

WHISTLER

AGENDA

REGULAR MEETING OF MUNICIPAL COUNCIL TUESDAY, OCTOBER 3, 2017, STARTING AT 5:30 P.M.

In the Franz Wilhelmsen Theatre at Maury Young Arts Centre – Formerly Millennium Place 4335 Blackcomb Way, Whistler, BC V0N 1B4

ADOPTION OF AGENDA

Adoption of the Regular Council agenda of October 3, 2017.

ADOPTION OF MINUTES

Adoption of the Regular Council minutes of September 19, 2017.

PUBLIC QUESTION AND ANSWER PERIOD

MAYOR'S REPORT

ADMINISTRATIVE REPORTS

Update from the Mayor's Task Force on Resident Housing Report No. 17-106 File No. 2150

A presentation by municipal staff.

That Council direct staff to arrange a community engagement forum to seek feedback on the proposed recommendations from the Mayor's Task Force on Resident Housing, prior to finalizing the Task Force's recommendations to Council.

DP1337 and SEC0022 – DL8078 – Function Junction Master Planned Mixed Use Development Report No. 17-107 File No. DP1337, SEC0022

A presentation by municipal staff.

That Council approve the issuance of Development Permit DP1377 for the proposed subdivision and master planned development of District Lot 8078 at the entrance to Function Junction which includes a service station and three mixed use buildings with 18 employee housing units as illustrated on the architectural and landscape plans A-0.0 – A-5.2, L-1.1 – L-2.3and TP-1 prepared by Murdoch Company Architecture + Planning Ltd., dated received September 19, 2017, the site servicing key plan KP1 prepared by R.F. Binnie & Associates Ltd., dated September 5, 2017, and the Service Station Sign Plans prepared by Country Signs dated March 17, 2017, including:

- a) A variance to the setback regulations contained in "Zoning and Parking Bylaw No. 303, 2015" for the proposed retaining wall in the north setback area up to 3.0 metres in height; and
- Authorization for the Mayor and Municipal Clerk to execute a Section 219 covenant attaching the approved ground water monitoring program and response plan for the service station;

AGENDA Regular Council Meeting October 3, 2017 Page 2

and subject to the following conditions:

- Resolution of the detailed items specified in the letter attached as Appendix "G" to Administrative Report No. 17-107 to the satisfaction of the General Manager of Resort Experience;
- 2. Council approval of Section 524 (Floodplain Exemption) Application SEC0022; and
- 3. That Council approval excludes the proposed freestanding sign in the covenanted highway tree buffer area which will be brought forward for Council consideration at a future meeting as a separate item; and further

That Council approve Section 524 (Floodplain Exemption) Application SEC0022 exempting District Lot 8078 from the flood proofing requirements contained in "Zoning and Parking Bylaw No. 303, 2015", which are replaced by the specific flood construction level and recommendations contained in the certified report prepared by LaCas Consultants Inc. professional engineers and hydrologists, dated October 1, 2008, and authorize the Mayor and Municipal Clerk to execute a Section 219 covenant attaching the aforementioned report.

Cheakamus Crossing DES Recommendations Report No. 17-105 File No. 420.2 A presentation by municipal staff.

That Council direct Whistler2020 Development Corporation to extend Phase 2 of the District Energy System Upgrade and Maintenance Program to a final end date of March 31, 2018;

That Council request Whistler2020 Development Corporation to facilitate a discussion of bulk pricing for annual maintenance of the home heating systems in the 174 townhomes constructed by Whistler2020 Development Corporation;

That Council direct staff to create a process that would conditionally allow owners of the 174 Whistler2020 Development Corporation constructed townhomes the option to disconnect from the District Energy System after March 31, 2018 if they are still dissatisfied with the operation of their home heating systems; and

That Council direct staff to explore the potential sale of the District Energy System to a private company to allow private management and regulation as a utility under the BC Utilities Commission.

Sea to Sky Highway Road Closure Protocol Assessment – Next Steps Report No. 17-104 File No. 7020-20 (xLGMA) A presentation by municipal staff.

That Council endorse the creation of a Working Group entitled "Sea to Sky Highway Road Closure Protocol Working Group" to prioritize, assign timeframes and take action on the recommendations contained within the "Sea to Sky Highway Road Closure Protocol Assessment – Final Report" produced by Creative Transportation Solutions; and

That Council endorse the Terms of Reference attached as Appendix "A" to Council Report No. 17-104.

AGENDA Regular Council Meeting October 3, 2017 Page 3

Permissive

Tax

Exemption Bylaw No. 2162, 2017 Report No. 17-103 File No. 4567 **That** Council consider giving first, second and third readings to the "Permissive Tax Exemption Bylaw No. 2162, 2017".

MINUTES OF COMMITTEES AND COMMISSIONS

Recreation Leisure Advisory Committee Minutes of the Recreation Leisure Advisory Committee meeting of April 20, 2017.

Forest and Wildland Advisory Committee Minutes of the Forest and Wildland Advisory Committee meeting of July 12, 2017.

Whistler Bear Advisory Committee Minutes of the Whistler Bear Advisory Committee meeting of August 9, 2017.

BYLAWS FOR FIRST, SECOND AND THIRD READINGS

Permissive Tax

Exemption Bylaw No. 2162, 2017

That "Permissive Tax Exemption Bylaw No. 2162, 2017" be given first, second and third readings.

OTHER BUSINESS

CORRESPONDENCE

Artificial Turf Field Feedback File No. 8516 Correspondence from Robert Cessford, dated September 25, 2017, regarding the proposed artificial turf field.

ADJOURNMENT



WHISTLER

MINUTES

REGULAR MEETING OF MUNICIPAL COUNCIL TUESDAY, SEPTEMBER 19, 2017, STARTING AT 5:30 P.M.

In the Franz Wilhelmsen Theatre at Maury Young Arts Centre – Formerly Millennium Place 4335 Blackcomb Way, Whistler, BC V0N 1B4

PRESENT:

Mayor: N. Wilhelm-Morden

Councillors: S. Anderson, J. Crompton, J. Ford, J. Grills and

S. Maxwell

Chief Administrative Officer, M. Furey

General Manager of Infrastructure Services, J. Hallisey

General Manager of Corporate and Community Services, N. McPhail

General Manager of Resort Experience, J. Jansen

Director of Planning, Mike Kirkegaard

Municipal Clerk, B. Browning

Manager of Communications, M. Comeau

Fire Chief, G. Playfair

Manager of Environmental Stewardship, H. Beresford

Senior Planner, M. Laidlaw

Planner, A. Antonelli

Transportation Demand Management Coordinator, E. DalSanto

Emergency Program Coordinator, E. Marriner

FireSmart Coordinator, S. Rogers

Council Coordinator, S. Termuende

Whistler Bear Advisory Committee Member, S. Dolson

Agenda

ADOPTION OF AGENDA

Moved by Councillor J. Crompton Seconded by Councillor S. Anderson

That Council adopt the Regular Council agenda of September 19, 2017 as amended to move Sylvia Dolson's recognition to the first Presentation/ Delegation.

CARRIED

Minutes

ADOPTION OF MINUTES

Moved by Councillor S. Maxwell Seconded by Councillor J. Grills

That Council adopt the Regular Council minutes of September 5, 2017.

CARRIED

Public Hearing Minutes of "Zoning Amendment Bylaw (Tourist

Accommodation Uses in RTA Zones)
No. 2161. 2017"

Moved by Councillor J. Ford Seconded by Councillor J. Grills

That Council adopt the Public Hearing Minutes of "Zoning Amendment Bylaw (Tourist Accommodation Uses in RTA Zones) No. 2161, 2017" of September 5, 2017.

CARRIED

Public Hearing
Minutes of "Zoning
Amendment Bylaw
(Solid Waste Facilities)
No. 2154, 2017"

Moved by Councillor J. Ford Seconded by Councillor J. Grills

That Council adopt the Public Hearing Minutes of "Zoning Amendment Bylaw (Solid Waste Facilities) No. 2154, 2017" of September 5, 2017.

CARRIED

PUBLIC QUESTION AND ANSWER PERIOD

Question by John Sinclair Re: Parking Income and Operations John Sinclair -1500 Spring Creek Drive, Whistler

Mr. Sinclair asked if anyone in Whistler currently receives complementary or subsidized parking through the RMOW either directly or indirectly. Mr. Sinclair sought clarification regarding the RMOW parking revenue and revenue allocation. Mr. Sinclair also asked Council and staff to clarify the percentage rate of parking revenue going into transit upgrades. Mr. Sinclair asked who owns the physical parking meters in the RMOW parking lots.

Mayor Nancy Wilhelm Morden referred Mr. Sinclair's questions to the General Manager of Infrastructure Services James Hallisey.

Mayor Nancy Wilhelm Morden and the Chief Administrative Officer Mike Furey responded to Mr. Sinclair stating that parking is available to the Mayor, the Chief Administrative Officer, the Citizen of the Year, and some on call Protective Services staff.

PRESENTATIONS/DELEGATIONS

Sylvia Dolson Recognition A presentation was given by Mayor Nancy Wilhem-Morden honouring Sylvia Dolson's years of service on the Whistler Bear Advisory Committee.

Summer Transportation Initiative Results A presentation was given by General Manager of Infrastructure Services James Hallisey and Consulting Engineer from Drdul Community Transportation Planning Richard Drdul, on the Transportation Action Group (TAG) and the Summer 2017 Transportation Initiative Results.

FireSmart, 2017 Wildfire Season in Review and Fuel Thinning Projects A presentation was given by the Manager of Environmental Stewardship Heather Beresford, FireSmart Coordinator Scott Rogers, Emergency Program Coordinator Erin Marriner and Fire Chief Geoff Playfair on Fuel Thinning Projects, FireSmart achievements and the 2017 Wildfire Season.

MAYOR'S REPORT

Mayor's Report

Three RMOW staff have received Perfect "10"s as part of the Whistler Chamber of Commerce's Secret Shopper Program. One customer service staff from Meadow Park Sports Centre and two Whistler Public Library staff were recognized in term two of the Chamber's program. The Mayor congratulated Julie Michel, Recreation Facility Clerk, Julie Burrows, Youth Services Specialist and Kaley O'Brien, Public Services Specialist, for providing outstanding customer service to the community. The Mayor thanked all staff for contributing to the organization's goal of achieving excellence in customer service. The Chamber's Secret Shopper Program is available to all member companies and organizations who wish to elevate their service level, by providing feedback on the Secret Shopper experience.

Whistler was named the number one favorite ski resort in the world at the Conde Nast Traveller Reader's Travel Awards. The award was presented to Tourism Whistler's UK Public Relations Representative in London on September 4, 2017. This recognition reflects the hard work that everyone has contributed towards making Whistler an incredible place to visit all year around.

Whistler is also shortlisted for the 2017 World Snow Awards.

Last week Mayor Nancy Wilhelm-Morden and CAO Mike Furey met Andrew Weaver, Leader of the Green Party of British Columbia. The Mayor also met with the Minister of Transportation and Infrastructure, Hon. Claire Trevena and with the Minister of Tourism, Arts and Culture, Hon. Lisa Beare and Mayor Nancy Wilhlem-Mornden is looking forward to good results arising from those meetings.

Mayor Nancy Wilhelm-Morden and Council will be attending the Union of British Columbia Municipalities Convention next week and they are looking forward to a productive week.

Whistler will be celebrating BC Culture Days September 29 to October 1, 2017 with a variety of events and activities around the community. Culture Days is a collaborative, Canada-wide volunteer movement to increase involvement in the arts and cultural life of communities. The following partners will be participating in Whistler's Culture Days:

- the Audain Art Museum:
- Arts Whistler;
- the Squamish Lil'wat Cultural Centre;
- the Whistler Museum; and
- the Chamber of Commerce.

Mayor Nancy Wilhelm-Morden encouraged everyone to come out and enjoy the Cultural Connector, which includes 57 public art installations and dozens of

natural heritage information panels located throughout the community. The RMOW will be updating the heritage information panels in the coming months in partnership with the Whistler Naturalists Society. A variety of local artists will be producing live art along the Village portion of the Cultural Connector during Culture Days. The RMOW is also investing in a new public art mural located on the Creekside underpass, by artist Jessa Gillbert. For more information and a full listing of events, visit artswhistler.com/culturedays.

Annual maintenance at Meadow Park Sports Centre is almost complete. The fitness centre and studio are both open and the pool is scheduled to reopen on Saturday, September 23, 2017. RMOW staff would like to thank the public for their patience while this work was completed.

Staff will plan another community chipping day for mid-October if weather is still conducive to homeowners doing work around their properties. Feedback has been positive with the second community chipping day this year. Fuel thinning will begin above Alpine Meadows and the Whistler Cemetery in October. Ground brush and debris will be removed, branches pruned and specific trees removed, but larger coniferous trees and deciduous trees will remain. This reduces the ability of fire to spread from the forest into the community and vice versa, while maintaining a healthy forest ecosystem.

Hikers and bikers should be aware that the work near the Whistler Cemetery borders the Whip Me Snip Me and Rainbow hiking trails and the Alpine Meadows site borders the Rick's Roost trail to the first switchback and 19 Mile Creek. Wildfire prevention is a shared responsibility. Visit whistler.ca/firesmart to find out how private property owners can take simple steps to protect their properties and Whistler.

This Sunday, September 24, 2017 is the 37th annual BC Rivers Day, an annual celebration to raise awareness about and appreciation for B.C.'s waterways. Whistler is fortunate to have such pristine waterways, from Fitzsimmons Creek to the River of Golden Dreams and the Cheakamus River. Waterways are vital components of our natural environment and our community's mountain character. Do your part to protect them by keeping rivers, shorelines and beach areas clean and free of litter and waste. To celebrate BC Rivers Day get out on the water and enjoy a canoe or kayak rental or guided tour by local tour operators. Local businesses offering discounts on September 24, 2017 include Backroads Whistler, Canadian Wilderness Adventures and Whistler Eco Tours.

The 2017 Civic Service Awards will be held Tuesday, November 21, 2017. Active members of an RMOW Committee in a volunteer or unpaid role may be nominated by municipal staff, Committee or Board members for an award until October 6, 2017. These awards recognize individuals that bring distinction to themselves and to the RMOW in volunteer roles through Committees and Boards of Council. Details are available at whistler.ca/civicserviceawards.

ADMINISTRATIVE REPORTS

DVP1115 – 9225 Emerald Drive Report No. 17-054 File No. DVP1115 Moved by Councillor J. Grills Seconded by Councillor J. Ford

That Council approve the issuance of Development Variance Permit 1115 for the proposed development located at 9225 Emerald Drive to vary the building setbacks as follows:

a) Vary the rear parcel line setback from 10.0 metres to 1.6 metres, as shown on the Site Plan, dated August 24, 2017, prepared by Opus, attached as Appendix "B" to Administrative Report No. 17-054.

CARRIED

Emergency Planning Committee Terms of Reference Amendment Report No. 17-099 File No. 850 Moved by Councillor S. Anderson Seconded by Councillor S. Maxwell

That Council approve the Emergency Planning Committee Updated Terms of Reference, attached as Appendix "A" to Administrative Report to Council No. 17-099.

CARRIED

BYLAWS FOR ADOPTION

Solid Waste Bylaw No. 2139, 2017 Moved by Councillor S. Maxwell Seconded by Councillor J. Crompton

That "Solid Waste Bylaw No. 2139, 2017" be adopted.

CARRIED

Land Use Procedures and Fees Amendment Bylaw (Solid Waste Storage and Separation Facilities) No. 2155, 2017 Moved by Councillor J. Ford Seconded by Councillor J. Grills

That "Land Use Procedures and Fees Amendment Bylaw (Solid Waste Storage and Separation Facilities) No. 2155, 2017" be adopted.

CARRIED

Zoning Amendment Bylaw (Solid Waste Facilities) No. 2154, 2017 Moved by Councillor J. Crompton Seconded by Councillor S. Maxwell

That "Zoning Amendment Bylaw (Solid Waste Facilities) No. 2154, 2017"

be adopted.

CARRIED

Zoning Amendment

(Tourist

Moved by Councillor J. Grills Seconded by Councillor J. Ford Bylaw

Accommodation Uses in RTA Zones) No. 2161, 2017

That "Zoning Amendment Bylaw (Tourist Accommodation Uses in RTA Zones) No. 2161, 2017" be adopted.

CARRIED

Other Business

OTHER BUSINESS

There were no items of Other Business.

CORRESPONDENCE

Retail Space Vacancy Tax Suggestion File No. 3009

Moved by Councillor J. Ford Seconded by Councillor J. Grills

That correspondence from Karen Thomson, dated August 30, 2017, suggesting implementing a vacancy tax on retail spaces left empty for longer than three

months to keep rents down be received and referred to staff.

CARRIED

Installation of Speedbump File No. 7002 Moved by Councillor S. Maxwell Seconded by Councillor S. Anderson

That correspondence from Phil Mitchell, dated August 30, 2017, requesting a third speedbump be installed between the two entrances to Matterhorn Drive be

received and referred to staff.

CARRIED

Garbage Disposal and Pickup File No. 3009

Moved by Councillor J. Ford Seconded by Councillor J. Grills

That correspondence from Stephanie McColm, dated August 30, 2017. requesting the addition of public garbage buildings throughout Whistler for those who cannot easily access the Transfer Station be received and referred to staff. **CARRIED**

Water Use Bylaw

Moved by Councillor J. Ford Seconded by Councillor J. Cromton

File No. 220

That correspondence from Bob and Sue Adams, dated August 31, 2017, regarding feedback on the proposed 2018 Water Use Bylaw be received and referred to staff.

CARRIED

Airport Privatization File No. 3009

Moved by Councillor J. Ford Seconded by Councillor S. Maxwell

That correspondence from National Airlines Council of Canada, dated August 31, 2017, requesting support to oppose airport privatization across Canada be received.

CARRIED

Green Communities Committee – Congratulations on Achieving Carbon Neutrality

Moved by Councillor S. Maxwell Seconded by Councillor J. Crompton

That correspondence from the Green Communities Committee, dated September 1, 2017, congratulating the Resort Municipality of Whistler for achieving Corporate Carbon Neutrality for the 2016 reporting year be received. **CARRIED**

Housing Costs and Labour Shortages File No. 3009

File No. 2014

Moved by Councillor J. Grills Seconded by Councillor J. Ford

That correspondence from Debbie Yates, dated September 5, 2017, regarding housing costs and labour shortages in Whistler be received and referred to staff. **CARRIED**

City of Abbotsford Support for 2017 **UBCM** Resolution File No. 2014

Moved by Councillor J. Crompton Seconded by Councillor S. Anderson

That correspondence from the City of Abbotsford, dated September 5, 2017, requesting support for their Prevention of the Opioid Crisis resolution at the 2017 UBCM Convention be received.

CARRIED

Climate Leadership Institute

File No. 2014

Moved by Councillor J. Grills Seconded by Councillor S. Maxwell

That correspondence from the BC Municipal Climate Leadership Council, dated September 6, 2017, regarding the upcoming Climate Leadership Institute be received and referred to staff.

CARRIED

Adjournment

ADJOURNMENT

Moved by Councillor J. Crompton

That Council adjourn the September 19, 2017 Council meeting at 7:02 p.m.

CARRIED

Mayor, N. Wilhem-Morden	Municipal Clerk, B. Browning



WHISTLER

REPORT ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: October 3, 2017 REPORT: 17-106

FROM: Corporate, Economic and Environmental Services FILE: 2150

SUBJECT: UPDATE FROM THE MAYOR'S TASK FORCE ON RESIDENT HOUSING

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the Director of Corporate, Economic and Environmental Services be endorsed.

RECOMMENDATION

That Council direct staff to arrange a community engagement forum to seek feedback on the proposed recommendations from the Mayor's Task Force on Resident Housing, prior to finalizing the Task Force's recommendations to Council.

PURPOSE OF REPORT

The purpose of this report is to provide a summary of the work undertaken to-date by the Mayor's Task Force on Resident Housing (the "Task Force") and to gain Council's support for hosting a community engagement session designed to seek additional feedback on the proposed recommendations.

DISCUSSION

By way of background, the Task Force was established on October 18, 2016 when Council adopted the Terms of Reference for the new Select Committee of Council. The Task Force was formed firstly, to ensure a common understanding of recent key trends relating to housing, in particular those that were driving the underlying issues of housing availability and affordability. Secondly, it was considered important to better understand the key challenges and opportunities to then enable prioritization of potential initiatives available to support Whistler's already stated objectives regarding resident housing.

The final outcomes of the Task Force are anticipated to be a set of short and medium term recommended actions strategically designed to improve availability and affordability of housing – with both the public and private sector expected to take responsibility for making these recommended actions a reality.

The Task Force composition is a broad representation of the community – local stakeholder organizations and community representatives – each in a unique position to contribute to the understanding, evaluation, planning and implementation of Whistler's resident housing initiatives.

Representation is as follows:

Terry Deutscher Community member-at-large Ben Smith Community member-at-large

Cheryl Skribe Executive Director, Whistler Community Services Society

Melissa Pace CEO, Whistler Chamber of Commerce

Nicole Shannon President, Whistler Association of Retailers & Merchants

Ray Longmuir Director, Real Estate Association of Whistler Kevin Wallace President, Restaurant Association of Whistler

Ian Lowe Director, Hotel Association of Whistler

Barrett Fisher CEO, Tourism Whistler

Joel Chevalier VP, Employee Experience, Vail Resorts

Mike Kirkegaard Director of Planning, Resort Municipality of Whistler

Mike Furey Chief Administrative Officer, Resort Municipality of Whistler

Michael Hutchison Chair of the Board, Whistler Housing Authority
Marla Zucht General Manager, Whistler Housing Authority

Toni Metcalf Economic Development Officer

Jocelyn Chen Economic Development Analyst (Task Force Recording Secretary)

Resident Housing Strategy

Whistler's Resident Housing Strategy was defined in Whistler 2020: our community's guiding framework which sets out the desired future – our vision and sustainability objectives as well as how we intend to achieve our vision. The Resident Housing Strategy is concerned with meeting the housing needs of diverse permanent residents and seasonal employees in an affordable and sustainable way – providing for both rental and ownership options.

To track performance toward the Resident Housing Descriptions of Success, a number of indicators are identified in Whistler 2020, including:

- Supply of restricted housing;
- Resident ownership;
- Housing affordability;
- Local workforce; and
- Restricted wait time.

As a result of tracking the above indicators, it is noted that work had already commenced to help alleviate the challenges being experienced in the community. In particular, in 2015 the RMOW had gifted lands worth multi-millions of dollars to the Whistler Housing Authority to build additional resident restricted inventory.

Task Force Process

Following establishment by Council in October 2016, the Task Force met for the first time just weeks later in November 2016 to review their objectives as defined by the Terms of Reference. They quickly identified short term opportunities and started to plan for the longer term. Short term was identified as deliverable within three –six months, while longer term referred to the (medium) two – five year timeframe.

While there were many potential short term opportunities considered, the Task Force was conscious to ensure any actions taken in the short term were financially viable and appropriate for the

community. It was acknowledged that there were only a limited number of short term actions that are considered viable, and these are likely to only have a limited impact – given the nature of housing builds having a long lead time. Nonetheless, given the immediate need, the Task Force agreed to place focus on improving the utilization of existing housing inventory, while longer term initiatives were identified and progressed.

As has already been widely communicated and reported, the short term initiatives have been implemented and are progressively gaining traction. These include the introduction of:

- 1. Home Run a program developed to match property owners with business owners started in December 2016, whereby a licenced property manager acts as an intermediary to support landlords (property owners) find appropriate tenants (business owners). The business owner is provided support to find housing for their staff contributing to recruitment and retention efforts. As they take full responsibility for the lease, it also overcomes some of the concerns heard from property owners wary of renting to the local workforce. It provides a low risk, hassle free solution for property owners to make their underutilized properties available for Whistler's workforce.
- 2. **Business Licence Bylaw** new legislation adopted in July 2017 to support enforcement against owners of residential properties being used for tourist accommodations. All property owners marketing or using their property for tourist accommodations must now have a business licence and business licences are only issued for properties with zoning where tourist accommodations are permitted. Without the appropriate zoning, residential property owners are not permitted to market or rent their homes to tourists, regardless of duration.
- 3. Employee Housing Service Charge Bylaw Update this Bylaw requires all developers of commercial, industrial and tourist accommodation in Whistler to contribute to the affordable housing stock on the basis that each of these developments contribute to additional employee housing needs. Developers can fulfil their obligations either through the construction of affordable housing for employees or through contribution of cash-in-lieu of development to an employee restricted housing fund. Specifically, the update is intended to ensure ongoing charges keep pace with inflation to support the generation of funds for employee housing; and the Bylaw is to be applicable to relevant new developments which generate additional employees.

With regard to initiatives that fall in the longer term timeframe, these have been established based on significant analyses and research. It is critical that time was taken to ensure an in-depth understanding of the drivers behind the current housing pressures. There are a number of factors that are directly contributing to the current situation, and defining the appropriate solutions to counter those is necessary.

Breadth of research and analyses

The depth of analyses undertaken to identify these factors included a broad range of perspectives.

Hearing the community's concerns was key in fully understanding the range of issues being faced by different community groups, including both renters and owners. To this end, the Task Force commissioned a community housing survey and received 2,276 responses – assuming these are unique individuals, this equates to responses from 25 percent of Whistler's adult population, likely the highest ever response rate for an RMOW survey. The respondents included the range of those affected by housing, including seasonal renters, permanent residents working in Whistler and renting or owning, workforce commuting into Whistler, as well as those living, but not working in

Whistler. Using these as segments of the population, the research results were able to categorize and identify similarities and differences between the groups. The survey explored how homes were currently used by these different segments, relationship of individuals living in different dwelling types, number of people sharing bedrooms, use of suites in single family homes, together with future expectations about housing needs.

The Task Force also heard from various community members during the past several months, including letters addressed to the Mayor and Council which were referred to the Task Force for consideration. Key themes ranged from lack of affordability and tenant issues with landlords, to nightly rentals in residential homes, to community growth, and a wide spectrum of other concerns. These also informed the Task Force's work.

In addition to the community perspective received and considered as noted above, a range of data was analyzed to further provide evidence to inform draft policy recommendations. These are set out below:

- RMOW existing housing policies were reviewed for opportunities, including Whistler 2020, the current OCP, "OCP Amendment Bylaw No. 1983, 2011", as well as the Infill Housing Policy;
- Population trends, changes in demographics and household situations from Census 2016 and historical years were used to inform forecasts of the makeup of the Whistler community;
- WHA data resident restricted inventory, waitlists, eligibility requirements and title restrictions, employer surveys;
- Property valuations, ownership rates and dwelling characteristics within neighbourhoods were determined based on BC Property Assessments and associated Land Titles data;
- Various housing market models were examined, including Vancouver and Vienna providing diverse concepts in providing affordable housing;
- Tourism and associated employment trends were analyzed in conjunction with their correlation to broader economic trends, based on Tourism Whistler, BC Statistics and Conference Board of Canada Tourism Sector report; and
- Local, provincial and national economic trends and future outlook studies were analyzed to
 understand potential future implications on housing needs, from sources such as Royal
 Bank of Canada's Economic Outlook, and the Conference Board of Canada's Provincial
 Long Term Economic Outlook. These considered impacts on our economy including foreign
 exchange rates (particularly the USD), interest rate movements (both domestically and
 internationally), general macro-economic performance and geopolitical factors (such as from
 the United States, United Kingdom, European Union. Etc.).

The proposed next step in this process is to share the detailed findings and recommendations from the Task Force with the community for broader input and consideration. Staff propose that this engagement be integrated with the upcoming Community Forum, which is being organized by the RMOW Communications team in conjunction with the Task Force. It is anticipated that feedback from the community will then be considered by the Task Force before finalizing and formalizing their recommendations to Council.

WHISTLER 2020 ANALYSIS

The proposed recommendation has the potential to move the community toward the following identified Whistler2020 Descriptions of Success:

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
	Resident Restricted housing is affordable for permanent and short-term residents, through innovative and effective policy and financial models	
	The planned flexibility within neighbourhood design, housing form, and housing tenure enables the adaptability to meet changing housing needs and future affordability considerations.	Proposed recommendations from the Task Force take into consideration and are aligned with all of these descriptions of success.
Resident Housing	Whistler has a sufficient quantity and appropriate mix of quality housing to meet the needs of diverse residents.	
3	Residents enjoy housing in mixed-use neighbourhoods that are intensive, vibrant and include a range of housing forms.	
	Housing has been developed close to transit, pedestrian and bicycle routes, and amenities and services to reduce auto dependency	
	Developed areas are designed and managed to be sensitive to the surrounding environment	

Staff have not identified any Whistler2020 Descriptions of Success that the proposed recommendation would be expected to move the community away from.

OTHER POLICY CONSIDERATIONS

The recommendation to schedule an engagement session with the community on this issue is consistent with the RMOW Corporate Policy to "Ensure community engagement is structured to effectively support municipal decision-making".

BUDGET CONSIDERATIONS

There are no additional budget requests at this stage.

The Community Forum will incorporate a number of topics for community engagement, and this session is planned for within existing budgets.

Following the Task Force's formal report to Council, there may be recommendations to Council for financial resources to further progress the specific resident housing projects identified. These recommendations may result in funding requirements that will be evaluated through the municipal budgeting process and be brought forward to Council consistent with standard practice.

Update From The Mayor's Task Force On Resident Housing October 3, 2017
Page 6

COMMUNITY ENGAGEMENT AND CONSULTATION

Prior updates have been presented to regular Council meetings, specifically on October 4, 2016 for the establishment of the Task Force, and most recently on June 6, 2017 sharing the results of the Community Housing Survey. Additional communications were released via newsletter and other digital media as initiatives were progressed.

Two community members serve as members-at-large of the Task Force.

The draft recommendations from the Task Force will be presented in support of this report at the October 3, 2017 Regular Council meeting, and shared again at the Community Forum planned for November 2, 2017. The municipal website will be updated to reflect the key messages from these presentations including specific details of the draft recommendations. These advance communications will provide time for community members to read and absorb the content and then provide feedback at the community forum.

Advertisements about the Community Forum will be placed in the local newspapers in the lead up to the event, and will be included in municipal communications including newsletters.

SUMMARY

Council is asked to direct staff to arrange a community engagement forum to seek feedback on the proposed recommendations from the Task Force, prior to finalizing the Task Force's recommendations to Council.

Respectfully submitted,

Toni Metcalf
ECONOMIC DEVELOPMENT OFFICER
for
Ted Battiston
DIRECTOR OF CORPORATE, ECONOMIC AND ENVIRONMENTAL SERVICES



WHISTLER

REPORT ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: October 3, 2017 REPORT: 17- 107

FROM: Resort Experience FILE: DP1337, SEC0022

SUBJECT: DP1337 & SEC0022 – DL8078 - FUNCTION JUNCTION MASTER PLANNED

MIXED USE DEVELOPMENT

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Resort Experience be endorsed.

RECOMMENDATION

That Council approve the issuance of Development Permit DP1377 for the proposed subdivision and master planned development of District Lot 8078 at the entrance to Function Junction which includes a service station and three mixed use buildings with 18 employee housing units as illustrated on the architectural and landscape plans A-0.0 – A-5.2, L-1.1 – L-2.3and TP-1 prepared by Murdoch Company Architecture + Planning Ltd., dated received September 19, 2017, the site servicing key plan KP1 prepared by R.F. Binnie & Associates Ltd., dated September 5, 2017, and the Service Station Sign Plans prepared by Country Signs dated March 17, 2017, including:

- a) A variance to the setback regulations contained in "Zoning and Parking Bylaw No. 303, 2015" for the proposed retaining wall in the north setback area up to 3.0 metres in height;
 and
- b) Authorization for the Mayor and Municipal Clerk to execute a Section 219 covenant attaching the approved ground water monitoring program and response plan for the service station;

and subject to the following conditions:

- 1. Resolution of the detailed items specified in the letter attached as Appendix "G" to Administrative Report No. 17-107 to the satisfaction of the General Manager of Resort Experience;
- 2. Council approval of Section 524 (Floodplain Exemption) Application SEC0022; and
- 3. That Council approval excludes the proposed freestanding sign in the covenanted highway tree buffer area which will be brought forward for Council consideration at a future meeting as a separate item; and further

That Council approve Section 524 (Floodplain Exemption) Application SEC0022 exempting District Lot 8078 from the flood proofing requirements contained in "Zoning and Parking Bylaw No. 303, 2015", which are replaced by the specific flood construction level and recommendations contained in the certified report prepared by LaCas Consultants Inc. professional engineers and hydrologists, dated October 1, 2008, and authorize the Mayor and Municipal Clerk to execute a Section 219 covenant attaching the aforementioned report.

DP1337 & SEC0022 – DL8078 - Function Junction Master Planned Mixed Use Development October 3, 2017
Page 2

REFERENCES

Location: Corner of Highway 99 and Alpha Lake Road (no current street address)

Legal: District Lot 8078, Group 1, NWD

Owner: 0775448 BC LTD.

Zoning: CS2 (Commercial Service Station Two) and IS5 (Industrial Service Five)

Appendices: "A" - Location Map

"B" - Architectural/Landscape Plans
"C" - Site Servicing Key Plan
"D" - Service Station Sign Plan

"E" - Applicant Rationale for freestanding sign at highway

"F" - Advisory Design Panel Minutes

"G" - Letter to Applicant

PURPOSE OF REPORT

The purpose of this report is to seek Council's approval of the issuance of Development Permit DP1337, an application for the proposed subdivision and master planned development of District Lot 8078 at the entrance to Function Junction which includes a service station and three mixed use buildings with 18 employee housing units.

The proposed development is subject to development permit guidelines for the form and character of commercial and industrial development, protection of the natural environment, protection of development from hazardous conditions, and establishment of objectives to promote energy and water conservation. The development permit is subject to Council approval as the proposal involves subdivision of land and the development of buildings greater than 20 square metres in floor area.

This report also seeks Council's consideration to grant an exemption to the flood proofing requirements under "Zoning and Parking Bylaw No. 303, 2015 for District Lot 8078.

Council has the authority to exempt a parcel from flood proofing requirements enacted by bylaw under Section 524 of the *Local Government Act* provided a report prepared by a professional geotechnical engineer or geoscientist is received stating that the land may be used safely for the use intended.

DISCUSSION

Background

The subject lands are owned by the Lil'wat Nation pursuant to the Legacy Land Agreement, an important outcome of the 2010 Games, which provides the First Nations with an increased presence and further opportunities in Whistler.

The 2.15 ha (5.3 acre) site is located at the entrance to Function Junction and is bounded by Highway 99 to the south, Alpha Lake Road to the east and the railway tracks to the north (see Appendix A). The site is undeveloped and is currently forested by second growth, juvenile and mature trees.

Proposed Development

The proposal has two distinct components comprised of a service station totalling 368 square metres (3,966 sq. ft.) of gross floor area and a light industrial/commercial service/office/employee housing building complex totalling 6,445 square metres (69,373 sq. ft.) of gross floor area in three buildings, of which 4,758 square metres is allocated to light industrial/commercial service/office use, and 1,686 square metres is allocated to employee housing in the form of 17 – two-bedroom units and 1 – one-bedroom unit.

Through the design review process the applicant has worked to protect the covenanted 20 metre wide tree buffer adjacent to the Highway 99 right of way, reduce parking and vehicle circulation dominance of the site, provide a better relationship between buildings, provide a more friendly pedestrian experience to and from the site and between buildings and provide outdoor space in front of the main floor businesses for sitting/patio/display space. This master planned approach provides for a further evolution of mixed use development in Function Junction and also provides needed employee housing.

The proposed development is illustrated in the architectural and landscape plans provided in Appendix "B". The following further describes the proposed development.

Site Planning & Circulation

The development parcel is proposed to be subdivided into two lots, Lot 1 for the service station and Lot 2 for the light industrial/commercial service/office/employee housing development. Access to the two proposed lots is from Alpha Lake Road via a proposed new private road with sidewalks.

Lot 1 is proposed to be developed with a service station with three covered pump islands and a one-storey service station building containing retail, restaurant and washroom space. 16 parking stalls are required and 22 parking stalls are provided. No loading stalls are required, however one is provided and is deemed practical. Outdoor picnic tables are provided. A direct pedestrian connection is provided from the Valley Trail to the service station building.

Lot 2 is proposed to be developed with three buildings with two distinct building types (A and B). All buildings are three-storey buildings. Building B is proposed to be the first building constructed and will include underground parking. The remaining parking is proposed as surface parking broken up by significant tree islands. Large 4.5 metre sidewalks in front of the three buildings will create space for seating and landscape areas and provide separation between the parking/drive isles and the ground floor units. 117 parking stalls are required, of which 120 are provided (75 surface, 45 U/G). Three loading bays are required and three are provided. Outdoor bicycle parking is also provided.

The northwest portion of Lot 2 will require fill and retaining to meet the flood construction level and a variance is requested to enable a retaining wall ranging from 1.5 metres – 3.0 metres in height along the north property line adjacent to the CN rail tracks (maximum 0.6 metres height is permitted outside of the building envelope). Staff supports this variance request.

A 20 metre wide vegetated buffer is preserved adjacent to the Highway 99 right of way as required by a covenant registered on title of the property.

Architecture

The primary building fascia materials of the one-storey service station building will be tilt up concrete and horizontal hardie siding. The roof will be comprised of flat and sloped sections of torch on membrane. Significant roof overhangs are proposed at the front entrance, supported by stained glulam posts and beams. The pump island canopy materials will consist of stained wood fascia, wood clad posts and torch on membrane roof.

The three, three-storey light industrial/commercial service/office/employee housing buildings will consist of a similar vernacular on a larger scale. Primary building fascia materials will be tilt up concrete and horizontal hardie siding. The roofs will have a 4 percent slope and roof materials will be torch on membrane. Storefronts on the first floor are proposed to either have large areas of window glazing, or glazed garage doors dependent on tenant needs. Roof canopies and 3rd floor balconies for the employee housing will provide articulation to the building façade. In addition, Building B will have increased roof articulation to break up the massing and long façade of this building. Third floor balconies will also have screen details as a portion of each balcony is designated for bike storage.

Space for solid waste separation and storage is integrated into every building.

Landscape

Existing trees will be retained at the northeast corner of the site near Alpha Lake Road and the railway tracks and within the 20 metre wide tree buffer adjacent to the Highway 99 right of way.

Supplementary planting within the 20 metre tree buffer is proposed to aid in visually screening the development from the highway. To ensure that the development is adequately screened from view, staff and the applicant with conduct a post construction review, along with input from the applicant's environmental consultant, to determine any additional planting of shrubs and trees that may be required.

New planting within the developed areas will include significant planted islands to break up the parking, provide separation between parking and drive isles, provide shade, and moderate the building massing. Accent planting is proposed to enhance entry features, building entrances and public spaces.

Areas of tree preservation will be protected with wood hoarding during construction.

Signage

The applicant's signage plan proposes building fascia signs for each of the buildings and their tenancies, and two larger freestanding signs as illustrated in Appendices "B" and "D". The proposed sign at the entrance road to Lot 1 is supported as a project identification sign but would require a development variance permit for any sign content related to Lot 2.

The freestanding sign proposed for the service station is located in the covenanted highway tree buffer area on Lot 1 and is not supported, consistent with the requirements of the covenant and municipal "Official Community Plan" (OCP) policies. The applicant has submitted their rationale for the freestanding sign facing the highway as Appendix "E". Staff note that the Advisory Design Panel was supportive of this sign.

Signage within the covenanted tree buffer is inconsistent with the desired entry experience to Whistler and OCP policies that restrict signage on Highway 99 to be limited to directional signage and seek to maintain high visual quality along Highway 99 wherever possible by requiring a 20 metre vegetated buffer to be retained on lands that abut the highway right of way. The covenanted tree buffer further reinforces these OCP policies as a forested area to protect and maintain in perpetuity.

The service station will be visible to southbound traffic on Highway 99 as illustrated in the view analysis contained in Appendix "B". Staff recommend that the proposed sign should be relocated to the Alpha Lake Road frontage outside of the 20 metre tree buffer. Staff are also supportive of gas station icons being added to the RMOW Function Junction sign and for both northbound and southbound highway directory signage, which is consistent with the OCP and covenant and would provide necessary information to vehicles traveling the highway looking for a service station.

Staff has been requested by the applicant that Council consider this signage independently as a separate matter at a future meeting of Council, and staff support this request. This is reflected in the recommendation to Council.

Off-site Road and Pedestrian Improvements

The traffic impact assessment and pedestrian circulation study provided for the proposed development recommend the following:

- Provide new road entrance to the site from the west side of Alpha Lake Road;
- Realign the existing Lynham Road on the east side of Alpha Lake Road to align with the new road access to the site:

- Widen Alpha Lake Road to include a dedicated left turn lane with 30 metres length of vehicle storage at the development access intersection and a second eastbound through lane for traffic heading towards Highway 99;
- At the Highway 99 and Alpha Lake Road intersection provide a second northbound through lane and a second eastbound left-turn lane. This improvement is recommended regardless of the proposed development; and
- Provide a paved trail to connect the proposed development to the existing crosswalks at the Highway 99 and Alpha Lake Road/Cheakamus Lake intersection (this trail is detailed to Valley Trail standard in Appendix "B").

The proposed improvements are generally illustrated on the site servicing key plan attached as Appendix "C". As a condition of development permit issuance, staff request the proposed Valley Trail be extended to the rail right of way, the mid-intersection pedestrian crosswalk proposed in the pedestrian study be addressed by the traffic engineer and details of all off-site works are required to be finalized.

The road and pedestrian improvements are required to be completed by the developer as required by an existing covenant. The proposed highway improvements require approval by the Ministry of Transportation and Infrastructure.

Floodproofing

Flood control levels within the municipality are regulated by Section 4 of Part 5 of "Zoning and Parking Bylaw No. 303, 2015". The specific sections applicable to District Lot 8078 are referenced in the accompanying table:

Applicable Subsections	Requirement	Comment
Part 5, Subsection 4(2)	Notwithstanding any other provisions of this Bylaw, no building or part thereof shall be constructed, reconstructed, moved or extended nor shall any mobile home or unit, modular home or structure be located: (e) with the underside of a wooden floor system or top of concrete slab or any area used by habitation, business or storage of good damageable by floodwaters, or in the case of mobile home or unit the ground level or top of concrete or asphalt pad on which it is located, lower than: (v) 3 metres above the high water mark of the Cheakamus River; and (vii)1.5 metres above the high water mark of any other watercourse.	The geotechnical report prepared by LaCas Consultants Inc., dated October 1, 2008, confirms that the property is safe for the intended use if developed to a flood construction level of 602 metres and the recommendations contained in the report are followed. This report was accepted by the RMOW in 2008 for the rezoning of the lands, however, was not registered on the title of the property of the lands at that time. This is now required to permit the development as proposed.

Advisory Design Panel Review

The proposal was presented to the municipal Advisory Design Panel on July 19, 2017 and on August 16, 2017.

At the July 19, 2017 meeting, the majority of the Advisory Design Panel's comments were related to site planning and creating a more pedestrian friendly development. At the August 16, 2017 meeting the Panel strongly supported the repositioning of the buildings, the pedestrian access improvements and the work/live character over that of the July 19th design review. The Panel passed a motion

supporting the design with the applicant to work with staff on some further detailing of building colour, exterior lighting and the public realm, consideration of at grade residential outdoor space, enhancing pedestrian safety at the Valley Trail crossing and ensuring good visibility through signage and access points.

The minutes of the August 16, 2017 Advisory Design Panel meeting are attached as Appendix "F".

Further detailing of the described items are requested to be addressed as a condition of development permit issuance as noted in the letter to the applicant attached as Appendix "G".

WHISTLER 2020 ANALYSIS

Overall, the proposal supports the Whistler 2020 strategies of Built Environment and Resident Housing.

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
	The built environment is attractive and vibrant, reflecting the resort community's character, protecting viewscapes and evoking a dynamic sense of place.	The proposal meets the OCP development permit form and character guidelines and the covenanted highway tree buffer requirements.
	The built environment is safe and accessible for people of all abilities, anticipating and accommodating wellbeing needs and satisfying visitor experience.	Pedestrian access is incorporated to and through the site to applicable standards.
o	Building design, construction and operation is characterized by efficiency, durability and flexibility for changing and long-term uses.	The owners have provided a green building strategy that identifies the development will meet and exceed current building code standards. Ground floor entry treatment is designed to be flexible, dependent on tenant needs.
	Residents live, work and play in relatively compact, mixed-use neighbourhoods that reflect Whistler's character and are close to appropriate green space, transit, trails, amenities and services.	Employee housing is incorporated into the development, close to appropriate green space, transit, trails, amenities and services
Davidant	Housing has been developed close to transit, pedestrian and bicycle routes, and amenities and services to reduce auto dependency.	Employee housing is incorporated into the development, close to transit, pedestrian and bicycle routes, and amenities and services to reduce auto dependency.
Resident Housing	Whistler has a sufficient quantify and appropriate mix of quality housing to meet the needs of diverse residents (Target: 75% of Whistler employees live in the resort community).	The proposal includes employee housing in the form of 17 – Two bedroom units and 1 – One bedroom unit to contribute to the 75 percent target.

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves away from	Mitigation Strategies and Comments
none		

OTHER POLICY CONSIDERATIONS

Zoning and Parking Bylaw No. 303, 2015

The property is split-zoned, with a part of the property zoned CS2 (Commercial Service Station Two) and a part of the property zoned IS5 (Industrial Service Five). Refer to drawing A-0.1 of Appendix "B".

The IS5 Zone provides for light industrial uses, commercial services, professional office use, restaurant and employee housing. The IS5 Zone contains density restrictions on the total amount of office, restaurant and ground level retail/rental use to reduce parking requirements and traffic generation.

The CS2 Zone permits a service station, automobile repair and servicing, maximum of two auxiliary residential dwelling units, and auxiliary restaurant use. Restaurant use is restricted to 25 percent of the total gross floor area on the parcel.

The development permit includes a setback variance to permit a retaining wall up to 3.0 metres in height in the north setback area (maximum 0.6 metres in height is permitted outside of the building envelope). This retaining wall will range from 1.5 metres to 3.0 metres in height along the north property line of Lot 2 to meet the flood construction level. The retaining wall will face the railway tracks and is not considered to have any negative impacts on adjacent lands. Staff supports this variance request.

All other aspects of the proposal meet all regulations of "Zoning and Parking Bylaw No. 303, 2015".

OCP Development Permit Guidelines

The property is located within Development Permit Area #28 and is subject to development permit approval and guidelines for the form and character of commercial and industrial development, protection of the natural environment, protection of development from hazardous conditions, and requires the establishment of objectives to promote energy and water conservation. The applicable guidelines are contained within the Official Community Plan.

The table below describes how the proposed development is consistent with the applicable guidelines.

