

**Committee of the Whole Report** For the Meeting of October 6, 2022

Subject:	Rezoning Application No. 00820 and Deve Application No. 00207 for 722 and 726 Disco	•
From:	Karen Hoese, Director, Sustainable Planning a	nd Community Development
То:	Committee of the Whole	Date: September 22, 2022

#### RECOMMENDATION

#### **Rezoning Application**

- That Council instruct staff to prepare the necessary Zoning Regulation Bylaw Amendment that would authorize the proposed development outlined in Rezoning Application No. 00820 for 722 and 726 Discovery Street, that first and second reading of the Zoning Regulation Bylaw Amendment be considered by Council and a Public Hearing date be set.
- 2. The applicant provided the following items prior to a Public Hearing:
  - a. an updated Arborist Report and Tree Management Plan to the satisfaction of the Director of Parks, Recreation and Facilities
  - b. a revised site plan and landscape plan that comply with the Tree Protection Bylaw with respect to tree identification, soil volumes and tree replacement to the satisfaction of the Director of Parks, Recreation and Facilities
  - c. a revised site plan and landscape plan that comply with the City's Downtown Public Realm Plan and Streetscape Standards (DPRP), specifically, the 'New Town' District for the frontage, to the satisfaction of the Director of Engineering and Public Works
  - d. a revised site plan and landscape plan showing nine short-term bicycle parking spaces on site in accordance with Schedule C: Off-street Parking to the satisfaction of the Director of Sustainable Planning and Community Development.
- 3. The applicant prepared and executed legal agreements to secure the following with the form and contents to the satisfaction of the Director of Sustainable Planning and Community Development, Director of Engineering and Public Works, and the City Solicitor prior to final adoption of the bylaws:
  - a. all dwelling units would remain affordable or below-market rental for 60 years, or the life of the building, whichever is greater
  - b. all dwelling units are to be owned by a non-profit or government agency for 60 years,

or the life of the building, whichever is greater, to guarantee that the development will continue to provide non-market housing

- c. a minimum of nine accessible and five adaptable dwelling units to be constructed in accordance with CAN/CSA-B651-95, the National Standard of Canada for barrier-free design
- d. provide civil design drawings and construct a mid-block crosswalk adjacent to the development, which would include bulb outs, lighting, enhanced street furnishings and landscaping, and coordinate with the mid-block crosswalk requirements associated with the adjacent development proposal on the properties located at 710 Caledonia Ave and 1961 Douglas Street
- e. the design, supply and installation of the City's Downtown Public Realm Plan and Streetscape Standards (DPRP), specifically, the 'New Town' District for the Discovery Street development frontage, including furnishings, materials, sidewalk scoring patterns and pedestrian lights
- f. provide five (5) BC Transit's EcoPasses for employees, for a five-year duration; install a level 2 electric charger along the site's Discovery Street frontage for public use; and provide electric charging abilities for a minimum of 20% of the long-term bicycle parking spaces
- g. install solar voltaic rooftop panels in accordance with the plans dated August 18, 2022
- h. secure sewage attenuation should it be determined that sewage attenuation will be required for this development following the review of Sanitary Design Flow calculations prepared by Lawson Engineering Ltd., to the satisfaction of the Director of Engineering and Public Works.
- 4. Discharge the existing Easement (CA6123705 and CA6123706) from the title of 722 Discovery Street to the satisfaction of the City Solicitor.

#### **Development Permit with Variances Application**

That Council refer the application back to staff and give the applicant an opportunity to reconsider the siting of the building to allow for the retention and protection of the Garry oak trees to the satisfaction of the Director of Sustainable Planning and Community Development and the Director of Parks, Recreation and Facilities.

#### LEGISLATIVE AUTHORITY

This report discusses a Rezoning Application and a concurrent Development Permit with Variances (DPV) Application. Relevant rezoning considerations include the proposal to increase the density and add multi-unit residential and office as new uses while the relevant DPV considerations relate to the application's consistency with design guidelines and the impact of variances.

#### Enabling Legislation

In accordance with Section 479 of the *Local Government Act*, Council may regulate within a zone the use of land, buildings and other structures, the density of the use of the land, building and other structures, the siting, size and dimensions of buildings and other structures as well as the uses that are permitted on the land and the location of uses on the land and within buildings and

other structures.

In accordance with Section 482 of the *Local Government Act*, a zoning bylaw may establish different density regulations for a zone, one generally applicable for the zone and the others to apply if certain conditions are met.

In accordance with Section 483 of the *Local Government Act*, Council may enter into a Housing Agreement which may include terms agreed to by the owner regarding the occupancy of the housing units and provided such agreement does not vary the use of the density of the land from that permitted under the zoning bylaw.

In accordance with Section 489 of the *Local Government Act*, Council may issue a Development Permit in accordance with the applicable guidelines specified in the *Official Community Plan*. A Development Permit may vary or supplement the Zoning Regulation Bylaw but may not vary the use or density of the land from that specified in the Bylaw.

#### EXECUTIVE SUMMARY

The purpose of this report is to present Council with information, analysis and recommendations for a Rezoning Application and a Development Permit with Variances Application for the properties located at 722 and 726 Discovery Street. The proposal is to rezone from the M-1 Zone, Limited Light Industrial District, to a new residential rental tenure zone in order to increase the density and permit an eight-storey, multi-unit residential building consisting of approximately 90 supportive housing dwelling units. There is a concurrent Development Permit with Variances Application pertaining to the proposed form and character, exterior finishes and landscaping. The proposed variances are related to vehicle and bicycle parking.

The following points were considered in assessing the Rezoning Application:

- The Official Community Plan (OCP, 2012) Urban Place designation is Core Employment, which supports residential uses within the Rock Bay neighbourhood between Douglas Street and Blanshard Street
- The proposed density is 3:46:1 floor space ratio (FSR), which is above the maximum residential density of 3:1 FSR supported in Core Employment. However, the proposal is further advancing important OCP policies and objectives related to housing and homelessness, sustainability, food security and community well-being
- The subject properties are located within the Rock Bay District in the *Downtown Core Area Plan* (DCAP, 2011), which supports residential and residential mixed-use development between Douglas Street and Blanshard Street, and the development of non-market housing as the Downtown Core Area grows, in partnership with provincial, non-profit and industry partners
- The proposal is for approximately 90 fully self-contained (including a private washroom and a kitchenette) supportive housing units and support services for people who are atrisk-of-homelessness in the community
- The subject property is located in close proximity to rapid transit on Douglas Street. The DCAP encourages pedestrian connections to transit corridors and transit stops that are direct, safe, convenient, barrier-free, easily identifiable and navigable. The applicant would be installing a new mid-block crossing on Discovery Street to improve pedestrian infrastructure and support transit in the neighbourhood.

The following points were considered in assessing the Development Permit with Variances Application:

- The subject properties are within Development Permit Area (DPA) 7A: Douglas Street and Blanshard Street, which encourages the revitalization of commercial corridors, including Douglas and Blanshard streets through high quality architecture, landscape and urban design
- The application is proposing to remove three significant Garry oak trees, which significantly contribute to the urban forest and public realm, to accommodate the building, driveway and pad-mounted transformer (PMT), despite strong encouragement to adjust the site layout to retain the trees
- The proposal is replacing an underutilized surface parking lot with a multi-unit residential building, which will provide additional housing and enhance the neighbourhood
- To create a sense of community on-site, the applicant is proposing outdoor amenity space for residents, including a gazebo, outdoor seating, allotment garden boxes, and landscaping
- The proposal is providing no parking on-site. The DCAP supports parking variances for transit-supportive uses located adjacent to major transit stops. The subject site is less than a 100m from a transit stop on Douglas Street. To further support the lack on on-site parking the applicant is proposing additional transit demand management measures.

#### BACKGROUND

#### **Description of Proposal**

The rezoning proposal is to increase the density and permit a multiple dwelling building consisting of approximately 90 supportive housing units, a commercial kitchen, dining area and support staff offices.

The following differences from the M-1 Zone, Limited Light Industrial District, are being proposed and would be accommodated in the new residential rental tenure zone:

- increase the density from 3:1 to 3.46:1 FSR
- permit residential uses
- increase the maximum height from 15m to 30.05m.

The associated Development Permit with Variance application is for an eight-storey, multi-unit residential building and associated landscaping. Specific details include:

- a steel-framed, modular building
- exterior materials on the building include brick veneer, vertical metal panel, metal plate panel, metal plate spandrel panel, horizontal fibre cement plank, concrete composite metal cladding, heavy timber columns, and metal handrail and guardrail systems
- corrugated metal screening for rooftop mechanical equipment
- exterior finishes of the accessory building for bicycle parking and garbage/recycling enclosure include brick veneer and corrugated metal siding
- outdoor amenity space on the rooftop of the accessory building including allotment garden boxes and outdoor seating
- outdoor common area at grade including a gazebo, outdoor seating, allotment garden boxes, and landscaping
- three significant Garry oak trees to be removed and 12 new trees to be planted on site

- 30 long-term and 6 short-term bicycle parking spaces
- no residential or visitor parking spaces on site
- an accessible vehicle pick-up and drop-off area.

The proposed variances are related to:

- reducing the required number of residential parking spaces from 18 to nil, commercial parking spaces from one to nil, and visitor parking spaces from nine to nil
- reducing the required number of long-term bicycle parking spaces from 90 to 30
- reducing the required number of short-term bicycle parking spaces from nine to six.

#### Land Use Context

The area is characterized by a mix of light industrial, commercial and residential uses.



Figure 1. Aerial photo of subject properties

#### **Existing Site Development and Development Potential**

The site is presently used as a surface parking lot.

Under the current M-1 Zone, the property could be developed at a density of 3:1 FSR and include a five-storey commercial and/or light industrial building consisting of a mix of uses, such as manufacturing, processing and assembly, warehouses, financial institution, high-tech, office, restaurant, school, transient accommodation, or work-live.

#### Data Table

The following data table compares the proposal with the existing M-1 Zone, Limited Light Industrial District. An asterisk is used to identify where the proposal is less stringent than the existing zone. Additionally, the key City policy that pertains to the area has been included in this table.

Zoning Criteria	Proposal	M-1 Zone	OCP Policy	DCAP
Site area (m²) – minimum	1344.83	n/a		
Density (Floor Space Ratio) – maximum	3.46:1*	3	5:1 (max residential density up to 3:1)	5:1 (max residential density up to 3:1)
Height (m) – maximum	30.05*	15	n/a	60
Storeys – maximum	8	n/a	15	20
Site coverage (%) – maximum	46.60	n/a		
Open site space (%) – minimum	53.30	n/a		
Setbacks (m) – minimum				
Front (Discovery Street)	3.20	n/a		
Rear (North)	3	3 or 0		
Side yard (West)	14.50 (building) <b>1.20* (bicycle</b> enclosure)	3 or 0		
Side yard (East)	2.5* (building) 1.6* (heat pump)	3 or 0		
Vehicle parking – minimum	0*	18 (residential) 1 (commercial)		
Visitor vehicle parking - minimum	0*	9		
Loading Space (m) – minimum				
Width	4	4		
Length	9	9		
Height	open	4.30		
Setback from street	0*	3		

Zoning Criteria	Proposal	M-1 Zone	OCP Policy	DCAP
Access from street	4*	5		
Bicycle parking stalls – minimum				
Long-term	30*	90		
Short-term	6*	9		
Percentage (%) of horizontal spaces	47*	50		

#### Active Transportation

The applicant is proposing to provide 30 long-term and six short-term bicycle parking spaces to support active transportation.

#### Public Realm

The following public realm improvements are proposed in association with this application:

- installation of a dual head level two vehicle charger on Discovery Street
- construction of a mid-block crosswalk adjacent to the development, which would include bulb outs, lighting, enhanced street furnishings and landscaping, and would be coordinated with the mid-block crosswalk requirements associated with the adjacent development proposal on the properties located at 710 Caledonia Avenue and 1961 Douglas Street.

The above would be secured with a Section 219 covenant and registered on the property's title, prior to Council giving final consideration of the proposed Zoning Regulation Bylaw Amendment.

#### **Community Consultation**

Consistent with the *Community Association Land Use Committee (CALUC) Procedures for Processing Rezoning and Variance Applications*, prior to submission of the application, it was posted on the Development Tracker along with an invitation to complete a comment form regarding the proposal. Mailed notification was sent to owners and occupiers of property within 200m of the subject property advising that a consultation process was taking place and that information could be obtained and feedback provided through the Development Tracker. A sign was also posted on site, to notify those passing by of this consultative phase. Additionally, the applicant participated in an online community meeting with the CALUC on February 7, 2022. A letter dated February 11, 2022, along with the comment forms are attached to this report.

Only one comment form was received in the pre-application process and the response was in support of the proposal. However, the CALUC letter expressed concerns related to the lack of larger size (two- and three-bedroom) dwelling units and a shortfall in on-site parking for employees.

The associated application proposes variances, therefore, in accordance with the City's *Land Use Procedures Bylaw*, it requires notice, sign posting and a meeting of Council to consider the variances.

#### ANALYSIS

#### **Rezoning Application**

#### Official Community Plan

The subject properties are designated Core Employment in the OCP, which supports residential mixed-use, work/live and commercial, including office, hotels and other visitor accommodation, for the areas located between Douglas Street and Blanshard Street. The OCP supports building heights up to 15 storeys and a base density of 3:1 FSR up to a maximum of 5:1 FSR, of which the residential density does not exceed 3:1 FSR. The proposal complies with the use and height policies in the OCP; however, the proposed residential density is above the maximum density identified in the Core Employment Urban Place designation.

The proposal further advances several key policies and objectives in the OCP, which need to be taken into consideration when evaluating the proposed density and merits of this application. The key features of this proposal include:

- affordable and stable housing with support services for people in core housing need
- support services on site, such as life skills training and employment assistance to build individual capacity
- self-contained units with kitchenettes and access to regular meal services to support nutritional health
- indoor and outdoor amenities for residents to foster inclusivity and a sense of community on site
- gardens and other food production spaces for the use of residents
- partnerships with community organizations to reduce poverty in the city.

#### Burnside Gorge Neighbourhood Plan

The *Burnside Gorge Neighbourhood Plan* refers to the DCAP for land use policies related to use, height and density. DCAP identifies the subject properties within the Rock Bay District, which envisions the area as a key employment centre that attracts a range of commercial and light industrial businesses to provide a more diversified and resilient employment base. With respect to residential development, the Plan states that residential and residential mixed-use development are to be primarily located between Douglas Street and Blanshard Street. Furthermore, the Plan states that residential development is to be located, designed, and appropriately sited to mitigate any potentially negative effects on the general operation and function of adjacent employment activities. The building is situated 2.5m from the east property line and 3m from the rear property line. There are residential dwelling units with operable windows facing east. However, there are no residential units facing the rear yard, which would minimize any potential conflicts between residential and employment activities.

Building heights up to 60m (approximately 20 storeys) and a base density of 3:1 FSR up to a maximum of 5:1 FSR, of which the residential density does not exceed 3:1 FSR is supported in the Plan. The proposal complies with the use and height policies in the DCAP; however, the

proposed residential density is above the maximum density identified in the Plan.

Further to the land use policies, the Plan includes policies pertaining to housing affordability. Specifically, it recognizes the importance of supporting the development of non-market housing in the Downtown Core Area as it continues to grow as well as fostering partnerships with provincial, regional, non-profit and industry partners to deliver affordable housing in the Urban Core.

#### <u>Housing</u>

The application, if approved, would add approximately 90 new supportive housing dwelling units, which would increase the overall supply of housing in the area and contribute to the targets set out in the *Victoria Housing Strategy*.

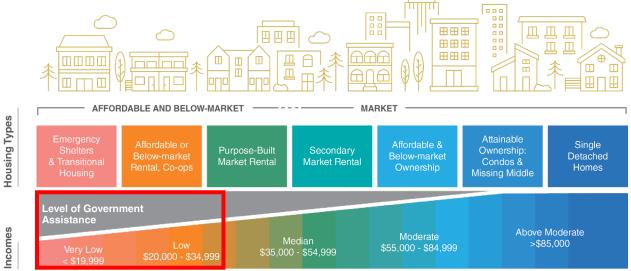


Figure 1. Housing Continuum

#### Affordability Targets

The application indicates that all 90 rental dwelling units would fall under the very low to lowincome range of the City's housing continuum as shown in Figure 1. To secure this commitment of providing affordable rental housing, BC Housing is willing to enter into a Housing Agreement to ensure that all residential rental units would remain affordable or below-market for 60 years or the life of the building, whichever is greater. By securing the above, the proposal is further advancing several housing objectives in the OCP and BGNP.

#### Housing Mix

At present there is no policy that provides targets regarding housing mix and unit type is not regulated or secured. However, the OCP identifies a mix of units as an objective and identifies the need for a diverse range of housing units including family housing. As submitted, this application proposes approximately 90 self-contained, studio units to fulfill current housing needs in the community. Current tenants living at the Capital City Centre Hotel, also owned by BC Housing, would be relocated to this new building once it is completed.

#### Security of Tenure

In addition to a proposed residential rental tenure zone, a Housing Agreement is being proposed which would ensure that all 90 dwelling units would remain rental and owned by a non-profit or government agency for 60 years, or the life of the building, whichever is greater.

#### **Development Permit with Variance Application**

#### Official Community Plan: Design Guidelines

The OCP identifies the subject properties within DPA 7A: Corridors, which envisions the revitalization of areas of commercial use along corridors through high-quality architecture, landscape and urban design to enhance their visual appearance, strengthen commercial viability and encourage pedestrian use. In March 2022, Council adopted new DCAP design guidelines, which apply to this application. Below is a summary of how the proposal addresses some of the key elements in the new design guidelines.

#### Urban Forest

The design guidelines emphasize the importance of designing buildings that provide street vitality and safety through the creation of active and interesting streets including an increased urban forest canopy.

Furthermore, the City's Urban Forest Master Plan (UFMP, 2013) speaks to the value of Biodiversity and Conservation of Victoria's remnant ecosystems including Garry oaks. The Plan states, "Victoria has many stately old trees that are 'significant' because of their heritage, wildlife, landmark, or historic values. While the Tree Protection Bylaw provides some measure of protection for these much-loved veterans, additional measures are required to encourage and optimize their conservation. In many cases, they are literally irreplaceable."

The Burnside Gorge area has traditionally low canopy cover for the size of the neighborhood at 14.6%. In addition, the UFMP recommends developing canopy cover targets for the City and recommends alignment with other municipalities in the Pacific Northwest in which the overall canopy cover goal is 40%, varied depending on neighbourhood type (i.e. residential 25%, street ROWs 25% and Central Business Districts at 15%).

Along the Discovery Street frontage, there are three large, healthy bylaw-protected Garry Oak trees and one bylaw-protected Garry Oak seedling. The applicant is proposing to remove all four trees to accommodate the building, driveway and pad-mounted transformer (PMT) despite staff strongly encouraging the applicant to adjust the site layout to retain the trees, which significantly contribute to the urban forest and public realm and is in accordance with City policies and design guidelines. The applicant has stated that due to the challenging site grades, modular construction practices, the size of building required to provide 90 supportive housing units, access to the garbage and recycling enclosure, loading service requirements and the need for suitable and attractive private amenity space, it is not a viable option to rotate the building 90 degrees to retain any of the trees.

It is strongly recommended that the applicant further explore design solutions to retain these significant Garry Oak trees. The retention and protection of these trees and the restoration of the remnant ecosystem through understory native plantings will help offset tree canopy loss elsewhere on the property, and in the neighbourhood and further advance several urban forest

and community well-being policies and design guidelines contained in the OCP, DCAP and UFMP.



Figure 2. Photos of the Garry oak trees

#### Building Composition and Site Layout

The DCAP includes specific design guidelines to ensure that a tall building (defined as any building over 23m in height) is designed to protect sky views and access to sunlight through balanced street width to building height proportions, the overall massing, generous tower setbacks and separation distances. The proposed building is 30.05m tall, and the following table compares the proposal with key design guidelines in DCAP for mid-rise residential building (up to approximately 36m in height) to assess its impact on neighbouring lots and the public realm.

Design Criteria for a Mid-Rise Residential Building	Recommended	Proposed
Site area for an interior lot – minimum	1600m²	1344m²
Tower setback from the street – minimum	3m	3m
Tower setback from the side and rear property lines - minimum	10m	14.4m (west side) 2.5m (east side) 3m (rear – north side)
Tower floor plate size – maximum	900m²	559m²
Floor plate width - maximum	22m	19.34m
Building Orientation	North-South	North-South

To summarize, the proposal does not meet the minimum site area for an interior lot or the minimum tower setbacks from the side and rear property lines, which may impact access to sunlight and sky views if other tall buildings are constructed on the adjacent lots. However, from the west property line, the applicant is proposing a much larger side yard setback to minimize impacts on the adjacent heritage-designated building. The proposal does comply with the minimum tower setback from the street, floor plate width, and building orientation, and it is significantly below the maximum tower floor plate size. The building would have minimal shadow impacts on the public realm.

In terms of façade composition, the proposal includes a high proportion of transparent glazing at street level to support street vitality and safety. The application also proposes the use of highquality and durable materials as well as a variety of textures and details in the exterior cladding to achieve visual interest and compliment the façade composition of the proposed mixed-use development at 710 Caledonia Avenue and 1961 Douglas Street.

Lastly, the design guidelines encourage back-of-house uses, such as loading, garbage collection, utilities, and pad-mounted transformers (PMT) to be situated away from public view, where possible. In this proposal, the back-of-house uses would be visible from the street, especially the PMT station; however, the applicant has introduced landscaping and screening to soften the visual impact of these uses and located the garbage and recycling enclosure and accessory building as far away from the street as possible.

#### Outdoor common space

Providing well-designed and attractive open space and landscaped areas that complement the overall building design, increasing tree canopy cover, mitigating heath island effects, and reducing stormwater runoff and greenhouse gas emissions are strongly encouraged in the design guidelines. In addition, providing a range of shared outdoor amenity spaces that are available for all building residents and that encourage social interaction, play and urban food production are strongly encouraged in the design guidelines. The shared outdoor amenity space in the rear yard has been designed to achieve the following:

- maximize access to sunlight while providing areas of shade in the summer
- accessible, usable, and well-integrated open space for residents with substantial outdoor seating
- clear access and visibility from circulation space
- soft landscaping areas with trees to reduce heat island effects
- raised planter boxes for urban agriculture opportunities for residents.

In addition, the outdoor amenity space on the rooftop of the accessory building will include additional raised planter boxes and outdoor seating for residents.

However, it is worth noting that the tree soil volumes and siting requirements outlined in the *Tree Protection Bylaw* have not been met on the plans. It is recommended for Council's consideration that the application meets the tree soil volumes and siting requirements as a condition of rezoning.

#### Variances

#### Vehicle Parking

The applicant is proposing the following parking variances:

- reduce the required number of residential parking spaces from 18 to nil
- reduce the required number of commercial parking spaces from one to nil
- reduce the required number of visitor parking spaces from nine to nil.

The applicant is proposing to provide a loading space on-site for deliveries, garbage and recycling pick-up, and a pick-up and drop-off area for residents.

According to the Parking Study prepared by Bunt & Associates (see Attachment E), the supportive housing demographic typically have low vehicle ownership rates. The study analyzed parking data from 10 supportive housing buildings in the region, outside of Victoria's core area, and concluded that the average vehicle ownership rate is 0.05 vehicles per unit. This vehicle

ownership rate would equate to a parking demand of approximately five parking spaces for residents in this proposed development. According to the study, the ten other locations have little to no transportation demand management (TDM) initiatives to help reduce automobile dependency whereas this proposal includes TDM measures to offset the impacts of a parking shortfall on site, which is discussed further below.

With respect to visitor and employee parking demand, the study concluded that the average peak visitor parking demand would be 0.06 parking spaces per unit, which equates to approximately five parking spaces. The applicant anticipates up to approximately five employees to be working on site at any given time. Moreover, it is predicted that the parking demand would be approximately two to three parking spaces for employees and an additional two to three parking spaces for visitors. Due to the demand for on-street parking in the neighbourhood, the study concluded that Discovery Street has minimal excess parking; therefore, the need for appropriate TDM measures to minimize the impacts of no employee and visitor parking on-site is an important component of this application.

To off-set the impacts of no parking on-site, the applicant is proposing the following TDM measures, which are considered supportable:

- five BC Transit's EcoPasses to be provided for employees, for a five-year duration
- construction of a mid-block pedestrian crossing near the site's east edge
- installation of a level two electric charger along the site's Discovery Street frontage for public use
- approximately six (20%) electric charging outlets for the long-term bicycle parking spaces.

The subject site is also well-served by public transit. There are 14 transit routes accessible within 800m or an approximately 15min walk, including one transit stop located on Douglas Street, within 100m of the site. BC Housing confirms that all residents of supportive housing have free transit passes available to them through the Low-Income Transit Assistance Program, which is administered through the Social Planning Council. Furthermore, BC's Ministry of Social Development and Poverty Reduction Program also offers bus passes to individuals living in supportive housing.

In addition to public transit, the subject site is well connected to both walking and cycling networks, and is in close proximity to local shops, services and amenities in the neighbourhood. Given the proposed TDM measures and the site's ideal location from a sustainable transportation perspective, the proposed parking variances are supportable.

#### Bicycle Parking

The applicant is proposing to reduce the long-term bicycle parking spaces from 90 to 30 and the short-term bicycle parking spaces from nine to six. BC Housing indicates that 30 long-term bicycle parking spaces will meet resident demand based on anecdotal data provided by operators of similar developments.

With respect to short-term bicycle parking, staff recommend that the applicant comply with the short-term bicycle parking requirements in Schedule C: Off-street Parking. There is enough space on-site to accommodate three more short-term bicycle parking spaces. Given that there is no vehicle parking, adding the bicycle parking may encourage visitors to use the bike facilities.

#### **Accessibility**

The British Columbia Building Code regulates accessibility as it pertains to buildings. The applicant is proposing nine accessible and five adaptable studio dwelling units, which would be designed in accordance with CAN/CSA-B651-95, the National Standard of Canada, for barrier-free design. These standards either meet or exceed the accessibility requirements of both BC Housing and the British Columbia Building Code. The nine accessible units would be wheelchair accessible, and a safe useable environment for persons with physical, sensory or cognitive disabilities. The proposed outdoor areas and pathways surrounding the buildings are also designed to be accessible, except for the rooftop amenity space above the bike room.

#### **Sustainability**

As indicated in the applicant's letter dated August 12, 2022, the following sustainability features are associated with this proposal:

- building meets BC Energy Step Code Level 3 (exceeds the City's Step 2 requirements)
- solar voltaic rooftop panels to offset power consumption.

#### Advisory Design Panel Review

The application was reviewed by the Advisory Design Panel on June 22, 2022. At that meeting, the following motion was passed:

That the Advisory Design Panel supports housing of this nature and scale with the number of units in this location and for this purpose recommend to Council that Development Permit Application No. 000207 for 722 and 726 Discovery Street does not sufficiently meet the applicable design guidelines and policies and should be declined and that the key areas that should be revised include:

- design of building and entry should be welcoming and offer a sense of home
- building should not read as nonmarket housing
- changing window formats and scale to read more residential instead of institutional
- increase bike parking
- consider preserving the Gary Oak trees along Discovery Street
- matching the exterior program to the needs of the future residents
- recycling enclosure concealed and covered
- further consideration of the termination of the building
- explore opportunities to enhance building performance.

In response, the applicant has made the following design revisions to the proposal:

- added rooftop projections and breaks in the vertical proportions to soften the perceived building mass
- modified the exterior materials to be high quality and durable
- added more windows and incorporated a more playful approach to the window pattern and proportions
- added a wrap-around canopy along the street frontage
- provided additional hard and soft landscaping and adjustments to the layout of the outdoor amenity areas to enhance access and usability
- added a rooftop amenity space above the bike room.

Considering that this is a modular building, the revisions to the proposal are more aligned with the applicable design guidelines that focus on building composition and landscape design. However, staff continue to have concerns with the removal of the three significant Garry Oak trees at the front of the property.

#### Tree Preservation Bylaw and Urban Forest Master Plan

#### Tree Inventory

The goals of the *Urban Forest Master Plan* (UFMP, 2013) include protecting, enhancing, and expanding Victoria's urban forest and optimizing community benefits from the urban forest in all neighborhoods. This application was received after July 1, 2021, therefore *Tree Protection Bylaw* No. 21-035 applies.

The inventory in the Arborist Report does not account for all the bylaw-protected trees on the subject properties. There is a total of eight bylaw-protected trees on the subject property as well as two smaller yew plants, which may be bylaw-protected Pacific yews. Confirmation of species will be required in accordance with the *Tree Protection Bylaw*.

The proposed plans currently show one municipal tree, a 38 cm DBH Field elm, as removed; however, the arborist report and staff recommend the retention of this tree. Along the Discovery frontage, there are three large bylaw-protected Garry oak trees (87cm, 87cm and 74cm DBH), and one small 100cm tall, bylaw-protected Garry oak seedling on the subject lot. The application proposes to remove all four Garry oaks and replace them with medium or small canopy trees at maturity. The proposed placement of the new trees does not meet the *Tree Protection Bylaw* soil volumes or siting, and therefore, they will not count towards replacement trees or the tree minimum.

Staff have undertaken a visual assessment of the existing Garry Oak trees and consider these trees to be in good to fair health and structural condition. Two of the trees have asphalt paved up to the base, and as a result, further exploration work is recommended to determine the extent of the protected root zone, and condition. These large trees are likely part of Victoria's remnant Garry Oak ecosystem and are visible in 1928 air photo records.

Trees in urban environments live in challenging conditions, and space for productive root growth is challenged by underground services and compacted soils, and space above ground is often challenged by overhead wires or building faces. Trees of this size and condition are very uncommon in urban environments such as Burnside and Downtown and staff consider them to be significant based on their size, species and condition.

Tree Status	Total # of Trees		To be PLANTED	NET CHANGE
On-site trees, bylaw protected	6	6	6	0
On-site trees, not bylaw protected	0	0	6	+6
Municipal trees	1	1	3	+2

#### Tree impact Summary Table

Neighbouring trees, bylaw protected	0	0	0	0
Neighbouring trees, not bylaw protected	0	0	0	0
Total	7	7	15	+8

Financial impacts related to maintaining the newly proposed municipal trees is unknown at this time.

#### OTHER CONSIDERATIONS

In July 2017, an easement was registered on the title of 722 Discovery Street to secure one surface parking space for the use of Capital City Centre Motel located at 1961 Douglas Street as a condition of a parking variance that was triggered as a result of an approved addition of a penthouse unit in the motel. Since then, BC Housing purchased the property at 1961 Douglas Street and the site is currently being operated as transitional housing. Should Council approve this application, the existing easement (CA6123705 and CA6123706) would have to be discharged from title to the satisfaction of the City Solicitor since there is no parking proposed in this application.

#### CONCLUSIONS

The proposal to increase the density and permit a multi-unit residential building consisting of approximately 90 supportive housing dwelling units further advances several policies and objectives in the OCP related to housing and community well-being. The proposed vehicle and long-term bicycle parking variances are supportable; however, it is recommended that the application provide the required nine short-term bicycle parking spaces on site.

While there were concerns raised by ADP with the proposed building composition and landscaping, the applicant has tried to address the issues through revisions to their proposal. More significantly, there are some outstanding challenges in terms of competing City priorities, namely the retention of three significant Garry Oak trees while providing supportive housing on the site. As the resolution to these could have impacts on the density, form and massing, a recommendation is provided to refer this application back to staff for further refinements in conjunction with the Development Permit with Variances application, specifically to retain the Garry Oak trees. Staff have provided alternate motions including support for the proposal as it stands.

#### ALTERNATE MOTIONS

#### Option 1 (Advance the application to a Public Hearing "as is")

#### Rezoning Application

1. That Council instruct staff to prepare the necessary Zoning Regulation Bylaw Amendment that would authorize the proposed development outlined in Rezoning Application No. 00820 for 722 and 726 Discovery Street, that first and second reading of the Zoning Regulation Bylaw Amendment be considered by Council and a Public Hearing date be set.

- 2. The applicant provide the following items prior to a Public Hearing:
  - a. provide an updated Arborist Report and Tree Management Plan to the satisfaction of the Director of Parks, Recreation and Facilities.
  - b. revise the site plan and landscape plan to comply with the tree identification, soil volume and tree replacement requirements in accordance with the Tree Protection Bylaw to the satisfaction of the Director of Parks, Recreation and Facilities.
  - c. revise the site plan and landscape plan to comply with the City's Downtown Public Realm Plan and Streetscape Standards (DPRP), specifically, the 'New Town' District for the frontage, to the satisfaction of the Director of Engineering and Public Works.
- 3. The applicant prepare and execute legal agreements to secure the following with the form and contents to the satisfaction of the Director of Sustainable Planning and Community Development, Director of Engineering and Public Works, and the City Solicitor prior to final adoption of the bylaws:
  - a. all dwelling units would remain affordable or below-market rental for 60 years, or the life of the building, whichever is greater.
  - b. all dwelling units are to be owned by a non-profit or government agency for 60 years, or the life of the building, whichever is greater, to guarantee that the development will continue to provide non-market housing.
  - c. a minimum of nine accessible and five adaptable dwelling units to be constructed in accordance with CAN/CSA-B651-95, the National Standard of Canada for barrier-free design.
  - d. provide civil design drawings and construct a mid-block crosswalk adjacent to the development, which would include bulb outs, lighting, enhanced street furnishings and landscaping, and coordinate with the mid-block crosswalk requirements associated with the adjacent development proposal on the properties located at 710 Caledonia Ave and 1961 Douglas Street.
  - e. the design, supply and installation of the City's Downtown Public Realm Plan and Streetscape Standards (DPRP), specifically, the 'New Town' District for the Discovery Street development frontage, including furnishings, materials, sidewalk scoring patterns and pedestrian lights.
  - f. provide five (5) BC Transit's EcoPasses for employees, for a five-year duration; install a level 2 electric charger along the site's Discovery Street frontage with for public use; and provide electric charging abilities for a minimum of 20% of the long-term bicycle parking spaces.
  - g. install solar voltaic rooftop panels in accordance with the plans dated August 18, 2022.
  - h. secure sewage attenuation should it be determined that sewage attenuation will be required for this development following the review of Sanitary Design Flow calculations prepared by Lawson Engineering Ltd., to the satisfaction of the Director of Engineering and Public Works.
- 4. Discharge the existing Easement (CA6123705 and CA6123706) from the title of 722 Discovery Street to the satisfaction of the City Solicitor.

#### Development Permit with Variance Application

That Council, after giving notice and allowing an opportunity for public comment at a meeting of

Council, and after the Public Hearing for Rezoning Application No. 00820, if it is approved, consider the following motion:

- 1. That Council authorize the issuance of Development Permit with Variances Application No. 00207 for 722 and 726 Discovery Street in accordance with:
  - a. Plans date stamped August 19, 2022.
  - b. Development meeting all *Zoning Regulation Bylaw* requirements, except for the following variances:
    - i. reduce the required number of residential parking spaces from 18 to nil
    - ii. reduce the required number of commercial parking spaces from one to nil
    - iii. reduce the required number of visitor parking spaces from nine to nil
    - iv. reduce the required number of long-term bicycle parking spaces from 90 to 30
- 2. That the Development Permit, if issued, lapses in two years from the date of this resolution.

#### **Option 2 (Decline)**

That Council decline Rezoning Application No. 00820 and Development Permit with Variances Application No. 00207 for 722 and 726 Discovery Street.

Respectfully submitted,

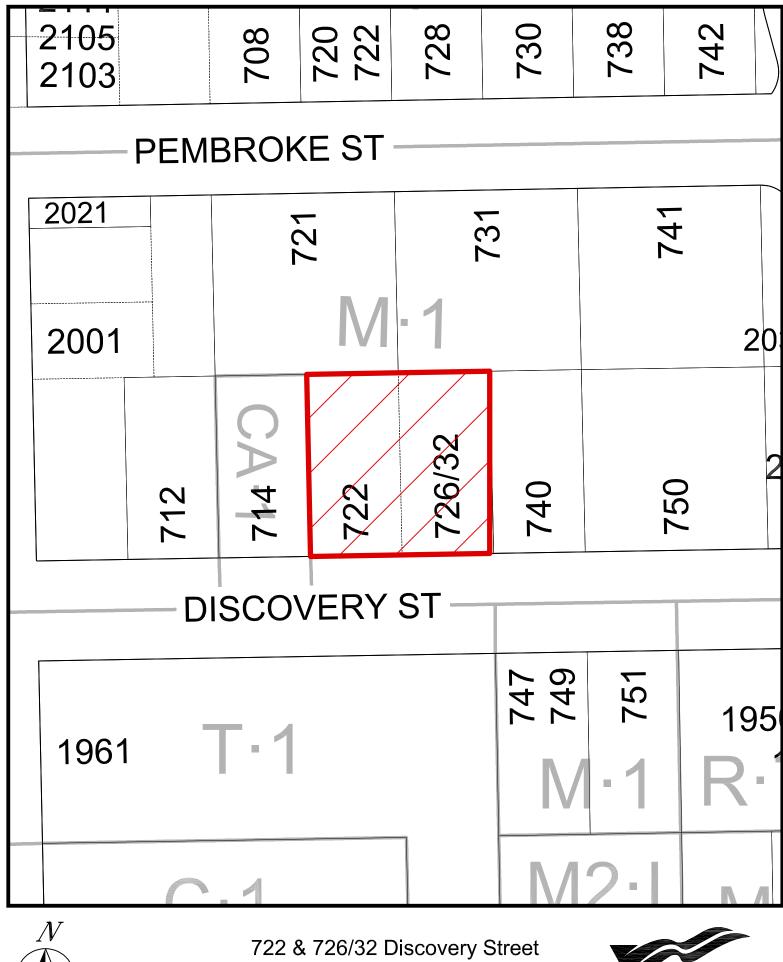
Leanne Taylor Senior Planner Development Services Division Karen Hoese, Director Sustainable Planning and Community Development Department

#### Report accepted and recommended by the City Manager.

#### List of Attachments

- Attachment A: Subject Map
- Attachment B: Plans date stamped August 19, 2022
- Attachment C: Letter from applicant to Mayor and Council dated September 14, 2022
- Attachment D: Community Benefits of Supportive Housing
- Attachment E: Parking Study prepared by Bunt & Associates dated August 11, 2022
- Attachment F: Arborist Report prepared by Capital Tree Service Inc., dated August 17, 2022
- Attachment G: Advisory Design Panel report dated June 22, 2022
- Attachment H: Minutes from the Advisory Design Panel
- Attachment I: Community Association Land Use Committee Comments dated February 11, 2022
- Attachment J: Pre-Application Consultation Comments from Online Feedback Form
- Attachment K: Correspondence (Letters received from residents).

#### ATTACHMENT A



Rezoning No.00820



## DISCOVERY STREET SUPPORTIVE HOUSING LAND USE & D.P. RE-SUBMISSION - 12.08.2022



## Design Team

<u>CLIENT:</u> BC Housing Sean Rorison PHONE: 000.000.0000 EMAIL:srorison@bchousing.org



ARCHITECT: S2 Architecture Michael Defina PHONE: 403.670.7000



EMAIL:m.defina@s2architecture.com

LANDSCAPE: WSP Michael Holm PHONE: 604.631.9637 EMAIL:michael.holm@wsp.com



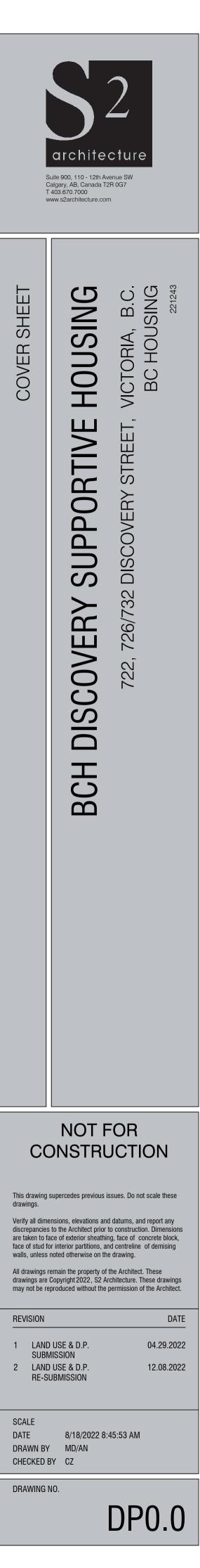
<u>CIVIL:</u>

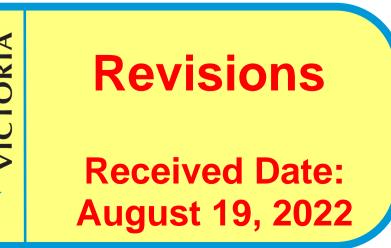
Lawson Engineering & Development NAME Stuart Purves PHONE: 250.832.3220 EMAIL:stuart@lawsondevelopments.com

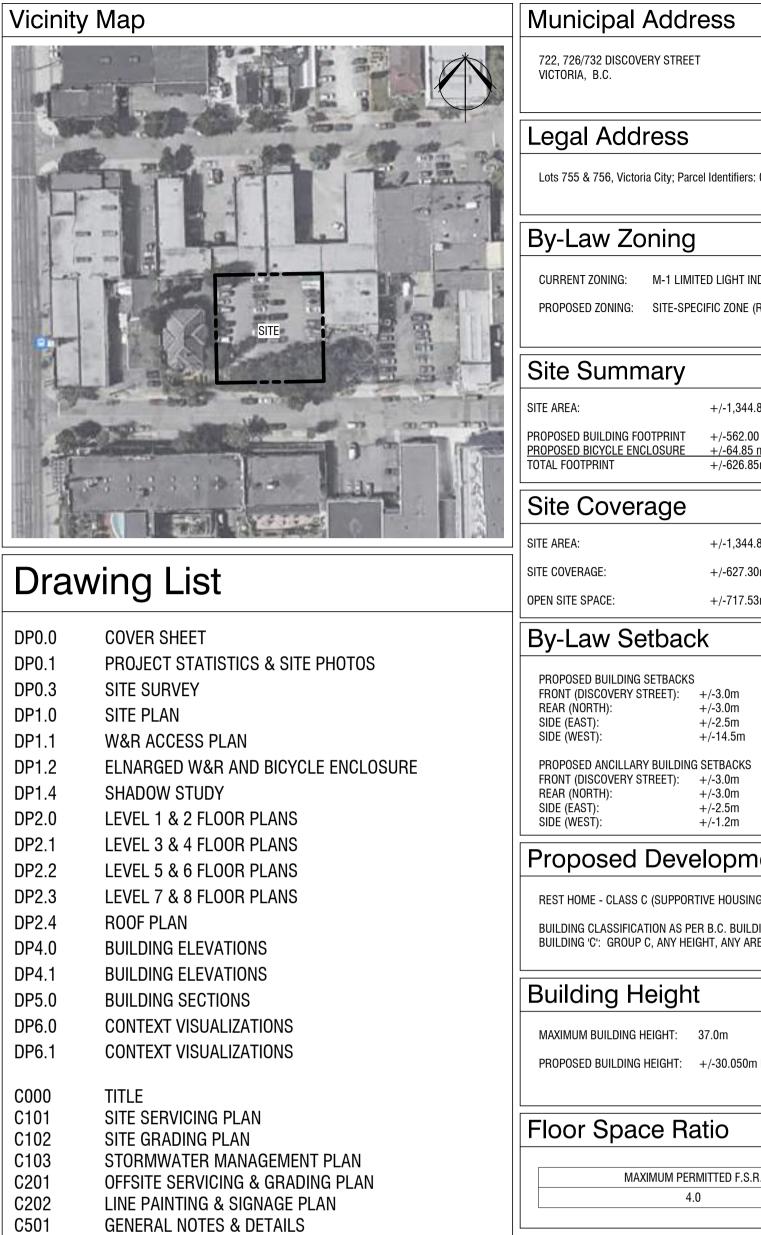




## **ATTACHMENT B**







L-00

L-01

L-02

L-03

L-04

L-05

L-06

L-07

COVER

DETAILS

DETAILS

DETAILS

LANDSCAPE PLAN

FENCE / TRELLIS ELEVATION

PLANTING PLAN

TREE REPLACEMENT & STORMWATERS AREA PLAN

#### Municipal Address

722, 726/732 DISCOVERY STREET VICTORIA, B.C.

Lots 755 & 756, Victoria City; Parcel Identifiers: 009-382-151 & 009-382-232

CURRENT ZONING: M-1 LIMITED LIGHT INDUSTRIAL PROPOSED ZONING: SITE-SPECIFIC ZONE (RESIDENTIAL RENTAL TENURE)

SITE AREA:	-
PROPOSED BUILDING FOOTPRINT PROPOSED BICYCLE ENCLOSURE TOTAL FOOTPRINT	-

+/-1,344.83m<sup>2</sup> (0.33 ac) +/-562.00 m2 +/-64.85 m2 +/-626.85m<sup>2</sup>

+/-1,344.83m<sup>2</sup> (0.33 ac) +/-627.30m<sup>2</sup> (46.6%) +/-717.53m<sup>2</sup> (53.3%)

PROPOSED BUILDING SETBACKS FRONT (DISCOVERY STREET): +/-3.0m REAR (NORTH): +/-3.0m SIDE (EAST): +/-2.5m SIDE (WEST): +/-14.5m

#### Proposed Development

REST HOME - CLASS C (SUPPORTIVE HOUSING) BUILDING CLASSIFICATION AS PER B.C. BUILDING CODE:

BUILDING 'C': GROUP C, ANY HEIGHT, ANY AREA, SPRINKLERED

MAXIMUM BUILDING HEIGHT: 37.0m PROPOSED BUILDING HEIGHT: +/-30.050m MEASURED FROM PROPOSED AVERAGE GRADE

#### Floor Space Ratio

MAXIMUM PERMITTED F.S.R. 4.0

PROPOSED F.S.R. 3.46

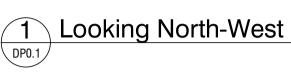
GRADE PARKING	PATIO, TERRA AREAS ARE NO			, IVIEUHAN	IUAL PENT	πυυδεδ; ΑΙ	ND ABUVE
	GROSS FLOO	DR AREA					
Level 1				562 m²			
Level 2				585 m <sup>2</sup>			
Level 3 Level 4				585 m² 585 m²			
Level 5				585 m <sup>2</sup>			
Level 6				585 m²			
Level 7 Level 8				585 m² 585 m²			
TOTAL GFA				657 m <sup>2</sup>			
Dwelling	Unit (		t INIT SUMM	/IARY			
UNIT NAME	UNIT	TYPE		UNIT AR	EA (	QUANTITY	% OF TOT
A1		UDIO		34.5m <sup>2</sup>		76	84.4%
A2 A3		BLE STUDIO		34.5m <sup>2</sup> 34.5m <sup>2</sup>		9 5	10.0% 5.6%
TOTAL	ADAFTAD			34.00	-	90	100.0%
DESCRIF UNITS - RES UNITS - V EMPLOYEE	idential Isitor	RESIDEN UNIT COUNT 90 90 N/A	ITIAL - UN AREA (m2) N/A N/A 86	0.2 STALI 0.1 STALI	g Ctor _S Per Uni _S Per Uni Per 80 m2	T 18 T 9	D PROVID
UNITS - RES UNITS - V	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT ) SUBSEQUENT	UNIT COUNT 90 90 N/A S PROVIDED EVELOPME OWN VEHI TRAFFIC A	AREA (m2) N/A N/A 86 D BY CITY NT IS FOP CLES OR I	FA 0.2 STALI 0.1 STALI 1 STALL OF VICTOR SUPPOPR DRIVE. BAS	CTOR LS PER UNI LS PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F	T 18 T 9 2 1 28 IG ON JUNE ING IN WHIO REVIOUS P	0 0 0 15, 2022.
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT SUBSEQUENT ROVIDED ON SI	UNIT COUNT 90 90 N/A B PROVIDED EVELOPME OWN VEHI TRAFFIC A TE.	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK	FA 0.2 STALI 0.1 STALI 1 STALL OF VICTOR SUPPOPR DRIVE. BAS NG ANALY	CTOR LS PER UNI LS PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F SIS, NO PA	T 18 T 9 2 1 28 IG ON JUNE ING IN WHIO REVIOUS P	0 0 0 15, 2022.
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT SUBSEQUENT ROVIDED ON SI Parking	UNIT COUNT 90 90 N/A B PROVIDED EVELOPME OWN VEHI TRAFFIC A TE.	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK	FA 0.2 STALI 0.1 STALI 1 STALI 0F VICTOR SUPPOPR SUPPOPR NG ANALY	CTOR LS PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F SIS, NO PA	T 18 T 9 2 1 28 IG ON JUNE ING IN WHIO REVIOUS P	0 0 0 15, 2022.
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR Bicycle F	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT O SUBSEQUENT ROVIDED ON SI Parking F SCRIPTION	UNIT COUNT 90 90 N/A S PROVIDED EVELOPME OWN VEHI TRAFFIC A TE.	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK	FA 0.2 STALI 0.1 STALI 1 STALI 0F VICTOR SUPPOPR DRIVE. BAS NG ANALY PETERM PAR TY F/	CTOR _S PER UNI _S PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F SIS, NO PA <b>DTS</b> KING ACTOR	T 18 T 9 2 1 IG ON JUNE ING IN WHIO REVIOUS P RKING IS TO REQUIRE	0 0 0 15, 2022. CH THE ROJECT D BE
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR Bicycle F	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT SUBSEQUENT ROVIDED ON SI Parking F	UNIT COUNT 90 90 N/A S PROVIDED EVELOPME OWN VEHI TRAFFIC A TE.	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK	FA 0.2 STALI 0.1 STALI 1 STALI 0F VICTOR SUPPOPR DRIVE. BAS NG ANALY PETERM PAR TY F/	CTOR LS PER UNI S PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON P SIS, NO PA	T 18 T 9 2 1 IG ON JUNE ING IN WHIO REVIOUS P RKING IS TO REQUIRE	0 0 0 15, 2022.
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR Bicycle F	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT SUBSEQUENT ROVIDED ON SI Parking F SCRIPTION NIT COUNT	UNIT COUNT 90 90 N/A S PROVIDED EVELOPME OWN VEHI TRAFFIC A TE.	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK QUANTI QUANTI 90	FA 0.2 STALI 0.1 STALI 1 STALI 0F VICTOR SUPPOPR DRIVE. BAS NG ANALY CONTRACTOR C	CTOR LS PER UNI LS PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F SIS, NO PA DES NO PA DES SIS, NO PA DES SIS, NO PA DES SIS, NO PA DES SIS, NO PA	T 18 T 9 2 1 IG ON JUNE ING IN WHIO REVIOUS P RKING IS TO REQUIRE	0 0 0 15, 2022. CH THE ROJECT D BE
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR Bicycle F	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT SUBSEQUENT ROVIDED ON SI Parking F SCRIPTION NIT COUNT	UNIT COUNT 90 90 N/A B PROVIDED EVELOPME OWN VEHI TRAFFIC A TE. D Red	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK QUANTI QUANTI 90	FA 0.2 STALI 0.1 STALI 1 STALI 0F VICTOR SUPPOPR DRIVE. BAS NG ANALY CONTREMINING CONTREMIN	CTOR LS PER UNI LS PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F SIS, NO PA DES NO PA DES SIS, NO PA DES SIS, NO PA DES SIS, NO PA DES SIS, NO PA	T 18 T 9 2 1 IG ON JUNE ING IN WHIO REVIOUS P RKING IS TO REQUIRE	0 0 0 15, 2022. CH THE ROJECT D BE
UNITS - RES UNITS - V EMPLOYEE TOTAL PARKING NOTE: PARKING ( NOTE: THE PURP RESIDENTS TYPIC EXPERIENCE AND REQUIRED OR PR Bicycle F	IDENTIAL ISITOR AREAS CALCULATIONS OSE OF THIS D CALLY DO NOT O SUBSEQUENT ROVIDED ON SI Parking F SCRIPTION NIT COUNT	UNIT COUNT 90 90 N/A B PROVIDED EVELOPME OWN VEHI TRAFFIC A TE. D Red	AREA (m2) N/A N/A 86 D BY CITY NT IS FOF CLES OR I ND PARK QUITE	FA 0.2 STALI 0.1 STALI 1 STALI 0F VICTOR SUPPOPR DRIVE. BAS NG ANALY CONTREMINING SUPPOPR DRIVE. BAS NG ANALY CONTREMINING TERM PAR TERM PAR TERM PAR TERM PAR TERM PAR	CTOR LS PER UNI PER 80 m2 IA PLANNIN TIVE HOUS ED UPON F SIS, NO PA <b>DTS</b> KING ACTOR 25 ROOMS RKING	T 18 T 9 2 1 IG ON JUNE ING IN WHIO REVIOUS P RKING IS TO REQUIRE 3.6	0 0 0 15, 2022. CH THE ROJECT D BE

SUFFICIENT SPACE HAS BEEN PROVIDED FOR A MIN. OF ONE COLLECTION CONTAINER FOR GARBAGE, ONE COLLECTION CONTAINER FOR RECYCABLE MATERIALS, AND TWO COLLECTION CONTAINERS FOR FOOD AND YARD WASTE MATERIALS TO ACCOMODATE THE TOTAL WASTE VOLUME. THE FOLLOWING IS A LIST OF CONTAINERS PROVIDED: 4yd<sup>3</sup> WASTE BIN

 4yd<sup>3</sup> RECYCLE BIN TWO 189L ORGANICS BINS

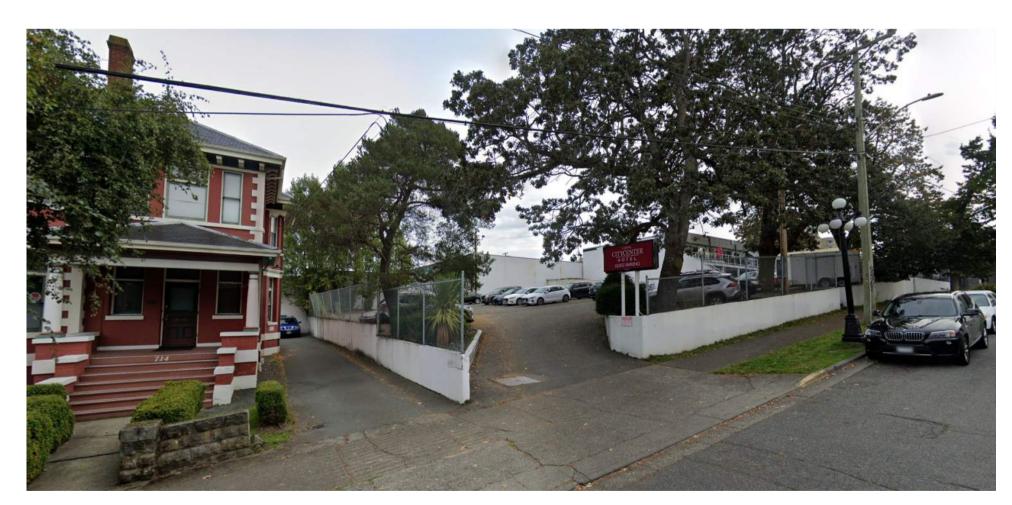
NOTE: DUE TO THE SIZE OF THE DEVELOPMENT, BI-WEEKLY WASTE PICK-UP IS BEING PROPOSED.

