

City of Ketchum

March 6, 2023

Mayor Bradshaw and City Councilors City of Ketchum Ketchum, Idaho

Mayor Bradshaw and City Councilors:

Recommendation to approve Purchase Order #23070 with Holst Architecture for Professional Services related to Feasibility Analysis for the Development of Community Housing on Publicly Owned Properties

Recommendation and Summary

The city competitively solicited proposals from architectural firms to complete a development feasibility analysis of community housing on existing publicly owned properties (Lift Tower Lodge, Leadville parking lot, south and north YMCA parking lots, and recycling lot). A selection committee was formed to review the proposals consisting of city staff, URA Executive Director, CEO of the YMCA and Chair of the Housing Authority Board. The committee scored all written proposals and then interviewed the top two ranked firms. The committee was unanimous in recommending Holst Architecture.

"I move to approve Purchase Order #23070 with Holst Architects."

Reasons for recommendation are as follows:

- The approved Housing Action Plan and FY23 budget outlined this as a priority project.
- This analysis will inform the range of total development potential on these properties and will recommend a sequencing order to inform future development request for proposals.
- This process will also allow for stakeholders and the public to provide feedback on the development of these properties similar to the recent process utilized by the KURA on the Washington Street lot.

Introduction & History

This project aligns with the stated goals in the Housing Action Plan:

- Goal 1 Create + Preserve Housing
 - Action 2: Develop new housing construction pipeline:
 - Create a 10-year pipeline.
 - o Support development of workforce housing at KURA's 1st and Washington site.
 - Explore joint master plan housing development opportunities on city parcels near the YMCA (in keeping with the parking agreement) and city-owned Leadville parcel.

Action 4. Preserve and improve affordable housing at Lift Tower Lodge.

Sustainability Impact

Local housing choices enable local workers to live close to where they work and reduce greenhouse gases via commuting trips.

Financial Requirement/Impact

The purchase order request outlines a not-to-exceed amount of \$57,500 for the project. The FY23 Housing Action Plan budget allocated \$25,000 for the project. Adequate funds exist in the contingency account to fund the remaining portion.

Attachments

Scope of work
Purchase Order
Proposal from RFP process
Similar past projects completed by Holst

JADE RILEY CITY ADMINISTRATOR CITY OF KETCHUM 191 5TH STREET WEST KETCHUM, ID 83340 03.01.2023

RE: PROPOSAL FOR SERVICES: FEASIBILITY ANALYSIS FOR THE DEVELOPMENT OF COMMUNITY HOUSING ON PUBLICLY OWNED PROPERTIES

Jade and City Council members,

Thank you for the opportunity to provide this proposal for Architectural Services. We are pleased to provide comprehensive and timely services in support of the important targets in the Ketchum Housing Action Plan. We look forward to working with your team.

123 NE 3RD AVE. SUITE 310 PORTLAND, OR 97232

HOLSTARC.COM

PROJECT SUMMARY

Holst will provide a land use feasibility analysis for the 5 properties identified in the RFP and 1-2 additional sites identified during the February 17, 2023 selection committee workshop. We will collaborate with city staff to identify opportunities, constraints, and optimal configurations for development at each property.

We will participate in and support the City's public outreach effort, providing housing expertise as well as public engagement presentations in both virtual and in person formats.

SCOPE OF SERVICES

COMMUNITY ENGAGEMENT EVENTS

- Our team will be a resource on housing and inclusive design for the City-led effort.
- We will participate in virtual outreach and anticipate 2-3
 virtual public engagement events where we are presenting or
 facilitating a conversation with the community or focus
 group.
- We anticipate approximately 2 in person events to present feasibility study progress as part of the community engagement effort.

FEASIBILITY STUDIES FOR 5-7 CITY OWNED PARCELS

- Land use and zoning code analysis for each site.
- Review of applicable regulatory requirements, easements, and utilities.
- Analyze local and site-specific information, such as adjacencies, orientation, view sheds, and access.
- Exploration of massing options showing yield potential, FAR, site layout strategies, and parking counts.
- Work with stakeholders to evaluate and refine feasibility concepts.
- Create a final presentation package of site diagrams, massing options, recommendations, and metrics for each site.

SCHEDULE

March 2023

- Analyze site due diligence information and community engagement survey feedback
- o Provide a summary document for each study area to be used in community outreach
- Develop a zoning analysis and initial feasibility study for each site
- o Review initial feasibility studies with Stakeholders

April 2023

- Refine feasibility studies based on stakeholder feedback and community engagement process information
- Create initial feasibility study package for public release
- Community engagement events or focus group involvement

May 2023

- Refine feasibility studies based on stakeholder feedback and community engagement process information
- Meet with stakeholders to review further development of feasibility studies
- Community engagement events or focus group involvement
- Deliver a final feasibility presentation package for City use and public release

FEE STRUCTURE

Our proposed fee for the scope outlined is lump sum and hourly NTE, as indicated in the table below. Holst will invoice monthly based on work complete. Fees below include all reimbursable expenses for travel. See Terms and Conditions for additional information.

SCOPE OF SERVICES		
COMMUNITY ENGAGEMENT EVENTS	HOURLY NTE \$18,500	
FEASIBILITY STUDIES FOR 5-7 PARCELS [\$5,000/SITE]	\$35,000	
CIVIL ENGINEERING CONSULTING	HOURLY NTE \$4,000	
SUBTOTAL	\$57,500	

DUE DILIGENGE INFORMATION	
PROPERTY SURVEYS AS REQUIRED	TBD
(GALENA ENGINEERING)	

EXCLUSIONS AND CONDITIONS OF DESIGN

- Holst and a Civil subconsultant team will work from survey documents provided by the City of Ketchum and subcontract with Galena Engineering Inc. for any outstanding survey information.
- MEP and Structural Engineering services are not included.
- Landscape design services are not included.
- Traffic studies and coordination are not included.
- Permits, jurisdictional and system development fees are not included.
- Environmental and geotechnical reports are not included.
- Outsourced renderings if requested by Owner are not included.
- Land Use entitlement processes is not included.

EXHIBITS

In support of this proposal please find the attached Sample Feasibility Study exhibits. Each report was tailored to the clients' specific needs for site evaluation.

- Exhibit A 600W Front Street Feasibility Studies
- Exhibit B Dekum Court Massing Study
- Exhibit C 3000 Powell Exec. Summary + Feasibility Design
- Exhibit D Metro Barbur North and South Site Design Studies

TERMS AND CONDITIONS

This proposal is valid for 30 days commencing on the date of this document. Reimbursable expenses such as taxes, application/permit fees, travel, printing, and consultant fees shall be invoiced at cost plus 10%. Reimbursable expenses for travel are included. Taxes include all state and local assessments, including the Oregon Corporate Activities Tax outlined under Oregon Laws 2019, chapters 122 and 579. All invoices will include a reimbursable expense using Holst's effective tax rate of 0.4% on all services, reimbursable expenses, and reimbursable consultant costs billed.

Invoices shall be payable within 30 days of the invoice date. Invoices not paid within 30 days of the invoice date shall be subject to interest at the rate of 1.5 percent per month. Invoices not paid within 60 days of the invoice date shall be considered substantial nonperformance on the part of the Owner and cause for suspension of performance of services or termination of services. Holst shall give seven days' written notice to the Owner prior to suspension or termination of services. In the event of suspension of services, Holst shall have no liability to the Owner for delay or damage caused because of such suspension of services. Before resuming services, Holst shall be paid all sums due prior to suspension, including interest accrued. If the project is suspended for more than 30 consecutive days, Holst shall be compensated for actual expenses incurred in the interruption and resumption of services, if any. Holst's fees for the remaining services and the time schedules shall be equitably adjusted. Owner may cancel this engagement upon written notice to Holst if Owner pays all fees for work completed and reimbursables incurred through the date of termination.

Holst shall be deemed the authors and owners of our respective Instruments of Service, including the Drawings and Specifications, and shall retain all common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights of Holst. In the event the Owner uses the Instruments of Service without retaining the authors of the Instruments of Service, the Owner releases Holst from all claims and causes of action arising from such uses. The Owner, to the extent permitted by law, further agrees to indemnify and hold harmless Holst from all costs and expenses, including the cost of defense, related to claims and causes of action asserted by any third person or entity to the extent such costs and expenses arise from the Owner's use of the Instruments of Service.

If any action is brought to enforce the terms of this Agreement, the prevailing party will be entitled to recover its reasonable attorneys' fees, costs, and expenses from the other party, in addition to any other relief to which the prevailing party may be entitled.

HOURLY RATES

Professional services shall be billed on an hourly basis according to the Rate Schedule currently in effect. The current Holst Hourly Rates are attached to this proposal. Holst Architecture reserves the right to adjust hourly rates on an annual basis.

AGREEMENT

If this proposal meets with your approval, please sign a copy of this proposal that will serve as your authorization for Holst to proceed with work.

Accepted by Owner:

CITY OF KETCHUM

DATE

If you have any questions or require additional information, please contact me directly.

Sincerely,

RENÉE STRAND, AIA HOLST ARCHITECTURE

2023 RATE SCHEDULE

Work performed by Holst Architecture will be billed monthly according to the current rate schedule in effect at the time of the work performed.

PERSONNEL CHARGES

123 NE 3 RD AVE.
SUITE 310
PORTLAND, OR
97232

HOLSTARC.COM

Principal	\$220.00/hour
Project Manager	\$180.00/hour
Project Designer	\$180.00/hour
Project Architect	\$180.00/hour
BIM Coordinator	\$180.00/hour
Inclusive Design Facilitator	\$150.00/hour
Architect / Designer	\$130.00/hour
Project Accountant	\$180.00/hour



CITY OF KETCHUM

PO BOX 2315 * 191 5TH ST. * KETCHUM, ID 83340 Administration 208-726-3841 (fax) 208-726-8234

PURCHASE ORDER BUDGETED ITEM? ___Yes ___No

PURCHASE ORDER - NUMBER: 23070

To: Ship to:

5975 HOLST 123 NE 3RD AVE PORTLAND OR 97232

CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340

P. O. Date	Created By	Requested By	Department	Req Number	Terms
03/02/2023	Shellie	Shellie		0	

Quantity	Description	Unit Price	Total
1.00	FEASIBILITY ANALYSIS FOR COMMUNITY H 54-4410-4200	57,500.00	57,500.00
	SHIPPING &	& HANDLING	0.00
	TOTAL P	O AMOUNT	57,500.00

Authorized S	Signature
--------------	-----------

CITY OF KETCHUM, IDAHO

Feasibility Analysis for the Development of Community Housing on Publicly-owned Properties

November 18, 2022



ALY SWINDLEY
CITY OF KETCHUM

Dear Aly and members of the selection committee,

Our team is excited about the opportunity to be your partner in the feasibility analysis for Ketchum's development of community housing. We are inspired by the Ketchum Housing Action Plan and the City's commitment to addressing the shortage of affordable housing for local residents.

The Right Fit: A women-owned firm with a staff of over 50, Holst's designers and architects provide the right balance of scale and specificity. We design every project from scratch and tailor our details to its specific conditions, balancing our experience and capacity to handle early concepts and feasibility analysis, with the foresight to predict and mitigate potential pitfalls that could impact your five sites as you embark on the design and construction of workforce housing.

Your project comes at a perfect time for Holst, as several of our projects that involve the proposed team are at stages where we can dedicate our efforts to you for the duration of the feasibility analysis without compromise.

Affordable Housing Experts: Holst has been a leader in creating some of the most innovative multi-family housing for the last two decades. From groundbreaking condominium projects to multi-family housing that has raised the bar, we use our specific knowledge to balance the typically narrow margins of this typology, ensuring we meet your budget and schedule while squeezing every inch of design out of each opportunity. Because Holst works with both market-rate and affordable housing developers on a regular basis, we can leverage our varied experience to bring together the best of both worlds, making the ordinary extraordinary. We have designed and built over 1,100 units of affordable and student housing over the past 10 years, with nearly 1,000 more currently in design or under construction.

Regional Design: Holst has been working in Idaho for the past eight years. We have delivered 870 units of much needed housing to Boise and the surrounding Treasure Valley, and have helped shape new neighborhoods across the state and region. Traveling to Idaho has become part of our regular workflow and something our team enjoys. We're excited to explore the natural beauty of Ketchum as we get to know your community and project sites.

Sincerely,

Renée Strand, Principal in Charge 503.233.9856 | rstrand@holstarc.com

123 NE 3RD AVENUE SUITE 310 PORTLAND, OR 97232

HOLSTARC.COM

APPROACH AND TIMELINE











KETCHUM SITES

- 1. YMCA North Lot
- 2. YMCA South Lot
- 3. Lewis Street Lot
- 4. 6th & Leadville Lot
- 5. Lift Tower Lodge

ADDRESSING AN URGENT NEED

We understand that the work of this feasibility analysis is part of a larger, urgent need to honor and maintain the soul of Ketchum—its community. To do that, we need to address the massive shortage of affordable homes for residents. Knowing that housing is influenced by multiple factors, including social, land-use, economic, and population changes, we will engage in this feasibility analysis as a true partner and collaborator in the nuanced discovery process and distillation of solutions.

OUR PATH FORWARD

To get there, we start by centering design justice and fostering collaborative relationships with the entire team. We value the wide variety of perspectives your staff, subject matter experts, and community members will provide throughout our work together. With sustainability and equity at the forefront of our process, we are confident that we can create a feasibility

study that will be an invaluable asset to your team as you embark on developing five sites with housing to support Ketchum residents.

Knowing that this feasibility analysis will help chart your path forward into the design and construction process, it is our job to ensure that we provide you accurate data to understand costs and implications of each decision. We always begin with the end in mind and will work with the City of Ketchum each step of the way, navigating the project toward the best possible outcome within the available means.

"[...] the pursuit of accessible community housing represents more than a roof over community members' heads – it's a quest to maintain the "soul" of the community"

- KETCHUM HOUSING ACTION PLAN

COMMUNITY ENGAGEMENT

We are so glad that your Housing Action Plan underscores the importance of truly partnering with community members to engage, learn, and act together. We align with you on this and believe that the feasibility analysis won't be a success unless it centers your people and community—creating opportunities for both to thrive.

Community engagement is at the core of our work and our culture at Holst. On our team, we have included Hannah Silver as Inclusive Design Facilitator. This is her full-time role at Holst, and is an investment in our conscientious design education and intentional goal-setting—and we're even more excited to share her wealth of knowledge with clients and community.

PROJECT TIMELINE

The timeline outlined in your RFP aligns with our understanding of the work and our capacity to deliver this comprehensive feasibility study.

In the Housing Action Plan, you stated that agreement on – and use of – common data that is updated regularly to clarify communication is particularly important. We'll start the process by digging into community studies and doing a deep dive into the City of Ketchum Comprehensive Plan and codes to make sure that we're all working from the same foundation.

During the month of January, we will kick off a robust and engaging process by conducting thorough research and working directly with Ketchum's stakeholders and community members to start finding the big ideas and common themes we all believe in. When done right, design can unify people behind a common goal. Doing this requires taking all the disparate needs, individual desires, conflicting opinions, and varied perspectives as raw ingredients that we distill into a unifying feasibility study that transcends differences and binds us as a community.

In February and March, we will continue our analysis of the opportunities on the five sites. On the pages that follow, we have broken down our feasibility analysis process into individual steps and deliverables. Although the sites could be studied concurrently or consecutively within that time period, we recommend performing the steps for all sites concurrently to better leverage and cross reference data.

CITY OF KETCHUM'S SIX PRINCIPLES TO APPROACH THE PROJECT

- Housing solutions must be cross sectional and layered to have real impact.
- 2. Coordination around a shared vision is imperative.
- Ketchum's housing solutions should encourage and be consistent with regional collaboration efforts while also being specific and actionable for Ketchum.
- 4. A healthy, vibrant community relies on local housing for a range of income levels.
- Communication, collaboration and accountability build trust and a more activated, informed, and supportive community.
- 6. Working to create effective housing solutions is a continual, iterative process.

STEP 1: UNDERSTAND THE SITE, CONTEXT, & COMMUNITY NEEDS



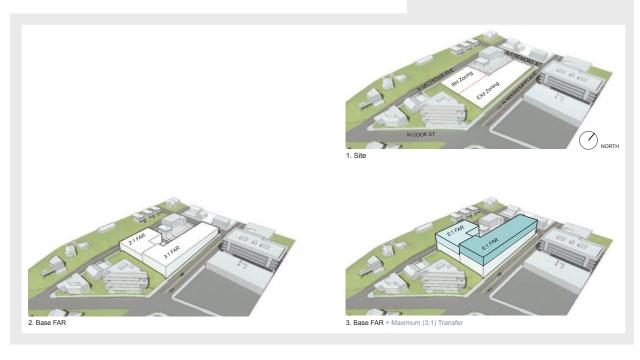
WHAT WE DO IN STEP 1:

- Review all applicable community studies and the Ketchum Comprehensive Plan.
- Community engagement—our team will be a resource on affordable housing and inclusive design for the City-led effort.
- Analyze local and site-specific information, such as adjacencies, orientation, and access.

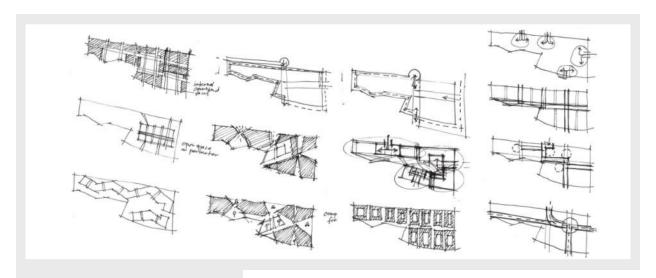
STEP 2: PERFORM CODE ANALYSIS

WHAT WE DO IN STEP 2:

- Thorough land use and zoning code analysis.
- Review of applicable regulatory requirements, easements, and utilities.



STEP 3: EXPLORE SITE OPPORTUNITIES



WHAT WE DO IN STEP 3:

Conduct yield studies, explore massing options, FAR, site layout, and parking strategies.

STEP 4: PRESENT FEASIBILITY OPTIONS

WHAT WE DO IN STEP 4:

- Work with stakeholders to evaluate and refine feasibility concepts.
- Create a final presentation package of concept diagrams and metrics for each site.



ABOUT HOLST



WHO WE ARE

Holst is an award-winning, women-owned architecture firm of more than 50 professionals based in Portland, Oregon, and led by partners Renée Strand, Kim Wilson, Kevin Valk, and Dave Otte. Our reputation in the community and among our peers is founded on a process of inquiry and iteration that instills design excellence from the big idea through the execution of each crafted detail.

For 30 years, a clearly defined value system and an open and collaborative approach has governed our design methodology. We design for experience, always aiming to turn the ordinary into extraordinary. From conception to completion, we oversee all aspects of the planning, design, and construction processes to ensure that our projects are functional, efficient, financially responsible, and a source of inspiration.

We believe that everyone deserves good design, and we strive to make a social impact with every space we create. We create healthy, functional spaces built for all people, built to last, supportive of social justice, and respectful of the environment. We engage communities and expertise beyond our own to strengthen and improve our design process. We are easy to work with because of our willingness to learn; our openness enables innovation in all facets of our work.

Holst's projects for commercial, residential, education, hospitality, and nonprofit organizations have been widely published and recognized with over 60 design awards in the last 10 years. In 2020, we were named the AIA Northwest and Pacific Region's Firm of the Year for outstanding contributions to the profession of architecture through our commitment to excellence in design and elevating the quality of the built environment.

123 NE 3RD AVE. SUITE 310 PORTLAND, OR 97232

HOLSTARC.COM

CERTIFED WBE / DBE OR: #10644 WA: #604480965

IDAHO BUSINESS LICENSE: 4534612

IDAHO ARCHITECTURE LICENSE: AR-986162



RENÉE STRAND

PRINCIPAL IN CHARGE HOLST ARCHITECTURE | PRINCIPAL / OWNER

BIO

As an Owner, Principal, and Managing Director at Holst, Renée's leadership and vision have been instrumental to maintaining Holst's high standards through significant growth, while tirelessly advocating for equity in architecture.

Renée started her career working in custom residential and luxury resort projects and she now regularly works in affordable housing—enabling her to bring the highest level of quality, craftsmanship and style to her current work. Renée's extensive portfolio includes mixed-use housing, higher education, hospitality, retail, complex interior renovations, and single-family residences. An exceptional communicator, she brings an ability to clarify sophisticated design strategies to her clients and build consensus. These skills have also served her well in navigating permitting processes in more than sixty cities and counties nationwide.

An active member of her community, Renée has volunteered for the Caldera Arts Program, Architecture Foundation of Oregon's Architects in Schools program, Portland Institute of Contemporary Art (PICA), and Habitat for Humanity, in addition to providing pro bono design work to local nonprofits Last year, Renée co-taught a University of Oregon School of Architecture housing studio that focused on affordable housing.

SELECTED PROJECTS

Housing

Human Solutions The Aurora Affordable Housing | Portland, OR

CDP Julia West Permanent Supportive Housing | Portland, OR

Roundhouse The Avens Apartments | Boise, ID

Roundhouse Hearth Apartments | Boise, ID

Roundhouse The Clara Apartments | Eagle, ID

Roundhouse The Fowler Apartments | Boise, ID

Visum Development Vanguard Apartments | Boise, ID

Home Forward Dekum Court Feasibility Study | Portland, OR

Coho Collaborative Passive House Multi-family | Seattle, WA

Archipelago Olympia Place Student Housing | Amherst, MA

Fore Property Northpointe Apartments | Portland, OR

EDUCATION

Master of Architecture, University of Oregon, 2004

Bachelor of Science in Architecture, University of Michigan, 2000

CERTIFICATIONS

Architect | Idaho, Oregon, Washington, and Montana

National Council of Architectural Registration Boards (NCARB) Certified

LEED Accredited Professional

AFFILIATIONS, AWARDS & APPOINTMENTS

Adjunct Faculty, University of Oregon, 2021 - present

Holst American Institute of Architects (AIA) Northwest & Pacific Region (NWPR) Firm of the Year, 2020

National Organization of Minority Architects (NOMA) Portland Chapter

American Institute of Architects (AIA)

Women In Architecture, presenter, 2021

Architects in Schools, 2004 - present

University of Oregon, Guest Critic, 2005 - present

American Institute of Architects (AIA) San Antonio Awards, Jury Member, 2017

Oregon Daily Journal of Commerce, Woman of Vision, 2016

Marysville School, Advisory Council, 2006 - 2015

Kendall College of Art & Design, Adjunct Faculty, 2005 - 2006

University of Oregon, Graduate Teaching Fellow, 2002



LEE SHRADAR

PROJECT DESIGNER HOLST ARCHITECTURE | SENIOR ASSOCIATE

BIO

Lee joined Holst in 2005 and has been a key member of the Holst team, with his broad experience, enabling him to successfully contribute to every project phase. His diverse design portfolio includes commercial office, multi-family, educational, and single-family residential markets. From the initial conception of projects through design review, permitting, pricing, and construction, Lee is involved at every stage of design and project coordination.

From actively listening to his clients' visions from feasibility through construction administration, Lee's strong communication skills are invaluable. His proficiency with 3D visualization, conceptualization, and code and constructibility issues enable design concepts and creative solutions to be implemented efficiently. Throughout a project, he excels at consultant coordination, working collaboratively with consultants and subs to create efficient processes and the smartest solutions.

Lee focuses on front-end design and establishes concepts and guidelines that flow throughout the subsequent phases. Due to his extensive experience with developer projects, Lee deeply understands the necessary balance between budgets, design decisions, and constructibility issues, all while maintaining a clear architectural expression.

SELECTED PROJECTS

Housing

Roundhouse Hearth Apartments | Boise, ID

Roundhouse The Clara Apartments | Eagle, ID

Roundhouse The Avens Apartments | Boise, ID

Killian Pacific Ninebark Apartments | Washougal, WA

Fore Property Northpointe Apartments | Portland, OR

Fore Property Revere Apartments | Portland, OR

Archipelago One East Pleasant Student Housing | Amherst, MA

Archipelago Kendrick Place Student Housing | Amherst, MA

Archipelago Olympia Place Student Housing | Amherst, MA

LL Hawkins Apartments | Portland, OR

Sawyer's Row Apartments | Portland, OR

EDUCATION

Bachelor of Architecture, University of Kansas, 2005

CERTIFICATIONS

LEED Accredited Professional

AFFILIATIONS & APPOINTMENTS

University of Oregon School of Architecture Guest Critic, 2005 - 2022



HANNAH SILVER

INCLUSIVE DESIGN FACILITATOR HOLST ARCHITECTURE

BIO

With a background in architecture and urban planning, Hannah Silver brings a broad understanding of health, equity, and sustainable design best practices to her engaging community outreach and workshop facilitation. Hannah is committed to centering the experiences of spatially marginalized people, highlighting intersectional needs, and emphasizing practical strategies for making good design happen.

Most recently, Hannah worked in consulting as the founder of Informal / Function (I/F), providing accessible and engaging education about inclusive design to building project teams.

