



AGENDA

Community Planning Advisory Committee

Wednesday, September 6, 2023 at 7:00 p.m.
City Hall Council Chambers, 410 Esplanade

Mandate: *The mandate of the committee is to provide feedback to applicants and advice to Council on land use applications, policies, regulations and initiatives referred either directly by Council or through the Development Approval Procedures Bylaw.*

1. CALL TO ORDER AND ACKNOWLEDGEMENT (7:00pm)
The Town of Ladysmith acknowledges with gratitude that this meeting takes place on the traditional, unceded territory of the Stz'uminus First Nation.
- 1.1 INFORMATION ON HOW TO ATTEND THE MEETING
Residents are welcome to attend in person at City Hall Chambers at 410 Esplanade.
2. WELCOME, INTRODUCTION & ORIENTATION FOR NEW MEMBERS (7:05pm)
3. ELECTION OF CHAIR (7:15pm)
4. AGENDA APPROVAL (7:20pm)
5. ADOPTION OF June 7, 2023 MINUTES* (7:25pm)
6. NEW BUSINESS
None.
7. COUNCIL REFERRALS (7:30pm)
 - a. Zoning Bylaw Amendment Application 3360-23-01 – 19 Gatacre Street*
(30 minutes)
 - b. Official Community Plan & Zoning Bylaw Amendment Application 3360-23-02 – 10750 South Watts Road*
(30 minutes)
8. MONTHLY BRIEFING (8:30 pm)
File Updates (10 minutes)
9. NEXT MEETING – TBD
10. ADJOURNMENT (8:45 pm)

*Attachments



MINUTES

Community Planning Advisory Committee

Wednesday, May 3, 2023 at 7:00 p.m.
City Hall Council Chambers, 410 Espanade

PRESENT: Chair - Jason Harrison; Members – Steve Frankel, Tamara Hutchinson, Jason Robertson; Council Liaison – Marsh Stevens; Director of Development Services – Jake Belobaba; Planner/Recorder – Andrew Wilson

ABSENT: Members – Brian Childs, Abbas Farahbakhsh, Jennifer Sibbald

GUESTS:

Jason Harrison called the meeting to order at 7:05 PM, acknowledging with gratitude that Ladysmith is located on the traditional unceded territories of the Stz'uminus First Nation.

1. AGENDA APPROVAL

It was moved, seconded, and carried that the Agenda of May 3, 2023, Community Planning Advisory Committee meeting be approved.

2. ADOPTION OF MINUTES

It was moved, seconded, and carried that the Minutes of March 15, 2023, Community Planning Advisory Committee meeting be approved.

3. NEW BUSINESS

None.

4. COUNCIL REFERRALS

a. Zoning Bylaw Amendment 3360-22-09 – 624 John Wilson Place

Planner Andrew Wilson provided an overview of the proposal for a secondary suite in a newly constructed two-storey single family dwelling in the Holland Creek area. Committee members asked staff about the rationale behind only allowing secondary suites on certain sized parcels. Staff explained that minimum lot sizes are largely arbitrary, and that there is a historical assumption that more dwellings require larger size lots.

Committee members questioned if there is enough room for parking on the parcel and if it will impact on-street parking. Staff commented that there is a clause in the Business Regulations and Licensing (Rental Units) Bylaw, (Bylaw No. 2093) that tenants shall not be required to park on the street where on-site parking is available, and contravention of this bylaw can result in a fine. Committee members made comments that the number of available parking spots on the property is adequate, and the tandem parking configuration seems suitable.

Committee members made comments about the potential for more rezoning and variance applications to permit secondary suites in this subdivision. Committee members discussed the need for Council to have a broader discussion about secondary suite requirements in all zones.

It was moved, seconded, and carried that the Community Planning Advisory Committee recommends that Council approve Zoning Bylaw Amendment 3360-22-09 (624 John Wilson Place) as presented, and that Council investigate current prerequisites for secondary suites, specifically for minimum lot size and minimum frontage.

5. MONTHLY BRIEFING

The following files, that the Committee previously reviewed, have been to Council since the last meeting:

- 11 & 17 Warren Street (3360-21-12)
- 1141 Cloke Road (3360-22-05)
- Official Community Plan Bylaw 2022, No. 2200

6. NEXT MEETING – TBD

7. ADJOURNMENT

It was moved, seconded, and carried that the meeting be adjourned at 7:47 PM.

Chair (J. Harrison)

RECEIVED:

Corporate Officer (M. O'Halloran)

CPAC REFERRAL REPORT

Report Prepared By: Andrew Wilson, Planner
Meeting Date: September 6, 2023
File No: ZBL 3360-23-01
RE: Zoning Bylaw Amendment Application for a Funeral Home use at 19 Gatacre Street

EXECUTIVE SUMMARY:

The Town has received an application to amend the zoning bylaw for the purpose of operating a funeral consulting business including temporary storage of human remains (Funeral Home) at 19 Gatacre Street. The Community Planning Advisory Committee (CPAC) is being asked to provide feedback regarding the application in accordance with the CPAC Terms of Reference.

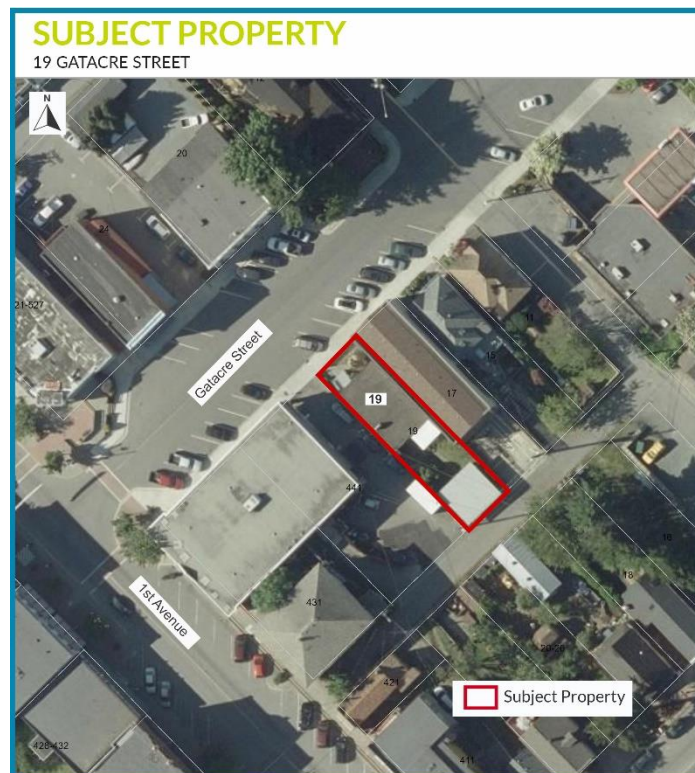
BACKGROUND/PROPOSAL

The subject property (see Figure 1) is located at 19 Gatacre Street within the commercial Downtown Core area, which consists of a mix of commercial and residential uses.

The subject property contains a two-storey single-family dwelling that is currently being used as a residence on the upper storey (89 m²) and a funeral consulting service (office use) on the lower storey (74 m²).

The applicant previously operated the business, which included temporary cold-storage of human remains, on a neighbouring property at 17 Gatacre Street. However, the zoning bylaw regulations were modified in 2016 such that “Funeral Homes” or “Funeral Parlours” (including preparation/storage of human remains) are no longer permitted in the downtown, except on one property (112 French Street). As such, current zoning on the subject property (19 Gatacre Street) does not allow the applicant to operate the cold-storage portion of the business (the consulting portion of the business is permitted as an

Figure 1: Subject property map.



office use), and he has therefore applied for a zoning bylaw amendment to allow preparation/storage of human remains.

The proposed operation will include the existing funeral consulting services and cold storage to hold the deceased temporarily until deposition arrangements have been made. Cremation is not proposed for this application and is not a permitted use elsewhere in the downtown; however, cremated remains may be held on site temporarily. Funerals or memorials are not hosted on the subject property and are not proposed as part of this application.

The applicant has provided a cover letter to support the rezoning application (Attached).

DISCUSSION

Official Community Plan (OCP) Bylaw 2022, No. 2200:

The subject property is within the Downtown Heart land use designation in the new OCP. Downtown Heart is considered a Priority Growth Area and is the heart of cultural, culinary, economic, and public life. It provides for a range of commercial uses including retail, office, and services, as well as civic and cultural services. The Downtown Heart is also part of a neighbourhood in which people increasingly live in homes above commercial uses in multi-family buildings, as well as in residential multi-family buildings.

The following OCP policies are relevant to the proposal:

Policy 2.4 General Land Use Policies:

- c. Support mixed-use development in areas that are served well by transit, good pedestrian infrastructure, and trails. Prioritize this development type in the Priority Growth Areas.
- d. Strongly encourage all commercial uses to have residential uses above the ground floor. Encourage the densification of existing areas with this development form, along with provision of amenities and infrastructure.

The development is supported by the Downtown Heart designation and is consistent with the OCP policies noted above. An OCP amendment is not required.

Development Permit Area:

The subject property is within “Development Permit Area 2 – Downtown” (DPA 2) in the OCP. DPA 2 guides the form and character for developments in the Downtown and a Development Permit (DP) is required for building alteration and construction of new buildings. The applicant is not proposing any alterations to the existing building at this time, nor any new construction.

Zoning Bylaw:

The subject property is zoned Downtown Commercial (C-2) in Zoning Bylaw 2014, No. 1860 (see Figure 2). The C-2 zone is intended to accommodate a broad range of commercial and community uses in the historic Downtown. The proposed use is considered a “Funeral Home” use under the zoning bylaw, which is defined in the Zoning Bylaw as “premises used for preparing human remains for burial or other end of life processes, and conducting funeral services, but excludes facilities for cremation or aquamation.” This use is not a permitted in the C-2 zone except as a site-specific regulation at 112 French Street.

Parking:

The zoning bylaw requires a minimum of one parking space per eight seats for a Funeral Home and one space per residential dwelling. The property currently has two parking spaces on site in a carport accessed via the rear laneway.

However, a Zoning Bylaw amendment (Bylaw No. 2140) was adopted on July 4, 2023, which removed the requirement for on-site commercial parking spaces within the Downtown.

