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VCU Monroe Park Campus 'Iconic Green'
Pre-Planning and Design Study

Prepared for:
VCU Facilities Management, Planning and Design

Prepared by:

Nicholas Anthony Jancaitis, CPT, PLA

In Partial Fulfillment
Of the Requirements for the Master of Urban and Regional Planning in the
VCU Wilder School of Government and Public Affairs
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VCU Monroe Park Campus 'Iconic Green'
Pre-Planning and Design Study

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1.0 INTRODUCTION

Icon

noun

1. a picture, image, or other representation.
2. *Eastern Church*. a representation of some sacred personage, as Christ or a saint or angel, painted usually on a wood surface and venerated itself as sacred.
3. **a sign or representation that stands for its object by virtue of a resemblance or analogy to it:** (*an icon of womanhood.*)
4. a person or thing that is revered or idolized: (*Elvis Presley is a cultural icon of the 20th century.*)
5. *Digital Technology*. a picture or symbol that appears on a screen and is used to represent a file, account, application, etc.: (*Tap the icon to download the app. Click the flag icon at the top of the web page to toggle the language to English.*)
6. *Semiotics*. **a sign or representation that stands for its object by virtue of a resemblance or analogy to it.**

Iconic

adjective

- 1: of, relating to, or having the characteristics of an icon
- 2a: **widely recognized and well-established** (*an iconic brand name*)
- b: widely known and acknowledged especially for distinctive excellence (*an iconic writer; a region's iconic wines*)

The ONE VCU Master Plan refers to two 'Iconic Greens', one for each main campus. The ONE VCU Master Plan establishes the guideposts for VCU from a planning standpoint – incorporating social science, political motivations, education requirements, and good design practices into a holistic document. The ONE VCU Master Plan has set the goals and objectives for the future look and feel of the VCU community on both campuses. For the Monroe Park Campus, the proposed site is currently under the existing VCU Student Commons building's footprint. The Student Commons is already a hub of activity and resources but dated and slated for demolition to allow for a new structure that is more adaptable to the current and planned campus requirements. The definition of "Icon" and tighter – iconic refers to a 'representation that stands for its object by ... analogy to it.' Often that definition makes one think of the golden arches for McDonald's or the swoosh for Nike – but in this instance, the purpose of this place – VCU - has more to do with place-making than branding. The Master Plan labels the 'Iconic Green' explicitly as a 'nexus of programmatic synergies,' essentially being the hub of many diverse activities on each campus. In order to achieve the synergy necessary for the space before breaking ground, a consideration of the surrounding buildings, neighborhoods, and the potential users has been completed.

The programming for a space such as an iconic green required an in-depth look at what VCU requires, the student body needs, the local community is entitled to, and

what is functionally allowable per environmental, governmental, and jurisdictional factors. Figure 1 displays the Principal Strategies of Unify the Campus – a Guiding Principle of the ONE VCU Master Plan. VCU, through a thorough and rational planning process, has indicated that the environmental and community connections for both campuses should utilize these guidelines.

Figure 1: Unify the Campus 'Principal Strategies' of the ONE VCU Master Plan



Figure 1. Unify the Campus' Principal Strategies.' From ONE VCU Master Plan (ONE VCU, 2019).

Given the COVID-19 pandemic, the social unrest in the United States, and rapid changes in the way life occurs across the nation. It would be a disservice to the VCU students and faculty to

design a space, such as this one, without factoring in these once in a generation events. Physical distancing, outdoor space utilization, social equity and justice, equal rights, environmental justice, and honest examinations of history are indeed a part of the conversation about how spaces are designed and lived in. Green spaces significantly reduce stress among college students, whether natural or human-made (Seitz, et al. 2014). In a time that pressure from factors far beyond the scope an average college student undergoes, the principle of outdoor green space and its healing qualities cannot be understated.

However, inequality in access to green spaces can often manifest in disparities in health outcomes, learning disparities, and environmental racism (Cole, et al. 2018). Community access to the Monroe Park campus's 'nexus' campus is paramount for the 'Iconic Green' to be billed as successful. The fine line between success and the inherent possibility of the surrounding neighborhood becoming gentrified though are hand in hand – with a majority of the residents now being student-renters, this economic change could force the first line intended user even further afield from the space originally intended for their use as a part of their daily lives (Cole, et al. 2018).

1.1 PLAN PURPOSE

Once the VCU Student Commons relocates, and the adjacent building construction has either begun or finished, the need for a well thought out green space in the heart of VCU's Monroe Park Campus will be immediate. The VCU Planning and Design team now has a set of recommendations for the ONE VCU Master Plan-specified 'Iconic Green' ready to present.

1.2 CLIENT DESCRIPTION

From <https://fmd.vcu.edu/planning--design/>:
Planning

The Office of Planning and Design provides planning support to Virginia Commonwealth University and VCU Health organizations in the development, evaluation, and justification of facility needs and projects. Its primary services include the following:

- Coordinating Facilities Management support with the **ONE VCU Master Plan** implementation and planning
- Assisting vice presidents, deans, directors, and department heads in determining project needs regarding scope, schedules, and preliminary cost, and articulating those needs through an approved facilities development plan
- Assisting Capital Assets and Real Estate in evaluating property acquisition opportunities in terms of needs and uses
- Providing liaison services to the State Council of Higher Education for Virginia and the Virginia Department of Planning and Budget on space inventory and utilization issues and program justification for all capital projects
- Maintaining drawings and plans for facilities and providing for their use as needed by project managers and other university personnel

Design

The Office of Planning and Design also provides design support to VCU and VCU Health organizations in the development, evaluation, and justification of facility needs and projects. This office provides the following services:

- Project management services
- Interior design services
- Sign design consultation
- Contract with outside architecture and engineering services
- Space planning and programming
- Liaison with the Virginia Division of Engineering and Buildings
- Preliminary cost estimating

1.3 OUTLINE OF PLAN

The 'Iconic Green' pre-planning study for the Monroe Park Campus of VCU provides the framework and data necessary to support the intended 'nexus' on the proposed site. A review of the existing literature on various subjects included below will highlight models and successful measures that have ensured success for previous similar built works. Having an understanding of the underlying factors and implications for the site, a needs assessment using existing literature and design precedents and in comparison, with VCU's own desired end state and needs. Focusing on these comparisons within a theoretical framework established in this plan provides recommendations that support the vision statement, goals, and associated objectives.

2.0 PROJECT BACKGROUND AND EXISTING CONDITIONS

Figure 2: Google Image of Linden Street at Floyd Street



Figure 2. Google Image of Linden Street at Floyd Street from Google Maps Images, (Google, 2019)

Figure 2 shows the intersection of what used to be Linden Street (straight ahead), and Floyd Street (running left to right) looking south along Linden Street. What this image highlights is that the location of the 'Iconic Green' is almost entirely

under the current VCU Student Commons (brick building on the left). On the right is Harris Hall, scheduled for a major renovation and expansion in the next few years – that expansion will bring the façade of the new structure up to the existing walkways on all sides.

The fact is that visualizing the 'Iconic Green' as a place right now is complicated by the presence of change. For the 'Iconic Green' to begin, the Harris Hall renovations must be complete, the Student Commons has to be torn down (after the new Student Commons construction), and further, the Temple Building (south of Main Street) slated for demolition. Also, the VCU Thalheimer Tennis Center must relocate – the Tennis Center currently resides on the proposed site of the new Student Commons. All of these building footprint shifts, along with a few other new construction projects, will accommodate a green space surrounded by academic buildings, as shown by the conceptual image below from the ONE VCU Master Plan.

Figure 3: ONE VCU Master Plan Proposed Rendering of New Construction on the Monroe Park Campus



Figure 3. ONE VCU Master Plan Rendering with Callouts (ONE VCU, 2019)

The clear intent is that the surrounding buildings provide a necessary activity level that encourages users and passersby to engage with the area – similar to Burnham's idea of 'activating' the central portion of the 1893 World's Fair exhibits (Moore, 1921). The number of daily users in the space alone will ensure that pedestrians pass through the space for some level of passive use. In the current environment, classrooms are sitting vacant as online and virtual instruction takes their place – this cannot be considered a permanent change.

VCU has clearly defined the need to have central green spaces in the ONE VCU Master Plan and the associated process for each of its two campuses. Each of the spaces links the university and its' various activities and the inclusion of the surrounding communities. The 'Front Door' initiatives from the Master Plan are already under construction and actively seek to address how the public perceives VCU through outreach and design improvements (ONE VCU, 2019).

Figure 4: Looking South Along Linden Street
– Pedestrian Connection



Figure 4. Looking South along Linden Street, during an in-session VCU day, Fall 2020. © Nicholas Jancaitis, 2020.

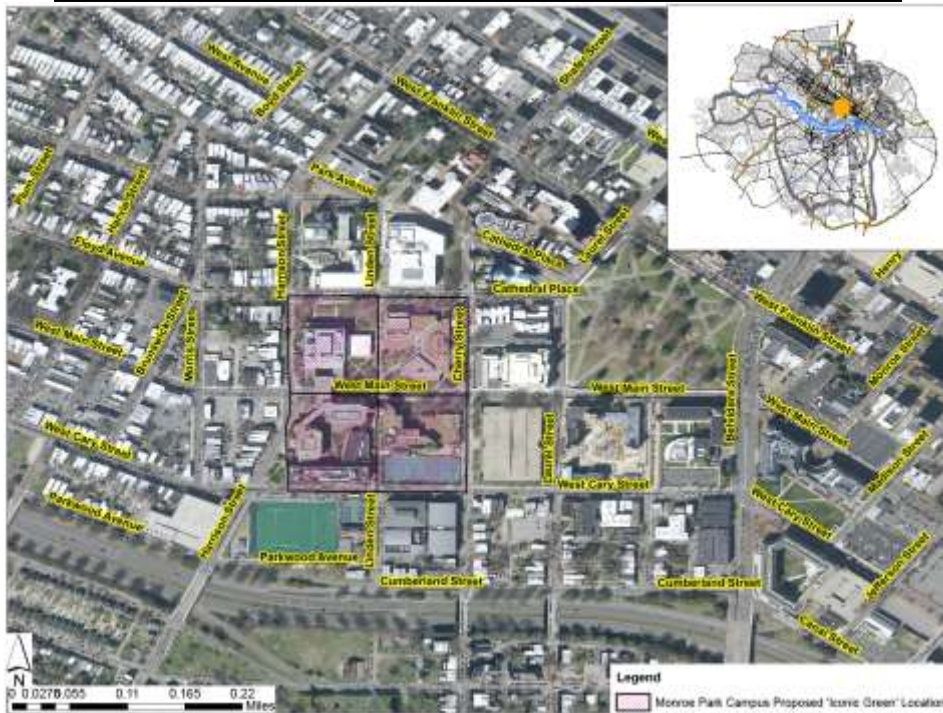
2.1 PLAN CONTEXT

The existing conditions around the proposed 'Iconic Green' represent a mainly urban campus with mature landscapes along the streetscapes and little greenery pockets interspersed throughout. With the Broad Street corridor to the north, the Belvidere corridor to the east, using Plum Street for a limit to the west, and finally I-195 to the south, the area is surrounded by pavement.

The Monroe Park Campus garners its' name from the park of the same name central to the campus. The City of Richmond, along with other members of the Monroe Park Conservancy, recently participated in and supported a significant overhaul of Monroe Park. Monroe Park already provides active and passive recreation support for a portion of the VCU student body. Monroe Park is a two-block walk to the 'Iconic Green.' Monroe Park is owned and maintained by the City of Richmond.

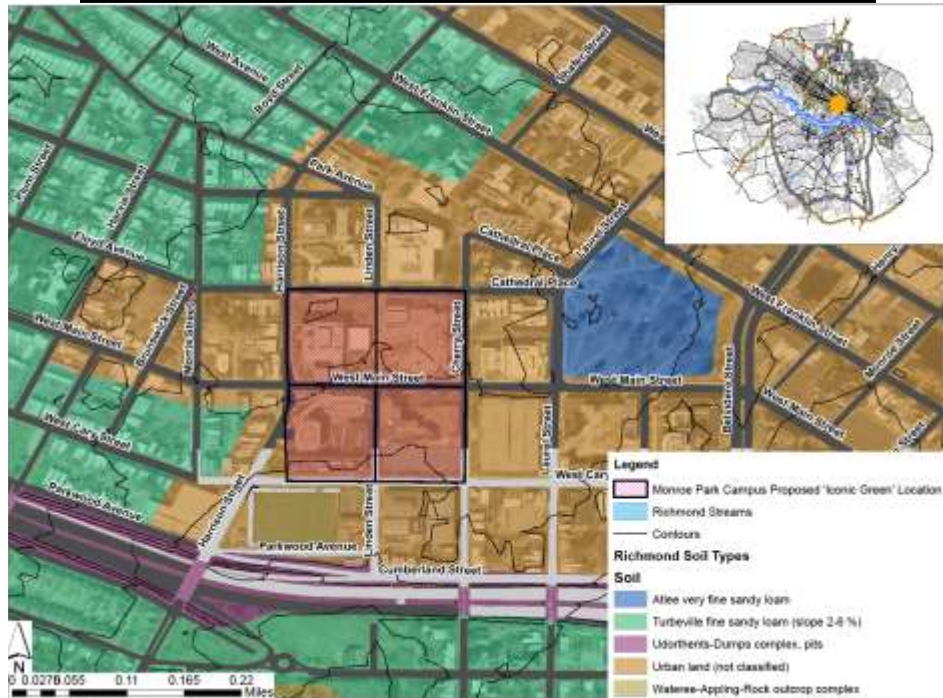
The next, and nearest, sizeable green space is the Hollywood Cemetery to the south of I-195. Attached to the Cemetery are sports fields and playgrounds under the care of the City of Richmond. Throughout the area are numerous 'pocket' parks and green spaces that lend themselves to passive recreation and smaller scale active pursuits.

Map 1: 'Iconic Green' Location on Monroe Park Campus



VCU has been expanding the Monroe Park Campus's building footprint for the past few decades, especially since 2005. Now crossing over Broad Street and Belvidere, the university heavily influences major arterial roads and their overall streetscaping. The expansion has now allowed the university to refocus on each campus's cores and develop a 'nexus' that students come to for various reasons.

