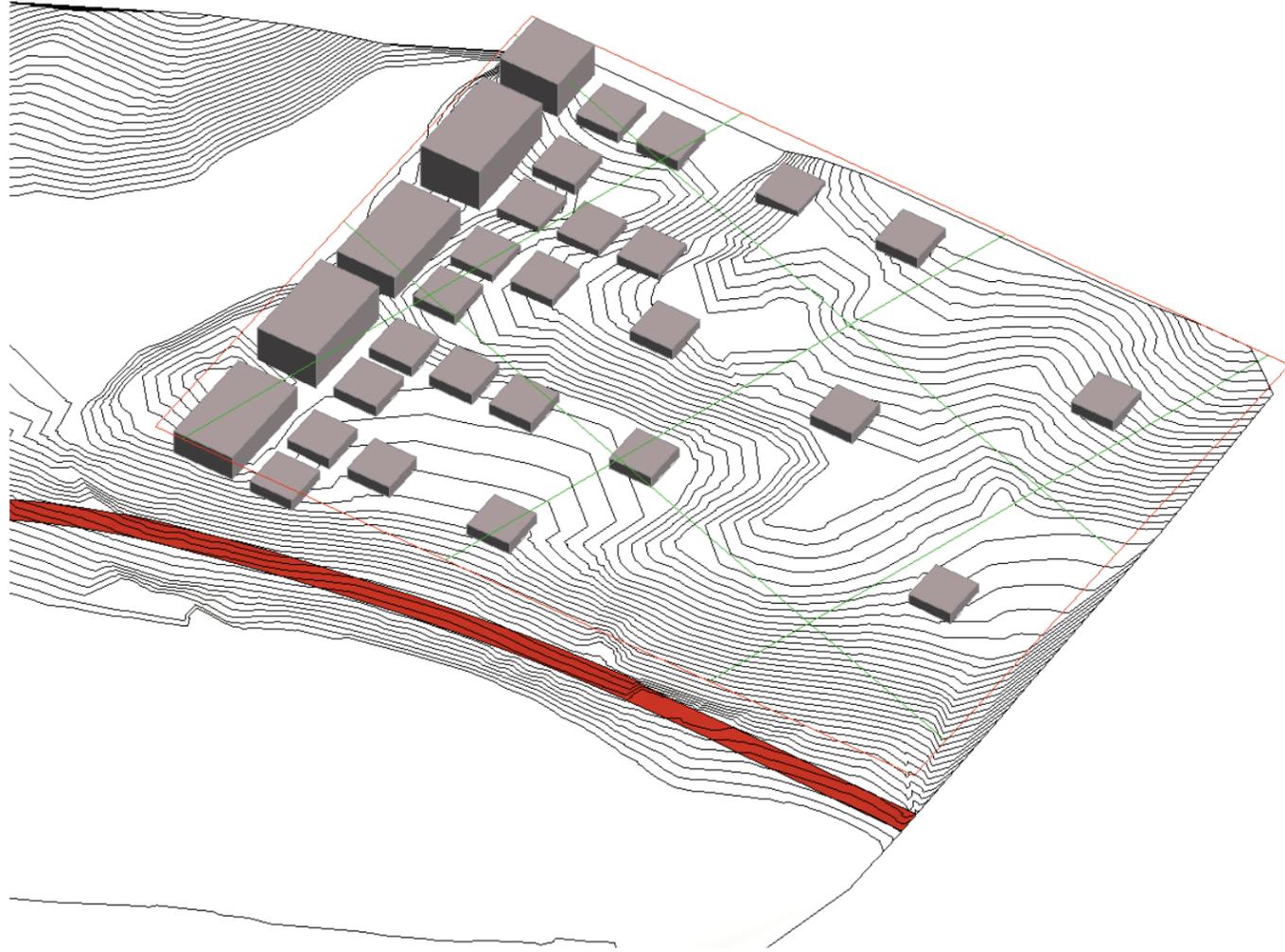


Scheme Stats

Buildings follow grid of Scottsville's Historic Downtown. Building Density mirrors the density pattern of the historic downtown as the buildings get

