



**VARSITY MULTI  
SERVICE RE-DEVELOPMENT**



**URBAN DESIGN REVIEW PANEL  
PROJECT PACKAGE**

**PROJECT TEAM:**

the marc boutin architectural collaborative inc. | Johnston Davidson Architect + Planning Inc. |  
Baumschlager Hutter Partners | Entuitive | The AME Consulting Group Ltd. | Nemetz (S/A) & Associates  
Ltd. | ISL Engineering and Land Services | Bunt & Associates Engineering Ltd.

2021 05 12



# PROJECT TEAM

**OWNER GROUP**

City of Calgary

**INTEGRATED DESIGN TEAM**

**PRIME CONSULTANT**

the marc boutin architectural collaborative inc.

**ARCHITECTURAL CONSULTANTS**

Johnston Davidson Architecture + Planning Inc.

Baumschlager Hutter Partners

**STRUCTURAL ENGINEERING**

Entuitive Corporation

**BUILDING ENVELOPE**

Entuitive Corporation

**MECHANICAL ENGINEERING**

The AME Consulting Group Ltd.

**ELECTRICAL ENGINEERING**

Nemetz (S/A) & Associates

**CIVIL ENGINEERING**

ISL Engineering and Land Services

**LANDSCAPE ARCHITECTURE**

ISL Engineering and Land Services

**TRAFFIC ENGINEERING**

Bunt & Associates Engineering Ltd.

**OWNER CONSULTANT TEAM**

**GREEN BUILDING CONSULTANT**

Stantec Inc.

**COST CONSULTANT**

Altus Group



# PROJECT BRIEF

## INTRODUCTION

The Marc Boutin Architectural Collaborative (MBAC) was retained by the City of Calgary to deliver the Varsity Multi-Service Redevelopment (VMSR) project in September 2018 following a Conceptual Exploratory Master Plan completed in July 2018. The VMSR is to be an integrated facility where several stakeholders will be hosted within a single site. It will be one of the first projects of its kind constructed by the City of Calgary. In contrast to historic City of Calgary projects that are typically single-use facilities, the aspirations of this multi-service facility include the creation of flexible spaces with maximized efficiency through the avoidance of redundancy and duplication of effort.

The project is located on a parcel at the corner of 37 Street NW and 32 Avenue NW at 3740 32 Avenue NW. The site is situated north of the University of Calgary Campus and on the edge of the University Research Park and the Varsity community residential area. The total site parcel is 14,800 square meters with Fire Station No. 17 and a Household Hazardous Waste Drop-Off currently located on the southern portion of the site. The proposed integrated facility is to be constructed so that the existing Fire Station No. 17 can remain operational with no disruption in response time or service during the development of the new facility.

## PLANNING AND URBAN DESIGN RATIONALE

The project's planning and urban design rationale emerged from two key contextual factors: the opportunities and challenges of an integrated facility, consisting of a fire station, affordable housing, corporate accommodation, a commercial retail unit (potential day care), and a household hazardous waste drop-off, and the opportunities and challenges of the site, characterized as a hinge condition between three distinct contexts made up of the community of Varsity, the University Research Park, and the University of Calgary.

The re-imagined VMSR unstacks the previous podium-based design to create a centralized campus approach. The campus design is most fully characterized by the definition of a south-facing shared courtyard space that features strong permeable edges, promoting social exchange and safety, as well as a variety of potential activities (passive and active), seating arrangements, hard and soft landscaping, in an expression of integration.

Each programmatic use has its own footprint, though connected and unified into a legible whole, creating a ground plane focused building that is sympathetic to the surrounding community context, and significantly lower in overall building height than the previous iteration. The VMSR is an L-shaped mass, comprised of a square 2 storey CFD block, a linear 4 storey CHC block, and connected in the centre through a single storey glazed pavilion that houses the CA and future CRU build out. The form of the building creates a generous exterior courtyard, centralized around an urban scale amenity seating, that functions as multi-use space to create a unified, south-facing community area.

The building massing and footprint creates separation between the disparate programs for functional and safety reasons, while visually unifying through a central node that acts as wayfinding, gathering, and amenity for the 3 primary building user groups of CFD, CHC, and CA/CRU.

The VMSR is read as a singular cohesive gesture at a scale to integrate into the surrounding context, composed of the three primary programmatic blocks. The CFD drives the selection of the architectural expression through the use of brick in an homage to the cultural significance and understanding of fire and emergency services. The mass of the CFD is a plain rectilinear form, transitioning to a curved parapet and mechanical unit screen on the upper level. The CFD mass is punctuated on the north side by windows into the upper-level dorms rooms, and an expansive fully glazed façade on the south to provide visibility into and out of the operational bays housing the fire apparatuses. This approach functionally allows for natural lighting and improved working conditions, while also creating a legible, transparent interface to the community. The CFD is accessed through the central single storey pavilion that houses the CA and future CRU. This central node is conceptualized as a connective tissue that houses and bridges the incongruent programmatic elements of the VMSR. The fully glazed north and south elevations create a defining entry condition that is apparent to all site users that promotes site safety and wayfinding that give way to a grand public gesture. The CHC block continues the established architectural language with punctuated forms defining the individual housing units. It was key that the residential block be oriented north-south to provide the most equitable access to natural light for all residential units.

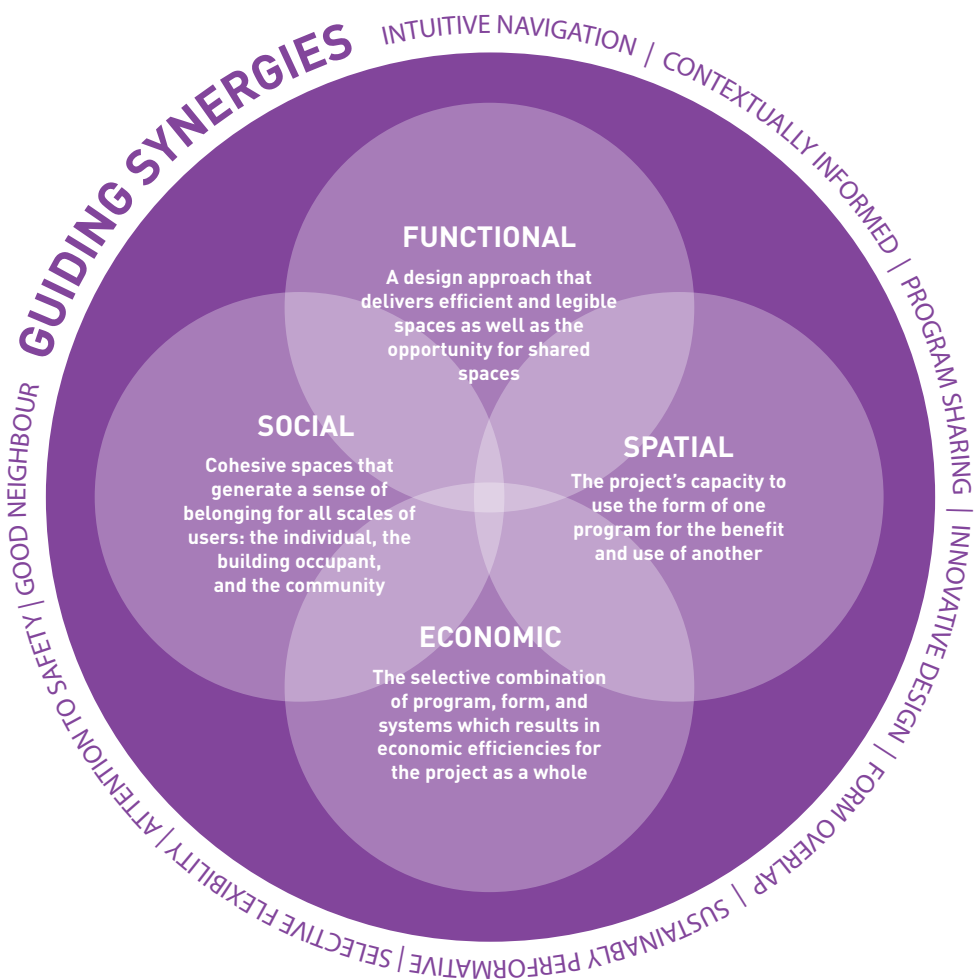
To unify the elements of the VMSR, a public, urban scale multi-functional stair is carved into the central building node, inviting users and the public to the rooftop amenity. The gesture of the stair creates a legible, south facing amenity space that acts as social space, and cultivates integration and interaction. The rooftop can be controlled through access, while the stair always remains accessible. The form of the staircase is strategically carved and sculpted to create seating, offer conveyance, and provide views into the adjacent courtyard. The creation of flexible, multi-use spaces is mirrored at the ground plane, where a functional courtyard is created through the geometry of the building form and urban stair. Grooves of trees shelter the private program areas, while grassed landscape and a rubber surface create informal areas of play and occupation. The lower-level courtyard is dedicated to the CHC program, though fosters interaction with the CFD and CA/CRU through visibility, location, and provided amenity.

The siting of the VMSR has been relocated away from the northwest corner of the site per previous design iterations, to the southeast, close to the existing Fire Station 17. The relocation on the parcel provides the opportunity to reuse the existing fire station approach for emergency services onto 32nd Ave. addressing several concerns previously raised around site access and safety. The relocation creates a single, reserved access for the CFD to ensure response time are met, while preventing accidental interaction with other site vehicular traffic. The relocation and reconfiguration places the CHC component of the VMSR adjacent 37th St. creating an immediately visible, integrated, connection to the public realm.

Through the relocation of the CFD access to the south, additional site entry roads and total asphalt area have been decreased with only a single access off 37th into the site parking. The parking area itself has been located to the north to create a division between the pedestrian and vehicle realms and contains a generous central planted medium to bifurcate the asphalt area required to accommodate the CHC and CFD parking number

needs. The parking lot circulation creates a continuous loop to provide easy navigation and houses the publicly accessible Household Hazardous Waste Drop-Off and site garbage and recycling area away from users and views in the northeast corner of the parcel.

Holistically, the intent of the architecture and large urban design approach is to create a contextually sensitive development that fosters interaction, safety, connectivity, and diversity. The balanced approach to the scheme represents the unification of disparate elements that must be carefully orchestrated to achieve a sense of integration, while maintaining functional separation and safety considerations. The architectural language seeks to engage and energize the surrounding community while creating a restrained and unified formal gesture that creates a beautiful and well considered addition to the broader community and City.



# PROGRAM DESCRIPTION

The stakeholders involved in this project are:

- The Calgary Fire Department, Station 17
- Calgary Housing
- Corporate Accommodation
- A Commercial Retail Unit
- Household Hazardous Waste Drop-Off

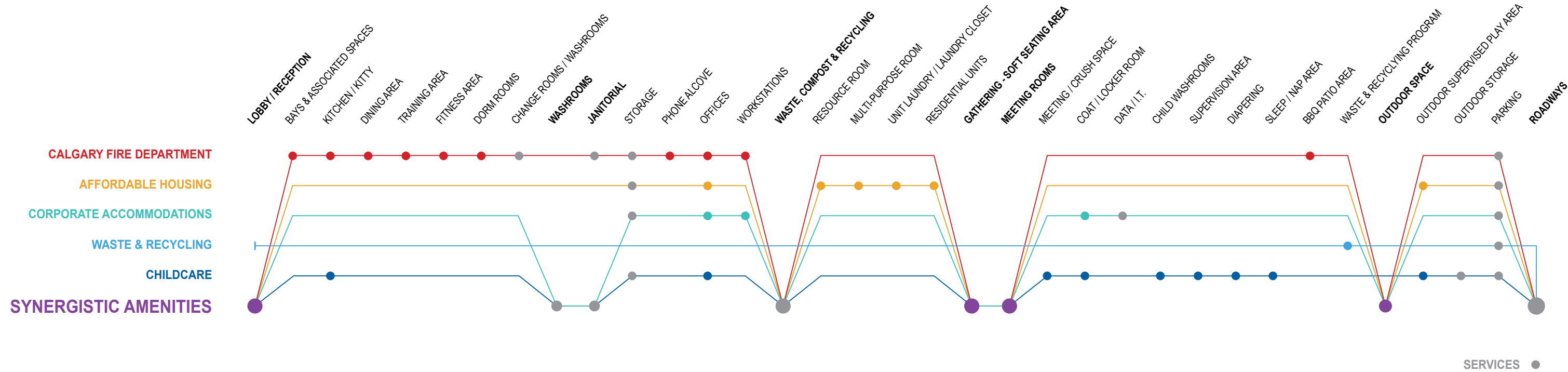
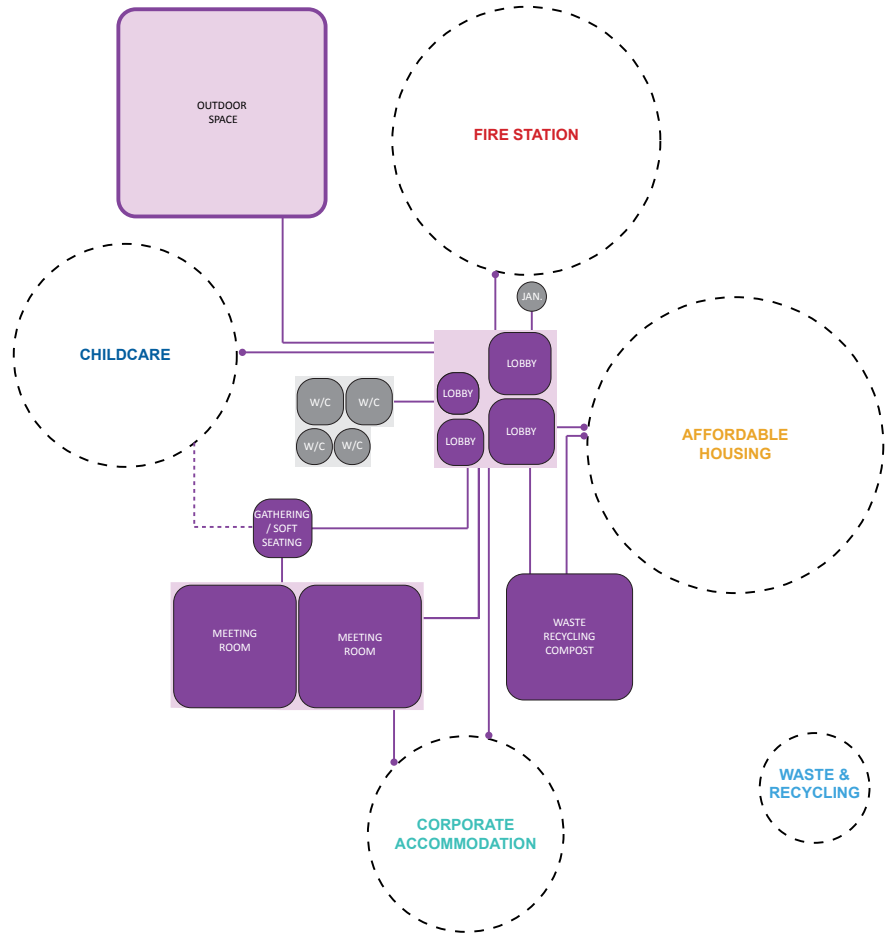
The Calgary Fire Department (CFD) portion of the facility is to be the upgraded Fire Station No.17. With the new development located north of the existing facility, the current fire station will maintain services during construction and vacate the existing station once the integrated facility is operational. The new fire station will provide 14 dorm rooms and increase the number of bays from three to five in comparison to the existing fire station 17 on the site. The current intention is for the CFD to occupy four out of the five bays with Emergency Response Services (EMS) to occupy the fifth bay. It is anticipated that as the surrounding communities grow, CFD will occupy that entire portion of the facility in the future.