EDUCATION

Master of Urban and Regional Planning, Portland State University, 2015

Bachelor of Science in Architecture, University of Virginia, 2012

CERTIFICATIONS

WELL Accredited Professional

LEED Accredited Professional

Fitwel Ambassador

EcoDistricts Accredited Professional

SELECTED PROJECTS

Community Engagement, Inclusive Design Consultation & Design Team Education 73Foster Affordable Housing | Portland, OR

East County Flagship Library | Gresham OR

Holgate Library Renovation with Bora Architects and Colloqate *

Midland Library Renovation with Bora Architects and Collogate *

Portland State University's Science Building 1 Renovation *

8 Ways to Design for Disabled Joy, independent research project & outreach *

Fat-Friendly Design with AllGo, AIA / IIDA of Oregon trainings and informational video *

WITH Sacramento project with PSU's Center for Public Interest Design, conducted small-scale engagement with formerly unhoused individuals *

^{*} Denotes work done while employed at other firms

ABOUT T-O ENGINEERING



FIRM PROFILE

T-O Engineers is a leading Northwest consulting, engineering and planning firm providing expertise in civil engineering, surveying, landscape architecture and construction administrative services. They have experience working with local, state and federal agencies as well as private companies and individuals. They strive to provide their clients with responsive service and build long-term relationships to help them achieve their project goals.

T-O proudly employs more than 180 professionals and has built the company around specialized engineers and their supporting staff. Over the past 10 years, T-O has performed survey and engineering services in collaboration with the proposed team. Projects with Holst include The Fowler, The Avens, and Hearth apartment buildings in downtown Boise.

For more than 30 years, T-O Engineers has provided civil engineering and surveying services for land development clients, building their reputation as a responsive firm with the ability to tackle the toughest issues from foothills to floodways.

T-O has completed numerous affordable housing projects in many configurations ranging from single family subdivisions, apartment complexes, and cottage-style facilities. From large planned communities down to smaller infill sites with complex entitlement issues, their local experience with city codes and planning ordinances, as well as their relationships with regulatory agencies allows them to keep projects moving smoothly through the development process.

T-O Engineers' knowledge, experience, and attention to detail will be invaluble when it comes to studying Ketchum's five sites.

T-O OFFICES:
BOISE
CHEYENNE
CODY
COEUR D'ALENE
HEBER CITY
MERIDIAN
NAMPA
SPOKANE

WENATCHEE

TO-ENGINEERS.COM



BRENDAN DANIELS

CIVIL ENGINEERING PROJECT MANAGER T-O ENGINEERS

BIO

Brendon is a Project Manager with over 10 years of experience in local agency coordination, design, and construction engineering and inspection. He has been involved in a large variety of projects across the public and private sectors. Brendon has a solid foundation as a design engineer; utilizing his knowledge and innovation from the private sector to help municipalities meet both their short term design needs and long term planning for facilities.

Brendon has repeatedly worked with clients who appreciate his responsiveness and attention to detail. He has been involved in successful design projects with extensive analysis of vehicle movements and large site layouts. Many of Brendon's projects include large design teams with Architectural, structural, and MEP teams where T-O works as both a prime and subconsultant. He is well versed in the coordination and required to make these multi-firm projects efficient and successful.

SELECTED PROJECTS

The Avens Mixed-Use Development | Boise, ID [with Holst]

In coordination with ACHD, ITD, CCDC and City of Boise, T-O provided topographic survey, site design, grading, stormwater design with green infrastructure storage, utility connections, right of way detailing and well fulldesign services for the new 28th Street improvements.

The Fowler Mixed-Use Development | Boise, ID [with Holst]

In coordination with ACHD, ITD, CCDC and City of Boise, T-O provided topographic survey, site design, grading, stormwater design with green infrastructure storage, utility connections and frontage improvements.

Hearth Mixed-Use Development | Boise, ID [with Holst]

In coordination with ACHD, ITD, CCDC and City of Boise, T-O provided topographic survey, site design, grading, stormwater design with green infrastructure storage, utility connections and frontage improvements.

11th and Lee Mixed Use | Boise, ID

Beginning in March 2022, this project includes topographic survey, site design, grading, utility connections and stormwater design utilizing permeable paver systems. It also includes inter-agency coordination with CCDC on the development of enhanced pedestrian / bicycle facilities along the project frontage.

HOPE Plaza Apartments | Caldwell, ID

Developed by New Beginnings Housing, T-O provided civil design including water, sewer main line extensions, multi-phase site grading and drainage design. The project required design elements dealing with high ground water impacting both grading and stormwater options.

EDUCATION

Gonzaga University Bachelor of Science, Civil Engineering

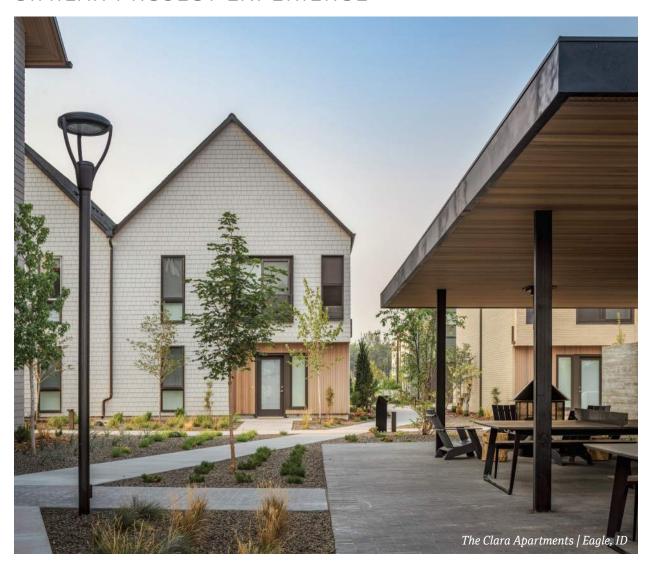
CERTIFICATIONS

Licensed Professional Engineer

ID #17135

NV #024214

SIMILAR PROJECT EXPERIENCE



HOLST'S DIVERSE PORTFOLIO

Our qualifications include a range of projects that all relate closely to the characteristics of the five sites outlined in the RFP. These include contemporary infill housing in historic districts, experience in a destination town that welcomes outdoor tourism and adventurers, highly sustainable and resource-conscious designs, as well as multi-family developments that set the bar, acting as a catlyst for the growth of vibrant new neighborhoods. These examples demonstrate our diverse experience, which will be necessary to deliver feasibility studies that consider not only the the early research and analysis of your sites, but also how they will live, evolve, and contribute to the City of Ketchum for decades to come. Although you'll see images of beautiful completed projects, it's important to note that each of these

projects began with early studies that charted its path forward. Our perspective and fresh eyes will ensure each of your sites are functional, sustainable, and a source of inspiration to the residents of Ketchum and visitors alike.

A REGIONAL ARCHITECT

While Holst is based in Portland, approximately 50% of our current work is in jurisdictions outside the city. We have recently completed projects in Seattle, Bend, Seaside, and Corvallis, as well as a project that recently completed construction in Bhutan. Principal in Charge Renée Strand is a licensed architect in the State of Idaho, having completed four housing projects in the Treasure Valley, with a fifth about to enter construction.

AFFORDABLE, WORKFORCE, AND STUDENT HOUSING





















Holst's award-winning, 50-person studio strives to make a social impact with every space we design, and our portfolio includes many of the region's most significant affordable and supportive housing developments. We have designed / renovated and built over 1,100 units of affordable and student housing over the past 10 years, with nearly 1,000 more currently in design or under construction.

- 1,106 AFFORDABLE, WORKFORCE, AND STUDENT HOUSING UNITS
- 1. Bud Clark Commons 130 affordable units
- 2. Olympia Place 73 student housing units
- 3. Lifeworks Beech Street 48 affordable units
- 4. Kendrick Place 36 student housing units
- 5. Argyle Gardens 42 affordable units
- 6. Home Forward Renovations 435 affordable units
- 7. One East Pleasant 134 student housing units
- 8. 72Foster 101 affordable units
- 9. Nick Fish- 40 affordable units
- 10. Glisan Commons 67 affordable units

WORK IN IDAHO AND ACROSS THE REGION











868 HOUSING UNITS IN IDAHO

- 1. The Avens 196 units | Boise
- 2. The Fowler 159 units | Boise
- 3. Hearth 161 units | Boise
- 4. Vanguard 75 units | Boise
- 5. The Clara 277 units | Eagle

Holst has been working in Idaho for the past eight years—traveling has become part of our regular workflow and a source of excitement for our team. We are on our way to delivering 870 units of much needed housing to Boise and the surrounding Treasure Valley, and have a new housing project breaking ground in Boise in March 2023. Given that Portland is only 3.5 hours away by plane, we can easily make trips to Ketchum, and we're also happy to coordinate visits to Ketchum that coincide with our regularly scheduled trips to Boise and pass those savings on to the City of Ketchum. Being mindful of our impact on the environment, we purchase carbon offset credits for all of our business travel.

CURRENT AFFORDABLE HOUSING PROJECTS











(a)







In addition to Holst's portfolio of completed affordable housing projects, we currently have eight projects currently in design or under construction, totaling nearly 1,000 units.

Given the shortage of affordable housing across our region, we are proud to specialize in creating high quality, beautiful, affordable housing that integrates seamlessly into the fabric of the community.

970 AFFORDABLE UNITS IN PROGRESS

- 1. 74th & Glisan 137 units
- 2. 3000 Powell 206 units
- 3. The Aurora 93 units
- 4. Francis & Clare Place 61 units
- *5.* 73Foster 64 units
- 6. Grace Peck Terrace 95 units
- 7. hollywoodHUB 224 units
- 8. Julia West 90 units

310 OAK STREET

HOOD RIVER, OR



SUMMARY

Located in downtown Hood River, Oregon, Holst designed a four-story mixed-use building that is modern in detail, scale, and function, nestled favorably within an historic context. Traditional materials of brick and wood are used to complement the modern expression of the concrete structure, as the building mass steps back to form an adjacent outdoor plaza.

Access to light and views was achieved by creating an intimate public courtyard between buildings, which also supports the retail tenants by offering outdoor spaces that are protected from the notorious Columbia River Gorge winds. The loft-style units have expansive floor-to-ceiling windows with panoramic views of the Gorge and Mount Adams. Cherry is used throughout, from the custom-designed fireplace to the reading nook's built-in couch and shelves. Floors are concrete slab with radiant heating.

Ground floor retail and a cafe contribute to a lively street presence and share the multi-purpose outdoor space for performances and a farmer's market. The pedestrian corridor respects Hood River's walkability and the building's prime location in the heart of the town's retail district.

BRIEF

Mixed-use condominium building with high-profile retail on ground floor

PROJECT RELEVANCY

Similar to your 6th & Leadville Lot, 310 Oak is located in downtown Hood River—a small but vibrant town near Mt. Hood and the Columbia Gorge that welcomes outdoor adventurers and tourism.

SITE SIZE

0.73 acres

SIZE

32,000 sq. ft.

COMPLETION

2006

CLIENT

Smart Development



72FOSTER

PORTLAND, OR



SUMMARY

Designed for REACH Community Development, 72Foster contains 101 units of affordable housing tailored to intergenerational families in SE Portland—the first of its kind in the city. The intergenerational focus informs the building's close proximity to transit, the mix of studio to three-bedroom units, and the project's sustainability and affordability goals.

The building's angled shape respects the existing neighborhood scale, provides a new courtyard as a public amenity, and acts as a buffer from bustling Foster Road. An open breezeway maintains the connection from the residential neighborhood to the popular Portland Mercado across the street.

The building's exterior alternates brick and Hardieplank for texture and variation without sacrificing durability and affordability. A strategic use of cedar surrounding the entrance and breezeway brings visual warmth at the human scale. A clean, calm interior palette enables lively artist-painted murals to lead visitors through the lobby and into the ground floor community room.

On the roof, an expansive 106.5 kW solar array offsets utility costs for common space areas of the building. The building skin features two inches of continuous insulation, and the solar array's energy production is tracked through a building management system with data publicly displayed on a screen in the lobby.

To meet the needs of seniors and families, each apartment unit features comfortable room proportions, large windows, ceiling fans in every room, and generously sized kitchens with mechanically ventilated range hoods. Onsite programs and services will be provided through a partnership with the Asian Health & Service Center.

BRIEF

Affordable housing and resource center tailored for intergenerational families

PROJECT RELEVANCY

Similar to your YMCA South Lot, 72Foster has created a vibrant affordable community outside of Portland's downtown core. The project was part of the revitalization of the neighborhood, paving the way for further development.

SITE SIZE

0.87 acres

SIZE

79,600 sq. ft.

101 units

COMPLETION

2019

CLIENT

REACH Community Development

SELECTED AWARDS

2020 AIA Oregon Architecture Award of Merit

2019 AIA Northwest and Pacific Region Design Award of Merit

2019 Multi-Housing News Award of Excellence, Design + Development, Bronze Award



"When we saw this project come up, we were practically cheering because you're doing everything right here...This is a great project."

Carlotta Collette METRO COUNCILOR











LL HAWKINS

PORTLAND, OR



SUMMARY

The first project in the recently masterplanned Conway site in NW Portland, LL Hawkins and Slabtown Marketplace will serve as a catalyst for future development and revitalization in the area. The 92,000 sq. ft. mixed-use development in NW Portland provides market-rate apartments, retail, a grocery store, parking, and a new pedestrian accessway.

The western half of the site includes the redevelopment of a 36,000 sq. ft. warehouse called Slabtown Marketplace. New Seasons Market, a local grocery store, is the building's anchor tenant, and there are two additional tenant retail spaces being built out in 2016. Architecturally, Slabtown Marketplace takes its cue from the surrounding mid-century warehouse district. New storefront openings were cut into the perimeter on all four sides, and expansive wood canopies and porches reminiscent of loading docks create rich new pedestrian environments.

LL Hawkins, a new six-story mixed-use building, takes up the eastern portion of the site. The 125,000 sq. ft. building includes 114 apartments, six retail spaces, and 79 underground parking spaces for the apartment tenants. The variegated building facade breaks down the mass into smaller vertical elements, evoking an early 20th-century scale.

BRIFE

Mixed-use apartment building with retail, pedestrian accessway, and renovated warehouse / grocery store

PROJECT RELEVANCY

Similar to your Lewis Street Lot, LL Hawkins was located in an industrial warehouse district. As the first new development in the area, LL Hawkins served as a catalyst for what has become one of Portland's coolest new neighborhoods.

SITE SIZE

0.90 acres

SIZE

125,000 sq. ft.

114 units

COMPLETION

2015

CERTIFICATION

LEED Gold

CLIENT

CE John

SELECTED AWARDS

2019 Oregon ASLA Awards, Honor Award

2016 Daily Journal of Commerce TopProjects, 2nd Place in Renovation Category



"[LL Hawkins] sets new design standards for multifamily housing in Portland."

PORTLAND MONTHLY MAGAZINE











HEARTH

BOISE, ID



SUMMARY

Hearth was Holst's third new multi-family project in downtown Boise. Located just one block from the Fowler apartments, Hearth brings further density and urban amenities to the growing Central Addition.

In conjunction with the City of Boise's vision for a mixed-use district, the program includes apartment units in three different sizes, ground floor live / work units, and retail tenant spaces. Resident amenities include indoor bike storage, a fitness center, an indoor spa, a clubroom, and an elevated community courtyard space with lounge seating and kitchen.

Holst's design is centered around fostering a rich pedestrian experience in the LIV District. The building's "Z" shape pulls the building massing from the street while maximizing usable square footage inside. This also creates space for the fourth-floor courtyards, which further enliven the streetscape. Other resident amenity spaces are expressed on the exterior to animate the building. The ground floor retail tenant spaces open out onto the sidewalk with operable windows and patio seating.

The building is clad in a mix of light-colored brick veneer and stucco, contrasted with darker aluminum systems. Units with balconies were arranged to face either downtown Boise or the surrounding foothills.

Ample sidewalk space maximizes pedestrian interaction with the building, providing seating and connecting to the resident entrance and tenant spaces.

BRIEF

Mixed-use housing with luxury amenities and ground floor retail

PROJECT RELEVANCY

Similar to your Lift Tower Lodge site, Hearth adds density to downtown Boise, with 161 units on a larger lot.

SITE SIZE

1.092 acres

SIZE

222,000 sq. ft.

161 units

CERTIFICATION

Fitwel

COMPLETION

2022

CLIENT

Roundhouse



"Very impressed with this beautiful apartment complex. The rooms are beautifully made and there are amazing amenities!"

RESIDENT











THURMAN STREET LOFTS

PORTLAND, OR



SUMMARY

This 26,000 sq. ft. mixed-use building sensitively engages the nostalgic character of Portland's historic Northwest District, while responding to the higher density and commercial requirements of zoning changes.

Thurman Street Lofts include 16 loft / condominium units ranging in size from 640 to 1900 sq. ft. It also provides 500 sq. ft. of groundfloor retail, secure ground floor parking, and private balconies.

Inspired by the turn-of-the-century masonry apartment buildings of the area, each unit is graced with large picture windows punched deep into the wood facades. The building corners break down, exposing delicate wood screens. The perceived building height is reduced by setting the top floor back 12 feet from the street and back facades, providing private full-width terraces to those units.

Contrasting shades of sustainable Brazilian Ipe siding create visual interest and help minimize the perceived mass of the building. This Ipe rainscreen also provides a strong, breathable exterior skin. Loft interiors are graced with exposed wood ceilings, hardwood floors, granite countertops, and expansive windows. Serving both function and cost, an energy-efficient radiant floor heating system warms each unit for a fraction of the cost of traditional systems.

BRIEF

Mixed-use condominium building with ground-floor retail

PROJECT RELEVANCY

Similar to your 6th & Leadville Lot, the Thurman Street Lofts are located in Portland's urban core. The building's small footprint maximizes use of the site.

SITE SIZE

0.15 acres

SIZE

26,000 sq. ft.

16 units

COMPLETION

2006

CLIENT

937 Group LLC

SELECTED AWARDS

2006 Excellence in Construction, Associated Builders and Contractors, Inc.



"The Thurman Street Lofts...extend the articulated, wood exterior towards a more sculptural end, with windows almost carved from the dark wood facades."

John Hill DAILY DOSE OF ARCHITECTURE











LIFEWORKS NW / BEECH STREET APARTMENTS

PORTLAND, OR



SUMMARY

LifeWorks NW / Beech Street Apartments is a mixed-use development in NE Portland that provides permanent family housing and supportive services for women recovering from addiction. A collaboration between Home Forward, Portland's housing authority, and LifeWorks NW, a mental health and addiction nonprofit, the project provides space for both short-term treatment and long-term recovery.

Comprising the east wing of the project, LifeWorks NW's Project Network program provides sixteen temporary units for 36 women to live in during substance abuse treatment, along with their young children, and includes a child development center, library, courtyard, administration, and a variety of gathering spaces for treatment. Across two courtyards separated by a shared community room, the project's west wing provides 32 permanent family apartments reserved for graduates of substance abuse treatment programs, operated by Home Forward. It provides ongoing support for women in recovery.

This unique, community-oriented development aims to be a model of both social and environmental sustainability. The LEED Platinum project features a green roof, onsite stormwater treatment, high-efficiency lighting, locally sourced materials, and no-VOC paints and finishes.

BRIEF

Affordable housing for women and their children, along with support services

PROJECT RELEVANCY

Similar to your YMCA North Lot, the Beech Street Apartments are located in a quieter neighborhood outside of Portland's downtown core, on a similar sized site.

SITE SIZE

1.1 acres

SIZE

61,500 sq. ft.

48 units

COMPLETION

2014

CERTIFICATION

LEED Platinum

CLIENT

LifeWorks NW, Home Forward

SELECTED AWARDS

2015 ENR Best of the Year award winner, Residential / Hospitality Category



"This innovative collaboration provides a treatment facility and permanent housing that helps families to build a solid base of recovery, maintain a crucial support network, sustain the success of their treatment, and remain in their local community."

> Mary Monnat PRESIDENT / CEO, LIFEWORKS NW











VANGUARD

BOISE, ID



SUMMARY

Targeting students and young professionals, the Vanguard bridges historic downtown Boise and the newer Central Addition neighborhood with 75 units of market rate housing. Visum Development, based in Ithaca, New York, chose Holst to design their first foray into the Boise Market, a new eight-story building that shares a block with the Basque Cultural Center.

A series of systematic design choices respond to the context of downtown historic buildings, neighborhood edges, and downtown circulation patterns. The shape of the concrete and wood-framed building results from a shifting of a portion of the max zoning envelope back on the site, creating folded vertical planes along its street frontages. Balconies highlighted in ochre link the protruding and receding edges and contrast the building's dark brick façades. The color extends to the ground to identify the building's main entrance on Sixth Avenue.

The lobby serves a dual purpose as a study / workspace. Other amenities include plentiful bike parking, a community lounge, and a shared roof deck with fire pit and grill. In the public spaces, sealed concrete floors, plywood finishes, and metal details carry an industrial aesthetic throughout to appeal to the building's young target audience. The studio, one-, and two- bedroom units feature a neutral, modern palette of white, light wood, and concrete.

BRIEF

New eight-story multi-family building tailored to students and young professionals

PROJECT RELEVANCY

Similar to your Lewis Street Lot, Vanguard sits on a smaller lot in a developing neighborhood of Boise's downtown, adjacent to a historic neighborhood.

SITE SIZE

0.18 acres

SIZE

55,869 sq. ft.

75 units

COMPLETION

2021

CLIENT

Visum Development



"The Vanguard brings a fresh contemporary design that is unique to Boise's downtown...
The Vanguard is changing the face of urban living in Boise."

Natalie Lemas Hernandez PROPERTY MANAGER, COMMERCIAL NW











INITIAL BUDGET ESTIMATE & HOURLY RATES

We estimate the Architectural fee at \$30,000 and will provide Civil Engineering consulting hourly as required. We are flexible and happy to complete the Feasibility Analysis as a lump sum or hourly NTE—whichever the City prefers.

HOLST'S 2022 HOURLY RATES

Principal - \$200

Project Manager - \$165

Project Designer - \$165

Project Architect - \$165

Architect / Designer III - \$135

Architect / Designer II - \$115

Architect / Designer I - \$100

Project Accountant - \$165

Work performed by Holst will be billed monthly according to the current rate schedule in effect at the time of the work performed. Hourly rates are updated annually.

T-O ENGINEERING'S 2022 HOURLY RATES

Principal - \$225 - \$250

Project Manager - \$115 - \$210

Project Engineer - \$110 - \$165

Staff Engineer - \$85 - \$120

Survey Manager - \$150 - \$200

Staff Surveyor - \$70 - \$120

Survey Technician - \$70 - \$120

Environmental Specialist \$95 - \$130

GIS Specialist \$90 - \$110

Administrative \$60 - \$115



Sample image from a recent affordable housing site study.

REFERENCES



Fora Health Treatment Center HQ

MARK EDLEN

Co-Founder, Edlen & Co.

Location: Ketchum, Idaho

208-776-0550

mark.edlen@edlenandco.com

MAJOR PROJECTS

- The Nick Fish Affordable Housing
- · The Aurora Affordable Housing
- Fora Health Treatment Center HQ
- · Lifeworks NW Beech Street Apts
- Moore Street Affordable Housing



Asian Health & Service Center

BOB WALSH

Co-Founder & Chairman, Walsh Construction Co.

