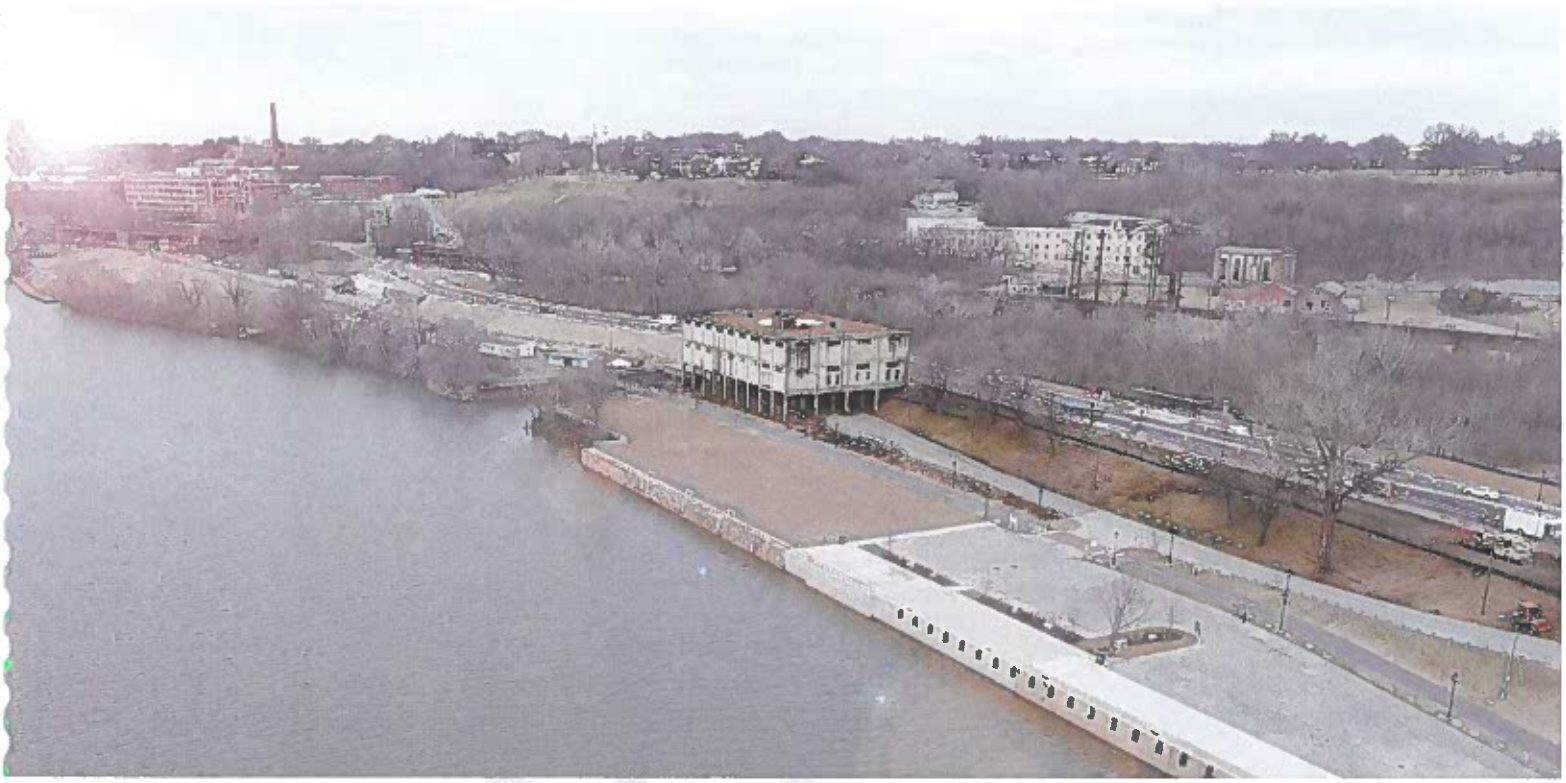
RICHMOND EDA PROPERTY CONCEPT ALTERNATIVES



NOVEMBER 12, 2020

PREPARED FOR:

Richmond Economic Development Authority
501 East Franklin Street
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Economic Development Authority
City of Richmond

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Table of Contents

Introduction

Site Data & Location Map

- Address: 3101 & 4303 East Main Street, Richmond, VA, 23223
- Parcel ID: E0000817002 & E0001127013
- Parcel Area: 1.517 AC & 3.2 AC
- Owner: Richmond Economic Development Authority (EDA)
- Zoning: M-2, Heavy Industrial
- Floodplain: Zone AE
- Base Flood Elevation: 34 feet-11 inches
- Existing Building Size: 30,000 SF

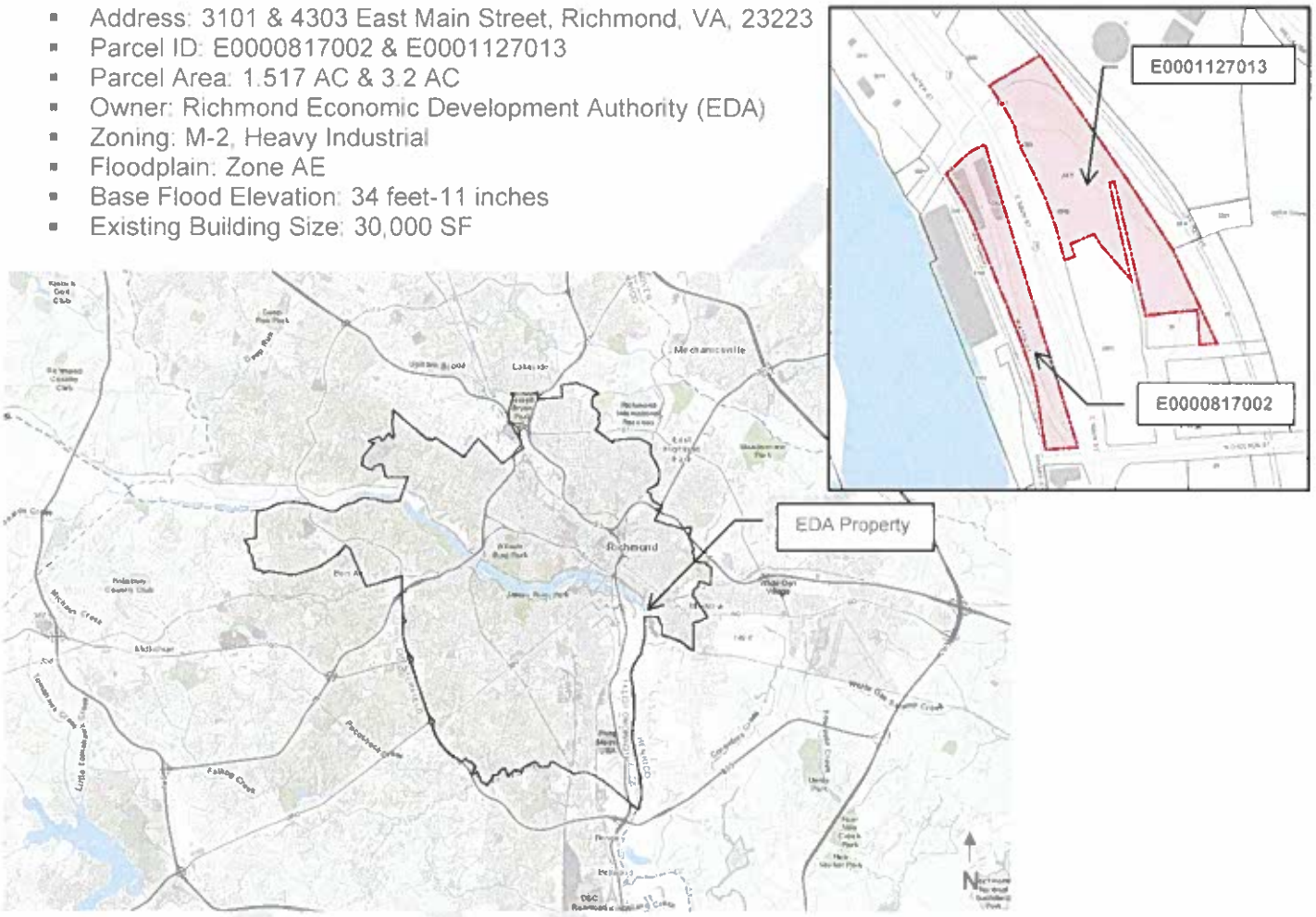

Figure 1: Location Map (top) | Intermediate Terminal Site within Context of City of Richmond, Virginia (bottom)

Scope of Planning Study

The Richmond Economic Development Authority (EDA) seeks to secure the future of its real estate holdings along East Main Street including the Intermediate Terminal No. 3 site. To that end, the EDA has engaged Timmons Group to complete an assessment of leasable and developable square footage available on two adjoining parcels: the parcel containing the Terminal No. 3 building and a parcel directly across East Main Street. This study contends with the site's many constraints, and its gives particular consideration to site access and parking options.

It is critical to note that there is an active Plan of Development (POD-025679-2017) on file for this site with the City of Richmond. The POD is named Stone Brewing World Bistro & Garden (dated October 2017) and can be amended based on the findings of this study and at the direction of Stone Brewing Company and the EDA. The POD details a renovation of the existing Intermediate Terminal building, the addition of surface parking lot across East Main Street, and other site amenities and improvements.

The site is located at the convergence of several pieces of valuable public infrastructure and public facilities: an ascendant downtown riverfront, popular parks and greenways, recently enhanced transportation networks, new residential development, and a growing craft beer tourism sector. The confluence of so many recent developments taking place around the site has certainly raised the value and development potential of the property in recent years.

Previous Studies & References

As a part of this study, the following references, completed works, and other studies were used in the framework and development of this document.