Calgary Housing Corporation (CHC) administers safe and affordable housing to families and individuals throughout the City and as part of the VMSR, will provide 48 residential units which includes studio units, 1-bedroom units, 2-bedroom units, and 3-bedroom units with a specific focus on providing homes for families.

The Corporate Accommodation (CA) program will act as satellite working spaces for City of Calgary employees and provide an alternative to having to travel to the downtown Municipal Building(s). The spaces include individual offices, workstations, meeting rooms, and crush space. There is the potential for future use of meeting rooms to be rented out and function as community spaces.

The Commercial Retail Unit (CRU) will not be fitted out as part of the project, but the space is currently being designed to accommodate 60 children for a childcare (CC) space. Child supervision rooms, staff support rooms, and an exterior space are included in the design.

A City-operated, Household Hazardous Waste Drop-Off (HHWD) site is currently located on the Fire Station No. 17 property. This location is the most popular HHWD site in Calgary and is highly valued community service by surrounding residents. One of the project mandates is to incorporate a relocated HHWD on the integrated facility site with specific considerations for site circulation and access.





# LOCATION & SITE CONDITIONS



Location Map

● Project Location



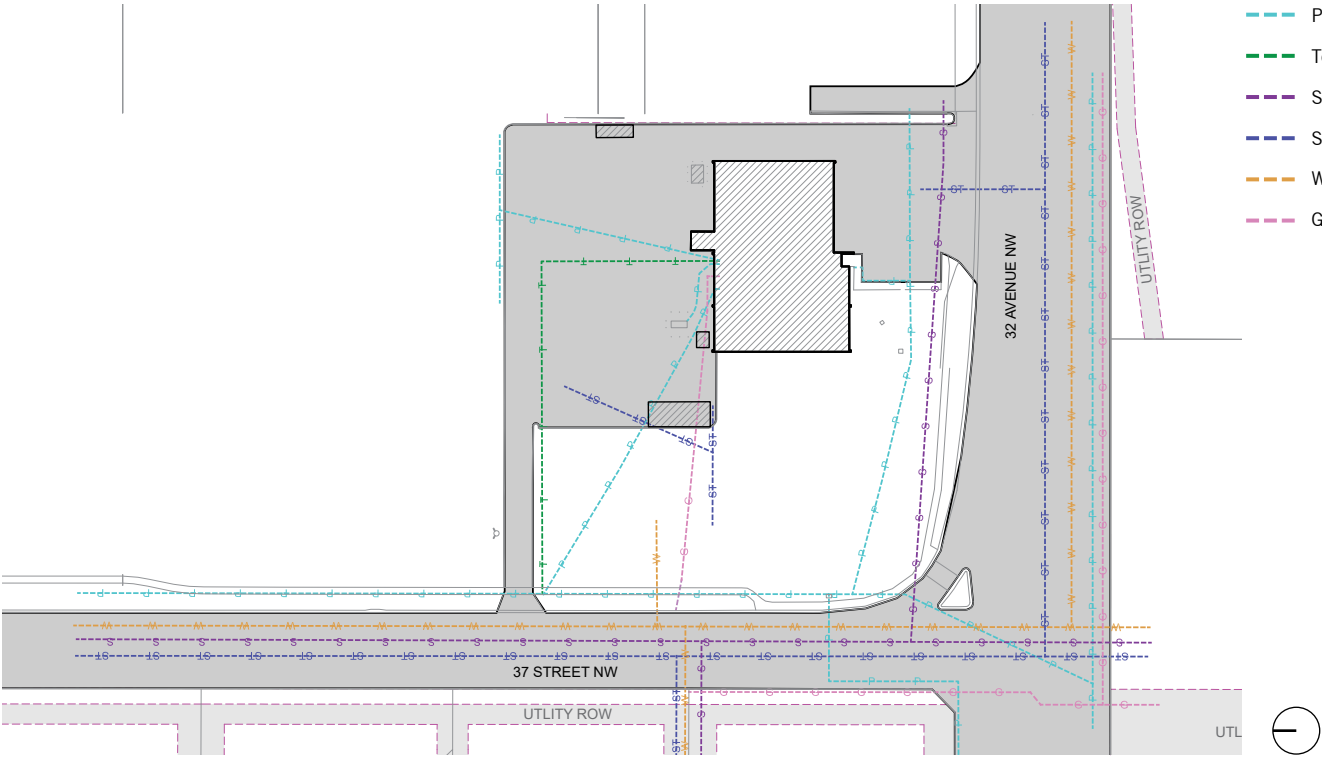
Context Map

— Bike Lane  
— Bus Route  
■ Bus Stop

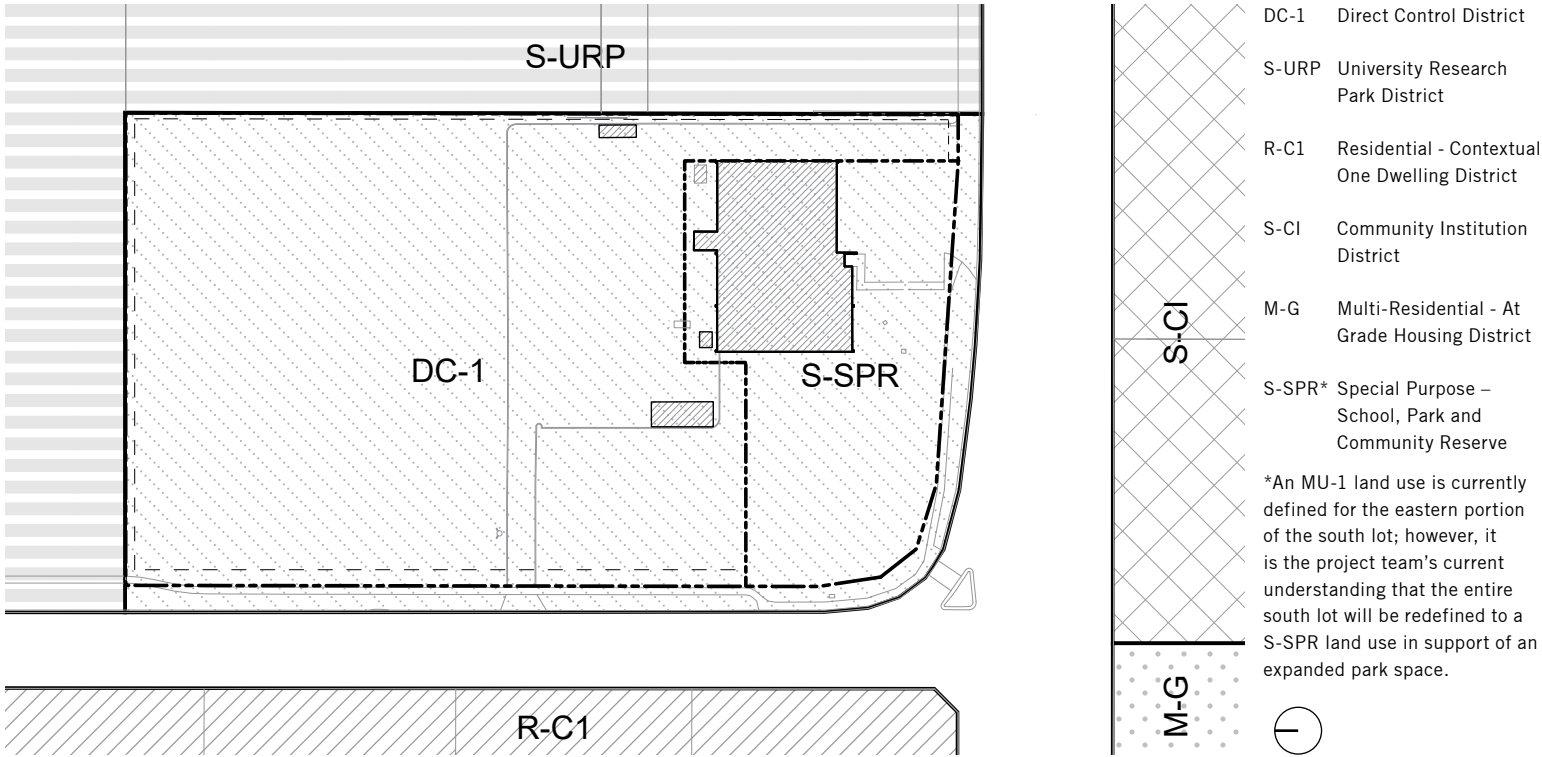




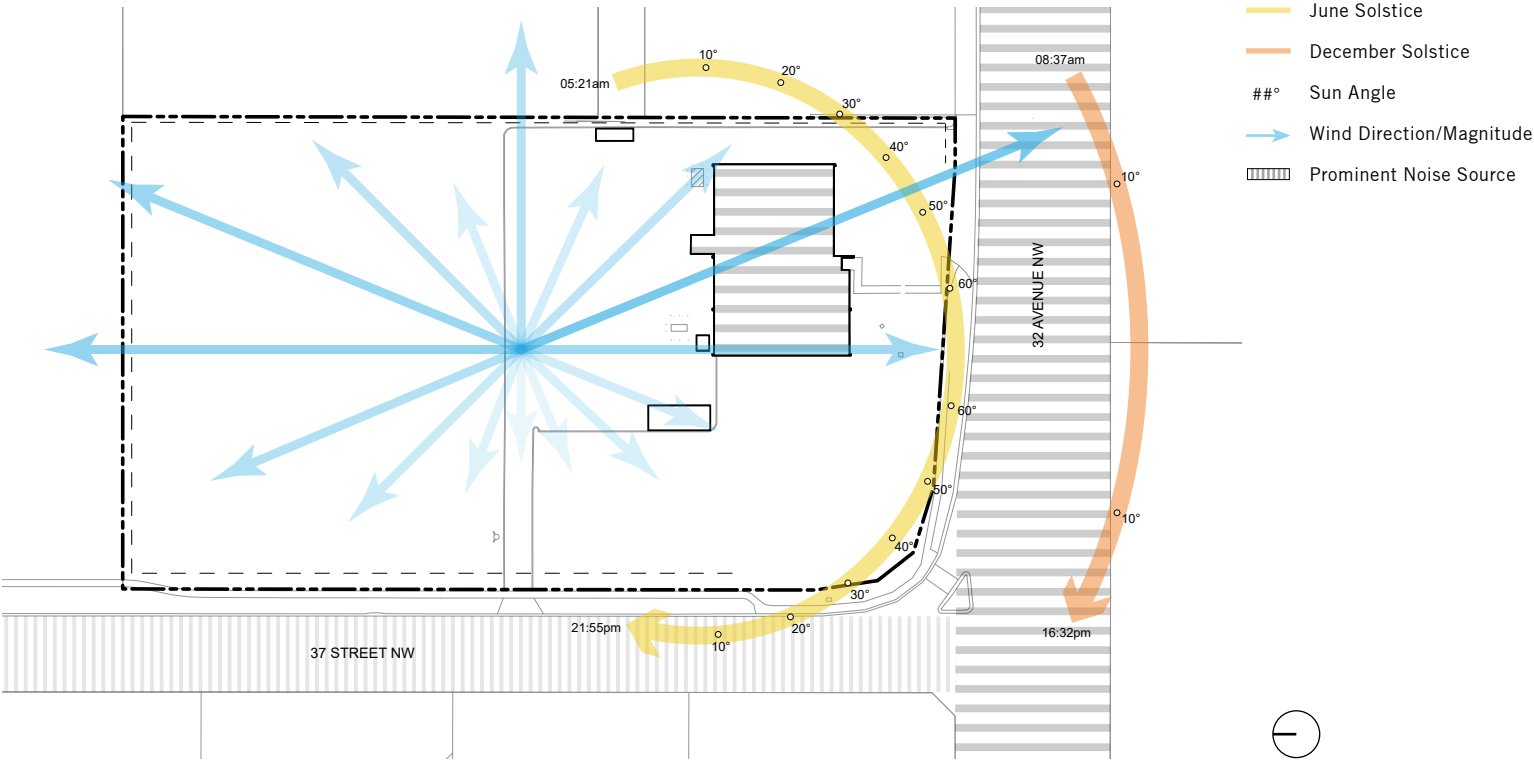
# LOCATION & SITE CONDITIONS



Site Existing Infrastructure



Site Land Use



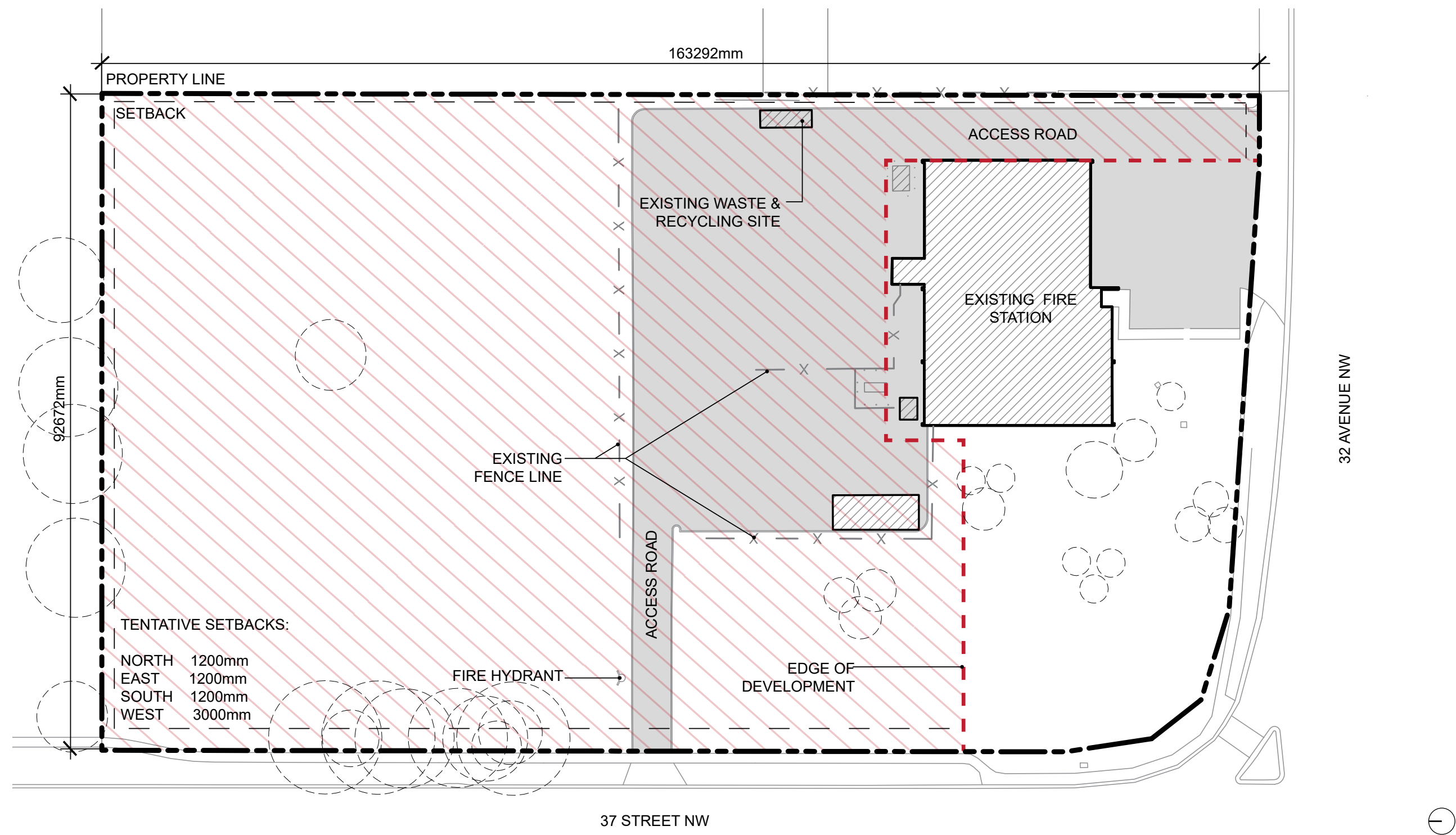
Site Existing Environment



Site Landscape and Site Features



# LOCATION & SITE CONDITIONS



Existing Site Conditions

Portion of Site Under Development

# LOCATION & SITE CONDITIONS

## EXISTING SITE & SURROUNDING AREA PHOTOS



VMSR Site looking East



Properties to the Northeast of the Site



Existing Fire Station No. 17



VMSR Site looking South



37 Street NW looking North



Existing Household Hazardous Waste Drop-Off



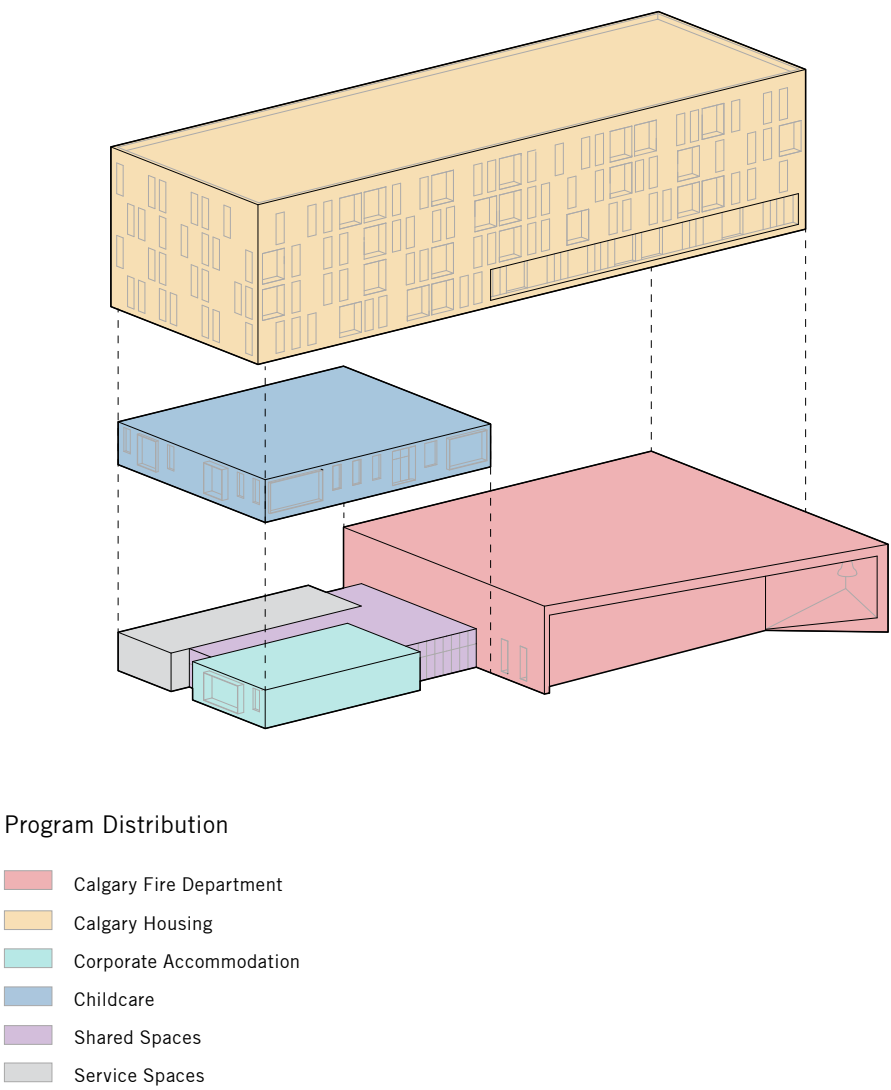
# PREVIOUSLY PRESENTED DESIGN

The VMSR project was previously presented to the Urban Design Review Panel (UDRP) June 2019, submitted for development permit in December 2019, presented to the Calgary Planning Commission (CPC) in September, 2020, and presented for public hearing October 2020. Ultimately, through the development permit process, the project was requested to reconsider and revise several key approach elements including parking and access, location of building on site, integration into the existing community, and considerations for green space and future development of the remaining parcel area.

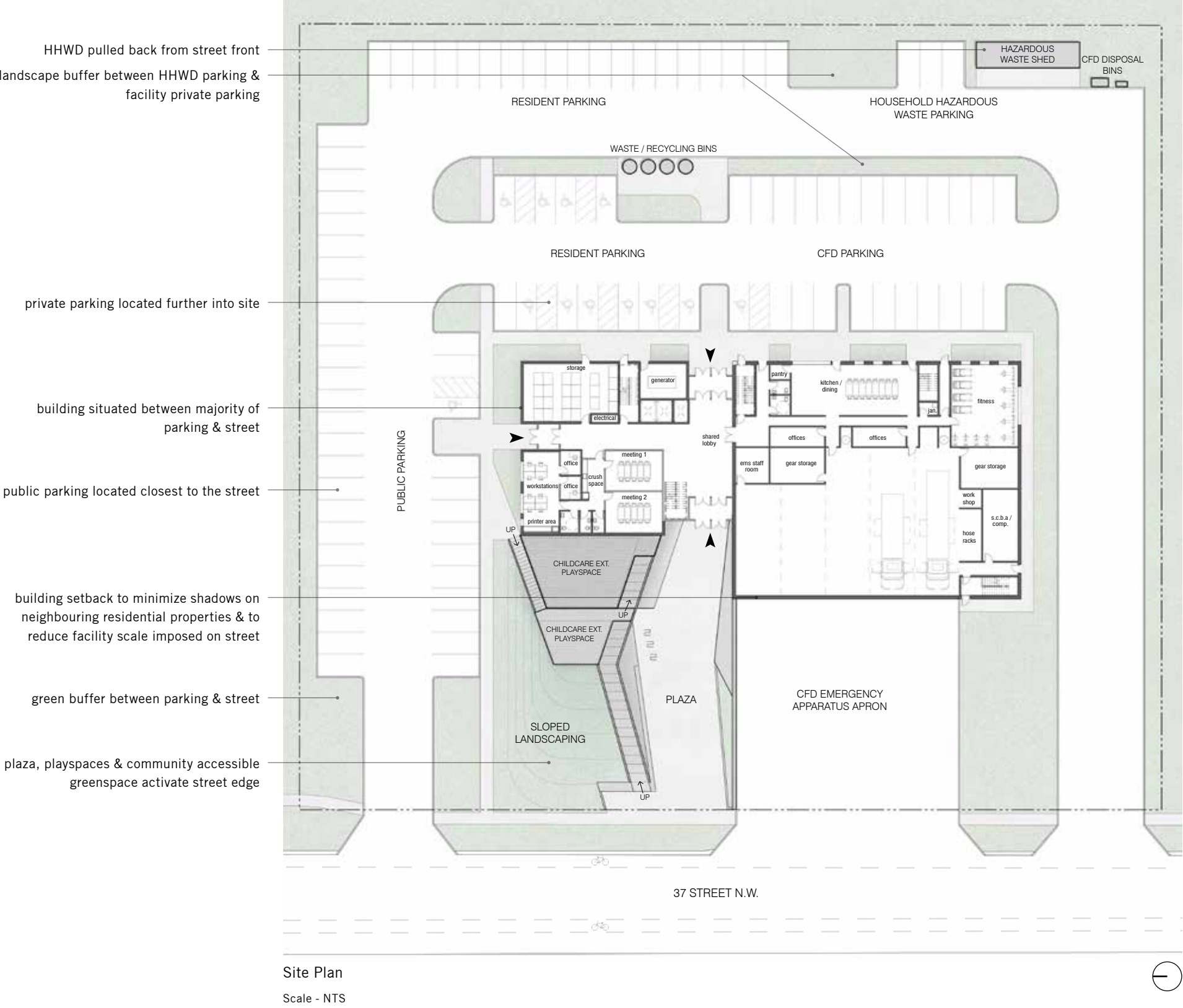
Since the time of the requested revisions, the project team; MBAC, consultant team, and the City or Calgary project management team, have worked diligently to re-imagine the project (described herein) to ensure that the issues previously raised have been addressed and considered in a holistic manner.



West Facade Render



PREVIOUSLY PRESENTED DESIGN





# PREVIOUSLY PRESENTED DESIGN



Urban Section A  
Scale - 1:500



Urban Section B  
Scale - 1:500

# RESPONSE TO PREVIOUS UDRP, CPC, PUBLIC HEARING COMMENTS

## URBAN DESIGN REVIEW PANEL

The following UDRP comments were compiled in response to the design presented at the review that occurred on June 26, 2019:

### 1 CREATIVITY

UDRP Commentary:

The project proposes an integrated facility including a fire station, affordable housing, childcare, and corporate accommodation. While hazardous waste drop-off does not seem to fit as well within the other urban uses, in general it is still well received by the Panel. The application is felt to be creative through the form overlap and shared program features, though refinements in site design could make for a dramatically more creative solution.