Location: Ketchum, Idaho & Portland, Oregon

503-222-4375

bwalsh@walshconstruction.com

MAJOR PROJECTS

- · Bud Clark Commons
- Argyle Gardens
- Home Forward Tower Renovations (4)
- Lifeworks NW Beech Street Apartments
- Asian Health & Service Center
- · hollywoodHUB
- · Frances & Clare
- Julia West
- 73Foster
- Walsh Construction HQ
- Rivertec Office Renovation
- Ecotrust

KATIE VILA

Chief Operating Officer, Roundhouse Development

Location: Boise, Idaho

208-271-7281

katie@rndhouse.com

MAJOR PROJECTS

- The Avens Apartments
- Hearth Apartments
- The Clara Apartments
- The Fowler Apartments
- · Perch Apartments



The Clara Apartments

SHELLAN RODRIGUEZ

Principal & Owner, SMR Development

Location: Boise, Idaho

406-531-0401

shellan@smrdevelopment.com

MAJOR PROJECTS

 The Fowler Apartments (while with Capital City Development Corporation - CCDC)



The Fowler Apartments

HOLST

123 NE 3RD AVE SUITE 310, PORTLAND, OR 97232

HOLSTARC.COM

HOLST

29 October 2018

VISUM DEVELOPMENT GROUP 600 W FRONT STREET

BOISE, ID

Feasibility Study



SITE AND MASSING STUDY

SITE ZONING INFO3
BASIS FOR DESIGN4
CONCEPT A5
CONCEPT B 8
CONCEPT C11
SUMMARY INFORMATION14

ZONING ANALYSIS

600 W FRONT ST, BOISE ID 83702

S10 T3 R2, LOT 5, BLOCK 23 BCOT SUBDIVISION

0.18 ACRES / 8,000SF [80FT X 100FT]

DOWNTOWN MIXED-USE AREA

C-5DDC ZONE

DOWNTOWN CORRIDOR OF CAPITAL BOULEVARD SPECIAL DESIGN DISTRICT

NO HEIGHT LIMIT FOR RESIDENTIAL (4:1 FOR COMMERCIAL)

P1 PARKING ZONE, NO PARKING REQUIRED FOR RESIDENTIAL

CCDC RIVER-MYRTLE - OLD BOISE URBAN RENEWAL DISTRICT

CENTRAL BUSINESS DISTRICT, OLD-BOISE EASTSIDE PLANNING AREA

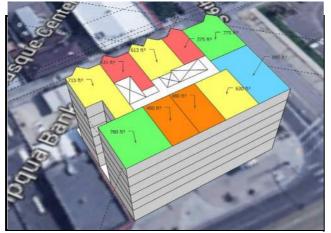
BLOCK FRONTAGE DESIGNATIONS (COMMERCIAL/MIXED USE ON 6TH, LANDSCAPED ON FRONT)

STREETSCAPE TYPES (URBAN CONCRETE W/ BRICK ON 6TH, URBAN CONCRETE ON FRONT)



BASIS FOR DESIGN

AREA & UNIT MIX



Floor plan layout

Single residential floor plan summary

Floorplan rentable area	6,163 sf
14% for common areas	1,003 sf
Floorplan gross area	7,166 sf

Total residential area mix

Residential floors	5	
Unit type	Average size	Total count
Micro studio	405	10
Studio	480	10
1-bed	653	15
Super 1-bed	-	-
Micro 2-bed	-	-
2-bed 1-bath	778	10
2-bed 2-bath	880	5
Total r	esidential unit count	50
Total resi	dential rentable area	30,815 sf
Total g	gross residential area	35,831 sf

Residential Rent Rates

Unit type	Average size
Micro studio	405 sf
Studio	480 sf
1-bed	653 sf
Super 1-bed	-
Micro 2-bed	-
2-bed 1-bath	778 sf
2-bed 2-bath	880 sf

Podium mix

Floor plan size	14,332.56 << 2 floors
13% for common areas	1,863 sf
Remaining available commercial rentable area	204 sf

Unit type	Size	Count
Commercial unit 1	3,600 sf	1
Amenity spaces	2,500 sf	1
Micro studio	405 sf	2
Studio	480 sf	2
1-bed	653 sf	3
2-bed 1-bath	778 sf	2
2-bed 2-bath	880 sf	1
	12,265 sf	12

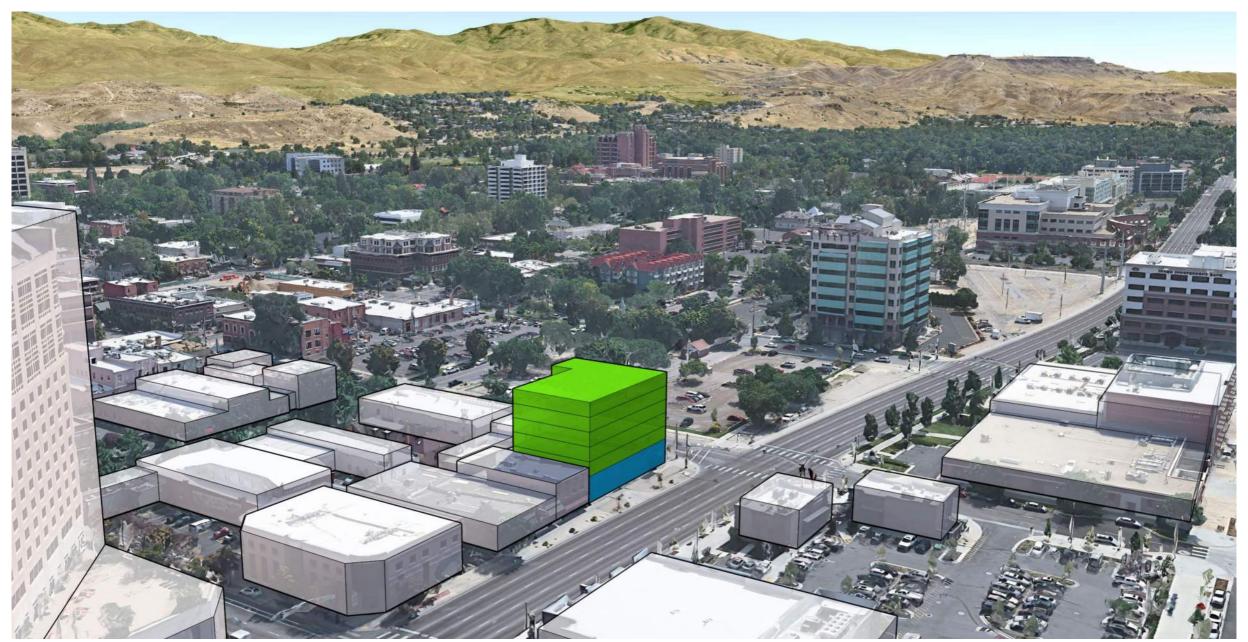
Ground floor unit mix exceeds maximum area

Total commercial area

Total ground floor unit count	12
Total ground floor rentable area	9,296 sf
Total gross ground floor area	14,128 sf

CONCEPT A

5 OVER 1 "L-SHAPED"



CONCEPT A

5 OVER 1 "L-SHAPED"

"L-SHAPED" SCHEME

HOUSING, GROUND FLOOR COMMERCIAL SPACE, SURFACE PARKING

5-FLOORS TYPE 5 OVER 1-FLOOR TYPE 1 CONSTRUCTION

BUILDING SIZE 41,700 SQ FT [GROSS] HEIGHT 70' / 6 FLOORS

 SM STUDIO [419 SF AVG]
 15 UNITS

 LG STUDIO [462 SF AVG]
 15 UNITS

 1-BED [644 SF AVG]
 10 UNITS

 2-BED [900 SF AVG]
 10 UNITS

 TOTAL
 50 UNITS





TYPICAL FLOOR PLAN





CONCEPT A

5 OVER 1 "L-SHAPED"

"L-SHAPED" SCHEME

HOUSING, GROUND FLOOR COMMERCIAL SPACE, SURFACE PARKING

5-FLOORS TYPE 5 OVER 1-FLOOR TYPE 1 CONSTRUCTION

BUILDING SIZE 41,700 SQ FT [GROSS] HEIGHT 70' / 6 FLOORS

 SM STUDIO [419 SF AVG]
 15 UNITS

 LG STUDIO [462 SF AVG]
 15 UNITS

 1-BED [644 SF AVG]
 10 UNITS

 2-BED [900 SF AVG]
 10 UNITS

 TOTAL
 50 UNITS





GROUND FLOOR PLAN





CONCEPT B

5 OVER 2 "NARROW BAR"



CONCEPT B

5 OVER 2 "NARROW BAR"

"NARROW BAR" SCHEME

HOUSING, GROUND FLOOR COMMERCIAL SPACE, SURFACE PARKING

5-FLOORS TYPE 5 OVER 2-FLOORS TYPE 1 CONSTRUCTION

BUILDING SIZE 45,200 SQ FT [GROSS] HEIGHT 75' / 7 FLOORS

 STUDIO [480 SF AVG]
 29 UNITS

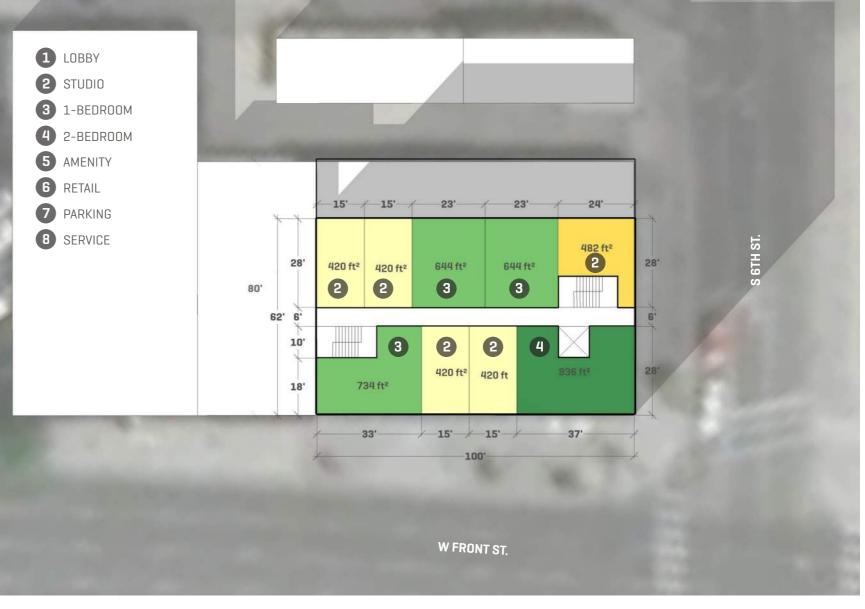
 1-BED [639 SF AVG]
 16 UNITS

 2-BED [857 SF AVG]
 5 UNITS

 TOTAL
 50 UNITS

PARKING COUNT 5 STALLS





TYPICAL FLOOR PLAN





CONCEPT B

5 OVER 2 "NARROW BAR"

"NARROW BAR" SCHEME

HOUSING, GROUND FLOOR COMMERCIAL SPACE, SURFACE PARKING

5-FLOORS TYPE 5 OVER 2-FLOORS TYPE 1 CONSTRUCTION

BUILDING SIZE 45,200 SQ FT [GROSS] HEIGHT 75' / 7 FLOORS

 STUDIO [480 SF AVG]
 29 UNITS

 1-BED [639 SF AVG]
 16 UNITS

 2-BED [857 SF AVG]
 5 UNITS

 TOTAL
 50 UNITS

PARKING COUNT 5 STALLS





GROUND FLOOR PLAN





CONCEPT C

5 OVER 3 "WIDE BAR"



CONCEPT C

5 OVER 3 "WIDE BAR"

"L-SHAPED" SCHEME

HOUSING, GROUND FLOOR COMMERCIAL SPACE, SURFACE PARKING

5-FLOORS TYPE 5 OVER 3-FLOORS TYPE 1 CONSTRUCTION

BUILDING SIZE 62,395 SQ FT [GROSS] HEIGHT 87' / 8 FLOORS

 STUDIO [480 SF AVG]
 14 UNITS

 1-BED [639 SF AVG]
 28 UNITS

 2-BED [857 SF AVG]
 21 UNITS

 TOTAL
 63 UNITS

PARKING COUNT 14 STALLS





TYPICAL FLOOR PLAN





CONCEPT C

5 OVER 3 "WIDE BAR"

"L-SHAPED" SCHEME

HOUSING, GROUND FLOOR COMMERCIAL SPACE, SURFACE PARKING

5-FLOORS TYPE 5 OVER 3-FLOORS TYPE 1 CONSTRUCTION

BUILDING SIZE 62,395 SQ FT [GROSS] HEIGHT 87' / 8 FLOORS

 STUDIO [480 SF AVG]
 14 UNITS

 1-BED [639 SF AVG]
 28 UNITS

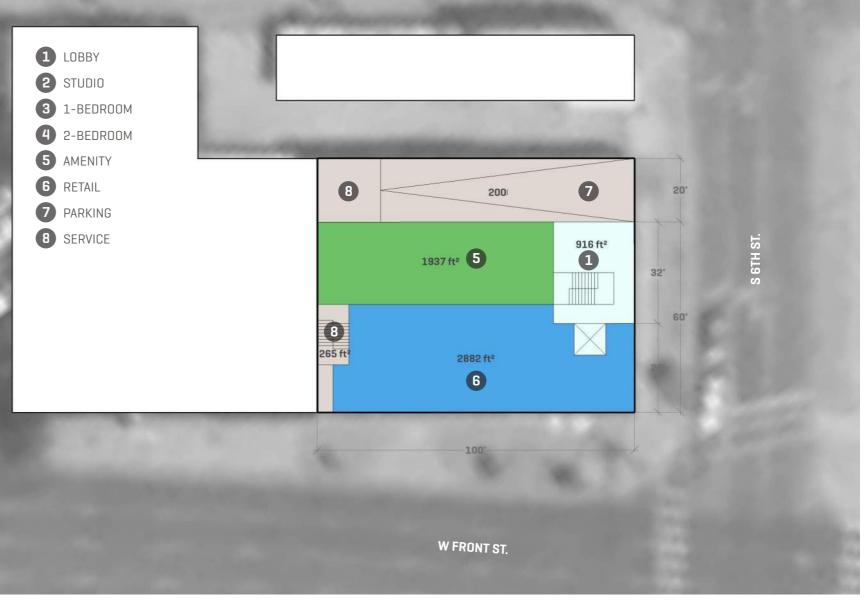
 2-BED [857 SF AVG]
 21 UNITS

 TOTAL
 63 UNITS

BASEMENT

PARKING COUNT 14 STALLS



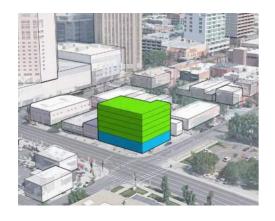


GROUND FLOOR PLAN



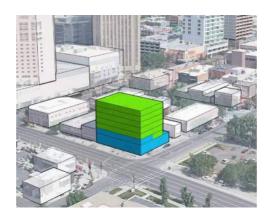


SUMMARY OF OPTIONS



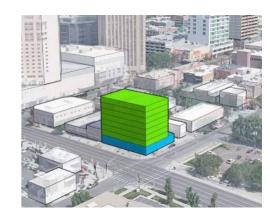
CONCEPT A: 5 OVER 1 "L-SHAPED"

BUILDING SIZE HEIGHT	41,700 SQ FT [GROSS] 70' / 6 FLOORS
SM STUDIO [419 SF AVG] LG STUDIO [462 SF AVG]	15 UNITS 15 UNITS
1-BED [644 SF AVG]	10 UNITS
2-BED [900 SF AVG]	10 UNITS
TOTAL	50 UNITS



CONCEPT B: 5 OVER 2 "NARROW BAR"

BUILDING SIZE	45,200 SQ FT [GROSS]
HEIGHT	75' / 7 FLOORS
STUDIO [480 SF AVG]	29 UNITS
1-BED [639 SF AVG]	16 UNITS
2-BED [857 SF AVG]	5 <u>UNITS</u>
TOTAL	50 UNITS
ON-GRADE PARKING COUNT	5 STALLS



CONCEPT C: 5 OVER 3 "WIDE BAR"

BUILDING SIZE	62,395 SQ FT [GROSS]
HEIGHT	87' / 8 FLOORS
STUDIO [480 SF AVG]	14 UNITS
1-BED [639 SF AVG]	28 UNITS
2-BED [857 SF AVG]	21 UNITS
TOTAL	63 UNITS
BASEMENT PARKING COUNT	14 STALLS

HOLST

08 November 2018

VISUM DEVELOPMENT GROUP 600 W FRONT STREET

BOISE, ID

Feasibility Study



SITE AND MASSING STUDY

SITE ZONING INFO3
3D CONCEPT VIEW4
GROUND FLOOR PLAN5
LEVEL 02-07 FLOOR PLAN6
LEVEL 08 FLOOR PLAN7

ZONING ANALYSIS

600 W FRONT ST, BOISE ID 83702

S10 T3 R2, LOT 5, BLOCK 23 BCOT SUBDIVISION

0.18 ACRES / 8,000SF (80FT X 100FT)

DOWNTOWN MIXED-USE AREA

C-5DDC ZONE

DOWNTOWN CORRIDOR OF CAPITAL BOULEVARD SPECIAL DESIGN DISTRICT

NO HEIGHT LIMIT FOR RESIDENTIAL (4:1 FOR COMMERCIAL)

P1 PARKING ZONE, NO PARKING REQUIRED FOR RESIDENTIAL

CCDC RIVER-MYRTLE - OLD BOISE URBAN RENEWAL DISTRICT

CENTRAL BUSINESS DISTRICT, OLD-BOISE EASTSIDE PLANNING AREA

BLOCK FRONTAGE DESIGNATIONS (COMMERCIAL/MIXED USE ON 6TH, LANDSCAPED ON FRONT)

STREETSCAPE TYPES (URBAN CONCRETE W/ BRICK ON 6TH, URBAN CONCRETE ON FRONT)



5 OVER 3 "L-SHAPED"



"L-SHAPED" SCHEME

HOUSING WITH PRIVATE PATIOS, GROUND FLOOR AMENITY SPACE FOR FITNESS AND CO-WORKING, ROOFTOP COMMUNITY ROOM AND SHARED PATIO

5-FLOORS TYPE 5 OVER 3-FLOORS TYPE 1 CONSTRUCTION

BUILDING SIZE 59,375 GSF

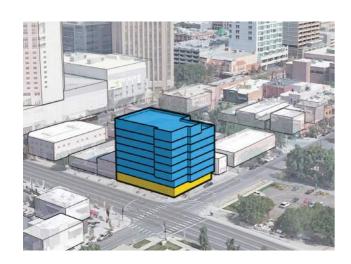
BUILDING HEIGHT 87'-3" / 8 FLOORS

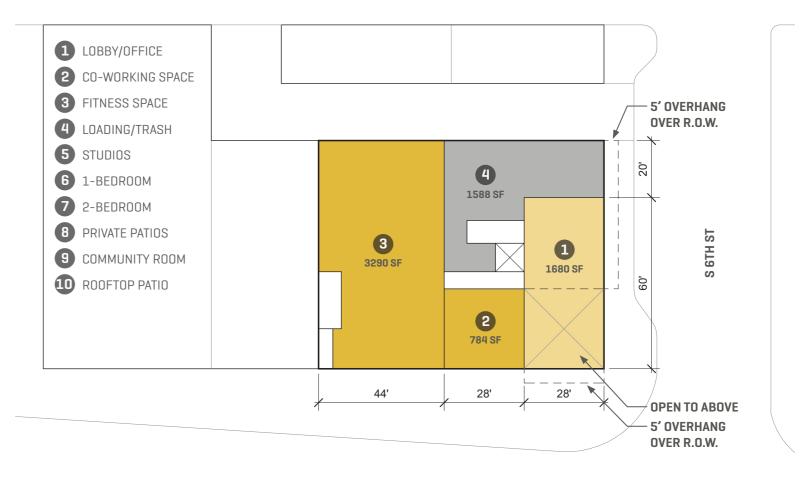
 STUDIO [424 SF AVG]
 14 UNITS [21%]

 1-BED [594 SF]
 34 UNITS [51%]

 2-BED [916 SF]
 19 UNITS [28%]

TOTAL 67 UNITS





W FRONT ST

GROUND FLOOR PLAN





"L-SHAPED" SCHEME

HOUSING WITH PRIVATE PATIOS, GROUND FLOOR AMENITY SPACE FOR FITNESS AND CO-WORKING, ROOFTOP COMMUNITY ROOM AND SHARED PATIO

5-FLOORS TYPE 5 OVER 3-FLOORS TYPE 1 CONSTRUCTION

BUILDING SIZE 59,375 GSF

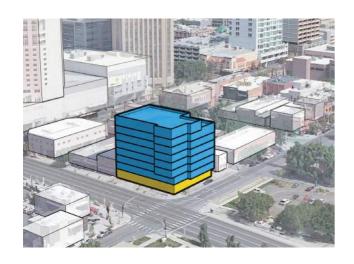
BUILDING HEIGHT 87'-3" / 8 FLOORS

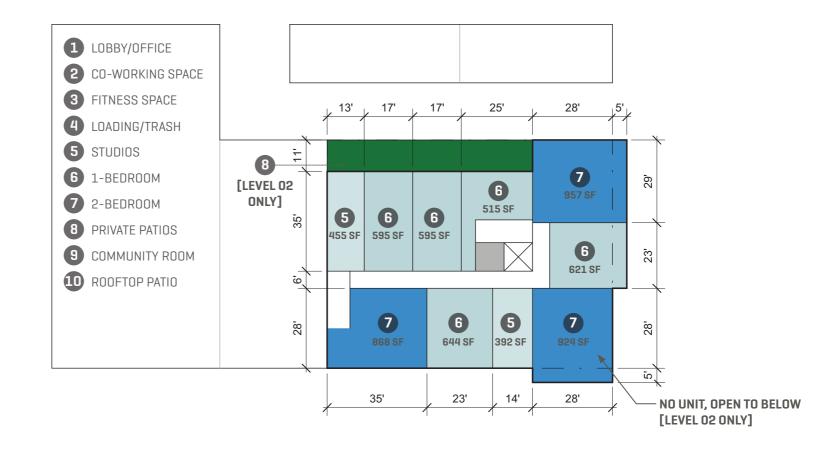
 STUDIO [424 SF AVG]
 14 UNITS [21%]

 1-BED [594 SF]
 34 UNITS [51%]

 2-BED [916 SF]
 19 UNITS [28%]

TOTAL 67 UNITS





TYPICAL [LEVEL 02-07] FLOOR PLAN





"L-SHAPED" SCHEME

HOUSING WITH PRIVATE PATIOS, GROUND FLOOR AMENITY SPACE FOR FITNESS AND CO-WORKING, ROOFTOP COMMUNITY ROOM AND SHARED PATIO

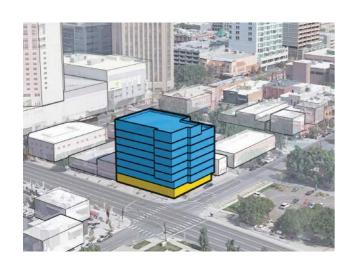
5-FLOORS TYPE 5 OVER 3-FLOORS TYPE 1 CONSTRUCTION

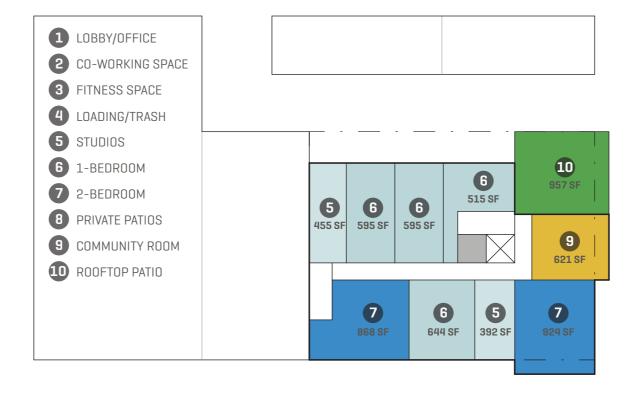
BUILDING SIZE 59,375 GSF

BUILDING HEIGHT 87'-3" / 8 FLOORS

STUDIO [424 SF AVG] 14 UNITS [21%] 1-BED [594 SF] 34 UNITS [51%] 2-BED [916 SF] 19 UNITS [28%]

TOTAL 67 UNITS





LEVEL 08 FLOOR PLAN





HOLST

THANK YOU.

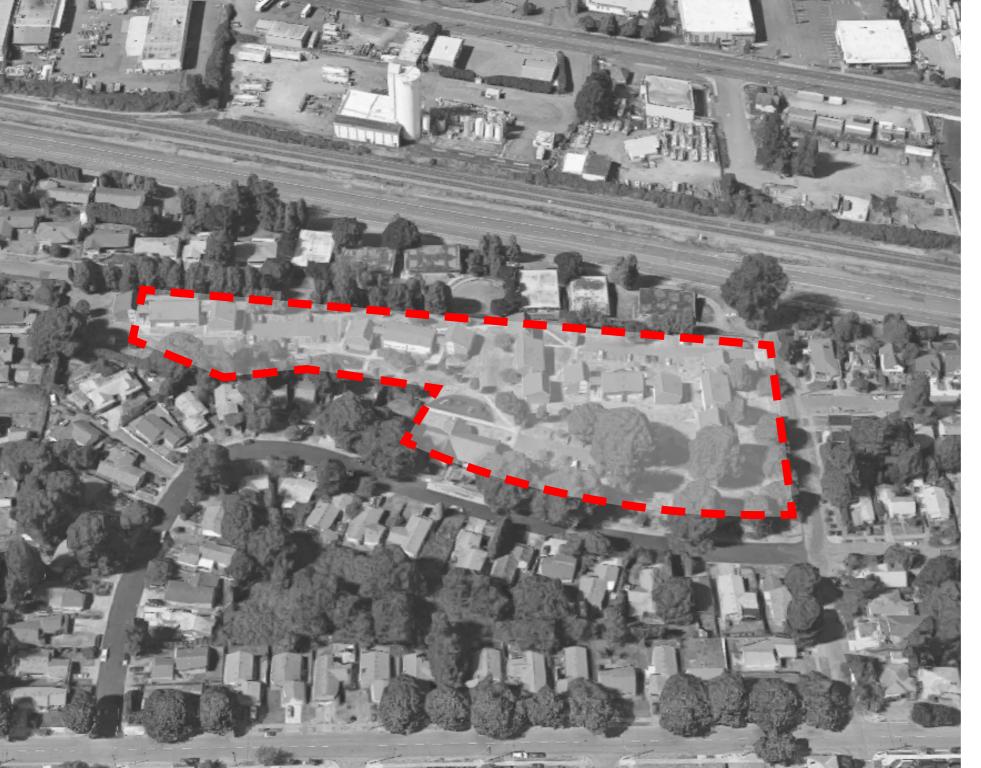
HOLST

26 October 2018

HOME FORWARD DEKUM COURT STUDY

PORTLAND, OR

Site Design Study



SITE AND MASSING STUDY

SITE INFORMATION 3
SITE ZONING INFO5
PROCESS STUDIES9
SITE PRECEDENTS11
SITE PLAN12
SITE AERIAL
PERSPECTIVE14
PERSPECTIVE15
SUMMARY INFORMATION16

SITE INFORMATION

VICINITY MAP

DESCRIPTION/REACTION:

The site is located along the northern edge of the Concordia neighborhood. The adjacent neighborhood is composed mainly of 1-story residences built in the 60's-70's. The site fronts along NE 27th Ave and NE Saratoga St with secondary access from NE Morgan St. NE 27th Ave serves as the point of access to Concordia University and Faubion Elementary School.