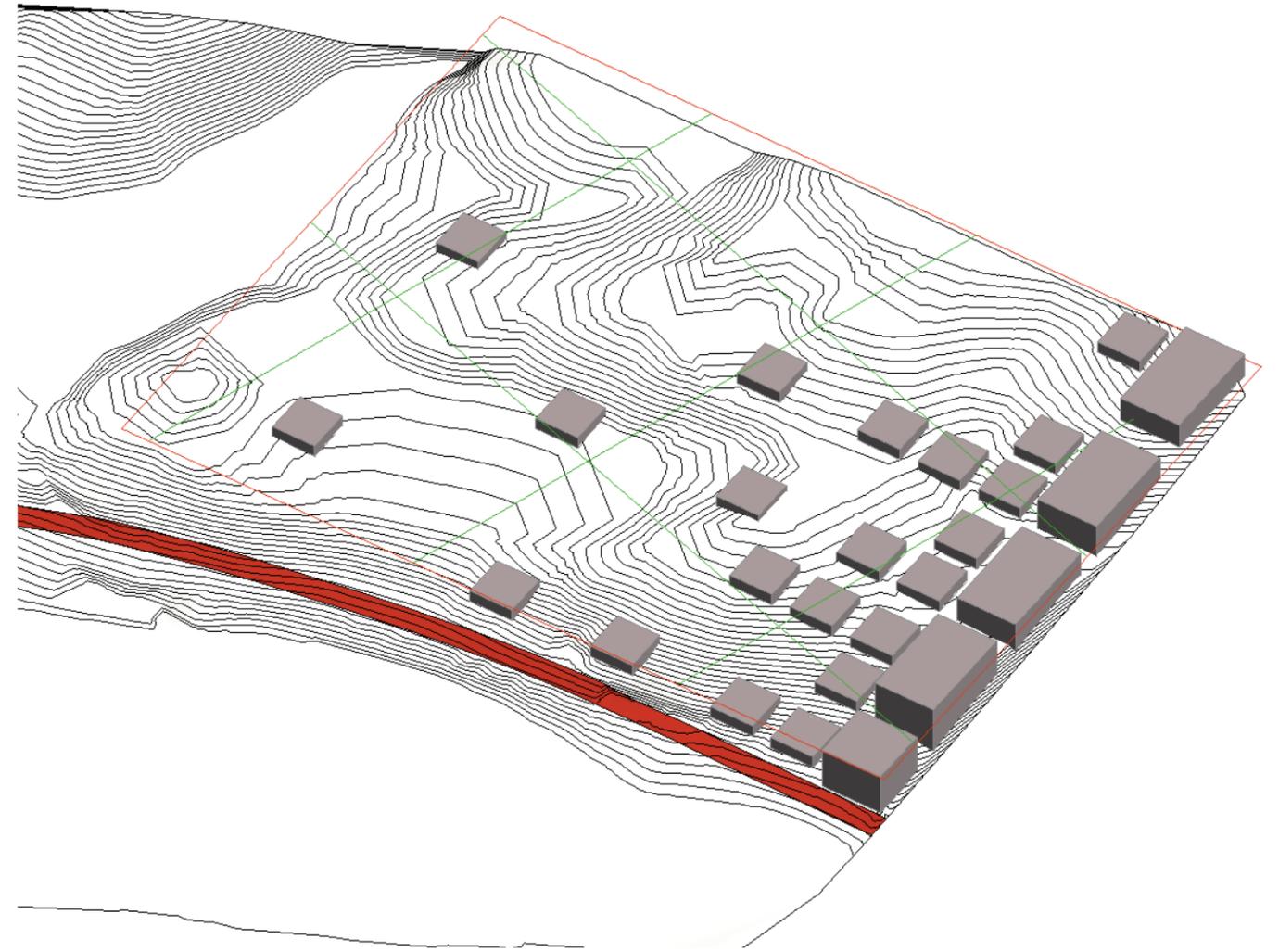
Housing Study - Max

Housing Grid Iterations



Scheme Stats

Buildings break historic downtown grid and are parallel to plot edge. Building Density mirrors the density pattern of the historic downtown as the