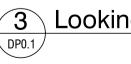












3 Looking North-East



VICTORIA, B.C. BC HOUSING

Ш

ш

 $\cap$ 

Ś

R

OVEI

()

DIS(

32

726/

722,

HOUSING

TIVE

SUPPOR

**BCH DISCOVERY** 

PHOTOS SITE  $\infty$ STATISTICS PROJECT

### NOT FOR CONSTRUCTION

This drawing supercedes previous issues. Do not scale these drawings.

Verify all dimensions, elevations and datums, and report any discrepancies to the Architect prior to construction. Dimensions are taken to face of exterior sheathing, face of concrete block, face of stud for interior partitions, and centreline of demising walls, unless noted otherwise on the drawing.

All drawings remain the property of the Architect. These drawings are Copyright 2022, S2 Architecture. These drawings may not be reproduced without the permission of the Architect.

#### REVISION

1 LAND USE & D.P. 04.29.2022 SUBMISSION 2 LAND USE & D.P. 12.08.2022 **RE-SUBMISSION** 

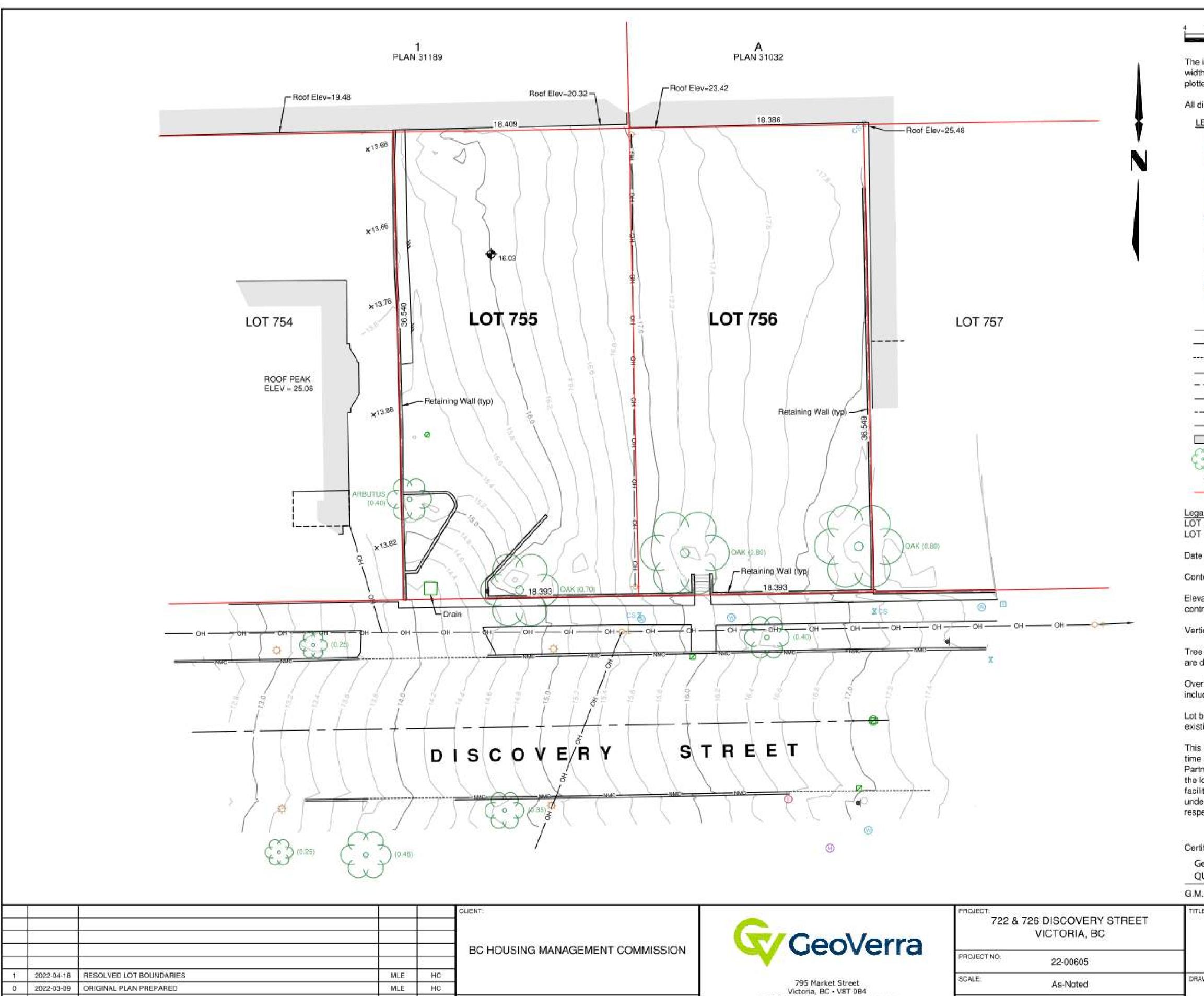
SCALE 1:50 DRAWN BY MD/AN CHECKED BY CZ

DATE 8/18/2022 8:45:53 AM

**DP0.1** 

DRAWING NO.

DATE



CLIENT REF. NO:

DRN

CHK

YYYY-MM-DD

ISS/REY

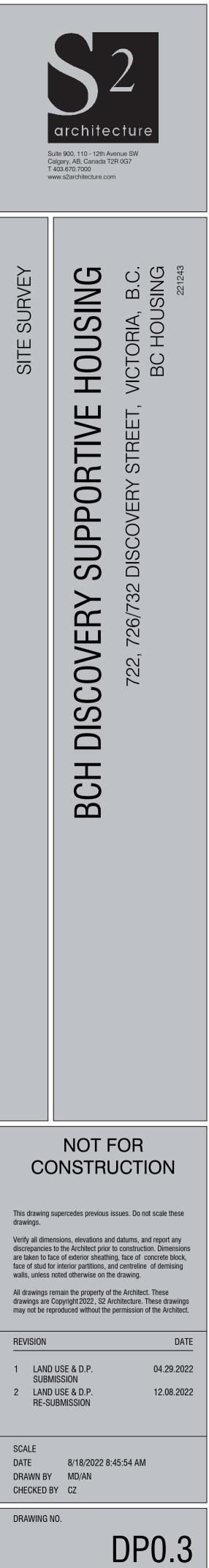
DESCRIPTION

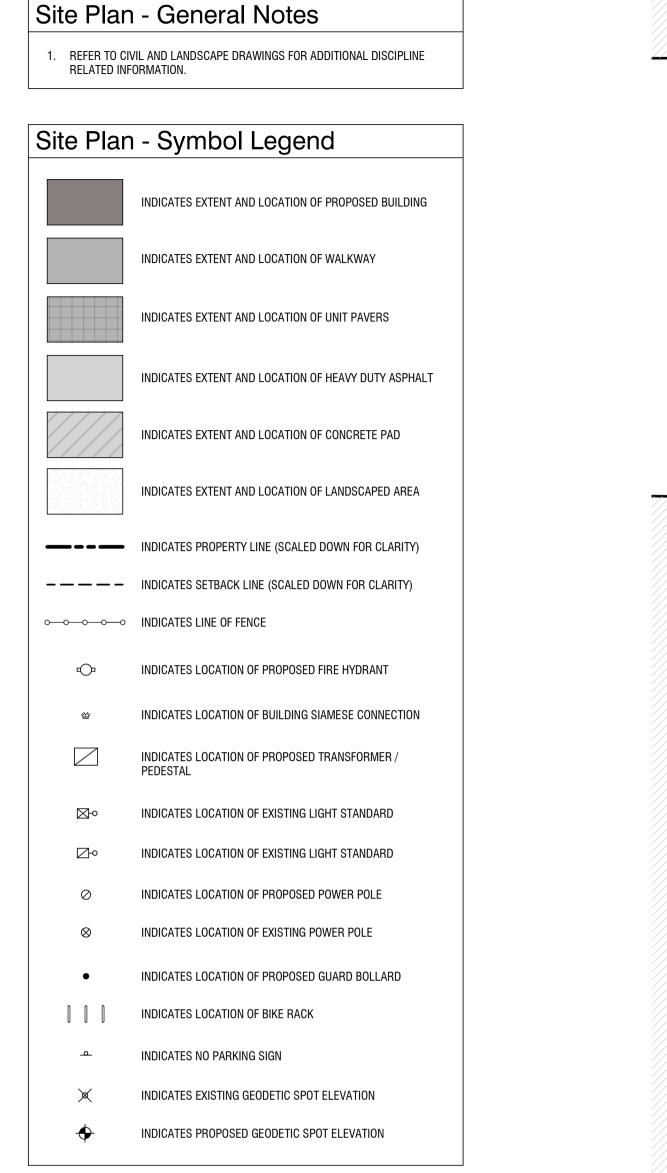
t: 250-342-9767 · www.geoverra.com

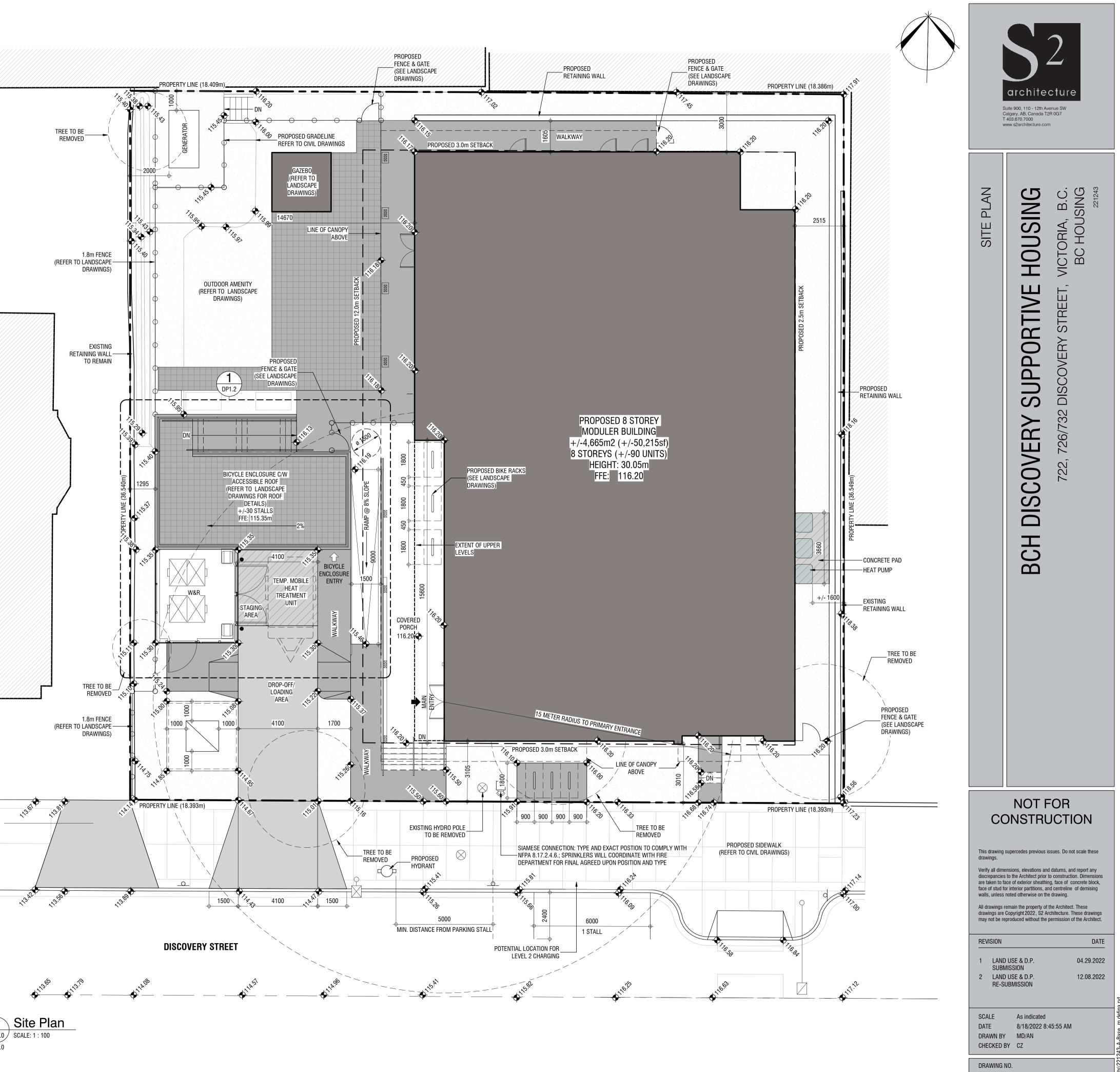
DISCIPLINE:

GEOMATICS

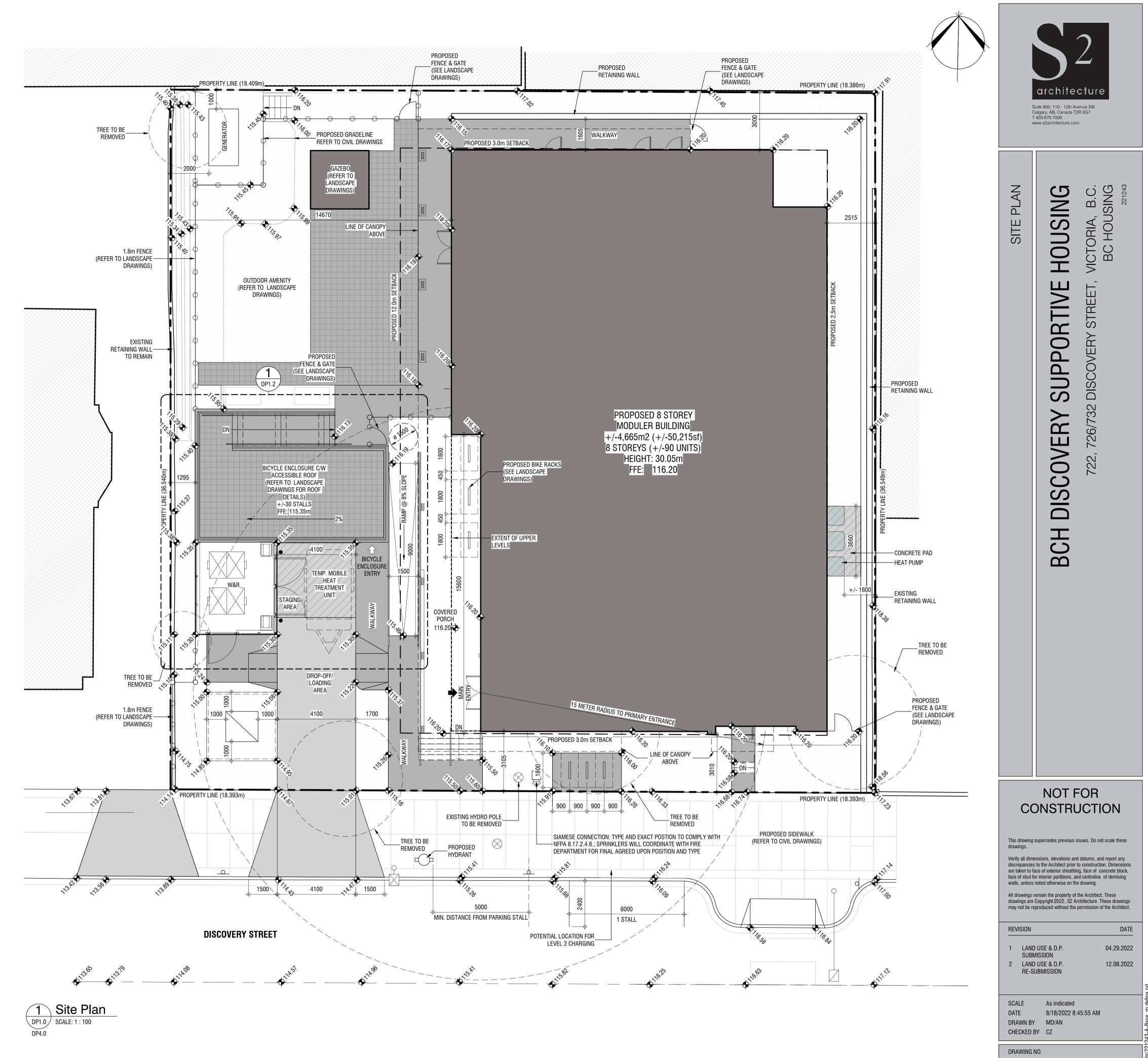
intended	0 4 8 12
	plot size of this plan is 594mm in
	mm in height (ISO A2 size) when cale of 1:200
	are in metres and decimals thereof.
	denotes catchbasin
0	denotes catchbasin/manhole
0	denotes drain
0	denotes sewer manhole denotes water manhole
X	denotes water valve
XCS V	denotes curb stop denotes water vault
6	denotes gas meter
0	denotes hydro pole
OL OT	denotes hydro pole with light denotes hydro pole with transformer
ø	denotes lamp pole
4	denotes sign
	denotes fence denotes non-mountable curb
	denotes curb letdown
	denotes edge of pavement
	denotes edge of gravel denotes center line of road
	denotes building overhang
-0H	denotes overhead wire
A Maple	denotes building outline denotes deciduous tree,
£ (0.75)	species and diameter
× 5.21	denotes spot elevation denotes property line
840 - 24 <u>9</u>	Survey: February 28, 2022. val = 0.2 m.
	e to geodetic datum, derived from geodetic ment 17-3. Published Elevation = 7.987m.
tical Datu	m CGVD28 (HTV2.0).
	rs are taken at breast height. Tree symbols natic only to show relative sizes.
80.84	es are diagrammatic only and may not nnections.
	es shown hereon are derived from ties to ev evidence and Land Title Office records.
ude all co boundarie	
ude all co boundarie sting surve s plan rep e of surve tnership a location c ilities whet lerground	resents the best information available at the y. GeoVerra Surveys (BC) Limited and its employees take no responsibility for of any underground conduits, pipes, or other ther shown on or omitted from this plan. All installations should be located by the ithorities prior to construction.
ude all co boundarie sting surve s plan rep e of surve thership a location c lities whet lerground pective au	resents the best information available at the y. GeoVerra Surveys (BC) Limited and its employees take no responsibility for of any underground conduits, pipes, or other ther shown on or omitted from this plan. All installations should be located by the ithorities prior to construction.
ude all co boundarie sting surve s plan rep e of surve tnership a location c lities whet lerground pective au tified Com	resents the best information available at the y. GeoVerra Surveys (BC) Limited and its employees take no responsibility for of any underground conduits, pipes, or other ther shown on or omitted from this plan. All installations should be located by the ithorities prior to construction.
ude all co boundarie sting surve s plan rep e of surve tnership a location c lities when ective au tified Com Seoffrey I QUCXHE A. Hobbs,	resents the best information available at the y. GeoVerra Surveys (BC) Limited and its employees take no responsibility for of any underground conduits, pipes, or other ther shown on or omitted from this plan. All installations should be located by the ithorities prior to construction.
ude all co boundarie sting surve s plan rep e of surve thership a location c lities whei lerground pective au tilled Com Geoffrey I QUCXHE	resents the best information available at the y. GeoVerra Surveys (BC) Limited and its employees take no responsibility for of any underground conduits, pipes, or other ther shown on or omitted from this plan. All installations should be located by the thorities prior to construction.