SITE INFORMATION NEIGHBORHOOD CONTEXT



1 NE 27TH & SARATOGA LOOKING NW



5 NE MORGAN ST CUL-DE-SAC



2 NE SARATOGA RESIDENCE



6 NE 27TH RESIDENCE



3 NE SARATOGA RESIDENCE



7 NE 27TH RESIDENCES



4 APOSTOLIC ORIGINAL HOLY CHURCH



8 CONCORDIA UNIVERSITY

SITE ZONING INFORMATION SITE PLAN

ZONING ANALYSIS

BASE ZONING: R2 - RESIDENTIAL

COMP PLAN DESIGNATION: RM1 - RESIDENTIAL MULTI-DWELLING

ALLOWABLE USES: HOUSEHOLD LIVING,
DAYCARE, COMMUNITY SERVICE &
SCHOOLS [CONDITIONAL USES]

MAX FAR: 1:1 = 230,936 SF

BONUS FAR: 2:1 = 461,872 SF

MAX HEIGHT: 35'

MAX HEIGHT W/ BONUS: 45'

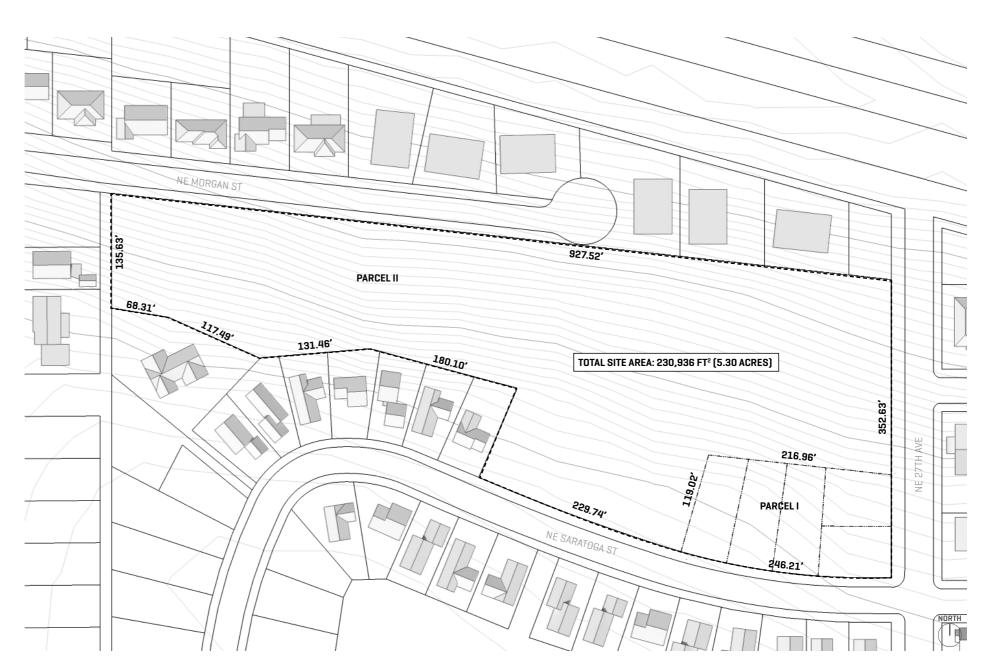
MAX BLDG COVERAGE: 50%, 60%W/ BONUS

MIN LANDSCAPED AREA: 30% SITE AREA

REQ'D OUTDOOR AREA: 48 SF/UNIT

REQ'D COMMON AREA: 10% SITE AREA

MIN PARKING: NOT REQ'D



SITE ZONING INFORMATION

SITE PLAN

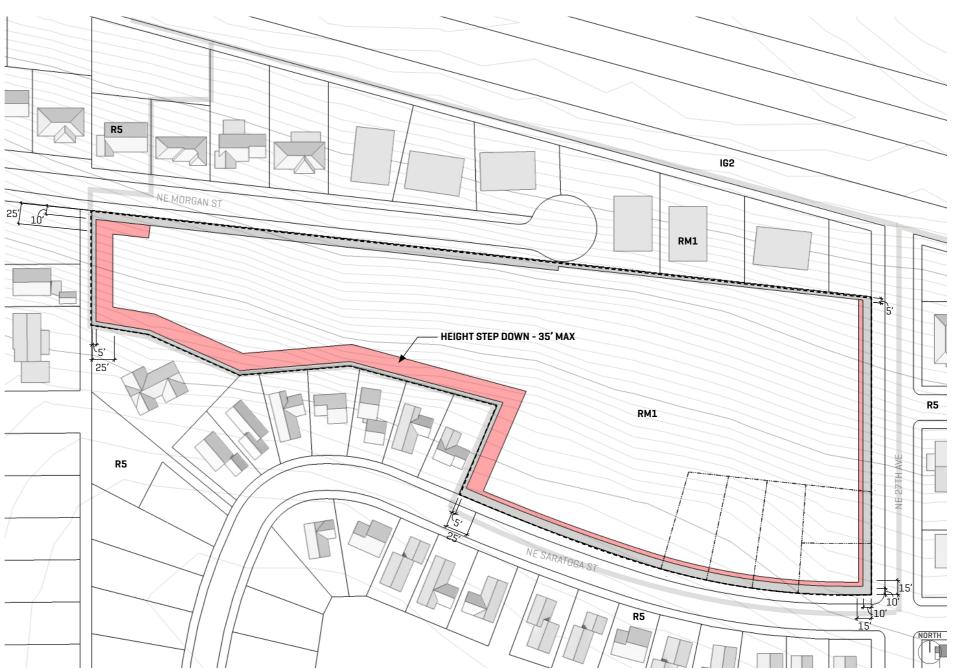
ZONING ANALYSIS

BLDG SETBACKS:

- -10' MIN AT FRONT
- -5' MIN AT SIDE AND REAR
- -5' MIN AT R-ZONE LOT LINE

STEP DOWN HEIGHTS:

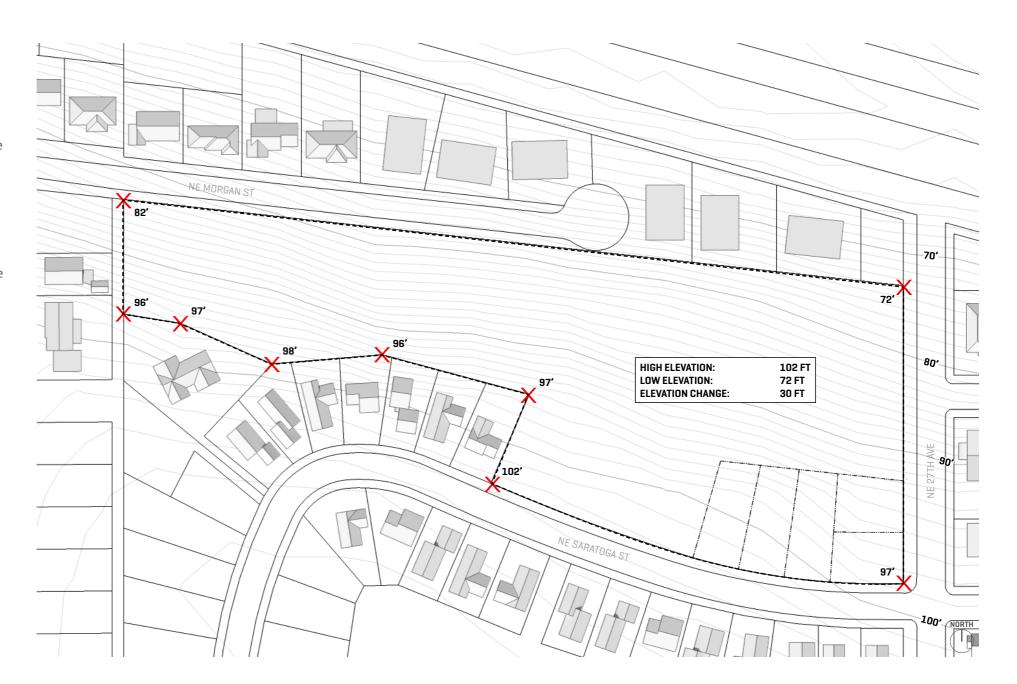
- 35' MAX W/IN 25' OF R-ZONE LOT LINE
- 35' MAX W/IN 15' OF R-ZONE STREET LOT LINE



TOPOGRAPHIC SITE PLAN

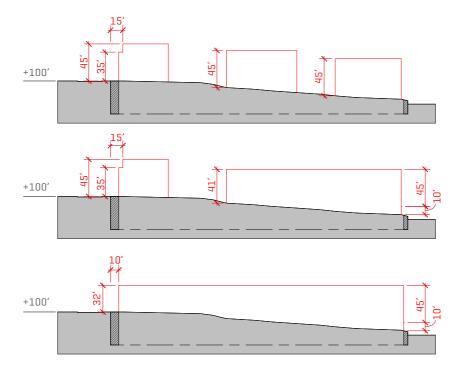
The Dekum Court site has 30 ft of elevation change based on survey data.

Low-point is the NE corner, high-point is the SW corner. This becomes critical when calculating max building height defined in the zoning code. A single connected structure spanning the entire site would be required to calculate max height from the site low-point + 10 ft for the entire extent of the site. An alternate strategy is to break the site into 2 or more structures with no building spanning more than 10 ft elevation change relative to the adjacent curb. This allows each building height to be calculated independently relative to it's own highest adjacent curb elevation.

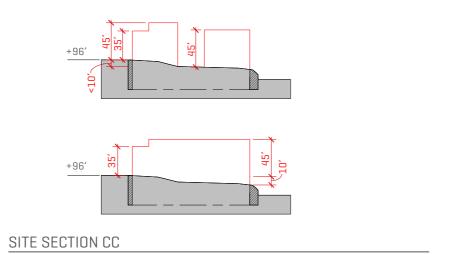


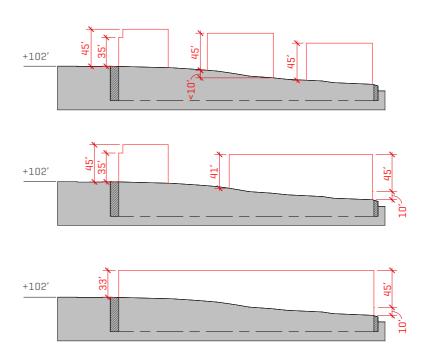
MAX ZONING ENVELOPE

SITE SECTIONS

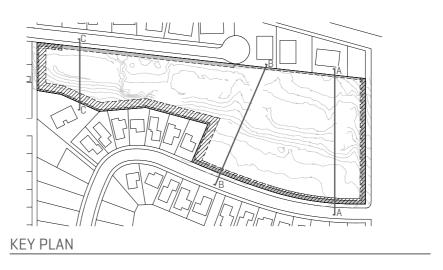


SITE SECTION AA



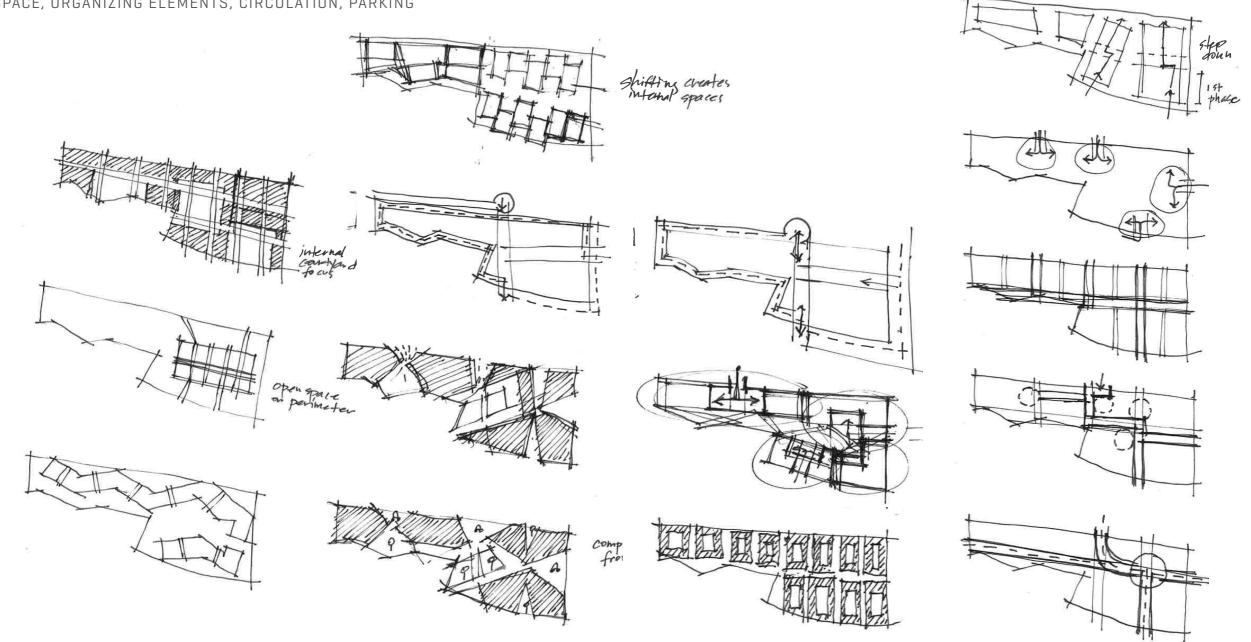


SITE SECTION BB



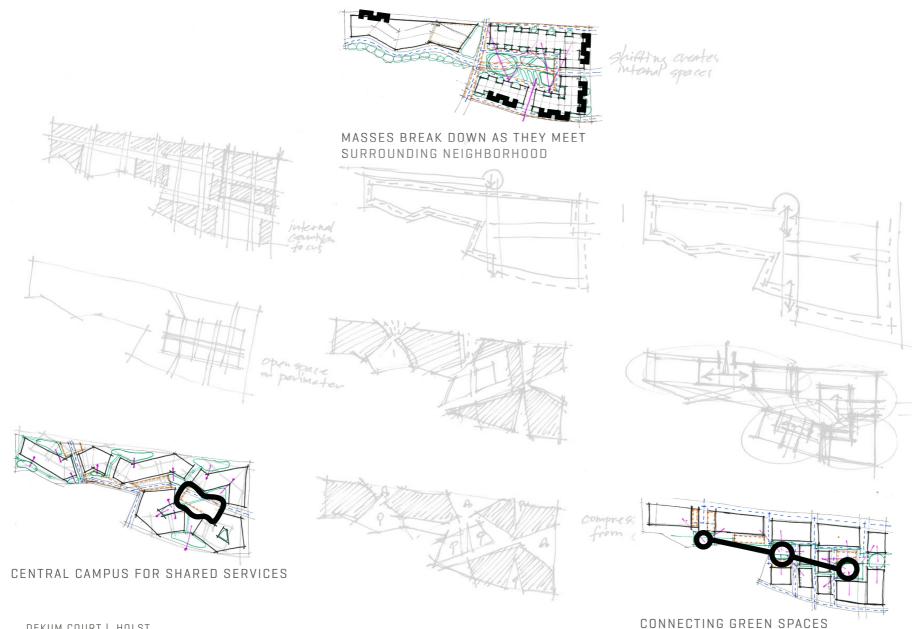
PROCESS STUDIES

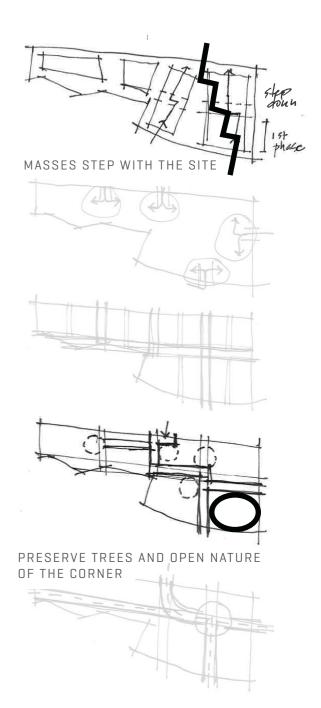
LOOKING AT DENSITY, BUILDING CONFIGURATIONS, AMENITY SPACE, ORGANIZING ELEMENTS, CIRCULATION, PARKING



PROCESS STUDY CONCEPTS DEVELOPED

HIGHLIGHTING PRIORITIES





SITE PRECEDENTS





















SITE PLAN



SITE MASSING AERIAL - VIEW FROM SE

200 RESIDENTIAL UNITS

FAR: 1.0

PARKING RATIO: .49/UNIT

(.5 SPACES/1-2 BRS 1 SPACE/3-4 BRS)

BUILDING HEIGHTS: 35-45' (3-4 STORIES)

- A BUILDING TYPE A
 3 OVER 1 PODIUM BUILDINGS
 43 UNITS
 GROUND FLOOR SOCIAL SERVICES
- B BUILDING TYPE B 3-STORY WALK-UPS 32 UNITS
- BUILDING TYPE C 3-STORY WALK-UPS 22 UNITS
- 1 CORNER PARK & TREE PRESERVATION
- 2 SHARED OUTDOOR AMENITY
- 3 PLAZA
- 4 PARTIAL GROUND FLOOR SOCIAL SERVICES
- 5 DRIVE AISLE WITH PARALLEL PARKING



STATS SUMMARY

SITE AREA: 230,936 SF

TOTAL RESIDENTIAL SF: 210,200 SF
TOTAL SERVICES SF: 22,400 SF
TOTAL BUILDING SF: 232,600 SF

FAR: 1.0 FAR

PHASE 1 UNIT MIX:

STUDIOS 0 1-BRS 2 2-BR 16 3-BR 24 4-BR 1 TOTAL 43

PHASE 2 UNIT MIX:

 STUDIOS
 37

 1-BRS
 40

 2-BR
 40

 3-BR
 20

 4-BR
 20

 TOTAL
 157

TOTAL UNITS: 200 UNITS

PARKING SPACES: 98 SPACES PARKING RATIO: .49/UNIT

(.5 SPACES/1-2 BRS 1 SPACES/3-4 BRS)

BUILDING HEIGHTS: 35-45' (3-4 STORIES)



A BUILDING TYPE A
3 OVER 1 PODIUM BUILDINGS

RESIDENTIAL SF: 39,400 SF/BUILDING SERVICES SF: 5,500/BUILDING TOTAL SF: 44,900 SF/BUILDING TOTAL UNITS: 43/BUILDING B BUILDING TYPE B
3-STORY WALK-UPS

RESIDENTIAL SF: 29,400 SF/BUILDING SERVICES SF: 0 SF/BUILDING TOTAL SF: 29,400 SF/BUILDING TOTAL UNITS: 28/BUILDING

*RESIDENTIAL SF: 25,000 SF/BUILDING SERVICES SF: 4,400 SF/BUILDING TOTAL SF: 29,400 SF/BUILDING TOTAL UNITS: 20/BUILDING **C** BUILDING TYPE C

3-STORY WALK-UPS

RESIDENTIAL SF: 21,000 SF/BUILDING SERVICES SF: 0 SF/BUILDING TOTAL SF: 21,000 SF/BUILDING TOTAL UNITS: 20/BUILDING

*RESIDENTIAL SF: 21,000 SF/BUILDING SERVICES SF: 3,500 SF/BUILDING TOTAL SF: 17,500 SF/BUILDING TOTAL UNITS: 13/BUILDING









HOLST

THANK YOU.

HOLST

19 APRIL 2019

3000 SE POWELL

PORTLAND, OR

Feasibility Study Executive Summary

CONTENTS

EXECUTIVE SUMMARY

APPENDICES

- I PROJECT NARRATIVES
- II FEASIBILITY DESIGN
- III PRE-APPLICATION CONFERENCE SUMMARY
- IV EARTHWORK ASSUMPTIONS
- V MODULAR ROUGH ORDER OF MAGNITUDE
- VI CONCEPTUAL BUDGETS
 - A) STICK-BUILT, ON-GRADE PARKING
 - B) STICK-BUILT, BELOW-GRADE PARKING
 - C) MODULAR, ON-GRADE PARKING
 - D) MODULAR, BELOW-GRADE PARKING
- VII BUDGET COMPARISON

OBSERVATIONS & RECOMMENDATION

For 3000 SE Powell, Holst worked closely with engineers, contractors, cost estimators, and prefabrication specialty consultants to conduct a thorough study comparing the costs and benefits between "modular" and "stick-built" construction. Building on our previous experience on the Low Income Single Adult Housing (LISAH) modular co-housing design for Transition Projects that breaks ground Spring 2019, we have identified lessons learned in the Portland affordable housing market that are worth highlighting in the modular/stick-built decision-making process for 3000 SE Powell:

- 01 Local Capacity. The market for pre-fab multi-family housing in Oregon is still in its infancy. There are no fabrication shops in Oregon that execute projects of the size and complexity of 3000 SE Powell, therefore fabrication must be outsourced to shops that compete in markets with significantly higher construction costs, such as Silicon Valley or Seattle. While construction costs in the Portland market continue to rise, we are not yet at the tipping point where modular construction can be cost competitive with projects that are stick-built on site. (Note: panelization is an exception to this rule, where panelized walls can result in cost savings depending on the specific bidding climate).
- O2 Schedule Complexity. Affordable housing projects are often required to be "permit-ready" in order to close with lenders on construction financing. Because permitting modular construction in Portland typically requires a lengthy process of two non-concurrent levels of review (one with the State of Oregon and one with the City of Portland), beginning construction early in the modular shop is not possible unless there is bridge financing that is willing to take the risk to start building the modules (mods) prior to closing. This complication means publicly financed projects have a harder time realizing the schedule savings typically associated with prefabrication, as the time saved by building in the shop while the site is prepped is traded for an extended duration for permitting and entitlements.
- O3 Target Business and Workforce Goals. All work done off-site in the modular shop is typically done by a specific crew or crews that create valuable efficiency. However, this efficiency comes at the cost of sacrificing goals for increasing the capacity and success of target businesses and training new workforces. Bringing subcontractors and workers inexperienced with modular construction into the fabrication environment is extremely difficult, especially when that fabrication shop is out-of-state. This results in a significant challenge in meeting broader goals of the community in terms of job creation, equity, and diversity.
- 04 Warrantee Risks and Bid Coverage. Because modular is not yet commonplace in our market, there is significant risk regarding warrantees and contractor responsibility in the hand-off between the shop and the site. Additionally, because there is site-work needed to tie the mods together in multifamily housing, this creates small, yet complicated and risky scopes of work that are unattractive to potential subcontractors in a robust bidding environment, especially for target businesses in the mechanical, electrical, and plumbing (MEP) trades.
- 05 Site/Zoning Constraints on Yield. While modular can work anywhere, it is much easier to stage and hoist mods on sites that have more breathing room than 3000 SE Powell. Additionally, since all sides of the Powell site are constrained by property lines, setbacks, and height restrictions, the physical characteristics of modular result in fewer possible units in the same available building envelope. Mods have double walls, ceilings, and floors which take up almost twice the space as the same components in stick-built construction.
- 06 Replicability. Bigger sites with more landscape buffering are ideal for modular designs intended for mass production. The LISAH modular co-housing project is designed to have identical buildings spread across an open site, versus 3000 SE Powell, a custom-sized building that must tweak standard mods at each corner to maximize the amount of possible housing that can be provided within constricted site boundaries.

The result of this study and lessons learned is that a modular design for 3000 SE Powell results in fewer units delivered at a higher cost and greater risk. Additionally, fewer equity and employment goals of the City of Portland are reached with a modular approach without the clear benefit of replicability on future projects. Due to these observations, Holst recommends 3000 SE Powell be constructed using conventional stick-built or panelized construction techniques.

DESIGN

Based on a site and zoning analysis and preliminary client programming, we have developed a conceptual design strategy for the project, outlined in appendices I and II. The proposed 5-story building is comprised of (4) stories of Type VA (wood) construction over (1) story of Type IA (concrete) construction, sprinklered per NFPA 13. The unit mix includes studio, 1-bedroom, 2-bedroom, and 3-bedroom units, with a target of 35% family units.

The design proposes a public plaza along SE Powell to adjoin active use space, with north-facing roof decks to provide additional visual interest along the Powell corridor. An interior courtyard connects ground floor units, resident services, and amenities, including indoor/outdoor play areas and a common laundry. A landscaped slope and switchback ramp link the courtyard to an "overlook terrace," opening the building's form to the west and providing views of the southwest hills. A steel framed, glazed "connector" joins the east and west portions of the building at all levels, serving as a structural seismic joint. It offers views from SE Powell to the interior courtyard and is programmed with active use space, play areas, and primary circulation. A screened parking garage will be accessed via SE 30th Avenue, with the vehicle entry held back from Powell to allow for active use space at the pedestrian corner. The garage has options for on-grade with approximately 21 stalls, or below-grade with approximately 33 stalls. A double cab elevator serves the main lobby, with a single cab elevator serving the southeast portion of the building and parking garage.

Both stick-built and modular construction have been considered for the wood-framed upper stories. The stick-built design allows 10'-1" floor-to-floor heights, or an option for 9'-9" floor-to-floor heights with the addition of a mezzanine level for ground floor townhomes. The modular design requires a 10'-5" floor-to-floor height to allow for thickened floor-ceiling assemblies, and it does not offer the option for townhomes due to the height restrictions.

In the stick-built option, unit exhaust is subducted directly to the roof with exhaust fans at the top of each shaft, and a rooftop makeup air unit provides ventilation. In the modular option, each unit has an individual heat recovery ventilator (HRV) within the ceiling that ducts outside air and exhaust via exterior wall louvers. Heating/cooling strategies include Packaged Terminal Air Conditioners (PTACs) which are ducted, through-wall units, for the stick-built option and mini-splits with roof-mounted heat pumps for the modular option, however both strategies are viable for both stick-built and modular. A central hot water system will be installed on each upper floor fed with natural gas piping. Ground floor utilities include a diesel fueled generator, electric fire pump, and trash compactor. The electrical service is estimated to be 4000A at 208/120V, 3 phase, 4 wire.