### 2 CONTEXT

UDRP Commentary:

The project's potential for greatest impact and response to the most notable contextual influence is the street edge. This condition is currently defined by multiple driveway interruptions (see Integration below). Excessive surface parking is perceived for the intended building use and the resulting orientation isolates the building with a sea of asphalt. Reduced parking and the elimination of a redundant driveway access is strongly encouraged by the Panel.

Shading impact is minimal and is not of concern in the context. In fact, moving the building closer to 37th is recommended (also see Human Scale).

### 3 HUMAN SCALE

UDRP Commentary:

While the fire station massing on the lower level may be fixed (due to functional requirements), the remaining building massing appears to be pushed too far from the public realm. Applicant to review shifting the rest of the building towards the street for an improved interface. This gesture could improve several aspects, including a reduction of distance in regard to the front door and the street. This consideration would also decrease the expanse of the 'plaza' area, which is relatively unprogrammed space and likely to be underutilized in the built form.

A reinforced tree line along the street may help buffer the edge for the adjacent residents, while improving the human scale (also see Integration).

### 4 INTEGRATION

UDRP Commentary:

Integration of 37th Street NW with the public realm is negatively impacted by previously noted vehicular considerations. It is perceived that over 50% of this edge condition is composed of asphalt. The Panel appreciates CFD requirements for the expansive apron, however, challenge the applicant to review the degree interruption of the sidewalk condition. Applicant/owner to review reduced surface parking requirements and the

elimination of a driveway access, which would will significantly improve the integration along this edge.

The landscape plan shows the site surrounded on three sides by a continuous treed edge, which isolates the site from the potential of a shared landscape (as it relates to the adjacent open space areas). Conversely, a continuous treed edge is perceived to be more appropriate along 37th Street for a better interface with the adjacent residential area. Applicant to review the overall landscape strategy for a unified approach to the surrounding edge conditions.

### 5 CONNECTIVITY

UDRP Commentary:

Refer to above commentary as it relates to strengthening the pedestrian environment along 37th Street NW.

Noted pedestrian desire lines are observed running throughout the subject parcel (refer to satellite image). While the Panel acknowledges these pathways are informal and utilize private property, reflecting on these lines could be an interesting 'nod' to active circulation networks, given proximity to the University and LRT station. A design solution respecting both current and future use of these connections should be considered, as it is also anticipated that new residents of this project will likely utilize similar desire lines that may continue to cross through the site.

### 6 ANIMATION

UDRP Commentary:

Building design is interesting and incorporates active uses. The overlap of main circulation areas is positive. The Panel is interested in review of the east elevation which was not shown as part of the presentation material.

Please refer to Context, Integration, and Connectivity for site related elements that relate to animation of the public realm. It is recommended that an overall landscaping strategy be implemented to unify project, including concept of the sloped landscape area in the NW corner of the site.