- *The Pulse Corridor Plan* | City of Richmond DPR | July 2017
- *Richmond Riverfront Plan* Adopted Downriver Riverfront Plan | Hargreaves Associates | September 2017
- Stone Brewing World Bistro & Garden POD-025679-2017 | Timmons Group | October 2017
- Structural Engineering Study | Ground Penetrating Radar & Timmons Group | March 2018
- Gillies Creek Greenway Green Infrastructure Plan | Skeo Solutions | May 2018
- East Main Street Realignment | Whitman, Requardt & Associates | June 2018
- Structural Engineering Study | Dunbar Milby Williams Pittman & Vaughan | February 2020
- *Richmond 300: A Guide for Growth* Master Plan | City of Richmond Department of Planning and Development Review (DPR) | September 2020
- Libby Hill Viewshed Study Draft | City of Richmond DPR | September 2020

Stakeholder Interviews

- Leonard Sledge – Director, Department of Economic Development / Secretary, Richmond EDA
- John Molster – Chair, Richmond EDA
- Mark Olinger – Director, Department of Planning and Development Review (DPR), City of Richmond
- Sean Monahan – Chief Operating Officer, Stone Brewing Co.

Planning & Development Considerations

Several challenging constraints limit the capacity of the site for adaptive reuse—including some of the same features that lend the site its character. For examples, the site lies at the nexus of East Main Street, the Virginia Capital Trail, the future Gillies Creek Greenway, the Pulse Bus Rapid Transit (BRT) line, John Smith Blueway and James River Navigation Channel, a CSX Railroad line, and major public utilities; these features that make the site a potential hub are the same features that bound and traverse the site, restricting developable footprint.

These constraints pose limitations on both the developable site acreage and alterations to the existing building. At present, the Intermediate Terminal building is approximately 30,000 square feet in size. The site's constraints, both within the parcels and the surrounding context, limit both vertical and horizontal options for expanding the existing building. The site's constraints can be categorized as either primary or secondary development constraints and are generally identified in order from most to least restrictive. These constraints are described below and illustrated with associated exhibits.

Primary Development Constraints

Libby Hill Scenic Viewshed

The site is located to the south and downslope of Libby Hill and is within the Libby Hill Scenic Viewshed that spans southward across the James River from Libby Hill.

This viewshed, as a critical resource to the city's cultural landscape, acts as an aerial easement and constraint on future development on the site. The recently completed *Libby Hill Viewshed Study Draft* recommends restrictions on any construction or building expansion on the Intermediate Terminal site that projects higher than the existing roof and mechanical equipment on the building. The actual elevation of the top of the Intermediate Terminal roof is approximately 68 feet-11 inches, while the mechanical equipment protrudes approximately 12 feet above that elevation. Interviews with Mark Olinger, Director of Planning and Development Review (DPR) for the City, confirmed these assumptions and reiterated that any new horizontal building addition should not have a roof exceeding the roof elevation of the existing building. The following exhibits from the *Libby Hill Viewshed Study Draft* further illustrate challenges that the viewshed imposes on the development of the Intermediate Terminal site.

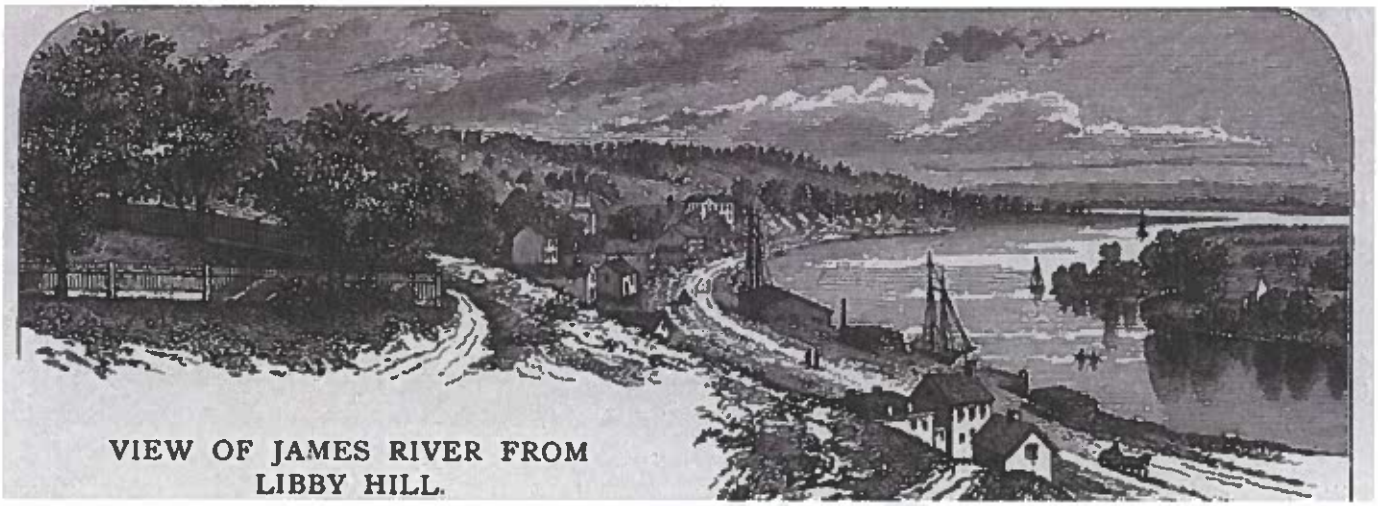

Figure 2. View of James River from Libby Hill | Valentine Museum

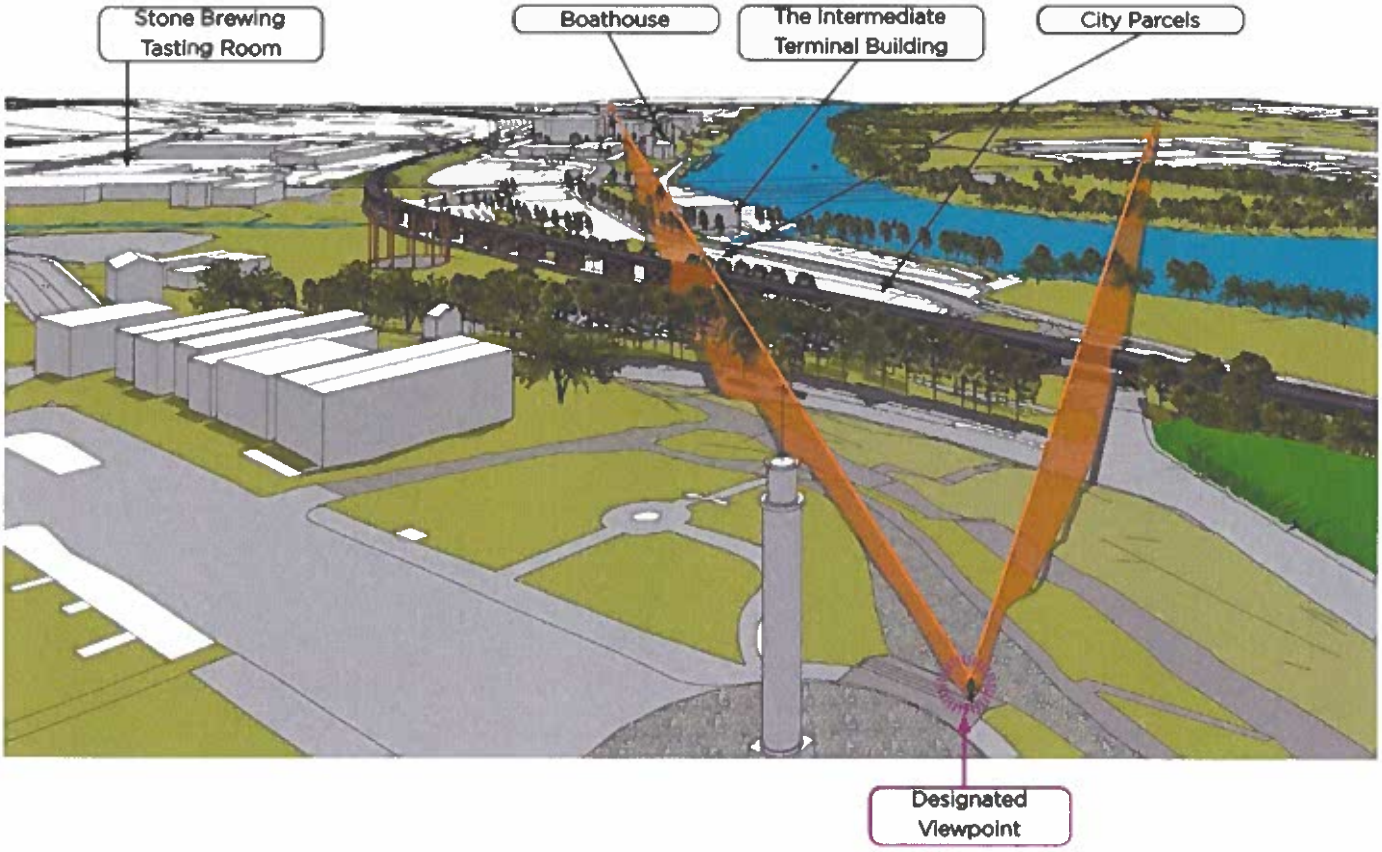

Figure 3. Critical Viewshed Corridor– Libby Hill Viewshed Study | City of Richmond

