

Troy Clay Inc.

Master Site Development Plan

(to be read in conjunction with the Planning Brief)

In supporting a Specialized Hauling Business



SW-15-23-28-W4M, Block 1, Plan 9812200
232098 – Range Road 283, Rocky View County

Prepared for
Troy Clay Inc./IPIG Inc.

Carswell Planning



Revised, April 2021



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revised April, 2020

Master Site Development Plan for Troy Clay Inc.

-submitted by Carswell Planning Inc.

1.0 Introduction

1.1 Proposal

Amendment to the Land Use Bylaw to redesignate lands from Agriculture - General (A-GEN) District to Industrial – Light (I-LHT) District with an accompanying Master Site Development Plan (MSDP) in recognition of an existing specialized hauling business with an accessory dwelling unit. The business involves outdoor storage of trucks and vehicles, trailers, and equipment.

1.2 History

Carswell Planning Inc. acted as agent for Troy Clay Inc. for Development Permit #PRDP 20190035. The DP was for a Home-Based Business, Type II, for a landscaping company and is conditionally approved. Conditions could generally be met with respect to a Landscape Plan (which has been approved) and the number of employees and most conditions. However, the owner feels the outdoor storage limitations to 400 m² (4,306 ft.²) and maximum of eight business-related visits per day confining to the business of landscaping and hauling. Further, the equipment and vehicles sometimes require repair within the existing building on-site. The owner wishes to expand and would like to have planning permissions in place to do so.

1.3 Introduction

Carswell Planning has been retained to act as agent on behalf of the owner. The proposal is in recognition of an existing specialized hauling business and owner's residence. The scale is still minimal with respect to adjacent property owners, but would exceed that of a Home-Based Business. Redesignation to I-LHT is appropriate. The County Plan requests an MSDP for the Industrial redesignation.

1.4 Scope of MSDP

The MSDP emphasis is on site design with the intent to provide Council and the public with a clear idea of the final appearance of the development. More specifically, it is to address:

- building placement and setbacks;
- building height and general architectural appearance;
- parking and public lighting;
- landscaping for visual appearance and/or mitigation measures;
- agriculture boundary design guidelines; and

An **Operational Plan** forms part of the MSDP to fulfill criteria previously mentioned, detailed within are hours of operation and how the facility is looked after.



1.5 Ownership and Legal Description

Troy Clay is the owner/director of IPIG Inc. for the site, being 8.08 ha (19.97 acres), registered on title 151 240 314. Legal description is Meridian 4, Range 28, Township 23, Section 15, Quarter Southwest: Plan 9812200, Block 1. There is a restrictive covenant for a utility right of way to Canadian Western Natural Gas Company Ltd. "20 ft. Strips". The property is separated from the property to the north by a rail bed now used by AltaLink Powerlines.

1.6 Summary of Community Consultation

Troy Clay and his neighbours have worked together throughout their respective developments. The Transportation Impact Assessment was done together with the neighbours to best assess a cumulative impact based on all developments in the immediate area. Troy Clay also has a letter of support for his proposal from his neighbour to the north, Singer Transport.

2.0 The Site

Figure 1: Location Map, shows the site in SW-15-23-28-W4M. The subject lands are one section (1 mile) east of Calgary fronting on Range Rd. 283, south of Highway 560 (Glenmore Trail) by a section and a half (1.5 miles).

