

ATTACHMENT A: APPLICATION REFERRALS

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Province of Alberta

Alberta Health Services

Thank you for inviting Alberta Health Services (AHS) Safe Healthy Environments (SHE) to comment on the above-referenced application. We understand that this application includes two components: one is to redesignate the subject lands from Ranch and Farm District to a Direct Control District to accommodate a new Gravel Pit Operation, the other is to adopt the Scott Property Master Site Development Plan to guide redesignation, subdivision, and development proposals.

Safe Healthy Environments was consulted during the previous application from 2008 to 2010. The application was refused in the first reading of public hearing. Particular concerns about air quality impacts and cumulative effects from existing and future gravel pits were raised at that time and in a few complaints from adjacent residents located in the southwest corner of SW 5 26-2-W5M, referred to Crestview Estates. We expect similar questions and concerns to be raised again in this round of application. Therefore, we pay particular attention to information that may help address those concerns. The following three documents were reviewed this time.

- Lehigh Hanson Materials Limited Scott Property Air Dispersion Modelling Assessment (AECOM, July 2020)
- Lehigh Hanson Materials Limited Scott Property Cumulative Effects Assessment (AECOM, July 2020)
- Circulation Draft Master Site Development Plan (MSDP) A policy to guide the implementation of a Natural Resource Extraction/Processing Facility (Scott Property, July 2020)

Based on the information provided in the above reports, Safe Healthy Environments doesn't have objection to the application but would like to provide the following comments for your consideration:

- 1. We noticed that the following measures are proposed to reduce the emissions and hope the County has established a process to ensure the implementation of these measures:
 - The introduction of using an in-pit conveyor system to transfer material off-site would minimize the emission from haul trucks (e.g. diesel engine, road dust). As per Section 11.0 in the MSDP, development permit approval would be required from the City of Calgary in concurrent with the RVC development permit process to ensure the alignment of the proposed overland conveyor.
 - On-site crushing activities are minimized to reduce the use of diesel-powered equipment and the emission.
- 2. AECOM's reports concludes that the operations of the proposed Scott Property would result in negligible to low impacts to air



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quality. Safe Healthy Environments feels that more scrutiny is necessary for coming up with this statement. Both PM2.5 and NO2 are considered as non-threshold chemicals, which means there are no recognized thresholds below which no damage to health is observed. Therefore, the general principal is to achieve the lowest concentrations possible. Air quality objectives are not considered to be "pollute-up-to" levels, but markers for stringent management actions (AEP, 2019). Among the 14 selected receptor locations, the predicted pollution levels for all parameters remain close to baseline levels at all locations except for the two Crestview Estates locations. For the two residential receptors located Crestview Estates, the Application Concentration for PM2.5, PM10 and NO2 either approach or exceed of the 1-hr and 24-hr air quality objectives and are significantly higher than the baseline levels (see Table 22, 23, 24, 25, 27, 28 of the Air Dispersion Modelling Assessment Report). The elevation of PM10 concentration is likely attributed to the fine fraction of PM2.5. Elevated PM2.5 is a risk factor for developing cardiovascular and respiratory diseases, as well as lung cancer, and NO2 at elevated levels can causes significant inflammation of the airways (WHO, 2018). Short term health impacts from pit operations are evident in the Air Dispersion Modelling Assessment. Although the results meet Alberta Environment and Parks's (AEP) approval requirements, Safe Healthy Environments recommends some levels of health impact assessment for the residential community at southwest corner of the project area. This would also help communicate with residents that have concerns in future community engagement.

3. Safe Healthy Environments understands that air monitoring would be conducted at 4 selected location as illustrated in Figure 18 in the MSDP and the air monitoring results would be posted on a project website as per requirement of Policy 15.3. Safe Healthy Environments would like to receive the information of the data posting website. We also recommend the applicant to develop a communication plans with the residents to address the inquiries from the residents. Public complaint protocol that outlines strategies, processes and follow-up in response to public concerns and complaints about the operation should also be developed.