SITE CONSIDERATIONS

A PGE utility easement runs east-west through the center of the property. The design proposes rerouting the primary line from the existing vault on the property to the east to a new vault in the Powell right-of-way. Another new vault would intercept the lines at the NW corner of the property and route to (2) transformers mounted on vaults adjacent to the building at SE 30th. The existing transformer pole serving the property to the west would be re-fed via the new transformers, eliminating the existing easement.

Phase I and II Environmental Site Assessments completed prior to this study have identified fill material in the range of 30 to 40 feet in depth. A geotechnical report will be completed during schematic design; any extraordinary site-related costs have not been included in this feasibility study. Infiltration tests will be required to determine whether stormwater can be managed with drywells.

A summary of the pre-application conference with city bureaus is included in appendix III. A need for connectivity between SE Powell and SE Francis to the south was discussed, with the Portland Bureau of Transportation requiring half street improvements at SE 30th, along with a 31' wide dedication extending the SE 30th ROW to the southern property line for future development. An approximately 15' wide public bicycle and pedestrian path may be allowable in lieu of half-street improvements at the southern unimproved area via a Public Works Alternative Review.

PRICING

Preliminary budgets are included in appendix VI for a) stick-built with on-grade parking, b) stick-built with below-grade parking, c) modular with on-grade parking, and d) modular with below grade parking. The budgets are supplemented with earthwork assumptions in appendix IV and a rough order of magnitude for the modular scope in appendix V. Modular has an additional cost of approximately \$3 million (or \$45k/unit) in the on-grade parking option and additional cost of approximately \$2.8 million (or \$42k/unit) in the below-grade parking option. The below-grade parking estimates an additional cost of approximately \$5 million, however this option will be maintained during schematic design in the event that geotechnical findings make it financially viable. While a townhome option was not included in pricing, it assumes an additional 4,600 SF, equating to an additional cost of approximately \$1.3 million.

MODULAR

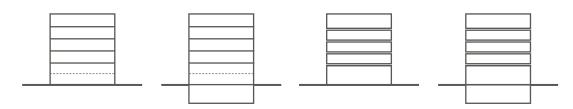
Modular construction offers the benefit of a reduced construction schedule with simultaneous onsite work and factory production of unit modules. The factory environment allows for a higher level of quality control, accuracy, efficiency, and safety. It also offers the flexibility of year-round construction and provides a reduction in both waste material and carbon emissions. While the preliminary budgets for modular assume a scope of fully prefabricated unit and corridor construction at the upper levels, with minor field-framing infill, there are several alternative factory-produced solutions to consider:

- Panelized exterior walls, either open structural panels (framework and sheathing only, with precut openings) or closed structural panels (including windows, doors, integrated HVAC, weather barriers, cladding).
- Panelized interior walls with pre-cut openings at shear walls, including "wet" utility walls at kitchens and bathrooms, roughed-in for final site connections.
- Bathroom "pods," complete with interior finishes, fixtures and casework, roughed-in for final site connections.
- Panelized floor systems and roof truss assemblies.
- MEP racks for routing at corridor ceilings.
- · Interior doors and hardware.

There are challenges and risks to consider with modular construction as well. It can reduce MWESB participation by an estimated 11%, with MEP trades most affected. Refer to Appendix VII for additional details. Warranties for equipment that is factory-installed but field-completed must be shared between the modular factory and on-site subcontractors, requiring clearly defined accountability. Ownership of the modular components transfers from the factory to the general contractor during transportation to the site, providing a level of risk to the general contractor for any transportation-related defects. A common concern is reduced interest by subcontractors to take on "connections only" work that ties factory-installed equipment to on-site MEP systems. Pursuing a state permit review for modular prior to submitting for city review can lengthen the permitting timeline by approximately 3 months.

The option matrix and priority maps that follow offer a comparison of the trade-offs between stick-built and modular construction, along with on-grade and below-grade parking options.

OPTION MATRIX



	STICK-BUILT ON-GRADE PKG BELOW-GRADE PKG		MODULAR ON-GRADE PKG BELOW-GRADE PKG	
	UN-GRADE PRO	DLLUW-UKADE PKU	UN-UNADE PRU	DLLUW-GRADE PRO
COST				
TOTAL	\$39,088,572	\$44,178,372	\$42,137,721	\$47,027,935
PER UNIT	\$232,670	\$245,435	\$277,222	\$286,756
PER SF	\$271	\$284	\$292	\$302

PROGRAM				
GROSS AREA	144,169 SF	155,533 SF	144,169 SF	155,533 SF
# OF UNITS	168	180	152	164
# OF PARKING SPACES	21	33	21	33
TOWNHOME OPTION	YES	YES	NO	NO

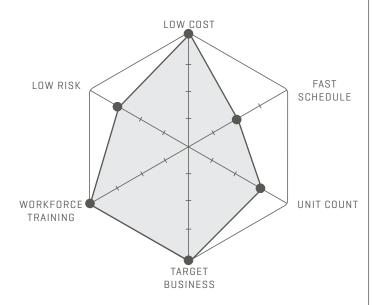
SCHEDULE				
CONSTRUCTION	18 MO.	21 MO.	13 MO.	16 MO.
PERMIT	5 MO.	5 MO.	8 MO.	8 MO.
PER SF	8,000 SF/MO.	7,400 SF/MO.	11,100 SF/MO.	9,700 SF/MO.

WORKFORCE				
% ON-SITE	100%	100%	58%	60%
% OFF-SITE (FACTORY)	0%	0%	42%	40%
TARGET BUSINESS IMPACT	HIGH IMPACT	HIGH IMPACT	LOW IMPACT	LOW IMPACT
MWESB TRADES ANTICIPATED	28%	27%	17%	19%
WORKFORCE TRAINING IMPACT	HIGH IMPACT	HIGH IMPACT	LOW IMPACT	LOW IMPACT

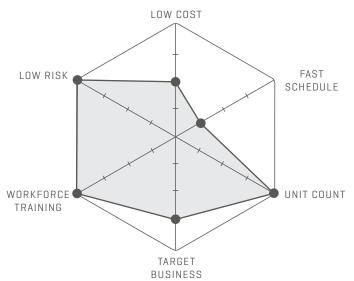
RISKS/UNKNOWNS				
STATE PERMITTING	NOT REQ.	NOT REQ.	POTENTIALLY REQ.	POTENTIALLY REQ.
INSPECTIONS	CITY ONLY	CITY ONLY	STATE + CITY	STATE + CITY
WARRANTY OWNERSHIP	SITE SUBS ONLY	SITE SUBS ONLY	FACTORY + SITE SUBS	FACTORY + SITE SUBS
CONSULTANT TIMELINES	BID SUBS	BID SUBS	DESIGN/BUILD SUBS	DESIGN/BUILD SUBS
GC/MONTH IF SCHEDULE EXTENDS	\$66,000/M0.	\$65,000/M0.	\$69,000/M0.	\$67,000/M0.

PRIORITY MAPS

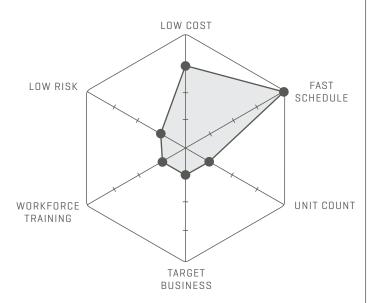
STICK-BUILT ON-GRADE PARKING



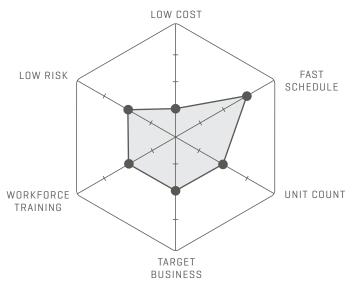
STICK-BUILT
BELOW-GRADE PARKING



MODULAR
ON-GRADE PARKING



MODULAR BELOW-GRADE PARKING



HOLST

19 APRIL 2019

3000 SE POWELL

PORTLAND, OR

Appendix II: Feasibility Design



CONTENTS

SITE INFORMATION 3
SITE ZONING ANALYSIS
MAX BUILDING HEIGHT 6
BUILDING SECTIONS 7
PROCESS SKETCHES10
PLANS: ON-GRADE PARKING 11
PLANS: TOWNHOMES12
PLANS: BELOW-GRADE PARKING 13
AERIAL VIEW14
STREET VIEWS15
LANDSCAPE DESIGN16
PRECEDENTS 17
PLAN: MODULAR18
UNIT LAYOUTS19

SITE INFORMATION VICINITY MAP

DESCRIPTION/REACTION:

The site is located along the busy commercial corridor of SE Powell with neighboring shops and restaurants.

Powell is a major artery linking the eastern part of the city with the Willamette river and the west side.

The site is on the northern edge of the Creston Kenilworth neighborhood, which reaches from Powell to Holgate at its southern edge and is bounded by 26th to the east and Foster to the west.

Motel 6 is located immediately to the east of the site while the Cleveland High School football field is across the street adjacent to a newly renovated Target store.

Per the pre-application conference, the city requested this project contribute to a more pedestrian-friendly experience and enhance the sense of "place" at the Powell corridor. There is a need for connectivity between Powell and SE Francis, with a future street potentially bridging SE 31st with SE 30th. The connection should include a pedestrian/bike path at the west side of the site, with the ablility to link to future surrounding development.



SITE ANALYSIS

TOPOGRAPHIC DATA

The site has 18 ft of elevation change based on survey data. Low-point is the SW corner, high-point is the center of sidewalk to north. For commercial/mixed use zone, where building within 20 ft of street lot line and sidewalk topographic change less than 10 ft, base point for height measurement is highest elevation of sidewalk, 136 ft.

ZONING DATA

BASE ZONING: CM2-D

COMP PLAN DESIGNATION: MU-C

DESIGN REVIEW: TYPE III

PATTERN AREA: INNER

PEDESTRIAN DISTRICT: NO

TRANSIT STREET: SE POWELL

CIVIC CORRIDOR: SE POWELL

MAX FAR: 2.5:1

BONUS FAR: 4:1 = 200,104 SF

STRUCTURED PARKING FAR: 0.5:1

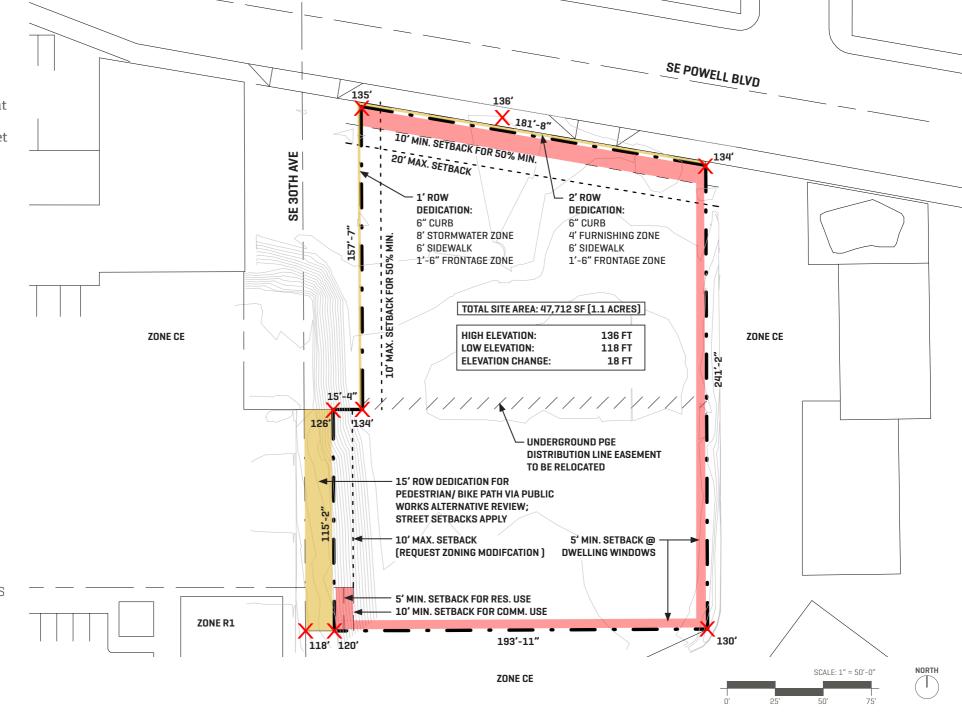
BASE HEIGHT: 45'

MAX HEIGHT W/ BONUS: 60' [+4' PARAPET]

INCL. +5' INCLUSIONARY HOUSING

INCL. +5' GROUND FLOOR HIGH CEILINGS

MAX BLDG COVERAGE: 100%



SITE ANALYSIS

ZONING DATA

BLDG SETBACKS:

NORTH: 10' MIN, 20' MAX
PROJECTIONS UP TO 3' MAX
50% MIN LENGTH TO MEET MIN
SETBACK

WEST @ C ZONES: 10' MAX 50% MIN LENGTH TO MEET MAX

SETBACK

WEST @ R ZONES: 5' MIN IF RESIDENTIAL USE: 10' MIN IF COMMERCIAL USE

DWELLING WINDOW SETBACKS:
5' MIN. FROM LOT LINES ABUTTING
C ZONES

MIN LANDSCAPED AREA: 15% (7,492 SF)
URBAN GREEN ALTERNATIVES ALLOWED

REQ'D OUTDOOR AREA: 48 SF/UNIT

LANDSCAPE BUFFER ABUTTING R-ZONE: 10' DEPTH OF L3

GROUND FLOOR WINDOW STANDARDS: 40% MIN COVERAGE AT SE POWELL BLVD 25% MIN COVERAGE AT SE 30TH AVE

FACADE ARTICULATION:

25% MIN FACADE AREA MUST BE DIVIDED INTO PLANES OFFSET 2' MIN DEPTH

WINDOWS AT STREET-FACING FACADE: 15% MIN AREA TO BE WINDOWS OR ENTRY DOORS

SCREENING:

REQUIRED FOR GARBAGE, RECYCLING & MECHANICAL EQUIPMENT ON GROUND OR ROOF WITHIN 50' OF R-ZONE

ZONING DATA

TRANSIT STREET MAIN ENTRANCE:

1 MAIN ENTRANCE TO DWELLING UNITS

1 MAIN ENTRANCE TO NON-RES. SPACE

PARKING:

MIN: O SPACES

MAX: 1.35 SPACES/DWELLING UNIT

BIKE PARKING:

1.1 LONG-TERM SPACES/DWELLING UNIT 1 SHORT TERM SPACE/20 UNITS

LOADING:

1 SPACE MEETING "STANDARD A" 35'L X 10'W X 13'H CLEARANCE

OR 2 SPACES MEETING "STANDARD B" 18'L X 9'W X 10'H CLEARANCE

SETBACK ABUTTING C ZONE OR STREET: 5' L2 OR 10' L1

LOCATE GARAGE DOORS OR GATES 20' MIN FROM SIDEWALK

SITE DATA

STREET CLASSIFICATIONS: SE POWELL BLVD:

MAJOR CITY TRAFFIC STREET
MAJOR TRANSIT PRIORITY STREET
CITY BIKEWAY
CITY WALKWAY
MAJOR TRUCK STREET

MAJOR EMERGENCY RESPONSE STREET SE 30TH AVE:

LOCAL SERVICE STREET FOR ALL MODES OF TRANSPORTATION

TRANSIT: BUS #9, FREQUENT SERVICE WITHIN 500'

FIRE HYDRANTS:

1 AT NE CORNER OF SE 30TH AVE 1 AT NE CORNER OF SE 31ST AVE

EA DESIGN CONSIDERATIONS

VEHICLE ACCESS TO PARKING SHOULD ROUTE FROM SE 30TH VS. POWELL.

POWELL FRONTAGE REQUIRES IMPROVEMENT FOR 12' PEDESTRIAN CORRIDOR.

STANDARD HALF-STREET IMPROVEMENTS REQUIRED FOR SE 30TH, INCLUDING 20' PAVING, CURB 16' FROM ROW CENTERLINE, 8' PUBLIC STORMWATER FACILITY, 6' SIDWALK AND 1'-6" FRONTAGE ZONE.

POWELL FRONTAGE SHOULD HAVE PRIORITY FOR ACTIVATED GROUND FLOOR SPACE.

PROVIDE HIGH QUALITY, DURABLE FACADE MATERIALS, WITH SPECIAL CONSIDERATION FOR GROUND FLOOR PEDESTRIAN AREAS.

DEDICATED ROW PEDESTRIAN/BIKE PATHS WOULD BE CONSIDERED "STREETS" PER ZONING CODE. NOTE BUILDING LENGTH & FACADE ARTICULATION REQUIREMENTS.

PROVIDE GENEROUS CANOPIES AT SIDEWALKS AND SETBACKS.

LOCATE TRANSFORMERS UNDERGROUND IN ROW IF ON-SITE LOCATION NOT AVAILABLE; COORDINATE W/ PBOT FOR ENCROACHMENT PERMIT.

PROVIDE WRITTEN NARRATIVE FOR LOADING, DRIVEWAY LOCATIONS, PARKING ACCESS, RESTRICTED STREET, AND PARKING SPACES, INCLUDING LOADING MANAGEMENT PLAN.

STREET TREES AT 1:25 LF ARE REQUIRED WHERE FRONTAGE IMPROVEMENTS OCCUR, INCLUDING NEW STREETS.

MAX BUILDING HEIGHT

MAX ZONING ENVELOPE LEVEL 06 60' - 0" 45' BASE HEIGHT +10' BONUS FOR INCLUSIONARY HOUSING +5' GROUND FLOOR HIGH CEILINGS +4' PARAPET LEVEL 05 48' - 1" LEVEL 04 37' - 10" 60' - 0" 55' + 5' HIGH CEILINGS @ GROUND F 15' - 0" MIN B.O. STRUCTURE 15'-0" MIN HEIGHT @ 75% OF GROUND FLOOR ELEV. 136' HIGH POINT OF SIDEWALK

BUILDING SECTION STICK-BUILT

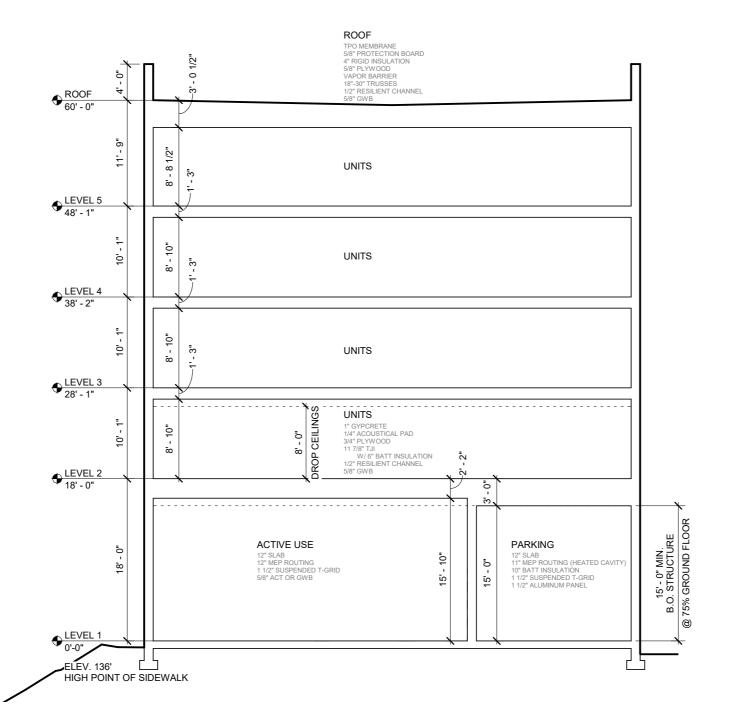
ALLOWANCES

12" PT SLAB

15" FLOOR/CEILING ASSEMBLY

8'-10" CEILING HEIGHTS

30" MIN. ROOF ASSEMBLY



BUILDING SECTION STICK-BUILT, W/ TOWNHOMES

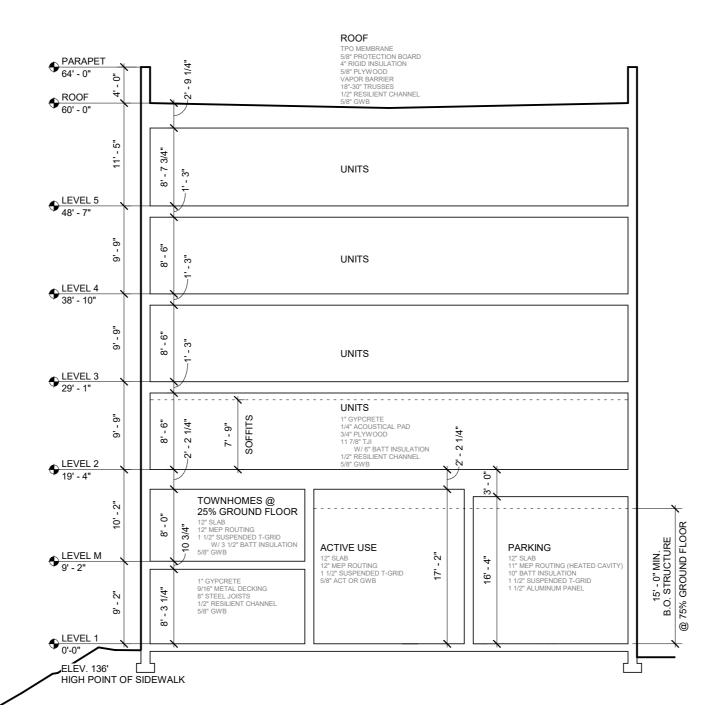
ALLOWANCES

12" PT SLAB

15" FLOOR/CEILING ASSEMBLY

8'-6" CEILING HEIGHTS

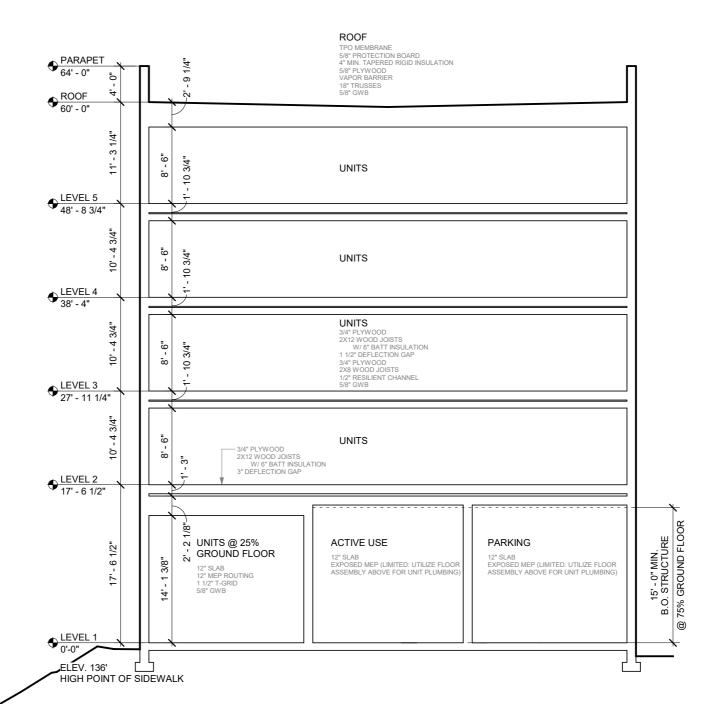
24"- 36" ROOF ASSEMBLY



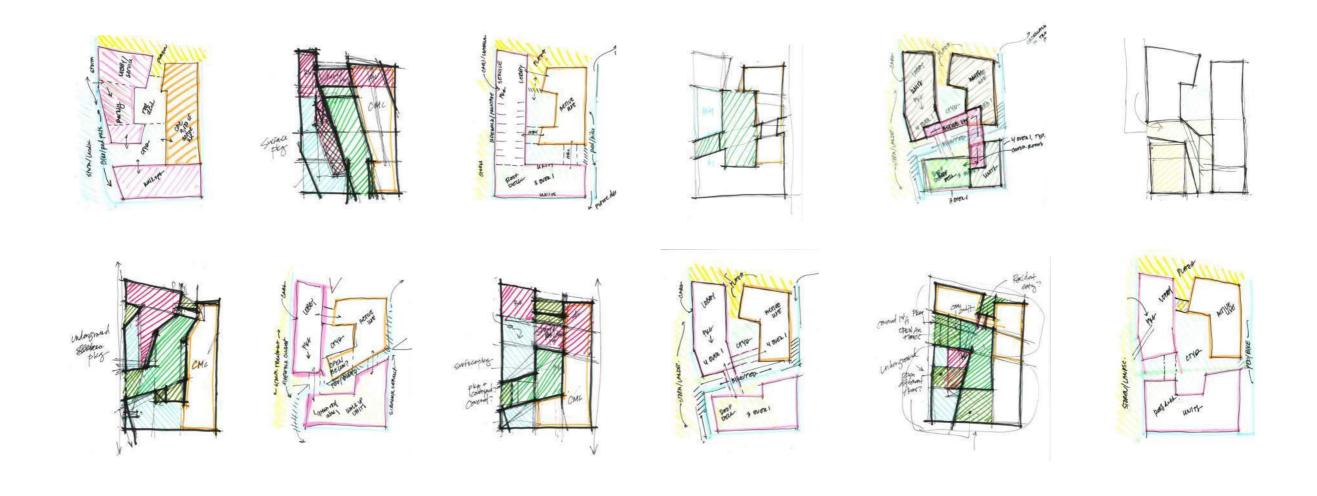
BUILDING SECTION MODULAR

ALLOWANCES

12" PT SLAB
22.75" FLOOR/CEILING ASSEMBLY
8'-6" CEILING HEIGHTS
24" - 36" ROOF ASSEMBLY



PROCESS SKETCHES



PLAN STUDY A: ON-GRADE PARKING

30TH AVE IMPROVEMENT BEYOND RIDGELINE

BUILDING SIZE 144,169 SF [GROSS]