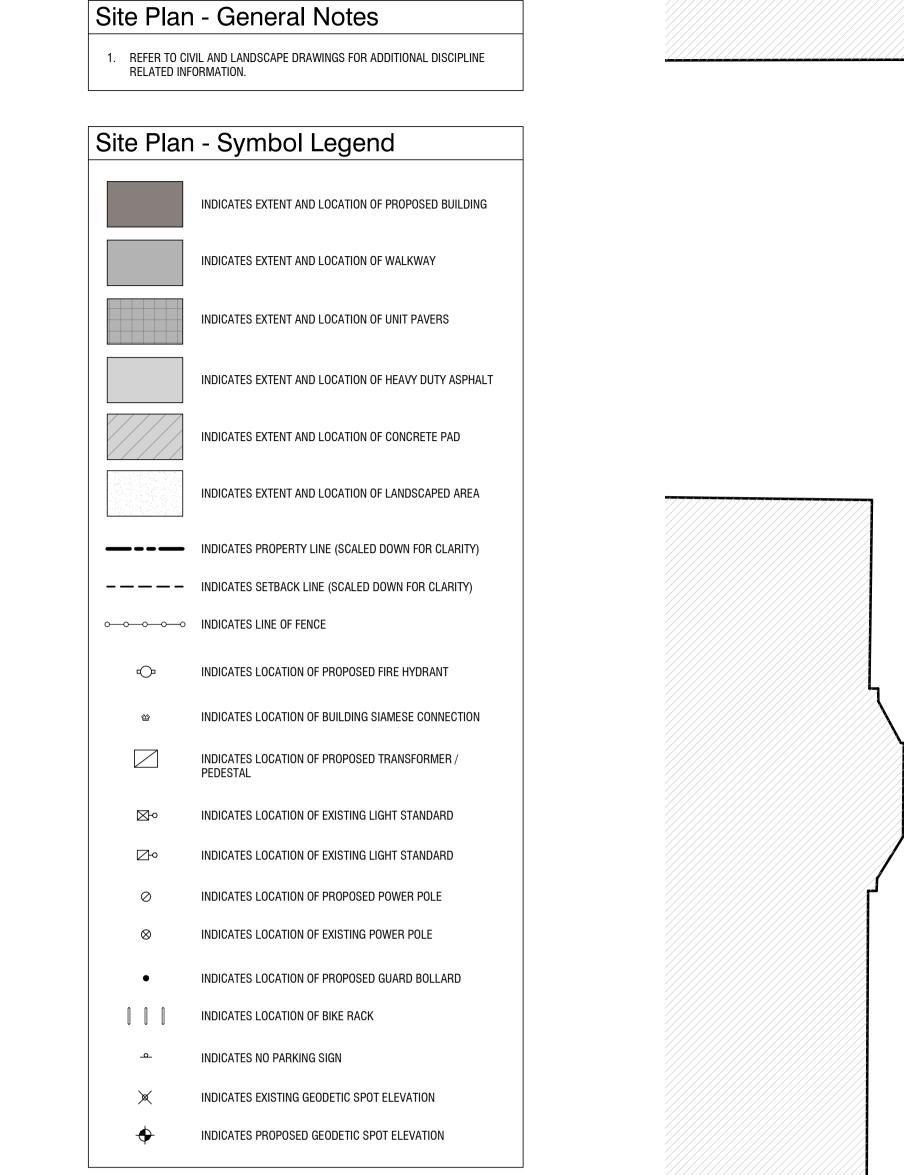


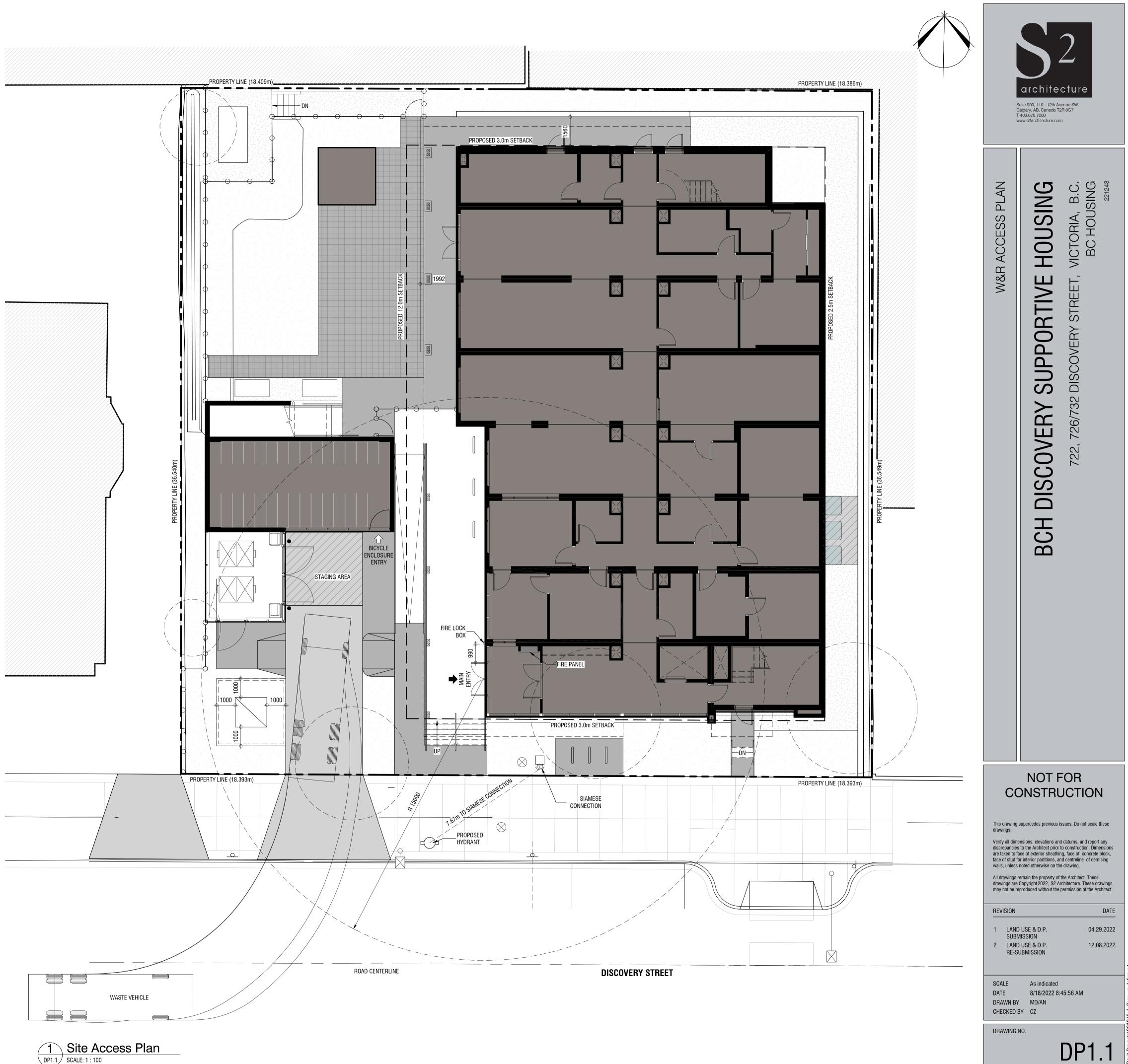






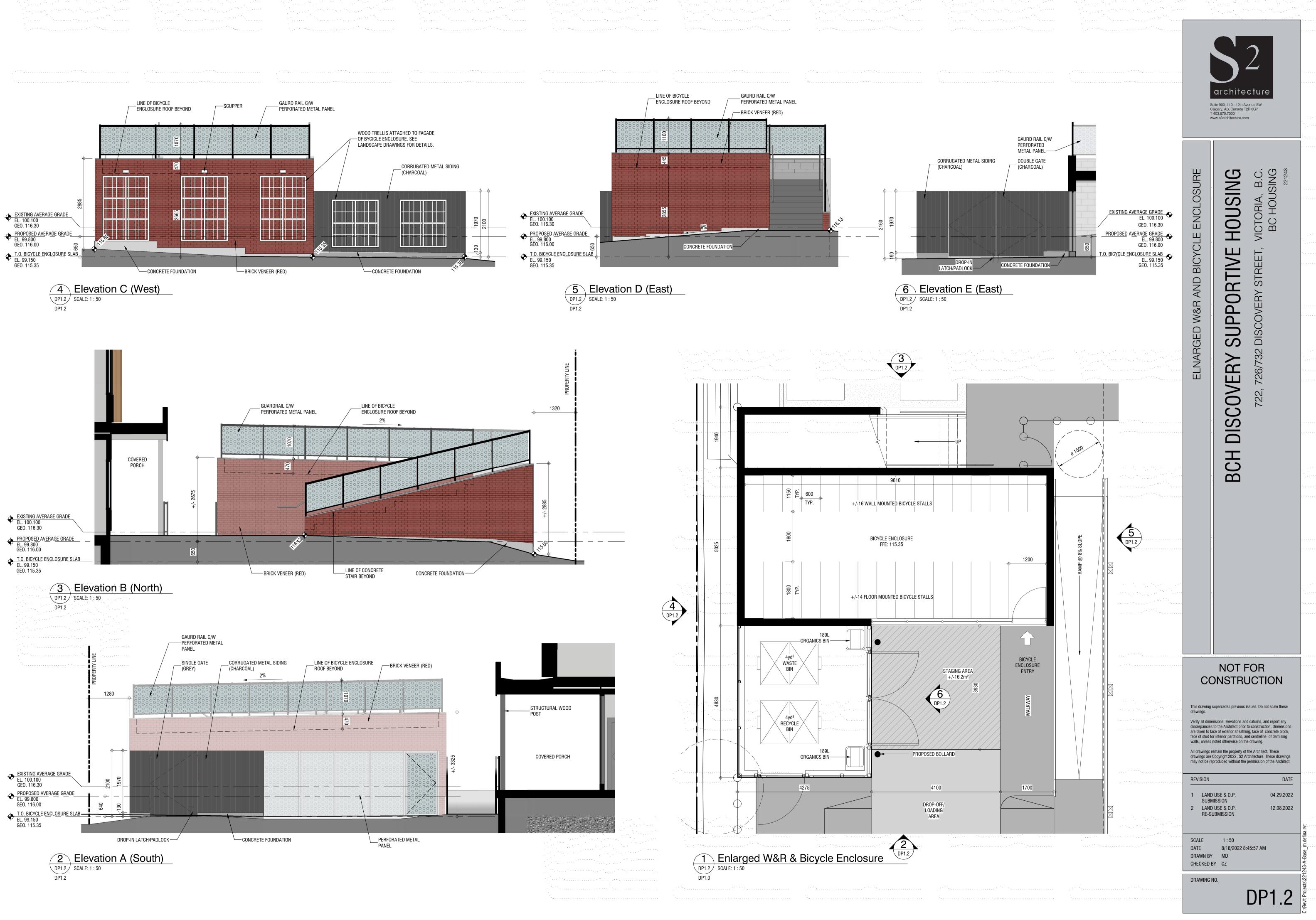
DP1.0

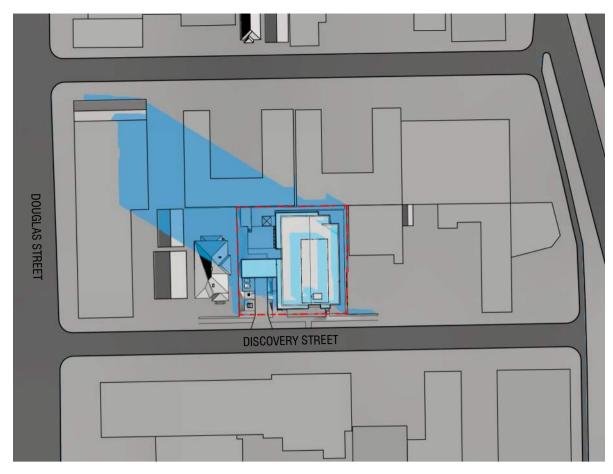






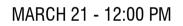


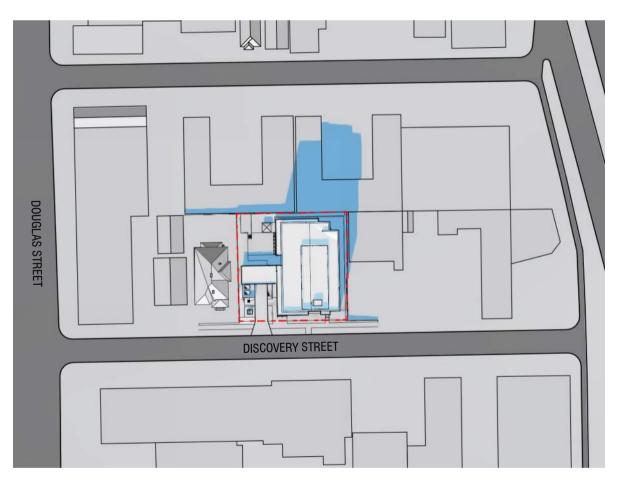




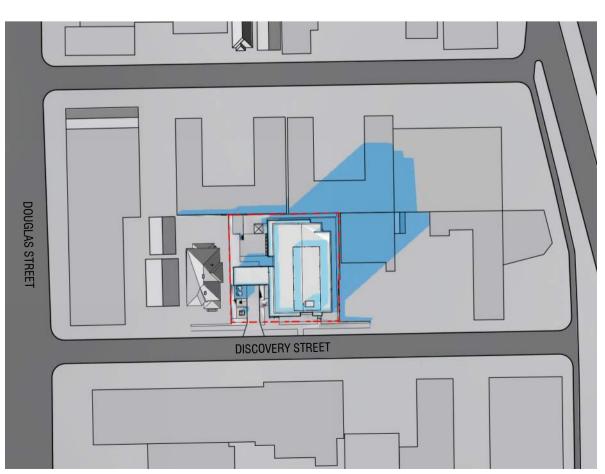
MARCH 21 - 10:00 AM



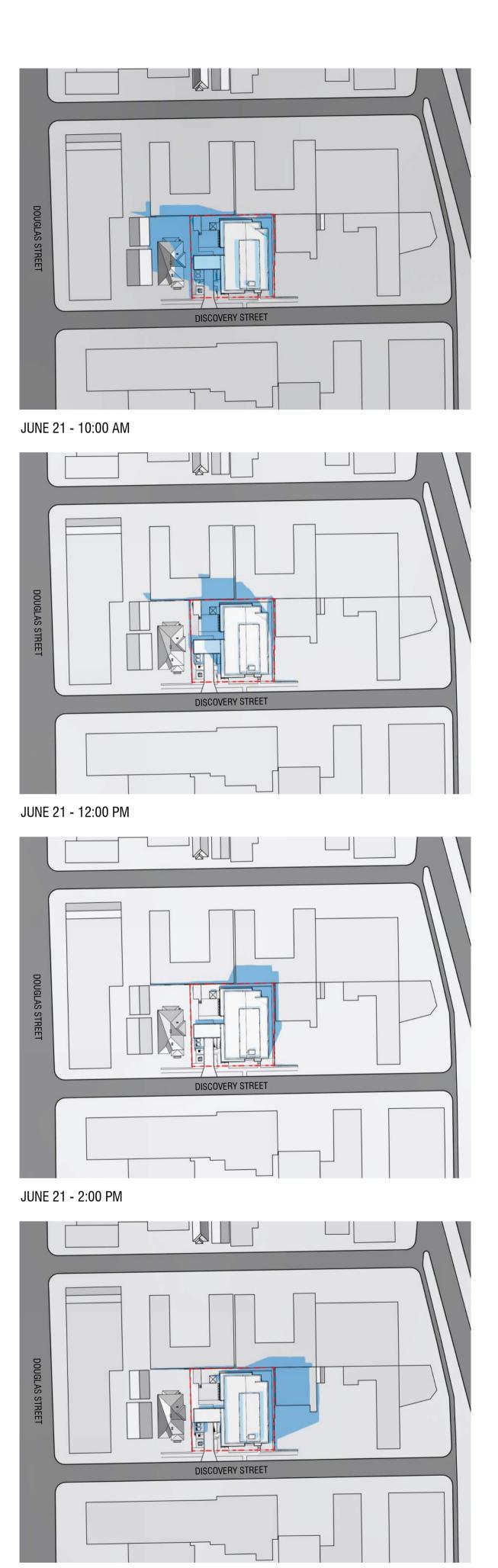




MARCH 21 - 2:00 PM



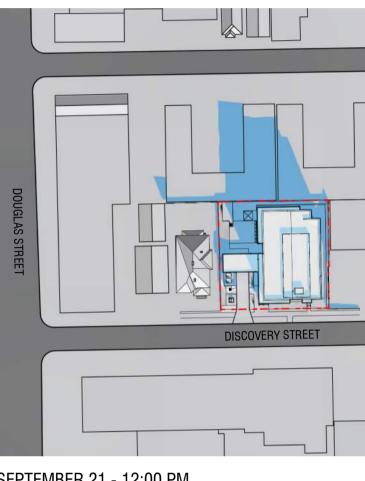
MARCH 21 - 4:00PM



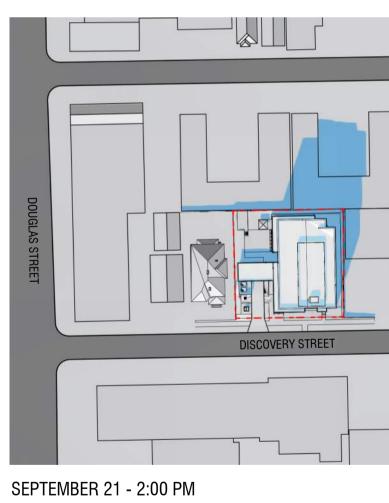
JUNE 21 - 4:00PM



SEPTEMBER 21 - 10:00 AM



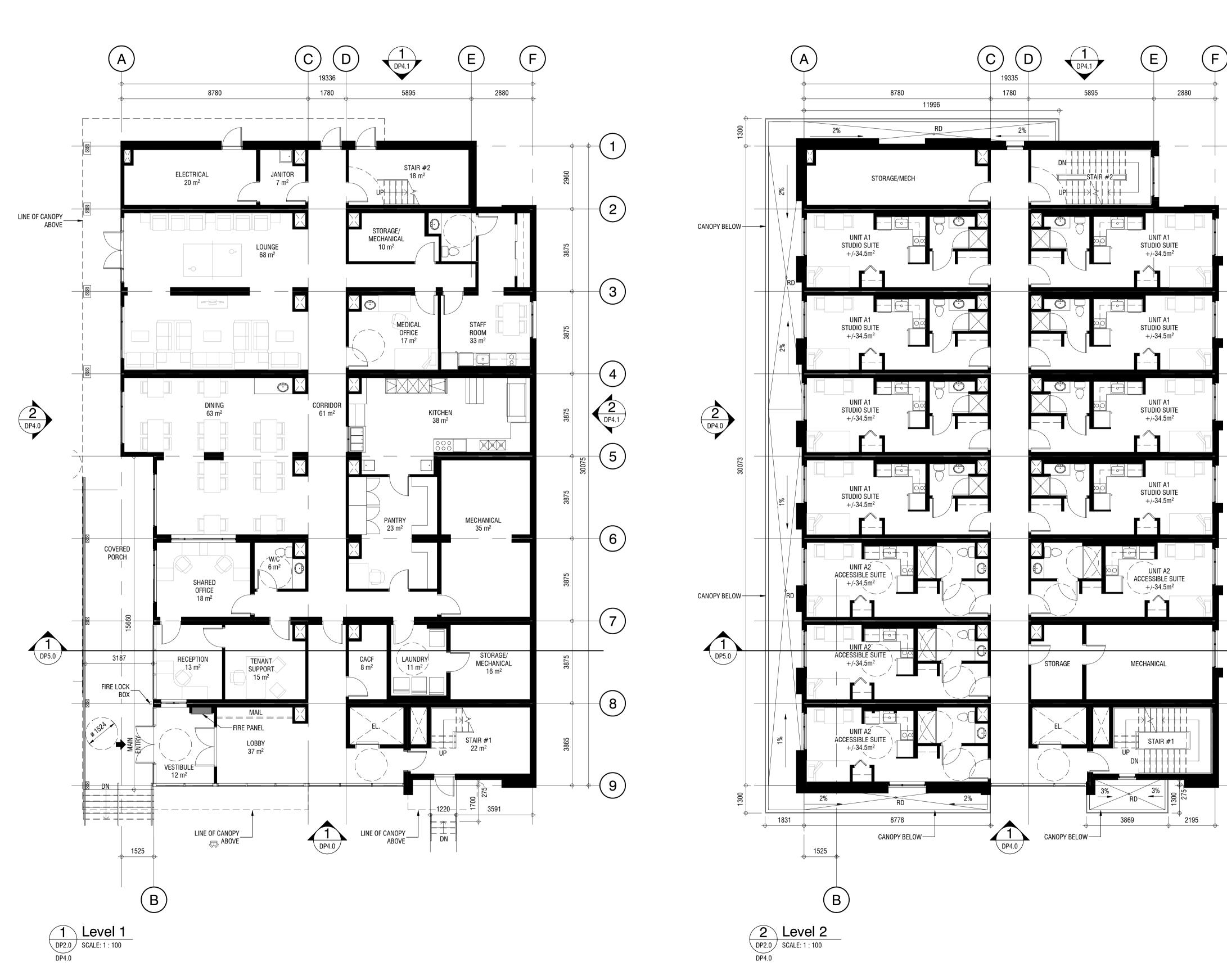
SEPTEMBER 21 - 12:00 PM

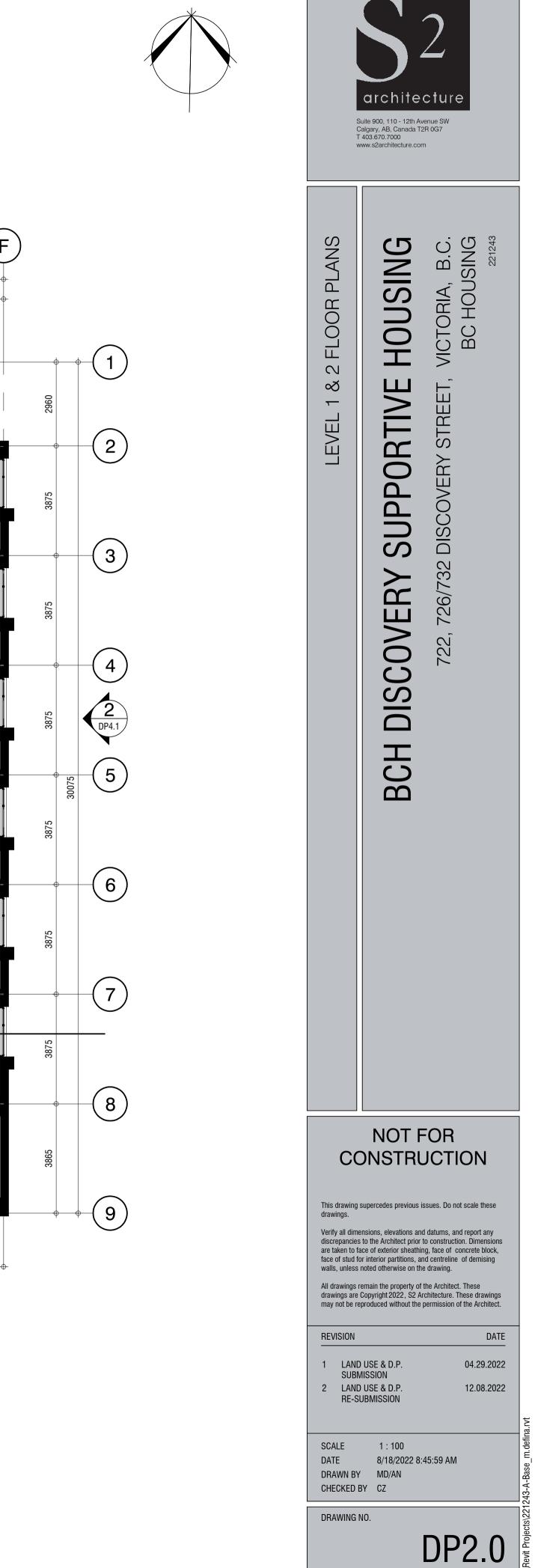


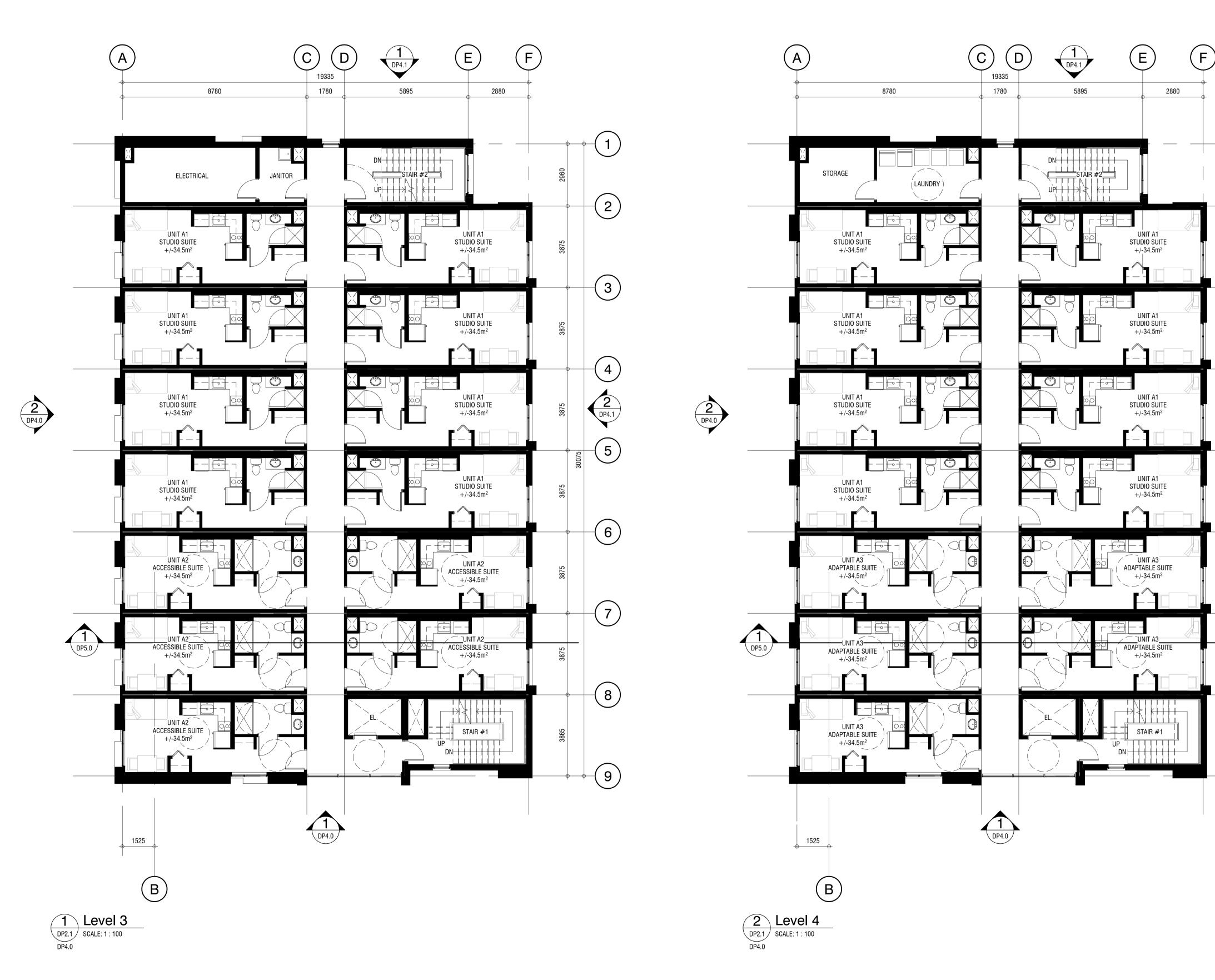


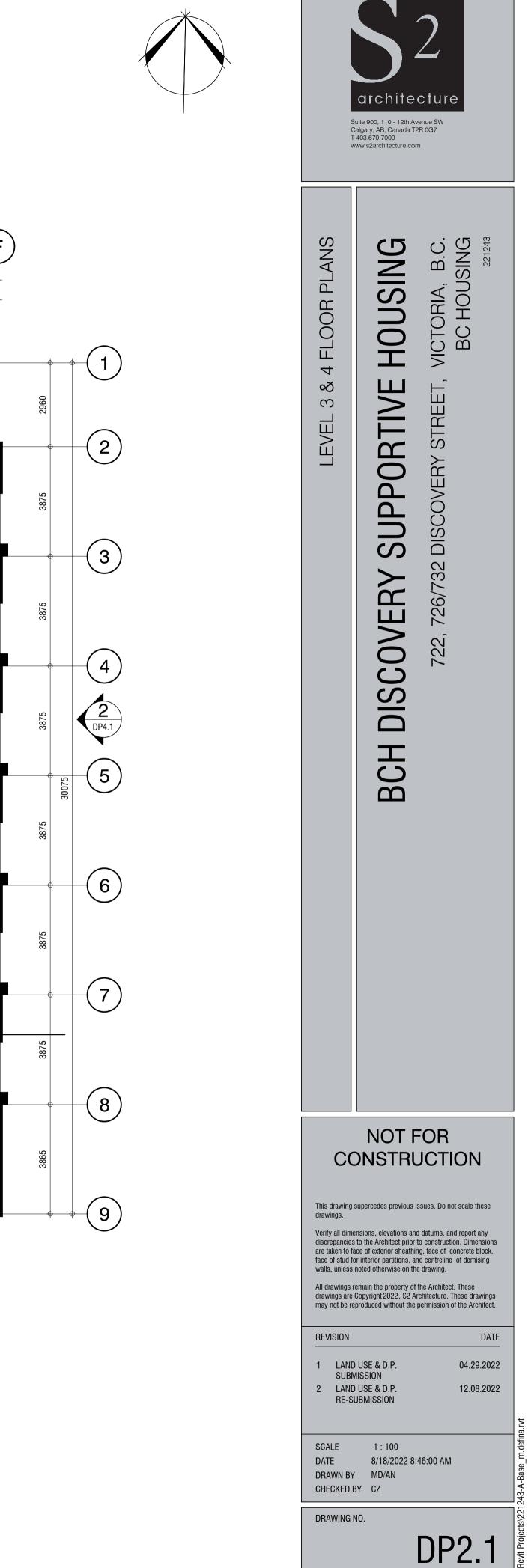
SEPTEMBER 21 - 4:00PM

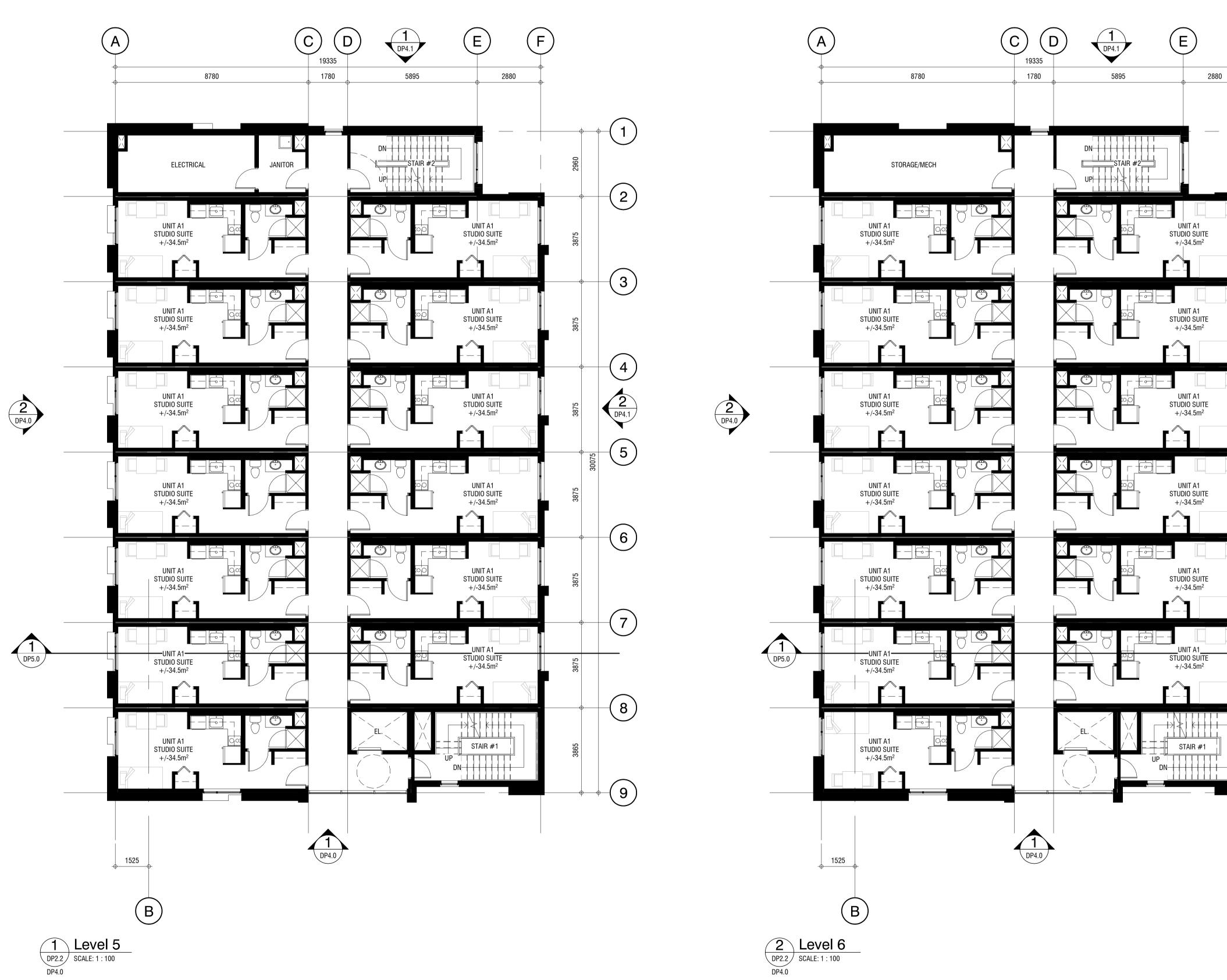
	Su Ca T 4	Sp2 2 architecture bite 900, 110 - 12th Avenue SW algary, AB, Canada T2R 0G7 403.670.7000 ww.s2architecture.com	
	SHADOW STUDY	IVE HOUSING Reet, VICTORIA, B.C.	221243
		BCH DISCOVERY SUPPORTIVE 722, 726/732 DISCOVERY STREET,	
		B	
	This drawing si drawings. Verify all dimer discrepancies t are taken to fac face of stud for walls, unless n All drawings are C may not be rep REVISION 1 LAND SUBM 2 LAND RE-SU	ISSION	ale these port any Dimensions rete block, demising ese e drawings e Architect. DATE 4.29.2022 2.08.2022
	SCALE DATE DRAWN BY CHECKED B DRAWING N		C:\Revit Projects\221243-A-Base_m.defina.rvt

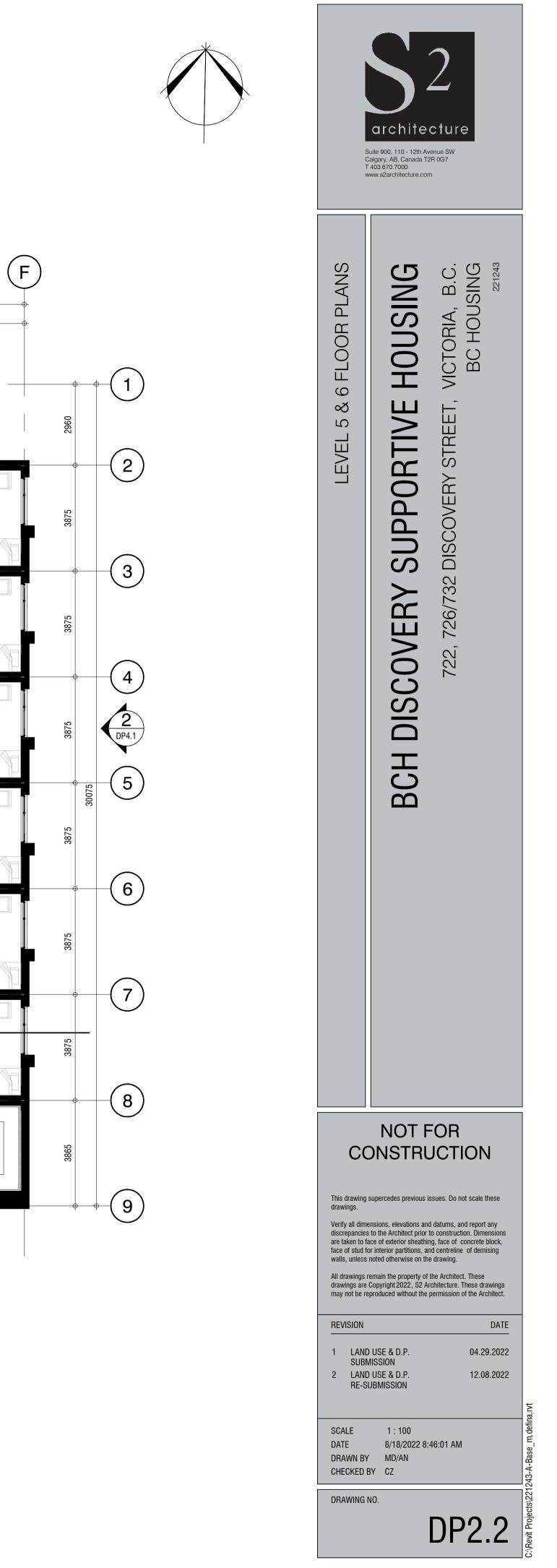


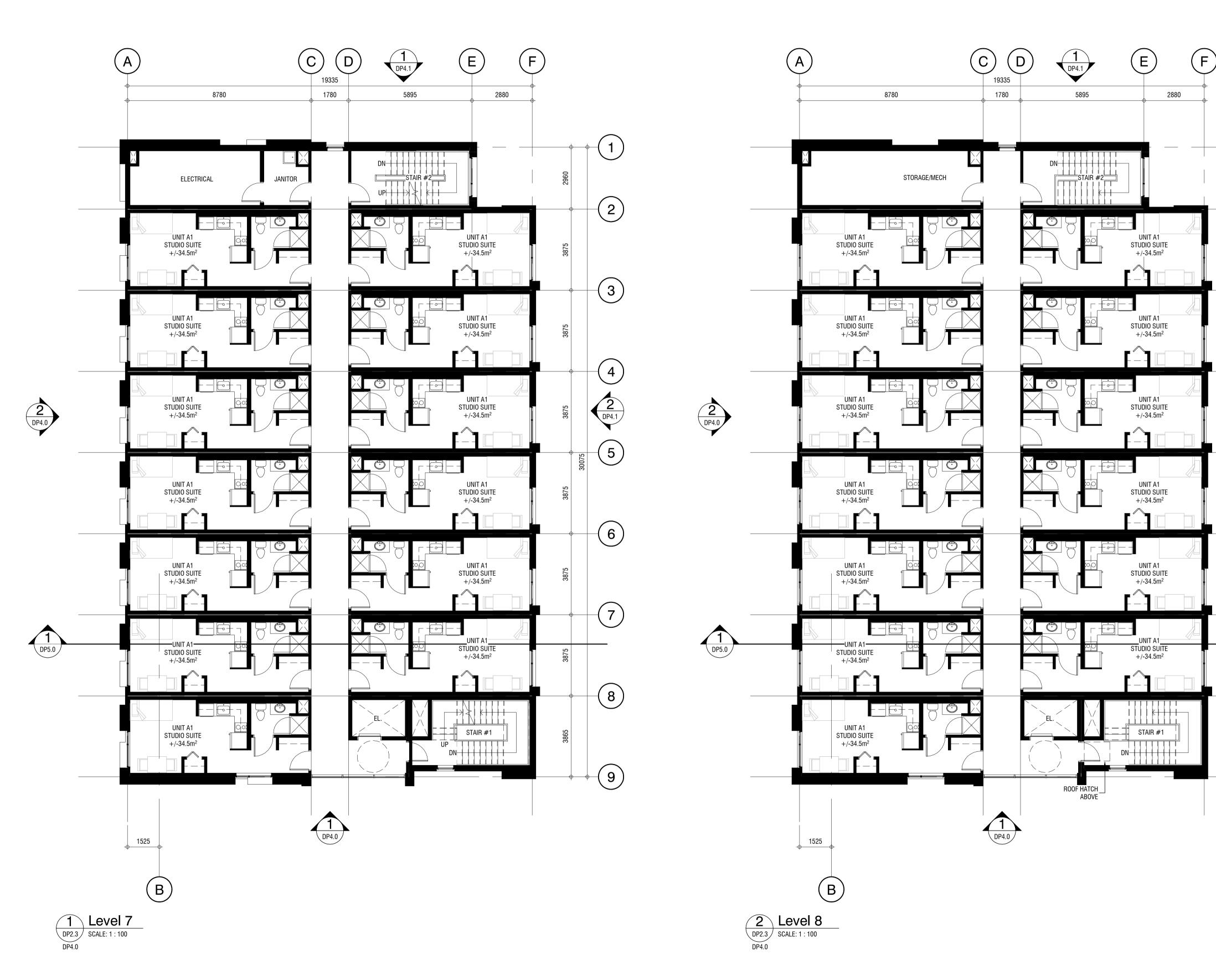


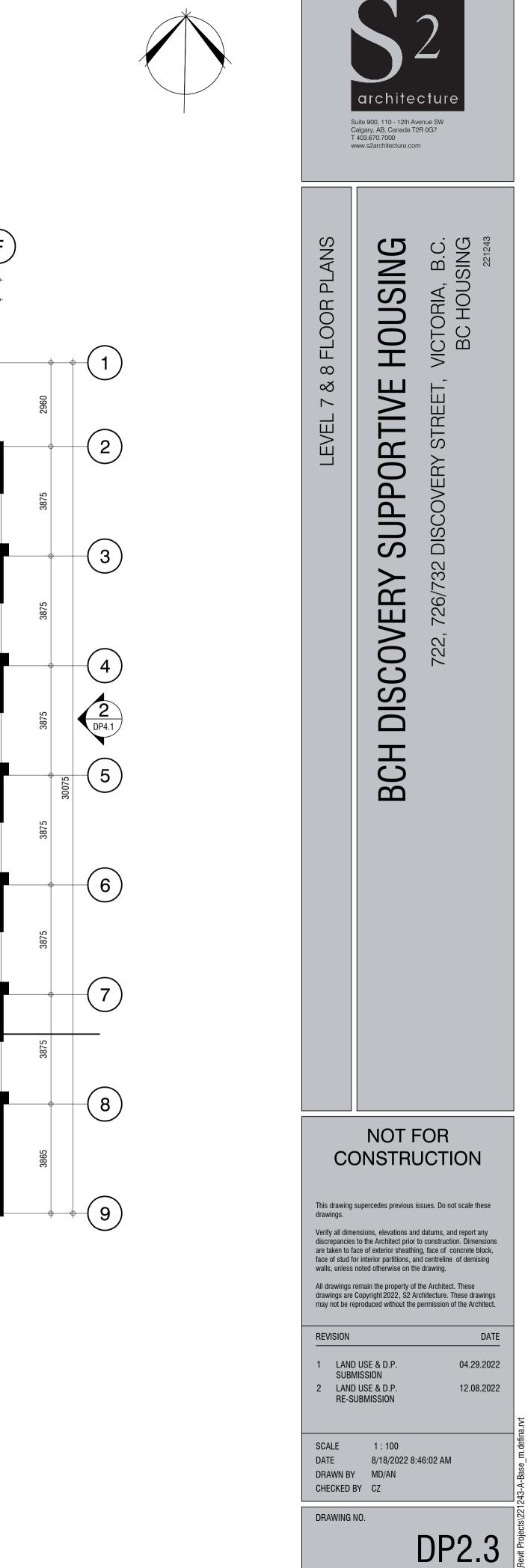


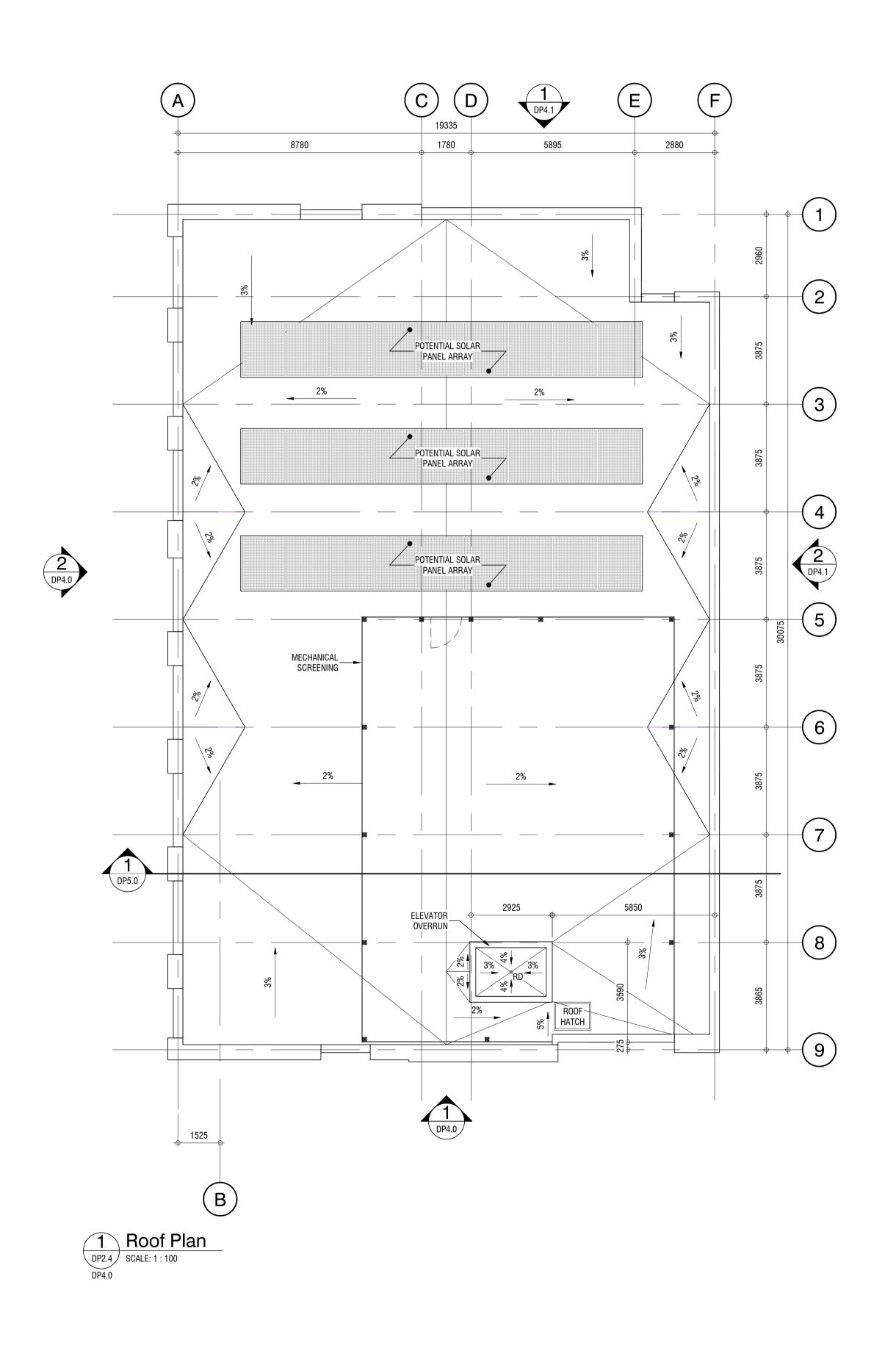


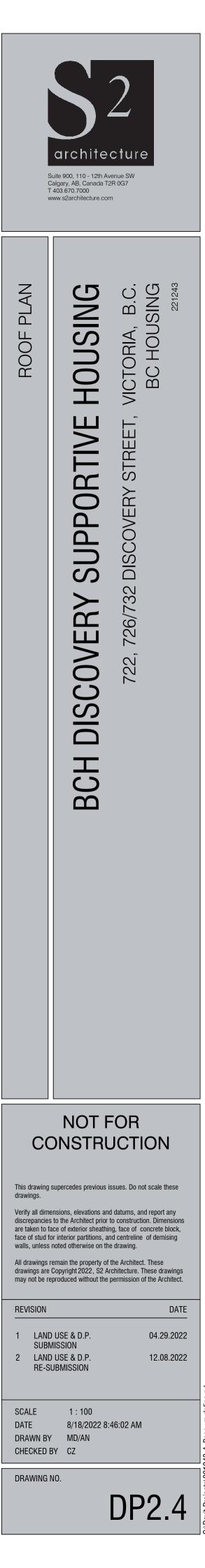














egend	$\sim 2$
D LOOK) - GOLDEN OAK TONE	
ANK SET IN CHANNEL - WHITE	architecture
REY	Suite 900, 110 - 12th Avenue SW Calgary, AB, Canada T2R 0G7
ARCOAL MULLIONS - VISION GLASS	T 403.670.7000 www.s2architecture.com
L.C/W CHARCOAL MULLIONS - CHARCOAL	
ARCOAL MULLIONS - DOUBLE DOORS	
INS - BLACK	DNS B.C. ING 221243
POSIT METAL CLADDING - DARK GREY	
DAK TONE	G ELEVATIONS HOUSING ICTORIA, B.C. BC HOUSING 221243
OAK TONE	BC CTC
AK TONE CK	Ž
FRAME, GLASS INSERT AND DOUBLE	BUILD TTVE TREET
CHARCOAL	BUIL OVERY SUPPORTIV 722, 726/732 DISCOVERY STREE
NG - CHARCOAL	VER VER
······································	
λΥ	SU
	BUILD BCH DISCOVERY SUPPORTIVE 722, 726/732 DISCOVERY STREET
	NOT FOR CONSTRUCTION           This drawing supercedes previous issues. Do not scale these drawings.           Verify all dimensions, elevations and datums, and report any discrepancies to the Architect prior to construction. Dimensions are taken to face of exterior sheathing, face of concrete block, face of stud for interior partitions, and centreline of demising walls, unless noted otherwise on the drawing.           All drawings remain the property of the Architect. These drawings are Copyright 2022, S2 Architecture. These drawings may not be reproduced without the permission of the Architect.

REV	SION			
1	LAND US SUBMISS			
2	LAND USE & D.P. RE-SUBMISSION			
SCALE		As indicated		
DATE		8/18/2022 8:46:13 AM		

DATE

04.29.2022

12.08.2022

DP4.0

8/18/2022 8:46:13 AM DRAWN BY MD/AN CHECKED BY CZ

DRAWING NO.

3 15 16



(i) A set of the set of the set of the set of the set of the set of the set of the set of the set of the set of the s	· · · · · · · · · · · · · · · · · · ·		
			· · ·
Legend		$\mathbf{C}_{2}$	
DD LOOK) - GOLDEN OAK TONE			
LANK SET IN CHANNEL - WHITE		architecture	
GREY		Suite 900, 110 - 12th Avenue SW	
IARCOAL MULLIONS - VISION GLASS	Т	Calgary, AB, Canada T2R 0G7 [ 403.670.7000 www.s2architecture.com	
EL C/W CHARCOAL MULLIONS - CHARCOAL			
IARCOAL MULLIONS - DOUBLE DOORS	(0)		
IMNS - BLACK	EVATIONS	HOUSING ICTORIA, B.C. BC HOUSING	
MPOSIT METAL CLADDING - DARK GREY	ATIC	A, I NUSUUS	
OAK TONE	Ш	HC NI	
N OAK TONE		BCT BC	
OAK TONE	UNG.		۰.
			•••
L FRAME, GLASS INSERT AND DOUBLE	BUILE	T T	
- CHARCOAL		ITY S	
IING - CHARCOAL		JPPC cover	
RAY		<b>OVERY SUPPORTIV</b> 722, 726/732 DISCOVERY STREE	
BA		BCH DISCOVERY SUPPORTIVE 722, 726/732 DISCOVERY STREET	
		DIS	
		BCH	· · ·

NOT	FOR
CONSTR	UCTION

This drawing supercedes previous issues. Do not scale these drawings.

Verify all dimensions, elevations and datums, and report any discrepancies to the Architect prior to construction. Dimensions are taken to face of exterior sheathing, face of concrete block, face of stud for interior partitions, and centreline of demising walls, unless noted otherwise on the drawing.

All drawings remain the property of the Architect. These drawings are Copyright 2022, S2 Architecture. These drawings may not be reproduced without the permission of the Architect.

DATE

04.29.2022

12.08.2022

DP4.1

#### REVISION

•

17 3 1

116.11

8 9

1 LAND USE & D.P. SUBMISSION 2 LAND USE & D.P. RE-SUBMISSION

DATE DRAWN BY MD/AN

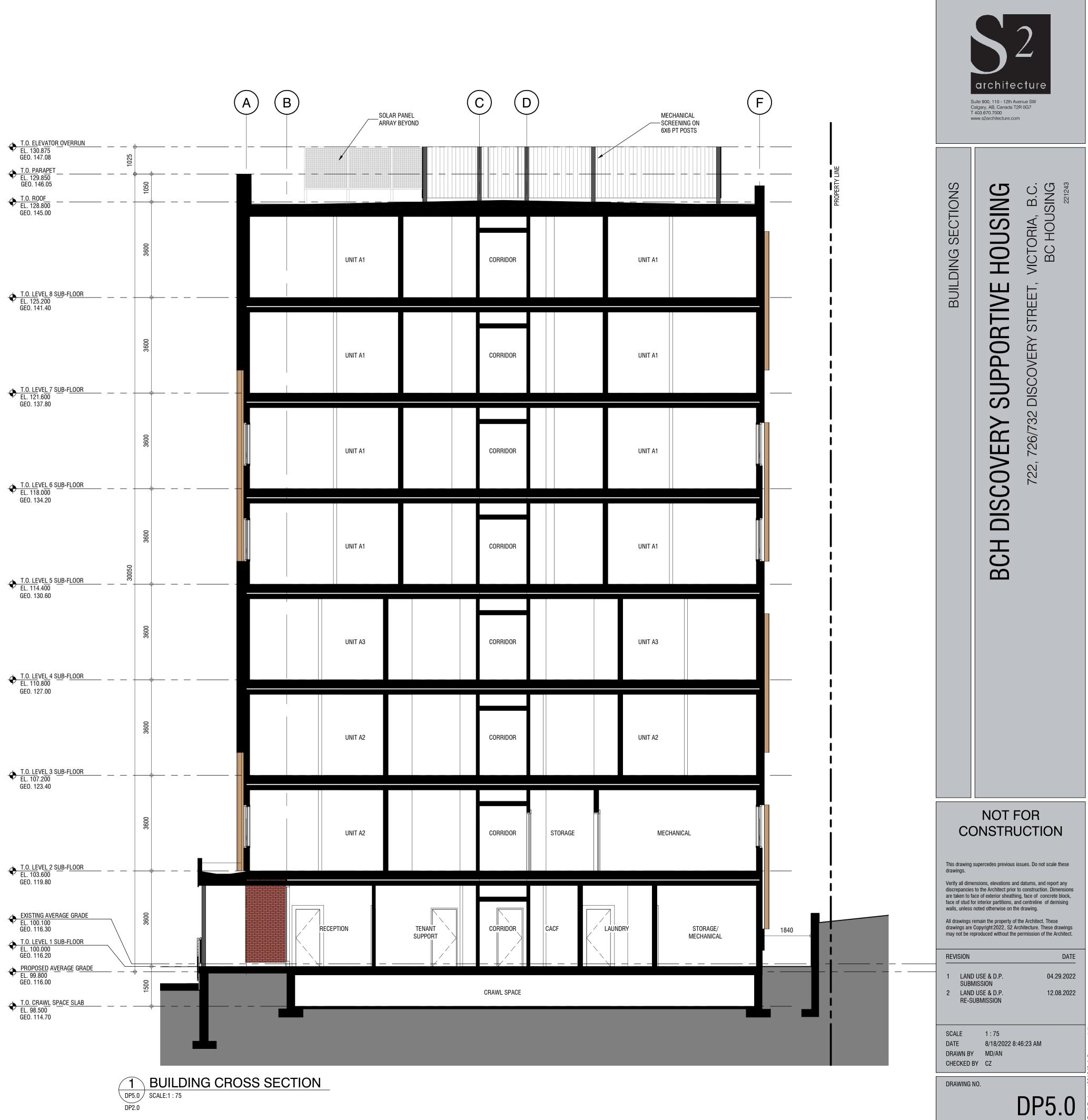
\_\_\_\_

\_\_\_\_

SCALE As indicated 8/18/2022 8:46:22 AM CHECKED BY CZ

DRAWING NO.

<ul> <li> <ul> <li></li></ul></li></ul>
T.O. LEVEL 6 SUB-FLOOR EL. 118.000 GEO. 134.20
T.O. LEVEL 5 SUB-FLOOR EL. 114.400 GEO. 130.60
T.O. LEVEL 4 SUB-FLOOR EL. 110.800 GEO. 127.00







AERIAL VIEW LOOKING NORTH-WEST



AERIAL VIEW LOOKING SOUTH-WEST



# CONTEXT VISUALIZATIONS

## VICTORIA, B.C. BC HOUSING BCH DISCOVERY SUPPORTIVE HOUSING 722, 726/732 DISCOVERY STREET,

#### NOT FOR CONSTRUCTION

This drawing supercedes previous issues. Do not scale these drawings.

Verify all dimensions, elevations and datums, and report any discrepancies to the Architect prior to construction. Dimensions are taken to face of exterior sheathing, face of concrete block, face of stud for interior partitions, and centreline of demising walls, unless noted otherwise on the drawing.

All drawings remain the property of the Architect. These drawings are Copyright 2022, S2 Architecture. These drawings may not be reproduced without the permission of the Architect.

#### REVISION

1 LAND USE & D.P. SUBMISSION 04.29.2022 2 LAND USE & D.P. RE-SUBMISSION 12.08.2022

SCALE DRAWN BY MD/AN CHECKED BY CZ

DATE 8/18/2022 8:46:23 AM

DRAWING NO.

DATE

DP6.0



AERIAL VIEW LOOKING NORTH-EAST

AERIAL VIEW LOOKING SOUTH-EAST

All drawings remain the property of the Architect. These drawings are Copyright 2022, S2 Architecture. These drawings may not be reproduced without the permission of the Architect.

REVISION

1 LAND USE & D.P. SUBMISSION 04.29.2022 2 LAND USE & D.P. RE-SUBMISSION 12.08.2022

SCALE DRAWN BY MD/AN CHECKED BY CZ

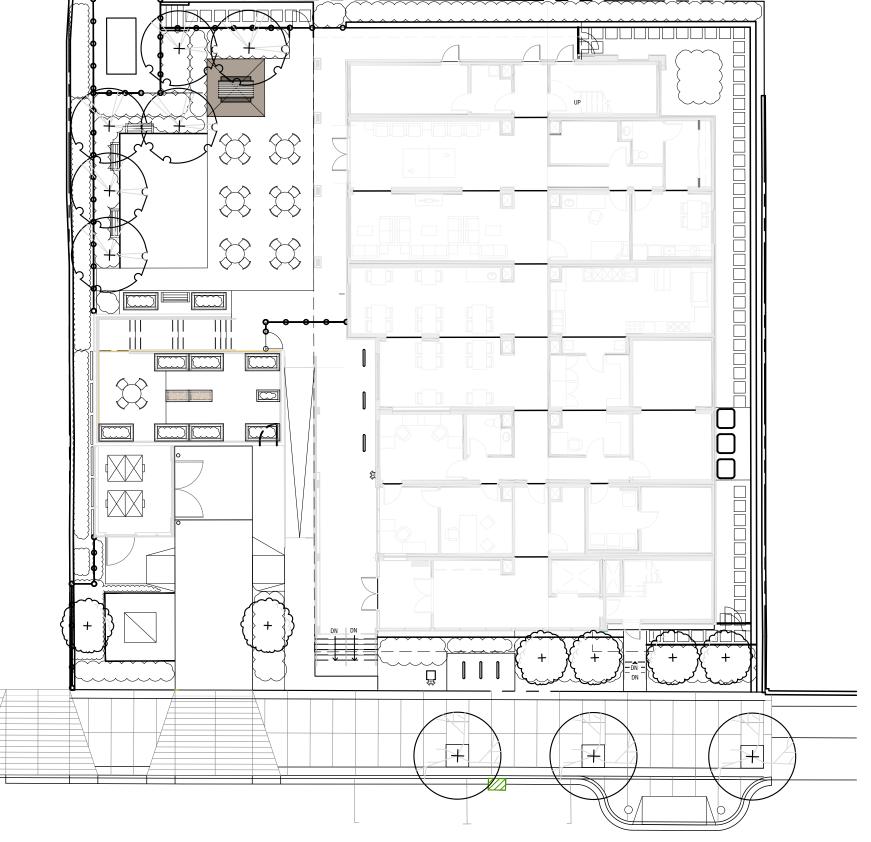
DATE 8/18/2022 8:46:24 AM

DP6.1

DRAWING NO.



DATE



#### CRITICAL NOTES

CANADIAN LANDSCAPE STANDARD:

Landscape installation to be compliant with Canadian Landscape Standards (full document applies). It is expected that Landscape The contractor is to supply a schedule outlining the intended dates for landscape installation. The contractor is to request (with 72h Contractors will have a current copy of the document (digital or hardcopy) present with them on site. notice) a review for tree protection fencing, tree stake layout, and substantial completion. Additional key meetings identified for requested by the landscape architect at project kick-off or in construction are to be provided with 72h notice. Examples of critical RFI'S: reviews are outlined below. The contractor is expected to provide weekly emails summarizing progress on landscape and the 'look Questions (RFI's) pertaining to landscape to be immediately submitted to Contract Administrator for clarification whom will contact ahead' of the intended schedule for the following week.

C.

Landscape Architect for response.

+

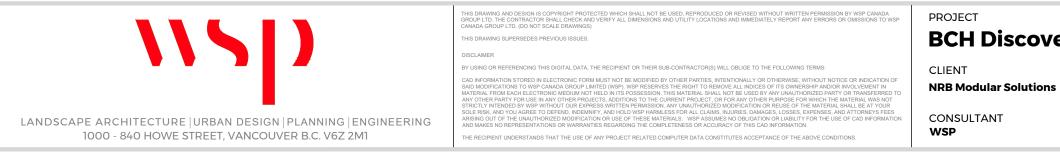
#### AS-BUILTS:

Contractor is expected to provide a copy of marked up as-builts noting any construction changes at the time of substantial performance of the project.

#### SUBMITTALS:

Submittals on landscape include but are not limited to:

- a. Shop drawings on all specified furnishings including notes on colour and dimensions b. Shop drawings on all custom site elements (i.e. walls, railings, fences, etc.) including notes on colour, finishes and dimensions
- c. A growing medium (or amended soil report, if required) submittal compliant with the Canadian Landscape Standard Seed or sod mix designs (Canada No. 1 grade) as defined within with drawings and in compliance with Canadian Landscape d.
- Standards e. A request for the Landscape Architect to pre-review trees/shrubs for the project at the nursery in advance of delivery to site. Note that the Landscape Architect requires this process for reviews to occur immediately upon award as to prevent issues with timeline. If quantities of a shrub or tree are minimal, photo submittals will be reviewed as an alternate. Bark mulch to be organic composted mulch, compliant with Canadian Landscape Standards (dark brown colour). Submit 1L f.
- sample or website information prior to purchase Unit paving and hard-surface materials to be submitted for verification on colour, size and pattern, and compaction.
- Mix design and supplier information of hard surface poured or placed materials (i.e. aggregates, concrete, asphalt), including base preparation materials and affiliated compaction testing Primer and paint submittals, if required for project i.



DISCOVERY STREET

#### LANDSCAPE SCHEDULE

LANDSCAPE CRITICAL REVIEWS:

- Landscape critical review meetings include (but are not limited to):
- a. Tree protection fencing setup requires a review by the arborist prior to construction. Project kick-off on landscape, and review of stockpile and preservation of existing materials b.
- Mobilization and preparation/installation of hard surfaces or drainage features (i.e. raingardens), if specified within landscape drawings
- d. Tree stakes to be provided for review of tree placements to demonstrate compliance and offsets from utilities. Alignment of tree plantings to be reviewed.
- Mobilization of soils and furnishing works (requires furnishings to be reviewed after delivery to site to review for damages). e. Note that soils may be tested up to 2 times for verification of compliancy of mix at the Contractor's cost, if material is
- suspected to be non-compliant. See notes above on submittals. Mobilization of custom works (i.e. wooden walkways or custom benches), if applicable to contract, will be required for a critical f review meeting of proposed layout and connections.
- Delivery of the plant material to site (mobilization of planting works)
- General progress reviews for installation of soft landscape materials (trees, ground covers, shrubs, lawns, etc).
- Substantial and total performance of the landscape Commissioning reviews, if required

BCH Discovery Street | 722, 726 / 732 Discovery Street, Victoria, B.C.



## **BCH DISCOVERY** STREET

722, 726 / 732 Discovery Street, Victoria, B.C.

ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT

#### DRAWING LIST

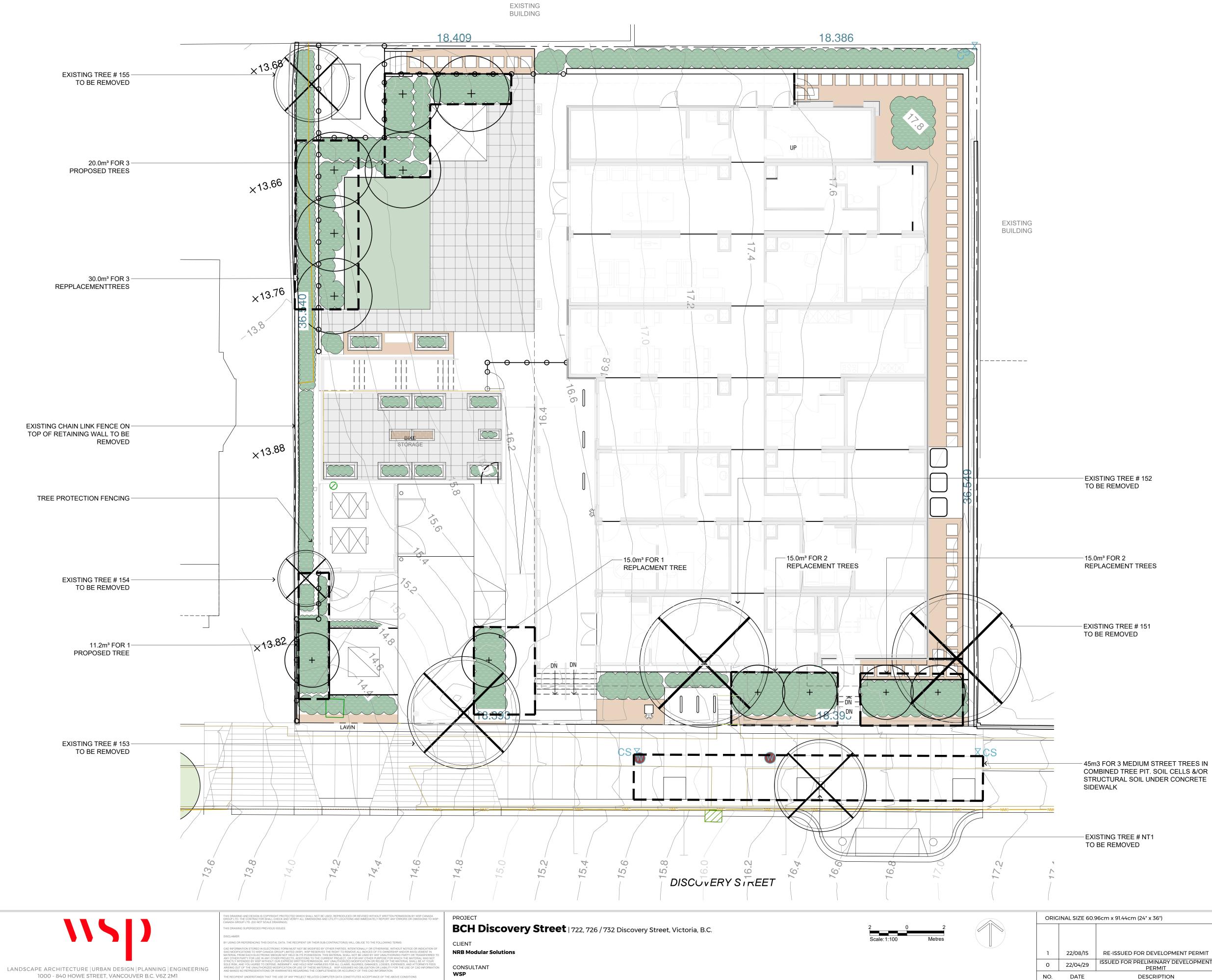
L-00	COVER
L-01	TREE REPLACEMENT & STORMWATER AREAS PLAN
L-02	LANDSCAPE PLAN
L-03	PLANTING PLAN
L-04	DETAILS
L-05	DETAILS
L-06	DETAILS
L-07	FENCE / TRELLIS ELEVATION

WSP LANDSCAPE ARCHITECTURE

Michael Holm Senior Project Manager Email: michael.holm@wsp.com Phone: (604) 631-9637

Lisa Ng Landscape Designer Email: lisa.ng@wsp.com Phone: (604) 601-6836

ORIC	INAL SIZE 60.9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	MjH	SHEET TITLE	
					DRAWN BY	LN	(	COVER
					CHECKED BY	MjH		
1	22/08/15	RE-ISSUED FOR DEVELOPMENT PERMIT	MjH		PROJECT #	211-01841-00	SHEET NO.	
0	22/04/29	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE			
NO.	DATE	DESCRIPTION	BY			N/A		L-00

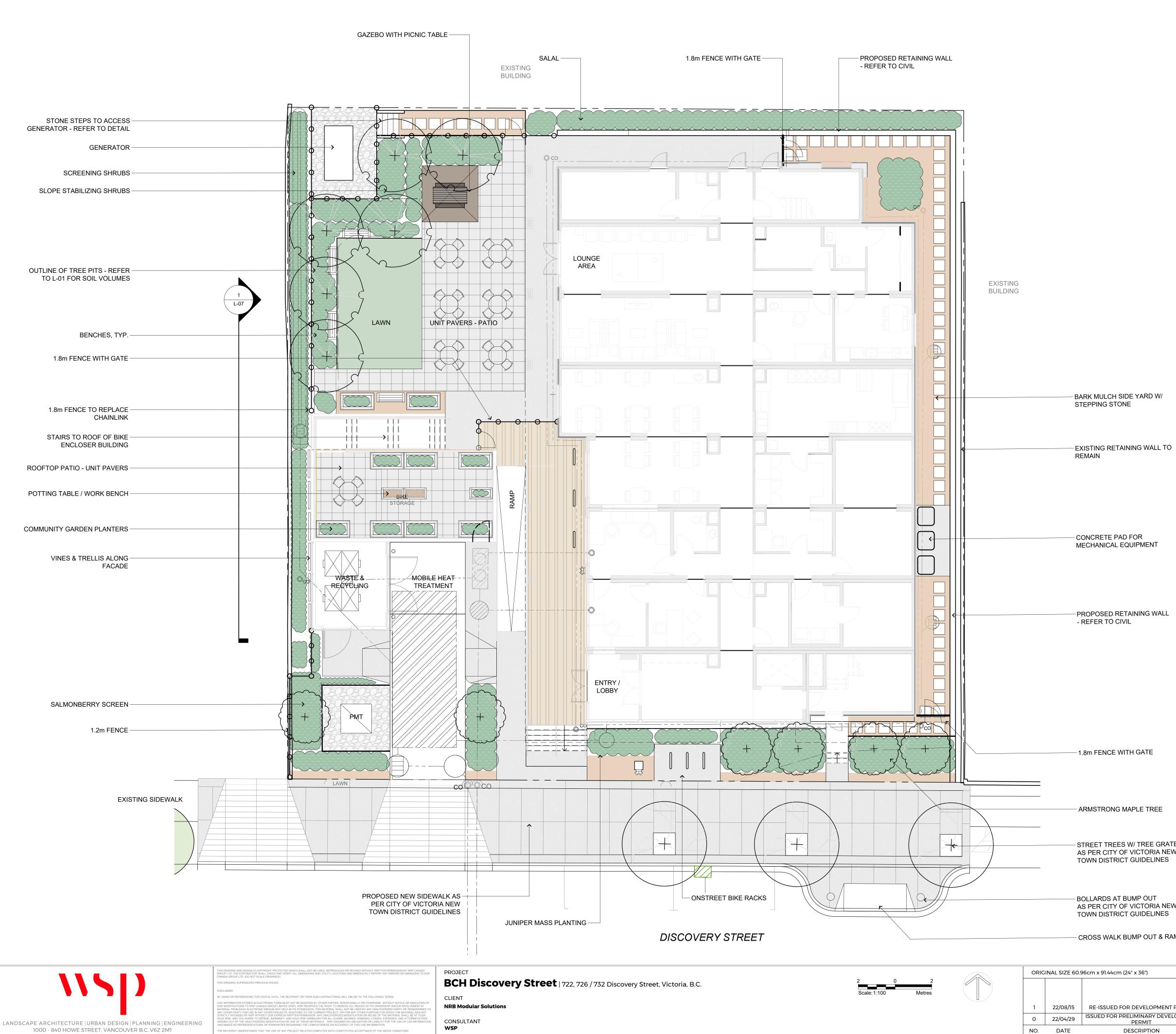


### LEGEND

	PROPERTY LINE	
	EXISTING FENCE TO BE	REMOVED
1 L-05	TREE PROTECTION FENC Refer to detail and arborist r	
+ 1 L-05	TREE TO BE RETAINED Provide tree protection fenc	ing. Refer to detail and arborist report.
+	REPLACEMENT / PROPOS	SED TREE
	REPLACEMENT TREE SO	IL VOLUME (m³)
	TREE TO BE REMOVED	
for all Tree Numb - Existing trees to r protection fencing request review fro health manageme Contractor to be p adjustments to pr	report prepared by Capital Tre pers, Diameters and Canopy si remain protected as indicated g in accordance with the arbori om project arborist prior to mol ent to trees as deemed require present for tree protection fenc rotection fencing requested un TTREE REQUIRE	on drawings. Contractor to provide tree ist report, and City of Victoria Tree By-law and bilization. Arborist will provide any cut-back or ed from a public health and safety perspective cing review with arborist, and make any der arborist supervision.
EXISTING VEGETATION EXISTING VEGETATION Existing Trees on Site - 6 Existing Trees to be Rem 3 Oak Trees with DBH of 1 Pine Tree with DBH of 1 Black Cottonwood with 1 Field Elm with DBH of 3	l oved - 6 80cm each 40cm DBH of 62cm	REPLACEMENT REQUIREMENTS 3 Oak Trees require - 6 New Trees 1 Pine Tree requires - 2 New Trees 1 Cottonwood - 1 Tree 1 Elm - 1 Tree Total Replacement Trees Needed - 10
MINIMAL TREE REQUIF Requirements: 50 trees / Site Area 1,344.83m <sup>2</sup> x 0. Minimum Trees required -	REMENTS FOR SITE hectare   0.005 tree / m² .005 = 6.72	
	QUANTITIES - 15 NEW TREES	S
STORM WA	TER INFILTRA	TION AREAS
	RUB BED AREAS = 136.0 M2 450mm Depth	
Refe		ndard for Growing Medium - 2P for Soil &
LAW	VN AREA = 32.0 M2	
	er to Canadian Landscape Sta nage Composition.	ndard for Growing Medium - 2H for Soil &
68.0	(ADA HYDRA-PRESSED PAV ) M2 GROUND PLANE ) M2 BICYCLE ROOF DECK	/ERS AREAS : ( refer to L-02 for material info

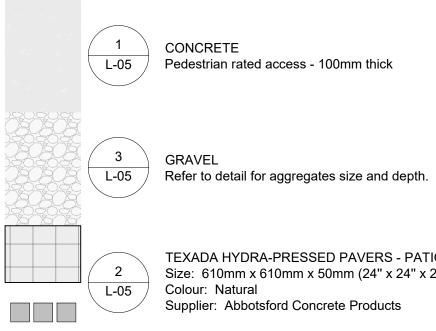
MjH SHEET TITLE ORIGINAL SIZE 60.96cm x 91.44cm (24" x 36") SEALED DESIGN BY TREE REPLACEMENT & STORMWATER AREA PLAN DRAWN BY LN CHECKED BY MjH PROJECT # RE-ISSUED FOR DEVELOPMENT PERMIT 211-01841-00 SHEET NO. MjH ISSUED FOR PRELIMINARY DEVELOPMENT SCALE PERMIT L-01 DESCRIPTION BY 1:100

WOOD CHIPS AREA = 72.65 m2 At 100mm depth with filter fabric

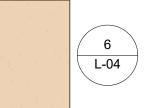


<b>OVERY Street</b>   722, 726 / 732 Discovery Street, Vio
--

### HARDSCAPE LEGEND

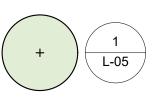


TEXADA HYDRA-PRESSED PAVERS - PATIO & STEPPING STONES Size: 610mm x 610mm x 50mm (24" x 24" x 2")



WOOD CHIPS L-04 At 100mm depth with filter fabric

### SOFTSCAPE LEGEND



TREE TO BE RETAINED Provide tree protection fencing. Refer to detail and arborist report.