Figure 1: Location Map in RVC

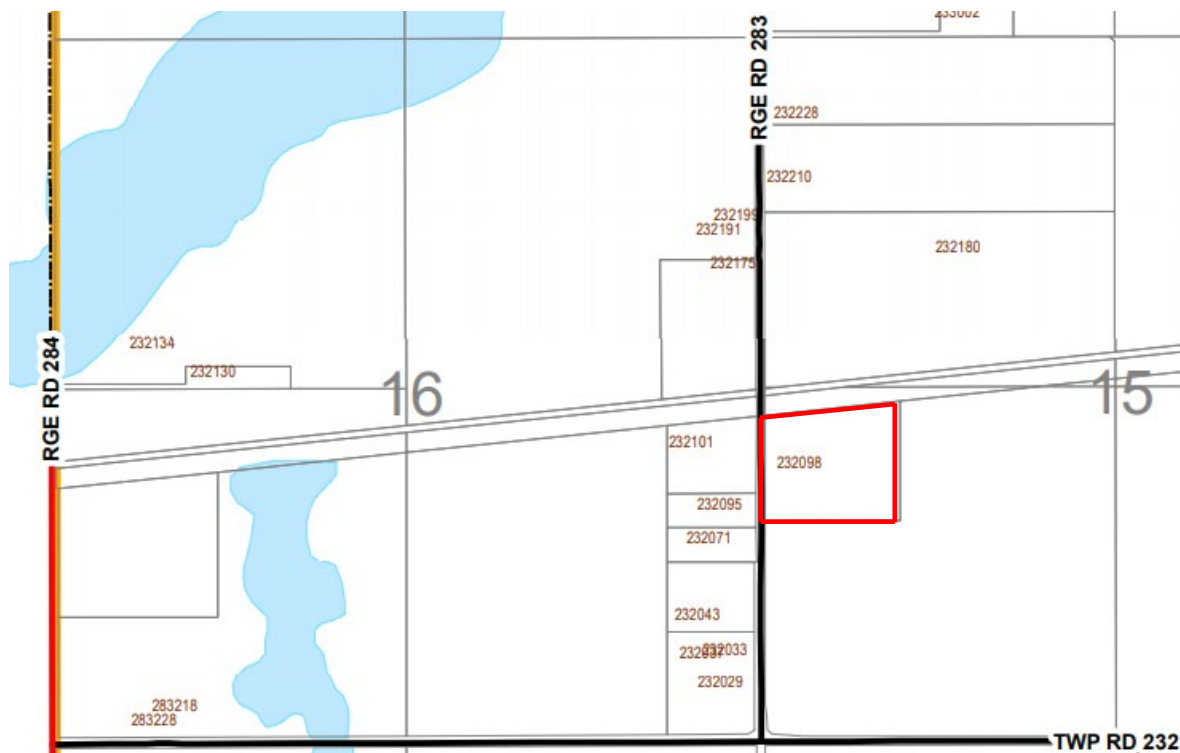


Figure 2: Aerial, shows the property in relation to the scale of other businesses in the area, as well as the landscaping efforts to neighbouring properties. A rectangular dugout is shown in the northeastern corner of the property and rows of trees planted in the southern portion of the property, some of which are used for the landscaping component of the business.



Figure 2: Aerial



Figure 3: Street View of Site, shows the residence in the foreground with a driveway leading to the business component towards the centre of the property. The property presents itself in a well-kept manner with trees planted as part of the landscaping seen next to the driveway.