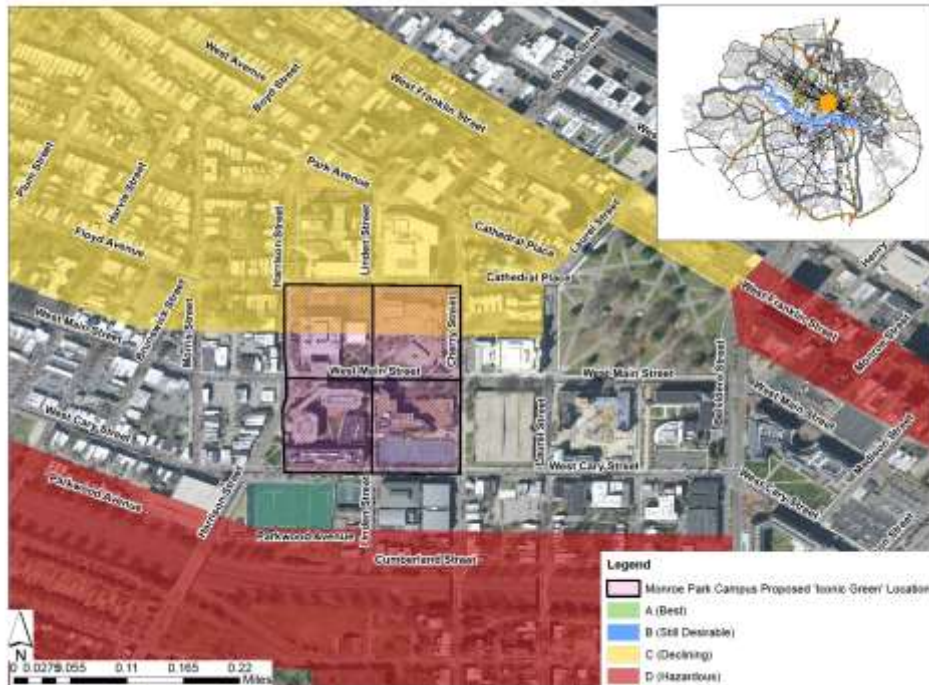
Map 2: Existing Soils, Contours, and Water Features



The site has unknown soil types, being densely built on; however, soil augmentation will be required for future plant material success. The soil types also show that the ground is gently sloping but not at a steep inclination. There is a gentle grade change, with the high point along Floyd Avenue to the north of the site, running downhill to Cary Street.

There are no perennial or intermittent streams on the site or near it, which means there are no Resource Protection Areas (RPA). This lack of water also implies no Resource Management Area (RMA), 100- or 500-year floodplain restrictions. Water flows through the existing city storm sewer system, heading towards the James River.

Map 3: 'Iconic Green' Relationship to HOLC' Redlining Map'



The 'Redlining' maps done by the Home Owners Loan Corporation in the 1930s have proven to be the death knell of many American communities, Richmond included. **Map 3** displays that the bulk of the VCU Monroe Park Campus is declining at the evaluation time. VCU capitalized on the availability of this less-desirable section of the city for a portion of the campus. Ignoring the connotation of de jure segregation as a founding factor in the campus' growth in future planning is unwise (Rothstein, 2017).

Another equity-based issue that affects the VCU Monroe Park campus and the surrounding neighborhood is urban heat island effects (Rothstein, 2017). The heat island effect is most intense along the I-195 corridor – constructed under the guise of Urban Renewal. For the proposed site itself, VCU has maintained a large number of mature street trees and campus green spaces that have reduced the effects of the large buildings that tend to populate university campuses – especially on an urban campus. However, along the Broad Street Corridor that VCU has been expanding onto and around, another large area of intense heat is present, warranting further investment or countering.

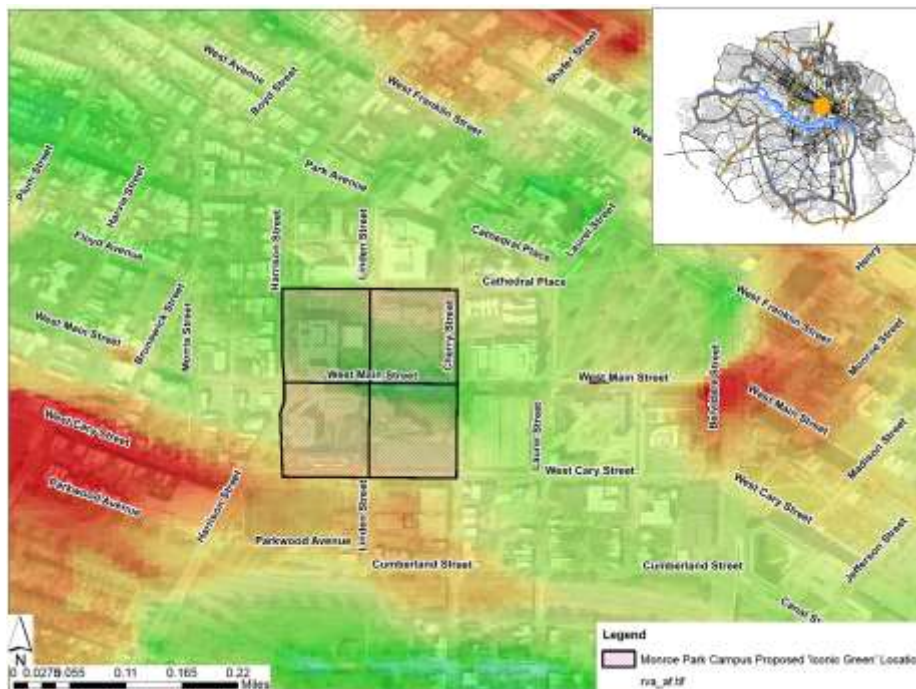
Since the district labeled inappropriately as a failed or failing community in the late 1930s, land, and parcels in that section were undesirable and, therefore, more

affordable. One of the predecessors to Virginia Commonwealth University was the Richmond Professional Institute (RPI). RPI was originally located across from the Governor's Mansion in downtown Richmond. In the late 1920s, RPI bought their first building at 827 West Franklin Street, three blocks from the proposed site. After the HOLC map was published, and combined with outside support to RPI, RPI would expand the footprint along Franklin Street and into the surrounding neighborhoods (RPI Wiki, 2020).

Once RPI merged with the Medical College of Virginia (MCV) in 1967, VCU quickly became the largest student body in Virginia. RPI had been able to expand rapidly from the late 1930s to 1967 to encompass over 12,000 students – and that expansion was fueled by depressed land prices from the HOLC mapping (RPI Wiki and VCU Wiki, 2020). The justification for Urban Renewal projects, such as I-195 cutting through downtown Richmond, two blocks to the south of the site, further reveals the effects of the HOLC mapping on Richmond. The remaining housing stock has since turned over to primarily student renters and inexpensive homes that have fueled a transition in the last 20 years, paralleling the gentrification discussion in Section 2.2.

Since the founding of VCU in 1967, the university has expanded the Monroe Park campus's footprint. Crossing Broad Street and Belvidere has infused more and more of the Richmond-VCU district with a younger, more active population – driving increasing rent prices, street improvements, and forcing existing residents to relocate to other portions of the city or out altogether. In light of these contextual issues, the Iconic Green could be viewed as a further attempt by VCU to alienate the residents and their predecessors from what was previously their own space.

Map 4: Urban Heat Island Effect Around Monroe Park Campus



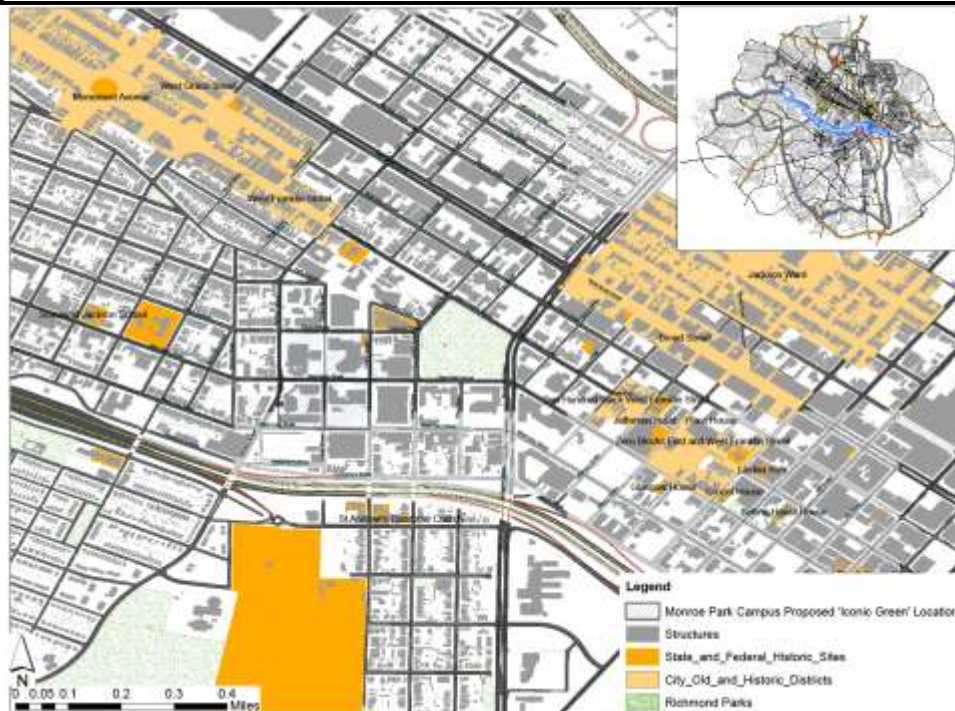
The Monroe Park Campus, surrounded by numerous Arts, Cultural, and Historical sites and districts that define Richmond's communities, influences Richmond's culture. On the proposed site itself is the Hunt-Sitterding House, listed on the National Register of Historic Places list, and currently houses the VCU Administration for

the Division of Student Affairs. The Hunt-Sitterding House was constructed between 1889 and 1891 and displays a late Victorian-era architecture prevalent in the area during Richmond's' townhouse period (Hunt-Sitterding, 2020).

The Monroe Ward, Jackson Ward, and the Monument Avenue districts provide contextual ties to the VCU campus. Relating to the historical, racial, and unequal divides Richmond has labored through over the years, these districts remind and contextualize VCU's future development – and how those ties bind the university not only to be a good neighbor – but to be a good steward of the memories the community carries.

In light of the Redlining, described on the previous section, of Richmond and its distinct impact on the campus's historical impression later, tying the VCU campus into those historical narratives remains relevant. Further, Richmond's city actively seeks to preserve intact historical architecture with their districting, with philosophical and cultural values. VCU operates within that framework, and those memories will guide this project.

Map 5: State and Federal Historic Districts and Sites Near Monroe Park



The Broad Street Arts District (BSAD) is a short seven-block walk from the site and offers an opportunity for the Monroe Park campus to tie in the Liberal Arts focus of VCU into the greater-Richmond focus on the arts. VCU has already begun to pivot with the student gallery and other projects in proximity to the district – the site could be a furtherance of that tie-in.

The BSAD began a renaissance along Broad Street that was mostly vacant and abandoned decades ago. As Richmond's residents' flight to the suburbs shuttered storefronts and hoteliers alike, the wide avenue along Broad Street failed. With significant reinvestment and a search for an end to suburban sprawl brought more and more life back into Richmond's city, so did a call for Richmond's identity. In due course, Richmond settled on a metropolis identified for its beer culture (see Scotts Addition), the

Medical College of Virginia (VCU), and the liberal arts. Galleries poured into the BASD, along with lively restaurants and bars.

Map 6: Broad Street Arts District



As the culture shifted along Broad Street, so did the surrounding neighborhoods. Rents and home prices skyrocketed. Gentrification settled in along Broad Street and its environs that drove residents out – those few who remained. While the BASD and the theme of the liberal arts are a vital relation to VCU, the broader relationship to the proposed Iconic Green is the reminder that Richmond has suffered repeated governmental promise of a better way of planning, though that led

to gentrification often.

Map 7: Richmond Neighborhoods in Proximity to Monroe Park Campus

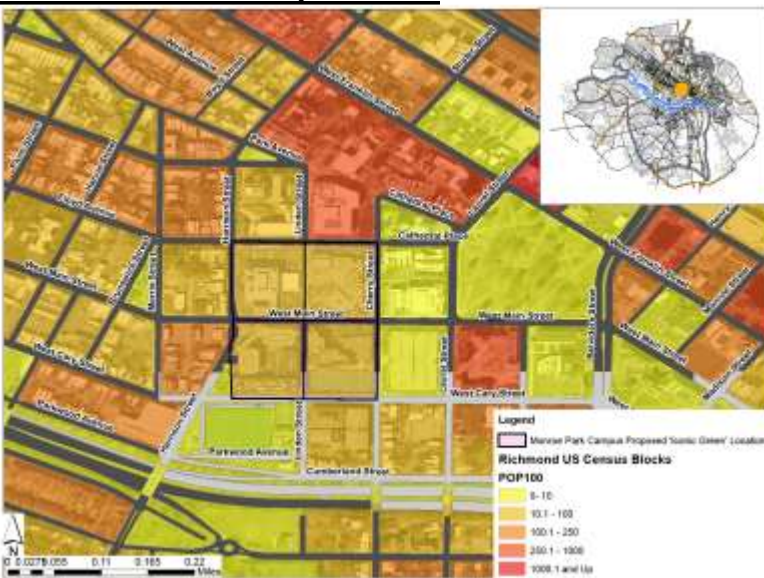


The neighborhoods around the proposed site have existed for generations, and each has rich histories that give Richmond its' unique feel. The VCU neighborhood is the newest designation and includes several blocks of non-VCU related uses such as apartments and street-level retail stores. Along the western border of the campus is the Fan neighborhood, best known for Monument Avenue and Park Avenue. Along the eastern edge lies the Monroe Ward, which is more commercial in nature today. VCU is starting to claim properties along the Belvidere corridor and deeper into Monroe Ward,

speeding up the transition from a once residential section to a mixed-use and university one.

The balance between university academic buildings, university residential buildings, and the City of Richmond's needs plays out through the location of the population surrounding the campus. The concentrations (in red) shown on Map 8 of the highest population counts by block coincide with VCU-owned residence halls. High-rise towers have begun to rise around the Monroe Park campus in order to accommodate a growing on-campus resident portion of the student body. The transition from a 1900's townhome community to a dense urban fabric has defined the past two decades for this section of Richmond, with VCU as the catalyst (Hunt-Sitterding, 2020).

Map 8: Monroe Park Campus Census Tract Block Total Populations



Map 9: Richmond Census Tract Locations Included in Demographics



The 2020 Census data will not be available for another couple of years. Still, reliable data from the 2010 Census demonstrates the proposed site's population characteristics and its environs—the block groups used for the analysis listed on **Map 9**. The area's population has a younger median age, female-dominated trends, and almost exclusively college-aged (15-24). The importance of designing a space that accommodates the intended user is tantamount, and with this information in hand, planning a space used routinely is significantly more comfortable. There is a tiny number of children within the area and almost none within a 10-block radius of the proposed site. As a planning or design factor, they will not be included going forward. Also, of note, the elderly are not represented with large amounts of the population, so they will also not be the intended audience in this site's planning.

Table 1: US, Richmond and Monroe Park Area Census Tract Demographics by Age, Sex, and Adulthood

Data as of 2010 Geographic Area Name	United States	Richmond	Richmond Virginia Census Tracts near Study Area							
			302	305	402	403	404	411	412	413
Total Population	303,965,272	201,828	2,143	3,272	2,588	3,309	3,577	3,921	1,187	3,227
Male Percentage	49.1%	47.4%	45.5%	56.1%	38.6%	32.8%	40.6%	59.1%	51.6%	46.4%
Female Percentage	50.9%	52.6%	54.5%	43.9%	61.4%	67.2%	59.4%	40.9%	48.4%	53.6%
5-9 YO	20,116,654	11,189	2	52	81	3	0	91	0	211
% 5-9 YO	6.6%	5.5%	0.1%	1.6%	3.1%	0.1%	0.0%	2.3%	0.0%	6.5%
10-14 YO	20,643,730	9,070	18	0	7	3	33	15	10	154
%10-14 YO	6.8%	4.5%	0.8%	0.0%	0.3%	0.1%	0.9%	0.4%	0.8%	4.8%
15-19 YO	22,132,691	16,774	592	367	203	2,452	565	144	67	276
% 15-19 YO	7.3%	8.3%	27.6%	11.2%	7.8%	74.1%	15.8%	3.7%	5.6%	8.6%
20-24 YO	21,214,118	24,309	494	1,318	1,203	706	1,325	1,274	544	624
% 20-24 YO	7.0%	12.0%	23.1%	40.3%	46.5%	21.3%	27.0%	32.5%	45.8%	19.3%
Median Age in Location	36.9	32.6	24.6	24.1	23.1	19.1	23.6	25.6	23.7	28.7
Total 18 YO and Older	229,932,155	162,228	2,068	3,069	2,408	3,261	3,450	3,601	1,146	2,607
% 18 YO and Older	75.60%	80.40%	96.50%	93.80%	93%	98.50%	96.40%	91.80%	96.50%	80.80%
Total 21 YO and Older	216,369,649	146,098	1,423	2,366	2,034	591	2,389	3,241	819	2,280
% 21 YO and Older	71.20%	72.40%	66.40%	72.30%	78.60%	17.90%	66.80%	82.70%	69%	70.70%
Total 62 YO and Older	47,432,207	27,889	88	114	149	53	613	282	35	609
% 62 YO and Older	15.60%	13.80%	4.10%	3.50%	5.80%	1.60%	17.10%	7.20%	2.90%	18.90%

Table 1: Data from US Census Bureau 2010 Data by American Factfinder (Census, 2020).