PROPOSED BYLAW AMENDMENT:

To facilitate the addition of the proposed use, a site-specific amendment to the C-2 zone is proposed that will allow Funeral Home as principal use on the subject property. The Funeral Home definition in the zoning bylaw includes hosting funeral/memorial services; however, since the applicant is not intending to host funerals, it is proposed that funeral/memorial hosting services be prohibited. This will also eliminate any traffic/parking congestion issues that could arise from holding funerals on the property, considering the limited on-site parking. The two existing parking spaces are considered adequate to meet the needs of the current and proposed uses and will meet the minimum parking requirements in the Zoning Bylaw, provided Bylaw No. 2140 is adopted by Council.

Figure 2: Zoning map.

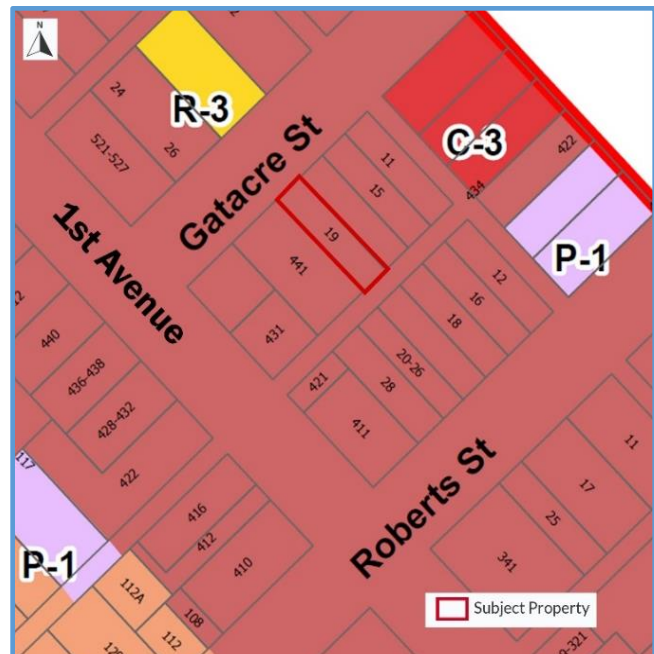


Figure 3: Site photo of 19 Gatacre Street.



As it is a site-specific amendment, the proposed Zoning Bylaw amendment will only be applicable to 19 Gatacre Street.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The application will be forwarded to Engineering, the Fire Chief, and Building Inspection as part of the application process.

NEXT STEPS:

Following the referral period, the application will proceed to Council for consideration of first and second readings.

ATTACHMENTS:

- A. Applicant cover letter

Attachment A

Sep 01-2022

Jake Belobaba

Director of Development Services

Re: Rationale Letter

Evergreen Cremation Centre has been in operation, located at 17 Gatacre Street, since November 2015 operating as a Funeral Provider – but not a funeral home. We have purchased 19 Gatacre Street and wish to continue to provide our services to the growing population of Ladysmith.

On site we; prepare documents necessary to create death certificates and facilitate the burial or cremation of the deceased; occasionally meet with executors and family members who have had a death, although most arrangements are made in the families homes; hold the deceased until the arrangements for final disposition are made; and hold cremated remains until returned to the estate.

I consider Evergreen Cremation Centre a “Funeral Provider” for a few main reasons, Licensing through Consumer Protection of BC states we are a funeral provider. The fact we do not hold funeral/ memorials at any of our locations, and never have. We do not perform embalming, if an embalming is required the service is contracted out, - we have no embalming room or equipment. There is no chapel in our buildings, but if a person is wanting a ceremony, we help arrange much like an Event Planner sits in an office and help design celebrations, but the celebrations are not held at the Event Planners office, but again I designed the company to help those who are looking for a “simple cremation”, but the cremation itself is, and always have been, off site as well.

During the years in business we have not caused or been effected by any parking issues as we do not have group gatherings. Typical meetings in our office (when in the office) is on average 30 minutes and involving 1-2 people who arrive in one car. The building is used as an office space to meet with families and storage/ holding facilities, providing a service to the people of Ladysmith and areas surrounding and I believe because of the fact we do not hold funerals we hold true to the Community Plan.

Kind regards

Kevin Owens

Director of Evergreen Cremation Centre

CPAC REFERRAL REPORT

Report Prepared By: Julie Thompson RPP, MCIP, Senior Planner
Meeting Date: September 6, 2023
File No: 3360-23-02
RE: Zoning Bylaw & OCP Amendment Application – 10750 South Watts Road

INTRODUCTION/BAKGROUND

The Town has received an application to amend the Zoning Bylaw and Official Community Plan (OCP) to allow for a warehouse and office industrial development at 10750 South Watts Road. The subject property is located in the Industrial (I-2) zone, and the applicant would like to increase the permitted density, from a floor space ratio of 0.3 to 0.7, to facilitate construction of the proposed development.

The subject property is not serviced by a community sanitary sewer system, which is unavailable to the area. However, community water via the CVRD's Saltair system may be available as a main is located along the South Watts Road property frontage. The applicant is proposing to connect to the Saltair system and provide an on-site sewage disposal system in lieu of a community system.

The development is proposed to consist of:

- A large warehouse building containing three individual units.
- Each unit is proposed to contain a warehouse, storage, and offices.
- Each unit is proposed to have two levels.
- Unit sizes range from 1460m²-1494.4m² in size.
- The building is proposed to be stepped with the topography of the land.

The applicant has provided conceptual drawings and a rationale letter which are attached to this report.

Subject property

The subject property is approximately 9,288.3m² in size and is currently designated Industrial under the OCP, zoned Industrial (I-2) under the Zoning Bylaw and falls within the Industrial development permit area (DPA 5). The property is also in the Industrial land use designation within the South Ladysmith Local Area Plan, which forms part of the OCP. The property is currently undeveloped and historically contained a dwelling. Adjacent land uses include:

- North: Industrial zoned land and institutional zoned land (Peerless Road Recycling Centre).
- East: Trans-Canada Highway and Cowichan Valley Regional District (CVRD) lands opposite the highway.
- South: Mostly forested Agricultural Land Reserve (ALR) lands containing a private residence.
- West: South Watts Road, industrial lands, and forested ALR lands.

A transit-stop is located near the subject property at Westdowne & Thicke Roads, with service between Ladysmith and Chemainus.

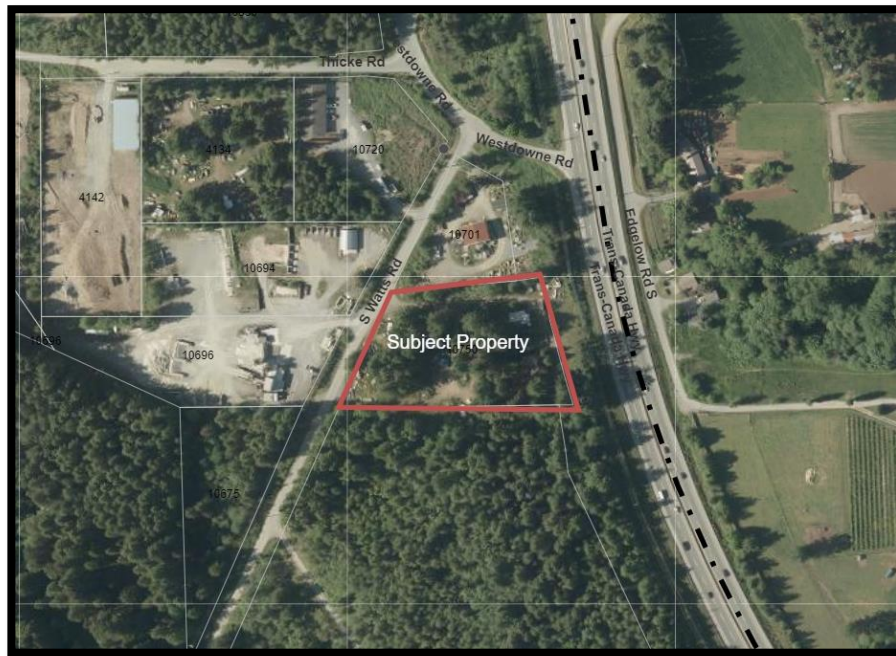


Figure 1: Subject Property Aerial Photo (2019)



Figure 2: Zoning & ALR Map

DISCUSSION:

Official Community Plan

The subject property is located within the Industrial designation in “Official Community Plan Bylaw 2022, No. 2200”. The Industrial designation provides a range of industrial and light industrial uses, and limited commercial uses to support industrial parks. The proposed development is supported by the Industrial designation and meets, or has the potential to meet, additional OCP policies which are summarized with staff comments in Appendix A. Policies that the development meets or has the potential to meet include those related to growth, general land-use, transportation, local economy, municipal infrastructure, social infrastructure, and green buildings, including reducing greenhouse gas (GHG) emissions. Guaranteeing that some of these policies are met may require registration of a covenant on title as a condition of rezoning. For example, the covenant could require that renewable energy sources are used to heat and cool the development, impose a BC Energy Step Code requirement, require transit-stop improvements, etc. See Appendix A for staff comments on these policies.

South Ladysmith Area Plan

The South Ladysmith (SL) Area Plan is part of the OCP (Schedule D of the OCP) and contains policies that are applicable to the proposed development. However, it is noted that the SL Area Plan was part of the previous OCP (adopted in 2003) and was not updated as part of the development of the new OCP. Some policies are outdated.

The SL Area Plan designates the subject property Industrial. Industrial policies support a range of industrial uses including land-extensive heavy industry associated with the forest sector, primary processing, manufacturing, warehousing, wholesaling and storage, product assembly and service, transportation, and distribution uses. The Industrial designation supports a FSR maximum of 0.4 and a maximum building height of three storeys.

Industrial and Servicing policies in the SL Area Plan require that new development on parcels less than 2.0ha be serviced by community water and community sewer systems, while interim on-site servicing is permitted on parcels 2.0ha or larger. The south Ladysmith area does not have access to community sewer and a limited number of parcels have access to the CVRD’s Saltair community water system. The SL Area Plan recognizes that there is inadequate community servicing to the area and policy objectives call for the completion of upgrades to the community sewer system to extend it to south Ladysmith. In the 20 years since the SL Area Plan was adopted, this work has not been completed. There is a Development Cost Charges (DCC) project that the Town has begun collecting money towards for the extension, however, completion of the project is not expected in the immediate future.

The proposed development is approximately 0.9ha in size, and the SL Area Plan policies therefore do not support on-site servicing. Likewise, the proposed FSR of 0.7 exceeds the maximum FSR of 0.4 supported by the SL Area Plan. Broadly speaking, the OCP is generally supportive of the proposed development. However, outdated FSR and minimum parcel size

requirements in the SL Area Plan are strictly worded and as such, an OCP amendment will be required to allow the proposed development.