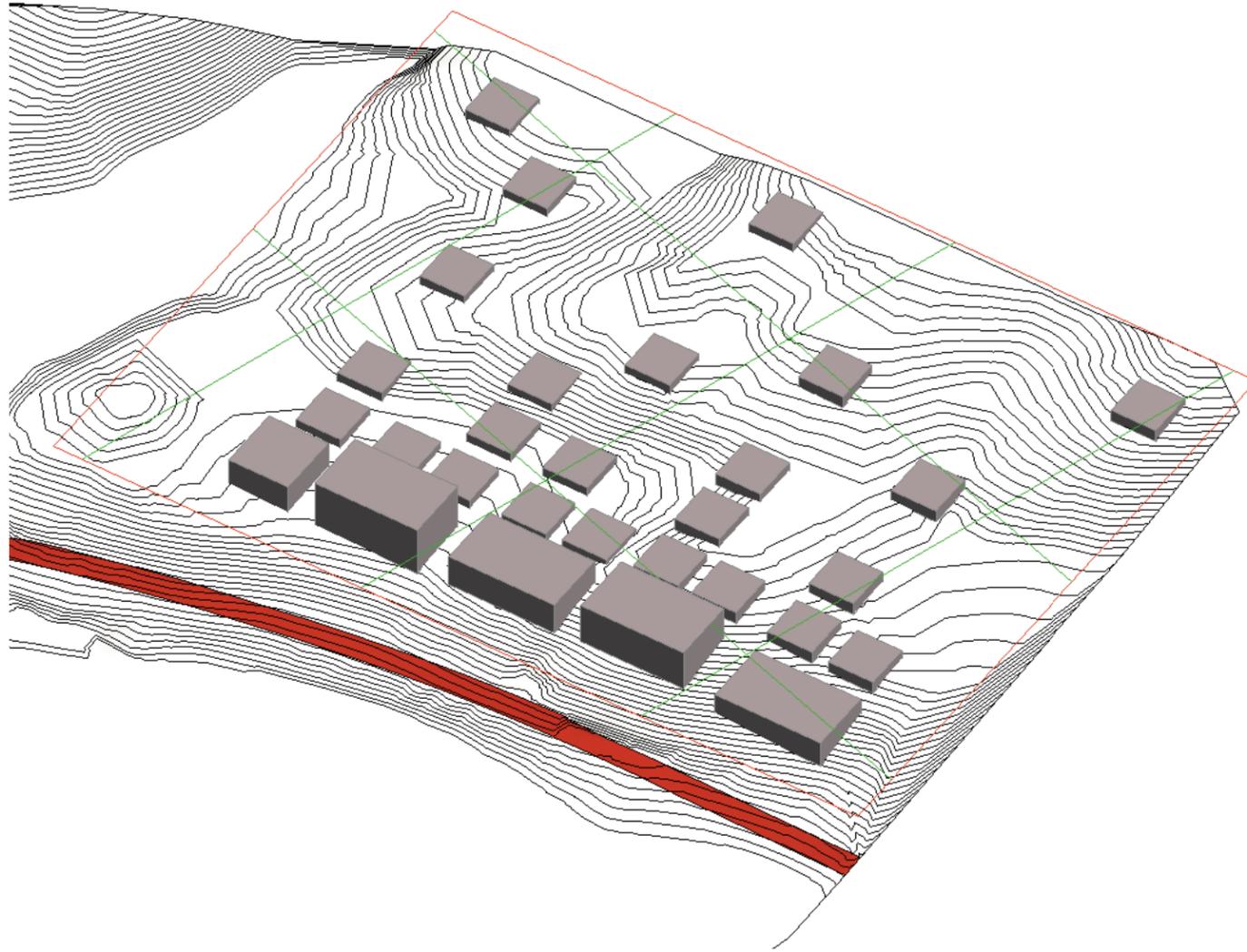


Scheme Stats

Buildings break historic downtown grid and are parallel to plot edge. Building Density mimics the density pattern of the historic downtown as the