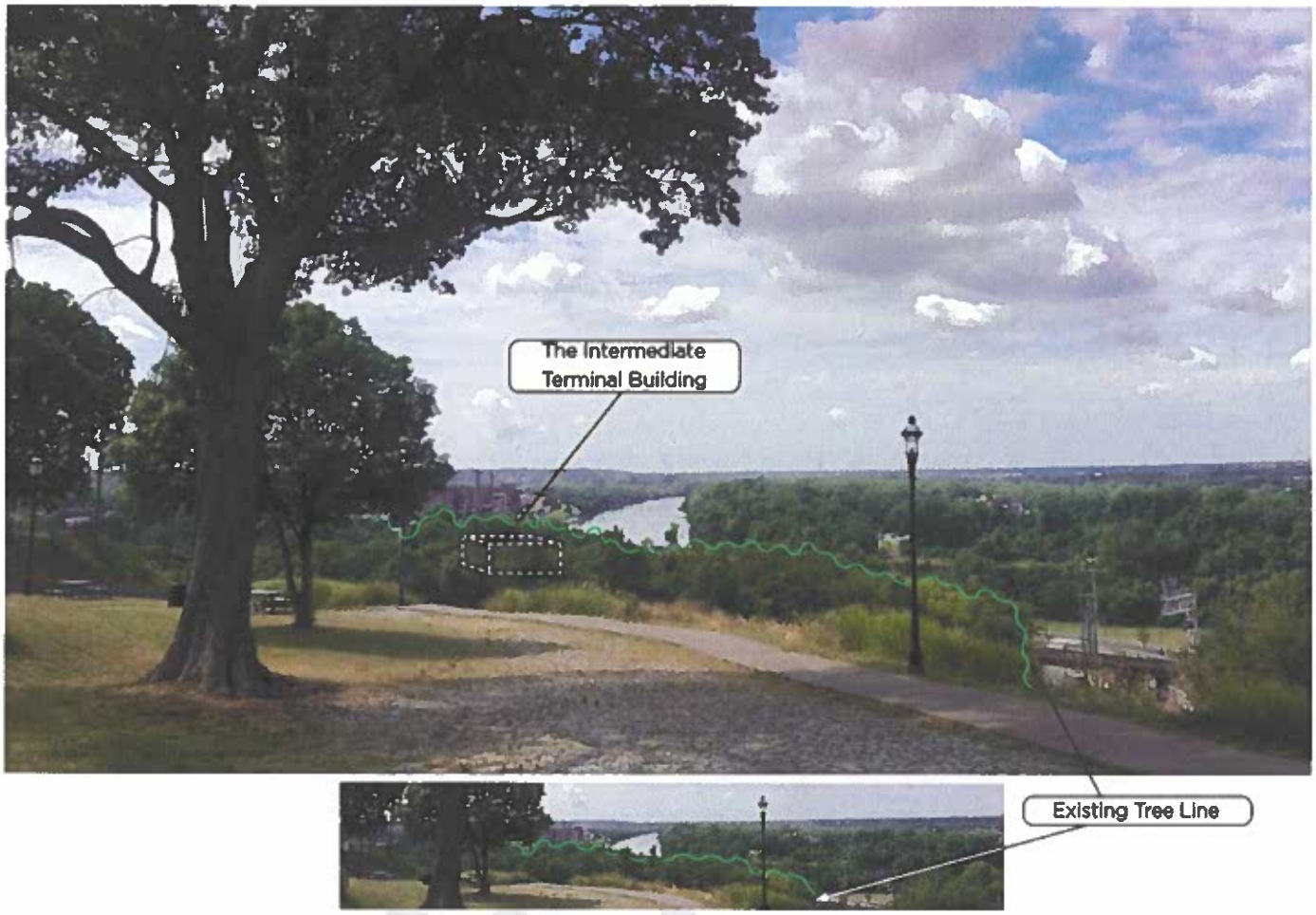

Figure 4 Critical Viewshed Image– Libby Hill Viewshed Study | City of Richmond

100-Year Floodplain

Due to the proximity of the site to the James River and Gillies Creek, the federally designated 100-Year floodplain places limitations on development. Interpolated from data provided by FEMA, the base flood elevation at the location of the Intermediate Terminal building is 34 feet 11 inches, which means that no occupiable, leasable space can exist at or below this elevation without considerable waterproofing measures. Best practices in development suggest that the actual design flood elevation for any newly renovated or constructed space should be at least one foot above the base flood elevation, which sets the finish floor for any future development on the site at 35 feet-11 inches. This is a development constraint that limits the potential development footprint and eliminates the possibility of constructing occupiable space below this elevation. The first floor of the existing Intermediate Terminal building sits at elevation 33 feet-3 inches, which is below the base flood elevation and thus is not considered occupiable under current building codes without considerable waterproofing measures. The National Flood Hazard Layer from the Federal Emergency Management Agency's (FEMA) FIRMette map is shown below for reference.

Additionally, restrictions on erecting structured parking within a FIRM Zone AE site limits the potential for using the ground floor of the terminal building as dedicated parking for the end user. Based on FEMA's guidance, the parking garage would need to be floodproofed and have an entrance at or above the base flood elevation, both of which are not feasible under this redevelopment scenario.

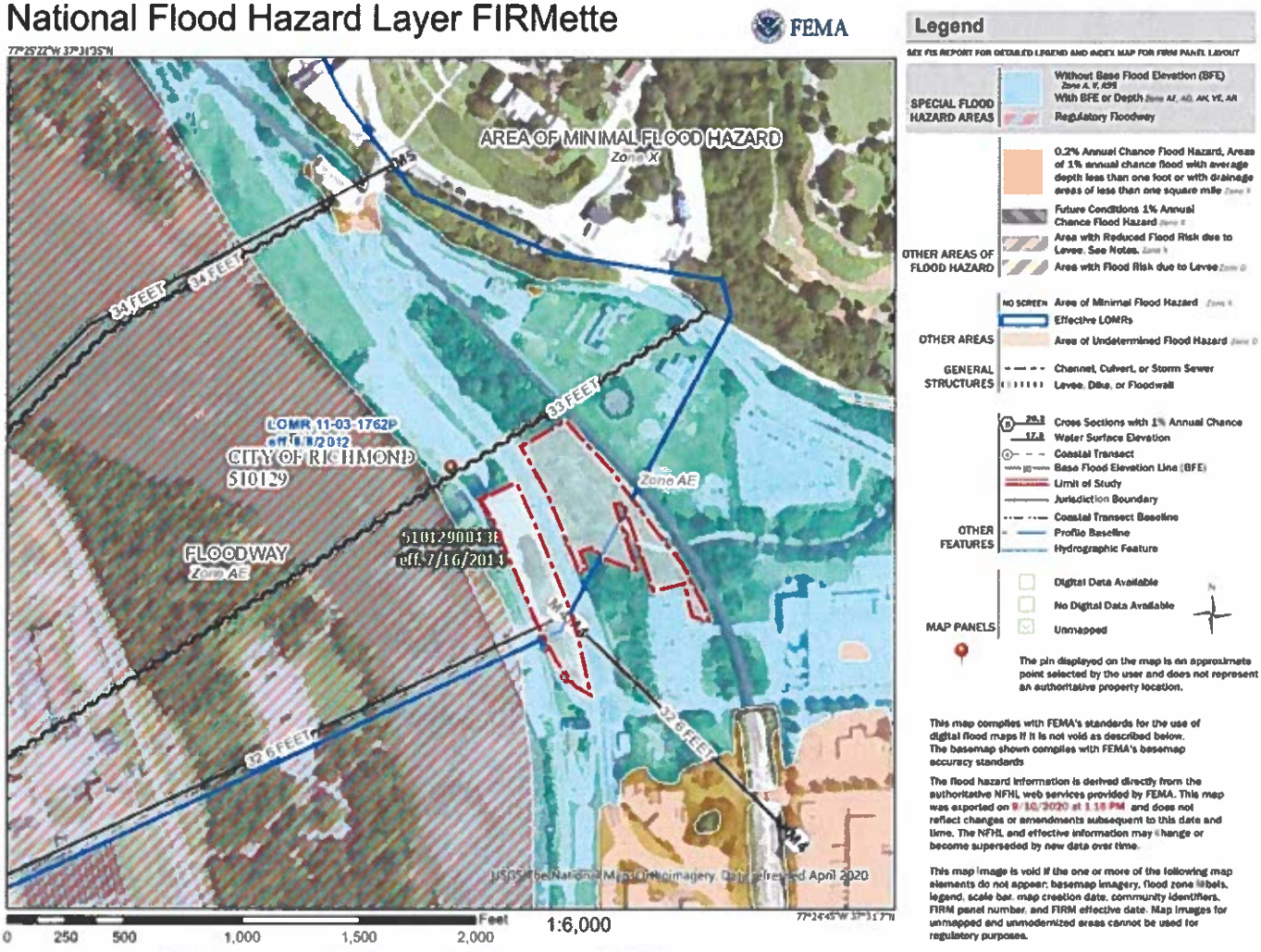

Figure 5: FEMA FIRMette Map

Figure 6: A model (Timmons Group) shows existing conditions (left) and flooding at the base flood elevation (right)

Utilities and Easements

Both public and private utility structures and easements cross the site to the southeast of the Intermediate Terminal building and present limitations on additional potential development footprint. The Gillies Creek Interceptor, a 48-inch polyester resin concrete sanitary sewer line that bisects the site running southeast to northwest through 50-foot wide easement. Further to the east, the Fulton Bottom Interceptor, a 30-inch polyester resin concrete sanitary sewer line runs southeast to northwest and through an approximately 30-foot wide easement. Two water lines cross the site: an 8-inch ductile iron cement line along East Main Street and an 8-inch cast iron and a 6-inch cast iron line running northwest to southeast between Wharf Street and East Main Street. These waterlines have approximately 15-foot wide easements. Storm sewer lines are also present at the site: a 12-inch reinforced concrete pipe and a 15-inch reinforced concrete pipe traverse the site near and under the Intermediate Terminal building and a similar 12-inch reinforced concrete pipe and a 15-inch reinforced concrete pipe parallels East Main Street to manage runoff from the recent road improvements. These pipes have easements of at least 10 feet to 15 feet. Natural gas is also present in this area; a 4-inch ductile iron pipe runs along the south side of East Main Street within the City-owned right of way, and transitions into a 2-inch polyethylene natural gas line near the north side of the Intermediate Terminal building.

Regarding known private utilities, Dominion Energy-owned overhead electric lines run generally north-south and parallel to East Main Street within the current City-owned right of way. Underground electric lines are also present along the north side of Wharf Street and along the south side of East Main Street, which service existing city owned streetlights. State owned streetlights are also located along the Virginia Capital Trail immediately south of the Intermediate Terminal building and a private underground electric line runs parallel to the trail in order to supply power to these lights. It is assumed that private communications infrastructure also exists in this area, but this information was not available at the time of this study. The following utility map shows the locations of this infrastructure and illustrates the impact that these structures and easements have on the site's developable area. The cost of relocating these utilities varies widely based on the size and type of public or private utility.