OCP Development Permit Guidelines	Comments
Protection of the natural environment	
Permeable parking surfaces are encouraged, permeable surfaces required for snow storage areas.	Permeable parking surfaces are considered impractical in an industrial service zone. Proposed snow storage areas are outside of hard surfaces.
Storm water runoff should be managed through natural systems. A storm water management plan indicating how runoff will be minimized such that post development hydrology mimics pre-development conditions is required.	A storm water management plan is required prior to DP issuance.
Disturbance to existing vegetation that is not directly affected by the footprint of buildings and circulation must be minimized. Any disturbed areas shall be rehabilitated with appropriate landscaping. Protection of development from hazardous	The proposal is consistent with this guideline. Tree retention areas will be protected during construction and permanent fencing is requested to protect the 20 metre tree buffer area.
Conditions No DP will be issued prior to the submission of a flood hazard assessment and associated recommendations for mitigating any identified risks.	Flood hazard report completed. A ground water monitoring and petroleum products containment and response plan specific to the service station site is also required prior to DP issuance, such

	report to be appended to a covenant registered on
	title.
Exterior cladding and roof materials should be low or non-combustible.	The proposed exterior cladding and roof materials meets this guideline.
Roof design must establish effective snow management to protect pedestrian and vehicle areas from snow shed and ice accumulation. Whistler's freeze thaw/cycle and frequent large accumulation of snow are to be considered in building design and material selection.	A roof snow shed report completed by a professional engineer has been completed.
Form and character of development	
Building siting and design (particularly building form, massing, rooflines and facades) should reduce visual impacts from adjoining lands, roads and Highway 99)	Buildings are set back from the property line to reduce visual impacts from adjoining lands, roads and Highway 99.
Landscape and screening elements should be coordinated with building design, and include only plants suited to local soils and climate.	The proposal meets this guideline.
Flat roofs are acceptable but their appearance must be attenuated with appropriate façade and cornice treatments.	The proposal meets this guideline.
Windows, porches and building entries for pedestrians should be incorporated to avoid blank walls facing streets or parking areas.	The proposal meets this guideline.
Where office and residential uses are included in upper stories of buildings, balconies are encouraged to provide private outdoor space, add visual interest and attenuate building mass.	Balconies are proposed on the upper stories of the two buildings that contain employee housing. No balconies are proposed on the upper story of the building containing office, however, outdoor seating areas are provided at ground level.
Building materials and colours shall be consistent with the forested mountain character of the region. Appropriate materials include wood and composite siding, metal and textured concrete.	The proposal meets this guideline. The Advisory Design Panel requested the applicant to consider some visual or colour detailing that would differentiate each building as noted in the letter to the applicant attached as Appendix "G".
Parking, loading and vehicle circulation areas should be located, designed and screened so that they do not dominate development sites. Parking areas shall not be visible from Highway 99.	The proposal meets this guideline.
All surface parking must include adequate areas for snow storage and drainage.	The applicant's professional engineer has provided a report certifying that the identified snow storage areas will meet average winter requirements with the addition of 77 square metres of snow storage area on-site.
Recycling and garbage containers, as required, shall be contained in structures that are consistent with the form and character of adjacent buildings.	Space is incorporated into all buildings.
Energy and water conservation	
Buildings to take advantage of opportunities for passive solar heating and natural ventilation.	The proposal meets this guideline.
Roof overhangs, window placement and landscaping should be coordinated to provide cooling and shade during the summer and solar access in winter.	The applicant's green building strategy identifies the building includes passive solar shading, the benefits of which will be demonstrated through an energy model.
Roof surfaces should be designed to accommodate solar energy collection devices; skylights are discouraged.	Complies. The building can accommodate solar energy devices.

Minimize the areas of north facing windows.	North facing windows are minimized except in
	Building B where they are included to integrate
	with the site, provide interest to the streetscape.
Roof design and equipment to allow rainwater collection	The applicant's green building strategy includes
systems for irrigation are encouraged.	installation of rain water collection systems that
	services onsite irrigation systems.
Landscaping shall consist primarily of plants suited to	The proposal meets this guideline.
local climate conditions requiring minimal irrigation.	

Employee Housing Service Charge Bylaw 1507, 2000

A development covenant registered on title of DL8078 requires the owner to provide the employee housing deemed by the "Employee Housing and Service Charge Bylaw No. 1507, 2000" to be generated by the proposed development.

The proposed development is deemed to generate 26 employees. The owners are providing employee housing in the form of 17 – two bedroom units and 1 – one bedroom unit on-site, sufficient to house 70 employees per "Employee Housing and Service Charge Bylaw No. 1507, 2000". Registration of a housing agreement pursuant to Section 483 of the *Local Government Act* for the employee housing will be required prior to building permit issuance, consistent with "Employee Housing and Service Charge Bylaw No. 1507, 2000".

Green Building Policy

In addition to the development permit area guidelines to promote energy and water conservation, a covenant registered on the title of the property requires the development to achieve LEED-Canada NC V1.0 gold certification or a detailed list, to be approved by the GM of Resort Experience, of building specifications for resource efficiency and environmentally sensitive construction.

The owners have provided a green building strategy which identifies that the development will meet and exceed current building code standards.

Legal Encumbrances

Development covenant BB0935630 was registered on title of DL8078 at time of rezoning the lands in 2009 and provides additional criteria to guide the development of the site. This includes:

- 1. Provision of a ground water monitoring and petroleum products containment and response plan that will be appended to a new covenant on the service station site;
- 2. Provision of an environmental monitoring plan and environmental monitoring during construction:
- 3. Maintenance and supplementary planting of the 20 meter highway vegetation buffer
- 4. Provision of employee housing for the number of employees deemed to be generated by the proposed development under "Employee Housing and Service Charge Bylaw No. 1507, 2000";
- 5. Green building standards; and
- 6. Traffic and pedestrian circulation improvements.

The proposal will meet these covenant requirements as described in this report and subject to the issuance conditions contained in the letter to the applicant attached as Appendix "G".

BUDGET CONSIDERATIONS

The municipality's direct costs of processing and reviewing this application have been covered through the development permit application fees.

DP1337 & SEC0022 - DL8078 - Function Junction Master Planned Mixed Use Development October 3, 2017 Page 10

COMMUNITY ENGAGEMENT AND CONSULTATION

An information sign has been posted on the property per development permit application requirements. No inquiries have been received.

SUMMARY

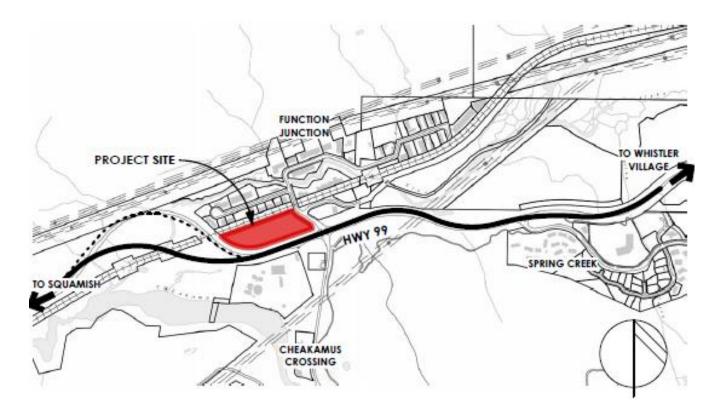
This report recommends Council's approval of the issuance of Development Permit DP1337, an application for the proposed subdivision and master planned development of District Lot 8078 at the entrance to Function Junction which includes a service station and three mixed use buildings with 18 employee housing units, subject to the conditions listed in the report recommendation.

This report further recommends that Council approve Section 524 (Floodplain Exemption) Application SEC0022 exempting District Lot 8078 from the flood proofing requirements contained in "Zoning and Parking Bylaw No. 303, 2015", which are replaced by the specific flood construction level and recommendations contained in the certified report prepared by LaCas Consultants Inc.

Respectfully submitted,

Melissa Laidlaw
SENIOR PLANNER
for
Mike Kirkegaard
ACTING GENERAL MANAGER OF RESORT EXPERIENCE

APPENDIX A LOCATION MAP



Project Directory Lil'wat Nation (T) 604 894 6115 ext 2239 Lil'wat Management Services LP Kerry.Mehaffey@lilwat.ca Kerry Mehaffey **Architect & Landscape Architect:** Murdoch + Co. (T) (604) 905-6992 #106 - 1394 Main Street Whistler, B.C. V0N 1B4 **Brent Murdoch** murdoch@telus.net Doug Bush (T) (604) 932- 3314 18-1370 Alpha Lake Road Whistler, B.C. V0N 1B1 **Civil Engineer:** R.F. Binnie & Associates Ltd. (T) (604) 567-9004 201-401147 Glenalder Place Squamish, BC V8B 0G2 Rob DosSantos RDosSantos@binnie.com

A-2.4a A-2.0b A-2.1b A-2.2b A-2.3b A-2.4b **Elevations**

> A-3.5

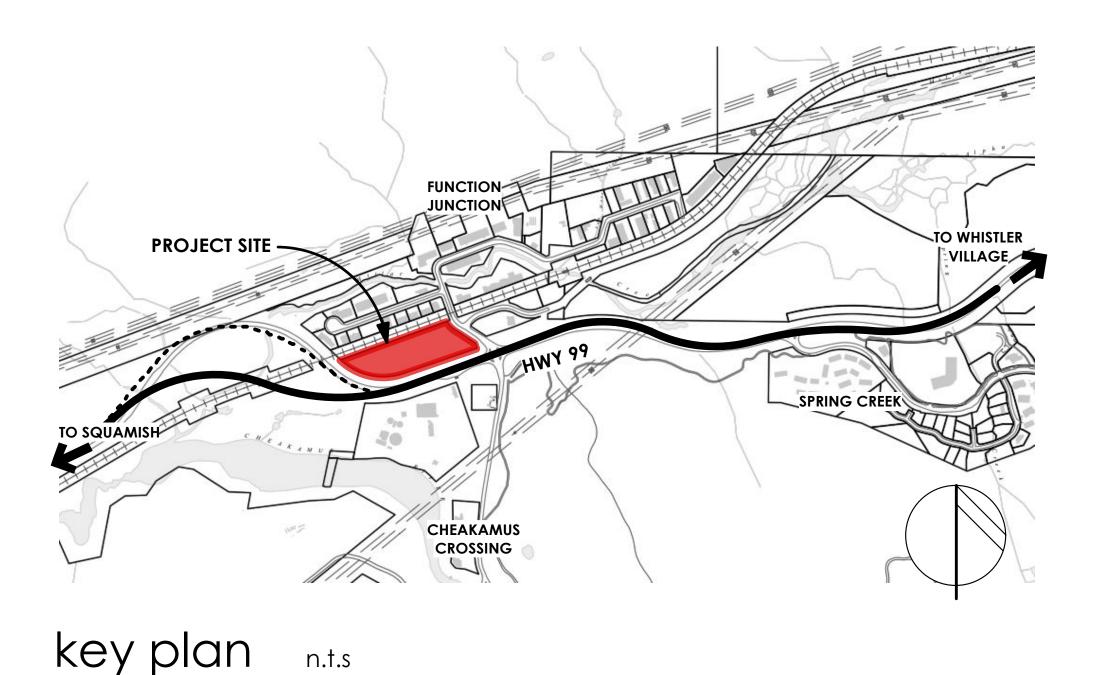
Building B - Elevations

Building B - Sections

Civic Address: Alpha Lake Roa Legal: DL 8078, GROUP1, N.V Zone: CS-2 Service Station		
TOTAL Site Area: 2.21 ha	231,531.70 sq.ft.	21,510.00 m2
LOT 1 (CS-2) Area: 6 573 m2 / 7	0 751 sq.ft.	
The maximum permitted floor spa		
The max. permitted gross floor ar The max. permitted gross floor ar		of total GFA
Gross Floor Area:		
Restaurant	991.40 sq.ft.	92.10 m2
Retail	<u>2974.20 sq.ft.</u>	<u>276.31 m2</u>
TOTAL	3965.60 sq.ft.	368.42 m2
Max. Restaurant 25%	991.40 sq.ft.	92.10 m2
Excluded:		
Mechanical/Garbage	211.40 sq.ft.	19.64 m2
mechanical/Garbaye		
Height Permited: 7.6m (24.93 ft	t)	
· ·		.)

		Developme	nt Statistics - Lot 2	
Dra	awing List	Civic Address: Alpha La Legal: DL 8078, GROU Zone: IS5, Industrial Ser	P1, N.W.D.	
A-0.0 A-0.1	COVER SHEET, Site Location & Context Zoning Plan	TOTAL Site Area: 2.21 ha	a 231,531.70 sq.ft.	21,510.00 m2
A-1.0 A-1.1	Site Plan (Combined Lots 1 & 2) Snow Storage Plan	LOT 2 (IS-5) Area:	160,780.52 sq.ft.	14,937.00 m2
TP-1	Tree Preservation Plan	The max. permitted floor		
1 - 4 4	0	PROPOSED F.S.R.:	0.431	
Lot 1	, Service Station	Max. allowable GFA:	80,390.26 sq.ft.	6,985.75 m2
L-1.1	LOT 1 Site Grading Plan	Gross Floor Area:		
L-1.2	LOT 1 Illustrative Site Sections	Building A1		
L-1.3	LOT 1 Landscape Planting Plan	Main	7544.76 sq.ft.	700.93 m2
		Mezzanine	3333.53 sq.ft.	309.70 m2
A-2.1.1	Lower Floor Plan	Upper	7588.10 sq.ft.	704.96 m2
A-2.1.1	Lower Floor Plan - AREAS		18,466.39 sq.ft.	1,715.58 m2
A-2.2.1	Roof Plan	Building A2	,	•
A-3.1.1	Elevations	Main	7544.76 sq.ft.	700.93 m ²
A-3.2.1	Elevations	Mezzanine	3333.53 sq.ft.	309.70 m2
A-3.3.1	Elevations - Canopy	Upper	6179.70 sq.ft.	574.11 m ²
A-4.1.1	Sections	- J. J. J.	17,057.99 sq.ft.	1,584.74 m2
A-4.2.1	Sections	Building B	,	,
		U/G Parkade	1143.05 sq.ft.	106.19 m2
Lot 2	, Commercial Developement	Main	14767.67 sq.ft.	1371.96 m2
LOT Z	, commercial bevelopement	Mezzanine	5964.00 sq.ft.	554.07 m2
L-2.1	LOT 2 Site Grading Plan	Upper	11971.30 sq.ft.	1112.17 m2
L-2.1 L-2.2	LOT 2 Site Grading Plan LOT 2 Illustrative Site Sections	эррэ	33,846.02 sq.ft.	3,144.40 m2
L-2.2 L-2.3	LOT 2 Landscape Planting Plan		33,3 13132 34114	•, · · · · · · ·
Plans	2012 Editioodpe Flanking Flan	Total G.F.A.	69,370.40 sq.ft.	6,444.72 m2
A-2.1	Building A1 - Main Floor Plan	available GFA	11,019.86 sq.ft.	0 , <u>-</u> <u>-</u>
A-2.2	Building A1 - Mezzanine Floor Plan	avanable 5171	77,070.00 04.11.	
A-2.2	Building A1 - Upper Floor Plan	Height Permited 12.0m	Building A1: 9.48 m ht.	
A-2.4	Building A1 - Roof Plan	see Roof Plans for calc.	Building A2: 10.11 m ht.	
	<u>-</u>	See Noor Flans for care.	Building B: 10.11 m ht.	
A-2.1a	Building A2 - Main Floor Plan		Building B. 10.11 III III.	
A-2.2a	Building A2 - Mezzanine Floor Plan	Flood Control Lovel (ECL)	602.0m (as per LaCas Consultants Inc. rep	ort Ootobor 2009)
A-2.3a	Building A2 - Upper Floor Plan	Flood Collifol Level (FCL)	002.011 (as per LaCas Consultants Inc. rep	ort, October 2006)
A-2.4a	Building A2 - Roof Plan	Design Under Part 9 201	2 BC Building Code	updated 17/08/01
A-2.0b	Building B - Underground Parking	Design Onder Fait 9 201	z be building code	apualeu 17700/01
A-2.1b	Building B - Main Floor Plan			
A-2.2b	Building B - Mezzanine Floor Plan	Parking Ca	lculations	
A-2.3b	Building B - Upper Floor Plan	i aikiiiy Ca	iculations	
A-2.4b	Building B - Roof Plan			
Elevations		REQUIRED:		
A-3.1	Building A1 - Elevations	LOT 1:	Service Station @ 4 / 100m2 GFA	16 cars
A-3.2	Building A1 - Elevations			
A-3.3	Building A2 - Elevations	LOT 2 :	GFA excluding parkade	6338.53 m2
A-3.4	Building A2 - Elevations			No of Stalls

Design Under Part 9 2012	BC Building Code	updated 17/08/01
Parking Cal	culations	
REQUIRED:		
LOT 1:	Service Station @ 4 / 100m2 GF	A 16 cars
LOT 2 :	GFA excluding parkad	le 6338.53 m2
		No of Stalls
1686.05 m2	26.6% Employee Housing @ 1.5	5/unit 36.000
792.32 m2	12.5% Office @ 3/100m2	23.769
183.82 m2	2.9% Retail @ 4/100m2 GFA	7.353
2776.28 m2	43.8% Manufact. @ 1/100m2	27.763
697.24 m2	11% Research/Indoor Rec @ 2/	100m2 13.945
107.76 m2	1.7% Public House @ 11/100m2	11.853
95.08 m2	1.5% Restaurant @ 5/100m2 GF	A 4.754
6338.53 m2 GFA	excludes parkade	125.437
	Total Required	: <u>142 cars</u>
PROVIDED :		
LOT 1:	22 suface stalls (incl. 1 HC/acce	ssible)
LOT 2:	75 suface stalls (incl. 3 HC/acce	ssible)
	45 underground parkade	





context plan

lurdoch+ ny unauth	nents contains copyrigh Company Architectur norized use, disclosure	re+Planning Ltd. , or duplication of a
formation pplicable	contained herein may	result in liability ur
Issued	For:	Date
	1 01.	Date
No:	Revision:	Date
\triangle		
		+
		O
		Ž
		Q
		0
		Ą
)evelopment

Junction

Function

Sealed By:

Drawn By:

Project No:

12.10

BM

Lil'wat Nation: <u>Function Junction Commercial Development</u>

Received 2017-09-19

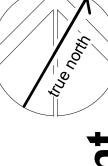
This documents contains copyrighted material belonging to **Murdoch+Company Architecture+Planning Ltd.**Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

APPENDIX B

Issued For:	Date:
DP APPLICATION	APRIL 18/17
REVISED: RMOW comments	JUNE 05/17
ISSUED FOR ADP	JUNE 22/17
REVISED - DELETE R.O.W	AUG. 08/17

No.	Revision:	Date
10.	TACVISIOTI.	Date

project north



MURDOCH COMPANY ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

Drawn By:	Scale:
BM/DS	1:500
Project No:	Sheet No:
1210	A-0.1

85.24 [85.24m]

18715

LMS

2128

SITE AREA 2.15 ha

18715

Millar Creek Road

VR

1035

Area: 6,573 m2 CS-2

LOT 1

HIGHWAY 99

This documents contains copyrighted material belonging to **Murdoch+Company Architecture+Planning Ltd.**Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

Issued For:	Date:
DP APPLICATION	APRIL 18/17
REVISED: RMOW comments	JUNE 05/17
ISSUED FOR ADP	JUNE 22/17
REVISED - DELETE R.O.W	AUG. 08/17

Nο.	Revision:	Date
140.	T C VISIOIT.	Date

project north

Junction

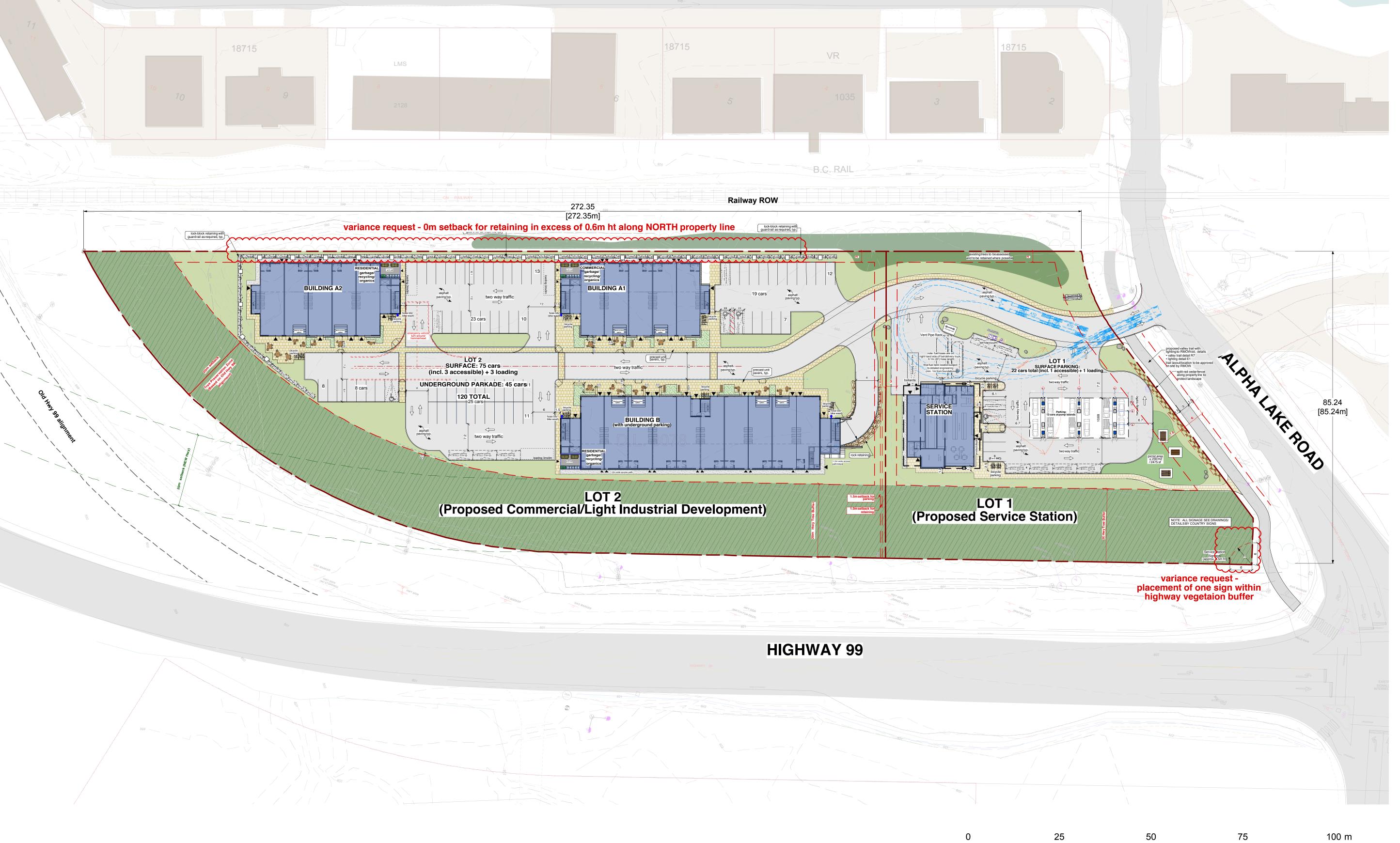
Function

WHistler,

MURDOCH COMPANY ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

Sealed By:

Drawn By: BM/DS 1: 500 Project No:



Issued For:	Date:
DP APPLICATION	APRIL 18/17
REVISED: RMOW comments	JUNE 05/17
ISSUED FOR ADP	JUNE 22/17
REVISED - DELETE R.O.W	AUG. 08/17

No: Revision: Date:

project north

MURDOCH - COMPANY

ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

Sealed By:

Drawn By: Scale: BM/DS 1:500 Project No: Sheet No:

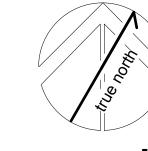
18715 VR 18715 S 1035 3	
CLOT 2 (Proposed Commercial/Light Industrial Development) THEE PRESERVATION ZONE: (20m BUFFER/SETBACK BASED ON OLD HWY 99 ALIGNMENT) THEE PROTECTION FENCING (PLYWOOD HOARDING) TO BE INSTALLED AND MAINTAINED ALLONG TREE PRESERVATION ZONE BOUNDARY DURING CONSTRUCTION. HOARDING TO BE LOCATED ON SITE RESERVATION ZONE BOUNDARY DURING CONSTRUCTION. HOARDING TO BE LOCATED ON SITE RIMS. MA WANY FROM THE TRUNKS OF EXISTING TREES.	
APPROX. LOCATION OF A 20m SETBACK/ BUPFER BASED ON CURRENT HWY 99 ALIGNMENT OLD HWY 99 ALIGNMENT OLD HWY 99 ALIGNMENT OLD HWY 99 ALIGNMENT OVERHEAD POWERLES OVERHEAD POWERLES OVERHEAD POWERLES OVERHEAD POWERLES	(ice Station)
NEW/CURRENT HWY 99 ALIGNMENT Supplementary planting within the buffer is to be done in accordance with the recommendations in Cascade's report, which includes the removal of existing shrubs/vegetation and additional soil to increase survival of the new planting.	25 50 75 100 m

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

Issued For:	Date:
DP APPLICATION	APRIL 18/17
REVISED: RMOW comments	JUNE 05/17
ISSUED FOR ADP	JUNE 22/17
REVISED - DELETE R.O.W	AUG. 08/17

No:	Revision:	Date:

project north



unction ction

ARCHITECTURE + PLANNING LTD.

#106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

rawn By:	Scale:
BM/DS	1: 200
Project No:	Sheet No:
1401	1 -1 1

	+ 607.93		60.19	YIELD SIGN	602.10	Project No:
0	5	10	15	20	25 m	1401

LIGHTING LEGEND

600.95

600.81

EXTERIOR WALL SCONCE: UPLIGHT/DOWNLIGHT

EXTERIOR, WALL MOUNTED DOWN-LIGHT OR

SHIELDED FLOOD LIGHT ON MOTION SENSOR

EXTERIOR, CEILING MOUNTED SOFFIT LIGHT FIXTURE

Received 2017-09-19

\$500.73 _ \(\frac{1}{2}\) \(\frac{5500}{2}\) \(\frac{5500}{2}\) \(\frac{5}{2}\)

existing trees to be assessed and to be retained where possible Received 2017-09-19 APPENDIX B



This documents contains copyrighted material belonging to **Murdoch+Company Architecture+Planning Ltd.**Any unauthorized use, disclosure, or duplication of any information chained herein may result in liability under

Issued For:	Date:
DP APPLICATION	APRIL 18/17
REVISED: RMOW comments	JUNE 05/17
ISSUED FOR ADP	JUNE 22/17
REVISED - DELETE R.O.W	AUG. 08/17

No:	Revision:	Date
\bigwedge		
	project north	
)

Function Junction

C

MURDOCH COMPANY ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

Sealed By:

Drawn By:	Scale:
BM/DS	1:200
Project No:	Sheet No:

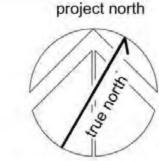
1401 **L-1.2**

APPENDIX B

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd. Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

1	ssued For:	Date:	
-	DP APPLICATION	APRIL 18/17	
	REVISED: RMOW comments	JUNE 05/17	
	ISSUED FOR ADP	JUNE 22/17	
	REVISED - DELETE R.O.W	AUG. 08/17	

No: Revision: Date:



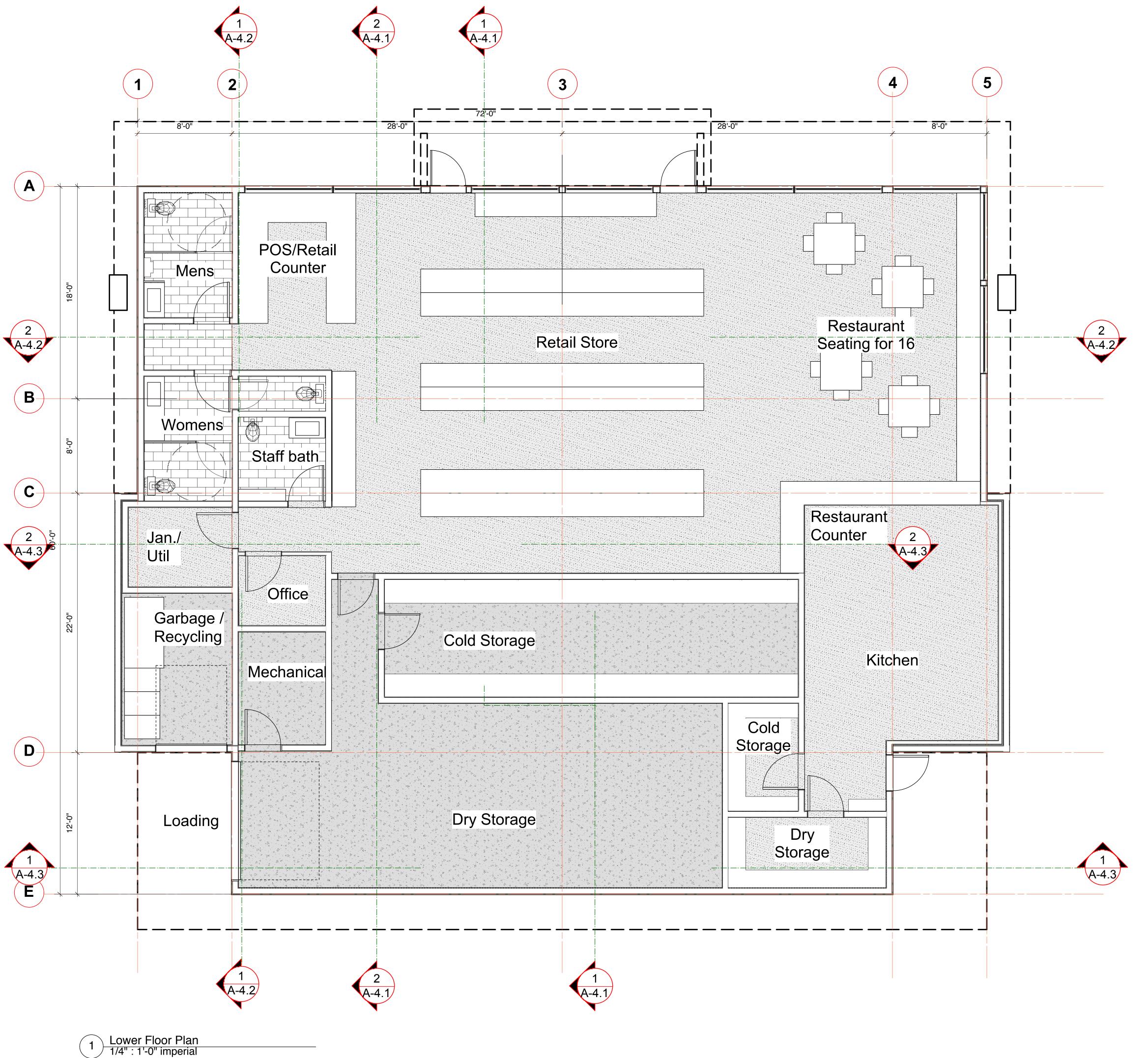
MURDOCH ---- COMPANY

ARCHITECTURE + PLANNING LTD. #106-4319 Main Street P.O. Box 1394

Whistler, B.C. VON 1BO Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

Drawn By:	Scale:
BM/DS	1: 200
Project No:	Sheet No:
1401	1_1 3



This documents contains copyrighted material belonging to **Murdoch+Company Architecture+Planning Ltd.**Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws. Issued For: DP APPLICATION REVISED: RMOW comments ISSUED FOR ADP No: Revision: Function Junction Commercial Development PLAN Station:LOWER Service MURDOCH - COMPANY ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

Date:

APRIL 18/17

JUNE 05/17

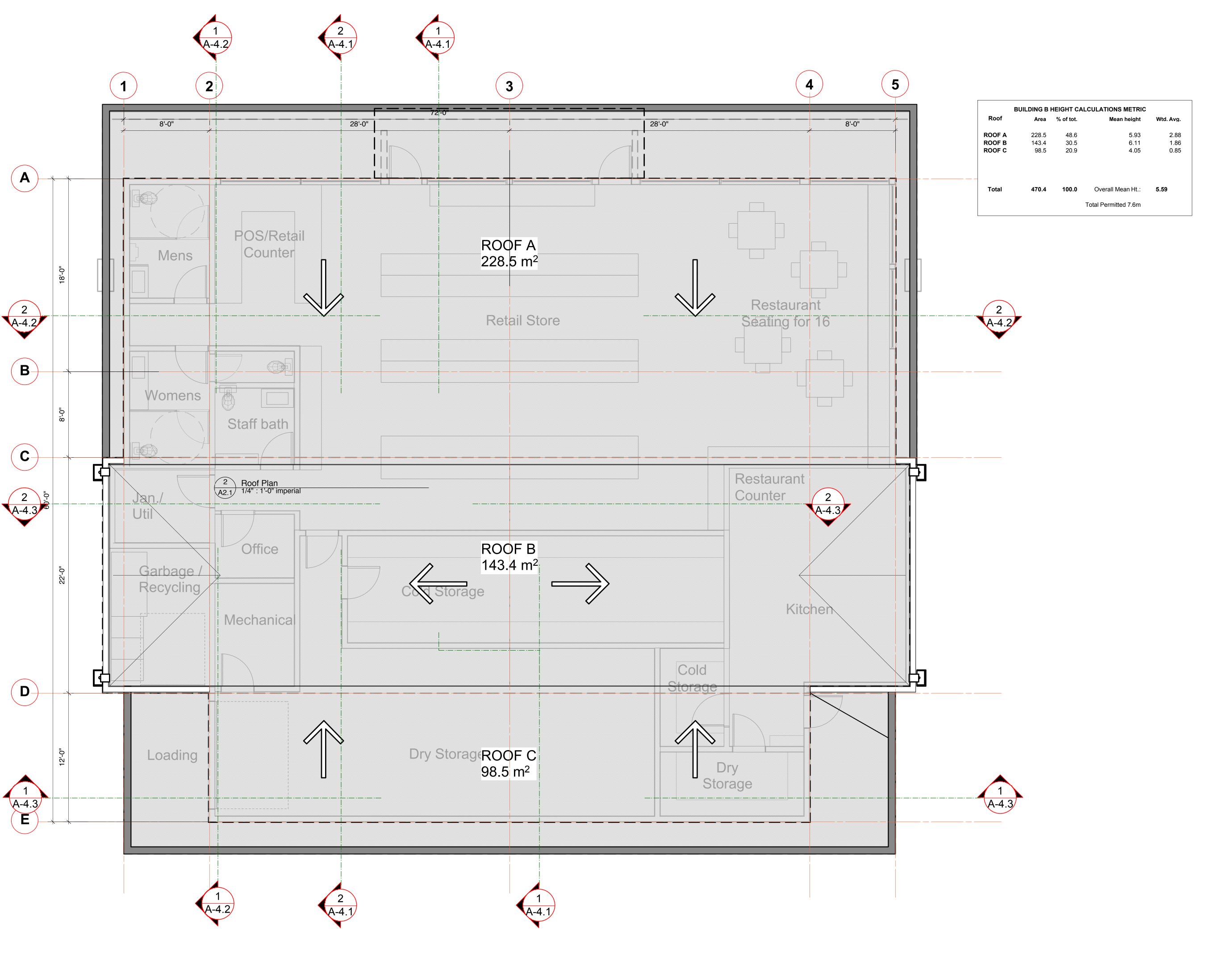
JUNE 22/17

Date:

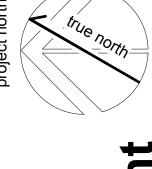
Alpha Lake Road, Whistler, BC

Sealed By:

		Σ
Drawn By:	Scale:	Se
BM/AC	1/4"=1'-0"	_ot
Project No:	Sheet No:	
	A O 4 4	7.
14.01	H-2.1.1	
	l 	Ä



APPENDIX B This documents contains copyrighted material belonging to **Murdoch+Company Architecture+Planning Ltd.**Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws. Date: Issued For: DP APPLICATION APRIL 18/17 REVISED: RMOW comments JUNE 05/17 ISSUED FOR ADP JUNE 22/17 No: Revision: Date:



Function Junction Commercial Development Alpha Lake Road, Whistler, BC

ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

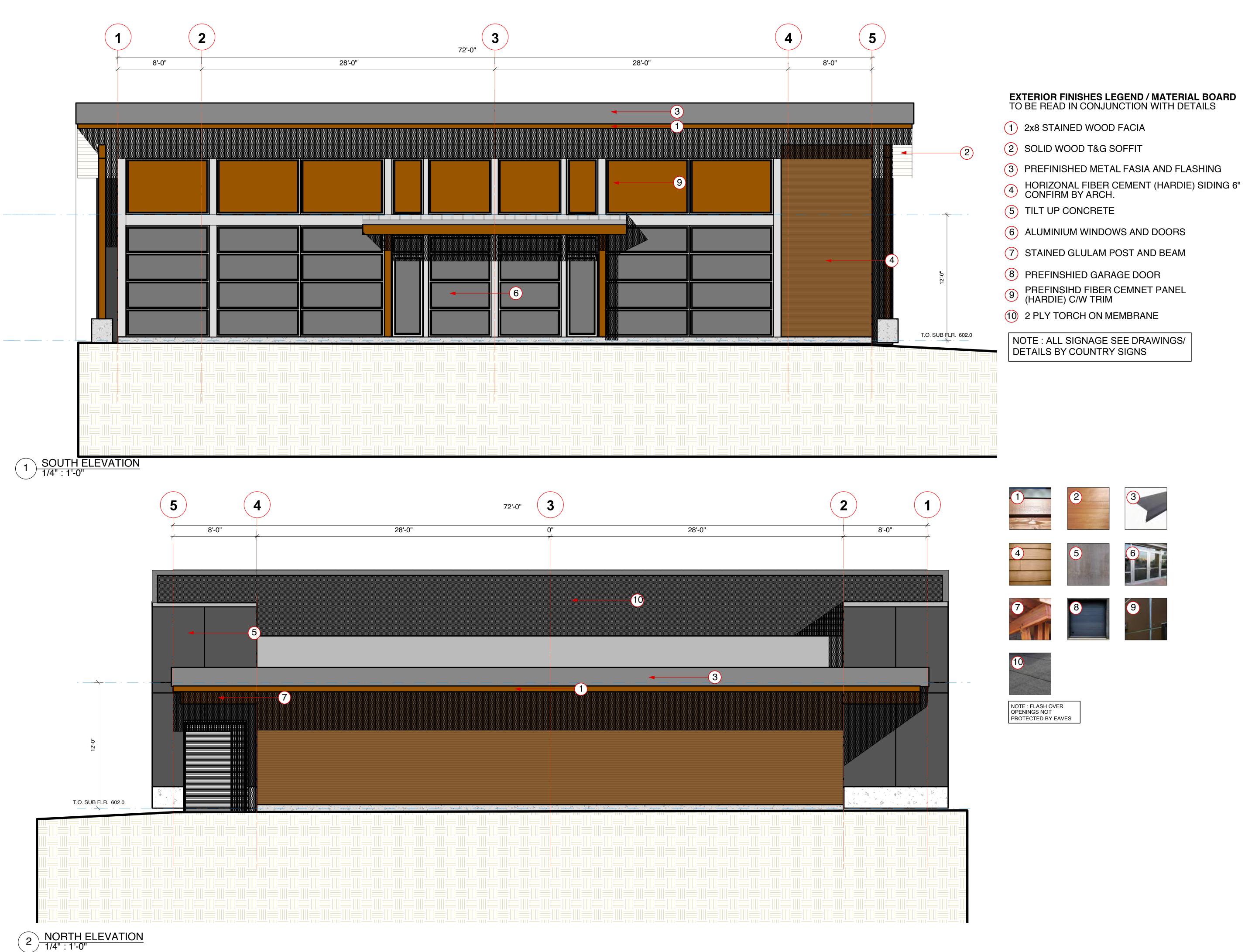
Sealed By:

Station:

Service

Project No: 14.01	Sheet No: A-2.2.1	-2.2.1
BM/AC	1/4"=1'-0"	Lot 1
 Drawn By:	Scale:	, Service

Roof Plan
1/4": 1'-0" imperial



This documents contains copyrighted material belonging to **Murdoch+Company Architecture+Planning Ltd.**Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under Issued For: Date: DP APPLICATION **APRIL 18/17** REVISED: RMOW comments JUNE 05/17 ISSUED FOR ADP JUNE 22/17 No: Revision: Date:

evelopment

ommercial Junction Whistler, Road, Function

Station

ARCHITECTURE + PLANNING LTD. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0

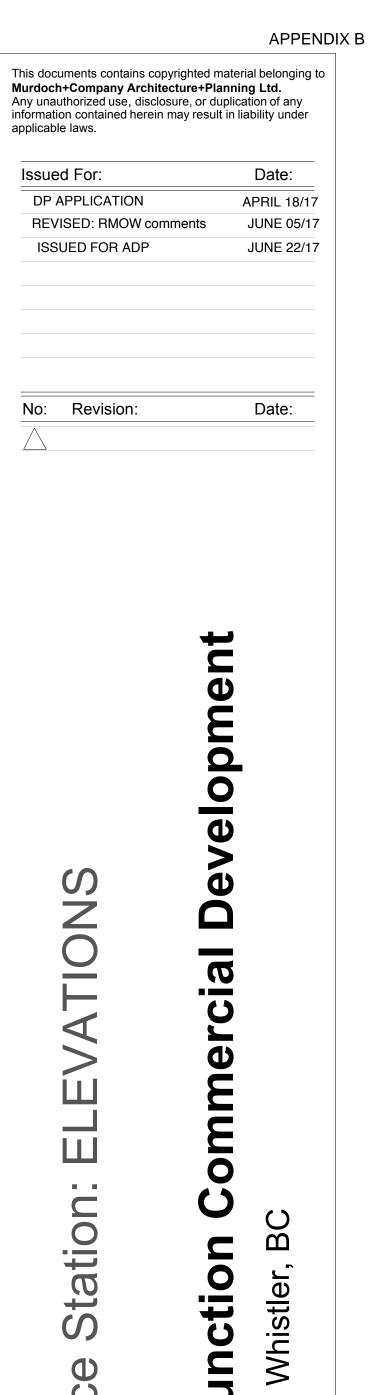
1/4"=1'-0" Project No: Sheet No:

Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

Drawn By:

BM/AC





Drawn By:

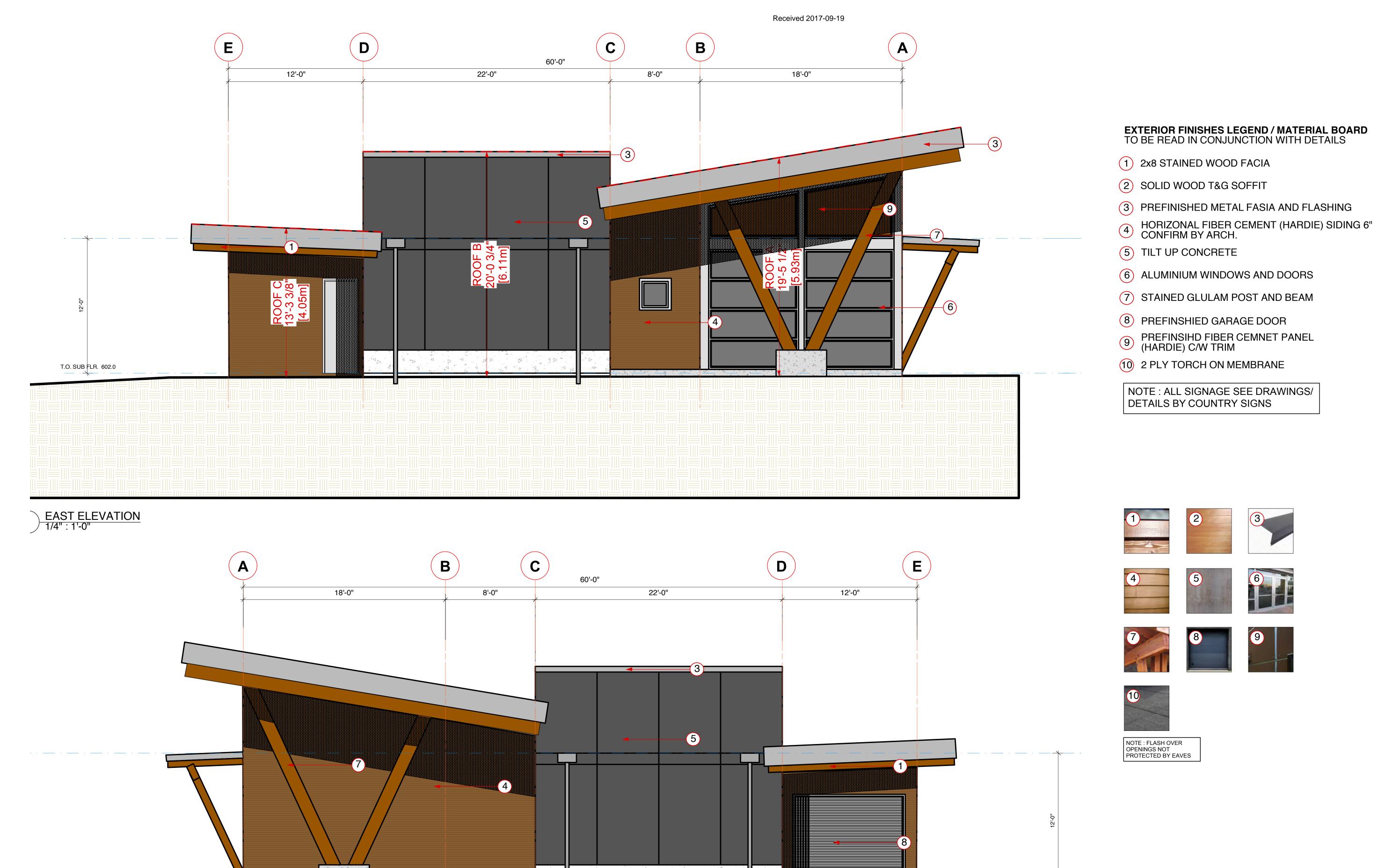
BM/AC

Project No:

1/4"=1'-0"

T.O. SUB FLR. 602.0

Junction Road, Function MURDOCH - COMPANY ARCHITECTURE + PLANNING LTD. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net



Received 2017-09-19

EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

- 1) 2x8 STAINED WOOD FACIA
- 2 SOLID WOOD T&G SOFFIT
- 3 PREFINISHED METAL FASIA AND FLASHING
- HORIZONAL FIBER CEMENT (HARDIE) SIDING 6" CONFIRM BY ARCH.
- 5 CAST IN PLACE CONCRETE

- 6 ALUMINIUM WINDOWS AND DOORS
- 7 WOOD CLAD CANOPT STRUCTURE
- 8 PREFINSHIED GARAGE DOOR
- 9 PREFINSIHD FIBER CEMNET PANEL (HARDIE) C/W TRIM
- 10 2 PLY TORCH ON MEMBRANE



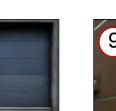








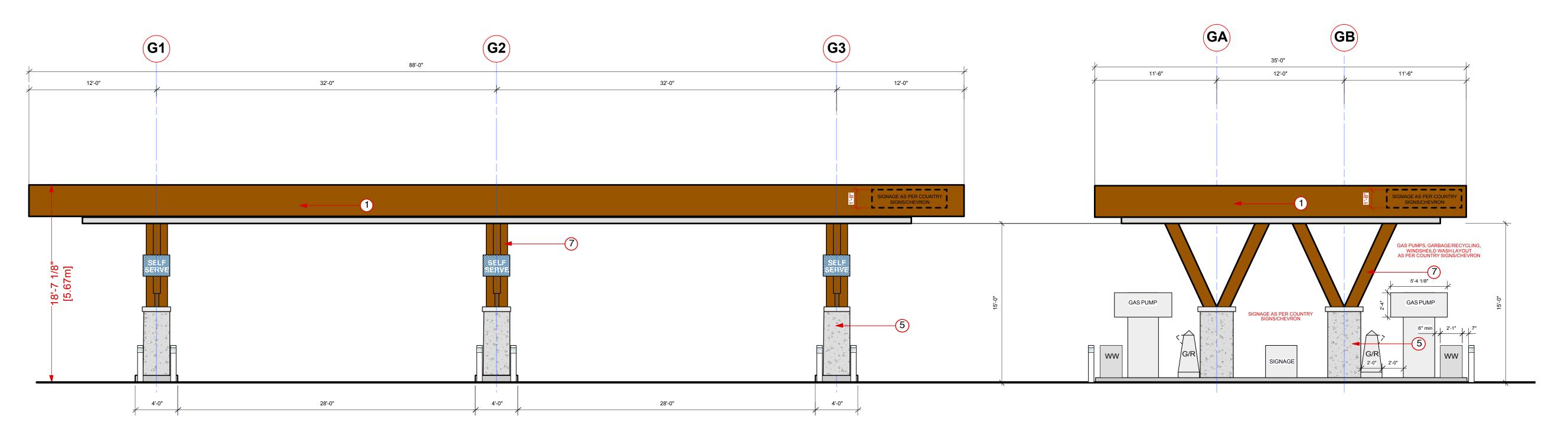






NOTE : FLASH OVER OPENINGS NOT PROTECTED BY EAVES

NOTE: ALL SIGNAGE BY TENANT, IN ACCORDANCE WITH RMOW CURRENT SIGNAGE BYLAW, MAX. LETTER HEIGHT 12"