Table 1 highlights select information from the comprehensive demographic data; for further details, see **Table 4** in Appendix 7.2. Age groups from 25 and up were not represented in the bulk of the nearest census block tracts, as shown by the population's negligible amount in each, almost all being between the ages of 18-21. The population ages out of the dormitories, as reflected by the 20 and older numbers making up larger portions of the population outside of the Monroe Park campus census tract.

Table 2: United States, Richmond, and Monroe Park Area Census Tract Demographics by select Racial Groups

Data as of 2010 Geographic Area Name	United States	Richmond	Richmond Virginia Census Tracts near Study Area							
			302	305	402	403	404	411	412	413
White	224,895,700	84,552	821	1,240	1,372	2,111	3,075	3,244	1,070	696
% White	74.0%	41.9%	38.3%	37.9%	53.0%	63.8%	86.0%	82.7%	90.1%	21.6%
Black or African American	37,978,752	103,148	901	803	862	618	190	546	17	2,319
% Black or African American	12.5%	51.1%	42.0%	24.5%	33.3%	18.7%	5.3%	13.9%	1.4%	71.9%
Asian	14,185,493	4,531	239	980	207	420	264	48	33	42
% Asian	4.7%	2.2%	11.2%	30.0%	8.0%	12.7%	7.4%	1.2%	2.8%	1.3%

Table 2: Data from US Census Bureau 2010 Data by American Factfinder (Census, 2020).

Table 2 shows how the history of Redlining, Urban Renewal, Monument Avenue (The Lost Cause), and VCU's growth have pushed Richmond residents into enclaves

that they (the residents) feel more resemble their preferred living situation. The Fan (404 and 411) and Oregon Hill (412) display White populations over 82% of the total and do not match the City of Richmond's make up. Monroe Ward (305) and Jackson Ward (302) are closer representations of a diverse population in transitioning areas – and likely in the 2020 census will reflect even more diversity. While in Block 413 (Randolph) please note that over 70% of the population is Black or African American; whether this is now de facto segregation or de jure, this study cannot specify.

2.2 EXISTING KNOWLEDGE

Defining the University Brand:

"Why are universities changing the iconographic expressions of their identity? The explanation rests therefore on the competition among otherwise similar institutions: since by definition all universities teach advanced studies, all members of a university faculty are distinguished scholars, and all universities offer similar academic degrees in a similar range of academic disciplines, universities must labour to distinguish themselves by declaring their distinction and proclaiming their reputation. Competition is the driver for branding; branding is a technique of market differentiation." (Drori et al. 2013)

The Gili Drori quote above sums up the competitive field among higher education institutions across the United States currently. Universities are changing everything from their seals to their mascots to ensure their brand identity (read marketing) is known across the field (Drori et al. 2016). Some universities have been at the branding game for as long as they have existed, such as the University of Virginia – intentionally designed in a way that set it apart from other institutions at the time, while others are now coming to the point that they must somehow define themselves through as many methods as possible. VCU has the 'Brand Center,' which has everything to do with marketing. Still, the mentality has certainly bled through to administration – see the VCU Trademarked Art Sheet that specifies everything from the specific colors in three different color-coding systems to how the letters and words are associated with the university should be approached (VCU Art, 2020).

Conversely, branding in the higher education field is that the schools might succeed in making themselves stand out from their competition while also wholly ignoring what they do in the first place, i.e., higher education (Drori, et al. 2016). Or worse, they could take a famous brand, Drake University, and dump that for an ill-fated "D+" campaign. While well-intentioned, 'D' stood for Drake, and the '+' for all of the possibilities there; all it ended up accomplishing was getting the grade with all who saw it that it represented (Drori, et al. 2016).

VCU has an extensive marketing department and a clearly defined brand, even without Final Four runs, recognized by high school students, especially in the large regional pool of applicants that the university is seeking. What VCU does not have, per the client (the VCU Planning Office), is a definable architectural presence – on either campus. Referring back to the University of Virginia, you think of the Rotunda or the Lawn as the campus icons. For Virginia Tech, the icon is either that of Burruss Hall or the Drillfield. Both are Virginia state universities with defined brands, but with an identifiable architectural brand that further sets them apart from their competition. VCU

is now striving with how best to be defined architecturally as an urban core campus – and green space might just be the key to that process.

The intent of the site is to re-scale the existing Student Commons to the surrounding area to better integrate the buildings into the urban fabric. The current Student Commons is better suited for a suburban office park, than a growing urban metropolis. The intent of the buildings that will replace the Commons and others is to add building height back in (four to five stories), that will frame the Iconic Green.

Public and Higher Education Green Space Impacts on Populations

Refocusing on Urban Core green spaces, increasing their numbers, and changing their community roles has seen a resurgence in the past few decades (Pincetl and Gearin, 2005). Studies have shown test scores increase in various subjects due to the proximity or convenience of green spaces to students (Browning and Rigolon, 2019). Further, campus green spaces have a profound positive effect on students' well-being through stress alleviation, and vice versa, which induces more stress when not visually or emotionally appealing as a design space (Seitz, et al., 2014).

Recapturing urban land as green space allows for stormwater runoff to be placed back into the natural drainage system. The conversion of land from an impervious surface to one of a porous nature also counteracts the urban heat island effect in downtown centers. Reduction of the building square footage interior spaces in outdated construction models allows for energy efficiencies that reduce greenhouse gas emissions from lower heating and cooling costs, stormwater coefficients closer to pre-construction levels, electricity used, and higher sustainability levels with newer construction materials designed for durability (Pincetl and Gearin, 2005).

Tree cover, good green views from a window, and proximity (within 2000 meters) of green spaces to the classroom most often are linked to higher grades and college-preparatory exam scores for students (Browning and Rigolon, 2019). Monroe Park Campus nestled in Monroe Park and surrounded by long, maturely treed streets with manicured walks and grass swaths – hinting that the campus should already be seeing favorable testing scores and higher grades. With the intended increase in built square footage around the site, the need for more valuable green space is apparent.

Viable and well-designed green spaces are required to satisfy a student's academic needs and emotional well-being. Green spaces improve students' wellness (Seitz, et al. 2014). A student is more likely to pay attention in class if their peripheral view or window view is of a green view (Seitz, et al. 2014). Students, Professors, and general passersby will often stop at random trees, open lawns, or quiet landscaped areas in order to meet their physical or mainly emotional needs (Seitz, et al. 2014). Satisfying the on-going need to meet student and community health requirements is a driving force for the inclusion of the 'Iconic Green' in the ONE VCU Master Plan.

Linking community and university health outcomes, reducing greenhouse gas emissions while also increasing urban shade, and increasing student grades are all connected via the increase in campus green space. Since space is at a premium on an urban campus like VCU, tactical decisions will balance university requirements with its population and the surrounding communities. In this situation, the future space chosen is sited to have a maximum effect, but could be a double-edged sword.

Urban Green Space, the Prelude to Gentrification:

The addition of any government-led project is often a sign of investment from the local, regional, or national community that can lead to the existing residents' dispersal. Those existing local populations are often there due to previous policies or more insidious reasons – Redlining, lack of choice in housing, discrimination, etc. The location of the Monroe Park 'Iconic Green' is significant in that it is wholly owned land by the university and not converting from an existing residential area. However, based on education level predictors for vegetated landscape characteristics, a new green space in an urban setting is likely to attract a large portion of the existing residents in the surrounding neighborhoods (Wang and Zhao, 2017).

Figure 5: Measurement Scale of Vegetated Landscape Characteristics

Table 1
Measurement scale of vegetated landscape characteristics.

Landscape characteristic	Scoring
Vertical structure of vegetation	One layer = 1; two layers = 2; three or more layers = 3
Number of colors	One or two = 1; Three or four = 2; Five or more = 3
Color contrast	Weakly = 1; clearly = 2; strongly = 3
Naturalness	Artificial environment is dominant = 1; artificial and natural environment are joint = 2; natural environment is dominant = 3
Accessibility	Difficult to access = 1; neutral to access = 2; easy to access = 3
Visual scale	No open space = 1; semi-open space = 2; open space = 3
Degree of plant maturation	Young plants are dominant = 1; young and mature plants are joint = 2; mature plants are dominant = 3
Safety	Dangerous = 1; medium = 2, safe = 3
Growth status of plant	Bad = 1; medium = 2; good = 3
Elements except plant (water, topographic variation)	None = 1; a few = 2; more = 3

Figure 5: Taken from 'Demographic Groups' differences in visual preferences... (Wang and Zhao, 2016).

Figure 6: Two Picturesque Landscapes with the Highest Preference Scores



Figure 6: Taken from 'Demographic Groups' differences in visual preferences... (Wang and Zhao, 2016).

The two above figures' importance is that there is a critical way to identify human relationships with their surroundings. The two preference score images show clearly that manicured landscape spaces with diverse plan materials were highly coveted –

they were in the two highest-scoring images in the study. Images of unkempt or natural landscape spaces that didn't have a variety in colors and plant species were much lower scoring – in the 2.5-point range (Wang and Zhao, 2017). The conclusion here is that those coveted style landscape features will attract more attention to the 'Iconic Green' – a double-edged sword for the surrounding community. In conjunction with all of the new construction around the green, the site will be a potential catalyst for gentrification in the surrounding neighborhoods.

While well-intended, greening of communities can often have a negative equity effect, especially on those who are in disadvantaged populations.

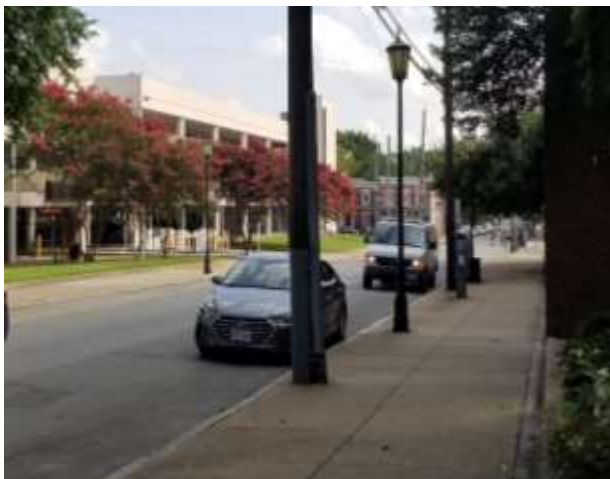
"While new or improved green spaces benefit residents by providing opportunities for physical activity, improving social cohesion, and reducing air pollution, accompanying gentrification may result in contentious local social relations, and may actually exacerbate inequities in health and other outcomes by determining who benefits from these amenities, and who doesn't" (Cole, et al. 2016)

While this planning intervention is on an Urban Campus, it would be unwise to ignore the socio-economic status and overall demographics of the surrounding community and not anticipate some level of unintended consequences around the new green. Targeted greening often aligns with those who would benefit the least – for example, those already exercising and utilizing bike paths or nature paths for quiet walks. Congruently, greening in disadvantaged neighborhoods is often associated with future or impending gentrification initiatives (Wang and Zhao, 2017).

The importance of meshing the new green space into Richmond's existing urban fabric cannot be understated. The causal link between new green spaces and gentrification may be uncertain. The typical results of an urban home's increased property values and desirability around a new green space are predictable (Wang and Zhao, 2017). Since the intent is to produce an 'Iconic Green,' green gentrification's potential remains potent.

The City Beautiful, Activating Space and Ignoring the Darkness

Figure 7: Typical VCU Campus Edge and Road Streetscape



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Daniel Burnham's 'White City' is revered for the uniqueness, brashness, and explosions of variety that Burnham could pull together in a concise amount of time (Moore, 1921). The underbelly of that project, the murders, lives lost in constructed or altered due to relocation is hardly ever discussed. The parallel for VCU here is that you have a central courtyard space – hub 'Iconic Green' – surrounded by various import buildings. The same as the 'White City.' The courtyard's purpose is a linkage and conveyance space that elevates the

surrounding facilities to higher goals. The links between the indoor and outdoor spaces compound the effect of the green itself.

While the 'White City' was not a wholly community-benefiting project, the VCU 'Iconic Green' campus projects designed to benefit the community, specifically the students and faculty of VCU. Addressing ownership of an area of such importance leads to discussions about public and private space (Bernadini and Irvine, 2007). The 'Front Door' initiatives for VCU address long-overdue maintenance and streetscape improvements that show VCU as a good neighbor (ONE VCU, 2019). This program's side effect is that streetscapes are beginning to unbalance once the improvements arrive, and the investments show a disparity with unintended consequences.

The ability to tie the green to the rest of the community, not just VCU, will define how Richmond residents view space. By limiting the place by making it meaningful and significant to the city's residents, there is a solid footing to establish the space as an 'iconic' one (Bernidini and Irvine, 2007). Without an accepted community identification, the space relegates to a VCU-exclusive endeavor that further alienates the surrounding population – counter to the ONE VCU Master Plan's guiding strategies, especially integration into the community (ONE VCU, 2019).

Placemaking for Urban Spaces – Remembering How People Live

William H. Whyte drove massive social and design change when he came out with the movie/documentary 'The Social Life of Small Urban Spaces' in 1980. His film propelled a still alive movement today in the form of The Project for Public Spaces (pps.org, 2020). His approach and study of small urban spaces and their unexpected failures or successes define planning, landscape architects, and architects thinking on properly designing small outdoor spaces.

Surprisingly, Whyte found that design practices intended to exclude users from spaces were mainly the cause of the design's failure. Exclusionary design practices for homeless, skateboarders and even animals caused parks and plazas alike to fail and fall into disuse (Hine, 2013). These design principles are critical to the Iconic Green in an urban core application such as the Monroe Park campus of VCU. Further, since the site will be a hub of the campus – finding design tools that apply to activate the nexus are critical.

Figure 8: Harrison Street Streetscape Issues Across from VCU Campus



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The various tools to a planner or designer of urban space are surprisingly simple, based on Whyte's theorems and observations. An abundance of places to sit, in varieties from stationary to movable, and ranging from comfortable to uncomfortable (dependent on the user's length of stay) strongly shaped a space's success. Street vendors, good tree canopies, surrounding supportive structures (active buildings), and artistic displays (fountains and sculptures mostly) were also vital signs of successful urban plazas and green spaces (Hines, 2013). Whyte firmly believed that the street and urban spaces were the keys to tying urbanites together and addressing social dysfunction in cities.