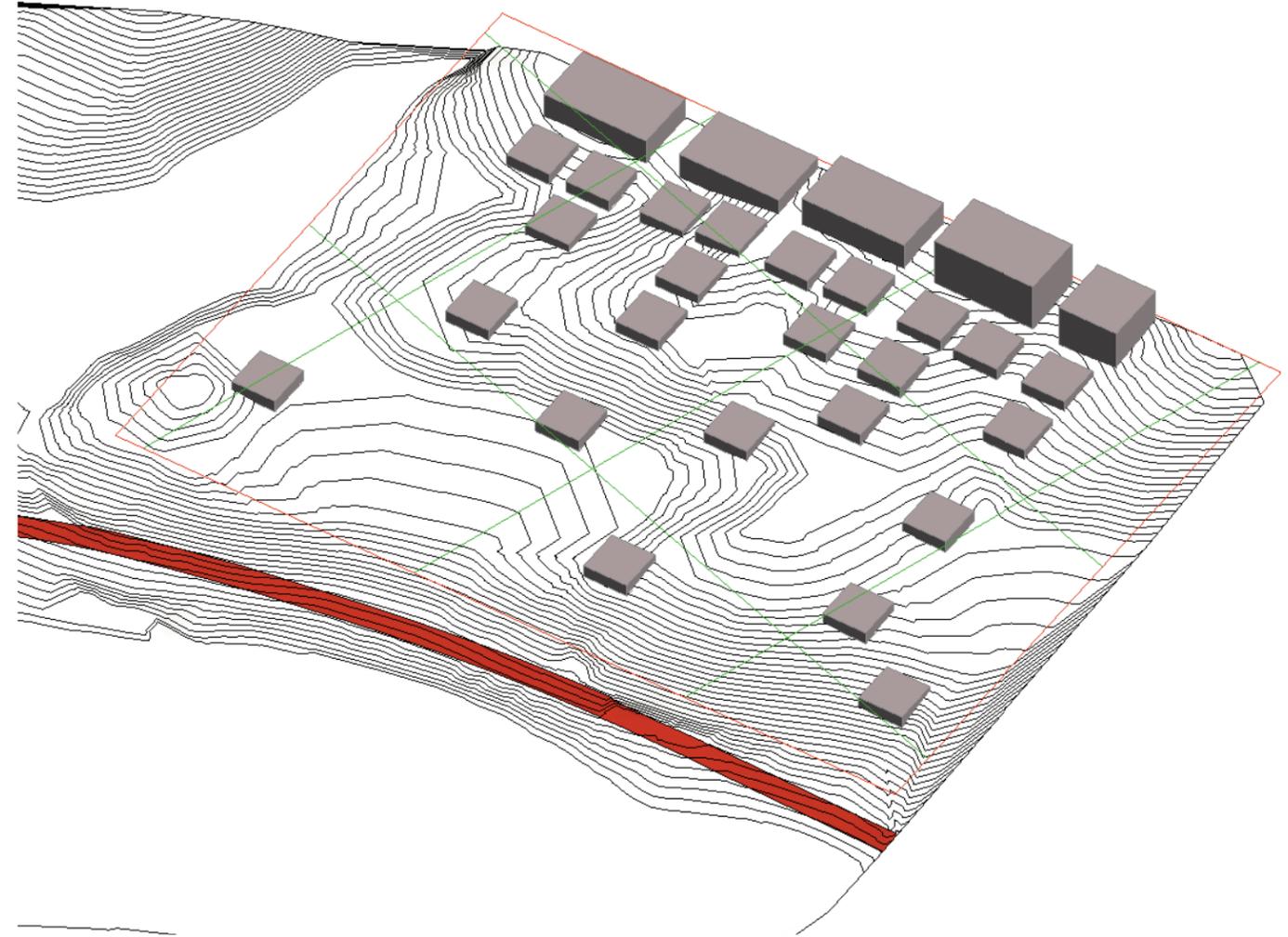
Housing Study - Max

Housing Grid Iterations



Scheme Stats

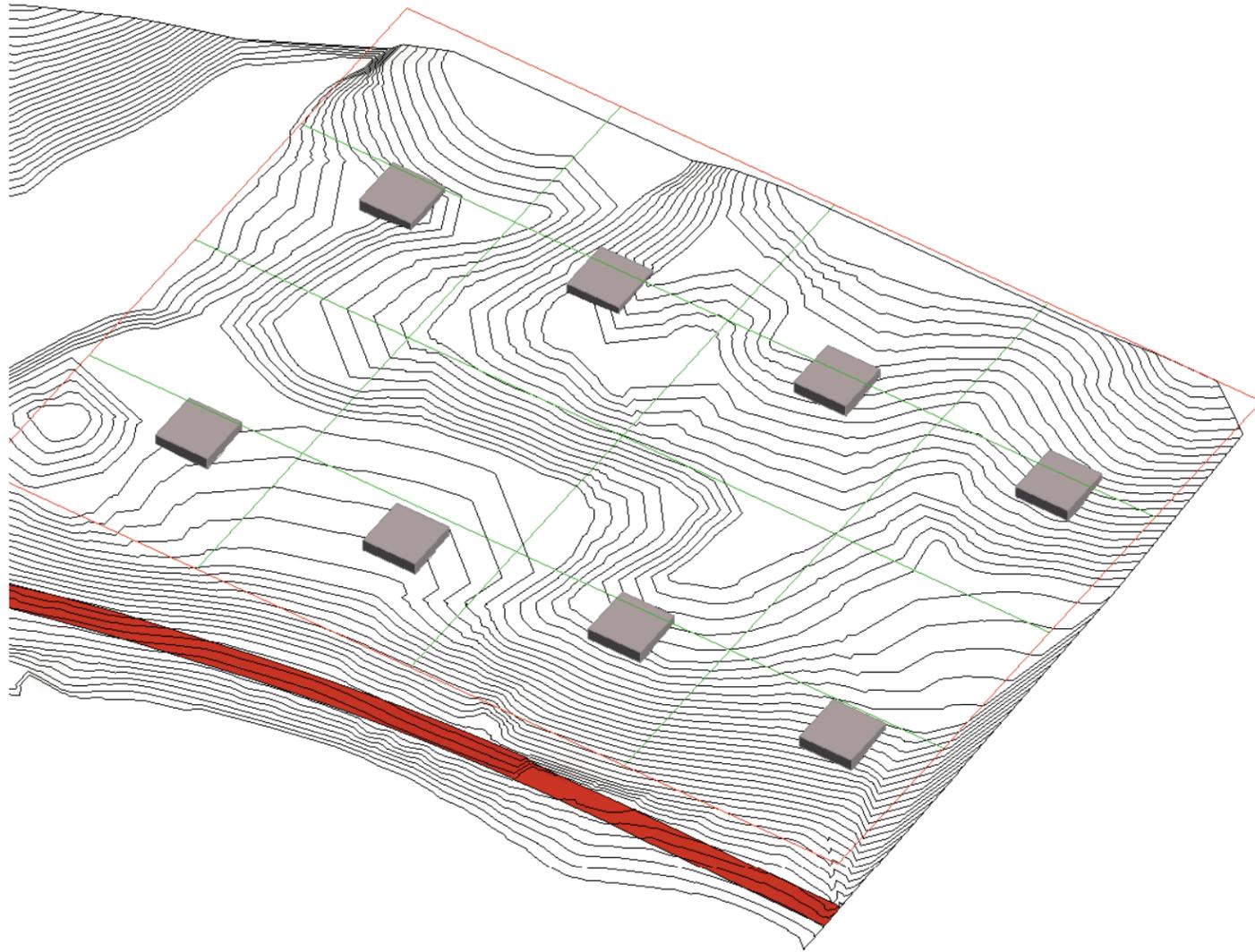
Buildings break historic downtown grid and are perpendicular to plot edge. Building Density mimics the density pattern of the historic downtown as the buildings get further from Rt. 20.



Scheme Stats

Buildings break historic downtown grid and are perpendicular to plot edge. Building Density mirrors the density pattern of the historic downtown as the buildings get further from Rt. 20.