OPTION A 1/4" : 1'-0"

Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under Issued For: DP APPLICATION REVISED: RMOW comments ISSUED FOR ADP No: Revision: ommercial Development Station Junction ction ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net Sealed By:

Drawn By:

1/4"=1'-0"

BM

Whistler,

Lake Road,

Alpha

APPENDIX B

Date:

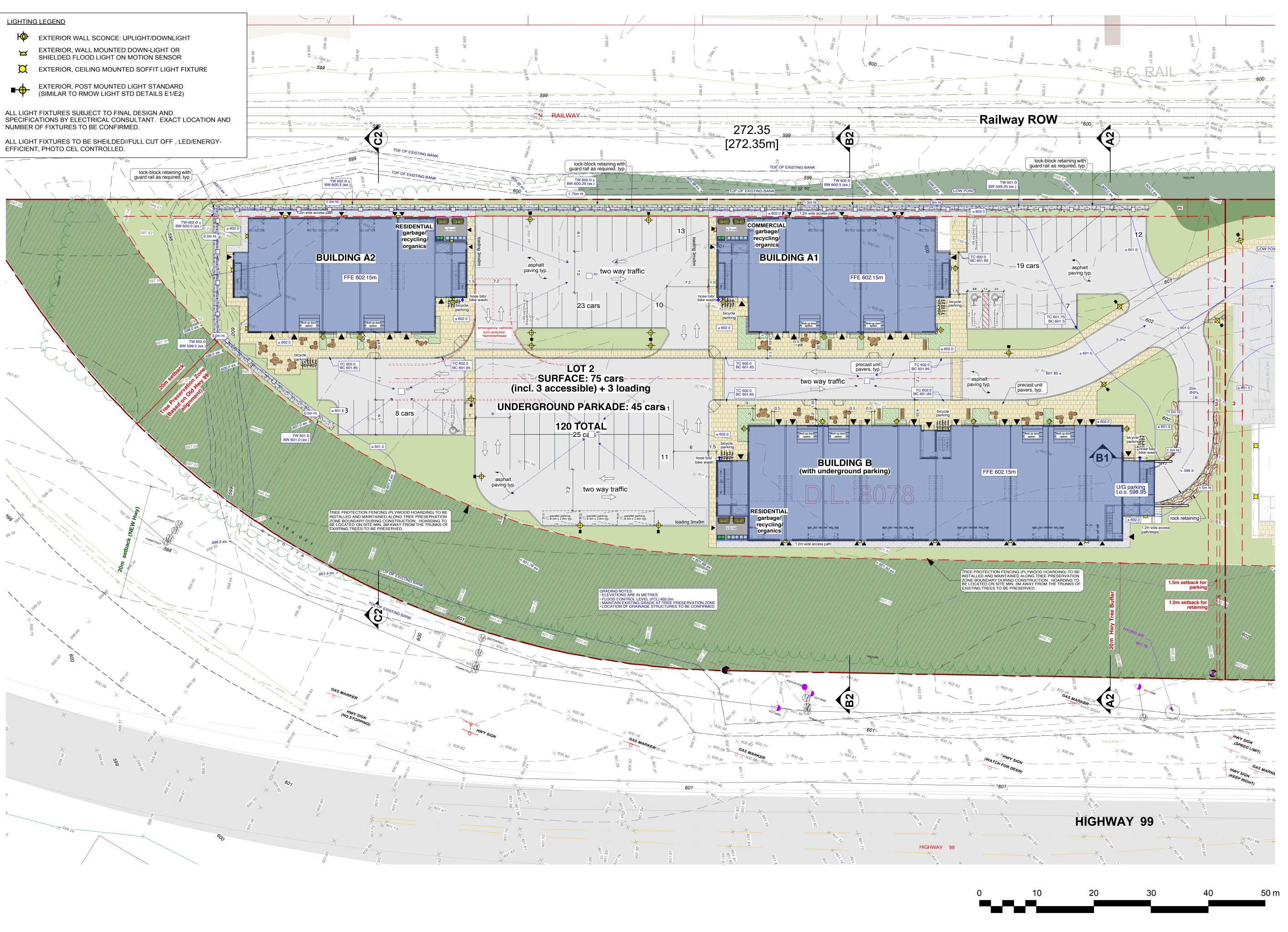
APRIL 18/17

JUNE 05/17

JUNE 22/17

Date:

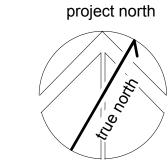
This documents contains copyrighted material belonging to



This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

Issued For:	Date:
DP APPLICATION	APRIL 18/17
REVISED: RMOW comments	JUNE 05/17
ISSUED FOR ADP	JUNE 22/17
REVISED - DELETE R.O.W	AUG. 08/17

No: Revision:



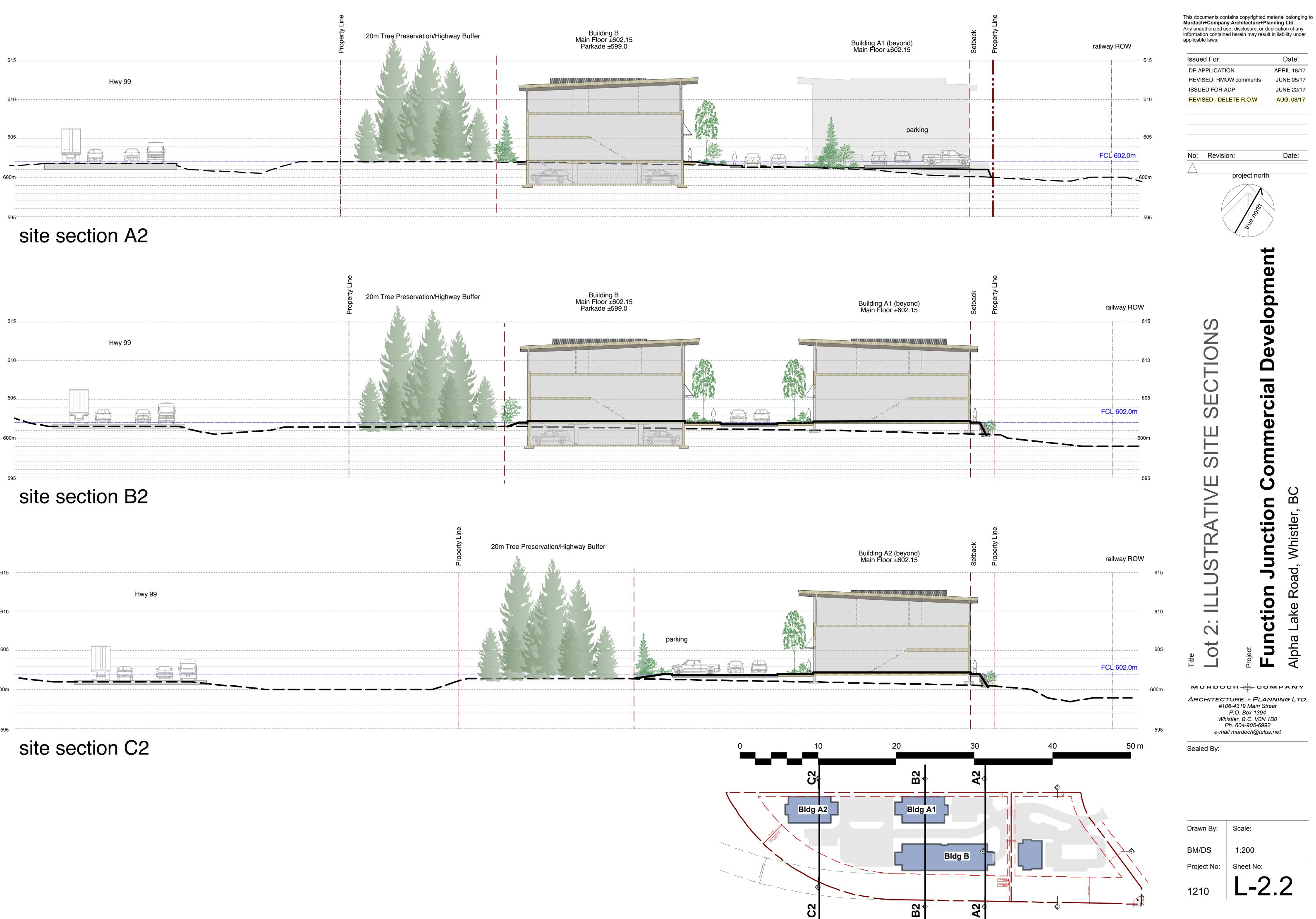
Junction Road,

MURDOCH COMPANY ARCHITECTURE + PLANNING LTD.
#106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0
Ph. 604-905-6992
e-mail murdoch@telus.net

Sealed By:

Drawn By:	Scale:
BM/DS	1: 300
Project No:	Sheet No:
	1 0 1
1210	L-2.1

Received 2017-09-19 APPENDIX B



3. IRRIGATION: Irrigation system to be installed to the current edition of IIABC available at: http://www.irrigationbc.com.

5. Landscape architect to receive 48 hour notice for review of planting layout prior to installation.

Maintain a copy on site.

blue

4. Plant quantities in the plant list are for convenience only.

PERENNIALS

GRASSES

ech 85 Echinacea purpurea "Magnus"

nep 65 Nepeta x faassenii rud 75 Rudbeckia fulgida "Goldsturm"

hel 90 Helictotrichon semperviens

cal 65 Calamagrostis x acutifolia 'Karl Foerster'

pen 85 Pennisetum alopecuroides "Cassian"

Purple Coneflower

Garden Catmint

Black-Eyed Susan

Feather Reed Grass

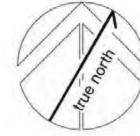
Evergreen Oat Grass Dwarf Fountain Grass

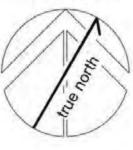
This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability unde applicable laws.

Issued For:	Date
DP APPLICATION	APRIL 18/
REVISED: RMOW comments	JUNE 05/
ISSUED FOR ADP	JUNE 22
REVISED - DELETE R.O.W	AUG. 08

No: Revision:

project north





ctio

Whistler

3

ction

MURDOCH - COMPANY ARCHITECTURE + PLANNING LTD. #106-4319 Main Street P.O. Box 1394

Whistler, B.C. VON 1B0

Ph. 604-905-6992

e-mail murdoch@telus.net

Sealed By:

Scale:
1: 300
Sheet No:

project north

Commercial Development Whistler, BC Junction

Function

Alpha Lake Road, BUILDING MURDOCH COMPANY

Architecture + Planning Ltd. #106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

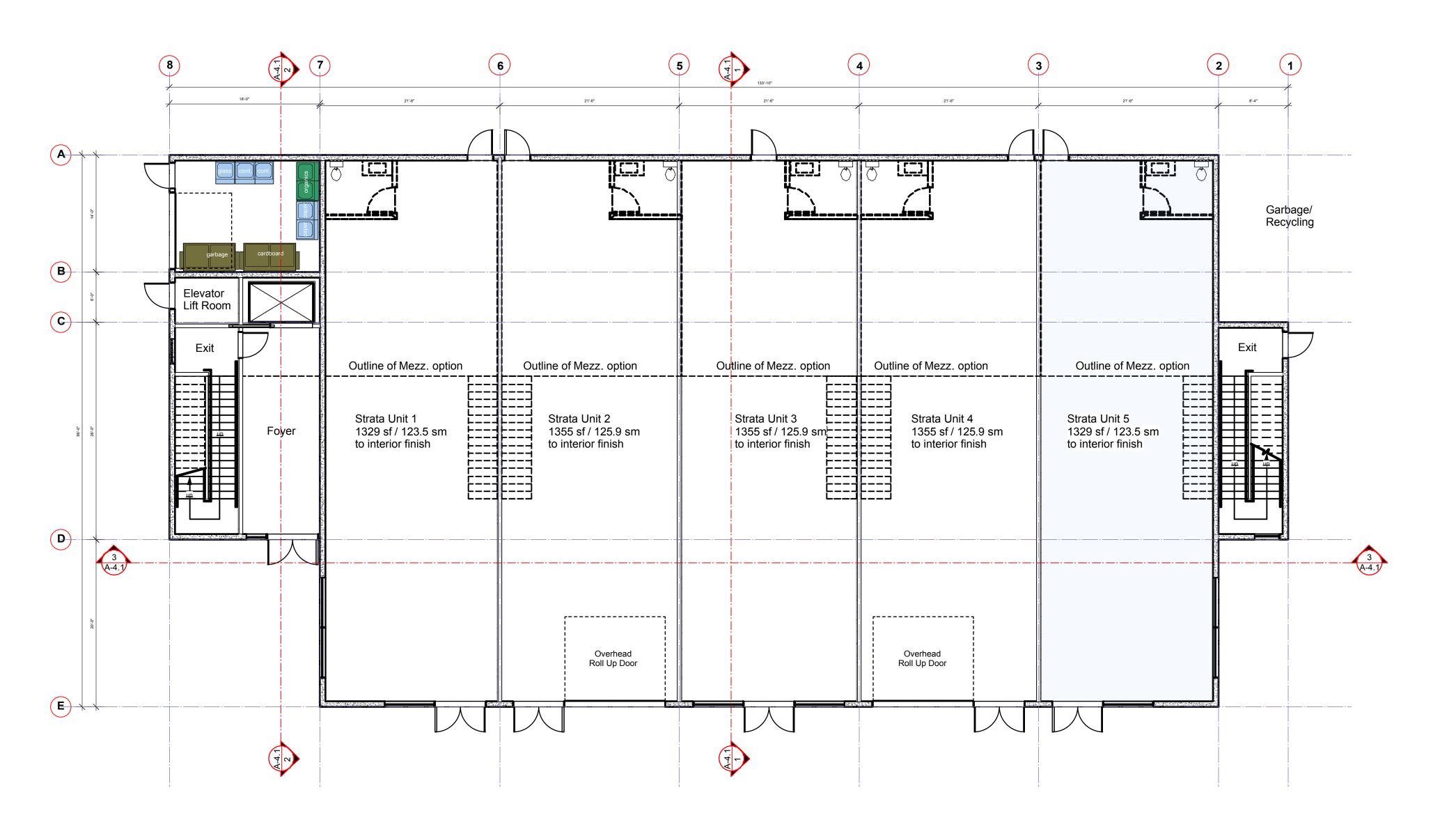
Sealed By:

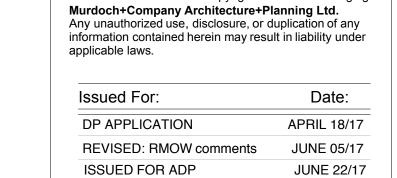
MAIN

Drawn By: BM/DS 1/8" = 1'0"

Sheet No: Project No:







No: Revision: Date:

project north

Junction Commercial Development Alpha Lake Road, Whistler, BC

Function

MURDOCH — COMPANY

Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

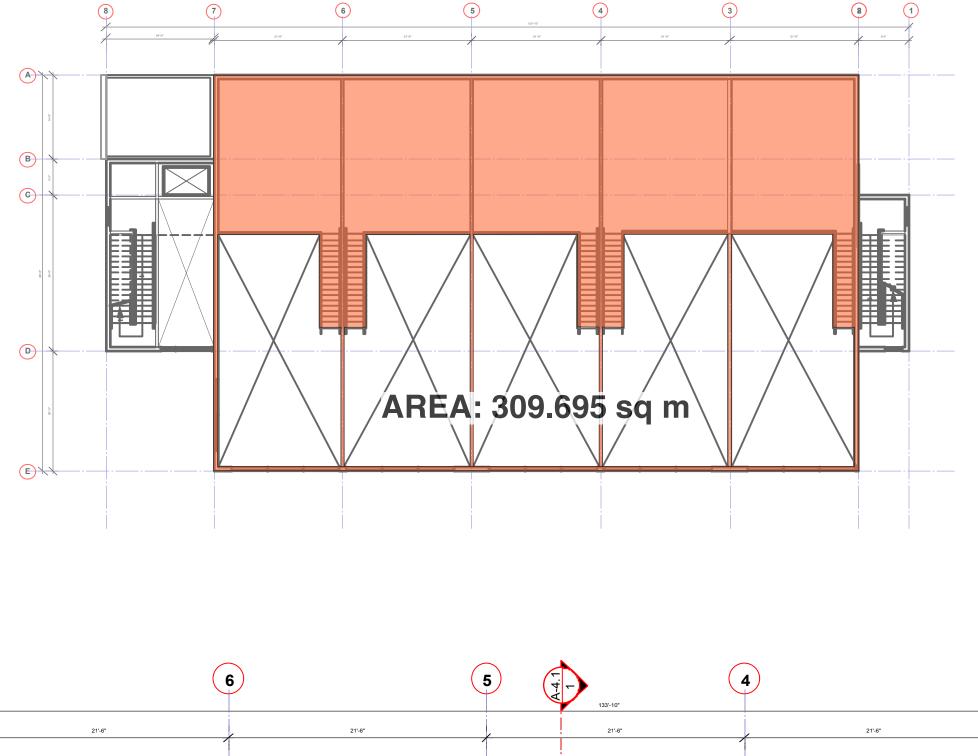
Drawn By:

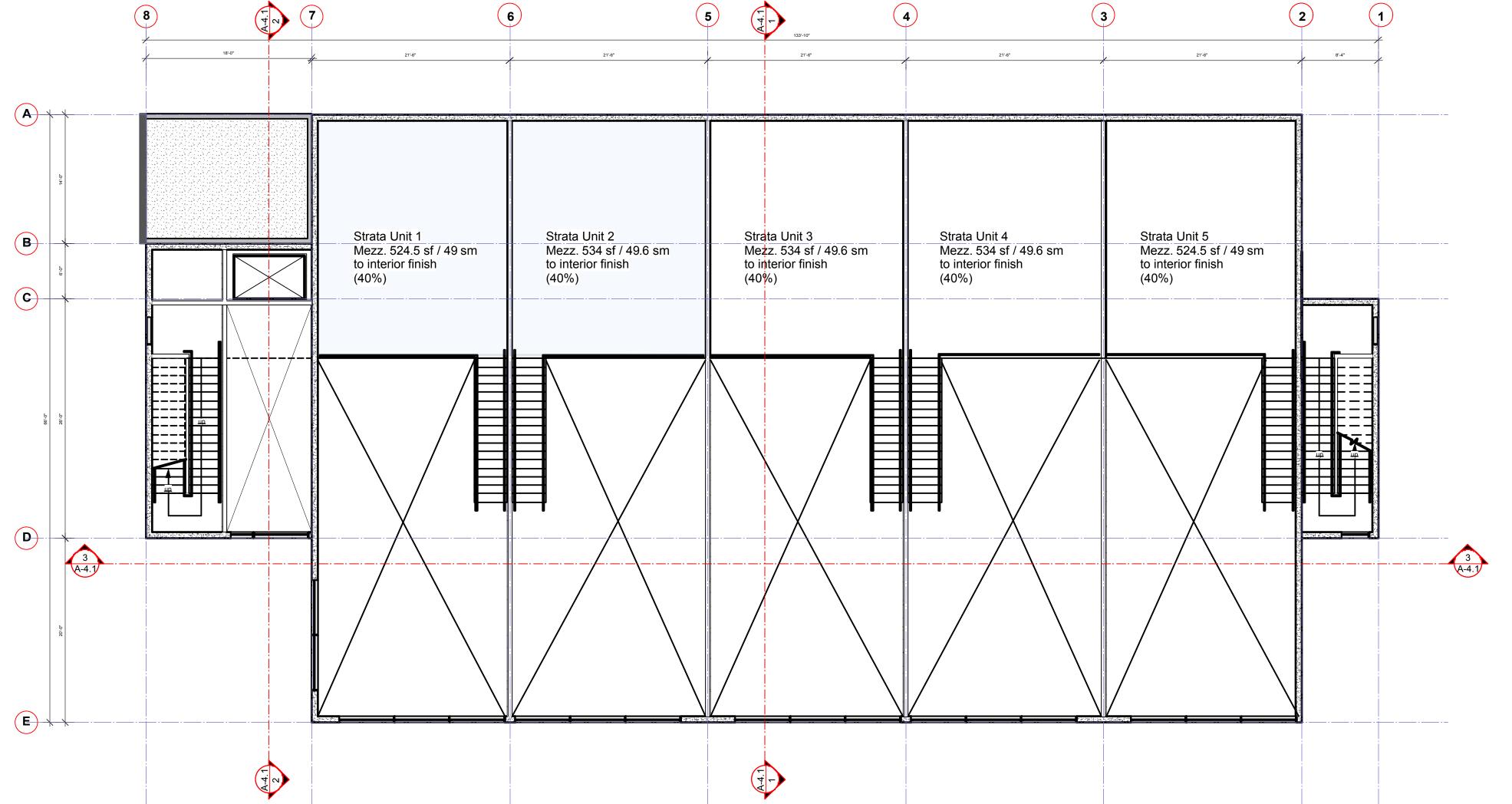
BM/DS

Project No: Sheet No:

1/8" = 1'0"

FLOOR ANINE N "A1" MEZ BUILDING Sealed By:





BUILDING

"A1" MEZZANINE FLOOR

Date:

APRIL 18/17

JUNE 05/17

JUNE 22/17

Date:

Commercial Development

Junction

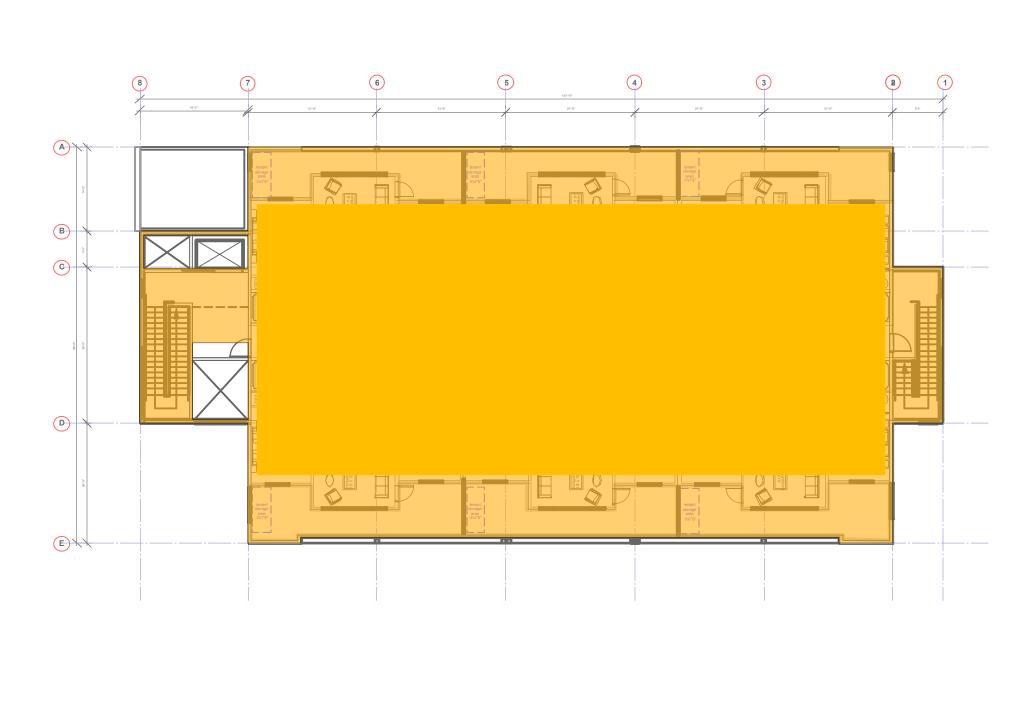
unction

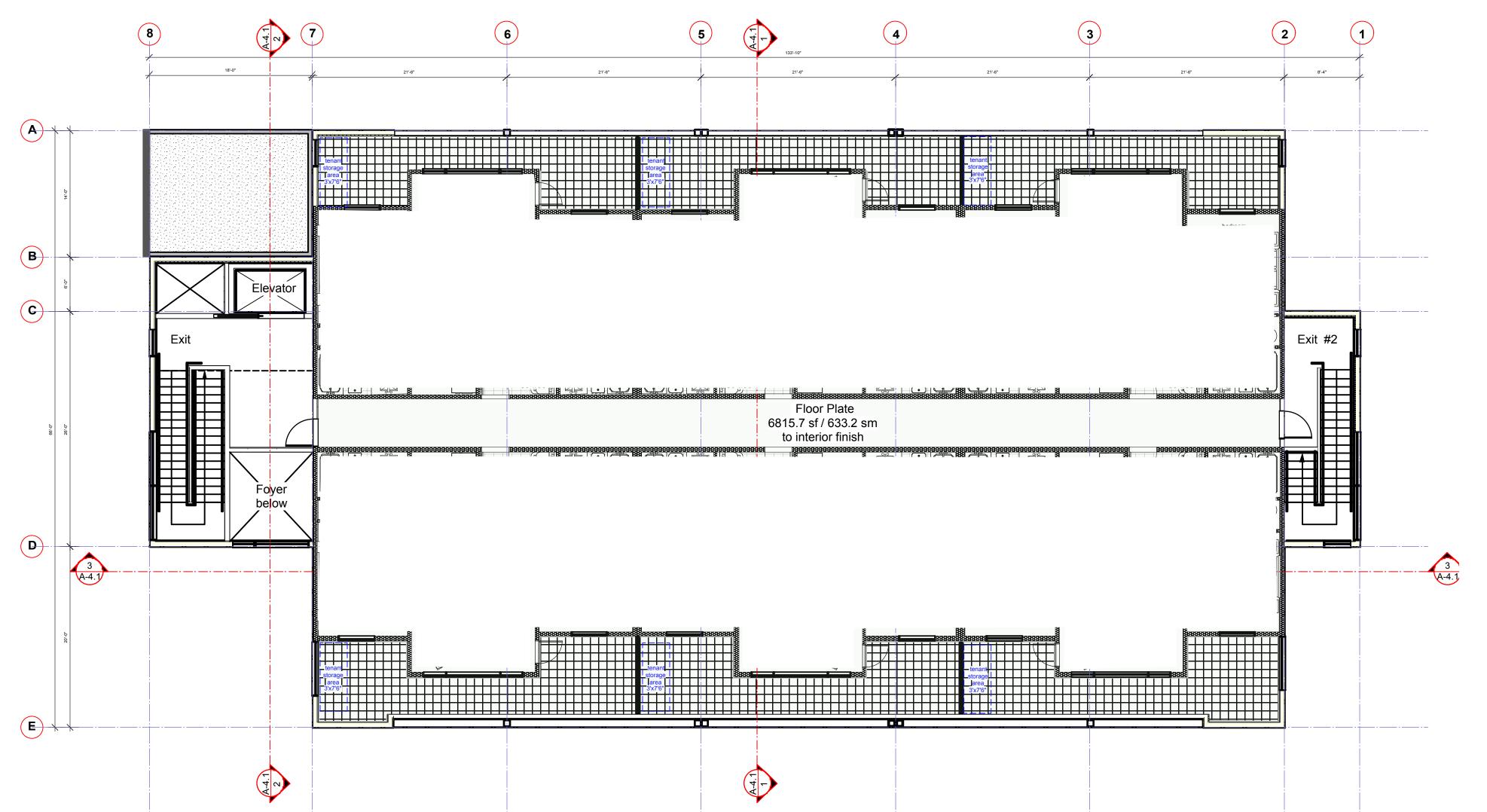
BC

Whistler,

Lake Road,

Alpha





1 UPPER FLOOR PLAN - BUILDING A1
1/8" = 1'0"



Date:

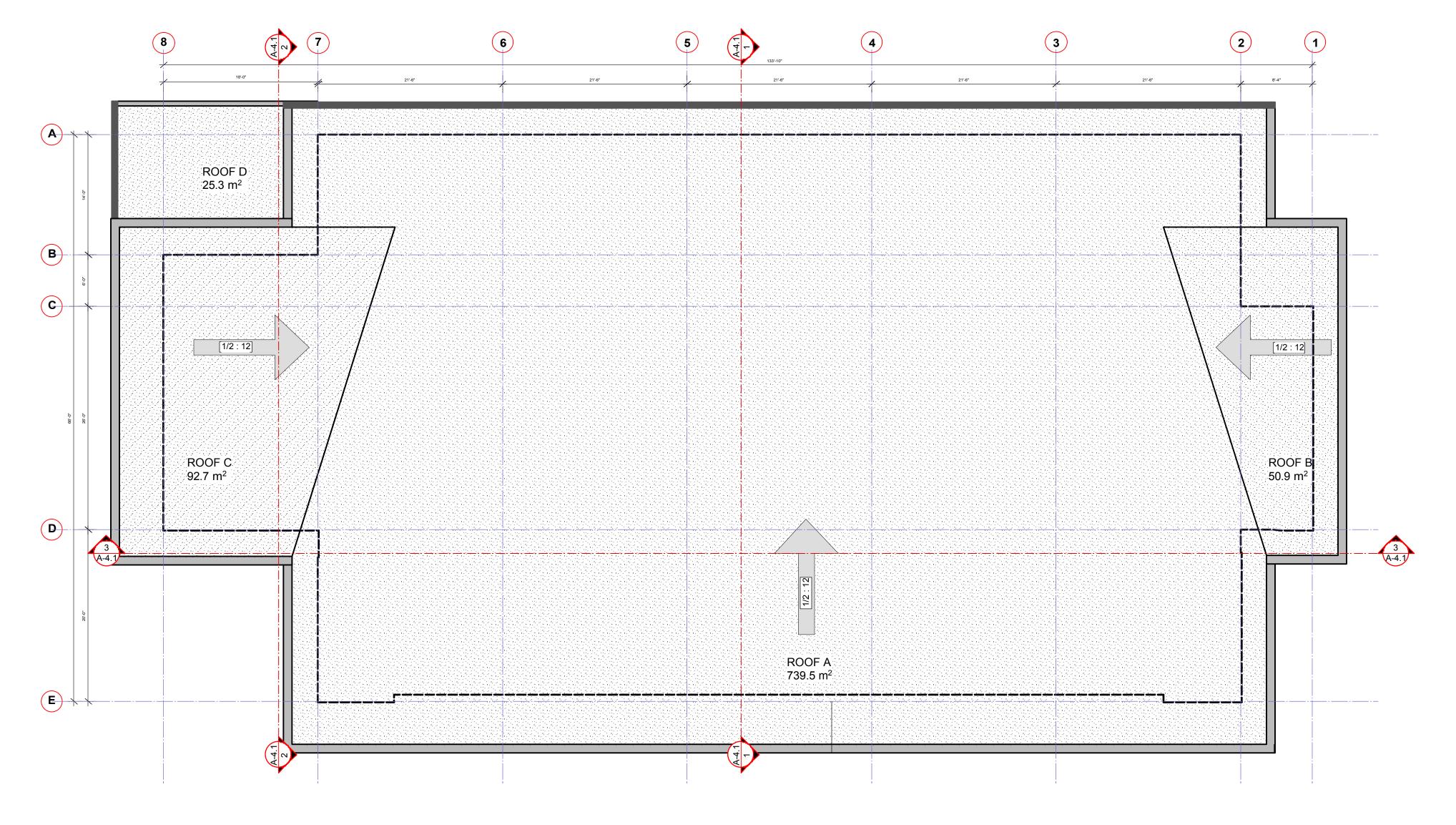
APRIL 18/17

JUNE 05/17

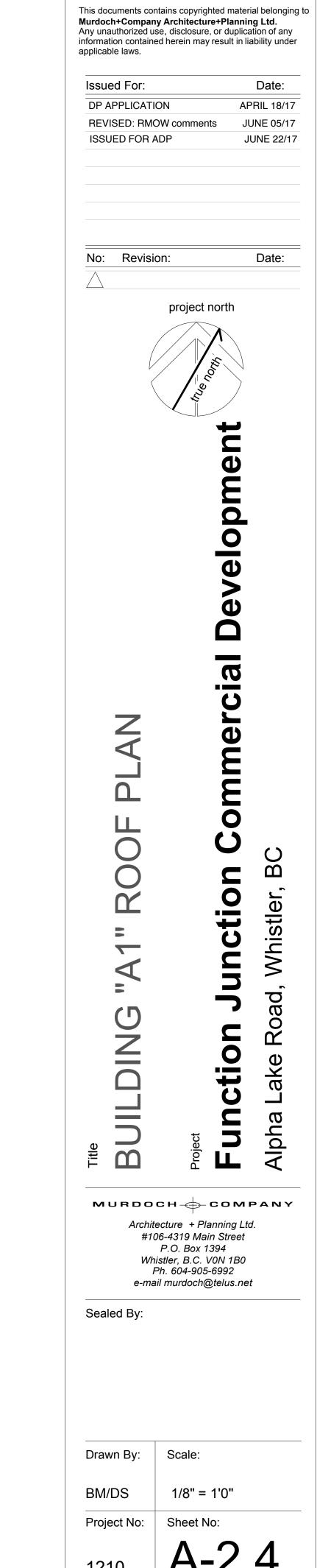
JUNE 22/17

В	UILDING A1	HEIGHT CA	LCULATIONS METRIC	•
Roof	Area	% of tot.	Mean height	Wtd. Avg.
ROOF A	739.5	81.4	10.08	8.21
ROOF B	50.9	5.6	10.21	0.57
ROOF C	92.7	10.2	10.32	1.05
ROOF C	25.3	2.8	4.96	0.14
Total	908.4	100.0	Overall Mean Ht.:	9.97
		Te	otal Permitted 12.0m	

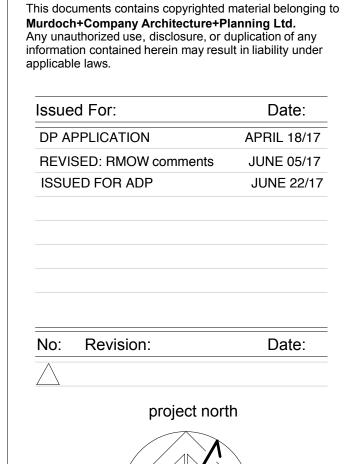
*NOTE: LOW SLOPE TORCH ON ROOF NO SIGNIFICANT SNOW DUMP



ROOF PLAN - BUILDING A1
1/8" = 1'0"



Date: project north Junction Commercial Development Alpha Lake Road, Whistler, BC Function MURDOCH COMPANY Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net 1/8" = 1'0"



Commercial Development

BC Junction Whistler, I Lake Road, Function

Alpha $\mathbf{\Omega}$

MURDOCH COMPANY Architecture + Planning Ltd. #106-4319 Main Street
P.O. Box 1394
Whistler, B.C. VON 1B0

Ph. 604-905-6992 e-mail murdoch@telus.net

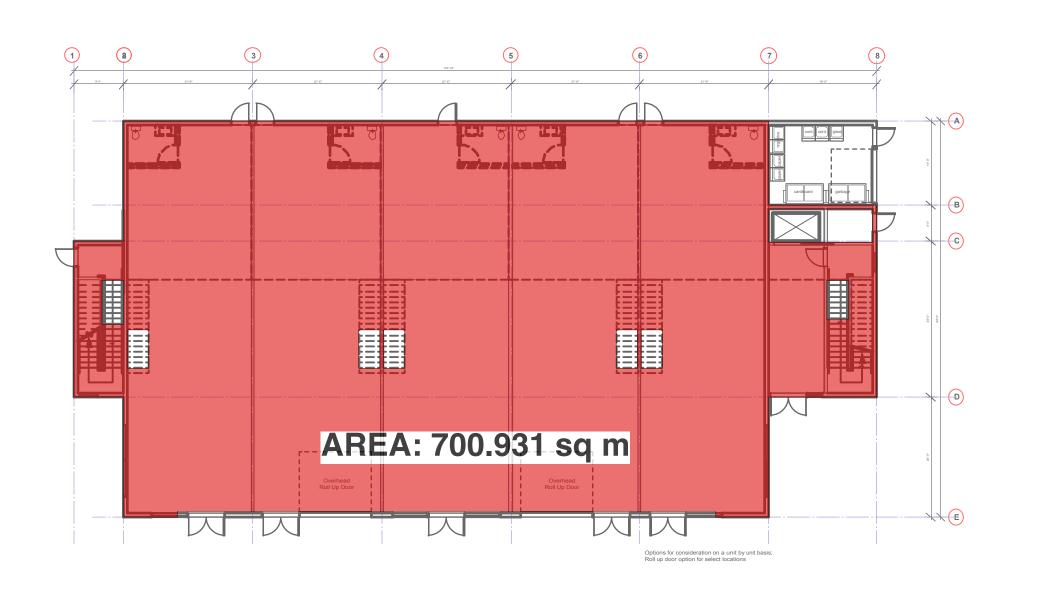
Sealed By:

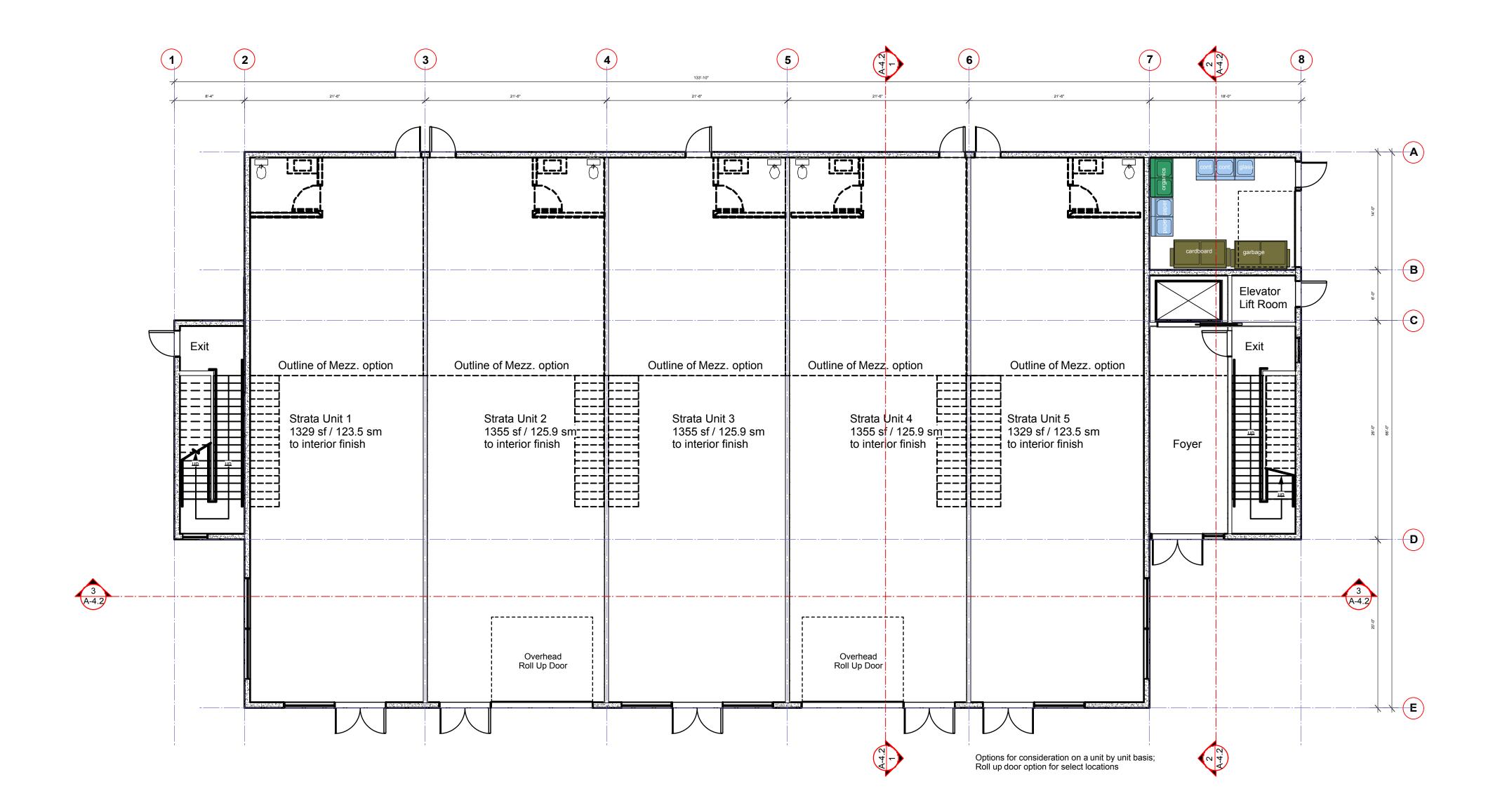
MAIN

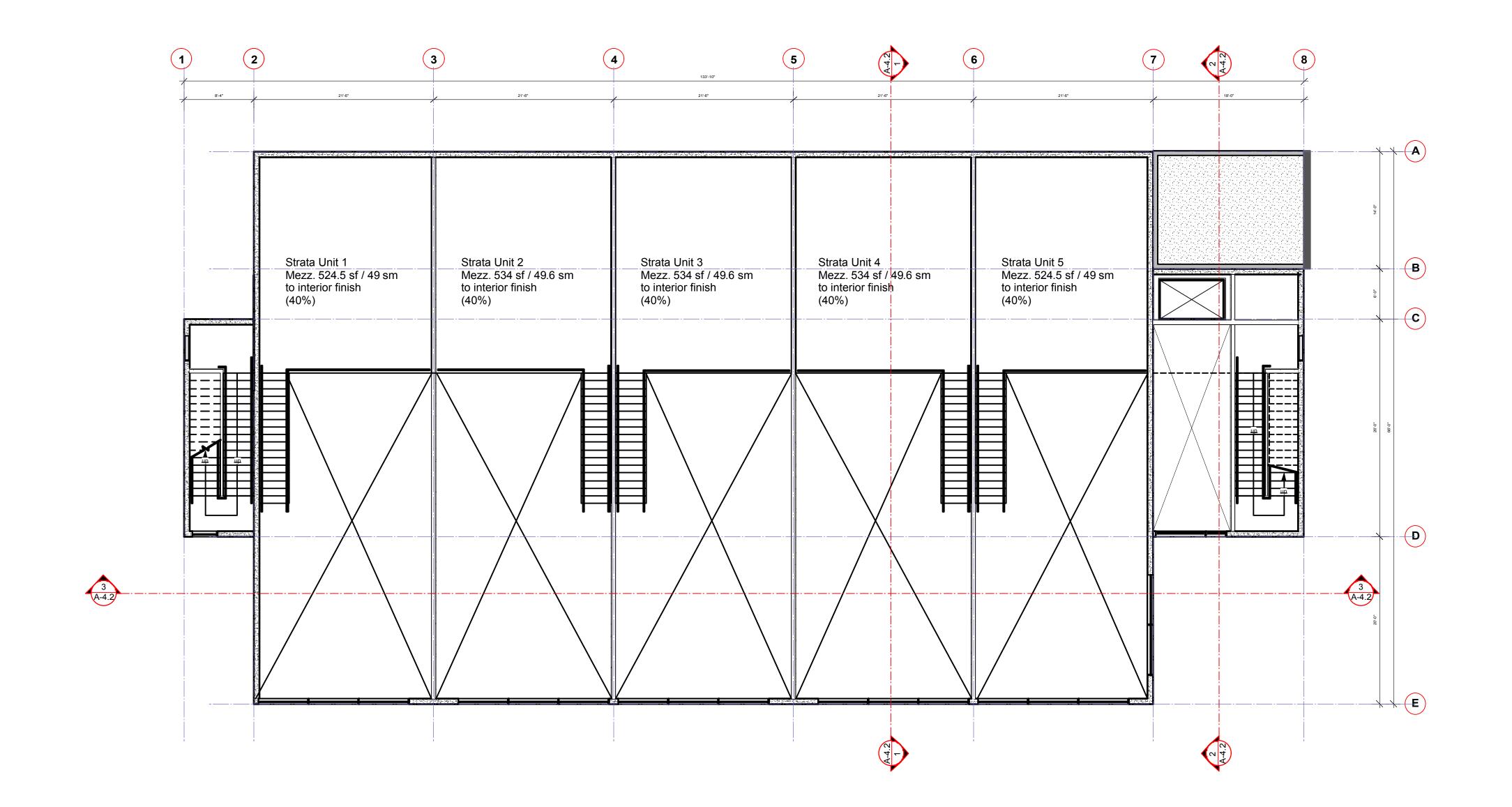
5

Drawn By: BM/DS 1/8" = 1'0"

Project No:







1 MEZZANINE FLOOR PLAN - BUILDING A2
1/8" = 1'0"

APPENDIX B

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

Issued For: Date: APRIL 18/17 DP APPLICATION REVISED: RMOW comments JUNE 05/17 ISSUED FOR ADP JUNE 22/17

No: Revision: Date:

project north

교

ANINE

N

"A2" MEZ

BUILDING

Function Junction Commercial Development

Alpha Lake Road, Whistler, BC

MURDOCH — COMPANY

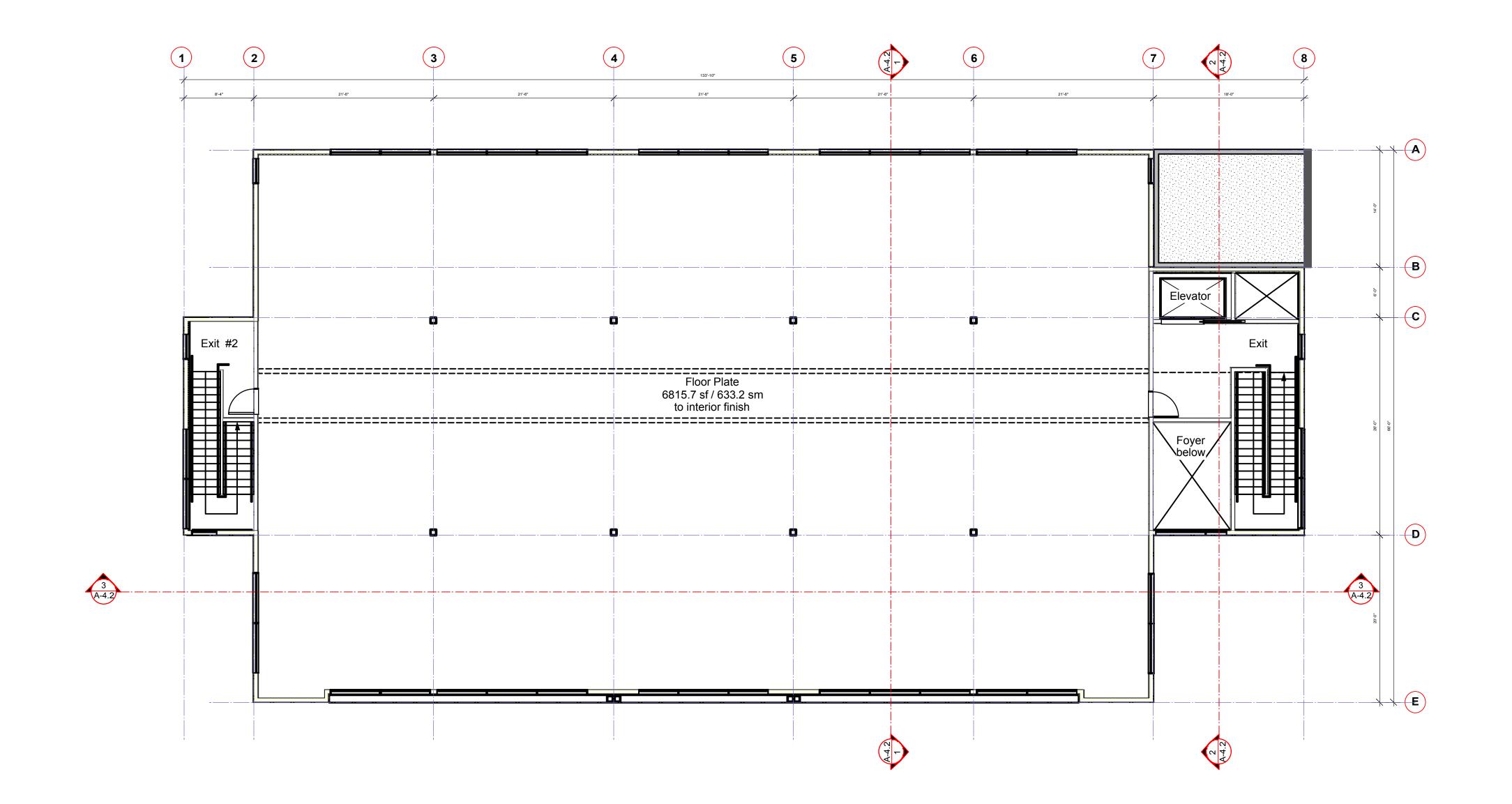
Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

Drawn By:

BM/DS 1/8" = 1'0" Project No: Sheet No:

"A2" MEZZANINE FLOOR



1 UPPER FLOOR PLAN - BUILDING A2
1/8" = 1'0"

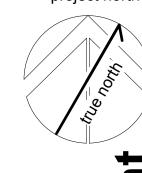
APPENDIX B

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under applicable laws.