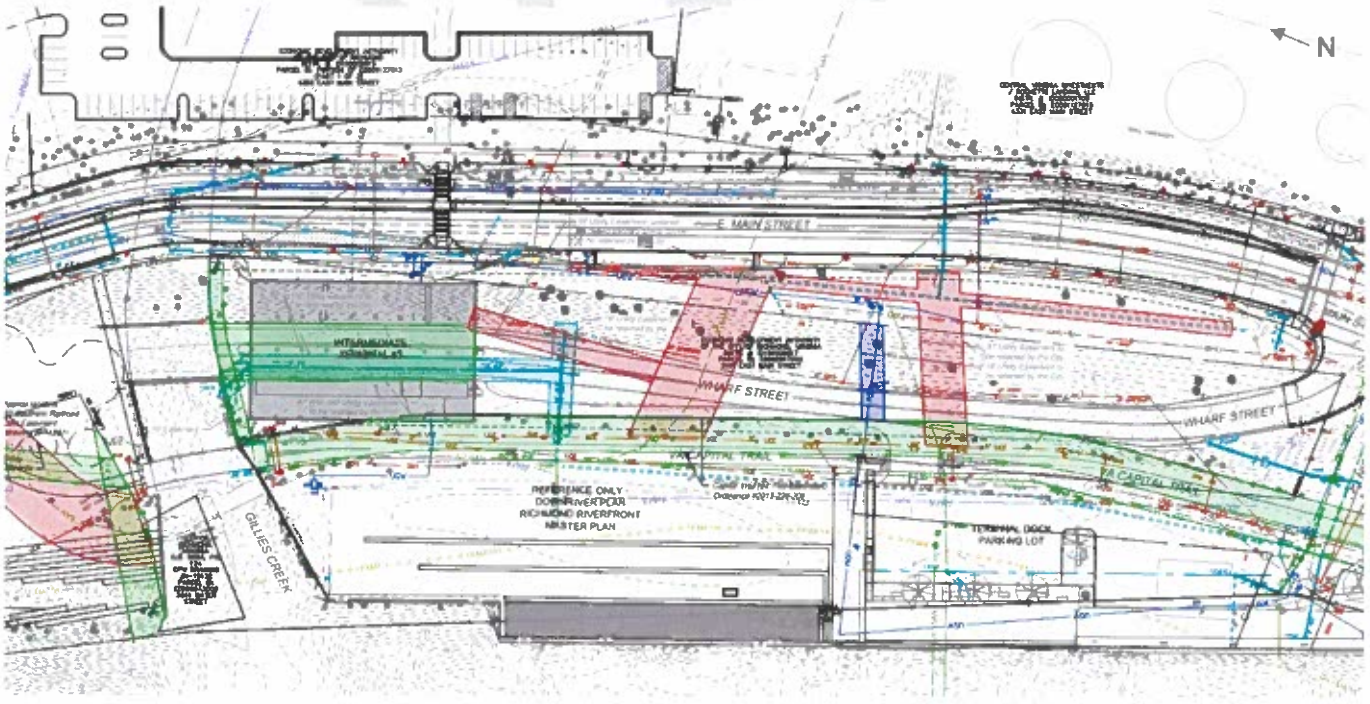

Figure 7. Existing utility and easement map

Parking: Existing Availability and Future Capacity

At roughly 30,000 square feet and zoned M-2 Heavy Industrial, the Intermediate Terminal building requires approximately 100 parking spaces for redevelopment of the site as a retail establishment and 300 spaces as a restaurant establishment, or some combination of the two if a mix of uses is proposed. Any building addition proposed would require one (1) additional space for each 100 square feet of restaurant expansion and one (1) additional space per 300 square feet of retail expansion. PDR has acknowledged that on-street parking available in the immediate vicinity of the site is suitable to meet the intent of the Zoning Ordinance; however, prospective tenants for this facility will likely desire for parking closer to the main entrance of the building. The Intermediate Terminal building site itself has no available area for parking; parking can neither be placed underneath or adjacent to the building due to flooding restrictions and other constraints, as was shown on the current POD and discussed later on in this report. Thus, parking poses a significant challenge.

Immediately adjacent to the building, there are 72 on-street parking spaces along East Main Street that are expected to serve parking needs for redevelopment of the site. Approximately 28 spaces exist in the terminal dock parking lot, to the immediate south the Intermediate Terminal building, and over 350 spaces are generally available in the two Stone Brewing Company parking lots, located a short walk to the Intermediate Terminal site. Within a half-mile mile radius of the site, well over 500 spaces exist as on-street parking, further supporting the use of street parking to serve the redevelopment needs of the site.

Figure 8, an exhibit from the *Richmond Riverfront Plan*, shows an overlay of existing and planned parking within a half mile of the Intermediate Terminal building. This exhibit demonstrates that ample parking, both surface and on-street, exists in the vicinity and would be suitable to support redevelopment of the site, though careful consideration would need to be given to accessible spaces and loading and service needs for the various visitors. Accessible spaces are not currently available with proper curb ramps, slopes, and tactile warning strips along the newly constructed East main Street.

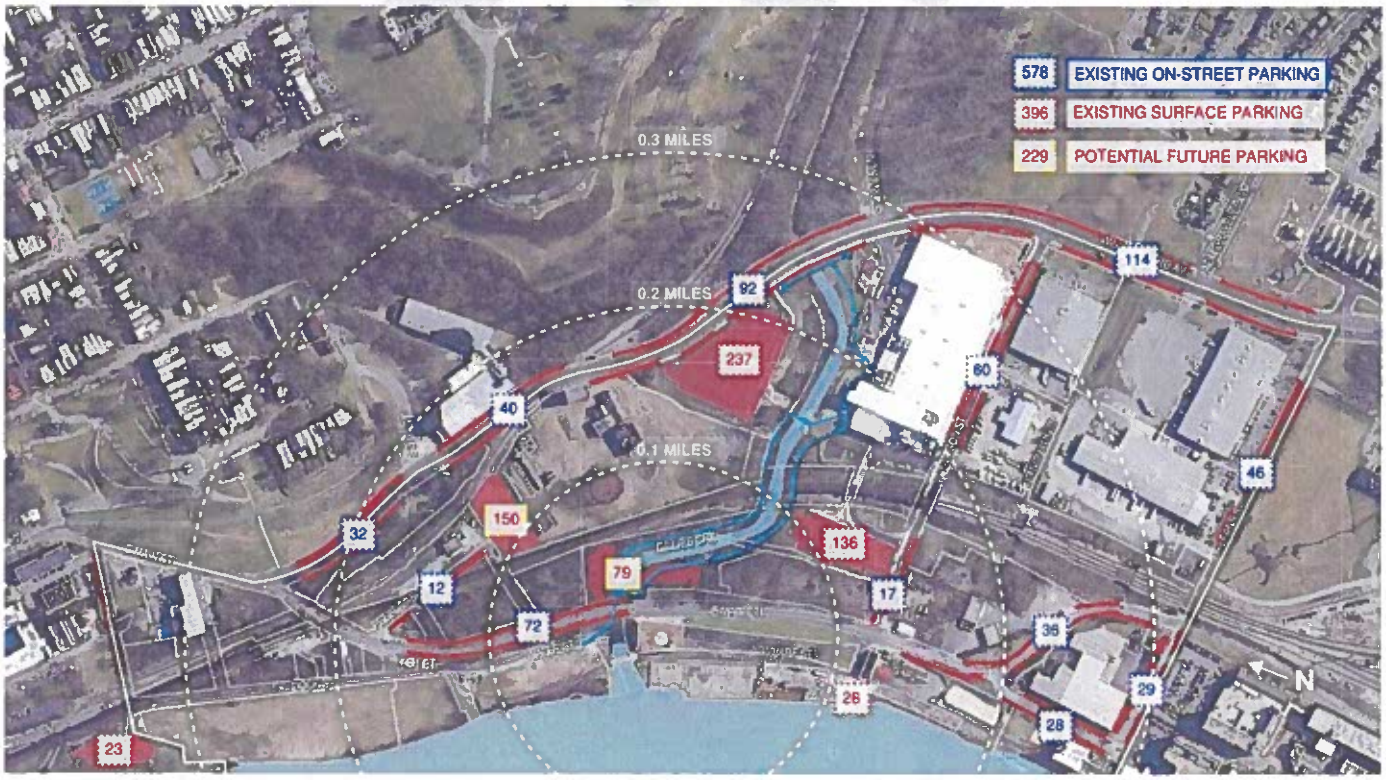

Figure 8. Parking opportunities from the Richmond Riverfront Plan - Downriver Plan