Figure 3: Street View of Site



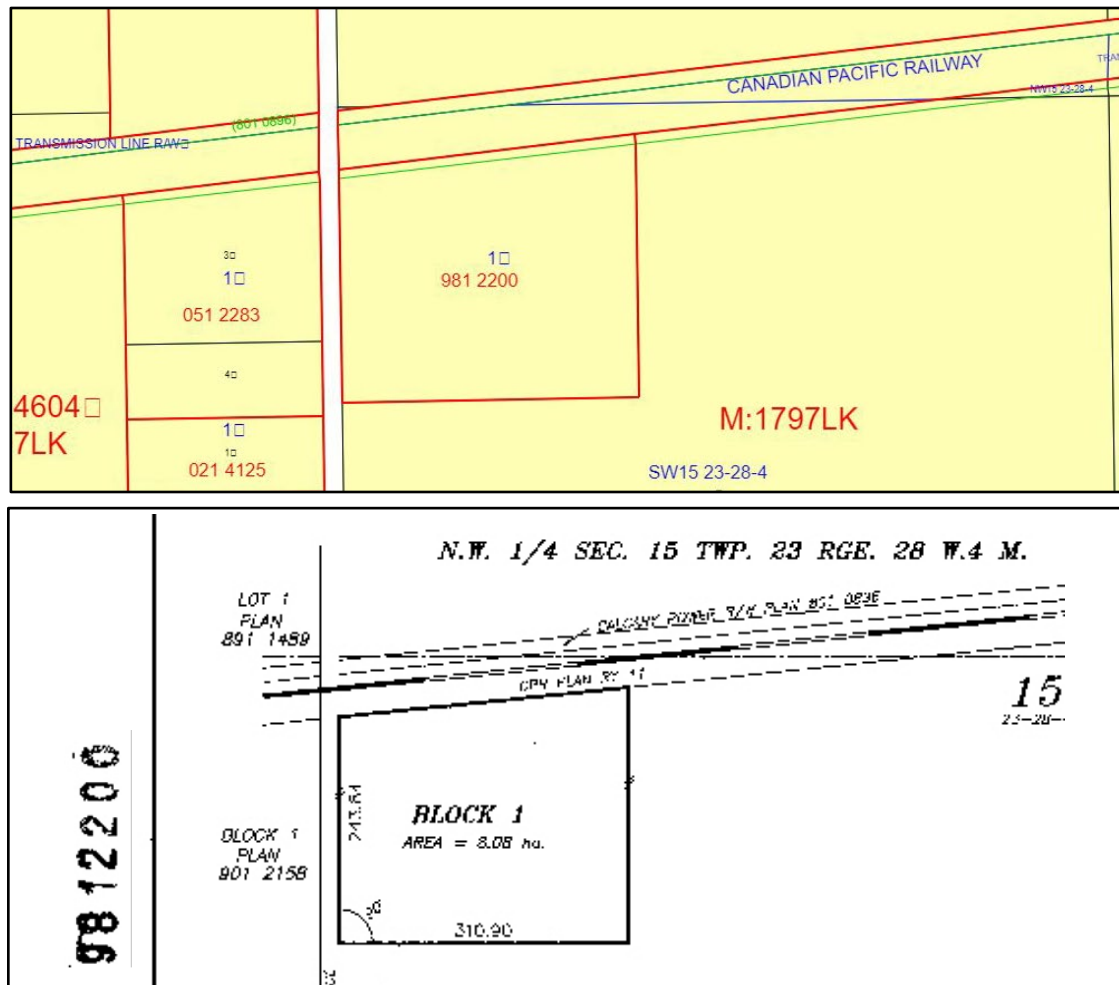
**Figure 4: Survey**

Figure 4: Survey, shows the parcel from the Alberta Land Registry. North of the property is a berm that is the rail base to a former Canadian Pacific Railroad line and now site of a transmission line. There is a restrictive covenant for the northerly 6 m (20 ft.) of the property for a gas line.

3.0 Site Assessment

3.1 Soil Suitability and Topography

Soils for the proposal have slight limitations due to wetlands in the area. The subject lands are within the Fescue Grassland Eco-Region (RVC 2009, *Agricultural Context Study, Map#3 Eco-Regions*). Soils are 0.2 m topsoil of silty clay loam over sub-soil, being silty clay, over brown clay/sand above shale and sandstone at depth.

Topography is relatively level at elevation 1022 m with a gentle slope towards the northeast at elevation 1020 m where the dugout is now. A ditch connects to the dugout.



3.2 Environment

Alberta Environment wetland mapping estimates some wetlands in the quarter section, primarily lesser value of C, some of which are incidental or remnants, most being off-site. A preliminary review concluded that the site does not contain any critical environmental constraints that would be expected to impact the proposed development.

It is the intent of the development to avoid any wetlands and continue having stormwater managed using a portion of the existing dugout in the northeast portion of the property. A permit through the Water Act would be taken out in recognition of this and any future modifications. Any further assessment will occur at the development permit stage.

3.3 Water

Water is to be available in accordance with the Water Act and the Environmental Protection and Enhancement Act. County Servicing Standards, Section 600-Water Supply states, "When the proposed water supply is from a groundwater aquifer with fewer than 6 lots within a quarter section, a well driller's report will be required." Within the quarter section, there is only one other lot, being 134.61 acres. The well driller's report is available for GIC Well ID. 286370 showing a pump rate is 22.5 L/min (5 igpm).

Industrial uses will require approvals from Alberta Environment and Parks (AEP) to withdraw water from groundwater. RVC Servicing Standards note that water supply requires a cistern which will be implemented prior to a development permit.

3.4 Waste Water

Servicing Standards for sewage treatment in industrial designations require a holding tank which will be also addressed at time of subdivision. The existing dwelling has a conventional on-site sewage treatment system that is expected to continue to serve the building.

3.5 Stormwater

ISL produced a Stormwater Management Plan, revised June 2020 for the site. This takes into account the proposed development being approximately 8 ha, composed of indoor and outdoor industrial storage, a residential area, open space, and an access road. A Stormwater Management Facility (SWMF) is proposed to manage any excess runoff under the post-development conditions. The location of the SWMF is to be at the northeast corner of the site, near the dugout. Continuous simulation modelling was conducted for the existing dugout and the future SWMF. The required SWMF footprint is about 0.4586 ha taking into account imperviousness area calculated at 6% of the subject site.