2 L-04

PROPOSED TREES Minimum 900mm depth growing medium, complete with mulch. Refer to details. Installed as per Canadian Landscape Standards.

3&5

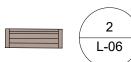
SHRUB PLANTING Minimum 450mm depth import growing medium complete with mulch. Refer to details. Installed as per Canadian Landscape Standards.



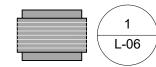
L-04

SOD LAWN L-04 / Minimum 150mm depth import growing medium. Refer to details.

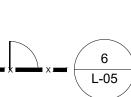
### SITE FURNISHING LEGEND



2 PARK BENCH L-06 Refer to detail for product specifications and sizes.

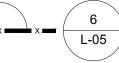


PICNIC TABLE Refer to detail for product specifications and sizes.



6

L-05 / Provide shop drawing of fence prior to fabrication. Refer to detail.



PROPOSED 1.2m WOOD FENCE:

PROPOSED 1.8m WOOD FENCE AND GATE:

Refer to detail for product specifications and sizes.

L-06 Provide shop drawing of fence prior to fabrication. Refer to detail.



5

3

L-06

4

-1.8m FENCE WITH GATE

ARMSTRONG MAPLE TREE

- STREET TREES W/ TREE GRATE AS PER CITY OF VICTORIA NEW TOWN DISTRICT GUIDELINES

- BOLLARDS AT BUMP OUT

AS PER CITY OF VICTORIA NEW TOWN DISTRICT GUIDELINES

- CROSS WALK BUMP OUT & RAMP



L-05

STONE STEPS Refer to detail

CEDAR PLANTER

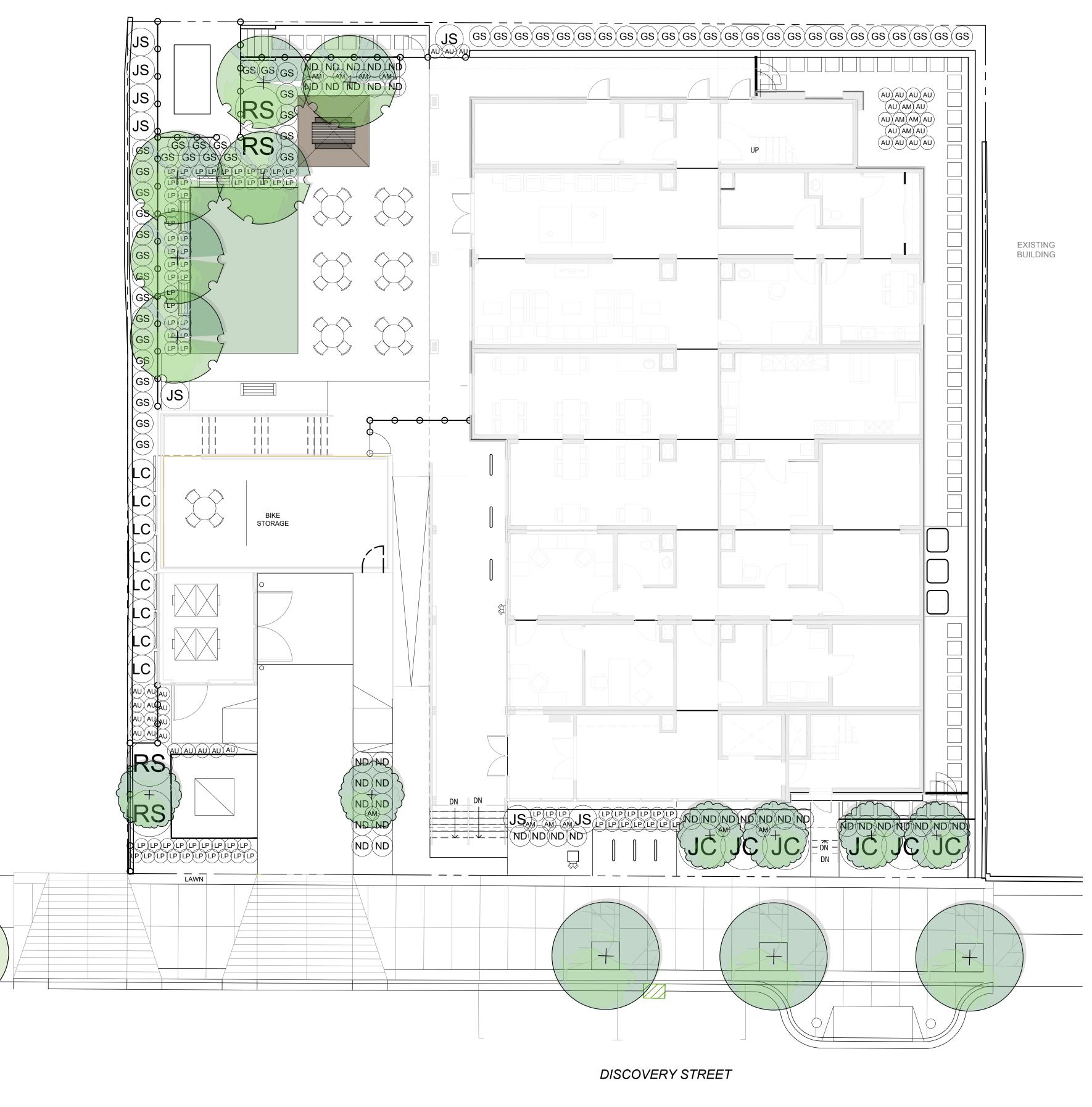
GAZEBO





EDGER Refer to detail

).9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	MjH	SHEET TITLE	
				DRAWN BY	LN		LANDSCAPE PLAN
				CHECKED BY	MjH		
	RE-ISSUED FOR DEVELOPMENT PERMIT	MjH		PROJECT #	211-01841-00	SHEET NO.	
	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE			
	DESCRIPTION	BY			1:100		L-02







HIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP CANADA ROUP LTD. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND IMMEDIATELY REPORT ANY ERRORS OR OMISSIONS TO WSP INADA GROUP LTD. (DO NOT SCALE DRAWINGS)

ECIPIENT OR THEIR SUB-CONTRACTOR(S) WILL OBLIGE TO THE FOLLOWING TERMS

S DRAWING SUPERSEDES PREVIOUS ISSUE

SCLAIMER USING OR REFEREN





BCH Discovery Street | 722, 726 / 732 Discovery Street, Victoria, B.C.

#### TREE SPECIES

SYM	QTY	BOTANTICAL NAME	COMMON NAME	SIZE	SPACING
+	6	Magnolia Grandiflora	Victoria Magnolia	B&B, 6cm cal., 1.8m ht standard	As shown
+	6	Acer Rubrum 'Armstrong'	Armstrong Maple	B&B, 6cm cal., 1.8m ht standard	As shown
+	3	Ulmus Americana	Brandon Elm	B&B, 6cm cal., 1.8m ht standard	As shown

#### SHRUB SPECIES

SYM	QTY	BOTANTICAL NAME	COMMON NAME	SIZE	SPACING
AM	14	Achillea millefolium	Common yarrow	#2 Pot, full	600mm o.c.
AU	31	Arctostaphylos uva-ursi	Kinnikinnick	#2 Pot, full	600mm o.c.
GS	53	Gaultheria shallon	Salal	#2 Pot, full	900mm o.c.
JC	6	Juniperus communis	Common juniper	#2 Pot, full	2200mm o.c.
JS	8	Juniperus scopulorum 'Blue Arrow'	'Blue Arrow' juniper	#2 Pot, full	1200mm o.c.
LP	72	Lavandula x intermedia 'Provence'	Provence lavender	#2 Pot, full	600mm o.c.
LC	8	Lonicera ciliosa	Orange honeysuckle	#2 Pot, full	1200mm o.c.
ND	39	Nandina domestica 'Gulf Stream'	'Gulf Stream' dwarf nandina	#2 Pot, full	900mm o.c.
RS	4	Rubus spectabilis	Salmonberry	#2 Pot, full	2000mm o.c.

#### PLANTING NOTES

The following are core requirements of plant selection and installation:

- a. Plants are to be regionally sourced, with preference on local nurseries. Key plants or tree species that cannot be locally sourced should be explored for regional availability within the cascade region, complete from BC south through Washington, Oregon and California.
- b. Preparation and fine grading of soft landscapes (lawns, planting beds, trees) to be in accordance with Canadian Landscape Standards
- Composted bark mulch to be continuously be provided within plantings beds (unless stated otherwise), C. at a 50mm depth, increasing to 100mm depth in tree watering well locations. Watering wells to be 1m diameter around trees, in accordance with Canadian Landscape Standards.
- d. Plant materials are to be protected and stored to prevent damage from freezing or weather events prior to installation. Protect and insulate material in accordance with Canadian Landscape Standards as required.
- e. Depths of growing medium to be as follows: 900mm depth required for trees and 450mm depth required for shrubs within all new planting beds, in accordance with 'Level 2P' mix design as defined in the Canadian Landscape Standard. New lawn spaces are to receive 150mm depth growing medium, in accordance with 'Level 2L' mix design as defined in the Canadian Landscape Standard.
- f. Lawn restoration, if required, to meet flush with existing and demonstrate even blend and complete establishment and integration with existing lawn. Lawn material (i.e. sod or seed/over-seed or hydroseed) to be provided in accordance with drawing g.
- notes. Ensure mix design submittal is provided of product. Sod (if required) is to be non-netted. Seed (if required) is to be evenly distributed. Hydroseed (if required) is to be applied in even distribution in accordance with manufacturer's specifications. Hydroseed to include tackifier in accordance with manufacturer's blend. Incidentally increase tackifier under the guidance of the supplier in winter months in applications where slope stability is required.

#### ESTABLISHMENT MAINTENANCE FOR PLANTING BEDS

Landscape Maintenance to be provided complete through substantial completion and until all deficiencies are amended (whichever is longer). Maintenance to be compliant with 'Level 2' (weeds no larger than 2" diameter) in accordance with Canadian Landscape Standard.

#### ESTABLISHMENT MAINTENANCE FOR LAWN SPACES

Lawns that are constructed with sod are to be 100% established and in accordance with Canadian Landscape Standards. Sodded lawns should appear evenly integrated with adjacent rolls and non-visible for edges or lifts in finish. Seeded lawns are to be evenly covered and established with vigorous growth. All lawns to appear with vigorous growth and maintenance with a minimum of 2 cuttings to a 60mm height for substantial review. Incidentally mow to a continued 60mm height until the time of substantial completion. Do not allow lawns to exceed an 80mm height between cuttings.

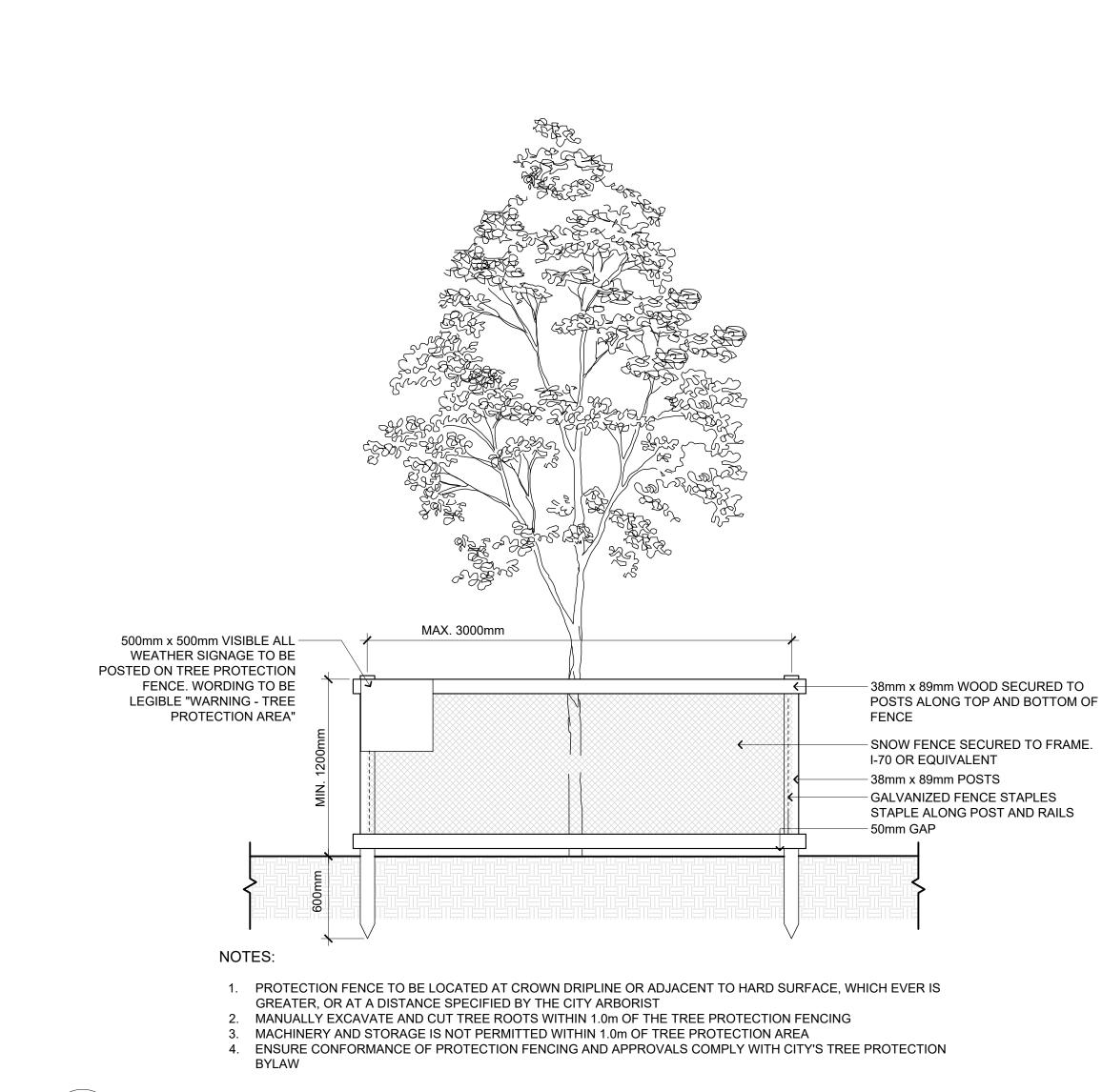
#### ESTABLISHMENT WATERING

Landscape watering to be provided complete through substantial completion and until all deficiencies are amended (whichever is longer). Establishment watering to be compliant with Canadian Landscape Standards. Landscapes to be maintained at 75% moisture content availability in soils; as defined in 'Establishment Watering' requirements of the Canadian Landscape Standard. Ensure landscape is watered adequately to prevent detriment to plant health prior to use of irrigation system. If a water ban is in place within the city, notify Contract Administrator.

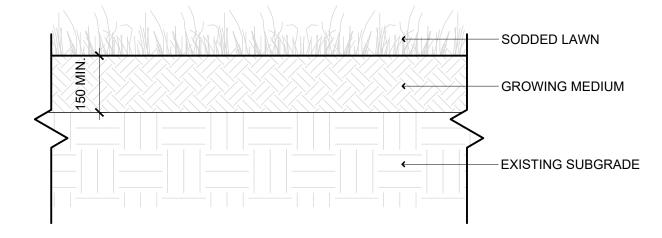
#### WARRANTY

Warranty on landscape to be 1 year, unless noted otherwise.

ORIC	INAL SIZE 60.9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	MjH	SHEET TITLE	
					DRAWN BY	LN		PLANTING
					CHECKED BY	MjH		
1	22/08/15	RE-ISSUED FOR DEVELOPMENT PERMIT	МјН		PROJECT #	211-01841-00	SHEET NO.	
0	22/04/29	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE			
NO.	DATE	DESCRIPTION	BY			1:100		L-03



TREE PROTECTION FENCING L-04 SCALE: 1:25



RISK, AND YOU AGREE TO DEFEND, IND NG OUT OF THE UNAUTHORIZED MODIF

NOTE:

1. ALL LAWN TO BE SEEDED IN TWO DIRECTIONS AT 90° FROM EACH

OTHER 2. GROWING MEDIUM TO BE IN ACCORDANCE WITH LEVEL 1 WELL GROOMED "1H/1L" (BASED ON THE USE) AS PER THE CANADIAN LANDSCAPE STANDARDS

4 SOD LAWN DETAIL L-04 SCALE: 1:10

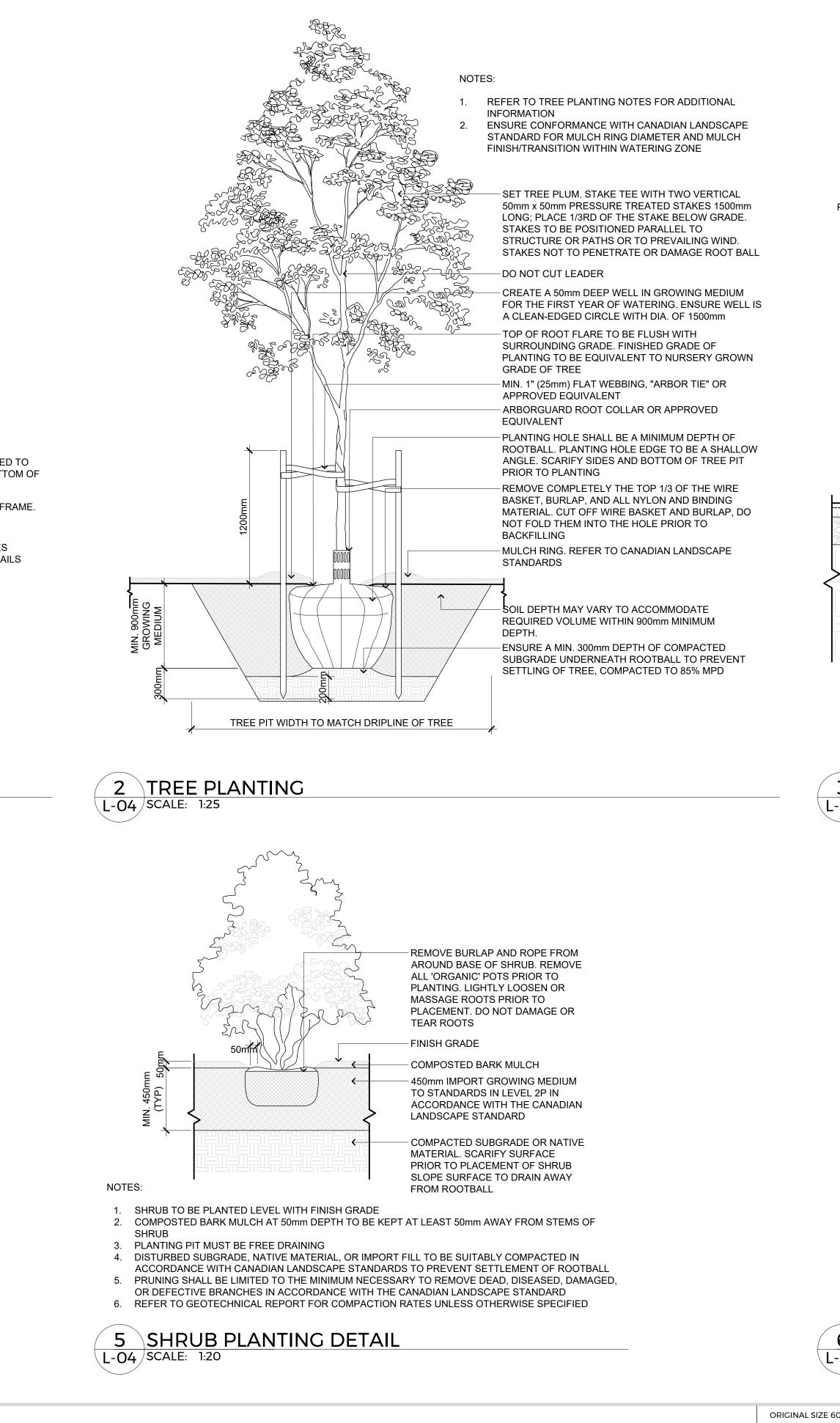


1000 - 840 HOWE STREET, VANCOUVER B.C. V6Z 2M1

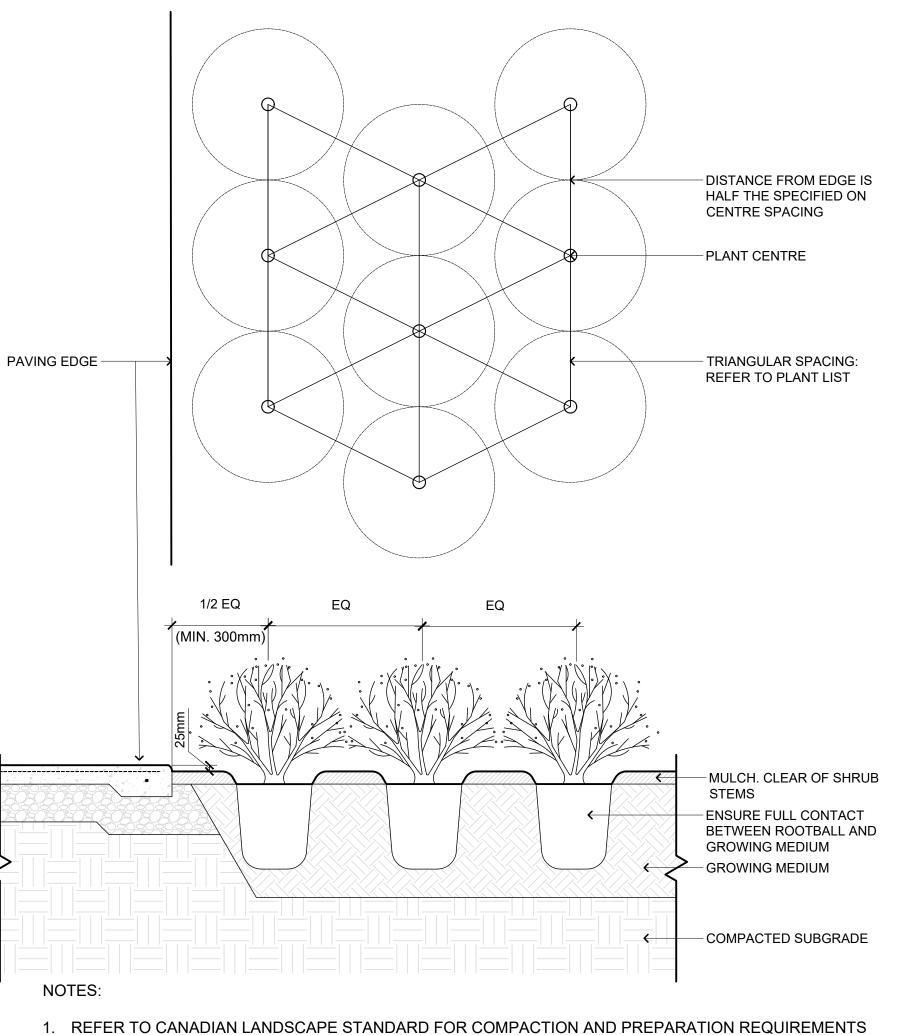
TED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP CANADA VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND IMMEDIATELY REPORT ANY ERRORS OR OMISSIONS TO W OUP LTD. THE CONTRACTOR SHALL CHECK ANI NADA GROUP LTD. (DO NOT SCALE DRAWINGS) S DRAWING SUPERSEDES PREVIOUS IS SCLAIMER

PROJECT CLIENT **NRB Modular Solutions** 

CONSULTANT WSP

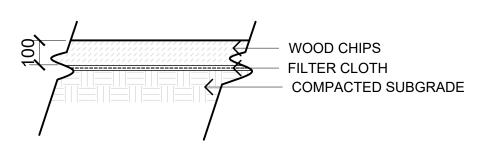


BCH Discovery Street | 722, 726 / 732 Discovery Street, Victoria, B.C.



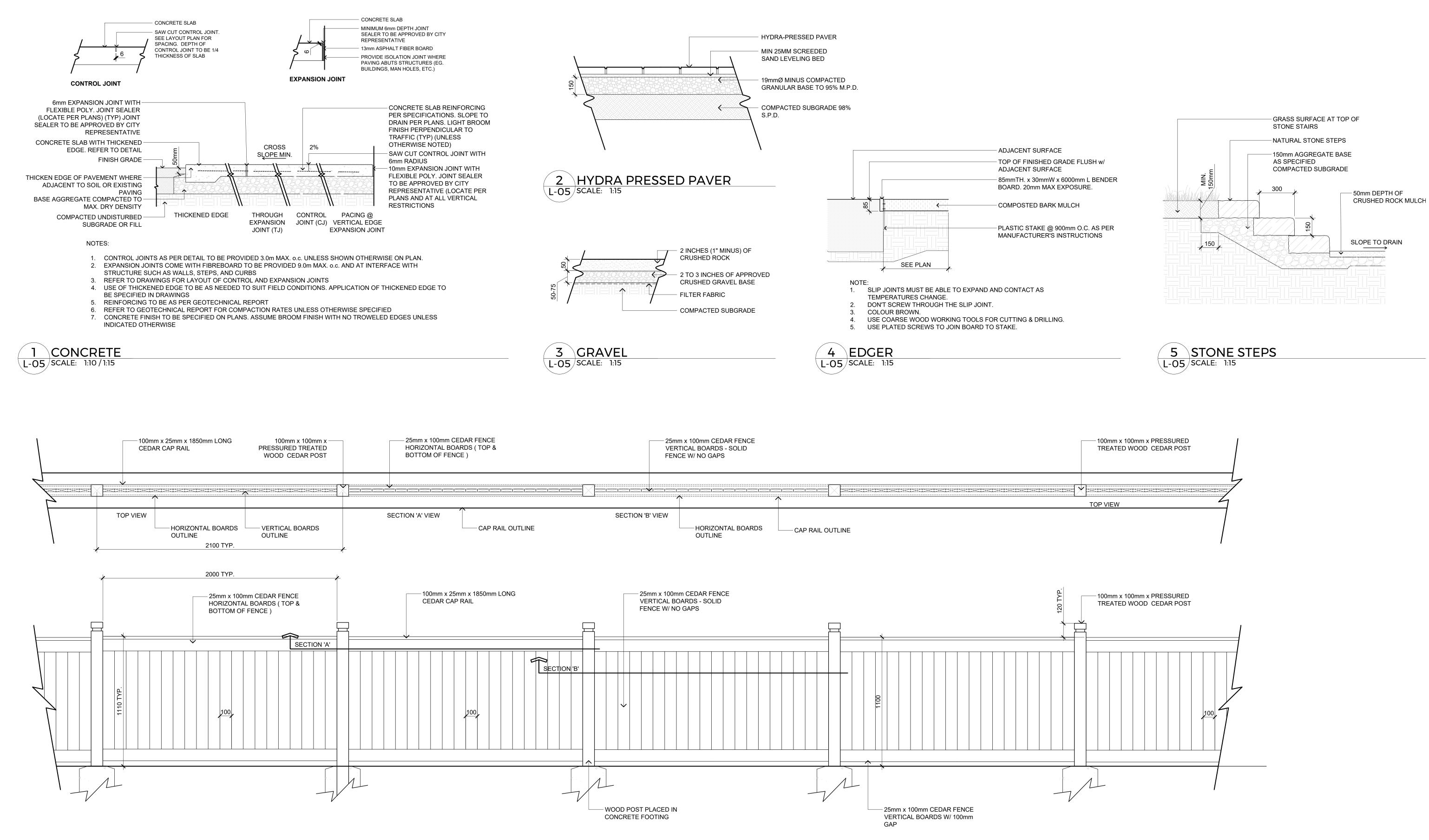
- FOR PLANTING BEDS
- 2. REFER TO TYPICAL SHRUB PLANTING DETAILS FOR INFORMATION ON MULCH AND GROWING MEDIUM 3. ENSURE MATURE SHRUB FORM WILL NOT OVERHANG WALKWAY
- 4. COMPACTION RATE TO BE 95% MPD UNLESS OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT

3 SHRUB SPACING DETAIL L-04 SCALE: 1:15

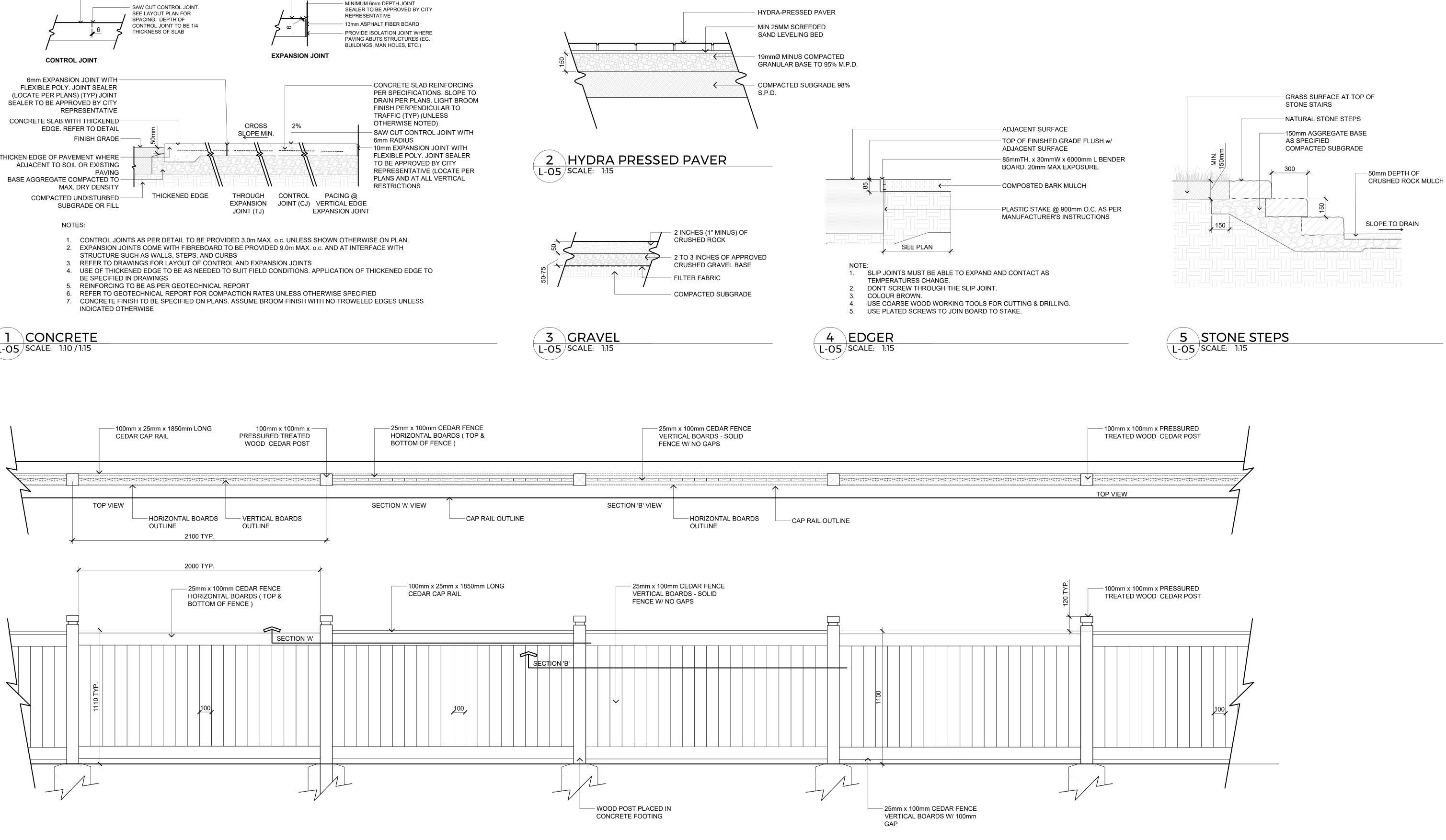


#### 6 WOOD CHIPS | MULCH L-04 SCALE: 1:20

60.9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	MjH	SHEET TITLE
				DRAWN BY	LN	DETAILS
				CHECKED BY	MjH	
5	RE-ISSUED FOR DEVELOPMENT PERMIT	MjH		PROJECT #	211-01841-00	SHEET NO.
Э	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE		1.01
	DESCRIPTION	BY			AS SHOWN	L-04







6 1.2m WOOD FENCE L-05 SCALE: 1:15

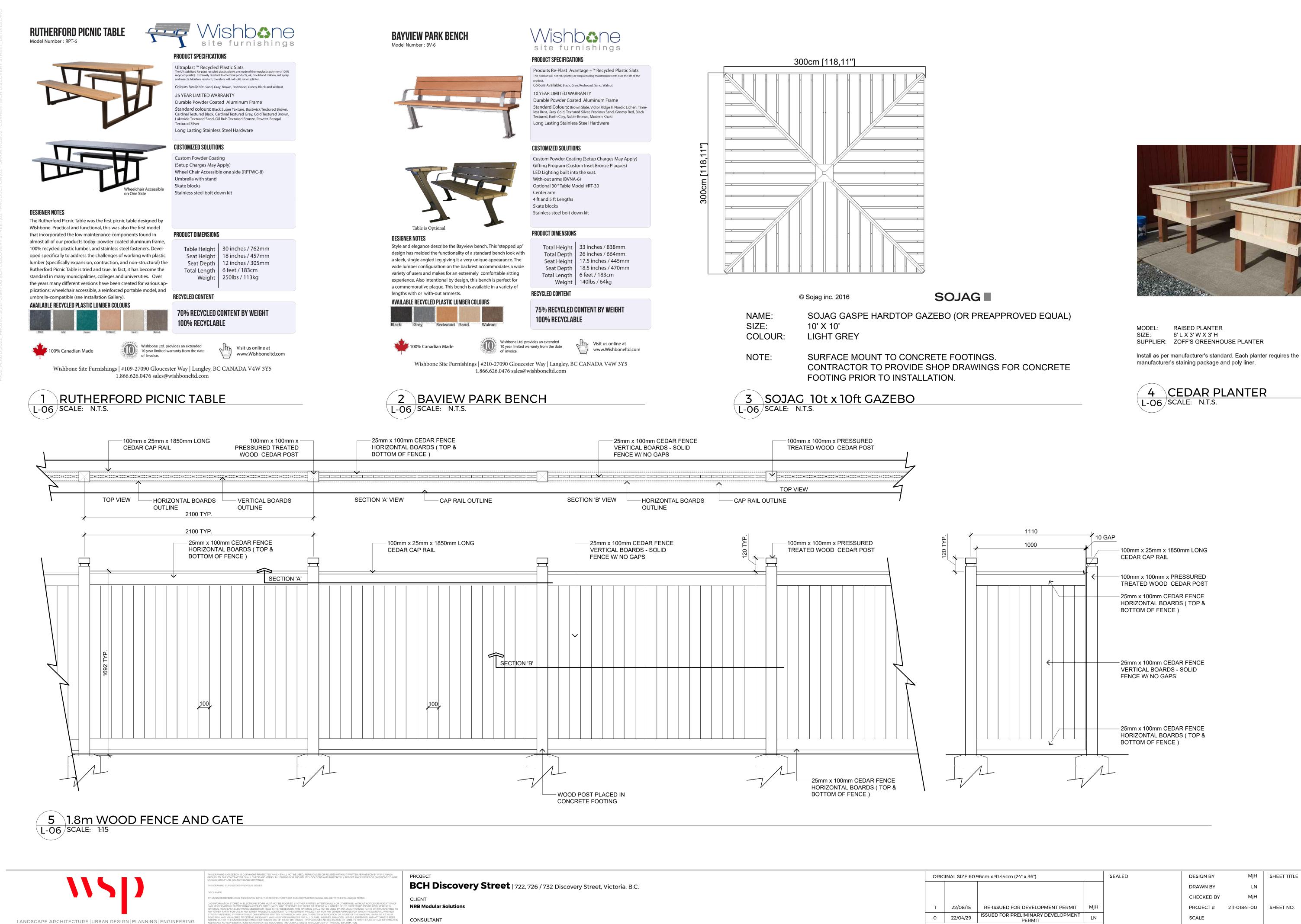


THIS DRAWING AND DESIGN IS COPYRIGHT PROTECTED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP CANADA ROUP LTD. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND IMMEDIATELY REPORT ANY ERRORS OR OMISSIONS TO W ANADA GROUP LTD. (DO NOT SCALE DRAWINGS) PROJECT S DRAWING SUP SCLAIMER CLIENT **NRB Modular Solutions** 

CONSULTANT WSP

BCH Discovery Street | 722, 726 / 732 Discovery Street, Victoria, B.C.

60.9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	MjH	SHEET TITLE	
				DRAWN BY	LN	DET	AILS
				CHECKED BY	MjH		
15	RE-ISSUED FOR DEVELOPMENT PERMIT	MjH		PROJECT #	211-01841-00	SHEET NO.	
29	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE			
	DESCRIPTION	BY			AS SHOWN		L-05



1000 - 840 HOWE STREET, VANCOUVER B.C. V6Z 2M1

WSP

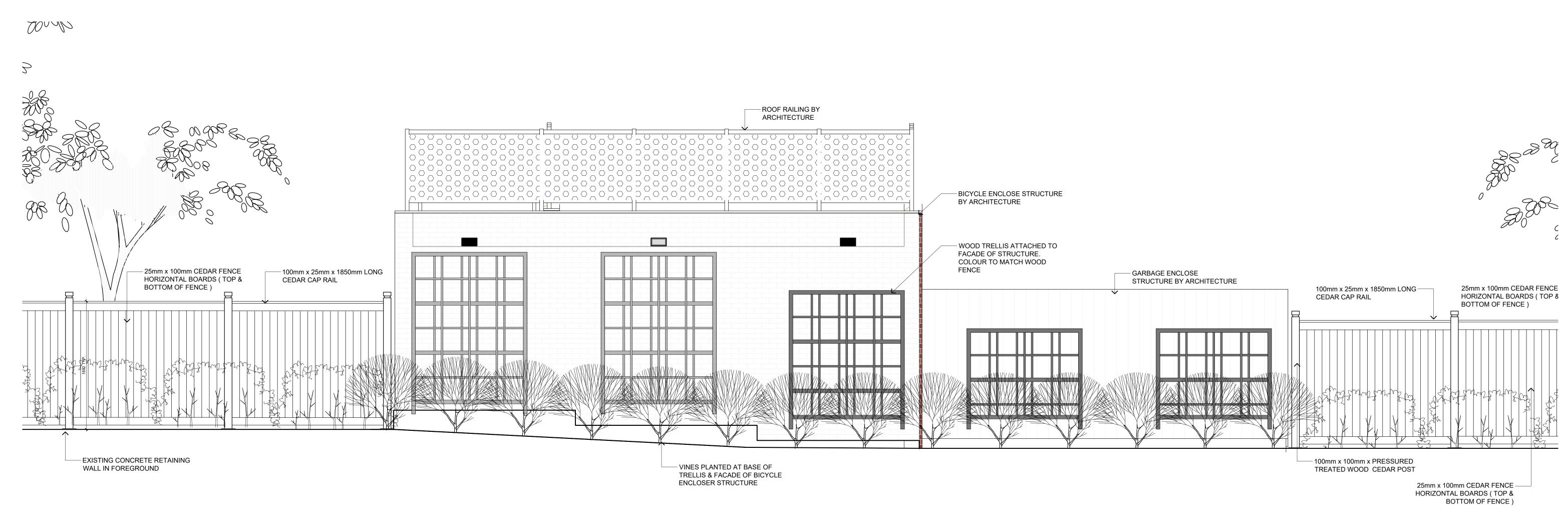
NO. DATE



MODEL: RAISED PLANTER SIZE: 6' L X 3' W X 3' H SUPPLIER: ZOFF'S GREENHOUSE PLANTER

4 CEDAR PLANTER L-06 SCALE: N.T.S.

60.9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	MjH	SHEET TITLE
				DRAWN BY	LN	DETAILS
				CHECKED BY	MjH	
5	RE-ISSUED FOR DEVELOPMENT PERMIT	MjH		PROJECT #	211-01841-00	SHEET NO.
29	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE		
	DESCRIPTION	BY			AS SHOWN	L-06







CTED WHICH SHALL NOT BE USED, REPRODUCED OR REVISED WITHOUT WRITTEN PERMISSION BY WSP CANADA VERIFY ALL DIMENSIONS AND UTILITY LOCATIONS AND IMMEDIATELY REPORT ANY ERRORS OR OMISSIONS TO W NADA GROUP LTD. (DO NOT SCALE DRAWINGS) S DRAWING SUPERSEDES PREVIOUS ISS ISCLAIMER

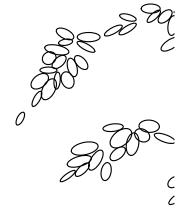
LE RISK, AND YOU AGREE TO DEFEND, INDEMNIFY, AND HOLD WSP HARMLESS FOR ALL CLAIMS, INJURIES, DAI SING OUT OF THE UNAUTHORIZED MODIFICATION OR USE OF THESE MATERIALS. WSP ASSUMES NO OBLIGAT

USING OR REFE

RECIPIENT



BCH Discovery Street | 722, 726 / 732 Discovery Street, Victoria, B.C.



ORIC	SINAL SIZE 60.9	96cm x 91.44cm (24" x 36")		SEALED	DESIGN BY	МјН	SHEET TITLE	
					DRAWN BY	LN		DETAILS
					CHECKED BY	MjH		
1	22/08/15	RE-ISSUED FOR DEVELOPMENT PERMIT	MjH		PROJECT #	211-01841-00	SHEET NO.	
0	22/04/29	ISSUED FOR PRELIMINARY DEVELOPMENT PERMIT	LN		SCALE			
NO.	DATE	DESCRIPTION	BY			AS SHOWN		L-07

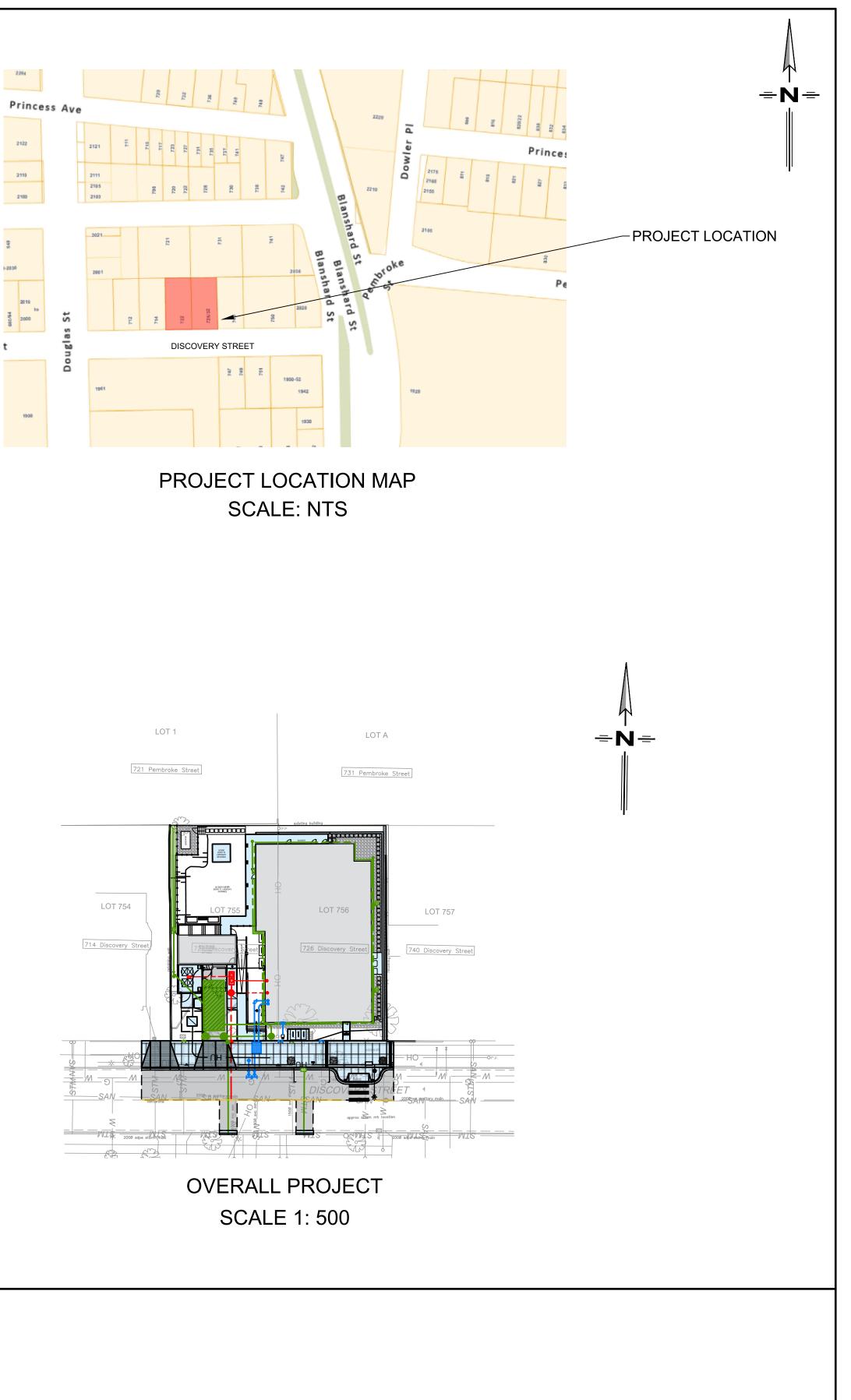
# SUPPORTIVE HOUSING, DISCOVERY STREET, VICTORIA, BC **RE-ISSUED FOR DEVELOPMENT PERMIT**

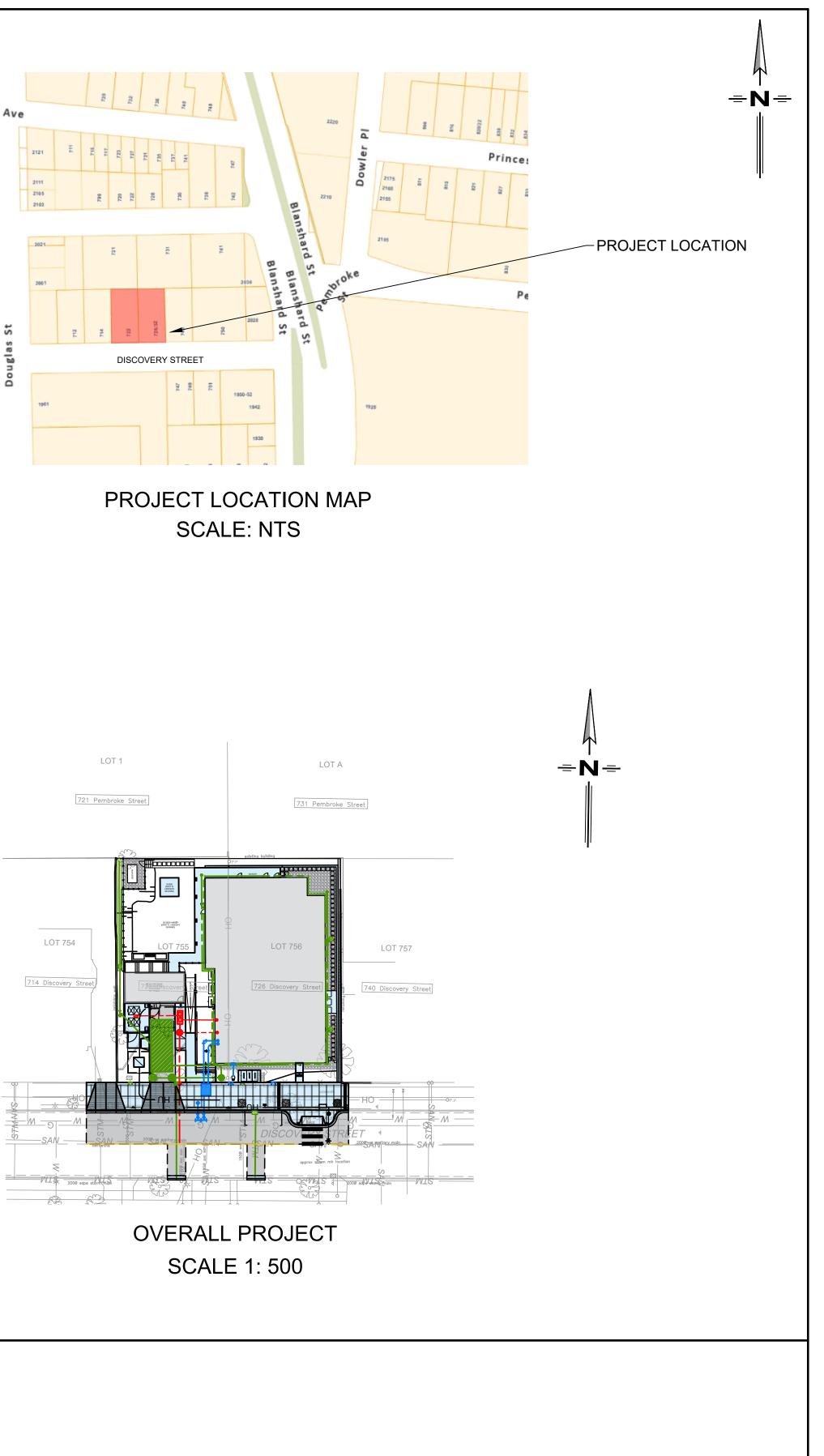
DRAWING INDEX:

- C000 TITLE
- C101 SITE SERVICING PLAN
- C102 SITE GRADING PLAN
- C103 STORMWATER MANAGEMENT PLAN
- C201 OFFSITE SERVICING & GRADING PLAN
- C202 LINE PAINTING & SIGNAGE PLAN
- C501 GENERAL NOTES & DETAILS

JECTS\249\1	PROJECT No: 249-1	DWG No	C000	SHEET:	1 OF 7	PERMIT No
PLOT August 18. 2022 COMPUTER-1-Z:\PRO	PREPARED FOR:		8250 PO BOX 10	PREPARED B LAKESHORE DRIV 06 SALMON ARM, BO PH. (250) 832-3220	SON ING LTD. —	DESIGN BY: SI DESIGN DATE REVIEWED BY DRAWN BY: SI REVISION NUM REVISION DAT ALL MEASURE NOTED.