Public Utility

AltaLink Management AltaLink has 3 x 240,000V transmission lines running up the West side of W1/2-5-26-2-W5M. The Easternmost set of towers would be some 30-40m West of your project extents based on the 100m setback (from edge of road allowance), but the proposed berm & some soil testing locations are possibly closer to the towers. I've attached a few screenshots here.



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Please be aware that height/ground elevation/sloping restrictions and safety requirements may exist as far as 25m from the transmission line centerline and tower base to comply with code. There is also an OH&S setback from surface mine excavations to utility rights of way (30m; part 36 of OH&S code). As such I would ask that you coordinate with us for any fill/construction/testing activities within approximately 25m of transmission line centerline, if you require any variances to OH&S requirements (mining activities or processing equipment), and for any activities which require access through the AltaLink ROW. Questions and requests can be directed to myself or 3rdPartyRequests@AltaLink.ca.

Additionally, mining operations near transmission lines should consider:

- Large amounts of dust can impair the performance of transmission line insulation, causing flashover in some cases; if mining/crush activities would be near the transmission circuits and creating large amounts of dust, then some means of dust mitigation (ie. water spraying) should be implemented by the mine.
 - Water should not be sprayed towards the lines.
- Electromagnetic field from 3 x 240,000V lines can be fairly strong.
 - Typically this means metallic objects (pipelines, fences, eves troughs etc.) near the line should be bonded and grounded; effects do decrease rapidly with distance, but long runs of fence or pipe up to ~100m away & parallel to the line can be a concern.
 - Mine is solely responsible for bonding/grounding/mitigation of electrical effects on its infrastructure and equipment.
 - This can also cause issues with triggering blasting and explosives (though based on where this is, in proximity to houses etc., I'm guessing that's not a factor here – so just an FYI).

We have no objection to the proposed development plan, provided that the above comments are considered and included when developing and operating The Scott Property.

Adjacent Municipality

The City of Calgary

The City of Calgary has reviewed the above noted application in reference to the Rocky View County/City of Calgary Intermunicipal Development Plan (IDP) and other applicable policies. The City of Calgary Administration has the following comments for your consideration and requests that a response be drafted and sent to The City.

Planning:

• City of Calgary development and building permits would be required for the overland conveyor system.



- A full CPAG pre-application meeting is recommended prior to any planning applications made within the Calgary city limits. Further information regarding the pre-application process can be found at: https://www.calgary.ca/pda/pd/permits/development-permits/preapplication-meetings.html.
- The City of Calgary met with the applicant and has provided additional comments regarding the overland conveyor in Attachment 1 below.
- Although Millennium EMS Solutions Ltd. did not identify an
 environmental concern, the above noted Phase I ESA is somewhat
 dated (2008) and does not cover the entire application area. Given
 the age of the report and given that it does not cover the entire
 application area, it may or may not reflect current site conditions for
 the entire application area.
- Alberta Environment & Parks (AEP) should be engaged to determine the status of the application for the proposed gravel pit operation. For reference, AEP's website in regards to gravel pits is as follows: https://www.alberta.ca/land-conservation-andreclamation-guidelines-for-pits-and-surface-materials.aspx.
- The applicant did submit an air dispersion modelling report. Alberta Environment & Parks and Alberta Health Services could be engaged to evaluate environmental or public health concerns associated with potential ambient air quality impacts that may result from the proposed gravel pit operation.

Stormwater:

• The City is requesting that a condition be made that the culvert is to be removed when the conveyor is decommissioned.

Source Water:

- The conceptual scheme falls outside of the City of Calgary's Source Watershed. Stormwater generated from within the Scott Property Master Site Development Plan Area, could impact someone else's drinking water / source water downstream, re-emphasizing the importance that a sustainable stormwater solution be developed and approved prior to development occurring.
- Due to the proposed use of the site and the potential increase in sediment and runoff, we recommend additional measures to reduce any potential impact to source water downstream.

General Comments:

 The City is concerned about the number of wetlands that are being lost due to the development of this site. As the site contains 48 wetlands and 6 ephemeral water bodies, this development would have a negative impact on the biodiversity in the area.