### 7 ACCESSIBILITY

UDRP Commentary:

While barrier free design is proposed in the current submission, the grade difference of the outdoor daycare space separates the natural wayfinding potential and reduces ease of travel. Access to hard play spaces at the front are awkward and appear detached from front terraced landscape area, which is presented as a potential play space for daycare.

As described throughout this response document, pedestrian connectivity is a secondary gesture to the vehicular considerations. The proposed entrance space is unified and continuous which is anticipated to be a successful gesture, however the location of the street facing doors is detached from the street. The plaza is not perceived to be an active space, putting emphasis on reducing the overall length of this space and making the front door more prominent along 37th.

The north and more notably the east entrance is likely to be utilized to a greater degree than the front (west) door, as they are adjacent the parking areas. The design of this entry has not been shown and should be developed accordingly to the anticipated level of use.

### 8 DIVERSITY

UDRP Commentary:

A diverse user group is being proposed.

Transparency into the fire station (via the fully glazed doors) into the apparatus bays is an exceptional gesture and will greatly activate this portion of the façade that would otherwise be somewhat sterile.

### 9 FLEXIBILITY

UDRP Commentary:

The integrated facility appears to build in flexibility as part of its base design. Lower level spaces present a degree adaptable uses, within the set functional parameters of the fire station component.

### 10 SAFETY

UDRP Commentary:

The project achieves a safe and positive sense of comfort.

The elimination of a driveway access will further improve safety by reducing the number of pedestrian and vehicular crossings.

### 11 ORIENTATION

UDRP Commentary:

Refer to Context and Connectivity comments.

### 12 SUSTAINABILITY

UDRP Commentary:

Sustainable practices are being met. Integration of both uses and increased density promote a positive impact.

### 13 DURABILITY

UDRP Commentary:

Materials are of high quality, require low maintenance, and present longevity in the anticipated lifespan of the project.



# RESPONSE TO PREVIOUS UDRP, CPC, PUBLIC HEARING COMMENTS

## CALGARY PLANNING COMMISSION

The following CPC comments were compiled in response to the design presented at the review that occurred on September 3, 2020:

1. Resolve access/egress condition details
2. Explore entry sequence into the residential project, seeking increased separation between commercial/fire and residential uses
3. Integrate the site with surrounding streets, pathways and fire truck operations
4. Evaluate access conditions on 37 Street NW and/or the adjacent south site, and provide a comprehensive site access plan
5. Evaluate mechanisms for fire truck exit safety; and
6. Explore opportunities for improved signal control at the 37 Street and 32 Avenue intersection, for implementation in conjunction with the proposed development

## PUBLIC HEARING

The following CPC comments were compiled in response to the design presented at the review that occurred on October 5, 2020:

1. The applicant address the matters identified by CPC as well as the comprehensive land use matters including the Concept Plan and arrangement of uses on the site
2. The applicant work with Transportation Planning to consider amending the egress away from 37 Street and on to 32 Avenue

# REDESIGN EXPLORATIONS

Following the October 5, 2020 Public Hearing, the project team conducted a series of studies with the stakeholder groups and various City of Calgary departments to explore the possibilities of accomplishing the recommendations and conditions indicated through the Urban Design Review Panel, Calgary Planning Commission, and Public Hearing.

These studies were evaluated against those metrics as well as the achieving the programmatic requirements of the multiple stakeholders for the project.

Study 3 of Round 2 was ultimately selected due to it meeting the stakeholder program requirements, its high achievement of the UDRP, CPC, and Public Hearing conditions, and the successful reorientation of the CFD emergency access to 32 Avenue without compromising emergency response.

## (A) UDRP RECOMMENDATIONS

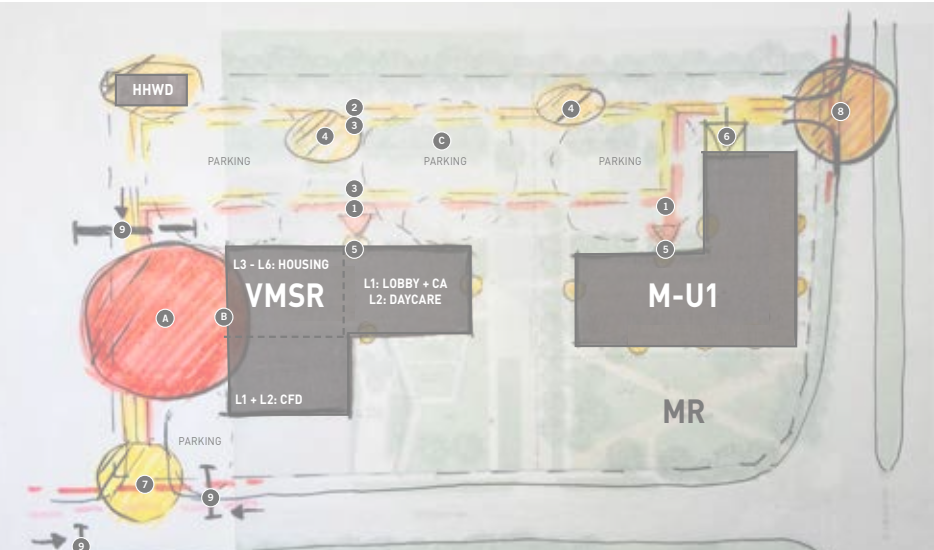
- 1A Reduce parking
- 2A Shift building closer to street edge for improved building-street interface
- 3A Eliminate redundant driveway access
- 4A Acknowledge & connect with existing pedestrian desire lines to adjacent properties

## (B) CPC, (C) PUBLIC HEARING CONDITIONS

- 1B Resolve access/egress condition details
- 2B Explore entry sequence into the residential project, seeking increased separation between commercial/fire and residential uses
- 3B Integrate the site with surrounding streets, pathways and fire truck operations
- 4B Evaluate access conditions on 37 Street NW and/or the adjacent south site, and provide a comprehensive site access plan
- 5B Evaluate mechanisms for fire truck exit safety; and
- 6B Explore opportunities for improved signal control at the 37 Street and 32 Avenue intersection, for implementation in conjunction with the proposed development.
- 1C The applicant address the matters identified by CPC as well as the comprehensive land use matters including the Concept Plan and arrangement of uses on the site
- 2C The applicant work with Transportation Planning to consider amending the egress away from 37 Street and on to 32 Avenue

✓ Fully addressed    ✓ Partially addressed    ✗ Not addressed

## ROUND 1

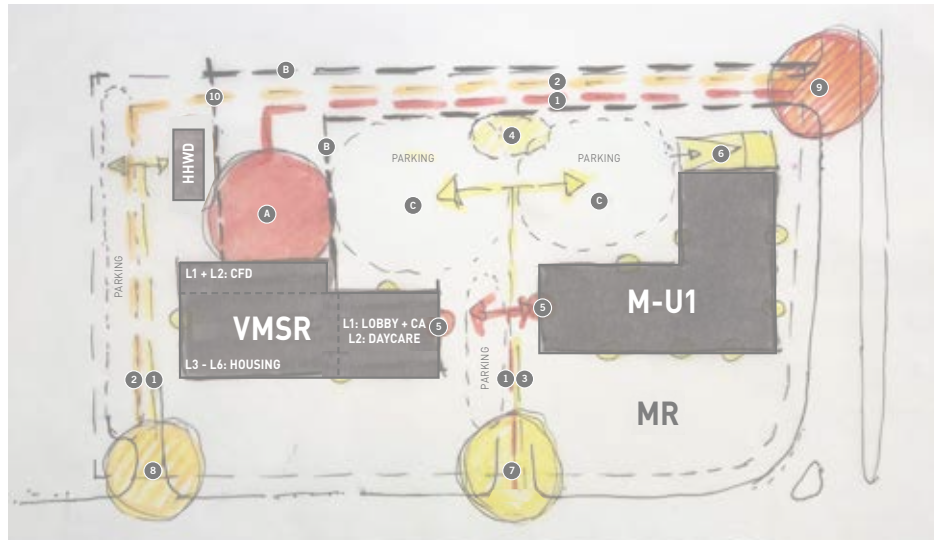
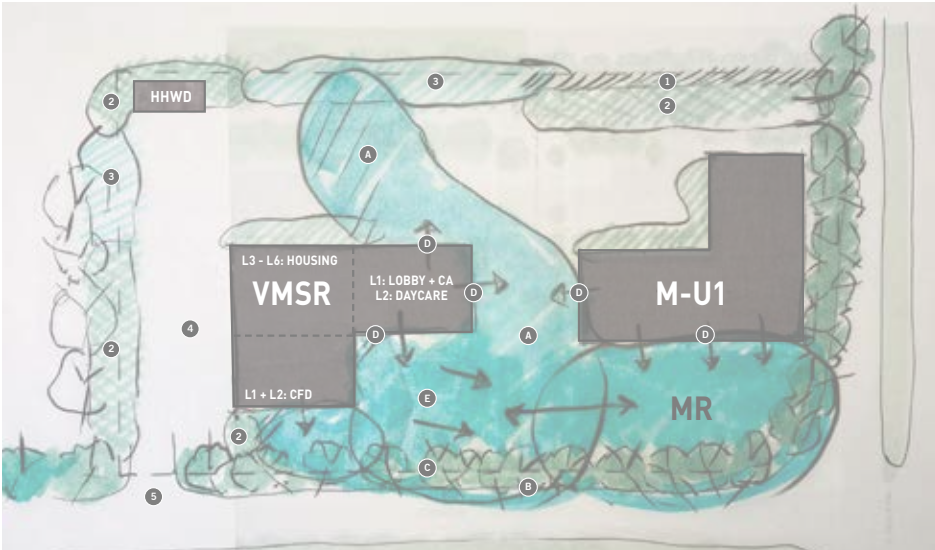


### STUDY 1

✓ 1A ✗ 2A ✓ 3A ✗ 4A ✓ 1B ✓ 2B ✓ 3B ✗ 4B ✓ 5B ✓ 1C ✗ 2C

#### REJECTED DUE TO:

- Overlap of CFD apron and public drive aisles within the site
- Not meeting parking requirements for program stakeholders
- CFD emergency access off of 37th Street

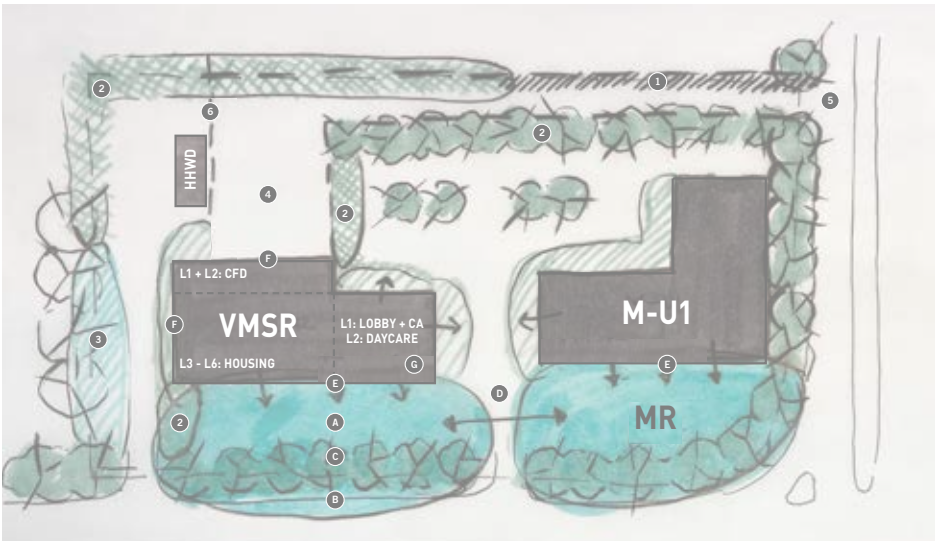


### STUDY 2

✓ 1A ✗ 2A ✓ 3A ✗ 4A ✓ 1B ✓ 2B ✓ 3B ✓ 4B ✓ 5B ✓ 1C ✓ 2C

#### REJECTED DUE TO:

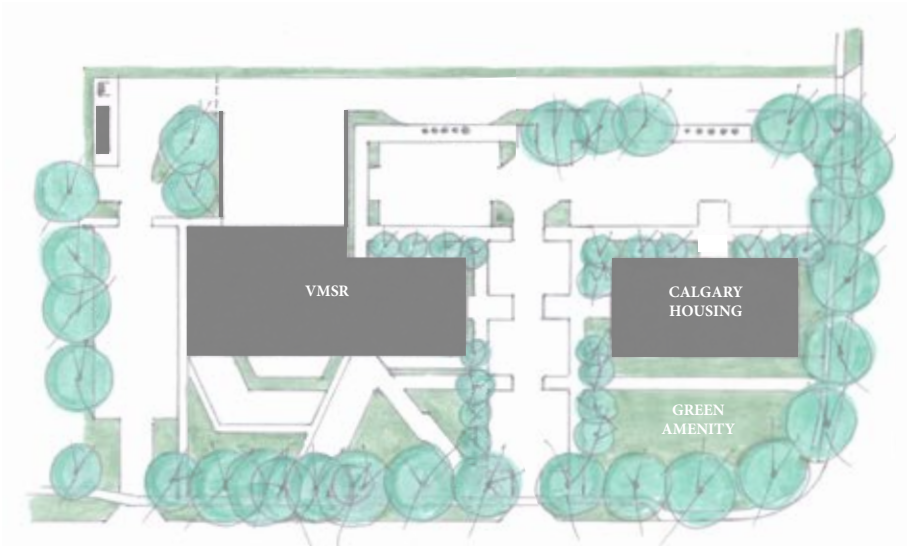
- Apron length - does not meet CFD requirements for timed exit
- Apron configuration does not support turnaround as required
- Not meeting parking requirements for program stakeholders