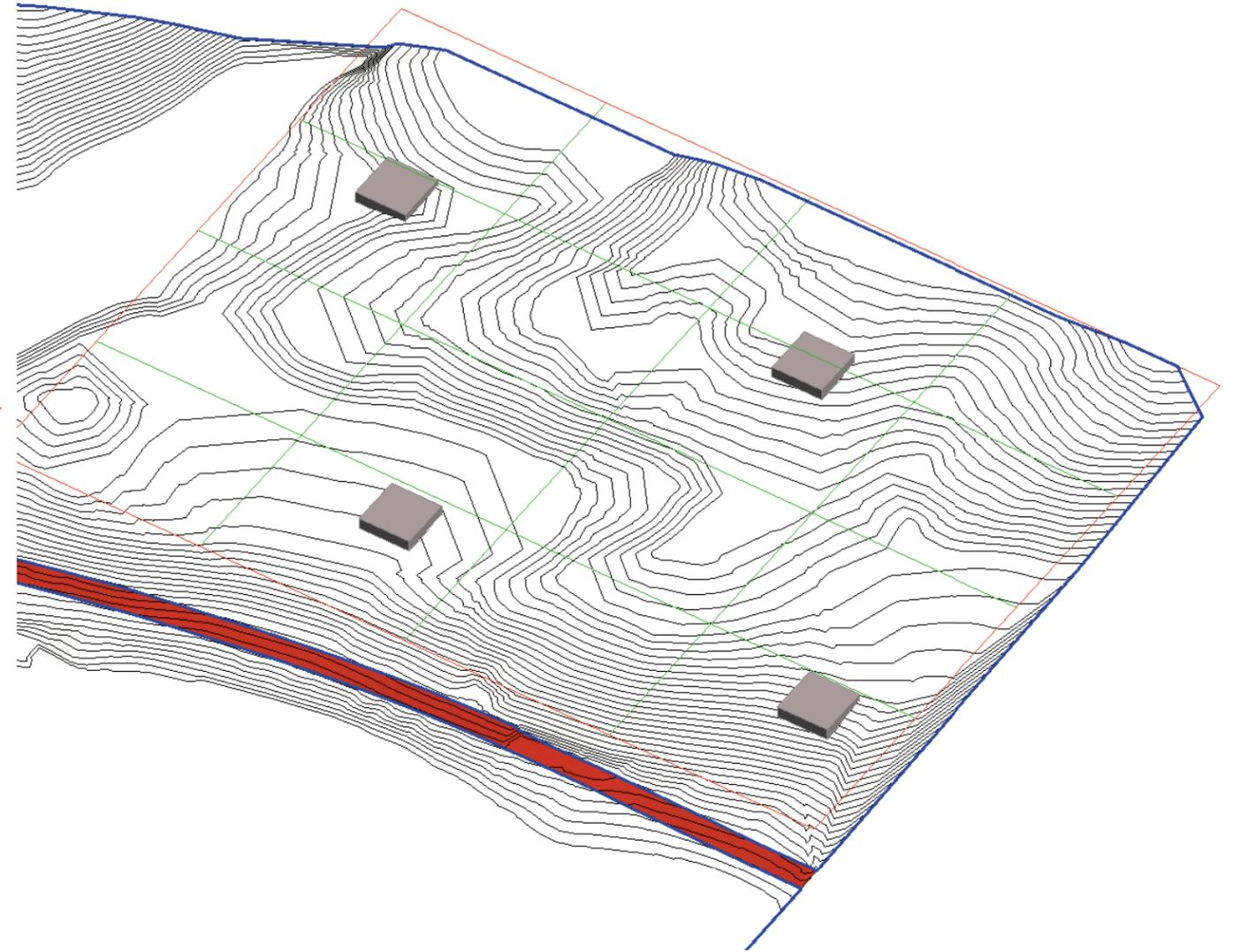
Housing Study - Min.



Scheme Stats

Eight 2000 Sq Ft Houses

1 Acre Per house



Scheme Stats

Four 2000 Sq Ft Houses

2 Acre Per house

Wetlands



**Exhibit D: Additional
Architectural Layouts**

**Prepared by Cornerstone
Architects**

COMMERCIAL

1 BEDROOM APARTMENT

2 BEDROOM APARTMENT

CORNERSTONE
 ARCHITECTURE AND INTERIOR DESIGN
 23 WEST BROAD STREET SUITE 200 RICHMOND, VIRGINIA 23220
 TELEPHONE: 804.353.3051
 WEBSITE: WWW.CSARCH.COM

CONSULTANTS

SEAL

NOT FOR CONSTRUCTION

WAUKESHAW
SCOTTSDALE PLANT
APARTMENTS
 SCOTTSDALE, VIRGINIA 24590



C:\Users\dpellon\Desktop\190568.00 SCOTTSDALE PLANT\SCOTTSDALE PLANT.bpn - Tuesday, October 8, 2019 - 3:52 PM - dpellon

13
 SK-04
LAYOUT 1
 SCALE: 1/32" = 1'-0"

MARK	DATE	DESCRIPTION

PROJECT NO: 190XX.PP
 MODEL FILE: SCOTTSDALE PLANT.bpn
 START DATE: XXX/XX/XXXX
 PROJECT MANAGER: DPP
 PRINCIPAL IN CHARGE: ERQ

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SHEET TITLE
BUILDING LAYOUT 1

SK-04

**Exhibit E: Phase II Environmental Site Assessment
Scope of Work and Estimate**

**Prepared by Commonwealth Environmental
Associates, Inc.**



Commonwealth Environmental Associates, Inc.

7411 Iron Bridge Rd. • Richmond, VA 23237 • 804.275.9320 • Fax: 804.275.9322

September 3, 2019

Waukeshaw Development Inc.
230 E. Bank Street
Petersburg, Virginia 23803

Attn: Ms. Zoe York

RE: Limited Phase II Environmental Site Assessment Proposal
Former Hyosung Tire Plant
800 Bird Street
Scottsville, Virginia
CEA Proposal No. DM190903A

Dear Ms. York:

Commonwealth Environmental Associates, Inc., is pleased to submit this proposal for completing the recommended Limited Phase II Environmental Site Assessment Services at the above referenced property. The proposed scope of services is based on the findings presented within client provided Phase I ESA studies prepared by Environ International Corporation dated December 2002 and F&R, Inc. dated May 31, 2011. The complete reports were not available. In Part A, the cost estimate for completing the services is presented.