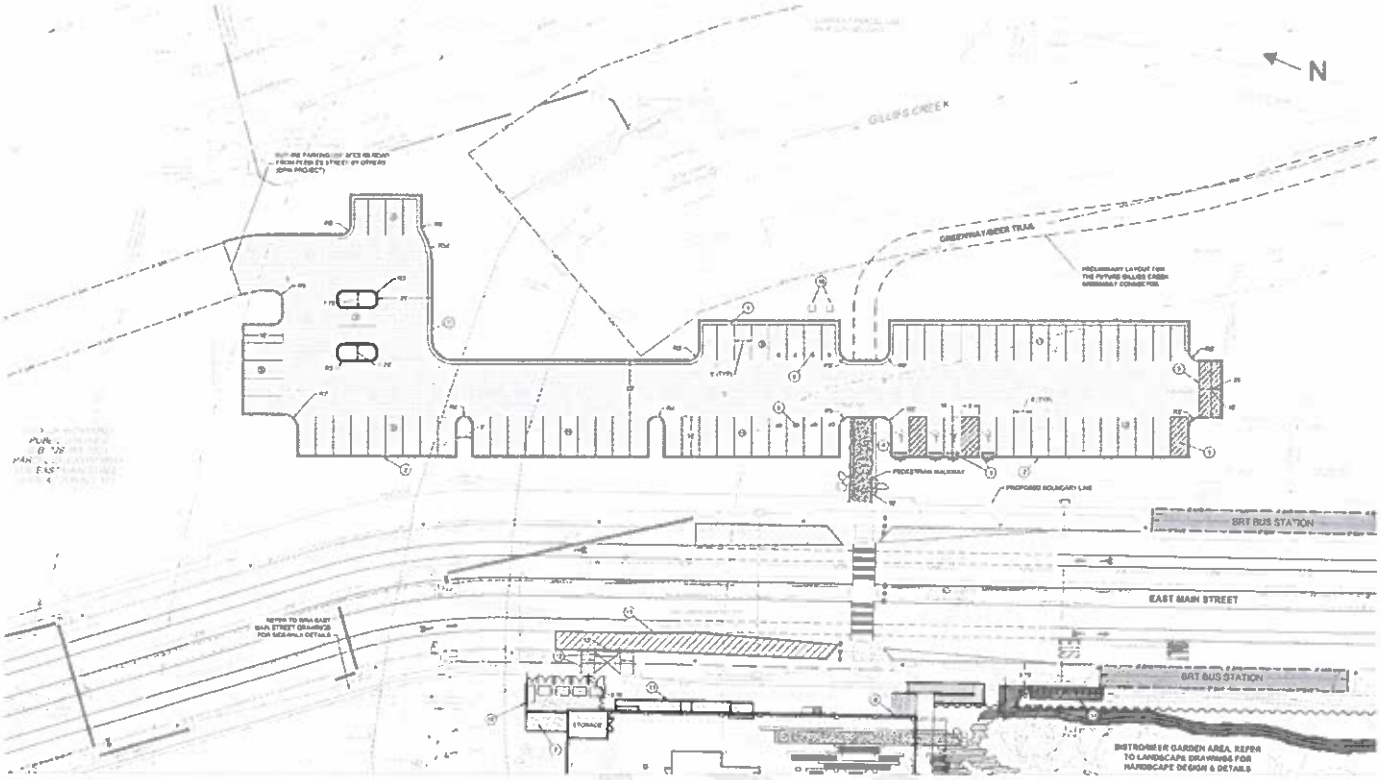

Figure 9: Proposed parking lot included in POD drawings

As shown in Figure 9, a Plan of Development (POD) on file for the redevelopment of the Intermediate Terminal building shows a new surface parking lot on the northeast side of East Main Street with a capacity of 79 vehicles. This parking is critical to the long-term viability of potential businesses located on this site and would also serve the need for accessible parking in proximity to the main entrance of the building along East Main Street.

One of the greatest challenges to developing this parking lot is providing adequate access to the lot above the base flood elevation for a safe means of ingress and egress aligned with local code. Figure 10 shows potential parking lot access options. The most viable access point originates at the recently constructed roundabout at East Main Street, which is located above the base flood elevation. This access point would require improvements to Peebles Street north of the elevated rail lines and construction of a new access road heading south under the rail lines, ultimately paralleling East Main Street as the driveway approaches the proposed parking lot. This is shown in red on the exhibit.

Figure 10: Proposed Parking Lot on Northeast Side of East Main Street as Shown in POD Drawings

Secondary Development Constraints

Virginia Capital Trail

The 51.7-mile-long Virginia Capital Trail connects Virginia's current capital city of Richmond with its historical capital of Jamestown. The multiuse trail carries hundreds of thousands of riders annually and has become an economic driver for tourism, retail, service, and restaurants in the area. As shown in Figure 11, the Capital Trail winds along the north side of the city's riverfront area and borders the Intermediate Terminal building directly to the west. As such, development and expansion of the Intermediate Terminal building to the south are limited due to the trail and associated right of way. The riverfront green space between the trail and the river has been identified for future public park development, further limiting any potential expansion to the south and west of the Intermediate Terminal building.

Figure 11. Richmond Riverfront Master Plan – Downriver Plan | City of Richmond

Steep Terrain

Steep terrain characterizes the slope from East Main street down to Wharf Street and the terminal dock at the James River. Slopes of 3 to 1 and greater exist in this area; upper elevations along East Main Street range from 24 to 26 feet and lower elevations at the toe of the slope along Wharf Street range from 12 to 13 feet. These steep slopes, in combination with existing utilities and mature urban trees, narrow the development options on the site due to the cost associated with building out limited additional square footage above the base flood elevation. The following graphic, Figure 12, shows the general steepness of the slopes.

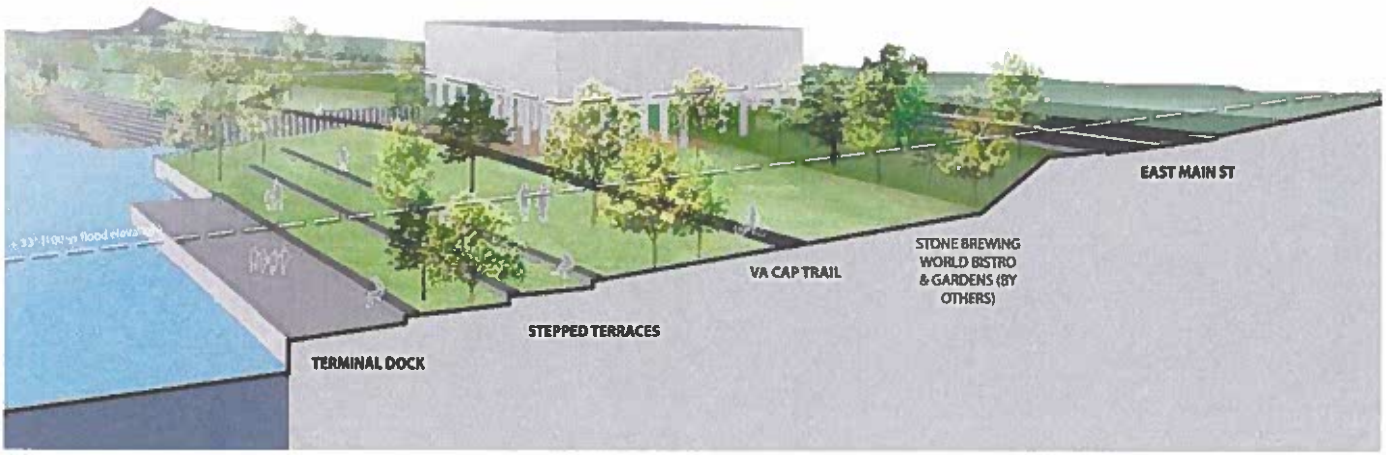

Figure 12. Richmond Riverfront Plan – Downriver Plan | City of Richmond

Wharf Street Termination

Until recently, vehicles could navigate along Wharf Street and drive directly under the Intermediate Terminal building, linking Dock Street and East Main Street. With the opening of a newly improved East Main Street boulevard segment along this area of the east riverfront, Wharf Street was truncated at its north end and closed to through traffic. The remaining section of road can serve as a loading and service access to the Intermediate Terminal building and possibly as a second location for ADA-compliant access to the building. It can also provide additional access to the terminal dock and parking lot area.

Gillies Creek and Gillies Creek Greenway

Gillies Creek meets the James River directly northwest of the Intermediate Terminal after passing under East Main Street through a series of culverts. Originating near the White Oak Village shopping center in eastern Henrico County, the creek begins as a natural channel and transitions to a concrete channel around Jennie Scher Road. The creek receives runoff from the Oakwood, Chimborazo, Fulton, and Montrose Heights neighborhoods. Despite its concrete channelization where it runs past Stone Brewing Company's brewery and downstream to the Intermediate Terminal site, the creek has an associated 50-foot wide Resource Protection Area (RPA) and larger Resource Management Area encompassing the RPA that restrict development options. Figure 13 below shows how almost all of the parcel to the northeast of East Main Street is within the blue RPA area. Restrictions on land use and development within the RPA prevent structured parking, buildings, and intensely developed uses. While further restricting the potential of the site to meet the economic development goals of focus in this study, the RPA designation still allows for the possibility of developing trails, greenways, and other recreation uses (including parking for these uses).