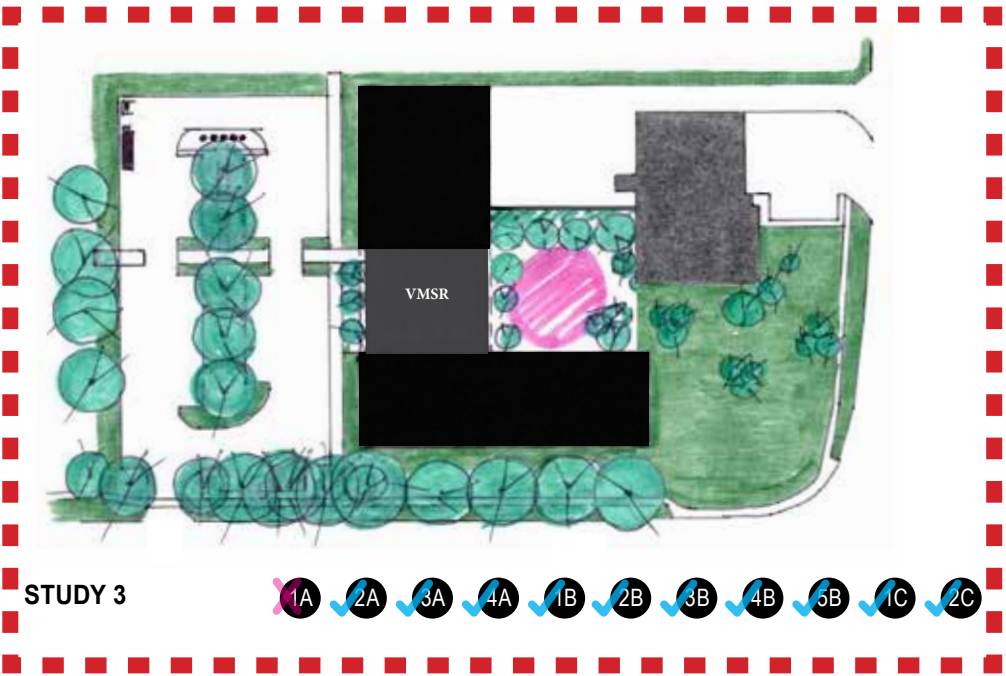
# REDESIGN EXPLORATIONS

## ROUND 2



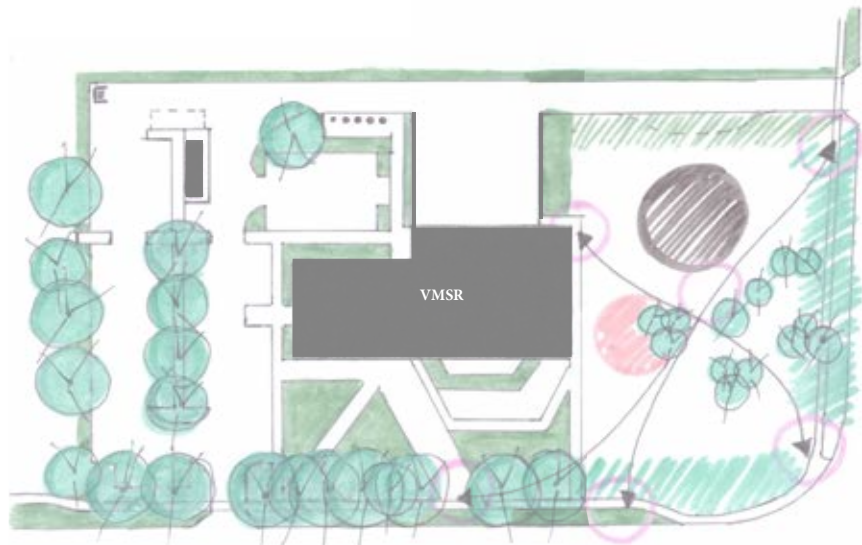
STUDY 1 1A 2A 3A 4A 1B 2B 3B 4B 5B 1C 2C

- REJECTED DUE TO:
- Apron length - does not meet CFD requirements for timed exit
  - Apron configuration does not support turnaround as required
  - Number of access roads off 37th St.
  - Does not address neighborhood scale and community concerns



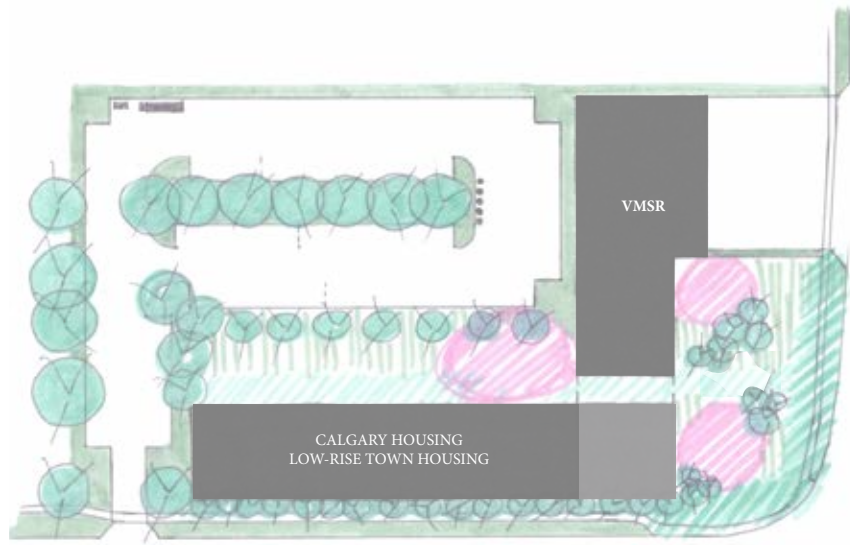
STUDY 3 1A 2A 3A 4A 1B 2B 3B 4B 5B 1C 2C

SELECTED DUE TO VIABILITY OF CFD APRON  
ORIENTATION, BUILDING SCALE,  
AND NEIGHBORHOOD SENSITIVITY



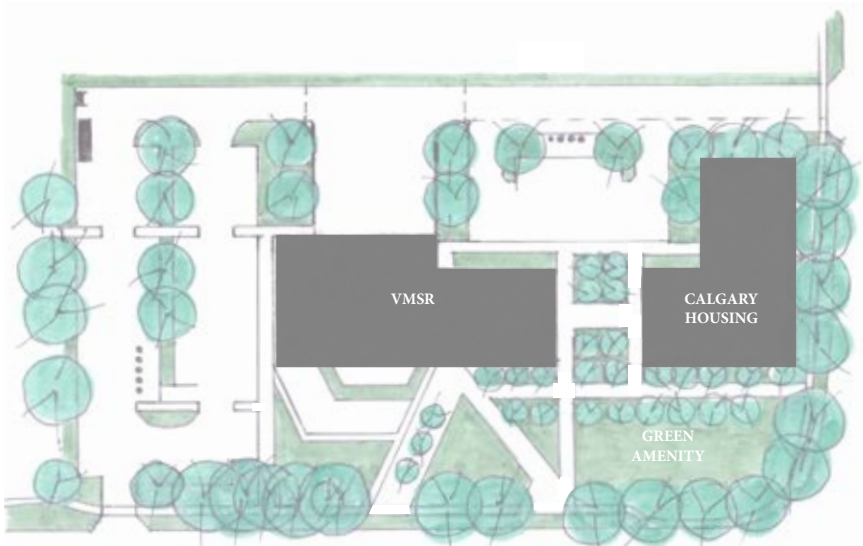
STUDY 2 - OP 1 1A 2A 3A 4A 1B 2B 3B 4B 5B 1C 2C

- REJECTED DUE TO:
- Apron length - does not meet CFD requirements for timed exit
  - Apron configuration does not support turnaround as required
  - Does not address neighborhood scale and community concerns



STUDY 4 1A 2A 3A 4A 1B 2B 3B 4B 5B 1C 2C

- REJECTED DUE TO:
- Requirement for demolition of existing fire station

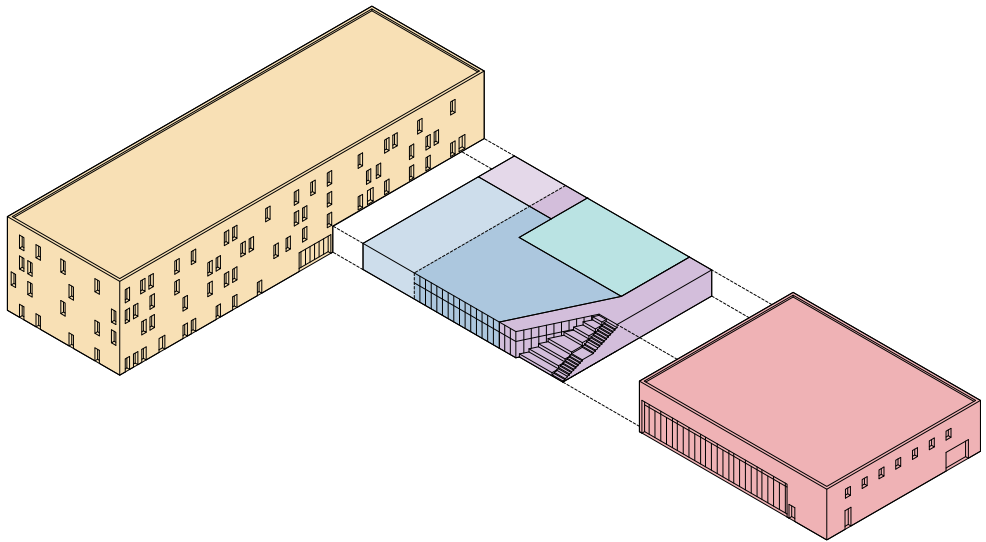


STUDY 2 - OP 2 1A 2A 3A 4A 1B 2B 3B 4B 5B 1C 2C

- REJECTED DUE TO:
- Apron length - does not meet CFD requirements for timed exit
  - Shared access road with CFD
  - Does not address neighborhood scale and community concerns

# OPTIMIZED MASSING & SITE PLAN

The re-imagined VMSR unstacks the previous podium-based design to create a centralized campus approach. Each use has its own footprint, though connected and unified into a legible whole, creating a ground plane focused building that is sympathetic to the surrounding community context, and significantly lower in overall building height than the previous iteration. The VMSR is an L-shaped mass, comprised of a square 2 storey CFD block, a linear 4 storey CHC block, and connected in the centre though a single storey glazed pavilion that houses the CA and future CRU build out. The form of the building creates a generous exterior courtyard, that functions as multi-use amenity space for the CHC to create a unified community scale space.



Program Distribution in Optimized Massing

- Calgary Fire Department
- Calgary Housing
- Corporate Accommodation
- Childcare
- Shared Spaces



Site Plan

Scale - NTS

- Primary Building Entry
- Connection to Adjacent Properties
- House Hold Hazardous Waste Drop-Off
- Facility Waste, Recycling, Organic Bins
- Loading Stall
- CFD Emergency Lane
- Existing CFD Station 17
- Child Care / Public Rooftop Amenity Space
- Calgary Housing Rooftop Amenity Space
- Rooftop Access Stair with Integrated Public Seating
- Rubber Play Amenity Surface
- Informal Gathering Area
- Calgary Housing Resource Room Patio Space
- Bench Seating
- Multi-Function Play, Lighting, Signage Surface
- Bicycle Racks
- Existing Popular Trees
- Screened Mechanical Equipment





# CONTEXT



Urban Section A  
Scale - 1:500

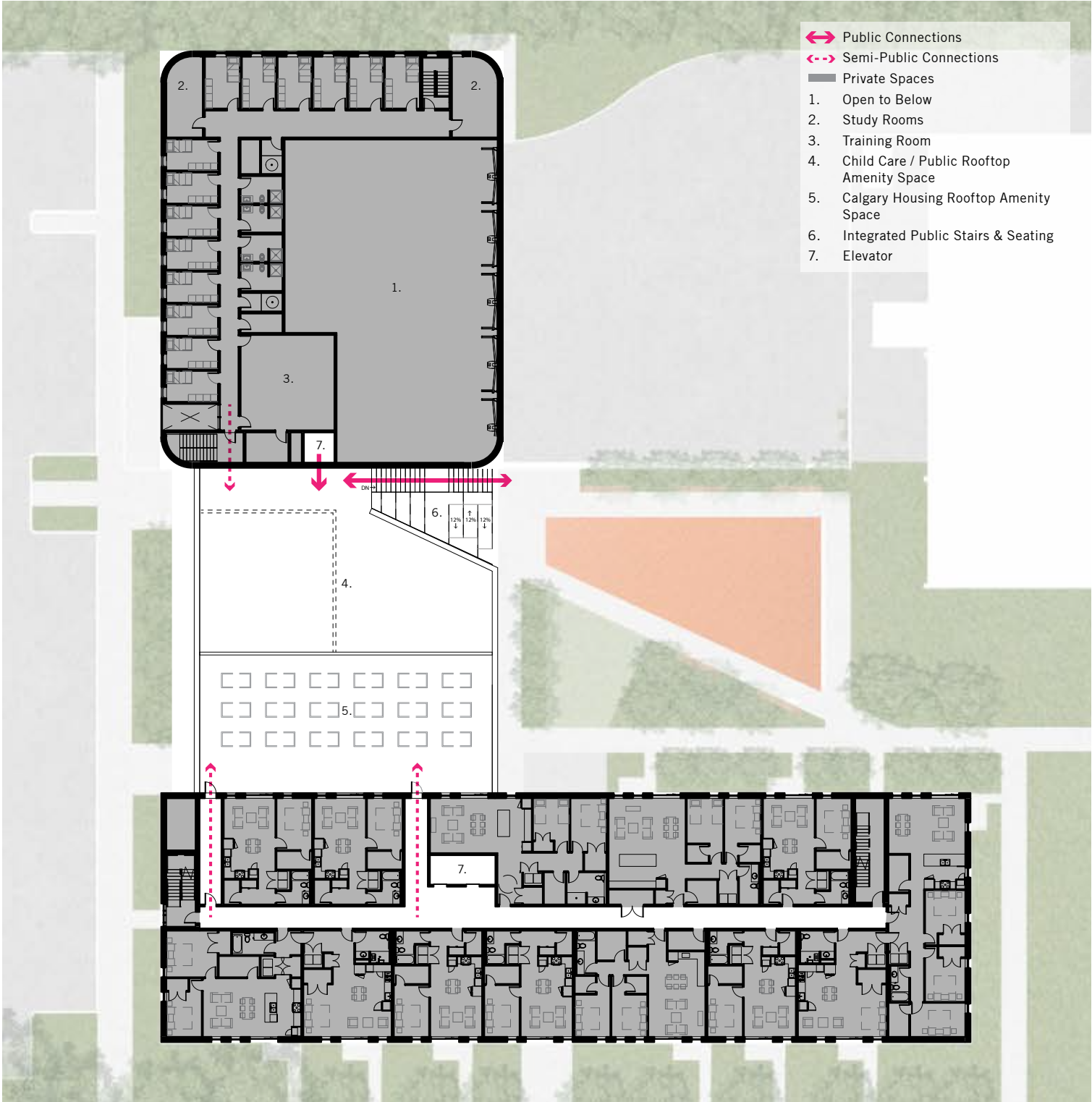


Urban Section B  
Scale - 1:500

PUBLIC REALM



Site /Main Floor Plan  
Scale - NTS



Site /Second Floor Plan  
Scale - NTS







Perspective Facing South Along 37 Street NW



# PUBLIC REALM

## INTEGRATED PUBLIC SPACE

To unify the elements of the VMSR, a public, urban scale multi-functional stair is carved into the central building node, inviting users and the public to the rooftop amenity. The gesture of the stair creates a legible, south facing amenity space that acts as social space, and cultivates integration and interaction. The rooftop can be controlled though access, while the stair always remains accessible. The form of the staircase is strategically carved and sculpted to crate seating, offer conveyance, and provide views into the adjacent courtyard. The creation of flexible, multi-use spaces is mirrored at the ground plane, where a functional courtyard is created through the geometry of the building form and urban stair. Grooves of trees shelter the private program areas, while grassed landscape and a rubber surface create informal areas of play and occupation. The lower-level courtyard is dedicated to the CHC program, though fosters interaction with the CFD and CA/CRU through visibility, location, and provided amenity.