CITY OF VICTORIA





### lo: 1001279 SPH E: 2022/03/18 BY: SAP SPH UMBER: 3 ATE: 2022/08/10 REMENTS IN m UNLESS OTHERWISE

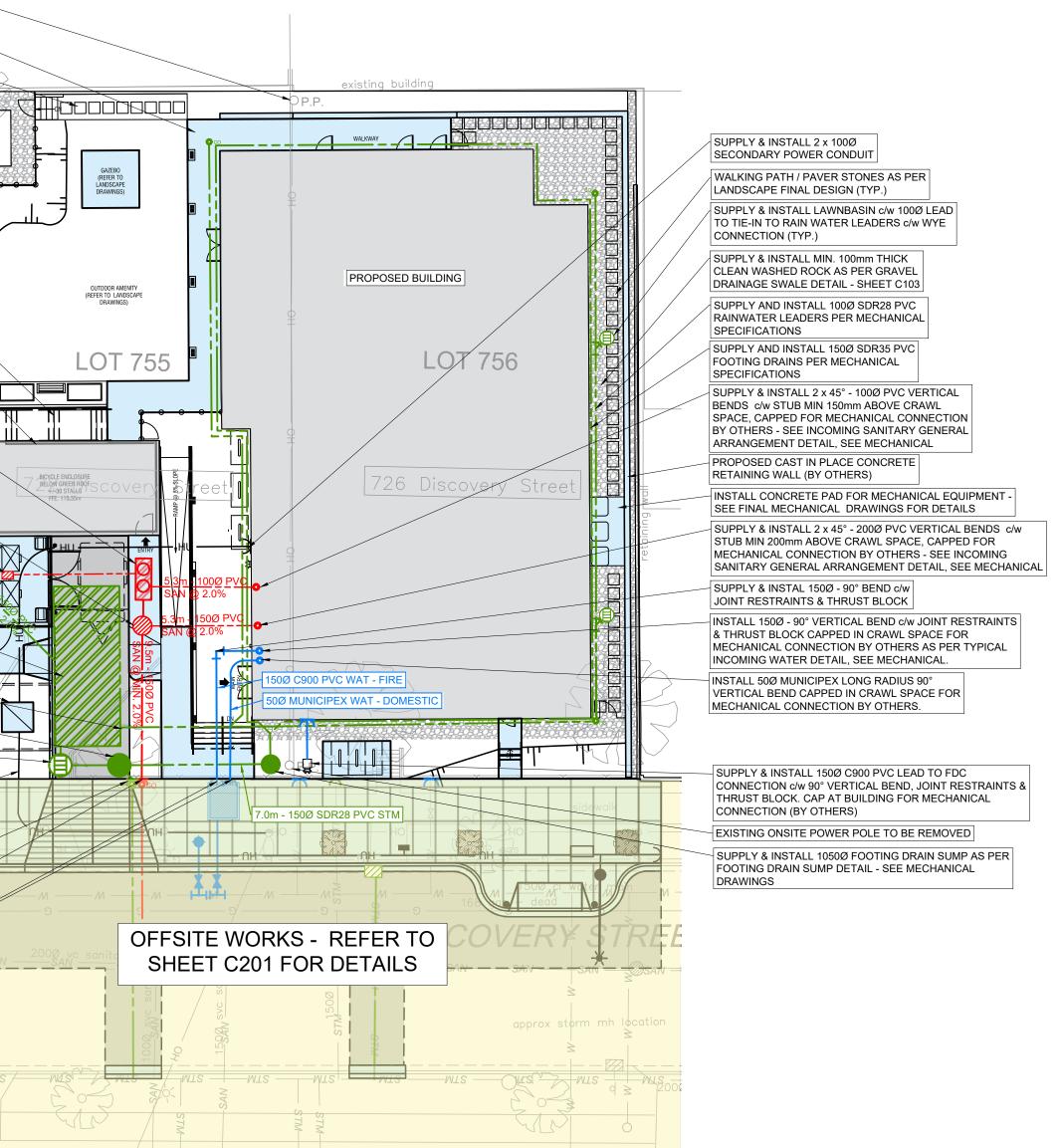
CITY OF VICTORIA APPROVED

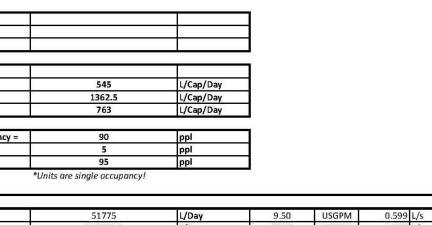
DATE:

EXISTING ONSITE POWER POLE TO BE REMOVED	
SUPPLY & INSTALL CONCRETE SIDEWALK (MIN. 100mm THICK SIDEWALK c/w 200mm 19Ø BASE GRAVELS)	
PATH TO GENERATOR AS PER FINAL LANDSCAPE DESIGN	
PROPOSED GENERATOR LOCATION	
SUPPLY & INSTALL 100mm THICK - 75Ø CLEAR CRUSH BASE FOR GENERATOR	
INSTALL SHALLOW DRAINAGE SWALE	
AS PER DETAIL ON SHEET C103 REFER TO LANDSCAPE FOR	
SURFACE FINISH & EXACT SLOPE ALIGNMENT	
PROPOSED STAIRS FOR GREEN ROOF ACCESS ( SEE ARCHITECTURAL PLANS FOR DETAILS)	
PROPOSED BIKE STORAGE BUILDING BELOW GREEN ROOF (SEE ARCHITECTURAL PLANS FOR DETAILS	
SUPPLY & INSTALL LAWN BASIN AT END OF SHALLOW DRAINAGE SWALE c/w 150Ø PVC LEAD TO DETENTION TANK	
SUPPLY AND INSTALL GREASE INTERCEPTOR - SCHIER GB-250 (200 GPM) BURIED INSTALLATION AS PER MECHANICAL DETAIL	
SUPPLY AND INSTALL 1050Ø	
SANITARY MANHOLE	
SUPPLY & INSTALL ZURN Z537/ Z535 HEAVY DUTY PARKING DECK DRAIN (OR APPROVED EQUIVILENT) c/w 100Ø PVC LEAD TO GREASE INTERCEPTOR	Street
SUPPLY & INSTALL 45° BEND c/w CLEANOUT	
EXISTING CONCRETE RETAINING WALL TO REMAIN	
EXISTING TREE TO BE REMOVED	
PROPOSED STORMWATER DETENTION SYSTEM, SEE DETAILS ON SHEET C103	
PROPOSED TRANSFORMER LOCATION	
TIE-IN 100Ø RAINWATER LEAD TO STORMTANK	
SUPPLY & INSTALL 1200Ø MANHOLE c/w ROYAL FLOW CONTROL DEVICE	
SUPPLY & INSTALL STC 300 OIL & GRIT SEPERATOR DEVICE c/w GRATE LID	
REMOVE AND DISPOSE EXISTING CATCHBASIN, CAP AND ABANDON EXISTING SERVICE AT PL	
SUPPLY & INSTALL 3 x 75Ø PRIMARY POWER CONDUIT FROM PL TO PMT	
TIE-IN TO STORM	
SERVICE AT PROPERTY LINE & INSTALL 45° BEND	SAN SAN SEA
TIE-IN TO SANITARY SERVICE AT PROPERTY LINE	centerline
TIE IN TO CITY STUB AT PROPERTY LINE (TYP.)	STM
	WIS     WIS       Ø sdpe storm main

#### TABLE 1: DOMESTIC WATER DEMAND INFORMATION

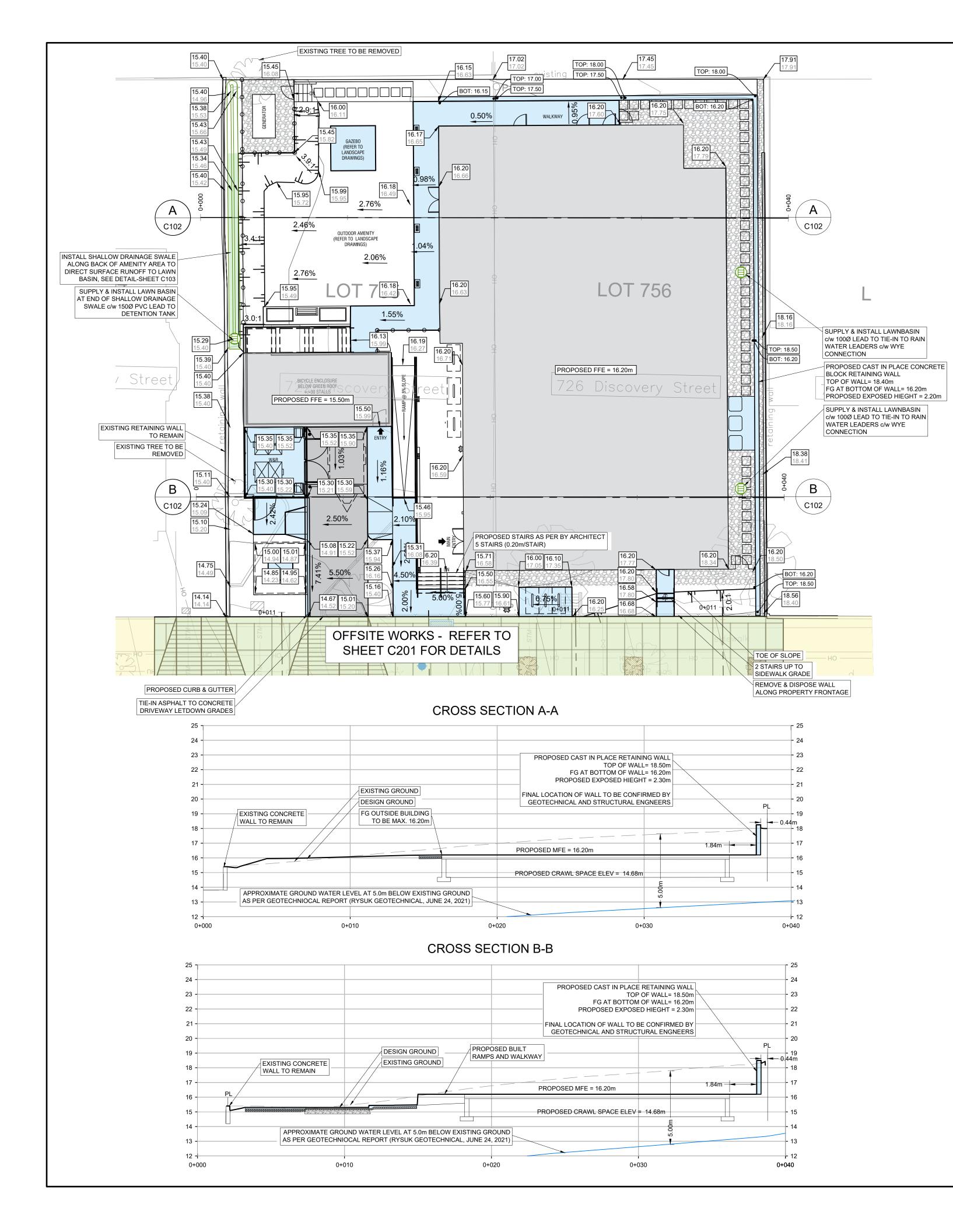
CRD	Water Service Requirements:
Dom	estic Water Daily Demand
1 Ho	ur Peak Domestic Water Demand
CRD	- Engineering Specifications
Aver	age Day Demand:
Max	Day Demand:
Peak	Hour Demand:
	overy Street BCH - Maximum Occupar Max 5 Staff =
Tota	Maximum Occupancy =
Disc	overy Street BCH - Apartments
Aver	age Day Demand:
0.0402-01	Day Demand:
Max	baj bemanar





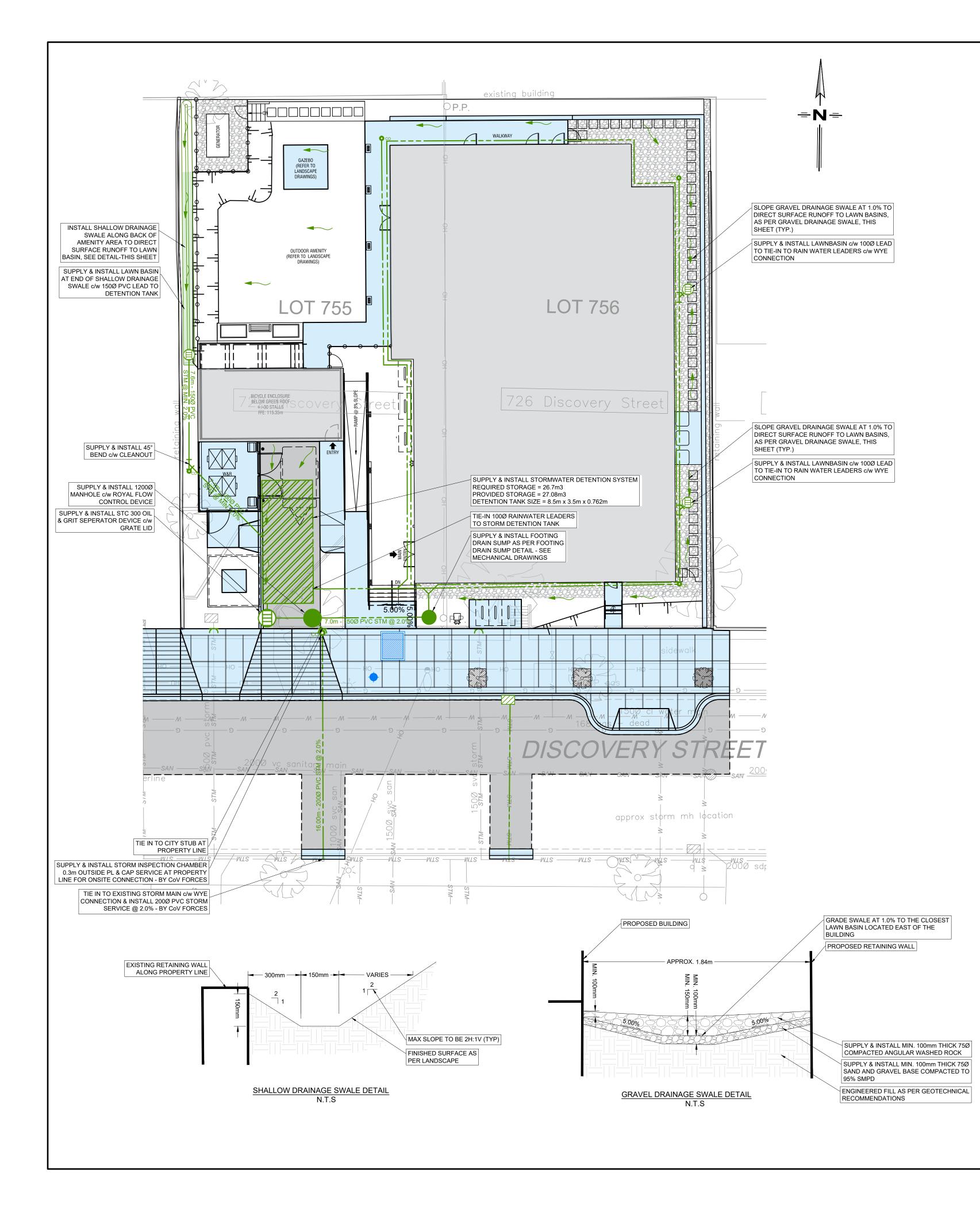
		LEGE			
	0		<u>TING</u> 0/TELEPHONE POLE		
	© 0		0/TELEPHONE POLE C PHONE POLE	W DAVI	Τ
	Ф (Р	HYDR	0 POLE 0 POLE C/W TRANS.		
	0		O POLE C/W TRANS. TOP STREET LIGHT		
		SANIT	ARY MANHOLE		
			M MANHOLE HBASIN		
	-••- >>		IYDRANT VALVE		
SAN WLS MM		SANIT	ARY SEWER		
		W WATE	STORM MAIN WATER MAIN		
	— e — — 11 —	GAS	RGROUND TELEPHON	E	
	**************************************	FENCE	E DUOUS/EVERGREEN		
	*x ~00	HEDG	E		
		PROP			
	0		ARY MANHOLE M MANHOLE		
			HBASIN VALVE		
	$\odot$		IYDRANT ARY SEWER		
			M SEWER R MAIN		
	— <b>– ►</b>	DITCH			
	_ ۲	END C			
	ΝИ	WHEE	L CHAIR RAMP		
			WAY LETDOWN		
WC	DRK.	OMISSIONS PF	RIOR TO COMME	NCING	i
3	2022/08/10	RE-ISSUED FOR DE	EVELOPMENT PERMIT	SPH	SAP
3 2	2022/08/10 2022/04/28		Evelopment Permit /Elopment Permit	SPH SPH	SAP SAP
		ISSUED FOR DEV			SAF
2	2022/04/28	ISSUED FOR DEV	ELOPMENT PERMIT	SPH	SAF SAF
2	2022/04/28 2022/04/06	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC	VELOPMENT PERMIT	SPH SPH	SAF SAF SAF
2 1 0	2022/04/28 2022/04/06 2022/03/18 DATE	ISSUED FOR DEV ISSUED FOR REZI	VELOPMENT PERMIT	SPH SPH SPH BY	SAF SAF SAF
2 1 0	2022/04/28 2022/04/06 2022/03/18 DATE	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC	VELOPMENT PERMIT	SPH SPH SPH	SAF SAF SAF
2 1 0	2022/04/28 2022/04/06 2022/03/18 DATE	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC	VELOPMENT PERMIT	SPH SPH SPH BY	SAF SAF SAP
2 1 0	2022/04/28 2022/04/06 2022/03/18 DATE	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC	VELOPMENT PERMIT	SPH SPH BY SPH SPH	SAF SAF APP'
2 1 0	2022/04/28 2022/04/06 2022/03/18 DATE	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC	VELOPMENT PERMIT	SPH SPH BY	SAP SAP APP
2 1 0	2022/04/28 2022/04/06 2022/03/18 DATE	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC REVISI	VELOPMENT PERMIT	SPH SPH BY SPH SPH	SAP SAP APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC REVISI	VELOPMENT PERMIT	SPH SPH BY SPH SPH	SAF SAF APP' I
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL	ISSUED FOR DEV ISSUED FOR REZ ISSUED F DESC REVISI	relopment permit oning application for review cription ONS DESIGN DRAWN DATE 202 CHECKED	SPH SPH BY SPH SPH	SAP SAP APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		relopment permit oning application for review cription ONS DESIGN DRAWN DATE 202 CHECKED	SPH SPH SPH SPH SPH 22/03 SAF	SAF SAF APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL	ISSUED FOR DEV ISSUED FOR REZI ISSUED FOR REZI DESC REVISI 1001279 1:200	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED	SPH SPH SPH SPH 22/03 SAF	SAF SAF APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0	ISSUED FOR DEV ISSUED FOR REZI ISSUED FOR REZI DESC REVISI 1001279 1:200 LAKESHC	ACTIC CHECKED	SPH SPH SPH SPH 22/03 SAF Aeters	SAF SAF APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200	ACTIC CHECKED	SPH SPH SPH SPH 22/03 SAF Aeters	SAF SAF APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200	ACTIC CHECKED	SPH SPH SPH SPH 22/03 SAF Aeters	SAF SAF APP'
2 1 NO.	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAKESHO 106 SALMON P: (250) 8	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED	SPH SPH SPH SPH 22/03 SAF Aeters	SAF SAF APP'
2 1 NO. PERM SCAL	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 PO BOX	ISSUED FOR DEV ISSUED FOR REZU ISSUED FOR REZU REVISI 1001279 1:200 LAKESHO 106 SALMON P: (250) 8	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP' 1 3/18
2 1 NO. PERM SCALI	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 822 PO BOX	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAK ENG 5C LAKESHO 106 SALMON P: (250) 8 CONTINE	relopment permit oning application or review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 NO. PERM SCALI	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 822 PO BOX	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAK ENG 5C LAKESHO 106 SALMON P: (250) 8 CONTINE	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF App'
2 1 NO. PERM SCALI	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 SEAL IT NO.: ES: 0 SEAL JPPC JPPC	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAK ENG 5C LAKESHO 106 SALMON P: (250) 8 CONTINE	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 NO. PERM SCALI	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 SEAL IT NO.: ES: 0 SEAL JPPC JPPC	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 NO. PERM SCALI	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 SEAL IT NO.: ES: 0 SEAL JPPC JPPC	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF App'
2 1 NO. PERM SCAL	2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 SEAL IT NO.: ES: 0 SEAL JPPC JPPC	ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 NO. PERM SCALI		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1200 1200 1200 1200 1200 1200 1200 120	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF App'
2 1 NO. NO.		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1200 1200 1200 1200 1200 1200 1200 120	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF App'
2 1 NO. NO.		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1200 1200 1200 1200 1200 1200 1200 120	relopment permit oning application cor review cription ONS DESIGN DRAWN DATE 202 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF App'
2 1 NO. NO.		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAA ENG 5C LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8	relopment permit oning application on review cons design drawn date 202 checked checke	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 NO. PERM SCALI SCALI SL SL PROJ		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ DESC REVISI 1001279 1:200 LA ENG 5C LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8	relopment permit oning application on Review ons Design DRAWN DATE 202 CHECKED CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 0 NO. PERM SCALI SCALI SL SL VIO SI PIOJ		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ REVISI 1001279 1:200 LAA ENG 5C LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8	relopment permit oning application on review cons design drawn date 202 checked checke	SPH SPH SPH SPH 22/03 SAF 22/03 SAF	SAF SAF APP'
2 1 NO. NO.		ISSUED FOR DEV ISSUED FOR REZ ISSUED FOR REZ DESC REVISI 1001279 1:200 LAA ENG 5C LAKESHO 106 SALMON P: (250) 8 CLAKESHO 106 SALMON P: (250) 8 SERV	relopment permit oning application or review ons design drawn date 202 checked		SAF SAF APP'

**−N**−



		LEGE	<u>END</u>			
			STING			
	•		RO/TELEPHONE PO RO/TELEPHONE PO		W DAVI	Τ
	0		EPHONE POLE RO POLE			
	•	HYD	RO POLE C/W TRAN T TOP STREET LIGH			
	Ě	GUY				
	0	STO	RM MANHOLE			
			CHBASIN HYDRANT			
	SAN —		E VALVE ITARY SEWER			
/		GAS				
	— 10 —	UND FEN	ERGROUND TELEPH CE	HONE	Ī	
	* 83	DEC	IDUOUS/EVERGREE GE	ΕN		
		PRO	POSED			
			ITARY MANHOLE RM MANHOLE			
		CAT	CHBASIN			
	$\odot$	FIRE	E VALVE HYDRANT			
			ITARY SEWER RM SEWER			
	— – <b>)</b> –		ER MAIN CHLINE			
	-( 7		T/OUTLET HEADWA CAP	LL		
	ΝИ	WHE	EL CHAIR RAMP			
	∖⊨≡		EWAY LETDOWN			
DIN ER	ENSIONS A	AND UTILITY I	CHECK AND VE OCATIONS AN PRIOR TO COMI	D RI	EPOR	T ALL
DRAW						
	INGS ARE	NOT TO BE S	CALED			
3	2022/08/10	RE-ISSUED FOR	DEVELOPMENT PER	-	SPH	SAP
2	2022/08/10 2022/04/28	RE-ISSUED FOR	DEVELOPMENT PER	11Т	SPH	SAP
2	2022/08/10 2022/04/28 2022/04/06	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE	DEVELOPMENT PER	11Т	SPH SPH	SAP SAP
2	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE ISSUED	DEVELOPMENT PER	11Т	SPH	SAP
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE ISSUED DES	DEVELOPMENT PER EVELOPMENT PERM ZONING APPLICATION FOR REVIEW	11Т	SPH SPH SPH	SAP SAP SAP
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE ISSUED DES	DEVELOPMENT PER EVELOPMENT PERM ZONING APPLICATION	1IT ON	SPH SPH SPH	SAP SAP SAP
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE ISSUED DES	DEVELOPMENT PER EVELOPMENT PERM ZONING APPLICATION FOR REVIEW SCRIPTION SIONS	11T ON	sph sph вy	SAP SAP SAP
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE ISSUED DES	DEVELOPMENT PERMETER DEVELOPMENT DEVELOPME	11T ON	SPH SPH SPH BY	SAP SAP SAP
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE	RE-ISSUED FOR ISSUED FOR DI ISSUED FOR RE ISSUED DES	DEVELOPMENT PER EVELOPMENT PERM ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN	IIT ON	sph sph вy	SAP SAP APP'I
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD	RE-ISSUED FOR ISSUED FOR DE ISSUED FOR RE ISSUED DES REVIS	DEVELOPMENT PER EVELOPMENT PERM ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN	11T ON 202	SPH SPH SPH SPH SPH SPH	SAP SAP APP'I 1 3/18
2 1 0	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE	RE-ISSUED FOR ISSUED FOR DE ISSUED FOR RE ISSUED DES REVIS	DEVELOPMENT PERMETERED EVELOPMENT PERMETERED ZONING APPLICATION FOR REVIEW SCRIPTION DESIGN DESIGN DRAWN DATE	11T ON 202	SPH SPH BY SPH	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE REVIS	DEVELOPMENT PERMETERENT PERMETER PERMETERENT PERMETERENT PERMETERIT PERMETERIT PERMETERIT PERMETERIT PERMETERIT PE	11T ON 202	SPH SPH SPH SPH SPH SPH	SAP SAP APP'I 1 3/18
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL	RE-ISSUED FOR ISSUED FOR DE ISSUED FOR RE ISSUED DES REVIS	DEVELOPMENT PERM EVELOPMENT PERM ZONING APPLICATION FOR REVIEW SCRIPTION BIONS DESIGN DRAWN DATE CHECKED	11T ON 202	SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		EVELOPMENT PERMISSIONS DESIGN DATE CHECKED	IIT ON 202	SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		DEVELOPMENT PERM EVELOPMENT PERM ZONING APPLICATION FOR REVIEW SCRIPTION BIONS DESIGN DRAWN DATE CHECKED	IIT ON 202	SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I 1 3/18
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1001279 1.5 3 1.150	EVELOPMENT PERMISSIONS DESIGN DATE CHECKED		SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL IIT No.: ES: 0 	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1:150 LAKESH 106 SALMC	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL IIT No.: ES: 0 	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1:150 LAKESH 106 SALMC	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL IIT No.: ES: 0 	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1:150 LAKESH 106 SALMC	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL IIT No.: ES: 0 	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1.5 3 1.150 LAKESH 1001279 1.5 3 1.150 LAKESH 106 SALMO P: (250)	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'I
2 1 NO.	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL IIT No.: ES: 0 	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1:150 LAKESH 106 SALMC	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'I
2 1 NO. PERM SCAL	2022/08/10 2022/04/28 2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL IIT NO.: ES: 0 825 PO BOX	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1:150 LAK 5C LAKESH 106 SALMC P: (250)	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO. PERW SCAL	2022/08/10 2022/04/28 2022/03/18 2022/03/18 YEAR/MM/DD SEAL IT No.: ES: 0 822 PO BOX	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1.15 1:150 LAK ENC 5C LAKESH 106 SALMC P: (250) SC LAKESH 106 SALMC P: (250)	DEVELOPMENT PERMIT	Mete	SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO. PERIV SCAL	2022/08/10 2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL ITT No.: ES: 0 820 PO BOX	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1.5 3 1.15 3 1.150 ILA EN( 5 CLAKESH 106 SALMC P: (250) CCLAKESH 106 SALMC P: (250) CCLAKESH 106 SALMC P: (250)	DEVELOPMENT PERMIT ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN DATE CHECKED 4.5 6 CHECKED 4.5 6 CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	Mete	SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APPT 3/18 3/18
2 1 NO. PERIV SCAL	2022/08/10 2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL ITT No.: ES: 0 820 PO BOX	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1.15 1:150 LAK ENC 5C LAKESH 106 SALMC P: (250) SC LAKESH 106 SALMC P: (250)	DEVELOPMENT PERMIT ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN DATE CHECKED 4.5 6 CHECKED 4.5 6 CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	Mete	SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO. PERIV SCAL	2022/08/10 2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL ITT No.: ES: 0 820 PO BOX	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1.5 3 1.15 3 1.150 ILA EN( 5 CLAKESH 106 SALMC P: (250) CCLAKESH 106 SALMC P: (250) CCLAKESH 106 SALMC P: (250)	DEVELOPMENT PERMIT ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN DATE CHECKED 4.5 6 CHECKED 4.5 6 CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	Mete	SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APPT 3/18 3/18
2 1 NO. PERIV SCAL	2022/08/10 2022/04/28 2022/04/06 2022/03/18 YEAR/MM/DD SEAL ITT No.: ES: 0 82.0 PO BOX	RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1.5 3 1.15 3 1.150 ILA EN( 5 CLAKESH 106 SALMC P: (250) CCLAKESH 106 SALMC P: (250) CCLAKESH 106 SALMC P: (250)	DEVELOPMENT PERMIT ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN DATE CHECKED 4.5 6 CHECKED 4.5 6 CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	Mete	SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APPT 3/18 3/18
2 1 NO. PERM SCAL		RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE REVIS 1001279 1.5 3 1.150 LAA EN( 5C LAKESH 106 SALMC P: (250) CC LAKESH 107 CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC LAKESH	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO. PERIV SCAL		RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1001279 1.5 3 1:150 LAA 5C LAKESH 106 SALMC P: (250) CC LAKESH 107 CAL CONTINUE CONT	DEVELOPMENT PERMIT ZONING APPLICATION FOR REVIEW SCRIPTION SIONS DESIGN DRAWN DATE CHECKED 4.5 6 CHECKED 4.5 6 CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED		SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APPT 3/18 3/18
2 1 NO. PERM SCAL		RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1001279 1.5 3 1:150 LAA 5C LAKESH 106 SALMC P: (250) CC LAKESH 107 CAL CONTINUE CONT	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO. PERM SCAL		RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1001279 1.5 3 1:150 LAA ENC 5C LAKESH 106 SALMC P: (250) SC LAKESH 106 SALMC P: (250) CONG	DEVELOPMENT PERMIT		SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APPT 3/18 3/18
2 1 NO. PERM SCAL		RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1001279 1.5 3 1.150 LAA ENC SC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC CC CC CC CC CC CC CC CC CC CC CC CC CC	DEVELOPMENT PERMIT ZONING APPLICATION SIONS DESIGN DRAWN DATE CHECKED 4.5 6 CHECKED		SPH SPH SPH SPH SPH SPH SPH SPH SPH SPH	SAP SAP APP'I
2 1 NO. PERM SCAL		RE-ISSUED FOR ISSUED FOR RE ISSUED FOR RE ISSUED FOR RE ISSUED REVIS 1001279 1.5 3 1.150 LAA ENC SC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC LAKESH 106 SALMC P: (250) CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC CC LAKESH 107 CC CC LAKESH 106 SALMC P: (250) CC CC CC CC CC CC CC CC CC CC CC CC CC CC	DEVELOPMENT PERMIT ZONING APPLICATION FOR REVIEW SCRIPTION DESIGN DRAWN DATE CHECKED C			SAP SAP APP'

**=N**=

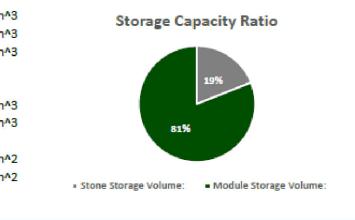


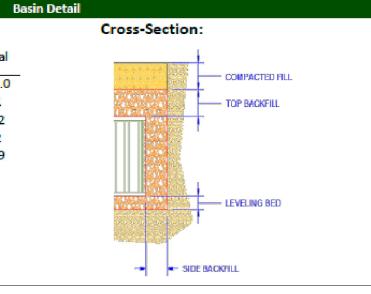
Project:	732 Discovery S	t LEDS Project #:	249-1		
ate:	2022-04-07	Prepared By:	SPH		
ocation:	Victoria, BC	Checked By:	SAP		
	_				
npervious Area(s)	Roofs				
	Parking				
	Concrete				
otal Area Impervious	(m2)	835			
Precipitation (m)		0.032			
		site and released at	ore-dev. rate		
ost-Development Der Emm over impervious are Volume BLE 2: STORMTA	ANK STORAG	2 m <sup>3</sup> E VOLUME			
emm over impervious are <b>Volume</b>	ANK STORAG	2 m <sup>3</sup> E VOLUME		or	
2mm over impervious are Volume BLE 2: STORMTA	ANK STORAG	E VOLUME	ume Calculato	Or	
BLE 2: STORMTA	ANK STORAG	E VOLUME	ume Calculato	odule 8.5	
BLE 2: STORMTA	ANK STORAG	E VOLUME	ume Calculato	odule	
BLE 2: STORMTA Store impervious are Volume BLE 2: STORMTA Project Name: Engineer:	ANK STORAG	E VOLUME	ume Calculato	odule 8.5 3.5	
BLE 2: STORMTA	ANK STORAG	E VOLUME	ume Calculato	odule 8.5	_'
BLE 2: STORMTA	ANK STORAG	E VOLUME	ume Calculato	odule 8.5 3.5 wation	_' _'
Emm over impervious are Volume  BLE 2: STORMTA  STORMTA  Project Name: Engineer: Stuar Units: SI	ANK STORAG	E VOLUME	ume Calculato	odule 8.5 3.5 wation 8.8	_'
Emm over impervious are         Volume         BLE 2: STORMTA         STORMTA         Project Name:         Engineer:       Stuar         Units:       SI         Liner:       Yes	ANK STORAG	E VOLUME	ume Calculato	odule 8.5 3.5 wation 8.8 3.80	

oject:	732 Discovery S	LEDS Project #:	: 249-1	
nte:	2022-04-07	Prepared By:	SPH	
ocation:	Victoria, BC	Checked By:	SAP	
	·			
pervious Area(s)	Roofs	638		
	Parking	76		
	Concrete			
tal Area Impervious	<u>(</u> m2)	835		
Precipitation (m)		0.032		
est-Development Det mm over impervious are		site and released at	t pre-dev rate	
Volume	26.72	$m^3$		
Volume	20.72	վու		<b> </b>
STORM	<b>TARK</b> M	e volume <i>Iodule</i> vo	lume Calcul	ator
<b>STORIA</b> Project Name:	VAHA Discover	lodule vo	lume Calcul	ator Module
Project Name:	VAHA Discover	lodule vo	Length: Width:	
Project Name:	VAHA Discover	Date: <u>11-Apr-22</u>	Length:	Module <u>8.5</u> n <u>3.5</u> n
Project Name: Engineer: Stuart Units: SI	VAHA Discover	10dule vo	Length: Width: Length:	Module <u>8.5</u> n
Project Name:	VAHA Discover	Date: <u>11-Apr-22</u>	Length: Width:	Module <u>8.5</u> n <u>3.5</u> n
Project Name: Engineer: Stuart Units: SI	VAHA Discover Purves, P.Eng [ Shape:Location:	Date: <u>11-Apr-22</u> Square/Rectangle	Length: Width: Length: Width:	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single	VAHA Discover Purves, P.Eng Shape: Location: Height:	Date: 11-Apr-22 Square/Rectangle Excavation 762	Length: Width: Length: Width:	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r
Project Name: Engineer: Stuart Units: SI Liner: Yes	VAHA Discover Purves, P.Eng Shape: Location: Height:	Date: <u>11-Apr-22</u> Square/Rectangle Excavation	Length: Width: Length: Width:	Module         8.5         1           3.5         1         1           Excavation         8.8         1           3.80         1         1           Stone         0         1           0.3         1         1
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single	VAHA Discover Purves, P.Eng Shape: Location: Height:	Date: 11-Apr-22 Square/Rectangle Excavation 762	Length: Width: Length: Width: Eveling Bed Top Backfill:	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           0.3         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage:	VAHA Discover	Date: 11-Apr-22 Square/Rectangle Excavation 762 Porosity: 40% Results	Length: Width: Length: Width: Eveling Bed Top Backfill:	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           0.3         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Capacity: Stone Storage Volume:	VAHA Discover Purves, P.Eng Shape: Location: Height: All 5.14	Date: <u>11-Apr-22</u> Square/Rectangle Excavation 762 Porosity: <u>40%</u> Results	Length: Width: Length: Width: Eveling Bed Top Backfill:	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Capacity: Stone Storage Volume: Module Storage Volume:	VAHA Discover	Iodule Vol   y Street   Date: 11-Apr-22   Square/Rectangle   Excavation   762   Porosity: 40%   Results   n^3 St	Length: Width: Length: Width: Ueveling Bed Top Backfill: Compacted F	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           Fill:         0.3         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Stone Storage: Stone Storage Volume: Module Storage Volume: Total Storage Volume:	VAHA Discover	Date: <u>11-Apr-22</u> Square/Rectangle Excavation 762 Porosity: <u>40%</u> Results	Length: Width: Length: Width: Eveling Bed Top Backfill: Compacted F	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           Fill:         0.3         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Stone Storage: Stone Storage Volume: Module Storage Volume: Total Storage Volume:	VAHA Discover	Iodule vol         y Street         Date:       11-Apr-22         Square/Rectangle         Excavation         762         Porosity:       40%         Results         n^3       St         n^3       St         n^3       St	Length: Width: Length: Width: Ueveling Bed Top Backfill: Compacted F	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           Fill:         0.3         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Stone Storage: Stone Storage Volume: Module Storage Volume: Total Storage Volume: Quantities: Required Excavation:	VAHA Discover           : Purves, P.Eng         I           Shape:	Iodule vol   y Street   Date: 11-Apr-22   Square/Rectangle   Excavation   762   Porosity: 40%   Results   m^3 St   m^3 St   m^3   m^3   m^3	Length: Width: Length: Width: Eveling Bed Top Backfill: Compacted F	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           Fill:         0.3         r
Project Name: Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Stone Storage: Stone Storage Volume: Module Storage Volume: Total Storage Volume:	VAHA Discover           : Purves, P.Eng         I           Shape:	Iodule vol         y Street         Date:       11-Apr-22         Square/Rectangle         Excavation         762         Porosity:       40%         Results         n^3       St         n^3       St         n^3       St	Length: Width: Length: Width: Eveling Bed Top Backfill: Compacted F	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           Fill:         0.3         r
Engineer: Stuart Units: SI Liner: Yes Stacking: Single Stone Storage: Capacity: Stone Storage Volume: Module Storage Volume: Total Storage Volume: Required Excavation:	VAHA Discover         : Purves, P.Eng       I         Shape:	Iodule vol   y Street   Date: 11-Apr-22   Square/Rectangle   Excavation   762   Porosity: 40%   Results   m^3 St   m^3 St   m^3   m^3   m^3	Length: Width: Length: Width: Eveling Bed Top Backfill: Compacted F	Module         8.5         r           3.5         r           Excavation         8.8         r           3.80         r           Stone         0         r           Fill:         0.3         r

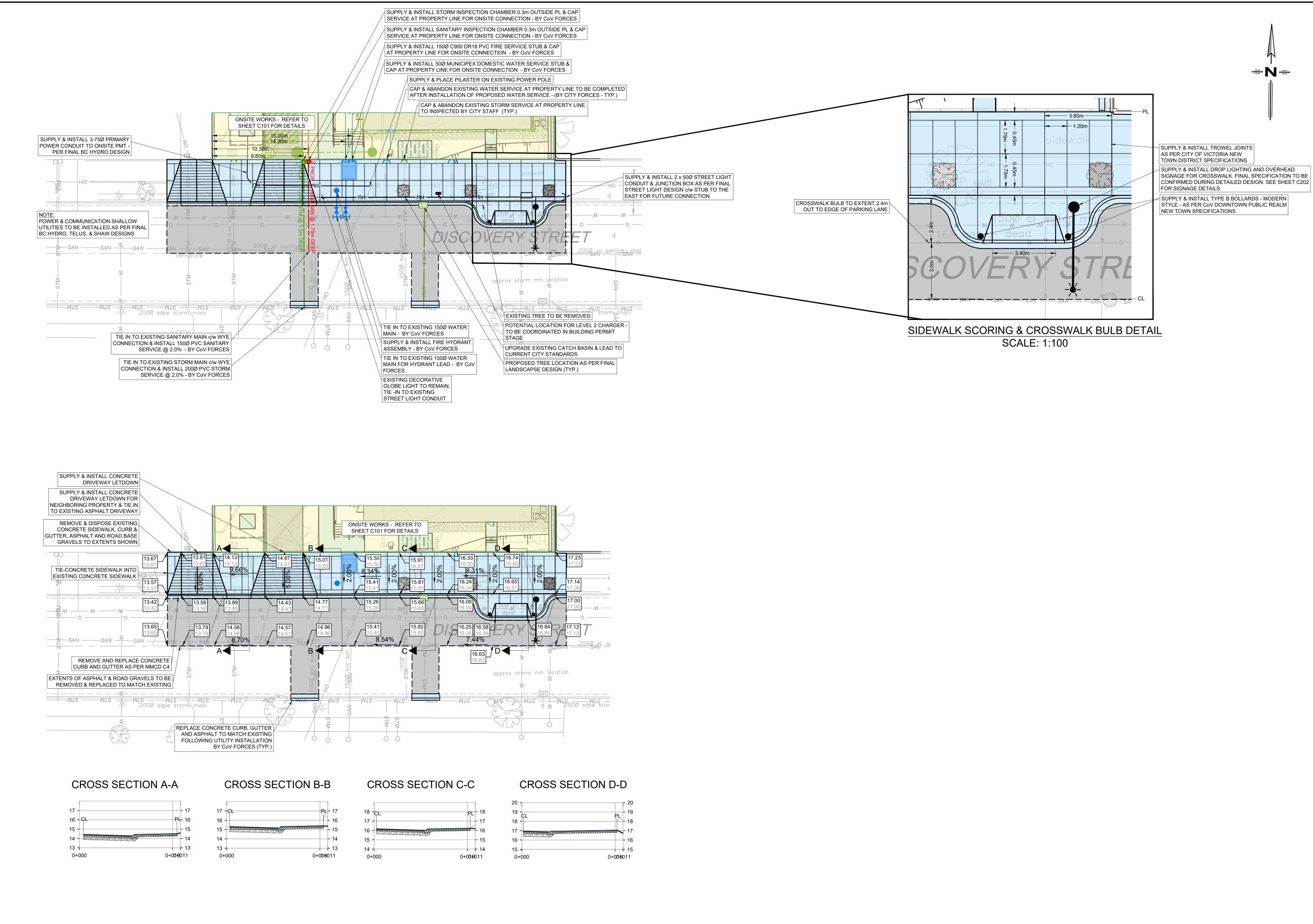
#### Component Quantities:

omponent Quantities:						
	Bottom	Тор	Total			
	Layer	Layer	TOtal			
Height	762.0	N/A	762.0			
# of Modules	71	N/A	71			
# of Platens	142	N/A	142			
# of Side Panels	52	N/A	52			
# of Columns	569	N/A	569			
# of Stacking Pins	0	N/A	0			
	-					

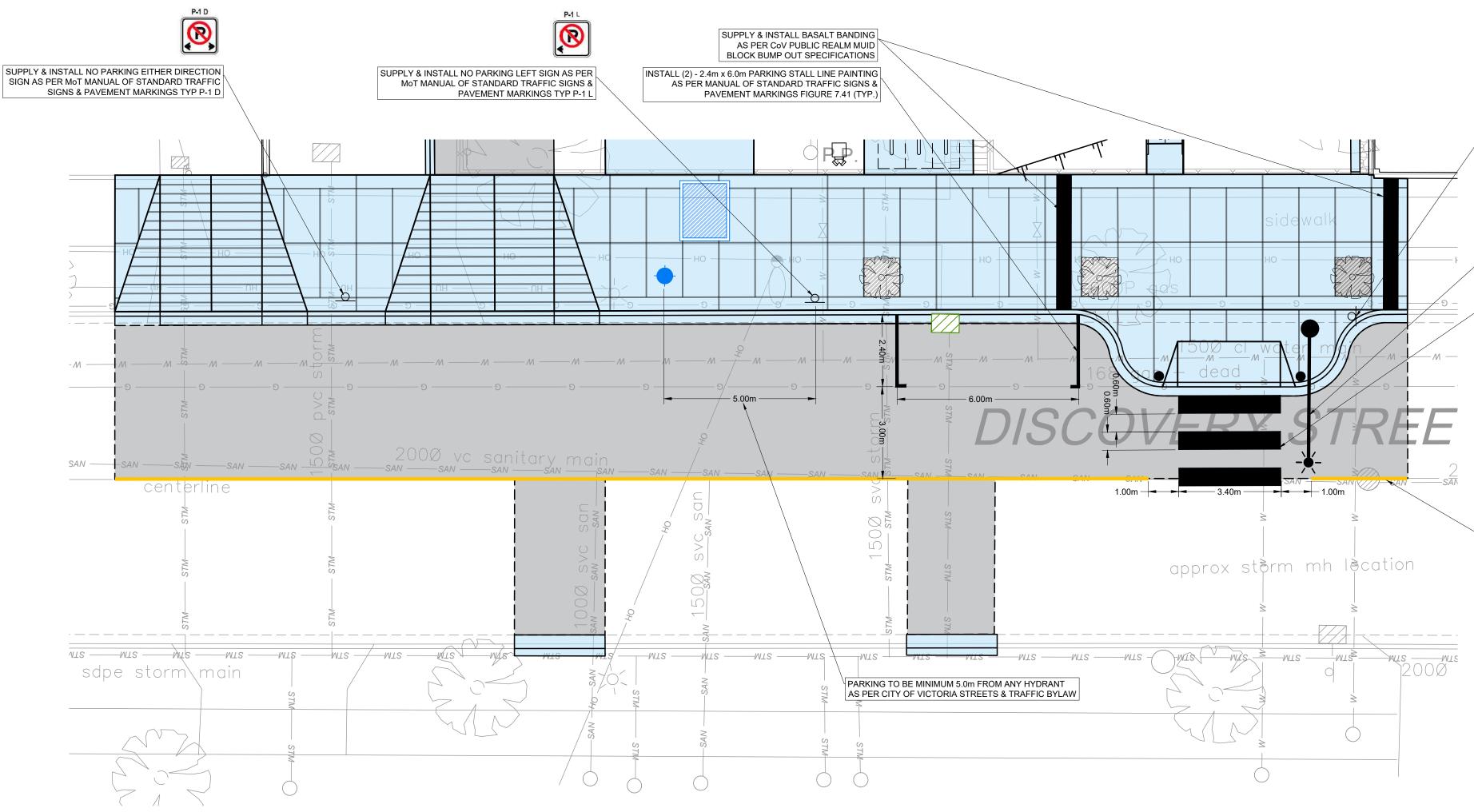


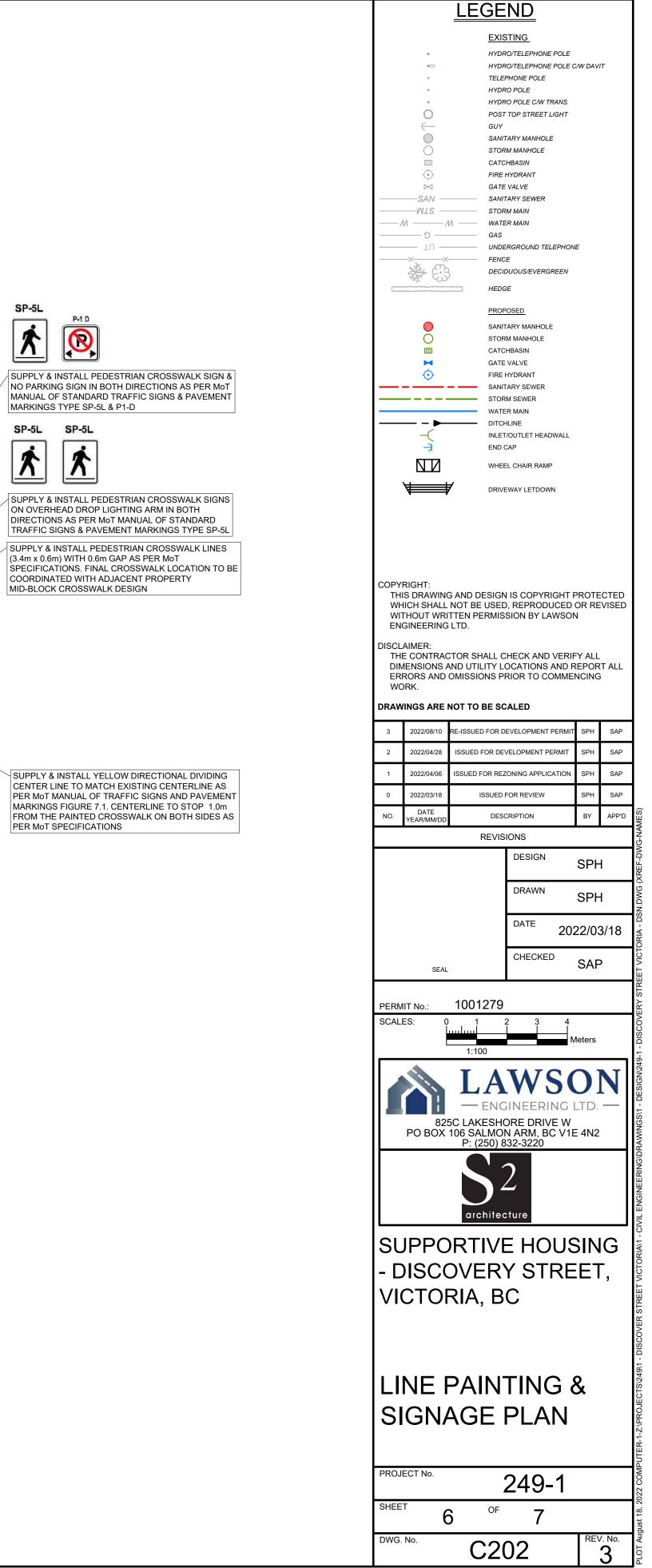


		LEGE	ND		
			<u>STING</u>		
	•		O/TELEPHONE POLE	W DAV	Т
	0		PHONE POLE		-
	•		20 POLE 20 POLE C/W TRANS.		
	ò		TOP STREET LIGHT		
	Č	GUY			
			TARY MANHOLE		
			HBASIN		
			HYDRANT		
			VALVE TARY SEWER		
			M MAIN		
/	/N	И — WATE — GAS	ER MAIN		
	— IN —		RGROUND TELEPHON	E	
	-XX	FENC	E DUOUS/EVERGREEN		
	37 500	)			
L	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	HEDG	E		
	-	PROF	OSED		
			ARY MANHOLE		
			HBASIN		
			VALVE		
	<u> </u>		HYDRANT FARY SEWER		
			M SEWER		
	►				
		DITCH INLET	ILINE /OUTLET HEADWALL		
	۲ ۲	END			
	ΝИ	WHE	EL CHAIR RAMP		
	∀━━━━━━	1			
	4	DRIVE	EWAY LETDOWN		
WH WIT ENT	HICH SHALL THOUT WRI GINEERING AIMER:	NOT BE USED TTEN PERMIS LTD.	I IS COPYRIGHT F D, REPRODUCED SION BY LAWSON HECK AND VERIF	OR RE	VISED
DIN ERI WC	/ENSIONS / RORS AND DRK.	AND UTILITY L OMISSIONS PI	OCATIONS AND R RIOR TO COMMEI	REPOR	T ALL
DRAW	INGS ARE	NOT TO BE SC	ALED		
3	2022/08/10	RE-ISSUED FOR D	EVELOPMENT PERMIT	SPH	SAP
2	2022/04/28	ISSUED FOR DE	VELOPMENT PERMIT	SPH	SAP
1	2022/04/06	ISSUED FOR REZ	ONING APPLICATION	SPH	SAP
I	2022/04/00			ЗГП	SAF
0	2022/03/18	ISSUED	FOR REVIEW	SPH	SAP
NO.	DATE YEAR/MM/DD	DES	CRIPTION	BY	APP'D
		REVIS	IONS		
			DESIGN		1
				SPF	1
			DRAWN	SPF	1
				511	
			DATE 202	22/03	3/18
			202	22/00	5/10
			CHECKED	SAF	)
	SEAL			0/ 11	
		1001279			
PERM SCAL	1IT No.: ES: 0	1.5 3	4.5 6		
JUAL				tere	
		1:150	Me	eters	
	1	TA	THIO		Т
~			WSC		
			INEERING I	_TD.	
	82	ENC 5C LAKESH	ORE DRIVE W		—
	82: PO BOX	ENC 5C LAKESH	ORE DRIVE W N ARM, BC V1E		_
1	829 PO BOX	ENC 5C LAKESHO 106 SALMO	ORE DRIVE W N ARM, BC V1E		_
	820 PO BOX	ENC 5C LAKESHO 106 SALMO	ORE DRIVE W N ARM, BC V1E		
	825 PO BOX	ENC 5C LAKESHO 106 SALMO	ORE DRIVE W N ARM, BC V1E		
	PO BOX	- ENC 5C LAKESHO 106 SALMOI P: (250) 8	DRE DRIVE W N ARM, BC V1E 32-3220		_
	82 PO BOX	ENC 5C LAKESHO 106 SALMO	DRE DRIVE W N ARM, BC V1E 32-3220		_
SI	PO BOX	ENC 5C LAKESHO 106 SALMO P: (250) 8 Control of the second P: (250) 8 Control of the second P: (250) 8	DRE DRIVE W N ARM, BC V1E 32-3220	E 4N2	
	ро вох	DRTIVE	DRE DRIVE W N ARM, BC V1E 32-3220 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
	ро вох	DRTIVE	DRE DRIVE W N ARM, BC V1E 32-3220	E 4N2	
- C	ро вох JPPC DISC(	DRTIVE	DRE DRIVE W N ARM, BC V1E 32-3220 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C	ро вох JPPC DISC(	DRTIVE	DRE DRIVE W N ARM, BC V1E 32-3220 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C	ро вох JPPC DISC(	DRTIVE	DRE DRIVE W N ARM, BC V1E 32-3220 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI	JPPC JSCC CTOI	DRTIVE DVER RIA, B	DRE DRIVE W N ARM, BC V1E 32-3220 2 Eture E HOUS Y STRE C	E 4N2	
- C VI	JPPC JSCC CTOI	DRTIVE	DRE DRIVE W N ARM, BC V1E 32-3220 2 Eture E HOUS Y STRE C	E 4N2	
- C VI PF	JPPC JPPC DISCO CTOI	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI Pf	JPPC JPPC DISCO CTOI	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI PF S	JPPC JPPC DISCO CTOI RELI	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI PF S <sup>-</sup> M		DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI PF S <sup>-</sup> M	JPPC JPPC DISCO CTOI RELI	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI PF S <sup>-</sup> M	JPPC JPPC DISCO CTOI RELI FOR ANA ANA	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI PF S <sup>-</sup> M, PL		DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 2	E 4N2	
- C VI PF S <sup>-</sup> M, PL	PO BOX	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 4 RY ARY ARY ARY ARY ARY ARY ARY	E 4N2	
- C VI PF S <sup>-</sup> M/ PL	JPPC JSCC CTOI RELI FOR ANA ANA ECT NO.	DRTIVE DVER RIA, B	2 2 2 2 2 2 2 2 2 2 2 2 2 4 1 2 4 1 2 4 1 2 4 9 1 2 4 1 2 4 9 1 1 1 1 1 1 1 1 1 1 1 1 1	SIN	