3.0 METHODOLOGY AND APPROACH

A theoretical perspective establishes a problem-solving framework to resolve the obstacles in the project. For the 'Iconic Green' on the Monroe Park Campus, the two leading theories to establish that framework will be the City Beautiful Movement and the Just City. By utilizing these frames, the space's conceptual planning will continue, despite expected roadblocks. Since the site location is directed and the future building constrains the programming for the site uses surrounding it, a flexible and relatable framework will ensure that the conceptual design process will not bog down – nor will it alienate the intended users of the green. By focusing on providing equity in the planning process and enduring green space design, the 'Iconic Green' will realize these goals with bought in community and university partners, ensuring ownership of the site – not alienation.

Competing planning theories or movements have consistently formed and reformed based on social movements worldwide, but especially in the United States. Often those movements morph into follow-on movements – either reactionary or a natural progression. One of the first movements was the City Beautiful movement, and much later – and a reactionary one – is the Just City movement (Fainstein, 2010; Daniels, 2009). Sustainability, especially from the Just City movements' perspective, encompasses equity, diversity, and democracy – so the process is vital (Feldman, 2011). The City Beautiful movement ascribed to the belief that aesthetics and imposing order onto the city's chaos would improve residents' lives – so the outcome is critical (Daniels, 2009). The competing ideals of equity through process versus the outcomes aesthetic appeal in planning interventions is an 'essential tension' in sustainability and planning practice (Verma, 1995). More importantly, the give and take necessary between the Just City and the City Beautiful's core principles can develop and finish a "Just and Beautiful City" (Feldman, 2011).

The City Beautiful movement arose in the late 1880s and lasted until the 1920s. The movement's founding principle was that design could not be separate from social and current issues – by using civic beauty and engagement via monumental building styles (Britannica, 2020). The movement's prevalence throughout the park, regional, and city planning greatly influenced the architecture, landscape architecture, and planning fields immensely (City Wiki, 2020). The latter two professions were just in their infancy in the United States and drew their founding from the City Beautiful movement itself.

Major proponents include Daniel Burnham (famous especially for the World's Columbian Exposition in 1893 in Chicago), Frederick Law Olmsted, Jr., and Charles McKim (City Wiki, 2020). Those three were also teamed up by then-Senator James McMillan, whose plan and legislating ultimately transformed the Washington, DC Mall into the Mall that exists today. The series of monuments and monumentalized green spaces define the city today, activating the central courtyard's spaces while also activating the central space by utilizing the buildings around it (Dodd, 2012).

Conversely, the City Beautiful movement did not truly address the social issues that the movement sought designs to overcome. The thought process that a statue could overcome overcrowding, slums, and racial and gender inequities eventually went out of style with most of the United States (Britannica, 2020). Iconic buildings, however, define a sense of place – examples of such as Union Station in Washington, DC, or the San Francisco City Hall of 1915 – and stand as the reasoning for the City Beautiful framework's inclusion for this project. However, to adapt the movement to modern ideals while recognizing the need for a design mindset, a planning theory is laid over this design foundation to address the shortcomings discussed above.

The planning theory that readily redresses equity flaws in past planning theories is the Just City theory. The primary proponent for the Just City has been Susan Fainstein since about 1999. Her book, also titled *The Just City* in 2010, laments the shortfalls that planners and current 'communicative planning' thinking in the field (Fainstein Wiki, 2020). The 'structural inequalities' inherent to build-first planning initiatives drive out the concept that any new project could genuinely be inclusive (Fainstein, 2010). Fainstein and her disciples believe that the Just City theory derives from democracy, diversity, and equity (Fainstein, 2010).

In shifting the discussion from economic development and structured ends, Fainstein and the Just City theory place equity into the planning process and profession. The lack of resident inclusion clearly defines the flaws of the City Beautiful movement. The residents are often wholly excluded from the projects – and are often completely removed by the projects (Britannica, 2020). The Just City sees the process, not the ends, as the defining characteristic of a planning project (Fainstein Wiki, 2020).

Since the Just City movement arose to espouse equity and consistent injustices throughout planning practice, the process versus outcome discussion's pendulum has swung heavily in favor of the Just City movement (Reece, 2018; Feldman, 2011). Fainstein argued (successfully and rightfully) that planning practice had for far too long been flirting with Tokenism or even Non-Participation of constituent groups and their associated participation in the planning process (Fainstein, 2016; Arnstein, 1969). The Just City movement drives the process as the core principle to allow for equity and inclusion of all stakeholders – especially those who had previously been disenfranchised with planning processes beforehand – or those who were not allowed to participate (Fainstein, 2010). As the Just City movement has gained momentum and focused more on the process – the process has overtaken the outcome so that the aesthetics of a planning intervention have become an afterthought (Feldman, 2011). The Just City Values Index characterizes this oversight; of the 50 indicator metrics, beauty is only one (Just City Index, 2020). The other 49 metrics centralize on the process and those involved – and the associated experience those involved have – again in the process. In the definitions of the values and metrics, subtle mentions arise

of the built environment – the outcome – highlighting that even the Just City movement must ultimately confront the process's results with a finished product (Just City Index, 2020). While "Citizen Participation is Power," citizen appreciation and ownership of a Just City-process beautifully designed outcome are in the words of Tim 'Tool Time' Taylor – More Power (Arnstein, 1969).

With the Just City Index theoretical framework and the City Beautiful design mindset, the best methods of identifying relevant design and preference data, in this case, are the utilization of case studies of existing campus green and 'iconic' spaces and the surveying of the local and target audiences for the Monroe Park campus green space. Both methodologies will be discussed below.

Avoiding the argument between process and outcome has undone planning before (Daniels, 2009). The 'essential tension' between the two ends of the planning theory spectrum binds the Just City and City Beautiful movements together (Verma, 1995). While Anne Feldman proposed merging the two under the moniker 'The Just and Beautiful City,' the more proper name is the Just Beautiful City movement (Feldman, 2011). That unification of the two principles and tenets relies on that tension between the process and outcome-based movements and merges them into a dynamic functional theory for planning. Further, by that combination and usage, sometimes one or the other might be the dominant process or outcome-based thought process on a project by project basis. What would not be ignored in that discussion is the other movement's presence and necessity (Christensen, 2015). With the Just Beautiful City directives, planning and sustainability planning would have a toolkit of equity-driven aesthetically appealing design methodologies that will engage all communities and empower constituents through a process that derives an essential outcome.

In light of the Just City providing an apt Planning Theoretical Framework, but having no influence on the actual design of a space, building, or city, and the City Beautiful movement providing a stylistic approach to 'iconic' spaces and design in general, they combine to shape the frame for this project. By taking the inclusive and equity-driven approach of the Just City, and morphing the tendencies of the City Beautiful movement to plow through regions for the hegemony into an inclusive design and planning process that derives the most desirable product for the 'Iconic Green' on the Monroe Park Campus.

3.1 PROBLEM STATEMENT

How should VCU design and implement the intended 'Iconic' Green in the Monroe Park Campus's heart that properly honors and integrates with the surrounding community to focus on equity, safety, and future adaptability?

The ONE VCU Master Plan provides a framework for addressing how the university will address the surrounding communities and their campus interactions. Further, the 'Front Door' program's implementation has already begun addressing this consideration heavily in streetscape and landscape improvements. The Iconic Green will be a continuation of that effort. However, tying in safety, adaptability, and, most importantly – equity will certainly drive the ultimate look and 'feel' of a space that will be central to the campus's identity.

3.2 RESEARCH QUESTIONS

The following six questions address crucial issues in the design of the Iconic Green informed by the theoretical framework outlined above. Design standards typically lag community needs while design theory addresses them. At the same time, design standards are more actionable and hence enjoy widespread adoption. To integrate these considerations of theory and practice, these research questions address current events, past standards, and future narratives that have or will have shaped the 'Iconic Green' for the Monroe Park Campus of VCU. A brief description of the context accompanies the question.

Question 1:

What requirements do universities impose for greenspaces in their control?

Context: When students think of Virginia Tech, University of Virginia, William and Mary, and other campuses, they associate them with iconic spaces. VCU has lacked a similar sense of identity and lacks reinforcement of its place as an urban campus. Defining how spaces shaped other Virginia campuses will detail a set of best practices and a path forward for VCU.

Question 2:

How do current, past, and future VCU students want to use a large green space in the heart of their campus?

Context: This question is at the heart of the 'Iconic' green. Shaping this space to be multi-functional, adaptive, and sustainable while meeting diverse needs of a vast group of students is crucial in proposing an effective solution.

Question 3:

Richmond's history is rife with racism, inequities, and lack of opportunities for minorities or under-represented groups. How might the 'Iconic' Green address those concerns?

Context: A vital point of the ONE VCU Master Plan was that the surrounding communities' needs should focus on the future campus building, design, usefulness, etc. This question seeks avenues to expand that inclusion in one of the most public-friendly and accessible spaces on the university campus.

Question 4:

What are higher learning campus design standards that drive open space security and safety, and how are they best applied to VCU and the proposed 'Iconic' green?

Context: Across the nation, universities, planners, and designers alike have sought solutions that increase the population's safety and focus on prevention – ultimately ending unsafe design trends. Great strides have been made in this area in the past few decades and should be compared to VCU to support this plan.

Question 5:

What Richmond and VCU historical figures, events, places, or other items of interest are located on or nearby VCU that could lend credibility to or could enhance the 'Iconic Green on VCU?

Context: An inventory of historical artifacts around Richmond and VCU will be conducted to address this question.

Question 6:

How will the 'Iconic Green' be transformed to become a year-round hub of activities (on weekends, at night after classes, and in between class sessions.)?

Context: Unlike cities like New York, Richmond, has a restricted night life. Since the 'Iconic Green' is intended to be a nexus of social and academic activities at the Monroe Park Campus, determining its appearance late night (safety, lighting, accommodations for overnight users?) and what happens on the 'Iconic Green' on weekends and holidays when students, faculty, and staff are equally important. Who utilizes the space? What activates the space once the intended primary users are away? Looking at the current COVID-19 Pandemic influence on the existing VCU campus (see Fig. 10 and 11, for example), the stark emptiness is pervasive and addressing this with inclusive site programming will be a crucial step.

3.3 CONTENT ANALYSIS

Local and Target Audience Surveys:

Utilizing a 'semantic differential method,' a series of 10 questions were presented to each of the respondents, utilizing grammatically opposite adjectives as descriptors to determine the respondent's evoked response (Hsu, et al., 2000). The Semantic Differential use here explicitly assumes that the presented image with an accompanying question will produce an agreement or disagreement. For instance, if a poorly lit sidewalk with garbage strewn about the picture was shown, and the question to the respondent was: 'Do you feel safe in this location?', with the options ranging from 'feeling very unsafe' to 'feeling very safe (QuestionPro, 2020).'

Using the Just City Index: Value Indicators as a guidepost, community engagement with the identified target audience of the 'Iconic Green' – student population – requires in a COVID-19 environment a creative solution. With permission from the client, a 10-question survey was sent to students, faculty, and staff of Virginia Commonwealth University over the Winter class break. The ten questions sought to place the stake-holders desires for the future green space in a collaborative planning environment – that was sensitive to the inabilities of all to gather in significant numbers but allowing for the process to evolve in an equity form.

The driving questions behind the images were:

1. How often do you walk or bike across the VCU Monroe Park Campus?
2. Would you do so more if there was a green space that met your personal needs of reflection and calming?

3. Do you feel that Richmond and VCU needs an open space that brings the community together with a shared identity to build power and increase fairness?
4. Do you feel accepted at VCU and in Richmond?
5. Do you feel like you have a choice in where you want to maintain your resilience?
6. Do you feel rejuvenated when you visit VCU and Richmond green spaces?
7. Do private green spaces satisfy you?
8. Do public green spaces satisfy you?
9. Do you prefer urban green spaces over rural green spaces?
10. Do you feel safe walking or remaining on VCU's green spaces?

With each question relating specifically to a research question, the data was then compiled and categorized by each respondent. There will not be a need to gather more demographic information, as the target audience's determination has already arrived at VCU students and faculty – the online portion of the survey will intentionally only go to groups of VCU Students, Faculty, and Staff. Due to the COVID-19 pandemic, the attempt to honor consideration for Richmond and the surrounding neighborhoods, several 'pop-up' survey booths along Linden Street and Main Street attempted to gain passersby perspectives on the same 10-image survey was not conducted.

The images selected will include some from the case study locations, VCU, and general web searches that produce images applicable to green space design. As the example shown before, the respondents will have a matched set of opposite responses to address the images portrayed. The questions will be understandable and will not require reference material for the respondent to grasp the reasoning behind, or definition thereof, of the questions. The selection scale will be determined from a range of one to five (if the person is honest, they receive a one; if they are dishonest, a five – again from the respondent's perspective) (Al-Hindawe, 1996). If the respondent is unsure or neutral to the image, they would respond with a three. Since this is an attitude study, the best system to apply is the semantic differential – it is among the best methodologies for measuring varying-component concepts (Al-Hindawe, 1996).

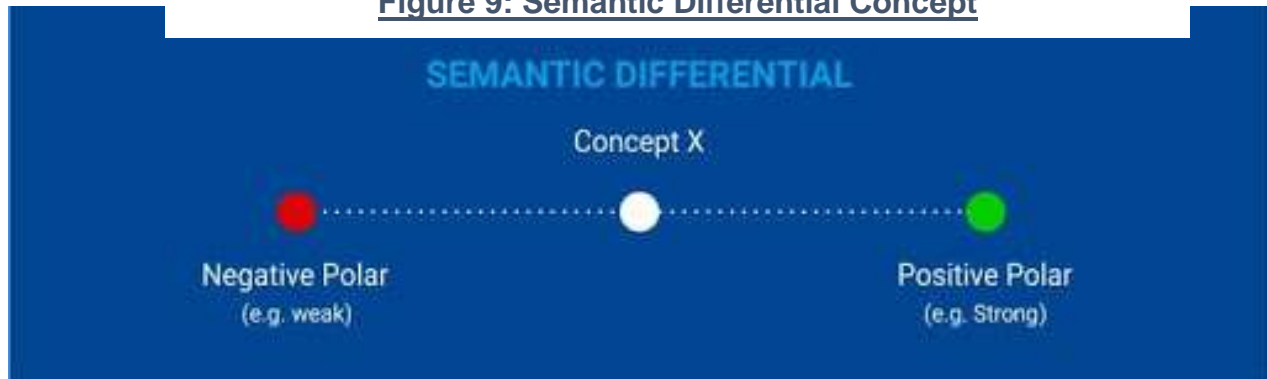
To account for the three underlying variances in the expected respondent judgments, termed evaluation, activity, and potency, the study will start from a point that realizes that these three organize the human experience (Bradley and Lang, 1994). From this reasoning, a pilot study with the pop-up canopy survey will first determine the proper adjective-pair usage and questioning line for the images (Al-Hindawe, 1996). By allowing a general discussion with the first set of respondents, the adjectives to describe the photos and linked to the ten questions previously and how they inter-relate to the six research questions. Once the adjectives are selected, it is possible to determine the suitable and grammatically correct antonym – honest versus dishonest, for example (Al-Hindawe, 1996). To avoid ambiguity, voice inflection and respondent's personal experiences before settling on the proper adjective pair to use; for instance, the use of intelligent and dull together could imply, without appropriate context, that one is boring or intelligent – as opposed to the intended unintelligent versus intelligent (Al-Hindawe, 1996).