## ACCESSIBILITY

With the goal of ensuring that all spaces within the public realm are accessible to all people, a public elevator for roof top access is to be provided. The elevator is be accessible from the public lobby that connects the north parking lot to the south courtyard. A ramp that extends part way up the seating portion of the stairs has also been proposed. This ramp can be used as seating or provide those with mobility challenges to access the higher tiers, allowing the users to be a part of the integrated space.

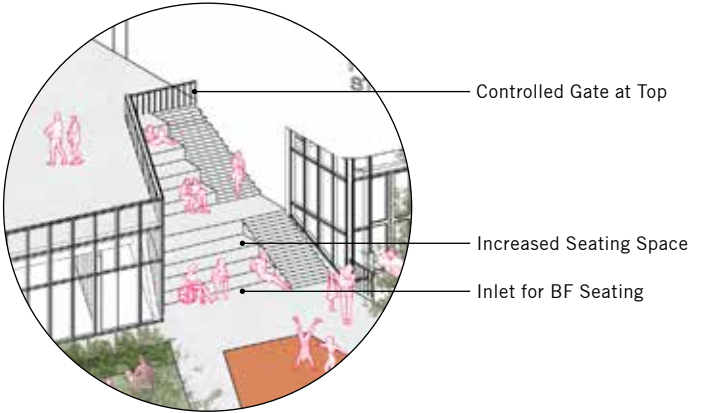
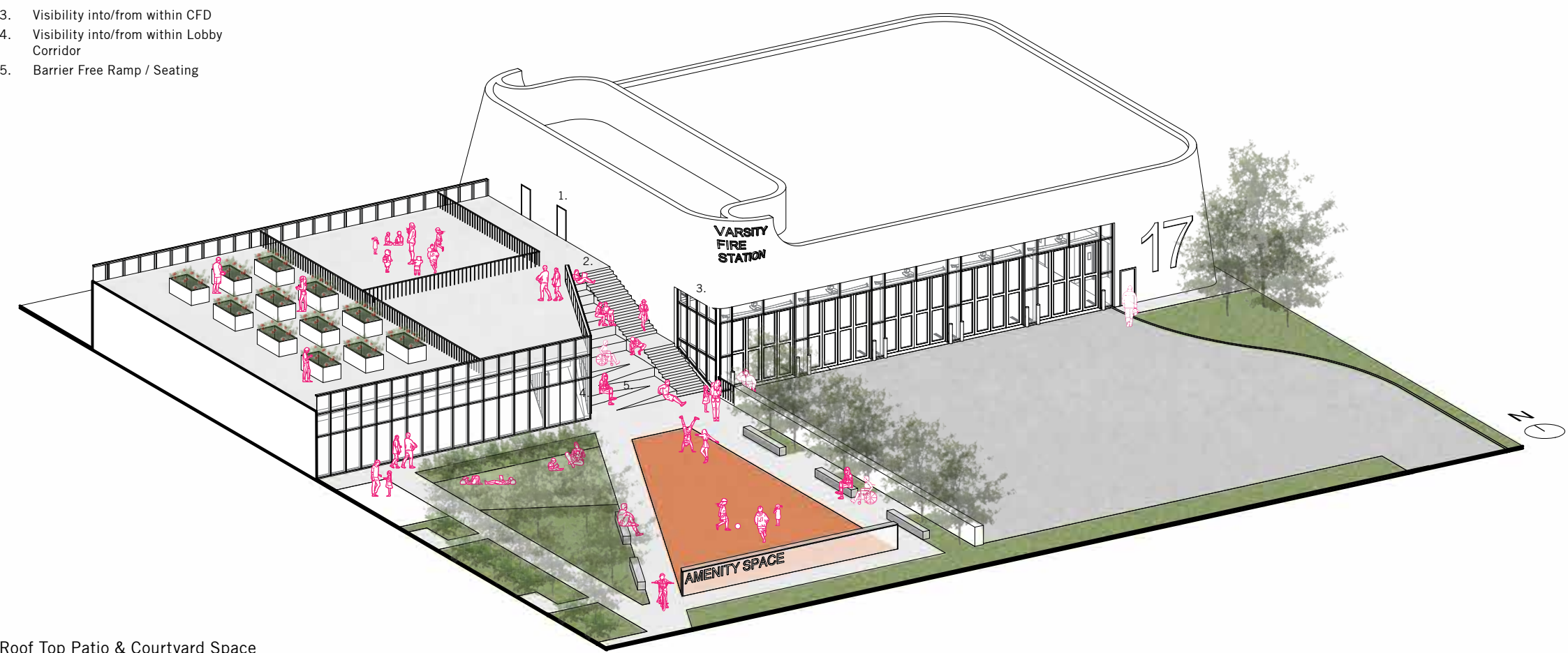
## SECURITY & CONTROL

There are many possibilities with how the roof top patio can be used. There is the consideration for the future commercial retail unit tenant, potentially a child care, to use it as exterior play space, CFD may use the space for workout equipment, Calgary Housing has indicated that community gardens may be a good use of that space or the space could be open to the public providing a great spectator relationship to the courtyard below.

With those potential uses, there are several possibilities for access to the roof to be monitored and controlled. On the Calgary Housing side of the roof top patio, Calgary Housing has the ability to lock or limit control of the doors from the second floor to the patio. For the eastern portion of the patio, the public elevator can be operated at certain times of the day or have controls be modified to be accessible to only those with key-cards. A gate can also be implemented at the top of the public stair/seating area so that the public does not have access to the roof, but can continue to use seating for the courtyard.

Security will be provided through animated lighting throughout the public realm and through “eyes on the street”; the courtyard, stairs, and roof top patio are highly visible by the building occupants. The courtyard and stairs are visible from the interior lobby and from the CFD apparatus bays which is a 24 hour run facility. The roof top patio is visible to several units on the second storey and above from the Calgary Housing block. These spaces are open, to be well lit, and are highly visible, creating safe spaces for the users.

- 1. Elevator Access
- 2. Potential Control Gate to Roof
- 3. Visibility into/from within CFD
- 4. Visibility into/from within Lobby Corridor
- 5. Barrier Free Ramp / Seating



Roof Top Patio & Courtyard Space

Scale - NTS

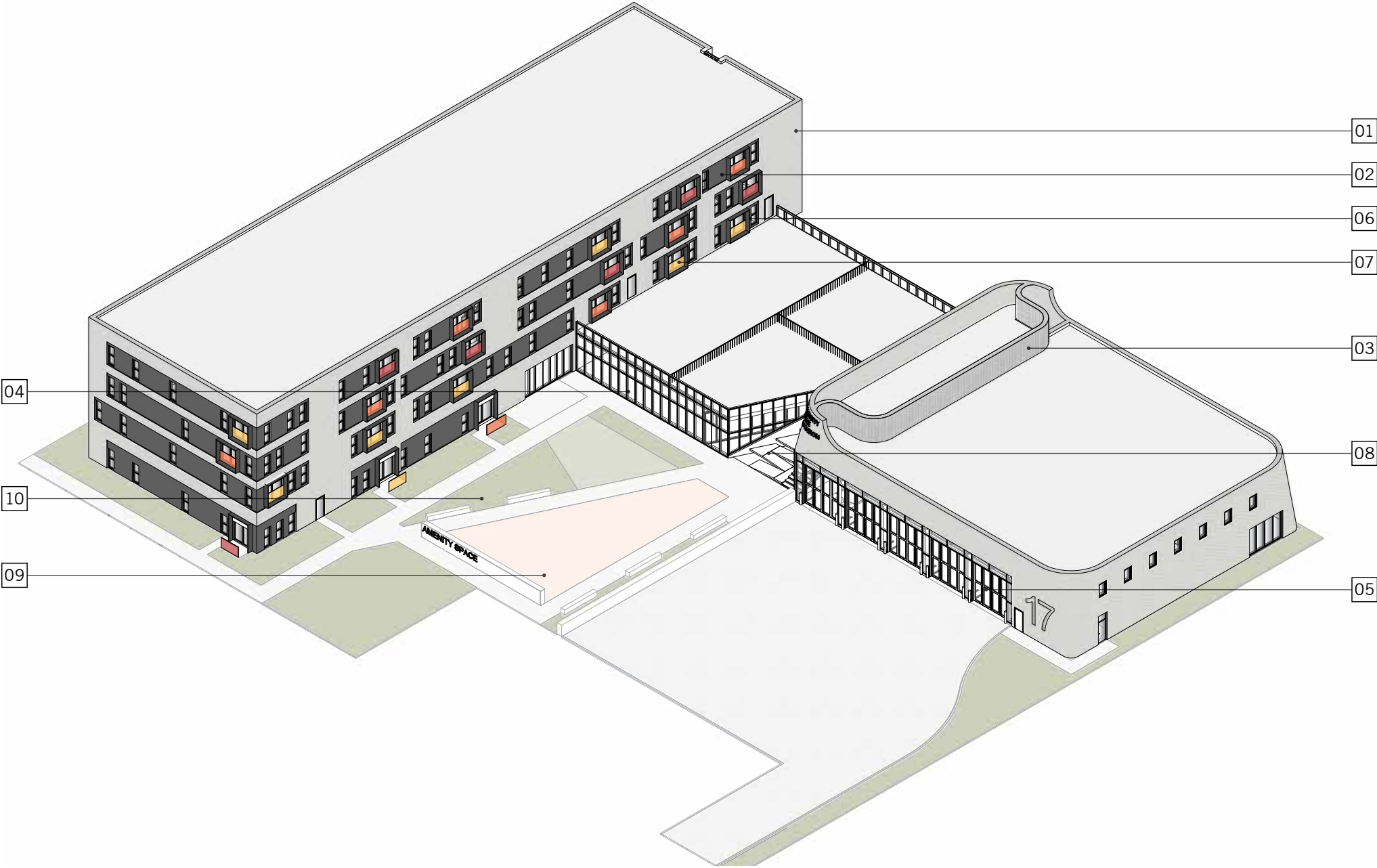




Perspective Facing North from Integrative Courtyard



# PROPOSED MATERIALS



01: FACADE



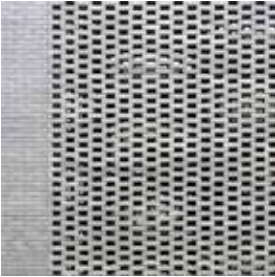
Clay brick masonry. The uniform material that ties the disparate programmatic elements together. The brick evokes a historical material association with fire stations that represent durability, security, and protection.

02: FACADE



High-density cement panels. This material type will meet the rigorous demands for durability for the exterior cladding of a multi-residential building and requires little maintenance. Assigned at strategic locations, the HDCP signifies the individual units within.

03: FACADE ACCENT



In key locations of the facade the brick becomes transparent through a hit and miss pattern, creating dynamic interest across the building, and offering shaded views to the building occupants.

04: GLAZING



Charcoal framed, fiberglass curtain wall. To meet the project's energy goals, curtain wall infill, for singular and full wall openings will have the benefit of high thermal performance and noise reduction. Centralized in the connective pavilion, the glazing acts as a transparent facilitator to promote connectivity and integration.

05: GLAZING



Fully glazed operational 4-fold doors for the fire station provide optimal natural light for interior working conditions while creating a strong public face and connection through transparency.



# PROPOSED MATERIALS

06: GLAZING ACCENT



Charcoal aluminum frames encapsulate and frame windows, offering sun screening and a legible identity for single units.

07: GLAZING ACCENT



Colored acrylic Juliet door guards are aligned to individual housing units. The colors are abstracted from a painting of an Alberta landscape and bring individuality and identity to the housing units.

08: GROUND SURFACE



Concrete, a robust and economical material, creates public pathways and the generous, occupied urban design stair in the courtyard.

09: GROUND SURFACE



A multi-use area is defined in the courtyard through a poured surface. The material is durable, inviting, economical, and soft, allowing for a variety of uses across a wide demographic.

10: GROUND SURFACE



Planting. A key consideration to creating a viable, vibrant, and inviting courtyard amenity is to use planting as seating (grass), shading, and screening to the private amenities.



# POTENTIAL FUTURE DEVELOPMENT & PHASING



## PHASE 1 - CURRENT

Phase 1 involves the development of the Varsity Multi-Service Redevelopment structure and associated site and a connecting pathway through the adjacent south S-SRP lot to 32 Avenue. The remainder of the southern lot would remain intact until the commencement of Phase 2.



## PHASE 2

Phase 2 would involve the development of the south S-SPR lot. This would include the decommissioning and demolition of the existing fire station with the subsequent design and development of the park. The community has expressed interest in working with the City of Calgary in the generation of a play structure. Other potential ideas for the park include a dog park and informal play areas. These spaces would both benefit and be a benefit to the VMSR integrated courtyard and roof top patio.