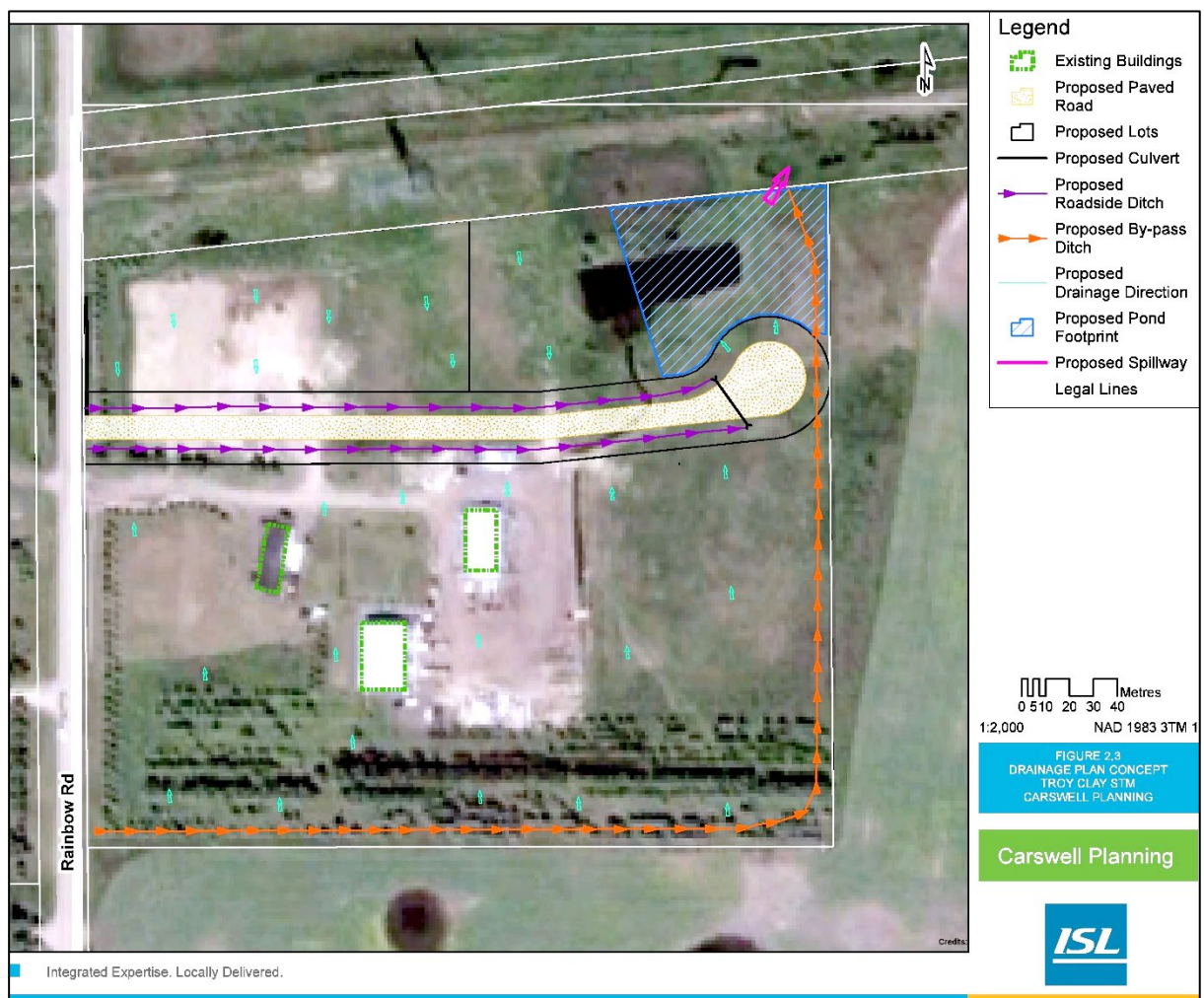
Existing drainage patterns for the site consist of drainage to the existing dugout on the property. A former CPR rail bed, and now transmission line for AltaLink, acts as a berm north of the property. An opening at the berm allows for natural drainage flow paths to be maintained and flows to migrate through the series of wetlands to the north.

General requirements of the proposed stormwater management system would adhere to the following:

- Grading the site so that any excess runoff generated due to development within the property boundary will be diverted into a stormwater management facility (SWMF);
- Zero discharge from the proposed Stormwater Management Facility (SWMF) under 1:100 year conditions, maintaining existing downstream flow patterns and flow path; &
- Upstream external overland flow is to be conveyed through the site via a by-pass ditch.

The SWMF takes into account a potential road built to RVC Servicing Standards, should an industrial subdivision be considered in the future that could connect to future development of adjacent lands. Figure 5, Drainage Plan Concept, shows the proposed stormwater pond 2 m in depth at the northeast corner servicing the property. Connections are provided through re-grading to the proposed roadside ditches for the potential internal road with corresponding culverts. By-pass ditches along the southern and eastern property lines are to intercept any upstream external flow. An emergency spillway to the north is proposed to discharge any overflow from the SWMF into the existing drainage course and wetland network.