While the pilot study happens, a random sampling of images will also be inserted into the survey. The additional images will address the concern that the survey

creator's biases are removed from the survey results. For example, if the creator prefers rolling lawns with little to no people in a park, then a picture of such would please the creator – and would most likely be included in the survey. By having photos in the pilot study found by others outside of the creator, the respondents show that those additional images please them better and included in the survey.

The survey reflects the Just City Index: Value Indicators, Figure 10, on the next

Figure 9: Semantic Differential Concept



page. The 12 Value Indicators elicit strong feelings among those who strive to balance the American political system. For Planners and Urban Designers, the twelve Value Indicators are necessary to combat internal and external biases. Their inclusion into the 'Iconic Green' Plan Proposal demonstrates a commitment to the 'Fairness' and 'Power' that the respondents to the survey would demand.

While the survey will prove to be a critical 'needs assessment' by the local population and expected users of the space, the space's determination of design needs runs parallel to the process. As is common in the planning practice as a whole, balancing between being a professional and an advocate remains a balance. In the next section, the discussion transitions to the five case studies' layout, their locations, and the rating system to be applied to them.

Figure 10: The Just City Index: Value Indicators



Case Studies of Comparable Higher Education' Iconic Greens':

In order to gather comparable information, past Iconic university green spaces, and urban open space design practices, five existing similar spaces were analyzed according to the matrix in Table 3. These case studies highlight the design features of successful urban, rural, and college campus spaces that are regionally-based and comparable to VCU. The five sites examined were the Drillfield at Virginia Tech, The Lawn at the University of Virginia, University Yard at George Washington University, The Oval at the University of Louisville, and finally Monarch Fountain at Old Dominion University. The case study locations have various features that can be adapted to the 'Iconic Green' site readily and add significantly to the process.

The sites were analyzed in the following manner:

Table 3: Site Case Study Evaluation Criteria

Site:	The Lawn	Drillfield	University Yard	The Oval	Monarch Fountain
Rating Category:					
Safety					
Iconic Level					
Lighting					
Plant Variety					
Paving Materials					
Shade					
Seating					
Building Connections					
Link to Local Community					
Sustainability					

The ratings on a scale of one to five and the case study with the highest combined score exhibit the most features required in the VCU' Iconic Green' site. A score of one would imply that the site has no existing or planned features similar to the rating category. In contrast, a score of five would indicate that the area has numerous and innovative features of that particular rating category. Each rating category informs the conceptual design process in parallel to the local user survey.

There are three to five evaluation criteria for each rating category. The safety category looked at local crime statistics, including violent and non-violent crimes, car theft, robberies, and other common college-related crimes within a 0.25-mile radius of the site. The Iconic Level rating category evaluated the availability of images of the space on multiple search platforms, how many people are in the photos using the space, and how the university itself treats the space both online and in advertising features. The Lighting rating category observed night time effect lighting, safety lighting, and general way-finding ability in non-daylight hours. The Plant Variety rating category sought to identify local plant materials versus invasive ones, variety in height, texture, color, and seasonal visual pleasure. The Shade rating category evaluated the

availability of shade on the site, how that shade is provided (natural vs. human-made), and access to shade around the site within a 0.25-mile radius while remaining outdoors. The Seating rating category evaluated how many chairs, benches, seat-height walls, manicured lawns, and other seat/lounging options are available to space users. The Building Connections rating category looked at how the space is connected to its surroundings if buildings are fronting on the space and how they interconnect. The Link to Local Community rating category determined if the local, or more significant, the community uses the space beyond the university's students and faculty – and in what numbers. The final rating category is Sustainability, which evaluated the site features that ensure the on-going use of the site, how those features contribute to the net-zero footprint of the design, and recent and innovative features that contribute to the future.

Figure 11: Harris Hall Sunken Plaza – To be Razed



With the student/faculty survey and the comparable case study's in hand, the content analysis is complete. The two different forms of data provided are invaluable in programming the conceptual design for the 'Iconic Green' on the Monroe Park Campus. The insights lend credibility to both the plan and the VCU Planning and Design office process.

3.4 CONTEXTUAL ANALYSIS

After completing the content analysis, a contextual analysis of both datasets for comparison and linkages to the VCU Monroe Park campus, was conducted. A set of recommendations was derived from the data. Shaping those recommendations into design strategies and concepts based on comparative analyses of the sites and data points most relevant to the VCU project is the purpose of this phase.

The determining factors for the contextual analysis was the six research questions. The relevance of the survey data and the site studies addressed their particular application to answering the research questions and providing a footing for managing the problem statement.

Step 1 for the contextual analysis was fitting the datasets into question-by-question categories based on how they address or answer the corresponding item. For instance, if one of the reviewed sites had a memorial for past racial injustices, then that site review will address question three. That site was further analyzed for similarities to the VCU site.

Step 2 for the contextual analysis determined the best practices or answers from the survey that ultimately applies to each research question. For instance, if an overwhelming majority of the student and faculty respondents say they do not feel safe

addressing Research Question 4, the site design case studies that best-applied safety features were further reviewed for their specific safety standards.

Step 3 ensures that the best practice or statistical analysis was chosen as the lead answer, or some combination thereof, fits within the project's theoretical framework. An example being if the answer to Question 2 is to develop a skate park that addresses VCU student needs and is a proven campus design standard, leading to a review for the context in Richmond and through the Just City Index.

Step 4 of the process addressed those answers or practices that do not fit within the VCU site or requirements and find a modulated solution that will best address the concern and research aims.

Step 5 resolved any further discrepancies between the results and the guiding principles leading to a final contextual analysis product that addresses all research questions and the problem statement. The results are codified in a Design Guideline Pamphlet for the VCU 'Iconic Green' on Monroe Park Campus.

4.0 Research Findings

The findings from the constituent survey and the five site case studies follow in this section. The six research questions are established in previous sections, and are answered through the previously reported existing conditions, current literature review, and the following findings. Research Question 1 is directly addressed by the Case Studies, Section 4.2. Research Question 2 is addressed by the Constituent Survey, in Section 4.1. Research Question 3 is answered partially but multiple portions of this plan, namely Sections 2.2, 3.3, and 4.1. Research Question 4 is addressed by portions of the Case Studies, further research into university campus design practices presented in the design recommendations later, and from the existing conditions portions of this document. Research Question 5 is addressed in the Case Study section and further in the design recommendations later – due to the COVID-19 pandemic, the research study was unable to gather in-person data from an active VCU campus that would have provided key insights directly related to this topic area. Research Question 6 is derived from the Theoretical Framework noted in Section 3.3, and applied to the 5 Case Studies, with key points taken from the Constituent Survey to validate.

4.1 Analytical Results

Based on the desired inclusivity of a Just City-based planning process, a research survey was crafted to address certain Research Questions, as noted in Section 4.0. Appendix 8.3 displays the full survey, as the respondents saw it. The Constituent Survey was released online for any community members to respond to and was sent specifically to certain VCU constituent group points of contact. Since the intended audience for the 'Iconic Green' is VCU Students, Faculty, and Staff primarily aged 18 to 24, the survey was sent to the Faculty Senate, Staff Senate, and the Student Affairs Office for VCU, in order to ensure widest dissemination to the VCU community. The release of the survey through various means of social media was to be as inclusive as possible for the surrounding neighborhoods to VCU. Further, with the impacts of COVID-19 in mind, the survey remained active until 13 March 2021.

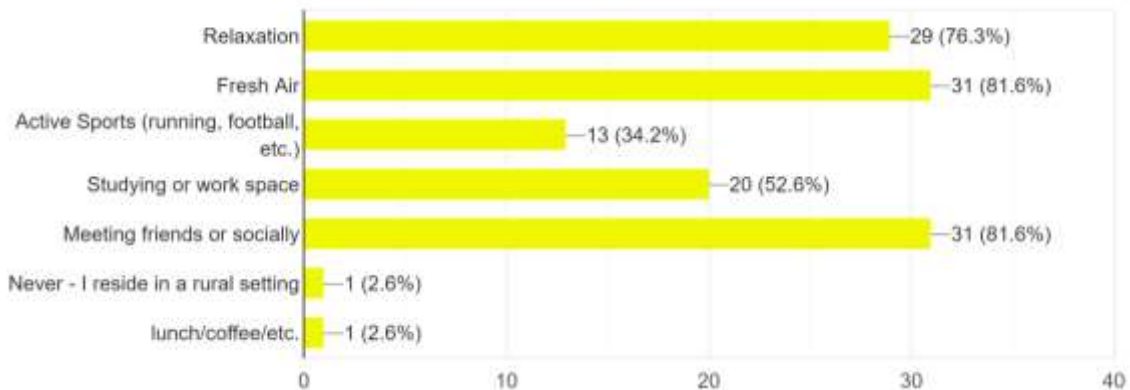
Figure 12: Looking Northwest To Harris Hall – Seating and Diverse Landscaping



The constituent study had 38 respondents, of which 17 are VCU Students, 0 are VCU Faculty, 3 are VCU Staff, 6 are Richmond residents, and the remainder, 12, are none of the previous. The majority of the respondents are 26-50 years old (23), with the next largest group being 18 to 25 years old (12). The respondents generally do not have a habit of stopping on the campus to recharge themselves (25), but this is attributed to the wide distribution of the survey – and the saturation of the VCU marketplace with surveys during this window. In line with the saturation from outside of the VCU footprint, the walking or biking population majority of the respondents do not do so at VCU (20). Interestingly however, 23 respondents did say ‘Yes’ to question 5 (Do you stop to recharge outside at VCU in nature?), and another 7 said ‘Maybe’ – constituting a positive majority for impacts on the users of VCU outdoor spaces.

How do you use urban parks?

38 responses



Moving into the general design questions, 33 respondents preferred ‘Public – Clearly Safe’ outdoor spaces to ‘Private – Appears Safe’ ones. Question 7 delved into how the respondents like to use urban parks. Over 81% of the respondents appreciate ‘Fresh

Air' and 'Meeting friends of socially' using urban parks. Also, 76.3% of the respondents use urban parks for 'Relaxation.'

The majority of respondents to Question 8 about safety on the VCU campus green spaces (26) have felt safe on them – but a large number (12) of respondents have felt unsafe in those same spaces. Similarly, 27 respondents feel uncomfortable in dark outdoor spaces, with a small pool of 11 respondents who feel comfortable in dark spaces. While most of the respondents feel that VCU is an equitable campus, 10 respondents noted that they don't consider it equitable to them or everyone they know. The 11-question constituent survey allows this document to better understand the VCU community and shape design and planning recommendations for the 'Iconic Green.'

The respondents provided valuable insight into the perceptions they have currently of the VCU campus, the associated green spaces, and how they feel within those given spaces. These responses shape the recommendations with their candor and validity. The VCU campus has a clear perception problem with equity, safety, and availability of green space that meets the university's needs. The 'Iconic Green' location and adaptable programming will respond to those needs readily.

4.2 Five Case Study Results

The five peer universities and sites analyzed for this research study were: Virginia Tech and the Drillfield; University of Virginia and the Lawn; University of Louisville and the Oval; George Washington University and University Yard; and finally, Old Dominion University and Monarch Fountain. The full ratings from the case study analysis can be found in Appendix 8.4.

Figure 13: Birds-Eye View of Virginia Tech's Drillfield



Virginia Tech's Drillfield scored the highest total points with 36 out of 50 possible. The Drillfield has over 20 acres and a perimeter well over 3,700 feet, making it five times larger than the suggested VCU 'Iconic Green'. While the sizing is not comparable, the mix of uses, and the 'Iconic' level of the Drillfield is a necessary comparison. The Drillfield hosts numerous campus events, memorials, and is easily identifiable through many forms of online and print communications. The Drillfield's size is also enhanced

Figure 15: View of Virginia Tech's War Memorial on the Drillfield



by the oval and bowl shape, encouraging shaded edge sitting and people watching. The shaded edges are enhanced by the large variety of plant variety, a category the Drillfield also handily won. The downside to the oval shape is a lack of definition at the edges and the interactions with the majority of the campus buildings are not positive. The large size is also disadvantage of the Drillfield, and the location on a rural campus does not translate well to an urban campus. The student body sizing is comparable and both VCU and VT boast good university lighting plans that accommodate year-round and full day use of the entire campuses.

Figure 14: Birds-Eye View of the Lawn at UVA



The Lawn at UVA was the original design by Thomas Jefferson, with the focal point on the buildings. Since the design and function of the space has endured for centuries, this space also tied with the Drillfield for its 'Iconic' level. The Lawn also claimed one of the top spots for the spaces relationships between the surrounding buildings and the green space in the middle. The Lawn serves as the site of

graduations annually and houses professors and honors students in the surrounding buildings. This nexus of activity is a direct parallel to the future VCU 'Iconic Green's' desire to be a synergistic hub. The space is about 5 acres in size, and directly comparable to VCU's site. The connection to the City of Charlottesville however is lacking, as the Lawn is insulated by a large portion of the campus from the main sections of the city. Also, the Lawn has relatively low plant variety and sustainable practice scores due to a lack of diversity and water run off problems.

Figure 16: Aerial View of GWU's The Yard



George Washington University's University Yard was the third-highest rated space, and the highest urban campus space. The Yard is also the smallest of the case study locations at only an acre and a half. The strengths of the Yard are the iconic level, but not quite as high as the Lawn or Drillfield, the level of shade provided by the mature trees and surrounding buildings, and the connections of the site to the same buildings and Washington, DC on the whole. The lack of size prevented the Yard from having a large amount of plant variety – as

well as the larger focus on paved in areas to serve more large crowd events. The Yard does score well on paving material variety and usage, due to that focus on large crowd events. Another concern for the Yard is Safety, a further explanation of that evaluation criteria category is found later in this section.

Old Dominion University's Monarch Fountain is actually a misnomer, as the fountain itself is actually a small portion of a larger quad within the main campus. The quad itself is almost seven acres in size, and almost double the size of the future VCU 'Iconic Green'. The Fountain space excels in paving materials, seating and building connections. A variety of stone, concrete and brick pavers are used throughout, and are mixed in with seating arrangements and opportunities that encourage social and institutional use throughout the year. Since the site is surrounded on all sides by buildings with direct access to the space, the connections abound. However, the

Figure 17: Birds-Eye View of ODU's Monarch Fountain and surrounding Green



Fountain is within the campus and not easily accessible to the Norfolk, VA community, so the site scores poorly on the link to the community. Also, with such a large focus on shorter buildings around the fountain and large paved areas, the sustainability score of the site is relatively low.

Figure 18: Birds-Eye View of The Oval at UofL



University of Louisville's Oval is the lowest scoring of the five case study sites. From a design standpoint, the Oval did not excel in any of the categories, and generally is seen as an undesirable location on the campus to visit. Finding available information on the space is difficult, and referencing any online or media coverage of the site was impossible to locate. Further, since the space is separated from any university structures by a road (not unlike Drillfield

Drive for VT – but structures directly relate to that space) the space actually received a zero in that rating category. Also, the Oval is far removed from Louisville, KY, and has no distinct connection to the campus, receiving another low mark for the community link category. Being an urban campus like VCU, the safety category is an interesting comparison, as Louisville scored well on that rating category.