LEVEL 1

8,908 SF ACTIVE USE

12,135 SF PARKING/BIKE PARKING 2,594 SF CIRCULATION/SUPPORT

6,184 SF HOUSING

UPPER LEVELS

14,028 SF ACTIVE USE

15,892 SF CIRCULATION/SUPPORT

84,428 SF HOUSING

7,130 SF COURTYARD

2,211 SF 2ND FL ROOF DECKS

HEIGHT 60', 5 FLOORS

STUDIO (350 SF AVG) 108 UNITS 2-BED (800 SF AVG) 56 UNITS 3-BED (1,000 SF AVG) 4 UNITS

TOTAL 168 UNITS [36% FAMILY]

PARKING COUNT +/-21 STALLS [.13 RATIO]



PLAN STUDY A ALT: ON-GRADE PARKING W/ TOWNHOMES

30TH AVE IMPROVEMENT BEYOND RIDGELINE

BUILDING SIZE 149,853 SF [GROSS]

LEVEL 1

8,908 SF ACTIVE USE

12,135 SF PARKING/BIKE PARKING 2,594 SF CIRCULATION/SUPPORT

6,184 SF HOUSING

MEZZANINE

5.684 SF HOUSING

UPPER LEVELS

12.548 SF ACTIVE USE

15,892 SF CIRCULATION/SUPPORT

85,908 SF HOUSING

7,130 SF COURTYARD

2,211 SF 2ND FL ROOF DECKS

HEIGHT 60', 5 FLOORS

STUDIO (350 SF AVG) 96 UNITS 1-BED (600 SF AVG) 12 UNITS 2-BED (800 SF AVG) 52 UNITS 3-BED (1,000 SF AVG) 10 UNITS

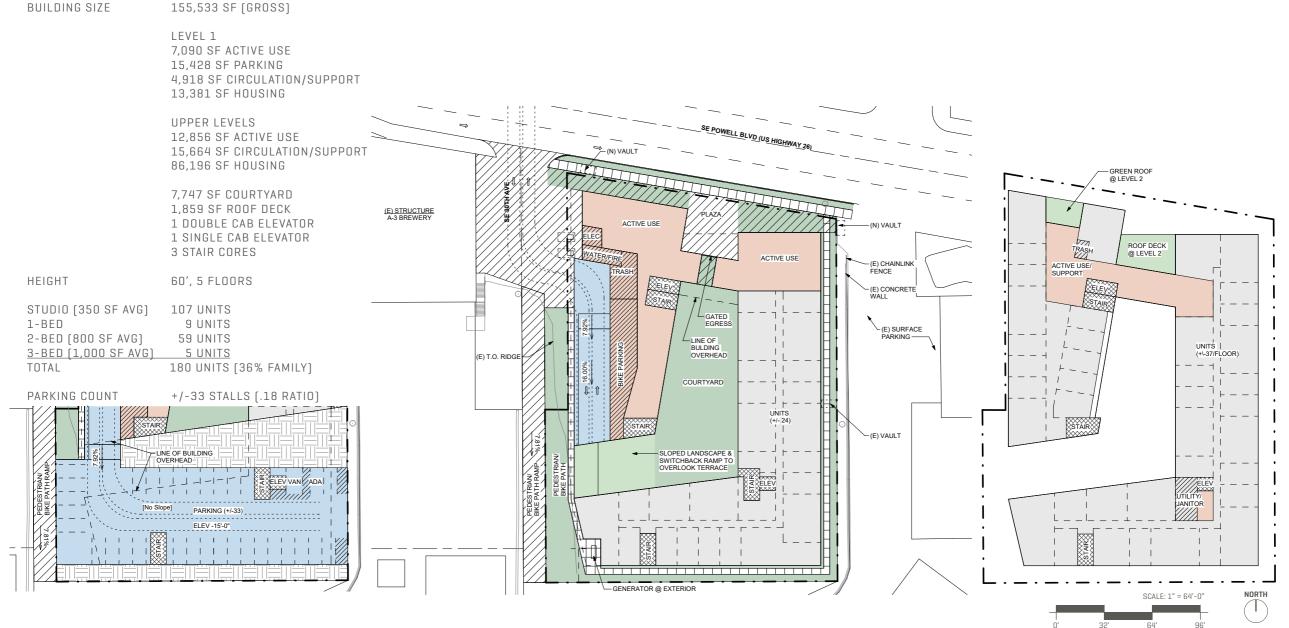
TOTAL 170 UNITS [36% FAMILY]

PARKING COUNT +/-20 STALLS [.12 RATIO]

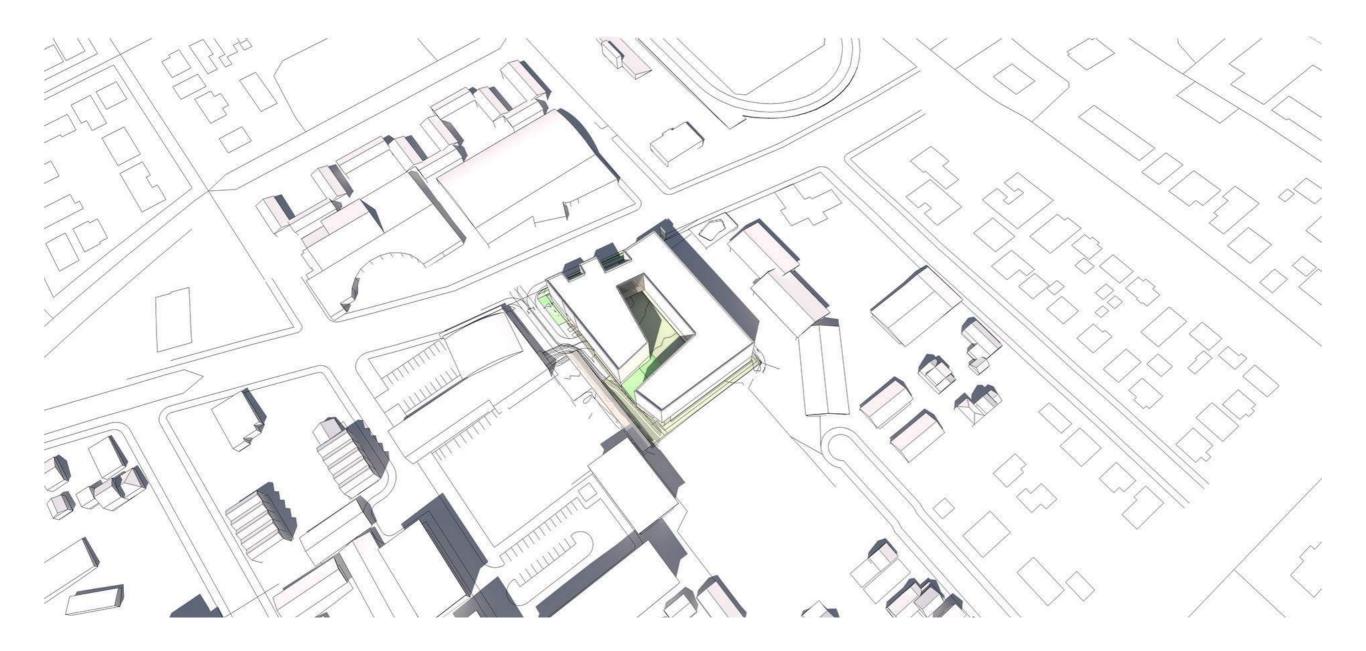


PLAN STUDY B: BELOW-GRADE PARKING

30TH AVE IMPROVEMENT TO RIDGELINE



AERIAL VIEW



STREET VIEWS

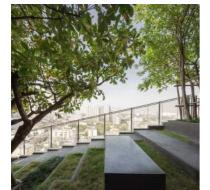




VIEW LOOKING WEST VIEW LOOKING EAST

LANDSCAPE DESIGN

OVERLOOK TERRACE



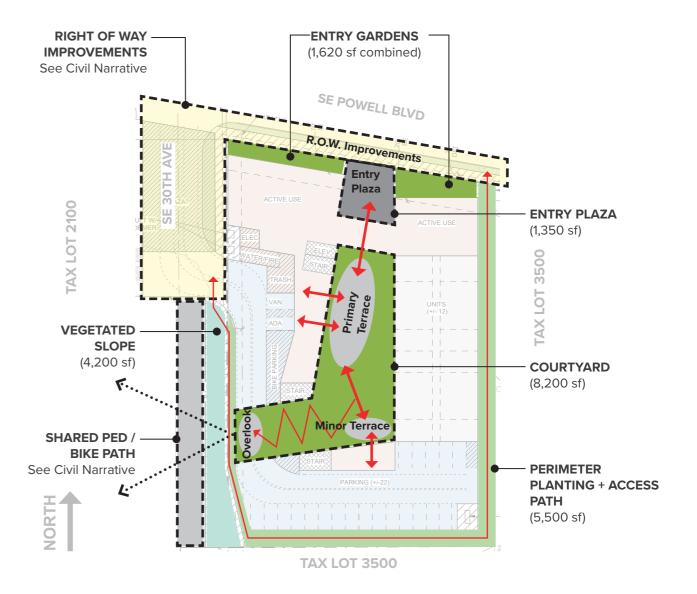












PRECEDENTS



















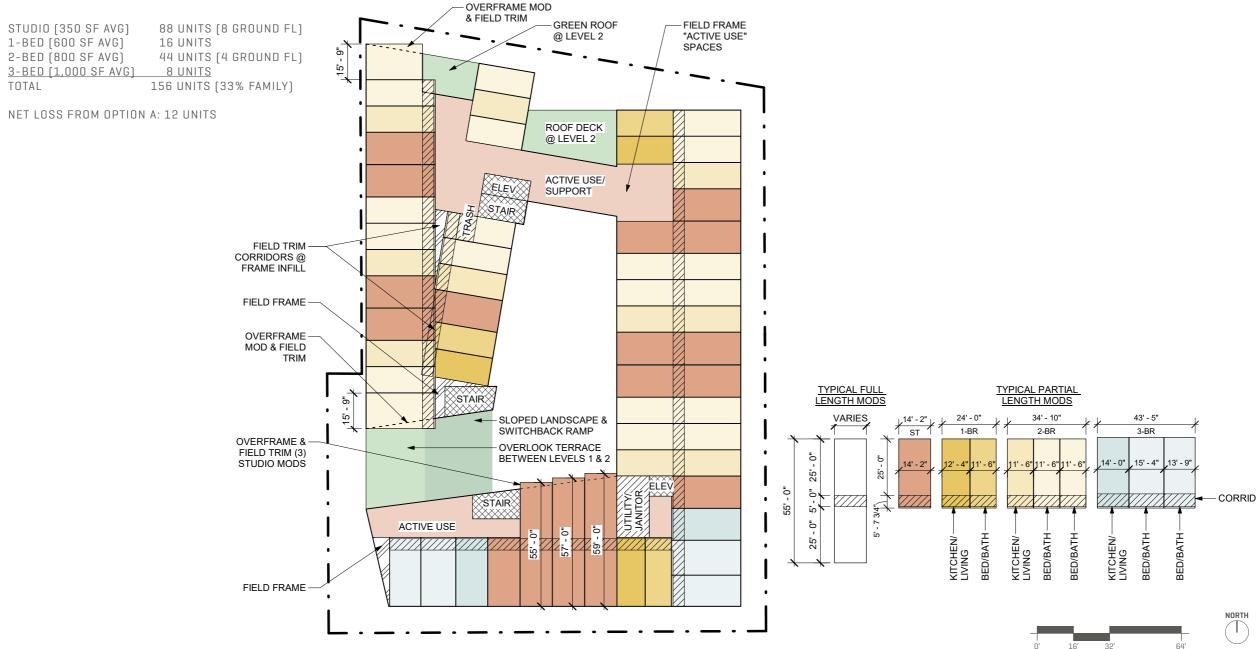


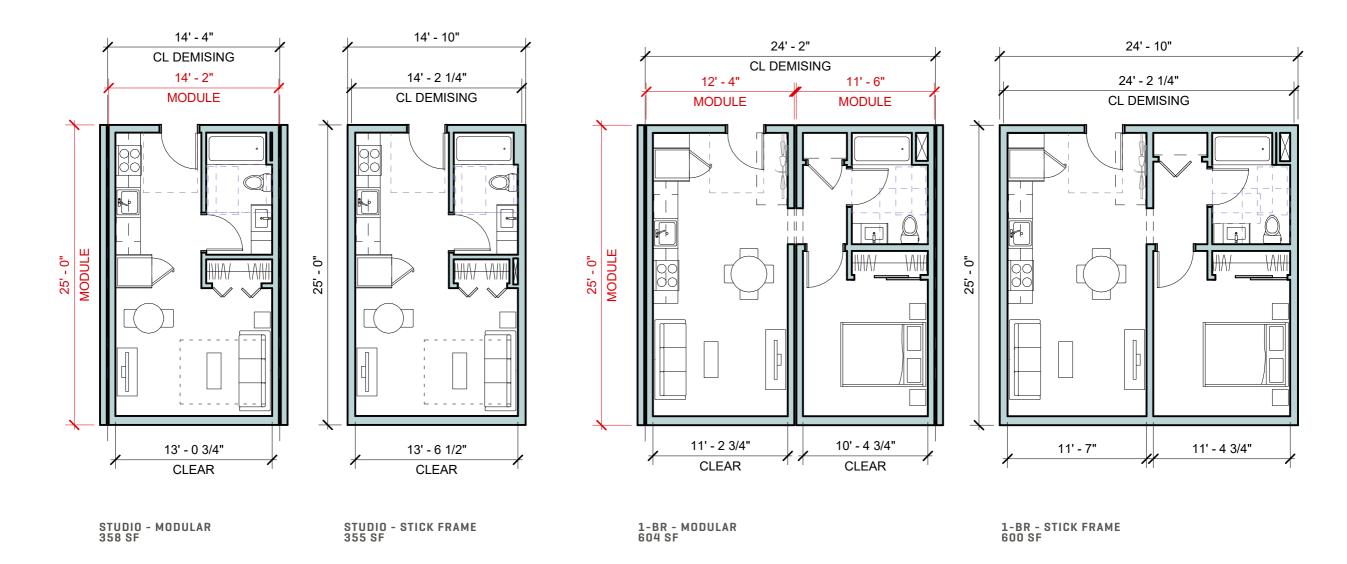






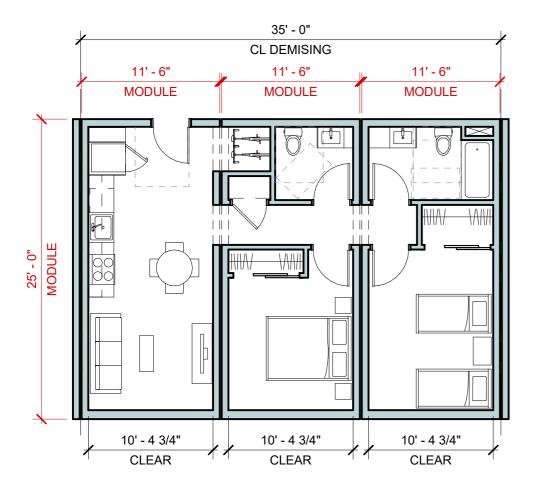
PLAN STUDY: MODULAR

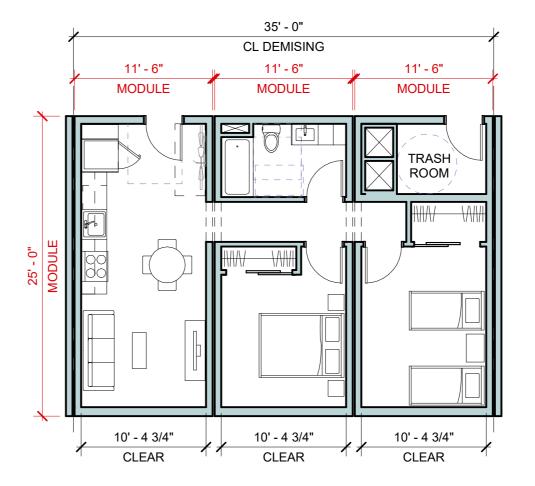






UNIT LAYOUTS 2-BEDROOMS



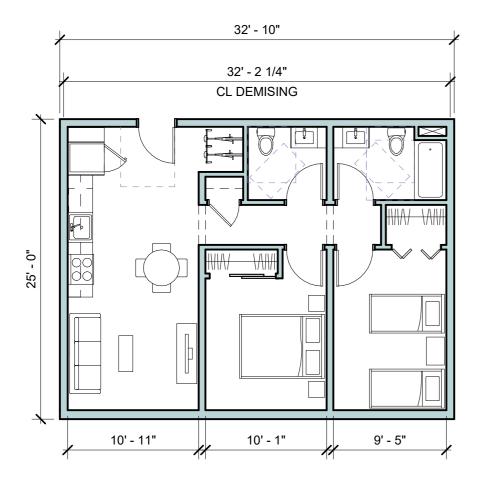


2-BR / 1.5-BA - MODULAR 875 SF

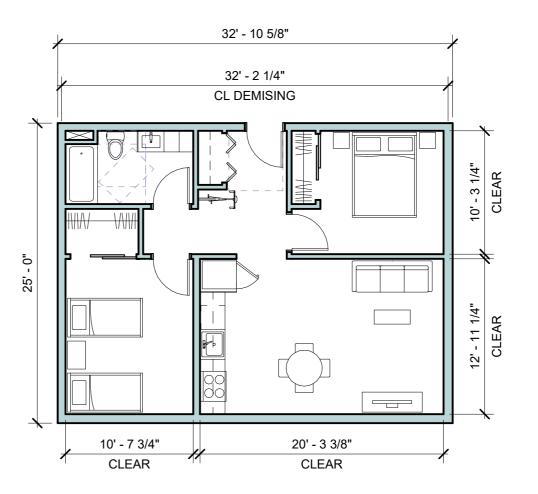
2-BR / 1-BA @ TRASH ROOM - MODULAR 875 SF



UNIT LAYOUTS 2-BEDROOMS



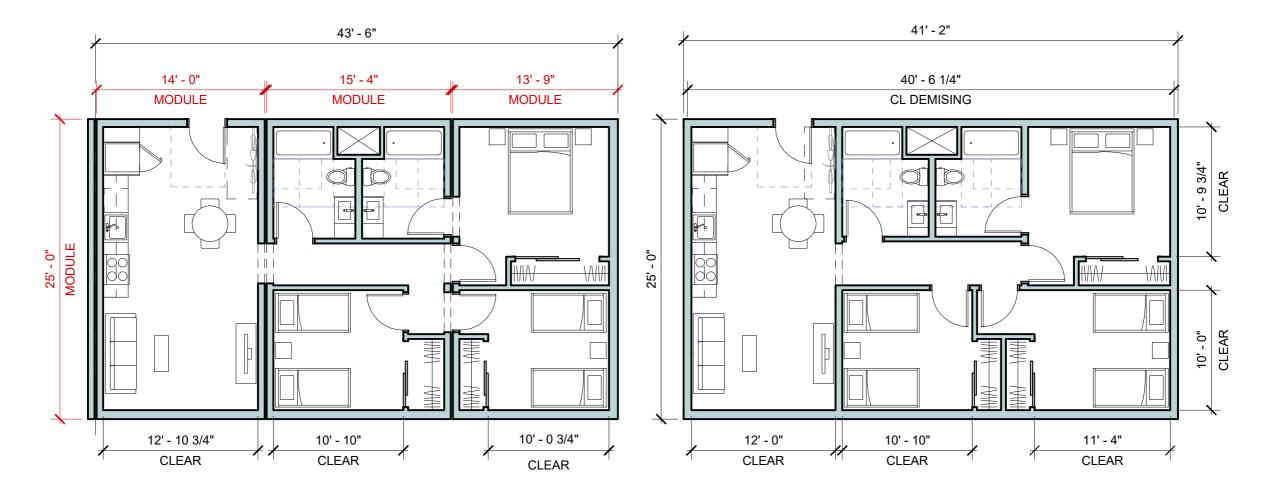
2-BR / 1.5-BA - STICK BUILT 800 SF



2-BR / 1-BA @ OUTSIDE CORNER - STICK BUILT 800 SF



UNIT LAYOUTS 3-BEDROOMS

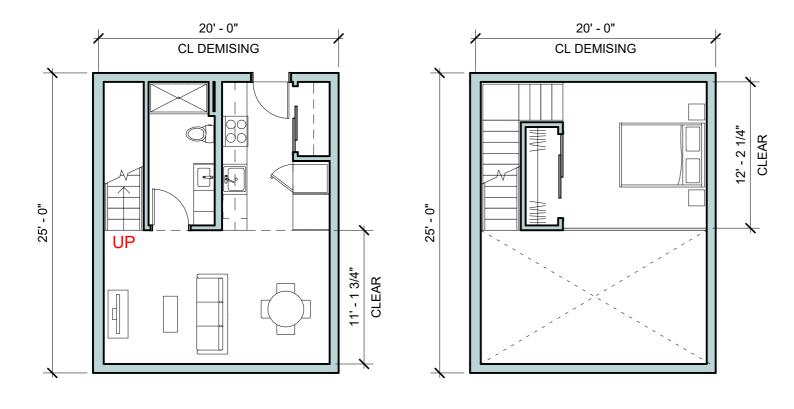


3-BR @ OUTSIDE CORNER - MODULAR 1073 SF (W/ SHAFT DEDUCTION)

3-BR @ OUTSIDE CORNER - STICK FRAME 1000 SF (W/ SHAFT DEDUCTION)



UNIT LAYOUTS TOWNHOMES

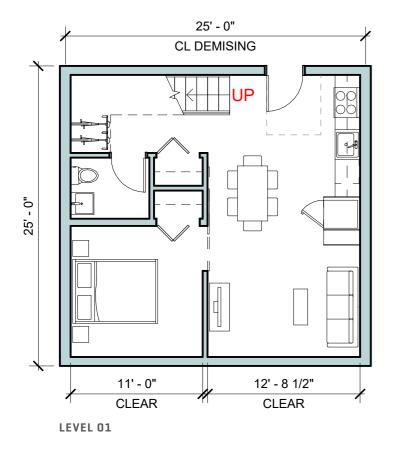


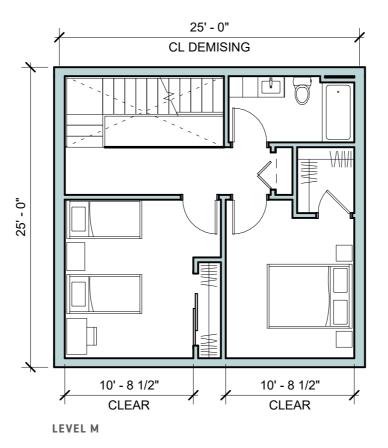
LEVEL 01 LEVEL M

1-BR TOWNHOME 700 SF (W/ 50 SF STAIR DEDUCTION)



UNIT LAYOUTS TOWNHOMES





3-BR TOWNHOME 1200 SF (W/ 50 SF STAIR DEDUCTION)



HOLST

THANK YOU.