			<u>END</u>		
		<u> </u>	XISTING		
			YDRO/TELEPHONE POLE YDRO/TELEPHONE POLE	C/W DAV	T
	0		ELEPHONE POLE YDRO POLE		
	•	H	YDRO POLE C/W TRANS.		
	$\stackrel{\text{O}}{\leftarrow}$	Gl	DST TOP STREET LIGHT UY		
			ANITARY MANHOLE FORM MANHOLE		
	······································		ATCHBASIN RE HYDRANT		
			ATE VALVE ANITARY SEWER		
	WLS	S7	TORM MAIN		
/	л — Л — Э —		ATER MAIN AS		
	— TU —		NDERGROUND TELEPHOI ENCE	NE	
	* Co	DE	ECIDUOUS/EVERGREEN		
~		HE HE	EDGE		
	Ø		<u>ROPOSED</u> ANITARY MANHOLE		
	Ŏ	ST	TORM MANHOLE		
		GA	ATE VALVE		
	<u> </u>		RE HYDRANT ANITARY SEWER		
			TORM SEWER ATER MAIN		
	— <b>— ►</b>	Di	TCHLINE LET/OUTLET HEADWALL		
	لر با		ND CAP		
	NИ	W	HEEL CHAIR RAMP		
	₩	🕈 DF	RIVEWAY LETDOWN		
WI EN DISCL TH DIN	THOUT WRI GINEERING AIMER: E CONTRAC IENSIONS /	TTEN PERM LTD. CTOR SHALI	ED, REPRODUCED 11SSION BY LAWSO L CHECK AND VERI 1 LOCATIONS AND I	N FY ALL REPOR	T ALL
ER			PRIOR TO COMME		
		NOT TO BE	SCALED		
3	2022/08/10	RE-ISSUED FO	R DEVELOPMENT PERMI	SPH	SAP
J	2022/00/10			John	JAP
2	2022/04/28	ISSUED FOR	DEVELOPMENT PERMIT	SPH	SAP
2	2022/04/28 2022/04/06		DEVELOPMENT PERMIT	SPH SPH	SAP SAP
		ISSUED FOR I			
1	2022/04/06	ISSUED FOR I	REZONING APPLICATION	SPH	SAP
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION	SPH SPH	SAP SAP
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION	SPH SPH	SAP SAP APP'D
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN	SPH SPH BY	SAP SAP APP'D
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS	SPH SPH BY	SAP SAP APP'D
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN	SPH SPH BY	SAP SAP APP'D
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20	SPH SPH SPH SPH SPH	SAP SAP APP'D
1 0	2022/04/06 2022/03/18 DATE	ISSUED FOR I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN	SPH SPH BY SPH	SAP SAP APP'D
1 0 NO.	2022/04/06 2022/03/18 DATE YEAR/MM/DD		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED	SPH SPH SPH SPH SPH	SAP SAP APP'D
1 0 NO.	2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED	SPH SPH SPH SPH SPH	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED '9 4 6 8	SPH SPH SPH SPH SPH	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED '9 4 6 8	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 DATE YEAR/MM/DD SEAL		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 PATE YEAR/MM/DD SEAL IIT No.: ES: 0 825		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 PATE YEAR/MM/DD SEAL IIT No.: ES: 0 825		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED '9 4 6 8 CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 PATE YEAR/MM/DD SEAL IIT No.: ES: 0 825		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 PATE YEAR/MM/DD SEAL IIT No.: ES: 0 825		REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 NO.	2022/04/06 2022/03/18 PATE YEAR/MM/DD SEAL IIT No.: ES: 0 825	ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 L/ EN 5C LAKES 106 SALM P: (250	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF	SAP SAP APP'D
1 0 NO. PERW SCAL	2022/04/06 2022/03/18 PEAR/MM/DD SEAL IIT No.: ES: 0 825 PO BOX	ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 L/ EN 5C LAKES 106 SALM P: (250 C LAKES 106 SALM P: (250)	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	SPH SPH SPH SPH 22/03 SAF Aeters	SAP SAP APP'D
1 NO. PERM SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 829 PO BOX	ISSUED FOR ISSUED REV 100127 1:200 L/ EN 5C LAKES 106 SALM P: (250 CLAKES 106 SALM P: (250)	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED 29 4 6 8 CHECKED 20 CHECKED	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERW SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 822 PO BOX	ISSUED FOR ISSUED ISSUED REV 100127 1:200 L/ 5C LAKES 106 SALM P: (250 SC LAKES 106 SALM P: (250 CONTIN	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED 0 4 6 8 CHECKED CHE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERW SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 822 PO BOX	ISSUED FOR ISSUED REV 100127 1:200 L/ EN 5C LAKES 106 SALM P: (250 CLAKES 106 SALM P: (250)	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHECKED 0 4 6 8 CHECKED CHE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERW SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 822 PO BOX	ISSUED FOR ISSUED ISSUED REV 100127 1:200 L/ 5C LAKES 106 SALM P: (250 SC LAKES 106 SALM P: (250 CONTIN	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERW SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 822 PO BOX	ISSUED FOR ISSUED ISSUED REV 100127 1:200 L/ 5C LAKES 106 SALM P: (250 SC LAKES 106 SALM P: (250 CONTIN	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL		ISSUED FOR ISSUED ISSUED REV 100127 1:200 L/ 1:200 L/ SC LAKES 106 SALM P: (250 SC LAKES 106 SC	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IIT No.: ES: 0 822 PO BOX	ISSUED FOR ISSUED ISSUED REV 100127 1:200 L/ 1:200 L/ SC LAKES 106 SALM P: (250 SC LAKES 106 SC	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED CHE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL		ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 L/ 1:200 L/ Soc LAKES 106 SALM P: (250 Soc LAKES 106 SALM Soc LAKES 106 S	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 0 4 6 8 CHECKED 0 9 4 6 8 CHECKED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL SE	ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 I CL/ I CON I CO	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 9 4 6 8 (CHECKED 79 4 6 8 (CHECKED 79 4 6 8 (CHECKED CHECKE	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL SE	ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 I CL/ I CON I CO	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 0 4 6 8 CHECKED 0 9 4 6 8 CHECKED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL	2022/04/06 2022/03/18 YEAR/MM/DD SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL IT NO.: ES: 0 SEAL SE	ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 I CL/ I CON I CO	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 9 4 6 8 79 4 6 8 79 4 6 8 79 4 6 8 79 4 6 8 79 4 6 8 79 79 79 79 79 79 79 79 79 79 79 79 79	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERM SCAL		ISSUED FOR ISSUED ISSUED ISSUED REV 100127 1:200 I 1:200 I 1:200 I 1:200 I I I I I I I I I I I I I I I I I I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 0 4 6 8 CHECKED 0 9 4 6 8 CHECKED 0 9 4 6 8 CHECKED 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CO LTD. E 4N2	SAP SAP APP'D
1 NO. PERW SCAL		ISSUED FOR I ISSUED FOR I ISSUED REV 100127 1:200 I CL/ I CON I CO	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 9 4 6 8 CHECKED 9 4 6 8 CHECKED 0 CHECKED C	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Meters CIN	SAP SAP APP'D
1 NO. PERW SCAL		ISSUED FOR ISSUED ISSUED ISSUED REV 100127 1:200 I I I I I I I I I I I I I I I I I I	REZONING APPLICATION ED FOR REVIEW ESCRIPTION /ISIONS DESIGN DRAWN DATE 20 CHECKED 0 4 6 8 79 4 6 8 79 79 79 79 79 79 79 79 79 79 79 79 79	SPH SPH SPH SPH 22/03 SAF 22/03 SAF Aeters CIN E 4N2	SAP SAP APP'D





- 1. ALL WORKS TO CONFORM TO THE CITY OF VICTORIA BYLAWS AND THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND STANDARD DETAIL DRAWINGS. UNLESS OTHERWISE SPECIFIED.
- 2. ALL MATERIALS SHALL CONFORM TO THE CITY OF VICTORIA APPROVED PRODUCTS LIST.
- 3. SCHEDULE 40 AND SCHEDULE 80 PLASTIC PIPE SHALL NOT BE USED FOR ANY SITE APPLICATIONS IN THE SITE WORK. 4. ANY REVISIONS TO THESE DRAWINGS MUST BE APPROVED BY THE DESIGN ENGINEER, WHO SHALL REVIEW ANY CHANGES WITH THE CITY OF
- VICTORIA DIRECTOR OF INFRASTRUCTURE SERVICES.
- 5. CONTRACTOR MUST REQUEST A UTILITY LOCATE THROUGH BC ONE CALL BEFORE EXCAVATING WITH ANY POWER EQUIPMENT.
- 6. WORKSAFE BC IS TO BE NOTIFIED PRIOR TO THE START OF CONSTRUCTION AND THE CONTRACTOR SHALL BE REGISTERED WITH WORKSAFE BC. 7. CONTRACTOR TO EXPOSE ALL EXISTING UTILITIES AT ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION. CONTRACTOR IS TO VERIFY LOCATION AND INVERTS AND REPORT TO ENGINEER ANY CONFLICTS OR DISCREPANCIES.
- 8. UTILITY TRENCH TO CONFORM TO MMCD STANDARD DRAWING G4.

9. EXISTING UNDERGROUND UTILITIES MAY NEED TO BE LOWERED OR RAISED TO SUIT THE FINAL DESIGN GRADES IN ACCORDANCE WITH MINIMUM AND MAXIMUM COVER REQUIREMENTS FOR EACH UTILITY.

- 10. RESIDENTS AND BUSINESS OWNERS AFFECTED BY THE PROPOSED CONSTRUCTION ARE TO BE NOTIFIED BY THE CONTRACTOR IN WRITING 48 HOURS PRIOR TO THE START OF CONSTRUCTION AND PROVIDED WITH THE CONTRACTORS PHONE NUMBER AND SCHEDULE
- 11. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED TO EXISTING STREETS OR SERVICES BY CONSTRUCTION EQUIPMENT AND/OR TRUCKS HAULING MATERIALS TO THE SITE. THIS WILL INCLUDE DAILY CLEANING OR SWEEPING OF ALL EXISTING ROADS OF DIRT AND DEBRIS CAUSED BY CONSTRUCTION ACTIVITY.
- 12. TRAFFIC CONTROL IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH SECTION 52 OF THE INDUSTRIAL HEALTH AND SAFETY REGULATIONS OF THE WORKER'S COMPENSATION BOARD OF B.C. THE DEVELOPER IS TO HAVE, ON SITE, A COPY OF THE CURRENT "B.C. TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS" AS PUBLISHED BY THE MINISTRY OF TRANSPORTATION (MOT). VEHICULAR AND PEDESTRIAN ACCESS IS TO BE MAINTAINED ALONG EXISTING ROADS DURING CONSTRUCTION.
- 13. A TRAFFIC MANAGEMENT PLAN WITH LANE CLOSURES MUST BE APPROVED BY THE CITY OF VICTORIA PRIOR TO CONSTRUCTION. 14. LEGAL SURVEY MONUMENTS ARE TO BE PROTECTED. SHOULD THEY REQUIRE RAISING OR RELOCATING, THE CONTRACTOR MUST NOTIFY THE INSPECTOR AT LEAST 72 HOURS IN ADVANCE OF SCHEDULING WORK AFFECTING THEM.
- 15. PIPE BEDDING TO BE MMCD TYPE 1 GRANULAR PIPE BEDDING COMPACTED TO 95% MODIFIED PROCTOR DENSITY
- 16. PIPE BACKFILL TO BE IMPORTED 75mm MINUS PIT RUN GRAVEL COMPACTED TO 95% MODIFIED PROCTOR DENSITY. WHEN NATIVE SITE GRANULAR BACKFILL IS PROPOSED FOR USE IN TRENCHES THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PROVIDE SAMPLES TO THE GEOTECHNICAL MATERIALS TESTING AGENCY FOR APPROVAL, BEFORE PROCEEDING WITH THE RE-USE OF NATIVE BACKFILL MATERIALS. THE SITE MATERIAL MUST BE APPROVED FOR RE-USE BY THE GEOTECHNICAL ENGINEER. 17. WHEN INFILLING OF EXISTING DITCHES, ETC., IS REQUIRED OR PROPOSED, AND WHERE SERVICES ARE CONSTRUCTED IN FILL SECTIONS, THE FILL
- MATERIAL IS TO BE APPROVED GRANULAR MATERIAL PLACED IN LIFTS NOT EXCEEDING 300MM AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY
- 18. FIGURED DIMENSIONS SHALL GOVERN OVER SCALED DIMENSIONS.
- 19. AFTER CONSTRUCTION, RESTORE WORK AREAS AND EXISTING FEATURES TO THEIR ORIGINAL CONDITION OR BETTER. 20. ADJUST ALL PROPOSED AND EXISTING APPURTENANCES TO MEET FINAL DESIGN GRADES
- 21. DEWATERING FOR UTILITY INSTALLATIONS WILL BE COMPLETED AT THE CONTRACTORS EXPENSE. DEWATERING IN THE TRENCHES SHALL BE COMPLETED AS OUTLINED IN THE GEOTECHNICAL REPORT FOR THE SITE, OR AS REQUIRED.

#### ROADWORKS NOTES

- 1. SEE PLAN AND PROFILE DRAWINGS FOR TYPICAL ROAD CROSS-SECTIONS. WHERE INDICATED, PROVIDE DRIVEWAY CROSSINGS IN CONFORMANCE WITH MMCD STANDARD DRAWING C7.
- 2. CHANGES OF GRADE ARE TO BE FORMED BY SMOOTH VERTICAL CURVES. 3. ALL LOOSE, ORGANIC, OTHERWISE DELETERIOUS MATERIALS OR SOFT SPOT(S) ARE TO BE EXCAVATED AND REMOVED FROM THE ROADWAY AND UTILITY TRENCHES IN THE ROADWAY
- 4. SUB-BASE AND GRANULAR BASE MATERIALS SHALL BE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
- 5. THE ROAD BASE SHALL EXTEND A MINIMUM OF 0.3m BEYOND THE CURB & GUTTER.
- 6. CATCH BASIN RIM ELEVATIONS GIVEN ARE THE ELEVATION OF THE SURFACE INLET.
- 7. EXISTING VALVE BOXES, MANHOLES, ETC. WITHIN THE ROAD R.O.W ARE TO BE ADJUSTED TO SUIT THE PROPOSED FINISHED GRADE 8. THE CONDITIONS FOR PLACING ASPHALT PAVEMENT AND CONCRETE SHALL BE IN ACCORDANCE WITH THE CITY OF VICTORIA STANDARD CONSTRUCTION DOCUMENTS AND MMCD SPECIFICATIONS AND STANDARD DETAIL DRAWINGS APPLICABLE AT THE TIME OF CONSTRUCTION. WEATHER CONDITIONS MUST ALSO BE IN CONFORMANCE WITH MMCD SPECIFICATIONS. SHOULD DEVIANCIES BE ALLOWED FROM THESE SPECIFICATIONS, THE CONTRACTOR IS TO ASSUME ALL RESPONSIBILITY FOR THESE PRODUCTS.
- 9. TIE-INS TO EXISTING PAVEMENT SHALL BE MADE BY CUTTING BACK THE EXISTING PAVEMENT TO SOUND MATERIAL AS NECESSARY TO PRODUCE A NEAT VERTICAL FACE AND PROVIDE A KEY-WAY. PRIOR TO PLACING ASPHALTIC CONCRETE, EXPOSED PAVEMENT FACES AND OTHER ABUTTING STRUCTURES SHALL BE TACK COATED WITH ASPHALT EMULSION.
- 10. ALL EXISTING ASPHALT TO BE REMOVED MUST BE DISPOSED OF AT AN APPROVED SITE.

11. REPAIR ANY PAVEMENT DAMAGE OR DAMAGE TO PRIVATE PROPERTY. PAVEMENT RESTORATION AS PER MMCD STANDARD DRAWING G5. REFER TO ROADWORKS PLAN DRAWINGS FOR SPECIFIED PAVEMENT STRUCTURE.

#### WATERWORKS NOTES

W2.

- 1. WATER MAIN AND SERVICE CONNECTION MATERIALS SHALL CONFORM TO THE CITY OF VICTORIA APPROVED PRODUCTS LIST AND MMCD SECTION 33 11 01. 100 - 300mm DIAMETER WATER MAINS TO BE DUCTILE IRON PRESSURE CLASS 350 TO AWWA C151 OR PVC CLASS 150 TO AWWA C900. 350-900mm DIAMETER WATER MAINS TO BE DUCTILE IRON PRESSURE CLASS 250 TO AWWA C151 OR PVC CLASS 150 TO AWWA C905 EXCEPT AS NOTED ABOVE. ALL FITTINGS AND VALVES TO BE DUCTILE IRON (DI) TYTON JOINT WITH CLOSED LUGS UNLESS OTHERWISE SPECIFIED. ALL CURB STOPS TO BE FITTED WITH MUELLER TELESCOPING SERVICE BOXES OR APPROVED EQUIVALENT.
- 2. THE CONTRACTOR AND CONSULTANT ARE TO COMPLETE ALL TIE-INS AND DISCONNECTS FOR CITY WATER, SEWER AND DRAINAGE SYSTEMS IN THE PRESENCE OF CITY PERSONNEL. THE CONTRACTOR IS TO COORDINATE THIS WITH THE UTILITIES DEPARTMENT AT LEAST TWO (2) FULL WORKING DAYS PRIOR TO SCHEDULING. FOR WATER TIE-INS, PRIOR APPROVAL IS REQUIRED FROM THECITY DIRECTOR OF INFRASTRUCTURE SERVICES T CONFIRM SUCCESSFUL PRESSURE TESTING, CHLORINATION, AND FLUSHING. PRIOR TO SCHEDULING, THE CONTRACTOR MUST OBTAIN A ROAD USAGE PERMIT
- 3. CONTRACTOR TO PROVIDE A MINIMUM 1.8m COVER OVER ALL PROPOSED OFFSITE WATER MAINS.
- 4. MINIMUM GRADE OF WATER MAINS TO BE 0.10%
- 5. ALL DOMESTIC SERVICE CONNECTIONS TO BE A MINIMUM OF 25mm DIAMETER UNLESS OTHERWISE SPECIFIED. SERVICE CONNECTION TO CONFORM TO MMCD STANDARD DRAWING
- 6. DURING CONSTRUCTION AND AT ANY TIME PRIOR TO ACCEPTANCE AND PRESSURIZING OF WATER MAINS BY THE CITY, THE CONTRACTOR, ON
- BEHALF OF THE OWNER, SHALL INSTALL A PLASTIC BAG OVER EACH HYDRANT TO INDICATE THAT HYDRANT IS NOT IN USE. 7. WATER MAINS SHALL BE LAID A MINIMUM OF 3m HORIZONTALLY FROM ANY SANITARY OR STORM SEWER. WHERE THIS HORIZONTAL SEPARATION IS NOT POSSIBLE, AND/OR WHERE WATERMAINS AND SEWERS MUST CROSS OR SHARE THE SAME TRENCH, THE WATERMAIN SHOULD BE AT LEAST 0.45m ABOVE THE SEWER (MEASURED BETWEEN THE BOTTOM OF THE WATERMAIN AND THE TOP OF THE SEWER) AND SUFFICIENTLY TO ONE SIDE OF THE SEWER TO ALLOW FOR SEWER REPAIRS WITHOUT DISTURBING THE WATERMAIN. IF A VARIANCE IS REQUIRED OR PROPOSED, CONTRACTOR TO PROVIDE IN WRITING THE REASONING WHY IT IS NECESSARY (FOR EXAMPLE, BEDROCK, OR EXISTING UTILITIES IN LIMITED SPACE, ETC.). PROVIDE DETAIL OF THE PROPOSED MITIGATION (FOR EXAMPLE, HIGHER PRESSURE CLASS PIPE, JOINT AND/OR STRUCTURAL PROTECTION, CASING, ETC.). IF NEITHER THE HORIZONTAL OR VERTICAL SEPARATION IS POSSIBLE THEN THE SEWERS SHOULD BE OF THE SAME SERVICE CAPABILITY AS THE WATERMAIN
- 8. WHERE A WATER MAIN CROSSES A SANITARY OR STORM SEWER, THE JOINTS OF THE WATER MAIN, OVER A LENGTH EXTENDING 3M EITHER SIDE OF THE SANITARY/STORM SEWER ARE TO BE WRAPPED WITH HEAT SHRINK PLASTIC OR PACKED WITH COMPOUND AND WRAPPED WITH PETROLATUM TAPE IN ACCORDANCE WITH THE LAST VERSION OF THE AWWA STANDARDS C217, AND C214 OR C209. IF REQUIRED, CONTRACTOR TO INSTALL LI-BEND AS PER MMCD STANDARD DRAWING W51
- 9. A MINIMUM OF 1.5m HORIZONTAL CENTRE TO CENTRE AND 150mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND ELECTRICAL CONDUITS, GAS MAINS AND TELEPHONE CONDUITS EXCEPT WHERE NOTED.
- 10. CONTRACTOR SHALL CONDUCT PRESSURE TEST IN ACCORDANCE WITH MMCD AND AWWA SPECIFICATIONS.
- 11. CONTRACTOR SHALL FLUSH AND DISINFECT WATER MAINS IN ACCORDANCE WITH AWWA STANDARDS AND AS APPROVED BY THE CITY OF VICTORIA
- 12. CHLORINE SOLUTIONS SHALL BE NEUTRALIZED IN ACCORDANCE WITH MINISTRY OF THE ENVIRONMENT AND DEPARTMENT OF FISHERIES AND OCEAN PRIOR TO DISCHARGE TO ANY DRAINAGE COURSE.

13. WHERE PRACTICAL, SERVICE LINES AND METER BOXES SHALL BE INSTALLED TO FINISH GRADE, OUTSIDE OF DRIVEWAYS OR PAVED AREAS. SANITARY AND STORM SEWER NOTES

- 1. SANITARY SEWER AND STORM SEWER MATERIALS SHALL CONFORM TO THE CITY OF VICTORIA APPROVED PRODUCTS LIST AND MMCD PLATINUM SECTIONS 33 30 01 AND 33 40 01. SANITARY AND STORM SEWER MAINS UNDER 600mm DIAMETER TO BE MINIMUM PVC SDR35 TO ASTM D2412 AND ASTM D3034 (UNLESS OTHERWISE NOTED). SANITARY AND STORM SEWER MAINS 600mm DIAMETER AND LARGER TO BE PVC SDR35 TO ASTM D2412 AND ASTM D3034 OR NON-REINFORCED CLASS 3 CONCRETE CIRCULAR TO ASTM C14M OR REINFORCED CLASS III CONCRETE CIRCULAR TO ASTM C76M OR AS NOTED ON THE DRAWINGS, PVC PROFILE PIPE TO ASTM F794 AND CSA B182.4 IS ALSO ACCEPTABLE FOR 200mm - 1200mm DIAMETER STORM SEWER. HDPE PROFILE PIPE TO CSA B182.8 IS ALSO ACCEPTABLE FOR 100mm - 900mm DIAMETER STORM SEWER.
- 2. CONTRACTOR TO PROVIDE A MINIMUM 1.2m COVER OVER ALL PROPOSED OFFSITE SANITARY MAINS AND 1.2m COVER OVER ALL PROPOSED OFFSITE STORM MAINS. WHERE MINIMUM COVER CANNOT BE PROVIDED FOR OFFSITE MAINS, SEWERS SHALL BE CONSTRUCTED OF CONCRETE AS NOTED IN THE DRAWINGS.
- 3. CONTRACTOR IS TO EXPOSE AND CONFIRM LOCATIONS AND INVERTS OF ALL EXISTING SANITARY AND STORM SERVICE CONNECTIONS PRIOR TO CONSTRUCTION AND REPORT TO ENGINEER ANY CONFLICTS OR DISCREPANCIES. ALL EXISTING SERVICE CONNECTIONS TO BE REPAIRED IN REQUIRED AND TIED IN TO THE PROPOSED SANITARY OR STORM SEWER.
- 4. ALL SANITARY SEWER SERVICE CONNECTIONS ARE TO BE A MINIMUM 100mm DIAMETER PVC SDR28 TO ASTM D3034 FOR SINGLE-FAMILY RESIDENTIAL AND MINIMUM 150mm DIAMETER PVC SDR28 TO ASTM D3034 FOR MULTI-FAMILY RESIDENTIAL UNLESS OTHERWISE NOTED. COMMERCIAL AND INDUSTRIAL. MINIMUM GRADE FOR SERVICE CONNECTIONS FROM THE MAIN TO THE PROPERTY LINE SHALL BE 2.0% UNLESS OTHERWISE NOTED. REFER TO MMCD DRAWINGS S7.
- 5. ALL EXISTING AND PROPOSED SERVICE CONNECTIONS ARE TO BE PROVIDED WITH AN INSPECTION CHAMBER. SANITARY SERVICE CONNECTIONS TO HAVE A 200mm DIAMETER INSPECTION CHAMBER AS PER MMCD DRAWING S9.
- 6. CONNECTIONS TO THE NEW SANITARY STORM MAINS UNDER 450mm DIAMETER SHALL BE MADE USING STANDARD WYE FITTINGS. CONNECTIONS TO NEW SANITARY AND STORM MAINS 450mm DIAMETER AND LARGER AND TO EXISTING MAINS SHALL BE MADE USING WYE SADDLES OR
- INSERTA-TEES WHERE NOTED. REFER TO MMCD STANDARD DRAWING S1 FOR MANHOLE REQUIREMENTS 7. A MINIMUN OF 3m HORIZONTAL CLEAR SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND ALL SANITARY AND STORM

- SEWERS/SERVICES EXCEPT WHERE NOTED
- C209.
- TO MMCD DRAWINGS S1
- OBTAINED.
- THE COST OF THE CONTRACTOR.
- OTHERWISE NOTED.
- PAVEMENT MARKING AND SIGNAGE NOTES: MARKINGS).

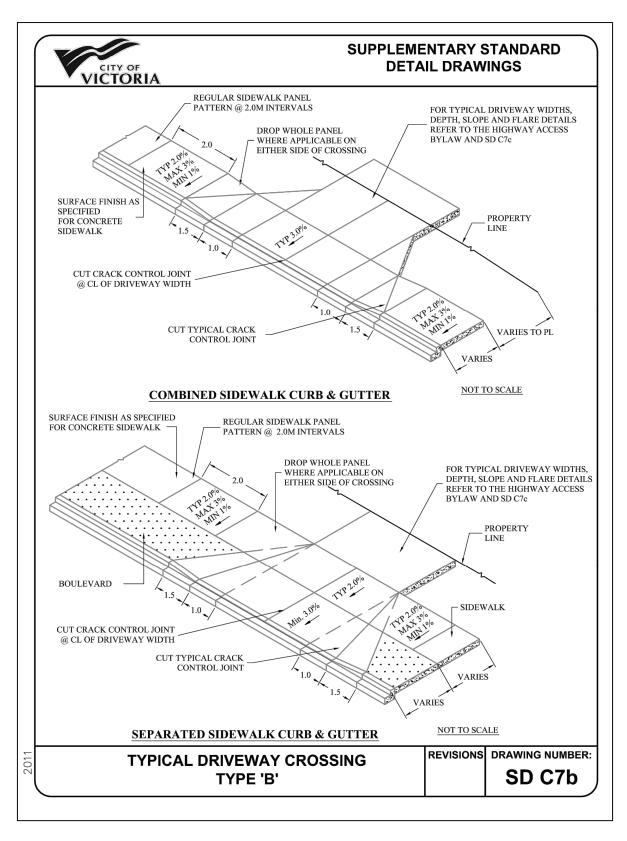
#### EXISTING UTILITIES

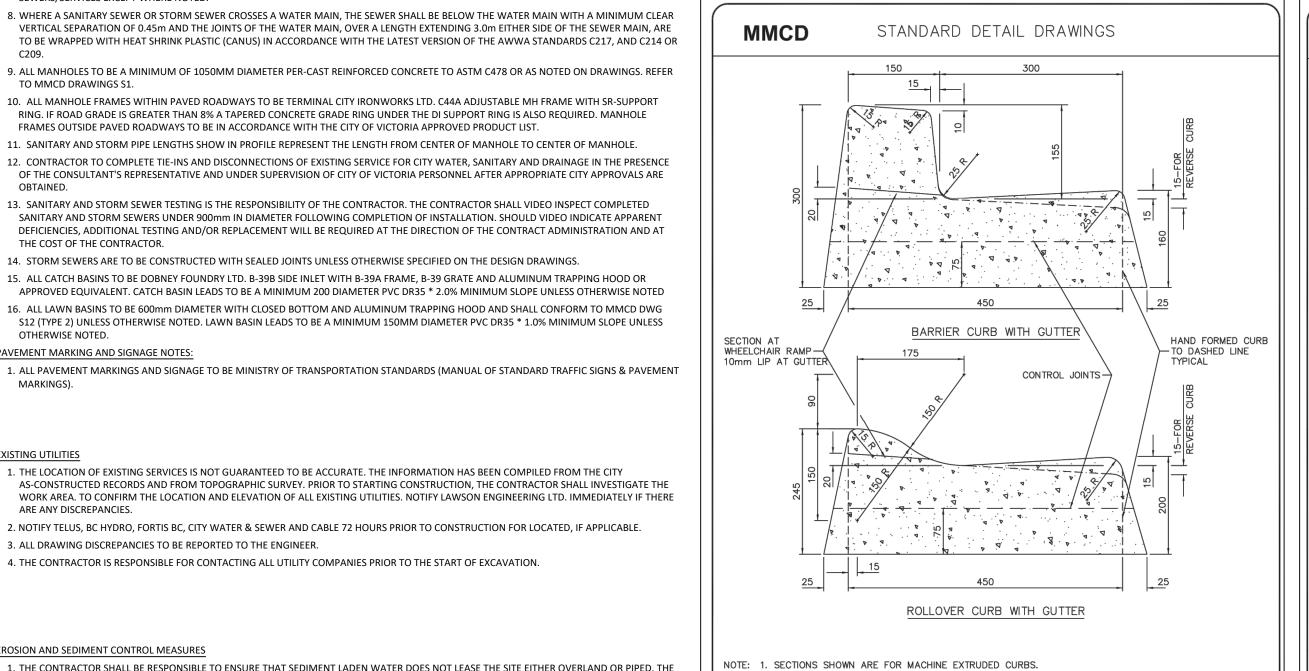
- ARE ANY DISCREPANCIES.
- 3. ALL DRAWING DISCREPANCIES TO BE REPORTED TO THE ENGINEER.

EROSION AND SEDIMENT CONTROL MEASURES

- NEIGHBOURING PROPERTIES
- CONTRACTORS SUBSEQUENT PROGRESS CLAIM.

- TRACKING OF SEDIMENT OFFSITE.





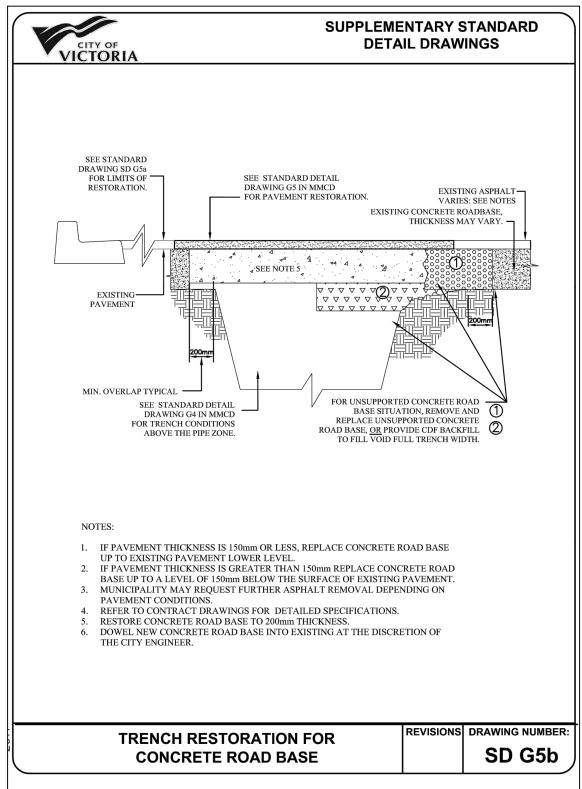
NOT TO SCALE

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEASE THE SITE EITHER OVERLAND OR PIPED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DRAINAGE DURING CONSTRUCTION AND SHALL PREVENT SURFACE RUNOFF FROM FLOWING ONTO 2. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP THE CITY ROADS CLEAN TO THE SATISFACTION OF THE CITY OF VICTORIA. IN THE EVENT THAT

THE CITY SENDS OUT THEIR STREET SWEEPERS, THE COST WILL BE CHARGED BACK TO THE CONTRACTOR AND IT WILL BE DEDUCTED FROM THE 3. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO KEEP DUST TO THE LEVELS ACCEPTABLE TO THE CITY AND TO THE PUBLIC. 4. THE COST OF EROSION AND SEDIMENT CONTROL MEASURES INCLUDING MAINTENANCE, REMOVAL, STREET CLEANING AND DUST CONTROL SHALL

BE INCLUDED IN THE CONTRACTORS PRICE WITH NO ADDITIONAL COST TO THE CONTRACT. THE WORK SHALL BE CONSIDERED INCIDENTAL. 5. UNSURFACED ENTRANCES, ROADS AND PARKING AREA USED BY THE CONSTRUCTION TRAFFIC SHALL BE STABILIZED TO MINIMIZE EROSION AND

6. SURFACE WATER COLLECTED FROM DISTURBED AREAS OF THE SITE SHALL BE ROUTED THROUGH A SEDIMENT POND OR TRAP PRIOR TO RELEASE FROM THE SITE, IF THE PERIMETER PROTECTION DOES NOT PROVIDE ADEQUATE RETENTION. SIGNING ENGINEER TO APPROVE AREA FOR CONTROL.

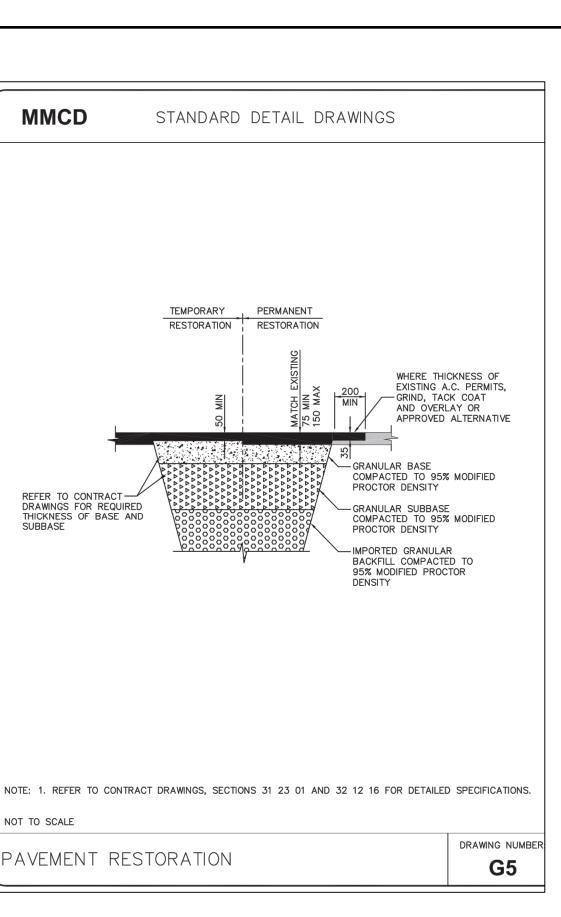


2. REFER TO CONTRACT DRAWINGS, SECTION 03 30 20 FOR DETAILED SPECIFICATIONS.

4. REFER TO DRAWING C5 FOR DIMENSIONS OF WIDE BASE CURB AND GUTTER.

3. REFER TO DRAWING C1, C2 AND C3 FOR INSTALLATION DETAILS.

CONCRETE CURBS - NARROW BASE



MMCD

NOT TO SCALE

DRAWING NUMBER:

**C4** 

			<u>END</u>			
		Ē	XISTING			
• ©			YDRO/TELEPHONE POLE YDRO/TELEPHONE POLE (	/W חאע	Т	
	0	TI	ELEPHONE POLE YDRO POLE		,	
	•	н	YDRO POLE C/W TRANS.			
	$\stackrel{\mathrm{O}}{\leftarrow}$	G	OST TOP STREET LIGHT UY			
	$\bigcirc$		SANITARY MANHOLE STORM MANHOLE			
	······································		ATCHBASIN IRE HYDRANT			
	⊠ —_SAN —		FIRE HYDRANT GATE VALVE — SANITARY SEWER			
/		-	TORM MAIN /ATER MAIN			
	C NL		- WATER MAIN - GAS - UNDERGROUND TELEPHONE			
	× ** 63		UNDERGROUND TELEPHONE			
			ECIDUOUS/EVERGREEN EDGE			
		PI	ROPOSED			
			ANITARY MANHOLE TORM MANHOLE			
		C	ATCHBASIN			
	$\odot$	FI				
		S <sup>-</sup>	ANITARY SEWER TORM SEWER			
	— – <b>)</b> –		ATER MAIN			
	́́Т,		ILET/OUTLET HEADWALL ND CAP			
	NZ	W	HEEL CHAIR RAMP			
	\====	<b>/</b> DI	RIVEWAY LETDOWN			
DISCL TH DIN ER	ENSIONS A	CTOR SHAL	L CHECK AND VERIF Y LOCATIONS AND F S PRIOR TO COMME	REPOR	T ALL	
DRAW	INGS ARE	NOT TO BE	SCALED			
3	2022/08/10	RE-ISSUED FC	R DEVELOPMENT PERMIT	SPH	SAP	
2	2022/04/28	ISSUED FOR	DEVELOPMENT PERMIT	SPH	SAP	
1	2022/04/06	ISSUED FOR	REZONING APPLICATION	SPH	SAP	
0	2022/03/18	ISSU	ED FOR REVIEW	SPH	SAP	
NO.	DATE YEAR/MM/DD	C	DESCRIPTION	BY	APP'D	
		RE	DESIGN			
					ł	
			DEGIGIN	SPF		
			DRAWN	SPF	1	
			DRAWN	SPF	-	
			DRAWN		-	
	SEAL		DRAWN	SPF	8/18	
	SEAL		DRAWN DATE 202 CHECKED	SPF 22/03	8/18	
	IIT No.:	100127	DRAWN DATE 202 CHECKED	SPF 22/03	8/18	
PERM	IIT No.:		DRAWN DATE 202 CHECKED	SPF 22/03	8/18	
	IIT No.:	100127	DRAWN DATE 202 CHECKED	SPF 22/03 SAF	3/18	
	IIT No.:	100127	DRAWN DATE 202 CHECKED	SPF 22/03 SAF	3/18	
	IIT No.: ES:	100127	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF	3/18	
	IIT No.: ES:	100127	DRAWN DATE 202 CHECKED 79 CHECKED GINEERING	SPF 22/03 SAF	3/18	
	IIT No.: ES:	100127	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF	3/18	
	IIT No.: ES:	100127	DRAWN DATE 202 CHECKED 79 CHECKED GINEERING	SPF 22/03 SAF	3/18	
	IIT No.: ES:	100127 L/ EN 5C LAKES 106 SALM P: (250	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF	3/18	
SCAL	IIT No.: ES:	100127 L SC LAKES 106 SALW P: (250 S archif	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF	3/18 N	
SCAL	IIT No.: ES:	100127 L SC LAKES 106 SALW P: (250 S archif	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF	3/18 N	
SCAL	IIT No.: ES: PO BOX	100127 LA EN 5C LAKES 106 SALW P: (250 S C C C C C C C C C C C C C C C C C C	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF D] LTD. = 4N2	3/18	
SCAL	IIT No.: ES: PO BOX	100127	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF D] LTD. = 4N2	3/18	
SCAL	IIT No.: ES: PO BOX	100127	DRAWN DATE 202 CHECKED 79	SPF 22/03 SAF D] LTD. = 4N2	3/18	
SCAL SCAL SL SL	IT No.: ES: PO BOX	100127	DRAWN DATE 202 CHECKED 79 79 79 79 79 79 79 79 79 79 79 79 79	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SCAL SL SL - C VIO		100127	DRAWN DATE 202 CHECKED 79 CHECKED 70 70 CHECKED 70 CHEC	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SCAL SL SL - C VIO		100127	DRAWN DATE 202 CHECKED 79 79 79 79 79 79 79 79 79 79 79 79 79	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SCAL SL SL - C VIO		100127	DRAWN DATE 202 CHECKED 79 CHECKED 70 70 CHECKED 70 CHEC	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SL - C VI		100127	DRAWN DATE 202 CHECKED 79 CHECKED 70 70 CHECKED 70 CHEC	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SCAL SL SL - C VIO		100127	DRAWN DATE 202 CHECKED 79 CHECKED 70 70 CHECKED 70 CHEC	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SL - C VI GI AI		100127	DRAWN DATE 202 CHECKED 79 79 79 79 70 79 70 70 70 70 70 70 70 70 70 70 70 70 70	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SL - C VI GI AI		100127	DRAWN DATE 202 CHECKED 79 79 79 79 79 79 79 79 79 79 79 79 79	SPF 22/03 SAF D 1 1 1 2 2 2 2 2 1 2 1 2 1 2 1 2 1 2 1	3/18	
SCAL SCAL SL SL - C VI GI AI		100127	DRAWN DATE 202 CHECKED 79 CHECKED 70 70 CHECKED 70 CHEC	SPF 22/03 SAF D 1 1 1 2 1 2 2 3 3 5 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	3/18	



1701 – 4555 Kingsway Burnaby, BC V5H 4V8 T: 604 433 1711 F: 604 439 4722 www.bchousing.org

Mayor Helps & Council City of Victoria City Hall 1 Centennial Square Victoria, BC V8W 1P6

September 14, 2022

Dear Mayor & Council,

#### Description of proposal

BC Housing, working with S2 Architecture, has prepared the attached proposal for land use redesignation and development permit for a new housing project to be built at 722 Discovery Street in Victoria, British Columbia. The proposed building is an 8-storey steel-framed, modular, multi-unit residential building with a commercial kitchen, dining area, and support staff areas on the main level. The site will include an outdoor amenity area, bike storage, and landscaping.

Changes to the land use zoning are requested to allow an 8-storey supportive housing residential building to be constructed on the subject parcel located at 722, 726, 732 Discovery Street Victoria, B.C.

Currently the land is zoned as M-1 Limited Light Industrial. A site-specific land use zoning is requested that would use R3-C as a base and allow the following:

	0
Permitted Use:	Multi-residential (rental)
Building height:	37 m (8 stories)
Building footprint:	551 m <sup>2</sup>
Total building (GFA):	4,665 m <sup>2</sup>
Building setbacks:	Front (Discovery Street): +/-3.0m
	Rear (North): +/-3.0m
	Side (East): +/-2.5m
	Side (West): +/-14.5m
Floor Area Ratio (FAR):	3.56

The proposed development will include the following:

Site area:	1,344.83 m <sup>2</sup>
Type of tenure:	Residential supportive housing rental suites
Number of suites:	90
Types of suites:	Studio (76), Accessible Studio (9), Adaptable Studio (5)
Adaptable housing:	9 accessible suites and 5 adaptable suites are proposed

#### Project benefits and amenities

The proposed development, including the Chard development to the south, will revitalize the neighbourhood by creating a variety of housing types and a "15-minute neighbourhood", where all residents live within a short walk of offices, childcare centre, and community-serving retail that includes a grocery store.

- The supportive housing proposed for 722, 726 & 732 Discovery Street would replace the existing shelter spaces in the Capital City Center Hotel.
- Approximately 90 community members currently rely on the Capital City Center Hotel supports and accommodation.
- BC Housing is committed to ensuring that no one is displaced as a result of this redevelopment.
- If approved, the redevelopment would happen in stages, with a replacement supportive housing site being built on the parking lot at 722, 726 & 732 Discovery Street first.
- We know that hotels are not a suitable long-term solution for people experiencing homelessness. Purpose-built supportive housing such as this provide the best outcomes for the most vulnerable members of our communities.
- Supportive housing is an opportunity for people to leave the streets and shelter system for safe and stable housing, towards improved quality of life.
- At least 1,523 individuals were experiencing homelessness in the last Capital region Point-in-Time Homeless Count in March 2020.
- The COVID-19 pandemic highlights the need to get people off the streets and out of shelters and into safe, stable housing.
- Supportive housing is self-contained suites (including private washroom and a kitchenette) with support services provided on-site, to ensure people can achieve and maintain housing stability.
- Supports include resident support workers, life skills training, employment assistance, connection and referral to community services and support groups.
- All residents would sign a program agreement and would pay rent.

#### Neighbourhood

The subject site on Discovery Street is located across the street from a separate project at 710 Caledonia Street and 1961 Douglas Street. Together, these two projects will result in a diverse, multi-purpose development. The proposals include purpose-built and designed supportive housing, market rental units, below-market rental units, office units, childcare, a public plaza, commercial retail, a grocery store, and condominiums.

The proposed residential use of the Discovery site is not supported in the current zoning of M-1 Limited Light Industrial.

#### Design and development permit guidelines

The project team has consulted extensively with the City of Victoria through email correspondence and 3 preapplication meetings. The proposed development plans were reviewed by a City development panel with revisions made to the design to accommodate design guidelines, best practices, and Downtown Core Area Plan requirements.

Following these meetings, several accommodations were made to the proposal that include:

- Enhanced architectural articulation with projections, windows and variety in exterior cladding choices and applications
- An activated street frontage with building articulation and wrap-around canopy

- A playful approach to glazing, articulation, and floor stacking to break vertical lines and create a more complex pattern and rhythm
- Materials that provide visual cues consistent with a multi-tenant residential tower
- Location of bike storage and waste and recycling enclosures so that they are accessible but visually screened
- On-site handling/staging of all waste and recycling
- An accessible vehicle drop-off zone for loading/unloading
- An increased setback on the west property line
- Screening and landscaping around the BC Hydro pad-mounted transformer
- Screening of the private outdoor amenity space
- Architectural treatment of the bicycle enclosure and gates
- Screening along the west property line

#### Transportation

The project will provide 90 affordable residential rental studio units. As these units are purpose-built for supportive housing, they are substantially unique from a vehicle parking perspective as residents are not anticipated to own a vehicle. The proposed development does not include on-site parking therefore, a parking variance of the City of Victoria's bylaw requirements of 28 vehicle parking spaces is requested.