All universities looked at, and including VCU, are required to annually submit a Security and Fire Safety Report by federal statute. Each case study locations report was reviewed and compared by all the given statistics in each. Considerations in those reports were given to the location of the campus, proximity to urban or rural populations, total student body sizes, and other possible mitigating factors for the categories. The urban campuses (like VCU) of George Washington, Louisville and Old Dominion all had relatively similar student body sizes to VCU, but were generally safer than the VCU campus. VCU still suffers from the higher crime rates in Richmond crossing the imaginary boundary onto campus, and as such, a focus of any on campus green space has to be public safety.

Determining the highest rated iconic spaces required a historical and current trends analysis of the sites. Each was viewed through the online search engines and rated on the amount of information returned initially. For instance, the Drillfield returned the most hits and also had an interesting 3D panoramic experience at multiple sites across the space. While, the Oval at Louisville search returned only 7 images, 4 of which were images of the sign at the beginning of the space – and none showed anyone in the actual space. Additional considerations were paid if the space was a landmark outside of just the university, i.e. what is the return visit or visit value of the space.

The lighting of a public green space is actually a tenuous process that can bog down a valid design. For the Drillfield, the space is actually large enough that in between the walkways a full football game can happen without running into a streetlamp that provides ample lighting at night for the spaces being used by pedestrians later. While the Lawn is iconic and designed with the building connections being the main feature, the lighting is lacking as the space is only receiving ambient lighting from the same buildings around the edge. Conversely, it is noted that the lighting around the Lawn is intentional for the ambience and romance it evokes.

Since the Drillfield has the most plant variety, especially when compared to the other schools, it is of note that VT has a vested interest in that variety. The Horticultural Department there spearheads an effort to spread local and native flora across the campus, then uses those spaces as classrooms. It is of use, and improves the sustainability of the campus as well, since local and native plant materials are necessary for the long-term health of the local environment. Other schools used similar plant palettes to the rest of their Universities, and that held their scores down in those two categories. Plant design, as noted in the literature review sections, is critical to improving the effectiveness of a green space. The variety, interest, and virility of the space has a positive impact on grades, mental health, public health, and the sustainability of a project.

Paving materials and building connections were interlinked in that if the space had good variety and usage of paving materials, the space often tied into the buildings well. Monarch Fountains usage of a variety of materials made the space more intimate and inviting to casual passersby, and led to the high score on seating as well. However, the Lawn and University Yard both excel at tying their green space to their surrounding structures, enhancing the synergy of their spaces – bringing a level of daily vitality that is necessary for the VCU ‘Iconic Green’.

Another tie in to the sustainability category is the shade category. The Drillfield scores high in both categories, but suffers from large areas of grass and herbaceous material that is cut short routinely for sport and open space use. The large, mature, and various trees as the trademark of sites that not only provide great amounts of shade, but reduce heat island effects (especially for urban campuses) and encourage public interactions.

The final category of analysis was the link to the local community. The design of the space, the connective tissue, the location of the space on the campus, and the iconic level were all components of this category. Of all of the previous data points, this category is the most critical to the framework this plan operates under and affects the outcomes the greatest. VCU’s ‘Iconic Green’ location is in direct interaction with the local community, Main Street runs through the heart of the future space and many transit routes cross the space. For the space to function for the Monroe Park campus, it should emulate the University Yard in that the space has a direct link to the outside urban neighborhood. Further, the needs of the community of VCU to further enhance sustainability and links to Richmond will drive the importance of this category throughout the implementation phase.

The Case Studies provided contextual evidence and best practices for the ‘Iconic Green’ to follow or reference for implementation. The studies also showed comparative focuses on urban campus design friction points, what is required to achieve iconic

status, and how to emulate a nexus or focal point for a university. All of the case study locations have regional value to the VCU community and are relatable to their day-to-day interactions with the university in the whole.

5.0 Recommendations

Through the extensive research and comparisons into the 'Iconic Green', a set of recommendations are proposed below that shape the MPC Green Design Guideline Pamphlet that follows. The Vision Statement, Goals, Objectives, and Actions are all derived from the Research Questions and pertinent design theory that encompasses this document. Balancing VCU's need for a functional and budget-conscious space with the community's (VCU and surrounds) requires transformational-level design thinking. The Design Guidelines utilize principles that have proven sustainable, equitable, and sturdy over time. The goals, objectives, and specifically the Actions provide the backbone of the project as it moves forward in an equitable process. From that equitable process an equitable outcome can arise for the MPC Green.

5.1 Vision Statement

One comment from the survey on parks for this pre-planning study sticks out and pertains to the Vision Statement recommended below:

"The name "Iconic Green" is incredibly off-putting - fatuous and self-important. Call it a park, please. The description is almost unintelligible bureaucratese. Maybe the authors understand what "nexus of programmatic synergies" really means, and maybe they have specific ideas about how "to achieve the synergy necessary for the space before breaking ground," but if they do, they need to spell this out in plain language to and not hide their meaning in vagueness." – Anonymous

That same respondent went on to mention leaving Monroe Park alone (this plan has no impact on Monroe Park) and to allow that space to be open and unprogrammed. The nature of this plan inherently intends to program the space so to ensure equity, inclusion, and variety that will ultimately please all users (potential or imagined). But there is also the distinct and reasonable assumption that users simply want space. Space to lay down in, space to relax in, space to socialize in, space to meditate in, space to play in, just space. Therefore, the Vision Statement for the Iconic Green on Monroe Park Campus (hereafter MPC) is:

Through the provision of an urban outdoor space the MPC Green will enhance the beauty and nurture the health and well-being of the VCU and Richmond communities.

5.2 Goals, Objectives, Actions

5.2.1 – Goal One: Design an equitable and inclusive green space that brings together VCU faculty, students, and staff with local Richmond neighborhood residents.

Context: VCU cannot ignore the location of the site along a major east-west thoroughfare in the heart of Richmond. Nor can VCU ignore the proximity to

neighborhoods in Richmond that have leftover resentment for past VCU expansions or other negative experiences. Addressing those interactions head on through the MPC Green design is one way that VCU can redress past actions.

5.2.1.1 – Objective One: Create a Friends of MPC Green before the design phase is initiated, and utilize members of the stakeholders permanently as governing the organization.

Context: The support network necessary for modern parks (rural and urban) requires volunteers, social media enterprise, and stakeholders to work in concert to keep a park afloat. By creating a functioning 'Friends' of organization, VCU cements the MPC Green as more than an image on paper, but as a part of the community.

5.2.1.1.A – Action One: Establish the Friend of MPC Green non-profit organization that is responsible for programs and activities that make the space more inclusive and equitable.

5.2.1.1.B – Action Two: Identify members from the Office of the Student Affairs to lead the committee, council members from each surrounding Richmond neighborhood, local businesses, VCU Student Government, Staff Senate, and Faculty Senate with technical advisors from VCU Planning and Design, Facility Management and any other VCU offices.

5.2.1.2 – Objective Two: At least two years prior to planned construction beginning on the MPC Green, establish a design team that focuses on equity-based planning. Context: Normally a designer works on a project with a very short turnaround until the site is built. For an equitable process like the one that the MPC Green requires, the design team must be built from the ground up. For this to work the design team needs components that by necessity are equitable and non-traditional.

5.2.1.2.A – Action One: Identify key local and regional stakeholders and constituents that will be contributing members to the design team.

5.2.1.2.B – Action Two: Hold an international design competition for the MPC Green, prior to the design phase starting – the design team and the Friends of MPC Green will judge and select the winner. Rules to be determined by all stakeholders (Friends of MPC Green, Design Team, VCU leadership). The winning design will be the starting point for the final product.

5.2.1.2.C – Action Three: Have open and free meetings of the design team that are available and convenient to the public (all of the public) throughout the process. All comments, suggestions, and discussions will be recorded and reviewed.

5.2.2 – Goal Two: Create a space that defines VCU for generations to come – one that is Iconic.

Context: The discussion at the beginning of this study about what is an Icon or Iconic framed how VCU wants to be seen. To craft that image in the built environment, VCU

has to establish an architectural identity across the campus – with a hub of that identity being the MPC Green.

5.2.2.1 – Objective One: Utilize the VCU Brand Center and associated school programs to develop a ‘Brand Identity’ for the MPC Green.

Context: Cultural identity in the world of colleges and universities is paramount for success. The varying case studies all reflect that emotional involvement that an iconic space can create for an associated college. Shaping and molding that image and identity for VCU is the logical step to achieve iconic status like the Drillfield for Virginia Tech or the Lawn for the University of Virginia.

5.2.2.1.A – Action One: Form and establish the MPC Green ID Committee, comprised of Brand Center leadership, student body representatives, marketing experts, local stakeholders, and the design team within six months of the initiation of the design and planning phase. ID will stand for Iconic Design – but in a manner that is more applicable to all users of the space.

5.2.2.1.B – Action Two: Within 12 months of the completion of the MPC Green, transition VCU media and associated images to the campaign designed by the MPC Green Icon Committee.

5.2.2.1.C – Action Three: Within 24 months establish a survey and evaluation of the branding and icon status of the MPC Green. Re-evaluate the branding program continuously and revise for better market penetration.

5.2.2.2 – Objective Two: Through the Friends of the MPC Green, develop local partnerships and community volunteer pools within all stakeholder groups.

Context: Through the establishment of partnerships and volunteering the MPC Green will gain validity. The ‘ownership’ that the participants will feel over the space will forever ingratiate them with the space. While the bulk of the volunteers will be VCU-related, the involvement of the surrounding community members will invest in the tying of Richmond and VCU together. The simple act of planting a shrub or raking leaves can lead to a lifetime of investment in a given space.

5.2.2.2.A – Action One: Six months after the founding of the Friends of the MPC Green, establish a weekly volunteer schedule beginning in the design phase, through construction and completion of construction.

5.2.2.2.B – Action Two: Within the Design Team, the Friends of the MPC Green, and the VCU Office of Student Affairs appoint one



position each as Volunteer and Outreach Coordinators no later than 6 months after the initiation of Planning.

5.2.2.2.C – Action Three: As the Outreach Coordinator positions are filled, they will begin meeting weekly to determine the program, schedule, and brainstorming for further outreach.

5.2.2.3 – Objective Three: With the Design from the MPC Green Design Competition complete and validated through a Just City process, initiate construction immediately.

Context: Momentum in projects can be stalled by bureaucratic processes, unforeseen circumstances, and improper procedures. To avoid these pitfalls putting in place the right team, involving the community early and often, and building momentum to a common goal is critical.

5.2.2.3.A – Action One: Secure a bonded and highly rated series of contractors who utilize green, sustainable, and equitable hiring and construction processes within 12 months of the design process beginning.

5.2.2.3.B – Action Two: Establish an MPC Green VCU-based website that has a strong social media outreach goal prior to the international design competition.

5.2.2.3.C – Action Three: Minimize impacts on the student experience by phasing in the construction of the MPC Green.

5.2.3 – Goal Three: Reduce the Urban Heat Island effect related to VCU’s Monroe Park Campus and hardscaping.

Context: The largest sustainability impact for the MPC Green is the improvement and increase of green space across the campus. Further, the addition of stormwater penetration, CO2 scrubbing, and reduced hardscaping will contribute significantly to how users of the MPC Green react and utilize the space.

5.2.3.1 – Objective One: Increase urban tree canopy on the VCU Monroe Park Campus from current levels within five years of construction by 50%.

Context: The VCU campus already has established pockets of green and street trees, but lacks significant investments in greening roof tops, lowering herbaceous (grass) levels, and improving stormwater penetration via natural processes.

5.2.3.1.A – Action One: Create a program – MPC T – Monroe Park Campus Trees – that has the sole focus on enhancing the campus’ tree canopy increase within one year of construction.

5.2.3.1.B – Action Two: Analyze opportunities across the Monroe Park Campus for tree planting with varying levels of effort – immediate availability, 2-5 years availability, and 5-10 years availability. Conclude analysis within one year of construction.

5.2.3.1.C – Action Three: Analyze green roofs, roof top terraces and gardens, and green walls for all future construction – especially around the MPC Green – prior to the design phase of the MPC Green.



5.2.3.2 – Objective Two: Use reflective or heat-reducing paving products, while reducing other impervious surfaces around the Monroe Park Campus within five years of construction.

Context: Heat reflection and lack of stormwater penetration into the core of the VCU campus is the leading cause of the increased temperature readings around the campus. By countering with water-absorbing materials, best stormwater practices, and sustainable technologies the reduction can occur.

5.2.3.2.A – Action One: As a part of the design competition, reward designs the utilize unique and porous paving materials for any hardscaping of the MPC Green.

5.2.3.2.B – Action Two: Convert or redesign all building rooftops that directly surround the MPC Green into both usable space and with green-roof technologies within 24 months of the completion of the MPC Green.

5.2.3.3 – Objective Three: For buildings on the Monroe Park Campus, transition them to at least 50% reliance on renewable energy sources and increase their sustainability ratings within five years of construction.

Context: The Just City Movement focuses on the process of achieving equity through sustainability. Sustainability is achieved through many modes of the built environment. For VCU to account for the energy usage, loss, and overuse on the Monroe Park Campus will lessen the burden of the energy infrastructure – having positive downtrace effects on global climate change.

5.2.3.3.A – Action One: During the design and planning phase for the MPC Green, survey existing buildings for energy consumption, viability for alternative energy conversion, solar and wind exposure, and energy reduction capacity.

5.2.3.3.B – Action Two: Within 12 months of the MPC Green’s completion, transition at least 25% of the Monroe Park Campus buildings to the 50% reliance on renewable energy source requirement.

5.2.3.3.C – Action Three: Within 24 months of the MPC Green’s completion re-survey all Monroe Park Campus buildings and validate all changes or improvements similar to 5.2.3.3.A.

5.2.4 – Goal Four: Highlight the beauty, nature, history, and unity of VCU and Richmond through activities, events, installations, festivals, seminars and other routine functions.

Context: Bringing life, activity, and catalytic thought to the MPC Green is needed to define the space through action – not inaction. The best that VCU and Richmond have to offer can and should be on display at a ‘Iconic’ location. Shaping the MPC Green as the ‘pivot’ point for sustainability and equity in Richmond starts with utilizing the space early and often.

5.2.4.1 – Objective One: At least once a month, if not more often, host events that include, and are valued by, both VCU and Richmond constituents.

Context: During school sessions, VCU has daily outreach and functions in the ‘public’ square space adjacent to the Library. Shifting some of those functions that are better suited to a larger space with a more inclusive audience can be accomplished through the use of the MPC Green.

5.2.4.1.A – Action One: Form an organizing sub-committee (of the Friends of MPC Green) that is the lead for Inclusive Events planning for the MPC Green within one year of construction.

5.2.4.1.B – Action Two: Develop an annual list of desired international and American talent to come perform/speak/interact with the Richmond and VCU populations and source funding to compensate their time and abilities.

5.2.4.1.C – Action Three: Program the MPC Green to be adaptable to many different forms of events, reward adaptive uses during the international design competition judging.

5.2.4.2 – Objective Two: Set aside a portion of the MPC Green that allows for history, art, public events, and other similar uses – that is maintained as valuable green space when not in use.

Context: A critical aspect of the case study sites was their usage of memorials and art to captivate a user. While memorials can be beholden to the group who emplaced them, VCU and Richmond have the unique opportunity to shape a space that embodies unity and equity. Using the MPC Green to capture that sense of togetherness will bring a sense of pride to the community.