Purpose of Proposed Services

To complete a limited study to include soil and groundwater sampling and analysis in two (2) areas of the subject site that were previously referenced as having subsurface chlorinated solvent contamination including the bulk chemical loading / unloading area and adjacent to the area of the building where hot-stretch dip operations were conducted.

Scope of Services

The scope of services anticipated for this limited scope project includes the following activities:

- CEA will provide the personnel and management required to complete the project.
- CEA will have the public underground utilities marked prior to initiating services at the site.

- ❑ CEA will have the proposed sample locations cleared by a private utility contractor prior to drilling activities.
- ❑ CEA will utilize the truck mounted direct push drilling equipment to extend a maximum of five (5) borings to the soil / groundwater interface to collect soil and / or groundwater samples. The borings will be utilized to collect soil and / or groundwater samples for field analysis utilizing a Photo-ionization Detector (PID) as well as field observations for staining, fill or odors. Temporary wells may be installed in the boring locations to facilitate any groundwater sampling. Near surface / perched groundwater is estimated at a depth of 20.0 feet.
- ❑ CEA will submit a maximum of five (5) soil and groundwater samples each collected from the boring locations to a certified laboratory for chemical analysis that will include Volatile Organic Compounds (Method 8260).
- ❑ Utilizing stainless steel soil vapor probe, CEA will collect soil vapor samples from two (2) locations beneath the structure pad within the former plant building for Volatile Organic Compounds (Method TO-15). The soil vapor samples will be collected per EPA Protocol. This sampling is to determine if there is any threat of the infiltration of vapors into the structure from and subsurface solvent on the subject property.
- ❑ CEA will prepare a Phase II Environmental Site Assessment findings report presenting the observations, any chemical analysis results and pertinent maps and quality control documentation.

CEA can provide any or all aspects of the recommended services. A detailed cost estimate is presented as Attachment A. The actual quantity of time and materials required to complete the study will be invoiced. CEA will complete the study in a cost-efficient manner.

CEA request three – four weeks from authorization to proceed to complete this scope of services. If you select our firm to provide services for you on this project, please sign the Proposal Acceptance Sheet located in Part C and return one copy to this office. We anticipate initiating work on this project immediately upon verbal acceptance of this proposal.

We appreciate the opportunity to provide you with this proposal for environmental services on this project. Please do not hesitate to contact me with any questions concerning this proposal or any aspect of the project at (804) 275-9320.

Sincerely,

COMMONWEALTH ENVIRONMENTAL ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "W. Fred Mayes". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

By:

W. Fred Mayes
President

Attachment: Part A - Cost Estimate
Part B - Proposal Acceptance Sheet

Part A
Cost Estimate
Limited Field Analysis / Phase II Environmental Site Assessment Services
Former Hyosung Tire Plant
800 Bird Street
Scottsville, Virginia

Part A – Limited Phase II ESA Services

Senior Environmental Staff	est. 2 hours @ \$75.00 / hr.	\$ 150.00
Environmental Staff	est. 20 hours @ \$65.00 / hr.	\$1,300.00
 Drilling Services		
Private Utility Contractor	estimated	\$ 600.00
Geoprobe Equipment	est. 1 day @ \$2,190.00 / day	\$2,090.00
Decon/Supplies/Disposables	estimated	\$ 250.00
 Chemical Analysis		
VOC's - 8260 (soil/groundwater)	est. 10 samples @ \$115.00 / ea.	\$1,150.00
VOC's –TO15 (vapor)	est. 2 samples @ \$390.00 / ea.	\$ 780.00*
Sampling Supplies/Equipment Rental	Lump Sum	\$ 340.00
Mileage/Expenses/Disposables	Not to Exceed	<u>\$ 125.00</u>
Total Estimate, Part A		\$ 6,785.00

*If the plan is to renovate and use the current structure, CEA recommends sub-slab testing. If the site is to be redeveloped, subsurface soil vapor testing per EPA protocols is recommended.

PART B

PROPOSAL ACCEPTANCE SHEET

COMMONWEALTH ENVIRONMENTAL ASSOCIATES, Inc.
PROPOSAL ACCEPTANCE AND AGREEMENT
FOR SERVICES

This Agreement made this 3rd day of September, 2019, by and between Waukeshaw Development Inc. (hereinafter referred to as "Client") 230 E. Bank Street, Petersburg, Virginia 23803 and Commonwealth Environmental Associates, Inc., a Virginia Corporation (hereinafter referred to as "CEA"), 7411 Iron Bridge Road, Richmond, Virginia 23237.

WITNESSETH: WHEREAS, Client desires to contract with CEA to perform services pertaining to Client's project known as "Limited Phase II Environmental Site Assessment Services" (hereinafter referred to as Project) at the former Hyosung Corporation facility at 800 Bird Street (street address) in Scottsville, Virginia.

WHEREAS, CEA is engaged in the business of providing services and has submitted a proposal offering to perform services for Client at the request of Client; and

WHEREAS, the proposal was based upon the representations of the Client and it is acknowledged that CEA's reliance upon such representations is reasonable; and

WHEREAS, Client has reviewed the proposal and authorizes CEA to perform the services described therein according to the terms of this agreement.

NOW, THEREFORE, in consideration of the Mutual Covenants and Promises included herein, Client and CEA agree as follows:

PROPOSAL ACCEPTANCE - Client hereby accepts CEA's proposal referenced below.