Development Permit Area

The subject property is located within Development Permit Area 5 – Industrial (DPA 5) in accordance with the OCP. The purpose of the DPA 5 guidelines is to establish objectives and guidelines for:

- the general character of the development, including the siting, form and exterior design and buildings and other structures, landscaping, and specific features in the development, machinery, equipment and systems external to buildings and other structures; and
- to promote energy conservation, water conservation, and the reduction of greenhouse gas emissions.

Issuance of a development permit (DP) is required prior to construction on the subject property. The development will be required to be generally consistent with DPA 5 guidelines. It is noted that the current plans have not been reviewed against the DPA 5 guidelines at this time as the plans are conceptual and do not depict the final design. Should the rezoning be approved, CPAC will not have an opportunity to review the DP application for this development since reviewing industrial DPs is not in CPAC's Terms of Reference.

The subject property is also located in Development Permit Area 6 – Riparian (DPA 6) as a drainage ditch runs along the Trans-Canada Highway property frontage, within 30m of the property. DPA 6 is established to protect streams (as defined by the Provincial Riparian Areas Protection Regulation (RAPR)) and their riparian areas. The riparian area was previously assessed as part of a previous development proposal for a cannabis facility that was not constructed (see Figure X). Prior to any land alteration, construction, or vegetation disturbance/removal, a new assessment will be required to ensure that the riparian area will not be negatively affected by the proposed development during and post-construction.

Community Contribution Policy:

Community Contributions (CCs) are often negotiated as a part of discretionary decisions of Council, such as rezoning applications, and are intended to ensure a proposed development will not have an

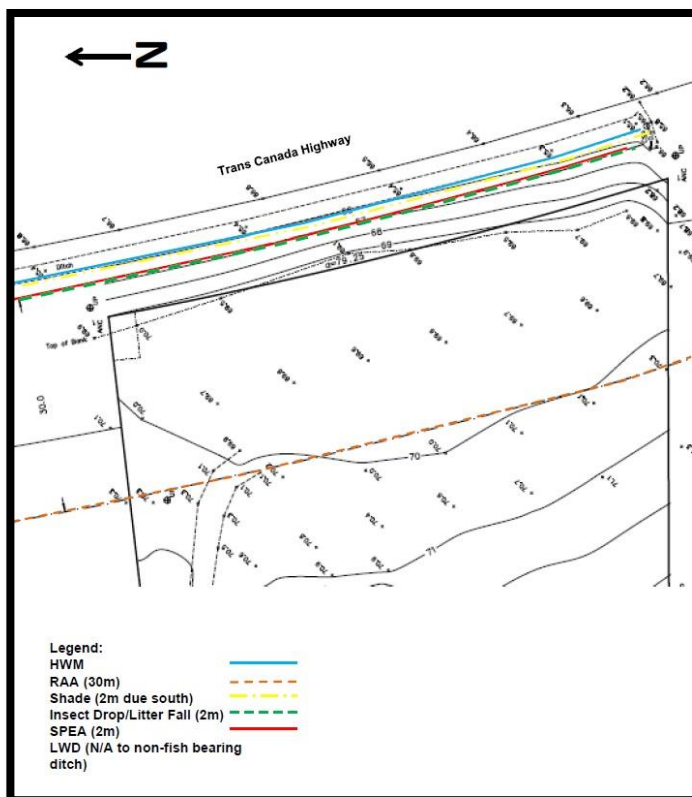


Figure 1: Drainage ditch and riparian area.

undue economic, social, environmental or infrastructural burden on the community, and/or ensure the benefits of the project outweigh the impacts on the community. The CC Policy provides examples and guidance for the provision of CCs, such as public realm improvements, heritage conservation, contribution of land for parks and/or civic uses, provision of special needs or affordable housing, improvements to parks, etc. Cash is also an acceptable CC. Since the applicant is proposing a higher density than is otherwise permitted, a CC is recommended. The applicant has not proposed a CC at this time, however, suggestions to the applicant have been provided based on the CC policy and other OCP policies, including improvements to a nearby transit stop at Westdowne and Thicke Roads. Any CC offered will be reviewed to ensure that it is viable and meets the CC policy.

Zoning Bylaw

The subject property is zoned Industrial (I-2) in “Zoning Bylaw 2014, No. 1860”. The purpose of the I-2 zone is to accommodate larger, heavy industrial operations and employment centres in an Industrial Park or working waterfront setting. The I-2 zone permits all uses that are in the Light Industrial (I-1) zone, as well as heavier industrial uses such as motor vehicle salvage and wrecking, storage yard, shipping yard, log handling, recycling plant, concrete batch plant, etc. Permitted accessory uses include office, food truck, retail sales, caretaker dwelling, and sani-dump station. The maximum floor space ratio (FSR) in the I-2 zone is 0.3 and the maximum parcel coverage is 75%. The applicant is proposing to construct an industrial development with a proposed FSR of approximately 0.47. However, the applicant is requesting a FSR of 0.7, which matches the FSR maximum in the I-1 zone, to enable the addition of a full second level in the building in the future. The zoning bylaw amendment proposes to allow a FSR of 0.7 on a site-specific basis. The proposed warehouse and office uses comply with permitted uses in the I-2 zone.

The I-2 zone allows a maximum principle building height of 15m but provides greater setbacks for buildings exceeding 12m in height, and smaller setbacks for buildings 12m or less. The zoning bylaw amendment proposes to include a site-specific amendment to the setbacks to allow *portions* of buildings greater than 12m to meet the increased setbacks, instead of the entire building. This will allow for greater flexibility in building siting and design.

A summary of the current and proposed land-use regulations for the proposed development are provided in Table 1, below.

Table 1: Proposed Land-Use Regulations

	Current/Required Regulations	Proposed Regulations
Official Community Plan Designation	Industrial	No change
Development Permit Area	Industrial	No change
Zoning	Industrial (I-2)	I-2 with site specific regulations (see below)
Floor Space Ratio (FSR)	0.3	0.7 *site specific
Parcel Coverage	75%	75
Height	15m	15m
Principle building setbacks	<p><u>Buildings with a height greater than 12m</u> Front: 10 m Sides: 10m Rear: 10m</p> <p><u>Buildings with a height 12m or less</u> Front: 6m Sides: 3m Rear: 3m</p>	<p><u>Portions of buildings with a height greater than 12m</u> *site specific Front: 10 m Sides: 10m Rear: 10m</p> <p><u>Buildings with a height 12m or less</u> Front: 6m Sides: 3m Rear: 3m</p>
Landscaping and Screening	Minimum 1.5m wide landscape buffer required along the south property line. Shade trees required in hard-surface parking areas.	No change
Parking	<p><u>Vehicle:</u> 1 per 200m² gross floor area (GFA) for warehouses. 1 per 30m² GFA for offices. Equivalent to approximately 39 stalls.</p> <p><u>Bicycle:</u> 1 long-term bike parking per 10 employees. 4 (10% of required off-street vehicle parking)</p>	<p><u>Vehicle:</u> No change.</p> <p><u>Bicycle:</u> No change.</p>
Loading	2 spaces	No change

Servicing

The subject property is not serviced by a community sanitary sewer system as the Town's system does not extend into south Ladysmith. However, community water may be available via the CVRD's Saltair system; the water main runs the property frontage on South Watts Road. Both the Zoning Bylaw and the Town's Subdivision & Development Servicing Bylaw would require connection to community water and community sewer for the proposed development. The applicant plans to connect to the Saltair water system, provided the CVRD permits the connection. In the absence of community sewer, the applicant is proposing an on-site septic system capable of supporting the proposed uses. In support of the proposed servicing, the applicant has provided the following documents (see attached):

- A report for water connection from MSR Solutions Inc.
- A plan and report for an on-site septic system from MSR Solutions Inc.

A variance to the Zoning Bylaw and Subdivision & Development Servicing Bylaw will be required to allow an interim on-site septic system while a community system is unavailable. This may be done through the Development Variance Permit (DVP) process, in tandem with the DP application process (provided the rezoning is approved by Council). The DVP may contain conditions such as a requirement to connect to a community sewer system within two years of it becoming available. Registration of a covenant may also be recommended.

Agricultural Land Reserve

The property is directly adjacent to a large property to the south that is located within the ALR (see Figure 2). OCP policy states that "development on lands adjacent to the ALR should incorporate urban-side setbacks and buffering as described in Part 3 of the Ministry of Ag. And Food Guide to Edge Planning". The Food Guide to Edge Planning recommends a 15m building setback and an 8m wide vegetative buffer on the subject property along the south property boundary adjacent the ALR. The proposed siting of the building would meet the 15m setback, however, the 8m wide buffer would cut into the proposed loading areas and driving surfaces. The application will be referred to the Agricultural Land Commission (ALC) for further comment. It is noted that additional setback and buffer requirements can be added to the proposed zoning bylaw amendment on a site-specific basis.

COMMUNITY PLANNING ADVISORY COMMITTEE (CPAC) REVIEW:

This application is being referred to CPAC for comment in accordance with the Committee's Terms of Reference and the Town's Development Procedures Bylaw. CPAC's Terms of Reference provides the following principles for reviewing OCP and Zoning Bylaw Amendment applications:

- Refer to the OCP and Council's strategic priorities in the review of the proposal.
- Hear from the applicant and its consulting team through a brief presentation to summarize the proposal.
- Consider each proposal on its own merits.
- Provide its advice to Council in the form of a motion.