Figure 5: Drainage Plan Concept



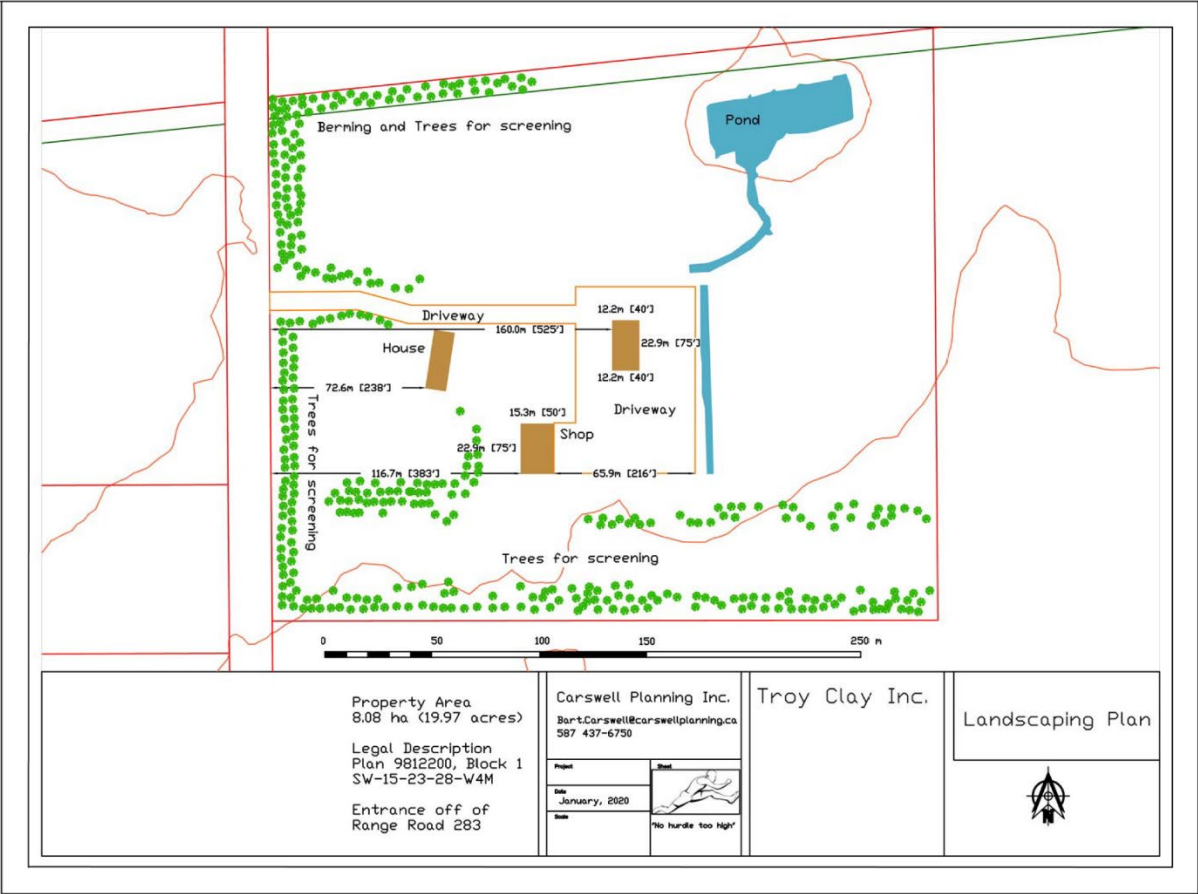
3.6 Landscaping

Section 26: Landscaping, Screening and Outdoor Display Areas of the LUB notes that a landscaping plan may be required for business development. A landscaped strip of 4 m width or alternative configuration of 1 m is to be provided in front yards adjacent to a road.

Figure 6: Landscaping Plan, shows berming and trees for screening along the road, the northern boundary and southern boundary. Trees are mostly coniferous (Spruce) for visual and wind screening. The existing vegetation will be preserved where it is aesthetically pleasing and offers a buffer to surrounding properties. The coniferous trees (Spruce) are already planted in place and double-rowed for the most part. Berming also contributes to a barrier for control of off-site stormwater migration.

Landscaping treatments are designed to enhance the primary land use, define the property and frame industrial uses from accessory uses. Objectives include: soft landscaping concentrated in areas facing the municipal road frontage, the use of native plant materials is encouraged and where practical, site grading to divert surface runoff the benefit landscaping elements within the subject lands. A more detailed plan is expected at the development permit stage.