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Transportation:

- Provide the operational protocol for number of heavy and employee vehicles accessing the site during typical daily operations. Would improvements to the intersection of 144 Avenue/ Rocky Ridge Road be required to support the proposed operations?
- The proposed gravel conveyor belt crosses City of Calgary road right-of-ways (144 Avenue, Rocky Ridge Road, 69 Street). Further details of the crossings shall be provided which would include: street cross-sections, a profile, and how the conveyor would pass under the road. Structural details would also be required to show how the conveyor tunnel supports the road. The conveyor crossings shall not conflict or adversely impact any shallow utilities, OH power lines, ATCO gas lines and or drainage within the City of Calgary.
- An agreement between the Conveyor operator and the City would be required for proposed conveyor crossings located in City road right-of-ways.

Internal Departments

Recreation, Parks and Community Support

There are no concerns with this land use redesignation application.

Comments pertaining to reserve dedication – inclusive of Deferred Reserve Caveat 741 083 992) to support development of parks, recreation or an active transportation network would be provided at any future subdivision stage.

Planning and Development Services (Engineering)

General:

- As the application is for aggregate extraction, the applicant is to provide payment of the Community Aggregate Payment Levy in accordance with Bylaw C-7748-2018, as amended.
- Historical Resources Act approval was received from Alberta Culture dated April 10, 2014. Engineering has no concerns.
- Phase 1 Environmental Site Assessment was completed by Millennium EMS Solutions Ltd. Dated July 2008. The report concluded that there are no significant environmental concerns. Engineering has no comments at this time.
- As a permanent condition of the future DP, the applicant would be required to provide the County with the EPEA registration for the proposed extraction site.
- As a condition of the future DP, the applicant would be required to provide a detailed Operations Plan. The plan shall include:
 - Noise, emissions, dust and air quality monitoring plans providing the location of any offsite monitoring stations, monitoring intervals, mitigation practices and procedures to be



followed by the pit operators if prescribed limits have been exceeded;

- Dust control plan showing the location of any offsite air quality measurement stations including procedures to be followed if air quality limit exceedances have occurred;
- Emissions Mitigation Plan addressing air quality and dust mitigation practices, monitoring intervals and locations;
- Identify any potential environmental impacts inclusive of mitigation measures to address the impacts.
- Engineering as no concerns with the Acoustic Assessment prepared by SLR Consulting Ltd, dated June 2020. No concerns with the proposed MSDP to maintain noise level to operate at or below 55dBA. An updated noise control strategy would be required at future Development Permit Stage.
- As a condition of future DP, the applicant would be required to provide a detailed Weed Control Plan, which meets the requirements of the Weed Control Act and the County's Land Use Bylaw. The recommendations of the plan are to be implemented during extraction activities.
- The applicant provided an Air Dispersion Assessment prepared by AECOM dated June 2020. The assessment concluded that the proposed mining operation is not expected to exceed air quality objectives beyond the subject lands and have minimal impact on nearby residences. As a condition of future DP, the applicant would be required to provide an updated Air Quality Assessment, prepared by a qualified professional, for proposed phases provide a strategy that would allow the pit to remain in compliance with the Canadian Ambient Air Quality Standards (CAAQS) and Alberta Ambient Air Quality Objectives (AAAQO).
- The applicant provided Landscape and Visual Impact Assessment prepared by AECOM dated July, 2020. The report concluded that out of the 19 viewpoints identified, post-mitigation would reduce to four residential lots (one to the north and three to the south) that may impact views due to their elevated building grades. The mining activities are to occur within 5-10 m below grade with south, east, north and west berm to be constructed to 6-7 meters in height. As a condition of future DP, the applicant would be required to provide a comprehensive landscaping plan, prepared by a qualified Landscape Architect for subsequent phases including area showing the landscaping elements that are to be incorporated into the berm, setback and entrance areas.

Geotechnical:

 Hydrogeological Technical Assessment prepared by AECOM dated July 2020 provided the groundwater table depth ranging from 11-45 meters below ground surface. At a condition of future DP, the application would require to demonstrate that the gravel extraction



and processing operation would cease at least 1 m above the water table in compliance with "A Guide to the Code of Practice for Pits" published by Alberta Environment.