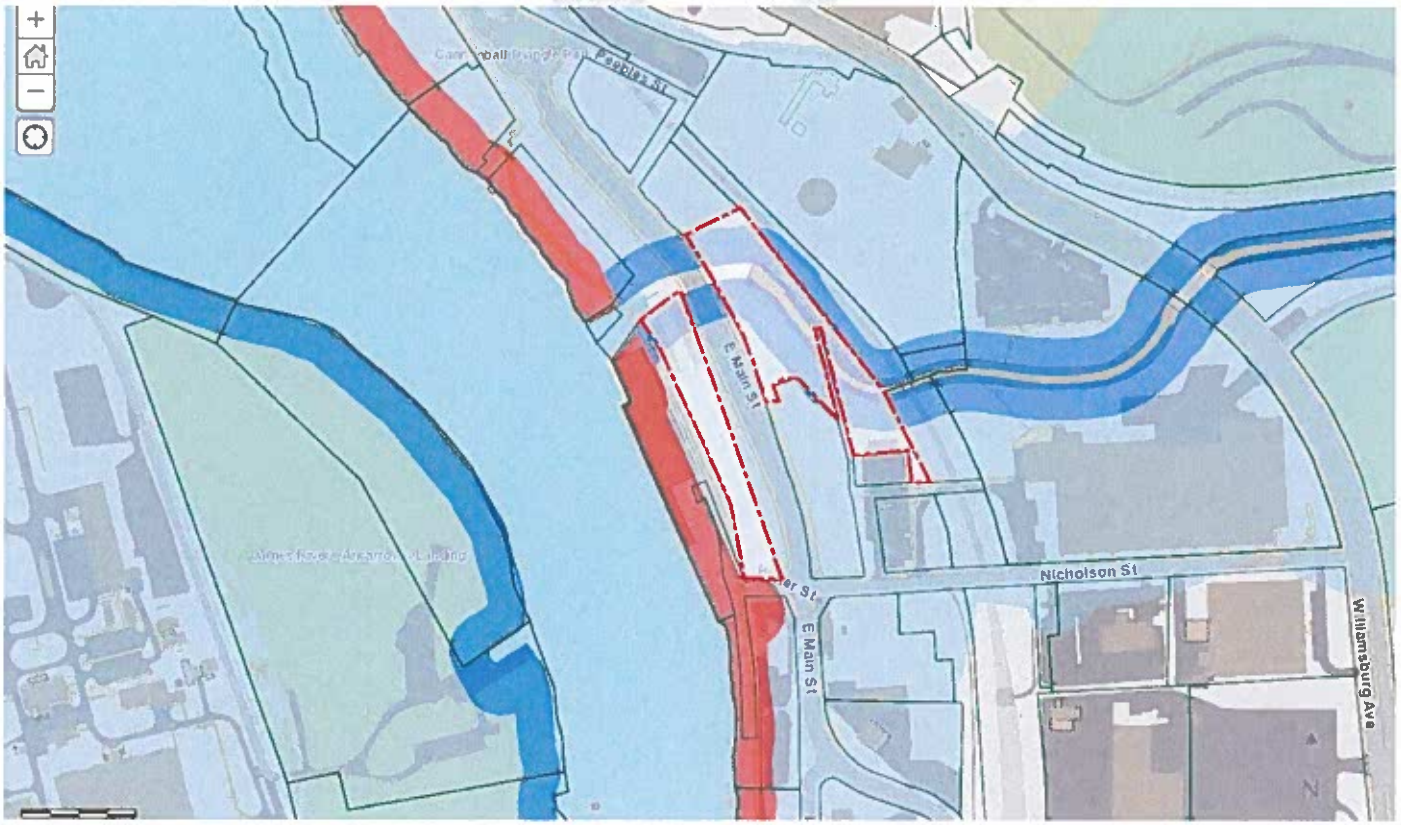

Figure 13. Map showing 50' Resource Protection Area along Gillies Creek | City of Richmond

Additionally, the future alignment for the proposed Gillies Creek Greenway traverses the site north of East Main Street and is slated to cross the road directly to the north of the Intermediate Terminal building.[1] A proposed multiuse trail will run along the south side of the creek channel and will connect to the Virginia Capital Trail near where Gillies Creek joins the James River.

Figure 14: Gillies Creek Green Infrastructure Plan | Skeo

Structural Engineering Studies

Two structural engineering studies have been performed to date: the first by Ground Penetrating Radar (GPR) in March of 2018, and the second by Dunbar Milby Williams Pittman & Vaughan (DMWPV) in February of 2020. The GPR study concluded that the existing Intermediate Terminal building had significant concrete and reinforcing deficiencies. While the report suggested that reinforcing and structural remediation was possible for this use, the EDA determined that the cost to do so was prohibitive when considered in addition to the cost necessary to also floodproof the lower floor of the building due to its location below the base flood elevation, thus bringing the building into code compliance. Subsequently, the DMWPV study stated that the floors of the building were capable of supporting gravity loads for a number of possible future uses, including a restaurant. The study also suggested that the Intermediate Terminal building is structurally adequate to resist the effects of a 100-year flood event and could be renovated in place.

Riverfront Plan, Downriver Plan Amendment

Adopted by Richmond City Council in September 2017, the Richmond Riverfront Plan – Amendment 1: Downriver Update 2017 defines potential connections, infrastructure, parking, land use, and development for

[1] Skeo. *Gillies Creek Green Infrastructure Plan*. May 2018. http://www.walkablewatershed.com/wp-content/uploads/2018/06/GC_GSI_report_FINAL.pdf

the area along the James River from Pear Street to Rocketts Landing.[2] The site surrounding the Intermediate Terminal building is directly within the master plan study area and significant changes of land use in or around the site would require Planning Commission review and approval of such deviations are not guaranteed. The Downriver Plan identifies this site for adaptive reuse of the Intermediate Terminal building and suggests that the adjacent land sloping down from East Main Street to Wharf Street be utilized for Stone Brewing Company's World Bistro & Gardens or a similar type of development.

With the exception of the Stone World Bistro and Gardens as planned under the current POD, the Riverfront Plan indicates that parcels owned by the City of Richmond along the east riverfront be maintained or developed as greenspace for public park and civic spaces. As shown in Figure 15 and Figure 16, open greenspace adjacent to the land owned by the EDA and south of the Virginia Capital Trail is depicted in the Downriver Plan as a series of stepped terraces, boardwalks, fishing access points, and passive recreational uses. The planned land use here limits the potential for any development expansion beyond the existing alignment of the Virginia Capital Trail in the direction of the James River.

Figure 15 Richmond Riverfront Plan - Downriver Plan | City of Richmond

[2] Hargreaves Associates. "Richmond Riverfront Plan – Amendment 1: Downriver Update." June 21, 2017. http://www.richmondgov.com/PlanningAndDevelopmentReview/documents/PlansRiverfront/2017_06_21-Downriver_Riverfront_Plan_Amendment_Revision.pdf

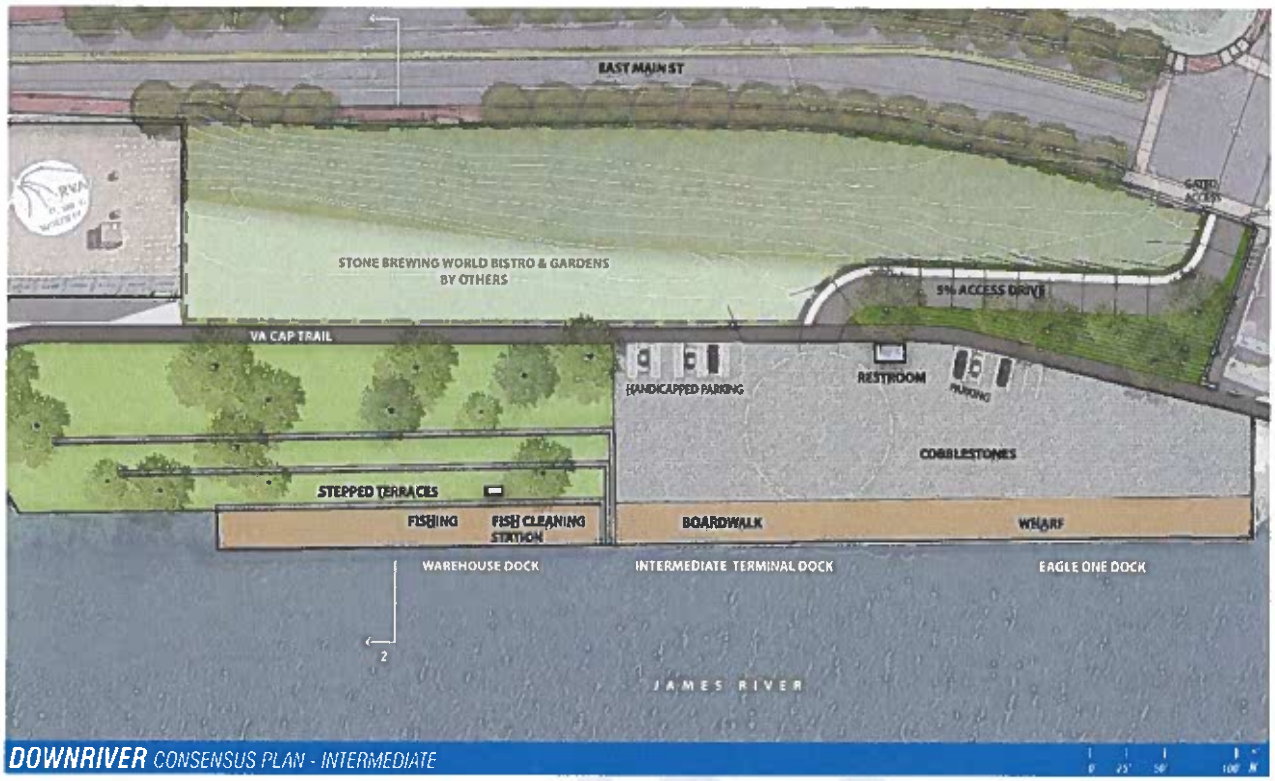

Figure 16: Richmond Riverfront Plan - Downriver Plan | City of Richmond

Figure 17: Richmond Riverfront Plan - Downriver Plan | City of Richmond

Richmond 300 Master Plan

In September 2020, Richmond City Council in September 2020, the *Richmond 300 A Guide for Growth* the City's first new master plan in nearly 20 years.[3] While this area of the city is not specifically referenced in any of the document's detailed area plans, the Future Land Use Map shown in Figure 18 identifies this area's land use as Corridor Mixed Use. While this land use is flexible, any deviation from what is considered Corridor Mixed Use could require Planning Commission review and approval. As property owned by the EDA, the Intermediate Terminal site is poised for a mix of uses including retail, restaurant, office, hospitality, entertainment, and residential, the first three offering more potential tax revenue per square foot and thus incentive for the city.