Issued For: Date: DP APPLICATION APRIL 18/17 REVISED: RMOW comments JUNE 05/17 ISSUED FOR ADP JUNE 22/17

No: Revision: Date:

project north



Commercial Development Whistler, BC Junction

Alpha Lake Road,

MURDOCH COMPANY

Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

用从

Drawn By: BM/DS 1/8" = 1'0"

Date:

APRIL 18/17

JUNE 05/17

JUNE 22/17

Date:

Junction Commercial Development

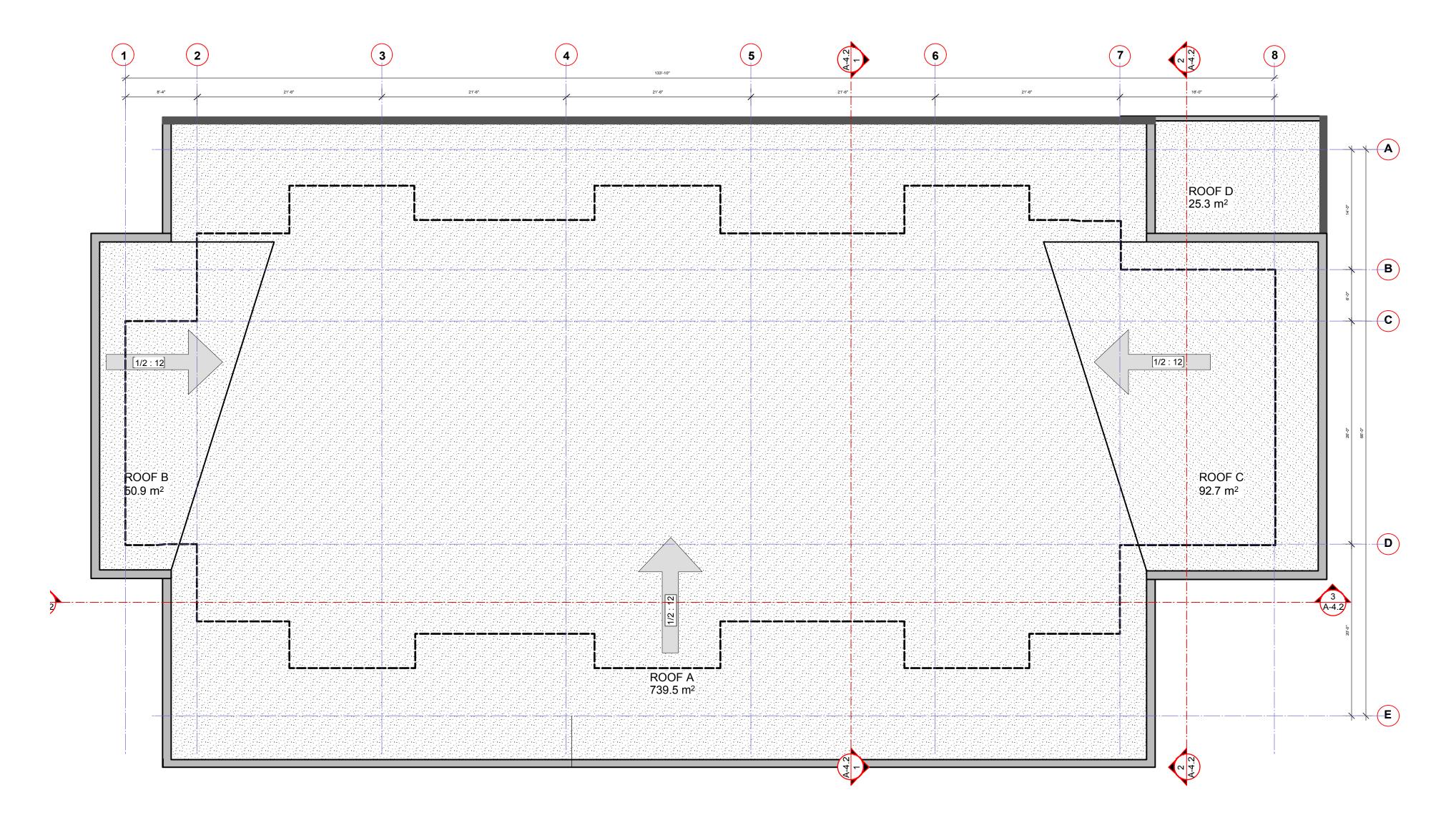
BC

FUNCTION JUNCTION, WHISTLER

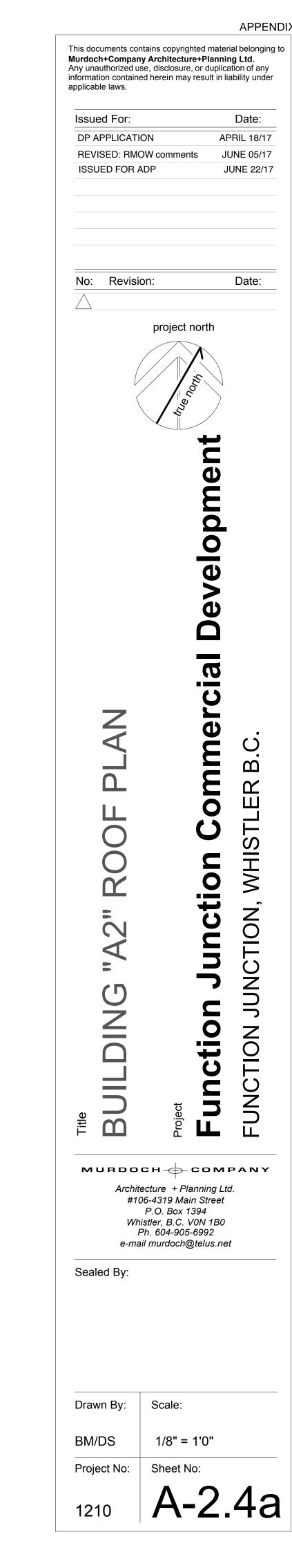
Function

Roof	BUILDING A2	2 HEIGHT C	ALCULATIONS METRI	C Wtd. Avg.
11001	Alea	/6 OI tot.	Mean neight	wiu. Avg.
ROOF A ROOF B	739.5 50.9	81.4 5.6	10.08 10.21	8.21 0.57
ROOF C	92.7	10.2	10.32	1.05
ROOF D	25.3	2.8	4.96	0.14
Total	908.4	100.0	Overall Mean Ht.: Total Permitted 12.0m	9.97

*NOTE: LOW SLOPE TORCH ON ROOF NO SIGNIFICANT SNOW DUMP



ROOF PLAN - BUILDING A2
1/8" = 1'0"



Date:

APRIL 18/17

JUNE 05/17

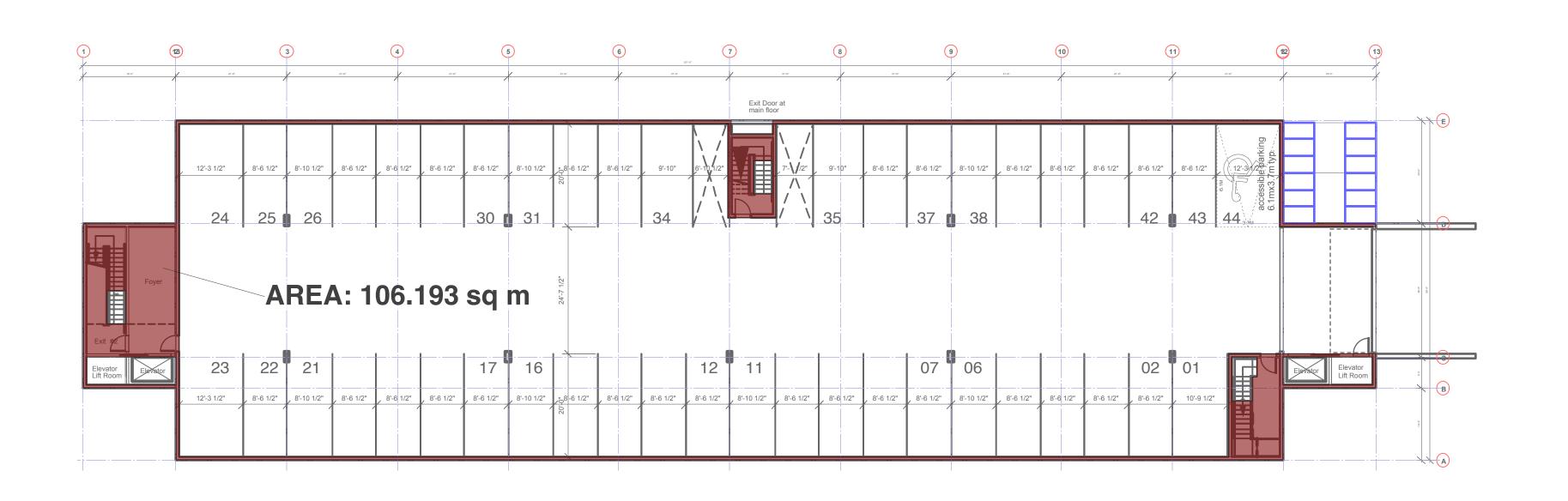
JUNE 22/17

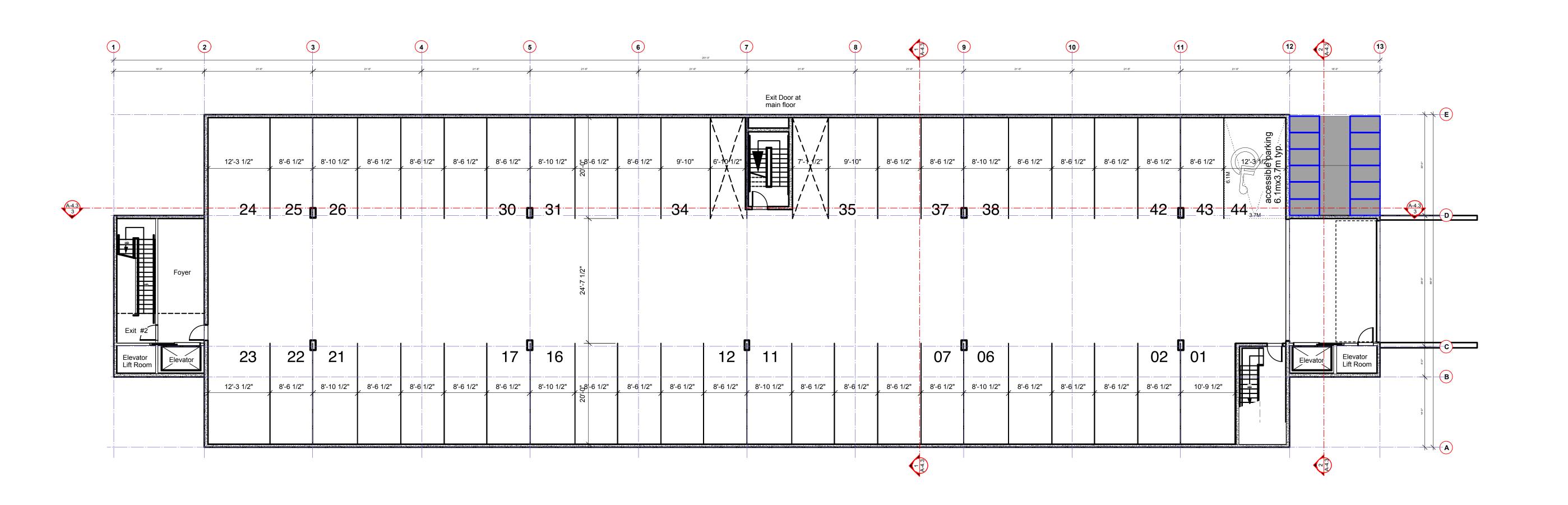
Date:

Alpha Lake Road, Whistler, BC

BUILDING "B" UNDERGROUND PARKADE PLAN

Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any

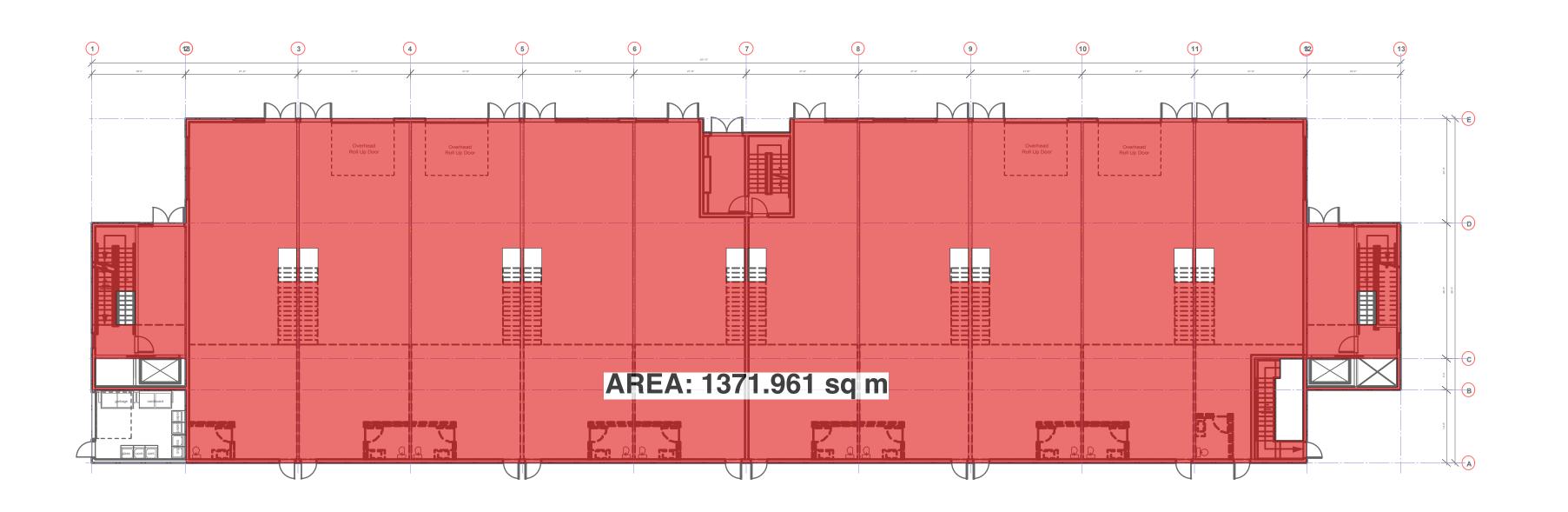


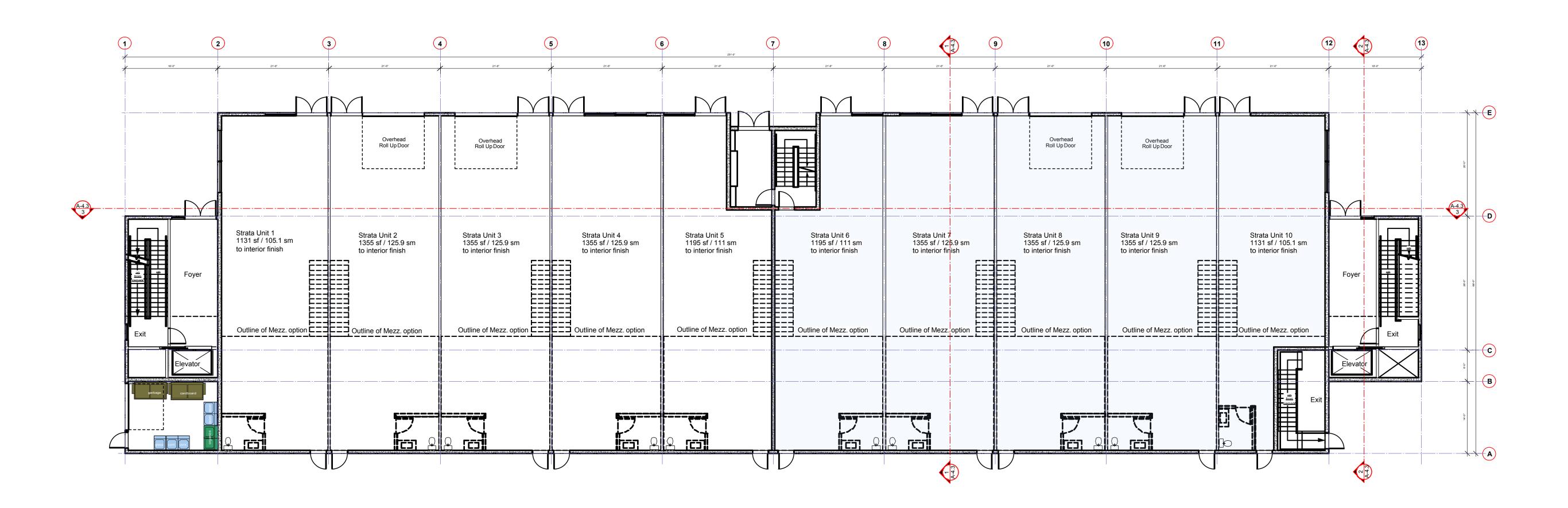


information contained herein may result in liability under applicable laws. Issued For: DP APPLICATION REVISED: RMOW comments ISSUED FOR ADP No: Revision: project north Development ARKADE Function Junction Commercial RGROUND BUILDING "B" UNDE MURDOCH - COMPANY Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net Sealed By:

Drawn By: 3/32"=1'0"

BM/DS Project No:





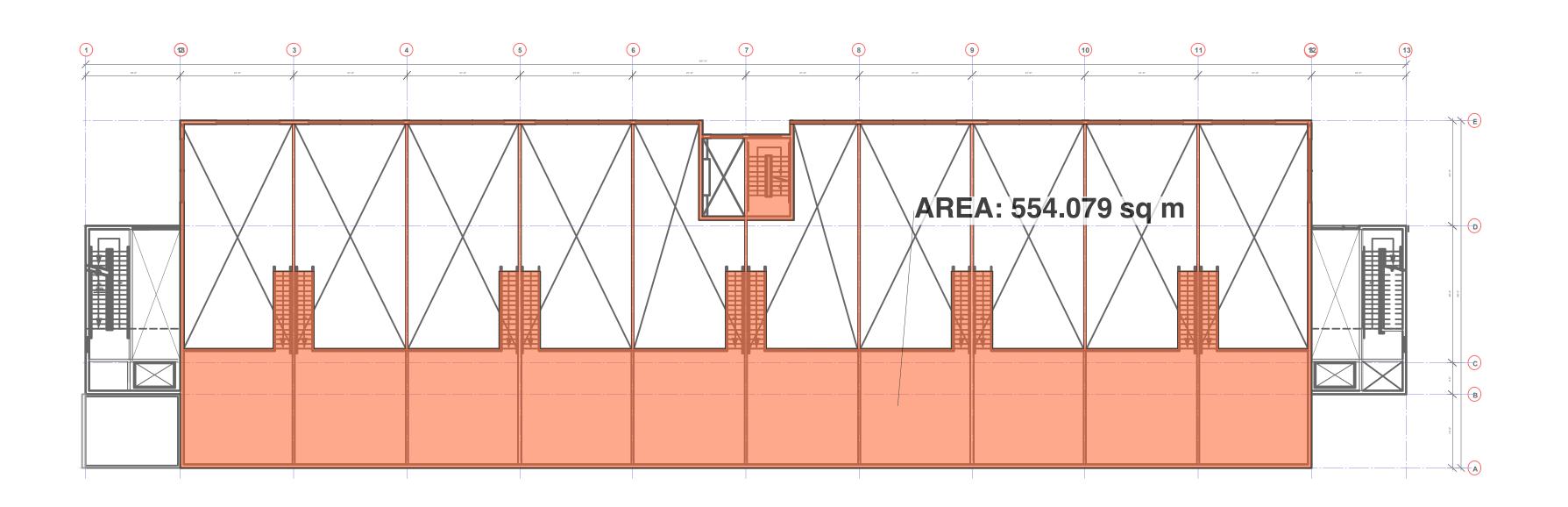
1 MAIN FLOOR PLAN - BUILDING B 3/32" = 1'0"

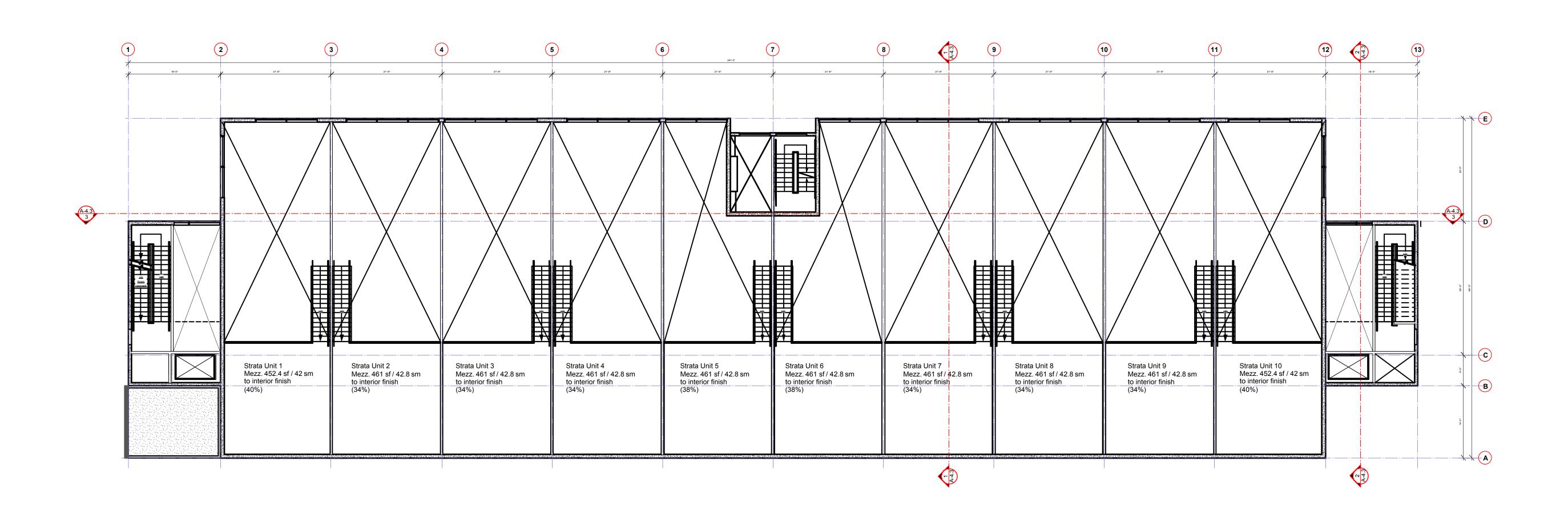


Project No:

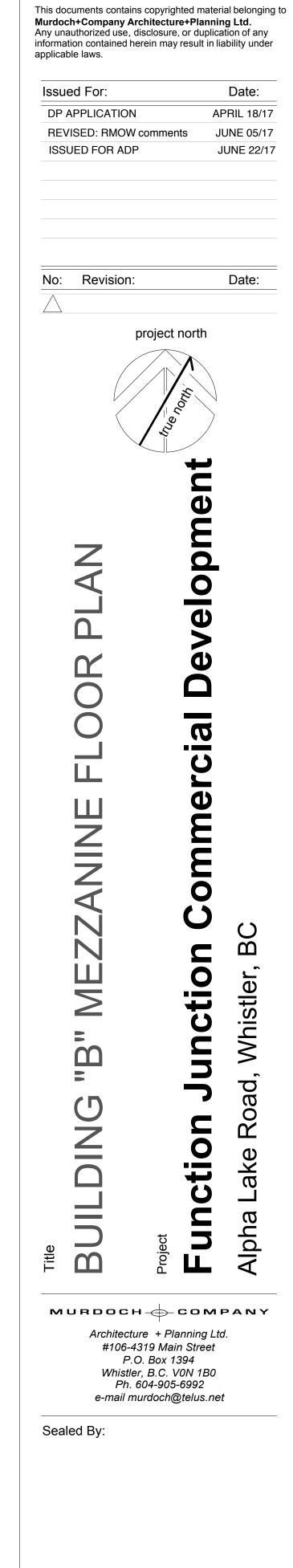
"B" MAIN FLOOR PLAN

BUILDING





1 MEZZANINE FLOOR PLAN - BUILDING B
3/32" = 1'0"



Drawn By:

BM/DS

Project No:

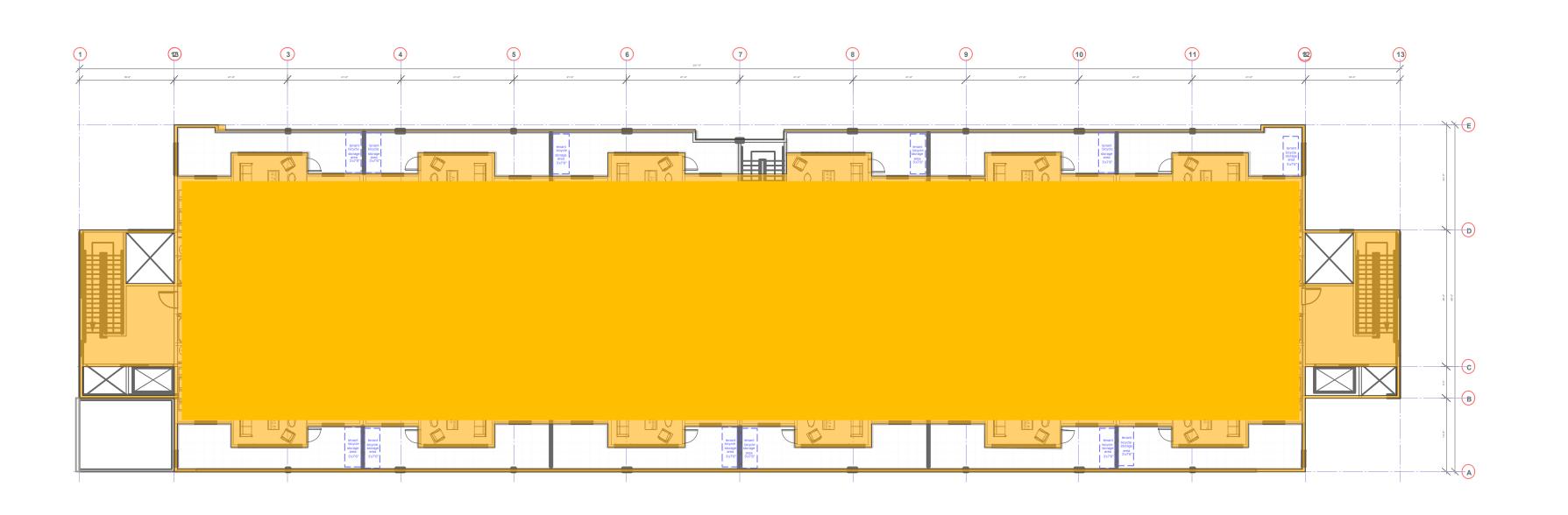
Scale:

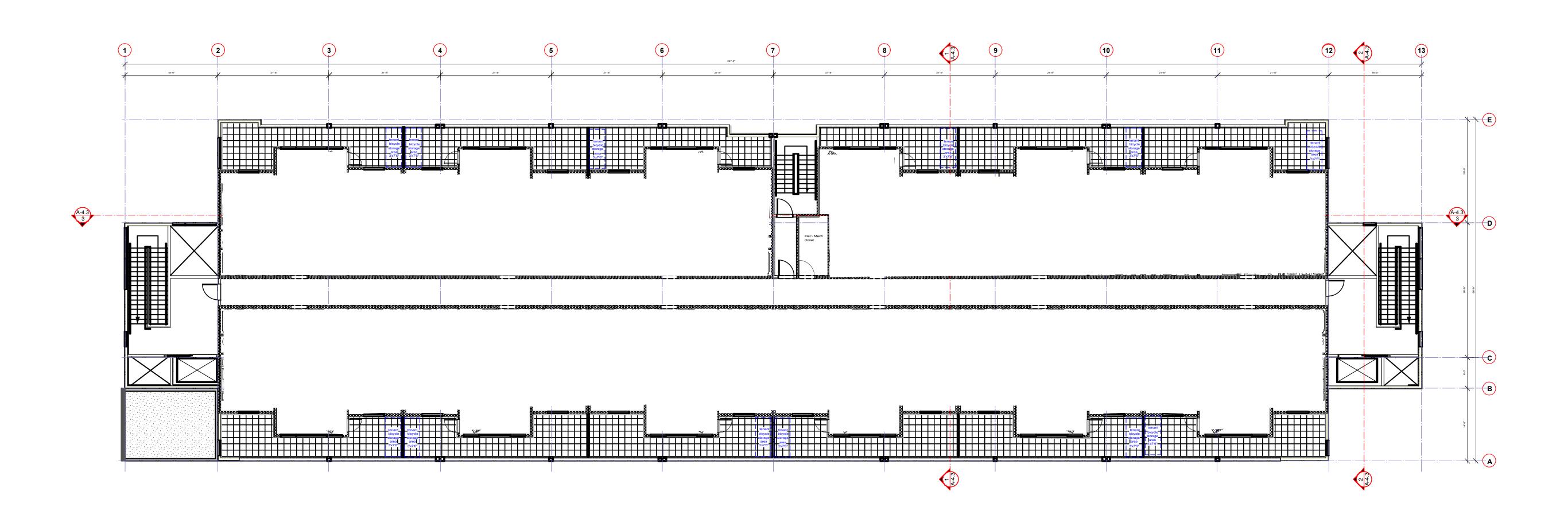
3/32"=1'0"

Sheet No:

BUILDING "B" MEZZANINE FLOOR PL

APPENDIX B





1 UPPER FLOOR PLAN - BUILDING B 3/32" = 1'0"



APPENDIX B

Date:

APRIL 18/17 JUNE 05/17

JUNE 22/17

Date:

BC

Whistler,

Alpha Lake Road,

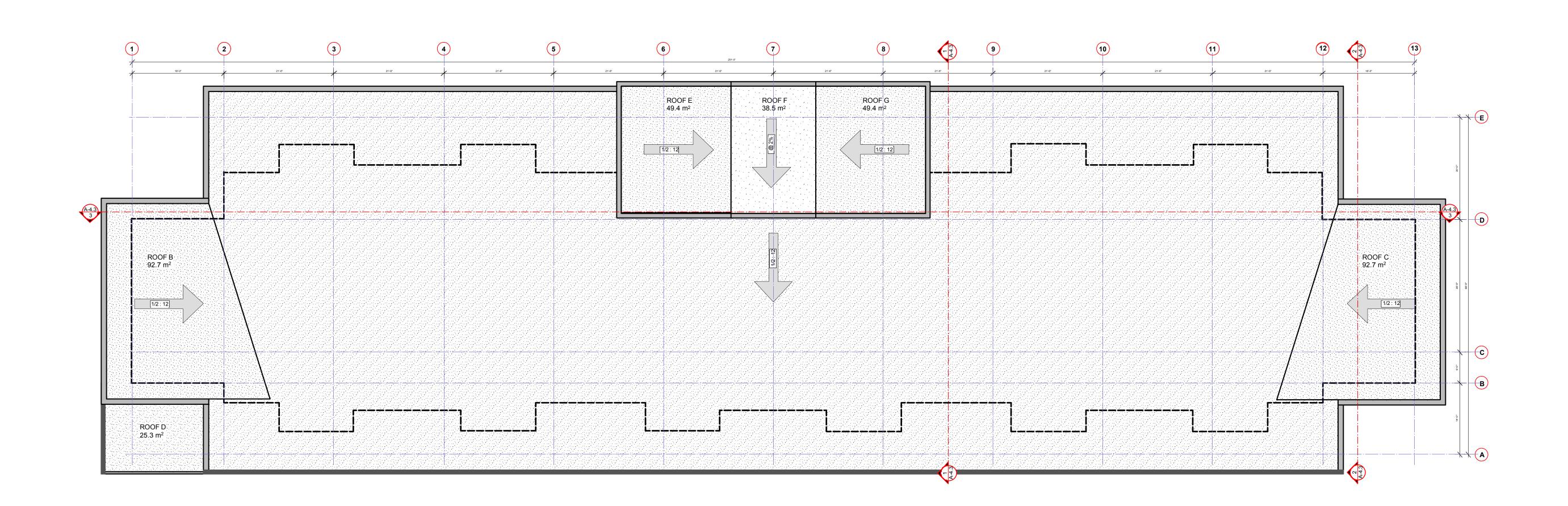
Sheet No:

Project No:

BUILDING "B" UPPER FLOOR PLAN

1479.0 92.7 92.7 25.3	% of tot. 83.2 5.2 5.2	Mean height 10.08 10.32 10.32	Wtd. Avg 8.39 0.54 0.54
92.7 92.7	5.2 5.2	10.32	0.54
92.7	5.2		
	· · -	10.32	0.54
25.3			
20.0	1.4	4.96	0.07
49.4	2.8	11.38	0.32
38.5	2.2	11.24	0.24
49.4	2.8	11.38	0.32
1777.6	102.8	Overall Mean Ht.:	10.09
	38.5 49.4	38.5 2.2 49.4 2.8	38.5 2.2 11.24 49.4 2.8 11.38

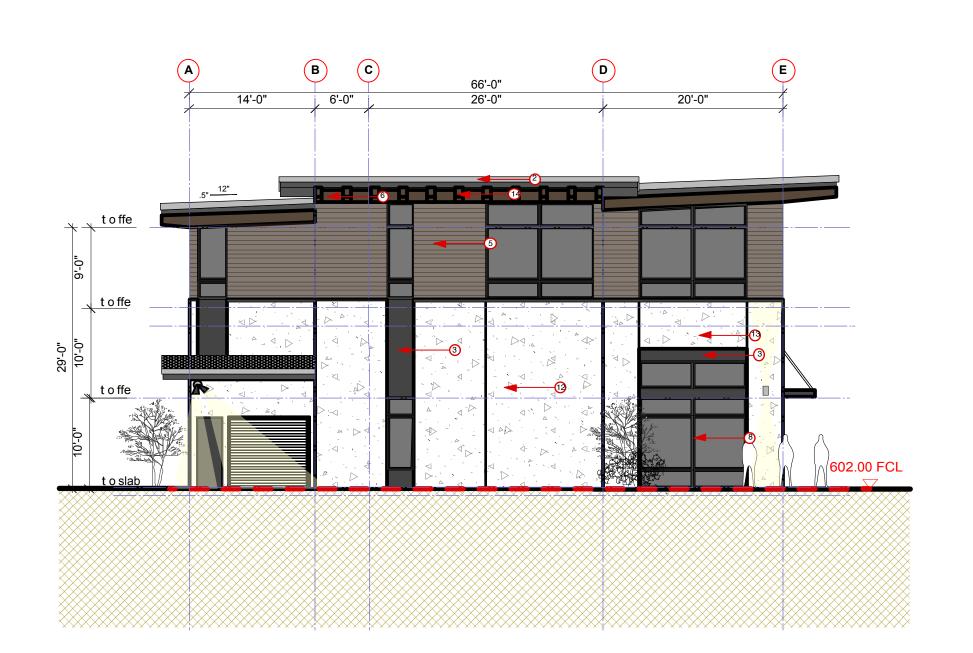
*NOTE: LOW SLOPE TORCH ON ROOF NO SIGNIFICANT SNOW DUMP



1 ROOF PLAN - BUILDING B



BUILDING "B" ROOF PLAN

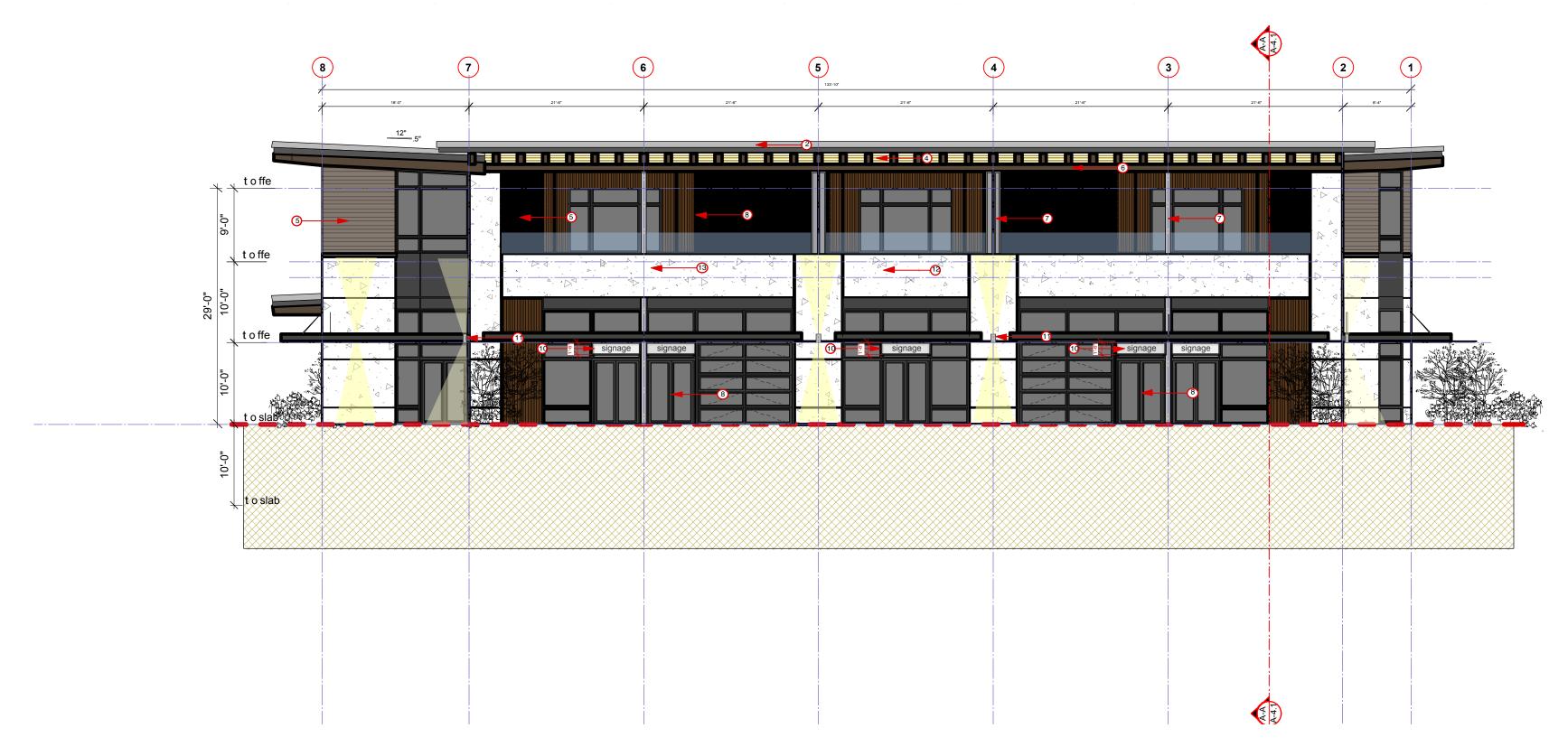


OPENINGS NOT PROTECTED BY EAVES

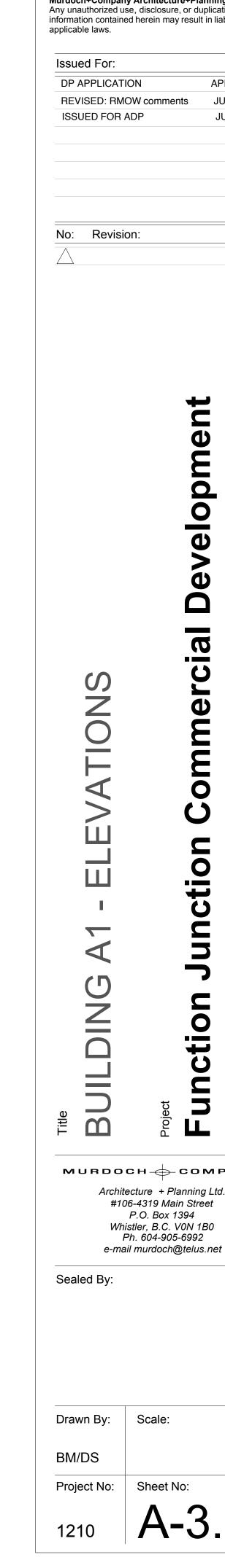
EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

- 1) TORCH ON ROOFING MEMBRANE
- 2 PREFINISHED METAL FLASHING
- 3 SHEET METAL PANELS
- 4 SOFFITING STAINED SOLID WOOD
- 6 HORIZONAL FIBER CEMENT (HARDIE) SIDING 6 LIOGHT BROWN / TAN, CONFIRM BY ARCH.
- 6 TIMBER TRIM BOARD TO MACH GLULAM
- 7 STEEL POSTS AND BEAM TYP. GALVANIZED
- 8 ANODIZED ALUMINIUM STORE FRONT WINDOWS AND DOORS
- 9 FIBER CEMENT (HARDIE) PANNEL WITH C/W TRIM
- COMPANY LOGO / SIGNAGE ATTACHED TO STEEL CANOPY (as per RMOW SIGNAGE BYLAW, MAX. LETTER HT. 12")
- 11) FEATURE EXTERIOR LIGHTING
- 12 ARCHITECTURAL CONCRETE TILT UP SMOOTH FINISH
- (13) ARCHITECTURAL CONCRETE TILT UP COLOUR IMPREGNATED
- (14) GLULAM BEAMS C/W DARK BROWN STAIN
- (15) GALVANIZED DOWN PIPES

NORTH ELEVATION - BUILDING A1 3/32" = 1'0" imperial



WEST ELEVATION - BUILDING A1



APPENDIX B This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under Date: DP APPLICATION **APRIL 18/17** REVISED: RMOW comments JUNE 05/17 ISSUED FOR ADP JUNE 22/17 No: Revision: Date: Development a ommerci Junction

Whistler, Lake Road,

Function

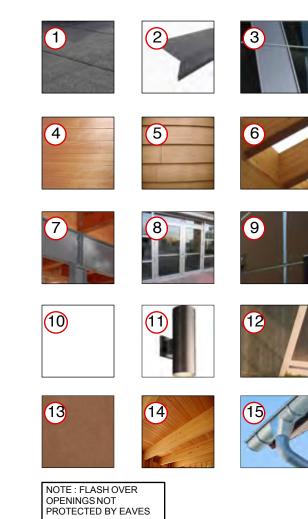
MURDOCH — COMPANY Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0

Sheet No:

- ELEVATIONS

BUILDING A1

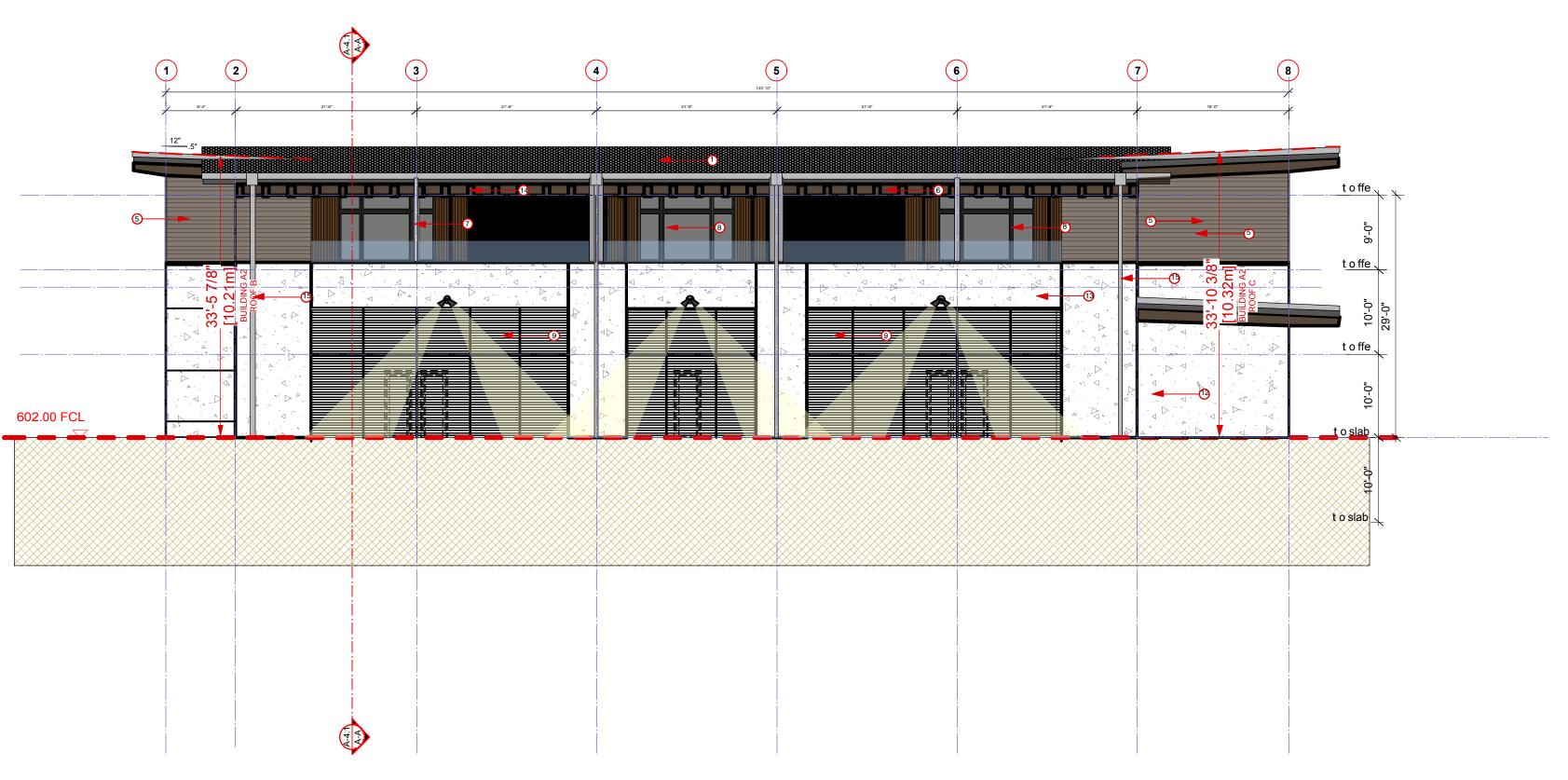




EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

- 1) TORCH ON ROOFING MEMBRANE
- 2 PREFINISHED METAL FLASHING
- 3 SHEET METAL PANELS
- 4 SOFFITING STAINED SOLID WOOD
- 6 HORIZONAL FIBER CEMENT (HARDIE) SIDING 6 LIOGHT BROWN / TAN, CONFIRM BY ARCH.
- 6 TIMBER TRIM BOARD TO MACH GLULAM
- 7 STEEL POSTS AND BEAM TYP. GALVANIZED
- 8 ANODIZED ALUMINIUM STORE FRONT WINDOWS AND DOORS
- 9 FIBER CEMENT (HARDIE) PANNEL WITH C/W TRIM
- COMPANY LOGO / SIGNAGE ATTACHED TO STEEL CANOPY (as per RMOW SIGNAGE BYLAW, MAX. LETTER HT. 12")
- 11) FEATURE EXTERIOR LIGHTING
- 12 ARCHITECTURAL CONCRETE TILT UP SMOOTH FINISH
- (13) ARCHITECTURAL CONCRETE TILT UP COLOUR IMPREGNATED
- (14) GLULAM BEAMS C/W DARK BROWN STAIN
- (15) GALVANIZED DOWN PIPES

SOUTH ELEVATION - BUILDING A1 3/32" = 1'0" imperial



EAST ELEVATION - BUILDING A1
3/32" = 1'0" imperial



Issued For: Date: DP APPLICATION **APRIL 18/17** JUNE 05/17 REVISED: RMOW comments ISSUED FOR ADP JUNE 22/17 No: Revision: Date:

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under

applicable laws.