ATTACHMENT(S):

- Appendix A: OCP Policy Review
- Applicant submission:
 - Conceptual designs
 - Rationale letter
 - Water report
 - On-site septic system drawings
 - On-site septic system report

Appendix A: OCP Policy Review

Policy/Policy Category	Comments
1.1 Growth Policies	
j. Preserve existing industrial lands for employment, as industrial land use is in relatively short supply in the region, and consistent with the Cowichan Industrial Land Use Strategy (2019).	The land has remained undeveloped as an industrial land use. The proposed development presents an opportunity to establish additional industrial activities within Ladysmith's south end.
2.4 General Land Use Policies	
X. prioritize infill and avoid greenfield development to reduce pressures on natural areas.	Development on the subject property would constitute infill development as the applicant is proposing to develop an existing parcel within an existing industrial area.
Aa. New development should incorporate the use of green infrastructure for rainwater management – including groundwater infiltration, rainwater detention, and rain gardens – in all land uses.	"Green" design features can be secured at time of rezoning (e.g. through covenant or zoning), be required by existing Town bylaws, and be required through Development Permit Area (DPA) guidelines.
Ad. Development on lands adjacent to the ALR should incorporate urban-side setbacks and buffering as described in Part 3 of the Ministry of Ag. And Food Guide to Edge Planning.	The subject property is adjacent to ALR lands to the south. The Food Guide to Edge Planning recommends a 15m building setback from the ALR, and an 8m wide vegetation buffer. The application will be referred to the Agricultural Land Commission (ALC) for comment.
Ak. Existing industrial lands, including marine industrial areas, should be protected for employment uses.	Industrial development on the subject property would protect and preserve it as an industrial site.
Reconciliation	
1.4 Place significant weight on input received by Stz'uminus First Nation regarding development proposals.	An OCP amendment is required, therefore, the application will be referred to the Stz'uminus First Nation for comment.
Transportation	
2.38 identify strategic investments in bus stops to improve accessibility, amenity provision and overall user experience. This included maintaining a priority list of desired transit shelter/stop upgrades that can be used to inform participation in BC Transit's cost-shared stop improvement program as well as to leverage any available transit infrastructure funding from other levels of government.	The subject property is near a transit stop at Westdowne and Thicke Roads. The application will be referred to BC Transit for comment on the applicability of transit stop improvements (e.g. a shelter) at this stop.

2.39 In lower density areas such as South and North Ladysmith, support other transit service delivery models such as Digital On-Demand Transit, as well as continued coverage and service capacity for people with a disability through handyDART.	The application will be referred to BC Transit for comment on the applicability of handyDART service to the site.
Municipal Infrastructure	
5.3 Where technically and operationally feasible, and aligned with the vision and goals of this OCP, support variances to development and servicing specifications to permit green infrastructure, public amenities, and/or active transportation.	The proposed development requires a variance or amendment to the Zoning Bylaw & Development and Subdivision Servicing Bylaw to allow operation of the development with on-site servicing in the absence of community servicing. The applicant has an opportunity to meet this policy if the on-site servicing is “green”. Green servicing could be secured as a condition of rezoning through registration of a covenant.
5.12 New development and rainwater infrastructure should be designed to manage flows to pre-development rates and factoring in future climate change projections. This includes preventing frequently occurring small rainfall events from becoming surface run-off and ensuring the maintenance of minimum base flows, and in some instances augmented base flows, in water bodies.	Current Town Engineering standards do not require pre-development rates for rainwater management. Rainwater management improvements that go beyond what bylaws currently require, such as pre-development rates, can be secured as a condition of rezoning through registration of a covenant.
5.14 support the integration of rainwater detention, infiltration, and conveyance systems with community or natural amenity space where possible. New development must implement their own sustainable rainwater management infrastructure.	See point above.
5.15 mimic natural ecosystem processes in rainwater system design and construction as much as possible. This includes minimizing runoff, maximizing infiltration, preserving and protecting the water absorbing capabilities of soil, vegetation and trees particularly along riparian corridors, and minimizing impervious surfaces on both private and public lands.	See point above.

5.16 encourage rainwater capture and discharge to ground where appropriate on public and private properties, while reducing impact to downslope properties.	See point above.
5.17 stormwater quality should meet applicable standards from the BC stormwater planning guidebook at the time it is discharged into receiving waterbodies.	See point above.
Social Infrastructure	
6.24 Provide engagement opportunities for all major projects unless public input cannot influence outcomes.	It is expected that if this application proceeds, a public hearing will be held in accordance with the requirements under the <i>Local Government Act</i> .
Local Economy	
7.5 Support the retention of – and multi-modal access to – employment lands in other commercial and industrial areas including the waterfront, midtown and south Ladysmith.	The subject property is located in south Ladysmith. Development of the lands as an industrial facility would help support its retention as industrial lands.
7.9 support green economic development activities, which range from local agriculture and food processing, to green businesses and green jobs supporting building retrofits, heat pump installations, and other means to move Ladysmith's buildings and infrastructure to net zero emissions.	The proposed uses in the development include warehouses and offices. There is potential to meet this policy if the proposed uses support green economic development activities.
7.12 consider development proposals' impacts on and resilience to climate change during the approvals process.	Consideration is given to climate change impacts based on additional policies noted in this table. CPAC may provide additional considerations.
7.13 existing industrial lands – both in terms of lands that are designated for industrial land uses and lands that are currently being used for industrial land uses – should be protected.	The applicant is proposing to keep the land within the Industrial designation and Industrial zoning. The proposed development is for industrial uses.

Green Buildings	
<p>8.4 All new buildings subject to rezoning should achieve net zero emissions as a condition of rezoning. This means that 100% of new buildings' space and water heating and cooling needs are met by zero emissions systems starting immediately</p>	<p>Conditions respecting emissions, such as requiring renewable energy sources, and green building design can be secured as a condition of rezoning through registration of a covenant.</p>

TOPOGRAPHIC SITE PLAN OF: LOT 20, DISTRICT LOT 72,
OYSTER DISTRICT, PLAN 8793 EXCEPT PARCEL A (DD 94199N)
THEREOF .

PID 005-462-959



The intended plot size of this plan is 559mm in width by 432mm in height (C-Size) when plotted at a scale of 1:400.

All distances and elevations are in metres and decimals thereof, unless otherwise noted.

Parcel dimensions shown hereon are derived from Plan 8793, DD94199N and field survey.

Civic address: 10750 South Watts Road, Ladysmith, British Columbia .

Current Zoning: Industrial (I-2)

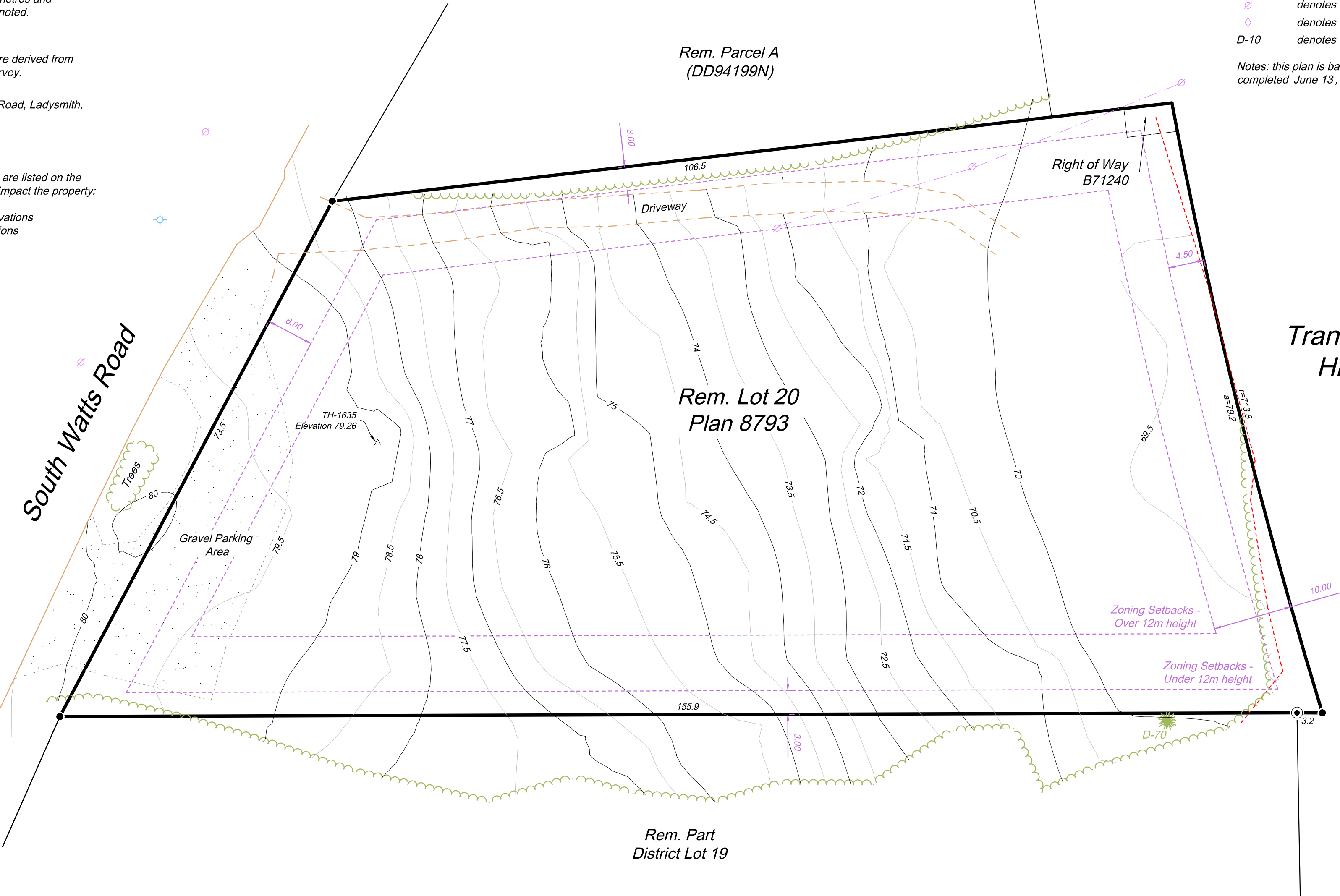
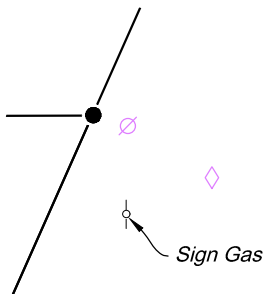
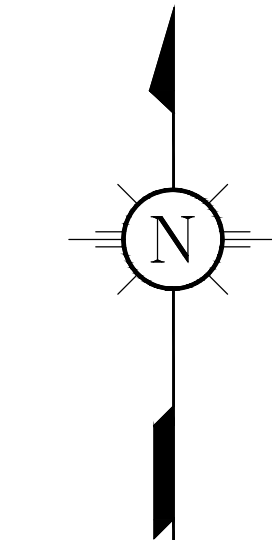
The following non-financial charges are listed on the current Certificate of Title and may impact the property:

DD94198N - Exceptions and Reservations
M76300 - Exceptions and Reservations
B71240 - Right of Way

LEGEND

- denotes Traverse Hub placed
- denotes Standard Iron Post found
- denotes Standard Concrete Post found
- denotes Edge of Gravel
- denotes Edge of Driveway
- denotes Top of Bank
- denotes Treeline/Bushline
- denotes Utility Line
- denotes Sign Post
- denotes Tree - Coniferous
- denotes Utility Pole
- denotes Valve
- D-10 denotes Tree Diameter in Centimeters

Notes: this plan is based on a field survey completed June 13, 2022.