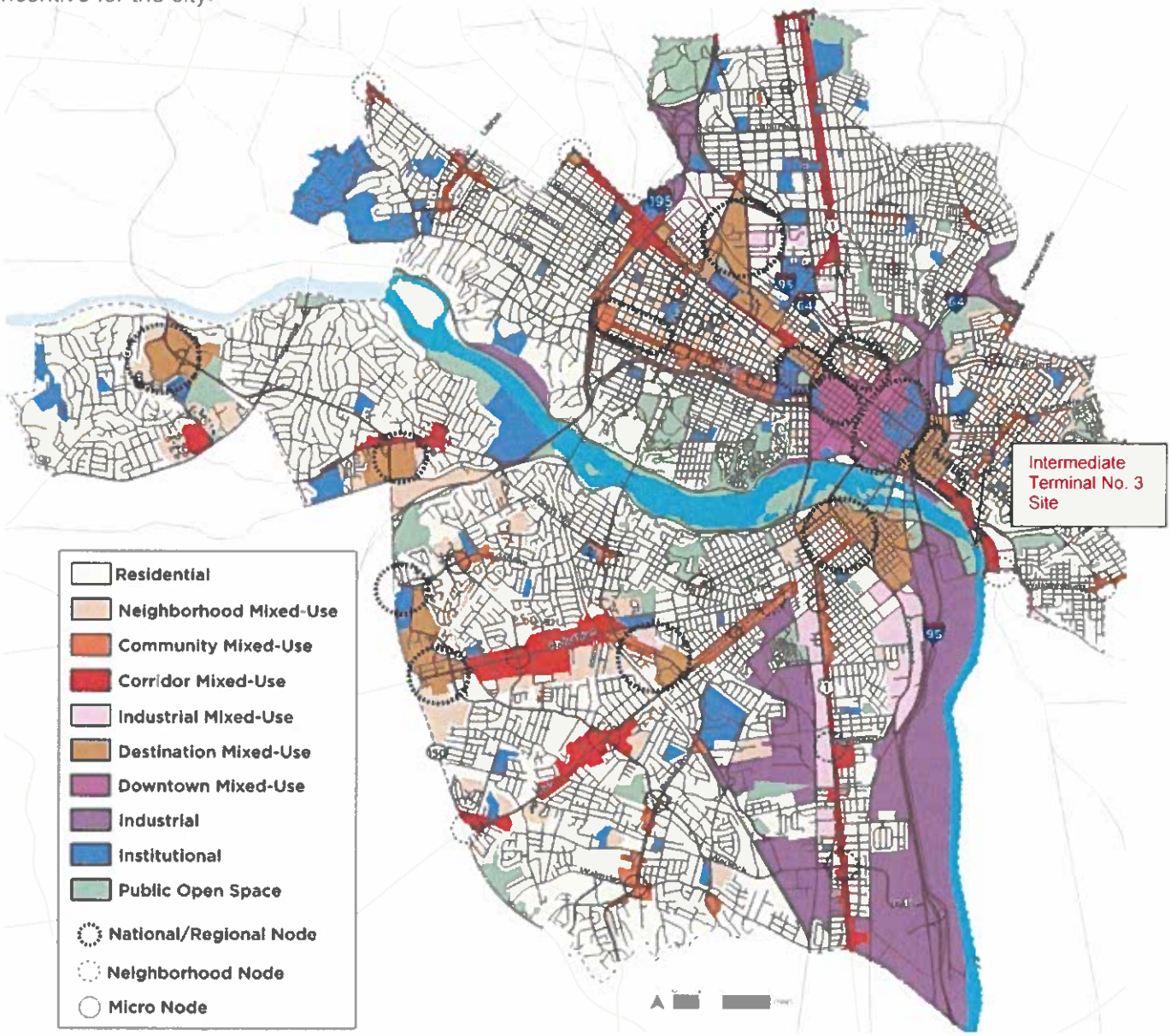

Figure 18: Richmond 300 - Future Land Use Map | City of Richmond

[3] City of Richmond Department of Planning and Development Review. *Richmond 300: A Guide for Growth.* http://www.richmond300.com/marketingMasterPlan/final

Planning & Development Recommendations

Developable Building Envelope Recommendations

The goal for this planning assessment is to identify and analyze constraints on site development in order to narrow in on a development footprint with leasable square footage that will generate new jobs and tax revenue. The existing two-story Intermediate Terminal building consists of approximately 30,000 square feet—15,000 square feet of floor area per story. While there are significant costs to redevelop the existing building and floodproof the portion of the lower floor below the base flood elevation, it is feasible and the current POD for the Stone Brewing Company World Bistro and Gardens lays out how this could be accomplished. Subsequently, any adjustments to the site development program that differ from the current Plan of Development on file with the City of Richmond would require revision and resubmission and additional time to complete. Those next steps are further outlined in the final section of this document.

Horizontal and Vertical Development

The area immediately southeast of the existing Intermediate Terminal building is best positioned to allow for horizontal expansion of the existing building program or to add future construction compatible with the redevelopment of the existing building. The footprint for expansion extends southeast to the northern limit of the easement surrounding the Fulton Bottom Interceptor (sanitary sewer line). Vertically, the development height is limited to two stories and no higher than the roof of the existing Intermediate Terminal building, as guided by the Libby Hill Viewshed Study. The existing terminal building has generous floor heights; by staggering a new adjacent building with a slightly higher first floor elevation and modifying the second-floor height accordingly, a two-story expansion is achievable without exceeding the height of the existing building. The extents of the developable area and building envelope is shown in Figures 19 to 24.

The new maximum expansion potential yields approximately 7,500 square feet per floor and at two stories, would result in an additional maximum 15,000 square feet of space. As shown by the smaller red box in Figure 19, it is possible to accommodate another 3,500 square feet of floor area further to the southeast, between the Gillies Creek Interceptor and the Fulton Bottom Interceptor. Development for a small free-standing building here, set into a steep hillside and situated between large utility easements is cost prohibitive; thus, this option is not considered feasible in the context of this study.

Parking and Access

As outlined previously, the availability of parking in close proximity to this site is a critical to its development potential. In order to ensure adequate parking for accessible spaces and parking dedicated for tenants, it is strongly recommended that the Richmond EDA proceed planning for the proposed parking lot on the northeast side of East Main Street, shown in Figure 18, with primary building access located along East Main Street. Additional parking needs beyond this surface lot can be met through existing access to on-street parking. Please see the previous section "Parking: Existing Availability and Future Capacity" for the building's parking requirements.

Preferred access to this new parking lot is from the roundabout via Peebles Street, under the elevated railroad tracks, and across the City-owned parcels. Coordination with any potential redevelopment of the Fulton Gas Works site and the parcels along East Main Street should be undertaken to assure that parking development plans are mutually beneficial. Loading and service access for the Intermediate Terminal site can be served from East Main Street and from an extension of Wharf Street at the lower building elevation, depending on the needs of future tenants.