APPENDIX B

Development

ommercial Ö BC Junction Whistler, Lake Road, Function Alpha

MURDOCH - COMPANY

Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

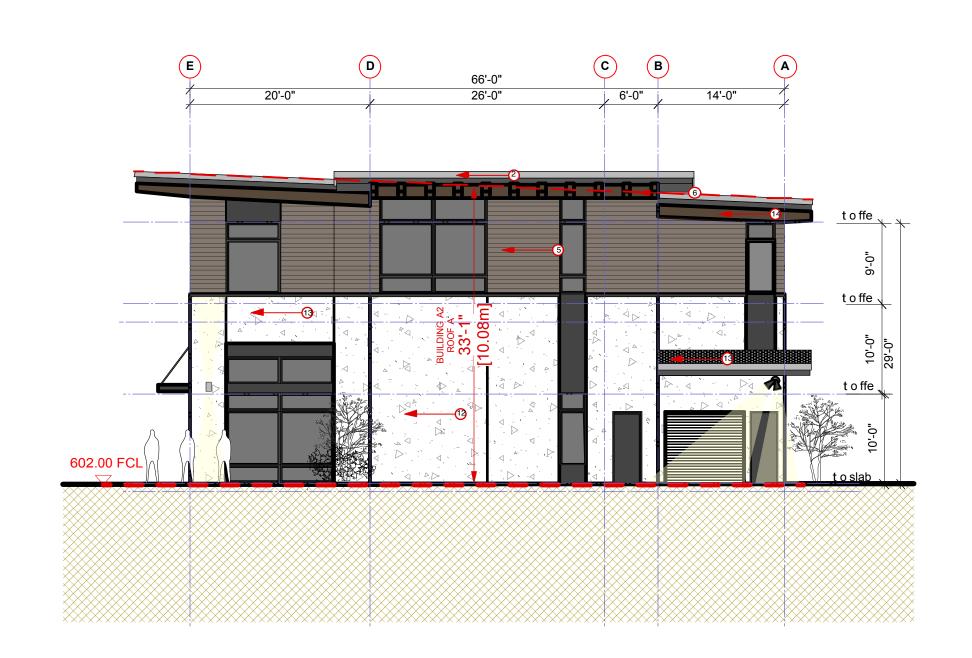
Drawn By:

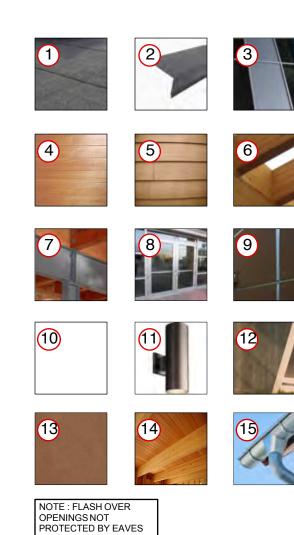
BM/DS

Project No: Sheet No:

- ELEVATIONS

BUILDING A1

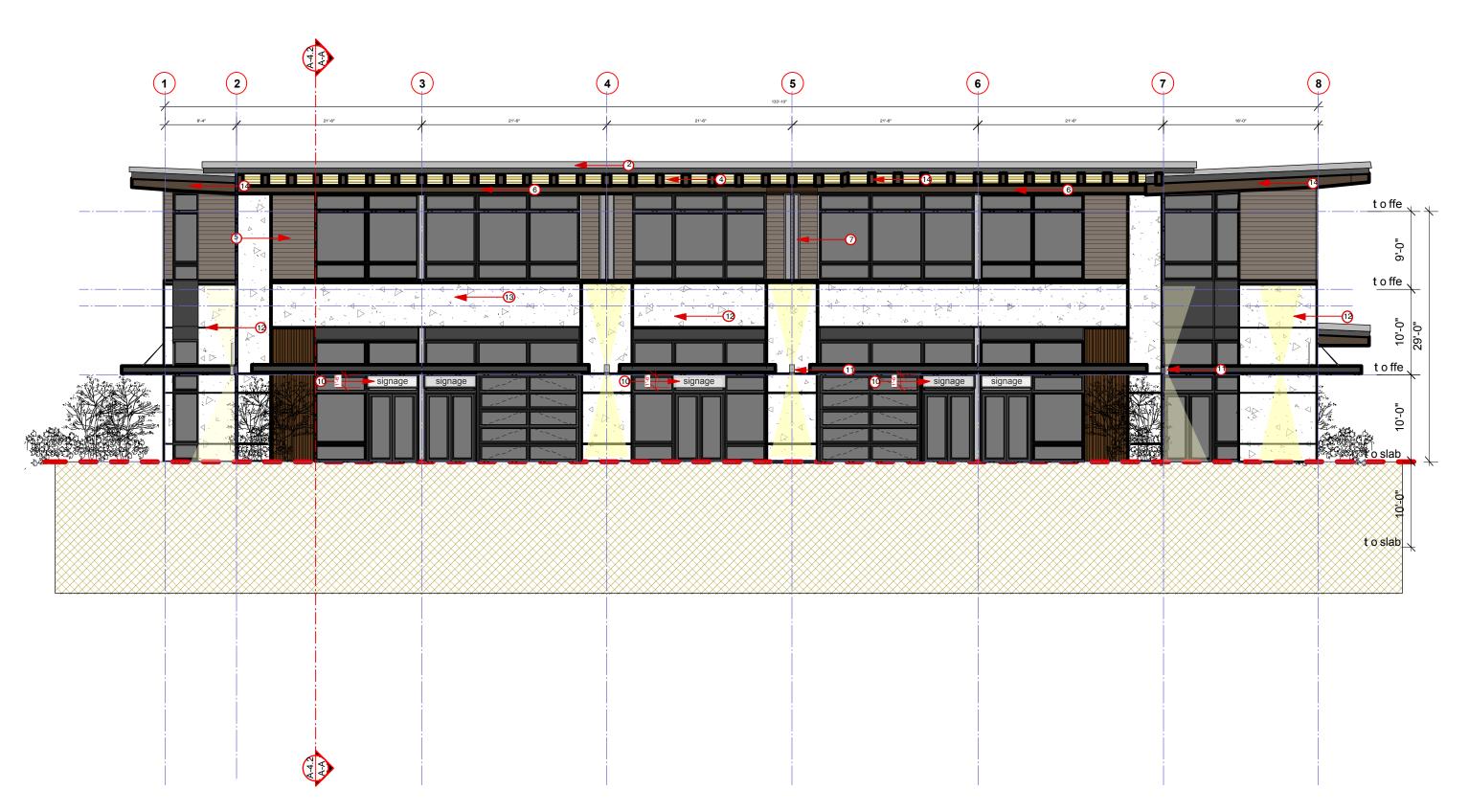




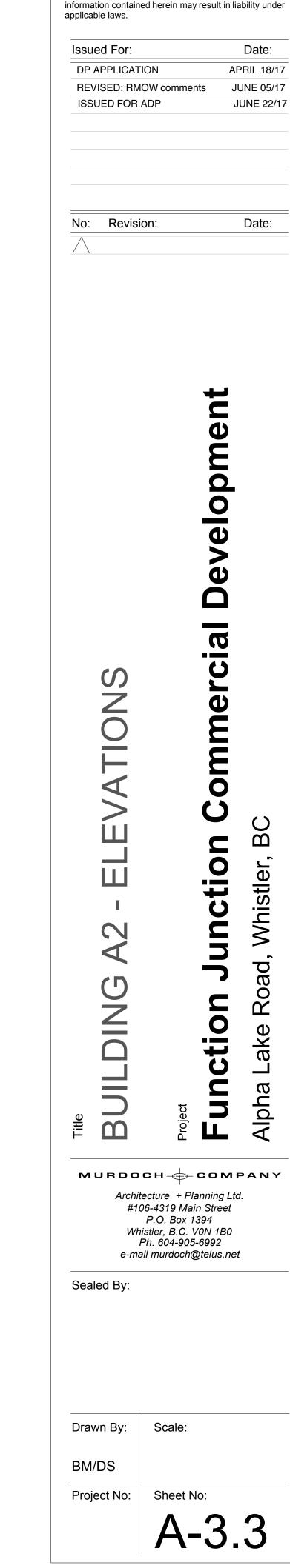
EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

- 1) TORCH ON ROOFING MEMBRANE
- 2 PREFINISHED METAL FLASHING
- 3 SHEET METAL PANELS
- 4 SOFFITING STAINED SOLID WOOD
- 6 HORIZONAL FIBER CEMENT (HARDIE) SIDING 6 LIOGHT BROWN / TAN, CONFIRM BY ARCH.
- 6 TIMBER TRIM BOARD TO MACH GLULAM
- 7 STEEL POSTS AND BEAM TYP. GALVANIZED
- 8 ANODIZED ALUMINIUM STORE FRONT WINDOWS AND DOORS
- 9 FIBER CEMENT (HARDIE) PANNEL WITH C/W TRIM
- COMPANY LOGO / SIGNAGE ATTACHED TO STEEL CANOPY (as per RMOW SIGNAGE BYLAW, MAX. LETTER HT. 12")
- 11) FEATURE EXTERIOR LIGHTING
- 12 ARCHITECTURAL CONCRETE TILT UP SMOOTH FINISH
- (13) ARCHITECTURAL CONCRETE TILT UP COLOUR IMPREGNATED
- (14) GLULAM BEAMS C/W DARK BROWN STAIN
- (15) GALVANIZED DOWN PIPES

NORTH ELEVATION - BUILDING A2 3/32" = 1'0" imperial



WEST ELEVATION - BUILDING A2 2 WESI LLL 3/32" = 1'0" imperial



Date: Development ommercial Junction Function MURDOCH — COMPANY Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

Whistler,

Lake Road,

APPENDIX B

Date:

APRIL 18/17

JUNE 05/17

JUNE 22/17

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any

- ELEVATIONS

BUILDING A2

Date:

APRIL 18/17

JUNE 05/17

JUNE 22/17

Date:

Development

ommercial

Ö

Junction

Function

Whistler,



NOTE : FLASH OVER OPENINGS NOT PROTECTED BY EAVES

EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

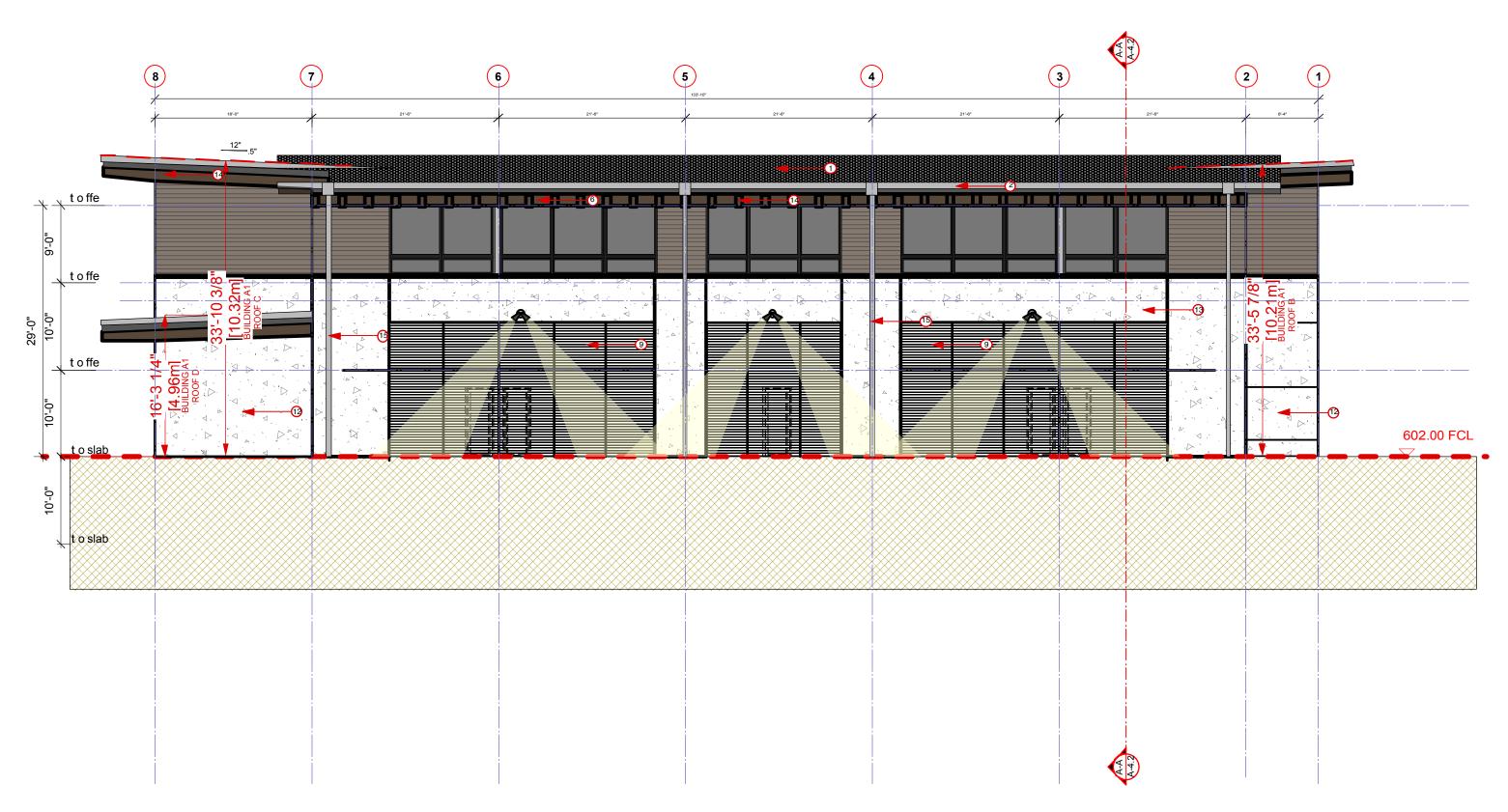
- 1) TORCH ON ROOFING MEMBRANE
- 2 PREFINISHED METAL FLASHING
- 3 SHEET METAL PANELS
- 4 SOFFITING STAINED SOLID WOOD
- HORIZONAL FIBER CEMENT (HARDIE) SIDING 6" LIOGHT BROWN / TAN, CONFIRM BY ARCH.
- 6 TIMBER TRIM BOARD TO MACH GLULAM
- 7 STEEL POSTS AND BEAM TYP. GALVANIZED
- 8 ANODIZED ALUMINIUM STORE FRONT WINDOWS AND DOORS
- 9 FIBER CEMENT (HARDIE) PANNEL WITH C/W TRIM
- COMPANY LOGO / SIGNAGE ATTACHED TO STEEL CANOPY (as per RMOW SIGNAGE BYLAW, MAX. LETTER HT. 12")
- 11) FEATURE EXTERIOR LIGHTING
- 12 ARCHITECTURAL CONCRETE TILT UP SMOOTH FINISH
- (13) ARCHITECTURAL CONCRETE TILT UP COLOUR IMPREGNATED
- (14) GLULAM BEAMS C/W DARK BROWN STAIN
- (15) GALVANIZED DOWN PIPES

SOUTH ELEVATION - BUILDING A2 3/32" = 1'0" imperial

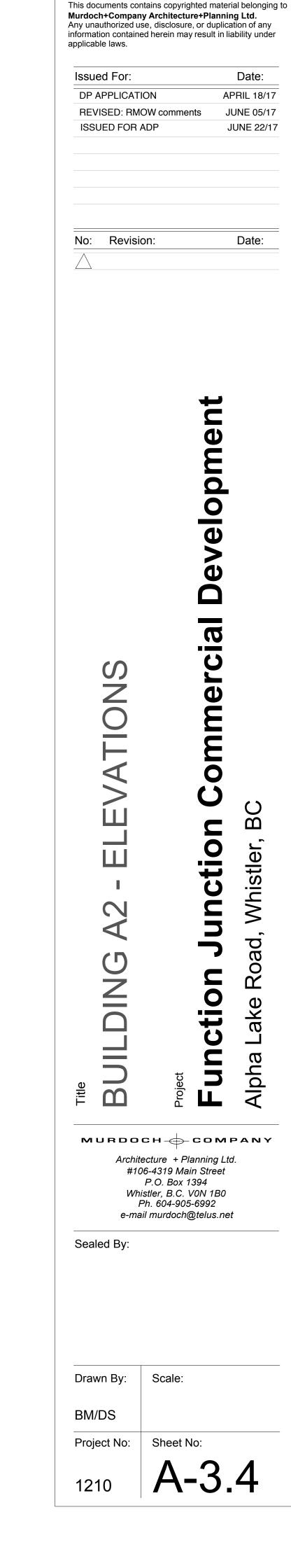
t o ffe

t o ffe

t o ffe



EAST ELEVATION - BUILDING A2
3/32" = 1'0" imperial



Lake Road, Alpha - ELEVATIONS BUILDING A2





EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

- 1) TORCH ON ROOFING MEMBRANE
- 2 PREFINISHED METAL FLASHING
- 3 SHEET METAL PANELS
- 4 SOFFITING STAINED SOLID WOOD
- 6 HORIZONAL FIBER CEMENT (HARDIE) SIDING 6 LIOGHT BROWN / TAN, CONFIRM BY ARCH.
- 6 TIMBER TRIM BOARD TO MACH GLULAM
- 7 STEEL POSTS AND BEAM TYP. GALVANIZED
- 8 ANODIZED ALUMINIUM STORE FRONT WINDOWS AND DOORS
- 9 FIBER CEMENT (HARDIE) PANNEL WITH C/W TRIM
- COMPANY LOGO / SIGNAGE ATTACHED TO STEEL CANOPY (as per RMOW SIGNAGE BYLAW, MAX. LETTER HT. 12")
- 11) FEATURE EXTERIOR LIGHTING
- 12 ARCHITECTURAL CONCRETE TILT UP SMOOTH FINISH
- (13) ARCHITECTURAL CONCRETE TILT UP COLOUR IMPREGNATED
- (14) GLULAM BEAMS C/W DARK BROWN STAIN
- (15) GALVANIZED DOWN PIPES

NORTH ELEVATION - BUILDING B 3/32" = 1'0" imperial



WEST ELEVATION - BUILDING B 2 WESI LLL...
3/32" = 1'0" imperial



Project No:

Whistler,

Lake Road,

Alpha

- ELEVATIONS

BUILDING B

APPENDIX B

Date:

APRIL 18/17

JUNE 05/17

JUNE 22/17

Date:

This documents contains copyrighted material belonging to Murdoch+Company Architecture+Planning Ltd.
Any unauthorized use, disclosure, or duplication of any information contained herein may result in liability under

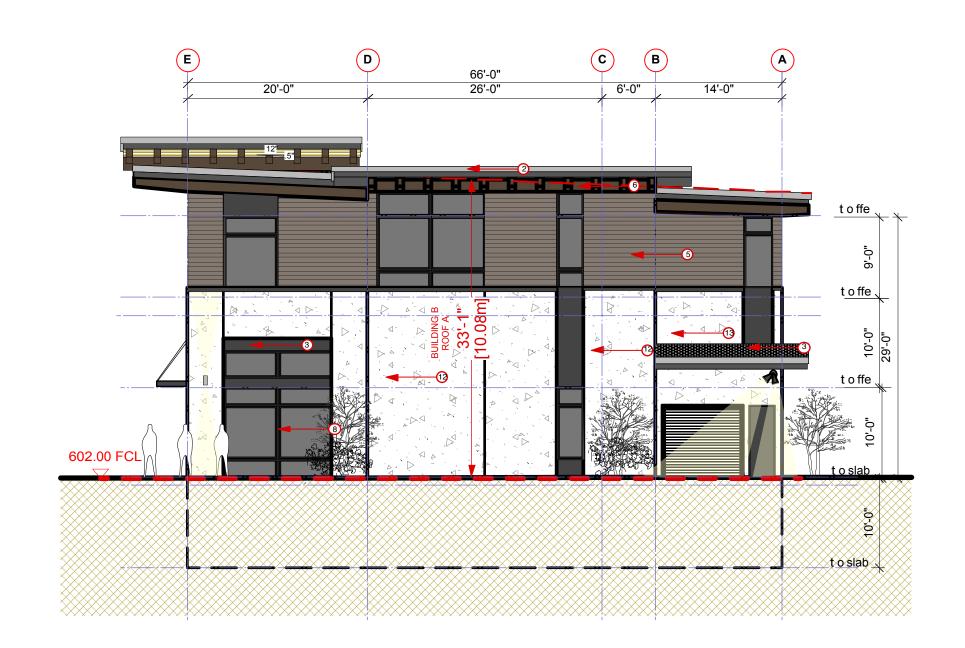
applicable laws.

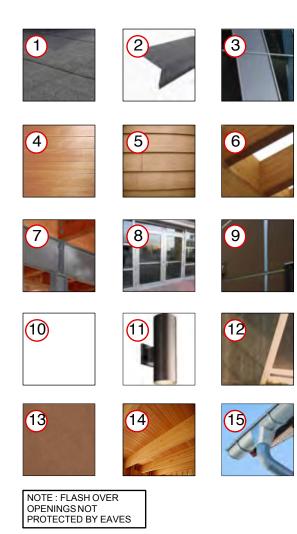
Issued For:

DP APPLICATION

ISSUED FOR ADP

REVISED: RMOW comments

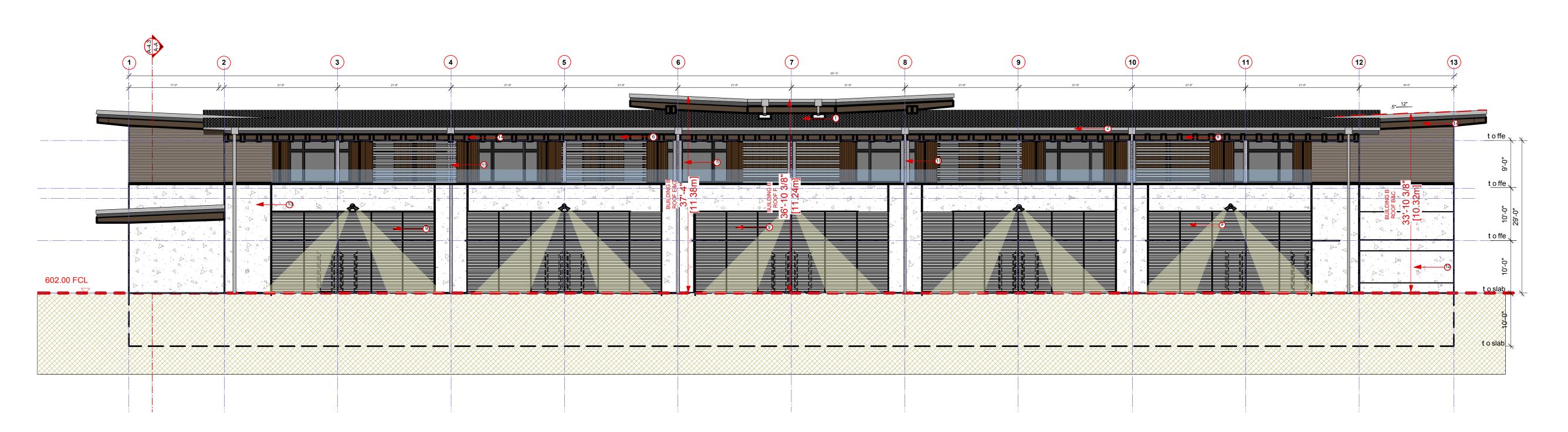




EXTERIOR FINISHES LEGEND / MATERIAL BOARD TO BE READ IN CONJUNCTION WITH DETAILS

- (1) TORCH ON ROOFING MEMBRANE
- 2 PREFINISHED METAL FLASHING
- 3 SHEET METAL PANELS
- 4 SOFFITING STAINED SOLID WOOD
- HORIZONAL FIBER CEMENT (HARDIE) SIDING 6" LIOGHT BROWN / TAN, CONFIRM BY ARCH.
- 6 TIMBER TRIM BOARD TO MACH GLULAM
- 7 STEEL POSTS AND BEAM TYP. GALVANIZED
- 8 ANODIZED ALUMINIUM STORE FRONT WINDOWS AND DOORS
- 9 FIBER CEMENT (HARDIE) PANNEL WITH C/W TRIM
- COMPANY LOGO / SIGNAGE ATTACHED TO STEEL CANOPY (as per RMOW SIGNAGE BYLAW, MAX. LETTER HT. 12")
- 11) FEATURE EXTERIOR LIGHTING
- 12 ARCHITECTURAL CONCRETE TILT UP SMOOTH FINISH
- (13) ARCHITECTURAL CONCRETE TILT UP COLOUR IMPREGNATED
- (14) GLULAM BEAMS C/W DARK BROWN STAIN
- (15) GALVANIZED DOWN PIPES

2 SOUTH ELEVATION - BUILDING B 3/32" = 1'0" imperial



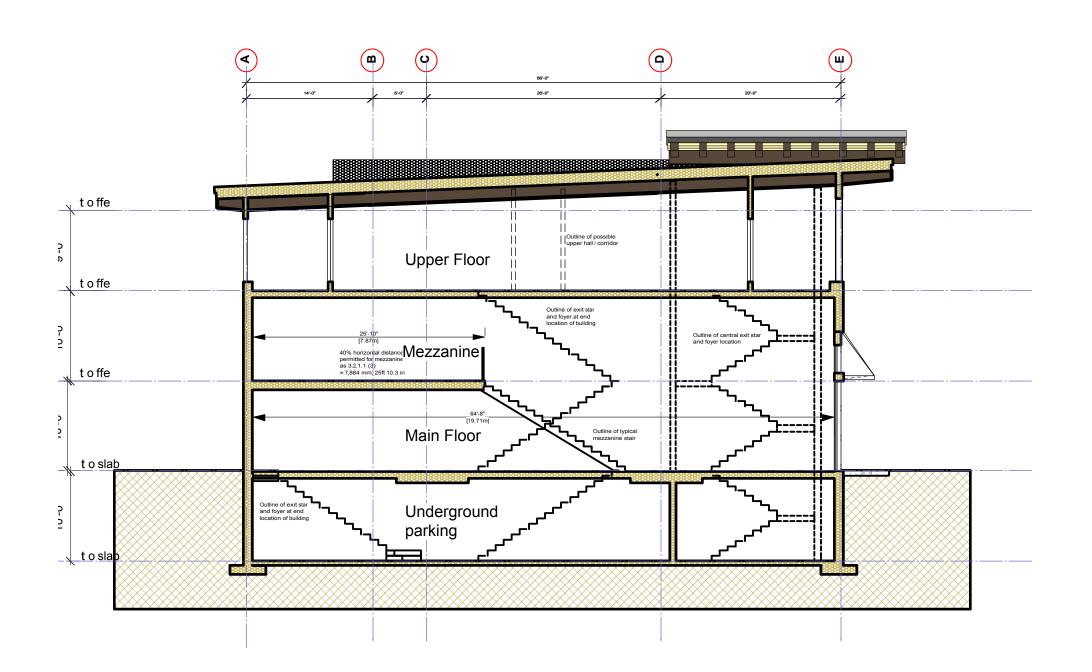
2 EAST ELEVATION - BUILDING B 3/32" = 1'0" imperial



- ELEVATIONS

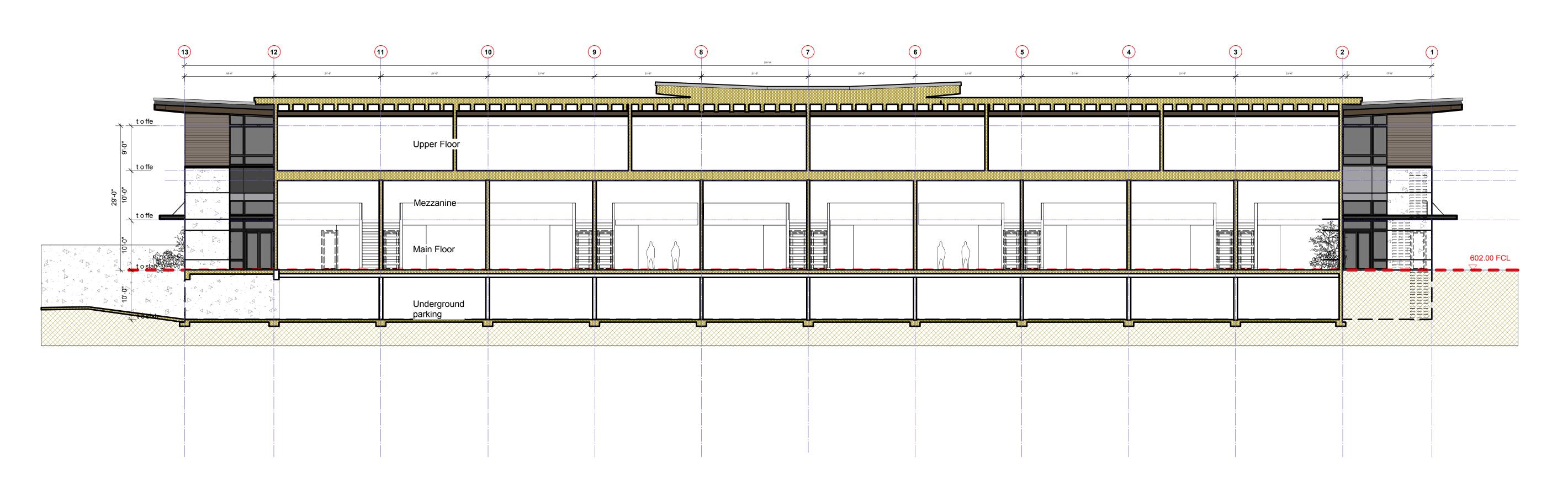
BUILDING B

APPENDIX B

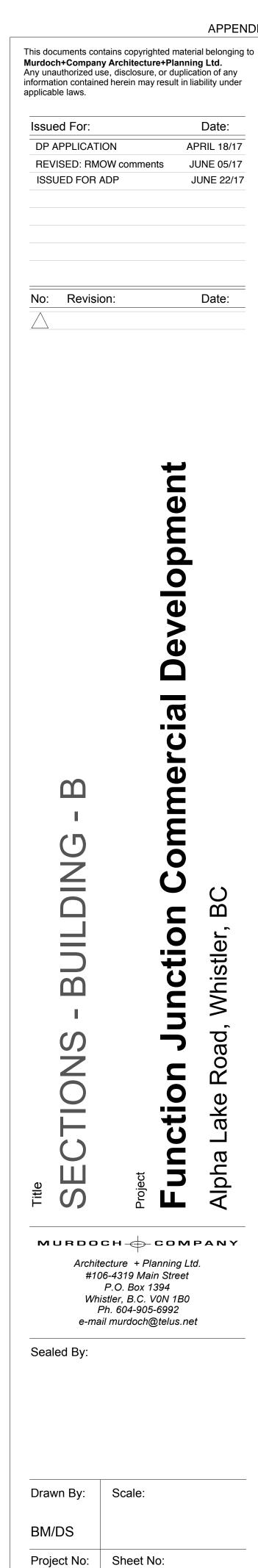


SECTION 1 - BUILDING B
3/32" = 1'0" imperial

SECTION 2 - BUILDING B
3/32" = 1'0" imperial



SECTION 3 - BUILDING B 3/32" = 1'0" imperial



APPENDIX B

Date:

JUNE 22/17

Date:

BC

Whistler, |

Alpha Lake Road,

- BUILDING

SECTIONS .



Junction Function

MURDOCH COMPANY Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992

e-mail murdoch@telus.net

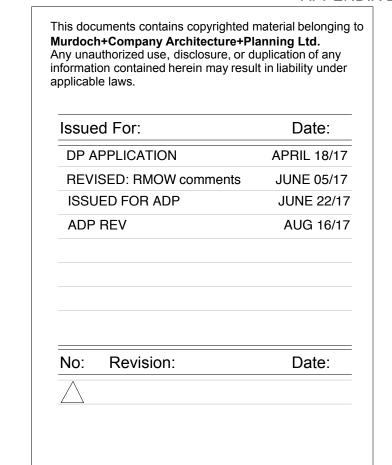
Sealed By:

Drawn By: BM/DS

Project No:



VIEW 3D SITE AERIAL



Function Junction Commercial Development Alpha Lake Road, Whistler, BC

Tite

)

MURDOCH COMPANY

Architecture + Planning Ltd.
#106-4319 Main Street

Architecture + Planning Ltd. #106-4319 Main Street P.O. Box 1394 Whistler, B.C. VON 1B0 Ph. 604-905-6992 e-mail murdoch@telus.net

Sealed By:

Drawn By: Scale:

BM/DS

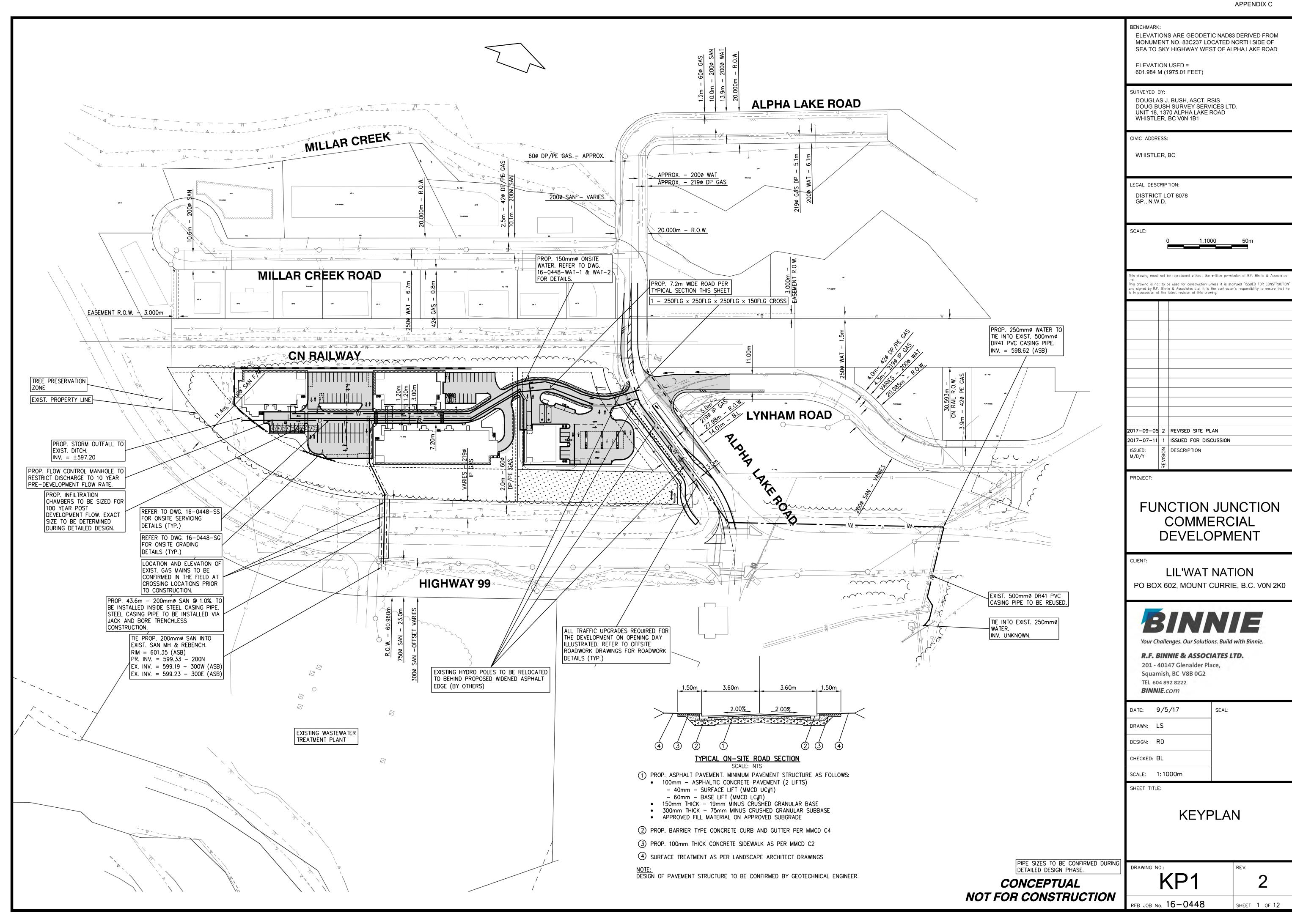
Project No: Sheet No:

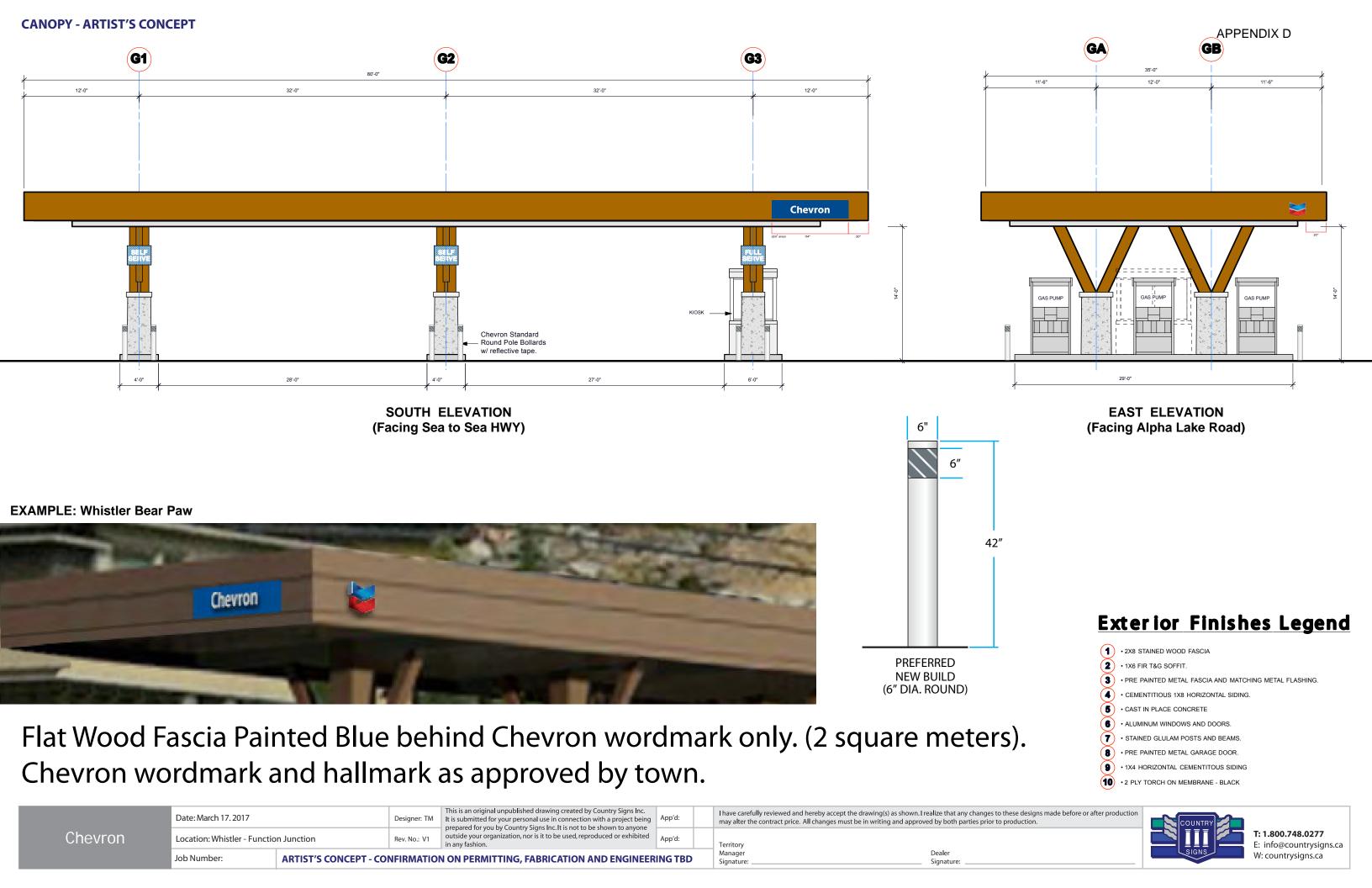
A-5.2



Received 2017-09-19

2 VIEW FROM RESIDENTIAL
Scale = N/A





EXAMPLEWHISTLER BEAR PAW

*Chevron Word mark limited to 12" letters.

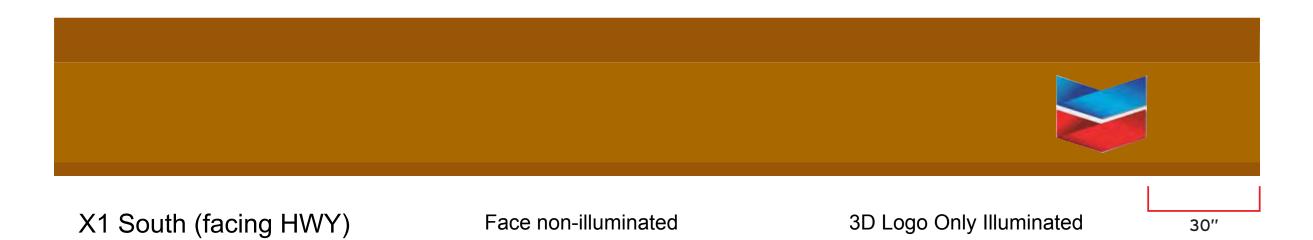
Blue Background limited to 2m² As per City by-law.

X1 West (facing road)

Face non-illuminated

3D Logo Only Illuminated





Date March 17. 2017

Designer TM
Location Whistler - Function

Designer TM
Job Number:

Designer TM
ARTIST'S CONCEPT - CONFIRMATION ON PERMITTING, FABRICATION AND ENGINEERING TBD

This is an original unpublished drawing created by Country Signs Inc.
It is submitted for your personal use in connection with a project being prepared for you by Country Signs Inc. It is not to be shown to anyone outside your organization, nor is it to be used, reproduced or exhibited in any fashion.

APp'd:

App'd:

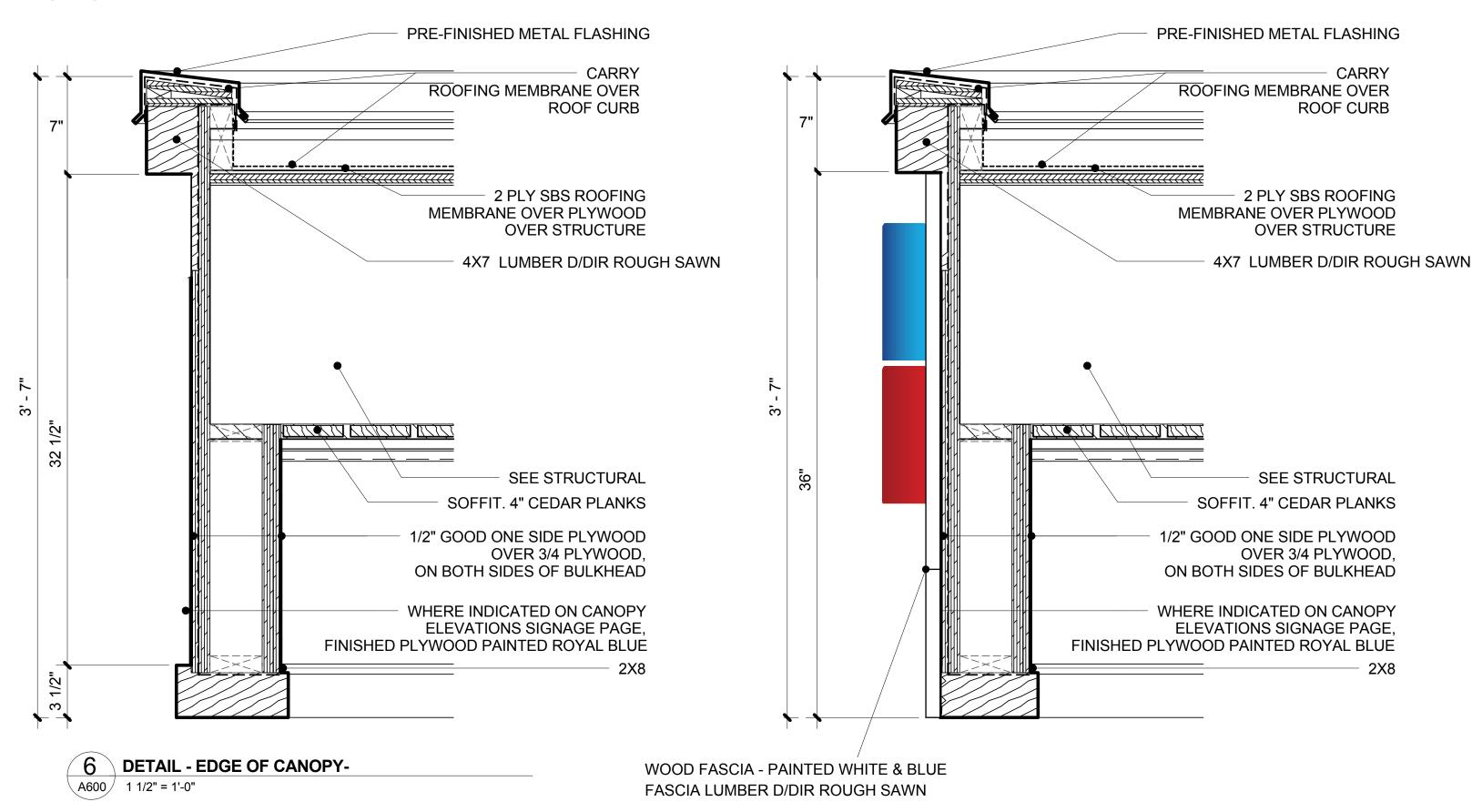
I have carefully reviewed and hereby accept the drawing(s) as shown. I realize that any changes to these designs made before or after production may alter the contract price. All changes must be in writing and approved by both parties prior to production.

App'd:

A



ALL AROUND CANOPY SIGNAGE PORTION



Date March 17. 2017

Designer TM
Location Whistler - Function

Designer TM
Designer TM
Location Whistler - Function

Designer TM
Designer TM
Location Whistler - Function

Designer TM
ARTIST'S CONCEPT - CONFIRMATION ON PERMITTING, FABRICATION AND ENGINEERING TBD

This is an original unpublished drawing created by Country Signs Inc.
It is submitted for your personal use in connection with a project being prepared for you by Country Signs Inc. It is not to be shown to anyone outside your organization, nor is it to be used, reproduced or exhibited in any fashion.

This is an original unpublished drawing created by Country Signs Inc.
It is submitted for your personal use in connection with a project being prepared for you by Country Signs Inc. It is not to be shown to anyone outside your organization, nor is it to be used, reproduced or exhibited in any fashion.

App'd:

App'd:

App'd:

This is an original unpublished drawing created by Country Signs Inc.
It is submitted for your personal use in connection with a project being prepared for you by Country Signs Inc.
It is submitted for your personal use in connection with a project being prepared for you by Country Signs Inc.
It is submitted for your personal use in connection with a project being may alter the contract price. All changes must be in writing and approved by both parties prior to production.