Mailing & delivery address:
PO Box 21005
Duncan, BC V9L 0C2

Toll Free: (877) 603 7398
Duncan Telephone: (250) 746 0775
info@plsi.ca
www.plsi.ca

Contours are shown at a 0.5 m interval and are referred to the CGVD28 datum.

This document shows the relative location of the surveyed buildings and features with respect to the boundaries of the parcel described hereon. This document shall not be used to define property lines or property corners.

© Polaris Land Surveying Inc. 2022. Polaris accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decisions made, or actions taken based on this document.

Date: 2022-06-22
File: 3187-01
Drawing: 3187-01-TOPO.dwg
Layout: C-Size

ISSUES		
No.	DATE	ISSUED FOR
SUB CONSULTANT		

10750 SOUTH WATTS ROAD LADYSMITH REZONING

10750 SOUTH WATTS ROAD, LADYSMITH, BC

ROSS POWER

HEROLD
ENGINEERING

3701 Shenton Rd. Nanaimo, BC V9T 2H1
T: 250 751 8558 F: 250 751 8559
E: mail@heroldengineering.com

Copyright reserved. This drawing remains the exclusive property and may not be reused or reproduced without written consent of Herold Engineering Limited.

SITE PLAN AND
ZONING INFO

DESIGNED KAR	SEAL
DESIGN REVIEW	
DRAFTED LYH/KAR	
DRAFTING REVIEW	
PROJECT No. 4012-002	CLIENT DRAWING No.
SCALE 1 : 250	PERMIT No.
REL DRAWING No. A1.1	OF

DESTROY ALL DRAWINGS SHOWING PREVIOUS REVISION

PRELIMINARY BUILDING AREAS

BUILDING AREA:	3,860.0m ²
WH:	3,170.1m ²
OFF:	597.9m ²
STORAGE:	597.9m ²
BUILDING GFA:	4,365.1m²
SITE AREA:	9,288.3m ²
SITE COVERAGE:	41.6%
FLOOR AREA RATIO:	0.47

UNIT 1
FFE 78.0m
FLOORPLATE: 1,268.0m²
GFA: 1,460m²
WH: 1,076m²
OFF: 192m²
STORAGE: 192m²
TOTAL UN#1: **1,460m²**

UNIT 2
FFE 75m
FLOORPLATE: 1,273.0m²
GFA: 1,489.5m²
WH: 1,056.5m²
OFF: 216.5m²
STORAGE: 216.5m²
TOTAL UN#2: **1,489.5m²**

UNIT 3
FFE 72m
FLOORPLATE: 1,227.0m²
GFA: 1,416.4m²
WH: 1,037.6m²
OFF: 189.4m²
STORAGE: 186.4m²
TOTAL UN#3: **1,494.4m²**

SETBACKS:
10m SETBACK FOR HEIGHT OVER 12.0m
LANDSCAPE SETBACK 3.0m
FRONT YARD SETBACK 6.0m
SIDEYARD SETBACK 3.0m
REARYARD SETBACK 3.0m
LANDSCAPE BUFFER AND SCREENING 3.0m
LANDSCAPE BUFFER 1.5m

LOADING AND PARKING:
3 LOADING ZONES PER UNIT - 9 TOTAL
PARKING 9 STALLS
PARKING 10 STALLS
PARKING 8 STALLS

RETAINING WALLS:
LOCK-BLOCK RETAINING WALL, HEIGHT TBD
RETAINING WALL TO CLEAR R.O.W.
LOCK-BLOCK RETAINING WALL, HEIGHT TBD. RETAINING WALL REQUIRES LANDSCAPE SCREENING AS PER DPA REQUIREMENTS.

Other features:
GARBAGE AREA
NORTH

SITE INFO:

CIVIL ADDRESS: 10750 SOUTH WATTS ROAD, LADYSMITH, BC
LEGAL DESCRIPTION: LOT 20, DISTRICT LOT 72, PLAN 8793, OYSTER DISTRICT
ZONING - CURRENT: I-2 INDUSTRIAL
ZONING - PROPOSED: TBD AFTER REZONING

SITE AREA: 9,288.3m²

PROPOSED BUILDING AREA: 3,860m² (41.6% SITE COVERAGE)
ALLOW. SITE COVERAGE I-2: 75%
ALLOW. SITE COVERAGE I-1: 75%

PROPOSED BUILDING AREA: 3,860m²
PROPOSED GROSS AREA:
OFFICE: 597.9m²
UPPER STORAGE: 597.9m²
WAREHOUSE: 3,170.1m²
TOTAL GFA: 4,365.1m²
PROPOSED FAR: 4,365.1 / 9,288.3 = 0.47

ALLOW. FLOOR AREA RATIO (FAR): 0.3
EXISTING ZONING I-2: 0.7 - 0.47 AS PRESENTED
PROPOSED: 0.7 - 0.47 AS PRESENTED

PRELIMINARY BUILDING HEIGHT: 15.0m (MAX. 15.0m AS PER ZONING)

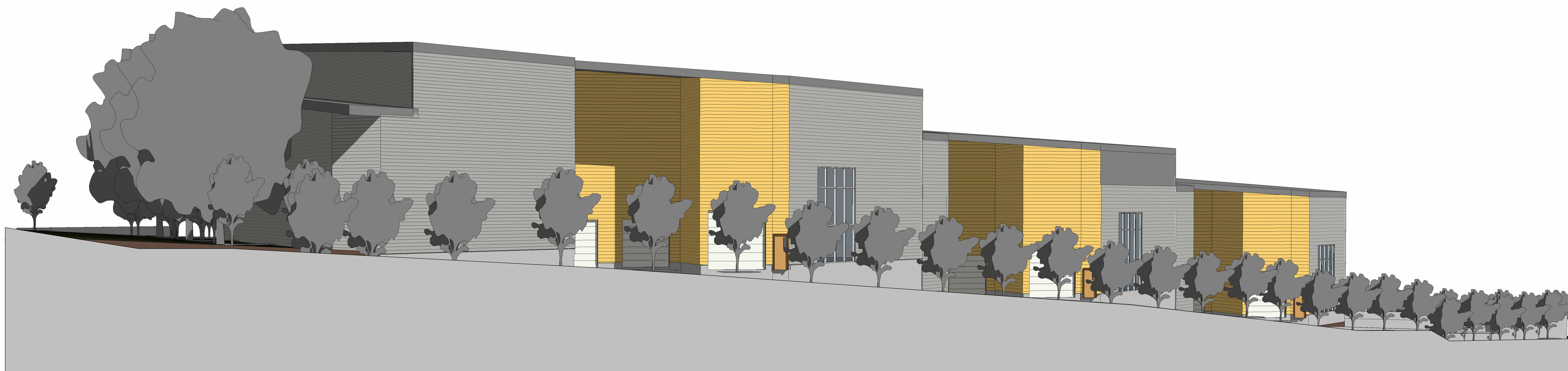
REQUIRED PARKING: WAREHOUSE & STORAGE : 1 / 200m²
TOTAL WAREHOUSE AREA: 3,170.1m² / 200 = 18.84

OFFICE: 1 / 30m²
TOTAL OFFICE AREA: 597.9m² / 30 = 19.93
18.84 + 19.93 = 38.77 = 39 STALLS

PRELIMINARY PARKING: 41 STALLS INCLUDING 3 HC @ FRONT ENTRANCES
3 LOADING ZONES PER UNIT - 9 TOTAL

REQUIRED SETBACKS: 6.0m FRONT (SOUTH WATTS)
3.0m ALL OTHER
10.0m FOR ALL BUILDING SECTIONS OVER 12.0m

LANDSCAPE BUFFERS: SOUTH WATTS (WEST) - 6.0m TO ALIGN WITH BUILDING
HIGHWAY 1 (EAST) - 3.0m PLUS RETAINING WALL SCREENING
SOUTH - FACING A.R.R. - 1.5m MIN. REQUIRED
NORTH - ADJOINING I-2 - NOT REQUIRED



1 NORTH-EAST FROM SOUTH WATTS ROAD



2 SOUTH-EAST FROM SOUTH WATTS ROAD

[illegible]

SUBCONSULTANT

110750 SOUTH WATTS ROAD LADYSMITH REZONING

10750 SOUTH WATTS ROAD, LADYSMITH, BC

GROSS POWER



© Copyright reserved. This drawing remains the exclusive property and may not be reused or reproduced without written consent of Herold Engineering

STREET VIEWS

DESIGNED KAR / LHY	SEAL
DESIGN REVIEW	
DRAFTED KAR	
DRAFTING REVIEW	
PROJECT No. 4012-002	CLIENT DRAWING No.
SCALE	PERMIT No.
HEL DRAWING No. A1.3	
	OF

DESTROY ALL DRAWINGS SHOWING PREVIOUS REVISION

February 22, 2023

4012-002

Town of Ladysmith
Main Office
410 Esplanade, PO Box 220
Ladysmith, BC
V9G 1A2

**Re: Re-Zoning Permit Application
10750 South Watts Road, Ladysmith, BC**

As part of the submission for the Re-Zoning Application, we have prepared the following report for the above-mentioned project, addressing the objectives of the permit guidelines.

Project Site Description

The project site is located at 10750 South Walls Road, in the South end of Ladysmith, near the Ladysmith / Cowichan Valley Regional district (CVRD) boarder. The site is currently Zoned I-2 within the Zoning Maps of the Town of Ladysmith. We are applying for a rezoning amendment to allow for a greater Floor Area Ratio (FAR) of the I-1 zoning, but keeping the property zoned I-2. The site is currently undeveloped beyond a previous single-family home on the site.

The reason for the Re-Zoning application is to increase the Floor Area Ratio (FAR) of the property from 0.3 in the I-2 Industrial zoning to 0.7 as per the I-1 Light Industrial zoning. This will allow the development of a larger warehouse style building with more internal uses, versus a smaller Building with more External Industrial Uses.

The buildings are yet to be designed, but preliminary design work shows a building stepping down the slope in three (3) equal sized units, with slab elevations between the units stepping 3.0m down the slope for each unit. The Building will likely be of either Concrete Tilt-up or Steel construction with Metal Cladding, with a SBS membrane roof.