CONTRACT DOCUMENTS - "Contract Documents" shall mean this document and change orders, as well as proposals and other documents listed below under SERVICES TO BE RENDERED.

SERVICES TO BE RENDERED - CEA will provide Services for the Project as indicated in Proposal Number DM190903A dated the 3rd day of September, 2019, which is included and incorporated herein. (Brief description of services, or if a proposal was not submitted describe services to be provided and attach fee schedules).

TERMS AND CONDITIONS

PAYMENT - Client will pay CEA for services and expenses in accordance with the Contract Documents. CEA will submit progress invoices to Client monthly and a final invoice upon completion of its Services. Each invoice, on presentation, is due and payable by Client. Invoices are past due after 30 days. Past due amounts are subject to a service charge of one and one-half percent per month (18 percent per annum) on the outstanding balance. Attorney's fees and other costs incurred in collecting past due amounts shall be paid by Client.

CEA shall be paid in full for all Services under this Agreement, including any additional services as specifically authorized by Client in excess of those stated in this Agreement.

The Client's obligation to pay for the Services contracted for is in no way dependent upon the Client's ability to obtain financing, payment from third-parties, approval of governmental or regulatory agencies, or upon the Client's successful completion of the Project.

WARRANTY, LIABILITY, AND STANDARD OF CARE - CEA shall perform Services for Client in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of competent contractors practicing in the same or a similar locality as the Project.

REPORTS - In connection with the performance of the Services, CEA shall deliver to Client four (4) copies of the reports or other written documents reflecting Services provided and the results of such Services or CEA's evaluation of the results of such Services. All reports and written documents delivered to Client are instruments reflecting the services provided by CEA pursuant to this Agreement and are made available for Client's use and for the use of the purchaser of the Project from the Client and such purchaser's lender subject to the limitations in this Agreement. All such reports, other written documents, all original data gathered by CEA and work papers produced by CEA in the performance of the Services are, and shall remain, the sole and exclusive property of CEA.

The Services, and any data, recommendations, proposals, reports, design criteria, and similar information provided by CEA to Client pursuant to this Agreement are provided for the exclusive use of Client, the purchaser of the Project from the Client, and such purchaser's lender on the Project and are not to be relied upon in connection with other projects or by third parties.

SAFETY - With respect to the performance of the Services, CEA shall take safety precautions required by federal, state and local laws, rules, regulations, statutes or ordinances. Should Client be conducting activities on the Site, CEA shall not be responsible for Site safety and shall have no right to direct or stop the work of Client's contractors, agents, or employees.

CONFIDENTIALITY - Subject to any obligation CEA may have under applicable law or regulation, CEA agrees to release information relating to the Services only to its employees and subcontractors in the performance of the Services or to Client's authorized representative and to persons designated by the authorized representative to receive such information.

SAMPLES - Unless otherwise requested, test specimens or samples will be disposed of immediately upon completion of tests and analysis. Upon written request, CEA will retain samples for a mutually acceptable storage charge and period of time. In the event that samples contain or may contain hazardous materials, CEA shall, after completion of testing and at Client's expense, (a) return such samples to Client, or (b) using a manifest signed by Client as generator, have such samples transported to a location selected by CEA with Client's approval. Client recognizes and agrees that CEA is acting as a bailee and at no time assumes title to said samples.

RESPONSIBILITIES OF CEA - CEA agrees to provide services in accordance with all applicable Federal, State and Local law (including all regulations and directives) in effect on the date of this agreement. CEA agrees to provide services in accordance with the proposal attached, but in no instance shall the proposal be interpreted to authorize or require provision of services not in compliance with law. In the event applicable law changes, CEA shall submit an amended proposal reflecting the effects of the changes upon the project, to include changes, if any, in the cost of services provided under this agreement.

AUTHORITY TO SUBCONTRACT - CEA is specifically authorized to select and engage subcontractors or contractors for performance of any portion or portions of the services to be provided by CEA to Client. Except for the right of payment, no party has the right to assign any portion of this agreement.

OWNERSHIP OF MATERIAL - CEA, by agreeing to provide services, does not take title to any material handled, remediated, treated, attempted to be remediated or treated, transported, stored or encountered as a result of performing such services. Client remains the owner and generator of all such material unless and until title is expressly transferred by written agreement of CEA.

CHANGE ORDERS - The proposal is based upon an initial analysis of the project. Client acknowledges that it is impossible for purposes of this project to completely verify the accuracy of any analysis prior to undertaking the Project. In the event that additional or different contaminants or substances are discovered, or contaminants or substances previously identified are found to be in different concentrations, or analysis of the material proposed methodology is otherwise found to be at variance from the proposal requiring services different, in the discretion of CEA, than those shown in the proposal, then CEA shall prepare and submit a CHANGE ORDER to Client for client's written authorization for the work to proceed in accordance with the change order. In the event client does not so authorize CEA, CEA at its discretion, may terminate this agreement and Client shall pay CEA for all services to the time of termination. In the event Client desires CEA to provide additional services, and in the discretion of CEA it is appropriate that the additional services be provided by CEA, Client shall submit a written or oral request for CHANGE ORDER to CEA. CEA shall respond in writing to the request by submitting a CHANGE ORDER for Client's written authorization for the work to proceed in accordance with the change order.

INVENTIONS - Any and all inventions or discoveries relating to the Services, including improvements and modifications to existing work product or processes made or conceived by CEA of its employees during the term of this Agreement are and shall remain the sole and exclusive property of CEA.