App'd:



APPENDIX D

Sandblasted cedar sign face,

Painted Chevron colours.

may alter the contract price. All changes must be in writing and approved by both parties prior to production

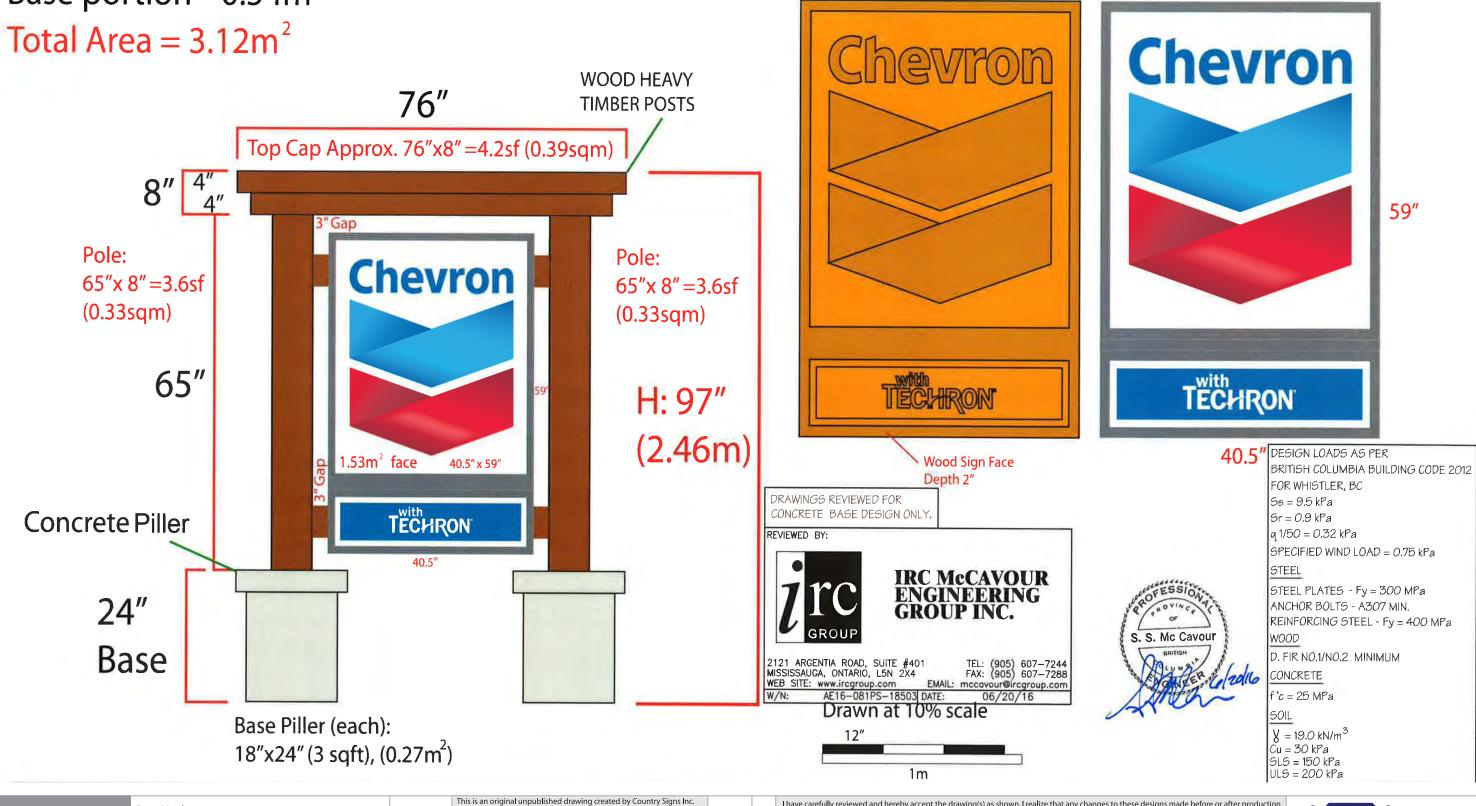
Dealer

Sign Box portion =1.53m² face Structure portion =1.05m² Base portion =0.54m²

Date March 17, 2017

Location Whistler - Function Junction

Chevron



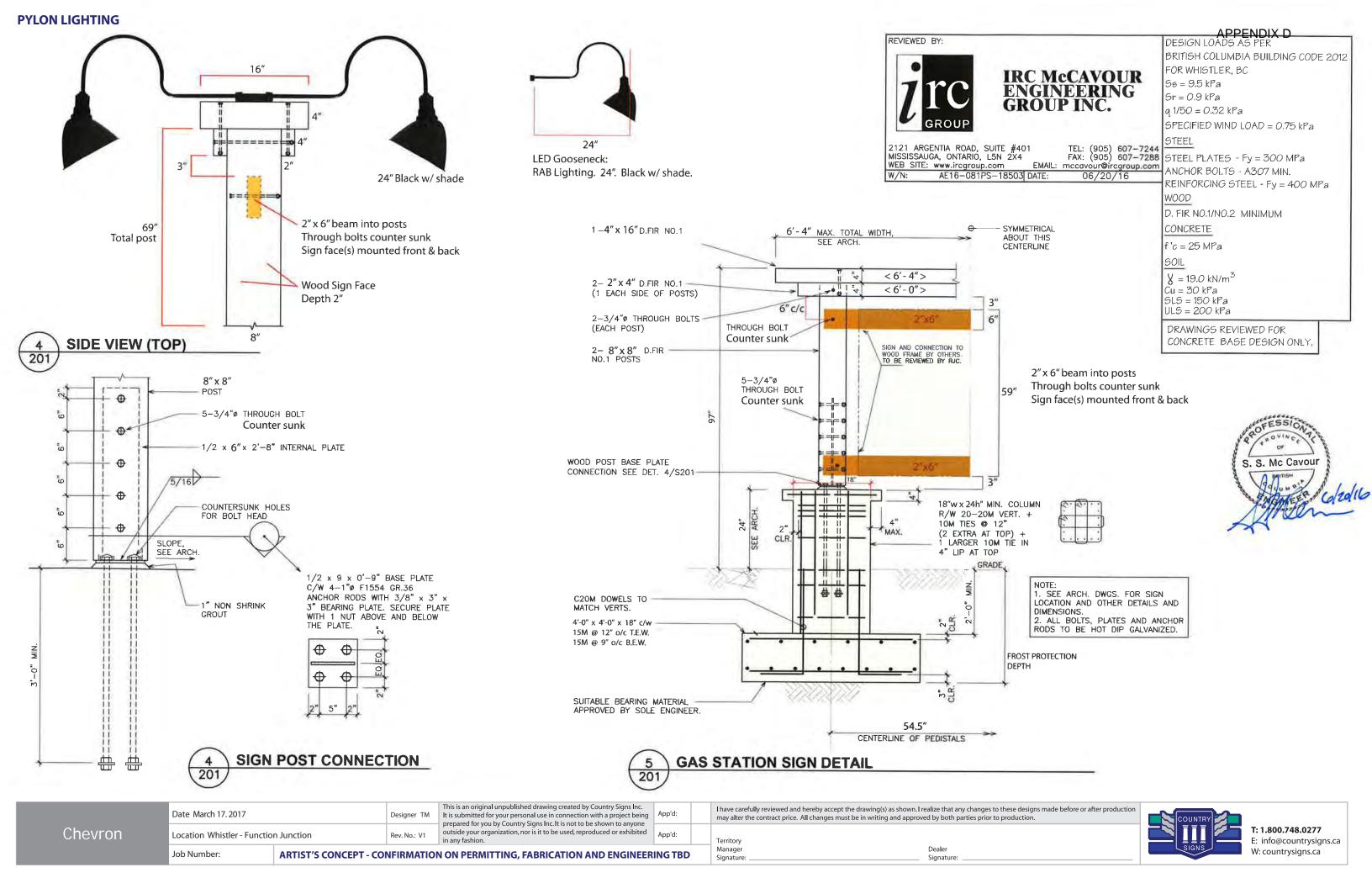
It is submitted for your personal use in connection with a project being

prepared for you by Country Signs Inc. It is not to be shown to anyone

outside your organization, nor is it to be used, reproduced or exhibited

ARTIST'S CONCEPT - CONFIRMATION ON PERMITTING, FABRICATION AND ENGINEERING TBD

 $I have \ carefully \ reviewed \ and \ hereby \ accept \ the \ drawing (s) \ as \ shown. I \ realize \ that \ any \ changes \ to \ these \ designs \ made \ before \ or \ after \ production \ for \ produ$ T: 1.800.748.0277 E: info@countrysigns.ca



Allen Concepts Inc.



3955 St. Pauls Avenue, North Vancouver, B.C. V7N 1T4 Ph: 604-980-4957 Cel: 604-961-1632 Email: allenconcepts @shaw.ca

New Chevron Station and Convenience Store Sea to Sky Highway and Alpha Lake Road Whistler B.C.

Primary Signage

Prepared by: Jim Allen, August 08, 2017

I have been in the gas station/convenience store design industry for 43 years, the first 29 years of which was with Mohawk Oil designing and building facilities throughout Western Canada. Having been involved over this time period in the development of over 200 stations I have a good sense of what is required to create a successful facility and business that attracts and meets the needs of the motoring public. This includes my involvement as Project Manager for Husky Energy in the re-build of their station on Lake Placid Road in Whistler in 2000.

In the development and successful operation of a new fuel facility and convenience store, appropriate signage with visibility for approaching motorists is a very important factor. When traveling or commuting, they require adequate advanced notice of an upcoming station where they can pull in safely to purchase their fuel requirements. In the case of this particular site, it will be the first fuel station for motorists since leaving Squamish and some motorists will be looking to refuel their vehicles after driving from Vancouver or further. As they approach the site from the south on the Sea to Sky Highway, the entire facility will be screened from their view by a robust buffer of evergreen trees. Consequently, they will be unaware of its location until they are at or past the intersection with no opportunity to safely turn left onto Alpha Lake Road to access the station. The business will therefore require signage to inform the approaching motorists of its location and fuel offering.

Further, if this facility is permitted to be appropriately and visibly identified, it will provide competitive and convenient choice for the motoring public traveling to and from Whistler for the purchase of fuel over the existing station at Creekside. This will likely reduce the existing congestion at the Creekside facility on busy week ends which will be a further benefit to fuel customers, local inhabitants and visitors alike.

In summary, signage plays a critical role as it is really the primary marketing tool to attract customers. The presentation of clear, visible signage on the highway is a critical part of creating that level of customer recognition and sales volume. The construction of a modern, convenient and efficient new fuel facility and convenience store represents a very sizable investment in buildings and equipment while creating jobs for staffing and management. In order to justify such an investment, the site must be able to create an appropriate level of customer traffic and sales. This would require that there be signage in the tree buffer zone that can be clearly be seen by motorists traveling both North and South on the adjacent Sea to Sky highway. Every effort will be made at the design stage to ensure a tasteful, nonobtrusive sign be created whilst providing a proper level of visibility for the customer.

Allen Concepts Inc.

Jim Allen, President

Jim Allen

MINUTES Regular Advisory Design Panel Meeting August 16, 2017 Page 2

Council recently approved the Powder Lodge renovation DP and the Coast Mountain Brewing Company outdoor patio liquor license.

Function Junction Commercial Development 2nd Review File No. DP1337 3:15 – 4:15 p.m.

PRESENTATIONS

The applicant team of Brent Murdoch, Brent Murdoch and Co.; Kerry Mehaffey, Lil'wat Capital Assets LP; Carlos Zavarce, Cornerstone Developments Ltd; Caroline Lamont; Cornerstone Developments Ltd entered the meeting at 3:15 p.m.

Senior Planner Melissa Laidlaw, RMOW introduced the project that is being developed by the Lil'wat Nation. Staff requests ADP review comments on the applicant's response to ADP's July 19, 2017 comments, the majority of which were related to site planning. Staff also requests ADP comments on the details of landscaping, massing, form and character, materials and details.

Brent Murdoch advised on the following.

- 1. Client group went back to look at the comments from Panel respecting the roundabout and the pedestrian quality of the site.
- 2. Removal of the roundabout and elimination of the parking along the site entrance road allows for a much stronger connection and ability to preserve more trees to the west side of the entry road.
- 3. We compartmentalize the parking a bit by moving the buildings, which also allowed a more significant landscape islands.
- 4. We also considered Panels comment about moving the buildings to allow access to the back of the buildings. We did not think this was appropriate. The vision and intent of this project is not to be everything for everyone and the target market is not heavy industrial.
- 5. We now have the ability to have a garbage room in every building on lot 2 instead of in only one building.
- 6. We very much like the wider sidewalk feel because it allows a terrace front porch quality.
- 7. Building articulation remains similar to previous drawing, with some added articulation to the largest building.
- 8. Sightline perspective now has a more of an urban feel to this project.

Panel offers the following comments.

Site Context and Landscaping

- 1. A variance for signage at the highway would be supported.
- Pedestrian access to site and through parking is improved and acceptable, but still need careful management of traffic at Valley Trail crossing.
- 3. Explore the option of some form of plaza that brings buildings A1 & B together in a meaningful/pedestrian focused way so that the buildings feel even more connected.
- 4. Consider an at grade outdoor area for the employee housing.

MINUTES
Regular Advisory Design Panel Meeting
August 16, 2017
Page 3

Form and Character

- 1. Strong support for repositioning of buildings.
- 2. A positive improvement to see garbage rooms in each building.
- 3. Improved pedestrian amenity and "patio" space is well defined.

Materials, Colours and Details

- 1. Support for simple colour scheme and palate
- 2. Good work/live character that supports the unique character of Function Junction.
- 3. Consider some visual or colour detailing that would differentiate each building.

Green Building Initiatives

1. Lighting and stormwater management are encouraged as important green building considerations for this project.

Moved by Julian Pattison Seconded by Brigitte Loranger

That the Advisory Design Panel supports the design as presented today with the applicant to work with staff in detailing the buildings and public realm, residential outdoor space, enhancing pedestrian safety and access at the valley trail crossing, and ensuring good visibility through signage and access points.

CARRIED

The applicant team left the meeting at.4:00 p.m.



CARLOS ZAVARCE
CORNERSTONE DEVELOPMENT
401 - 37989 CLEVELAND AVE
SQUAMISH BC V8B 0A7

October 3, 2017

RE: DP001337 - Lil'wat Nation Function Junction Commercial Development

Dear Mr. Zavarce:

The following provides a list of outstanding items to be addressed prior to development permit issuance, or as otherwise noted:

- 1. Address the following architectural and landscape details.
 - a) Address the final comments of the Advisory Design Panel from its August 16, 2017 review: explore some form of plaza or other detailing to bring buildings A1 and B together in a meaningful/pedestrian focused way; consider an at grade outdoor area for the employee housing; consider some visual or colour detailing to differentiate each building.
 - b) Update the architectural plans as follows:
 - i.) Relocate underground accessible parking stall #44 to stall #23 adjacent to the elevator per Zoning Bylaw requirements.
 - ii.) Provide details of all exterior lighting, all fixtures to be full cut-off. Note on architectural/signage drawings that all conduits to be concealed behind fascia.
 - iii.) Exit from service station building does not appear to meet Building Code.
 - c) Provide landscape plans detailing the following:
 - i.) a permanent fence along the north boundary of the highway tree buffer and a guardrail on top of the retaining wall,
 - ii.) pedestrian access to the service station building from the development access road,
 - iii.) all hard surface treatments.
 - iv.) landscape treatment in Alpha Lake Road right of way,
 - v.) planting of additional shrubs and trees in the covenanted highway buffer as determined by the municipality and the applicant along with input from Cascade Environmental Resource Group Ltd. subsequent to a site visit post construction, to ensure adequate screening of the development from the highway.
 - vi.) all areas of disturbance where no landscape is proposed to be hydroseeded and specify hydroseed mix,
 - vii.) add boulders in landscape areas where pedestrians may cut corners, where snow removal may damage planting,



- viii.) limit woody shrubs in snow dump areas as branches tend to get broken,
- ix.) add an additional 77 sq. m. of snow storage area on-site,
- x.) address the accessibility considerations relating to provision of an accessible picnic table, sidewalk and crosswalk detailing, curb cuts, and automated and pocket doors that were provided in my letter dated September 26, 2017.
- d) Submit a landscape estimate and security for the final approved landscape plan per Council Policy G-9.
- e) The proposed sign at the entrance road to Lot 1 is supported as a project identification sign but would require a development variance permit for any sign content related to Lot 2.
- 2. Provide further plans and documentation for approval for the following items:
 - a) The petroleum systems design brief prepared by TechPro Fuelling Solutions Inc, dated June 27, 2017 provides sufficient general direction. Provide a detailed ground water monitoring program and response plan for the service station site per the requirements of covenant BB0935630.
 - b) Provide a storm water management plan and sediment and erosion plan meeting the development permit guidelines. Provide confirmation from your flood consultant that the storm water management plan meets recommendation no. 4 of the geotechnical report prepared by LaCas Consultants Inc., dated October 1, 2008. Coordinate landscape grading plans accordingly.
 - c) Provide details of on-site and off-site servicing works, road and pedestrian improvements identified in the civil key plan and Traffic Impact Study prepared by R.F. Binnie & Associated Ltd, dated September 6, 2017 to RMOW standards. This includes valley trail details, extending the valley trail to the CN right of way, and the proposed crosswalk across Alpha Lake Road as recommended in Pedestrian Circulation Study by Carlos Zavarce, dated February 28, 2017 subject to a traffic analysis that supports this crosswalk. Enter into an agreement for the above off-site works and provide security per the requirements of covenant BB0935630 and Council Policy E2.
 - d) Submit a solid waste management plan meeting the recently adopted requirements of Zoning Amendment Bylaw (solid Waste Facilities) No. 2154, 2017. As previously noted, it is strongly recommended that residential and commercial garbage rooms be separate.
 - e) The environmental monitoring plan prepared by Cascade Environmental Resource Group Ltd., dated August 22, 2017 as required by covenant BB0935630 and the initial environmental review prepared by Cascade Environmental Resource Group Ltd., dated January 17, 2017 will be appended to the issued development permit. Prior to site alteration permit provide a copy of an environmental monitoring contract for RMOW approval as required by covenant BB0935630.
 - f) Provide a hazard tree assessment of the forest edge for trees located within falling distance from public sidewalks.



- g) Further description or quantification is required as to how the green building strategy dated September 5, 2017 will meet or exceed building permit requirements for anticipated 2018 building permits. It is also recommended the strategy meet all LEED 'required' points, or equivalent. Detail green building strategy initiatives into landscape and architectural plans.
- h) Provide 1 full size hard copy and 1 pdf of the finalized architectural and landscape plans and details, civil plans and sign plan for development permit issuance
- 3. The following legal agreements are required:
 - a) Enter into a housing agreement with the municipality pursuant to Section 483 of the Local Government Act to secure occupancy restrictions for the employee housing required under Bylaw No. 1507 prior to building permit issuance. This will require adoption of a housing agreement bylaw and registration of the housing agreement on title. Note all accommodation is restricted by zoning to employee housing or auxiliary residential dwelling units.
 - b) Register a covenant in favour of the Municipality appending the approved detailed ground water monitoring program and response plan for the service station site per the requirements of covenant BB0935630 prior to subdivision or installing any facility, tank or structure related to the service station use.
- 4. The following provincial approvals are required:
 - a) Provide written sign off on the proposed improvements in the Alpha Lake Road right of way by the CN Crossing Co-ordinator.
 - b) Ministry of Transportation and Infrastructure approval of DP001337.

Yours truly,

MELISSA LAIDLAW, Senior Planner mlaidlaw@whistler.ca



WHISTLER

REPORT ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: October 3, 2017 **REPORT:** 17-105

FROM: Infrastructure Services FILE: 420.2

SUBJECT: Cheakamus Crossing DES Recommendations

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Infrastructure Services be endorsed.

RECOMMENDATION

That Council direct Whistler2020 Development Corporation to extend Phase 2 of the District Energy System Upgrade and Maintenance Program to a final end date of March 31, 2018;

That Council request Whistler2020 Development Corporation to facilitate a discussion of bulk pricing for annual maintenance of the home heating systems in the 174 townhomes constructed by Whistler2020 Development Corporation;

That Council direct staff to create a process that would conditionally allow owners of the 174 Whistler2020 Development Corporation constructed townhomes the option to disconnect from the District Energy System after March 31, 2018 if they are still dissatisfied with the operation of their home heating systems; and

That Council direct staff to explore the potential sale of the District Energy System to a private company to allow private management and regulation as a utility under the BC Utilities Commission.

REFERENCES

Appendix "A" - Cheakamus Crossing DES Summary Report - September 2017.

Appendix "B" - Cheakamus Crossing DES Recommendations - September 2017.

PURPOSE OF REPORT

The purpose of this report is to provide direction to Whistler2020 Development Corporation (WDC) and RMOW staff with respect to the home heating systems in the WDC constructed homes in Cheakamus Crossing and the Cheakamus Crossing District Energy System (DES) utility.

DISCUSSION

WDC were the developers responsible for delivering the Cheakamus Crossing neighbourhood. In response to many owner concerns about their home heating systems, WDC commissioned a report in late 2015, which was completed in the spring 2016. The report identified several deficiencies and possible upgrades in the home heating systems, and the program presented by WDC was undertaken to complete one-time specified repairs and maintenance.

Following a two-phase repair and maintenance program in 2016 and 2017 by qualified contractors, the expert opinion of Integral Group (the professional engineering firm selected by WDC and the Cheakamus Crossing DES Volunteer Committee) is that the work undertaken to date in these programs has corrected the majority of the identified deficiencies. In addition to fixing deficiencies, upgrades were made to make the systems easier to properly maintain. The review identified that there were no systemic failures associated with either the design or installation of the DES.

It is noted that as the systems approach a decade of operation, they will require parts replacement over time (such as domestic hot water and buffer tanks which are expected to have an 8 to 10 - year lifespan).

The consulting engineering firm and the maintenance contractors have strongly recommended that owners take on the initiative to arrange bulk pricing from qualified contractors for an annual heating system maintenance program. This will allow for cost effective, stable and consistent servicing, and will help maintain the base line operating level that has been established. WDC has offered to facilitate bulk pricing quotations from qualified maintenance contractors.

With Council's approval, an option to disconnect from the DES system will be offered to individual homeowners in the spring 2018 if they are still dissatisfied with the operation of their home heating systems. A process will be established to ensure homeowners wishing to disconnect understand both the costs and benefits of making this change.

With the goal of providing further assurance to homeowners, RMOW staff will investigate the potential for selling the DES to a private utility operator. A private utility would be regulated by the BC Utilities Commission, and may include the maintenance of home heating systems as part of the operation of the utility. The potential costs and benefits of this idea will be explored and results will be reported to Council.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Built Environment	The new and renovated built environment has transitioned towards sustainable management of energy and materials.	Continuing to utilize the Cheakamus Crossing DES provides an environmentally sustainable source of heat energy to one of Whistler's newest neighbourhoods.
Energy	Whistler's energy system is supplied by a mix of sources that are local and regional wherever possible.	The Cheakamus Crossing DES adds to the mixture of energy options available in Whistler.
Energy	Community energy needs are met equitably.	The utility fees associated with the Cheakamus Crossing DES are set to provide an equitable cost for the heat provided.

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves away from	Mitigation Strategies and Comments
None.		

Cheakamus Crossing DES Recommendations October 3, 2017 Page 3

OTHER POLICY CONSIDERATIONS

None.

BUDGET CONSIDERATIONS

The RMOW has provided funds to WDC to carry out Phase 1 and Phase 2 of the DES Upgrade and Maintenance Program. To date, WDC has spent \$271,500 on implementing Phase 1 and Phase 2 of this program.

COMMUNITY ENGAGEMENT AND CONSULTATION

WDC, with assistance from the RMOW, met several times with a representative of the Cheakamus Crossing DES Volunteer Committee. Updates on the progress of Phase 1 and Phase 2 of the DES Upgrade and Maintenance program were provided on WDC's website.

SUMMARY

With Council's direction, WDC will continue Phase 2 of the DES Upgrade and Maintenance Program and will help facilitate bulk pricing for ongoing annual maintenance of the home heating systems. RMOW staff will work with owners of the 174 WDC constructed townhomes to allow them to initiate a process to disconnect from the DES system after March 31, 2018 if owners are still dissatisfied with the operation of their home heating systems. RMOW staff will also explore the potential to give the owners more assurance for the maintenance of their systems through the sale of the DES system to a third-party utility company.

Respectfully submitted,

James Hallisey
GENERAL MANAGER OF INFRASTRUCTURE SERVICES

Cheakamus Crossing Whistler 2020 Development Corporation

District Energy System Summary Report

September 22, 2017

Integral Group Consulting (BC) LLP
Suite 180 - 200 Granville Street Vancouver, BC V6C 1S4

Whistler Development Corporation c/o Mr. Eric Martin 4325 Blackcomb Way, Whistler, BC VON 1B4

Table of Contents

1.0 Cheakamus Crossing Neighbourhood

- 1.1 Introduction and history
- 1.2 Environmental Considerations
- 1.3 Marketing and sales of WHA Cheakamus Crossing Units
- 1.4 Home ownership and historic sales in WHA Cheakamus Crossing Units
- 1.5 Warranty information on WDC built Cheakamus Crossing residences

2.0 Cheakamus Crossing District Energy System

- 2.1 History of Cheakamus Crossing District Energy System (DES)
- 2.2 Costs
- 2.3 DES Fees
- 2.4 Background- District Energy Systems
- 2.5 Cheakamus Crossing District Energy System
- 2.6 Cheakamus Crossing DES Energy Study
- 2.7 Owner's Home Information Packages
- 2.8 Warranty Scope
- 2.9 Homeowner's Quick Reference Guide
- 2.10 Technical Service Guide

3.0 DES Studies and Reports

- 3.1 RMOW DES Energy Study
- 3.2 DES Volunteer Committee
- 3.3 DES forensic audit by Integral Group

4.0 DES Phase 1 and Phase 2 Owner's Assistance Program

- 4.1 Overview
- 4.2 Phase 1: Energy system repair and maintenance program
- 4.3 Phase 2: Repairs and Replacements
- 4.4 Program authorized technicians
- 4.5 Program summary
- 4.6 Ongoing maintenance program and options

5.0 DES Spending

6.0 Summary

1.0 Cheakamus Crossing Neighbourhood

1.1 Introduction and history

Since 1988, Whistler has had in place a Resident Employee Accommodation Policy. In 1997/ 1998 the municipality engaged community members to help chart a vision for the future by creating "Whistler 2002" a plan that outlined five community priorities which included, building a stronger resort community, enhancing the Whistler experience, moving toward environmental sustainability, achieving financial stability and contributing to the success of the region.

At that time, Whistler was considering a bid with the City of Vancouver for the 2010 Olympic and Paralympic Games and "guiding principles" were created to help guide Whistler's involvement in the bid to support and advance the community's priorities. To foster community character, diversity, volunteerism, pride and investment where one lives, the community set an overall goal to maintain 75-percent of Whistler's employees as residents within Whistler.

Leading up to the 2010 Olympic and Paralympic Games, Whistler faced a significant affordable housing challenge. Rates for market housing had risen significantly, from \$335,331 in 1994 to \$957,834 in 2001 for a single-family home. In 2005, the Whistler Housing Authority reported 535 families on the wait list to purchase resident-restricted housing, with a preference for two to three bedroom townhomes. 55-percent of the families on the waitlist wanted three or four bedroom townhomes. In 2007, the waitlist had ballooned to over 700 families which included families in need of affordable housing and families in WHA housing in need of larger homes.

The opportunity to create a significant amount of affordable housing for the community arose when the Province of British Columbia committed during the bid phase of the 2010 Olympic and Paralympic Games to construct temporary housing in Whistler for use during the Games. The concept emerged for the development of an Athlete's Village that could then be converted to permanent resident-restricted housing as a legacy for Whistler following the Games.

With \$31 million in capital funding from the Vancouver Olympic Committee (VANOC) through the provincial and federal government and land from a Land Bank provided by the Province of British Columbia, the RMOW agreed to develop an Athlete's Village for the 2010 Games that would then transition to resident-restricted housing. This new development would add 276 affordable housing units as well as a 55-room hostel and 20 market-priced townhomes.

In 2004, the RMOW created an independent organization, incorporated as a business with the RMOW as the sole shareholder. The name, "Whistler 2020 Development Corporation" (WDC) was chosen to reflect the community's goal of creating a new, sustainable neighbourhood for full-time Whistler residents, known as the "Legacy Neighbourhood". WDC managed the design and approval process for the new neighbourhood and developments in a similar manner to a

conventional developer with a focus on the delivery of the Athlete's Village and subsequent Legacy Neighbourhood. WDC Board members were appointed by Council with a strong focus on extensive expertise in the development and construction business and a commitment to the Community. A number of the original Board members from 2004 continue to volunteer today and have devoted thousands of hours of their time to WDC.

Drawing on their collective expertise, WDC ensured all facets of the project development met industry standards. WDC retained planning consultants to create development concepts at the start of the project and engage the community on the initial ideas for the neighbourhood. WDC developed plans for the initial phase of the neighbourhood which transitioned into a series of building projects and the accompanying infrastructure, including utilities.

WDC maintained responsibility for developing the Legacy Neighbourhood master plan for RMOW Council approval, developing a business and construction plan, preparing village development requests for proposals, executed contracts, monitored and oversaw construction activities and ensured project completion. WDC also managed the sales and occupancy process for Whistler Housing Authority pre-qualified Whistler residents.

The development of the Athlete's Village was shaped by four principle objectives;

- 1. **Establish a land bank:** The Community Land Bank agreement between the RMOW and Province provided a Crown grant of 300 acres to the RMOW to support resident-restricted housing. The initial Legacy Neighbourhood/ Cheakamus Crossing occupied 35 acres, leaving the balance available for future development, provided that development is for the purpose of creating resident-restricted housing and approved ancillary uses.
- 2. **Minimize financial risk to Whistler taxpayers**: The goal of the development was to break even, minimizing one time and on-going financial risk to the municipality.
- 3. Complete International Olympic Committee/VANOC housing requirements for November 2009 handover: Under the Venue Agreement, VANOC was to take possession November 1, 2009 to May 31, 2010. All buildings and improvements were to be completed on time to meet VANOC requirements and IOC standards.
- 4. **Retrofit and refurbish housing to turnover to purchasers by fall 2010**: To minimize financial risk to Whistler taxpayers, the housing needed to meet IOC standards but also be saleable to Whistler-based employees at affordable pricing.

Throughout the planning, building and retrofit phases, the WHA and WDC conducted an extensive community engagement process to ensure potential buyers were kept fully apprised on the progress of the developments. This included email updates to approximately 1,000 applicants on the waitlist and advertising in local publications. A rigorous planning process and attention to detail on all aspects of the infrastructure development, landscaping, building design and engineering resulted in a final mix of housing and accompanying finishes that met the identified housing needs of the residents on the purchase waitlist within their preferred price range of \$200,000 to \$300,000.

1.2 Environmental Considerations

Along with its reputation as a leader in the provision of residential housing, Whistler has also pursued excellence in climate change and environmental protection. Accordingly, each of the housing projects for the Athlete's Village/ Cheakamus Crossing development were designed with the Whistler Green Building Program in mind. This community-driven program is intended to encourage sustainable and environmentally friendly design and building practices at a grassroots level. In the design process, project objectives for the Legacy neighbourhood included optimizing site density to lower the overall footprint of the neighbourhood, ecologically sound and drought-resistant landscaping, walking paths and sidewalks to connect to transit routes, adding a new transit route to the neighbourhood as well as direct access to Whistler's Valley Trail.

As part of the goal of building a sustainable community and reducing the community's environmental footprint, a District Energy System (DES) was designed to service the neighbourhood and provide the majority of the energy requirements needed for heating and domestic hot water use, traditionally the largest contributor of a home's carbon footprint. Each residential unit was designed to be heated by a radiant hot water system, with the temperature of the water supplied by Whistler's Wastewater treatment plant boosted by heat pumps in each unit.

Leadership in Energy and Environmental Design (LEED) Neighbourhood Development provided instructive considerations through each step of the planning process. The Athlete's Village/Legacy Neighbourhood was one of twenty pilot projects assessed by the U.S. Green Building Council under a new rating system.

1.3 Marketing and sales of WHA Cheakamus Crossing units

WHA worked with WDC to market and manage the pre-sales of the housing in the Legacy Neighbourhood which was marketed as "Cheakamus Crossing". Whistler Real Estate Company was retained to complete the sales contracts with the buyers. The resident-restricted housing units were price-capped at purchase and any re-sales tied to a maximum appreciation rate tied to the Core Consumer Price Index as with other WHA properties.

Marketing and sales contracts for the Cheakamus Crossing properties managed by the WHA were executed by the Whistler Real Estate Company.

Disclosure statements by the Whistler Real Estate Company included a comprehensive section on the Home Warranty Information for each Cheakamus Crossing strata property.

A "Features Sheet" for the Cheakamus Crossing properties highlighted;

Neighborhood Features:

- Master Planned community designed with sustainability in mind—compact pedestrianfocused neighbourhood offering privacy, green space and a variety of housing types.
- LEED-ND Cheakamus Crossing is one of only 20 Canadian developments designated as a pilot project for LEED-ND (Neighbourhood Development). The LEED-ND program currently sets the highest standards in green neighborhood design practices
- District Energy System (DES) decreases the use of conventional energy sources for hot water and heating
- Mountain views and sunny location
- Amenities:
 - Children's play area
 - High Performance Training facility
 - Athletic fields and park areas
 - o Retail and commercial convenience centre
 - Abundant recreation within walking distance
 - Transit service

The disclosure statement provided by Whistler Real Estate that was signed by each purchaser, in relation to maintenance responsibilities of owners stated the following furnishings and equipment were included in the purchase price of each Strata Lot unless otherwise indicated:

- refrigerator;
- electric stove;
- dishwasher;
- microwave hood/fan;
- window blinds;
- washer/dryer;
- heat pump with two tanks (one for hot water and one for space heating);
- in-floor radiant heating on ground floor and second floor; and
- hydronic baseboard heaters on the third floor.

The Developer may, in its sole discretion, offer additional furnishings and equipment to purchasers of Strata Lots at an additional cost."

In relation to utilities services;

1.1 Utilities and Services

(a) Utilities

The Development will be serviced by the district energy (thermal) system (the "DES"), a water system, electric power, sewage, fire protection, telephone, cablevision and road access.

The DES is a municipal service, which will provide thermal energy for space heating and domestic hot water purposes. The DES will capture heat from the nearby wastewater treatment plant and transfer this energy to clean water which will be circulated around Cheakamus Crossing in a network of pipes. This warmed water will be used by heat pumps within the Development to provide space heating to the Strata Lots and to provide a portion of the energy used to heat the domestic hot water.

The Municipality will own and operate the DES, and will charge owners of the Strata Lots fees and charges in respect of:

- (i) the costs of operating, repairing and maintaining the DES; and
- (ii) a contribution to a replacement reserve fund for the components of the DES including, without limitation, the pipes, heat exchangers, boilers and pumps.

It is intended that the Municipality will enact bylaws to establish the fees and charges payable by owners. As the DES is to be owned and operated by the Municipality, it will not be governed by the Utilities Commission Act (British Columbia) so such fees and charges will be at the discretion of the Municipality, much like the existing municipal water and sewer services. The charges anticipated by the Municipality for the DES, when added to the electricity bill, will be comparable to the cost of electricity and gas for other traditional forms of heating and the supply of domestic hot water. The Developer anticipates that the fees and charges will be proportional to the Unit Entitlement of the Strata Lots.

Additionally, each disclosure included warranty information language as follows:

"Exhibit 1

The following coverage will be provided in respect of any defects in workmanship and materials for the construction and finishing of the buildings and common facilities:

Two Year Materials and Labour Warranty:

- 1. The coverage for the two-year materials and labour warranty is as follows:
 - (a) in the first twenty-four months:
 - (i) coverage for any defect in materials and labour supplied for the electrical, plumbing, heating, ventilation and air conditioning delivery and distribution systems; "

1.4 Home ownership and historic sales of WHA Cheakamus Crossing Units

The initial overall housing mix at Cheakamus Crossing consisted of 154 employee-restricted townhomes, 20 market townhomes (total of 174 units constructed by WDC), and 67 employee-restricted condos, as well as 55 rental apartments for WHA and 55 rental units for Hostelling Canada.

Home ownership and sales for approximately 90-percent of Cheakamus Crossing housing is managed by the Whistler Housing Authority.

The Whistler Housing Authority is widely recognized as an innovator and leader in the provision of residential housing. It operates on the mandate that it is essential for the majority of Whistler employees to live in the community in which they work. To achieve this objective, the WHA partners with the community to provide and sustain a range of housing options both rental and home ownership for those who live and work in Whistler. Creating an inventory of price controlled units that are only available to resident employees has proven to be the best means of reducing the impact of market forces, which for the last 20 years have driven the price of market housing out of reach for many locals.

In Cheakamus Crossing, WHA development for ownership include;

- The Falls condo units
- The Lofts condo units
- The Heights townhouses constructed by WDC
- The Rise townhouses constructed by WDC
- The Springs townhouses constructed by WDC
- The Terrace townhouses constructed by WDC
- Whitewater townhouses constructed by WDC

Riverbend, a market-priced townhouse development, was built by WDC as a means to recoup Whistler tax-payer funded capital costs incurred in the Cheakamus Crossing development.

The Chiyamesh is the 55-unit rental housing building managed by the WHA. Rents currently range from \$817 to \$1,020 including utilities. In 2010 rents were between \$775 and \$975.

All WHA homes in Cheakamus Crossing are price-restricted and resale value is limited to changes in the Core Consumer Price Index (CCPI) for Canada as reported by the Bank of Canada.

A positive increase to the CCPI from the CCPI at the date of the previous sale results in an increase in the value of a WHA price-restricted home at the time a new sales contract is executed.

A drop in the CCPI from the date of the previous sale and the execution of a new sales contract results in a decrease in the value of the home.

Cheakamus Crossing owners were permitted to start calculating the change in CCPI per the date of their signed Contract of Purchase and Sale as opposed to the date of their sales completion.

The WHA reported resale prices of \$260 to \$276 per square foot for WHA Cheakamus Crossing developments in 2011.

In 2016 and 2017 to date there have been 10 sales in Cheakamus Crossing with the price per square foot ranging from \$271 to \$296. The average WHA waitlist time for purchasers was 70 months or 5.8 years.

In comparison, market-priced employee-restricted housing sales in Whistler (Eaglecrest development, Bayshores and Suncrest Development, Brio) averaged approximately \$600 per square foot in 2016/17. Market price non-restricted housing price per square foot varies in Whistler but for townhouse developments in 2017 have ranged from \$700 per square foot to + \$1,000 per square foot. (Source: BC Assessment eValue)

In September 2017, a 3 bedroom, 3 bathroom 1,765 square foot unit at Riverbend, the market-priced housing in Cheakamus Crossing, was listed for \$1,499,000, \$849 per square foot.

1.5 Warranty information on WDC-built Cheakamus Crossing residences

Each owner of a resident restricted or market dwelling unit built by WDC in Cheakamus Crossing, received the benefit of various warranties as part of the purchase of their new home. There were three (3) separate warranties provided as follows:

- New home warranty under the provisions of the provincially legislated Homeowner Protection Act which was underwritten by either Travelers or National Home Warranty and provided:
 - a) a 12-month warranty for any claims related to interior finishing, plumbing, mechanical, and electrical, among other issues
 - b) a 5-year warranty for building envelope deficiencies

- c) a 10-year warranty for structural defects
- Contractual warranties from third party contractors (windows, appliances, flooring, plumbing, electrical, mechanical. etc) who were contracted by WDC to construct components of each home in each of the individual developments
- A warranty from WDC pursuant to the provisions of the Purchase and Sale Agreement (PSA) for each home

Prior to the expiration of each individual warranty as specified in 1(a), (b), and (c) and 2) and 3) above, WDC administered the warranty programs as required by responding to owner requests for warranty service. Items related to many components of the homes were submitted and addressed where legitimate during the applicable warranty periods, including numerous service requests related to the DES system and components within the home.

WDC kept individual warranty files for each new home and the warranty companies registered each individual new home owner and provided warranty documentation at occupancy and also maintained warranty files for each home. The number and type of deficiencies addressed under the warranties were not noted as anomalies in the development sector for a project of this nature and size.

2.0 Cheakamus Crossing District Energy System

2.1 History of Cheakamus Crossing and the District Energy System (DES)

A District Energy System(DES) was built and connected to all the units of Cheakamus Crossing when the neighbourhood was built for the 2010 Winter Games as the Whistler Athletes' Village.

In Whistler, the DES refers to the energy system that is in place from the Wastewater Treatment Plant to the exterior wall of properties connected to the DES. Multi-unit properties connect to the DES through a centralized mechanical room while individual homes/ townhouses each have their own privately-owned and operated heating system within their home that is connected to the DES. The properties themselves do not have a DES but are connected to the DES.

As outlined previously, one of the mandates for the Whistler Athlete's Village/ Cheakamus Crossing neighbourhood was to build a sustainable community that met the goals of 'Whistler2020' Whistler's integrated community sustainability plan and highest-level policy document.

WDC worked with consulting engineers Kerr Wood Leidel and mechanical engineers DEC Engineering to develop a District Energy System for the Whistler Athlete's Village/ Cheakamus Crossing neighbourhood that would meet the community's goal of reducing overall energy use.

The system was designed to use low-temperature ambient heat from treated sewage effluent from the nearby Whistler wastewater treatment plant. The engineers designed the DES to use treated wastewater effluent instead of natural gas in order to reduce greenhouse gas emissions by over 95-percent.

The Cheakamus Crossing DES makes use of energy from the wastewater process that would otherwise go to waste. The high efficiency of the DES provides a significant amount of heating to a large number of residences while using less energy overall as compared to individual heating units and units heated individually by natural gas.

2.2 Costs

The DE system cost of \$4.1 million was absorbed into the \$144 million total building costs for the affordable housing units in Cheakamus Crossing, which were shared among the Province (land and land remediation), the Vancouver Olympic Committee (VANOC) (\$35 million), RMOW (\$8 million) and the Municipal Finance Authority (MFA) (\$100 million loan). The RMOW received a two-year extension from the MFA to repay a \$13 million outstanding balance.

The RMOW does not include capital cost recovery or return on invested capital in its revenue requirements as the capital cost has been paid. Rates are set annually by Council based on staff reviews of operating costs. The amount to be received from DES ratepayers in 2011 was \$195,000, consisting of:

- \$125,000 in operating costs (including \$40,000 for electricity and \$50,000 for natural gas); and
- \$70,000 to a replacement reserve fund (to provide half of the estimated future capital replacement costs).

The RMOW's Bylaw 1951 sets a unit rate of \$4.58/m2 per year to recover \$195,000 from owners of 42,600 m2 of floor area.

2.3 DES Fees

To manage the ongoing maintenance and depreciation costs of the DES, the RMOW collects a quarterly DES fee from homeowners connected to the DES.

The fee is collected on April 1, July 1, September 1, and December 31 of every calendar year.

The unit area rate of \$4.58 / m² /year goes towards the costs of operation and maintenance of the municipal components of the DES (heat transfer and pumping equipment at the wastewater treatment plant and the DES piping through the neighbourhood).

2.4 Background on District Energy Systems

A District Energy System (DES) centralizes the production of heating or cooling for a residential or commercial development, neighbourhood or community. The concept and use of energy systems for multiple residences and commercial units is not new. Examples of steam-driven and other centralized heating units have been in use across North America for more than a century.

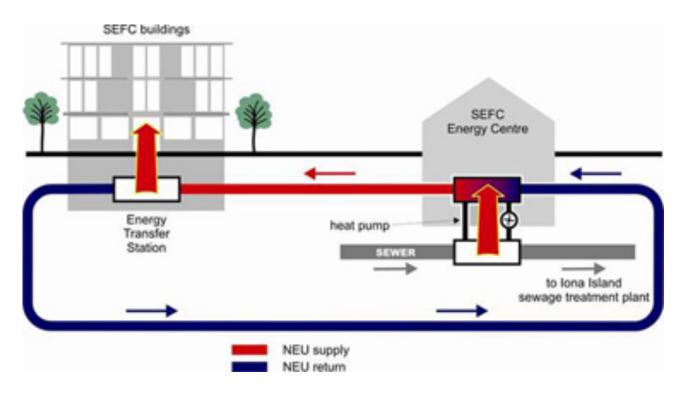


Image 1: Vancouver's Neighbourhood Energy Utility in Southeast False Creek. Source: City of Vancouver/ BC Climate Action Toolkit resources

District energy systems generate heat at a central plant, or extract heat from other sources. The heat is transferred to a fluid and distributed through underground pipes to buildings where it is used for space and water heating. The fluid is then returned to the source to be reheated and recirculated. Some systems also provide space cooling in a similar way. They may deliver energy services with greater efficiencies and lower emissions than individual furnaces, boilers, electric baseboards, and water heaters fueled by oil, natural gas, propane, or electricity. (Source: BC Climate Action Toolkit)

In British Columbia, examples of other District Energy Systems in use include;

- City of Vancouver's Southeast False Creek Neighbourhood Energy Utility which uses waste thermal energy captured from sewage to provide space heating and hot water to buildings in Southeast False Creek. Creative Energy is a private district energy system company that provides steam heat from natural gas in downtown Vancouver.
- Corix is a private company that manages geothermal distribution at Simon Fraser University's sustainable community, UniverCity including the sustainable and affordable housing development, Verdant.
- Corix systems are also in operation in strata developments across the lower mainland of B.C. including Will's Creek townhomes in South Surrey, The Rise Resort in Vernon.
- Dockside Green Energy in Victoria operates a central energy plant that produces hot
 water through a natural gas boiler and works in conjunction with a gasification process
 that uses waste wood. The heated water is transported to the Dockside Green
 community through a District Energy System.
- The Town of Gibsons, B.C. worked with developers and builders to construct an ambient-temperature district system for a 750-home development. A large ground heat exchanger (GHX) was built in the Parkland area.
- Revelstoke's Community Energy System uses sawdust and hog fuel from the Downie sawmill to fuel a 1.5 MW biomass boiler. The boiler provides heat to several downtown buildings through a district hot oil loop, as well as steam to Downie's drying kilns. The system provides energy rate stability to customers, improves air quality, and reduces greenhouse gas emissions.
- Richmond, B.C. manages the Alexandra District Energy Utility (ADEU), which increases heating and cooling efficiency by matching energy supply with energy demand.

2.5 Cheakamus Crossing District Energy System

The Cheakamus Crossing District Energy System (DES) uses treated wastewater at the Resort Municipality of Whistler's Wastewater Treatment Plant to provide a heat source for space and domestic water heating for buildings in the Cheakamus Crossing neighbourhood.

The RMOW operates and maintains the DES plant located within the municipal wastewater treatment plant, as well as DES piping in the neighbourhood up to the property lines. Strata properties are responsible for the piping on common property, and individual homeowners are responsible for all equipment within their homes.

The Cheakamus Crossing DES plant provides low temperature (10 to 12C) water through a five kilometre loop of pipe with associated valves and controls, to service connections across the neighbourhood. The plant extracts heat from treated effluent water and transfers it to the heat transfer fluid in the loop. The distribution piping and controls are partly on public land and partly on private land. The plant and distribution system are the property of the RMOW.