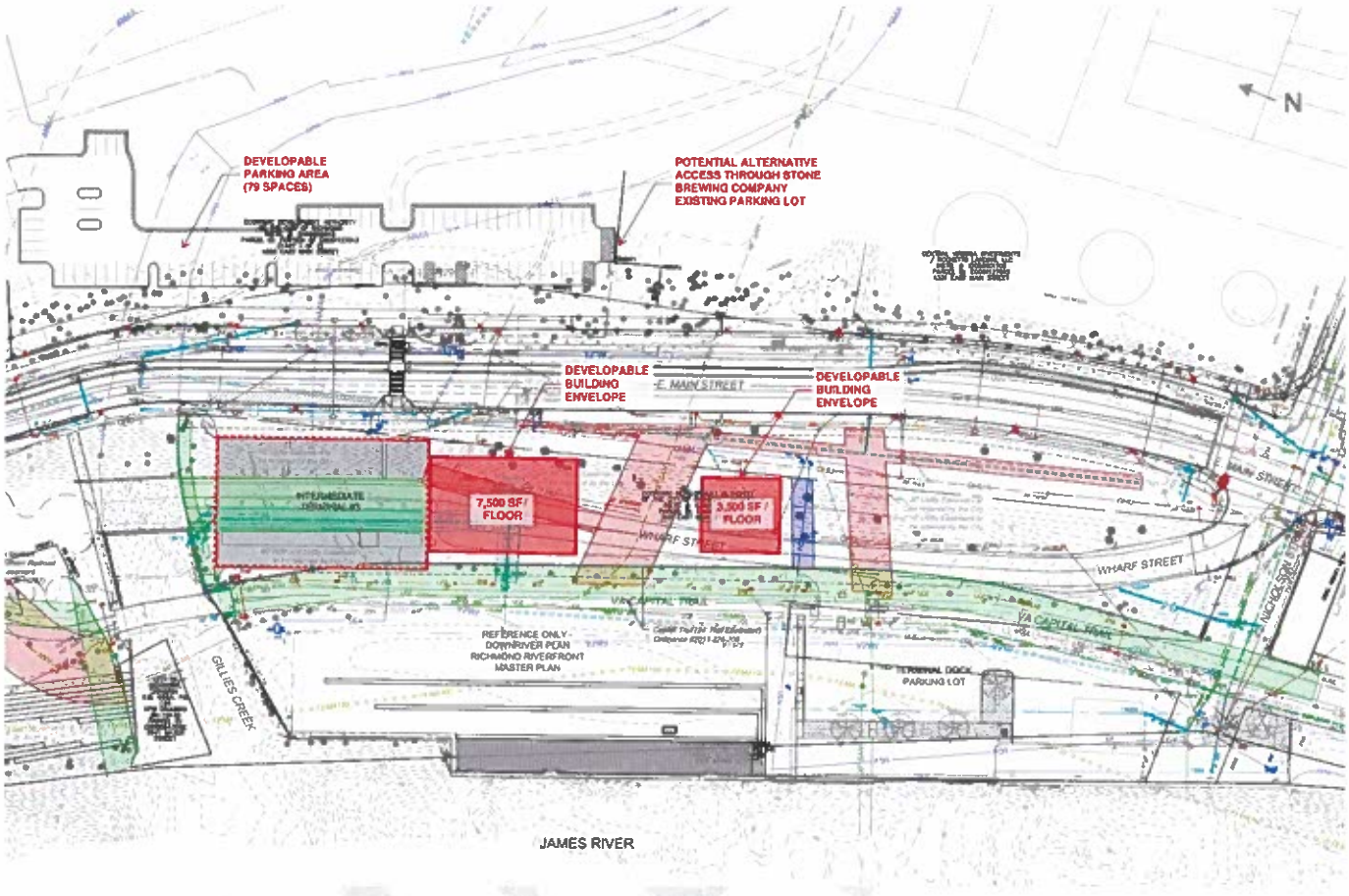

Figure 19: Plan showing limits of the developable building footprint

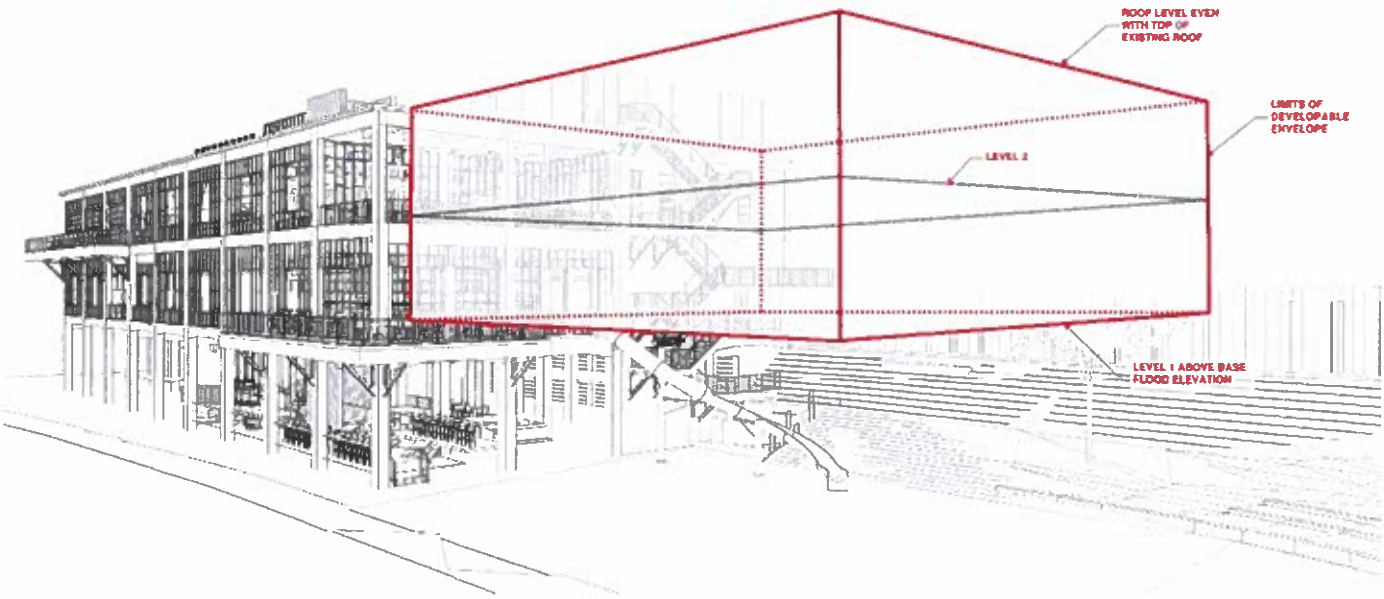

Figure 20: Model showing limits of developable building envelope

Figure 21. Model showing limits of developable building envelope

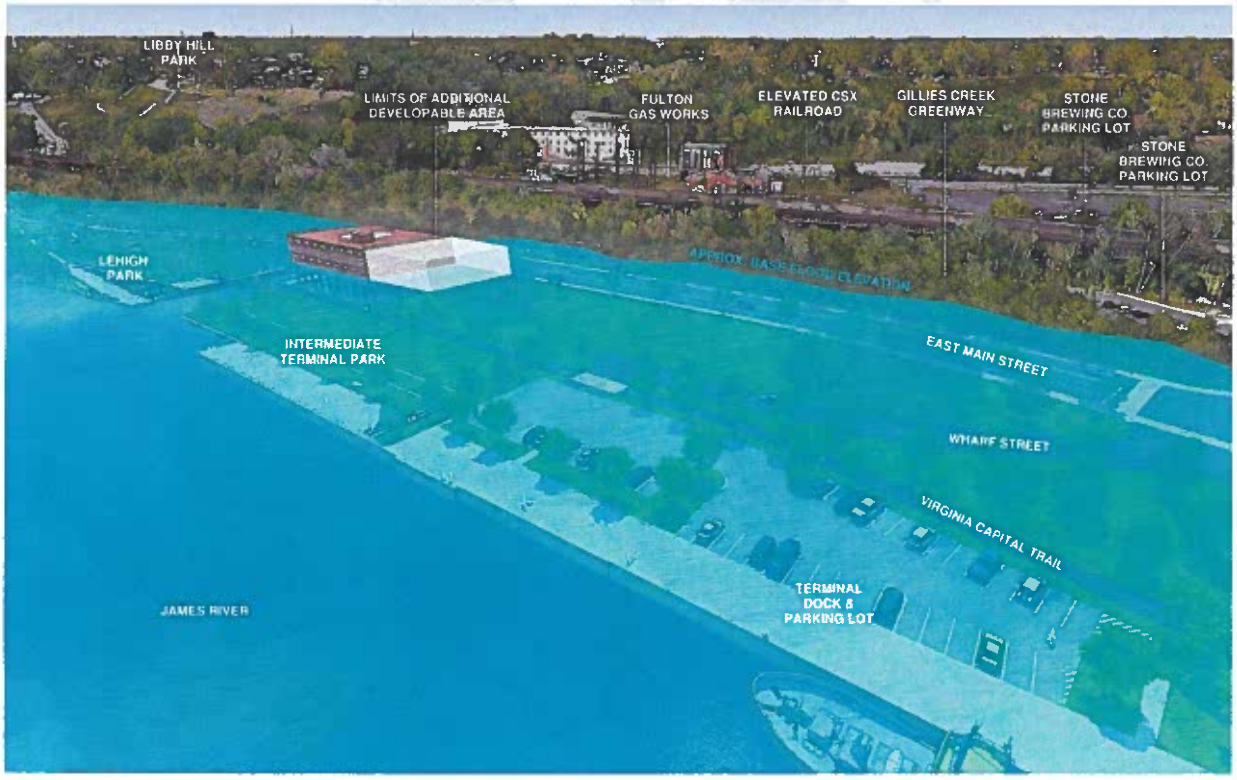

Figure 22. Model showing limits of developable building envelope with Base Flood Elevation overlay

Figure 23: Model showing limits of developable building envelope with viewshed overlay

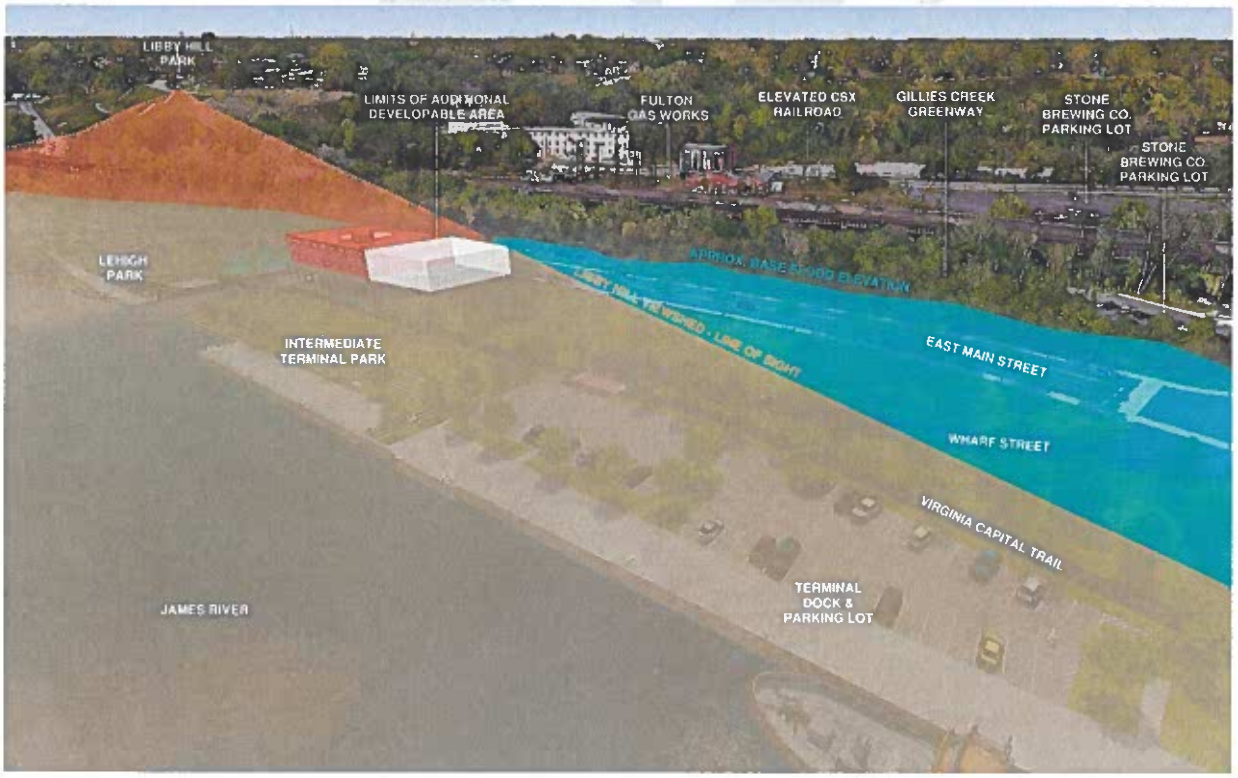

Figure 24. Model showing limits of developable building envelope with combined Base Flood Elevation and viewshed overlays

Development Approvals & Permitting Requirements

If redevelopment of this site occurs in general conformance with the findings and recommendations outlined within this study, the path to approval, permitting, and construction is consistent with typical City of Richmond processes. Development or adaptive reuse of the Intermediate Terminal building and the surrounding land owned by the EDA will require a City of Richmond Plan of Development (POD) application which is reviewed and approved by the Department of Planning and Development Review. The current POD for the site is on file with the City of Richmond and is still active and can be revised for resubmittal, including with an alternative program and development scenario than what was previously approved. To streamline the review and permitting process, it is recommended that the POD be amended with the development scenario that the EDA deems most beneficial in terms of generating new jobs and tax revenue.

A revised POD will require updates to the design plans, sections, details, calculations, applications, and other documents in order to fulfill the requirements for resubmission. The City of Richmond currently uses an Online Permit Portal web-based platform for plan intake and permit tracking. Anticipated permits required for redevelopment of the site are building and trades permits (electrical, mechanical, plumbing, etc.) associated with renovations or expansion of the building and the Land Disturbance, Richmond Stormwater Management Plan (RSMP), utilities permits (water, sewer and natural gas services), and Work in Streets permits associated with site development.

END OF STUDY

PREPARED FOR:

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501 East Franklin Street
Richmond, Virginia 23219

Economic Development Authority
City of Richmond

PREPARED BY:

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