With the building's location near Victoria's downtown core, the proposed site offers a robust transit network and easy access to amenities via walking and cycling. The site will utilize its publicly available curbside site frontage area (estimated spaces for 1 vehicle) for visitor and staff parking. It is recommended that one of these spaces be reserved for a car-share vehicle.

Bicycle parking will meet bylaw requirements with 30 Long-Term and 6 Short-Term bicycle spaces.

One loading space is included in the site plan which is intended for garbage and recycling pick-up activities.

Bunt & Associates were retained by BC Housing to conduct a parking review for the proposed parking variance and propose Transportation Demand Management (TDM) strategies to help reduce the development's demand for vehicle parking. Refer to the Parking Variance report included with this submission.

#### Heritage

Although the subject site does not have heritage status, the building to the west is designated as Heritage. Considerations were made to minimize impact to the neighbouring heritage building such as:

- The proposed main building is located as far as possible from the west property line
- Existing site retaining walls on the west property line are to be preserved
- Additional space was added to the setback between ancillary structures on the subject parcel and the neighbouring site
- The west property line includes screening for aesthetics and privacy

#### Green building features

This project will be constructed to meet BC Energy Step Code Level 3 energy compliance. An energy model report authored by Focal Engineering has been provided as part of this submission.

BC Housing is considering installing solar voltaic rooftop panels to offset the building's power consumption and reduce the project's greenhouse gas footprint.

#### Infrastructure

The existing property is serviced by sanitary, storm and water services. The existing services will be abandoned or removed, and new services installed. We understand that the existing municipal system for water and storm sewer capacity in front of the property is adequate. The existing water main is 150mm and existing storm main is 200mm fronting the site.

The existing sanitary main on Discovery Street is 200mm. A memo identifying the design flow rate has been prepared for use by the City to determine the developments impact to the existing system capacity. In the event that sewage attenuation is required, this will be secured in a legal agreement with the City.

The site frontage will be upgraded to meet the city of Victoria's Downtown Public Realm "New Town District" Specifications Including sidewalk, curb & gutter replacement along the entire frontage, new driveway crossings for the proposed site and neighboring property to the West, and road structure replacement along the site's frontage to centerline on discovery Street. A new midblock crosswalk is proposed at the East side of the frontage complete with overhead signage and downlighting.

Pedestrian access to Central Park and Royal Athletic Park via Caledonia Avenue, Quadra Street and Pembroke Street is an approximately 1km (14 min) walk with sidewalks/crosswalks throughout.

#### Streetscape

In response to comment from the City of Victoria during the application review process, the project will include the following public realm improvements to meet the New Town District Specifications:

- A widened Sidewalk that extends from property Line to the back of curb along the frontage, the sidewalk will include the New Town District sidewalk scoring pattern with trowel joints
- A widened section of sidewalk (bulb) with letdown area and bollards facing the street at the new midblock crosswalk location
- Proposed frontage improvements include street trees, short-term bicycle stalls and street parking.
- The final design will be confirmed with the City of Victoria at the building permit stage.

#### Summary

BC Housing is committed to providing a spectrum of housing options in communities across British Columbia. The existing hotel at 1961 Douglas Street is not a viable long term option for the tenants living there. BC Housing seeks to redevelop these vacant lots on Discovery Street to provide permanent housing with supports, which will better suit the needs of those sheltered at 1961 Douglas Street and also allow redevelopment of the hotel at 1961 Douglas Street to a more comprehensive mixed use property which will benefit the neighbourhood for the years to come.

Sincerely,

John McEown

Associate Vice President, Development Services

**BC Housing** 

ATTACHMENT D

## **Community Benefits** of Supportive Housing

This resource answers questions about Supportive Housing in your neighbourhood





#### What is supportive housing?

Provincially-funded supportive housing is for people experiencing homelessness. Supportive housing provides a home with access to on-site supports to ensure people can achieve and maintain housing stability. Residents have access to their own self-contained studio apartment or, in some cases, a secure unit with shared bathroom and amenity spaces. All residents sign either a program or tenancy agreement and participate in programming based on an individualized case plan.

All residents in supportive housing have made a choice to live there and are able to access the services provided by non-profit housing operators, such as life-skills training, and connections to primary health care, mental health and/or substance use services.





## Will supportive housing affect property values in my neighbourhood?

Studies show that property values immediately surrounding supportive housing sites typically keep pace with the trends of the surrounding municipality.



Property values immediately surrounding supportive housing sites **kept pace or surpassed** municipal trends 7,500

Supportive housing units **did not impact property values** between 1974-2005 in New York City

#### Facts and Statistics



- Research completed in 2019 of 13 B.C. supportive housing sites showed that property values immediately surrounding 10 sites either kept pace or surpassed surrounding municipal trends. Property values for the other three sites were not notably different compared to municipal trends.
- A study in New York City of 7,500 supportive housing units from 1974 to 2005 found no evidence of a negative impact on property values close to supportive housing.

#### Sources:

- Insight Specialty Consulting. 2019. Exploring Impacts of Non-Market Housing on Surrounding Property Values. BC Housing
- Furman Center for Real Estate & Urban Policy. 2008. The Impact of Supportive Housing on Surrounding Neighborhoods: Evidence from New York City. New York University. http://furmancenter.org/files/FurmanCenterPolicyBriefonSupportiveHousing\_LowRes.pdf



#### Is supportive housing costly for tax-payers?



Studies show the cost of providing supportive housing is less than the cost of providing the health and public safety services needed to address homelessness.



On average, a person **experiencing homelessness** with addictions and/or mental illness used

555,000 per year in health care and/or corrections services



On average, a person **in supportive housing** with addictions and/or mental illness used

7,000 per year in health care and/or corrections services

### S = S S S S / S

**Every dollar invested** in supportive housing **creates \$4-5** in social and/or economic value

Supportive housing residents were 64% less likely than shelter clients to use ambulance services





Average hospital stay for supportive housing residents was 50% less than shelter clients

#### Facts and Statistics

- A 2008 B.C. study found that on average a person experiencing homelessness with addictions and/or mental illness used \$55,000 per year in health care and/or corrections services compared to \$37,000 for a person in supportive housing.
  - 2018 B.C. studies showed that every dollar invested in supportive housing creates four to five dollars in social and/or economic value:
  - Government realizes about half of the savings from decreased use of services
  - Neighbourhoods benefit from improved well-being and increased local spending.
- A 2019 B.C. study linking data for more than 450 individuals in BC Housing-funded supportive housing and emergency shelters found:
  - Supportive housing residents were 64% less likely than emergency shelter clients to use ambulance services
  - The average hospital stay for supportive housing residents was 50% less than for emergency shelter clients.

#### Sources:

- Patterson, Michelle, Julian Somers, Karen McIntosh, Alan Shiell, Charles James Frankish. 2008. *Housing and Support for Adults with Severe Addictions and/or Mental Illness in British Columbia*. Centre For Applied Research in Mental Health and Addiction, Simon Fraser University https://www.sfu.ca/carmha/publications/housing-and-support-for-adults-with-severe.html
- Constellation Consulting Group. 2018. SROI Analysis: The Social and Economic Value of Dedicated-Site Supportive Housing in B.C. BC Housing. https://www.bchousing.org/research-centre/library/tools-developing-social-housing
- Malatest & Associates Ltd. 2019. Supportive Housing Outcome Evaluation. BC Housing (Underway).



### Will supportive housing change my neighbourhood?



Many supportive housing residents have an existing connection with the neighbourhood and report experiencing positive interactions with neighbours after they moved in.



Facts
and
Statistics

- 77% of survey respondents across seven<sup>1</sup> modular supportive housing sites reported having a prior connection to the neighbourhood before moving into their modular housing unit. These connections include living in the neighbourhood immediately before moving into their unit, having friends or relatives in the neighbourhood, and using services located in the neighbourhood.
- → 82% of survey respondents across seven modular supportive housing sites reported experiencing positive interactions with neighbours in the surrounding community since they moved in.
  - 73% of survey respondents across seven modular supportive housing sites reported having friends or relatives in the neighbourhood who they can talk to.

<sup>1</sup> Further reports are being completed which may cause results to change.

#### Sources:

BC Housing. 2019. Modular Supportive Housing Resident Outcomes Study: Results for First Seven Modular Supportive Housing Developments.
 https://www.bchousing.org/research-centre/library/transition-from-homelessness/modular-supportive-housing-resident-outcomes?sortType=sortByDate

#### **Community Benefits** of Supportive Housing





## Does supportive housing work to reduce homelessness in my neighbourhood and community?

Supportive housing residents are no longer homeless after they are housed. Once in a supportive housing unit, individuals previously experiencing homelessness report improvements in access to employment, income, education, addiction issues, mental health and life-skills.



#### <sup>1</sup> Further reports are being completed which may cause results to change.

#### Sources:

• BC Housing. 2019. Modular Supportive Housing Resident Outcomes Study: Results for First Seven Modular Supportive Housing Developments. https://www.bchousing.org/research-centre/library/transition-from-homelessness/modular-supportive-housing-resident-outcomes?sortType=sortByDate

5

#### **Community Benefits** of Supportive Housing





## Will supportive housing have an impact on nearby schools in my neighbourhood?

Many supportive housing sites for people experiencing homelessness across the province have been operating in their communities and near schools for 10+ years with no issues and with support from the community.





provincially-funded sites operate **within 500 metres** of a school



of supportive housing sites in B.C. within 500 metres of a school **have been operating for 10+ years** 

## Facts and Statistics

- → The oldest supportive housing site in B.C. has been operating for 47 years.
- There are over 210 provincially-funded supportive housing sites across the province that are within 500 metres of a school.

52%

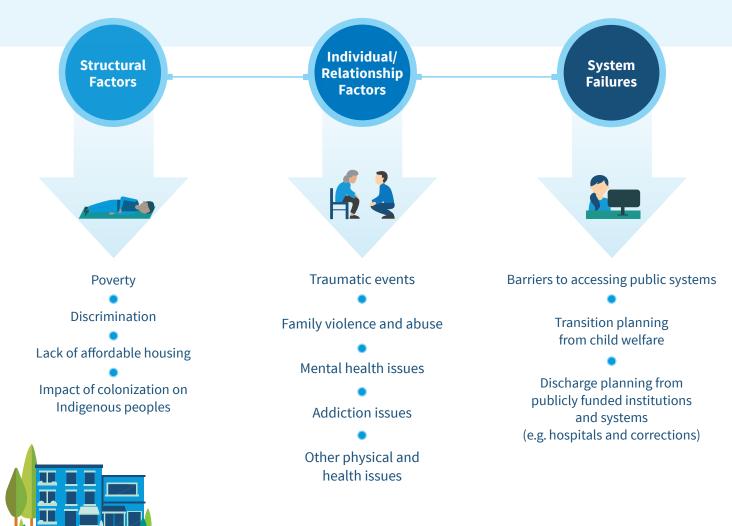
➡ 52% of provincially-funded supportive housing sites in B.C. within 500 metres of schools have been operating for 10+ years.

Sources: • BC Housing. 2019. Central Property System.



### **Understanding** Pathways to Homelessness

The information below provides a brief overview of pathways to homelessness. Often it is a combination of factors.



#### Sources:

 Gaetz, Stephen, Jesse Donaldson, Tim Richter and Tanya Gulliver. The State of Homelessness In Canada 2013. A Homeless Hub Research Paper. https://www.homelesshub.ca/sites/default/files/SOHC2103.pdf

#### **Works Cited**

For additional information, methodologies and limitations please see the studies cited.

BC Housing. 2019. Central Property System.

BC Housing. 2019. Modular Supportive Housing Resident Outcomes Study: Results for First Seven Modular Supportive Housing Developments. https://www.bchousing.org/research-centre/library/transition-from-homelessness/ modular-supportive-housing-resident-outcomes?sortType=sortByDate

Constellation Consulting Group. 2018. SROI Analysis: The Social and Economic Value of Dedicated-Site Supportive Housing in B.C. BC Housing. https://www.bchousing.org/research-centre/library/tools-developing-social-housing

Furman Center for Real Estate & Urban Policy. 2008. *The Impact of Supportive Housing on Surrounding Neighborhoods: Evidence from New York City*. New York University. http://furmancenter.org/files/FurmanCenterPolicyBriefonSupportiveHousing\_LowRes.pdf Gaetz, Stephen, Jesse Donaldson, Tim Richter and Tanya Gulliver. The State of Homelessness In Canada 2013. A Homeless Hub Research Paper. https://www.homelesshub.ca/sites/default/files/SOHC2103.pdf

Insight Specialty Consulting. 2019. *Exploring Impacts of Non-Market Housing on Surrounding Property Values*. BC Housing

Malatest & Associates Ltd. 2019. *Supportive Housing Outcome Evaluation*. BC Housing (Underway).

Patterson, Michelle, Julian Somers, Karen McIntosh, Alan Shiell, Charles James Frankish. 2008. *Housing and Support for Adults with Severe Addictions and/or Mental Illness in British Columbia*. Centre For Applied Research in Mental Health and Addiction, Simon Fraser University

https://www.sfu.ca/carmha/publications/housing-and-support-for-adults-with-severe.html

#### ATTACHMENT E



### 722, 726, 732 Discovery Street Parking Variance

Final Report V05

Prepared for BC Housing

Date August 11, 2022

Project No.

04-22-0077

bunt 🗞 associates

August 11, 2022 04-22-0077

Sean Rorison, Senior Development Manager Housing Hub BC Housing Management Commission 201-3440 Douglas St. Victoria, BC V8Z 3L5

Dear Sean:

#### Re: 722, 726, 732 Discovery Street, Parking Variance Final Report V05

Bunt & Associates Engineering Ltd. (Bunt) has completed our parking variance study for the proposed supportive residential development at 722, 726, 732 Discovery Street, Victoria, BC. Our Final Report is provided herewith, it addresses vehicle parking as well as transportation demand management strategies that can help support the proposed vehicle and bicycle parking supplies.

We trust that our input with this report will be of assistance. Please do not hesitate to contact us should you have any questions.

Best regards, Bunt & Associates

Jason Potter, M.Sc. PTP Senior Transportation Planner / Associate

#### CORPORATE AUTHORIZATION

Prepared By:

Jason Potter, M.Sc. PTP Professional Transportation Planner / Associate

Colleen Qiu, EIT Transportation Analyst Bunt & Associates Engineering Ltd. Suite 530, 645 Fort Street Victoria, BC V8W 1G2 Canada

Telephone: +1 250 592 6122

Date:August 11, 2022Project No.04-22-0077Status:Final V05

This document was prepared by Bunt & Associates for the benefit of the Client to whom it is addressed. The copyright and ownership of the report rests with Bunt & Associates. The information and data in the report reflects Bunt & Associates' best professional judgment in light of the knowledge and information available to Bunt & Associates at the time of preparation. Except as required by law, this report and the information and data contained are to be treated as confidential and may be used and relied upon only by the client, its officers and employees. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

#### TABLE OF CONTENTS

1.	INTR	ODUC	ΓΙΟΝ	1
	1.1	Study P	urpose & Objectives	. 1
	1.2	Propose	d Development	. 3
2.	EXIS	ring c	ONDITIONS	6
	2.1	Land Us	e	. 6
	2.2	Existing	Transportation Network	
		2.2.1	Road Network	
		2.2.2	Transit Network	
		2.2.3	Cycling & Pedestrian Networks	
		2.2.4	Car-Share	
3.	SITE	PLAN I	DESIGN REVIEW 1	2
	3.1	Site Acc	ess 1	12
	3.2		ive Housing Definition	
	3.3		Supply1	
		3.3.1	Vehicle Parking Bylaw Requirements	
		3.3.2	Vehicle Parking Demand Analysis	
		3.3.3 3.3.4	Vehicle Parking Options	
4.	SERV	ICE VE	HICLE OPERATIONS1	6
5.	TDM	& ACT	IVE MODES1	8
	5.1		ortation Demand Management 1	
	5.2		tiatives for Subject Development	
		5.2.1	Car Share	
		5.2.2	Transit Initiatives	
		5.2.3 5.2.4	Pedestrian Amenities	
		5.2.5	On-Street Parking Management	
		5.2.6	Bicycle Parking	
6.	SUM		& RECOMMENDATIONS	
	6.1		γ	
	6.2		nendations	

#### EXHIBITS

2
5
9
10
11
15
17

#### TABLES

Table 2.1: Existing Transit Service Frequency at Bus Stops Near Site	7
Table 3.1: Vehicle Parking Supply Requirement & Provision	13
Table 3.2: 700 Block Discovery Street, On-Street Parking Demand	14

i

# 1. INTRODUCTION

### 1.1 Study Purpose & Objectives

BC Housing is proposing the development of an 8-storey supportive residential rental building at 722, 726, and 732 Discovery Street.

The site is currently zoned as M-1 (Light Industrial District). BC Housing proposes to change the site's zoning to a site-specific zone (Residential Rental Tenure) reflective of its unique land use.

The project will feature 90 affordable supportive residential rental units. All units will be studio units.

The development does not offer on-site parking, and therefore under current zoning, would require a parking variance of 28 vehicle parking spaces from City of Victoria's bylaw requirements.

The development offers 30 Long Term bicycle spaces which would represent a variance from current zone Bylaw requirements.

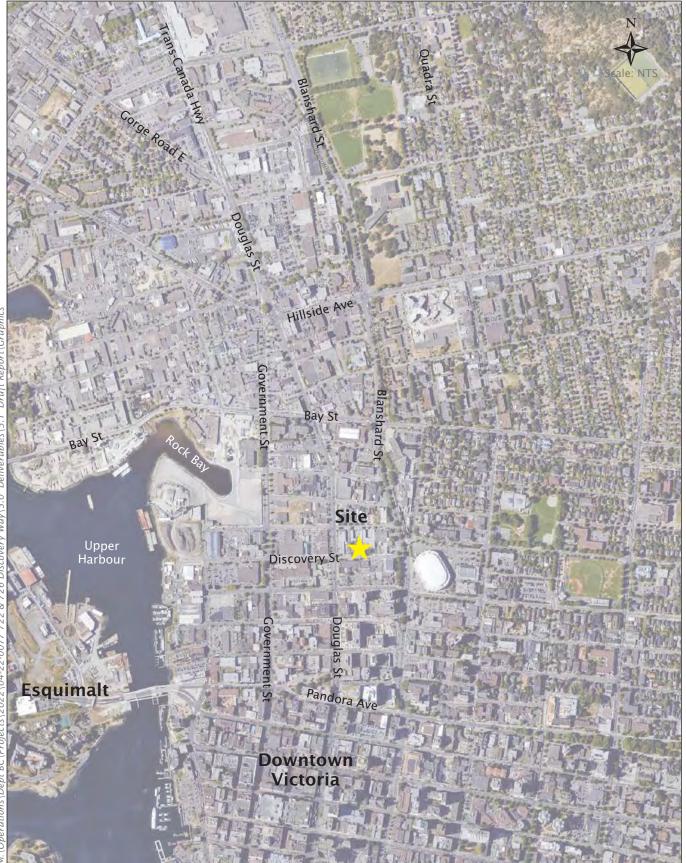
Bunt & Associates were retained by BC Housing to conduct a parking review for the proposed parking variance and propose Transportation Demand Management (TDM) strategies to help reduce the development's demand for vehicle parking.

This parking variance study will accompany BC Housing's rezoning application.

This proposed building is the first building of a larger development plan that is also described herein.

The location of the proposed development site is illustrated in Exhibit 1.1.

1



# Exhibit 1.1 Site Location



722 & 726 Discovery Street 77 March 2022 04-22-0077

### 1.2 Proposed Development

The proposed development is comprised of 90 studio apartment units. The building will also have a manager's office, kitchen dining room, a small medical office, staff room and staff laundry room

All residential units will be supportive rental units. As these units are purpose-built for supportive housing, they are substantially unique from a vehicle parking perspective. Residents are not anticipated to own a vehicle.

With the building's location near Victoria's downtown core, it offers a robust transit network and easy access to amenities via walking and cycling.

The development proposal does not include on-site vehicle parking for residents or visitors.

One loading space is included in the site plan which is intended for garbage and recycling pick-up activities.

The site has publicly available curbside parking along its frontage for approximately 1 vehicle as this area will be impacted by the introduction of a mid-block pedestrian crossing proposed to be located near the site's east edge. The development proposes to provide a Level 2 electric charger along the site's Discovery Street frontage which would be publicly available.

Bicycle parking will provide 30 Long-Term and six Short-Term bicycle spaces.

The proposed 722, 726 and 732 Discovery Street site plan (ground level) is shown in Exhibit 1.2.

The proposed development at 722, 726 and 732 Discovery Street is part of a larger development plan that also includes the following properties:

- 1961 Douglas Street (existing hotel); and
- 710 Caledonia Street (existing White Spot restaurant).

These sites are located directly across Discovery Street from the subject site. They are part of a separate approval process and therefore are not subject to this analysis, however the neighbouring development may accommodate vehicle parking options for 722, 726 and 732 Discovery Street visitors.

Together these sites will result in a diverse, multi-purpose development that includes purpose build and designed supportive housing, market rental units, below-market rental units, office units, childcare, a public plaza, commercial retail, a grocery store, and condominiums.

The following inserts' from BC Housing website describes the development concept and sequencing.

<sup>&</sup>lt;sup>1</sup> <u>https://letstalkhousingbc.ca/victoria-1961-douglas</u>

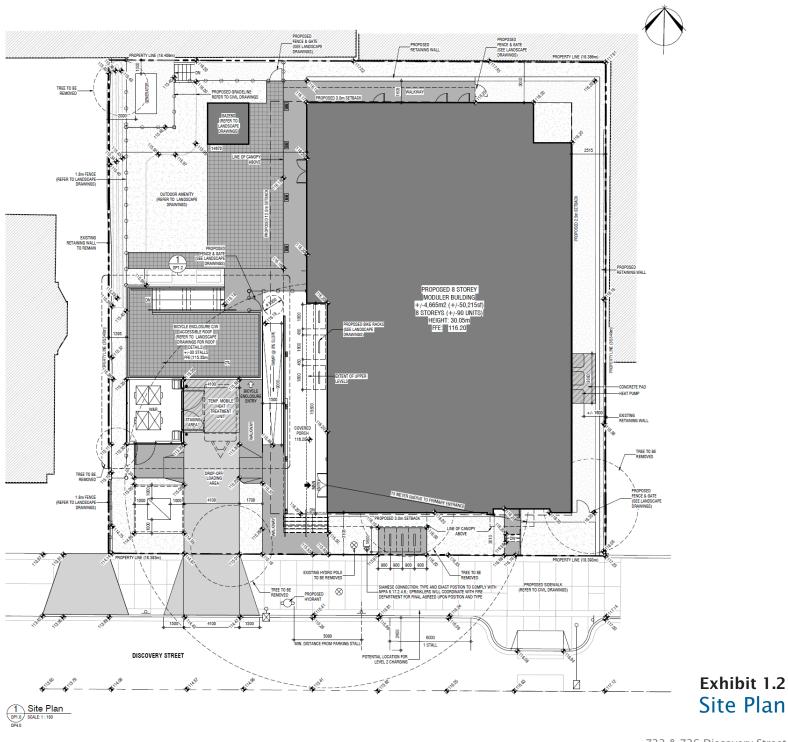
If successful, the proposal would happen in stages:

- 1. We would construct purpose-built supportive housing on the empty parking lot across the street (722, 726 & 732 Discovery Street).
- 2. Residents of the Capital City Center Hotel would have the opportunity to move to that replacement supportive housing.
- 3. Once the Capital City Center Hotel is empty, we would demolish it and the other buildings on the Douglas St lot (including the old White Spot).
- 4. Together, Chard and BC Housing would build affordable housing, offices, stores, a childcare centre and market housing on that land.



The image shows the two sites. The Capital City Center Hotel sits in the top left corner of the bigger box. The smaller box is where the replacement supportive housing would go.

We believe this proposed redevelopment would revitalise the neighbourhood by creating a variety of housing types and a "15-minute neighbourhood", where all residents live within a short walk of offices, childcare centre, and community-serving retail that includes a grocery store.





# 2. EXISTING CONDITIONS

### 2.1 Land Use

722, 726, 732 Discovery Street is currently used as a ground-level parking lot for the adjacent hotel (City Centre Hotel at 1961 Douglas Street). As described in Section 1, this hotel will be subsequently redeveloped and at that time will provide parking suitable for that site as well as opportunities for vehicle spaces for staff of 722, 726, 732 Discovery Street.

Land use adjacent to the site is primarily composed of low-rise industrial buildings, with some mid- to high-rise residential buildings to the south of the site.

The site is located approximately 400m north of Victoria's downtown area, in the Rock Bay neighbourhood. It is within Victoria's Core area as defined in Bylaw Schedule C

### 2.2 Existing Transportation Network

#### 2.2.1 Road Network

Douglas Street to the west of the site is a major arterial two-way roadway. It is a continuum of the Trans-Canada Highway with three travel lanes in each direction including a northbound bus lane. Blanshard Street to the east of the site is also a major arterial two-way roadway with three travel lanes in each direction. Discovery Street to the south of the site is an east/west route that operates as a local road. It provides free curbside parking (2-hour Monday to Saturday 8AM to 6PM) on both road edges.

#### 2.2.2 Transit Network

Situated next to one of the major transit corridors in Victoria, the site is well served by public transit, with 14 transit routes accessible within 800 metres of the site (approximately a ten-minute walk). These routes and local area bus stops are presented in **Exhibit 2.1**. **Table 2.1** shows the frequencies of the transit routes near the site.

	ROUTE		APPROXIMA	TE HEADWA	Y (MIN.)	
#	BUS ROUTE NAME	AM	MID-DAY	PM	EVENING	WEEKEND
4	UVic / Downtown	20	13	10	20	20
6	Royal Oak Exchange / Downtown	10	10	6	20	20
9	Royal Oak / UVic	50	60	45	-	-
10	James Bay / Royal Jubilee	30	33	25	58	30-60
11	Tillicum Centre / UVic	15	17	15	20	15-30
21	Interurban / Downtown	15	20	15	30	30-60
22	Vic General / Hillside Centre	30	25	30	30	30
30/31	Royal Oak Exchange / Downtown	10	10	10	17	13
32	Cordova Bay / Royal Oak Exchange	-	-	1 bus per day	-	60
47	Goldstream Meadows / Downtown	30	-	-	-	-
48	Happy Valley / Downtown	30	-	-	-	-
50	Langford / Downtown	12	12	9	16	Similar to weekdays
70/71/72	Swartz Bay / Downtown	30	30	30	90	60
75	Saanichton / Royal Oak / Downtown	30	-	16	-	60

Table 2.1: Existing Transit Service Frequency at Bus Stops Near Site

As shown in **Table 2.1**, various bus routes operate every 15 minutes or better throughout the day and into the evening ("frequent routes" are typically defined as routes with 15 minute or lower headways). Fifteenminute service is considered frequent enough that transit riders do not need to check a schedule - they can simply walk to a bus stop, knowing a bus will arrive soon. These frequencies enable people to make spontaneous trips on transit and easily travel longer distances without needing to own a car.

With 3 frequent and 11 additional routes nearby, and two bus stops within 100m of the site, public transit is a convenient option for most trips to and from the site.

#### 2.2.3 Cycling & Pedestrian Networks

The site is well connected to both walking and cycling networks. The site is close to several north-south bicycle routes with painted bike lanes, including Douglas Street, Blanshard Street, and Government Street. Most of Victoria's downtown area is within a range widely considered to be walkable (800 m or approximate15-minute walk).

All streets surrounding the development site have sidewalks as well as controlled pedestrian crossings at major intersections.

The City of Victoria is rapidly upgrading its network of All Ages and Abilities (AAA) cycling infrastructure. New AAA cycling routes will be created on Kings Road to the north of the site, creating a more complete east-west connection with the future Haultain Street bike lanes. These cycling upgrades are currently in progress. The existing and future cycling network surrounding the site is shown in **Exhibit 2.2**. People are often interested in cycling but concerned for their safety when riding adjacent to heavy traffic, so it is anticipated that these protected AAA cycling facilities will increase the rates of cycling to and from the development. The proposed development at 722, 726, 732 Discovery Street is well-positioned to support the anticipated cycling demand.

The location is within a walking distance of most everyday amenities and services, and all daily errands can be accomplished either on foot or on a bike. Walk Score is an on-line tool that assesses the walkability and bikeability of a location based on distances to a wide variety of amenities and services. The site scores an 89 for walkability which it defines as "Very Walkable".

The location receives a Bike Score of 92 out of 100, placing it in Walk Score's "biker's paradise" category. This already high score is expected to improve with the cycling upgrades performed over the next few years.

#### 2.2.4 Car-Share

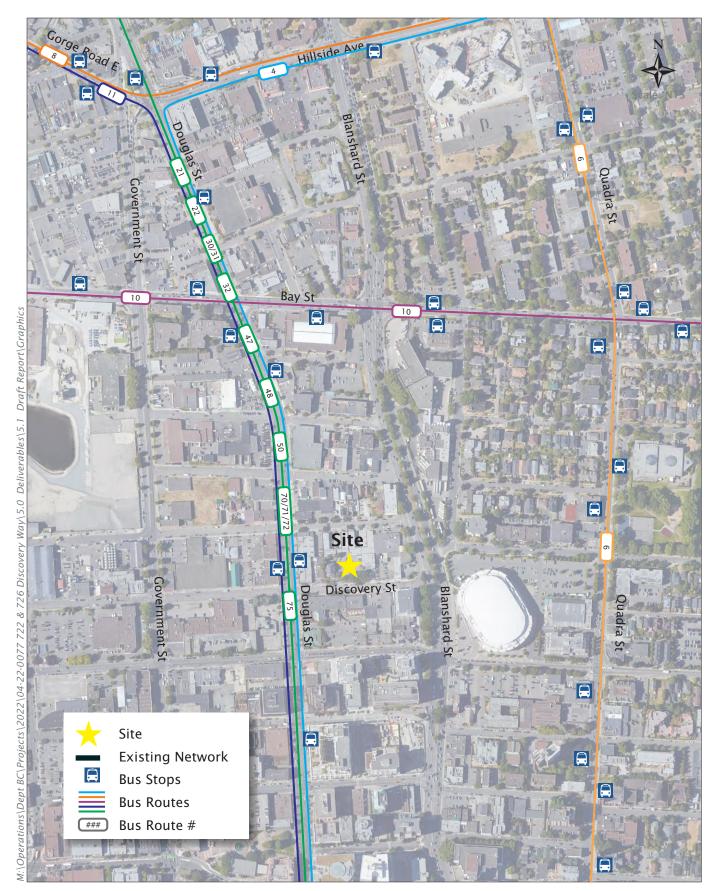
The site has 17 Modo carshare vehicles located within 1 km of the site, the closest of which is located approximately 200 m away on Pembroke Street near the Save-On Foods Memorial Centre. Approximately 20 other Modo vehicles are located in downtown Victoria, which is easily accessible by bike or transit.

Modo is a two-way carsharing service; registered members can pick up the vehicle from a parking spot and must return it to the same spot when they are done. Vehicles range from compact cars and sedans to SUVs and minivans, all of which are present within 1 km of the site. **Exhibit 2.3** shows the locations of nearby Modo carsharing vehicles.

Evo car share launched in Victoria in the summer of 2021 with 80 vehicles. Evo vehicles can be used and dropped off anywhere within the designated City of Victoria area.

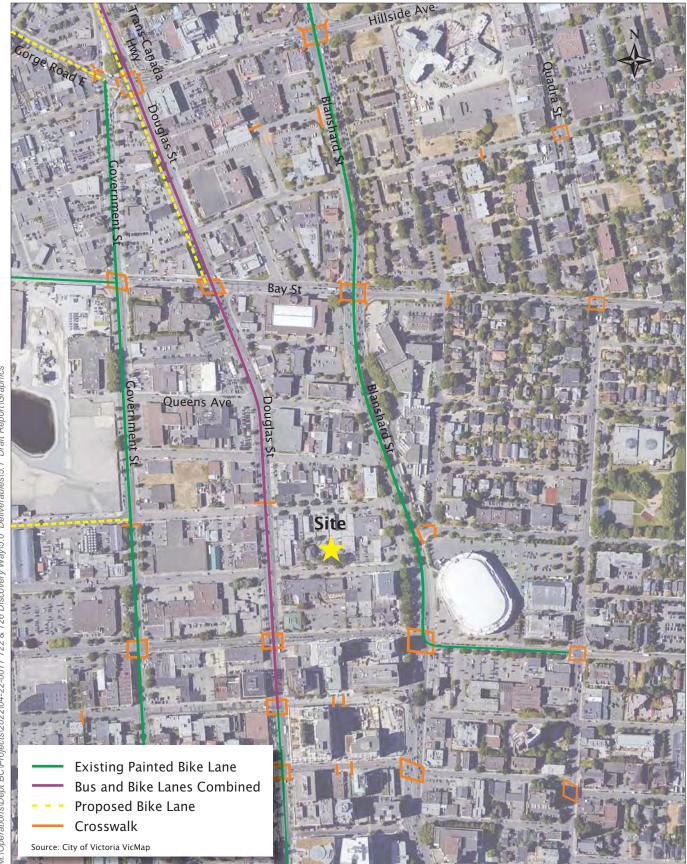
Another potential carsharing option for residents of the proposed development is Turo. Turo allows individuals to rent out their private vehicles when not in use. As of March 2022, two vehicle is listed on Turo within walking distance of 722, 726, 732 Discovery Street, and approximately 22 vehicles are listed in the greater Victoria area.

Other new car-sharing opportunities are anticipated in the years ahead as these types of businesses become more viable with app based and autonomous vehicle technologies.



# Exhibit 2.1 Transit Routes & Stops

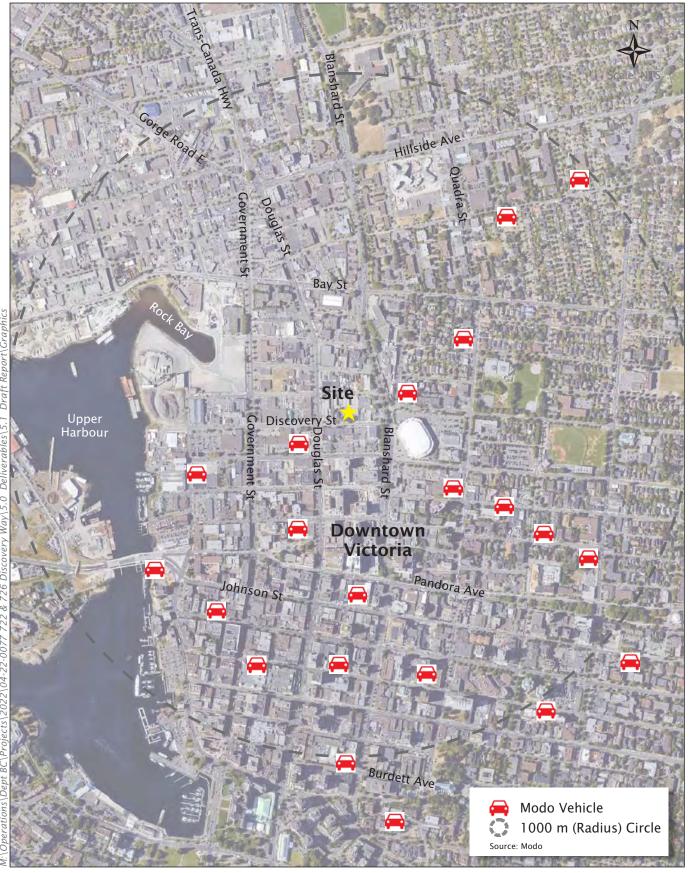




# Exhibit 2.2 Cycling and Pedestrian Network



722 & 726 Discovery Street 04-22-0077 March 2022



# Exhibit 2.3 **Car-share Vehicles**



722 & 726 Discovery St March 2022 04-22-0077

# 3. SITE PLAN DESIGN REVIEW

# 3.1 Site Access

The proposed development will have one vehicle access point from Discovery Street which will service one loading space. The loading space is anticipated to be used by delivery vehicles, maintenance vehicles, accessibility vehicles as well as garbage and recycling vehicles. Pedestrian access to the site's main entry will be from Discovery Street.

# 3.2 Supportive Housing Definition

According to BC Housing, supportive housing is "subsidized housing with on-site supports for single adults, seniors and people with disabilities at risk of experiencing homelessness". Supportive housing provides a home with access to on-site supports to ensure people can achieve and maintain housing stability.

According to the 2020 Greater Victoria Point-in-Time Homeless Count and Housing Needs Survey<sup>2</sup>, the main sources of income of the homeless population in Victoria remain welfare/income assistance and disability benefits. 26.3 % of the survey participants identified not having enough income for housing as their reason for homelessness.

# 3.3 Parking Supply

### 3.3.1 Vehicle Parking Bylaw Requirements

As per City of Victoria zoning requirements (Schedule C, Zoning Bylaw) the site is in Victoria's Core area.

City of Victoria Zoning Bylaw Schedule C stipulates a minimum number of vehicle spaces for Affordable housing at a rate of 0.2 spaces per unit when the units are less than 45m<sup>2</sup>. This is regardless of the development's location in Victoria.

In addition, the building is required to provide vehicle parking for the building's approximate 86 m<sup>2</sup> of supporting amenities which imply employees, these areas are listed below:

- Tenant Support 15m<sup>2</sup>
- Reception 13m<sup>2</sup>
- Shared Office 18m<sup>2</sup>
- Pantry (includes office area) 23m<sup>2</sup>
- Medical Office 17m<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> https://www.crd.bc.ca/docs/default-source/housing-pdf/housing-planning-and-programs/crd-pit-count-2020-community-report-2020-07-31.pdf

The Transitional Housing and Emergency Shelters land use applies to these employee generating land uses which has a rate of 1 parking space per 80 m<sup>2</sup>. Bylaw requirements are summarized in **Table 3.1**.

LAND USE	DENSITY	BYLAW RATE	BYLAW SUPPLY REQUIREMENT	PROVIDED	DIFFERENCE
Affordable Dwelling Units- Residents	90 units	0.2 spaces per unit	18	0	-18
Affordable Dwelling Units - Visitors	90 units	0.1 spaces per unit	9		-9
Employee Areas	86 m²	1 space per 80m²	1		-1
			28	0	-28

Table 3.1: Vehicle Parking Supply Requirement & Provision

As shown in **Table 3.1**, the proposed total parking supply of 0 spaces is 28 spaces below Bylaw requirements.

#### 3.3.2 Vehicle Parking Demand Analysis

The supportive housing demographic typically have low vehicle ownership rates. Data from Pacifica Housing, Victoria Native Friendship Centre and Victoria Cool Aid Society at a total of ten greater Victoria buildings (all outside of Victoria's Core area) had an average vehicle ownership rate of 0.05 vehicles per unit. All ten locations are outside of Victoria's Core area, the subject site being within the Core area may result in less reliance on vehicles than the proxy sites. This vehicle ownership rate would equate to a demand of approximately 5 spaces for residents. It is however notes that this resident vehicle ownership rates is from buildings with little to no Transportation Demand Management (TDM) initiatives to help reduce automobile dependence. Importantly, it is also noted that the operator of this site has confirmed that they can set criteria for the tenants and will require tenants to not own a vehicle as the building will not have spaces available. If prospective tenants do own a vehicle, they will have the option to reside in other supportive housing buildings in the area. Therefore, with this management practice the site anticipates zero resident vehicle parking demand.

The remainder of the site generated parking demand is anticipated to be generated by visitors and staff. Visitor parking demand at the same 10 proxy sites indicate the average peak visitor parking demand to be 0.08 spaces per unit with multiple comparative sites below 0.05 spaces per unit. Based on this data and Bunt's research on a wide range of residential apartments in BC communities we estimate the site's peak visitor parking demand to be approximately five spaces (0.06 per unit). This would include residential visitors and staff.

At peak periods up to five staff are anticipated to be working at the residential building site. They are anticipated to generate demand for approximately 2 -3 of the 5 visitors according to mode splits anticipated for staff at this near downtown location.

This equates to a total anticipated peak visitor demand of approximately 5 spaces for visitors and staff before TDM impact. City of Victoria's visitor parking space is 0.1 visitor space per unit, for comparison purposes, this equates to 9 required visitor spaces for the subject development.

#### 3.3.3 Vehicle Parking Options

The site is anticipated to have curbside parking available along its Discovery Street frontage that will accommodate 1 vehicle. This space may be used for short term loading activities as well as an electric charging space.

The subsequent second development phase as described in Section 1 at 1961 Douglas Street (existing hotel) and 710 Caledonia Street (existing White Spot restaurant) can provide parking for 722, 726, 732 Discovery Street as determined to be required at that time.

On street parking demand was assessed with three spot counts which are summarized in **Table 3.2.** In summary the weekday spot counts indicated an average demand of 66% over the blocks approximate 33 spaces, and a maximum peak of 85% which is the maximum desired occupancy for on-street parking. Demand was concentrated on west end of block. With this data we conclude that the on-street condition on Discovery Street has minimal excess and therefore all forecasted vehicle parking demand should be provided for on-site at the adjacent Phase 2 development site.

TIME	SUPPLY	DEMAND	AVAILABLE SPACES
Wednesday June 1, 3:30 PM	15 north edge, <u>18 south edge</u> 33 total	10 north edge, <u>11 south edge</u> 21 total	12
Friday, June 3, 10:30 AM	15 north edge, <u>18 south edge</u> 33 total	5 north edge, <u>12 south edge</u> 17 total	16
Wednesday June 8, 11:00 AM	15 north edge, <u>18 south edge</u> 33 total	11 north edge, <u>17 south edge</u> 28 total	5
AVERAGE	33	22	11

Surrounding neighborhood has various curbside and longer-term parking options. Local area curb side parking regulations are shown in **Exhibit 3.1**.



# Exhibit 3.1 Available Public Parking Near Site



722 & 726 Discovery Street 04-22-0077 March 2022

#### 3.3.4 Bicycle Parking

Well managed, secure, accessible, and covered bicycle parking will be provided as part of the development plan. Dimensions of bicycle spaces to meet City of Victoria requirements as per Schedule C, Table 4, Minimum Dimensions for Bicycle Parking.

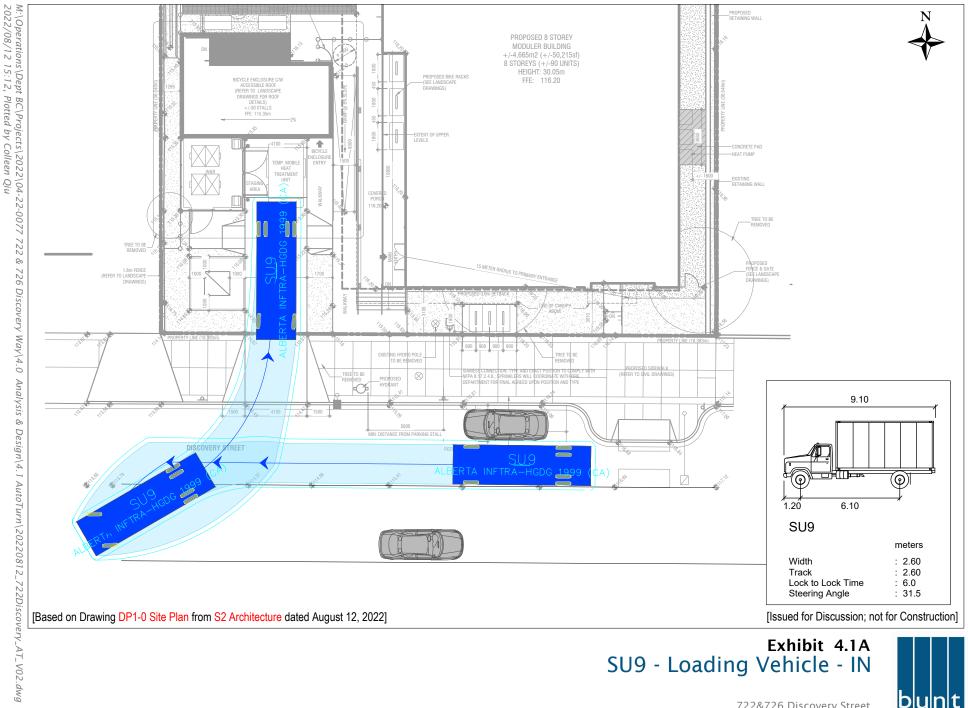
The site plan indicates a total of 30 Long-Term bicycle spaces. In addition, 6 Short-Term bicycle spaces will be provided at ground level in a well-lit, weather protected, and highly visible area.

# 4. SERVICE VEHICLE OPERATIONS

The City of Victoria Zoning Bylaw does not stipulate a requirement for off-street loading for supportive residential land use. Loading activity for the proposed 90 supportive residential units would likely involve vehicles no larger than a garbage/ recycling vehicle.

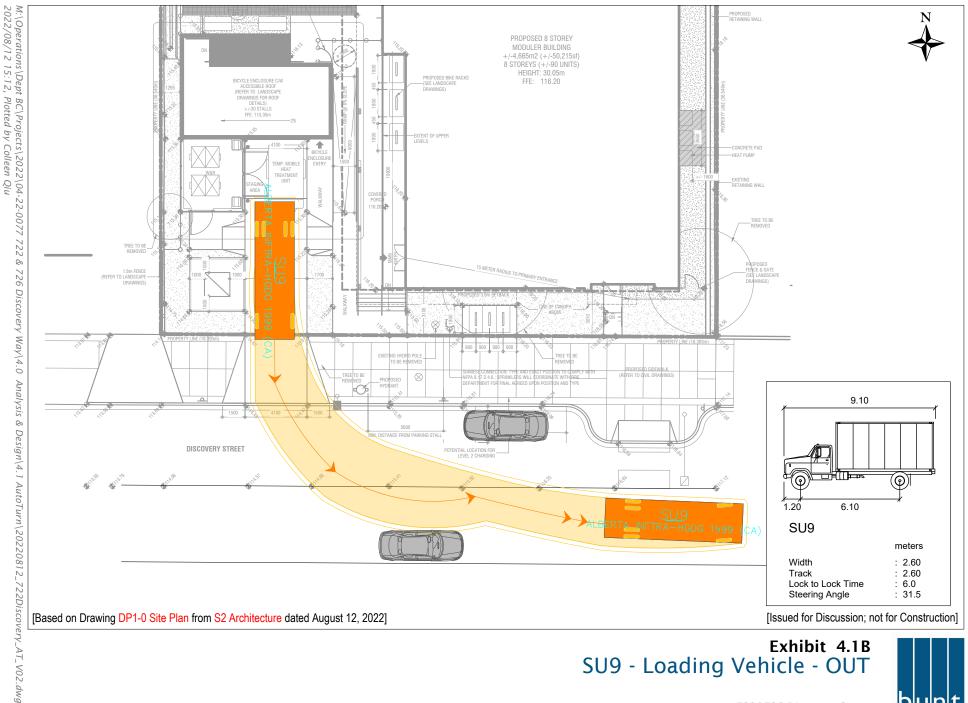
Small sized delivery vehicles are anticipated to use the loading space or the curb side parking spaces available on the site's Discovery Street frontage.

Bunt examined the functionality of the proposed loading space using AutoTURN path analysis. As shown in **Exhibit 4.1**, the proposed loading space is accessible, however it is reliant on using Discovery Street for its turn around maneuvers, for example to back into the loading space or if the vehicle enters in a froward motion then the vehicle would need to back out into Discovery Street.





**&**associates



722&726 Discovery Street 04-22-0077 August 2022 Scale 1:250 on Letter Prepared by CJQ

D

τ

**&**associates

# 5. TDM & ACTIVE MODES

## 5.1 Transportation Demand Management

Transportation Demand Management (TDM) is defined as the "application of strategies and policies to reduce travel demand (specifically that of single-occupant private vehicles), or to redistribute this demand in space or in time"<sup>3</sup>. A successful TDM program can influence travel behaviour away from Single Occupant Vehicle (SOV) travel during peak periods towards more sustainable modes such as High Occupancy Vehicle (HOV) travel, transit, cycling or walking. The responsibility for implementation of TDM measures can range across many groups, including regional and municipal governments, transit agencies, private developers, residents/resident associations or employers.

### 5.2 TDM Initiatives for Subject Development

The following Transportation Demand Management measures should be considered:

#### 5.2.1 Car Share

Convenient access to a shared vehicle will enable the residents of this development to reach far-away shops and services, transport large items, and visit recreational destinations outside of the Greater Victoria area, all without owning a private vehicle. Other advantages of car sharing include disincentivizing car travel through a pay-per-use model.

Operator correspondence with Modo indicates they are non-committal about having a car-share vehicle at this location. Memberships may be considered for each unit which would remain in the title of those units, these memberships would have an initial cost of \$500 per unit. This would add significant costs to the development without evidence that the memberships would be valued or used. As such, at this time car-share related TDM is not offered by the proposed development.

<sup>&</sup>lt;sup>3</sup> http://ops.fhwa.dot.gov/tdm/index.htm FHWA Travel Demand Management home page

#### 5.2.2 Transit Initiatives

Residents are anticipated to use transit as a primary transportation option.

BC Housing's operations teams indicate that all residents of supportive housing have transit passes available to them already via the Low-Income Transit Assistance Program<sup>4</sup>. Through this program all operators of BC Housing Supportive Housing including PHS, Cool Aid Society, and Our Place Society are members of this Bus Ticket Program administered through the Social Planning Council. This provides bus tickets for all tenants as needed. Eligible activities are very broad - including activities such as medical appointments, employment, counselling, and looking for housing.

Furthermore, BC's Ministry of Social Development and Poverty Reduction (MSDPR) Program also offers bus passes to individuals living in supportive housing. All eligible tenants can opt into a bus pass. This is normally about 90-95% of the tenants in a building.

As such we suggest BC Transit's EcoPass program for residents would represent overlap that would add significant unnecessary costs to the project.

We recommend that five (5) EcoPasses be provided for staff for a five-year duration.

#### 5.2.3 Pedestrian Amenities

In coordination with the adjacent development a pedestrian crossing will be provided at a mid-block location on 700 block Discover Street.

#### 5.2.4 Specialized Vehicle Parking

Current (2020) Bylaw regarding electric charging ability of parking spaces does not require visitor spaces to have electric charging abilities, only resident spaces.