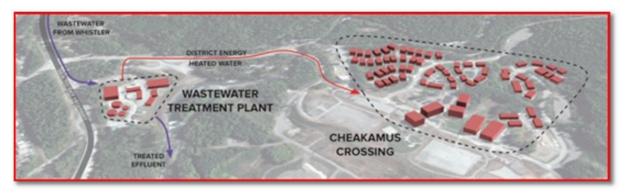


Image 2: Cheakamus Crossing Neighbourhood DES Overview Source: DEC Engineering, Homeowners Quick Reference Guide)

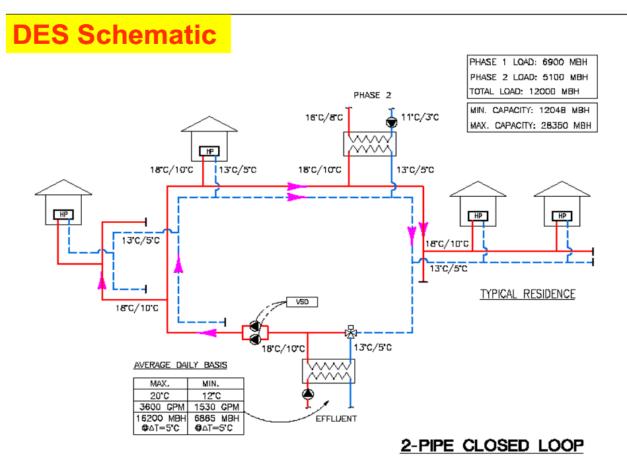


Image 3: DES Schematic

Source: Kerr Wood Leidal Consulting Engineers (hard to read illustration – can it be enlarged)

Within homes, the residential heat pump system includes an electric heat backup circuit (for home heat) and a backup electric hot water heating circuit (for domestic hot water). In the event of a failure of loop flow or temperature, the heat pump will switch to backup electric heating automatically, then attempt to go back to heat pump mode. If the system is unable to reset the heat pump, the heat pump will eventually shut down entirely, requiring the home owner to manually restart the heat pump once the DES loop is up and running again. Controls and backup boilers at the Cheakamus Crossing DES Plant are setup to ensure that loop temperature is always maintained in the correct range, in order to prevent needless electric heating expense or damage to the privately-owned heat pumps.

The extent of the DES inside the Cheakamus residences is limited only to a heat exchanger in the heat pump in each residence and then back out to the street. The remainder of the heating systems in the residence are independent of the DES loop and are the responsibility of the owner of the residence. The DES provides a heat sink for the heat pump to utilize in providing heat to the residence. This is illustrated in the photo below.

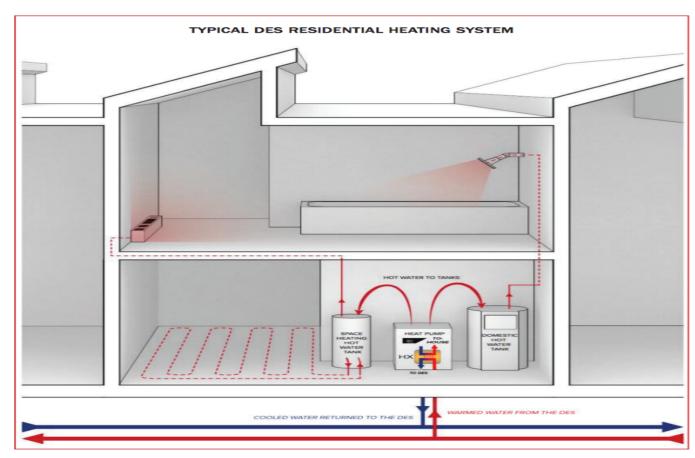


Image 4: DES home typical design

Source: DEC Engineering, Homeowners Quick Reference Guide

The Cheakamus Crossing DES service connections are associated with privately owned heat pumps in the various residential duplexes, row houses, hostel, high performance athlete centre and other commercial properties. The WDC-developed townhouses each have privately-owned heat pumps and control systems within their units.

Each unit is heated by a hot water radiant system. The temperature of the water supplied through the DES is increased by individual heat pumps in each unit for domestic hot water and space heating requirements.

The heat transfer fluid is made by chemically treating regular drinking water to ensure it does not cause corrosion to heat pumps or cause growth of bacteria in the Cheakamus Crossing DES loop piping, then adding fluorescent food-grade dye to help distinguish transfer fluid from other drinking water.

Specific components within Cheakamus Crossing homes developed by WDC that connect to the DES include;

- Heat Pump- The heat pump extracts heating energy from the DES loop and increases the
 water temperature that heats the rooms and water. Much like a refrigerator (which is
 cold on the inside and warm on the outside), the heat pump uses the same principles to
 cool the DES water and heat the water in the Domestic Hot Water and Space Heating
 storage tank.
- DES Control Valve- This valve regulates the flow of DES water into the heat pump.
- Domestic Hot Water (DHW) Tank This tank stores potable hot water needed for showering, washing, or other uses.
- DHW Heat Exchanger- This heat exchanger contains metal plates that allow the non-potable heating water loop to safely transfer heat to the potable domestic hot water.
- DHW Circulating Pump- This pump circulates the water from the DHW tank to the DHW heat exchanger for heating.
- Heating Water Tank- This is a buffer tank that stores the hot water used for space heating.
- Expansion Tank- This tank contains an air bladder that expands or contracts to absorb pressure changes in the system caused by temperature changes in the heating water.
- Backflow Preventer Devices- Each residential DES system had two backflow devices that
 required annual testing. These devices were replaced under the Phase 1 program with
 devices that do not require annual testing. Backflow is an undesirable reverse of flow of
 water back into the water supply.

2.6 Owner's Home Information Packages

Prior to occupancy, according to WDC, owners participated in a walk-through inspection and orientation of their home, and upon handover received hardcopy general maintenance manuals, and directions on how to log in to an online maintenance and warranty website containing information specific to their unit. Strata property management companies also participated in walk-throughs for the various complexes, and were provided with copies of drawings and operation manuals and participated in strata council meetings to promote owners undertaking annual DES maintenance programs.

Each WDC-developed unit was provided with a unique login and password to the cloud-based platform www.homeinformationpackages.com. Website and login information was included on a sticker placed on the internal electrical panel of each unit. See Appendix A: Website and login detail for Home Information Packages.

On this website, owners are provided with manufacturer's information, warranty information and maintenance information for appliances, electrical, heating and finishings. For each component, there is a page with manufacturer's information, warranty length, product specifications and operating guide as well as supplier and installer information and contact details.

See Appendix A: Website and login detail for Home Information Packages.

Web: www.westbaymechanical.com

Image 6: Heat pump detail provided on www.homeinformationpackages.com for a unit in the Heights

2.8 Homeowner's Quick Reference Guide

Web: www.westbaymechanical.com

As noted above, <u>www.homeinformationpackages.com</u> provided information on the operating of the system including the need for ongoing maintenance of the DES). In addition, in April 2016, following concerns about in-home system operations raised by homeowners, the RMOW commissioned DEC Engineering to produce a Quick Reference Guide to help homeowners better understand their DES components and provide answers to frequently asked questions along with troubleshooting tips.

The 14-page guide outlines how the heat pump functions and heats homes as part of a DES, optimal thermostat settings, finding qualified contractors, recommended servicing schedules as well as specific instruction on fan coil maintenance.

The troubleshooting section covers issues including one room not receiving heat, "red screen" issues, failure of the heating system to start, lack of hot water and power outages.

See Appendix B: 2016 Homeowner's Quick Reference Guide

2.9 Technical Service Guide

The RMOW produced a 146-page DES Technical Service Guide with a recommended proper routine maintenance to help ensure that the residential heating system connected to the Cheakamus Crossing DES is operating within the design parameters and in an efficient operational manner.

The guide recommended results of each service visit should be compared to normal operating parameters and set points as provided by DEC Engineering in this service guide. DEC Engineering recommended in the guide that heating system maintenance should be completed twice per year. Each service visit should include the completion of all Maintenance Checklist items listed in the guide. To ensure service consistency, DEC recommended the Technical Guide's included logbook be kept on site in the mechanical closet/room of each residential unit for the service technician to log the details of every service visit.

See Appendix C: 2016 Technical Service Guide

3.0 DES Studies and Reports

3.1 RMOW DES Energy Study

In November 2015, the RMOW began a six-month study to look at energy efficiency of the DES in Cheakamus Crossing.

As the original energy systems approached six years from construction and activation, the RMOW believed it was important to confirm if the typical DES connected residential heat pump system in Cheakamus Crossing was achieving the energy goals it was designed to meet.

The decision was made to conduct the Energy Study Program (ESP) to measure, analyze and report on actual energy use within a sample group of townhouses and how it compares to townhouses using more conventional electric heating systems. DEC Engineering, the original design firm of the DES and HP systems, in collaboration with the Engineering staff at the RMOW, developed the criteria and methodology of the ESP. A volunteer sample group of six townhouses were chosen for the ESP. Each system passed a technical inspection prior to the study. Next, each system was equipped with an energy monitoring system that was used to record key amperages and temperatures needed to estimate the energy being used to produce space heating and DHW heating during the study period. The study period was set up to allow

for six months of monitoring, beginning in January 2016 and lasting through to July 2016. The collected data was used by DEC Engineering personnel to analyze the energy efficiency and operating costs of the monitored systems, and to provide a comparison to more conventional electric heating scenarios.

The study examined how well Whistler's DES heats houses compared to the amount of electricity it consumes. The study was commissioned to determine how district energy systems perform relative to standard electrical baseboards, and followed the cancellation of a BC Hydro study to examine district energy systems across various BC jurisdictions.

Results indicated the heat pump systems in the townhomes have much lower annual energy costs to produce the same levels of heat energy output, compared to homes that have standard electric water heaters and either an electric hydronic boiler or baseboard heaters.

The heat pump systems using the DES had annual energy costs from 17 to 40 per cent lower than homes using electric systems for heat and hot water, with an average annual savings of \$428.00. Multiplying the average annual savings over a typical service life expectancy of 20 years equated to cost savings of \$8,560.00 (in 2016 dollars).

The study took into consideration both operating costs as well as total ownership costs, including the cost of energy, the cost of routine maintenance, DES utility fees, and the cost of equipment replacement at the end of its normal service life.

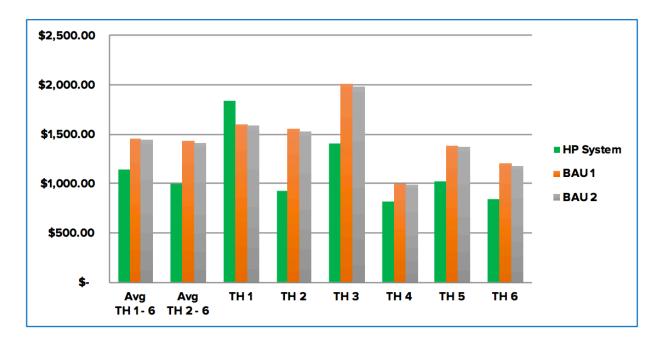


Image 7: 'HP system' denotes DES system compared to traditional electric baseboard/electric hot water tank (BAU 2) and an electric hot water boiler and circulating pipes (BAU 1). Townhouse 1 (TH 1) was only

using the DES for space heating and a separate electric tank for hot water. As a result, TH 1 still paid a DES fee for the months where space heating was not required. Source: District Energy Study.

Five of the six home heating systems in the study group were found to be achieving the energy efficiency levels they were originally intended and designed for. The one system in the study group that did not, had its DES hot water heating disabled and connected directly to electric supply, therefore was not being operated as it was designed to maximize energy-savings. These results indicate that the home heating systems are capable of meeting the energy and environmental performance targets they were designed to. They also indicate that the performance of the home heating system is sensitive to how they are operated which is directly linked to ongoing maintenance.

The home heating systems were found to be significantly more energy efficient than other conventional (BAU) electric heating systems. The study results indicate they are consuming on average 65% less electricity per year, to provide space and water heating. This corresponds to an average 65% reduction in related GHG emissions.

The study concluded the DES offers additional environmental benefits by substantially decreasing Whistler's electrical and natural gas requirements. Compared to conventional heating technologies, the DES reduces greenhouse gas emissions by up to 95 per cent; the equivalent to taking 350 cars off the road for a year.

Based on an average annual energy savings of 7,878 kWh, every 3.7 years each townhouse HP system could potentially save enough electricity to completely power an average Whistler house for a full year. The potential average annual savings from the 174 Cheakamus Crossing townhouses is 1,370,772 kWh. This represents enough electricity to completely power 52 average Whistler houses each year.

See Appendix D: District Energy Study

3.2 DES Volunteer Committee

In 2015, Cheakamus Crossing residents formed an ad hoc committee to review and discuss concerns with the operation of the DES and individual home heating systems. In spring 2015, WDC and RMOW representatives met initially with a representative of the Cheakamus Crossing DES ad hoc committee, to discuss resident concerns and issues with a view to analyzing system performance.

The consensus between the volunteer group, WDC and the RMOW was to obtain expert third party technical advice to help to better understand the system and various operational issues and challenges that had been experienced by owners. The volunteer residents committee, with assistance from WDC and RMOW, established terms of reference for the purposes of undertaking a proposal call to obtain proposals and fees from experts.

A number of proposals were received and the representatives agreed that the proposal from Integral Group best met the parameters established. Throughout the duration of the initial study by Integral and including the establishment of the Phase 1 and 2 remedial work programs, tendering to qualified contractors, and the work that ensued, WDC posted program updates on the www.CheakamusCrossing.ca site and also met with a DES Volunteer group representative from time to time and communicated by email.

3.3 DES Forensic Report by Integral Group Consulting

In April 2016, WDC commissioned a report from Integral Group Consulting, an independent engineering firm chosen by the Cheakamus Crossing DES Volunteer Committee, for a detailed mechanical engineering design peer review and forensic examination of the home heating systems installed in the townhouses and an investigation of the interface between the home heating systems and the local District Energy System.

See Appendix E: Cheakamus Crossing DES Forensic Report

The report found that design and construction appears to have been typical for a project such as the Cheakamus Crossing development, with site instructions being issued through the construction period to clarify and further detail what was to be provided for the home heating systems.

The report noted disappointment in the completion documentation and lack of detail on the procedures used for startup and commissioning and the lack of final Operating and Maintenance Manuals. However, the author of the 2016 Forensic report was not familiar with the history of the DES and was unaware that at time of commissioning, each WDC-developed unit was provided with a unique login and password to the cloud-based platform www.homeinformationpackages.com. Website and login information was included on a sticker placed on the internal electrical panel of each unit.

Additionally, prior to occupancy, owners participated in a walk-through inspection/orientation of their home, and upon handover received hardcopy general maintenance manuals, and directions on how to log in to an online maintenance and warranty website containing information specific to their unit. Strata property management companies also participated in walk-throughs for the various complexes, and were provided with copies of drawings and operation manuals.

The forensic report included site visits and owner interviews of 19 townhouses in the fall of 2015.

The findings included;

- The systems are remarkably similar considering the number of installing contractors that were involved. Some variations include the following: Heating pump and domestic hot water (DHW) pump direction of flow and location. Some pumps are located in the supply to the buffer tank and DHW heat exchanger, some in the return lines and some pumps are pumping into the heat exchanger and buffer tank, some are pumping out. These differences should not present any operational problems if the pumps are performing at specified flow and pressure.
- Spirovent air separators are all provided as indicated on the design drawings and are in an appropriate position in the system. These are very good air separators and should provide long term effective air removal from the systems. Smaller automatic air vents are also located in appropriate locations to remove air in the mechanical rooms. We did not see any fan coils with manual air vents as called for on the drawings. We heard no indication that there was air in any of the systems but the fan coils are the high points in the system and where air will accumulate if any is present in the systems and gets past the air separation in the mechanical rooms.
- The fan coils were supplied with heating water several different ways as follow:
 - 1. Some townhouses had a single control valve and balancing valve.
 - 2. Some townhouses had a single control valve and no balancing valve.
 - 3. Some townhouses had control valves and balancing valves per fan coil.
 - 4. Some townhouses had just control valves per fan coil.
 - 5. The design drawings called for a single control valve and balancing valve for all the fan coils.
 - 5. There were less pressure gauges and thermometers than would have been expected but both pressure gauge taps and the operating screen of the heat pumps provide sufficient information to service the systems.
 - 6. Some systems have less drain points than others with many new drain valves having been installed since the systems were first put into service. These help with doing system flushes but the tank drains and drains on the domestic water heating supply and return could be used to flush and clean the systems with regular servicing.
 - 7. The locations of the strainer, automatic balancing valve and control valve on the DES side of the system varied somewhat but the strainer was always located upstream of the other two items which is the most important thing.
 - 8. We noted that the heat pump starts as the control valve on the DES system starts to open. This could cause problems with heat pump startup. A time delay should be introduced or if the valve has an end switch it could be utilized to allow the valve to fully open prior to the heat pump starting.
 - 9. The switches for controlling the electric resistance heat in both the buffer tank for the heating system and the DHW tank were not consistent. Some had 2 switches, some had no switches, and some had switches including a 3-position switch on the DHW tank.

- Specific comments on the some of the townhouses visited are as follows:
 - 1. All the Whitewater townhouses visited had the expansion tanks located very close to the floor which does not allow access to the air valve on the bottom of the tanks. These tanks should be raised to allow access to this air valve for expansion tank testing and adjusting.
 - 2. 1160 Whitewater has the expansion tank for the heating system isolated from the system by the shut off valve. Expansion tanks should always be open to the system they serve. The only time this valve should be shut is when replacing the tank.
 - 3. #16 Riverbend has had the Tekmar controller changed and we could not determine if the sequences etc. were appropriate. The owner indicated no problems with control of the systems.
 - 4. #20 1375 Cloudburst (The Terrace) has corrosion appearing inside the heat pump. This appeared to come from the unions on the 3-way valve in the heat pump. There was no evidence of water at those locations at the time of the visit. The system has been flushed and material was removed from the system.
 - 5. #3 1380 Cloudburst (The Heights) reported never having had a problem but had just completed a very low flow flush of the system.
 - 6. #39 1275 Mount Fee Road (The Upper Rise) had some problems 2 years ago but after service which included a system flush system has been OK.
 - 7. #8 1245 Mount Fee Road (The Lower Rise) system did not respond to calls for DHW heat or heating but was not "red screened". Reset heat pump from breaker and system started and was up to temperature and seemed to be responding to calls for heat before we left.
 - 8. #13 Riverbend owner reported that there had never been a problem and did not think the system had ever been flushed.
 - 9. #38 1275 Mount Fee Road (The Upper Rise) has had the system modified in an attempt to reduce the pressure drop required to be overcome by the heating system pump and the pump size has been increased. Our impression is that the increased pump may have solved the problem without the re-piping but the system will still function as intended with the re-piping. Owner indicated system performance was improved

Other major findings of the report included;

- The flow rate on the DES supply and lack of time delay on the heat pump operation until the 2-way valve is fully open is a concern that should be corrected as it leaves the heat pump in an operating region that is approaching the limits of efficient and reliable operation.
- The Technical Service Guide should be used by the homeowner to outline service requirements to their service contractor and has a form included in the manual that the service contractor should fill out completely as they do each service and be inserted into the manual which should be kept in the mechanical room. This manual then provides a baseline and history of operation of the system and will be invaluable for keeping the systems

running smoothly. The manual suggests 2 full services per year which we agree with. If system operation is stable after 3 services, the homeowner could consider switching to annual service.

- The report recommended water samples from each unit except those included in my review be tested for hardness, TDS and pH and appropriate action taken where required to obtain hardness under 150 mg/L, TDS value under 250 and pH between 6.0 and 9.5. The appropriate action will typically be a flush which should be accompanied by a demineralization of the fill water if out of range of acceptability and a follow up visit to ensure pH is high enough. The report suggested doing the same on a yearly basis to track the water quality and react as required to maintain the water within those guidelines. If the tests show stability the time between tests can be increased.
- Any fan coils that do not have manual air vents should be equipped with them to avoid
 flushing to vent air. Flushing to vent air will introduce water into the system that may upset
 a stable water condition in the systems.
- Because of the inconsistencies noted on the control of the backup electric heat for both the
 heating and domestic hot water the report suggested that each townhouse be checked to
 confirm that at a minimum the electric heat will be available if the heat pump fails. The
 Technical Service Guide covers this procedure quite well.
- When shut off valves are provided on expansion tanks, these valves should be open except
 when replacing the tanks. The Schrader air valve on the bottom of the tank also needs to be
 made accessible to allow servicing of the tank.
- The report determined the RMOW appears to be doing a good job running and maintaining the DES plant and piping system (external to each home). The minimum supply water temperature of 10C is a good balance of energy efficiency and keeping the temperature high enough for reliable heat pump operation. The report examined operating difficulties in the early days of DES operation and concluded these problems appear to have been addressed.
- The report emphasized it is important to use service contractors who have service personnel that understand the systems, have trade tickets applicable to systems such as Refrigeration Mechanic, Pipe Fitter and Plumber and are willing to use the Technical Service Guide and do the required record keeping such as using the Service Report provided in the guide. The current service contractors (Western Technical Systems, Scoular Mechanical and Custom Air) appear to be capable of this but it will be up to the individual homeowner to ensure they provide the service required.

Overall, the report did not find systemic failure issues with the Cheakamus Crossing DES and recommended that owners source an ongoing maintenance program through service contractors that are familiar with the DES and the privately-owned components in residences.

4.0 DES Phase 1 and Phase 2 Owner's Assistance Program

4.1 Overview

Following the forensic report by Integral Group, WDC, RMOW, Integral Group and a Cheakamus Crossing community representative worked to focus on the challenges encountered in individual homes with the goal of identifying specific deficiencies and looking for ways to facilitate improved operations of the heating systems connected to the DES.

Nine units were closely inspected using a list of 10 specific items that were identified by the forensic report. This data was used as the basis to obtain competitive bids to determine the cost to make repairs for these 10 items, where required, in all WDC constructed townhomes. WDC presented this information with the community representative and Whistler Council and the decision was made to spend up to \$350,000 funded by WDC on a two-phase program for inspections and repairs.

167 of the 174 homeowners took part in this program representing 96% of townhomes in Cheakamus Crossing constructed by WDC.

4.2 Phase 1: Energy System Repair and Maintenance Program

WDC organized and contracted qualified technicians for the following work to be done:

- 1. Inspect flow valve and replace 6 gallon per minute cartridge with 8 gallon per minute cartridge.
- 2. Install time delay to prevent heat pump from starting until district energy system (DES) flow valve is fully open.
- 3. Install air relief vents on all fan coils or flush with high flow rates to eliminate air.
- 4. Inspect and, if required, correct sensor installation and location on both the heating buffer tank and the domestic hot water storage tank.
- 5. Confirm that backup heat for both heating buffer tank and domestic hot water tank operates automatically.
- 6. Confirm location of Schrader valves on expansion tanks. Raise tank installation if required to allow access to valve.
- 7. Adjust heat pump set-points to manufacturer's recommended settings for both heating and domestic hot water.
- 8. Take water sample from heating distribution system for testing.
- 9. Flush heating distribution systems

10. Replace backflow prevention device with one that does not require annual testing.

In December 2016, after consulting with the authorized technicians, Integral Group determined that a full system flush should be included in the Phase 1 scope for every home, regardless of water testing results. The flush included the entire heating system: the heat pump, the DHW heat exchanger, in floor heating system, fan coil piping and coils, and buffer tank. This change to the scope of work negated the need for water testing to be done.

4.3 Phase 2: Repairs and Replacements

Following participation in Phase 1, homeowners will have the option to participate in an additional repair program. For each individual unit, WDC reimburse up to 50% of eligible costs for additional home DES repairs and replacements up to a maximum of \$1000 based on the following;

- Phase 1 work is completed
- Must be work identified during the Phase 1 program
- Agreed upon work is negotiated directly between Homeowner and Qualified Technician
- Must be completed by one of the WDC Approved Companies
- Only paid invoices (receipts) for work completed by the WDC Approved Companies are eligible for reimbursement.

4.4 Program Wrap-Up

In May 2017, the program entered the final stages of completion. The original deadline was extended, and finishing dates were adjusted on an individual basis to ensure that reasonable time is permitted to wrap up Phase 1 and any Phase 2 repairs.

4.5 Program Authorized Technicians

Authorized companies engaged for this program are;

- Allied Plumbing, Heating & Air Conditioning Ltd.
- Energy 1 Services Ltd.
- Haakon HVAC Services

4.6 Phase 1 and Phase 2 Program Summary

Phase 1 Summary

Phase 1 work at Cheakamus Crossing was undertaken between mid-November 2016 and Mid-May 2017.

Technician reports for Phase 1 reported:

- 1. All Griswold balancing valves on the DES into each heat pump were found to be 6 USgpm and were changed to 8 USgpm or 9 USgpm as originally specified.
- 2. The time delay to allow the control valve on the DES to fully open before the heat pump starts has been completed for all the reported residences.
- 3. Manual air vents have been installed or were present on upper floor fan coils on 83 units out of 134. Whitewater did not require vents on fan coils as there are no fan coils in these residences. The remaining residences have hose bibbs installed to allow for flushing of fan coils.
- 4. Temperature sensor locations on the buffer tank and domestic hot water tank were reviewed and corrected as follows:
 - a. Whitewater: Sensors varied from 3" to 17" above floor on buffer tank and 17" to 33" on domestic water tank. All were corrected to +/- 13" on buffer tank and +/- 17" on domestic water tank.
 - b. The Rise: Sensors varied from 3" to 34" above floor on buffer tank and 6" to 33" on domestic water tank. All were corrected to +/- 13" on buffer tank and +/- 17" on domestic water tank.
 - c. Riverbend: Sensors varied from 6" to 56" above floor on buffer tank and 14" to 33" on domestic water tank. All were corrected to +/- 13" on buffer tank and +/- 17" on domestic water tank.
 - d. The Terrace: Sensors measured were 15" above floor for buffer tank and 10" for domestic water tank. Results for 12 of 27 residences were reported.
 - e. The Heights: Sensors measured were 7" or 8" above floor for buffer tank and 14" for domestic water tank. Results for all 27 of 27 residences were reported.
- 5. Backup heat for both tanks was intended to operate automatically if the heat pump failed to satisfy heat demand from the heating buffer tank or the domestic hot water tank. During initial review it was determined that various modes of control for both these tanks had been provided. This control either allowed the user to select automatic operation (Power Saver), manual operation for domestic hot water or manual override operation for heating or turn off the electric heat in each tank (automatic below); or just on-off control which would have the on mode be automatic and the off mode would turn off the electric elements. This part of the scope was to determine how many homes had this control and how many had just on-off switches.

- a. Whitewater: 33 units had automatic switch for space heating, 1 unit that did not have automatic space heating, 23 units had automatic switch for domestic water heating, 11 units that did not have automatic domestic water heating.
- The Rise: 57 units had automatic switch for space heating, 0 units that did not have automatic space heating, 54 units had automatic switch for domestic water heating, 3 units that did not have automatic domestic water heating.
- c. Riverbend: 15 units had automatic switch for space heating, 0 units that did not have automatic space heating, 5 units had automatic switch for domestic water heating, 0 units that did not have automatic domestic water heating.
- d. The Terrace: 25 units had automatic switch for space heating, 0 units that did not have automatic space heating, 25 units had automatic switch for domestic water heating, 0 units that did not have automatic domestic water heating. Two units were not reported.
- e. The Heights: 27 units had automatic switch for space heating, 0 units that did not have automatic space heating, 5 units had automatic switch for domestic water heating, 22 units that did not have automatic domestic water heating
- 6. Whitewater expansion tanks that were mounted too low occurred 23 times and all were raised to make Schrader air valve on tank accessible for service. Three homes had tanks mounted low but the Schrader valve was accessible and these tanks were not raised.
- 7. Heat pump set points were checked, pressure differentials measured and temperature differentials measured. Specifications referred to are from the Cheakamus Crossing Technical Service Guide. Summary and observations are as follows:
 - a. With the new Griswold balancing valve on the DES supply to each heat pump the pressure differential measured across the source side of the heat pump correlates with the catalog data for the heat pump at 8 USgpm. This is the case throughout the entire development.

b. Whitewater:

- i. Pressure into Heat Pump on Heating and Domestic Hot Water: All homes were within specification of 8-24 psi.
- ii. Temperature into Heat Pump on both Space Heating and Domestic Hot Water Heating minimum of 26°C: Nine homes were indicated below minimum but maximum deviation was 3°C which is within acceptable deviation and could be measurement error.
- iii. Temperature out of Heat Pump (Domestic Hot Water only) maximum of 54°C: Seven homes were above maximum of which 5 were within 3°C. The 2 homes above 3°C should reduce their domestic water set point to ensure the maximum is not exceeded. The homes within 3°C might want to check their domestic water set point.

- iv. Space Heating Temperature difference range across the Heat Pump of 8-11°C: All homes had temperature difference below 8°C. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- v. Domestic Water Heating Temperature difference range across the Heat Pump of 7-10°C: All homes had temperature difference below 7°C. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- vi. Space Heating Pressure differential range across the Heat Pump of 0.5-0.75 psi: All homes had pressure differential above 0.75 psi. This in combination with the temperature differences reported in point iv above indicate over delivery of flow which is a good operating condition for the heat pump and the system.
- vii. Domestic Water Heating Pressure differential range across the Heat Pump of a minimum of 1.0-1.5 psi: All homes had pressure differential above 1.5 psi. This in combination with the temperature differences reported in point v. above indicate over delivery of flow which is a good operating condition for the heat pump and the system.

c. The Rise:

- i. Pressure into Heat Pump on Heating and Domestic Hot Water: All homes were within specification of 8-24 psi except 2 which were below specification at 5psi. These suites should check the setting of the makeup water PRV and increase the pressure setting of this PRV to obtain at least 8 psi.
- ii. Temperature into Heat Pump on both Space Heating and Domestic Hot Water Heating minimum of 26°C: Five homes were indicated below minimum for Space Heating with 2 of those within 3°C, 2 within 6°C and 1 within 7°C. Homes within 3°C are within acceptable deviation and could be measurement error. The 3 suites outside this limit need to have the cause investigated. If these homes were checked in warm weather it could be that the heat had been turned off or there may be a set point issue.
- iii. Temperature Out of Heat Pump (Domestic Hot Water only) maximum of 54°C: Fourteen homes were above maximum of which 8 were within 3°C. The 6 homes above 3°C should reduce their domestic water set point to ensure the maximum is not exceeded. The homes within 3°C might want to check their domestic water set point.
- iv. Space Heating Temperature difference range across the Heat Pump of 8-11°C: All homes had temperature difference below 8°C except 2 homes were within specification and 4 homes were above specification. The homes less than or within specification in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system. Homes that have higher

- than specification should have their system flow rates checked as they may be lower than the design intended especially the 2 homes at 19 and 24°C.
- v. Domestic Water Heating Temperature difference range across the Heat Pump of 7-10°C: All homes had temperature difference below 7°C except 3 which were within specification. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- vi. Space Heating Pressure differential range across the Heat Pump of 0.5-0.75 psi: All homes had pressure differential above 0.75 psi except 3 which were near zero. This in combination with the temperature differences reported in point iv above indicate over delivery of flow which is a good operating condition for the heat pump and the system. The 3 homes below specification should have their systems rechecked for flow blockage as these homes appear to have very low flow rates.
- vii. Domestic Water Heating Pressure differential range across the Heat Pump of a minimum of 1.0-1.5 psi: All homes had pressure differential above 1.5 psi except 1 home was within specification and 1 home was just below specification. This in combination with the temperature differences reported in point v. above indicate over delivery of flow which is a good operating condition for the heat pump and the system.

d. Riverbend

- i. Pressure into Heat Pump on Heating and Domestic Hot Water: All homes were within specification of 8-24 psi.
- ii. Temperature into Heat Pump on both Space Heating and Domestic Hot Water Heating minimum of 26° C: One home was indicated below minimum but maximum deviation was 1° C which is within acceptable deviation and could be measurement error.
- iii. Temperature out of Heat Pump (Domestic Hot Water only) maximum of 54°C: Three homes were above maximum of which 2 were within 3°C. The home above 3°C should reduce their domestic water set point to ensure the maximum is not exceeded. The homes within 3°C might want to check their domestic water set point.
- iv. Space Heating Temperature difference range across the Heat Pump of 8-11°C: All homes had temperature difference below 8°C. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- v. Domestic Water Heating Temperature difference range across the Heat Pump of 7-10°C: All homes had temperature difference below 7°C. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.

- vi. Space Heating Pressure differential range across the Heat Pump of 0.5-0.75 psi: All homes had pressure differential above 0.75 psi. This in combination with the temperature differences reported in point iv above indicate over delivery of flow which is a good operating condition for the heat pump and the system.
- vii. Domestic Water Heating Pressure differential range across the Heat Pump of a minimum of 1.0-1.5 psi: All homes had pressure differential above 1.5 psi. This in combination with the temperature differences reported in point v. above indicate over delivery of flow which is a good operating condition for the heat pump and the system.

e. The Terrace

- i. Pressure into Heat Pump on Heating and Domestic Hot Water: All homes were within specification of 8-24 psi except 1 which was 10 psi above maximum limit on heating. This suite should check the setting of the makeup water PRV and adjust the pressure setting of this PRV to reduce this pressure to 24 psi.
- ii. Temperature into Heat Pump on both Space Heating and Domestic Hot Water Heating minimum of 26°C: One home was indicated below minimum for Space Heating by 7°C. The suite outside the limit needs to have the cause investigated. If this home was checked in warm weather it could be that the heat had been turned off or there may be a set point issue.
- iii. Temperature Out of Heat Pump (Domestic Hot Water only) maximum of 54°C: Fourteen homes were above maximum of which 2 were within 3°C. The 12 homes above 3°C should reduce their domestic water set point to ensure the maximum is not exceeded. The homes within 3°C might want to check their domestic water set point.
- iv. Space Heating Temperature difference range across the Heat Pump of $8-11^{\circ}$ C: All homes had temperature difference below 8° C. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- v. Domestic Water Heating Temperature difference range across the Heat Pump of 7-10°C: All homes had temperature difference below 7°C. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- vi. Space Heating Pressure differential range across the Heat Pump of 0.5-0.75 psi: All homes had pressure differential above 0.75 psi. This in combination with the temperature differences reported in point iv above indicate over delivery of flow which is a good operating condition for the heat pump and the system.
- vii. Domestic Water Heating Pressure differential range across the Heat Pump of a minimum of 1.0-1.5 psi: All homes had pressure differential above 1.5 psi. This in combination with the temperature differences reported in point v.

above indicate over delivery of flow which is a good operating condition for the heat pump and the system.

f. The Heights:

- i. Pressure into Heat Pump on Heating and Domestic Hot Water: All homes were within specification of 8-24 psi except 3 which were below the minimum limit. Two homes were within 0.5 psi of the minimum 8 psi which is acceptable and 1 was at 4 psi on heating. This suite should check the setting of the makeup water PRV and adjust the pressure setting of this PRV to increase this pressure to 8 psi. Four suites were not reported.
- ii. Temperature into Heat Pump on both Space Heating and Domestic Hot Water Heating minimum of 26°C: One home was indicated below minimum but maximum deviation was less than 1°C which is within acceptable deviation and could be measurement error. Four suites were not reported.
- iii. Temperature out of Heat Pump (Domestic Hot Water only) maximum of 54°C: Four homes were above maximum of which 2 were within 3°C. The home above 3°C should reduce their domestic water set point to ensure the maximum is not exceeded. The homes within 3°C might want to check their domestic water set point. Four suites were not reported.
- iv. Space Heating Temperature difference range across the Heat Pump of 8-11°C: All homes had temperature difference below 8°C except 1 which was within specification. This in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system.
- v. Domestic Water Heating Temperature difference range across the Heat Pump of 7-10°C: All homes had temperature difference below 7°C except 2 homes were within specification and 4 homes were above specification. The homes less than or within specification in combination with the pressure differences reported in points vi. and vii. below indicates over delivery of flow which is a good operating condition for the heat pump and the system. Homes that have higher than specification should have their system flow rates checked as they may be lower than the design intended especially the 3 homes at 12.7, 13.6 and 20.6°C.
- vi. Space Heating Pressure differential range across the Heat Pump of 0.5-0.75 psi: All homes had pressure differential above 0.75 psi. This in combination with the temperature differences reported in point iv above indicate over delivery of flow which is a good operating condition for the heat pump and the system.
- vii. Domestic Water Heating Pressure differential range across the Heat Pump of a minimum of 1.0-1.5 psi: All homes had pressure differential above 1.5 psi except 1 home was just below specification. This in combination with the temperature differences reported in point v. above indicate over delivery of flow which is a good operating condition for the heat pump and the system.

- 8. Revising the domestic water temperature sensors and changing the control of the domestic water tanks was removed from the Scope of Work.
- 9. Water samples were not taken once the decision was made to include the full system flushes for all homes.
- 10. Full flushes were completed on all homes except where occupants asked them not to be completed. Only one home requested no flush.
- 11. Revised backflow prevention was completed on all homes to eliminate the need to have the original backflow preventers serviced annually to help save the occupants the expense of this testing.

Phase 1 Analysis

Comments from each report received to date by Integral Group have been reviewed and it is Integral's expert opinion that the work indicated to be completed in Phase 2 is characterized as maintenance and parts replacement for a system such as this. The work undertaken in Phase 1 can be described as deficiency repair, maintenance and parts replacement. The systems are now 7.5 years old and will require parts replacement over time such as domestic hot water and buffer tanks which have an 8 to 10-year lifespan.

Summary of comments from contractors in the Checklist Reports are as follows:

- 1. There were 25 small leaks mostly described as at fittings and seemed related to threaded fittings.
- 2. There were problems reported for 16 heat pump run capacitors requiring replacement now or in the near future.
- 3. There were 15 reports of expansion tanks failing, starting to fail or low on air pressure.
- 4. There were 15 reports of fan coil zone valves sticking and needing replacement.
- 5. There were 8 reports of heat pump 3-way valve or actuator problems requiring repair or replacement.
- 6. There were 6 reports of problems with the heating system make up water PRV that requires replacement.
- 7. There were 5 problems reported with compressor contactors requiring replacement, cleaning or wire replacement.
- 8. There were 4 pumps reported as requiring replacement.
- 9. DES piping reported as being piped backwards 4 times.
- 10. Schrader valves on heat pump refrigerant circuit reported as leaking, needing repair or replacement and refrigerant added to heat pump reported 4 times
- 11. There were 3 Spirovent air separators reported to need replacement
- 12. There were 3 automatic air vents that required replacement.

- 13. There were 3 instances where electric heating elements on the heating buffer tank had failed.
- 14. There were 2 instances where it was indicated that the domestic hot water tank was starting to fail.
- 15. There were 12 other issues noted that were not cited multiple times.

Phase 2 Summary

Work orders received to date for Phase 2 have been received for work on heating systems in 25 homes. This includes: 7 from The Rise, 6 from Whitewater, 8 from The Terrace, 1 from The Heights and 3 from Riverbend.

Invoices for the work were eligible for a 50-percent rebate as per the Phase 1 Program outline.

The invoices range from \$75.65 to \$1,302.04 with a total of \$17,295.05 in spending. The average invoice was \$665.19 and the median price \$637.82. Six invoices were for amounts over \$1,000. No invoices were over \$2000 so all Phase 2 work so far has been compensated at 50%.

The invoices covered items indicated in the Checklist Reports.

Phase 2 Analysis

Comments from contractors following Phase 1 and Phase 2 work have noted;

- 1. The contractors agreed that the system was not unusual in application and was suitable for the service intended and the design of the system and the application is sound.
- 2. An Energy One contractor indicated that he did not feel there was a basic understanding of the system by the occupants and that owner knowledge and education is critical. Energy One noted many of problems addressed were associated with typical hydronic (radiant) systems and have nothing to do with the DES.
- 3. It was generally agreed that while the overall system differs somewhat from other DES systems installed in the Olympic Village in that each home has a heat pump rather than one building containing a heat pump. The contractors concluded the systems, if maintained properly should operate successfully.
- 4. There seemed to be a general consensus that the initial cleaning and startup of the systems may have been lacking. There were reports of general construction debris being flushed out of some of the systems.
- 5. It was generally agreed that heating of the domestic water was the more difficult process than the space heating and if ways to reduce this stress could be found that would eliminate a lot of the problems with red screens. The contractors noted that a compromised heat exchange surface would exacerbate problems with the higher temperature demand of domestic water, however should be repairable with sufficient flushing.

- 6. All three contractors agreed that the flushing undertaken was required and found a wide variety of system water conditions from fairly clean to so significantly contaminated that multiple flushes were required to obtain proper system operation.
- 7. Water condition was mentioned with the general consensus being that municipal water was acceptable for the systems but the systems will require monitoring to determine how often flushes might be required.

4.7 On-going maintenance program and options

During the bid process for the Phase 1/2 Programs, vendors were requested to provide bulk pricing for the recommended annual maintenance program. During the application process, homeowners were solicited for feedback on their interest in participating in such a program, and 25% of the applicants responded positively. Being that the question was not posed as part of completing the form for participation in the program, demand may be higher. Going forward, following the Phase 2 completion, WDC recommends owners to approach their Strata Council if they wish to budget for and procure a bulk-rate annual DES maintenance program for their neighbourhood. Stratas may contact WDC to request further information about bulk pricing options for ongoing maintenance.

5.0 DES spending

Spending to date on the homeowner resources, forensic audit, DES Energy Study and Phase 1 and Phase 2 programs for homeowners by WDC and the RMOW totaled \$356,970.98 with a breakdown as follows;

•	Cost to produce Homeowner Quick Reference Guide and Technical Guide	\$16,043.96
•	Cost for WDC to hire Integral to conduct forensic audit	\$14,829.02
•	Cost for RMOW to fund DES Energy Study	\$54,598.00
•	WDC spending on Phase 1 and 2 Programs	\$271,500.00
	Tot	al \$356,970.98

6.0 Summary

The Cheakamus Crossing DES has been in operation since 2010. WDC and the RMOW have responded to concerns raised by owners of WDC-built units to troubleshoot issues that have arisen with the in-home components connected to the DES. In addition to manuals provided in each unit, WDC and the RMOW have provided assistance in the form of homeowner and technical guides and individual unit guides.

Following a two-phase maintenance program in 2016 and 2017 to bring all units to a baseline operations level by qualified contractors, the expert opinion of Integral Group is that the work undertaken to date in these programs is characterized as normal maintenance, deficiency

repair and parts replacement for a system such as this. As the systems are approach a decade of operation, they will require parts replacement over time such as domestic hot water and buffer tanks which have an 8 to 10-year lifespan.

The consulting engineering firms have strongly recommended owners take on the initiative to arrange bulk pricing for an annual DES maintenance program for residents by qualified contractors. This will allow for bulk pricing, stable and consistent servicing and should help maintain the base line that has been established.

There do not appear to be widespread systemic issues with the DES or the individual home heating systems that are the result of installation or component failure. A DES Energy Study concluded the system is providing homeowners with energy cost savings as well as delivering on an overall reduction in energy use.

Resources

- BC Climate Action Toolkit <u>www.toolkit.bc.ca/tool/district-energy-systems</u>
- Geoxergy www.geoxergy.com/gibsons-district-energy-system/
- BC Housing- Strata Housing- <u>www2.gov.bc.ca/gov/content/housing-tenancy/strata-housing</u>
- Whistler Housing Authority- www.whistlerhousing.ca
- Whistler Housing Authority Disclosure statement: http://sales.cheakamuscrossing.ca/pdfs/disclosure_statements/The_Terrace_DS.pdf
- BC Assessment Authority- <u>www.bcassessment.ca</u>
- Cheakamus Crossing Portal- www.cheakamuscrossing.ca

Appendixes

Appendix A- "Photo: Website and login detail for Home Information Packages"

Appendix B – "2016 Homeowner's Quick Reference Guide"

Appendix C- "2016 Technical Service Guide"

Appendix D- "District Energy Study"

Appendix E – "Integral Group Forensic Audit Report"

Appendix B

Whistler 2020 Development Corporation Cheakamus Crossing District Energy System Recommendations

Report for Council prepared by: Whistler 2020 Development Corporation and RMOW Senior Staff

September 25, 2017

Table of Contents

Part A:

Introduction

Part B:

Recommendations and future options

Part A:

Introduction

During the bid phase of the 2010 Olympic and Paralympic Games the opportunity to create a significant amount of affordable housing was presented when the Province of British Columbia committed to construct housing in Whistler for use during the Games. The concept emerged for the development of an Athlete's Village that could then be converted to permanent resident-restricted housing as a legacy for Whistler following the Games.

With \$31 million in capital funding from the Vancouver Olympic Committee (VANOC) through the provincial and federal government and land from a Land Bank provided by the Province of British Columbia, the RMOW agreed to develop an Athlete's Village for the 2010 Games that would then transition to resident-restricted housing. This new development would add 276 affordable housing units as well as a 55-room hostel and 20 market-priced townhomes.

In 2004, the RMOW created an independent organization, incorporated as a business with the RMOW as the sole shareholder. The name, Whistler 2020 Development Corporation (WDC) was chosen to reflect the community's goal of creating a new, sustainable neighbourhood for full-time Whistler residents, known as the "Legacy Neighbourhood". WDC managed the design and approval process similar to a conventional developer with a focus on the delivery of the Athlete's Village and subsequent Legacy Neighbourhood. WDC Board of Directors members were appointed by Council with a strong focus on extensive expertise in the development and construction business and a commitment to the community. A number of the original board members from 2004 continue to volunteer today and have devoted thousands of hours of their time to the WDC.

Throughout the planning, building and retrofit phases, the WHA and WDC conducted an extensive community engagement process to ensure potential buyers were kept fully apprised. This included regular communications, email updates to approximately 1,000 applicants on the waitlist and advertising in local publications. A collaborative planning process and attention to detail on all aspects of the infrastructure development, landscaping, building design and engineering resulted in a final mix of housing and accompanying finishes that met the identified housing needs of the residents on the purchase waitlist within their preferred price range of \$200,000 to \$300,000.

The existing Whistler Housing Authority (WHA), which manages resident-restricted affordable housing, worked with WDC to market and manage the pre-sales of the housing in the Legacy Neighbourhood which was marketed as "Cheakamus Crossing". Whistler Real Estate Company was retained to complete the sales contracts with the buyers. The resident-restricted housing units were price-capped at purchase and any

re-sales tied to a maximum appreciation rate tied to the Core Consumer Price Index as with other WHA properties.

Along with recognition as leader in residential the provision of residential housing, Whistler has also pursued excellence in climate change and environmental protection. Accordingly, each of the WDC-developed Athlete's Village/ Cheakamus Crossing housing projects were developed with the Whistler Green Building Program in mind. This community-driven program is intended to encourage sustainable and environmentally friendly design and building practices at a grassroots level. In the design process, project objectives for the Legacy neighbourhood included optimizing site density to lower the overall footprint of the neighbourhood, ecologically sound and drought-resistant landscaping, walking paths and sidewalks to connect to transit routes, adding a new transit route to the neighbourhood as well as direct access to Whistler's Valley Trail.

A District Energy System (DES) was built and connected to all the units of Cheakamus Crossing when the neighbourhood was built for the 2010 Winter Games as the Whistler Athletes' Village.

The system was designed to use low-temperature ambient heat from treated sewage effluent from the nearby Whistler wastewater treatment plant. Using treated wastewater effluent instead of natural gas allows the neighbourhood to reduce greenhouse gas emissions from heating by over 95%.

The DES cost of \$4.1 million was absorbed into the \$144 million total building costs for the affordable housing units in Cheakamus Crossing, which were shared among the Province (land and land remediation), the Vancouver Olympic Committee (VANOC) (\$35 million), RMOW (\$8 million) and the Municipal Finance Authority (MFA) (\$100 million loan). The RMOW received a two-year extension from the MFA to repay a \$13 million outstanding balance.

As the capital cost of the system has been paid, the RMOW does not include capital cost recovery or return on invested capital in its revenue requirements to operate and manage the DES. However, to manage the ongoing maintenance and depreciation costs of the DES, the RMOW collects a quarterly DES fee from homeowners connected to the DES. Rates are set annually by Council based on staff reviews of operating costs.

Expert opinion sought by WDC and the RMOW has identified the critical importance for annual ongoing maintenance in order for heating equipment within homes connected to the DES to operate properly. Each home connected to the DES has owner-operated and maintained components as part of the home's heating system.