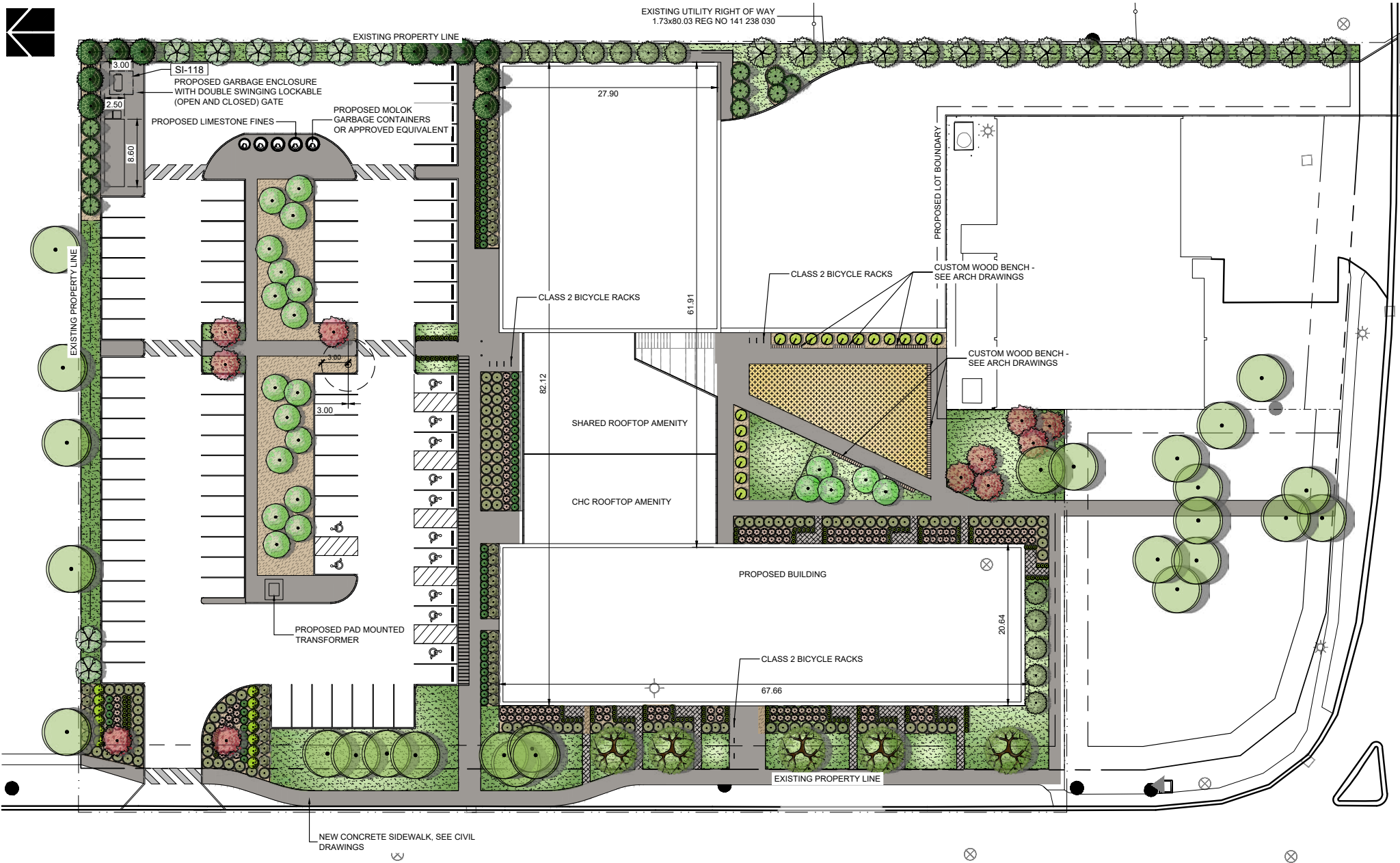
LANDSCAPE

PLANT SCHEDULE

CONIFEROUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME
	PL	11	Pinus contorta latifolia	Lodgepole Pine
	PG	11	Pinus ponderosa	Ponderosa Pine
EXISTING TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME
	EX	27	Existing Tree	
DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME
	PM	11	Malus x 'Big River	Big River Crabapple
	MJ	8	Malus x 'Jeffite'	Starlite Flowering Crabapple
	PE	17	Populus tremula 'Erecta'	Columnar Aspen
	PT2	22	Populus tremuloides	Trembling Aspen
	AG	12	Prunus padus commutate	Mayday
	SA	15	Sorbus aucuparia	Mountain Ash
	UA	5	Ulmus americana	American Elm
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME
	EC	37	Elaeagnus commutate	Wolf Willow
	JC	119	Juniperus communis 'Effusa'	Common effusa Juniper
	RG	13	Ribes aureum	Golden Flowering Currant
	ST	146	Spiraea trilobata	Three-lobed Spirea
	SO	68	Symphoricarpos occidentalis	Western Snowberry
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME
	EB2	203	Elymus arenarius Blue Dune	Blue Dune Lyme Grass
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME
	BM	1,224 m²	Bark Mulch	Mulch
	TS	1,517 m²	Sod	Sod

REFERENCE NOTES SCHEDULE

SYMBOL	SITE DESCRIPTION	QTY
	GARBAGE ENCLOSURE	12.0 m
SYMBOL	SITE DESCRIPTION	QTY
	3m ORGANIC CONTAINER	1
	5m WASTE AND RECYCLING CONTAINER	4
	BIKE RACK	10
SYMBOL	SITE DESCRIPTION	QTY
	WOOD CUSTOM BENCH	224.7 m²
	CONCRETE SIDEWALK	1,400 m²
	CONCRETE UNIT PAVERS	93.5 m²
	LIMESTONE FINES	2.6 m²
	RUBBER PLAY SURFACING	208.4 m²



Landscape Plan

Scale - NTS

# SITE LIGHTING & FURNITURE

OVERHEAD LIGHTING



BOLLARD LIGHTING



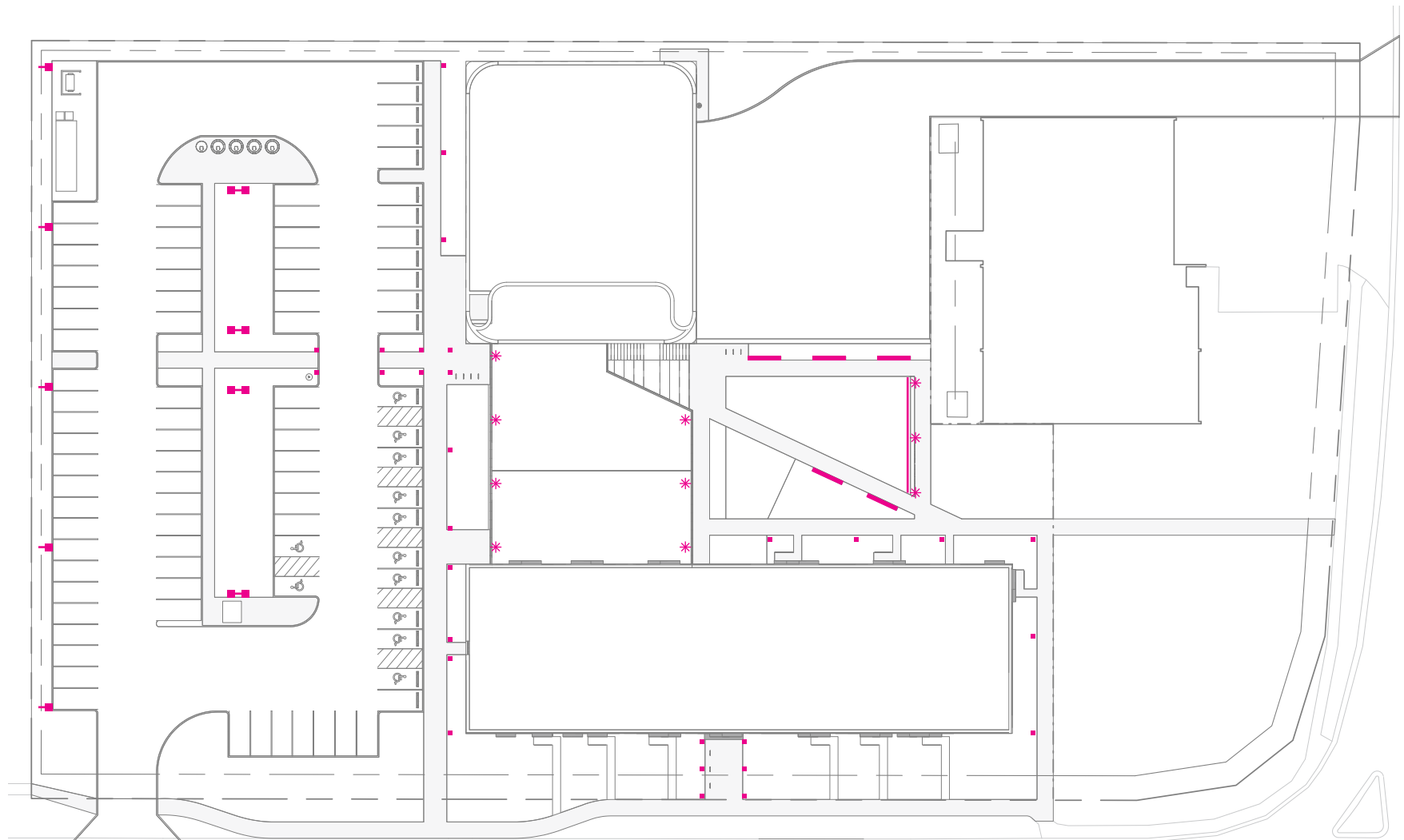
LINEAR LIGHTING



ANIMATED LIGHTING



BENCH

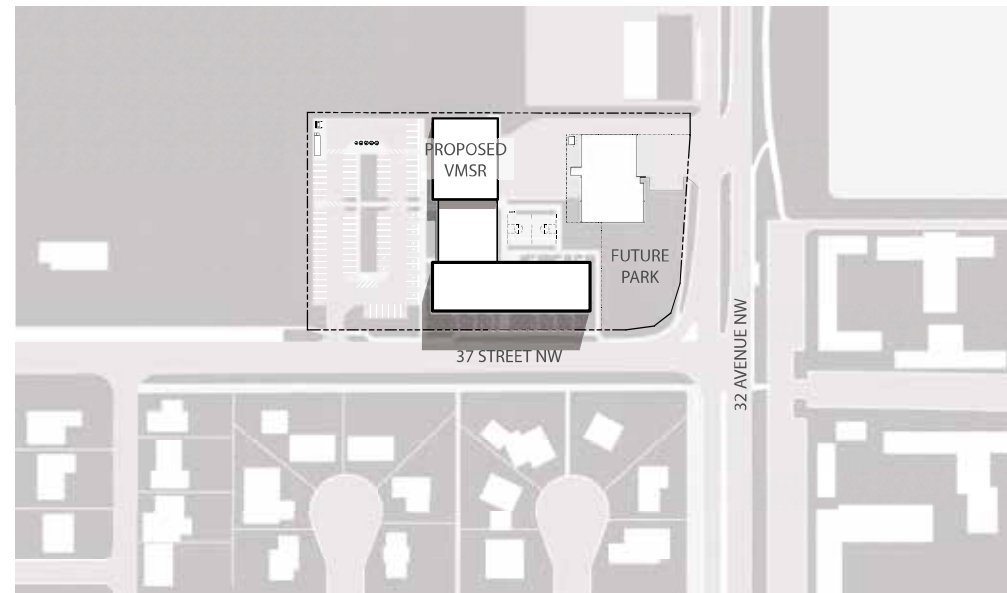




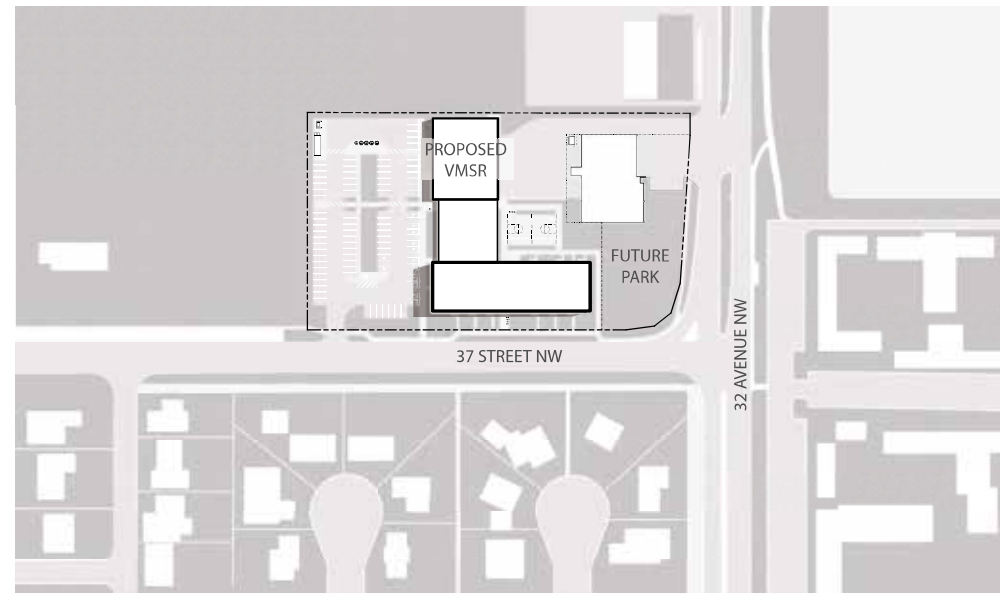
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37 STREET NW