Figure 6: Landscaping Plan



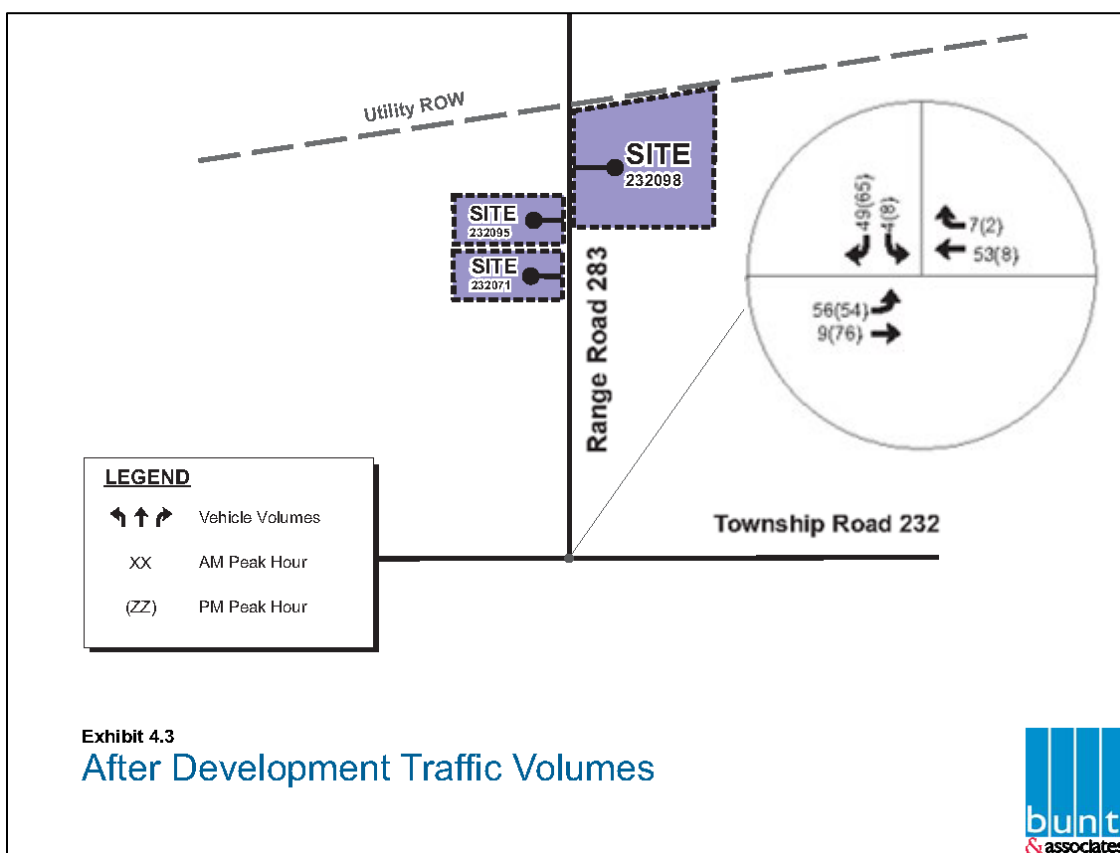


3.7 Transportation Impact Assessment

Bunt and Associates conducted a Transportation Impact Statement, November 2018, to look at the cumulative impact of neighbouring development proposals for light industrial uses, being 232098 (Clay), 232095 and 232071 Range Road 283 (located across the road and south). The TIA looked at the scenario which included the possibility of subdivision of industrial lots on the property. After confirming the scope of work with RVC, the traffic analysis included 6-hour weekday traffic counts at Range Rd. 283 and Twp. Rd. 232 during peak hours; project volumes from development; and identify mitigation measures required to accommodate background and site traffic.

Figure 7: Transportation Impact Study Counts, shows findings do not present a concern. Intersection analysis confirmed that the existing intersection treatment provided at Range Road 283 and Township Road 232 is appropriate to accommodate after development traffic volumes and that no intersection improvements are required.

Figure 7: Transportation Impact Study Counts



3.8 Parking

General Industrial has a parking requirement of 1 per 100 m² (1,076.4 sq. ft.) gross floor area. Loading spaces are 1 per 1,900 m². Most of the parking of tractor trailers is for repairs, welding, etc. until they are back on the road. The parking area has room for about 12 spaces for tractor trailers and cabs. About 5 vehicles parking for employees is also provided.

Both can be accommodated on the property. Outside of the building area, the gravel parking area is about 4364 m² with a 1235 m² gravel driveway leading to it. This can be modified at the Development Permit stage, as needed.

3.9 Structures

Figure 8: Structures, shows the existing buildings on the property. No new buildings are proposed at this time and not the foreseeable future. The existing shop is about 480 m² and 7.9 m in height. The other building is also used as a shop and is about 325 m² and 7.3 m in height. The third building is a split-level bungalow residence as shown in Figure 3: Streetview of the Site and is about 240 m². The owner acts as caretaker for the property and his business.