The building suites will have a high ceiling warehouse space to the rear, with the North Elevation housing a ground floor Office space with a Storage Mezzanine over the Office space. The North elevation will be an entrance drive aisle for parking and business access, while truck loading bays will drive around the building and have access along the South Elevation. The remainder of the parking will be along the perimeter of the building on the East and South Elevations. There is no parking proposed along South Watts Road at this time.

Please note, as with all elements of the building, these are schematic massing concepts only, and all Building Features, Site Grading and Parking items will be designed as per the Zoning Bylaws with input from the Civil Engineer during the Development Permit Application process.

Zoning

The property is currently zoned as I-2 Industrial Zoning and is designated as such on the OCP Land Use Map. We are applying for re-zoning to allow for the higher FAR as per the I-1 Light Industrial Zoning. Below is the rationale for why we are applying for re-zoning and how both zonings have an impact on the project.

Setbacks:

The existing I-2 Industrial zoning has the following setback requirements:

- Front yard – 6.0m
- Side yard – 3.0m
- Rear yard – 3.0m

There is an additional 10.0m setback for all parts of the building greater than 12.0m in height.

The proposed I-1 Light Industrial zoning has the following setback requirements:

- Front yard – 6.0m
- Side yard – 3.0m
- Rear yard – 3.0m

We have followed both Industrial Zoning guidelines in the attached drawings.

Landscape Buffers are as per DPA-5 Industrial and Part 7 of Bylaw 1860 with a Landscape buffer shown abutting the South Watts Frontage, The Island Highway Frontage as well as the abutting A-RR property to the south. We are not currently showing a north property landscape buffer, as it abuts Industrial Zoned land. As with all parts of this rationale, the buffers and landscaping are shown for illustrative purposes and a Landscape professional will be engaged for all future Development and Building Permit applications.

Parking is currently as per Part 8 of Bylaw 1860 and the site plan and calculations currently show compliance with the potential building size and use. All loading zones are located to the rear of the building. The current plan shows a drive around site access for larger trucks, with the front parking area being 2-way car access. The southern access will be exit only. Once rezoned, detailed building areas and parking calculations will be prepared for the Development permit application.

Site Coverage:

Both I-1 and I-2 zoning allow for 75% Parcel or Site coverage. As shown, the proposed site coverage currently sits at 41.6%, with a Building Area of 3,860.0m² and a Site Area of 9,288.3m².

Gross floor area as proposed is 4,368.1m² with the Site Area being 9,288.3m². This provides a Floor Area Ratio of 0.47. This is greater than the allowance of 0.3 in the I-2 zoning and complies with the I-1 zoning.

Building Height:

The existing I-2 Industrial zoning has the allowance for a 15.0m Building Height.

The Light Industrial zoning has the allowance for a 12.0m Building Height. It is preferable for warehousing to have higher ceilings and we have provided schematic drawings showing a max. height at 15.0m per section of the building. We have accounted for the 10.0m setback as

noted in the I-2 zoning for all areas of the building over 12.0m. This is only applicable at the South Watts Road interface.

Site Grading:

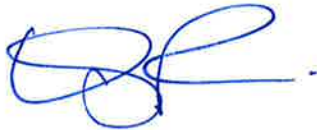
The site slopes down from South Watts Road towards the Island Highway with a drop of 11m over a length of 146m. we have a proposed retaining wall at the bottom of the site to provide drive aisles and site movement. All retaining walls are shown on the inside edge of the Landscape Buffers and will be screened as per the Landscape requirements as per Part 7 of Bylaw 1860 and the OCPs DPA-5 industrial. In the Development permit stage, site grading plans and retaining wall details will be developed. The items shown in the attached drawing files are schematic at this time.

Building Servicing:

The building is intended to be a Warehouse style building, with most of the internal spaces used for the shipping, storage, and movement of goods and or materials. This style of building typically has low staff levels for the building size, with each suite having +/- 190m² of office, lunchroom, meeting, and services space. If this was an outdoor intensive project, the office sizes and staffing would remain the same. The project has municipal water on South Watts Road. On site septic will be designed by a qualified designer during the design phase.

If you have any questions regarding the project, please reach out for additional information. I look forward to working with the Town of Ladysmith to work on this re-zoning application and working out a solution that works for both the client and the Town of Ladysmith.

Yours truly,



HEROLD ENGINEERING LIMITED

Kyle Riley, Architectural Technologist, AIBC
Associate

November 29, 2022

Colony Construction Corporation
19099 25 Ave Unit 204
Surrey, BC
V3Z 3V2

Attention: Hamed Ghaznavizadeh

Re: 10750 South Watts Rd Water System

Dear Mr. Ghaznavizadeh,

Upon review of potential water servicing options at 10750 South Watts Rd in Ladysmith, MSR Solutions (MSRS) has the following comments.

There is an existing 6" (150 mm) watermain with a fire hydrant on South Watts Rd operated by the Cowichan Valley Regional District as part of the Saltair Water System as shown in Figure 1. The CVRD has indicated that the development can connect to the watermain at an approximate cost of \$50,000, subject to changes as design proceeds. As the water meter costs upwards of \$10,000 and single family dwellings are \$7,000, the estimated connection and installation fees are reasonable.



Figure 1: Existing Watermain on South Watts Rd

The water supply from the CVRD can accommodate daily usage and will be metered and billed by the CVRD. If additional storage is required for the sprinkler system, requirements will be sized by a fire protection engineer as

per NFPA 13 – Standard for the Installation of Sprinkler Systems and MSRS will coordinate the design into the civil works.

The CVRD will hot tap into the watermain on South Watts Rd and provide both a 50 mm metered connection and a 150 mm fire flow line. The fire flow main will have a normally closed valve installed at the property line.

A Class “D” cost estimate is outlined below.

Item	Cost	Comments
Municipal Water Connection	\$50,000	6” main, metered to property line
Water Distribution to Warehouse	\$10,000	Watermain from meter to building.
Fire Protection Tanks	\$15,000	If required
Contingency (35%)	\$26,000	
Total	\$101,000	

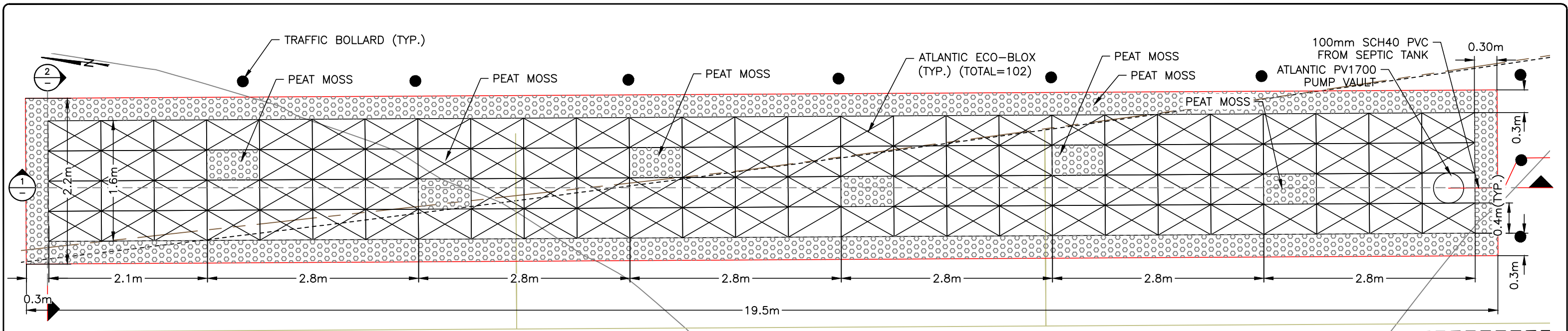
The proposed development can on 10750 South Watts Rd can be serviced by connecting to the Saltair Water System’s watermain located on South Watts Rd. It is proposed to install both a 50 mm metered service and additional fire flow main. Class D costs for the water servicing is \$101,000.

Regards,

MSR Solutions Inc.