The developer has however agreed to provide electric charging abilities to the site-fronting curbside parking space by equipping the space with a Level 2 charger or potentially other parking spaces on the block with a dual head Level 2 charger which would be suitable for two adjacent curbside parking spaces.

#### 5.2.5 On-Street Parking Management

Implementation of metered parking along 700 block Discovery Street will help the management of onstreet spaces.

<sup>&</sup>lt;sup>4</sup> https://communitycouncil.ca/low-income-transit-assistance-program

#### 5.2.6 Bicycle Parking

The development will be providing 30 long-term bicycle parking spaces and 6 short-terms spaces. This is below current zone bylaw requirements but is anticipated to meet resident demand based on anecdotal data provided by the operator of similar developments.

The developer will provide electric charging abilities for 20% of the long-term bicycle parking spaces.

# 6. SUMMARY & RECOMMENDATIONS

### 6.1 Summary

- 1. The proposed development at 722, 726, 732 Discovery Street consists of 90 supportive residential units.
- 2. Vehicle access to the building's parking spaces will be from Discovery Street on the site's east frontage.
- 3. The development proposes to provide zero vehicle parking spaces and as such requires a parking variance. Through City of Victoria Bylaw, the proposed development would need to provide 28 parking spaces.
- 4. The development proposes 30 Long Term bicycle spaces and 6 Short-Term bicycle spaces...
- 5. The proposed development is part of a larger development plan. The second component of the development plan includes properties across Discovery Street. This second development phase as described in Section 1 is at 1961 Douglas Street (existing hotel) and 710 Caledonia Street (existing White Spot restaurant).
- 6. Management of this building will require tenants to not own a vehicle as the building will not have spaces available. If prospective tenants do own a vehicle, they will have the option to reside in other supportive housing buildings in the area. Therefore, with this management practice, the site anticipates zero resident vehicle parking demand.
- 7. We estimate the site's peak visitor parking demand to be approximately five spaces (0.06 per unit). This would include residential visitors and staff.
- 8. At peak periods up to 5 staff are anticipated to be working at the residential building site creating a parking demand of approximately 2-3 spaces according to mode splits in comparable areas. The staff's reliance on a vehicle to get to work is mitigated with the proposed provision of 5 BC Transit EcoPasses for staff.

- 9. Non-staff visitor parking demand would be the reminder of the anticipated visitor demand which would again be approximately 2-3 spaces. This demand is anticipated to be adequately absorbed through on-street availability and at the neighbouring partner development which will have publicly available visitor parking spaces.
- 10. The site will have publicly available curbside parking along its frontage for an estimated 1 vehicle when considering the proposed driveway and the planned introduction of a mid-block pedestrian crossing of Discovery Street near the site's east edge.
- 11. Metered parking along the 700 block of Discovery Street is to be implemented with the subject and partnered adjacent development.
- 12. Saved costs from not building on-site parking spaces on this site can be passed onto tenants through reduced development costs.

#### 6.2 Recommendations

- 1. We recommend a clause be created that would permit visitors of 722 Discovery Street to use the neighbouring partnering site's visitor parking in consideration of the anticipated low quantity of visitors that would be anticipated to use those spaces (0-3 spaces during peak periods).
- 2. Transportation Demand Management initiatives proposed to support the proposed vehicle and bicycle parking variance are:
  - a. Level 2 electric vehicle charger along the site's Discovery Street frontage.
  - b. Five BC Transit EcoPasses for staff working at the site, provided for a five-year duration.
  - c. Adjacent sidewalk and public realm improvements.
  - d. Electric charging ability to the Long-Term bicycle storage rooms.



# **Capital Tree Service Inc.**

Arborist Report 722 & 726 Discovery St, Victoria, BC August 17, 2022

Prepared for: BC Housing C/O Sean Rorison Prepared by: Capital Tree Service Inc.

#### Capital Tree Service Inc.

310-777 Royal Oak Dr, PO Box 53512, Victoria BC, V8X 5K2 Ph: 250-217-8370, email: joelcreese@capitaltreeservice.ca capitaltreeservice.ca GST # 861289783RT0001 WSBC Account #713323 Liability and Professional E and O, HSM Insurance - \$5 Million

# Summary/Scope of Work

Capital Tree Service Inc. (CTS) was contacted by Sean Rorison (Client), a representative of BC Housing regarding, the construction of a new supportive housing building at 722 and 726 Discovery St (the Site) in the City of Victoria. The Client indicated they required an Arborist Report and Tree Protection Plan (TPP) to move forward with the permit application.

The Client has requested that CTS provide a Basic Visual Tree Assessment (BVTA) and TPP for the Site. CTS agreed to the complete the assessment and provide findings in an Arborist Report Form including a TPP.

Under the current proposal six (6) trees are proposed for removal and one (1) boulevard tree will be retained and protected. A tree inventory is included as **Appendix 'A'**. Photographs and a Site Plan are included as **Appendix 'B'** of this report.

# **Methodology**

The Site was entered January 5, 2022, by CTS for the purpose of conducting tree assessments and collecting inventory. Keegan Durovich, a consulting arborist and representative of CTS, conducted the inventory and observed the trees on the site. The weather that day was 2°C, overcast, and there was a 11km/hr NNE breeze.

The Site was assessed from grade. No form of diagnostic tools or invasive techniques were used during the assessment. Tree heights were estimated, and diameters were measured using a Richter Diameter Tape. Diameter at Breast Height (DBH) was measured approximately 1.4m above grade. Measurements and observations were recorded with the intent to provide a static representation of the area. A tree inventory is included as **Appendix 'A'** of this report. Photographs and a Site Plan are included as **Appendix 'B'** of this report.

During the assessment, a total of seven (7) were observed – all (7) of which are protected under the current City of Victoria Tree Bylaw. The trees referenced in **Appendix 'A'** have been tagged. Tags are located approximately 1.5-2m above grade on tree stems and were visible at the time of assessment. One boulevard tree is not tagged and is referred to as No Tag (NT) one (1).

Protected Root Zone calculations are based on the ISA recommended one foot for each one inch of trunk diameter (0.3m for each 2.5 cm).

# **Observations/Discussion**

During the assessment, one (1) parking lot, covering two (2) lots, with trees along the road frontage and a couple (2) of opportunistic trees in a corner was observed. The site appears to receive plenty of sunlight. The rooting area is restricted by retaining walls, pavement, and a building. Additionally, one of the trees (Gary Oak 151) appears to be growing over rocks. The boulevard tree (NT1) has similar restricted rooting area issues as the trees on the lot and has been utility pruned. Overall, trees appear to be in fair-good health with some common structural issues. A tree inventory is included as **Appendix 'A'** (as well as a separate attachment) of this report.

Protected Root Zone calculations are based on the ISA recommended one foot for each one inch of trunk diameter (0.3m for each 2.5 cm). Matheny and Clark's 'Trees and Development' was used to assess relative tolerance to Development Impacts.

All six (6) trees on the lot are proposed for removal due to their location within the footprint of the proposed development. Replacement trees will be required at a 1:1 ratio. Sidewalk upgrades will require the removal of one (1) boulevard tree, in front of lot 726 Discovery. Three (3) replacement boulevard trees are proposed.

### Replacement trees and soil calculations

Replacement tree locations (Appendix 2 Figure 2) and soil calculations are shown in the landscape plan prepared by the project landscape architect. Trees selected have been specified with consideration to required soil volume as specified in the City of Victoria Tree Protection Bylaw. See the landscape plan for replacement tree species and soil calculations.

## Common and Latin Names

Shore pine – Pinus contorta var. contorta Black cottonwood – Populus balsamifera subsp. trichocarpa Garry oak – Quercus garryana Field elm – Ulmus minor

## **Tree Condition Ratings Summary**

### **Health Condition:**

• Poor - significant signs of visible stress and/or decline that threaten the long-term survival of the specimen.

- Fair signs of stress
- Good no visible signs of significant stress and/or only minor aesthetic issues

# **Structural Condition:**

• Poor - Structural defects that have been in place for a long period of time to the point that

mitigation measures are limited.

- Fair Structural concerns that are possible to mitigate through pruning
- Good No visible or only minor structural flaws that require no to little pruning

### **Species Relative Tolerance to Construction Impacts<sup>1</sup>:**

Pine – Generally Moderate-Good

<sup>&</sup>lt;sup>1</sup> Nelda P. Matheny and James R. Clark, *Trees and Development: A Technical Guide to Preservation of Trees during Land Development* (Champaign, Ill: International Soc. of Arboriculture, 1998).

Black Cottonwood – Poor – "Mature trees prone to windthrow and trunk failure."

Gary Oak – Good – "Largely intolerant of construction injury"

Elm – Good – "Tolerant of root pruning."

# **Tree Protection Plan**

Utilize Tree Protection Fencing (TPF) to restrict access to Tree Protection Zones, see Appendix C for fencing specifications. Provide signage on fencing which states: Tree Protection Area – No Admittance. Signage must be in a visible location attached to the fence. Signage must be attached to the outside of each Tree Protection Fencing area.

Contact CTS to mark locations for the Tree Protection Fencing. All Tree Protection Fencing must be installed in the locations indicated by CTS. CTS must provide inspection and verification of the fencing detail for District approval.

Each Tree Protection Zone (TPZ) must be vacated of all construction materials and/or equipment. At no time may the fencing be removed or modified unless the Project Arborist is contacted and approval given. In such cases the Project Arborist must assist fence removal and assess combined impacts which are required for construction completion. Capital Tree Service 250-217-8370 – Three business days notice required.

#### Landing/Storage Area

All construction materials will be stored in areas identified as 'Landing/Storage' in site plans. These locations are indicated on the Site Plan.

#### **Access**

A single point of access shall be utilized. This shall be in the location marked 'Access' on the Site Plan. Contractors and workers shall be made aware of the Tree Protection Zones and Measures in place. Site access will be along the existing driveway. **Tree Protection Zones and areas of the Site not under construction or within the Zone of Impact will be strictly off limits.** It is the responsibility of the Client to schedule a pre-job meeting with the Project Arborist to discuss Tree Protection Plans, Zones, and requirements.

#### \*Three business days notice required. Project Arborist. 250-217-8370\*

#### **Root Assessment and Observation**

The Project Arborist must be on site for observation and assessment when working within the Protected Root Zone of any Protected Trees. This shall include trees:

• #NT1

## Tree Pruning

Tree pruning required for access and egress, tree health and safety shall be performed by an International Society of Arboriculture (ISA) Certified Arborist without the use of climbing spurs. All tree pruning shall be performed in accordance with ANSI A-300 Standards for Tree Care Operations.

## **Blasting**

The use of blasting for removal of rock may cause serious damage or death to nearby trees if not managed appropriately. Should blasting become necessary, CTS recommends the use of low nitrogen and low velocity explosives. Furthermore, we recommend the use of explosives to strategically fracture the rock before using an excavator to breakup (using a hoe ram) and remove the rock. It is critical that heavy matting is used to dampen shockwaves and  $\frac{3}{4}$ " plywood is used to protect (armour) retained trees wherever possible. A removal plan for the rock will be developed with the blasting contractor and the Project Arborist. It is recommended that this plan is created prior to the blasting contractor providing a cost estimate.

## **Excavation Process Plan**

- 1. Provide and schedule Project Arborist to assess site prior to construction.
- 2. Inventory and identify trees and hazards which could complicate excavation process.
- 3. Utilize hand tools and cutting equipment when large tree roots are anticipated.
- 4. When possible, utilize small, rubberized track excavation equipment which will reduce soil compaction.
- 5. Excavator operator must be well informed about dig site and goal to complete project.
- 6. Use shallow excavation sweeps across the site to establish a depth which roots can be easily identified. (3cm to 5cm in depth of soil for each sweep across the soil face)
- 7. Roots greater than 6cm in diameter shall be preserved and inspected by the Project Arborist. The project arborist will determine if roots should be pruned or cut.
- 8. All roots greater than 6cm in diameter should be identified and documented for project records.
- 9. Photos are highly recommended for documentation purposes.

Assessment of the site may expose further tree issues or conditions. If this occurs the project arborist will contact City Staff for further recommendations.

# **Role of the Project Arborist**

As well as creating the Tree Preservation Plan, the Project Arborist must be on site to supervise work within or immediately adjacent to the tree protection areas identified on the attached tree plan. This will include sidewalk, driveway and any improvements proposed for the municipal boulevard.

The Project Arborist will be present to supervise landscaping operations and activity within the tree protection areas.

At completion of the project, the Project Arborist will confirm that any tree protection or remediation related deficiencies have been addressed by the owner and building contractor. Once all deficiencies (if any) have been remedied, the Project Arborist shall prepare a letter to the City of Victoria confirming completion of the project.

## **Tree Protection Plan Summary**

- i. Provide a detailed sign specifying that tree protection measures are in place and will be followed during the project. Fines will be posted for malicious acts and can be placed on individuals who disregard the tree protection plan and its guidelines. Signs will be placed at each entrance of the project detailing what is expected when working in potentially high impact tree protection zones.
- ii. Provide tree protection fencing for all trees identified with protection requirement in this report. This fencing shall be four (4ft) feet in height and made of orange plastic. If required, header and footer boards will be used to secure the protective fencing.
- Tree protection and root protection signs will be placed on the fencing (see Appendix C).
   No entry will be allowed, unless specified by the Project Arborist and in their presence while on site.
- iv. Restrict vehicle traffic to designated access routes and travel lanes to avoid soil compaction and vegetation disturbances.
- v. Make all necessary precautions to prevent the storage of material, equipment, stockpiling of aggregate or excavated soils within tree protection areas. No dumping of fuels, oils or washing of concrete fluids will be allowed in tree protection zones.
- vi. Provide an onsite arborist when a risk of root damage, root cutting, or limb removal is required within the tree protection zone.
- vii. Avoid alterations to existing hydrological patterns to minimize vegetation impacts to the site.
- viii. The use of a Project Arborist is required to provide layout of tree protection zones. The Project Arborist(s) will provide pre-construction information to all parties involved with the project. The Project Arborist must be notified 72hrs prior to construction activities in sensitive areas. The Project Arborist should be used to provide root and branch pruning when diameters are greater than 6cm.

ix. At no time will tree protection zones be removed from the project unless approved by the Project Arborist

#### The following is a summary of key roles of the Project Arborist.

- Participation in a site meeting prior to the commencement of works adjacent to Tree Protection Zones to discuss the preservation plan and tree protection measures in place. It is the responsibility of the Client to schedule a pre-work site meeting. \*72 hrs Notice Required. CTS 250-217-8370\*
- The meeting will review the Tree Protection Plan, Tree Protection Zones and the specific measures required to protect the trees during the site preparation, construction, and landscape phases of construction.
- The Project Arborist will inspect the Tree Protection Fencing and any other tree protection measures prior to a tree permit being issued by the District and prior to work commencing on site.
- The Project Arborist will be on site during the following work within or immediately adjacent to the Tree Protection Areas as indicated on the attached Site Plan:
  - ✤ demolition
  - grading
  - ✤ excavation
  - rock removal or blasting
  - trenching for underground services and utilities
  - preparation of grade for the proposed driveways and parking areas
  - site inspections to insure adherence to Tree Protection Measures

Although this site has been assessed trees in the landscape are dynamic and changes could occur. This report is a static representation of the site during our assessment.

regatier

Keegan Durovich 17/08/2022 Capital Tree Service Inc. ISA Certified Arborist TRAQ PN-9272A B.A.Sc.

#### Capital Tree Service Inc. (CTS)

#### CONDITIONS OF ASSESSMENT AGREEMENT

This Conditions of Assessment Agreement is made pursuant to and as a provision of CTS, providing tree assessment services as agreed to between the parties, the terms and substance of which are incorporated in and made a part of this Agreement (collectively the "Services"). Trees are living organisms that are subject to stress and conditions and which inherently impose some degree or level of risk. Unless a tree is removed, the risk cannot be eliminated entirely. Tree conditions may also change over time even if there is no external evidence or manifestation. In that CTS provides the Services at a point in time utilizing applicable standard industry practices, any conclusions and recommendations provided are relevant only to the facts and conditions at the time the Services are performed. Given that CTS cannot predict or otherwise determine subsequent developments, CTS will not be liable for any such developments, acts, or conditions that occur including, but not limited to, decay, deterioration, or damage from any cause, insect infestation, acts of god or nature or otherwise. Unless otherwise stated in writing, assessments are performed visually from the ground on the aboveground portions of the tree(s). However, the outward appearance of trees may conceal defects. Therefore, to the extent permitted by law, CTS does not make and expressly disclaims any warranties or representations of any kind, express or implied, with respect to completeness or accuracy of the information contained in the reports or findings resulting from the Services beyond that expressly contracted for by CTS in writing, including, but not limited to, performing diagnosis or identifying hazards or conditions not within the scope of the Services or not readily discoverable using the methods applied pursuant to applicable standard industry practices. Further, CTS' liability for any claim, damage or loss caused by or related to the Services shall be limited to the work expressly contracted for. In performing the Services, CTS may have reviewed publicly available or other third- party records or conducted interviews and has assumed the genuineness of such documents and statements. CTS disclaims any liability for errors, omissions, or inaccuracies resulting from or contained in any information obtained from any third- party or publicly available source.

Except as agreed to between the parties prior to the Services being performed, the reports and recommendations resulting from the Services may not be used by any other party or for any other purpose. The undersigned also agrees, to the extent permitted by law, to protect, indemnify, defend and hold CTS harmless from and against any and all claims, demands, actions, rights and causes of action of every kind and nature, including actions for contribution or indemnity, that may hereafter at any time be asserted against CTS or another party, including, but not limited to, bodily injury or death or property damage arising in any manner from or in any way related to any disclaimers or limitations in this Agreement.

By accepting or using the Services, the customer will be deemed to have agreed to the terms of this Agreement, even if it is not signed.

#### Acknowledged by:

Name of Customer: Sean Rorison of the BC Housing Management Commission 722 Discovery St, Victoria

Authorized Signature: \_\_\_\_\_

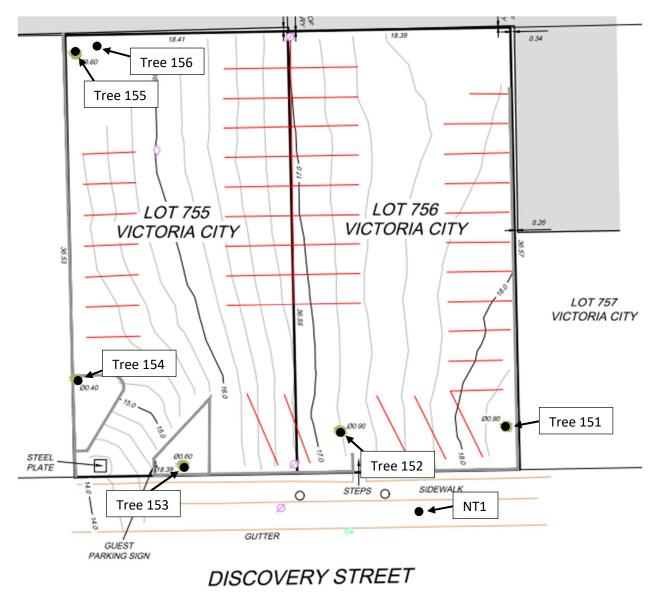
Date: 2022-08-17

# **Appendix 'A' Tree Inventory**

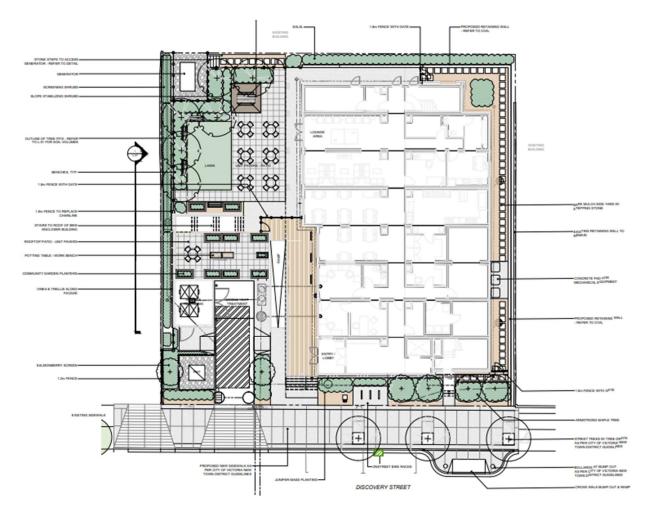
**Table 1. Tree Inventory for 722 and 726 Discovery St, Victoria.** Diameter at breast height (DBH) is measured in centimeters. Protected root zones (PRZ) are calculated using a 0.12 multiplier and represent the protected radius area around the tree in meters.

								Capital Tree Service Inc.	iervice Inc.
							Apper	dix A - Tree Inventor	Appendix A - Tree Inventory/Hazard Ratings Summary
Locat	Location: 722 Discovery St, Victoria, BC V8T 1H2	overy St	t, Victor	ia, BC V8	8T 1H2				
Date:	Date: January 6, 2022	022							Conditions: Overcast, 2°C, 11km/hr light breeze
Tag #	Species	DBH (cm)	PRZ (m)	Height (m)	Health/ Structure	Canopy Spread	Bylaw Protected		<b>Comments/Recommendations</b>
151	Garry oak	87	10	16	F-P/F	8	Yes	Deadwood. Pavement epicormic shoots.	Deadwood. Pavement over entire rooting area. Rooting area partially restricted by retaining wall. Great CODIT. Some older epicormic shoots.
152	Garry oak	87	10	19	F/P	7	Yes	<sup>9</sup> avement over entire I Jnion. Good CODIT on	Pavement over entire rooting area. Rooting area partially restricted by retaining wal union. Good CODIT on pruning wounds. Some narrow angles of attachment.
153	Garry oak	74	9	16	F/P	∞	Yes	2x stem 4m above grad	2x stem 4m above grade. Rooting area restricted by retaining walls and pavement. Epicormic growth
154	Shore Pine	49	6	13	F/P	б	Yes	Some narrow angle of :	Some narrow angle of attachments. 10+cm deadwood. Leaning stem.
156	Black Cottonwood	67	8	17	G/P	4	Yes	9 time stem at grade (1 runk. Rooting area res	9 time stem at grade (17, 25, 25, 15, 5, 5, 3, 3 cm DBHs). Narrow angle of attachments. Concrete footing for HVAC unit in trunk. Rooting area restricted by retaining wall, parking lot, and building.
157	Black Cottonwood	62	7	16	G/P	4	Yes	Growing from stump of	Growing from stump of removed cottonwood. 8x stem just above grade (22, 23, 15,
NT1	Field elm	38	5	10	F/P	л	Yes	Boulevard tree. Utility	Boulevard tree. Utility pruned. Limited viable rooting area due to hardscapes.

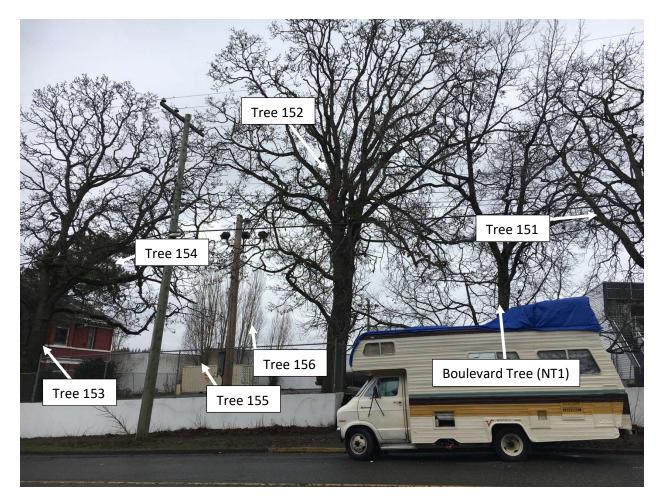
# Appendix 'B' Photos



**Figure 1. Site Plan and Tree Locations.** This site plan depicts the current state of the site and the tree locations. Locations of tree NT1 and 156 have been plotted by CTS for reference and have not been verified by a BC land surveyor.



**Figure 2. Tree Protection Fencing and Proposed Landscape Plan with Replacement Trees.** Red lines indicate tree protection fencing. See landscape plan for soil calculations for replacement trees.



**Figure 2. 722 and 726 Discovery St Frontage.** Trees are labled. The Boulevard tree is was not included in this assessment. Tree 154 is the pine behind the Gary oak 153.

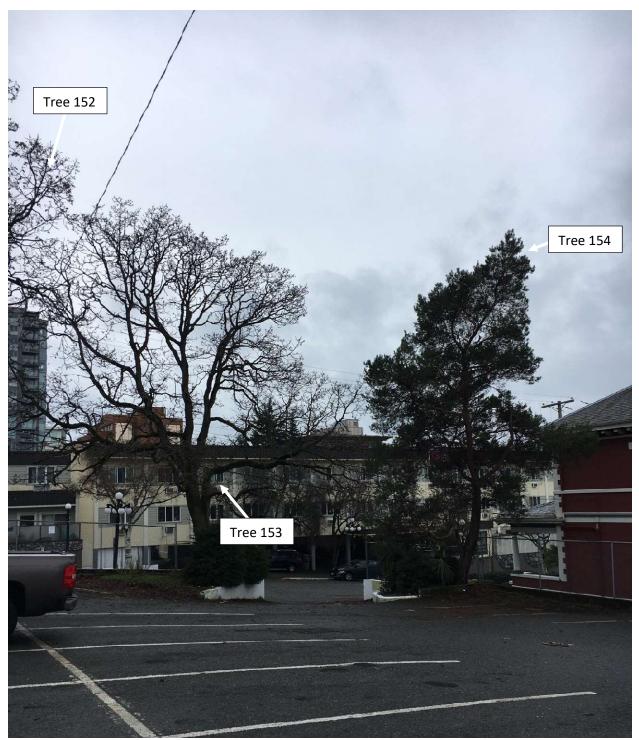


Figure 3. Trees 153 and 154. A long horizontal branch can be seen reaching over the driveway.



Figure 4. Tree 154. Tree 154, a Shore Pine. Landscape plants can be seen to the left (south) of the tree.



**Figure 5. Tree 153.** Note retaining walls restricting rooting area and pavement over available rooting area.



Figure 6. Trees 151 and 152. Note retaining walls restricting rooting area and pavement over available rooting area.



**Figure 7. Trunk and root crown of Tree 151.** Note rock enveloped by tree. Rooting area is restricted by pavement.



**Figure 8. Black Cottonwoods in the Northwest corner of the parking lot.** Trees 155 and 156 growing at the edge of the parking lot with a couple of smaller opportunistic cottonwoods. Rooting area is restricted by the building, pavement, and a retaining wall.



**Figure 9. Tree 156 Trunk.** Tree 156 is growing from the trunk of a removed tree with multiple codominant stems.





**Figure 10. Trunk of tree 155.** Multiple codominant stems with epicromic growth. Cement footing poured in trunk cavity.



# **Advisory Design Panel Report**

For the Meeting of June 22, 2022

То:	Advisory Design Panel	Date:	June 15, 2022
From:	Leanne Taylor, Senior Planner		
Subject:	Development Permit with Variance App Discovery Street	lication No. 0	00207 for 722 and 726

#### **EXECUTIVE SUMMARY**

The Advisory Design Panel (ADP) is requested to review a Development Permit with Variance Application for 722 and 726 Discovery Street and provide advice to Council. The proposal is for an eight-storey, multi-unit residential building consisting of approximately 90 dwelling units of supportive housing and requires a Rezoning Application.

The subject properties are designated Core Employment in the *Official Community Plan* (OCP, 2012), which supports residential mixed-use, work/ live, and commercial uses, including office, hotels and other visitor accommodation, located between Douglas Street and Blanshard Street. The OCP supports building heights up to 15 storeys and a base density of 3:1 Floor Space Ratio (FSR) up to a maximum of 5:1 FSR, of which the residential density does not exceed 3:1 FSR.

The *Burnside Gorge Neighbourhood Plan* refers to the *Downtown Core Area Plan* (DCAP) for land use policies related to use, height and density. DCAP identifies the subject properties within the Rock Bay District, which envisions the area as a key employment centre that attracts a range of commercial and light industrial businesses to provide a more diversified and resilient employment base. With respect to residential development, the Plan states that residential and residential mixed-use development are primarily located between Douglas Street and Blanshard Street, and that residential development is located, designed and sited to mitigate any potentially negative effects on the general operation and function of adjacent employment activities. Building heights up to 60m (approximately 20 storeys) and a base density of 3:1 FSR up to a maximum of 5:1 FSR, of which the residential density does not exceed 3:1 FSR is supported in the Plan.

Staff are looking for commentary from the Advisory Design Panel with regard to:

- building fenestration
- blank wall on north elevation
- termination of building
- building setbacks
- any other aspects of the proposal on which the ADP chooses to comment.

The Options section of this report provides guidance on possible recommendations that the Panel may make, or use as a basis to modify, in providing advice on this application.

#### BACKGROUND

Applicant:	Mr. Mark Griffiths S2 Architecture
Architect:	Mr. Mark Griffiths, Architect AIBC S2 Architecture
Development Permit Area:	Development Permit Area 7A, Corridors
Heritage Status:	N/A

#### **Description of Proposal**

The proposal is for an eight-storey, multi-unit residential development consisting of 90 dwelling units of supportive housing. The proposed density is 3.56:1 floor space ratio. The variance is related to parking.

The proposal includes the following major design components:

- steel-framed, modular building
- exterior materials on building include vertical metal panel, metal plate panel, metal plate spandrel panel horizontal fibre cement plank, concrete composite metal cladding, heavy timber columns, steel doors, and metal handrail and guardrail systems
- corrugated metal screening for rooftop mechanical equipment
- exterior finishes of bicycle parking enclosure include corrugated metal siding, metal panel fascia and chain-link fencing
- 90 self-contained dwelling units including a kitchenette, bathroom and sleeping area
- commercial kitchen, dining area, and support staff offices on the main floor
- outdoor common area, includes benches, gazebo with picnic table and lawn area
- substantial new landscaping and 11 new trees to be planted on site
- long-term bicycle parking enclosure for 30 bikes
- no residential or visitor parking spaces on site.

The following data table compares the proposal with the existing M-1 Zone, Limited Light Industrial District. An asterisk is used to identify where the proposal is less stringent than the existing Zone. Additionally, the key City policy that pertains to the area has been included in this table.

Zoning Criteria	Proposal	M-1 Zone	OCP Policy	DCAP
Site area (m²) – minimum	1344.83	n/a		
Density (Floor Space Ratio) – maximum	3.56:1*	3	5:1 (max residential density up to 3:1)	5:1 (max residential density up to 3:1)
Total floor area (m²) –	~4730*	n/a		

Zoning Criteria	Proposal	M-1 Zone	OCP Policy	DCAP
maximum				
Height (m) – maximum	~30.02*	15	n/a	60
Storeys – maximum	8	n/a	15	20
Site coverage (%) – maximum	47.50	n/a		
Open site space (%) – minimum	52.50	n/a		
Setbacks (m) – minimum				
Front (Discovery Street)	3.20	n/a		
Rear (North)	3	3 or 0		
Side yard (West)	14.67 (building) <b>1.29* (bicycle</b> enclosure)	3 or 0		
Side yard (East)	2.5* (building) 1.6* (heat pump)	3 or 0		
Vehicle parking – minimum	0*	18 (residential) 1		
Visitor vehicle parking - minimum	0*	(commercial) 9		
Bicycle parking stalls – minimum				
Long-term	30*	90		
Short-term	3*	9		

#### Sustainability Features

The application proposes the following sustainability features:

- meet BC Energy Step Code 3
- consideration of solar voltaic rooftop panels.

#### Consistency with Policies and Design Guidelines

#### Official Community Plan

The subject properties are designated Core Employment in the (OCP, 2012), which supports residential mixed-use, work/ live, and commercial, including office, hotels and other visitor accommodation, for the areas located between Douglas Street and Blanshard Street. The OCP supports building heights up to 15 storeys and a base density of 3:1 FSR up to a maximum of 5:1 FSR, of which the residential density does not exceed 3:1 FSR. This proposal is further advancing several OCP objectives related to housing, employment, and community well-being by locating non-market rental housing within the Urban Core to enable easy access to services and facilities for daily living.

The OCP identifies the subject properties within Development Permit Area (DPA) 7A: Corridors, which envisions the revitalization of areas of commercial use along corridors through high-quality architecture, landscape and urban design to enhance their visual appearance, strengthen commercial viability and encourage pedestrian use.

#### Downtown Core Area Plan

#### Land Use Policies

The *Burnside Gorge Neighbourhood Plan* refers to the DCAP for land use policies related to use, height and density. DCAP identifies the subject properties within the Rock Bay District, which envisions the area as a key employment centre that attracts a range of commercial and light industrial businesses to provide a more diversified and resilient employment base. With respect to residential development, the Plan states that residential and residential mixed-use development are primarily located between Douglas Street and Blanshard Street, and that residential development is located, designed, and sited to mitigate any potentially negative effects on the general operation and function of adjacent employment activities. Building heights up to 60m (approximately 20 storeys) and a base density of 3:1 FSR up to a maximum of 5:1 FSR, of which the residential density does not exceed 3:1 FSR is supported in the Plan.

Further to the land use policies, the Plan includes policies pertaining to housing affordability and specifically, the importance of supporting the development of non-market housing in the Downtown Core Area as it continues to grow and fostering partnerships with provincial, regional, non-profit and industry partners to deliver affordable housing in the Urban Core.

#### DCAP Design Guidelines

In March 2022, Council adopted new DCAP design guidelines that will come into effect this June. Staff considered these design guidelines when evaluating this proposal as they will apply while this proposal is still in process.

The new design guidelines recommend a site area of 1600m<sup>2</sup> for interior lots to accommodate a mid to high-rise building (a tall building over 23m in height) in order to meet appropriate tower setbacks, maintain access to sunlight and sky views from public open spaces, and minimize impacts on neighbouring lots. The combined site area is approximately 1344m<sup>2</sup>. For a mid-rise building (a residential building up to 36m in height), the new guidelines recommend a 10m setback from the side and rear property lines. The building is setback approximately 14.67m from the west property line; otherwise, the proposal does not comply with these design guidelines.

The design guidelines recommend that the tower floor plates do not exceed a maximum size of 650m<sup>2</sup>. The tower floor plate size is approximately 559m<sup>2</sup>. Lastly, the design guidelines recommend a maximum floor plate width of 24m and a north to south orientation. The floor plate

width is approximately 19.34m and the building has a north-south orientation.

Design Guidelines for Development Permit Area 7A: Corridors

- Advisory Design Guidelines for Buildings, Signs and Awnings (2006)
- Guidelines for Fences, Gates and Shutters (2010)
- Appendix 3: Sidewalk Width Guidelines and Appendix 4: Building Design Guidelines in the Downtown Core Area Plan.

#### ISSUES AND ANALYSIS

The following section(s) identify and provide a brief analysis of the areas where the Panel is requested to provide commentary. The Panel's commentary on any other aspects of the proposal is also welcome.

#### Building Fenestration

The Advisory Design Guidelines for Buildings, Signs and Awnings (2006) include design guidelines pertaining to the arrangement, proportion and pattern of windows, window rhythm (massing relationship between walls and openings), and the height-to-width relationship. Staff have encouraged the application to consider a more rectilinear-style window, especially along the front elevation, to give the building a more "residential-feel." Staff invite the ADP's further input on the building fenestration.

#### Blank Wall on North Elevation

Mitigating the visual impact of blank walls where unavoidable, through screening, landscaping, public art, patios, special materials, or other solutions to make them more visually interesting, is recommended in the DCAP design guidelines. Staff invite the ADP's input on the blank wall on north elevation and request recommendations regarding potential design solutions to mitigate its impact from Blanshard and Douglas Street.

#### Termination of Building

The design guidelines recommend a distinctive roof top to terminate towers that distinguish the building from others and contribute to an interesting and varied skyline. The guidelines provide some strategies for achieving this, such as:

- stepping back the upper floors of buildings
- incorporating a significant vertical element or finial
- incorporating a decorative roof "top hat"
- screening mechanical equipment creatively
- incorporating roof top landscaping and green roof features.

Staff feel that the rooftop could be further refined to improve its visual interest and invite ADP's input on this aspect of the design.

#### Building Setbacks

For a mid-rise building (a residential building up to 36m in height), the guidelines recommend a 10m setback from the side and rear property lines. The proposed building is setback approximately 14.67m from the west property line, 2.5m from the east property line and 3m from the rear property line. There may be an opportunity to shift the building slightly to the west to increase the building setback from the east property line to accommodate some screening and soft landscaping. Staff invite ADP's input on the proposed building setbacks in relation to the impacts these smaller setbacks may have on the potential redevelopment of adjacent properties.

#### OPTIONS

The following are three potential options that the Panel may consider using or modifying in formulating a recommendation to Council:

#### **Option One**

That the Advisory Design Panel recommend to Council that Development Permit with Variance Application No. 000207 for 722 and 726 Discovery Street be approved as presented.

#### **Option Two**

That the Advisory Design Panel recommend to Council that Development Permit Application No. 000207 for 722 and 726 Discovery Street be approved with the following changes:

• as listed by the ADP.

#### **Option Three**

That the Advisory Design Panel recommend to Council that Development Permit Application No. 000207 for 722 and 726 Discovery Street does not sufficiently meet the applicable design guidelines and polices and should be declined (and that the key areas that should be revised include:)

• as listed by the ADP, if there is further advice on how the application could be improved.

#### ATTACHMENTS

- Subject Map
- Aerial Map
- Architectural plans date stamped May 4, 2022
- Landscape plans date stamped May 4, 2022
- Civil plans date stamped May 4, 2022
- Applicant's letter dated May 2, 2022
- Arborist report dated September 1, 2021

cc: Mark Griffiths S2 Architecture Applicant & Architect.

# 5.1 Development Permit with Variance Application No. 000207 for 722 and 726 Discovery Street

The City is considering a proposal for an eight-storey, multi-unit residential building consisting of approximately 90 dwelling units of supportive housing and requires a Rezoning Application.

Applicant meeting attendees:

Mark Griffith	S2 Architecture
Chad Zyla	S2 Architecture
Michael Defina	S2 Architecture
Michael Holm	S2 Architecture
Sean Rorison	BC Housing

Leanne Taylor provided the Panel with a brief introduction of the Application and the areas that Council is seeking advice on, including the following:

- building fenestration
- blank wall on north elevation
- termination of building
- building setbacks
- any other aspects of the proposal on which the ADP chooses to comment.

Sean Rorison and Michael Defina provided the Panel with a detailed presentation of the site and context of the proposal and details of the proposed landscape plan.

The Panel asked the following questions of clarification:

- Can you speak to the design rational, placement of the building on site and why you chose to have the amenity space away from the public?
  - Building position and massing were decided by a few factors. Mainly being that the property is on a steep slope from east to west, as well as the fact we are using a modular construction steel to build. We wanted to make sure we were above grade enough so that we weren't causing any issues when it came to building the structure and any water damage below. There was a requirement from BC housing for a specific number of units. It made the most sense to place the building on the east side because of approachability. We wanted to take into consideration saving the trees and needed items like garbage and recycling close to the street. We looked at entry off the street but because of the slope we would need many stairs, this placement alleviates that.
- Have you considered rotating the building and different placements?
  - There is existing powerlines and we needed to find a way to safely erect a modular building so this needs to run linear to the site.
- Has there been thought to future developments in the area and what the OCP calls for on these lots with blank monotonous walls and how they may be covered?
  - In order to achieve the goals of BC Housing we ended up with a linear building with depth. In response to the depth, we are responding to building code requirements which limit glazing.

- Does this project meet the rapid deployment of affordable housing?
  - No, it does not comply because the current zoning is industrial. In order to comply it needs to be a zone that already permits multiple dwellings, and this zone does not.
- Is the design intended to be driven primarily by the neighbourhood context or by the prefab nature?
  - We understand we are working with a modular manufacturer; we believe it responds to the community and future developments we are seeing to the south.
- Does this have to be a modular building is that a requirement?
  - The majority of our housing with support buildings are done as modular and we intend to do a modular construction on this project and make sure it's a good fit for the building.
- How do the residents use the available outdoor space at the current hotel sites, and have they been asked what they would personally like?
  - There isn't a lot of useable at the City Centre hotel. They is only a large parking lot. There is a pool that should be filled in. We do a lot of gardening I the limited outdoor amenity spaces.
- Did you consider expressing the modular nature of the structure in the façade?
  - We looked at different options on how to articulate the façade but have limitations with building code. We thought the better approach was to wrap the building to break up the wood tones.
- Did you consider changing the massing in the areas where you are using different materials?
  - When we get above the first floor which is community space, the studio units stack regularly from front to back and are identical. We have looked at creating larger units, but this creates issues with residents. BC Housing has minimum requirements for units. The units are currently at their maximum floor space.
- Did you look at layouts that would save any of the Gary Oaks on Discovery Street?
  - $\circ~$  Yes, but based on the size and making sure the module sizes and requirements from BC Housing were met we had to keep it as it.
- Do you feel like there could be room for additional planters?
  - We could expand some garden planters if required but the space is tight. We want to keep it comfortable and relaxing.
- Is the generated sunken down?
  - Yes correct, to try and eliminate noise.
- Were there other locations you could have placed the generator?
  - It could have been in the front yard and then it would have been visible to the public and not as quiet.
- In your letter you expressed "a playful approach to glazing and rooflines." Can you explain why you think the roofline is playful and speak to the windows?
  - The windows are standard product used by BC Housing in their supportive housing projects. We tried to step the rooflines in different areas, each material has its own height. We have also lowered the glazing so the spandrel panel that sits at the top of the glazing up the elevator. We wanted to play with elevations as opposed to trying to decorate the roof considering the height.

- Is there a reason the garbage and recycling weren't encapsulated in some type of enclosure?
  - Typically, we don't cover them with a roof, but we wanted to keep it near the bike enclosure. The entrance for the bike enclosure is higher up from where the garbage enclosure doors open. The three main reasons we were limited were the height, access to the waste and recycling didn't let up landscape and the transformer for BC Hydro needed to be close to the street which is why we were led to this scenario.
- Is there a reason the pedestrian ramp is so far north?
  - The main reason is the alignment to the walkway where the garbage and recycling is. If we are doing loading here or if there's anyone with accessible needs, we needed a space because the slope of the drive aisle from east to West is very steep. So, we needed a curb ramp here, which pushed the ramp further north.
- What level of step code is this targeting?
  - Level 3.
- Is there a reason you are not targeting a higher step code?
  - Purely cost.

Panel members discussed:

- Don't like this proposal as it would never be presented as any type of market housing.
- Will not be in support of this proposal.
- Missed opportunity with this modular building and different options.
- Unimpressed with the exterior.
- Appreciate the work that goes into these housing projects and sympathise with BC Housing.
- No concerns with setbacks.
- Understand why the exterior looks simple.
- Don't agree that modular construction is needed.
- Would appreciate more thought into landscape plans.
- Would like to see further consideration to the circulation of amenity space and landscape.
- In the desire to house the people that need it, do all our standards need to be set aside?
- More thought, love and creativity needs to go into these programs and projects, it isn't a question of money.
- Nonmarket projects should not be able to be picked out within our City.
- Are we just trying to stack people or are we creating home?.
- This is not the only way we can do modular buildings, they need to have a sense of neighbourhood and community.
- Reminiscent of the public housing project in the USA.
- Don't want to stigmatize nonmarket housing.
- Being in these small boxes is better than living on the streets but we can do better.

#### Motion:

It was moved by Peter Johannknecht, seconded by David Berry that the Advisory Design Panel reopen the question period to ask the applicant if they are willing to take the necessary measures suggested by the ADP to improve this project.

#### **Carried Unanimously**

- Are the applicants willing to make the necessary changes discussed thus far by the ADP?
  - Yes, we want to make this building something everyone is proud of. The one constraint we do have is that we want to deliver 90 units of supportive housing onto this property.

#### Motion:

It was moved by Will King, seconded by Peter Johannknecht that the Advisory Design Panel supports housing of this nature and scale with the number of units in this location and for this purpose recommend to Council that Development Permit Application No. 000207 for 722 and 726 Discovery Street does not sufficiently meet the applicable design guidelines and polices and should be declined (and that the key areas that should be revised include:

- design of building and entry should be welcoming and offer a sense of home
- building should not read as nonmarket housing
- changing window formats and scale to read more residential instead of institutional
- increase bike parking
- consider preserving the Gary Oak trees along Discovery Street
- matching the exterior program to the needs of the future residents
- recycling enclosure concealed and covered
- further consideration of the termination of the building
- explore opportunities to enhance building performance

#### **Carried Unanimously**

## ATTACHMENT I



471 Cecelia Road, Victoria, BC V8T 4T4 T. 250-388-5251 | F. 250-388-5269 info@burnsidegorge.ca | www.burnsidegorge.ca

February 11, 2022

Mayor Helps & Council #1 Centennial Square Victoria, BC V8W 1P6

Dear Mayor Helps and Council:

## **BGLUC Feedback for Rezoning Application for 722 and 732 Discovery Street**

On February 7, 2022 the Burnside Gorge Land Use Committee (BGLUC) hosted a BGGA CALUC community meeting where a proposal to rezone 722 and 732 Discovery Street from C-1 limited commercial to a Site Specific Zoning A portion of this proposal is a joint venture with BC Housing to provide affordable rental accommodation.

Byron Chard of Chard Development, presented. Representatives from BC Housing were also on hand to answer questions.

As there was a total of 29 seconds of presentation in reference to this proposal there were a minimal number of comments.

Comments and questions from the approximately 42 attendees and 1 online response focused on the following:

- Frustration of the attendees with BC Housing ignoring the commitment to a moratorium on additional supportive housing in Burnside Gorge and reaffirmed in the Dec. 1, 2018 community commitment agreement.
- Preference for 2 or 3 bedroom family sized units as opposed to single resident occupancy as currently proposed.

The comments of the BGLUC review are as follows:

- The lack of on site parking for staff, support workers is unacceptable.
- There must be some landscaped exterior gathering amenity space other than a storage area for carts, etc. With +/- 90 residents this will only cause issues with gatherings on adjacent properties.

The BGLUC cannot support this proposal with the current lack of information on the final scope of development. In addition there is a requirement to address the disregard for the moratorium committed to in writing by BC Housing.

Respectfully,

en St

Avery Stetski

Land Use Committee Chair Burnside Gorge Community Association

cc: Sustainable Planning and Community Development Department Byron Chard – Chard Development Sean Rorison – BC Housing

# **ATTACHMENT J**

Survey Responses

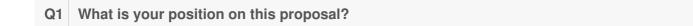
722-732 Discovery Street

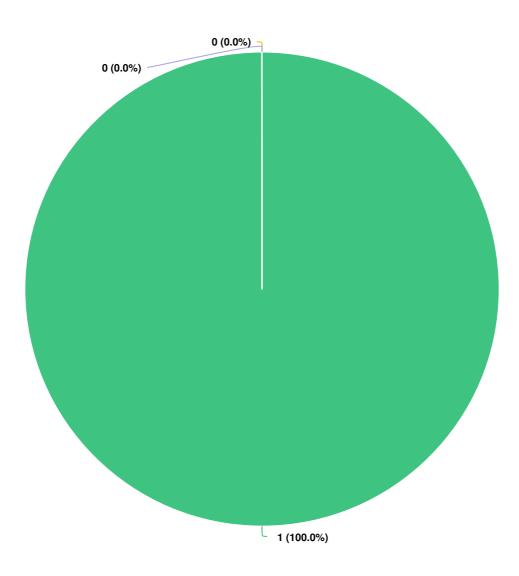
# Have Your Say

Project: 722-732 Discovery Street









#### **Question options**

Support Oppose Other (please specify)

Mandatory Question (1 response(s))



#### Q1. What is your position on this proposal?

Support

#### Q2. Comments (optional)

Support more housing for vulnerable and lower socioeconomic population. Units should be a bit bigger in my opinion . They look like dorm rooms not homes; Not suitable for housing vulnerable families

Q3. Your Full Name	Tom Lange
Q4. Your Street Address	1930 Jerome road
Q5. Your email address (optional)	not answered

Thank you for taking my call Ayla.

Hi Mayor and Council,

My name is David. I work at Limbic Media which has an office immediately next door to the proposed 7 story building at 732 Discovery Street.

I am writing to express my steadfast support for this project. I believe it is our duty as Canadians, British Coloumbians, and Victorians, to take care of those less fortunate in our community. I have had some conversations with my co-workers and neighbours about this development and I have heard varied opinions.

I was made very uncomfortable by an opinion raised by one of my neighbours about the proposed height of the building. From what I could tell, they live in a nearby building and were trying to get the height of the building reduced from 7 to 5 stories to preserve the ocean view from their apartment. I want to express my dissatisfaction with this opinion. It appears to me that this person thinks that preserving their ocean view is more important than housing the 28 people who would fit into the top two floors of the proposed building. I find this frankly, disgusting.

I have also heard concerns about homeless people hanging around on the streets and causing discomfort. This is something I do experience. I walk up discovery street several times a day, and it is uncomfortable to experience homeless-looking people hanging out on the street. What I do have to say on the subject though is that my comfort is less important than other people's access to housing. I will gladly walk up a street and feel discomfort if it means that more of our homeless population are given access to a safe and warm place to stay.

I think the version of the building with a community space would be preferable in order to give options to the residents. I hope it would cut down on the number of people hanging out on the sidewalk if there was another option to spend time other than being in your room. I have heard that there is a rule against bringing guests into your room which seems a little heavy handed to me, but I'm an expert in sound reactive lighting, not social services, so I'll stay in my lane.

I want to express my regret that the safe injection site that was meant to be built around the corner from my office was not built. It's too late to do anything about it now, but part of the reason I am writing now is that one of my neighbours came into my office to talk about this new development and expressed triumph at the fact that the community got together to block the safe injection site. It is very hard for me to make time to engage in municipal politics but I cannot sit by while my neighbours who have jobs and homes are roaming around and saying terrible things about the homeless who are sheltering in our neighbourhood. Ya know, maybe if they had a safe place to shoot up, they wouldn't be doing it on the sidewalk! Addiction is not simply a choice, but my neighbours do not seem to understand this.

Lastly, I want to say one thing. That is that I do consider the people who live at the Capital City Center Hotel to be my neighbours. I wish that more people who work at other businesses in Lo-Town agreed with me. They are our neighbours, they are people who have fallen on hard times, and they need our help. I am tired of the sentiment that these people made bad decisions and they are getting what they deserve. That is such a flawed way of thinking. It genuinely makes me angry.

Please let me know if I can help in any other ways or give any more information that could be helpful.

Thanks, David Schwab Mechanical Designer, Manufacturing & QA Technologist Limbic Media