Figure 8: Structures





3.10 Operations Plan

IPIG Inc. has multiple vehicles (~10) and approximately 5 hired staff members on-site at any one time.

The two (2) buildings for the business are about 480 m² for the main shop and 325 m² for the other.

Parking for Industrial (Light) exceeds the minimum of 1 per 100 m² (1076.39 ft²) gross floor area.

The following operations plan addresses most of the aforementioned matters.

- This facility may be operated on any day, but typically 7 a.m. to 4 p.m., Monday to Friday.
- This facility will be used for the business operated by Troy Clay as the owner/director of IPIG Inc. for the site.
- Although the company has up to 20 employees, most are involved in off-site trucking and a few employees remain on-site for truck repairs or administration, typically 5 employees.
- Any business at the facility will not include unlawful activities.
- Outdoor (parking lot, snow removal and landscape) maintenance will be taken care by the business and/or local contractors.
- Garbage collection and disposal will be contracted out to local contractors.
- The facility is to be equipped with outside sensor lights, fire extinguishers, and security system with surveillance cameras.
- Lighting is to be night sky friendly with the direction of light pointing down and not towards neighbouring properties.
- The owner lives on-site between the road and the gate to the business.

3.11 Architectural Design Objectives

When ready to attain a Development Permit detailed site plans will be submitted to address considerations such as:

- Stormwater Management Facilities and Wetlands (if required).
- Design of parking, signage, lighting, and garbage.
- Building heights, setbacks, material finishes, and building sizes.

3.12 Lighting Objectives

No significant lighting is proposed or expected within the MSDP area. However, if required, the developer will prepare a lighting plan which will be included in the Development Permit. All lighting would be in accordance with Section 27 of the LUB and be a "dark sky" system that minimizes glare and light pollution to neighbouring properties. Maximum mounting height shall be 12 m (39.37 ft). Lighting will be on sensors for security during evening hours outside of the operation. Details are to be provided at the Development Permit stage.



3.13 Signage Objectives

Proposed signage within the MSDP area shall meet the established regulations set in Section 35 of the LUB. Signage will be detailed in the plans included in the Development Permit.

3.14 Fencing Objectives

Existing fencing exists on the west side of the property fronting on Range Road 283. Additional fencing is not proposed or expected at this time, due to the proposed berming that can offer screening and privacy. If fencing is needed or proposed it will be in accordance to Section 35 of the LUB and will be detailed in the Development Permit.

3.15 Security

Outdoor and indoor video surveillance should be installed. Outside lighting should be active by motion sensor. Consideration is given to dark sky friendly lighting. The owner lives at the site in a residential dwelling. When away, a third-party company could also be engaged to provide security services to the facility. A gate and fencing should be provided controlling access to the site.

3.16 Garbage Removal

Waste/garbage collection and disposal will be contracted out to a local contractor.

3.17 Agricultural Boundary Design Considerations

Lands to the east of the property are designated Agriculture - General District, as such design considerations should be implemented to limit conflict and contention. Landscaping and tree planting has occurred on all property boundaries except the eastern portion at this time. At the Development Permit stage design considerations will be made in accordance with the County's Agricultural Boundary Design Guidelines.