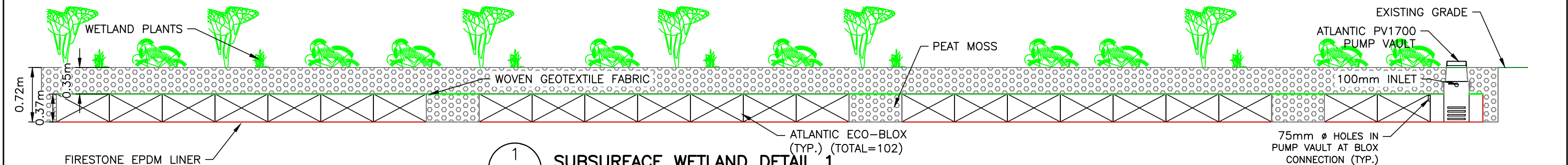


Jeff Brett, E.I.T.
Project Engineer



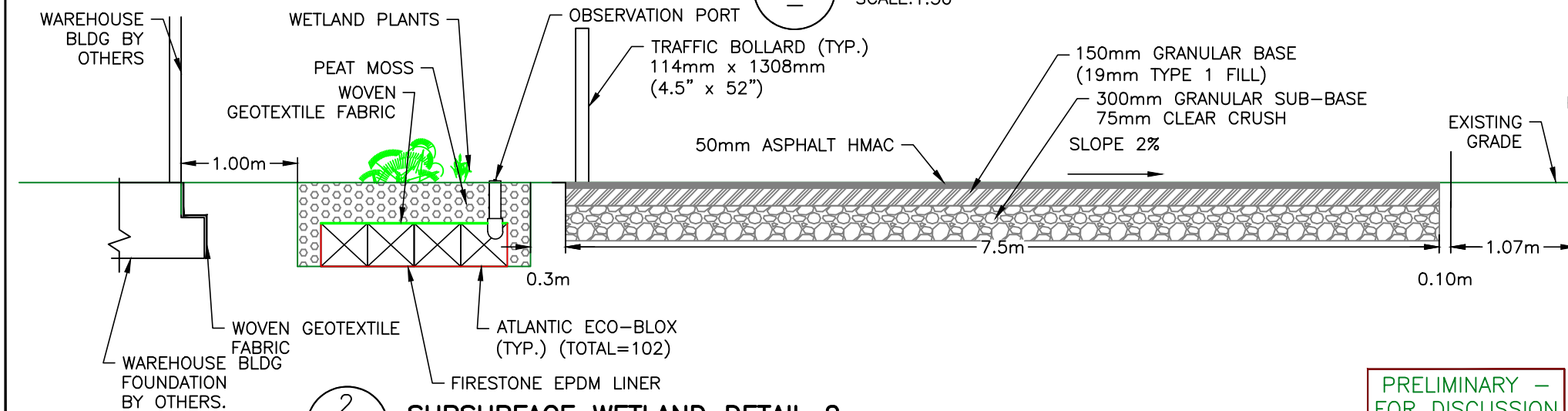
SUBSURFACE WETLAND PLAN

SCALE: 1:50



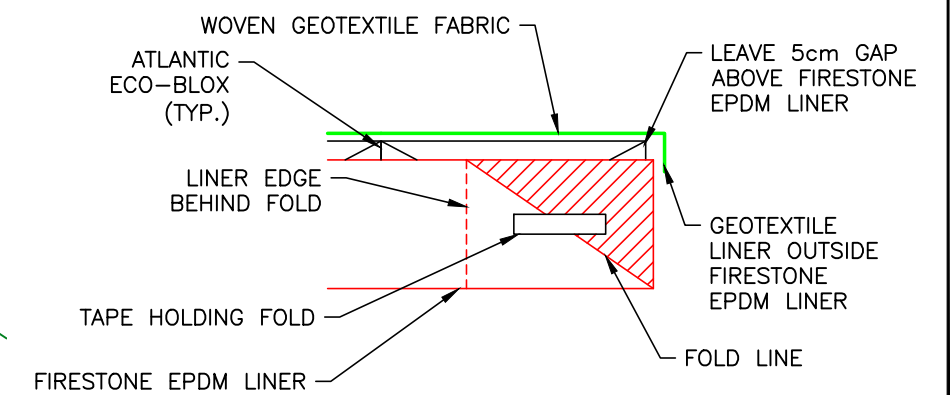
SUBSURFACE WETLAND DETAIL 1

SCALE: 1:50



SUBSURFACE WETLAND DETAIL 2

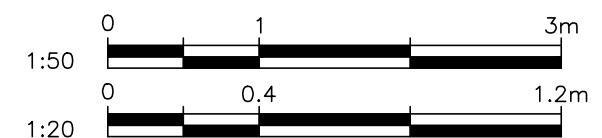
SCALE: 1:50



LINER CORNER FOLD DIAGRAM

SCALE: 1:20

PRELIMINARY –
FOR DISCUSSION
PURPOSES ONLY
OCTOBER 2022



MSR
Innovative Engineering Solutions
PERMIT TO PRACTICE #1001876

NO.	DATE	BY	REVISIONS	ENG
1	2022.10.20	A.M.	PRELIMINARY	M.S.

NO.	DATE	BY	ISSUED	ENG
1	2022.10.20	A.M.	PRELIMINARY	M.S.

PROJECT:
692 ROSS POWER LADYSMITH DEVELOPMENT

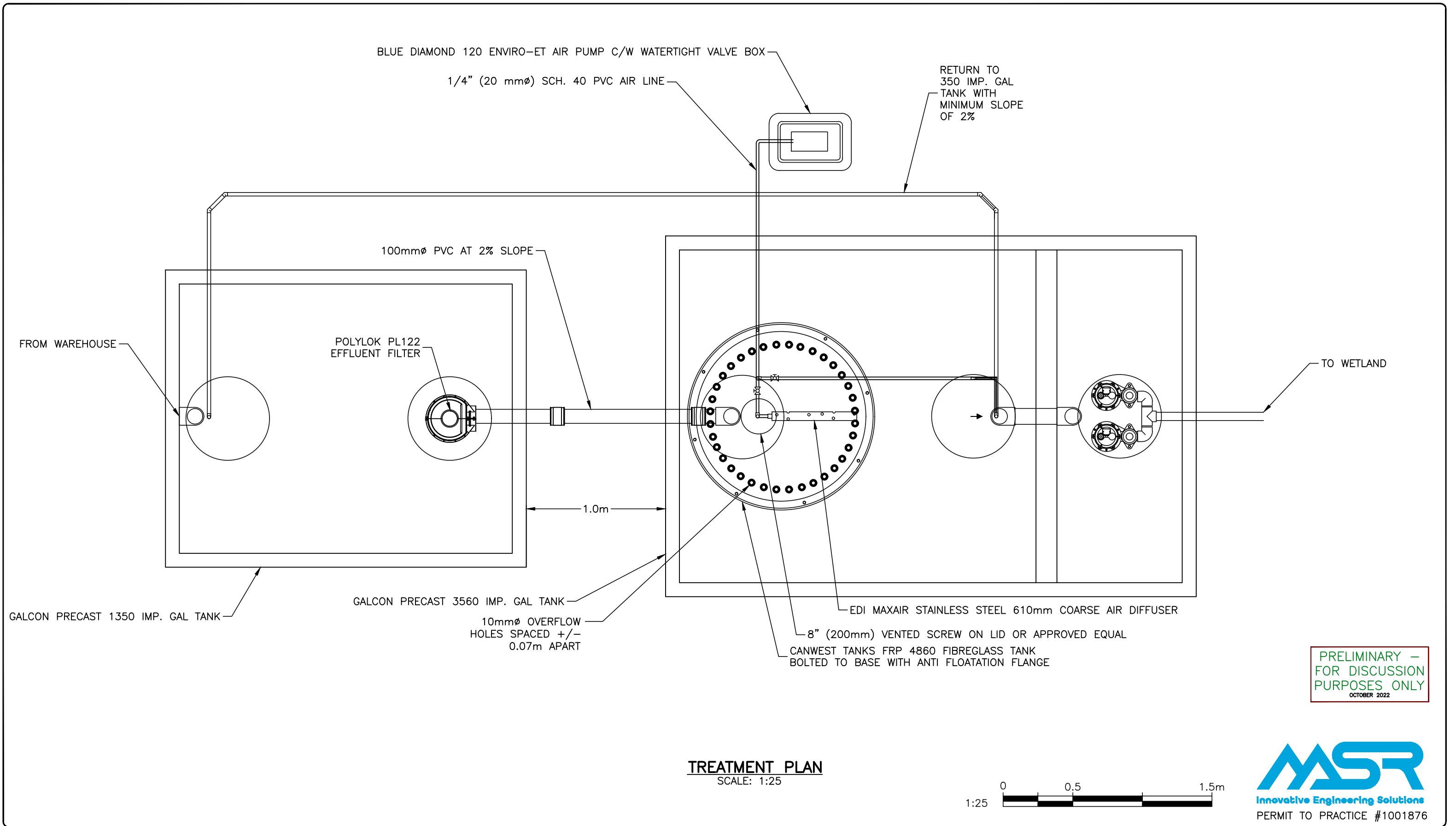
DESCRIPTION:
TREATMENT DISPOSAL PLAN, SECTIONS AND DETAILS

MSR SOLUTIONS INC.
INNOVATIVE ENGINEERING SERVICES
125 - 662 GOLDSTREAM AVENUE, LANGFORD
B.C. V9B 0N8
OFFICE: (250) 479 - 5164
FAX: 888.277.2816
info@msrsolutions.ca
www.msrsolutions.ca

DESIGN BY: J.B. DATE: 2022.10.13.
DRAWN BY: A.M. DATE: 2022.10.13.
CHECKED BY: J.B. DATE: 2022.10.20.
APPROVED BY: M.S. DATE: 2022.10.20.

HORZ. SCALE: AS SHOWN
VERT. SCALE: —
SHEET 4 OF —

DRAWING No.: C04
PROJ No.: 22-730
VERSION No.: 1



BC
CALL
BEFORE
YOU DIG
1-800-474-6886
or by CELLULAR phone
Responsible Area: SDP-646
CALL BEFORE YOU DIG
FOR YOUR PROTECTION

NO.	DATE	BY	REVISIONS	ENG

NO.	DATE	BY	ISSUED	M.S.	ENG
1.	2022.10.13.	A.M.	PRELIMINARY		

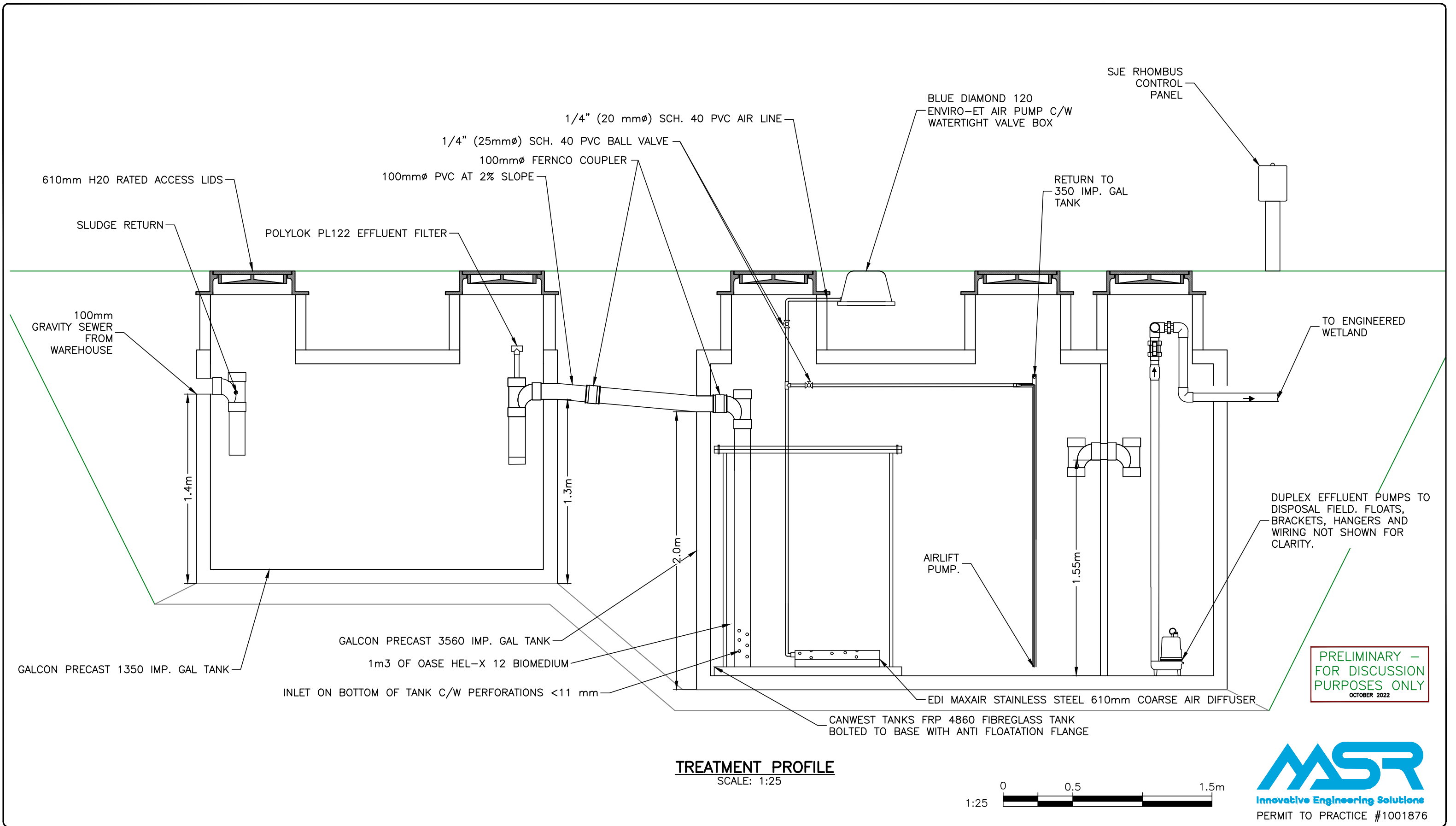
PROJECT:
692 ROSS POWER LADYSMITH DEVELOPMENT