HOLST

2 November 2018

METRO BARBUR SITE DESIGN STUDY

PORTLAND, OR

Site Design Study

OPTION A

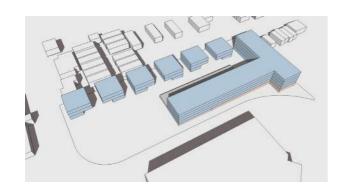
4-OVER-1 BUILDING, 3-STORY WALK-UP UNITS, RETAIL SPACE, COURTYARD, ROOF DECK, BELOW-GRADE AND SURFACE PARKING

MARKET-RATE HOUSING UNITS

BUILDING SIZE	221,000 GSF
GARAGE	40,400 GSF

STUDIOS [504 SF TYP] 48 UNITS [20%] 1-BED [660 SF] 143 UNITS [60%] 51 UNITS [20%] 242 UNITS 2-BED [1023 SF] TOTAL

PARKING COUNT 182 STALLS [0.75]







OPTION A

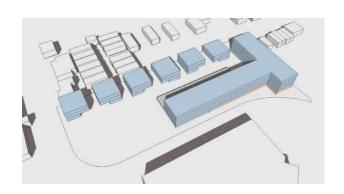
4-OVER-1 BUILDING, 3-STORY WALK-UP UNITS, RETAIL SPACE, COURTYARD, ROOF DECK, BELOW-GRADE AND SURFACE PARKING

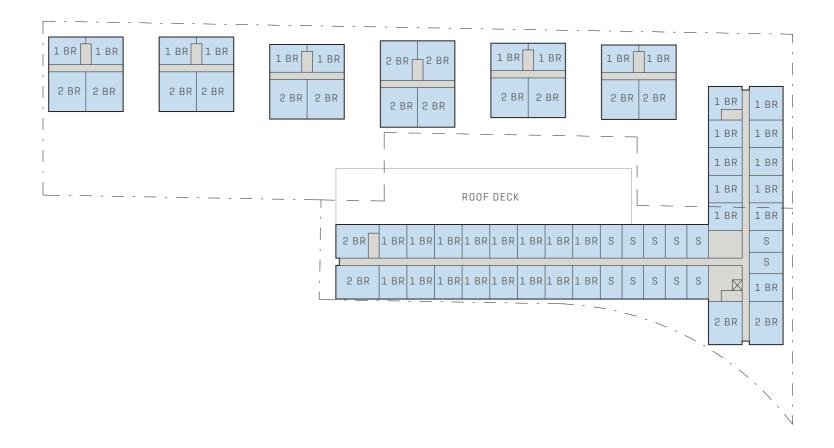
MARKET-RATE HOUSING UNITS

BUILDING SIZE	221,000 GSF
GARAGE	40,400 GSF

STUDIOS [504 SF TYP]	48 UNITS [20%
1-BED [660 SF]	143 UNITS [60%
2-BED [1023 SF]	51 UNITS [20%
TOTAL	242 UNITS

PARKING COUNT 182 STALLS [0.75]





OPTION B

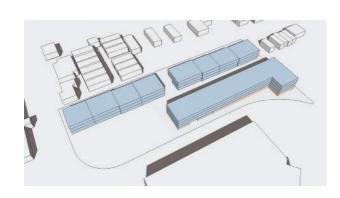
3-OVER-1 BUILDING, 3-STORY WALK-UP UNITS, EARLY EDUCATION SPACE. EARLY ED + HOUSING COURTYARDS, ALL SURFACE PARKING

AFFORDABLE HOUSING UNITS

STUDIOS [504 SF TYP] 38 UNITS [21%] 1-BED [644 SF] 58 UNITS [31%] 2-BED [924 SF] 71 UNITS [38%] 3-BED [1167 SF] 19 UNITS [10%] TOTAL 186 UNITS

1.48 BEDS/UNIT AVG

62 STALLS [0.33] PARKING COUNT







OPTION B

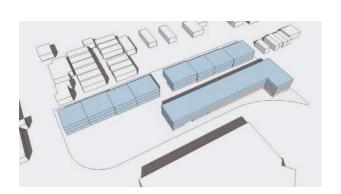
3-OVER-1 BUILDING, 3-STORY WALK-UP UNITS, EARLY EDUCATION SPACE, EARLY ED + HOUSING COURTYARDS, ALL SURFACE PARKING

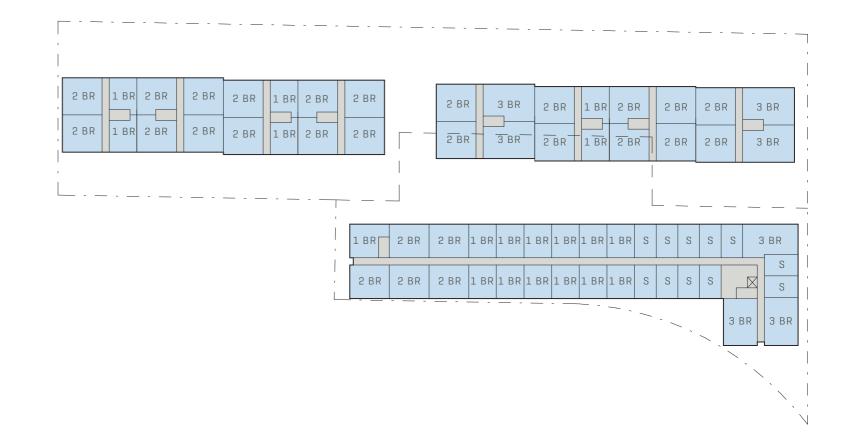
AFFORDABLE HOUSING UNITS

STUDIOS [504 SF TYP]	38 UNITS [21%]
1-BED [644 SF]	58 UNITS [31%]
2-BED [924 SF]	71 UNITS [38%]
3-BED [1167 SF]	19 UNITS [10%]
TOTAL	186 UNITS

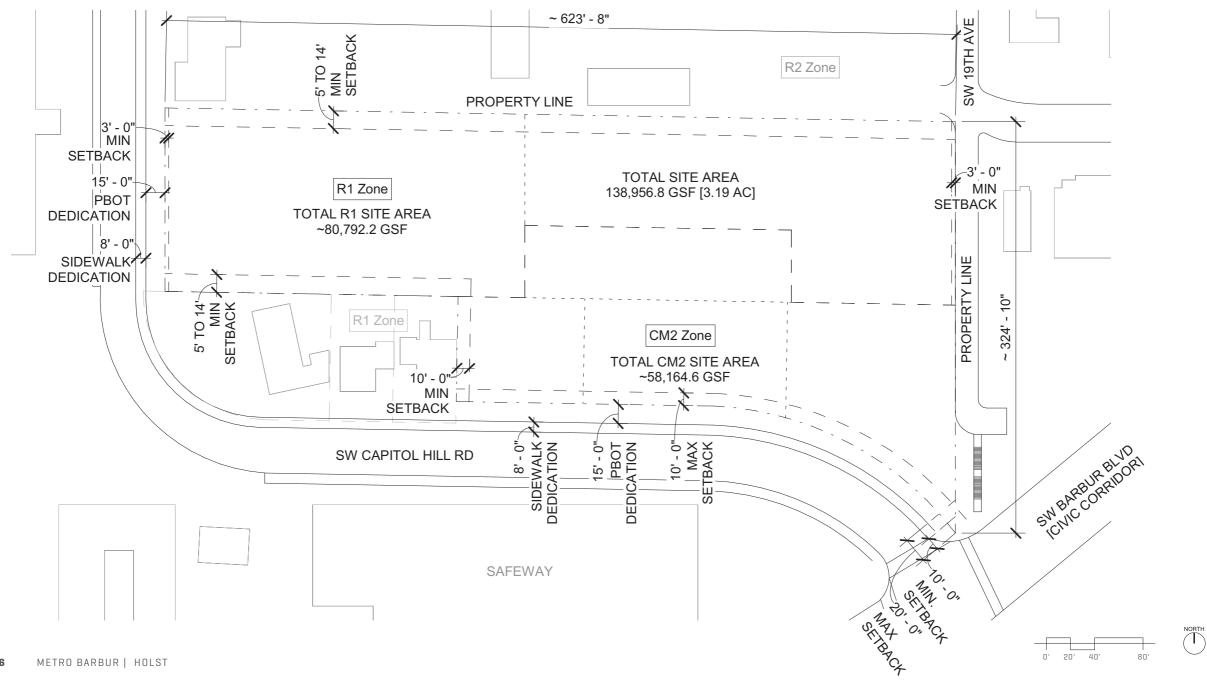
1.48 BEDS/UNIT AVG

PARKING COUNT 62 STALLS [0.33]





SITE INFORMATION



SITE INFORMATION

ZONING ANALYSIS	COMMERICIAL ZONE	RESIDENTIAL ZONE	
BASE ZONE	CM2 COMMERCIAL MIXED USE 2	R1 RESIDENTIAL 1000	
OVERLAYS	NONE	NONE	
COMP PLAN DESIGNATION	MU-C MIXED USE - CIVIC CORRIDOR [SW BARBUR]	R1 MULTI-DWELLING 1000	
PLAN DISTRICT	N/A	N/A	
URBAN RENEWAL AREA	N/A	N/A	
ALLOWABLE USES	HOUSEHOLD LIVING, RETAIL	HOUSEHOLD LIVING, RETAIL (LIMITED, RETAIL PLANT NURSERIES)	
TOTAL SITE AREA [161,608.8 GSF OR 3.71 ACRES]	58,164.6 GSF [1.34 ACRES]	103,444.2 GSF [2.37 ACRES]	
MAX FAR	2.5:1 = 145,411.5 GSF	**1.5:1 = 155,166.3 GSF	
MAX FAR W/ BONUS	4:1 = 232,658.4 GSF	**2.25:1 = 232,749.45 GSF	
MAX DENSITY	N/A	1 UNIT/1,000SF SITE AREA = 103 UNITS	
		AMENITY BONUSES [FOR OUTDOOR/CHILDREN'S AREAS, 3-BR UNITS, STORAGE, ETC]	
MIN DENSITY	N/A	1 UNIT/1,450SF SITE AREA = 72 UNITS	
MAX HEIGHT	45FT	45FT [25FT WHERE <10FT FROM FRONT PROPERTY LINE]	
MAX HEIGHT W/ BONUS	75FT W/ PLANNED DEVELOPMENT BONUS OPTION	N/A	
MIN BLDG SETBACKS	NONE [STREET]; 10FT [CIVIC CORRIDOR]	3FT [STREET]; 5-14FT [DEPENDING ON FACADE AREA AT SIDE + REAR]	
		**5-10FT [STREET]; SFT [SIDE + REAR]	
MAX BLDG SETBACKS	10FT [STREET]; 20FT [CIVIC CORRIDOR]	N/A	
MAX BUILDING SITE COVERAGE	85%	60%	
MAX BUILDING LENGTH	N/A	YES; 100FT WHERE BLDG <30FT FM STREET	
MIN LANDSCAPED SITE AREA	15%	20%	
MINIMUM PARKING	1/UNIT [HOUSEHOLD] OR O [W/ AFFORDABLE HOUSING EXCEPTION]	N/A	
MAXIMUM PARKING	1.35/UNIT [HOUSEHOLD] + VARIES BY TYPE [FOR RETAIL]	N/A	
REQ'D RESIDENTIAL OUTDOOR AREA	YES	YES	
		**BETTER HOUSING BY DESIGN PROJECT, PROPOSED REVISIONS	

HOLST

15 JANUARY 2021

METRO 10450 BARBUR STUDY

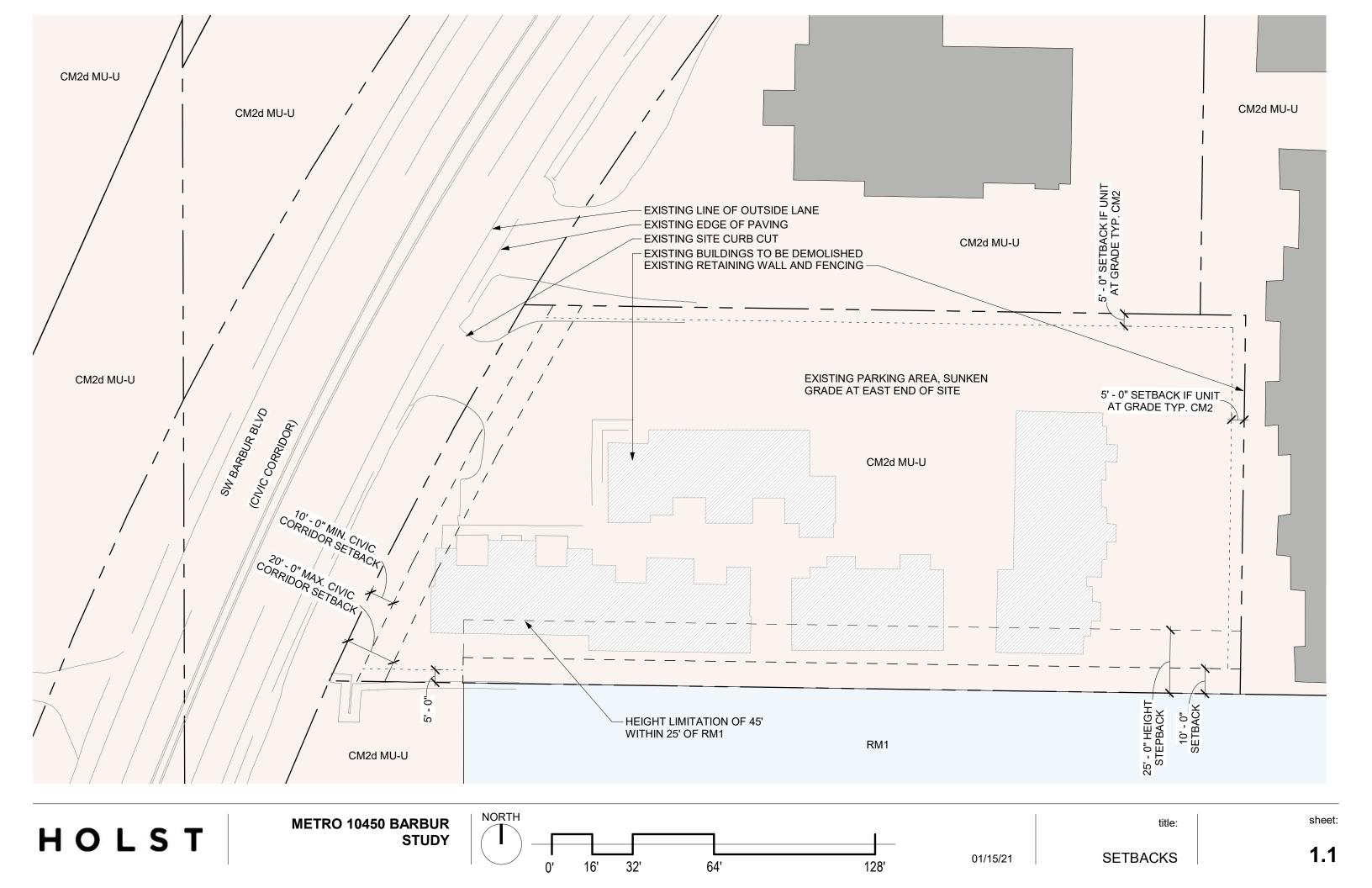
PORTLAND, OR

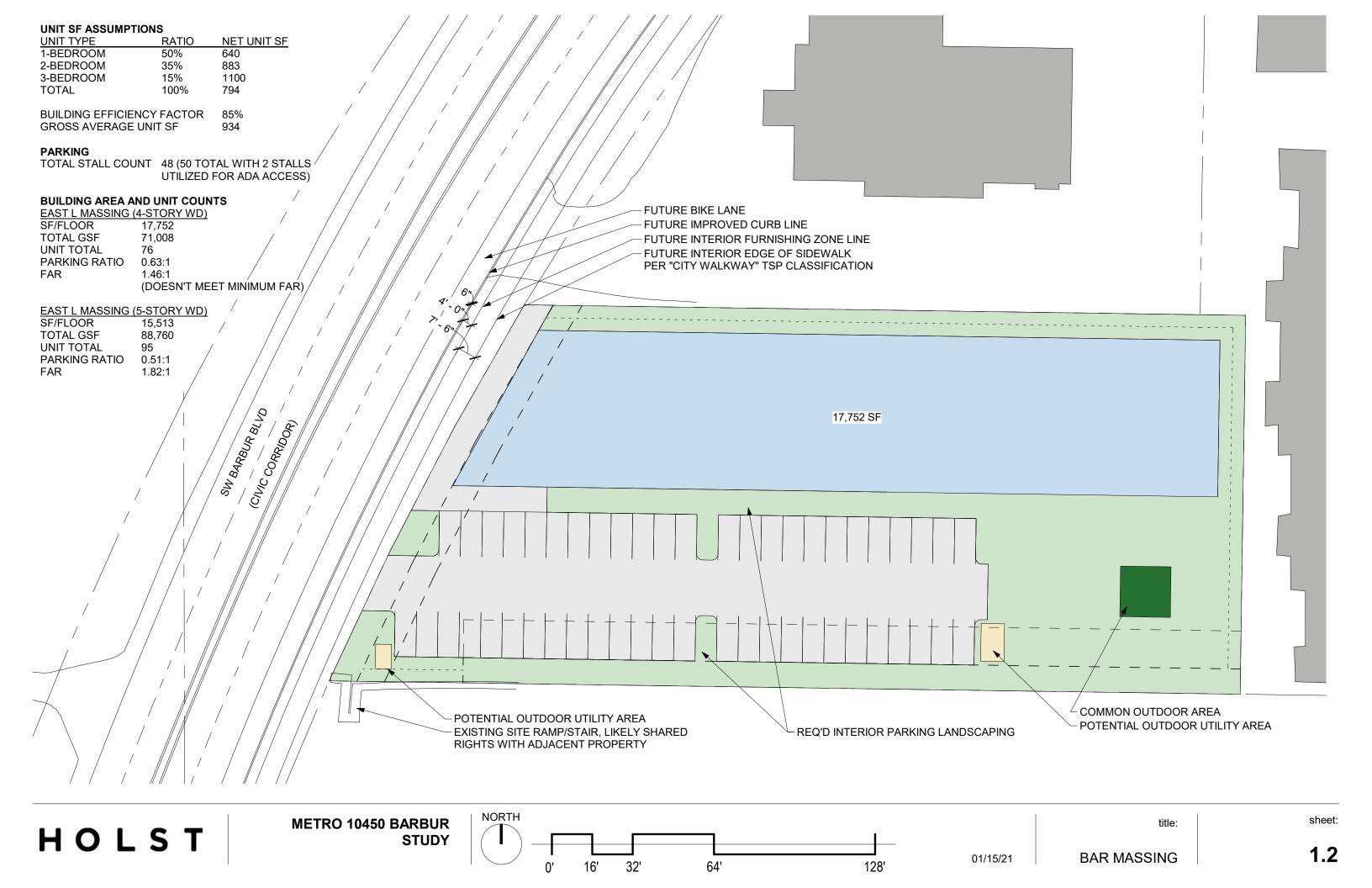
Site Design Study

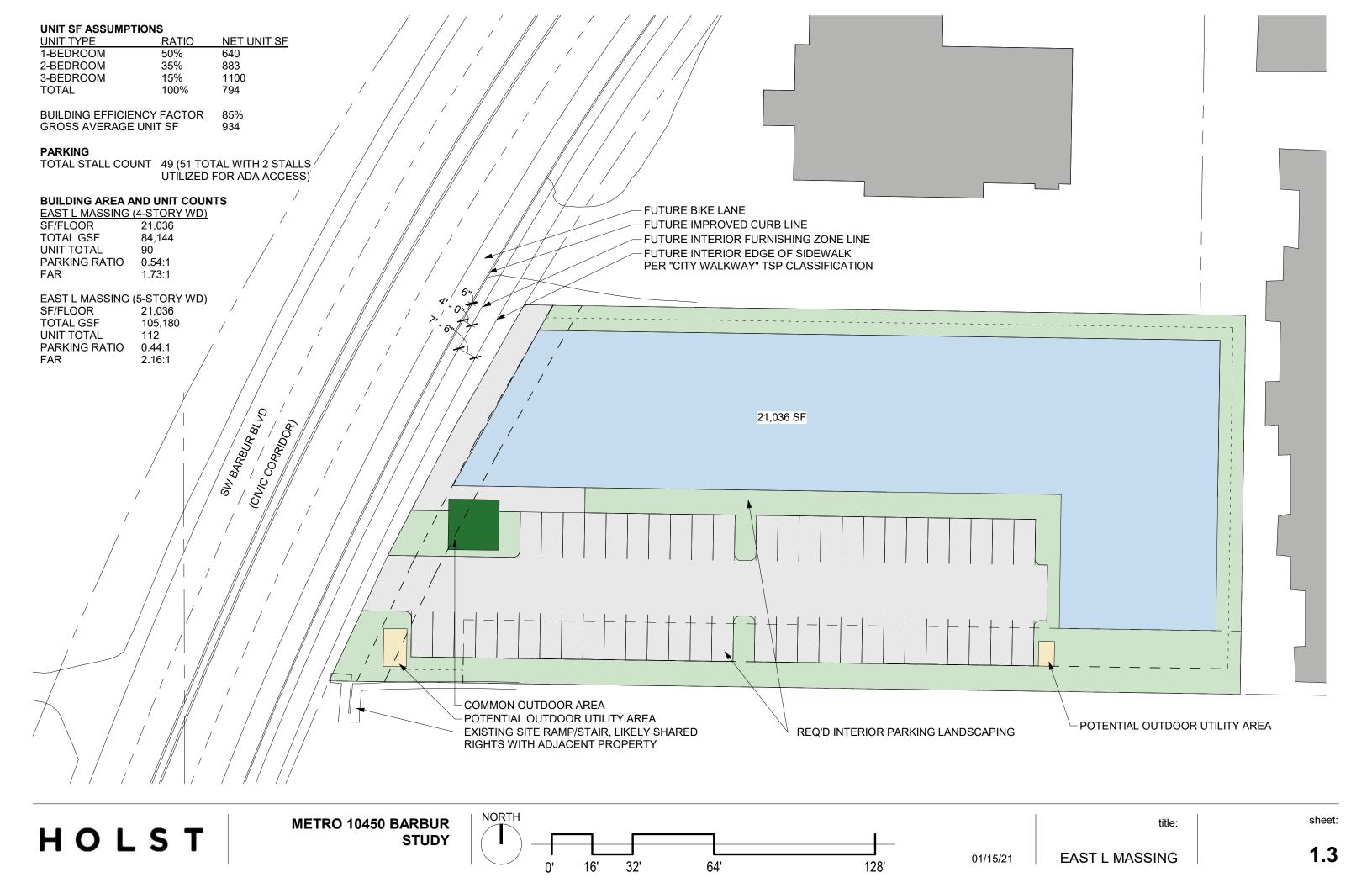
SITE INFORMATION

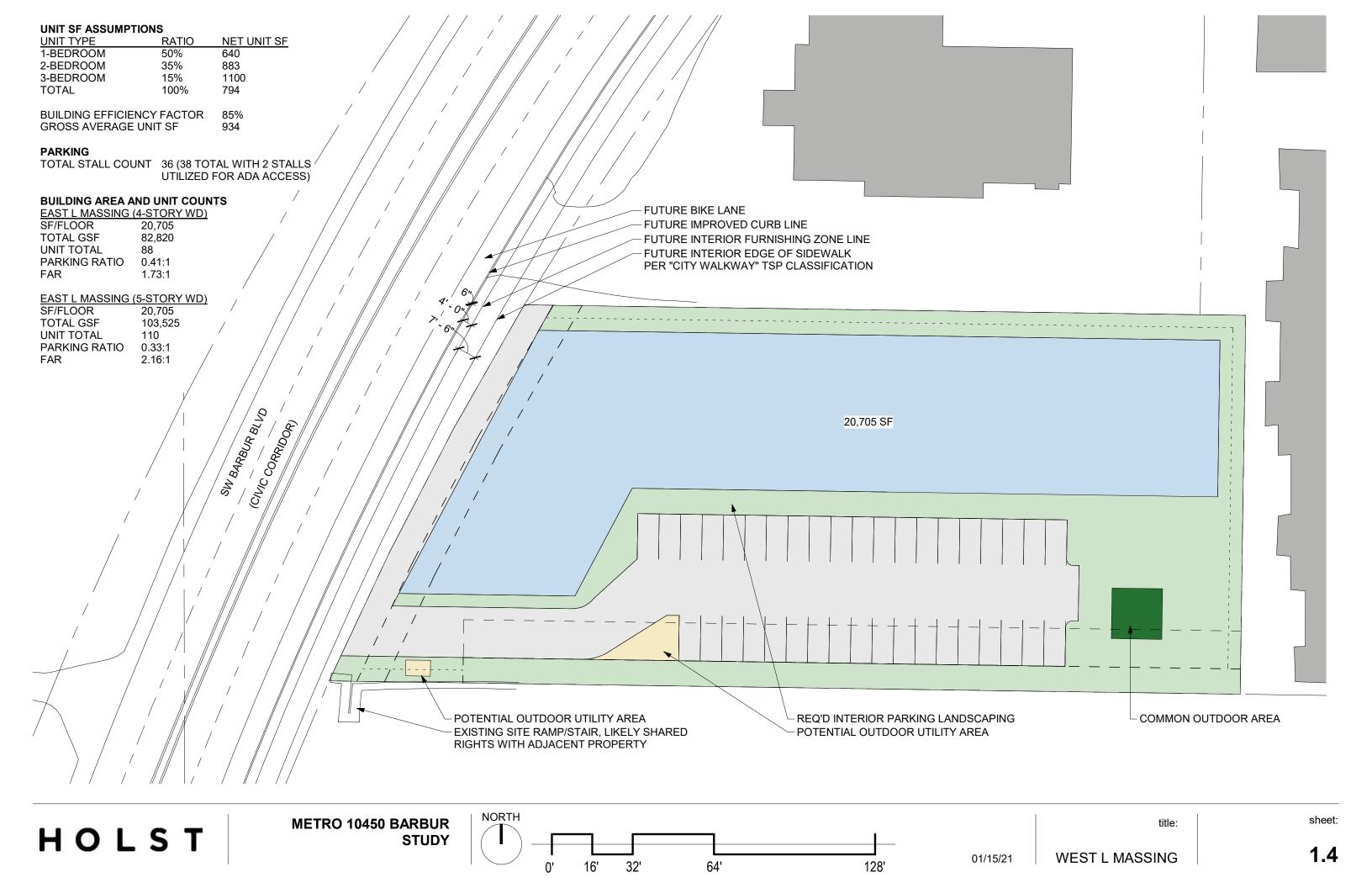
BASE ZONE	CM2 - COMMERCIAL MIXED USE 2	MIN BLDG SETBACKS	ABUTTING CM2 LOT LINE = OFT
OVERLAYS	D - DESIGN		ABUTTING SW BARBUR = 10FT [CIVIC CORRIDOR]
COMP PLAN DESIGNATION	MU-U MIXED USE - URBAN CENTER	MAX BLDG SETBACKS	ABUTTING RM1 LOT LINE = 10FT
PLAN DISTRICT	N/A CURRENTLY, WEST PORTLAND TOWN CENTER PLAN DISTRICT PROPOSED (SITE LOCATED IN SUBDISTRICT A)		ABUTTING CM2 LOT LINE =10FT
UDDAN DENEWAL ADEA			ABUTTING SW BARBUR = 20FT [CIVIC CORRIDOR]
URBAN RENEWAL AREA	N/A		ABUTTING RM1 LOT LINE = NONE
CIVIC CORRIDOR	YES	MAX BUILDING SITE COVERAGE	85%
ALLOWABLE USES	HOUSEHOLD LIVING, RETAIL SALES AND SERVICE,		
	OFFICE, COMMUNITY SERVICE, DAYCARE	MAX BUILDING LENGTH	N/A
TOTAL SITE AREA	MIN LANDSCAPED SITE AREA	MIN LANDSCAPED SITE AREA	15%
	48,722.13 GSF [1.12 ACRES]	MINIMUM PARKING	O [W/ AFFORDABLE HOUSING EXCEPTION]
MIN FAR	1.5:1 = PER PROPOSED WEST PORTLAND	MAXIMUM PARKING	1.35/UNIT [HOUSEHOLD] + VARIES BY TYPE [FOR RETAIL]
	TOWN CENTER PLAN DISTRICT (SUBDISTRICT A)	REO'D RESIDENTIAL OUTDOOR AREA	YES, 48SF OF OUTDOOR AREA PER UNIT
MAX FAR	2.5:1 = 121,805.33 GSF	REQ D RESIDENTIAL DUTDOUR AREA	
MAX FAR W/ BONUS	5.5:1 = 267,971.72 GSF		IF COMBINED INTO COMMON AREA, SPACE MUST BE AT LEAST 500SF IN AREA AND ALSO FIT 20FT X 20FT SQUARE
	FLOOR AREA MAY BE INCREASED BY 2 SQUARE FEET FOR EACH SQUARE FOOT OF NET BUILDING FLOOR AREA PROVIDED ON SITE FOR DAYCARE OR COMMUNITY SERVICE USE	GROUND FLOOR WINDOW STANDARDS	YES, 40% ON STREET-FACING FACADE IF NOT WALL OF DWELLING UNIT
MAX DENSITY	N/A	URBAN GREEN FEATURES	YES, PER PROPOSED WEST PORTLAND TOWN CENTER
MIN DENSITY	1 UNIT PER 1,450SF OF SITE AREA		PLAN DISTRICT. THIS COULD BE SPACE FOR LARGE TREES, ENHANCED NATIVE LANDSCAPING, STREET FACING
MAX HEIGHT	45FT		STORMWATER FACILITIES, ETC.
MAX HEIGHT W/ BONUS	+10FT MU-U FOR BASE ZONING W/ IH BONUS	ACTIVE GROUND FLOOR USE REQUIREMENT	NO, PER PROPOSED WEST PORTLAND TOWN CENTER PLAN DISTRICT COMMERCIAL CORRIDOR MAP 595-3
	+10FT MU-U FOR BASE ZONING W/ DAYCARE/COM. SERVICE BONUS	REQ'D AFFORDABLE COMMERCIAL SPACE	NO, PER PROPOSED WEST PORTLAND TOWN CENTER
	+10FT MU-U FOR BASE ZONING W/ AF. COMMERCIAL BONUS		PLAN DISTRICT SUBDISTRICT A THIS WOULD APPLY ONLY IF THE DEVELOPMENT WILL ADD ATLEAST 10,000SF AND THE NEW DEVELOPMENT WERE TO INCLUDE ATLEAST 10,000SF, THAN A MINIMUM OF 1,000SF WOULD NEED TO
	75FT W/ PLANNED DEVELOPMENT BONUS OPTION OR		
	INCLUSION OF ALL POSSIBLE BONUSES		BE AFFORDABLE COMMERCIAL SPACE
HEIGHT STEPBACKS	45FT MAXIMUM HEIGHT WITHIN 25FT OF RM1 LOT LINE	LOCATION OF VEHICLE AREA	NO, PER PROPOSED WEST PORTLAND TOWN CENTER PLAN DISTRICT COMMERCIAL CORRIDOR MAP 595-3