REPRESENTATION OF CLIENT - Client warrants and covenants that sufficient funds are available or will be available upon receipt of CEA's invoice to make payment in full for the services rendered by CEA. Client warrants that all information provided to CEA regarding the project and project location are complete and accurate to the best of Client's knowledge. Client agrees to furnish CEA and its agents, subcontractors and CEA a right-of-entry onto the project site and permission to perform the services included in this Agreement.

PROJECT SITE - Reasonable precautions will be taken to minimize damage to the Project site from CEA's activities and use of equipment. Client recognizes that the performance of the services included in this Agreement may cause alteration or damage to the site. Client accepts the fact that this is inherent in the work and will not look to CEA for reimbursement or hold CEA liable or responsible for any such alteration or damage. Should Client not be owner of the property, then Client agrees to notify the owner of the aforementioned possibility of unavoidable alteration and damage and to indemnify, and defend CEA against any claims by the owner or persons having possession of the site through the owner which are related to such alteration or damage.

CEA agrees to contact Miss Utility to locate all utilities serving the Project site and Client agrees to disclose accurate location of hidden or obscure man-made objects at the Project site known to Client.

TERMINATION OF CONTRACT - This Agreement may be terminated by either party upon seven days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, CEA shall be paid for Services performed to the termination date plus reasonable termination expenses.

UNFORESEEN OCCURRENCES - If, during the performance of services hereunder, any unforeseen hazardous substance, material, element or constituent or other unforeseen conditions or occurrences are encountered which, in CEA's sole judgment significantly affects or may affect the services, the risk involved in providing the services, or the recommended scope of services, CEA will promptly notify Client thereof. Subsequent to the that notification, CEA may: (a) If practicable, in CEA's sole judgment and with approval of Client, complete the original scope of services and the estimate of charges to include study of the previously unforeseen conditions or occurrences, such revision to be in writing and signed by the Client and incorporated herein as a Change Order; or (b) Terminate the services effective on the date of notification pursuant to the parties terms of TERMINATION OF CONTRACT.

FORCE MAJEURE - Should completion of any portion of the Services be delayed for causes beyond the control of or without the fault or negligence of CEA including force majeure, the time for performance shall be extended for a period equal to the delay and the parties shall mutually agree on the terms and conditions upon which the Services may be continued. Force majeure includes but is not restricted to, acts of God or the public enemy, acts of the Government of the United States or of the several states or any locality, or any foreign country, or any of them acting in their sovereign capacity, acts of Client's contractors or Agents, fires, floods, epidemics, riots, quarantine restrictions, strikes, civil insurrections, freight embargoes, and unusually severe weather.

INSURANCE - CEA shall maintain at its own expense the following insurance subject to normal industry exclusions: (1) Worker's Compensation insurance for statutory obligations; (2) Comprehensive Automobile Liability Insurance with limits of \$1,000,000.00, (3) General Liability Insurance with limits of \$2,000,000.00 per incident, and (4) Professional Liability with limits of \$1,000,000.00. Certificates will be issued upon execution of this agreement identifying details and limits of coverage.

INDEMNITY - CEA will indemnify, defend and hold harmless the Client, its directors, officers, agents, contractors, employees, successors and assigns from and against any and all claims, demands, suits, causes of action, penalties, fines, debts, losses, liabilities, expenses and judgments incurred in connection therewith, including attorney's fees court costs, resulting from or arising out of CEA's breach of this Agreement or the negligence or willful misconduct of CEA or CEA's employees or agents.

Client will indemnify, defend and hold harmless the CEA, its directors, officers, agents, contractors, employees, successors and assigns from and against any and all claims, demands, suits, causes of action, penalties, fines, debts, losses, liabilities, expenses and judgments incurred in connection therewith, including attorney's fees and court costs, resulting from or arising out of Client's breach of this Agreement or the negligence or willful misconduct of Client or Client's employees or agents.

CAPTIONS AND HEADINGS - The captions and headings throughout this Agreement are for convenience and reference only, and the words contained therein shall in no way be held or deemed to define, limit, describe, modify, or add to the interpretation, construction, or meaning of any provision, scope or intent of this Agreement.

SEVERABILITY - If any provision of this Agreement, or application thereof to any person or circumstance, shall to any extent be invalid, then such provision shall be modified if possible, to fulfill the intent of the parties as reflected in the original provision, the remainder of this Agreement, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby, and each provision of this Agreement shall be valid and enforced to the fullest extent permitted by law.

NO WAIVER - No waiver by either party of any default by the other party in the performance of any provision of this Agreement shall operate as or be construed as a waiver of any future default, whether like or different in character.

ENTIRE AGREEMENT - This Agreement, including the contract Documents, represents the entire understanding and agreement between the parties hereto relating to the Services and supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same.

To the extent that any additional or different terms or conditions conflict with the Terms and Conditions of this Agreement, the Terms and Conditions of this Agreement shall govern. No amendment or modification to this Agreement or any waiver of any provisions hereof shall be effective unless in writing and signed by both parties.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representative.

(DM190903A)

CLIENT

BY _____

Authorized Signature

BY COMMONWEALTH ENVIRONMENTAL ASSOCIATES, Inc.



BY _____

W. Fred Mayes, President

Exhibit F: Tire Plant Parcel Map

800 Bird St., Scottsville, VA
Parcel Map