Transportation:

- Traffic Analysis prepared by AECOM dated June 2020 indicated that by the use of the offsite-conveyor system, there would be no new haul truck traffic on the road network. The Applicant has confirmed that in the event that the conveyor system is down due to regular maintenance or failure, the extraction operation would be ceased. As such, there would be no new haul truck traffic on the road network resulted from the proposed development.
- Site access is proposed to be provided from Range Road 24 via a new approach to be constructed approximately 200 meters north of Burma Road. The applicant has licensed Range Road 24 road allowance for grazing purposes, the road allowance is still considered "open" and public foot traffic is still permitted. There are two options as follows:
 - Option 1: The applicant can proceed with a full road closure application with the County for Range Road 24. Once approved, the land can be consolidated with the subject parcel and direct access can be provided from Burma Road.
 Only a commercial approach would be required of Burma Road.
 - Option 2: The applicant would require to construct a paved road to County's standards from Burma Road to the proposed site access on Range Road 24, including a cul-desac and a proper approach to access the site. Engineering recommends construction of an Industrial/Commercial road standard where the County can provide the exemption from the applicant needing to enter into the Road Use Agreement in the event that aggregate material does need to be hauled from the site.
- Overland Conveyor Alignment: the applicant proposed to construct a 4.5 km overland conveyor to transport aggregate material from the Scott Property to the Spy Hill facility. The system would extend from the southeast corner of the site and crosses under Burma Road, County's Road. Engineering would require additional information and details on the alignment, depth of installation, size of conveyor, security and safety strategies before completing a full review of the approval.
- As a condition of future development permit stage, the applicant shall provide detail design of the overland conveyor system, specifically the crossing at Burma Road and along Range Road 24 all to the satisfaction of the County. Depending the proposed size of the conveyor system crossing Burma Road, any structure larger than 1.5 would be considered to be a Bridge Size Culvert and may



need to be registered with Alberta Transportation as a Bridge Structure.

 As a condition of future development permit stage, the applicant would require to provide details of how the conveyor system would be reclaimed within the overall reclamation plan.

Sanitary/Waste Water:

• Engineering has no concerns at this time. As per policy 449, the County recommends the use of sewage holding tanks and truck service for all industrial, commercial and institutional lands.

Water Supply And Waterworks:

• Engineering has no concerns at this time, however recommends the use of cisterns and truck service for all industrial, commercial and institutional applications.

Storm Water Management:

- A conceptual Stormwater Management Report was completed by AECOM Canada Ltd dated July 2020. Engineering has no concerns with the conceptual design of the site, all permanent storage facilities including conveyance would require AEPA registration under the Water Act along with registration of any associated Overland Drainage right-of-way.
- As a condition of future DP, Applicant would submit a Stormwater Management Plan, prepared by a qualified professional, providing the onsite stormwater management strategy for each phase of development.

Environmental:

- As a condition of future Development Permit stage, the applicant shall provide an Erosion and Sediment Control (ESC) Plan to support the operation of the pit and not limited to the following:
 - Minimizing surface disturbances
 - Preventing off-site mud tracks
 - Dust Controls
 - o Temporary and Permanent Erosion and Sediment Controls
 - o Emergency ESC measures
 - Post-pit operations and reclamation
- A Vegetation and Rare Plants Technical Assessment was provided, prepared by Lacuna Ecological Ltd, dated June 2020. The report identified various wetland and coulees throughout the subject parcel. As a condition of the future DP, the applicant would be required to demonstrate all necessary approvals are obtained for wetland disturbance from AEP under the Water Act.

At future Development Permit, the applicant may be required to provide an Environmental Protection Plan to ensure the protection of the



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	environmentally sensitive areas as per the recommendations of the Biophysical Impact Assessment, prepared by AECOM Canada Ltd. dated July 2020.
Agricultural and Environmental Services	It may be of benefit to the applicant to create a Weed Management Plan and have a contractor available (or be personally prepared) to control any regulated weeds. The applicant would need to ensure compliance with the Alberta Weed Control Act.

Circulation Period: August 7, 2020 to August 28, 2020.

Agencies that did not respond, expressed no concerns, or were not required for distribution, are not listed.