5.2.4.2.A – Action One: Require unique memorialization’s, art, and other interpretations of VCU and Richmond as part of the international design competition, and reward those entrants for unique views.

5.2.4.2.B – Action Two: During construction, provide infrastructure that allows seamless transitions of space between the various uses of the objective and as directed by the design team.



5.2.4.2.C – Action Three: The Friends of the MPC Green will establish subcommittees that will oversee these events and installations, providing oversight, gaining funding, and developing future plans.

5.3 Design Guideline Pamphlet

The following section is intended to be a guiding document for whomever picks up this process for the next stage. The MPC Green Design Guidelines are a compilation of best practices from numerous current sources – not the least of which are VCU’s own Facilities Management Design Standards, the North Potomac Yard Design Standards (Virginia Tech’s Northern Virginia Campus), the Peoples Park Development Design Guidelines (Cal-Berkeley), the Campus Planning and Urban Design Guidelines for the University of Arizona, and lastly the Achieving Great Federal Public Spaces from the Project for Public Spaces in conjunction with the US General Services Administration. All of these documents have common themes, either rooted in the higher education design fields, urban fabric design recommendations and best practices, or are comparable to the Case Studies looked at earlier.

William Whyte was mentioned in the Background Research section prominently as the founder of the Project for Public Spaces. Their free publications are fantastic starting points for baseline design and over-arching theories that envelop a total-project look at making positive choices for a site. In the case of the MPC Green, their practices align wholly with the Goals and Objectives laid out in the previous section.

12.9.3 Site Furnishings

The placement of bike racks will be coordinated through VCU Physical Plant Grounds, and will be placed in close proximity to off-site bike circulation paths and building entrances when applicable.

All exterior furnishings shall meet the requirements of the VCU Campus Amenity Guidelines.

End of Division 12

It is notable that the VCU Design Standards pay cursory attention to the actual design of outdoor spaces – whereas the ONEVCU Master Plan devotes pages to concepts and potential guidelines for outdoor spaces. This oversight should be remedied prior to the construction of the MPC Green.

For example, the site furnishings section is displayed above. Generally, the guideline does not provide for a proper framework for the MPC Green to exist. The following pages will allow for the site to develop properly.

5.4 Design Recommendations

There are four aims that the design of the MPC Green must achieve:

The MPC Green must be an inclusive space.



The MPC Green must be interactive and also allow for passive uses simultaneously



The MPC Green must be safe.



The MPC Green must be Sustainable.



The four aims align with the Goals and Objectives by achieving their end states through focused design practices.

5.4.1 The MPC Green must be an inclusive space.

- The opportunities (events, installations, etc.) provided for the MPC Green will be rooted in equity – no one groups (cultural, racial, gender, etc.) preferences will rule the design.
- Celebrations of the culture of Richmond, VCU, Virginia, and around the world should be the norm – not the exception for events that the MPC Green can host.
- Considerations for the potential users of the space should include homelessness, those experiencing hunger or extreme poverty, food deserts, those with substance use, political groups, religious groups – the MPC Green will consider those without a voice through design.



- Ensure MPC Green has access to a variety of power, communication, and entertainment systems that are easily accessed and provide the infrastructure necessary for the freedom of information.
- Provide urban agricultural amenities and community gardening seminars – encourage the use of rooftop gardens around the MPC Green.
- The MPC Green must recognize the roots of Richmond and VCU – and the racial tensions that underly the urban campus. Recognition and acknowledgement in the design for the MPC Green is critical.
- The MPC Green will not only be a center for the Monroe Park Campus, but it will be a hub of activities – those activities must be programmed accurately, and with deliberate attention to the audience.
- Install linkages between the surrounding buildings and the MPC Green – especially access to retail, dining, and resources for all members of VCU and Richmond.
- Provide free wireless internet to the entire space. Provide ethernet ports and hubs throughout that allow access for both students and residents to engage with the information available.
- While maintaining safety, include more intimate spaces throughout the design of the MPC Green that allows for different personalities and groups to experience the space in their own way.
- Through memorialization and education, teach the VCU and Richmond population about Sustainability, Equity, Climate Change, and local History.



5.4.2 The MPC Green must be interactive and also allow for passive uses simultaneously

- The MPC Green design will have space programmed for active recreation uses.
- The MPC Green design will also have space programmed for passive recreation uses.
- Introduce a variety of seating options throughout the space, including movable chairs and tables.
- Provide ample connections across all roadways that are safe for all transportation modes.
- Connect the MPC Green to the new Student Commons and all VCU academic and residential buildings that surround.
- Plan for events on the MPC Green that require kiosks or tent coverage – like pop-up flea markets or farmers markets – providing vendor licenses and assistance with clearing bureaucratic hurdles.
- Allow space for sun exposure and sun protection – both through shade structures and shade-producing trees.
- Design the MPC Green to have a field large enough for active recreation pursuits or large gatherings on.
- Implement a rotating ‘installation’ schedule for interactive and engaging art or technology displays that are enriching and enlightening for the user – and program spaces throughout the MPC Green to be flexible for multiple uses.
- Consider transition designs that buffer incongruent uses, and dispel the negative effects of one use on another – reducing traffic noise, separates ultimate frisbee from a book reader, as examples.
- Provide efficient connections from one side of the MPC Green to the other – but the journey must be memorable.



5.4.3 The MPC Green must be safe.

- The MPC Green design must provide adequate sightlines, pathways, signage, and wayfinding to ensure user comfort.
- Lighting design must be LED pathway and full cut off, providing ample night use and access.
- Either in the surrounding VCU structures or via a kiosk in the space, include a 24-hour VCU Police presence in the space.
- Design for inclusion of VCU standard safety equipment and ensure easy access.
- Consider a community-based policing approach in conjunction with the design, and add appropriate amenities to accommodate.
- Provide ingress and egress access for emergency vehicles throughout the space.
- Incorporate security measures to be design features, as opposed to eyesores or inconveniences for users of the space.
- Utilize seating steps as means of security and good design practice.
- Utilize design to account for extreme weather events impacts on the MPC Green. Snow, Ice, Flooding, High Winds, Hail and other similar events could be a risk to users' safety. Have an emergency weather plan as a part of the design process.
- Provide water assets – through public drinking fountains, misting, toilets and showers that are available all day and accessible in all forms.



5.4.4 The MPC Green must be sustainable.

- Design the MPC Green to maintain as much existing tree canopy as possible.
- Utilize the VCU Facilities Management Design and Construction Standards – especially the Sustainability requirements for the MPC Green.
- Enforce the Sustainability Requirements of the ONEVCU Master Plan for the MPC Green.
- Utilize the VCU Sustainability Office for review and consultation throughout the design, implementation, and maintenance phases of the MPC Green.
- Utilize porous pavement throughout.
- Avoid large irrigation requirements through xeriscaping, water harvesting, and other water saving design features.
- Utilize green walls for the structures around the MPC Green, as well as free-standing ones.
- Feature equity in the design process as laid out in the Goals and Objectives – inclusive planning is a requirement for the MPC Green and sustainability.
- Include multi-modal transportation with designed mass transit stops within walking distance, bike racks, scooter and bike rentals, and charging stations for alternative fuel vehicles and pedestrian modes.
- Achieve LEED Platinum design.
- Utilize alternative energy sources for all electrical requirements on the MPC Green.
- Utilize reclaimed materials from the removal of the existing Student Commons and Temple Buildings for site furnishings or other valuable uses in the design of the MPC Green.



6.0 Action Plan

The MPC Green Action Plan resolves the Recommendations provided in Section 5.2 with their intended timelines and assigns responsibilities to the right organizations and people to get the project done equitably and right.

6.1 Funding Opportunities

Generically, Virginia Commonwealth University would be funding the majority of the MPC Green through routine funding requests. However, the opportunity exists for private or public donations to the MPC Green through several avenues. The primary avenue for funding will be through the Friends of the MPC Green and an associated non-profit organization that fundraises on behalf of the MPC Green (up to 50% of the total build and maintenance costs). The next avenue for funding will come through naming rights for the space, or individual sections of the MPC Green could be given names (up to \$10 million or 25% of total building costs). While the naming of university structures carries a heavy donation burden, the naming rights for a bench or individual paver would be a cost-effective means to fund the construction of the MPC Green. The third funding avenue would be through corporate or government interest groups joining with the Friends of the MPC Green to pursue a common goal in the construction of the space (remaining 25% of the building costs).

Maintenance of the MPC Green will be funded through the Friends of the MPC Green (50%) and an annual maintenance agreement from VCU's Facilities Management (50%). Since the Friends of the MPC Green will be an organization partially made up of members from outside of the VCU structure, the governance of the site will be different than on other VCU properties. Also, with the use of volunteers and outside help, the MPC Green will benefit from reduced operating costs – increasing the benefits to the community as a whole – as more funding can be utilized for events and installations throughout the year on the MPC Green. The additional benefits are shown in the design guidelines with requirements like the provision of free wireless internet across the MPC Green, water harvesting and green walls, provision of rental bikes and scooters, et cetera.

6.2 Responsible Organizations

For the following tables (Implementation Matrix) the abbreviations below were utilized for the Responsible Parties:

VCU President	VCU-P
VCU Division of Administration	VDA
VCU Planning and Design	VPD
Friends of the MPC Green	F-MPC
VCU Office of Student Affairs	VSA
VCU Office of Sustainability	VOS
VCU Urban and Regional Studies and Planning	URSP
MPC Green Design Team	DT
VCU Brand Center	VBC

6.3 Implementation Matrix:

For the table timelengths –
 Short is defined as Less than a year.
 Mid is defined as 1-5 years.
 Long is defined as 5 to 10 years.

		Short	Mid	Long	Responsibility
Goal One: Design an equitable and inclusive green space that brings together VCU faculty, students, and staff with local Richmond neighborhood residents.	Objective One: Create a Friends of MPC Green before the design phase is initiated, and utilize members of the stakeholders permanently as governing the organization.				VDA, VDP
	Action One: Establish the Friend of MPC Green non-profit organization that is responsible for programs and activities that make the space more inclusive and equitable.				VCU-P, VDA, VDP, VSA, F-MPC, VOS
	Action Two: Identify members from the Office of the Student Affairs to lead the committee, council members from each surrounding Richmond neighborhood, local businesses, VCU Student Government, Staff Senate, and Faculty Senate with technical advisors from VCU Planning and Design, Facility Management and any other VCU offices.				VCU-P, VDA, VDP, VSA, F-MPC
	Objective Two: At least two years prior to planned construction beginning on the MPC Green, establish a design team that focuses on equity-based planning.				VCU-P, VDA, VDP, VSA, F-MPC, VOS, URSP
	Action One: Identify key local and regional stakeholders and constituents that will be contributing members to the design team.				F-MPC, VDP, DT
	Action Two: Hold an international design competition for the MPC Green, prior to the design phase starting – the design team and the Friends of MPC Green will judge and select the winner. The winning design will be the starting point for the final product.				VCU-P, VDP, F-MPC, DT
	Action Three: Have open and free meetings of the design team that are available and convenient to the public (all of the public) throughout the process. All comments, suggestions, and discussions will be recorded and reviewed.				VDP, DT, URSP

		Short	Mid	Long	Responsibility
Goal Two: Create a space that defines VCU for generations to come – one that is Iconic.	Objective One: Utilize the VCU Brand Center and associated school programs to develop a 'Brand Identity' for the MPC Green.				VCU-P, VDP, F-MPC, DT, VBC
	Action One: Form and establish the MPC Green ID Committee, within six months of the initiation of the design and planning phase.				VDP, F-MPC, DT, VBC, GIC
	Action Two: Within 12 months of the completion of the MPC Green, transition VCU media and associated images to the campaign designed by the MPC Green Icon Committee.				VDP, F-MPC, DT, VBC, GIC
	Action Three: Within 24 months establish a survey and evaluation of the branding and icon status of the MPC Green.				GIC, F-MPC
	Objective Two: Through the Friends of the MPC Green, develop local partnerships and volunteer pools within all stakeholder groups.				F-MPC
	Action One: Six months after the founding of the Friends of the MPC Green, establish a weekly volunteer schedule.				F-MPC
	Action Two: Appoint one position each as Volunteer and Outreach Coordinators no later than 6 months after the initiation of Planning.				VSA, F-MPC, DT
	Action Three: As the Outreach Coordinator positions are filled, they will begin meeting weekly.				VSA, F-MPC, DT
	Objective Three: With the Design from the MPC Green Design Competition complete and validated through a Just City process, initiate construction immediately.				VPD, DT, F-MPC, VCU-P, VDA
	Action One: Secure a bonded and highly rated series of contractors who utilize green, sustainable, and equitable hiring and construction processes within 12 months of the design process beginning.				VOS, URSP, VPD, DT, F-MPC, VDA
	Action Two: Establish an MPC Green VCU-based website that has a strong social media outreach goal prior to the international design competition.				VBC, GIC, VPD, DT, F-MPC
	Action Three: Minimize impacts on the student experience by phasing in the construction of the MPC Green throughout.				VDP, F-MPC, VSA, VCU-P, DT

Short	Mid	Long	Responsibility
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Goal Three: Reduce the Urban Heat Island effect related to VCU's Monroe Park Campus and hardscaping.	Objective One: Increase urban tree canopy on the VCU Monroe Park Campus from current levels within five years of construction by 50%.				VOS, URSP, VPD, DT, F-MPC, VDA
	Action One: Create a program – MPC T – Monroe Park Campus Trees –within one year of construction.				VOS, URSP, VPD, DT, F-MPC, VDA
	Action Two: Analyze opportunities across the Monroe Park Campus for tree planting. Conclude analysis within one year of construction.				VOS, VPD
	Action Three: Analyze green roofs, roof top terraces and gardens, and green walls for all future construction prior to the design phase of the MPC Green.				VOS, VPD
	Objective Two: Use reflective or heat-reducing paving products, while reducing other impervious surfaces around the Monroe Park Campus within five years of construction.				VPD, VOS, VCU-P
	Action One: As a part of the design competition, reward designs that utilize unique and porous paving materials for any hardscaping of the MPC Green.				DT, VPD, F-MPC, VOS, URSP
	Action Two: Convert or redesign all building rooftops that directly surround the MPC Green into both usable space and with green-roof technologies within 24 months of the completion of the MPC Green.				VOS, VPD
	Objective Three: For buildings on the Monroe Park Campus, transition them to at least 50% reliance on renewable energy sources and increase their sustainability ratings within five years of construction.				VPD, VOS, VCU-P, VDA
	Action One: During the design and planning phase for the MPC Green, survey existing buildings for energy consumption, viability for alternative energy conversion, solar and wind exposure, and energy reduction capacity.				VDP, VOS
	Action Two: Within 12 months of the MPC Green's completion, transition at least 25% of the Monroe Park Campus buildings to the 50% reliance on renewable energy source requirement.				VCU-P, VOS, VDP, VDA
	Action Three: Within 24 months of the MPC Green's completion re-survey all Monroe Park Campus buildings and validate all changes or improvements.				VDP, VDA