Prior to occupancy, WDC provided orientation walk-throughs for each owner and strata corporation and provided warranty and home-owner guides.

At the time of commissioning, each WDC-developed unit was provided with a unique login and password to the cloud-based platform www.homeinformationpackages.com. Website and login information was included on a sticker placed on the internal electrical panel of each unit.

On this website, owners are provided with manufacturer's information, warranty information and maintenance information for appliances, electrical, heating and fixtures. For each component, there is a page with manufacturer's information, warranty length, product specifications and operating guide as well as supplier and installer information and contact details. In addition, WDC and the RMOW have provided assistance in the form of homeowner and technical guides and individual unit guides.

In April 2016, the WDC commissioned a report from Integral Group Consulting, the independent engineering firm chosen by the Cheakamus Crossing DES Volunteer Committee, for a detailed mechanical engineering design peer review and forensic examination of the in-suite systems installed in the townhouses located at Cheakamus Crossing in Whistler, B.C. and an investigation of the interface between the in-suite systems and the local District Energy System.

The report found the Cheakamus Crossing development, design and construction appears to have been typical for a project of this nature. Overall, the report did not find systemic failure issues with the Cheakamus Crossing DES and recommended that owners have an ongoing maintenance program through service contractors that are familiar with the DES and the privately-owned in-suite systems.

To date, the RMOW through WDC has spent \$356,970.98 examining the efficiency of the DES, providing homeowners with additional resources, and investigating the existence of a systemic failure which has led to unexpected maintenance costs. Neither the forensic report nor the three contractors who conducted the Phase 1 and Phase 2 programs have noted any evidence of a systemic failure of the DES.

The consulting engineering firm and the maintenance contractors have strongly recommended owners take on the initiative to arrange bulk pricing for an annual heating system maintenance program for residents by qualified contractors. This will allow for bulk pricing, stable and consistent servicing and should help maintain the base line that has been established.

Part B:

Recommendations and future options for the Cheakamus Crossing District Energy System (DES)

In preparing recommendations for Council careful consideration was given to the findings of the DES Summary Report and other matters.

The Report found there were no systemic issues found that related to the design or installation of the DES. The Report also stated that in Integral's expert opinion that the work completed in Phase 1 is characterized as deficiency repair, maintenance and parts replacement for a system such as this.

Following a two-phase repair and maintenance program in 2016 and 2017 by qualified contractors, the expert opinion of Integral Group (the professional engineering firm selected by WDC and the Cheakamus Crossing DES Volunteer Committee) is that the work undertaken to date in these programs has corrected the majority of the identified deficiencies. The review identified that there were no systemic failures associated with either the design or installation of the DES. Integral Group have stated "Comments from each report received to date by Integral Group have been reviewed and it is Integral's expert opinion that the work indicated to be completed in Phase 2 is characterized as normal maintenance and parts replacement for a system such as this. The systems are now 7.5 years old and will require parts replacement over time such as domestic hot water and buffer tanks which have an 8 to 10-year lifespan."

The RMOW and WDC have heard from homeowners of WDC-built townhomes that there is ongoing uncertainty associated with the operation of their home heating systems. Both the RMOW and WDC have diligently conducted a forensic study and extensive maintenance and repair program to determine if there is a systemic issue that has resulted in a failure of the system to operate as designed. Neither the forensic report or the Phase 1 and 2 programs have found any such issues however expert opinion has related the necessity and importance of ongoing maintenance which supports the next steps outlined in the recommendations below. The recommendations recognize the principle of "caveat emptor" where the homeowners were provided with the necessary assurance at the time of their purchase of warranty protection on their home and specifically, the components within their home heating systems.

WDC and the RMOW acknowledge that individual home owners have identified financial challenges meeting the ongoing maintenance and operating costs of their home heating systems however, the findings noted above and in the full report do not support further funding assistance to homeowners beyond what is identified below. Speculation around potential assistance from RMOW or WDC should not influence participation by strata corporations from taking advantage of bulk pricing secured by WDC.

Recommendations for the WDC Board of Directors and RMOW Council include:

- 1) Extend Phase 2 of the DES Upgrade and Maintenance Program to March 31, 2018 with no extension beyond that date:
 - a. WDC would continue to provide an upgrade program to cover 50-percent of the costs up to a maximum of \$1000 per home for issues that require parts replacement or flushing as a continuation of Phase 2 of the DES Upgrade and Maintenance Program. b. Extending the DES Upgrade and Maintenance Program would allow for

further investigation of any potential systemic issues and provide homeowners with support through the winter months when demand on the system is highest.

- 2) Facilitate bulk pricing for annual maintenance of the home heating systems:
 - a. Annual maintenance was identified as a key to ensuring a reliable heating system by all three of the contractors involved in Phase 1 of the DES Upgrade and Maintenance Program.
 - b. Bulk pricing is available and can be arranged by strata or another homeowners group (in a manner similar to chimney and dryer duct cleaning).
 - c. WDC has agreed to meet with each of the five stratas and their property management companies to explore and discuss this option at a strata council meeting.
- 3) Allow homeowners to disconnect from the DES:
 - a. If unsatisfied with the operation of their home heating systems following the Winter 2017/2018 DES program, a homeowner may choose to disconnect entirely from the DES.
 - b. The homeowner will need to accept and acknowledge the implications of this decision. They will save approximately \$50.00/month in DES fees, however, the homeowner will be responsible for all expenses and consequences to design and retro-fit a new heating source.
 - c. The covenant registered on title (sample attached) compels the homeowner to connect to the DES and pay DES fees whether they are connected or not. A covenant modification or discharge through application to the RMOW can relieve the homeowner from these obligations.
 - d. Disconnecting from the DES requires that the homeowner be responsible to contact and receive permission from the RMOW should they (or a future owner) wish to reconnect to the DES. A potential process to disconnect from the DES would include:
 - i. Homeowner makes an application to disconnect from the DES
 - ii. Homeowner selects their preferred energy solution
 - iii. Homeowner signs disclaimer/ waiver
 - iv. Homeowner obtains proper permits and installs new energy system
 - v. RMOW confirms the homeowner has undertaken the work. RMOW modifies covenant that currently requires payment of quarterly DES fees.
 - vii. RMOW finance department modifies the data base and DES billing ceases.
- 4) Direct RMOW staff to explore the potential sale of the DES to a private company to allow private management and regulation as a utility under the BC Utilities Commission (BCUC):
 - a. The sale of the DES from the RMOW would allow the new utility to apply for regulation as a utility through the BCUC.
 - b. The BCUC regulates several geothermal community heating and cooling systems throughout B.C. The operation of these systems is similar to the Cheakamus Crossing DES.

- c. The BCUC is responsible for ensuring customers receive safe, reliable services at fair rates from the entities it regulates. The BCUC balances that responsibility against the need to ensure utilities are afforded a reasonable opportunity to earn a fair return on their invested capital. In addition to regulatory responsibilities, the BCUC reviews ratepayers' complaints and inquiries about regulated entities within its jurisdiction. d. The sale of the DES to a private utility could allow independent oversight of DES billing and service for Cheakamus residents.
- e. The sale could include negotiations to include the ownership of components within the "strata lot" and allow homeowners to potentially lease the components in their home from the utility, with the utility managing and maintaining these components on an ongoing basis.
- f. The potential downsides of this proposal are likely higher monthly fees for the DES as owners would be paying a third party for management and maintenance of the DES. A majority of DES users (homeowners and businesses) within Cheakamus Crossing would need to be in favour of moving to a private utility management process.
- g. The possible benefits could allow owners to move towards a more "worry free" home heating system as it may be possible they would no longer own the components within their homes and be responsible for maintenance.



WHISTLER

REPORT ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: October 3, 2017 REPORT: 17-104

FROM: Corporate and Community Services FILE: 7020-20 (xLGMA)

SUBJECT: SEA TO SKY HIGHWAY ROAD CLOSURE PROTOCOL ASSESSMENT – NEXT

STEPS

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Corporate and Community Services be endorsed.

RECOMMENDATION

That Council endorse the creation of a Working Group entitled "Sea to Sky Highway Road Closure Protocol Working Group" to prioritize, assign timeframes and take action on the recommendations contained within the "Sea to Sky Highway Road Closure Protocol Assessment – Final Report" produced by Creative Transportation Solutions; and

That Council endorse the Terms of Reference attached as Appendix "A" to Council Report No. 17-104.

REFERENCES

Appendix "A" – Terms of Reference for the Sea to Sky Highway Road Closure Protocol Working Group.

PURPOSE OF REPORT

The purpose of this report is to propose next steps in order to move forward the recommendations contained within the "Sea to Sky Highway Road Closure Protocol Assessment – Final Report" produced by Creative Transportation Solutions.

DISCUSSION

In October 2016, the RMOW sent out a Request for Proposals for an independent consultant to develop an emergency response strategy that identifies new approaches for directing closures and delays related to traffic accidents on the Sea to Sky Highway with the goal to identify strategic reallocation of existing resources, as well as additional investments by responsible agencies that will reduce the number of vehicle crashes and decrease the amount of time that the highway is closed in the event of an accident.

Creative Transportation Solutions (CTS) was awarded the contract and undertook a Sea to Sky Highway Road Closure Assessment on existing incident management procedures for closures and delays related to unplanned incidents on the Sea to Sky Highway between Horseshoe Bay and Whistler. CTS presented their results to Council at a Committee of the Whole on June 20, 2017 and Council formally received their report and endorsed their recommendations during the Regular Council meeting of the same date.

The assessment considered but was not limited to:

- A review of documented incidents on the Sea to Sky Highway and assessment of unplanned road closures and traffic delays between Horseshoe Bay in West Vancouver and Village Gate Boulevard in Whistler;
- A review of provincial protocols associated with detection and responses to motor vehicle incidents:
- ➤ A bench-marking review of incident management best practices in other jurisdictions;
- > The economic impact caused by excessive travel time delay; and
- An assessment of the emergency response resources currently available and the costs associated to maintain and increase the level of response by leveraging technology and centralizing personnel and equipment.

Based on their assessment, CTS made 16 key recommendations that would contribute to:

- Fewer unplanned road closures along the Sea to Sky Highway;
- A reduction in the average duration of unplanned road closures along the Sea to Sky Highway;
- A reduction in congestion and motorist frustration along the Sea to Sky Highway during unplanned road closures; and
- > An improved overall driving experience.

The majority of the recommendations contained within the report must have buy in from the various Sea to Sky Highway transportation partners to move forward and in many cases have financial and operational impacts on these partner organizations. As a result, staff are proposing that all applicable partners be invited to participate in a newly formed Working Group entitled the "Sea to Sky Highway Road Closure Protocol Working Group". The Sea to Sky Highway Road Closure Protocol Working Group will review all the recommendations and work with all applicable partners to determine the most effective path forward.

WHISTLER 2020 ANALYSIS

W2020 Strategy	TOWARD Descriptions of success that resolution moves us toward	Comments
Health and Social	The resort community is safe for both visitors and residents, and is prepared for potentially unavoidable emergency events	The reliability and safety of the Sea to Sky Highway is vital to the ongoing livability viability of Whistler
Economic	Whistler proactively seizes economic opportunities that are compatible with tourism, and effectively adapts to changing external conditions.	Closures along the Sea to Sky Highway have a significant financial and economic impact on Whistler and surrounding communities.

W2020 Strategy	AWAY FROM Descriptions of success that resolution moves away from	Mitigation Strategies and Comments
None.		

OTHER POLICY CONSIDERATIONS

None.

Sea to Sky Highway Road Closure Protocol Assessment-Next Steps October 3, 2017 Page 3

BUDGET CONSIDERATIONS

Some of the recommendations contained within the assessment will have financial impacts on the RMOW, however in most cases it is on other stakeholders. A 2018 project budget will be put forward to Council during the budget cycle to cover the costs of the working group and to continue with reporting out on unplanned road closures annually for patterns and trends in their occurrence.

COMMUNITY ENGAGEMENT AND CONSULTATION

The RMOW currently works with its various Whistler stakeholders to communicate road closure events and minimize the impact on visitors. The proposed Sea to Sky Highway Road Closure Protocol Working Group will have representatives from all applicable partners to review and action on the 16 recommendations contained within the report.

SUMMARY

This report proposes next steps in order to move forward the recommendations contained within the "Sea to Sky Highway Road Closure Protocol Assessment – Final Report" produced by CTS. Since the majority of the 16 recommendations contained within the report cannot be solely executed by the RMOW and instead must involve our partners, staff recommend creating a Sea to Sky Highway Road Closure Protocol Working Group to prioritize, assign timeframes and take action on the recommendations.

Respectfully submitted,

Shannon Story
MANAGER, PROTECTIVE SERVICES
For
Norm McPhail
GENERAL MANAGER OF CORPORATE AND COMMUNITY SERVICES



WHISTLER

APPENDIX A

TERMS OF REFERENCE

SEA TO SKY HIGHWAY ROAD CLOSURE PROTOCOL WORKING GROUP

Council Endorsement: File No.

PURPOSE OF WORKING GROUP

The purpose of the Resort Municipality of Whistler's (RMOW) Sea to Sky Highway Road Closure Protocol Working Group is to review, prioritize, assign timelines and take action on the 16 recommendations contained in the "Sea to Sky Highway Road Closure Protocol Assessment – Final Report" produced by Creative Transportation Solutions (CTS).

COMPOSITION

The Working Group shall be composed of the following members:

- I. One representative from the Whistler RCMP
- II. One representative from the RCMP Lower Mainland Traffic Services
- III. One representative from the Ministry of Transportation and Infrastructure(MOTI)
- IV. One representative from the Regional Transportation Management Centre
- V. One representative from Mainroad Contracting
- VI. One representative from Miller Capilano Maintenance Corporation
- VII. One representative from ECOMM
- VIII. One representative from ICBC
- IX. The General Manager of Corporate and Community Services from the RMOW
- X. The Manager Transportation and Waste Management from the RMOW
- XI. The Manager of Protective Services from the RMOW

The Working Group may invite other stakeholders to meetings as required for discussions from time to time. The Chairperson will be the Manager of Protective Services, with staff support from the Protective Services Department.

A quorum includes the majority of the members of the Working Group.





APPENDIX A

RESPONSIBILITIES

The Sea to Sky Highway Road Closure Protocol Working Group will review, prioritize, assign timelines and take action on the 16 recommendations contained in the "Sea to Sky Highway Road Closure Protocol Assessment-Final Report produced by Creative Transportation Solutions.

The Working Group will report back to Council on its progress.

MEETINGS

The Working Group will meet on an as-needed basis.



WHISTLER

REPORT ADMINISTRATIVE REPORT TO COUNCIL

PRESENTED: October 3, 2017 REPORT: 17-103

FROM: Corporate & Community Services FILE: 4567

SUBJECT: PERMISSIVE TAX EXEMPTION BYLAW No. 2162, 2017

COMMENT/RECOMMENDATION FROM THE CHIEF ADMINISTRATIVE OFFICER

That the recommendation of the General Manager of Corporate and Community Services be endorsed.

RECOMMENDATION

That Council consider giving first, second and third readings to the "Permissive Tax Exemption Bylaw No. 2162, 2017".

REFERENCES

Appendix "A" - "Permissive Tax Exemption Bylaw No. 2167, 2017"

PURPOSE OF REPORT

The purpose of this Bylaw is to request Council's consideration of the exemption of property value taxes under section 224 of the *Community Charter* for the properties listed in Schedules "A", "B" and "C" of the "Permissive Tax Exemption Bylaw No. 2162, 2017".

DISCUSSION

Section 224 of the *Community Charter* permits Council to grant an exemption from property taxation for land and improvements owned or held by a charitable, philanthropic, or other not for profit corporation and which Council considers are used for a purpose that is directly related to the purposes of the corporation under section 224(2)(a). It also allows for exemptions to properties used in relation to those already exempted for public worship under section 224(2)(f) and land or improvements owned or held by a person or organization and operated as a licensed community care facility under the *Community Care and Assisted Living Act* under section 224(2)(j). Section 224(4) allows the term of the exemption to be up to 10 years.

"Permissive Tax Exemption Bylaw No. 2162, 2017" adds two parcels for permissive exemptions:

- The Whistler Waldorf School (not previously taxed); and
- Whistler Community Services Society building at the Nester's Waste Station (new construction).

The Resort Municipality of Whistler currently has four permissive tax bylaws. This Bylaw repeals the four existing bylaws so that all of the permissive exemptions are covered in one bylaw with the goal of simplifying the administration of permissive exemptions. There are no changes to the period of time that existing permissive exemptions will be in effect.

Permissive Tax Exemption Bylaw No. 2162, 2017 October 3, 2017 Page 2

POLICY CONSIDERATIONS

A tax exemption must be adopted by bylaw on or before October 31st in order for the exemption to be in effect in the following year. The exemption applies only to the next calendar year and any subsequent years up to a total of 10 years that are provided for in the Bylaw.

The proposed permissive exemption is in accordance with the Resort Municipality of Whistler's policy statement as included in the "Five Year Financial Plan Bylaw 2017-2021 No. 2141, 2017" which includes the statement:

"As permitted by the *Community Charter*, council has granted exemptions from municipal property taxes for the following general purposes:

- Land and improvements surrounding a statutorily exempt building for public worship; and
- Properties owned or held by a not-for-profit organization whose purpose is to contribute to the well-being of the community with the provision of cultural, social, educational or recreational services."

BUDGET CONSIDERATIONS

There are no budget considerations as these properties have all been previously exempted from property taxation.

COMMUNITY ENGAGEMENT AND CONSULTATION

As required in the *Community Charter* section 227, notice of this Bylaw has been published in a local weekly newspaper for two consecutive weeks and posted in the public notice posting places.

SUMMARY

That the proposed "Permissive Taxation Exemption Bylaw No. 2162, 2017" which provides municipal tax exemptions for the properties listed in Schedules "A", "B" and "C" of the Bylaw receive first, second and third readings.

Respectfully submitted,

Maureen Peatfield
MANGER OF FINANCIAL SERVICES
for
Norm McPhail
GENERAL MANAGER OF CORPORATE AND COMMUNITY SERVICES

RESORT MUNICIPALITY OF WHISTLER PERMISSIVE TAX EXEMPTION BYLAW NO. 2162, 2017

A BYLAW TO AUTHORIZE THE EXEMPTION OF CERTAIN LANDS AND IMPROVEMENTS FOR 2017 AND SUBSEQUENT YEARS

WHEREAS Council may, by bylaw, pursuant to the provisions of Section 224 of the *Community Charter* exempt land or improvements, or both, from municipal property taxes;

AND WHEREAS Council considers permissive exemptions for land and improvements surrounding a statutorily exempt building for public worship and land and improvements owned or held by a not for profit organization whose purpose is to contribute to the well-being of the community with the provision of cultural, social, educational or recreational services.

NOW THEREFORE the Council of the Resort Municipality of Whistler, in an open meeting assembled, hereby **ENACTS AS FOLLOWS**:

1. <u>Title</u>

This Bylaw may be cited as the "Permissive Tax Exemption Bylaw No. 2162, 2017."

2. Administration:

- 2.1 All properties owned or occupied by a public authority, charitable, philanthropic or other not for profit corporation, listed under Schedule "A" are hereby exempted from taxation for the term of exemption indicated in Schedule "A".
- 2.2 All properties that receive statutory exemptions and are deserving of additional exemptions for ancillary properties surrounding the exempt buildings, listed in Schedule "B", are hereby exempted from taxation for the term of exemption indicated in Schedule "B".
- 2.3 All properties owned or held by a person or organization and operated as a licensed community care facility under the *Community Care and Assisted Living Act*, listed under Schedule "C", are hereby exempted from taxation for the term of exemption indicated in Schedule "C".
- 2.4 Schedules "A", "B" and "C" are attached hereto and form part of this Bylaw.

3. Repeal

- 3.1 The Resort Municipality of Whistler "Taxation Exemption for Places of Public Worship Bylaw No. 2009, 2012", is repealed.
- 3.2 The Resort Municipality of Whistler "Taxation Exemption for Public Daycare Facilities Bylaw No. 2010, 2012", is repealed.
- 3.3 The Resort Municipality of Whistler "Taxation Exemption for Not-For-Profit Organizations Bylaw No. 2011, 2012", is repealed.

GIVEN FIRST, SECOND and THIRD READIN	GS this day of	, 2017.
ADOPTED by Council on this day of	, 2017.	
Nancy Wilhelm-Morden, Mayor	Brooke Browning, Municipal Clerk	
I HEREBY CERTIFY that this is a true copy of "Permissive Tax Exemption Bylaw No. 2162, 2017".		
Brooke Browning, Municipal Clerk		

3.4

The Resort Municipality of Whistler "Taxation Exemption for Philanthropic Purposes Bylaw No. 2125, 2016", is repealed.

Schedule "A" Permissive Tax Exemption Bylaw No. 2162, 2017 Charitable, Philanthropic or Other Not For Profit Entities

Folio	Address	Details	Owned and Occupied by	Plan#	Lot/Block	District Lot	District	PID#	Expiry
		3,294.06 m ² of land which includes the school building envelope and 976.6m ² of paved							
006161.500	Portion of 7328 Kirpatrick Way	parking. One building of approximately 734.4m ^{2.}	Resort Municipality of Whistler, Occupied by Whistler Waldorf School Society			3860	New Westminster District Group 1	015-871-305	2019
008073.022	1080 Legacy Way		Resort Municipality of Whistler, Occupied by Whistler Sports Legacies	EPP1290	А	8073	New Westminster District Group 1	027-791-022	2022
008073.023	1345 Cloudburst Drive		Resort Municipality of Whistler, Occupied by Whistler Sports Legacies	EPP1290	В	8073	New Westminster District Group 1	027-791-068	2022
007924.007	1519 Spring Creek Drive		Resort Municipality of Whistler, Occupied by Whistler Community Services Society	LMP49873	3 5	7924	New Westminster District Group 1	025-046-411	2022
005160.100	Portion of 8000 Nesters Road	742m ² of land and one building of approximately 992m ² .	Resort Municipality of Whistler, Occupied by Whistler Community Services Society	LMP11103	3 2	1758	New Westminster District Group 1	018-353-517	2022
005316.102	2028 Rob Boyd Way		Whistler Mountain Ski Club	LMP47410) 3	5316	New Westminster District Group 1	024-867-900	2022
006162.002	Emerald Forest		Emerald Dreams Conservation Co Ltd.	VAP18892	2 A	3862	New Westminster District Group 1	007-311-478	2022
006548.000	Emerald Forest		Decigon Development Corp			4754	New Westminster District Group 1	015-837-891	2022
006641.000	4910 Glacier Lane		Crown Provincial, Occupied by Whistler Sports Legacies			8103	New Westminster District Group 1	027-528-294	2022
006571.101	7390 Fitzsimmons Road South		Audain Art Museum		D	5028	New Westminster District Group 1	025-120-093	2023
006166.090	4584 Blackcomb Way		Crown Provincial, Occupied by Spo7ez Cultural Centre and Community Society	LMP21845	5 В	3866	New Westminster District Group 1	011-568-283	2025

Schedule "B" Permissive Tax Exemption Bylaw No. 2162, 2017 Places of Public Worship

Folio	Address	Owned and Occupied by	Plan #	Lot	Block	District Lot	District	PID#	Expiry
		Roman Catholic Bishop of							
		Kamloops, Occupied by Our							
		Lady of the Mountains Catholic							
006548-310	6299 Lorimer Road	Church	LMP29492	Α		1755	New Westminster District Group 1	023-534-877	2022

Schedule "C" Permissive Tax Exemption Bylaw 2162, 2017 Licenced Community Care Facility

Folio	Address	Owned and Occupied by	Plan#	Lot	Block	District Lot	District	PID#	Expiry
		Crown Provincial, Occupied by							
006546.935	7146 Nesters Road	Dandelion Day Care Society			М	4752	New Westminster District Group 1	018-602-819	2022



WHISTLER

MINUTES

REGULAR MEETING OF THE RECREATION LEISURE ADVISORY COMMITTEE THURSDAY APRIL 20, 2017, STARTING AT 4:44 PM.

Myrtle Philip Community School 6195 Lorimer Rd, Whistler, BC V0N 1B6

PRESENT:

Murray Lunn, Chair
Bob Calladine, Member at Large
John Konig, Member at Large
Meredith Kunza, Tourism Whistler representative
Roger Weetman, Manager, Recreation, RMOW
Stephanie Sloan, Member at Large
Josie Chuback, Member at Large
Chris Kaipio, Member at Large
Dave Clark, Member at Large
Roger Soane, Member at Large
Roger Soane, Member at Large
Martin Pardoe, Manager, Resort Parks Planning, RMOW
Recording Secretary, Shannon Perry

REGRETS:

Councillor, Jen Ford Ian Currie, Howe Sound School District 48 representative Eric Wight, Member at Large Colin Pitt-Taylor, Member at Large

ADOPTION OF AGENDA

Included new business; water main repair, VT extension, dog park, and dog waste

Moved by Stephanie Sloan Seconded by John Konig

That Recreation Leisure Advisory Committee adopt the Regular Recreation Leisure Advisory Committee agenda of Thursday April 20, 2017

CARRIED

MINUTES
Regular Recreation Leisure Advisory Committee Meeting
April 20, 2017
Page 2

ADOPTION OF MINUTES

Moved by Josie Chuback Seconded by Dave Clark

That Recreation Leisure Advisory Committee adopt the Regular Recreation Leisure Advisory Committee minutes of March 9, 2017

CARRIED

PRESENTATIONS/DELEGATIONS

Parkland Acquisition

A brief presentation from Parks Planning Manager regarding the recent Council approval to acquire the Parkhurst lands. Site images were presented for review by the committee. As mentioned by the Mayor in the media there are no current plans to develop the site.

A discussion was held within the Committee, Members voiced their concern regarding access and homelessness use on the vacant site.

Q: Liability – will liability now be with the municipality? A: Yes, staff are scheduled to undertake a preliminary safety review at the end of April 2017.

Moved by Roger Soane Second by Murray Lunn

That Recreation Leisure Advisory Committee support the RMOW establishing a policy to prevent and remove unauthorized overnight parking and camping on municipal properties.

CARRIED

Recreation Leisure Advisory Committee wish to extend their full support and applaud Council decision to acquire the Parkhurst lands.

Artificial Turf Soccer Field Update

A presentation by Parks Planning Manager regarding an update on the Artificial Turf Project (ATF). At a recent Council meeting a comprehensive project update was provided vi an Information Report. Staff provided a condensed version of the Council presentation to RLAC. It was noted that two members of Council spoke in opposition of the project.

The current direction is to confirm the feasibility for the Bayly Park gravel field site and further develop budget estimate. Assuming the site proves to be feasible, the project will return to Council for further consideration later this year. A decision on the type of infill product will be made by Council at a future meeting.

MINUTES
Regular Recreation Leisure Advisory Committee Meeting
April 20, 2017
Page 3

Q: Has storage been considered on the site?

A: Yes, modest user storage needs are being considered in the design and circulation of the space.

Q: Will baseball have the opportunity to utilize the fields also?

A: Staff will explore concepts that allow for baseball use recognizing that the total area is insufficient and in a different geometric shape than what is required for baseball.

Q: Is there potential for a running track.

A: No, although staff will explore costs and feasibility of developing a series of running lanes along one side of the pitch.

Staff also noted that while explorations will occur to accommodate additional users, staff is extremely mindful of scope and cost increases.

A discussion was held within members of the committee, discussing the positive and negative impacts as well as the need and costs for an ATF.

OTHER BUSINESS

Water main at MPSC

An update from Recreation Manager regarding the issues with the water main leak in April. The leaks were identified in front of the arena and pool which resulted in a temporary pool shut down. The repairs are now completed.

VT extension project update

An update from Recreation Manager to the Committee. Valley Trail has been delayed due to water main leak. Clearing commenced April 20, 2017. Budget will be covered for the unforeseen works.

The bus shelter at MPSC is potentially going to have 46% funded from the province pending grant approval. Plans to add another accessibility parking bay are being reviewed as well as some adding conduit for more electric vehicle bays in the future. Completion predicted for end of July 2017.

Dog waste in parks

A concern from the public regarding dog waste was brought to the attention of the Committee. Member advised bylaw has drafted communication and are in the process of going to the public. Bylaw to attend the next scheduled RLAC meeting.

MINUTES Regular Recreation Leisure Advisory Committee Meeting April 20, 2017 Page 4

> Moved by Stephanie Sloan Second by Murray Lunn

That Recreation Leisure Advisory Committee strongly recommend that an off leash area be implemented at meadow park and that dog related issues as discussed in the RLMP be made a priority.

CARRIED

ADJOURNMENT

Moved by Bob Calladine

That Recreation Leisure Advisory Committee adjourn the April 20, 2017 Recreation Leisure Advisory Committee meeting at 5:57 p.m.

CARRIED

CHAIR: Murray Lunn



WHISTLER

MINUTES

REGULAR MEETING OF FOREST & WILDLAND ADVISORY COMMITTEE

WEDNESDAY, JULY 12, 2017, STARTING AT 3:00 P.M.

In the Flute Room

4325 Blackcomb Way, Whistler, BC V0N 1B4

File: 8221.03

Name	Meetings to Date: 7
Present:	
AWARE, Claire Ruddy, Chair	5
Member at Large, Derek Bonin	7
Member at Large, Arthur DeJong	6
Member at Large, Mac Lowry	3
Member at Large, Candace Rose-	3
Taylor	
Member at Large, Trevor Burton	5
Member at Large, Colin Rankin	5
WORCA, Todd Hellinga	4
Regrets:	
Member at Large, Johnny Mikes	5
Member at Large, Kathi Bridge	4
Recording Secretary	
Heather Beresford	7

Adoption of Agenda

ADOPTION OF AGENDA

Moved by T. Hellinga Seconded by T. Burton

That the Forest & Wildland Advisory Committee adopt the Forest & Wildland Advisory Committee agenda for July 12, 2017.

CARRIED

Adoption of Minutes

ADOPTION OF MINUTES

Moved by T. Hellinga Seconded by C. Rose-Taylor

That the Forest & Wildland Advisory Committee adopt the Forest & Wildland Advisory Committee minutes for June 14, 2017.

CARRIED

MINUTES Regular Forest & Wildland Advisory Committee Meeting July 12, 2017 Page 2

Verbal Reports

Council:

 FWAC extends its condolences to the Janyk family at the passing of Councillor Andree Janyk.

AWARE

Step Into Nature program underway

WORCA:

- Maintenance program ongoing and processing outstanding authorizations
- Jane Lakes needs cooperative planning with a focus on protecting the environment. RMOW 3 year fee-for-service agreement includes improving trails around Jane Lakes.
- Wedge logging and Comfortably Numb trail MTB riders not commenting negatively to WORCA
- Recent MTB report pointed to significant economic impact of the sport in Whistler. Additional funding to WORCA would help with increasing administration and planning duties.

RMOW:

- Brio site completed
- Callaghan FSR, Wedge, Alpine Meadows and CCF#5 fuel thinning projects scheduled for autumn 2017
- Firesmart public program progressing.
- Blackcomb wildfire on July 2 quick response controlled it quickly.
 Started by a squatter. More people are squatting around the valley due to housing and affordability challenges.

MOTION

Moved by T. Hellinga Seconded by C. Ruddy

That the Forest & Wildland Advisory Committee recommends the RMOW investigate establishing a temporary camping or housing area to reduce uncontrolled camping that is a wildfire risk to the community.

CARRIED

CCF Annual Report

Presentation by H. Beresford regarding the 2016 CCF Annual Report.

FWAC reviewed the draft previously circulated. Comments made within draft document.

ACTION: Circulate revised draft by email, finalize and send to CCF Board.

Other Business

OTHER BUSINESS

Presentation by C. Ruddy on behalf of Coast to Cascades Grizzly Bear Initiative (GBI) regarding proposed camping on Sproatt alpine trails.

- GBI met with RMOW Parks Operations to discuss concerns regarding proposal to provide alpine camping on Sproatt trails within known grizzly bear habitat.
- GBI sent email letter with recommendations to RMOW Parks Operations and copied FWAC and Whistler Bear Advisory Committee (WBAC).
- Grizzly bear populations near Whistler continue to be considered as threatened so it is important that their recovery not be compromised so the location of recreation infrastructure is important.
- Management aspects to consider if camping is provided in the alpine:
 - Seek advice from bear experts regarding location of camping sites that considers bear food sources and movements
 - Best practices will be required both in terms of infrastructure (eg. food caches, possible solar-powered electric bear fencing) and management of grey water, garbage and toilets
 - Bear education will be necessary and provided through partners, social media and trail signs.
 - Recommend that RMOW and partners seek expert advice regarding potential wildlife issues at the initial planning stage
- Trail Planning Working Group (TPWG) meets twice yearly with stakeholders to discuss trails, but coordinated planning is not as strong a focus as it was.
- Discussed opportunity for a FWAC member to sit on the TPWG. The WBAC made such a motion at its July 12 meeting.

MOTION

Moved by T. Hellinga Seconded by C. Rose-Taylor

That the Forest & Wildland Advisory Committee recommends that if camping is developed on the Sproatt alpine trails, the RMOW include the recommendations in the Coast to Cascades Grizzly Bear Initiative letter.

CARRIED

MOTION Moved by T. Hellinga Seconded by C. Ruddy MINUTES Regular Forest & Wildland Advisory Committee Meeting July 12, 2017 Page 4

That the Forest & Wildland Advisory Committee recommends that a FWAC member participate on the Trail Planning Working Group.

CARRIED

Future Agenda Items:

 Schedule presentation by Bob Cunneyworth, FLNRO Compliance and Enforcement Officer for September

ADJOURNMENT

Moved by D. Bonin

That the Forest & Wildland Advisory Committee adjourn the July 12, 2017 meeting at 5:10 p.m.

CARRIED

CHAIR: C. Ruddy

RECORDING SECRETARY: H. Beresford



WHISTLER

MINUTES

REGULAR MEETING OF WHISTLER BEAR ADVISORY COMMITTEE AUGUST 9, 2017, STARTING AT 8:30 A.M. In the Decker Room RMOW Public Works Yard

PRESENT:

Co-Chair, RMOW, H. Beresford
Co-Chair, Get Bear Smart, S. Dolson
AWARE/C2C Grizzly Bear Initiative, C. Ruddy
Conservation Officer Service, B. Mueller
Member at Large, N. Dudley
Whistler Blackcomb, A. DeJong
RCMP, R. Knapton
RMOW Bylaw Services, T. Lunn
RMOW Council, S. Maxwell
Recording Secretary, A. Paris

PUBLIC:

B. Webster M. Toom

REGRETS:

Carney's Waste Systems, P. Kindree Conservation Officer Service, S. Gravel Wind River Bear Institute, L. Homstol RMOW, T. Schaufele

ADOPTION OF AGENDA

Moved by A. DeJong Seconded by T. Lunn

That Whistler Bear Advisory Committee adopt the Whistler Bear Advisory Committee agenda of August 9, 2017.

CARRIED

ADOPTION OF MINUTES

Moved by T. Lunn Seconded by R. Knapton

That Whistler Bear Advisory Committee adopt the Regular Whistler Bear Advisory Committee minutes of July 12, 2017.

MINUTES
Regular Whistler Bear Advisory Committee Meeting
August 9, 2017
Page 2

CARRIED

PRESENTATIONS/DELEGATIONS

Whistler Blackcomb

A presentation by A. DeJong was given regarding Whistler Blackcomb activities and a discussion was held.

- No bear incidents in the last month
- Bear activity 1100- 1450 meters, mid mountain
- Berry production is sparse
- Bear at Roundhouse has not returned

B. Webster arrived at 8:35am

Conservation Officer Services

A presentation by B. Mueller was given regarding Conservation Officer Service's activities and a discussion was held.

- July 14th Nordic bear damage to garbage shed roof, persistent and trap set but no capture. Non-tagged bear.
- Bear accessing garbage in Cheakamus, was reported to Bylaw
- Bluff charge at Florence Peterson park, the municipality removed the berry tree
- Grizzly sighting, just south of Function Junction at the Train Wreck
- IRONMAN relocation to the Wedge area of a previously untagged bear on course
- COS zone changed in the Lower Mainland to include North Vancouver, Vancouver and Burnaby, added on two more officers
- Conversation on high number of bear calls. Low snow pack this year could have made bears stay low in elevation
- Coyotes in Cut Your Bars
- Follow up from COS, S. Dolson will send out Wind River Institute report about IRONMAN

RMOW Bylaw Services

A presentation by T. Lunn was given regarding RMOW Bylaw Services' activities and a discussion was held.

- Calls and tickets issues are up from last year this time
- Large camps in Cal-Cheak have been discouraged by blocking the pull outs. Less camps has led to a reduced number of outdoor kitchens and bear conflicts
- Issues with day lot 5 campers, including human waste between day lots.
- Discussion regarding staff training for food truck staff and disposal of food waste

ACTION: Bear Smart Program Assistant will follow up with food trucks ACTION: RMOW Bylaw Services will discuss day lot issues at Parking Lot committee meeting

RCMP

A presentation by R. Knapton was given regarding RCMP activities and a discussion was held.

MINUTES
Regular Whistler Bear Advisory Committee Meeting
August 9, 2017
Page 3

- 6 calls since July 1. 2-3 occurred because COS unable to attend.
- Sites: Crabapple Drive; Whistler Way; Lorimer and Nancy Green; Myrtle Philip school playground; Riverside campground

R. Knapton and A. DeJong left at 9:08am

RMOW- Bear Smart Program Assistant

A presentation by A. Paris was given regarding the Bear Smart Program Assistant's activities and a discussion was held.

- Attending Discover Nature weekly at Lost Lake
- Neighbourhood parties and bear education throughout the community
- Bear Alerts system are being posted consistently even if activity is low so that the webpage stays current
- Bear Smart Restaurant Program is being created in a way that is under RMOW control, as opposed to a subscription model
- BC Transit and garbage program need to figure out who has authority to approve communications
- Solid waste contractor program documents and contracts have been prepared but as of yet there are no participants

ACTION: A. Paris will arrange a meeting with S. Maxwell, H. Beresford, E. Dal Santo and Whistler Transit

RMOW- Solid Waste Bylaw

A presentation by H. Beresford was given regarding the solid waste bylaw and a discussion was held.

- Council gave first readings to Solid Waste Bylaw, No. 2139 on August 15th
- Public hearing scheduled for September council meeting, last opportunity for public comments
- Food establishments and special events will be required to create solid waste management plans.
- Planning department is updating guidelines and zoning bylaw to accommodate changes
- Carney's is producing guidelines for solid waste services.

ACTION: P. Kindree to share the guidelines at a future meeting

RMOW- Construction Bins

A presentation by T. Lunn was given regarding construction bins and attractants a discussion was held.

- Food waste going into construction bins and causing bear conflicts.
 Signs on bins inconsistent and are ignored. Site supervisors not taking responsibility. Bylaw wording makes it hard to enforce.
- Residents', workers' and visitors' garbage goes into bin
- bins do not have that same requirement
- Discussion on how Bylaw can get garbage bins removed once food waste is discovered in a construction bin. Ticket amounts need to be high enough to encourage companies to clean up site, rather than just taking the ticket

MINUTES
Regular Whistler Bear Advisory Committee Meeting
August 9, 2017
Page 4

- Conversation about solid waste bylaw language and attractants and site responsibility and accountability
- Consensus is that it would be beneficial to have more specifics regarding construction sites in bylaw

ACTION: Bylaw Services will discuss adding construction bins section to the bylaw regarding food waste and attractants

B. Mueller left at 9:53am

Get Bear Smart Society

A presentation by S. Dolson was given regarding Get Bear Smart Society activities and a discussion was held.

- Ironman hired bear dogs and handlers; pre-race inspection identified numerous locations frequented by bears; one bear near high school relocated by COS to Wedge area; communications between COS and Wind River could be improved; final report being submitted by Wind River Bear Institute. Recommend making it part of events operation procedures and funding.
- Digitizing the Bear Smart Restaurant Program
- Grizzly bear cards and funding from Lush
- Grizzly education kits prepared for School District 8 particularly in Nelson

Actions reviewed from last meeting, all complete.

 The Bear Response Plan is complete and will be distributed to COS, RCMP and Bylaw Services staff.

ADJOURNMENT

Moved by S. Dolson

That the Whistler Bear Advisory Committee adjourn the August 9, 2017 Council meeting at 10:22 a.m.

CARRIED

CO-CHAIR: H. Beresford
RECORDING SECRETARY: A. Paris

RESORT MUNICIPALITY OF WHISTLER PERMISSIVE TAX EXEMPTION BYLAW NO. 2162, 2017

A BYLAW TO AUTHORIZE THE EXEMPTION OF CERTAIN LANDS AND IMPROVEMENTS FOR 2017 AND SUBSEQUENT YEARS

WHEREAS Council may, by bylaw, pursuant to the provisions of Section 224 of the *Community Charter* exempt land or improvements, or both, from municipal property taxes;

AND WHEREAS Council considers permissive exemptions for land and improvements surrounding a statutorily exempt building for public worship and land and improvements owned or held by a not for profit organization whose purpose is to contribute to the well-being of the community with the provision of cultural, social, educational or recreational services.

NOW THEREFORE the Council of the Resort Municipality of Whistler, in an open meeting assembled, hereby **ENACTS AS FOLLOWS**:

1. <u>Title</u>

This Bylaw may be cited as the "Permissive Tax Exemption Bylaw No. 2162, 2017."

2. Administration:

- 2.1 All properties owned or occupied by a public authority, charitable, philanthropic or other not for profit corporation, listed under Schedule "A" are hereby exempted from taxation for the term of exemption indicated in Schedule "A".
- 2.2 All properties that receive statutory exemptions and are deserving of additional exemptions for ancillary properties surrounding the exempt buildings, listed in Schedule "B", are hereby exempted from taxation for the term of exemption indicated in Schedule "B".
- 2.3 All properties owned or held by a person or organization and operated as a licensed community care facility under the *Community Care and Assisted Living Act*, listed under Schedule "C", are hereby exempted from taxation for the term of exemption indicated in Schedule "C".
- 2.4 Schedules "A", "B" and "C" are attached hereto and form part of this Bylaw.

3. Repeal

- 3.1 The Resort Municipality of Whistler "Taxation Exemption for Places of Public Worship Bylaw No. 2009, 2012", is repealed.
- 3.2 The Resort Municipality of Whistler "Taxation Exemption for Public Daycare Facilities Bylaw No. 2010, 2012", is repealed.
- 3.3 The Resort Municipality of Whistler "Taxation Exemption for Not-For-Profit Organizations Bylaw No. 2011, 2012", is repealed.

GIVEN FIRST, SECOND and THIRD READIN	GS this day of	, 2017.
ADOPTED by Council on this day of	, 2017.	
Nancy Wilhelm-Morden, Mayor	Brooke Browning, Municipal Clerk	
I HEREBY CERTIFY that this is a true copy of "Permissive Tax Exemption Bylaw No. 2162, 2017".		
Brooke Browning, Municipal Clerk		

3.4

The Resort Municipality of Whistler "Taxation Exemption for Philanthropic Purposes Bylaw No. 2125, 2016", is repealed.

Schedule "A" Permissive Tax Exemption Bylaw No. 2162, 2017 Charitable, Philanthropic or Other Not For Profit Entities

Folio	Address	Details	Owned and Occupied by	Plan#	Lot/Block District Lot		District	PID#	Expiry
		3,294.06 m ² of land which includes the school building envelope and 976.6m ² of paved							
006161.500	Portion of 7328 Kirpatrick Way	parking. One building of approximately 734.4m ^{2.}	Resort Municipality of Whistler, Occupied by Whistler Waldorf School Society			3860	New Westminster District Group 1	015-871-305	2019
008073.022	1080 Legacy Way		Resort Municipality of Whistler, Occupied by Whistler Sports Legacies	EPP1290	А	8073	New Westminster District Group 1	027-791-022	2022
008073.023	1345 Cloudburst Drive		Resort Municipality of Whistler, Occupied by Whistler Sports Legacies	EPP1290	В	8073	New Westminster District Group 1	027-791-068	2022
007924.007	1519 Spring Creek Drive		Resort Municipality of Whistler, Occupied by Whistler Community Services Society	LMP49873	3 5	7924	New Westminster District Group 1	025-046-411	2022
005160.100	Portion of 8000 Nesters Road	742m ² of land and one building of approximately 992m ² .	Resort Municipality of Whistler, Occupied by Whistler Community Services Society	LMP11103	3 2	1758	New Westminster District Group 1	018-353-517	2022
005316.102	2028 Rob Boyd Way		Whistler Mountain Ski Club	LMP47410) 3	5316	New Westminster District Group 1	024-867-900	2022
006162.002	Emerald Forest		Emerald Dreams Conservation Co Ltd.	VAP18892	2 A	3862	New Westminster District Group 1	007-311-478	2022
006548.000	Emerald Forest		Decigon Development Corp			4754	New Westminster District Group 1	015-837-891	2022
006641.000	4910 Glacier Lane		Crown Provincial, Occupied by Whistler Sports Legacies			8103	New Westminster District Group 1	027-528-294	2022
006571.101	7390 Fitzsimmons Road South		Audain Art Museum		D	5028	New Westminster District Group 1	025-120-093	2023
006166.090	4584 Blackcomb Way		Crown Provincial, Occupied by Spo7ez Cultural Centre and Community Society	LMP21845	5 В	3866	New Westminster District Group 1	011-568-283	2025

Schedule "B" Permissive Tax Exemption Bylaw No. 2162, 2017 Places of Public Worship

Folio	Address	Owned and Occupied by	Plan #	Lot	Block	District Lot	District	PID#	Expiry
		Roman Catholic Bishop of							
		Kamloops, Occupied by Our							
		Lady of the Mountains Catholic							
006548-310	6299 Lorimer Road	Church	LMP29492	Α		1755	New Westminster District Group 1	023-534-877	2022

Schedule "C" Permissive Tax Exemption Bylaw 2162, 2017 Licenced Community Care Facility

Folio	Address	Owned and Occupied by	Plan#	Lot	Block	District Lot	District	PID#	Expiry
		Crown Provincial, Occupied by							
006546.935	7146 Nesters Road	Dandelion Day Care Society			М	4752	New Westminster District Group 1	018-602-819	2022

To: Mayor Wilhelm-Morden & Council

Sept 25th, 2017 Dear Mayor & Council.

RE: Another Look at Artificial Turf

Is it possible that our Mayor and Council have lost their collective minds?... or at least lost sight of the most important priorities for this resort?

This town survives (and thrives) on tourists both domestic and foreign. They are attracted by the many sports and other events such as Skiing, Ski & Snowboard Festival, Iron Man, Gran Fondo, Crankworx, hiking, sightseeing, golf, Film Festival, Writer's festival, Art Museum to name only a few. It has become so popular that the infrastructure is stretched to the limit. Parking, affordable housing and traffic jams are the most obvious.

Now the RMOW is proposing to spend four million dollars of OUR tax money on artificial turf for a soccer field. (unbelievable!). The turf has not been proven to be safe or potentially harmful, yet they are going ahead in any case. This is clearly a misguided boondoggle. The RMOW should be careful not to make (another) expensive mistake. What is wrong with the excellent grass soccer field at Myrtle Philip school area? Kids play soccer on natural grass all over this province and, if their parents want, they can go to Squamish which many do on a regular basis anyway. I ask what will artificial turf do to improve tourism to any extent or help to alleviate our most pressing issues of affordable housing and traffic problems on our 2-lane road? Why not spend four million dollars on things that really matter to our resort?

Let's not let this become another fail like the 2017 parking/bus fiasco which Mr. Drdul is now trying to put a positive spin on.

I'm losing faith in our municipal leaders and wonder who is really in control of our tax dollars. This may have reached third reading but my colleagues and I will do everything in our power to derail spending our four million dollars on artificial turf unless there is a public referendum.

Robert Cessford 4611 Montebello Pl. Whistler V0N 1B4