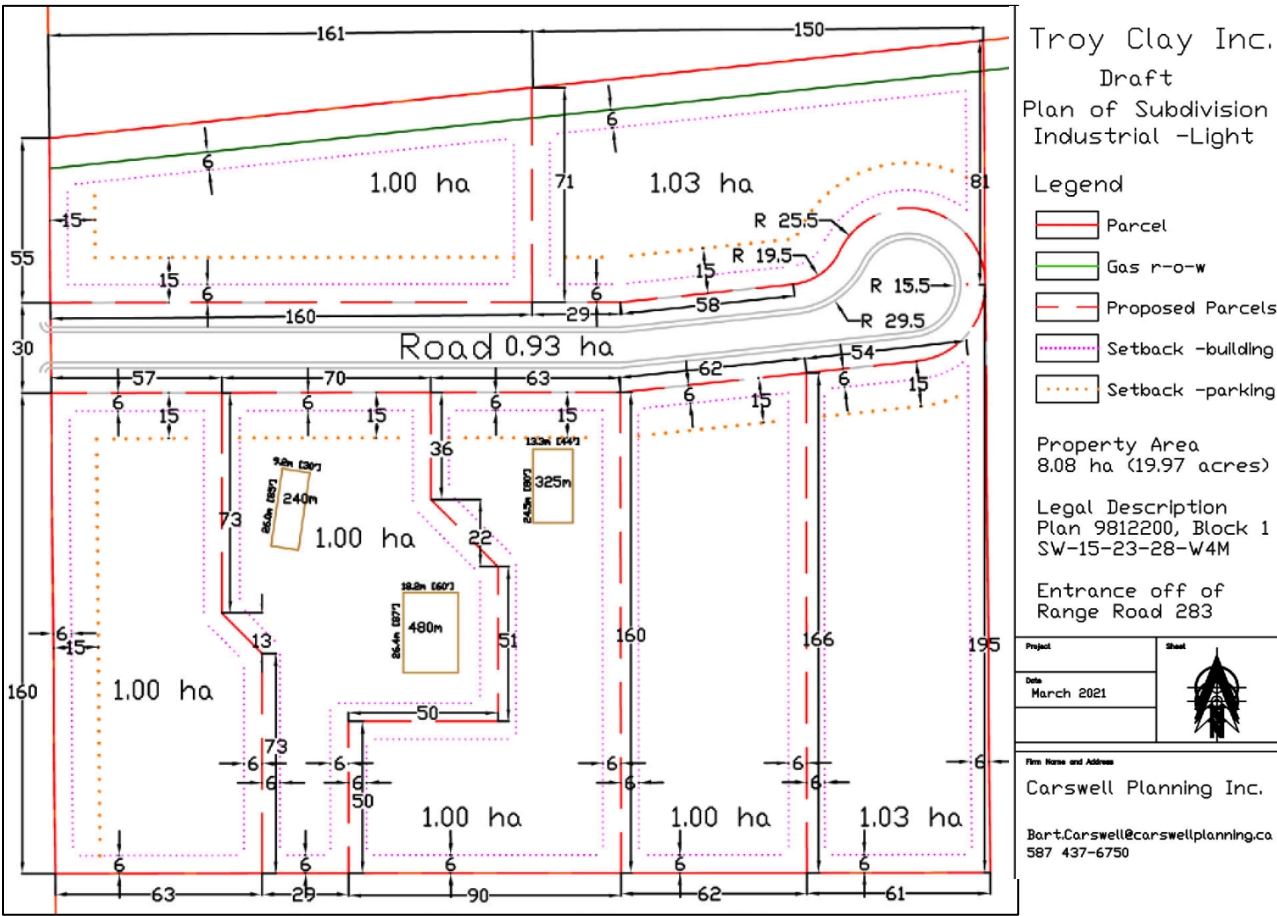
4.0 Redesignation

An accompanying application for a change of land use is submitted along with this MSDP application. Consideration for a future industrial subdivision is provided through an internal road to RVC Servicing Standards, but is not part of the change of land use at this time. Despite that, the SWMF is designed to re-grade the topography towards where it may be located.

5.0 Tentative Road and Lot Layout

Figure 9: Tentative Road and Lot Layout, shows a future industrial plan of subdivision which is not anticipated at this time. Building envelopes are shown as being within building setbacks and parking/storage setbacks. Any storage would be located to the rear and side of the principle building within each proposed lot shown. Parking would be adjusted to fit the needs of each proposed lot.

Figure 9: Tentative Road and Lot Layout





6.0 Implementation

A Development Permit (DP), with or without conditions would be required for permitted and discretionary uses listed in the Land Use Bylaw for I-LHT, being Industrial, Light Industrial. The Land Use Bylaw permitted use of Industrial (Light), "means those developments where activities and uses are primarily carried on within an enclosed building and no significant nuisance factor is created or apparent outside an enclosed building. Any development, even though fully enclosed, where, in the opinion of a Development Authority, there is significant risk of interfering with the amenity of adjacent sites because of the nature of the site, materials or processes, shall not be considered Industrial (Light). Typical uses include laboratories, general contractors and landscaping services, construction firms, self storage facilities and warehouse sales of furniture, floor coverings etc."

7.0 Conclusion

This MSDP is in recognition of an existing specialized hauling business/landscaping with an accessory dwelling unit. It accompanies the Redesignation Brief justifying the land use proposed. The business has a conditionally approved DP for a Home-Based Business, Type II, for a landscaping company and requires more outdoor space than allotted. It is seeking land use to permit expansion of existing operations. It is anticipated that the work that went into this MSDP will prove useful for implementation through DP approval.

The Redesignation provides for the permitted uses for the landscaping business and activities involving *outdoor storage – truck trailers* for the hauling aspect of the business and may be on-site for repairs. Most of the business is indoors and two buildings currently exist on-site. The owner's residence next to his business is also permitted as a *dwelling unit, accessory to the principal business use*, in this designation. The owner is seeking to have the property reclassified Industrial, Light (*I-LHT*) District, similar to the recent approval to the property north of the subject lands.

Respectfully submitted,

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