		Short	Mid	Long	Responsibility
Goal Four: Highlight the beauty, nature, history, and unity of VCU and Richmond through activities, events, installations, festivals, seminars and other routine functions.	Objective One: At least once a month, if not more often, host events that include, and are valued by, both VCU and Richmond constituents.				VSA, F-MPC
	Action One: Form an organizing sub-committee (of the Friends of MPC Green) that is the lead for Inclusive Events planning for the MPC Green within one year of construction.				VPD, VSA, F-MPC
	Action Two: Develop an annual list of desired international and American talent to come perform/speak/interact with the Richmond and VCU populations and source funding to compensate their time and abilities.				F-MPC
	Action Three: Program the MPC Green to be adaptable to many different forms of events, reward adaptive uses during the international design competition judging.				DT, F-MPC, VPD
	Objective Two: Set aside a portion of the MPC Green that allows for history, art, public events, and other similar uses – that is maintained as valuable green space when not in use.				DT, F-MPC, VPD, VSA, BIC
	Action One: Require unique memorializations, art, and other interpretations of VCU and Richmond as part of the international design competition, and reward those entrants for unique views.				DT, F-MPC, VPD, VSA
	Action Two: During construction, provide infrastructure that allows seamless transitions of space between the various uses of the objective and as directed by the design team.				DT
	Action Three: The Friends of the MPC Green will establish subcommittees that will oversee these events and installations, providing oversight, gaining funding, and developing future plans.				F-MPC

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8.0 APPENDICES

Appendix 8.1: The Just City Index: Values and Indicators

Acceptance	
Belonging	To feel accepted and comfortable in a setting despite age, gender, race, sexuality, or income
Empathy	Exercising the ability to recognize and understand the feelings and point of view of another
Inclusion	The acceptance of difference and the intention to involve diverse opinions, attitudes, and behaviors
Reconciliation	The process of finding a way to make two different ideas, facts, or points of view coexist or be true at the same time
Respect	A mutually earned and shared honoring of different voices, opinions, behaviors, and cultural expressions
Tolerance	The acceptance of difference
Trust	To promote confidence earned through the demonstration of fulfilling commitments and promises made among people and institutions
Aspiration	
Creative Innovation	Nurturing ingenuity in problem solving and intervention
Delight	Creating places, spaces, and processes that promote happiness and joy
Happiness	A state of well-being that brings about joy, contentment, or ease
Hope	The possibility of fulfillment of a desire, aspiration, outcome, or happiness
Inspiration	The result of creative thinking and collaboration that has the potential to produce new and innovative outcomes
Choice	
Diversity	An intentional state of mixed people, institutions, and cultural norms
Spontaneity	The potential to allow for the unplanned, where individuals or groups can freely self-create processes, interventions, or activities
Democracy	

Conflict	The acceptance of disagreement or opposition in pursuit of necessary change or improvement
Debate	Accepting and providing forums for the discussion of different voices and points of view in order to achieve greater inclusion in the processes and decision-making
Protest	The act of objection or disapproval in the form of public demonstration
Voice	Allowing the articulation of different points of view and cultural norms to help shape decision-making
Engagement	
Community	A group of individuals or collective groups having shared or common interests
Cooperation	The process by which individuals and collective groups work together to do something
Participation	The active engagement of individuals and community members in matters, both formal and informal, affecting social and spatial well-being
Togetherness	A sense of solidarity within and across population
Fairness	
Equality	The provision of equal or equivalent distribution, status rights, power, and amenity
Equity	The distribution of material and non-material goods in a manner that brings the greatest benefit required to any particular community
Merit	A good quality feature, process, or outcome that deserves to be praised and assigned worth or value
Transparency	The openness of process, rules, rights, and procedures through the sharing of knowledge and information
Identity	
Authenticity	The recognition of physical and social characteristics that are genuine to a particular place or culture and promote this recognition within communities
Beauty	Everyone's right to well-made, well-designed environments
Character	Features or attributes used to separate distinguishable qualities of place

Pride	A respect and admiration arising from feeling good and confident about some act, apace, place, or relationship
Spirituality	The presence of places and attitudes that support religious expression, practice, and beliefs
Vitality	An energetic, integrated community with opportunities for and support of cultural, civic, and economic involvement
Mobility	
Access	The convenient proximity to, quality of, or connectivity to basic needs, amenities, choices, and decisions
Connectivity	The physical and social networks that tie places and people together, providing contact and opportunity necessary for social well-being
Power	
Accountability	The acceptance of responsibility by individuals or collective groups to contribute to the creation and maintenance of just conditions for all
Agency	Enabling the confidence, rights, and status of individuals or groups to act on behalf of their own interests
Empowerment	To give formal authority or power to a person or collective group by promoting action or influence
Representation	A balance of community's desires, representative of its diversity, are present in the decision-making process
Resilience	
Adaptability	The ability to change or be changed in order to fit or work better in some situation or for some purpose
Durability	The ability of all social and spatial systems to remain strong and in good condition over a long period of time
Sustainability	The quality of not being harmful to the social or spatial well-being or depleting resources, and thereby supporting long-term social and spatial balance
Rights	
Freedom	The ability to act or speak freely without threat of external restriction
Knowledge	The ability to gain information or awareness through education and/or experience

Ownership	The ability to have stake in the property, process, outcome, and other assets
Welfare	
Healthiness	A state of complete physical, mental, and social well-being that supports the absence of disease or infirmity
Prosperity	The condition of being successful or thriving in terms of social, economic, civic, cultural, and health indicators
Protection	The state of being kept from harm or loss in social or spatial conditions
Safety	An environment that minimizes physical and emotional vulnerability and threats to well-being
Security	Social and spatial conditions that support the freedom from danger, exclusion, and harm

Appendix 8.2: Demographic Data

Table 4: US, Richmond and Monroe Park Area Census Tract Demographics by Age, Sex, and Adulthood (Full Table)

Data as of 2010	United States	Richmond	Richmond Virginia Census Tracts near Study Area							
			302	305	402	403	404	411	412	413
Geographic Area Name										
Total Population	303,965,272	201,828	2,143	3,272	2,588	3,309	3,577	3,921	1,187	3,227
Males In Total Population	149,398,724	95,592	975	1,835	998	1,086	1,452	2,317	613	1,497
Percentage Male of Population	49.1%	47.4%	45.5%	56.1%	38.6%	32.8%	40.6%	59.1%	51.6%	46.4%
Females In Total Population	154,566,548	106,236	1,168	1,437	1,590	2,223	2,125	1,604	574	1,730
Percentage Female of Population	50.9%	52.6%	54.5%	43.9%	61.4%	67.2%	59.4%	40.9%	48.4%	53.6%
Under 5 YO	20,131,420	13,023	25	151	36	0	69	200	31	129
% Under 5 YO	6.6%	6.5%	1.2%	4.6%	1.4%	0.0%	1.9%	5.1%	2.6%	4.0%
5-9 YO	20,116,654	11,189	2	52	81	3	0	91	0	211
% 5-9 YO	6.6%	5.5%	0.1%	1.6%	3.1%	0.1%	0.0%	2.3%	0.0%	6.5%
10-14 YO	20,643,730	9,070	18	0	7	3	33	15	10	154
%10-14 YO	6.8%	4.5%	0.8%	0.0%	0.3%	0.1%	0.9%	0.4%	0.8%	4.8%
15-19 YO	22,132,691	16,774	592	367	203	2,452	565	144	67	276
% 15-19 YO	7.3%	8.3%	27.6%	11.2%	7.8%	74.1%	15.8%	3.7%	5.6%	8.6%
20-24 YO	21,214,118	24,309	494	1,318	1,203	706	1,325	1,274	544	624
% 20-24 YO	7.0%	12.0%	23.1%	40.3%	46.5%	21.3%	27.0%	32.5%	45.8%	19.3%
25-34 YO	40,191,013	33,131	438	647	350	63	403	1,193	146	320
% 25-34 YO	13.2%	16.4%	20.4%	19.8%	13.5%	1.9%	11.3%	30.4%	12.3%	9.9%
35-44 YO	42,206,141	24,671	229	194	206	5	151	382	149	365
% 35-44 YO	13.9%	12.2%	10.7%	5.9%	8.0%	0.2%	4.2%	9.7%	12.6%	11.3%
45-54 YO	44,302,697	26,114	186	213	213	3	214	215	117	319

% 45-54 YO	14.6%	12.9%	8.7%	6.5%	8.2%	0.1%	6.0%	5.5%	9.9%	9.9%
55-59 YO	18,817,728	11,721	62	159	91	21	184	70	70	187
% 55-59 YO	6.20%	5.80%	2.90%	4.90%	3.50%	0.60%	5.10%	1.80%	5.90%	5.80%
60-64 YO	15,459,667	8,991	33	120	54	0	209	118	23	158
% 60-64 YO	5.10%	4.50%	1.50%	3.70%	2.10%	0%	5.80%	3%	1.90%	4.90%
65-74 YO	20,493,467	11,353	61	40	78	53	215	69	14	171
% 65-74 YO	6.70%	5.60%	2.80%	1.20%	3%	1.60%	6%	1.80%	1.20%	5.30%
75-84 YO	13,079,803	7,942	3	11	38	0	167	106	16	193
% 75-84 YO	4.30%	3.90%	0.10%	0.30%	1.50%	0%	4.70%	2.70%	1.30%	6%
85 YO and Up	5,176,143	3,540	0	0	28	0	42	44	0	120
% 85 YO and Up	1.70%	1.80%	0%	0%	1.10%	0%	1.20%	1.10%	0%	3.70%
Median Age in Location	36.9	32.6	24.6	24.1	23.1	19.1	23.6	25.6	23.7	28.7
Total 18 YO and Older	229,932,155	162,228	2,068	3,069	2,408	3,261	3,450	3,601	1,146	2,607
% 18 YO and Older	75.60%	80.40%	96.50%	93.80%	93%	98.50%	96.40%	91.80%	96.50%	80.80%
Total 21 YO and Older	216,369,649	146,098	1,423	2,366	2,034	591	2,389	3,241	819	2,280
% 21 YO and Older	71.20%	72.40%	66.40%	72.30%	78.60%	17.90%	66.80%	82.70%	69%	70.70%
Total 62 YO and Older	47,432,207	27,889	88	114	149	53	613	282	35	609
% 62 YO and Older	15.60%	13.80%	4.10%	3.50%	5.80%	1.60%	17.10%	7.20%	2.90%	18.90%

Appendix 8.3: Pre-Planning Study Survey

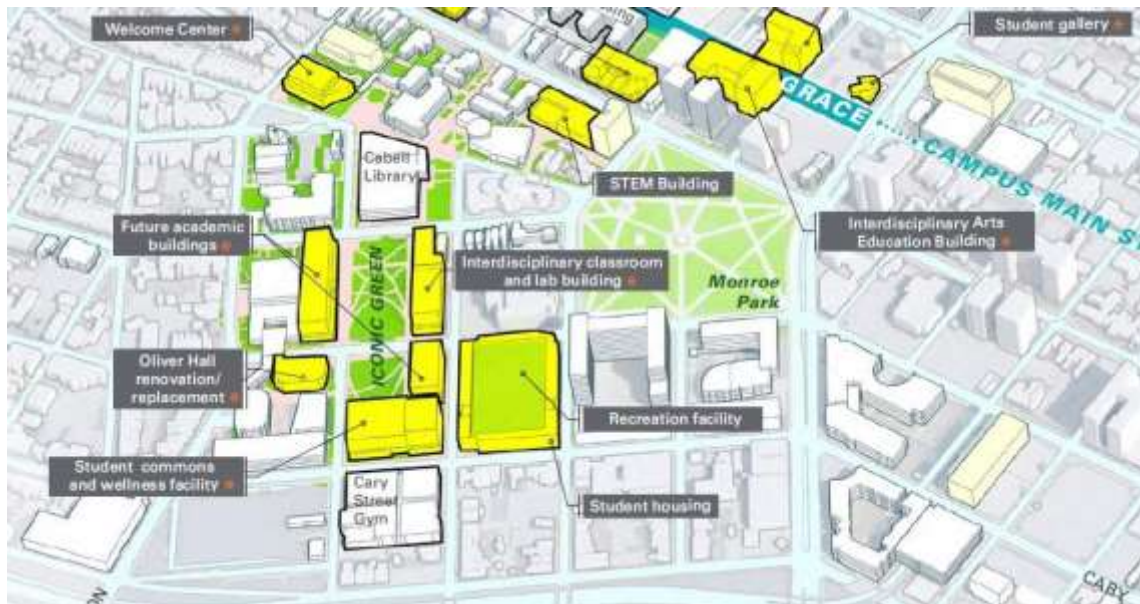
VCU Monroe Park Campus Iconic Green Pre-Planning Study

The ONE VCU Master Plan refers to two 'Iconic Greens', one for each main campus. The Master Plan labels the 'Iconic Green' explicitly as a 'nexus of programmatic synergies,' essentially being the hub of many diverse activities on each campus. In order to achieve the synergy necessary for the space before breaking ground, a consideration for the surrounding buildings, neighborhoods, and the potential users will be done – as well as their potential positive or negative impacts.

This survey will assist in understanding the student, faculty, and staff requirements for the future space allowing for a more inclusive design suggestion to the Planning and Design Office.

* Required

OneVCU Master Plan Image - "Iconic Green" for the Monroe Park Campus



1. Are you a...*
Mark only one oval.
 - VCU Student
 - VCU Faculty Member
 - VCU Staff Member
 - City of Richmond Resident
 - Other

1. How old are you?

Mark only one oval.

- Less than 18 years old
- 18 to 25 years old
- 26 to 50 years old
- 50 years and older
- Prefer not to say

2. Do you stop on the VCU Campus to mentally, spiritually, or physically recharge? *

Mark only one oval.

- Yes
- No

3. How often do you walk or bike across the VCU Monroe Park Campus?

Mark only one oval.

- 5 or more times a week
- 3 to 4 times a week
- 1 or 2 times a week
- Rarely or never

4. Do you stop to recharge outside at VCU in nature?

Mark only one oval.

- Yes
- No
- Maybe

5. Do you prefer private or public outdoor spaces for your stop on the VCU campus?

Mark only one oval.

- Private - appears safe
- Public - clearly safe

6. How do you use urban parks? *

Check all that apply.

- Relaxation
- Fresh Air
- Active Sports (running, football, etc.)
- Studying or work space

Meeting friends or socially

Other: _____

1. Have you ever felt unsafe on a VCU Campus green space or park? *

Mark only one oval.

Yes

No

2. How do dark outdoor spaces make you feel? *

Mark only one oval.

Uncomfortable

Comfortable

3. Do you find the VCU Campus to be equitably accessible to you and everyone you know?

Mark only one oval.

Not accessible

Accessible

4. Do you have any comments or suggestions for the 'Iconic Green' design?

For questions or comments related to this survey:

Please contact Nicholas Jancaitis at jancaitis@vcu.edu.

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Appendix 8.4: Case Study Results

Site:					
Rating Category:	The Lawn	Drillfield	University Yard	The Oval	Monarch Fountain
Safety	4	4	2	3	3
Iconic Level	5	5	4	2	3
Lighting	3	4	2	3	3
Plant Variety	3	5	2	2	3
Paving Materials	2	3	3	3	4
Shade	3	4	4	3	3
Seating	2	2	3	1	4
Building Connections	4	3	4	0	4
Link to Local Community	3	3	4	1	2
Sustainability	2	3	3	3	2

Totals:	31	36	31	21	31
Size:	4.88 Acres	20.73 Acres	1.52 Acres	3.63 Acres	6.83 Acres
Perimeter:	2,300 ft	3,770 ft	1,040 ft	1600 ft	2400 ft