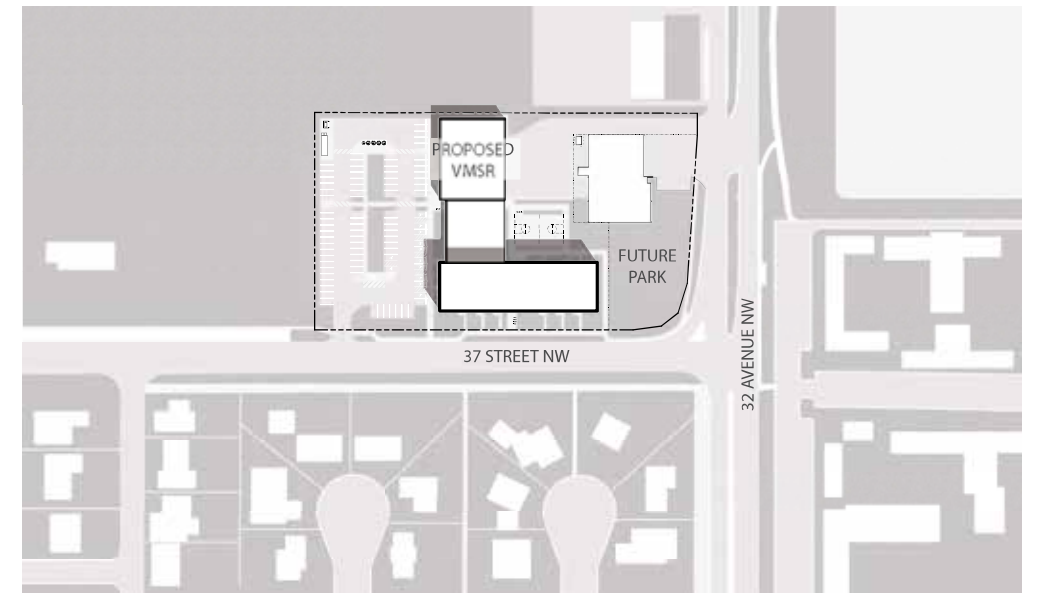
# B | APPENDIX B: SHADOW STUDY



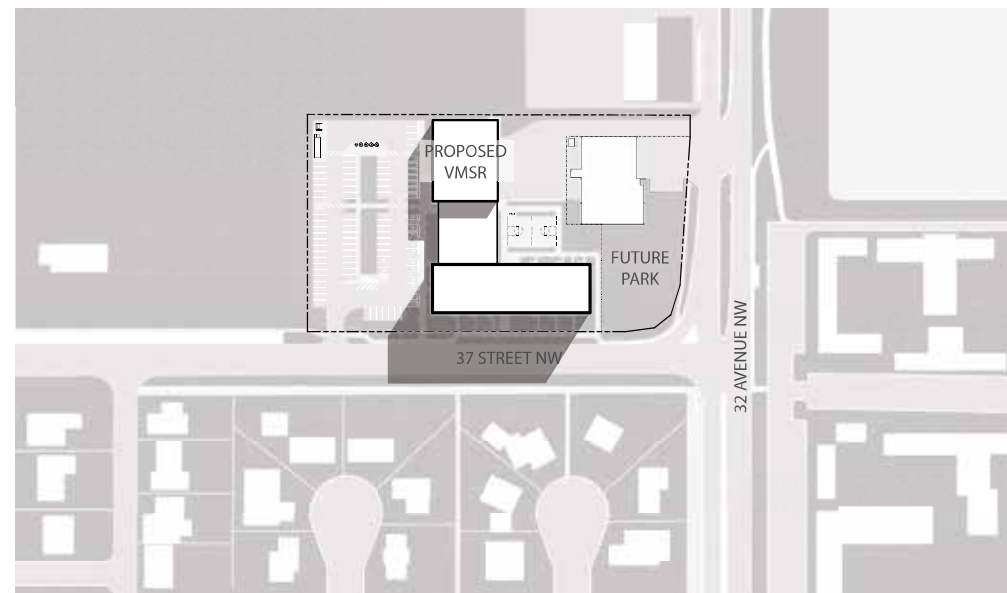
JUNE 21 - 9:00AM



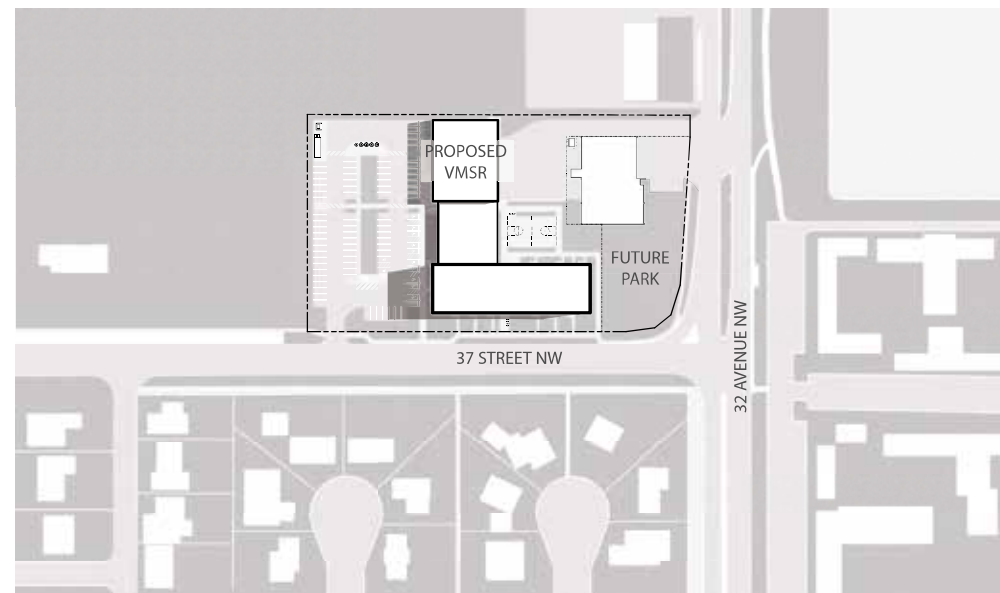
JUNE 21 - 12:00PM



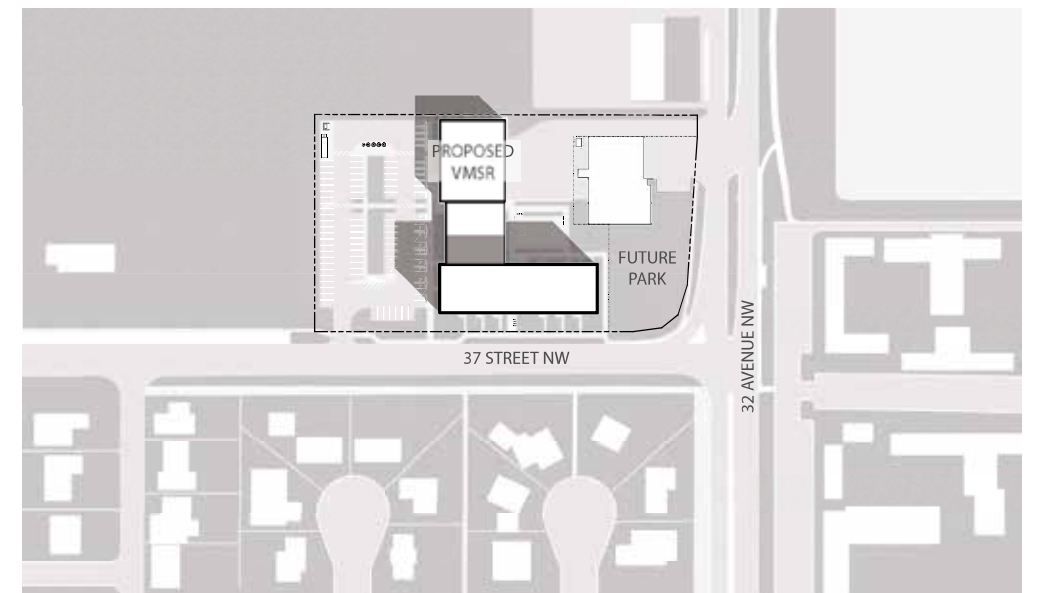
JUNE 21 - 3:00PM



SEPTEMBER 21 - 9:00AM

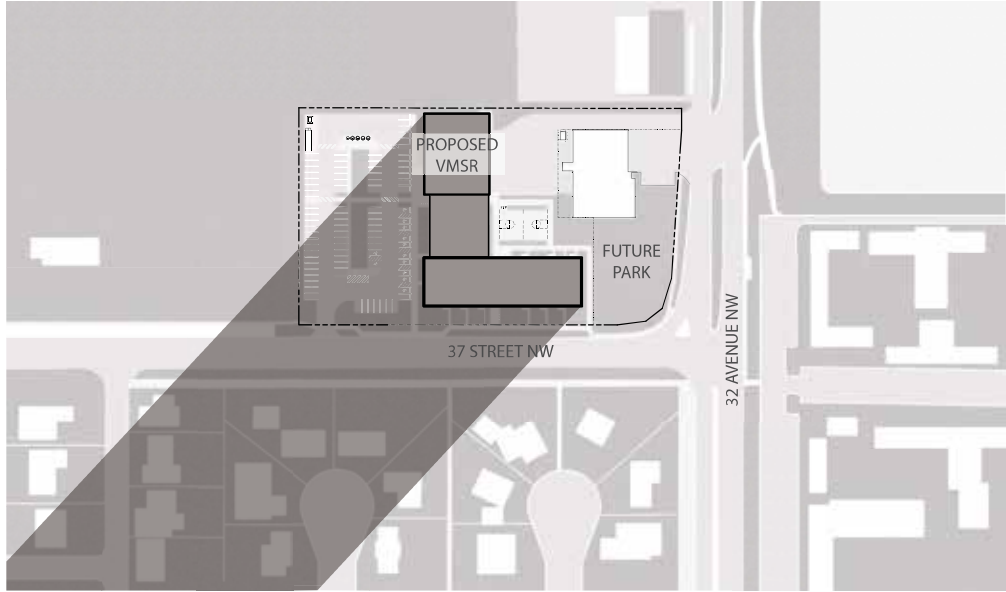


SEPTEMBER 21 - 12:00PM

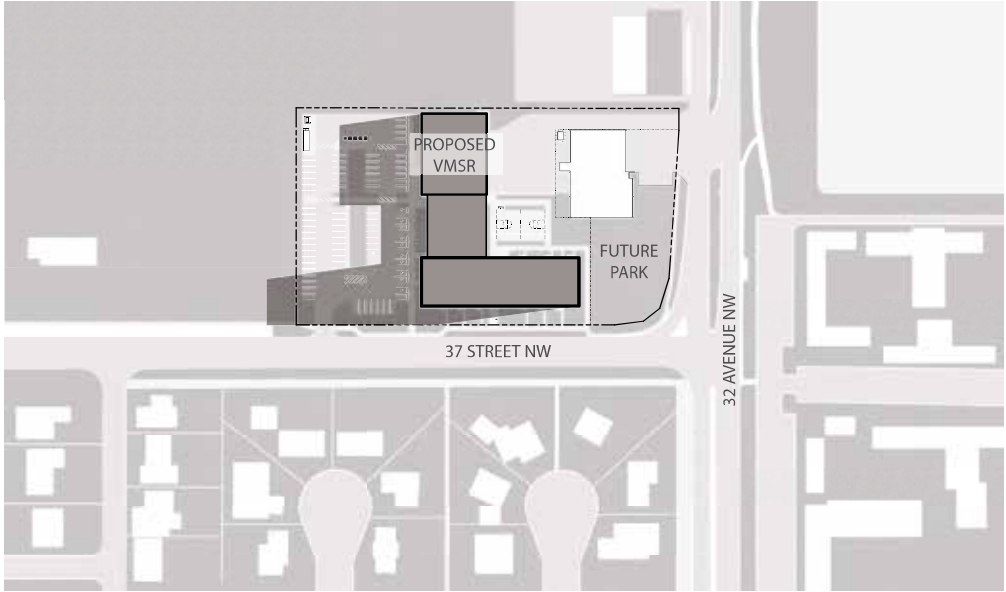


SEPTEMBER 21 - 3:00PM

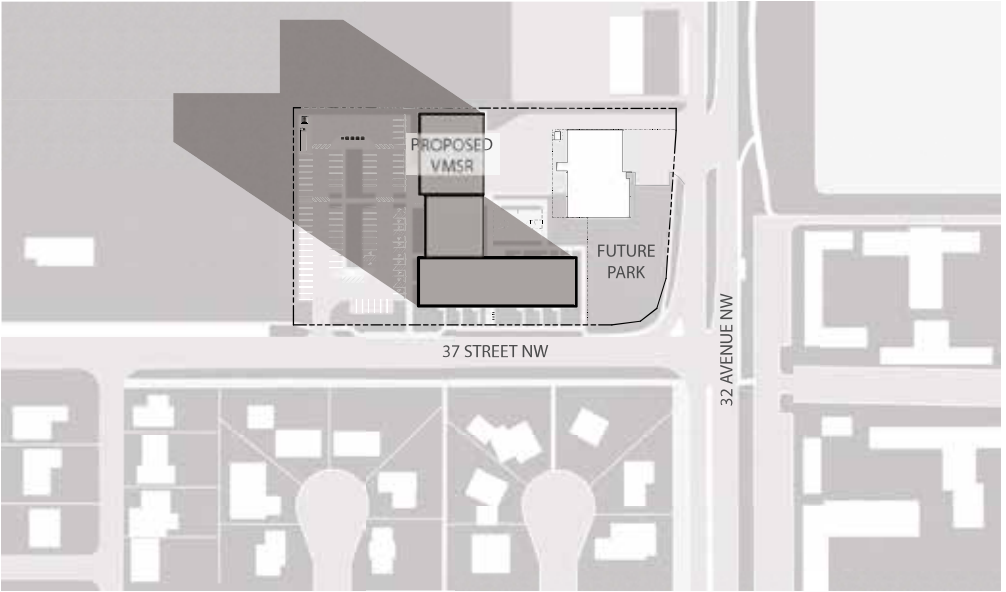




DECEMBER 21 - 9:00AM



DECEMBER 21 - 12:00PM



DECEMBER 21 - 3:00PM

# C | APPENDIX C: PROJECT DATA SHEET

Project Address: 3740 - 32 Avenue NW, Calgary, AB, T2N 1N8 (subject to change)

Parcel Area (including south site): 14,431m<sup>2</sup>

Site Area: 13,398m<sup>2</sup>

Building Area:

- Basement - 589m<sup>2</sup>
- 1st Floor - 3,342m<sup>2</sup>
- 2nd Floor - 1,925m<sup>2</sup>
- 3rd Floor - 1,391m<sup>2</sup>
- 4th Floor - 1,391m<sup>2</sup>
- Total - 8,339m<sup>2</sup>

Building Height: 14.9m

Top of Main Floor Elevation: 1107.35m

Building Use:

- Fire Station
- Residential (48 Units)
- Offices / Commercial
- Childcare Services

Major Occupancy Classification:

- Calgary Fire Station:
  - Group F, Division 3 - low-hazard industrial occupancies
  - Group C - residential occupancies
- Calgary Housing: Group C - residential occupancies
- Corporate Accommodation: Group D - business and personal services occupancies
- Childcare: Group A, Division 2 - Assembly occupancies not elsewhere classified in Group A

Ancillary Use:

- Household Hazardous Waste Drop-Off

Land Use Designation:

- Direct Control (MH-1 based)

Construction Type:

- Non-Combustible
- Combustible

Sustainability Target(s):

- LEED Gold (tentative)
- 40% less energy use than NECB 2014
- WELL Gold