DESCRIPTION:
TREATMENT PLAN

MSR SOLUTIONS INC.
INNOVATIVE ENGINEERING SERVICES
125 - 662 GOLDSTREAM AVENUE, LANGFORD
B.C. V9B 0N8
OFFICE: (250) 479 - 5164
FAX: 888.277.2816
info@msrsolutions.ca
www.msrsolutions.ca

DESIGN BY: J.B.	DATE: 2022.10.13.
DRAWN BY: A.M.	DATE: 2022.10.13.
CHECKED BY: J.B.	DATE: 2022.10.20.
APPROVED BY: M.S.	DATE: 2022.10.20.

HORZ. SCALE: 1:25	DRAWING No.: C03
VERT. SCALE: 1:25	PROJ No.: 22-730
SHEET 3 OF -	VERSION 1



BC CALL BEFORE YOU DIG 1-800-474-6886

CALL BEFORE YOU DIG

NO.	DATE	BY	REVISIONS	ENG

1.	2022.10.20.	A.M.	PRELIMINARY	M.S.
NO.	DATE	BY	ISSUED	ENG

PROJECT:
692 ROSS POWER LADYSMITH DEVELOPMENT

DESCRIPTION:
TREATMENT PROFILE

MSR SOLUTIONS INC.
INNOVATIVE ENGINEERING SERVICES
125 - 662 GOLDSTREAM AVENUE, LANGFORD
B.C. V9B 0N8
OFFICE: (250) 479 - 5164
FAX: 888.277.2816
info@msrsolutions.ca
www.msrsolutions.ca

DESIGN BY: J.B. DATE: 2022.10.13.
DRAWN BY: A.M. DATE: 2022.10.13.
CHECKED BY: J.B. DATE: 2022.10.20.
APPROVED BY: M.S. DATE: 2022.10.20.

HORZ. SCALE: 1:25
VERT. SCALE: 1:25
SHEET 2 OF -

DRAWING No.: C02
PROJ No.: 22-730
VERSION 1

August 24, 2023

Colony Construction Corporation
19099 25 Ave Unit 204
Surrey, BC
V3Z 3V2

Attention: Hamed Ghaznavizadeh

Re: 10750 South Watts Rd Sewage System

Dear Mr. Ghaznavizadeh,

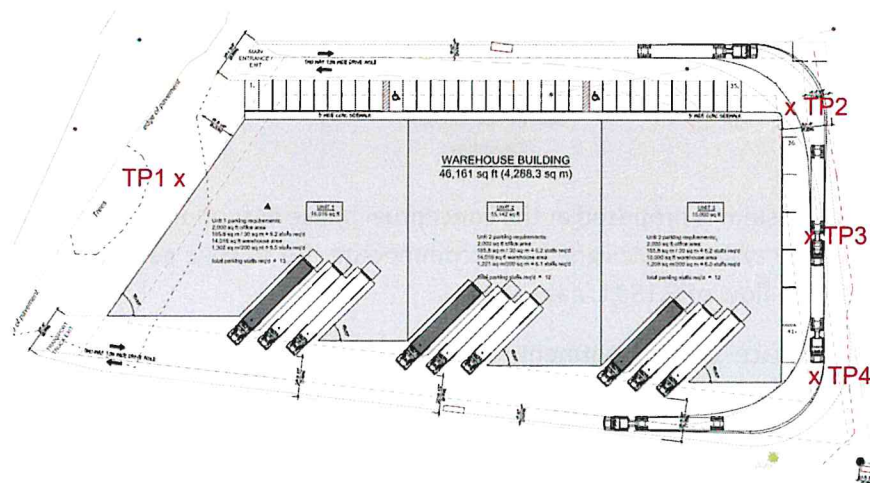
This letter explains a proposed sewage system at 10750 South Watts Rd in Ladysmith to support an ongoing rezoning application with the Town of Ladysmith.

The proposed sewage system is based on the warehouse with 42 parking spaces at 150 Lpd for a total of 6,150 L/day, and as such, the sewage treatment and disposal will be under the Sewerage System Regulation.

The intended site layout, topography, and soil conditions have contributed to the proposed location of treatment and disposal adjacent to the eastern building boundary. This location also allows gravity sewage collection from the buildings, avoiding the need for additional sewage pump stations while maintaining breakout point setbacks.

Sewage will be treated using a treatment system designed by MSR Solutions. These treatment units are efficient in providing Type 2 effluent standards (BOD5 and TSS < 45 mg/L) prior to disposal while having a relatively small footprint. The treatment system would be H2O loading rated, meaning cars could park on the lids, allowing for a parking spot in these locations.

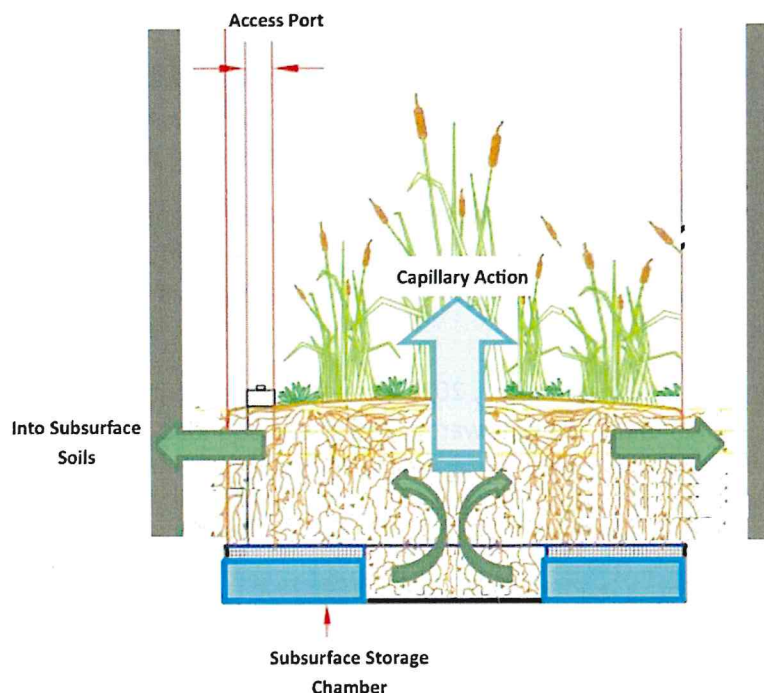
The site visit was performed on September 21st, 2022 to investigate potential sewage systems for the proposed warehouse building. The site generally slopes towards the Eastern boundary and is covered with brush and small shrubs. Test pits were performed at potential sewage disposal locations, near the western and eastern boundaries of the site, shown below.



Each test pit was dug to a depth of 0.6 m, consisting primarily of gravelly sandy loam, and no staining or limiting layers were observed. The soil was extremely dry and was fully saturated prior to the percolation testing. The test pits had little to no percolation during testing with the permeameter. A jar test was performed to analyze the soil texture. The jar test confirmed the gravelly sand loam properties throughout the proposed site.

Treated wastewater collects inside the subsurface storage chamber and overflows the top of the impermeable liner into the peat. The peat relies on capillary action and surface area interaction to transfer the effluent out of the chamber by wicking action, which is then either taken up by plants, lost to evaporation, or percolates into surrounding subsurface soils. The peat substrate contains a vast amount of surface area that houses beneficial microbes that consume the remaining coliform bacteria and dissolved compounds. Wetland plants are to be planted within the peat to uptake additional nutrients.

Engineered wetlands have a proven track record in British Columbia of providing enhanced tertiary treatment, removing even trace compounds such as pharmaceuticals which are not addressed by conventional wastewater treatment systems. The peat engineered wetland disposal area will be surrounded by bollards to prevent traffic from disrupting the disposal area.



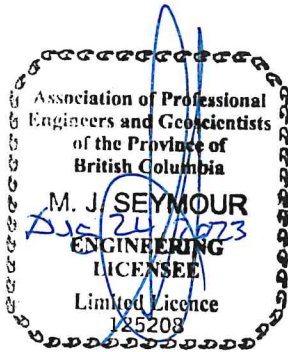
In conclusion, the sewage system is proposed at the conceptual phase in supporting the rezoning application with the Town of Ladysmith. The system is designed to accommodate the sewage generated by the warehouse and parking facilities with a total flow of 6,150 L/day.

To achieve efficient and space-saving treatment, the implementation of the secondary treatment has been proposed providing high-quality effluent before disposal. The recent soil analysis shows that the utilization of engineered wetlands is appropriate for this site. The engineered wetland will serve as the final treatment stage, further enhancing the quality of the produced effluent.

As the project progresses, the proposed sewage system will undergo the necessary procedures for submission under the Sewerage System Regulation to the Vancouver Island Health Authority including adequate sizing of treatment and disposal systems. This step will take place in a later stage of the project development.

The final system will be adequate to serve the sewage flow from the site and fully in compliance with the Sewerage System Regulation.

Regards,



Mike Seymour, P.L.Eng.
Principal
mike@msrsolutions.ca

Cc:

- Jarrod Koster, Herold Engineering Ltd