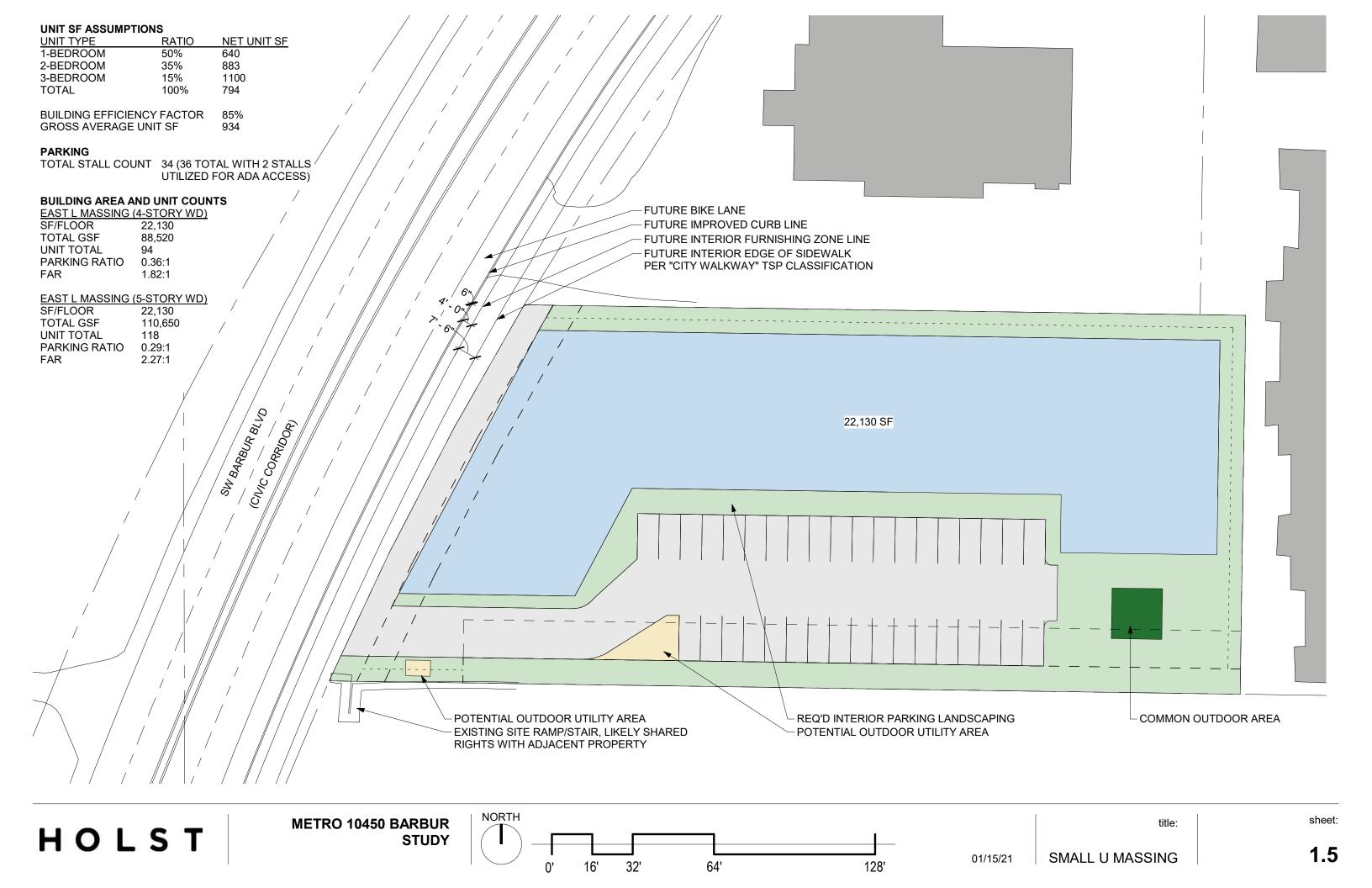


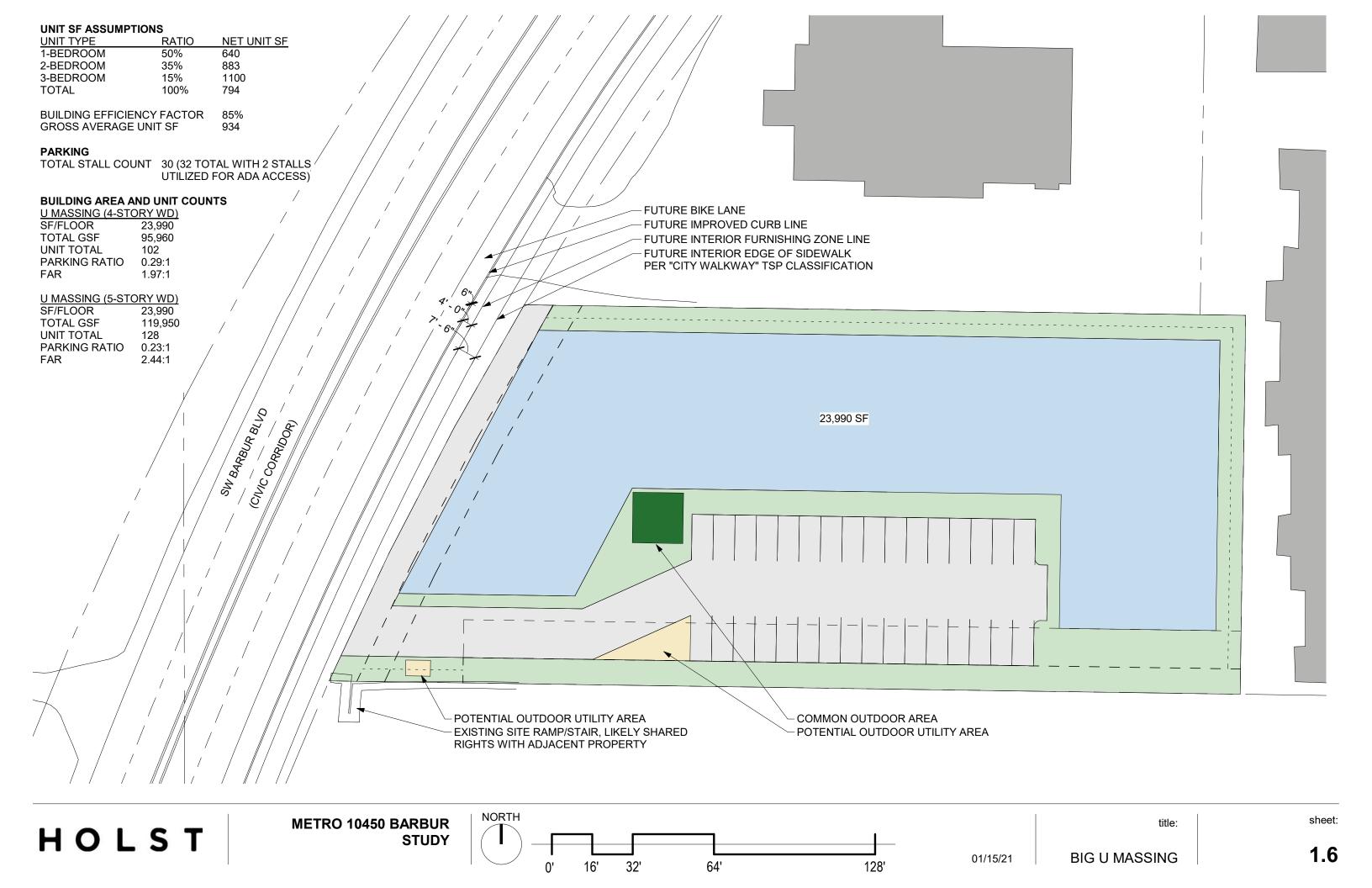


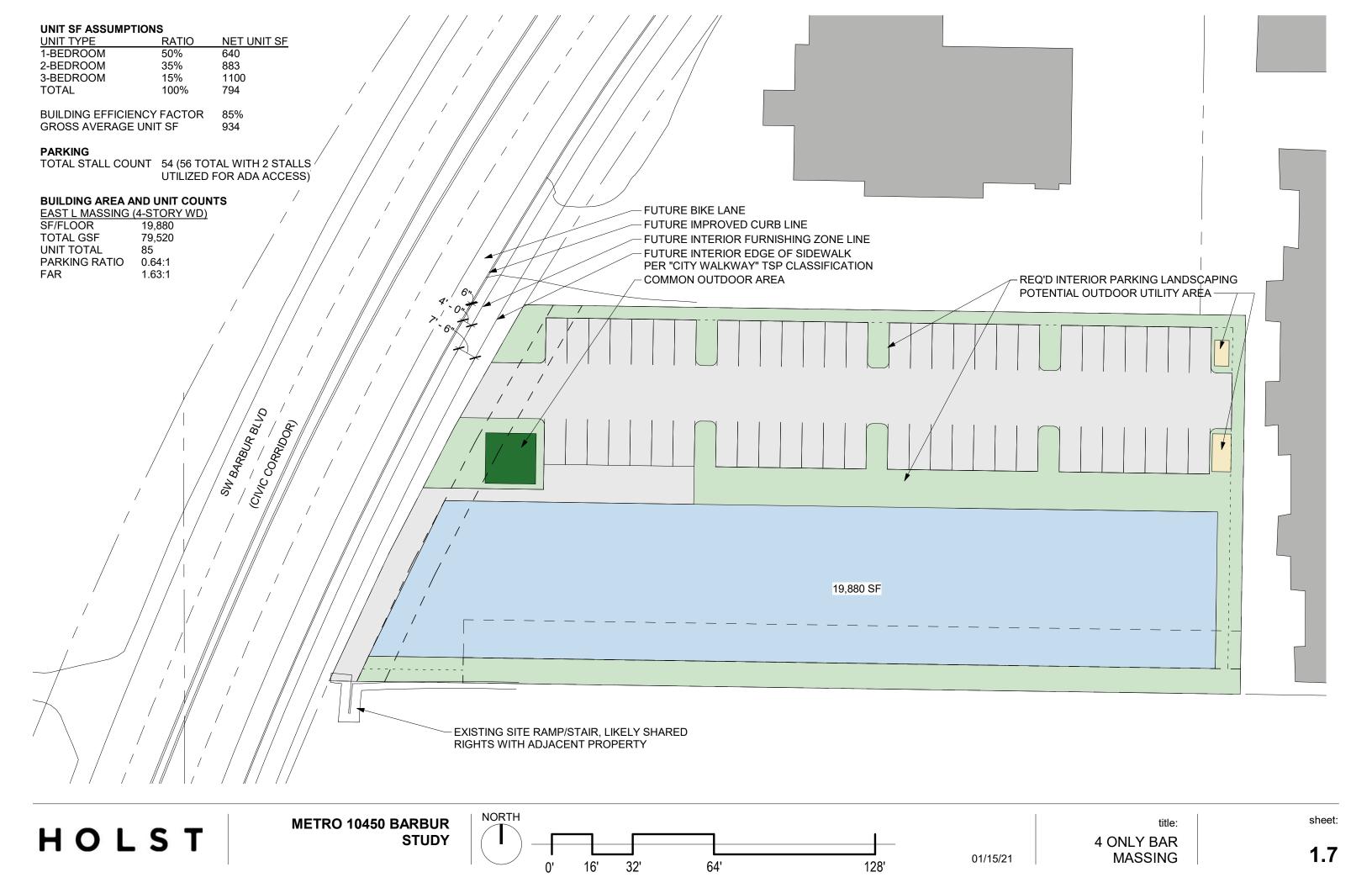


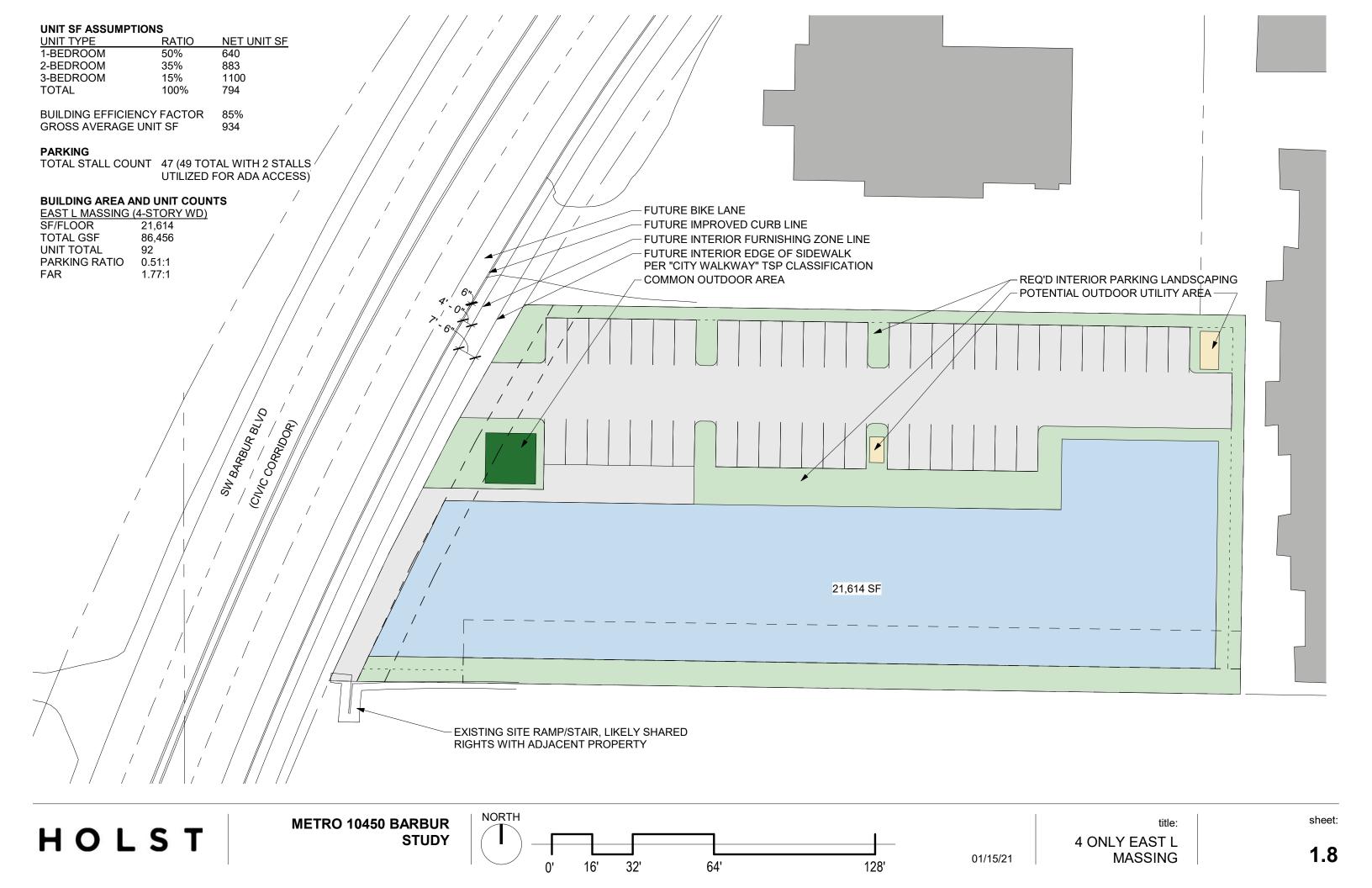


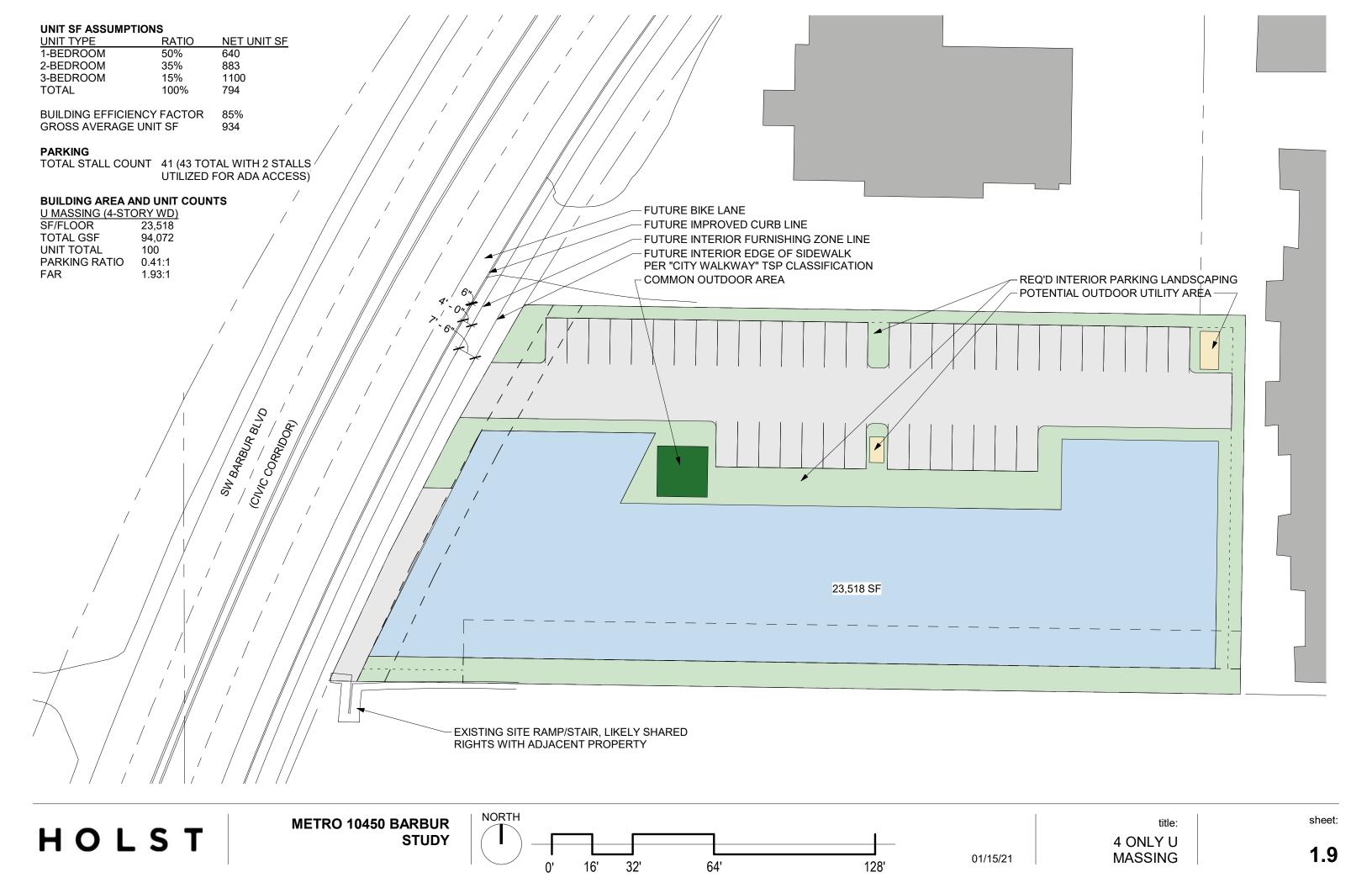










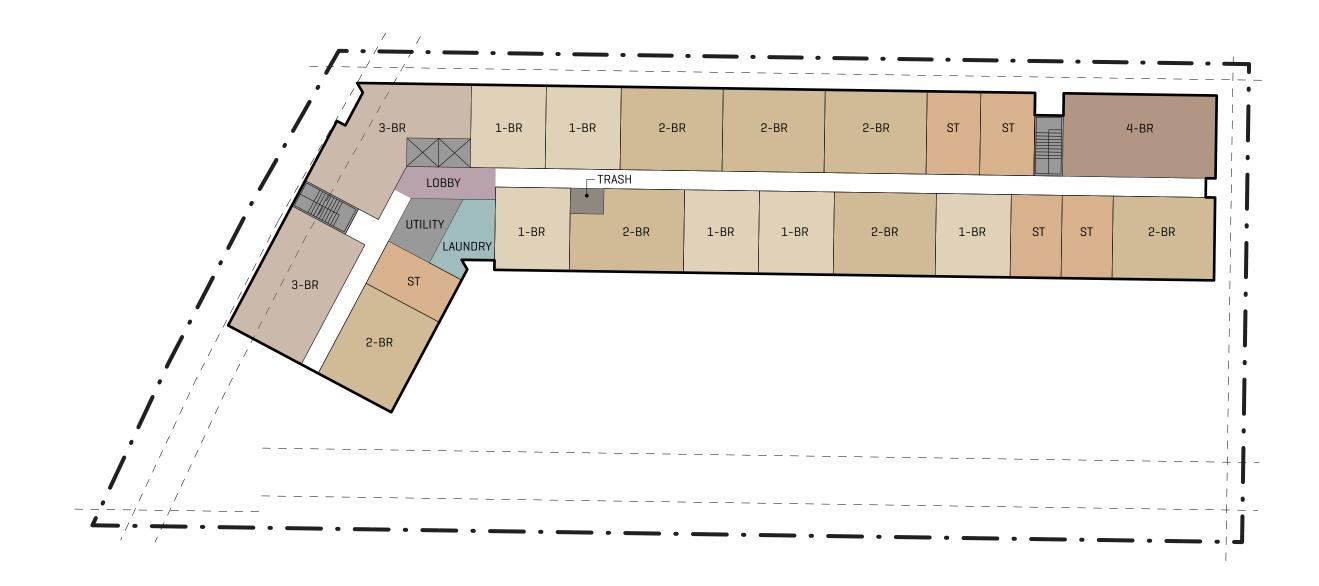


PRELIMINARY MASSING VIEW LOOKING NORTH





TYPICAL UPPER FLOOR PLAN 07 December 2022



HOLST

THANK YOU.